



Agenda
Village of Glen Ellyn
Capital Improvements Commission Meeting
Tuesday, November 9, 2021
7:00 PM
Glen Ellyn Civic Center, Room 301

- A. Call to Order**
- B. Public Comment (Non Agenda Items)**
- C. Approval of Minutes**
 - 1) Motion to approve the October 12, 2021 Capital Improvements Commission Meeting Minutes
- D. Current Business**
 - 1) CMAP Pavement Management Program Presentation
 - 2) CBD SUI - November 2021 Update
- E. Trustee's Report**
- F. Other Business**
- G. Public Works Report**
- H. Project Report**
 - 1) Engineering Project Report Dated November 5, 2021
- I. Adjournment**



Minutes
Village of Glen Ellyn
Capital Improvements
Regular Meeting
October 12, 2021
7:00 PM
Glen Ellyn Civic Center Room 301

Board or Commission: Capital Improvement
Meeting: Regular
Quorum: Yes

Date: October 12, 2021
Called to Order: 7:01 p.m.
Adjourned: 8:22 p.m.

MEMBER ATTENDANCE:

Steve Szymanski	Chairman	Present
Joel Baldin	Commissioner	Present
Adam B. Biggam	Commissioner	Absent
Joshua J. Cattero	Commissioner	Present
Arthur F. Foerster	Commissioner	Absent
Michael M. Lindquist	Commissioner	Present
Steve Neurauter	Commissioner	Absent
Jill Ziegler	Commissioner	Present
Rocco J. Zuccherro	Commissioner	Present
Bill Payne	Trustee Liaison	Absent
Richard Daubert	Staff Liaison Professional Engineer	Present

Also Present:

Tom Topor	Senior Civil Engineer
Dave Buckley	Public Works Director
Elisa Pollina	Recording Secretary

Public:

A. CALL TO ORDER

The **October 12, 2021** meeting of the Capital Improvements Commission was called to order by Chairman Szymanski at **7:01 PM** at the Glen Ellyn Civic Center.

B. PUBLIC COMMENT – None

C. APPROVAL OF MINUTES FROM SEPTEMBER 14, 2021 MEETING

MOTION TO APPROVE MINUTES FROM SEPTEMBER 14, 2021 CAPITAL IMPROVEMENTS COMMISSION MEETING

MOTION BY: Commissioner Lindquist

SECONDED BY: Commissioner Zuccherro

RESULT: UNANIMOUS APPROVAL

D. CURRENT BUSINESS –

1. *CBD SUI Project Update* – Engineer Topor presents an update on the items discussed at last month’s meeting. Underground utilities at Hillside – the CIC recommended preserving utility poles as they are, but if funds become available the CIC would prefer to put the utility lines underground. Staff was asked by the Village Board to pursue the undergrounding of utility lines and explore ComEd’s Rider LGC (Local Government Compliance Adjustment) to help spread out the costs among all Glen Ellyn customers. We are working with ComEd on this. An ordinance would need to be passed in order to do this. Engineer Daubert adds we tried to temper this because of the costs and we don’t have to do all of the work on Hillside and Duane. We can hold off and see how bids come in. This may come back to the CIC if the costs make sense. Topor adds we have to verify that we can do the rider and pass the costs on to the Com Ed customers.

Proposed Traffic Study at Main & Crescent – We discussed this with the Village board and it was concluded that the board did not feel comfortable eliminating the right turn lanes. Therefore, it is not worth spending the money on the traffic study if they do not want to eliminate the right turn lanes. This was a unanimous decision by the Village Board. The traffic study has been stopped. We notified Civil Tech to cancel the traffic study.

Engineer Daubert reports we are still working with Civil Tech on the change order. We did not present it to the Village Board yet. We need to fine tune the presentation. We will bring it to the board on November 25. We had a lot of discussions with Civil Tech to see if they could trim a little more off. They are looking to complete the design of it. The Village Board understands that the goal of the CIC was to make the downtown more walkable.

Commissioner Zuccherro asks if the Village Board shares that vision. Engineer Daubert adds it is a new board in a challenging position, perhaps as the process moves along the

Village Board may change their decision. While this may be frustrating to the CIC we need to stay focused on the design work so we can stay on track to begin construction next year.

Final Pre-Plans: Engineer Topor reports that we received the final cost estimate from Civil Tech on traffic control, utilities and landscape. There is a lot to go through and staff is looking at everything. We are trying to get changes back to Civil Tech next week. Commissioner Baldin adds I went through the set and I will scan them in and send my comments over to you. I am questioning some of the tree species. Some of them are not street species. There are a lot of street trees out there that are not being used. There are a lot ornamental tree species in the plan. I am all for diversity when it comes to trees, but on Main Street alone there are 8 varieties with different forms. I also noted the coping on the planters; I would suggest avoiding having a joint on the corner. The joint needs to be brought down to a 90 degree angle. The grades of the planter walls and curbs (sidewalk sloping) also needs to be addressed; same with the granite planters. They are assuming it is flat but it is not. The planters should be higher than what is shown. Engineer Daubert states we will make a note of that.

Topor reviews Phase 1 Milestones:

October 19- Review Final Pre-Plans

November 22- Final plans and contract

December 1 – Advertise for bids

January 1-February 14 – Contract award

January/February / Public Pre-construction meeting

Early March – Start construction

End of October – Complete construction

Chairman Szymanski ask how the schedule is coming along with Apex in comparison to this. Engineer Daubert states we have a meeting with them tomorrow to see their schedule.

Topor reviews the Bid Packaging Schedule – We combined into 3 stages. Phase1 – 2022, Phase 2-2023, Phase 2 & 3 2024-2026- This is combined so we have the flexibility to complete in 1 year and give to the designer. This updated phasing will have to be approved by the Village Board. We will bring this back to the CIC.

Procurement of Parkway Trees: Director Buckley reports Public Works put out an RFP to various nurseries for the trees. We want quality nurseries. We will probably be using multiple nurseries to get all the trees we need. The RFP is for all phases.

Chairman Szymanski asks if there are any material shortages. Topor states bricks are on a 20-25 week lead time; based on that, as soon as bids are awarded that will have to be put into the queue so it is ready for installation in June.

E. TRUSTEE'S REPORT – Engineer Daubert reports that Trustee Payne could not make the meeting tonight but said that a remote participation ordinance was approved last night at the Village Board meeting. He will review it with the CIC next month. Engineer Daubert adds if a commissioner cannot make a meeting in person, a form will need to

be filled out and the CIC quorum would need to vote on the acceptance for that commissioner to participate remotely. Chairman Szymanski states I am open to allowing remote participation if we have an in-person quorum.

F. OTHER BUSINESS – None

G. PUBLIC WORKS REPORT – Public Works Director Buckley reports we are getting closer to becoming fully staffed. We hired 2 maintenance workers and we have an interview next week with a civil engineer. We signed a contract for snow removal and maintenance for the Civic Center parking garage.

H. PROJECT REPORT – (See attached report) Engineer Daubert reports on the Utility Roadway Project – we are seeing progress on the project. It has been a challenging month staying on top of the contractor. All underground utility work has been substantially completed on Ridgewood Avenue, Phillips Avenue, and Vine Street. Street Resurfacing – we are waiting on a few punch list items and for the sod to be installed. We are tracking under the contract award. The mast arms for signals are at a 4-6 month lead time. Normally it is 4-6 weeks. The Pavement Index Survey will be brought before the CIC in November.

Chairman Szymanski thanks everyone for all their hard work.

I. ADJOURNMENT – Commissioner Zucchero motions and Commissioner Lindquist seconds to adjourn the meeting. The meeting was adjourned at 8:22 p.m.

The next meeting is scheduled for November 16, 2021

Submitted by Elisa Pollina, Recording Secretary

Reviewed by Richard Daubert



**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 11/9/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Presentation
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1640)**

DOC ID: 2021-1640

CMAP Pavement Management Program Presentation

Statement of the Issue:

Please see the attached memorandum and its associated attachments pertaining to this agenda item.

Analysis:

Budget Impact:

Action Requested:

Attachments:

1. 11.9.21 CIC CMAP Pavement Management Program Report Presentation Memo
2. Glen Ellyn Pavement Management Program Draft Report
3. Glen Ellyn Pavement Management Program Presentation



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer

DATE: November 5, 2021

RE: CMAP Pavement Management Program
Glen Ellyn Study Report Presentation

INTRODUCTION

The Village traditionally completes a quadrennial survey of its pavement network as to update the pavement inventory including objective measurement of the network condition. The most recent prior survey was completed in 2016 with the quadrennial survey update due in 2020. However, due to the financial implications of the COVID-19 Pandemic, the 2020 survey was deferred. On a positive note, staff did apply for participation in the Chicago Metropolitan Agency for Planning's (CMAP's) Pavement Management Program. The Village's application was successful with CMAP able to include Glen Ellyn within its Program. The Pavement Management Program included not only a pavement inventory and condition survey, but also a study of the Village's Pavement Management Program including consideration of five different maintenance and rehabilitation scenarios. The effort was fully funded by a State Planning Grant with no cost to the Village. In addition, the Village received a license for PAVER software which will allow the Village to more actively manage its pavement inventory.

SUBJECT

As outlined in the attached draft report, staff worked with Applied Research Associates, Inc. of Champaign, Illinois to update the Village's pavement inventory, including work history, and advance a condition survey of the Village's roadway network.

The pavement inventory and condition survey information was imported into PAVER software to establish a tabular summary of the Village's roadway pavement condition index. The tabular summary quantifies the inventory condition into 7 condition categories:

- Failed (<1%)
- Serious (1%)
- Very Poor (8%)
- Poor (12%)
- Fair (20%)
- Satisfactory (28%)
- Good (31%)

The tabular breakdown of pavement condition is provided for the whole network as well as broken down by the three functional classifications for the roadway network (Collector Roadways, Residential Roadways, and Arterial Roadways).

The aforementioned condition survey data was used in concert with the Village's master roadway and utility improvement plan and PAVER software to establish a Pavement Management Program (i.e. Pavement Management System). Staff worked with ARA to develop two Treatment Matrices: one being for Residential Roadways and the other for Arterial and Collector Roadways. The matrices assign varying levels of maintenance and rehabilitation work to the roadway segments based on PCI. Unit costs were assigned for the maintenance and rehabilitation work items.

To develop a 10-Year Pavement Management Program, the Village's 10-Year Budget Allocation for Roadway Improvements was utilized to comparatively model five different maintenance and rehabilitation scenarios which are summarized as follows:

1. Eliminate Backlogs
2. Maintain Current Condition
3. Keep Funding Level Current
4. Reduce Funding
5. Do Nothing

The modeling yielded that in order for the Village to maintain its current pavement condition (PCI ~73 which is satisfactory), that it will need to step up its maintenance and rehabilitation work to the roadway network from approximately \$4.5M annually to approximately \$6M annually. This change would be effective after CY2022 which involves approximately \$9M in roadway rehabilitation work. It is noted that this is based on modeling by the PAVER software including assumptions on unit costs including 5% annual increases in construction costs. Staff is hopeful that based on its recent experience, construction cost increases will be less than 5% with staff looking to advance maintenance and rehabilitation work in the years following 2022.

It is also noted that within the draft report, the International Roughness Index (IRI) values for the Village's roadway network is noted as unacceptable. IRI refers to the smoothness of the roadways (lower values being more favorable). To maintain consistency, the IRI scale used by ARA was for interstate pavements which is much more stringent in terms of IRI values. Local roads, especially in Glen Ellyn due to topography, will naturally have higher IRI values due to more abrupt profile changes, pavement joints, manhole frames/lids, railroad tracks, and sharp geometric changes such as roundabouts. Expanding on the aforementioned profile changes, the Village strives to provide ADA compliant crosswalks which require sharp geometric grade brakes. In addition, the Village implements cross section changes to superelevate roadway pavement as to make driveway approaches functional where topographic challenges exist.

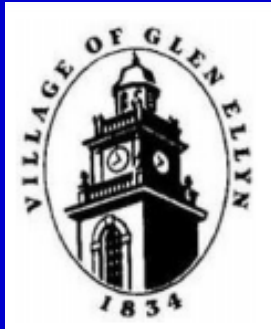
In summary, this exercise has proven invaluable to staff in terms of developing a more dynamic and active pavement management program. Staff will be utilizing the PAVER software to update the Village's pavement inventory and work history on an annual basis. As previously discussed with the CIC, staff is already looking to further advance pavement maintenance and rehabilitation activities in the outyears based on its cursory look at this information. Having said that, continued quadrennial condition surveys will continue to be completed and checked against the PAVER software modeling to confirm the appropriate budget to maintain the overall roadway network condition.

ACTION REQUESTED

This memo is intended to serve as a cover to the draft CMAP Pavement Management Report and Presentation which are attached to this memorandum for reference. Staff and ARA will be giving a presentation on this matter to the Capital Improvements Commission at its November 9th Meeting.

Attachments

1. Glen Ellyn Pavement Management Program Draft Report
2. Glen Ellyn Pavement Management Program Presentation



Pavement Data Collection and Pavement Management System Implementation for Village of Glen Ellyn, IL

Prepared for
Village of Glen Ellyn, Illinois
In Association with
Chicago Metropolitan Agency for Planning

Prepared by
Applied Research Associates, Inc.
100 Trade Centre Drive, Suite 200
Champaign, Illinois 61820
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DRAFT REPORT

September 2021

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List of Abbreviations

Abbreviation	Explanation
AADT -	Annual Average Daily Traffic
AC -	Asphalt Concrete
ADT -	Average Daily Traffic
AECOM -	The organization AECOM
ARA -	Applied Research Associates
ASTM -	American Society for Testing and Materials
CMAP -	Chicago Metropolitan Agency for Planning
DSV -	Digital Survey Vehicle
FHWA -	Federal Highway Administration
GIS -	Geographic Information System
GPS -	GLOBAL Positioning System
HMA -	Hot Mix Asphalt
IDOT -	Illinois Department of Transportation
IRI -	International Roughness Index
LCMS -	Laser Crack Measurement System
LTR -	Load Transfer Restoration
PCC -	Portland Cement Concrete
PCI -	Pavement Condition Index
PMS -	Pavement Management System
RSL -	Remaining Service Life
STA -	State Transportation Agencies

INTRODUCTION

1.1 Background

Chicago Metropolitan Agency for Planning (CMAP) selected ARA to develop pavement management plans for a selected number of local agencies from the CMAP region, including additional data collection for non-Federal Aid routes. The pavement management plans will provide participating local agencies with a document that describes the importance and types of pavement preservation, the current condition of pavements, scenarios evaluating the cost to meet different network-level pavement conditions, and recommended capital plans based on the selected pavement condition/spending scenarios. The pavement management plan for the Village of Glen Ellyn includes summary tables, charts, graphics, and maps depicting current pavement conditions and forecasted pavement conditions under different scenarios. CMAP and AECOM staff managed the development of the pavement management plan in conjunction with the Village of Glen Ellyn.

As part of this project, ARA has evaluated the current condition of the Village of Glen Ellyn's roadway pavement network, implemented a pavement management system (PMS) using PAVER™ software, forecasted condition, generated budget scenarios, and recommended future maintenance and rehabilitation (M&R) plans.

1.2 Project Kick-off and Records Review

ARA met with the Village of Glen Ellyn, CMAP, and AECOM representatives for a project kick-off meeting on March 18, 2021. Based on the kick-off meeting and documents provided by the Village and CMAP, pavement data was collected between April 14th and May 2nd, 2021. A GIS shapefile was originally picked from the IDOT's IRIS database and later updated based on feedback provided by the Village and was used as a base map for field data collection. The network segmentation provided in the GIS shapefile was the primary source of roadway inventory for the village's pavement management database. The Village responded with valuable information to a questionnaire that ARA developed to better understand the PMS inputs available from the Village and any specific project requirements. ARA worked with the village to finalize treatment types, unit costs, and their annual budgets from 2022 through 2031 to plan future M&R activities. The following documents were reviewed as part of this effort:

- GIS shapefile for the local agency (CMAP)
- Network Segmentation for collection (CMAP)
- Review of network segmentation (Village of Glen Ellyn)
- Completed Questionnaire (Village of Glen Ellyn)

1.3 Network Segmentation

The Village of Glen Ellyn manages approximately 88.82 miles of roadway pavements, consisting primarily of asphalt pavements. The village has about 11.97 miles of concrete pavements. The initial GIS shapefile had 946 segments. However, 2 were not inspected during data collection because one of those sections

was inaccessible and one was an intersection with Roosevelt Rd. Hence, only 944 segments were inspected.

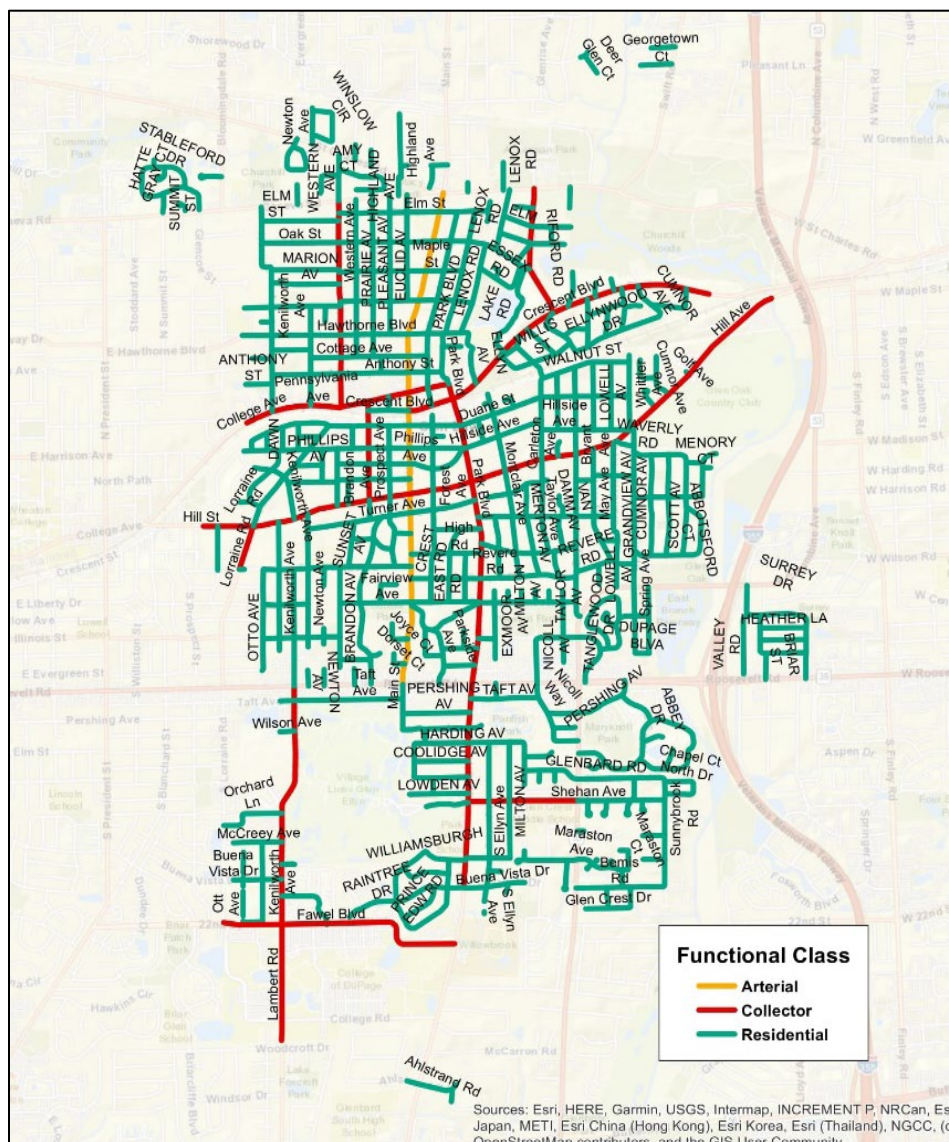


Figure 1. Village of Glen Ellyn's roadway network segmentation.

1.4 Traffic Data

Table 1 displays the distribution of network length based on functional class. As observed in Table 1, the majority of the roadway network is comprised of residential streets.

Collectors gather traffic from local roads and funnel it to the arterial network. Collectors serve primarily intra-county travel and typical travel distances are shorter than on arterial routes. Collectors are broken down into two categories: Major Collectors and Minor Collectors. Generally, major collector routes are longer; have lower driveway densities; have higher speed limits; are spaced at greater intervals; have higher traffic volumes, and may have more travel lanes than their minor collector counterparts.

The minimum spacing between two collector roadways in suburban areas of Illinois is ½ or 1 mile typically. In a densely populated urban area, two collector roadways might be found at ¼ mile spacing or less, but in most areas within the Chicago metropolitan region ¼ mile is considered an absolute minimum and requires significant justification in terms of the traffic patterns and land uses served. An exception is the case of paired one-way roads serving traffic moving in the opposite direction of each other. Projects on roadways with a minor collector functional classification and located outside of the adjusted urbanized area boundary are not eligible for federal-aid funding.

Local/residential roads primarily provide access to private properties and connect with higher classified routes. Design speeds are low, stub sections are common, and the main consideration is given to access needs. They offer the lowest level of mobility, have the shortest trip lengths, and through traffic is often deliberately discouraged. Local roads and streets are typically not eligible for federal-aid funding, though some bicycle and pedestrian projects on local roads and streets may be eligible for federal-aid funding.

Average daily traffic (ADT) data for the Village of Glen Ellyn network was obtained from the following two resources:

- Illinois Department of Transportation (IDOT) transportation management system:
<http://www.gettingaroundillinois.com/gai.htm?mt=aadt>.
- IDOT Traffic Count Database Systems:
<https://idot.ms2soft.com/tcds/tsearch.asp?loc=Idot&mod=>

The maximum traffic volume in the Village's network is 7,850 vehicles per day. Figure 2 shows the annual average daily traffic (AADT) data for the individual pavement sections.

Table 1. Village of Glen Ellyn's roadway network distribution.

Network/Functional Class	Length	Unit	Maximum AADT in 2021	Minimum AADT in 2021
Arterial	2.14	Miles	7,000	4,850
Collector	12.39	miles	7,850	300
Residential	74.29	miles	3,950	300
Total Network	88.82	miles		

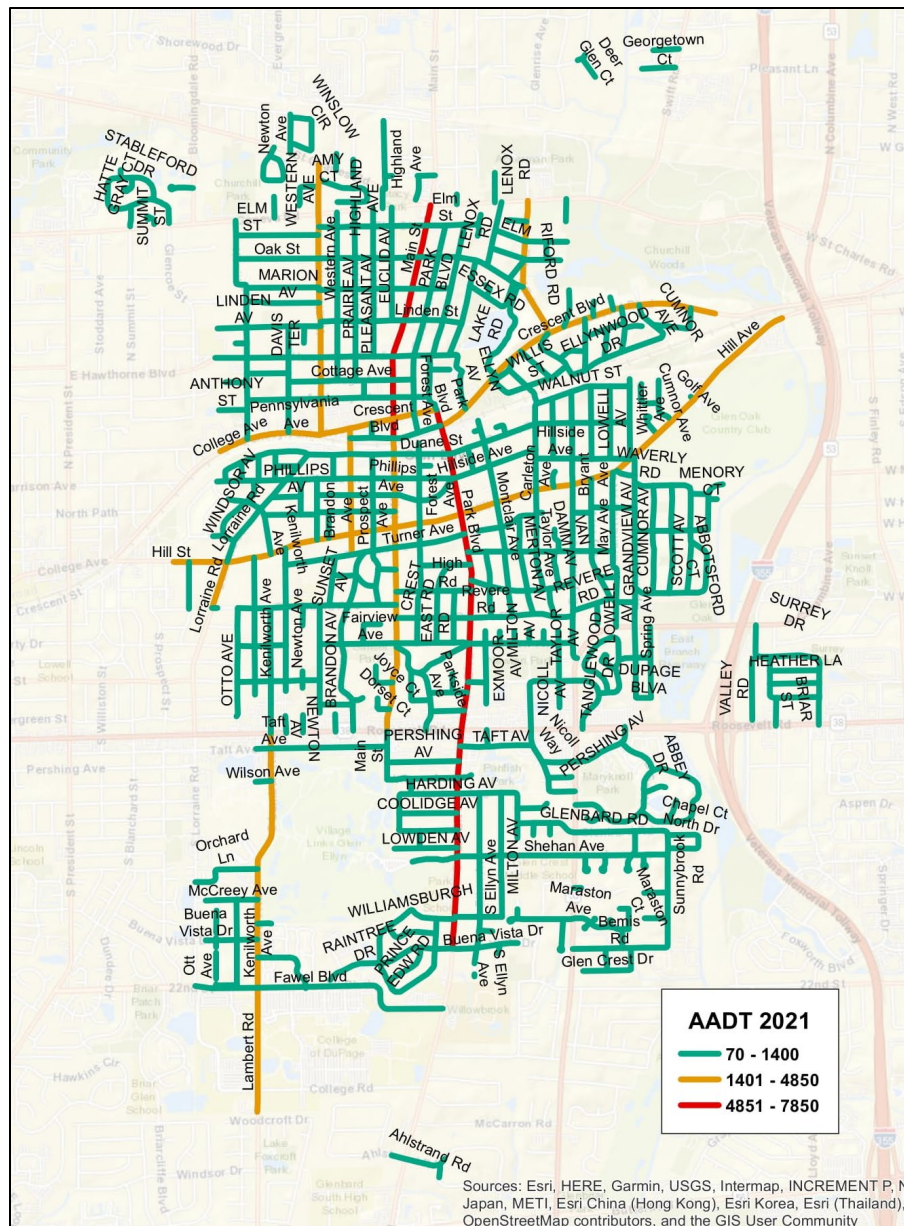


Figure 2. Village of Glen Ellyn's annual average daily traffic data.

2. FIELD DATA COLLECTION AND ASSESSMENT

2.1 Digital Survey Vehicle (DSV)

ARA collected geo-referenced images of the entire Village of Glen Ellyn roadway network using the DSV between April 14th and May 2nd, 2021. ARA's DSV equipped with the Laser Crack Measurement System (LCMS), shown in Figure 3, captures images at 20-ft intervals. Each image is linearly referenced with the DSV's onboard distance measuring instrument (DMI) and associated global positioning system (GPS) coordinates. For two-lane Village highways, ARA collected images in a single direction. In four-lane pavement sections, data was collected in the outermost lane in both directions.

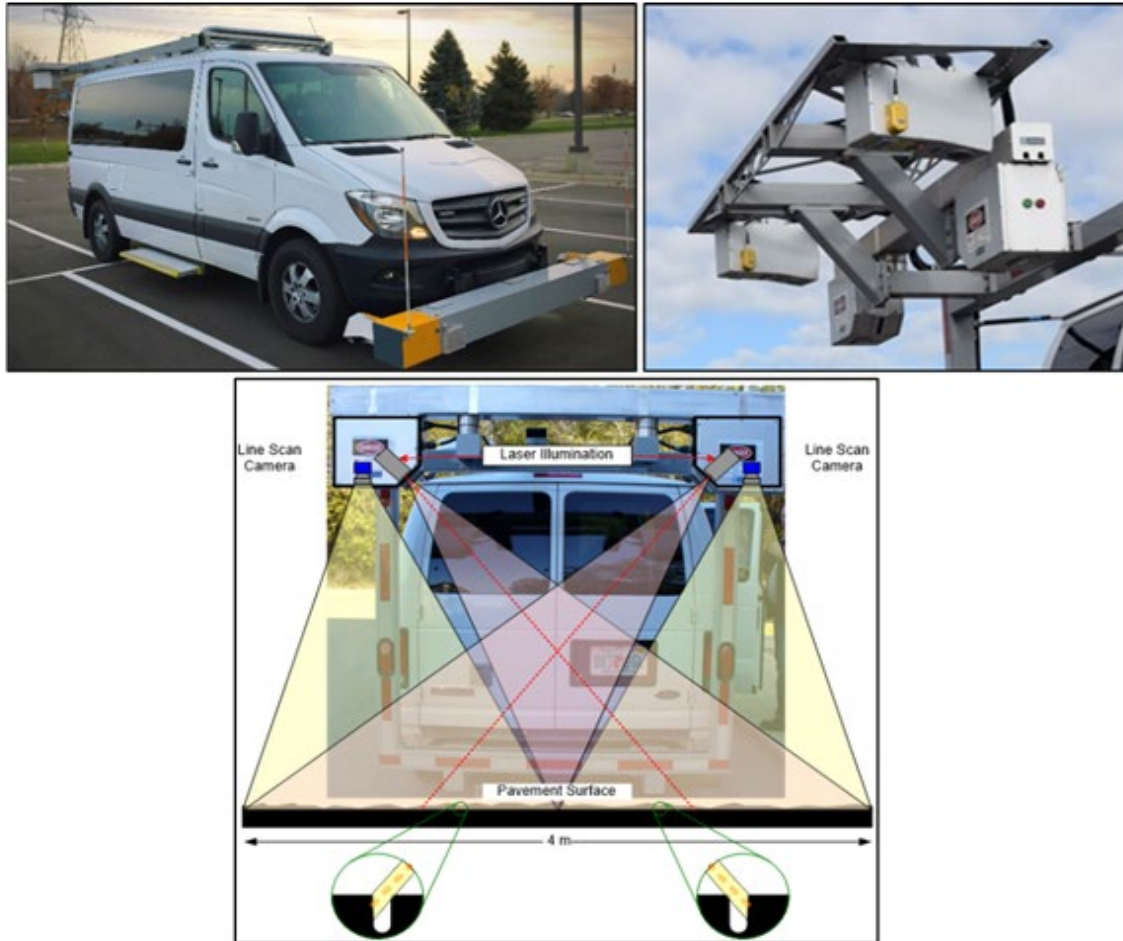


Figure 3. ARA's Laser Crack Measurement System (LCMS).

The LCMS captures enhanced right-of-way images using a right-of-way camera system. The images were used to assess the surface condition of pavements using the Pavement Condition Index (PCI) methodology per ASTM D6433. In addition to the images, International Roughness Index (IRI) and rutting information were collected using a high-speed laser profiling sensor for all the segments. The weighted average IRI value of the Village network is 264 inch/mile, which indicates the network is in 'Unacceptable' condition in terms of pavement roughness. See Figure 4 for the rating scale of IRI values. IRI is an index to express pavement roughness, which is an expression of the irregularities in a pavement surface that adversely affect the ride quality of a vehicle.

IRI (in/mile)	Condition
0 – 95	Smooth
96 – 170	Marginal
171 – 220	Rough
Over 220	Unacceptable

Figure 4: Pavement condition rating scale based on IRI values.

2.2 Pavement Condition Index Procedure

Pavement Condition Index (PCI) is a measurement of pavement condition which ranges from 0 to 100. This is an industry standard defined in ASTM D6433. A newly constructed pavement will have a PCI of 100 whereas a failed pavement will have a PCI of 10 or less. After construction, PCI starts to deteriorate with time due to traffic loads and volumes, climate, construction materials, and age. Examples of common traffic load-related distress are fatigue cracking, corner break, etc. whereas block cracking, longitudinal and transverse cracking, etc. are climate-related distresses.

PCI Value	Pavement Rating
100	Good
85	
70	Satisfactory
55	
40	Fair
25	
10	Poor
0	
	Very Poor
	Serious
	Failed

Figure 5. Pavement condition category based on the PCI value.

A PCI survey allows users to compare all pavements on a common scale and provides an index for monitoring pavement deterioration and treatment selection during the PMS analysis. Typically, PCI surveys are conducted foot-on-ground in the field. The modified version allows the use of digital images to perform the survey in an office environment and still provides the highest detail of distress rating.

ARA's LCMS system identifies the pavement distresses and reports the type, severity, and extent of key pavement distresses, as shown in Figure 6. Some sample pavement surface images with representative PCI values are shown in Figure 7 and Figure 8.

Ten percent of the surveyed sections were subjected to an internal quality assurance survey by an independent surveyor. After completion of the PCI calculation, visual checks were performed to ensure that the PCI values are representative of the surveyed images.

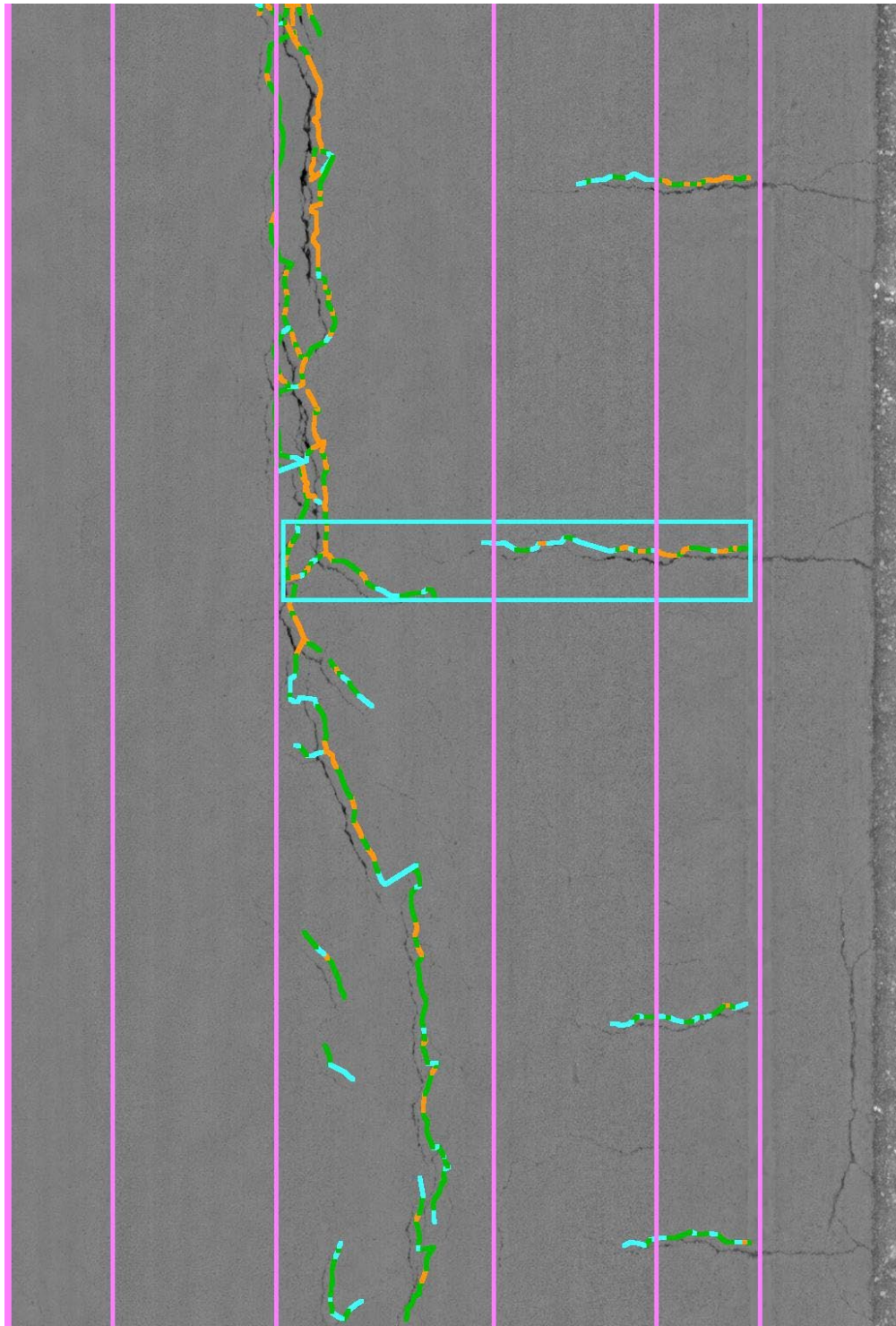


Figure 6. Pavement distress detection using LCMS system.

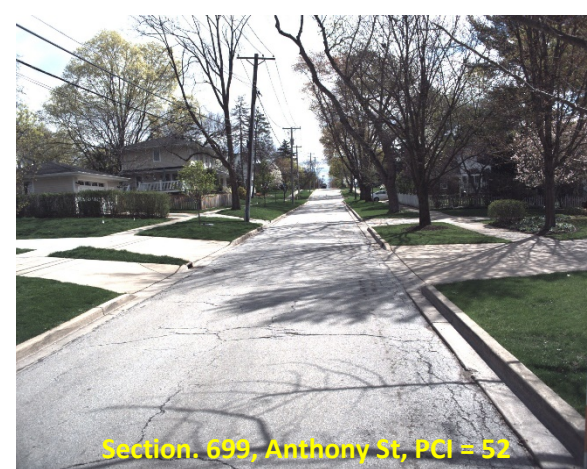
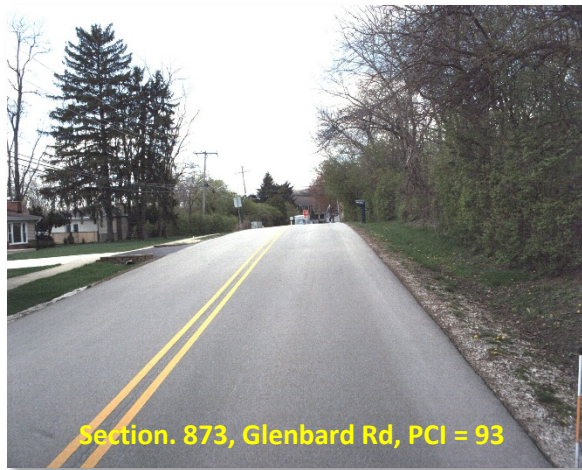


Figure 7. Sample pavement images with different PCI values ('Good' - 'Serious').



Figure 8: Sample pavement image with 'Failed' PCI value.

2.3 Pavement Network and Current Condition

After performing an automated condition survey with the collected images, the inspection data was imported into the PAVER™ software. As mentioned earlier, two (2) sections listed below were not inspected because they were either inaccessible or an intersection.

- Lombard Ave – Section ID: 0539 – 0.07 mi – Inaccessible.
- Pershing Ave– Section ID: 0844 – 0.01 mi – Intersection.

Based on the April 2021 pavement condition survey, the weighted average PCI of the network is 72.6, which represents a pavement network is in “Satisfactory” condition. ARA discussed the results of the PCI survey on June 9, 2021. Table 2 shows the pavement condition, percent area, number of sections, and number of sections by pavement surface type.

Table 2. Pavement condition, percent area, and the number of sections by pavement surface type.

Surface Type	Wt. Avg PCI	Pavement Area (SqFt)	% Area	Number of Sections
Asphalt Concrete (AC)	69.5	9,571,526	85.22	813
Portland Cement Concrete (PCC)	90.5	1,659,787	14.78	131

Figure 9 shows the distribution of network pavement area based on current pavement conditions. Per the latest survey, about 1% of the network is in ‘serious’ condition, about 20% of the network is in ‘poor’

or 'very poor' condition, about 20% in 'fair' condition, and about 59% of the network is in 'satisfactory' or 'good' condition.

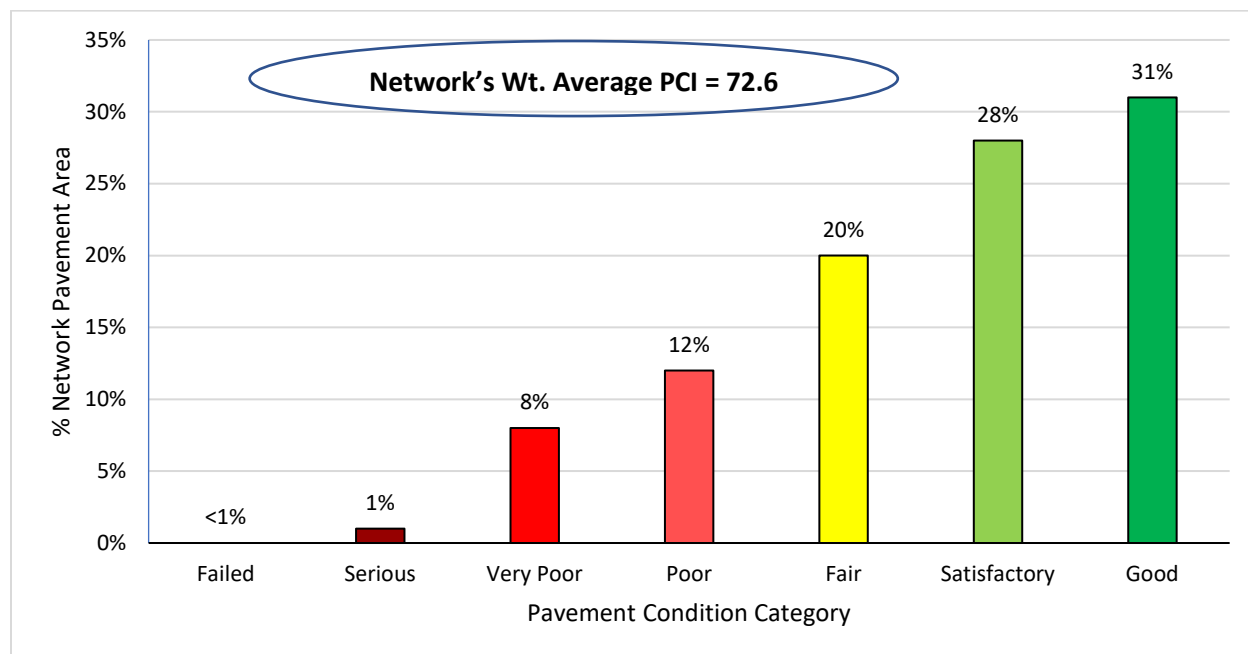


Figure 9. Distribution of network pavement area based on pavement condition.

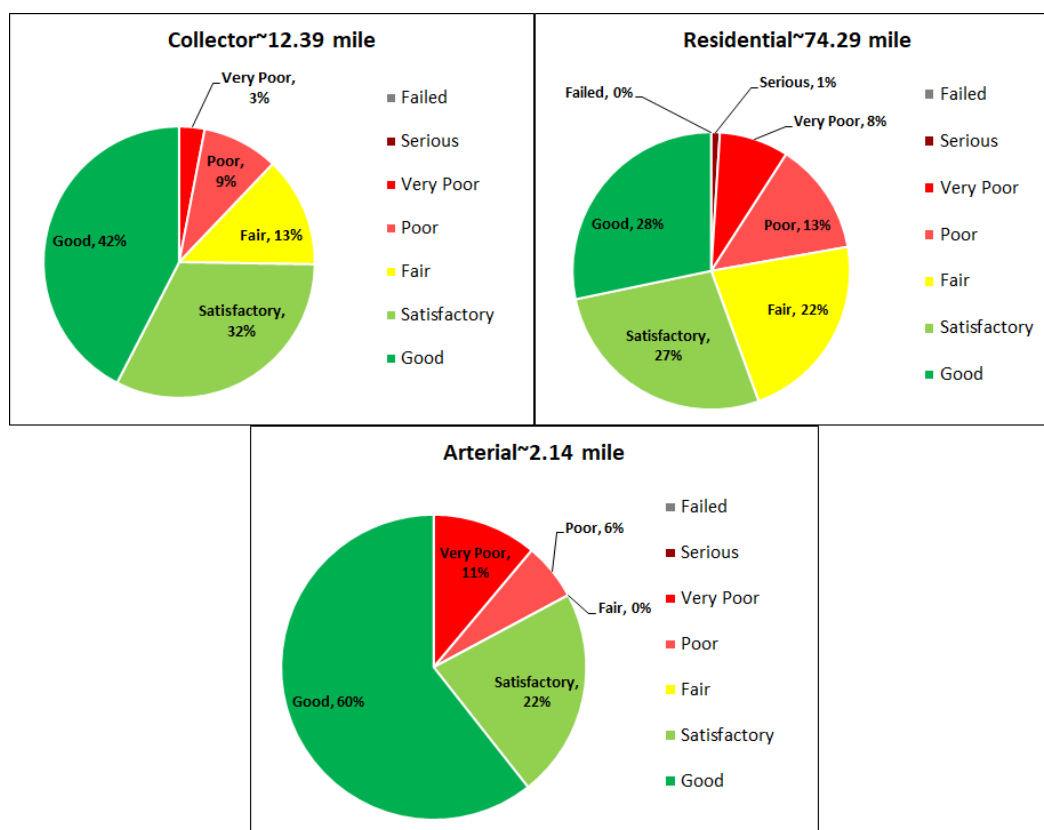


Figure 10. Pavement condition distribution based on functional class.

Figure 10 shows detailed distributions of pavement conditions among various PCI bands based on functional class. A large share (82%) of Arterial Pavements are in “Satisfactory” or better condition while other functional classes have smaller percentages of “Good” or “Satisfactory.” It indicates that the Arterial roads are maintained with their due importance. However, Figure 10 does indicate that there are roads in “Poor” and “Very Poor” categories in every functional class. Roads that are in “Satisfactory” or “Fair” category have the potential of profiting the most from a pavement management program.

Figure 11 shows the average pavement condition based on functional class. The collector pavement sections comprise about 18.2% of the network by pavement area and are in “Satisfactory” condition with an average PCI value of 79.2. Arterial sections constitute 2.5% of the network by pavement area and are in “Satisfactory” condition. The major part (79.3% by pavement area) of the network consists of residential streets with an average PCI value of 70.8, which marginally lies in the “Satisfactory” band. A GIS map with pavement conditions for individual segments is shown in Figure 12.

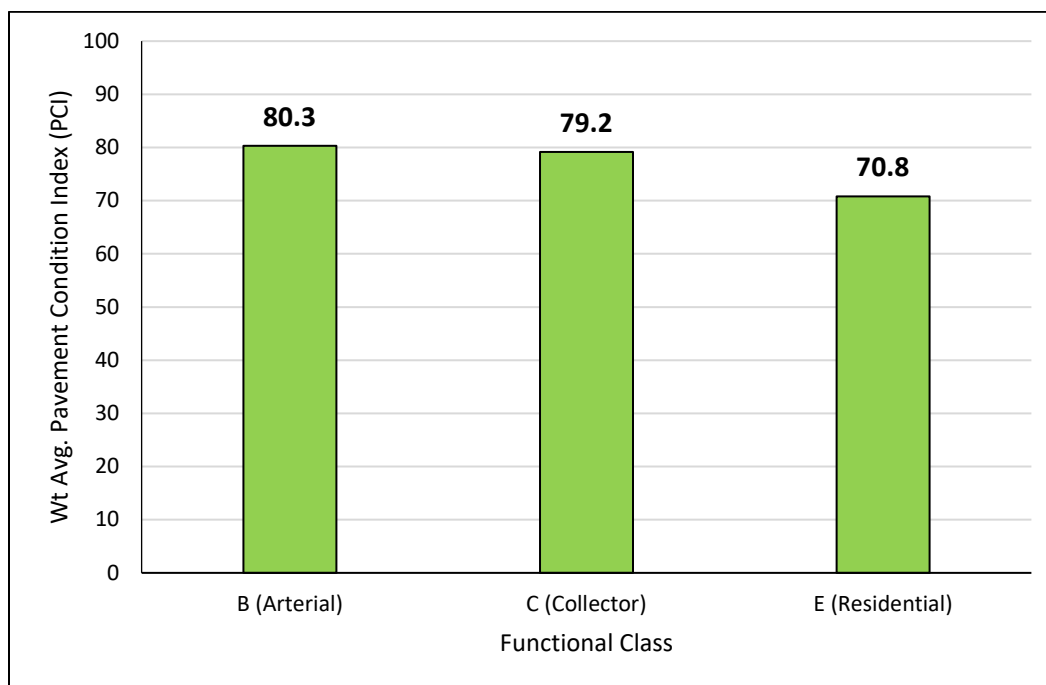


Figure 11. Average pavement condition index (PCI) based on functional class.

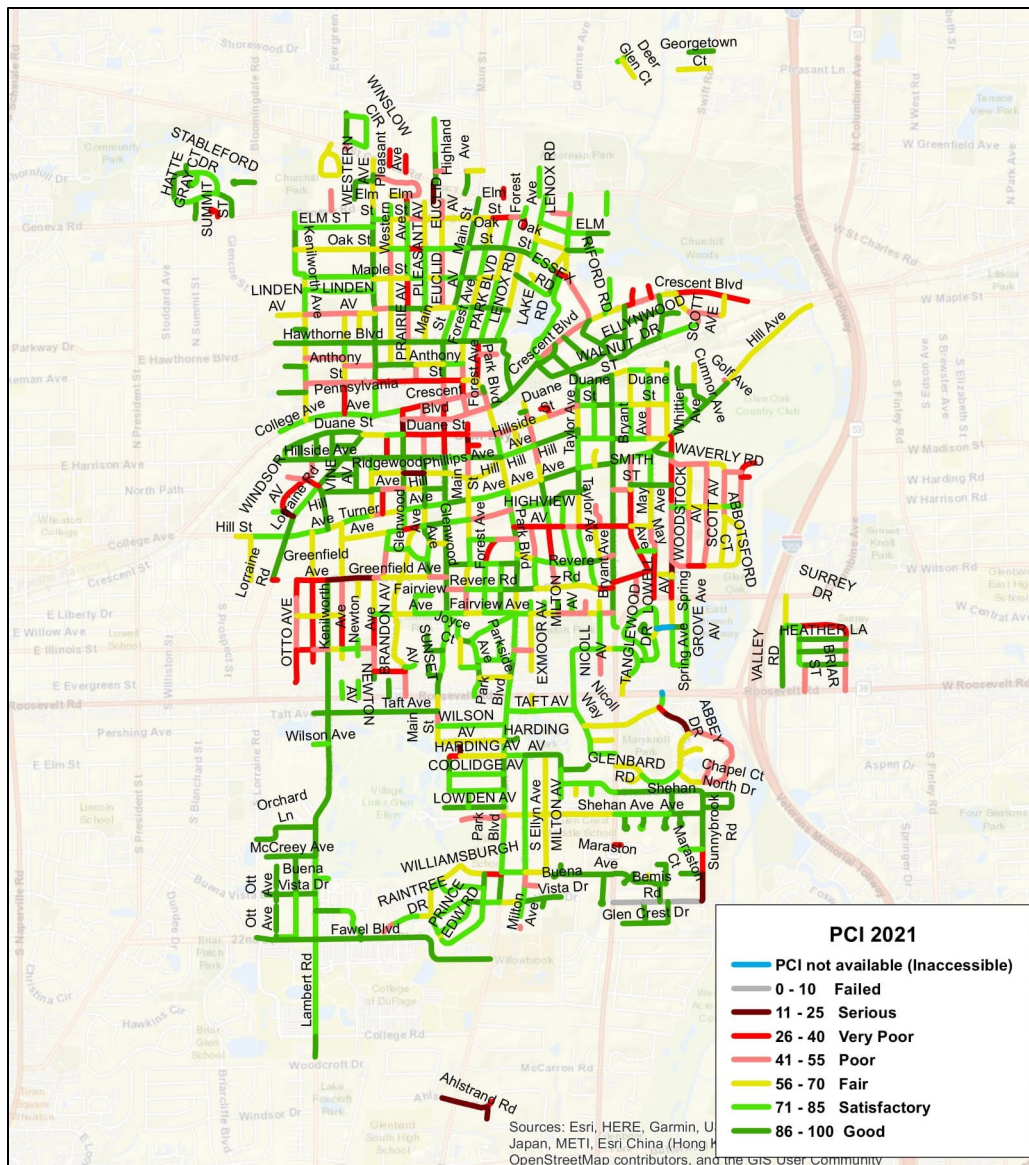


Figure 12. Village of Glen Ellyn's current pavement condition ratings.

3. PAVEMENT MANAGEMENT SYSTEM IMPLEMENTATION

ARA discussed the PMS analysis with the Village, CMAP, and AECOM on August 12, 2021. ARA discussed pavement performance models, treatment matrix, unit costs, and consequences of several funding scenarios. Based on the Village's feedback on PMS analysis, ARA prepared the PMS analysis, and results are presented in this section.

ARA used PAVER™ pavement management software to implement a pavement management system (PMS) for the Village of Glen Ellyn. PAVER™ provides pavement management capabilities to (a) develop and organize the pavement inventory, (b) assess the current condition of pavements, (c) develop models to predict future conditions, (d) report on past and future pavement performance, (e) develop scenarios for M&R based on budget or condition requirements, and (f) plan projects.

3.1 PAVER™ Pavement Management System Overview

Figure 13 shows the various modules of the PAVER™ software which includes:

- **Inventory** — The inventory module is designed based on a hierarchical structure including network, branch, and sections where a section is the smallest pavement unit managed by the agency. This structure allows users to easily organize their inventory while providing numerous fields and levels for storing pavement data.
- **Work History** — Similar to the inventory module, the work history module also follows the hierarchical structure. To update a pavement section's attribute or work history, it is required to have the network, branch, and section information.
- **Inspection** — In the inspection module, pavement can be surveyed manually or the automated survey data can be imported and modified, and finally PCI is being calculated.
- **PCI Family Model** — The PCI family model module is used to create a pavement performance model. Basically, it uses historical pavement condition and age data.
- **Condition Analysis** — The condition analysis module is used to analyze or predict the condition of the entire or part of the network. This feature reports past conditions based on prior interpolated values between previous inspections and projected conditions based on prediction models.
- **M&R Family Models** — M&R Family Models module is used to select treatment, treatment consequences, unit costs, and treatment matrix.
- **M&R Working Plans** — M&R working plans module allows creating multi-year network and project level M&R planning, scheduling, and budgeting. This module allows the users to create a consequence of the current funding level and generates funding scenarios for targeted PCI, backlog eliminations, etc.
- **Reports** — This module facilitates the generation of summary charts, latest condition maps, and user-defined reports. The users can pick and choose the attributes fields to create a report.

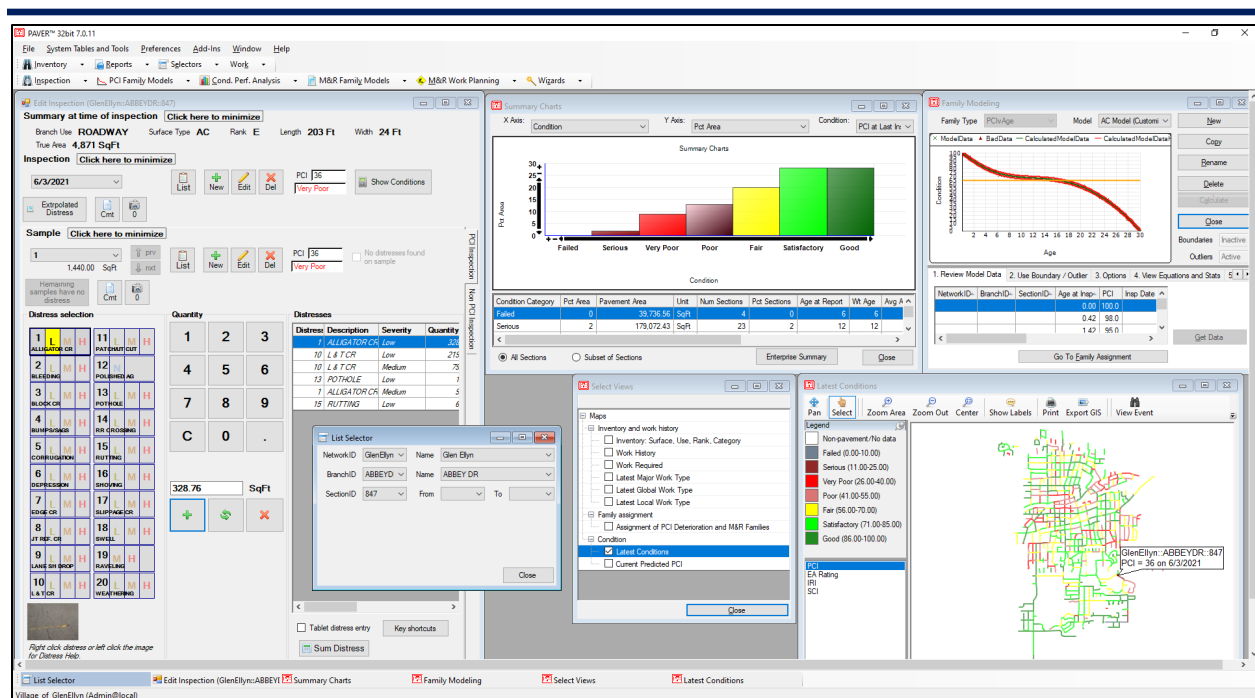


Figure 13. PAVER™ overview.

3.2 Pavement Performance Model

A PMS is only useful for making decisions if performance models can be established, validated, and relied upon to accurately forecast pavement conditions into the future. A pavement performance model is developed based on the date of construction for new pavement and the date of resurfacing for an overlay or mill and overlay, the types and thicknesses of pavement materials, the traffic level, and the pavement condition. The pavement performance model becomes more accurate with multiple pavement condition ratings, as the model gets calibrated and adjusted to match the conditions present at the time in a pavement's life cycle.

The PCI Family Models module in PAVER™ helps to identify and group pavements of similar construction that are subjected to similar traffic, weather, and other factors affecting pavement performance. The pavement condition historical data are used to build a model that can accurately predict the future performance of a group of pavements with similar attributes.

For the Village of Glen Ellyn, a PCI family model was developed both for the asphalt (AC) surfaced and concrete (PCC) surfaced pavements. The AC pavement performance model was developed based on the age data provided by the village and the latest PCI conditions. The reliability of the pavement performance models is expected to increase with future pavement inspection and age data. Figure 14 shows the PCI family model used for the AC pavements and Figure 15 for the PCC pavements.

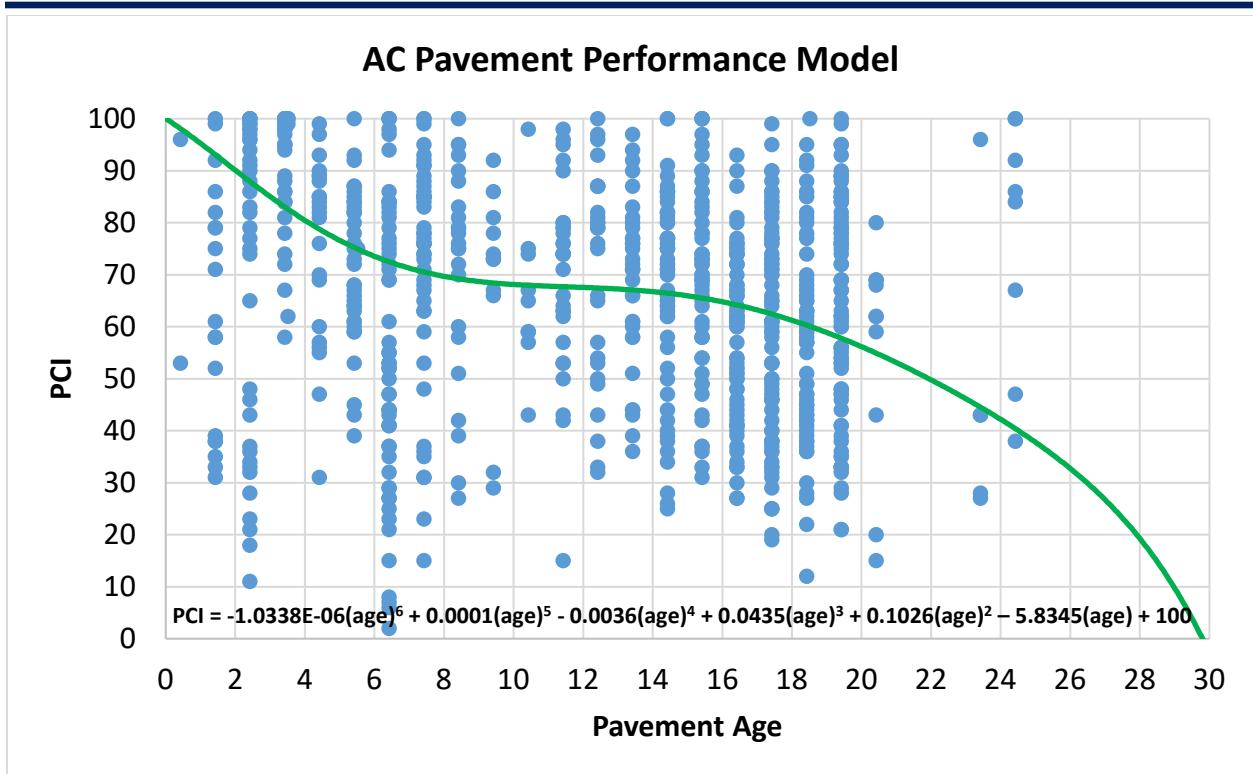


Figure 14. PCI family model for asphalt surfaced streets.

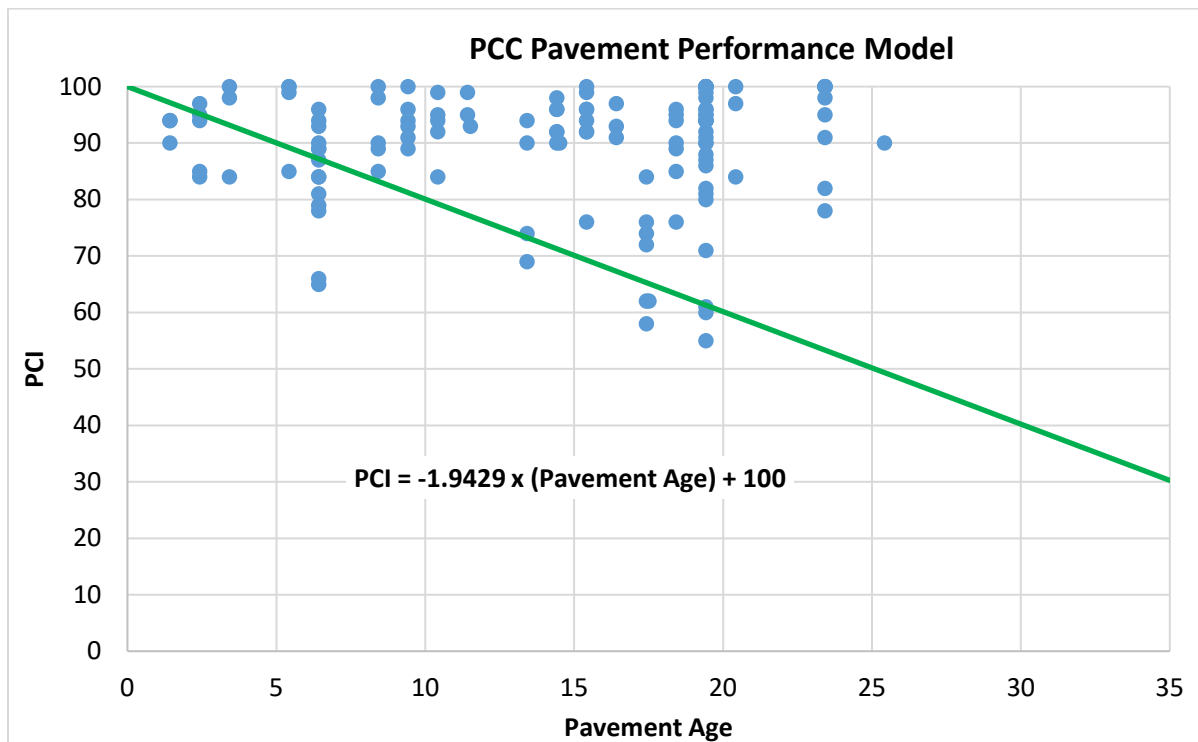


Figure 15: PCI family model for concrete surfaced streets.

3.3 Treatment Matrix

Based on the pavement preservation and rehabilitation techniques currently used in the Village of Glen Ellyn, and discussion with the Village, ARA developed a treatment matrix that defines when a treatment will be performed based on PCI values and functional class. In PAVER™, critical PCI is defined as the PCI value at which the rate of PCI loss increases with time and the cost of applying localized preventive maintenance increases significantly. The M&R Family Assignment Tool is used to designate sections to receive specific M&R work, including:

- Localized Stopgap
- Localized Preventive, and
- Major M&R

The *Localized Stopgap* (PCI<Critical) option is used to indicate the use of Safety M&R policies, which allows PAVER™ to plan localized stopgap M&R work (pothole filling, etc.) on areas where the PCI is below the critical level. The *Localized Preventive* M&R (PCI>= Critical) option allows PAVER™ to plan M&R work in localized areas where the PCI is above critical. In this option, life-extending credit, in years, can be given to any localized preventive work. Applying any preventive work where the PCI is still above critical will save money and improve the pavement life. The *Major M&R* option allows PAVER™ to plan any overlay or other major work where the resulting pavement has a PCI of 100.

Table 3. Treatment matrix for the Village of Glen Ellyn's Residential Roads (AC).

Treatment Matrix for Residential Roads (AC)			
PCI	Localized Preventive	Localized Stop Gap	Major M&R
0	No Localized Preventive Treatment Recommended	Patching and Repair	Reconstruction
30			4.0" Mill & Overlay (Type IB Equivalent)
50			3.0" Mill & Overlay (Type IA Equivalent)
60			
100	Crack Seal and Distress Repair	No Localized Stop Gap/ Major M&R Recommended	

Table 4. Treatment matrix for the Village of Glen Ellyn's Arterial/ Collector (AC) Roads.

Treatment Matrix for Arterial/Collector Roads			
PCI	Localized Preventive	Localized Stop Gap	Major M&R
0 30	No Localized Preventive Treatment Recommended	Patching and Repair	Reconstruction
50			5.0" Mill & Overlay (Type IC Equivalent)
65			4.0" Mill & Overlay (Type IB Equivalent)
100	Crack Seal and Distress Repair	No Localized Stop Gap/ Major M&R Recommended	

As observed in Table 3 and Table 4, Residential pavement sections with PCI greater than 60 and Collector pavement sections with PCI greater than 65 are selected for localized preventive treatments such as crack sealing or distress repair. These PCI values are the critical values set for pavements based on their levels of importance (Functional Class). Sections with PCI values falling below the critical PCI values are assigned to stopgap works such as patching and repair. The stopgap candidates are already eligible for major M&R work as long as funding is available. PAVERTM assigns major M&R works to a subset of the below critical sections depending on the availability of funding. The 3-inch and 4-inch Mill and Overlays are considered for the Residential Roads below PCI of 60 and 50 respectively. The Collector roads are set to receive 4-inch Mill and overlay a little early (as soon as the PCI drops below 65) and 4-inch Mill and Overlay below 50.

Table 5: Treatment matrix for the village's PCC roads.

PCI Value	PCC Treatments
0 40	Reconstruction
70	Slab Replacement
85	Crack Seal & Distress Repair

Table 5 displays the treatment matrix used for PCC segments regardless of their functional classes. PCC pavements falling below 85 were set for minimal maintenance activities while those falling below 70 were set to receive slab replacement. Pavements falling below 40 were set for Reconstruction.

3.4 Unit Costs

ARA used the unit costs presented in Table 6 for developing different budget scenarios and a Capital Improvement Plan (CIP). Some of the costs were directly provided by the Village. Some of these costs were discussed with the Village during the PMS analysis results meeting on August 12, 2021. The Village reviewed and approved the unit costs. Costs were determined based on a square yard or linear foot basis. The unit costs used for PAVER™ analysis are shown in Table 6. To run the PMS analysis in the future, the unit costs can be updated based on the available unit price of materials and construction.

Table 6. Treatment unit costs for the Village of Glen Ellyn.

Treatment Type	Unit Cost	Note
Distress Repair & Crack Seal-AC	\$ 1.65/ft.	Typical
3.00" Mill and Overlay-AC (Type IA Equivalent)	\$ 27.50/SY	Cost specific to Glen Ellyn
4.00" Mill and Overlay-AC (Type IB Equivalent)	\$ 38.50/SY	Cost specific to Glen Ellyn
5.00" Mill and Overlay-AC (Type IC Equivalent)	\$ 82.53/SY	Cost specific to Glen Ellyn
Partial Depth Patching-AC	\$ 22.00/SY	Assumed "Skip Patching"
Full Depth Patching-AC	\$ 55.44/SY	Typical
Reconstruction-AC	\$ 275.00/SY	Cost specific to Glen Ellyn
Crack Seal-PCC	\$ 1.65/ft.	Typical
Joint Seal (Localized)	\$ 1.65/ft.	Typical
Treatment Type	Unit Cost	Note
Joint Seal - Silicon	\$ 1.65/ft.	Typical
Grinding (Localized)	\$ 4.40/ft.	Typical
Patching - PCC Full Depth	\$ 247.50/SY	Typical
Patching - PCC Partial Depth	\$ 69.30/SY	Typical
Slab Replacement-PCC	\$ 148.50/SY	Typical
Reconstruction-PCC	\$ 275.00/SY	Cost specific to Glen Ellyn

3.5 Annual Budget

The Village of Glen Ellyn provided its annual budget from 2022-2031 as shown below:

- 2022 - \$8,840,767
- 2023 - \$3,811,173
- 2024 - \$3,121,539
- 2025 - \$5,273,364
- 2026 - \$5,343,621
- 2027 - \$6,492,088

- 2028 - \$6,474,142
- 2029 - \$3,817,072
- 2030 - \$2,958,768
- 2031 - \$3,253,915

Per discussion with the village, ARA allocated 15% of the budget for preventive maintenance activities each year and 85% for Major M&R activities. The assumed budget allocation from 2022 to 2031 is shown below in Figure 16.

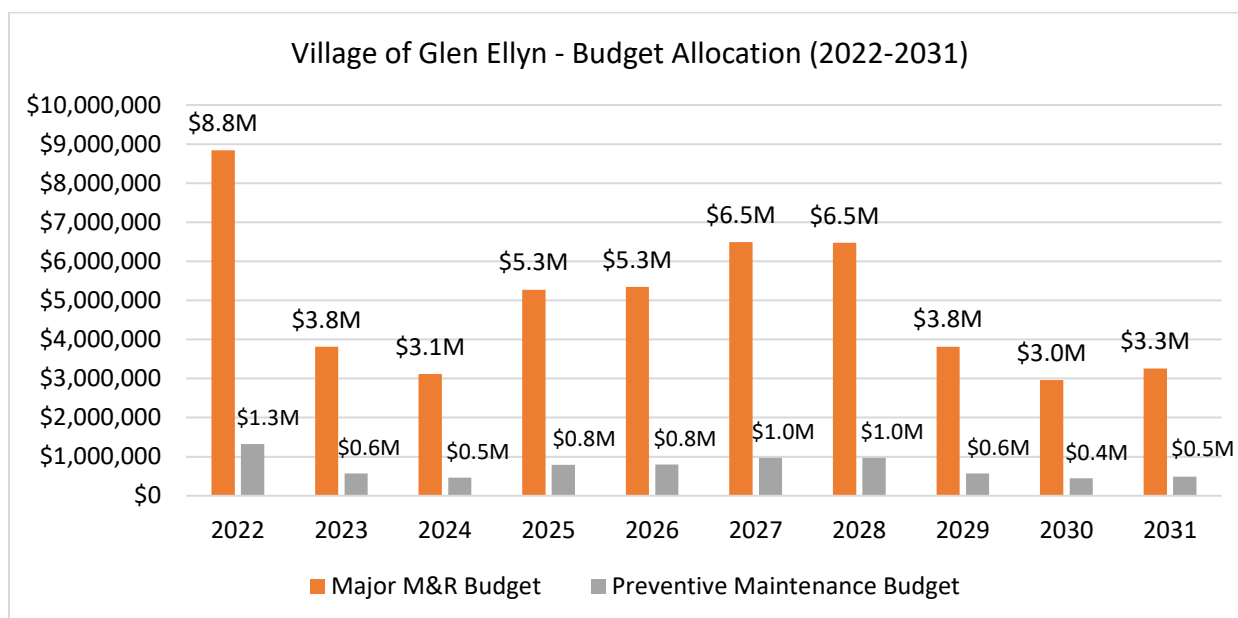


Figure 16. Assumed budget allocation for 10 years (2022-2031).

4. MAINTENANCE AND REHABILITATION ANALYSIS

Maintenance and rehabilitation (M&R) analysis can be performed in PAVER™ to generate an optimized work plan by assuming an annual funding level or by specifying a target PCI.

For the Village of Glen Ellyn, the M&R funding analyses were based on the roadway inventory approved by the Village, unit costs discussed with the Village, and the Village's existing Major M&R policies were used in the analyses. An inflation rate of 5% was used for all analyses. PCI family curves were developed based on existing pavement age and collected condition data. The critical PCI value was set to 60 for Residential and 65 for Collector and Arterial roads. The critical PCI value represents the condition at or below which Major M&R is recommended. The following five-year M&R funding scenarios were evaluated:

- Eliminate backlogs (pavements in fair or better condition at the end of the analysis period)
- Maintain current condition (PCI = 72.6)
- Keep funding level current
- Reduced Funding
- Do nothing

4.1 Funding Scenario Results

Using the M&R Working Plans module, different funding scenarios were generated. Based on the current overall funding level (Avg. \$970K/year), it was assumed that about 15% would be allocated for stopgap, and localized preventive distress maintenance whereas about 85% would be spent on major M&R activities. Although, funding required for backlog elimination is slightly higher than that for maintaining current condition, PCI gain is not as high. However, reducing the M&R funding from the current funding level would cause the current network PCI to drop to 59.5 by 2031.

Table 7 and Figure 17 display the effect of different funding levels on the average pavement condition of the Village network. From Table 7 and Figure 17, it can be observed that the current major M&R funding level is less than what is required for maintaining the current condition over next ten years. Providing a budget to eliminate backlogs will result in an average PCI of 72.3 after ten years, while not spending any funds on the M&R program will deteriorate the network to an average PCI of 46.1 after ten years. Although, funding required for backlog elimination is slightly higher than that for maintaining current condition, PCI gain is not as high. However, reducing the M&R funding from the current funding level would cause the current network PCI to drop to 59.5 by 2031.

Table 7. Predicted PCI based on funding scenarios.

Year	Eliminate Backlogs	Maintain Current Condition	Maintain Current Fund	Reduced Funding	Do Nothing
2021	72.6	72.6	72.6	72.6	72.6
2022	74.4	74.4	74.5	74.4	70.3
2023	76.2	75.5	73.9	71.7	66.9
2024	78.9	78.4	72.5	70.8	63.5
2025	76.7	76.1	72.2	67.9	60.3
2026	75.1	74.3	70.9	65.9	57.3
2027	74.1	73.1	69.4	65.1	54.5
2028	73.3	72.2	68.3	63.4	52.1
2029	72.8	71.6	67.3	61.7	49.9
2030	72.4	71.1	66.3	60.3	47.9
2031	72.3	71.0	65.8	59.5	46.1

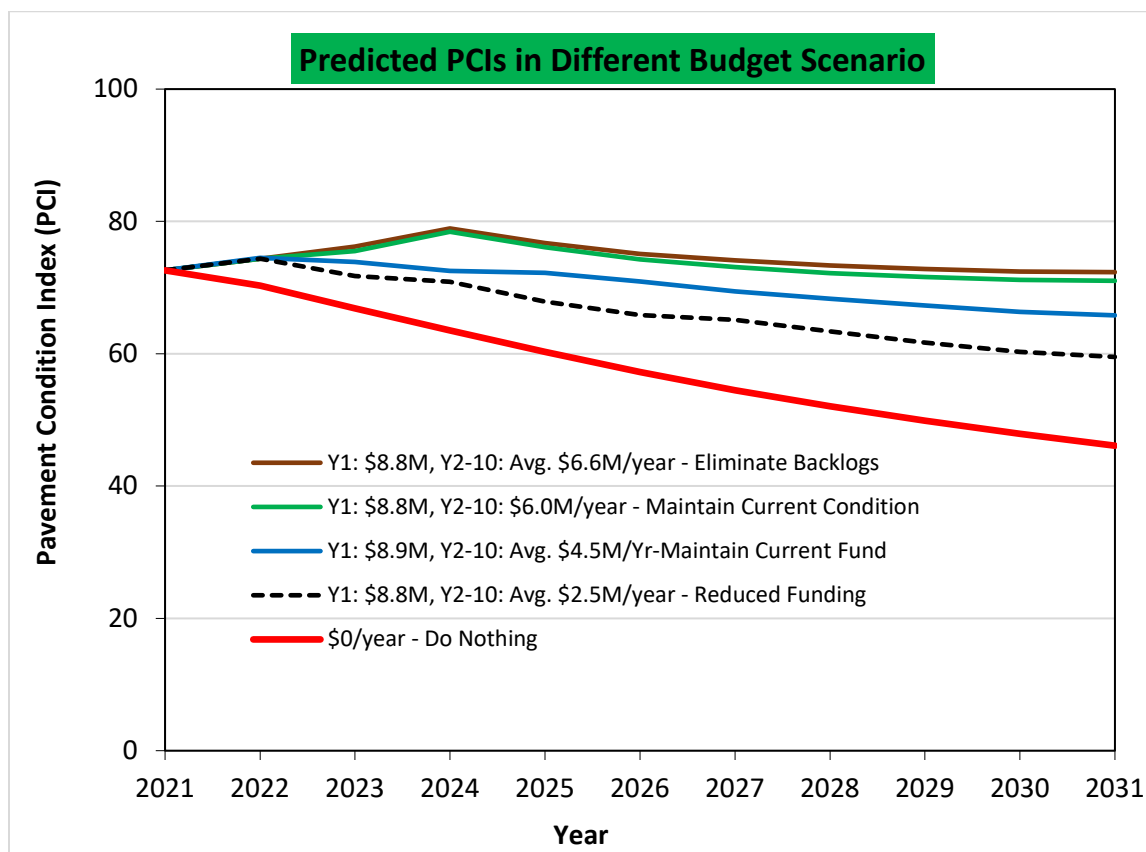
**Figure 17. Effect of funding level on Village's pavement condition.**

Table 8 and Figure 18 show the amount of funding required to achieve target PCI values for the various funding scenarios. To eliminate backlogs, it is required to invest about \$8.8M/year in 2022 for major M&R and about \$6.6M/year in the remaining years of the ten year period. Maintaining the current M&R funding (Y1: \$8.9M, Y2-10: Avg. \$4.5M/Yr) will result in a PCI of 65.8 by 2031.

Table 8. Total funded budget requirements per year based on funding scenarios.

Year	Eliminate Backlogs	Maintain Current Condition	Maintain Current Fund	Reduced Funding	Do Nothing
2022	\$8,840,767	\$8,840,767	\$8,938,115	\$8,840,767	\$0.00
2023	\$6,682,343	\$6,082,745	\$3,808,936	\$2,498,893	\$0.00
2024	\$6,655,282	\$6,086,665	\$3,115,256	\$2,498,223	\$0.00
2025	\$6,675,840	\$6,074,200	\$5,273,279	\$2,489,476	\$0.00
2026	\$6,660,978	\$6,085,038	\$5,335,377	\$2,498,626	\$0.00
2027	\$6,652,180	\$6,082,630	\$6,487,272	\$2,479,680	\$0.00
2028	\$6,676,219	\$6,081,348	\$6,460,229	\$2,479,390	\$0.00
2029	\$6,680,298	\$6,085,769	\$3,805,942	\$2,491,735	\$0.00
2030	\$6,683,021	\$6,087,132	\$2,939,746	\$2,467,234	\$0.00
2031	\$6,442,679	\$6,085,128	\$3,253,807	\$2,495,702	\$0.00

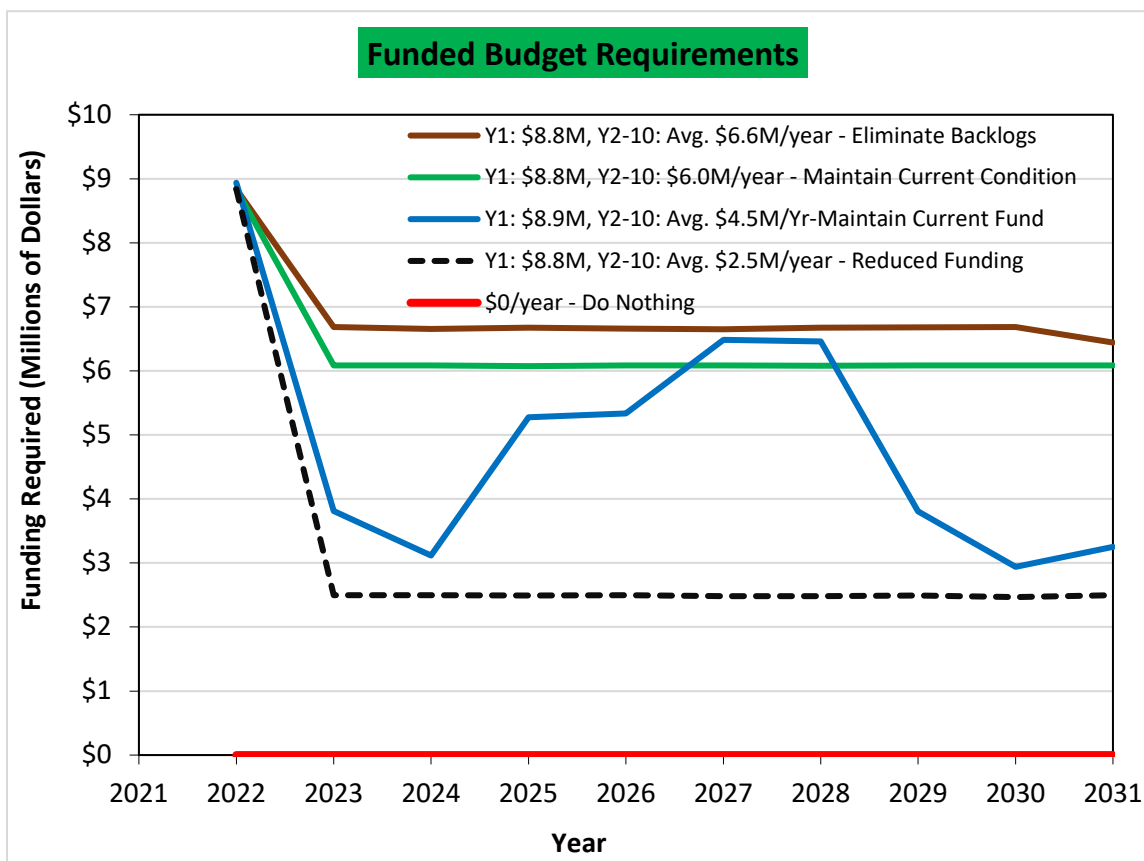
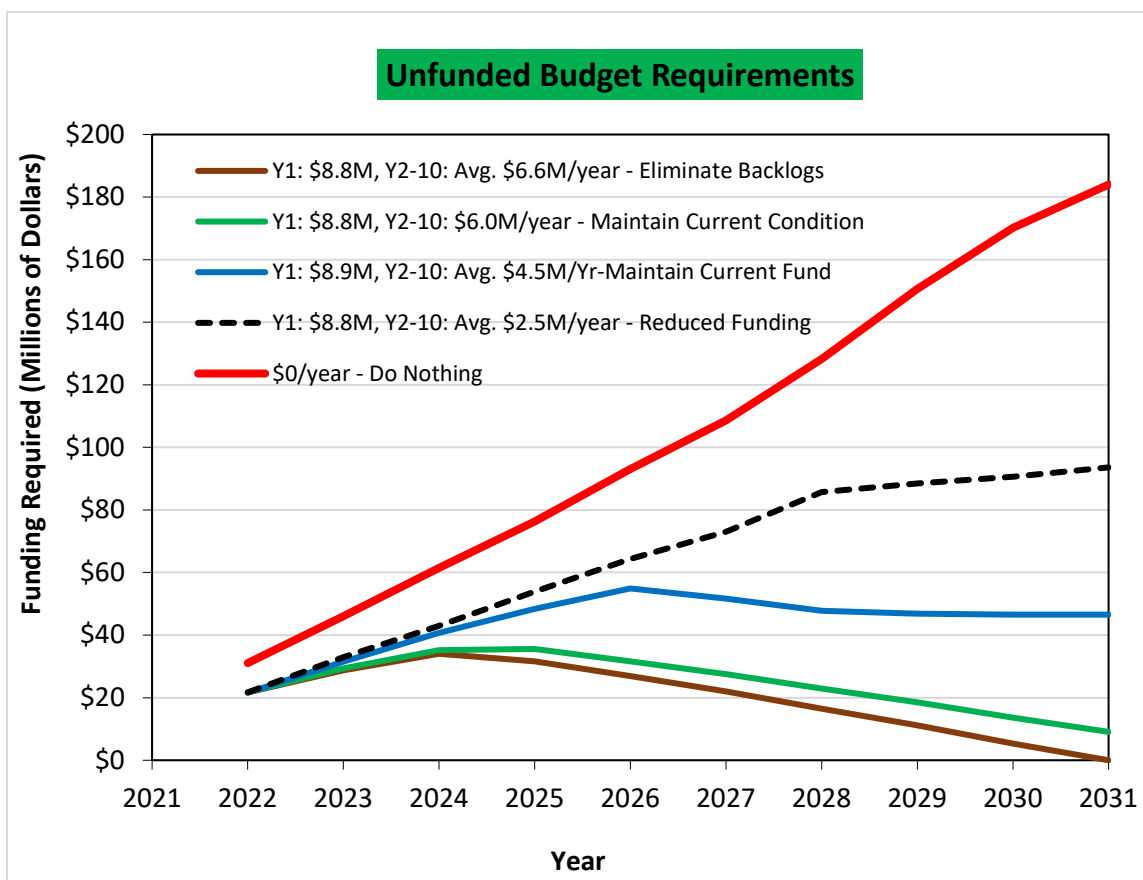
**Figure 18. Total funded budget requirements per year based on funding scenarios.**

Table 9 and Figure 19 show the total unfunded budget per year based on the funding scenarios. It can be seen that about \$21.7M is required in 2022 to eliminate the backlogs, while doing nothing will generate a backlog of \$184.0M by 2031. Current major M&R funding will sustain a backlog of \$46.5M by 2031.

Table 9. Total unfunded budget requirements per year based on funding scenarios.

Year	Eliminate Backlogs	Maintain Current Condition	Maintain Current Fund	Reduced Funding	Do Nothing
2022	\$21,691,046	\$21,691,046	\$21,593,698	\$21,691,046	\$31,060,519
2023	\$28,729,137	\$29,328,735	\$31,480,379	\$32,912,588	\$46,021,116
2024	\$34,031,324	\$35,228,284	\$40,711,294	\$43,003,258	\$61,477,842
2025	\$31,596,104	\$35,571,762	\$48,415,767	\$53,954,379	\$76,314,740
2026	\$26,860,287	\$31,610,668	\$54,913,415	\$64,360,232	\$93,094,537
2027	\$22,004,149	\$27,561,600	\$51,624,842	\$73,054,978	\$108,654,278
2028	\$16,473,212	\$22,903,406	\$47,790,929	\$85,688,971	\$128,224,218
2029	\$11,133,894	\$18,480,127	\$46,891,854	\$88,439,652	\$150,626,392
2030	\$5,289,724	\$13,599,156	\$46,578,856	\$90,676,555	\$170,167,153
2031	\$0	\$9,082,455	\$46,542,461	\$93,603,150	\$183,990,274

**Figure 19. Total unfunded budget requirements per year based on funding scenarios.**

The 10-Year major M&R plan based on the eliminate backlogs, current funding, anticipated funding, and 2021 localized distress maintenance plans are provided in Appendix A. Figure 20 shows the network condition distribution for the next ten years with the current funding level. Currently, about 9% of the

pavement network is in 'Very Poor' or 'Serious' condition. With current funding, the average PCI of the network is expected to be 65.8 in 2031; a decrease of 6.8 PCI points from the 2021 average PCI.

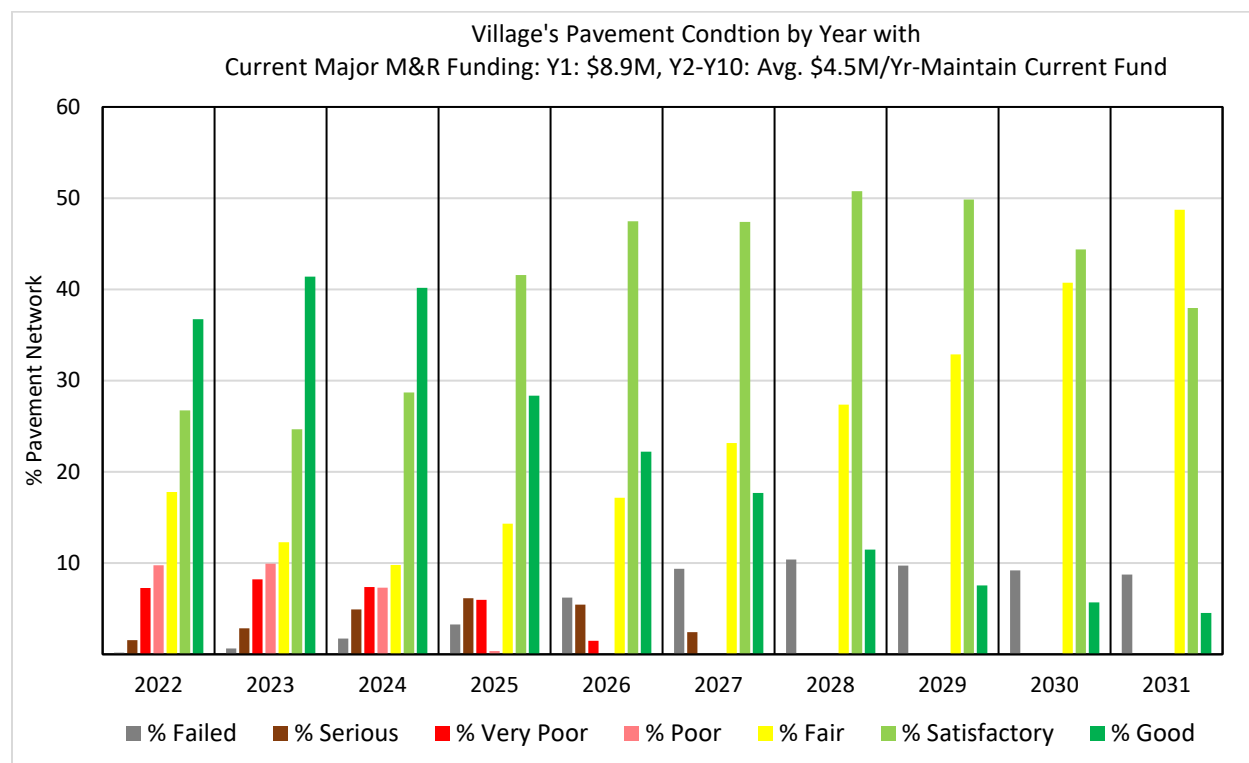


Figure 20. Pavement condition by year with current major M&R funding.

Based on the most recent inspection, about 79% of the network is "Fair" or better condition. However, the analysis suggests that if proper pavement management strategies are followed, about 91% (Figure 20) of the network will be in "Fair" or better condition by 2031 with the current funding. Table 10 presents the total ten year costs for the funded projects and the remaining M&R backlogs in 2031.

Table 10. Total 10-Year Costs for Various Funding Scenarios

Funding Scenario	Total 10-Year M&R Costs (2022-2031)	Remaining M&R Backlogs in 2031	Total 10-Year Costs	Predicted PCI 2031
Y1: \$8.8M, Y2-10: Avg. \$6.6M/year - Eliminate Backlogs	\$68.6 M	\$0	\$68.6 M	72.3
Y1: \$8.8M, Y2-10: \$6.0M/year - Maintain Current Condition	\$63.6 M	\$9.1 M	\$72.7 M	71.0
Y1: \$8.9M, Y2-10: Avg. \$4.5M/Yr-Maintain Current Fund	\$49.4 M	\$46.5 M	\$96. M	65.8
Y1: \$8.8M, Y2-10: Avg. \$2.5M/year - Reduced Funding	\$31.2 M	\$93.6 M	\$124.8 M	59.5
\$0/year - Do Nothing	\$0	\$184.0 M	\$184.0 M	46.1

1. 'M&R Backlogs' refers to the amount required to resurface/reconstruct all pavements at or below their critical PCI value.
2. 'Total 10-Year Costs' refers to the sum of 10-year major M&R expenses and remaining backlogs at the end of 10-year period.
3. Current network weighted average PCI is 72.6

4.2 Consequence of Localized Distress Maintenance

The consequence of a localized distress maintenance plan calculates the cost and resulting condition of immediate implementation of local M&R, for the year of the most recent inspection. Based on the 2021 pavement condition survey, the localized preventive plan estimated that PCI of 487 sections would increase by 7.0 points with an investment of \$390,186. Similarly, the localized stopgap plan estimated that PCI of 143 sections would increase by 5.3 points with an investment of \$33,792. The details of the localized distress maintenance plan based on the 2021 condition survey can be found in Appendix A. Table 11 shows the cost and pavement condition data of the consequence of the localized distress maintenance plan. Table 12 shows the details of the local distress maintenance plan for 2022.

Table 11. Details of the consequence of local distress maintenance plan

Number Sections	Policy Cost	Wt. Avg. of PCI before Maintenance	Wt. Avg. of PCI after Maintenance
487 (Localized Preventive)	\$390,186	79.6	86.6
143 (Localized Stopgap)	\$33,792	45.6	50.9

Table 12. Details of the local distress maintenance plan 2022

Work Description	Work Quantity	Work Units	Work Cost
Crack Sealing – AC & PCC	59,090	Ft	\$97,499
Patching (Shallow) - AC & PCC	66,225	SqFt	\$214,727
Patching (Deep) - AC & PCC	14,724	SqFt	\$99,355
Grinding (Localized)	141	Ft	\$620
Slab Replacement - PCC	714	SqFt	\$11,777
Total =			\$423,978

5. SUMMARY AND RECOMMENDATION

5.1 Summary

Pavement management can be defined as the systematic process of maintaining pavements cost-effectively. The investment in pavement management system is rational considering pavement management not only provides a consistent and rational management method to make decisions but also helps in optimal use of funds and reduces pavement rehabilitation, which results in extended pavement life and increased credibility with stakeholders.

In this effort to implement a pavement management system for the Village of Glen Ellyn, pavement data was collected with a state-of-the-art digital survey vehicle equipped with a laser crack measurement system. Pavement images were used in an automated condition survey process to assess the type, severity, and extent of the distresses. The pavement inspection data was imported to the PAVER™ software to determine the pavement condition index (PCI) and analyze the pavement network. This PAVER database provides a comprehensive inventory of pavement sections with all attributes that are required for pavement management.

Based on the April 2021 survey, the average pavement condition index (PCI) value for the Village is about 72.6, which indicates the pavement network is in overall “Satisfactory” condition. Based on the Village’s recommendation, several ten-year M&R funding analyses were performed using PAVER™ including (a) do nothing (\$0/year), (b) keep funding level current (Y1: \$8.9M, Y2-10: Avg. \$4.5M/Yr), (c) reduce the current funding (Y1: \$8.8M, Y2-10: Avg. \$2.5M/year), (d) maintain current condition (f) eliminate backlogs.

It was found that the Village’s existing funding level is not adequate to maintain the current pavement condition level for the next ten years. Although the current funding is high in some years then what is required for maintaining the current network condition, it does drop occasionally from the required amount. However, this approach constantly ignores the pavements needing treatment to stay in superior condition. Pavement treatments are less expensive as well as more rewarding when the condition is still better. As soon as the condition deteriorates further, required treatments become costlier and less rewarding in terms of PCI improvement.

5.2 Recommendations

5.2.1 Better utilization of available funds by performing timely repairs

Currently, less than 0% of the network is in ‘failed’ condition, 9% of the pavement area is in ‘very poor’ or ‘serious’ condition and 12% area is in ‘poor’ condition. The backlog is expected to increase every year with the current level of funding. It was determined that about \$6.0M/year of funding is needed to maintain the current condition of the pavement network after an initial \$8.8M in the first year. It is recommended that the Village should focus on applying routine preventive maintenance to the pavement sections in ‘satisfactory’ and ‘good’ condition. Preventive maintenance activities, such as crack sealing and localized patching, can cost-effectively extend the life of a pavement.

5.2.2 Routine update of PAVER™ pavement management system

ARA recommends updating the PAVER pavement management system annually to record the major M&R, stopgap and localized preventive maintenance activities, and pavement inventory changes (i.e., section split, new roads, jurisdictional changes, etc.). Based on the yearly updates of M&R activities, the Village can perform M&R analysis with an updated funding level (if available), accounting for the previous year(s) actual projects.

5.2.3 Routine pavement condition survey

For the Village of Glen Ellyn, it is an excellent initiative to establish a pavement management system with the cooperation of the Chicago Metropolitan Agency for Planning (CMAP). To realize the greatest benefit from this holistic effort, it is recommended that the Village of Glen Ellyn continue to perform pavement condition surveys on a three to a four-year cycle. The benefits of performing routine PCI surveys are many folded including:

- (a) A survey provides the current condition of the pavement network and helps to determine the effectiveness of completed M&R activities performed in the last few years,
- (b) Pavement performance models would be more accurate to predict the future condition, and
- (c) Appropriate treatment and optimal funding allocation are possible to repair localized distresses based on the survey

6. PAVEMENT PRESERVATION

Pavement preservation is a proactive method to keep pavements in good condition with lower costs. This approach includes work that is planned and performed to improve or retain the condition of the pavement in a state of good repair. The various pavement preservation techniques used in the state are also available in the local roads and streets manual (<https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Split/Local-Roads-and-Streets/Chapter%2045.pdf>) of IDOT. Preservation activities generally do not increase the structural strength but do restore pavements' overall condition. The intended purpose of a pavement preservation program is to maintain or restore the surface characteristics of pavements and to extend service life of the pavements being managed. However, the improvements are such that there is no increase in strength but they can have a positive impact on the structural capacity by slowing deterioration. The Federal Highway Administration (FHWA) Office of Asset Management provided the following guidance regarding pavement preservation definitions in a memorandum dated September 12, 2005:

Pavement preservation represents a proactive approach to maintain our existing highways. It enables State Transportation agencies (STAs) to reduce costly, time-consuming rehabilitation and reconstruction projects and the associated traffic disruptions. With timely preservation, we can provide the traveling public with improved safety and mobility, reduced congestion, and smoother, longer-lasting pavements. This is the true goal of pavement preservation, a goal in which the FHWA, through its partnership with the States, local agencies, industry organizations, and other interested stakeholders, is committed to achieving.

The main component of pavement preservation is preventive maintenance. As defined by FHWA, preventive maintenance is a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity). The general philosophy of the use of preventive maintenance treatments is to “apply the right treatment, to the right pavement, at the right time.” These practices result in an outcome of “keeping good roads in good condition.”

When activities (e.g., crack sealing, filling, application of seal coats) are placed on the pavement at the right time they are examples of preventive maintenance treatments. Preventive maintenance should be applied to pavements in good condition having significant remaining service life (RSL). It applies cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples include the following:

- Crack sealing
- Patching (Partial and Full depth)
- Rejuvenator/ Reclamite
- Microsurfacing
- Concrete Diamond Grinding

Based on the pavement condition assessment results the following treatment has been selected to describe in this section:

- Bituminous-Surfaced Pavements
 - Asphalt Rejuvenator i.e. reclamite
 - This treatment can be applied globally in the Village of Lyons network at the very early stage of newly constructed pavement or after placing a new surface.
 - Crack Filling/Crack Sealing
 - Sealing/filling cracks in asphalt and pavement prevent the intrusion of water into the pavement structure and decrease the deterioration of pavement conditions.
 - Microsurfacing
 - This treatment can be applied to pavements having relatively higher PCI and minimal distresses.
 - Patching
 - Asphalt patches are used for treating localized distresses from worsening.
- Concrete-Surfaced Pavements
 - Joint/Crack Sealing
 - Cracking sealing in concrete pavement prevents the entry of water beneath the concrete slab and helps to prevent pumping.
 - Concrete Diamond Grinding
 - Diamond grinding can be used for addressing concrete faulting and surface irregularities so that a smooth riding surface is restored.
 - Patching
 - Concrete patching can be used to treat individual slab distresses or joint distresses such as spalling.

AC - Crack Filling and Crack Sealing	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
These treatments are intended primarily to prevent the intrusion of moisture through existing cracks. Crack sealing refers to a sealant operation that addresses “working” cracks, i.e., those that open and close with changes in temperature. It typically implies high-quality materials and good preparation. Crack filling is for cracks that undergo little movement. Sealants used are typically thermo-plastic (bituminous) materials that soften upon heating and harden upon cooling.	Treatment can perform well in all climatic conditions. However, sealants perform best in the dryer and warmer environments that do not undergo large daily temperature changes.	Performance is not significantly affected by varying ADT or truck levels.	Functional/Other: • Longitudinal cracking • Minor block cracking • Transverse cracking Structural: Adds no structural benefit, but does reduce moisture infiltration through cracks. Only practical if the extent of cracking is minimal and if there is little to no structural cracking.	• Structural failure (i.e., extensive fatigue cracking or high severity rutting) • Extensive pavement deterioration, little remaining life
Construction Considerations	Placement should be done during cool, dry weather conditions. Proper crack cleaning is essential to a good bond and maximum performance. Some agencies also use hot compressed air lance prior to sealing.			
Expected Life	2 to 6 years.			
Typical Costs	\$0.30 to \$1.50 per linear ft for crack sealing, including routing; \$0.30 per linear ft for crack filling. Costs are slightly higher for small jobs.			

PCC - Joint Resealing and Crack Sealing	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
Resealing of transverse joints and sealing of cracks in PCC pavements is intended to minimize the infiltration of surface water into the underlying pavement structure and to prevent the intrusion of incompressibles into the joint. A range of materials including bituminous, silicone, and neoprene are used in designed configurations.	The sealing of PCC pavement joints and cracks performs well in all climatic conditions. Sealant performance is affected by environmental conditions and the performance of sealed and unsealed pavement structures probably varies within environmental regions.	• Performance is not affected by different ADT or percent trucks. • Silicone sealants that are not properly recessed are more likely to fail in the wheel path.	Functional/Other Longitudinal and transverse cracking (L) unsealed or partially sealed joints.	Different materials can be expected to perform for different durations. Material selection should be based on the expected time until the next treatment.
Site Restrictions	The sealant reservoir should be clean and dry. Variable width reservoirs may cause a problem where backer rods are specified.			
Construction Considerations	Sealant performance is dependent on many construction factors, including material type and placement geometry, and application in a clean and dry environment.			
Expected Life	7 to 8 years.			
Typical Costs	\$0.75 to \$1.25 per linear ft for hot-pour rubberized materials and from about \$1.00 to \$2.00 per linear ft for silicone materials.			

Asphalt Patching	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
Asphalt Patches are common method of treating localized distress. HMA patches can either be Full-depth or partial-depth. Full-depth patches are necessary where the entire depth of pavement is distressed. Partial-depth patches are necessary where the distress is only limited to the pavement surface	Preferably during dryer and warmer months. Cold patches can be used for temporary pothole fixes.	Traffic control is needed. Reduced roadway capacity should be evaluated. Traffic can return to a patched pavement once it cools off to 140°F	Partial Depth Repairs - Shallow potholes - Weathering and Ravelling - Block Cracking Full Depth Repairs - Depressions - Pumping - Bottom-up fatigue cracking (thin pavement structure) - Underlying stripping	- Thermal cracking - Extensive pavement deterioration, little or no remaining life
Site Restrictions	Appropriate traffic control			
Construction Considerations	- Patch boundary should be clearly defined - Remove distressed materials and repair saturated subgrade soil or correct the main cause of distress - Repair should extend 12 inches into the non-distressed pavement - Apply tack coat on all the vertical and horizontal surfaces before placing the patch and compact the patch. - Compact quickly after placing the patch to ensure maximum compaction - Avoiding vibratory compaction under 175°F - Maximum lift thickness is 3 inch. - Avoid leaving a thin strip of asphalt pavement (less than 18 inches wide) along the pavement edge. It is better to extend the repair to the pavement edge. - For small patches, use a jackhammer with a spade bit or a masonry saw. Make vertical cuts through the full depth of the asphalt pavement surface. If a jackhammer is used, work from the center of the patch area outward to avoid damaging good pavement. - For medium to large patches, use a diamond-bladed saw to cut the edges. If the distress is only at the surface and the pavement is thick enough, consider a partial-depth cut for thick asphalt pavement surfaces to retain some interlock with the remaining structure.			
Expected Life	A provisional maintenance before major M&R. A patch itself can last longer without increasing the overall life of an entire pavement section. Therefore, the expected life should be evaluated on a case by case basis.			
Typical Costs	- AC Patch –Partial Depth - \$20.00-25.00/SY - AC Patch –Full depth - \$40.00-50.00/SY			

Concrete Patching	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
Full-depth repairs are effective at correcting slab distress that extend beyond one-third the pavement depth such as longitudinal and transverse cracking, corner breaks, and joint spalling. Partial-depth repairs are primarily used to correct joint spalling. They can also be used to correct localized areas of distress that are limited to the upper 1/3 of the slab thickness.	Preferably during dryer seasons	High early strength concretes are used in cases where it is not desirable to close a lane overnight. Partial Depth Repairs are suitable under all traffic conditions.	<u>Full Depth Repairs</u> Localized distresses and to prepare distressed PCC pavements for a structural overlay to avoid premature failure of the overlay. <u>Partial Depth Repairs</u> To correct joint spalling caused by the intrusion of incompressible materials into the joints, localized areas of scaling, weak concrete, clay balls, or high steel, and the use of joint inserts.	- Widespread deterioration - Structurally deficient pavement. - Nearing the end of its fatigue life
Site Restrictions	None			
Construction Considerations	<u>Full Depth Repair</u> During construction, it is very important to properly prepare the base, restore joint load-transfer, and finish, texture, and cure the new material per governing specifications. <u>Partial Depth Repair</u> During construction, it is very important to properly determine repair boundaries, prepare the patch area, and finish, texture, and cure the new material per governing specifications. If distress is found to extend below the upper 1/3 of the slab, or if steel is exposed, a full-depth repair is required. Partial-depth patches should be a minimum of 4 in (10 cm) by 12 in (30 m).			
Expected Life	5 to 15 years			
Typical Costs	- PCC Patch –Full Depth - \$225/SY - PCC Patch –Partial depth - \$63/SY			

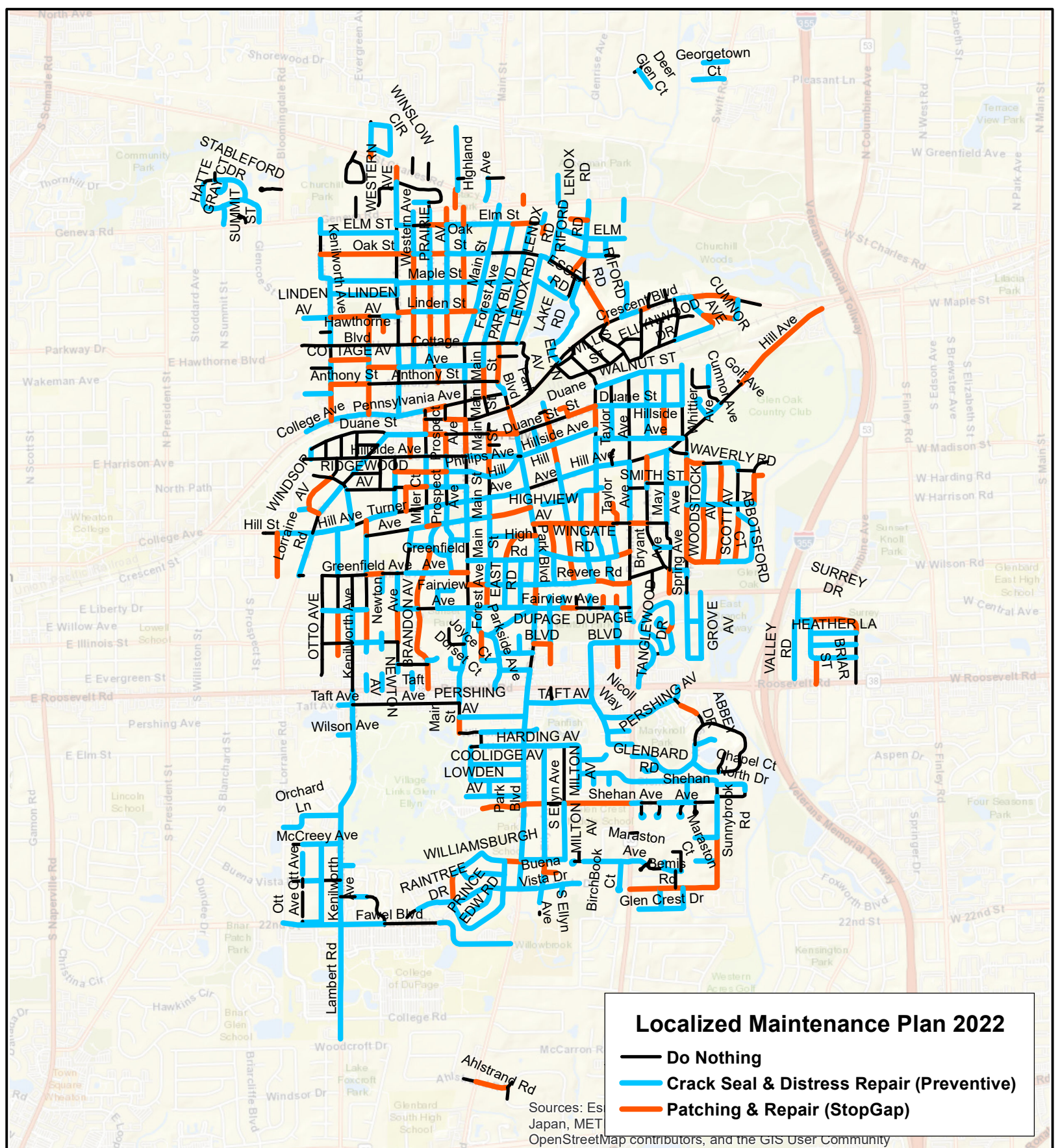
Asphalt Rejuvenator/Reclamite	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
According to the National Center for Pavement Preservation, "a true asphalt rejuvenator is a maltene-based petroleum product which has the ability to absorb or penetrate into an asphaltic concrete pavement and restore those reactive components (maltenes) that have been lost from the asphalt cement binder due to the natural process of oxidation. Reclamite is an asphalt pavement rejuvenator which is a maltene-based petroleum product.	• shall not be applied to a wet surface or when rain is occurring • shall not be applied when the temperature is less than 40° in the shade	Traffic control shall continue until the area has been sanded and the resultant surface is not slippery or dangerous to vehicular travel	Newly constructed pavements (0-3 years)	On older pavements, it will reverse the effects of aging due to reverse the effects of aging due to environmental damage from sunlight and environmental damage from sunlight and water intrusion.
Construction Considerations	All manufactured sand used during the treatment must be removed no later than 24 hours after the treatment of a roadway.			
Expected Life	Add 5 to 10 years of extra service life to the treated pavement			
Typical Costs	\$0.79-0.84/Sq. Yd.			

Microsurfacing	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
Microsurfacing is basically a slurry seal with an accelerated setting capability. It consists of the application of a mixture of water, asphalt emulsion, aggregate (very small crushed rock), and <u>chemical additives</u> to an existing asphalt concrete pavement surface. Polymer is commonly added to the asphalt emulsion to provide better mixture properties. The major difference between slurry seal and Microsurfacing is in how they "break" or harden.	• Not applicable during a rain event. • Not applicable in excessively cold temperature. • Atmospheric temperature is at least 10°C (50°F) and rising. • Pavement that have a lot of shade.	• Applicable to high traffic situations. • Traffic can be allowed to roll when a person's full weight can be placed on the pavement without the aggregates sticking to the shoe.	• Low to Moderate level of distress. • Structurally sound pavement.	• Highly distressed pavement. • High longitudinal roughness. • Structurally deficient pavement. • Subgrade rut. • Ruts above 2-in deep.
Site Restrictions	Lane closure is needed.			
Construction Considerations	• Spread microsurfacing materials only when the atmospheric temperature is at least 10°C (50°F) and rising. • Thoroughly cleaned surface and slightly dampened prior placing the mixture. • Ruts deeper than ½-in shall be filled separately.			
Expected Life	6-8 years			
Typical Costs	\$2.75/ yd ²			

Concrete Diamond Grinding	Evaluation Factors			
	Climate	Traffic	Pavement Condition	Not Applicable To
Diamond grinding is effective at removing joint faulting and other surface irregularities to restore a smooth-riding surface and increase pavement surface friction.	Not recommended during excessively cold or hot temperature.	Grinding may be used to remove faulting. If the root cause is not addressed, faulting can reoccur due to the continued application of truck traffic. If used to restore friction to a polished pavement (due to vehicle traffic), heavy volumes of traffic may cause the problem to reoccur.	Note that diamond grinding is a surface repair method because it corrects the existing faulting and wear of PCC pavements. It does nothing to correct pavement distress mechanisms. Therefore, grinding usually is performed in combination with other rehabilitation methods to both repair certain pavement distresses and prevent their recurrence.	• High severity faulting. • Structurally deficient pavement. • Mid panel cracks or corner breaks. • Material related distresses. • Softer aggregate.
Site Restrictions	Moving Lane Closure is needed.			
Construction Considerations	Typically constructed with a moving lane closure with traffic operating in the adjacent lanes. Diamond grinding should be used in conjunction with all restoration techniques including load-transfer restoration, full- and partial depth repair, cross stitching, and subsealing/undersealing.			
Expected Life	8-15 years			
Typical Costs	\$4.00/ft			

Appendix — A

1. 2022-2031 Major M&R Plan Based on Current Funding
2. 2022 Localized Distress Maintenance Plan
3. 2022-2031 Major M&R Plan Based on “Eliminate Backlog” Funding
4. Pavement Surface Type
5. 2021 Pavement Condition Index (PCI)
6. 2021 International Roughness Index (IRI)
7. List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding
8. List of Pavement Sections with 2021 PCI and IRI values
9. Details of the 2022 Localized Distress Maintenance Plan

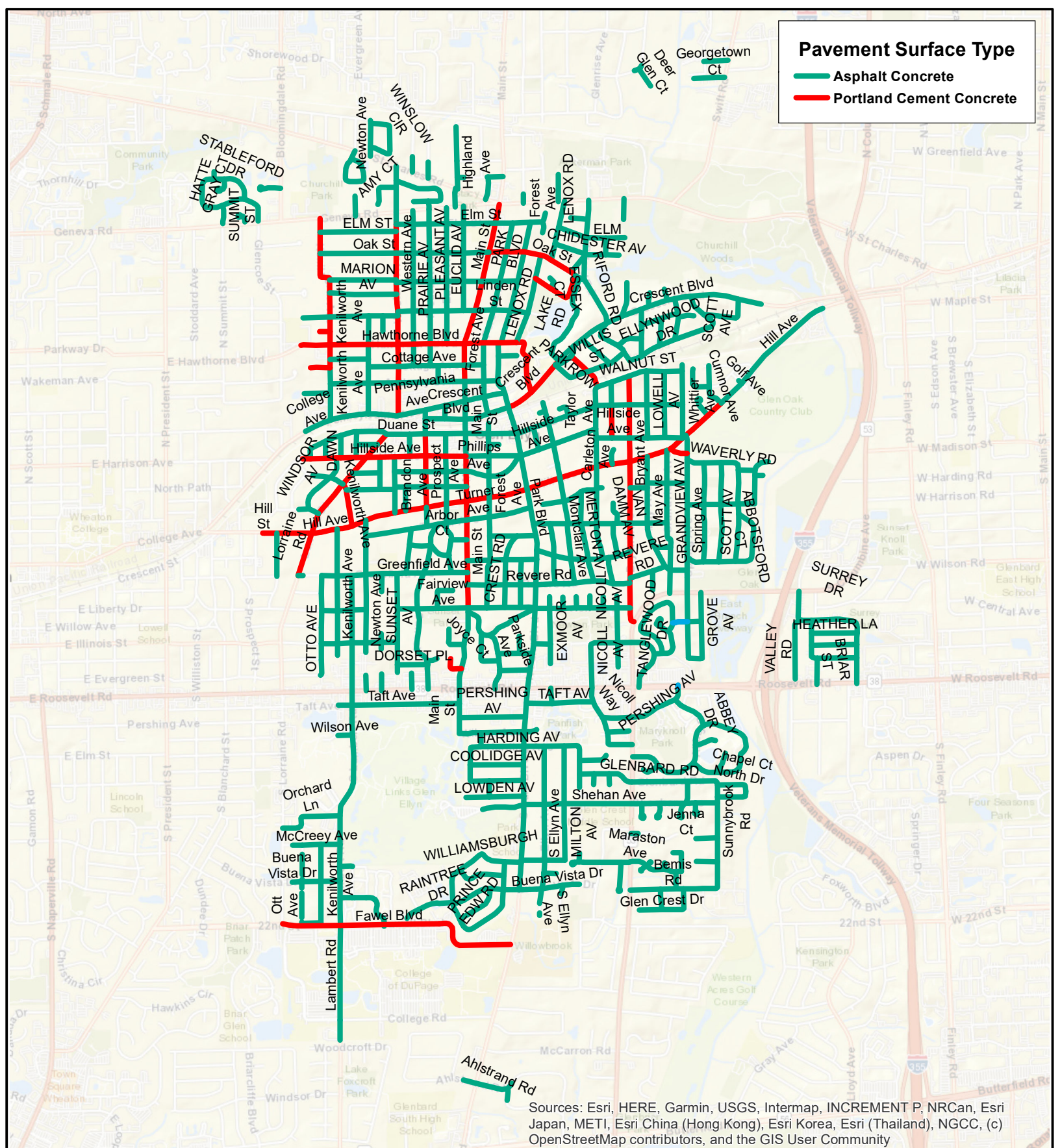


0 2,000 4,000 Feet

Localized Maintenance Plan 2022

Village of Glen Ellyn





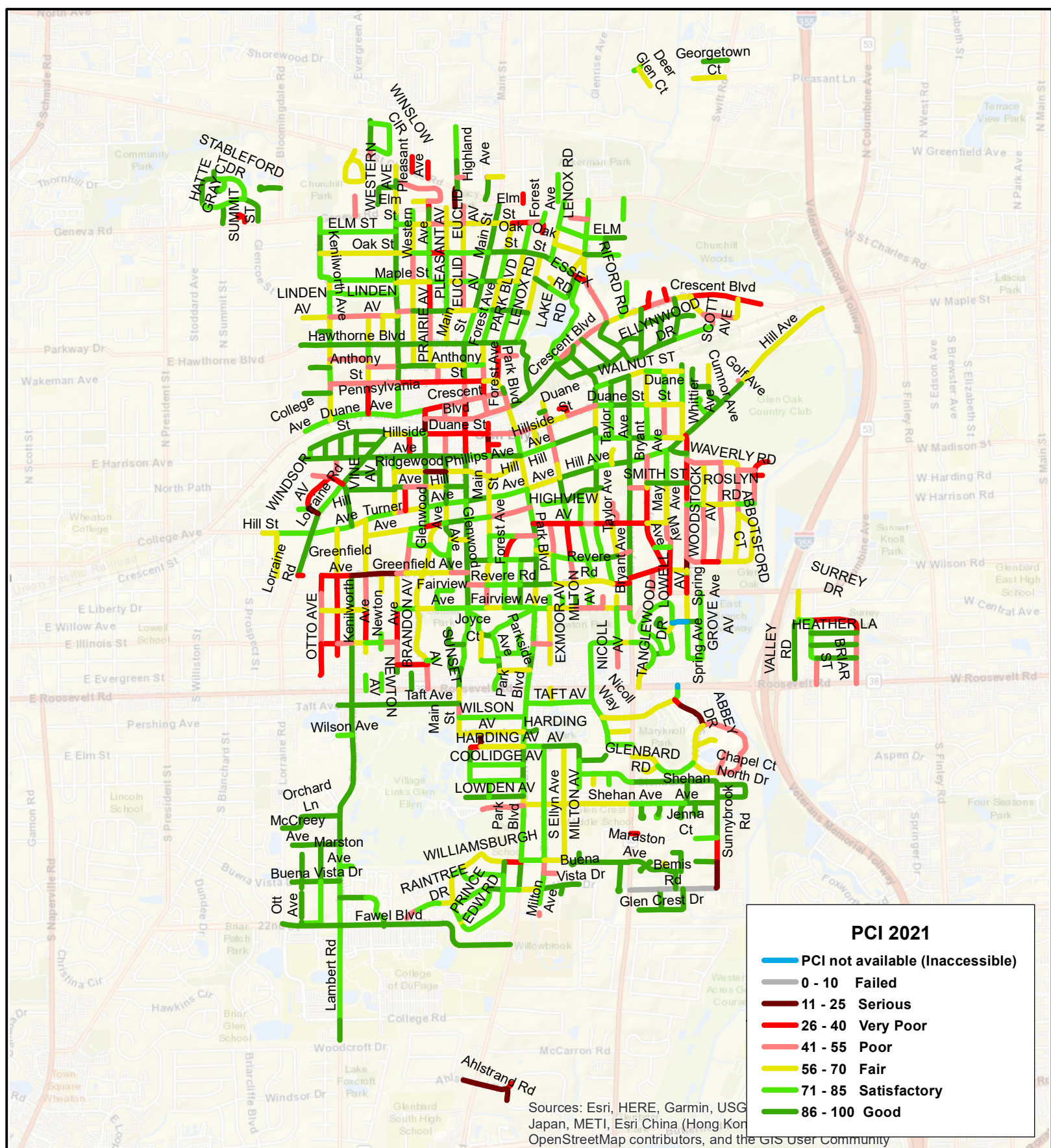
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Pavement Surface Type

Village of Glen Ellyn



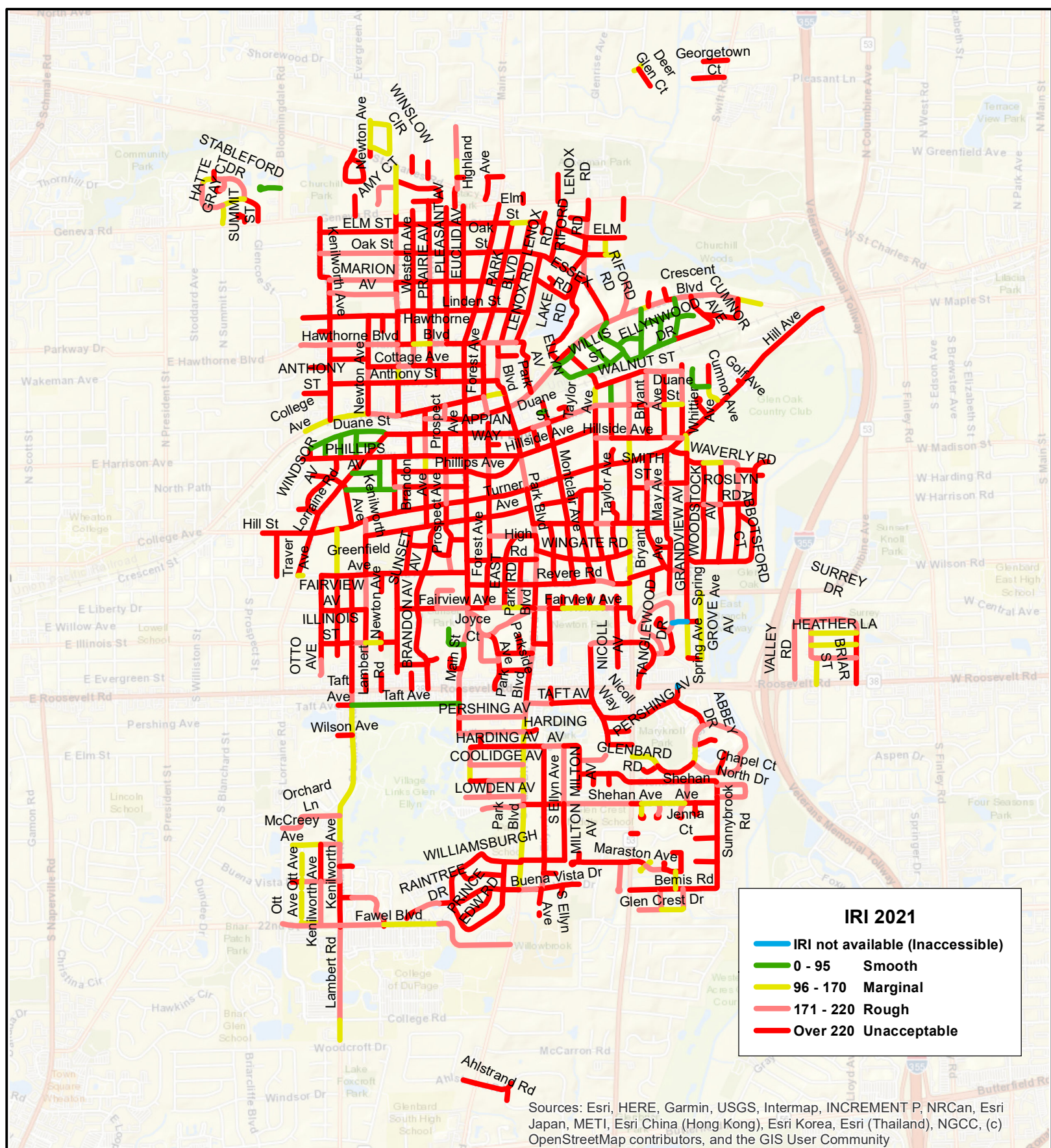


0 2,000 4,000 Feet

PCI 2021

Village of Glen Ellyn





0 2,000 4,000 Feet

IRI 2021

Village of Glen Ellyn



List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2022	BAKERHILL	902	67.7	\$53,529	Residential	AC	554	34	2022 Committed Project
2022	BAKERHILL	903	74.3	\$28,613	Residential	AC	296	34	2022 Committed Project
2022	BAKERHILL	904	74.3	\$29,952	Residential	AC	323	34	2022 Committed Project
2022	BemisRd	925	2.3	\$9,987	Residential	AC	176	20	Reconstruction
2022	BemisRd	924	1.3	\$20,188	Residential	AC	355	20	Reconstruction
2022	BemisRd	920	0.2	\$38,083	Residential	AC	698	20	Reconstruction
2022	BemisRd	926	0.0	\$43,128	Residential	AC	758	20	Reconstruction
2022	CARLISLECT	823	75.1	\$267,994	Residential	AC	1138	26	2022 Committed Project
2022	CHESTERFIE	634	51.6	\$254,551	Residential	AC	395	24	3.0" Mill & Overlay (Type IA Equivalent)
2022	CHESTERFIE	635	29.0	\$216,607	Residential	AC	336	24	Reconstruction
2022	COLCORDPL	175	29.0	\$501,256	Residential	AC	261	20	Reconstruction
2022	CRECENTDR	249	24.7	\$598,586	Residential	AC	311	20	Reconstruction
2022	CrescentBl	029	68.5	\$45,737	Collector	AC	477	24	2022 Committed Project
2022	CrescentBl	034	67.7	\$36,704	Collector	AC	383	24	2022 Committed Project
2022	CrescentBl	031	22.6	\$17,834	Collector	AC	186	24	Reconstruction
2022	CrescentBl	036	31.1	\$50,745	Collector	AC	529	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	035	36.5	\$105,427	Collector	AC	1100	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	026	40.7	\$46,268	Collector	AC	483	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	033	44.0	\$42,703	Collector	AC	446	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	122	44.0	\$48,053	Collector	AC	501	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	028	45.1	\$66,400	Collector	AC	693	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	121	47.2	\$51,417	Collector	AC	536	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	CrescentBl	032	50.5	\$16,744	Collector	AC	175	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	CrescentBl	030	52.7	\$23,837	Collector	AC	249	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	CrescentBl	027	60.6	\$35,488	Collector	AC	370	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	CrescentBl	142	49.4	\$44,651	Residential	AC	466	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	CrescentBl	141	42.9	\$43,594	Residential	AC	455	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	DuaneSt	684	34.3	\$371,951	Residential	AC	461	30	4.0" Mill & Overlay (Type IB Equivalent)
2022	DuaneSt	689	34.3	\$372,131	Residential	AC	461	30	4.0" Mill & Overlay (Type IB Equivalent)
2022	DuaneSt	683	26.9	\$63,391	Residential	AC	529	30	Reconstruction
2022	DUPAGEBLVD	527	72.6	\$188,929	Residential	AC	614	34	2022 Committed Project
2022	DUPAGEBLVD	528	61.8	\$98,805	Residential	AC	321	34	2022 Committed Project
2022	EXMOORAVE	202	58.3	\$33,979	Residential	AC	354	24	3.0" Mill & Overlay (Type IA Equivalent)
2022	ForestAve	389	49.4	\$38,934	Residential	AC	406	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	GlenwoodAv	417	50.5	\$29,564	Residential	AC	308	24	3.0" Mill & Overlay (Type IA Equivalent)
2022	GREENBRIAR	814	56.0	\$147,868	Residential	AC	628	26	3.0" Mill & Overlay (Type IA Equivalent)
2022	HillAve	043	74.7	\$29,446	Collector	PCC	695	24	Above Critical PCI/ Optional M&R
2022	HillAve	045	72.7	\$15,823	Collector	PCC	353	24	Above Critical PCI/ Optional M&R
2022	HillAve	054	78.7	\$17,221	Collector	PCC	459	24	Above Critical PCI/ Optional M&R
2022	HillAve	058	74.7	\$3,909	Collector	PCC	92	24	Above Critical PCI/ Optional M&R
2022	JennaCt	930	81.3	\$28,397	Residential	AC	499	20	2022 Committed Project
2022	MainSt	016	88.9	\$7,014	Arterial	PCC	277	24	Above Critical PCI/ Optional M&R
2022	MainSt	004	24.7	\$40,345	Arterial	AC	421	24	Reconstruction
2022	MainSt	011	29.0	\$31,491	Arterial	AC	329	24	Reconstruction
2022	MainSt	007	31.1	\$49,906	Arterial	AC	521	24	5.0" Mill & Overlay (Type IC Equivalent)
2022	MainSt	003	45.1	\$71,898	Arterial	AC	450	40	5.0" Mill & Overlay (Type IC Equivalent)
2022	MontclairA	341	50.5	\$32,002	Residential	AC	563	20	3.0" Mill & Overlay (Type IA Equivalent)
2022	NICOLLAV	325	72.6	\$309,316	Residential	AC	1005	34	2022 Committed Project
2022	ParkBlvd	087	75.1	\$18,693	Collector	AC	335	42	Above Critical PCI/ Optional M&R
2022	ParkBlvd	089	69.4	\$2,479	Collector	AC	29	50	Above Critical PCI/ Optional M&R
2022	ParkBlvd	369	29.0	\$307,158	Residential	AC	571	20	Reconstruction
2022	Pennsylvan	119	33.2	\$78,916	Collector	AC	470	42	5.0" Mill & Overlay (Type IC Equivalent)
2022	Pennsylvan	120	37.5	\$78,775	Collector	AC	470	42	5.0" Mill & Overlay (Type IC Equivalent)
2022	Pennsylvan	118	47.2	\$81,060	Collector	AC	483	42	5.0" Mill & Overlay (Type IC Equivalent)

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2022	Pennsylvan	117	50.5	\$74,665	Collector	AC	445	42	4.0" Mill & Overlay (Type IB Equivalent)
2022	PRINCEEDW	406	83.1	\$74,919	Residential	AC	318	26	2022 Committed Project
2022	PRINCEEDW	407	78.6	\$109,218	Residential	AC	1477	26	2022 Committed Project
2022	PRINCEEDW	408	79.5	\$76,542	Residential	AC	325	26	2022 Committed Project
2022	PRINCEEDWA	815	64.1	\$13,275	Residential	AC	180	26	2022 Committed Project
2022	PRINCEEDWA	816	81.3	\$30,801	Residential	AC	417	26	2022 Committed Project
2022	ProspectAv	128	20.5	\$32,441	Collector	AC	338	24	Reconstruction
2022	ProspectAv	123	24.7	\$19,833	Collector	AC	207	24	Reconstruction
2022	RAINTREEDR	832	76.0	\$106,705	Residential	AC	368	32	2022 Committed Project
2022	RAINTREEDR	833	82.2	\$270,702	Residential	AC	934	32	2022 Committed Project
2022	RAINTREEDR	834	84.9	\$88,264	Residential	AC	305	32	2022 Committed Project
2022	SAWYERAV	623	73.4	\$146,755	Residential	AC	227	24	2022 Committed Project
2022	SAWYERAV	624	18.3	\$164,058	Residential	AC	254	24	Reconstruction
2022	ShehanAve	129	59.4	\$83,999	Collector	AC	464	20	4.0" Mill & Overlay (Type IB Equivalent)
2022	ShehanAve	131	62.9	\$83,414	Collector	AC	461	20	4.0" Mill & Overlay (Type IB Equivalent)
2022	ShehanAve	130	64.1	\$337,226	Collector	AC	1552	24	4.0" Mill & Overlay (Type IB Equivalent)
2022	STAFFORDLN	416	75.1	\$78,612	Residential	AC	1063	26	2022 Committed Project
2022	StantonRd	900	22.6	\$88,303	Residential	AC	164	20	Reconstruction
2022	Sunnybrook	943	9.8	\$34,997	Residential	AC	615	20	Reconstruction
2022	TAFTAV	794	81.3	\$383,633	Residential	AC	595	24	2022 Committed Project
2022	TAFTAV	795	74.3	\$64,225	Residential	AC	941	24	2022 Committed Project
2022	WesternAve	079	79.7	\$2,764	Collector	PCC	91	20	Above Critical PCI/ Optional M&R
2022	WILLIAMSBU	817	75.1	\$49,290	Residential	AC	209	26	2022 Committed Project
2022	WILLIAMSBU	819	69.3	\$281,400	Residential	AC	1195	26	2022 Committed Project
2022	WILLIAMSBU	818	36.5	\$88,993	Residential	AC	378	26	4.0" Mill & Overlay (Type IB Equivalent)
2022	WINDSORAV	514	39.7	\$272,293	Residential	AC	506	20	4.0" Mill & Overlay (Type IB Equivalent)
2022	WINDSORAV	515	27.9	\$494,843	Residential	AC	920	20	Reconstruction
2023	ABBEYDR	852	70.9	\$34,145	Residential	AC	930	24	Above Critical PCI/ Optional M&R
2023	ABBOTSFORD	285	61.0	\$64,903	Residential	AC	1575	20	Above Critical PCI/ Optional M&R
2023	BrandonAve	459	67.3	\$12,388	Residential	AC	361	20	Above Critical PCI/ Optional M&R
2023	BRIARST	292	71.5	\$11,767	Residential	AC	302	26	Above Critical PCI/ Optional M&R
2023	BryantAve	171	80.8	\$4,461	Residential	PCC	121	24	Above Critical PCI/ Optional M&R
2023	BuenaVista	206	70.9	\$5,233	Residential	AC	114	30	Above Critical PCI/ Optional M&R
2023	BUENAVISTA	207	65.9	\$21,466	Residential	AC	399	30	Above Critical PCI/ Optional M&R
2023	CARLETONAV	945	71.7	\$33,433	Residential	AC	802	28	Above Critical PCI/ Optional M&R
2023	CarletonAv	301	54.0	\$216,029	Residential	AC	344	24	3.0" Mill & Overlay (Type IA Equivalent)
2023	CARLETONAV	182	46.3	\$493,925	Residential	AC	555	34	4.0" Mill & Overlay (Type IB Equivalent)
2023	CottageAve	711	67.3	\$20,833	Residential	AC	607	20	Above Critical PCI/ Optional M&R
2023	CrestCt	916	62.5	\$9,791	Residential	AC	191	26	Above Critical PCI/ Optional M&R
2023	CUMNORAV	276	68.0	\$32,186	Residential	AC	958	20	Above Critical PCI/ Optional M&R
2023	CUMNORAVE	222	62.5	\$21,117	Residential	AC	536	20	Above Critical PCI/ Optional M&R
2023	DuaneSt	686	69.7	\$14,021	Residential	AC	367	24	Above Critical PCI/ Optional M&R
2023	EmersonAve	216	44.4	\$1,751	Residential	AC	19	20	4.0" Mill & Overlay (Type IB Equivalent)
2023	ESSEXRD	751	85.8	\$10,536	Residential	PCC	414	20	Above Critical PCI/ Optional M&R
2023	ESSEXRD	752	72.8	\$16,105	Residential	PCC	412	20	Above Critical PCI/ Optional M&R
2023	EUCLIDAV	430	65.9	\$23,971	Residential	AC	668	20	Above Critical PCI/ Optional M&R
2023	EXMOORAV	354	65.9	\$29,303	Residential	AC	817	20	Above Critical PCI/ Optional M&R
2023	FAIRVIEWAV	541	68.0	\$15,548	Residential	AC	356	26	Above Critical PCI/ Optional M&R
2023	FAIRVIEWAV	542	64.1	\$14,704	Residential	AC	325	24	Above Critical PCI/ Optional M&R
2023	FAIRVIEWAV	543	61.0	\$17,929	Residential	AC	335	26	Above Critical PCI/ Optional M&R
2023	FairviewAv	544	69.7	\$17,658	Residential	AC	462	24	Above Critical PCI/ Optional M&R
2023	FairviewAv	549	70.3	\$12,633	Residential	AC	337	24	Above Critical PCI/ Optional M&R
2023	FairviewAv	550	62.5	\$19,408	Residential	AC	411	24	Above Critical PCI/ Optional M&R
2023	FairviewAv	557	69.7	\$26,939	Residential	AC	705	24	Above Critical PCI/ Optional M&R

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2023	GlenOak Av	670	83.8	\$13,291	Residential	PCC	402	24	Above Critical PCI/ Optional M&R
2023	GRANDVIEWWA	254	64.1	\$41,232	Residential	AC	912	24	Above Critical PCI/ Optional M&R
2023	Greenfield	577	67.3	\$26,300	Residential	AC	638	24	Above Critical PCI/ Optional M&R
2023	HATTEGRAY	153	76.2	\$9,591	Residential	AC	296	26	Above Critical PCI/ Optional M&R
2023	HighlandAv	211	74.1	\$21,472	Residential	AC	790	20	Above Critical PCI/ Optional M&R
2023	HillAve	041	80.8	\$21,599	Collector	PCC	586	24	Above Critical PCI/ Optional M&R
2023	HillAve	046	81.8	\$13,318	Collector	PCC	374	24	Above Critical PCI/ Optional M&R
2023	HillAve	047	80.8	\$15,297	Collector	PCC	415	24	Above Critical PCI/ Optional M&R
2023	HillAve	053	67.8	\$98,249	Collector	PCC	473	24	Above Critical PCI/ Optional M&R
2023	HillAve	055	77.8	\$19,417	Collector	PCC	478	24	Above Critical PCI/ Optional M&R
2023	HillAve	056	85.8	\$12,210	Collector	PCC	400	24	Above Critical PCI/ Optional M&R
2023	HillAve	940	86.8	\$12,408	Collector	PCC	424	24	Above Critical PCI/ Optional M&R
2023	HILLCRESTA	180	77.7	\$10,564	Residential	AC	376	24	Above Critical PCI/ Optional M&R
2023	HILLCRESTA	466	71.5	\$7,199	Residential	AC	200	24	Above Critical PCI/ Optional M&R
2023	ILLINOISST	533	61.0	\$15,916	Residential	AC	322	24	Above Critical PCI/ Optional M&R
2023	ILLINOISST	536	70.9	\$12,832	Residential	AC	350	24	Above Critical PCI/ Optional M&R
2023	INDIANDR	284	33.0	\$486,488	Residential	AC	651	20	4.0" Mill & Overlay (Type IB Equivalent)
2023	INDIANDR	283	1.4	\$85,119	Residential	AC	114	20	Reconstruction
2023	Kenilworth	298	73.5	\$26,823	Residential	AC	962	20	Above Critical PCI/ Optional M&R
2023	Kenilworth	495	70.8	\$22,580	Residential	PCC	316	20	Above Critical PCI/ Optional M&R
2023	Kenilworth	497	65.8	\$58,047	Residential	PCC	335	20	Above Critical PCI/ Optional M&R
2023	Kenilworth	503	78.8	\$26,058	Residential	PCC	795	20	Above Critical PCI/ Optional M&R
2023	Kenilworth	504	65.8	\$50,376	Residential	PCC	291	20	Above Critical PCI/ Optional M&R
2023	LambertRd	065	76.2	\$101,153	Collector	AC	2140	36	Above Critical PCI/ Optional M&R
2023	LENOXRD	381	69.7	\$12,268	Residential	AC	385	20	Above Critical PCI/ Optional M&R
2023	LENOXRD	382	68.0	\$13,124	Residential	AC	391	20	Above Critical PCI/ Optional M&R
2023	LENOXRD	384	72.1	\$21,345	Residential	AC	729	20	Above Critical PCI/ Optional M&R
2023	LENOXRD	385	61.0	\$33,323	Residential	AC	809	20	Above Critical PCI/ Optional M&R
2023	LindenSt	745	72.1	\$12,062	Residential	AC	412	20	Above Critical PCI/ Optional M&R
2023	MainSt	409	65.9	\$21,002	Residential	AC	325	36	Above Critical PCI/ Optional M&R
2023	MAPLEST	753	71.5	\$45,723	Residential	AC	1527	20	Above Critical PCI/ Optional M&R
2023	MapleSt	759	68.0	\$13,974	Residential	AC	416	20	Above Critical PCI/ Optional M&R
2023	MayAve	240	65.9	\$17,007	Residential	AC	395	24	Above Critical PCI/ Optional M&R
2023	MENORYCT	633	22.5	\$139,030	Residential	AC	186	20	Reconstruction
2023	MERTONAV	330	72.1	\$25,819	Residential	AC	735	24	Above Critical PCI/ Optional M&R
2023	NewtonAve	479	68.6	\$8,647	Residential	AC	218	24	Above Critical PCI/ Optional M&R
2023	OakSt	772	84.8	\$4,004	Residential	PCC	126	24	Above Critical PCI/ Optional M&R
2023	ParkBlvd	099	62.5	\$63,972	Collector	AC	547	26	4.0" Mill & Overlay (Type IB Equivalent)
2023	ParksideAv	371	72.8	\$15,112	Residential	AC	441	24	Above Critical PCI/ Optional M&R
2023	PERSHINGAV	843	62.5	\$67,604	Residential	AC	1073	32	Above Critical PCI/ Optional M&R
2023	PERSHINGAV	845	69.7	\$15,605	Residential	AC	306	32	Above Critical PCI/ Optional M&R
2023	PRAIRIEAV	446	70.3	\$9,849	Residential	AC	315	20	Above Critical PCI/ Optional M&R
2023	ProspectAv	445	70.3	\$13,763	Residential	AC	441	20	Above Critical PCI/ Optional M&R
2023	RAINTREEDR	835	65.9	\$17,881	Residential	AC	312	32	Above Critical PCI/ Optional M&R
2023	RiverDr	883	53.1	\$2,952	Residential	AC	46	20	3.0" Mill & Overlay (Type IA Equivalent)
2023	ROSLYNRD	619	70.9	\$11,612	Residential	AC	380	20	Above Critical PCI/ Optional M&R
2023	ROSLYNRD	621	69.7	\$11,952	Residential	AC	375	20	Above Critical PCI/ Optional M&R
2023	ROSLYNRD	622	65.9	\$14,041	Residential	AC	392	20	Above Critical PCI/ Optional M&R
2023	SecondSt	884	74.1	\$4,373	Residential	AC	161	20	Above Critical PCI/ Optional M&R
2023	SEllyn Ave	378	69.7	\$40,921	Residential	AC	1285	20	Above Critical PCI/ Optional M&R
2023	SEllyn Ave	895	69.7	\$10,649	Residential	AC	335	20	Above Critical PCI/ Optional M&R
2023	SHADYLN	642	22.5	\$297,435	Residential	AC	398	20	Reconstruction
2023	ShehanAve	808	70.3	\$8,767	Residential	AC	234	24	Above Critical PCI/ Optional M&R
2023	SpringAve	265	68.0	\$22,123	Residential	AC	659	20	Above Critical PCI/ Optional M&R

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2023	SpringAve	268	72.8	\$4,497	Residential	AC	131	24	Above Critical PCI/ Optional M&R
2023	SpringAve	271	64.3	\$1,883	Residential	AC	42	24	Above Critical PCI/ Optional M&R
2023	SUNSETAV	443	62.5	\$25,180	Residential	AC	533	24	Above Critical PCI/ Optional M&R
2023	VALLEYAV	595	70.3	\$13,595	Residential	AC	363	24	Above Critical PCI/ Optional M&R
2023	VANDAMM AV	306	68.6	\$24,848	Residential	AC	753	20	Above Critical PCI/ Optional M&R
2023	VANDAMM AV	305	48.8	\$260,690	Residential	AC	498	20	4.0" Mill & Overlay (Type IB Equivalent)
2023	WALNUTST	693	64.1	\$19,108	Residential	AC	423	24	Above Critical PCI/ Optional M&R
2023	WesternAve	073	78.5	\$6,416	Collector	AC	277	20	Above Critical PCI/ Optional M&R
2023	WesternAve	080	81.8	\$7,998	Collector	PCC	270	20	Above Critical PCI/ Optional M&R
2023	WESTERNAVE	878	67.4	\$23,693	Residential	AC	576	24	Above Critical PCI/ Optional M&R
2023	WINGATERD	583	64.1	\$15,368	Residential	AC	408	20	Above Critical PCI/ Optional M&R
2024	ABBEYDR	850	53.4	\$33,801	Residential	AC	417	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	ABBEYDR	851	53.4	\$55,335	Residential	AC	683	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	ArborCt	596	56.8	\$29,790	Residential	AC	368	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	BAKERCT	842	53.4	\$38,664	Residential	AC	477	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	BRANDONAV	461	53.4	\$66,144	Residential	AC	817	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	BrandonAve	458	53.4	\$36,203	Residential	AC	537	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	CHIDESTERA	775	56.8	\$48,882	Residential	AC	724	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	CumnorAve	947	55.4	\$38,380	Residential	AC	474	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	DeerGlenC	938	53.4	\$32,496	Residential	AC	482	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	ElmSt	784	56.8	\$49,452	Residential	AC	733	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	ElmSt	782	55.1	\$26,409	Residential	AC	391	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	FairviewAv	551	56.8	\$25,345	Residential	AC	313	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	ForestAve	397	56.8	\$39,167	Residential	AC	580	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	ForestAve	387	55.1	\$45,776	Residential	AC	678	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	GlenwoodAv	422	55.1	\$29,651	Residential	AC	439	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	Greenfield	576	53.4	\$32,589	Residential	AC	402	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	HARDINGAV	801	53.4	\$66,363	Residential	AC	983	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	HillAve	042	49.8	\$111,049	Collector	PCC	254	24	5.0" Mill & Overlay (Type IC Equivalent)
2024	HillAve	044	52.8	\$147,648	Collector	PCC	338	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	HillAve	941	53.4	\$289,678	Collector	AC	2558	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	HillAve	050	54.8	\$345,550	Collector	PCC	791	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	HillAve	060	55.8	\$123,442	Collector	PCC	483	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	HILLCRESTA	465	58.6	\$34,433	Residential	AC	425	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	HillSt	062	56.8	\$59,211	Collector	PCC	271	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	HillSt	061	57.0	\$11,996	Collector	PCC	55	24	4.0" Mill & Overlay (Type IB Equivalent)
2024	Kenilworth	501	60.8	\$33,947	Residential	PCC	187	20	Above Critical PCI/ Optional M&R
2024	Kenilworth	496	59.8	\$60,946	Residential	PCC	335	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	MARSTONAV	821	55.1	\$31,832	Residential	AC	472	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	MARYKNOLLC	841	55.1	\$53,021	Residential	AC	655	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	NewtonAve	477	56.8	\$12,444	Residential	AC	184	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	NicollWay	933	55.1	\$75,604	Residential	AC	700	32	3.0" Mill & Overlay (Type IA Equivalent)
2024	PARKBLVD	364	56.8	\$45,861	Residential	AC	680	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	ParkBlvd	097	36.1	\$90,363	Collector	AC	344	26	5.0" Mill & Overlay (Type IC Equivalent)
2024	ParkBlvd	102	50.3	\$138,762	Collector	AC	628	26	4.0" Mill & Overlay (Type IB Equivalent)
2024	PhillipsAv	638	53.4	\$59,410	Residential	AC	880	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	PRAIRIEAV	451	56.8	\$44,181	Residential	AC	655	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	RevereRd	567	53.4	\$30,344	Residential	AC	450	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	RidgewoodA	628	56.8	\$31,406	Residential	AC	465	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	RIFORDRD	136	41.6	\$275,982	Collector	AC	1137	24	5.0" Mill & Overlay (Type IC Equivalent)
2024	RIFORDRD	137	56.8	\$50,985	Collector	AC	540	20	4.0" Mill & Overlay (Type IB Equivalent)
2024	ROSLYNRD	620	55.1	\$27,191	Residential	AC	403	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	SCOTTAVE	224	58.6	\$30,518	Residential	AC	452	20	3.0" Mill & Overlay (Type IA Equivalent)
2024	SNOWHILLCT	839	56.8	\$32,168	Residential	AC	397	24	3.0" Mill & Overlay (Type IA Equivalent)

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2024	SURREYDR	286	55.1	\$58,680	Residential	AC	669	26	3.0" Mill & Overlay (Type IA Equivalent)
2024	WALNUTST	695	55.1	\$33,867	Residential	AC	418	24	3.0" Mill & Overlay (Type IA Equivalent)
2024	WILSONAV	798	55.1	\$80,290	Residential	AC	992	24	3.0" Mill & Overlay (Type IA Equivalent)
2025	ABBEYDR	853	47.8	\$62,743	Residential	AC	528	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	AnthonySt	703	44.4	\$37,896	Residential	AC	319	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	CARLETONAV	302	44.4	\$31,450	Residential	AC	264	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	DAVISTER	470	42.7	\$35,032	Residential	AC	354	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	DuaneSt	691	44.4	\$42,885	Residential	AC	361	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	DuaneSt	687	42.7	\$58,284	Residential	AC	490	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	ElmSt	783	47.8	\$36,853	Residential	AC	372	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	EUCLIDAV	426	46.1	\$36,292	Residential	AC	366	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	EUCLIDAV	427	42.7	\$73,993	Residential	AC	747	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	EXMOORAV	355	46.1	\$44,663	Residential	AC	451	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	FairviewAv	546	46.1	\$54,749	Residential	AC	460	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	FairviewAv	552	44.4	\$37,156	Residential	AC	312	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	FORESTAV	405	44.4	\$62,026	Residential	AC	626	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	ForestAve	396	49.6	\$44,343	Residential	AC	447	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	ForestAve	401	44.4	\$47,540	Residential	AC	480	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	HIGHLANDAV	414	57.9	\$47,910	Residential	AC	676	20	3.0" Mill & Overlay (Type IA Equivalent)
2025	HIGHVIEWAV	611	46.1	\$53,499	Residential	AC	450	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	HillAve	040	64.9	\$185,202	Collector	PCC	808	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	Kenilworth	499	47.8	\$61,526	Residential	AC	621	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	LINDENAV	741	49.6	\$34,423	Residential	AC	347	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	LindenSt	749	47.8	\$26,124	Residential	AC	264	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	LindenSt	743	42.7	\$38,660	Residential	AC	390	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	MainSt	411	42.7	\$43,215	Residential	AC	363	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	MayAve	241	34.8	\$97,217	Residential	AC	143	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	MayAve	239	11.6	\$332,506	Residential	AC	488	24	Reconstruction
2025	MayAve	243	0.3	\$413,510	Residential	AC	607	24	Reconstruction
2025	MILTONAV	334	47.8	\$132,019	Residential	AC	1332	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	MontclairA	336	49.6	\$23,532	Residential	AC	198	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	NewtonAve	473	46.1	\$65,642	Residential	AC	662	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	NewtonAve	481	44.4	\$35,439	Residential	AC	358	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	OakSt	761	46.1	\$173,015	Residential	AC	1746	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	OakSt	762	44.4	\$38,769	Residential	AC	391	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	OXFORDRD	591	49.6	\$38,407	Residential	AC	388	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	ParkBlvd	367	57.9	\$20,216	Residential	AC	219	26	3.0" Mill & Overlay (Type IA Equivalent)
2025	PhillipsAv	637	47.8	\$71,074	Residential	AC	717	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	PRAIRIEAV	449	41.1	\$75,513	Residential	AC	762	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	RevereRd	566	57.9	\$31,291	Residential	AC	442	20	3.0" Mill & Overlay (Type IA Equivalent)
2025	RevereRd	565	41.1	\$45,206	Residential	AC	456	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	REVERERD	569	14.5	\$211,380	Residential	AC	310	24	Reconstruction
2025	REVERERD	568	7.4	\$366,701	Residential	AC	538	24	Reconstruction
2025	Saddlewood	860	46.1	\$26,302	Residential	AC	204	26	4.0" Mill & Overlay (Type IB Equivalent)
2025	Saddlewood	859	41.6	\$203,315	Residential	AC	1578	26	4.0" Mill & Overlay (Type IB Equivalent)
2025	SCOTTAV	282	47.8	\$108,267	Residential	AC	1093	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	SUNSETAV	444	46.1	\$80,279	Residential	AC	675	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	SUNSETAV	440	44.4	\$154,233	Residential	AC	1297	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	SUNSETAV	439	42.7	\$101,355	Residential	AC	852	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	TANGLEWOOD	187	47.8	\$21,425	Residential	AC	216	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	TaylorAve	319	44.4	\$75,911	Residential	AC	766	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	TaylorAve	314	42.7	\$63,941	Residential	AC	538	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	TraverAve	517	42.7	\$790,619	Residential	AC	994	20	4.0" Mill & Overlay (Type IB Equivalent)
2025	TurnerAve	600	47.8	\$104,778	Residential	AC	1057	20	4.0" Mill & Overlay (Type IB Equivalent)

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2025	WESTERNAVE	877	47.8	\$40,303	Residential	AC	339	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	WhittierAv	262	42.7	\$92,151	Residential	AC	775	24	4.0" Mill & Overlay (Type IB Equivalent)
2025	WILSONAVE	189	57.9	\$42,500	Residential	AC	500	24	3.0" Mill & Overlay (Type IA Equivalent)
2026	AnthonySt	699	28.9	\$776,936	Residential	AC	871	24	Reconstruction
2026	CottageAve	706	30.5	\$290,637	Residential	AC	697	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	DuaneSt	688	28.9	\$594,090	Residential	AC	666	24	Reconstruction
2026	ElmSt	780	57.9	\$29,895	Residential	AC	402	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	ElmSt	781	32.2	\$41,128	Residential	AC	395	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	EmersonAve	217	35.7	\$36,270	Residential	AC	349	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	EmersonAve	215	34.0	\$15,608	Residential	AC	150	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	ESSEXCT	328	57.9	\$21,844	Residential	AC	294	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	FairviewAv	548	57.9	\$27,687	Residential	AC	310	24	3.0" Mill & Overlay (Type IA Equivalent)
2026	FairviewAv	556	34.0	\$38,271	Residential	AC	307	24	4.0" Mill & Overlay (Type IB Equivalent)
2026	ForestAve	392	57.9	\$50,660	Residential	AC	681	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	GLENELLYN	157	30.5	\$175,599	Residential	AC	421	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	GLENHAVEN	822	30.5	\$117,094	Residential	AC	281	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	GRANDAV	322	35.7	\$50,879	Residential	AC	489	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	Greenfield	575	17.5	\$181,144	Residential	AC	203	24	Reconstruction
2026	HillsideAv	669	57.9	\$37,343	Residential	AC	418	24	3.0" Mill & Overlay (Type IA Equivalent)
2026	ILLINOISST	535	30.5	\$181,554	Residential	AC	335	26	4.0" Mill & Overlay (Type IB Equivalent)
2026	LINDENAV	740	30.5	\$136,979	Residential	AC	328	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	MARYKNOLLC	840	30.5	\$1,136,381	Residential	AC	2270	24	4.0" Mill & Overlay (Type IB Equivalent)
2026	MayAve	245	57.9	\$9,789	Residential	AC	110	24	3.0" Mill & Overlay (Type IA Equivalent)
2026	OTTOAVE	934	32.2	\$51,300	Residential	AC	379	26	4.0" Mill & Overlay (Type IB Equivalent)
2026	PARKPLAZA	518	57.9	\$51,857	Residential	AC	697	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	PhillipsAv	640	57.9	\$40,084	Residential	AC	539	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	PLEASANTAV	434	34.0	\$77,533	Residential	AC	745	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	PLEASANTAV	438	32.2	\$38,610	Residential	AC	371	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	PRAIRIEAV	447	57.9	\$37,313	Residential	AC	502	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	PRAIRIEAV	448	35.7	\$69,748	Residential	AC	670	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	RAINTREEDR	831	32.2	\$54,632	Residential	AC	328	32	4.0" Mill & Overlay (Type IB Equivalent)
2026	SCOTTAV	281	30.5	\$96,605	Residential	AC	232	20	4.0" Mill & Overlay (Type IB Equivalent)
2026	SpringAve	264	28.9	\$134,504	Residential	AC	151	24	Reconstruction
2026	SURREYDR	289	32.2	\$80,227	Residential	AC	593	26	4.0" Mill & Overlay (Type IB Equivalent)
2026	WAVERLYRD	644	57.9	\$38,883	Residential	AC	523	20	3.0" Mill & Overlay (Type IA Equivalent)
2026	WILSONAV	797	35.7	\$62,761	Residential	AC	503	24	4.0" Mill & Overlay (Type IB Equivalent)
2026	WOODSTOCKA	279	30.5	\$551,531	Residential	AC	1322	20	4.0" Mill & Overlay (Type IB Equivalent)
2027	AnthonySt	701	20.4	\$643,088	Residential	AC	687	24	Reconstruction
2027	DuaneSt	678	59.3	\$37,409	Residential	AC	399	24	3.0" Mill & Overlay (Type IA Equivalent)
2027	DuaneSt	682	22.3	\$603,219	Residential	AC	644	24	Reconstruction
2027	DuaneSt	681	20.4	\$385,449	Residential	AC	412	24	Reconstruction
2027	FairviewAv	553	20.4	\$286,139	Residential	AC	306	24	Reconstruction
2027	ForestAve	398	18.7	\$410,926	Residential	AC	527	20	Reconstruction
2027	GolfAve	886	6.3	\$90,809	Residential	AC	97	24	Reconstruction
2027	ILLINOISST	534	18.7	\$346,202	Residential	AC	370	24	Reconstruction
2027	LENOXRD	383	59.3	\$42,974	Residential	AC	550	20	3.0" Mill & Overlay (Type IA Equivalent)
2027	LONGFELLOW	252	20.4	\$713,901	Residential	AC	763	24	Reconstruction
2027	LOWELLAV	236	59.3	\$72,356	Residential	AC	772	24	3.0" Mill & Overlay (Type IA Equivalent)
2027	MILTONAV	335	59.3	\$101,189	Residential	AC	1295	20	3.0" Mill & Overlay (Type IA Equivalent)
2027	MontclairA	343	59.3	\$29,736	Residential	AC	317	24	3.0" Mill & Overlay (Type IA Equivalent)
2027	NewtonAve	478	20.4	\$754,271	Residential	AC	806	24	Reconstruction
2027	OAKWOODCT	846	18.7	\$441,554	Residential	AC	472	24	Reconstruction
2027	ParkBlvd	101	63.8	\$109,658	Collector	AC	772	26	4.0" Mill & Overlay (Type IB Equivalent)
2027	PLEASANTAV	432	59.3	\$40,112	Residential	AC	514	20	3.0" Mill & Overlay (Type IA Equivalent)

List of Sections Selected for 2022-2031 Major M&R Plan Based on Current Funding

Year	Branch ID	Section ID	PCI Before	Cost	Functional Class	Surface Type	Length (ft)	Width (ft)	Work Type
2027	SCOTTAV	280	20.4	\$607,039	Residential	AC	778	20	Reconstruction
2027	STONEGATEC	857	59.3	\$19,594	Residential	AC	251	20	3.0" Mill & Overlay (Type IA Equivalent)
2027	WOODSTOCKA	278	18.7	\$751,649	Residential	AC	964	20	Reconstruction
2028	BRIARST	293	5.2	\$635,606	Residential	AC	597	26	Reconstruction
2028	CUMNORAV	277	5.2	\$1,082,003	Residential	AC	1321	20	Reconstruction
2028	MontclairA	338	9.1	\$462,619	Residential	AC	471	24	Reconstruction
2028	OTTOAVE	178	9.1	\$414,782	Residential	AC	390	26	Reconstruction
2028	OTTOAVE	179	9.1	\$421,602	Residential	AC	396	26	Reconstruction
2028	OXFORDRD	590	7.2	\$336,220	Residential	AC	410	20	Reconstruction
2028	ParkBlvd	090	64.8	\$45,075	Collector	AC	187	42	4.0" Mill & Overlay (Type IB Equivalent)
2028	PRAIRIEAV	450	7.2	\$540,685	Residential	AC	660	20	Reconstruction
2028	REGENTST	453	5.2	\$642,612	Residential	AC	654	24	Reconstruction
2028	RevereRd	559	9.1	\$368,508	Residential	AC	450	20	Reconstruction
2028	RidgewoodA	630	7.2	\$389,456	Residential	AC	475	20	Reconstruction
2028	STAGECOACH	866	9.1	\$270,763	Residential	AC	275	24	Reconstruction
2028	SURREYDR	290	11.1	\$287,893	Residential	AC	270	26	Reconstruction
2028	WAVERLYRD	645	11.1	\$308,233	Residential	AC	376	20	Reconstruction
2028	WINGATERD	587	3.3	\$254,173	Residential	AC	310	20	Reconstruction
2029	ANNANDALEA	158	60.0	\$53,512	Residential	AC	518	24	3.0" Mill & Overlay (Type IA Equivalent)
2029	DuaneSt	680	60.0	\$54,641	Residential	AC	529	24	3.0" Mill & Overlay (Type IA Equivalent)
2029	HIGHLANDAV	412	0.0	\$560,977	Residential	AC	652	20	Reconstruction
2029	Kenilworth	502	64.1	\$71,913	Residential	PCC	310	20	Above Critical PCI/ Optional M&R
2029	Kenilworth	506	63.1	\$128,184	Residential	PCC	552	20	Above Critical PCI/ Optional M&R
2029	MapleSt	754	60.0	\$33,773	Residential	AC	392	20	3.0" Mill & Overlay (Type IA Equivalent)
2029	STAGECOACH	868	0.0	\$1,303,741	Residential	AC	1263	24	Reconstruction
2029	SURREYDR	287	0.0	\$1,423,903	Residential	AC	1274	26	Reconstruction
2029	WesternAve	075	63.1	\$175,297	Collector	PCC	755	20	4.0" Mill & Overlay (Type IB Equivalent)
2030	ParkBlvd	110	64.6	\$55,581	Collector	AC	338	26	4.0" Mill & Overlay (Type IB Equivalent)
2030	Pennsylvan	114	64.6	\$164,784	Collector	AC	620	42	4.0" Mill & Overlay (Type IB Equivalent)
2030	RIFORDRD	132	64.6	\$55,904	Collector	AC	442	20	4.0" Mill & Overlay (Type IB Equivalent)
2030	RIFORDRD	133	64.7	\$5,885	Collector	AC	47	20	4.0" Mill & Overlay (Type IB Equivalent)
2030	SEllyn Ave	894	0.0	\$60,414	Residential	AC	56	24	Reconstruction
2030	SpringAve	270	0.0	\$1,296,294	Residential	AC	1196	24	Reconstruction
2030	WINCHELLWA	204	0.0	\$1,300,883	Residential	AC	960	30	Reconstruction
2031	AnthonySt	700	0.0	\$1,043,003	Residential	AC	917	24	Reconstruction
2031	CollegeAve	112	64.8	\$150,193	Collector	AC	628	36	4.0" Mill & Overlay (Type IB Equivalent)
2031	ForestAve	402	59.3	\$42,605	Residential	AC	449	20	3.0" Mill & Overlay (Type IA Equivalent)
2031	Georgetown	209	59.3	\$81,076	Residential	AC	712	24	3.0" Mill & Overlay (Type IA Equivalent)
2031	HillAve	051	63.2	\$276,649	Collector	PCC	901	24	4.0" Mill & Overlay (Type IB Equivalent)
2031	Kenilworth	511	0.0	\$992,058	Residential	AC	805	26	Reconstruction
2031	MainSt	013	64.8	\$121,425	Arterial	AC	762	24	4.0" Mill & Overlay (Type IB Equivalent)
2031	MapleSt	758	59.3	\$36,166	Residential	AC	381	20	3.0" Mill & Overlay (Type IA Equivalent)
2031	NewtonAve	482	59.3	\$84,499	Residential	AC	890	20	3.0" Mill & Overlay (Type IA Equivalent)
2031	OXFORDRD	592	0.0	\$330,277	Residential	AC	348	20	Reconstruction
2031	ParkBlvd	088	64.9	\$13,232	Collector	AC	47	42	4.0" Mill & Overlay (Type IB Equivalent)
2031	PhillipsAv	639	59.3	\$43,921	Residential	AC	463	20	3.0" Mill & Overlay (Type IA Equivalent)
2031	STAGECOACH	865	59.3	\$38,703	Residential	AC	340	24	3.0" Mill & Overlay (Type IA Equivalent)

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
ABBEYDR	847	Residential	203	24	AC	06-03-2021	280.00	36.00	Very Poor
ABBEYDR	848	Residential	316	24	AC	06-03-2021	278.50	20.00	Serious
ABBEYDR	849	Residential	402	24	AC	06-03-2021	326.00	19.00	Serious
ABBEYDR	850	Residential	417	24	AC	06-03-2021	159.50	61.00	Fair
ABBEYDR	851	Residential	683	24	AC	06-03-2021	164.00	61.00	Fair
ABBEYDR	852	Residential	930	24	AC	06-03-2021	230.75	74.00	Satisfactory
ABBEYDR	853	Residential	528	24	AC	06-03-2021	198.00	60.00	Fair
ABBOTSFORD	285	Residential	1575	20	AC	06-03-2021	331.2	64.0	Fair
AhlstrandR	898	Residential	298	20	AC	06-03-2021	2,117.00	25.00	Serious
AhlstrandR	899	Residential	743	20	AC	06-03-2021	546.67	20.00	Serious
AhlstrandR	901	Residential	268	20	AC	06-03-2021	465.00	25.00	Serious
AMYCT	155	Residential	771	24	AC	06-03-2021	188.7	87.0	Good
ANNANDALEA	158	Residential	518	24	AC	06-03-2021	283.5	68.0	Fair
ANTHONYST	698	Residential	597	20	AC	06-03-2021	289.50	96.00	Good
AnthonySt	699	Residential	871	24	AC	06-03-2021	344.00	52.00	Poor
AnthonySt	700	Residential	917	24	AC	06-03-2021	412.00	36.00	Very Poor
AnthonySt	701	Residential	687	24	AC	06-03-2021	458.67	51.00	Poor
AnthonySt	702	Residential	438	24	AC	06-03-2021	294.50	36.00	Very Poor
AnthonySt	703	Residential	319	24	AC	06-03-2021	317.00	58.00	Fair
AnthonySt	704	Residential	614	24	AC	06-03-2021	245.67	28.00	Very Poor
APPIANWAY	671	Residential	239	24	AC	06-03-2021	400.00	36.00	Very Poor
ArborCt	596	Residential	368	24	AC	06-03-2021	232.50	63.00	Fair
ARLINGTONA	593	Residential	494	24	AC	06-03-2021	298.00	75.00	Satisfactory
ARLINGTONA	594	Residential	518	24	AC	06-03-2021	331.00	74.00	Satisfactory
AVONCT	143	Residential	179	20	AC	06-03-2021	466.0	27.0	Very Poor
AVONCT	144	Residential	203	20	AC	06-03-2021	671.0	27.0	Very Poor
BAKERCT	842	Residential	477	24	AC	06-03-2021	287.33	61.00	Fair
BAKERHILL	902	Residential	554	34	AC	06-03-2021	388.00	68.00	Fair
BAKERHILL	903	Residential	296	34	AC	06-03-2021	284.00	76.00	Satisfactory
BAKERHILL	904	Residential	323	34	AC	06-03-2021	308.50	76.00	Satisfactory
BemisRd	920	Residential	698	20	AC	06-03-2021	474.67	6.00	Failed
BemisRd	924	Residential	355	20	AC	06-03-2021	380.50	7.00	Failed
BemisRd	925	Residential	176	20	AC	06-03-2021	397.00	8.00	Failed
BemisRd	926	Residential	758	20	AC	06-03-2021	424.67	2.00	Failed
BirchBookC	910	Residential	797	24	AC	06-03-2021	206.00	97.00	Good
BRAEBURNCT	199	Residential	218	24	AC	06-03-2021	265.0	95.0	Good
BRAEBURNCT	200	Residential	184	24	AC	06-03-2021	262.0	100.0	Good
BRANDONAV	461	Residential	817	24	AC	06-03-2021	350.0	61.0	Fair
BRANDONAV	462	Residential	761	24	AC	06-03-2021	284.7	36.0	Very Poor
BRANDONAV	463	Residential	522	24	AC	06-03-2021	318.5	47.0	Poor
BRANDONAV	464	Residential	173	24	AC	06-03-2021	347.0	91.0	Good
BrandonAve	457	Residential	340	20	AC	06-03-2021	332.0	75.0	Satisfactory
BrandonAve	458	Residential	537	20	AC	06-03-2021	251.5	61.0	Fair
BrandonAve	459	Residential	361	20	AC	06-03-2021	296.0	68.0	Fair
BrandonAve	460	Residential	53	20	AC	07-13-2021	250.0	86.0	Good
BRENTWOOD	867	Residential	665	20	AC	06-03-2021	219.67	88.00	Good
BRIARST	292	Residential	302	26	AC	06-03-2021	211.0	75.0	Satisfactory

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
BRIARST	293	Residential	597	26	AC	06-03-2021	157.5	47.0	Poor
BRIARST	294	Residential	276	26	AC	06-03-2021	189.0	83.0	Satisfactory
BRIARST	295	Residential	396	26	AC	06-03-2021	187.5	75.0	Satisfactory
BRIGHTON	522	Residential	905	26	AC	06-03-2021	189.3	88.0	Good
BrookCt	914	Residential	222	26	AC	06-03-2021	100.00	100.00	Good
BryantAve	162	Residential	662	24	PCC	06-03-2021	183.0	90.0	Good
BryantAve	163	Residential	549	24	PCC	06-03-2021	145.5	97.0	Good
BryantAve	164	Residential	652	24	PCC	06-03-2021	141.3	97.0	Good
BryantAve	165	Residential	759	24	PCC	06-03-2021	171.0	96.0	Good
BryantAve	166	Residential	600	24	PCC	06-03-2021	252.0	89.0	Good
BryantAve	167	Residential	807	24	PCC	06-03-2021	311.8	87.0	Good
BryantAve	168	Residential	564	24	PCC	06-03-2021	142.0	94.0	Good
BryantAve	169	Residential	366	24	PCC	06-03-2021	240.5	85.0	Satisfactory
BryantAve	170	Residential	611	24	PCC	06-03-2021	118.7	100.0	Good
BryantAve	171	Residential	121	24	PCC	06-03-2021	143.0	84.0	Satisfactory
BuenaVista	205	Residential	502	30	AC	06-03-2021	239.0	86.0	Good
BuenaVista	206	Residential	114	30	AC	06-03-2021	337.0	74.0	Satisfactory
BUENAVISTA	207	Residential	399	30	AC	06-03-2021	192.0	67.0	Fair
BuenaVista	230	Residential	220	20	AC	06-03-2021	300.0	100.0	Good
BuenaVista	231	Residential	436	20	AC	06-03-2021	180.5	98.0	Good
BuenaVista	232	Residential	436	20	AC	06-03-2021	181.5	100.0	Good
BuenaVista	893	Residential	380	30	AC	06-03-2021	289.00	97.00	Good
CARLETONAV	182	Residential	555	34	AC	06-03-2021	413.3	53.0	Poor
CARLETONAV	299	Residential	526	24	AC	09-09-2021	95.0	100.0	Good
CARLETONAV	300	Residential	753	24	PCC	06-03-2021	332.3	84.0	Satisfactory
CarletonAv	301	Residential	344	24	AC	06-03-2021	399.0	59.0	Fair
CARLETONAV	302	Residential	264	24	AC	06-03-2021	279.0	58.0	Fair
CARLETONAV	945	Residential	802	28	AC	07-07-2021	319.00	75.00	Satisfactory
CARLISLECT	823	Residential	1138	26	AC	06-03-2021	238.80	77.00	Satisfactory
CAROLYN	386	Residential	270	20	AC	06-03-2021	534.0	34.0	Very Poor
CENTERST	672	Residential	485	24	AC	09-09-2021	95.00	100.00	Good
ChapelCt N	856	Residential	765	24	AC	06-03-2021	173.33	98.00	Good
ChapelCt S	855	Residential	759	24	AC	06-03-2021	196.33	100.00	Good
CHESTERFIE	634	Residential	395	24	AC	06-03-2021	310.00	54.00	Poor
CHESTERFIE	635	Residential	336	24	AC	06-03-2021	418.50	33.00	Very Poor
CHIDESTERA	775	Residential	724	20	AC	06-03-2021	474.67	63.00	Fair
CHIDESTERA	776	Residential	485	20	AC	06-03-2021	228.50	92.00	Good
CHIDESTERA	777	Residential	299	20	AC	06-03-2021	147.50	78.00	Satisfactory
CLIFTONAV	735	Residential	356	20	AC	09-08-2021	85.00	100.00	Good
CLIFTONAVE	223	Residential	734	20	AC	06-03-2021	347.3	44.0	Poor
COLCORDPL	175	Residential	261	20	AC	06-03-2021	326.0	33.0	Very Poor
CollegeAve	112	Collector	628	36	AC	06-03-2021	132.3	73.0	Satisfactory
COOLIDGEAV	803	Residential	1222	24	AC	06-03-2021	196.20	79.00	Satisfactory
COTTAGEAV	705	Residential	875	20	AC	06-03-2021	311.00	43.00	Poor
CottageAve	706	Residential	697	20	AC	06-03-2021	513.00	53.00	Poor
CottageAve	707	Residential	344	20	AC	06-03-2021	215.50	93.00	Good
CottageAve	708	Residential	438	20	AC	06-03-2021	286.50	78.00	Satisfactory

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
CottageAve	709	Residential	179	20	AC	06-03-2021	267.00	100.00	Good
CottageAve	710	Residential	386	20	AC	06-03-2021	256.50	96.00	Good
CottageAve	711	Residential	607	20	AC	06-03-2021	288.33	68.00	Fair
CountryClu	173	Residential	376	24	AC	06-03-2021	232.5	84.0	Satisfactory
CountryClu	174	Residential	248	24	AC	06-03-2021	268.0	83.0	Satisfactory
COURTLANDC	194	Residential	222	24	AC	06-03-2021	496.0	74.0	Satisfactory
COURTLANDC	195	Residential	260	24	AC	06-03-2021	175.0	99.0	Good
CRANSTONCT	558	Residential	755	24	AC	06-03-2021	202.67	85.00	Satisfactory
CRECENTDR	249	Residential	311	20	AC	06-03-2021	353.0	29.0	Very Poor
CrescentBl	026	Collector	483	24	AC	06-03-2021	320.0	44.0	Poor
CrescentBl	027	Collector	370	24	AC	06-03-2021	177.0	62.0	Fair
CrescentBl	028	Collector	693	24	AC	06-03-2021	200.3	48.0	Poor
CrescentBl	029	Collector	477	24	AC	06-03-2021	170.5	69.0	Fair
CrescentBl	030	Collector	249	24	AC	06-03-2021	220.0	55.0	Poor
CrescentBl	031	Collector	186	24	AC	06-03-2021	165.0	27.0	Very Poor
CrescentBl	032	Collector	175	24	AC	06-03-2021	244.0	53.0	Poor
CrescentBl	033	Collector	446	24	AC	06-03-2021	200.5	47.0	Poor
CrescentBl	034	Collector	383	24	AC	06-03-2021	191.0	68.0	Fair
CrescentBl	035	Collector	1100	24	AC	06-03-2021	204.0	40.0	Very Poor
CrescentBl	036	Collector	529	24	AC	06-03-2021	167.0	35.0	Very Poor
CrescentBl	037	Collector	636	24	PCC	06-03-2021	186.7	97.0	Good
CrescentBl	038	Collector	122	24	PCC	06-03-2021	261.6	100.0	Good
CrescentBl	039	Collector	833	48	PCC	06-03-2021	208.3	98.0	Good
CrescentBl	121	Collector	536	24	AC	06-03-2021	344.0	50.0	Poor
CrescentBl	122	Collector	501	24	AC	06-03-2021	275.5	47.0	Poor
CrescentBl	141	Residential	455	24	AC	06-03-2021	196.0	46.0	Poor
CrescentBl	142	Residential	466	24	AC	06-03-2021	300.5	52.0	Poor
CRESCENTCT	712	Residential	428	20	AC	09-09-2021	95.00	100.00	Good
CRESCENTCT	713	Residential	242	20	AC	09-09-2021	95.00	100.00	Good
CrestCt	916	Residential	191	26	AC	06-03-2021	331.00	65.00	Fair
CRESTRD	348	Residential	628	20	AC	06-03-2021	297.0	33.0	Very Poor
CRESTRD	349	Residential	568	20	AC	06-03-2021	479.0	71.0	Satisfactory
CRESTRD	350	Residential	530	20	AC	06-03-2021	229.0	79.0	Satisfactory
CUMNORAV	276	Residential	958	20	AC	06-03-2021	284.5	69.0	Fair
CUMNORAV	277	Residential	1321	20	AC	06-03-2021	334.2	47.0	Poor
CUMNORAVE	221	Residential	386	20	AC	06-03-2021	243.0	47.0	Poor
CUMNORAVE	222	Residential	536	20	AC	06-03-2021	301.0	65.0	Fair
CumnorAve	885	Residential	104	24	AC	06-03-2021	409.00	95.00	Good
CumnorAve	946	Residential	431	24	AC	07-07-2021	100.00	99.00	Good
CumnorAve	947	Residential	474	24	AC	07-07-2021	400.00	62.00	Fair
DanbyDr	944	Residential	448	24	AC	06-03-2021	208.50	92.00	Good
DAVISTER	470	Residential	354	20	AC	06-03-2021	251.0	57.0	Fair
DAWESAV	804	Residential	429	24	AC	06-03-2021	220.50	82.00	Satisfactory
DAWESAV	805	Residential	788	24	AC	06-03-2021	216.67	85.00	Satisfactory
DAWN	490	Residential	522	20	AC	09-09-2021	90.0	100.0	Good
DeerGlenC	938	Residential	482	20	AC	06-03-2021	355.50	61.00	Fair
DERBYGLEN	146	Residential	523	26	AC	06-03-2021	169.5	81.0	Satisfactory

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
DERBYGLEN	147	Residential	458	26	AC	06-03-2021	172.5	85.0	Satisfactory
Dorchester	887	Residential	160	24	AC	06-03-2021	372.00	27.00	Very Poor
DORSETAV	521	Residential	405	20	AC	06-03-2021	180.0	79.0	Satisfactory
DorsetCt	520	Residential	468	24	PCC	06-03-2021	499.0	94.0	Good
DORSETPL	519	Residential	696	24	AC	06-03-2021	328.0	34.0	Very Poor
DuaneSt	673	Residential	384	24	AC	09-09-2021	95.00	100.00	Good
DuaneSt	674	Residential	383	24	AC	09-09-2021	95.00	100.00	Good
DuaneSt	675	Residential	369	24	AC	09-09-2021	95.00	100.00	Good
DuaneSt	676	Residential	704	24	AC	09-09-2021	95.00	100.00	Good
DuaneSt	677	Residential	408	24	AC	06-03-2021	296.50	77.00	Satisfactory
DuaneSt	678	Residential	399	24	AC	06-03-2021	183.00	67.00	Fair
DuaneSt	679	Residential	418	24	AC	06-03-2021	150.00	70.00	Fair
DuaneSt	680	Residential	529	24	AC	06-03-2021	446.50	68.00	Fair
DuaneSt	681	Residential	412	24	AC	06-03-2021	289.50	51.00	Poor
DuaneSt	682	Residential	644	24	AC	06-03-2021	234.33	52.00	Poor
DuaneSt	683	Residential	529	30	AC	06-03-2021	347.50	31.00	Very Poor
DuaneSt	684	Residential	461	30	AC	06-03-2021	494.50	38.00	Very Poor
DuaneSt	685	Residential	407	24	AC	06-03-2021	172.50	86.00	Good
DuaneSt	686	Residential	367	24	AC	06-03-2021	208.50	72.00	Satisfactory
DuaneSt	687	Residential	490	24	AC	06-03-2021	257.00	57.00	Fair
DuaneSt	688	Residential	666	24	AC	06-03-2021	194.00	52.00	Poor
DuaneSt	689	Residential	461	30	AC	06-03-2021	443.50	38.00	Very Poor
DuaneSt	690	Residential	364	24	AC	06-03-2021	416.00	74.00	Satisfactory
DuaneSt	691	Residential	361	24	AC	06-03-2021	184.00	58.00	Fair
DUANETERRA	159	Residential	344	24	AC	06-03-2021	574.0	26.0	Very Poor
DUPAGEBLVA	530	Residential	318	20	AC	06-03-2021	221.0	78.0	Satisfactory
DUPAGEBLVD	526	Residential	387	20	AC	06-03-2021	366.0	47.0	Poor
DUPAGEBLVD	527	Residential	614	34	AC	06-03-2021	218.3	74.0	Satisfactory
DUPAGEBLVD	528	Residential	321	34	AC	06-03-2021	351.5	63.0	Fair
DUPAGEBLVD	529	Residential	362	34	AC	06-03-2021	322.0	74.0	Satisfactory
EasternAve	296	Residential	477	20	AC	06-03-2021	506.0	75.0	Satisfactory
EASTRD	346	Residential	573	20	AC	06-03-2021	321.3	84.0	Satisfactory
EASTRD	347	Residential	533	20	AC	06-03-2021	194.5	98.0	Good
EDGEWOODDR	722	Residential	596	20	AC	09-08-2021	95.00	100.00	Good
ELLYNAV	357	Residential	976	24	PCC	06-03-2021	349.3	98.0	Good
ELLYNAV	358	Residential	417	24	PCC	06-03-2021	432.5	100.0	Good
ELLYNWOODD	225	Residential	806	20	AC	06-03-2021	345.3	74.0	Satisfactory
ELLYNWOODD	715	Residential	85	20	AC	06-03-2021	474.00	84.00	Satisfactory
ELLYNWOODD	716	Residential	285	20	AC	09-08-2021	95.00	100.00	Good
ELLYNWOODD	717	Residential	389	20	AC	09-08-2021	90.00	100.00	Good
ELLYNWOODD	718	Residential	482	20	AC	09-08-2021	90.00	100.00	Good
ELM	786	Residential	680	20	AC	06-03-2021	298.50	78.00	Satisfactory
ELM	787	Residential	449	20	AC	06-03-2021	387.50	76.00	Satisfactory
ELM	788	Residential	437	20	AC	06-03-2021	242.00	87.00	Good
ELMST	778	Residential	1750	20	AC	06-03-2021	287.00	71.00	Satisfactory
ElmSt	779	Residential	385	20	AC	06-03-2021	333.50	72.00	Satisfactory
ElmSt	780	Residential	402	20	AC	06-03-2021	254.50	66.00	Fair

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
ElmSt	781	Residential	395	20	AC	06-03-2021	237.00	54.00	Poor
ElmSt	782	Residential	391	20	AC	06-03-2021	278.50	62.00	Fair
ElmSt	783	Residential	372	20	AC	06-03-2021	291.50	60.00	Fair
ElmSt	784	Residential	733	20	AC	06-03-2021	284.00	63.00	Fair
ElmSt	785	Residential	410	20	AC	06-03-2021	169.50	36.00	Very Poor
EmersonAve	215	Residential	150	20	AC	06-03-2021	233.0	55.0	Poor
EmersonAve	216	Residential	19	20	AC	07-13-2021	266.0	51.0	Poor
EmersonAve	217	Residential	349	20	AC	06-03-2021	266.5	56.0	Fair
ESSEXCT	328	Residential	294	20	AC	06-03-2021	384.0	66.0	Fair
ESSEXRD	751	Residential	414	20	PCC	06-03-2021	257.50	89.00	Good
ESSEXRD	752	Residential	412	20	PCC	06-03-2021	375.00	76.00	Satisfactory
EUCLIDAV	426	Residential	366	20	AC	06-03-2021	297.0	59.0	Fair
EUCLIDAV	427	Residential	747	20	AC	06-03-2021	237.3	57.0	Fair
EUCLIDAV	428	Residential	682	20	AC	06-03-2021	322.7	79.0	Satisfactory
EUCLIDAV	429	Residential	658	20	AC	06-03-2021	327.3	80.0	Satisfactory
EUCLIDAV	430	Residential	668	20	AC	06-03-2021	355.3	67.0	Fair
EVERGREEN	471	Residential	298	20	AC	09-09-2021	95.0	100.0	Good
EVERGREEN	472	Residential	298	20	AC	09-09-2021	95.0	100.0	Good
EVERGREENC	854	Residential	452	24	AC	06-03-2021	328.33	42.00	Poor
EXMOORAV	351	Residential	738	20	AC	06-03-2021	273.3	42.0	Poor
EXMOORAV	352	Residential	658	20	AC	06-03-2021	255.3	75.0	Satisfactory
EXMOORAV	353	Residential	270	24	AC	06-03-2021	314.0	79.0	Satisfactory
EXMOORAV	354	Residential	817	20	AC	06-03-2021	276.5	67.0	Fair
EXMOORAV	355	Residential	451	20	AC	06-03-2021	245.0	59.0	Fair
EXMOORAVE	202	Residential	354	24	AC	06-03-2021	349.5	60.0	Fair
FAIRVIEWAV	541	Residential	356	26	AC	06-03-2021	244.50	69.00	Fair
FAIRVIEWAV	542	Residential	325	24	AC	06-03-2021	224.00	66.00	Fair
FAIRVIEWAV	543	Residential	335	26	AC	06-03-2021	252.50	64.00	Fair
FairviewAv	544	Residential	462	24	AC	06-03-2021	298.00	72.00	Satisfactory
FairviewAv	545	Residential	335	24	AC	06-03-2021	210.50	73.00	Satisfactory
FairviewAv	546	Residential	460	24	AC	06-03-2021	238.00	59.00	Fair
FairviewAv	547	Residential	427	24	AC	06-03-2021	276.50	72.00	Satisfactory
FairviewAv	548	Residential	310	24	AC	06-03-2021	245.50	66.00	Fair
FairviewAv	549	Residential	337	24	AC	06-03-2021	329.50	73.00	Satisfactory
FairviewAv	550	Residential	411	24	AC	06-03-2021	188.50	65.00	Fair
FairviewAv	551	Residential	313	24	AC	06-03-2021	219.00	63.00	Fair
FairviewAv	552	Residential	312	24	AC	06-03-2021	135.00	58.00	Fair
FairviewAv	553	Residential	306	24	AC	06-03-2021	161.00	51.00	Poor
FairviewAv	554	Residential	366	24	AC	06-03-2021	150.00	74.00	Satisfactory
FairviewAv	555	Residential	305	24	AC	06-03-2021	359.50	42.00	Poor
FairviewAv	556	Residential	307	24	AC	06-03-2021	148.50	55.00	Poor
FairviewAv	557	Residential	705	24	AC	06-03-2021	176.67	72.00	Satisfactory
FairwatSt	948	Residential	409	20	AC	07-07-2021	91.00	100.00	Good
FairwatSt	949	Residential	346	20	AC	07-07-2021	90.00	100.00	Good
FawelBlvd	905	Collector	1329	60	PCC	06-03-2021	189.27	92.00	Good
FawelBlvd	906	Collector	1006	60	PCC	06-03-2021	172.50	96.00	Good
FawelBlvd	907	Collector	1264	60	PCC	06-03-2021	164.20	98.00	Good

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
FawellBlvd	908	Collector	1997	60	PCC	06-03-2021	200.67	92.00	Good
FawellBlvd	208	Residential	436	20	AC	06-03-2021	140.5	77.0	Satisfactory
FORESTAV	405	Residential	626	20	AC	06-03-2021	209.3	58.0	Fair
ForestAve	387	Residential	678	20	AC	06-03-2021	466.0	62.0	Fair
ForestAve	388	Residential	358	24	AC	06-03-2021	290.5	30.0	Very Poor
ForestAve	389	Residential	406	24	AC	06-03-2021	176.0	52.0	Poor
ForestAve	390	Residential	502	20	AC	06-03-2021	254.0	70.0	Fair
ForestAve	391	Residential	375	20	AC	06-03-2021	286.5	41.0	Poor
ForestAve	392	Residential	681	20	AC	06-03-2021	234.3	66.0	Fair
ForestAve	393	Residential	789	20	AC	06-03-2021	314.7	74.0	Satisfactory
ForestAve	394	Residential	694	20	AC	06-03-2021	375.7	79.0	Satisfactory
ForestAve	395	Residential	235	24	AC	06-03-2021	251.0	28.0	Very Poor
ForestAve	396	Residential	447	20	AC	06-03-2021	231.0	61.0	Fair
ForestAve	397	Residential	580	20	AC	06-03-2021	341.7	63.0	Fair
ForestAve	398	Residential	527	20	AC	06-03-2021	312.0	50.0	Poor
ForestAve	399	Residential	250	24	AC	06-03-2021	510.0	22.0	Serious
ForestAve	400	Residential	470	20	AC	06-03-2021	197.5	45.0	Poor
ForestAve	401	Residential	480	20	AC	06-03-2021	330.0	58.0	Fair
ForestAve	402	Residential	449	20	AC	06-03-2021	412.0	69.0	Fair
ForestAve	403	Residential	552	20	AC	06-03-2021	246.0	82.0	Satisfactory
ForestAve	404	Residential	264	24	AC	06-03-2021	276.0	27.0	Very Poor
ForestAve	882	Residential	209	20	AC	06-03-2021	565.00	28.00	Very Poor
Georgetown	209	Residential	712	24	AC	06-03-2021	430.5	69.0	Fair
GLENARBOR	138	Residential	411	26	AC	09-08-2021	90.0	100.0	Good
GLENARBOR	139	Residential	215	26	AC	09-08-2021	95.0	100.0	Good
GLENBARDRD	872	Residential	338	20	AC	06-03-2021	316.00	76.00	Satisfactory
GLENBARDRD	873	Residential	1273	24	AC	06-03-2021	238.80	93.00	Good
GLENBARDRD	874	Residential	348	20	AC	06-03-2021	240.00	71.00	Satisfactory
GLENBARDRD	875	Residential	593	20	AC	06-03-2021	326.00	77.00	Satisfactory
GLENBARDRD	876	Residential	680	24	AC	06-03-2021	257.67	97.00	Good
GLENCOEST	145	Residential	691	26	AC	06-03-2021	261.7	95.0	Good
GlenCrest	922	Residential	513	24	AC	06-03-2021	202.50	94.00	Good
GlenCrest	923	Residential	513	24	AC	06-03-2021	169.50	96.00	Good
GLENELLYN	157	Residential	421	20	AC	06-03-2021	292.0	53.0	Poor
GLENHAVEN	822	Residential	281	20	AC	06-03-2021	346.00	53.00	Poor
GlenOak Av	670	Residential	402	24	PCC	06-03-2021	384.50	87.00	Good
GlenwoodAv	417	Residential	308	24	AC	06-03-2021	220.0	53.0	Poor
GlenwoodAv	418	Residential	511	24	AC	06-03-2021	335.0	44.0	Poor
GlenwoodAv	419	Residential	428	24	AC	06-03-2021	342.0	88.0	Good
GlenwoodAv	420	Residential	353	20	AC	06-03-2021	327.0	86.0	Good
GlenwoodAv	421	Residential	353	20	AC	06-03-2021	204.0	97.0	Good
GlenwoodAv	422	Residential	439	20	AC	06-03-2021	237.0	62.0	Fair
GlenwoodAv	423	Residential	390	20	AC	06-03-2021	192.5	100.0	Good
GlenwoodAv	424	Residential	410	24	AC	06-03-2021	192.5	89.0	Good
GlenwoodAv	425	Residential	355	24	AC	06-03-2021	247.0	77.0	Satisfactory
GolfAve	886	Residential	97	24	AC	06-03-2021	387.00	43.00	Poor
GRANDAV	322	Residential	489	20	AC	06-03-2021	262.0	56.0	Fair

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
GRANDAV	323	Residential	564	20	PCC	06-03-2021	353.5	90.0	Good
GRANDVIEWA	253	Residential	751	24	AC	06-03-2021	277.7	83.0	Satisfactory
GRANDVIEWA	254	Residential	912	24	AC	06-03-2021	274.5	66.0	Fair
GRANDVIEWA	255	Residential	528	24	AC	06-03-2021	323.0	33.0	Very Poor
GRANDVIEWA	256	Residential	607	24	AC	06-03-2021	260.3	42.0	Poor
GRANDVIEWA	257	Residential	526	24	AC	06-03-2021	327.0	38.0	Very Poor
GREENBRIAR	814	Residential	628	26	AC	06-03-2021	273.00	58.00	Fair
Greenfield	570	Residential	356	24	AC	06-03-2021	353.50	31.00	Very Poor
Greenfield	571	Residential	335	24	AC	06-03-2021	260.50	37.00	Very Poor
Greenfield	572	Residential	368	24	AC	06-03-2021	291.50	23.00	Serious
Greenfield	573	Residential	351	24	AC	06-03-2021	299.50	21.00	Serious
Greenfield	574	Residential	325	24	AC	06-03-2021	263.50	15.00	Serious
Greenfield	575	Residential	203	24	AC	06-03-2021	260.00	45.00	Poor
Greenfield	576	Residential	402	24	AC	06-03-2021	234.50	61.00	Fair
Greenfield	577	Residential	638	24	AC	06-03-2021	285.00	68.00	Fair
Greenfield	578	Residential	375	24	AC	06-03-2021	435.50	42.00	Poor
GreenviewD	927	Residential	400	26	AC	07-13-2021	100.00	100.00	Good
GREENWOODC	454	Residential	373	24	AC	06-03-2021	263.0	99.0	Good
GROVEAV	837	Residential	658	20	AC	06-03-2021	137.00	82.00	Satisfactory
GROVEAV	838	Residential	856	20	AC	06-03-2021	165.25	74.00	Satisfactory
HARDINGAV	799	Residential	241	20	AC	06-03-2021	427.00	36.00	Very Poor
HARDINGAV	800	Residential	463	20	AC	06-03-2021	308.50	79.00	Satisfactory
HARDINGAV	801	Residential	983	20	AC	06-03-2021	244.50	61.00	Fair
HARDINGAV	802	Residential	461	20	AC	06-03-2021	204.50	88.00	Good
HARWARDENS	176	Residential	108	24	AC	06-03-2021	143.0	38.0	Very Poor
HATTEGRAY	152	Residential	238	26	AC	06-03-2021	310.0	89.0	Good
HATTEGRAY	153	Residential	296	26	AC	06-03-2021	202.0	82.0	Satisfactory
HATTEGRAY	154	Residential	172	26	AC	06-03-2021	262.0	100.0	Good
HawthorneB	723	Residential	667	20	PCC	06-03-2021	206.00	100.00	Good
HawthorneB	724	Residential	878	20	PCC	06-03-2021	186.75	100.00	Good
HawthorneB	725	Residential	355	20	PCC	06-03-2021	275.50	96.00	Good
HawthorneB	726	Residential	684	20	PCC	06-03-2021	176.00	100.00	Good
HawthorneB	727	Residential	382	20	PCC	06-03-2021	183.50	100.00	Good
HawthorneB	728	Residential	440	20	PCC	06-03-2021	253.00	93.00	Good
HawthorneB	729	Residential	386	20	PCC	06-03-2021	142.00	100.00	Good
HawthorneB	730	Residential	335	20	PCC	06-03-2021	219.50	100.00	Good
HawthorneB	731	Residential	405	20	PCC	06-03-2021	222.50	89.00	Good
HawthorneB	732	Residential	351	20	PCC	06-03-2021	184.50	94.00	Good
HawthorneB	733	Residential	69	20	PCC	06-03-2021	191.00	91.00	Good
HEATHERLA	537	Residential	1049	26	AC	06-03-2021	159.3	92.0	Good
HEDGECT	858	Residential	250	20	AC	06-03-2021	296.00	78.00	Satisfactory
HICKORYRD	246	Residential	367	20	AC	09-08-2021	90.0	100.0	Good
HICKORYRD	247	Residential	310	20	AC	09-08-2021	95.0	100.0	Good
HICKORYRD	248	Residential	411	20	AC	09-08-2021	95.0	100.0	Good
HIGHGATE C	148	Residential	559	26	AC	06-03-2021	191.5	86.0	Good
HIGHLANDAV	156	Residential	428	20	AC	06-03-2021	523.0	21.0	Serious
HighlandAv	211	Residential	790	20	AC	06-03-2021	171.7	79.0	Satisfactory

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
HighlandAv	212	Residential	270	20	AC	06-03-2021	190.0	90.0	Good
HighlandAv	213	Residential	379	20	AC	06-03-2021	170.0	95.0	Good
HIGHLANDAV	412	Residential	652	20	AC	06-03-2021	486.3	44.0	Poor
HIGHLANDAV	413	Residential	673	20	AC	06-03-2021	496.3	42.0	Poor
HIGHLANDAV	414	Residential	676	20	AC	06-03-2021	395.7	65.0	Fair
HIGHLANDAV	415	Residential	397	20	AC	06-03-2021	356.0	43.0	Poor
HighRd	579	Residential	526	20	AC	06-03-2021	241.00	90.00	Good
HighRd	580	Residential	354	20	AC	06-03-2021	276.50	82.00	Satisfactory
HighRd	581	Residential	356	20	AC	06-03-2021	276.00	74.00	Satisfactory
HighRd	582	Residential	358	20	AC	06-03-2021	261.00	91.00	Good
HIGHVIEWAV	610	Residential	401	24	AC	06-03-2021	300.50	38.00	Very Poor
HIGHVIEWAV	611	Residential	450	24	AC	06-03-2021	357.50	59.00	Fair
HIGHVIEWAV	612	Residential	378	20	AC	06-03-2021	296.50	39.00	Very Poor
HIGHVIEWAV	613	Residential	353	20	AC	06-03-2021	337.00	43.00	Poor
HIGHVIEWAV	614	Residential	379	20	AC	06-03-2021	206.50	35.00	Very Poor
HIGHVIEWAV	615	Residential	302	20	AC	06-03-2021	522.50	32.00	Very Poor
HIGHVIEWAV	616	Residential	90	20	AC	06-03-2021	429.00	23.00	Serious
HIGHVIEWAV	617	Residential	296	20	AC	06-03-2021	710.50	34.00	Very Poor
HIGHVIEWAV	618	Residential	418	20	AC	06-03-2021	308.50	31.00	Very Poor
HillAve	040	Collector	808	24	PCC	06-03-2021	311.0	72.0	Satisfactory
HillAve	041	Collector	586	24	PCC	06-03-2021	315.3	84.0	Satisfactory
HillAve	042	Collector	254	24	PCC	06-03-2021	386.0	55.0	Poor
HillAve	043	Collector	695	24	PCC	06-03-2021	341.7	76.0	Satisfactory
HillAve	044	Collector	338	24	PCC	06-03-2021	473.0	58.0	Fair
HillAve	045	Collector	353	24	PCC	06-03-2021	307.5	74.0	Satisfactory
HillAve	046	Collector	374	24	PCC	06-03-2021	297.5	85.0	Satisfactory
HillAve	047	Collector	415	24	PCC	06-03-2021	316.5	84.0	Satisfactory
HillAve	048	Collector	90	24	PCC	06-03-2021	283.0	91.0	Good
HillAve	049	Collector	879	24	PCC	06-03-2021	308.3	86.0	Good
HillAve	050	Collector	791	24	PCC	06-03-2021	401.7	60.0	Fair
HillAve	051	Collector	901	24	PCC	06-03-2021	322.3	82.0	Satisfactory
HillAve	052	Collector	530	24	PCC	06-03-2021	450.0	91.0	Good
HillAve	053	Collector	473	24	PCC	06-03-2021	403.0	71.0	Satisfactory
HillAve	054	Collector	459	24	PCC	06-03-2021	324.0	80.0	Satisfactory
HillAve	055	Collector	478	24	PCC	06-03-2021	373.0	81.0	Satisfactory
HillAve	056	Collector	400	24	PCC	06-03-2021	433.5	89.0	Good
HillAve	057	Collector	374	24	PCC	06-03-2021	358.0	100.0	Good
HillAve	058	Collector	92	24	PCC	06-03-2021	364.0	76.0	Satisfactory
HillAve	059	Collector	204	24	PCC	06-03-2021	278.0	100.0	Good
HillAve	060	Collector	483	24	PCC	06-03-2021	392.5	61.0	Fair
HillAve	939	Collector	479	24	PCC	06-03-2021	296.00	94.00	Good
HillAve	940	Collector	424	24	PCC	06-03-2021	241.00	90.00	Good
HillAve	941	Collector	2558	24	AC	06-03-2021	259.50	61.00	Fair
HillAve	942	Collector	651	24	AC	06-03-2021	224.33	99.00	Good
HILLCRESTA	180	Residential	376	24	AC	06-03-2021	322.0	84.0	Satisfactory
HILLCRESTA	465	Residential	425	24	AC	06-03-2021	244.5	64.0	Fair
HILLCRESTA	466	Residential	200	24	AC	06-03-2021	263.0	75.0	Satisfactory

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
HILLCRESTA	467	Residential	157	24	AC	06-03-2021	378.0	81.0	Satisfactory
HillsideAv	647	Residential	182	20	PCC	06-03-2021	405.00	100.00	Good
HillsideAv	648	Residential	308	20	PCC	06-03-2021	315.50	92.00	Good
HillsideAv	649	Residential	348	20	PCC	06-03-2021	319.50	92.00	Good
HillsideAv	650	Residential	249	20	PCC	06-03-2021	355.00	100.00	Good
HillsideAv	651	Residential	106	20	PCC	06-03-2021	399.00	100.00	Good
HillsideAv	652	Residential	342	20	PCC	06-03-2021	402.00	96.00	Good
HillsideAv	653	Residential	344	20	PCC	06-03-2021	360.00	94.00	Good
HillsideAv	654	Residential	350	20	PCC	06-03-2021	282.50	99.00	Good
HillsideAv	655	Residential	235	20	PCC	06-03-2021	603.00	100.00	Good
HillsideAv	656	Residential	438	24	AC	06-03-2021	281.00	85.00	Satisfactory
HillsideAv	657	Residential	669	24	AC	06-03-2021	262.33	89.00	Good
HillsideAv	658	Residential	463	28	PCC	06-03-2021	280.50	100.00	Good
HillsideAv	659	Residential	525	24	AC	06-03-2021	279.50	82.00	Satisfactory
HillsideAv	660	Residential	462	28	PCC	06-03-2021	396.00	94.00	Good
HillsideAv	661	Residential	1036	24	AC	06-03-2021	247.25	86.00	Good
HillsideAv	662	Residential	365	20	PCC	06-03-2021	325.00	100.00	Good
HillsideAv	663	Residential	67	24	AC	06-03-2021	594.00	100.00	Good
HillsideAv	664	Residential	361	24	AC	06-03-2021	251.00	84.00	Satisfactory
HillsideAv	665	Residential	367	24	AC	06-03-2021	175.50	81.00	Satisfactory
HillsideAv	666	Residential	412	24	AC	06-03-2021	279.50	86.00	Good
HillsideAv	667	Residential	393	24	AC	06-03-2021	255.00	74.00	Satisfactory
HillsideAv	668	Residential	404	24	AC	06-03-2021	355.50	73.00	Satisfactory
HillsideAv	669	Residential	418	24	AC	06-03-2021	202.50	66.00	Fair
HillSt	061	Collector	55	24	PCC	07-07-2021	461.0	62.0	Fair
HillSt	062	Collector	271	24	PCC	06-03-2021	461.0	62.0	Fair
ILLINOISST	532	Residential	368	26	AC	06-03-2021	335.5	37.0	Very Poor
ILLINOISST	533	Residential	322	24	AC	06-03-2021	187.0	64.0	Fair
ILLINOISST	534	Residential	370	24	AC	06-03-2021	314.0	50.0	Poor
ILLINOISST	535	Residential	335	26	AC	06-03-2021	301.5	53.0	Poor
ILLINOISST	536	Residential	350	24	AC	06-03-2021	161.5	74.0	Satisfactory
INDIANDR	283	Residential	114	20	AC	06-03-2021	319.0	15.0	Serious
INDIANDR	284	Residential	651	20	AC	06-03-2021	259.3	42.0	Poor
JennaCt	930	Residential	499	20	AC	06-03-2021	295.00	84.00	Satisfactory
JONATHANCT	196	Residential	229	24	AC	06-03-2021	325.0	90.0	Good
JONATHANCT	197	Residential	523	24	AC	06-03-2021	193.5	90.0	Good
JONATHANCT	198	Residential	283	24	AC	06-03-2021	185.0	97.0	Good
JoyceCt	538	Residential	684	24	AC	09-09-2021	90.0	100.0	Good
Kenilworth	297	Residential	845	20	AC	06-03-2021	254.0	95.0	Good
Kenilworth	298	Residential	962	20	AC	06-03-2021	191.8	78.0	Satisfactory
Kenilworth	495	Residential	316	20	PCC	06-03-2021	375.0	74.0	Satisfactory
Kenilworth	496	Residential	335	20	PCC	06-03-2021	351.0	65.0	Fair
Kenilworth	497	Residential	335	20	PCC	06-03-2021	325.5	69.0	Fair
Kenilworth	498	Residential	208	20	AC	06-03-2021	540.0	44.0	Poor
Kenilworth	499	Residential	621	20	AC	06-03-2021	306.0	60.0	Fair
Kenilworth	500	Residential	373	20	AC	06-03-2021	295.5	81.0	Satisfactory
Kenilworth	501	Residential	187	20	PCC	06-03-2021	277.0	66.0	Fair

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
Kenilworth	502	Residential	310	20	PCC	06-03-2021	319.5	79.0	Satisfactory
Kenilworth	503	Residential	795	20	PCC	06-03-2021	380.7	82.0	Satisfactory
Kenilworth	504	Residential	291	20	PCC	06-03-2021	461.0	69.0	Fair
Kenilworth	505	Residential	492	20	PCC	06-03-2021	312.0	95.0	Good
Kenilworth	506	Residential	552	20	PCC	06-03-2021	372.5	78.0	Satisfactory
KENILWORTH	507	Residential	395	20	AC	09-09-2021	95.0	100.0	Good
Kenilworth	508	Residential	152	24	PCC	06-03-2021	463.0	100.0	Good
Kenilworth	509	Residential	845	24	PCC	06-03-2021	253.8	96.0	Good
Kenilworth	510	Residential	1077	24	AC	06-03-2021	167.3	70.0	Fair
Kenilworth	511	Residential	805	26	AC	06-03-2021	397.3	38.0	Very Poor
Kenilworth	512	Residential	273	26	AC	06-03-2021	288.0	40.0	Very Poor
Kenilworth	513	Residential	752	26	AC	06-03-2021	319.7	39.0	Very Poor
KENILWORTH	734	Residential	234	20	PCC	06-03-2021	483.00	94.00	Good
LAKERD	329	Residential	2237	24	AC	06-03-2021	240.0	71.0	Satisfactory
LAKEVIEWTE	597	Residential	629	20	AC	06-03-2021	200.33	71.00	Satisfactory
LAKEVIEWTE	598	Residential	428	20	AC	06-03-2021	238.50	44.00	Poor
LambertRd	064	Collector	324	40	AC	06-03-2021	203.0	90.0	Good
LambertRd	065	Collector	2140	36	AC	06-03-2021	213.4	82.0	Satisfactory
LambertRd	066	Collector	689	40	AC	06-03-2021	145.3	95.0	Good
LambertRd	067	Collector	386	40	AC	06-03-2021	253.7	80.0	Satisfactory
LambertRd	068	Collector	464	36	AC	06-03-2021	146.5	87.0	Good
LambertRd	069	Collector	2589	40	AC	06-03-2021	144.8	96.0	Good
LambertRd	070	Collector	510	40	AC	06-03-2021	211.3	81.0	Satisfactory
LambertRd	071	Collector	332	40	AC	06-03-2021	182.7	76.0	Satisfactory
LambertRd	072	Collector	673	40	AC	06-03-2021	271.0	85.0	Satisfactory
LambertRd	491	Residential	801	40	AC	06-03-2021	253.0	100.0	Good
LambertRd	492	Residential	463	50	AC	06-03-2021	277.5	100.0	Good
LambertRd	493	Residential	755	40	AC	06-03-2021	262.3	93.0	Good
LambertRd	494	Residential	640	50	AC	06-03-2021	318.7	100.0	Good
LAWRENCEAV	516	Residential	226	20	AC	06-03-2021	393.0	83.0	Satisfactory
LEEST	303	Residential	853	20	AC	09-09-2021	95.0	100.0	Good
LENOXRD	218	Residential	627	20	AC	06-03-2021	326.0	76.0	Satisfactory
LENOXRD	380	Residential	612	20	AC	06-03-2021	288.7	72.0	Satisfactory
LENOXRD	381	Residential	385	20	AC	06-03-2021	324.5	72.0	Satisfactory
LENOXRD	382	Residential	391	20	AC	06-03-2021	271.5	69.0	Fair
LENOXRD	383	Residential	550	20	AC	06-03-2021	229.0	67.0	Fair
LENOXRD	384	Residential	729	20	AC	06-03-2021	328.3	76.0	Satisfactory
LENOXRD	385	Residential	809	20	AC	06-03-2021	229.0	64.0	Fair
LINCOLNAV	307	Residential	386	20	AC	06-03-2021	155.0	95.0	Good
LINDENAV	738	Residential	613	20	AC	06-03-2021	358.67	70.00	Fair
LINDENAV	739	Residential	890	20	AC	06-03-2021	271.25	46.00	Poor
LINDENAV	740	Residential	328	20	AC	06-03-2021	299.50	53.00	Poor
LINDENAV	741	Residential	347	20	AC	06-03-2021	279.50	61.00	Fair
LindenSt	742	Residential	357	20	AC	06-03-2021	318.50	41.00	Poor
LindenSt	743	Residential	390	20	AC	06-03-2021	357.50	57.00	Fair
LindenSt	744	Residential	383	20	AC	06-03-2021	285.50	93.00	Good
LindenSt	745	Residential	412	20	AC	06-03-2021	307.00	76.00	Satisfactory

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
LindenSt	746	Residential	385	20	AC	06-03-2021	286.50	87.00	Good
LindenSt	747	Residential	401	20	AC	06-03-2021	283.50	99.00	Good
LindenSt	748	Residential	401	20	AC	06-03-2021	450.00	95.00	Good
LindenSt	749	Residential	264	20	AC	06-03-2021	387.00	60.00	Fair
LOMBARDAV	539	Residential	354	20	AC	N/A	N/A	N/A	N/A
LOMBARDAV	540	Residential	317	20	AC	06-03-2021	385.50	86.00	Good
LONDONBERR	531	Residential	1044	26	AC	06-03-2021	155.5	93.0	Good
LONGFELLOW	251	Residential	765	24	AC	06-03-2021	224.3	79.0	Satisfactory
LONGFELLOW	252	Residential	763	24	AC	06-03-2021	282.0	51.0	Poor
LorraineRd	063	Collector	1026	24	PCC	06-03-2021	424.8	90.0	Good
LorraineRd	484	Residential	320	24	PCC	06-03-2021	350.0	90.0	Good
LorraineRd	485	Residential	487	24	PCC	06-03-2021	275.5	95.0	Good
LorraineRd	486	Residential	882	24	PCC	06-03-2021	294.8	85.0	Satisfactory
LorraineRd	487	Residential	477	24	PCC	06-03-2021	379.0	95.0	Good
LorraineRd	488	Residential	329	24	PCC	06-03-2021	353.0	99.0	Good
LorraineRd	489	Residential	388	24	PCC	06-03-2021	341.5	99.0	Good
LorryCt	913	Residential	190	26	AC	07-13-2021	100.00	100.00	Good
LOWDENA	806	Residential	533	20	AC	06-03-2021	187.50	86.00	Good
LOWDENA	807	Residential	796	20	AC	06-03-2021	189.00	92.00	Good
LOWELLAV	236	Residential	772	24	AC	06-03-2021	199.3	67.0	Fair
LOWELLAV	237	Residential	765	24	AC	06-03-2021	238.7	84.0	Satisfactory
LOWELLAV	238	Residential	444	24	AC	06-03-2021	369.0	47.0	Poor
LynnRd	937	Residential	553	24	AC	06-03-2021	266.50	96.00	Good
MACINTOSH	192	Residential	246	24	AC	06-03-2021	287.0	100.0	Good
MACINTOSH	193	Residential	250	24	AC	06-03-2021	142.0	100.0	Good
MAIDENLN	524	Residential	501	20	AC	06-03-2021	233.5	79.0	Satisfactory
MAIDENLN	525	Residential	294	20	AC	06-03-2021	248.0	75.0	Satisfactory
MainSt	002	Arterial	500	26	PCC	06-03-2021	314.0	93.0	Good
MainSt	003	Arterial	450	40	AC	06-03-2021	340.5	48.0	Poor
MainSt	004	Arterial	421	24	AC	06-03-2021	306.0	29.0	Very Poor
MainSt	005	Arterial	91	24	AC	06-03-2021	351.0	86.0	Good
MainSt	006	Arterial	463	24	PCC	06-03-2021	415.0	95.0	Good
MainSt	007	Arterial	521	24	AC	06-03-2021	327.5	35.0	Very Poor
MainSt	008	Arterial	350	20	PCC	06-03-2021	409.0	94.0	Good
MainSt	009	Arterial	346	20	PCC	06-03-2021	361.0	95.0	Good
MainSt	010	Arterial	372	26	PCC	06-03-2021	352.5	91.0	Good
MainSt	011	Arterial	329	24	AC	06-03-2021	875.5	33.0	Very Poor
MainSt	012	Arterial	430	24	PCC	06-03-2021	412.0	84.0	Satisfactory
MainSt	013	Arterial	762	24	AC	06-03-2021	219.0	73.0	Satisfactory
MainSt	014	Arterial	284	24	PCC	06-03-2021	331.0	90.0	Good
MainSt	015	Arterial	532	24	PCC	06-03-2021	344.0	96.0	Good
MainSt	016	Arterial	277	24	PCC	07-07-2021	350.0	90.0	Good
MainSt	017	Arterial	570	24	AC	06-03-2021	223.0	76.0	Satisfactory
MainSt	018	Arterial	470	24	PCC	06-03-2021	375.0	94.0	Good
MainSt	019	Arterial	339	20	PCC	07-07-2021	350.0	93.0	Good
MainSt	020	Arterial	477	24	AC	06-03-2021	178.0	92.0	Good
MainSt	021	Arterial	690	26	PCC	06-03-2021	295.3	93.0	Good

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MainSt	022	Arterial	798	26	PCC	06-03-2021	335.3	84.0	Satisfactory
MainSt	023	Arterial	689	26	PCC	06-03-2021	306.3	89.0	Good
MainSt	024	Arterial	440	26	PCC	06-03-2021	409.5	90.0	Good
MainSt	025	Arterial	683	26	PCC	06-03-2021	342.7	96.0	Good
MainSt	409	Residential	325	36	AC	06-03-2021	409.5	67.0	Fair
MainSt	410	Residential	330	36	AC	06-03-2021	321.0	43.0	Poor
MainSt	411	Residential	363	24	AC	06-03-2021	335.0	57.0	Fair
MapleLn	897	Residential	206	24	AC	06-03-2021	483.00	98.00	Good
MAPLEST	753	Residential	1527	20	AC	06-03-2021	171.33	75.00	Satisfactory
MapleSt	754	Residential	392	20	AC	06-03-2021	416.00	68.00	Fair
MapleSt	755	Residential	390	20	AC	06-03-2021	276.50	70.00	Fair
MapleSt	756	Residential	386	20	AC	06-03-2021	315.50	80.00	Satisfactory
MapleSt	757	Residential	403	20	AC	06-03-2021	226.00	88.00	Good
MapleSt	758	Residential	381	20	AC	06-03-2021	348.50	69.00	Fair
MapleSt	759	Residential	416	20	AC	06-03-2021	272.50	69.00	Fair
MapleSt	760	Residential	427	20	AC	06-03-2021	314.00	82.00	Satisfactory
MarastonAv	911	Residential	1072	24	AC	06-03-2021	231.75	99.00	Good
MarastonAv	912	Residential	396	26	AC	06-03-2021	322.00	91.00	Good
MarastonAv	915	Residential	444	26	AC	06-03-2021	201.00	98.00	Good
MarastonAv	917	Residential	277	26	AC	06-03-2021	261.00	86.00	Good
MarastonAv	918	Residential	130	26	AC	06-03-2021	337.00	83.00	Satisfactory
MarastonCt	919	Residential	628	26	AC	06-03-2021	292.67	99.00	Good
MARIONAV	750	Residential	1540	20	AC	06-03-2021	217.67	72.00	Satisfactory
MARSTONAV	820	Residential	533	20	AC	06-03-2021	248.00	76.00	Satisfactory
MARSTONAV	821	Residential	472	20	AC	06-03-2021	252.00	62.00	Fair
MarstonAve	813	Residential	293	20	AC	06-03-2021	360.00	78.00	Satisfactory
MarstonAve	890	Residential	201	24	AC	06-03-2021	286.00	90.00	Good
MarstonAve	891	Residential	109	24	AC	06-03-2021	307.00	100.00	Good
MarstonAve	892	Residential	102	24	AC	06-03-2021	221.00	100.00	Good
MARYKNOLLC	840	Residential	2270	24	AC	06-03-2021	199.00	53.00	Poor
MARYKNOLLC	841	Residential	655	24	AC	06-03-2021	191.00	62.00	Fair
MayaCt	928	Residential	487	20	AC	06-03-2021	367.00	86.00	Good
MayAve	239	Residential	488	24	AC	06-03-2021	287.5	36.0	Very Poor
MayAve	240	Residential	395	24	AC	06-03-2021	194.0	67.0	Fair
MayAve	241	Residential	143	24	AC	06-03-2021	399.0	52.0	Poor
MayAve	242	Residential	603	24	AC	06-03-2021	262.7	45.0	Poor
MayAve	243	Residential	607	24	AC	06-03-2021	353.0	28.0	Very Poor
MayAve	244	Residential	812	24	AC	06-03-2021	351.0	35.0	Very Poor
MayAve	245	Residential	110	24	AC	06-03-2021	193.0	66.0	Fair
McCreedyAve	227	Residential	222	20	AC	06-03-2021	144.0	100.0	Good
McCreedyAve	228	Residential	444	20	AC	06-03-2021	201.5	98.0	Good
McCreedyAve	229	Residential	428	20	AC	06-03-2021	133.5	99.0	Good
MELROSE	456	Residential	510	24	AC	06-03-2021	373.0	39.0	Very Poor
MENORYCT	633	Residential	186	20	AC	06-03-2021	417.00	33.00	Very Poor
MEREDITHPL	789	Residential	389	20	AC	06-03-2021	392.00	43.00	Poor
MERTONAV	330	Residential	735	24	AC	06-03-2021	279.0	76.0	Satisfactory
MERTONAV	331	Residential	840	20	AC	06-03-2021	295.8	76.0	Satisfactory

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MERTONAV	332	Residential	518	20	AC	06-03-2021	337.0	72.0	Satisfactory
MIDWAYPKWY	250	Residential	630	20	AC	09-08-2021	90.0	100.0	Good
MillerCt	455	Residential	544	20	AC	06-03-2021	296.5	27.0	Very Poor
MILTONAV	333	Residential	256	24	AC	06-03-2021	281.0	75.0	Satisfactory
MILTONAV	334	Residential	1332	20	AC	06-03-2021	214.4	60.0	Fair
MILTONAV	335	Residential	1295	20	AC	06-03-2021	297.0	67.0	Fair
MiltonAve	896	Residential	208	20	AC	06-03-2021	304.00	95.00	Good
MontclairA	336	Residential	198	24	AC	06-03-2021	470.0	61.0	Fair
MontclairA	337	Residential	528	24	AC	06-03-2021	273.5	76.0	Satisfactory
MontclairA	338	Residential	471	24	AC	06-03-2021	227.0	49.0	Poor
MontclairA	339	Residential	512	24	AC	06-03-2021	351.0	47.0	Poor
MontclairA	340	Residential	820	20	AC	06-03-2021	268.7	37.0	Very Poor
MontclairA	341	Residential	563	20	AC	06-03-2021	413.7	53.0	Poor
MontclairA	342	Residential	536	24	AC	06-03-2021	408.0	88.0	Good
MontclairA	343	Residential	317	24	AC	06-03-2021	306.0	67.0	Fair
MontclairA	344	Residential	282	24	AC	06-03-2021	502.0	46.0	Poor
MONTCLAIRA	345	Residential	262	24	AC	06-03-2021	254.0	100.0	Good
MONTCLAIRA	869	Residential	311	20	AC	06-03-2021	226.00	79.00	Satisfactory
MONTCLAIRA	870	Residential	658	20	AC	06-03-2021	405.33	86.00	Good
MONTCLAIRA	871	Residential	315	20	AC	06-03-2021	278.00	78.00	Satisfactory
MUIRWOODDR	790	Residential	261	20	AC	06-03-2021	646.00	41.00	Poor
MUIRWOODDR	791	Residential	218	20	AC	06-03-2021	450.00	80.00	Satisfactory
NEWTONAV	483	Residential	360	24	AC	06-03-2021	335.0	78.0	Satisfactory
NewtonAve	473	Residential	662	20	AC	06-03-2021	257.3	59.0	Fair
NewtonAve	474	Residential	702	20	AC	06-03-2021	352.7	38.0	Very Poor
NewtonAve	475	Residential	331	20	AC	06-03-2021	226.0	74.0	Satisfactory
NewtonAve	476	Residential	375	20	AC	06-03-2021	217.0	70.0	Fair
NewtonAve	477	Residential	184	20	AC	06-03-2021	278.0	63.0	Fair
NewtonAve	478	Residential	806	24	AC	06-03-2021	204.7	51.0	Poor
NewtonAve	479	Residential	218	24	AC	06-03-2021	218.0	70.0	Fair
NewtonAve	480	Residential	759	24	AC	06-03-2021	235.7	37.0	Very Poor
NewtonAve	481	Residential	358	20	AC	06-03-2021	191.5	58.0	Fair
NewtonAve	482	Residential	890	20	AC	06-03-2021	309.0	69.0	Fair
NewtonAve	861	Residential	66	26	AC	07-13-2021	130.00	88.00	Good
NewtonAve	862	Residential	205	26	AC	06-03-2021	264.00	44.00	Poor
NewtonAve	863	Residential	550	26	AC	06-03-2021	135.50	86.00	Good
NICOLLAV	324	Residential	277	24	AC	06-03-2021	274.0	71.0	Satisfactory
NICOLLAV	325	Residential	1005	34	AC	06-03-2021	282.3	74.0	Satisfactory
NICOLLAV	326	Residential	360	24	AC	06-03-2021	423.5	80.0	Satisfactory
NICOLLAV	327	Residential	823	24	AC	06-03-2021	369.5	77.0	Satisfactory
NicollWay	931	Residential	330	32	AC	06-03-2021	367.00	72.00	Satisfactory
NicollWay	932	Residential	413	32	AC	06-03-2021	277.50	71.00	Satisfactory
NicollWay	933	Residential	700	32	AC	06-03-2021	288.67	62.00	Fair
OakSt	761	Residential	1746	20	AC	06-03-2021	199.43	59.00	Fair
OakSt	762	Residential	391	20	AC	06-03-2021	282.50	58.00	Fair
OakSt	763	Residential	388	20	AC	06-03-2021	312.00	39.00	Very Poor
OakSt	764	Residential	391	20	AC	06-03-2021	407.00	81.00	Satisfactory

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OakSt	765	Residential	399	20	PCC	06-03-2021	506.50	94.00	Good
OakSt	766	Residential	379	20	AC	06-03-2021	253.00	72.00	Satisfactory
OakSt	767	Residential	389	20	PCC	06-03-2021	358.50	99.00	Good
OakSt	768	Residential	410	20	PCC	06-03-2021	399.00	95.00	Good
OakSt	769	Residential	586	20	AC	06-03-2021	234.33	78.00	Satisfactory
OakSt	770	Residential	272	20	PCC	06-03-2021	394.00	92.00	Good
OakSt	771	Residential	532	20	PCC	06-03-2021	370.50	84.00	Satisfactory
OakSt	772	Residential	126	24	PCC	06-03-2021	218.00	88.00	Good
OakSt	773	Residential	110	24	AC	06-03-2021	242.00	32.00	Very Poor
OakSt	774	Residential	109	24	AC	06-03-2021	419.00	39.00	Very Poor
OAKWOODCT	846	Residential	472	24	AC	06-03-2021	358.50	50.00	Poor
OrchardLn	909	Residential	1530	24	AC	06-03-2021	185.33	95.00	Good
OttAve	233	Residential	53	20	AC	07-13-2021	100.0	100.0	Good
OttAve	234	Residential	731	20	AC	06-03-2021	141.0	100.0	Good
OttAve	235	Residential	476	20	AC	06-03-2021	122.0	99.0	Good
OTTOAVE	177	Residential	411	26	AC	06-03-2021	228.0	31.0	Very Poor
OTTOAVE	178	Residential	390	26	AC	06-03-2021	248.0	49.0	Poor
OTTOAVE	179	Residential	396	26	AC	06-03-2021	305.0	49.0	Poor
OTTOAVE	934	Residential	379	26	AC	06-03-2021	235.00	54.00	Poor
OTTOAVE	935	Residential	367	26	AC	06-03-2021	286.00	37.00	Very Poor
OTTOAVE	936	Residential	364	26	AC	06-03-2021	207.00	33.00	Very Poor
OXFORDRD	590	Residential	410	20	AC	06-03-2021	297.50	48.00	Poor
OXFORDRD	591	Residential	388	20	AC	06-03-2021	263.50	61.00	Fair
OXFORDRD	592	Residential	348	20	AC	06-03-2021	278.50	34.00	Very Poor
ParkBlvd	085	Collector	340	42	AC	06-03-2021	271.7	76.0	Satisfactory
ParkBlvd	086	Collector	416	42	AC	06-03-2021	119.5	86.0	Good
ParkBlvd	087	Collector	335	42	AC	06-03-2021	152.3	77.0	Satisfactory
ParkBlvd	088	Collector	47	42	AC	07-13-2021	170.0	73.0	Satisfactory
ParkBlvd	089	Collector	29	50	AC	07-13-2021	160.0	70.0	Fair
ParkBlvd	090	Collector	187	42	AC	06-03-2021	176.5	69.0	Fair
ParkBlvd	091	Collector	364	42	AC	06-03-2021	140.3	85.0	Satisfactory
ParkBlvd	092	Collector	368	42	AC	06-03-2021	113.7	91.0	Good
ParkBlvd	093	Collector	318	42	AC	06-03-2021	193.0	85.0	Satisfactory
ParkBlvd	094	Collector	1258	42	AC	06-03-2021	157.4	83.0	Satisfactory
ParkBlvd	095	Collector	347	42	AC	06-03-2021	151.0	85.0	Satisfactory
ParkBlvd	096	Collector	625	42	AC	06-03-2021	160.0	88.0	Good
ParkBlvd	097	Collector	344	26	AC	06-03-2021	461.0	49.0	Poor
ParkBlvd	098	Collector	817	26	AC	06-03-2021	251.8	85.0	Satisfactory
ParkBlvd	099	Collector	547	26	AC	06-03-2021	223.5	65.0	Fair
ParkBlvd	100	Collector	526	26	AC	06-03-2021	240.5	79.0	Satisfactory
ParkBlvd	101	Collector	772	26	AC	06-03-2021	206.0	68.0	Fair
ParkBlvd	102	Collector	628	26	AC	06-03-2021	430.7	59.0	Fair
ParkBlvd	103	Collector	429	26	AC	06-03-2021	266.0	76.0	Satisfactory
ParkBlvd	104	Collector	211	26	AC	06-03-2021	202.0	74.0	Satisfactory
ParkBlvd	105	Collector	579	26	AC	06-03-2021	185.3	92.0	Good
ParkBlvd	106	Collector	278	26	AC	06-03-2021	207.0	100.0	Good
ParkBlvd	107	Collector	385	26	AC	06-03-2021	258.0	84.0	Satisfactory

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
ParkBlvd	108	Collector	217	26	AC	06-03-2021	198.0	76.0	Satisfactory
ParkBlvd	109	Collector	424	26	AC	06-03-2021	229.0	78.0	Satisfactory
ParkBlvd	110	Collector	338	26	AC	06-03-2021	223.5	71.0	Satisfactory
ParkBlvd	111	Collector	390	26	AC	06-03-2021	194.0	89.0	Good
PARKBLVD	362	Residential	696	20	AC	06-03-2021	305.0	75.0	Satisfactory
PARKBLVD	363	Residential	773	20	AC	06-03-2021	354.7	76.0	Satisfactory
PARKBLVD	364	Residential	680	20	AC	06-03-2021	342.7	63.0	Fair
PARKBLVD	365	Residential	703	20	AC	06-03-2021	282.0	78.0	Satisfactory
ParkBlvd	366	Residential	303	20	AC	06-03-2021	444.5	32.0	Very Poor
ParkBlvd	367	Residential	219	26	AC	06-03-2021	292.0	65.0	Fair
ParkBlvd	368	Residential	121	26	AC	06-03-2021	311.0	87.0	Good
ParkBlvd	369	Residential	571	20	AC	06-03-2021	198.7	33.0	Very Poor
PARKPLAZA	518	Residential	697	20	AC	06-03-2021	233.7	66.0	Fair
PARKROW	308	Residential	442	20	AC	09-09-2021	95.0	100.0	Good
ParksideAv	359	Residential	326	24	AC	06-03-2021	237.0	25.0	Serious
ParksideAv	360	Residential	399	24	AC	06-03-2021	203.5	87.0	Good
ParksideAv	361	Residential	365	24	AC	06-03-2021	142.0	79.0	Satisfactory
ParksideAv	370	Residential	644	20	AC	06-03-2021	209.7	77.0	Satisfactory
ParksideAv	371	Residential	441	24	AC	06-03-2021	286.5	77.0	Satisfactory
ParksideAv	372	Residential	233	20	AC	06-03-2021	242.0	94.0	Good
ParksideAv	373	Residential	499	20	AC	06-03-2021	295.0	76.0	Satisfactory
ParksideAv	374	Residential	187	20	AC	06-03-2021	197.5	87.0	Good
ParksideAv	375	Residential	164	20	AC	06-03-2021	198.0	90.0	Good
Pennsylvan	113	Collector	405	36	AC	06-03-2021	157.5	75.0	Satisfactory
Pennsylvan	114	Collector	620	42	AC	06-03-2021	240.8	71.0	Satisfactory
Pennsylvan	115	Collector	474	36	AC	06-03-2021	132.5	81.0	Satisfactory
Pennsylvan	116	Collector	705	36	AC	06-03-2021	184.0	76.0	Satisfactory
Pennsylvan	117	Collector	445	42	AC	06-03-2021	242.5	53.0	Poor
Pennsylvan	118	Collector	483	42	AC	06-03-2021	163.0	50.0	Poor
Pennsylvan	119	Collector	470	42	AC	06-03-2021	382.0	37.0	Very Poor
Pennsylvan	120	Collector	470	42	AC	06-03-2021	312.0	41.0	Poor
PERSHINGAV	796	Residential	1520	24	AC	06-03-2021	172.50	82.00	Satisfactory
PERSHINGAV	843	Residential	1073	32	AC	06-03-2021	262.60	65.00	Fair
PERSHINGAV	844	Residential	50	32	AC	N/A	N/A	N/A	N/A
PERSHINGAV	845	Residential	306	32	AC	06-03-2021	247.00	72.00	Satisfactory
PHILLIPSAV	636	Residential	626	20	AC	09-08-2021	95.00	100.00	Good
PhillipsAv	637	Residential	717	20	AC	06-03-2021	262.00	60.00	Fair
PhillipsAv	638	Residential	880	20	AC	06-03-2021	292.00	61.00	Fair
PhillipsAv	639	Residential	463	20	AC	06-03-2021	382.00	69.00	Fair
PhillipsAv	640	Residential	539	20	AC	06-03-2021	293.00	66.00	Fair
PhillipsAv	641	Residential	464	20	AC	06-03-2021	554.00	15.00	Serious
PLEASANTAV	431	Residential	185	20	AC	06-03-2021	351.0	38.0	Very Poor
PLEASANTAV	432	Residential	514	20	AC	06-03-2021	310.5	67.0	Fair
PLEASANTAV	433	Residential	679	20	AC	06-03-2021	463.0	33.0	Very Poor
PLEASANTAV	434	Residential	745	20	AC	06-03-2021	407.3	55.0	Poor
PLEASANTAV	435	Residential	334	20	AC	06-03-2021	548.0	100.0	Good
PLEASANTAV	436	Residential	657	20	AC	06-03-2021	209.3	83.0	Satisfactory

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BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
PLEASANTAV	437	Residential	671	20	AC	06-03-2021	240.0	85.0	Satisfactory
PLEASANTAV	438	Residential	371	20	AC	06-03-2021	289.0	54.0	Poor
PleasantAv	881	Residential	373	20	AC	06-03-2021	331.50	29.00	Very Poor
PLUMTREE R	304	Residential	797	20	AC	06-03-2021	176.7	84.0	Satisfactory
PRAIRIEAV	446	Residential	315	20	AC	06-03-2021	419.0	73.0	Satisfactory
PRAIRIEAV	447	Residential	502	20	AC	06-03-2021	216.0	66.0	Fair
PRAIRIEAV	448	Residential	670	20	AC	06-03-2021	420.0	56.0	Fair
PRAIRIEAV	449	Residential	762	20	AC	06-03-2021	444.3	56.0	Fair
PRAIRIEAV	450	Residential	660	20	AC	06-03-2021	424.0	48.0	Poor
PRAIRIEAV	451	Residential	655	20	AC	06-03-2021	267.0	63.0	Fair
PrairieAve	880	Residential	352	20	AC	06-03-2021	346.00	38.00	Very Poor
PRINCEEDW	406	Residential	318	26	AC	06-03-2021	266.0	86.0	Good
PRINCEEDW	407	Residential	1477	26	AC	06-03-2021	227.8	81.0	Satisfactory
PRINCEEDW	408	Residential	325	26	AC	06-03-2021	253.5	82.0	Satisfactory
PRINCEEDWA	815	Residential	180	26	AC	06-03-2021	293.00	65.00	Fair
PRINCEEDWA	816	Residential	417	26	AC	06-03-2021	264.00	84.00	Satisfactory
ProspectAv	123	Collector	207	24	AC	06-03-2021	625.0	29.0	Very Poor
ProspectAv	124	Collector	511	24	PCC	06-03-2021	181.5	96.0	Good
ProspectAv	125	Collector	361	20	PCC	06-03-2021	159.5	92.0	Good
ProspectAv	126	Collector	342	20	PCC	06-03-2021	192.0	94.0	Good
ProspectAv	127	Collector	478	20	PCC	06-03-2021	321.0	96.0	Good
ProspectAv	128	Collector	338	24	AC	06-03-2021	954.5	25.0	Serious
ProspectAv	445	Residential	441	20	AC	06-03-2021	222.0	73.0	Satisfactory
RAINTREEDR	831	Residential	328	32	AC	06-03-2021	378.50	54.00	Poor
RAINTREEDR	832	Residential	368	32	AC	06-03-2021	244.00	78.00	Satisfactory
RAINTREEDR	833	Residential	934	32	AC	06-03-2021	220.25	85.00	Satisfactory
RAINTREEDR	834	Residential	305	32	AC	06-03-2021	240.50	88.00	Good
RAINTREEDR	835	Residential	312	32	AC	06-03-2021	289.00	67.00	Fair
RAINTREEDR	836	Residential	528	32	AC	06-03-2021	215.50	74.00	Satisfactory
Ramblewood	824	Residential	282	32	AC	06-03-2021	285.00	100.00	Good
Ramblewood	825	Residential	270	32	AC	06-03-2021	195.00	89.00	Good
Ramblewood	826	Residential	190	32	AC	06-03-2021	191.00	81.00	Satisfactory
Ramblewood	827	Residential	428	32	AC	06-03-2021	171.00	84.00	Satisfactory
Ramblewood	828	Residential	179	32	AC	06-03-2021	530.00	94.00	Good
Ramblewood	829	Residential	117	32	AC	06-03-2021	219.00	84.00	Satisfactory
Ramblewood	830	Residential	55	32	AC	07-13-2021	200.00	100.00	Good
REGENTST	452	Residential	370	24	AC	06-03-2021	291.5	76.0	Satisfactory
REGENTST	453	Residential	654	24	AC	06-03-2021	290.7	47.0	Poor
RevereRd	559	Residential	450	20	AC	06-03-2021	275.50	49.00	Poor
RevereRd	560	Residential	353	20	AC	06-03-2021	262.50	92.00	Good
RevereRd	561	Residential	410	20	AC	06-03-2021	285.00	80.00	Satisfactory
RevereRd	562	Residential	442	20	AC	06-03-2021	249.50	90.00	Good
RevereRd	563	Residential	355	20	AC	06-03-2021	292.00	77.00	Satisfactory
RevereRd	564	Residential	384	20	AC	06-03-2021	315.00	32.00	Very Poor
RevereRd	565	Residential	456	20	AC	06-03-2021	213.00	56.00	Fair
RevereRd	566	Residential	442	20	AC	06-03-2021	269.00	65.00	Fair
RevereRd	567	Residential	450	20	AC	06-03-2021	243.00	61.00	Fair

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REVERERD	568	Residential	538	24	AC	06-03-2021	304.50	33.00	Very Poor
REVERERD	569	Residential	310	24	AC	06-03-2021	433.50	38.00	Very Poor
RidgeRd	921	Residential	469	24	AC	06-03-2021	198.50	100.00	Good
RIDGEWOODA	625	Residential	774	24	AC	09-08-2021	95.00	100.00	Good
RIDGEWOODA	626	Residential	344	24	AC	09-09-2021	95.00	100.00	Good
RidgewoodA	627	Residential	246	20	AC	06-03-2021	199.00	93.00	Good
RidgewoodA	628	Residential	465	20	AC	06-03-2021	320.50	63.00	Fair
RidgewoodA	629	Residential	460	20	AC	06-03-2021	376.50	91.00	Good
RidgewoodA	630	Residential	475	20	AC	06-03-2021	238.50	48.00	Poor
RIFORDRD	132	Collector	442	20	AC	06-03-2021	274.5	71.0	Satisfactory
RIFORDRD	133	Collector	47	20	AC	07-13-2021	200.0	71.0	Satisfactory
RIFORDRD	134	Collector	374	20	AC	06-03-2021	236.0	74.0	Satisfactory
RIFORDRD	135	Collector	424	20	AC	06-03-2021	219.5	79.0	Satisfactory
RIFORDRD	136	Collector	1137	24	AC	06-03-2021	296.6	53.0	Poor
RIFORDRD	137	Collector	540	20	AC	06-03-2021	181.3	63.0	Fair
RIFORDRD	309	Residential	802	20	AC	09-09-2021	89.0	100.0	Good
RIFORDRD	310	Residential	233	20	AC	09-09-2021	93.0	100.0	Good
RIFORDRD	311	Residential	209	20	AC	09-09-2021	95.0	100.0	Good
RiverDr	883	Residential	46	20	AC	07-13-2021	154.00	58.00	Fair
ROGERRD	258	Residential	357	20	AC	09-09-2021	92.0	100.0	Good
ROGERRD	259	Residential	522	20	AC	09-09-2021	93.0	100.0	Good
ROGERRD	260	Residential	77	20	AC	09-09-2021	91.0	100.0	Good
ROSLYNRD	619	Residential	380	20	AC	06-03-2021	305.00	74.00	Satisfactory
ROSLYNRD	620	Residential	403	20	AC	06-03-2021	362.00	62.00	Fair
ROSLYNRD	621	Residential	375	20	AC	06-03-2021	226.00	72.00	Satisfactory
ROSLYNRD	622	Residential	392	20	AC	06-03-2021	211.50	67.00	Fair
Saddlewood	859	Residential	1578	26	AC	07-13-2021	350.00	56.00	Fair
Saddlewood	860	Residential	204	26	AC	06-03-2021	309.00	59.00	Fair
SAWYERAV	623	Residential	227	24	AC	06-03-2021	352.00	75.00	Satisfactory
SAWYERAV	624	Residential	254	24	AC	06-03-2021	717.00	23.00	Serious
SCOTTAV	280	Residential	778	20	AC	06-03-2021	195.0	51.0	Poor
SCOTTAV	281	Residential	232	20	AC	06-03-2021	345.0	53.0	Poor
SCOTTAV	282	Residential	1093	20	AC	06-03-2021	369.6	60.0	Fair
SCOTTAVE	224	Residential	452	20	AC	06-03-2021	400.0	64.0	Fair
SecondSt	884	Residential	161	20	AC	06-03-2021	154.00	79.00	Satisfactory
SEllyn Ave	376	Residential	1340	20	AC	06-03-2021	283.0	75.0	Satisfactory
SEllyn Ave	377	Residential	290	20	AC	06-03-2021	436.0	41.0	Poor
SEllyn Ave	378	Residential	1285	20	AC	06-03-2021	253.0	72.0	Satisfactory
SEllyn Ave	379	Residential	371	20	AC	06-03-2021	193.5	81.0	Satisfactory
SEllyn Ave	894	Residential	56	24	AC	07-13-2021	300.00	42.00	Poor
SEllyn Ave	895	Residential	335	20	AC	06-03-2021	272.00	72.00	Satisfactory
SHADYLN	642	Residential	398	20	AC	06-03-2021	303.50	33.00	Very Poor
SHEFFIELDL	714	Residential	450	20	PCC	06-03-2021	395.00	90.00	Good
ShehanAve	129	Collector	464	20	AC	06-03-2021	248.5	61.0	Fair
ShehanAve	130	Collector	1552	24	AC	06-03-2021	214.2	65.0	Fair
ShehanAve	131	Collector	461	20	AC	06-03-2021	295.0	64.0	Fair
ShehanAve	808	Residential	234	24	AC	06-03-2021	418.00	73.00	Satisfactory

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ShehanAve	809	Residential	238	24	AC	06-03-2021	304.00	92.00	Good
ShehanAve	810	Residential	506	24	AC	06-03-2021	244.00	100.00	Good
ShehanAve	811	Residential	413	24	AC	06-03-2021	138.50	82.00	Satisfactory
ShehanAve	812	Residential	582	24	AC	06-03-2021	147.33	83.00	Satisfactory
SMITHST	631	Residential	449	24	AC	06-03-2021	185.00	99.00	Good
SMITHST	632	Residential	469	24	AC	06-03-2021	227.00	93.00	Good
SNOWHILLCT	839	Residential	397	24	AC	06-03-2021	310.00	63.00	Fair
SPALDINGAV	692	Residential	138	24	AC	09-08-2021	90.00	100.00	Good
SPARKSIDE	203	Residential	366	24	AC	06-03-2021	177.0	81.0	Satisfactory
SpringAve	264	Residential	151	24	AC	06-03-2021	212.0	52.0	Poor
SpringAve	265	Residential	659	20	AC	06-03-2021	316.3	69.0	Fair
SpringAve	266	Residential	835	20	AC	06-03-2021	165.0	81.0	Satisfactory
SpringAve	267	Residential	308	24	AC	06-03-2021	256.0	25.0	Serious
SpringAve	268	Residential	131	24	AC	06-03-2021	260.0	77.0	Satisfactory
SpringAve	269	Residential	347	24	AC	06-03-2021	317.0	31.0	Very Poor
SpringAve	270	Residential	1196	24	AC	06-03-2021	288.0	44.0	Poor
SpringAve	271	Residential	42	24	AC	07-13-2021	260.0	66.0	Fair
SpringAve	272	Residential	418	24	AC	06-03-2021	168.5	39.0	Very Poor
SpringAve	273	Residential	144	24	AC	06-03-2021	322.0	77.0	Satisfactory
SpringAve	274	Residential	532	24	AC	06-03-2021	259.0	37.0	Very Poor
SpringAve	275	Residential	352	24	AC	06-03-2021	198.5	40.0	Very Poor
STABLEFORD	149	Residential	258	26	AC	06-03-2021	133.0	86.0	Good
STABLEFORD	150	Residential	785	26	AC	06-03-2021	173.3	85.0	Satisfactory
STABLEFORD	151	Residential	234	26	AC	06-03-2021	189.0	82.0	Satisfactory
STACYCT	214	Residential	523	20	AC	06-03-2021	274.0	89.0	Good
STAFFORDLN	416	Residential	1063	26	AC	06-03-2021	278.8	77.0	Satisfactory
STAGECOACH	865	Residential	340	24	AC	06-03-2021	326.50	69.00	Fair
STAGECOACH	866	Residential	275	24	AC	06-03-2021	298.00	49.00	Poor
STAGECOACH	868	Residential	1263	24	AC	06-03-2021	264.60	46.00	Poor
StantonRd	900	Residential	164	20	AC	06-03-2021	427.00	27.00	Very Poor
STEPHANIEL	356	Residential	391	20	AC	06-03-2021	288.5	80.0	Satisfactory
STONEGATEC	857	Residential	251	20	AC	06-03-2021	403.00	67.00	Fair
SUMMERDALE	210	Residential	1241	20	AC	06-03-2021	207.2	72.0	Satisfactory
SUMMITST	140	Residential	428	26	AC	06-03-2021	168.0	87.0	Good
Sunnybrook	190	Residential	76	20	AC	06-03-2021	322.0	100.0	Good
Sunnybrook	191	Residential	279	20	AC	06-03-2021	287.0	97.0	Good
Sunnybrook	888	Residential	128	20	AC	06-03-2021	425.00	100.00	Good
Sunnybrook	889	Residential	810	20	AC	06-03-2021	272.00	94.00	Good
Sunnybrook	929	Residential	546	20	AC	06-03-2021	287.50	31.00	Very Poor
Sunnybrook	943	Residential	615	20	AC	06-03-2021	527.00	15.00	Serious
SUNSETAV	439	Residential	852	24	AC	06-03-2021	278.5	57.0	Fair
SUNSETAV	440	Residential	1297	24	AC	06-03-2021	239.2	58.0	Fair
SUNSETAV	441	Residential	93	24	AC	06-03-2021	289.0	86.0	Good
SUNSETAV	442	Residential	560	24	AC	06-03-2021	274.3	43.0	Poor
SUNSETAV	443	Residential	533	24	AC	06-03-2021	268.0	65.0	Fair
SUNSETAV	444	Residential	675	24	AC	06-03-2021	281.3	59.0	Fair
SUNSETCT	523	Residential	231	24	AC	06-03-2021	299.0	82.0	Satisfactory

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SURREYDR	286	Residential	669	26	AC	06-03-2021	173.3	62.0	Fair
SURREYDR	287	Residential	1274	26	AC	06-03-2021	212.6	38.0	Very Poor
SURREYDR	288	Residential	275	26	AC	06-03-2021	195.0	80.0	Satisfactory
SURREYDR	289	Residential	593	26	AC	06-03-2021	272.0	54.0	Poor
SURREYDR	290	Residential	270	26	AC	06-03-2021	278.0	50.0	Poor
SURREYDR	291	Residential	302	26	AC	06-03-2021	292.0	43.0	Poor
TAFTAV	794	Residential	595	24	AC	06-03-2021	205.33	84.00	Satisfactory
TAFTAV	795	Residential	941	24	AC	06-03-2021	263.50	76.00	Satisfactory
TaftAve	792	Residential	317	36	AC	06-03-2021	361.00	90.00	Good
TaftAve	793	Residential	2464	36	AC	09-09-2021	95.00	100.00	Good
TANGLEWOOD	187	Residential	216	20	AC	06-03-2021	191.0	60.0	Fair
TANGLEWOOD	188	Residential	2264	20	AC	06-03-2021	213.3	84.0	Satisfactory
TAYLORAV	320	Residential	615	20	AC	06-03-2021	279.3	71.0	Satisfactory
TAYLORAV	321	Residential	257	24	AC	06-03-2021	323.0	44.0	Poor
TAYLORAVE	160	Residential	523	20	PCC	06-03-2021	397.0	98.0	Good
TAYLORAVE	161	Residential	432	24	PCC	06-03-2021	316.5	99.0	Good
TaylorAve	312	Residential	448	24	AC	09-09-2021	100.0	100.0	Good
TaylorAve	313	Residential	826	20	AC	06-03-2021	273.0	77.0	Satisfactory
TaylorAve	314	Residential	538	24	AC	06-03-2021	260.5	57.0	Fair
TaylorAve	315	Residential	489	24	AC	06-03-2021	479.0	87.0	Good
TaylorAve	316	Residential	659	24	AC	06-03-2021	316.0	80.0	Satisfactory
TaylorAve	317	Residential	204	24	AC	06-03-2021	260.0	96.0	Good
TaylorAve	318	Residential	53	20	AC	07-13-2021	350.0	75.0	Satisfactory
TaylorAve	319	Residential	766	20	AC	06-03-2021	331.3	58.0	Fair
TraverAve	517	Residential	994	20	AC	06-03-2021	316.0	57.0	Fair
TURNERAV	606	Residential	494	24	AC	06-03-2021	303.50	80.00	Satisfactory
TURNERAV	607	Residential	451	24	AC	06-03-2021	293.00	88.00	Good
TURNERAV	608	Residential	362	24	AC	06-03-2021	236.50	90.00	Good
TURNERAV	609	Residential	129	20	AC	06-03-2021	320.00	93.00	Good
TURNERAVE	172	Residential	396	24	AC	06-03-2021	277.0	46.0	Poor
TurnerAve	599	Residential	972	20	AC	06-03-2021	382.50	43.00	Poor
TurnerAve	600	Residential	1057	20	AC	06-03-2021	264.75	60.00	Fair
TurnerAve	601	Residential	471	20	AC	06-03-2021	259.00	98.00	Good
TurnerAve	602	Residential	526	20	AC	06-03-2021	405.50	75.00	Satisfactory
TurnerAve	603	Residential	365	20	AC	06-03-2021	285.00	83.00	Satisfactory
TurnerAve	604	Residential	176	20	AC	06-03-2021	337.00	79.00	Satisfactory
TurnerAve	605	Residential	282	20	AC	06-03-2021	252.00	36.00	Very Poor
VALLEYAV	595	Residential	363	24	AC	06-03-2021	228.00	73.00	Satisfactory
VALLEYRD	226	Residential	1402	20	AC	06-03-2021	188.3	90.0	Good
VANDAMM AV	305	Residential	498	20	AC	06-03-2021	380.0	55.0	Poor
VANDAMM AV	306	Residential	753	20	AC	06-03-2021	270.3	70.0	Fair
VINEAV	468	Residential	360	20	AC	09-08-2021	95.0	100.0	Good
VINEAV	469	Residential	378	20	AC	09-08-2021	95.0	100.0	Good
WALNUTST	693	Residential	423	24	AC	06-03-2021	277.00	66.00	Fair
WALNUTST	694	Residential	405	24	AC	06-03-2021	210.00	80.00	Satisfactory
WALNUTST	695	Residential	418	24	AC	06-03-2021	201.50	62.00	Fair
WALNUTST	696	Residential	336	24	AC	06-03-2021	318.50	85.00	Satisfactory

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
WALNUTST	697	Residential	430	24	AC	06-03-2021	315.50	89.00	Good
WAVERLYRD	643	Residential	403	20	AC	06-03-2021	293.00	42.00	Poor
WAVERLYRD	644	Residential	523	20	AC	06-03-2021	193.00	66.00	Fair
WAVERLYRD	645	Residential	376	20	AC	06-03-2021	371.00	50.00	Poor
WAVERLYRD	646	Residential	401	20	AC	06-03-2021	150.50	41.00	Poor
WesternAve	073	Collector	277	20	AC	06-03-2021	224.0	85.0	Satisfactory
WesternAve	074	Collector	510	20	PCC	06-03-2021	217.0	94.0	Good
WesternAve	075	Collector	755	20	PCC	06-03-2021	285.7	78.0	Satisfactory
WesternAve	076	Collector	368	20	PCC	06-03-2021	168.0	98.0	Good
WesternAve	077	Collector	663	20	PCC	06-03-2021	233.0	94.0	Good
WesternAve	078	Collector	619	20	PCC	06-03-2021	198.3	95.0	Good
WesternAve	079	Collector	91	20	PCC	06-03-2021	360.0	81.0	Satisfactory
WesternAve	080	Collector	270	20	PCC	06-03-2021	220.5	85.0	Satisfactory
WesternAve	081	Collector	51	20	AC	07-07-2021	200.0	100.0	Good
WesternAve	082	Collector	168	20	PCC	06-03-2021	282.0	94.0	Good
WesternAve	083	Collector	496	20	PCC	06-03-2021	181.5	90.0	Good
WesternAve	084	Collector	406	20	PCC	06-03-2021	187.5	100.0	Good
WESTERNAVE	877	Residential	339	24	AC	06-03-2021	113.50	60.00	Fair
WESTERNAVE	878	Residential	576	24	AC	07-13-2021	160.00	68.00	Fair
WESTERNAVE	879	Residential	146	24	AC	06-03-2021	158.00	95.00	Good
WhittierAv	261	Residential	147	24	AC	06-03-2021	262.0	92.0	Good
WhittierAv	262	Residential	775	24	AC	06-03-2021	288.7	57.0	Fair
WhittierAv	263	Residential	768	24	AC	06-03-2021	187.0	80.0	Satisfactory
WILLIAMSBUS	817	Residential	209	26	AC	06-03-2021	291.00	77.00	Satisfactory
WILLIAMSBUS	818	Residential	378	26	AC	06-03-2021	304.00	40.00	Very Poor
WILLIAMSBUS	819	Residential	1195	26	AC	06-03-2021	298.20	70.00	Fair
WILLISST	719	Residential	434	20	AC	09-09-2021	95.00	100.00	Good
WILLISST	720	Residential	542	20	AC	09-09-2021	90.00	100.00	Good
WILLISST	721	Residential	412	20	AC	09-09-2021	95.00	100.00	Good
WILSONAV	797	Residential	503	24	AC	06-03-2021	171.00	56.00	Fair
WILSONAV	798	Residential	992	24	AC	06-03-2021	215.50	62.00	Fair
WilsonAve	181	Residential	338	26	AC	06-03-2021	341.0	77.0	Satisfactory
WILSONAVE	189	Residential	500	24	AC	06-03-2021	220.5	65.0	Fair
WILSONAVE	201	Residential	297	24	AC	06-03-2021	380.5	86.0	Good
WINCHELLWA	204	Residential	960	30	AC	06-03-2021	216.3	41.0	Poor
WINDSORAV	514	Residential	506	20	AC	06-03-2021	386.5	43.0	Poor
WINDSORAV	515	Residential	920	20	AC	06-03-2021	355.3	32.0	Very Poor
WINGATERD	583	Residential	408	20	AC	06-03-2021	221.50	66.00	Fair
WINGATERD	584	Residential	399	20	AC	06-03-2021	262.00	76.00	Satisfactory
WINGATERD	585	Residential	341	20	AC	06-03-2021	262.50	73.00	Satisfactory
WINGATERD	586	Residential	400	20	AC	06-03-2021	251.50	84.00	Satisfactory
WINGATERD	587	Residential	310	20	AC	06-03-2021	325.00	46.00	Poor
WINGATERD	588	Residential	204	20	AC	06-03-2021	241.00	86.00	Good
WINGATERD	589	Residential	133	20	AC	06-03-2021	352.00	95.00	Good
WINSLOWCIR	864	Residential	1546	26	AC	06-03-2021	148.50	84.00	Satisfactory
WOODLANDDR	736	Residential	478	20	AC	09-08-2021	95.00	100.00	Good
WOODLANDDR	737	Residential	401	20	AC	09-08-2021	95.00	100.00	Good

List of 2021 PCI and IRI values

BranchID	Section ID	Functional Class	Length (ft)	Width (ft)	Surface Type	Last Inspection	IRI (in/mile)	PCI	PCI Category
WOODSTOCKA	278	Residential	964	20	AC	06-03-2021	241.3	50.0	Poor
WOODSTOCKA	279	Residential	1322	20	AC	06-03-2021	279.4	53.0	Poor
WOODVIEWDR	183	Residential	275	20	AC	06-03-2021	266.0	76.0	Satisfactory
WOODVIEWDR	184	Residential	183	20	AC	06-03-2021	179.0	97.0	Good
WOODVIEWDR	185	Residential	715	20	AC	06-03-2021	233.7	82.0	Satisfactory
WOODVIEWDR	186	Residential	382	20	AC	06-03-2021	340.5	89.0	Good

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
ABBEYDR	849	RUTTING	High	9	SqFt	0.10	Patching - AC Shallow	Residential	AC	24	402	06-03-2021	10	SqFt	\$2.44	\$23
ABBEYDR	850	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	417	06-03-2021	9	SqFt	\$6.16	\$51
ABBEYDR	850	L & T CR	Medium	39	Ft	0.39	Crack Sealing - AC	Residential	AC	24	417	06-03-2021	39	Ft	\$1.65	\$64
ABBEYDR	851	L & T CR	High	1	Ft	0.00	Patching - AC Shallow	Residential	AC	24	683	06-03-2021	2	SqFt	\$2.44	\$6
ABBEYDR	851	L & T CR	Medium	697	Ft	4.25	Crack Sealing - AC	Residential	AC	24	683	06-03-2021	697	Ft	\$1.65	\$1,150
ABBEYDR	852	RUTTING	Medium	9	SqFt	0.04	Patching - AC Shallow	Residential	AC	24	930	06-03-2021	10	SqFt	\$2.44	\$22
ABBEYDR	852	L & T CR	Medium	425	Ft	1.91	Crack Sealing - AC	Residential	AC	24	930	06-03-2021	425	Ft	\$1.65	\$702
ABBEYDR	852	L & T CR	High	51	Ft	0.23	Patching - AC Shallow	Residential	AC	24	930	06-03-2021	166	SqFt	\$2.44	\$405
ABBOTSFO	285	RUTTING	Medium	164	SqFt	0.52	Patching - AC Shallow	Residential	AC	20	1575	06-03-2021	165	SqFt	\$2.44	\$401
ABBOTSFO	285	ALLIGATOR CR	Medium	11	SqFt	0.03	Patching - AC Deep	Residential	AC	20	1575	06-03-2021	28	SqFt	\$6.16	\$170
ABBOTSFO	285	RUTTING	High	180	SqFt	0.57	Patching - AC Deep	Residential	AC	20	1575	06-03-2021	180	SqFt	\$6.16	\$1,110
ABBOTSFO	285	POTHOLE	Low	5	Count	0.02	Patching - AC Deep	Residential	AC	20	1575	06-03-2021	14	SqFt	\$6.16	\$87
ABBOTSFO	285	L & T CR	Medium	554	Ft	1.76	Crack Sealing - AC	Residential	AC	20	1575	06-03-2021	554	Ft	\$1.65	\$915
ABBOTSFO	285	L & T CR	High	39	Ft	0.12	Patching - AC Shallow	Residential	AC	20	1575	06-03-2021	127	SqFt	\$2.44	\$310
AhlstrandR	899	RUTTING	High	38	SqFt	0.26	Patching - AC Shallow	Residential	AC	20	743	06-03-2021	38	SqFt	\$2.44	\$93
ANNANDA	158	RUTTING	Medium	50	SqFt	0.40	Patching - AC Shallow	Residential	AC	24	518	06-03-2021	50	SqFt	\$2.44	\$122
ANNANDA	158	RUTTING	High	30	SqFt	0.24	Patching - AC Deep	Residential	AC	24	518	06-03-2021	30	SqFt	\$6.16	\$185
ANNANDA	158	L & T CR	Medium	239	Ft	1.92	Crack Sealing - AC	Residential	AC	24	518	06-03-2021	239	Ft	\$1.65	\$394
ANNANDA	158	L & T CR	High	60	Ft	0.49	Patching - AC Shallow	Residential	AC	24	518	06-03-2021	198	SqFt	\$2.44	\$484
ANTHONY	698	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	597	06-03-2021	0	SqFt	\$2.44	\$1
ANTHONY	698	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	597	06-03-2021	9	SqFt	\$2.44	\$21
AnthonySt	699	RUTTING	High	27	SqFt	0.13	Patching - AC Shallow	Residential	AC	24	871	06-03-2021	27	SqFt	\$2.44	\$66
ArborCt	596	RUTTING	Medium	20	SqFt	0.23	Patching - AC Shallow	Residential	AC	24	368	06-03-2021	20	SqFt	\$2.44	\$50
ArborCt	596	RUTTING	High	153	SqFt	1.74	Patching - AC Deep	Residential	AC	24	368	06-03-2021	153	SqFt	\$6.16	\$944
ArborCt	596	L & T CR	Medium	171	Ft	1.94	Crack Sealing - AC	Residential	AC	24	368	06-03-2021	172	Ft	\$1.65	\$283
ArborCt	596	L & T CR	High	59	Ft	0.67	Patching - AC Shallow	Residential	AC	24	368	06-03-2021	194	SqFt	\$2.44	\$473
ARLINGTON	593	L & T CR	Medium	70	Ft	0.59	Crack Sealing - AC	Residential	AC	24	494	06-03-2021	70	Ft	\$1.65	\$115
ARLINGTON	593	RUTTING	Medium	20	SqFt	0.17	Patching - AC Shallow	Residential	AC	24	494	06-03-2021	20	SqFt	\$2.44	\$49
ARLINGTON	593	L & T CR	High	10	Ft	0.08	Patching - AC Shallow	Residential	AC	24	494	06-03-2021	32	SqFt	\$2.44	\$79
ARLINGTON	593	POTHOLE	Low	6	Count	0.05	Patching - AC Deep	Residential	AC	24	494	06-03-2021	18	SqFt	\$6.16	\$111
ARLINGTON	594	ALLIGATOR CR	Medium	12	SqFt	0.10	Patching - AC Deep	Residential	AC	24	518	06-03-2021	30	SqFt	\$6.16	\$184
ARLINGTON	594	L & T CR	High	5	Ft	0.04	Patching - AC Shallow	Residential	AC	24	518	06-03-2021	16	SqFt	\$2.44	\$39
ARLINGTON	594	RUTTING	High	46	SqFt	0.37	Patching - AC Deep	Residential	AC	24	518	06-03-2021	46	SqFt	\$6.16	\$284
ARLINGTON	594	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	518	06-03-2021	10	SqFt	\$2.44	\$22
ARLINGTON	594	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	518	06-03-2021	9	SqFt	\$6.16	\$51
ARLINGTON	594	L & T CR	Medium	61	Ft	0.49	Crack Sealing - AC	Residential	AC	24	518	06-03-2021	61	Ft	\$1.65	\$100
BAKERCT	842	L & T CR	Medium	209	Ft	1.83	Crack Sealing - AC	Residential	AC	24	477	06-03-2021	209	Ft	\$1.65	\$345
BAKERCT	842	RUTTING	Medium	13	SqFt	0.12	Patching - AC Shallow	Residential	AC	24	477	06-03-2021	14	SqFt	\$2.44	\$33

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
BAKERCT	842	ALLIGATOR CR	Medium	0	SqFt	0.00	Patching - AC Deep	Residential	AC	24	477	06-03-2021	6	SqFt	\$6.16	\$38
BAKERHILL	902	RUTTING	High	56	SqFt	0.30	Patching - AC Deep	Residential	AC	34	554	06-03-2021	56	SqFt	\$6.16	\$343
BAKERHILL	902	L & T CR	High	59	Ft	0.31	Patching - AC Shallow	Residential	AC	34	554	06-03-2021	192	SqFt	\$2.44	\$468
BAKERHILL	902	L & T CR	Medium	310	Ft	1.65	Crack Sealing - AC	Residential	AC	34	554	06-03-2021	310	Ft	\$1.65	\$511
BAKERHILL	902	RUTTING	Medium	56	SqFt	0.30	Patching - AC Shallow	Residential	AC	34	554	06-03-2021	56	SqFt	\$2.44	\$136
BAKERHILL	903	POTHOLE	Low	4	Count	0.04	Patching - AC Deep	Residential	AC	34	296	06-03-2021	13	SqFt	\$6.16	\$79
BAKERHILL	903	L & T CR	High	8	Ft	0.08	Patching - AC Shallow	Residential	AC	34	296	06-03-2021	25	SqFt	\$2.44	\$61
BAKERHILL	903	L & T CR	Medium	43	Ft	0.43	Crack Sealing - AC	Residential	AC	34	296	06-03-2021	43	Ft	\$1.65	\$71
BAKERHILL	904	L & T CR	Medium	2	Ft	0.02	Crack Sealing - AC	Residential	AC	34	323	06-03-2021	2	Ft	\$1.65	\$3
BAKERHILL	904	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	34	323	06-03-2021	1	SqFt	\$2.44	\$2
BemisRd	920	RUTTING	High	349	SqFt	2.50	Patching - AC Shallow	Residential	AC	20	698	06-03-2021	349	SqFt	\$2.44	\$852
BemisRd	924	RUTTING	High	263	SqFt	3.70	Patching - AC Shallow	Residential	AC	20	355	06-03-2021	263	SqFt	\$2.44	\$641
BemisRd	925	RUTTING	High	252	SqFt	7.17	Patching - AC Shallow	Residential	AC	20	176	06-03-2021	252	SqFt	\$2.44	\$615
BemisRd	926	RUTTING	High	581	SqFt	3.83	Patching - AC Shallow	Residential	AC	20	758	06-03-2021	581	SqFt	\$2.44	\$1,419
BirchBook	910	L & T CR	High	14	Ft	0.07	Patching - AC Shallow	Residential	AC	24	797	06-03-2021	46	SqFt	\$2.44	\$113
BirchBook	910	L & T CR	Medium	0	Ft	0.00	Crack Sealing - AC	Residential	AC	24	797	06-03-2021	0	Ft	\$1.65	\$0
BRANDON	461	ALLIGATOR CR	Medium	124	SqFt	0.63	Patching - AC Deep	Residential	AC	24	817	06-03-2021	173	SqFt	\$6.16	\$1,067
BRANDON	461	RUTTING	Medium	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	817	06-03-2021	9	SqFt	\$2.44	\$22
BRANDON	461	L & T CR	High	7	Ft	0.03	Patching - AC Shallow	Residential	AC	24	817	06-03-2021	22	SqFt	\$2.44	\$52
BRANDON	461	L & T CR	Medium	457	Ft	2.33	Crack Sealing - AC	Residential	AC	24	817	06-03-2021	456	Ft	\$1.65	\$753
BRANDON	462	RUTTING	High	18	SqFt	0.10	Patching - AC Shallow	Residential	AC	24	761	06-03-2021	18	SqFt	\$2.44	\$45
BRANDON	464	L & T CR	Medium	8	Ft	0.19	Crack Sealing - AC	Residential	AC	24	173	06-03-2021	8	Ft	\$1.65	\$13
BrandonAv	458	L & T CR	High	37	Ft	0.34	Patching - AC Shallow	Residential	AC	20	537	06-03-2021	121	SqFt	\$2.44	\$294
BrandonAv	458	RUTTING	High	133	SqFt	1.24	Patching - AC Deep	Residential	AC	20	537	06-03-2021	133	SqFt	\$6.16	\$820
BrandonAv	458	POTHOLE	Low	5	Count	0.04	Patching - AC Deep	Residential	AC	20	537	06-03-2021	14	SqFt	\$6.16	\$85
BrandonAv	458	RUTTING	Medium	63	SqFt	0.59	Patching - AC Shallow	Residential	AC	20	537	06-03-2021	64	SqFt	\$2.44	\$154
BrandonAv	458	L & T CR	Medium	183	Ft	1.70	Crack Sealing - AC	Residential	AC	20	537	06-03-2021	182	Ft	\$1.65	\$301
BrandonAv	459	L & T CR	Medium	49	Ft	0.68	Crack Sealing - AC	Residential	AC	20	361	06-03-2021	49	Ft	\$1.65	\$81
BrandonAv	459	RUTTING	High	75	SqFt	1.04	Patching - AC Deep	Residential	AC	20	361	06-03-2021	75	SqFt	\$6.16	\$464
BRENTWO	867	L & T CR	Medium	22	Ft	0.16	Crack Sealing - AC	Residential	AC	20	665	06-03-2021	22	Ft	\$1.65	\$36
BRIARST	292	L & T CR	Medium	3	Ft	0.04	Crack Sealing - AC	Residential	AC	26	302	06-03-2021	3	Ft	\$1.65	\$5
BRIARST	293	RUTTING	High	33	SqFt	0.21	Patching - AC Shallow	Residential	AC	26	597	06-03-2021	33	SqFt	\$2.44	\$81
BRIARST	294	L & T CR	Medium	4	Ft	0.06	Crack Sealing - AC	Residential	AC	26	276	06-03-2021	5	Ft	\$1.65	\$7
BRIARST	294	ALLIGATOR CR	Medium	11	SqFt	0.15	Patching - AC Deep	Residential	AC	26	276	06-03-2021	28	SqFt	\$6.16	\$170
BRIARST	294	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	26	276	06-03-2021	1	SqFt	\$2.44	\$2
BRIARST	295	RUTTING	High	42	SqFt	0.41	Patching - AC Deep	Residential	AC	26	396	06-03-2021	42	SqFt	\$6.16	\$261
BRIARST	295	L & T CR	Medium	36	Ft	0.35	Crack Sealing - AC	Residential	AC	26	396	06-03-2021	36	Ft	\$1.65	\$60
BRIGHTON	522	L & T CR	High	141	Ft	0.60	Patching - AC Shallow	Residential	AC	26	905	06-03-2021	464	SqFt	\$2.44	\$1,131

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
BRIGHTON	522	L & T CR	Medium	39	Ft	0.16	Crack Sealing - AC	Residential	AC	26	905	06-03-2021	39	Ft	\$1.65	\$64
BryantAve	166	LINEAR CR	Medium	4	Slabs	4.00	Crack Sealing - PCC	Residential	PCC	24	600	06-03-2021	48	Ft	\$1.65	\$79
BryantAve	167	CORNER BREAK	High	2	Slabs	1.67	Patching - PCC Full Depth	Residential	PCC	24	807	06-03-2021	73	SqFt	\$27.50	\$1,998
BryantAve	168	CORNER BREAK	Medium	2	Slabs	1.67	Crack Sealing - PCC	Residential	PCC	24	564	06-03-2021	13	Ft	\$1.65	\$21
BryantAve	169	LINEAR CR	Medium	2	Slabs	3.57	Crack Sealing - PCC	Residential	PCC	24	366	06-03-2021	26	Ft	\$1.65	\$43
BryantAve	169	JOINT SPALL	Medium	13	Slabs	21.43	Patching - PCC Partial Depth	Residential	PCC	24	366	06-03-2021	36	SqFt	\$7.70	\$271
BuenaVista	205	L & T CR	Medium	49	Ft	0.33	Crack Sealing - AC	Residential	AC	30	502	06-03-2021	49	Ft	\$1.65	\$81
BuenaVista	205	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	30	502	06-03-2021	1	SqFt	\$2.44	\$3
BUENAVIS	207	L & T CR	High	26	Ft	0.21	Patching - AC Shallow	Residential	AC	30	399	06-03-2021	84	SqFt	\$2.44	\$205
BUENAVIS	207	L & T CR	Medium	73	Ft	0.61	Crack Sealing - AC	Residential	AC	30	399	06-03-2021	73	Ft	\$1.65	\$121
BUENAVIS	207	ALLIGATOR CR	Medium	14	SqFt	0.12	Patching - AC Deep	Residential	AC	30	399	06-03-2021	32	SqFt	\$6.16	\$202
BUENAVIS	207	RUTTING	High	33	SqFt	0.27	Patching - AC Deep	Residential	AC	30	399	06-03-2021	32	SqFt	\$6.16	\$201
BUENAVIS	207	RUTTING	Medium	72	SqFt	0.60	Patching - AC Shallow	Residential	AC	30	399	06-03-2021	72	SqFt	\$2.44	\$175
BUENAVIS	207	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	30	399	06-03-2021	5	SqFt	\$6.16	\$36
BuenaVista	232	L & T CR	Medium	0	Ft	0.00	Crack Sealing - AC	Residential	AC	20	436	06-03-2021	0	Ft	\$1.65	\$0
BuenaVista	893	L & T CR	Medium	1	Ft	0.01	Crack Sealing - AC	Residential	AC	30	380	06-03-2021	1	Ft	\$1.65	\$2
BuenaVista	893	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	30	380	06-03-2021	2	SqFt	\$2.44	\$6
CARLETON	182	RUTTING	High	13	SqFt	0.07	Patching - AC Shallow	Residential	AC	34	555	06-03-2021	13	SqFt	\$2.44	\$32
CARLETON	300	LINEAR CR	Medium	10	Slabs	10.00	Crack Sealing - PCC	Residential	PCC	24	753	06-03-2021	135	Ft	\$1.65	\$223
CARLETON	302	RUTTING	High	18	SqFt	0.28	Patching - AC Shallow	Residential	AC	24	264	06-03-2021	18	SqFt	\$2.44	\$44
CARLETON	945	ALLIGATOR CR	Medium	270	SqFt	1.20	Patching - AC Deep	Residential	AC	28	802	07-07-2021	339	SqFt	\$6.16	\$2,092
CARLISLEC	823	L & T CR	Medium	112	Ft	0.38	Crack Sealing - AC	Residential	AC	26	1138	06-03-2021	112	Ft	\$1.65	\$185
CARLISLEC	823	L & T CR	High	20	Ft	0.07	Patching - AC Shallow	Residential	AC	26	1138	06-03-2021	64	SqFt	\$2.44	\$156
CARLISLEC	823	RUTTING	High	35	SqFt	0.12	Patching - AC Deep	Residential	AC	26	1138	06-03-2021	34	SqFt	\$6.16	\$214
CARLISLEC	823	RUTTING	Medium	90	SqFt	0.30	Patching - AC Shallow	Residential	AC	26	1138	06-03-2021	89	SqFt	\$2.44	\$219
CAROLYN	386	RUTTING	High	31	SqFt	0.57	Patching - AC Shallow	Residential	AC	20	270	06-03-2021	31	SqFt	\$2.44	\$75
ChapelCt N	856	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	765	06-03-2021	4	SqFt	\$2.44	\$10
ChapelCt N	856	L & T CR	Medium	30	Ft	0.17	Crack Sealing - AC	Residential	AC	24	765	06-03-2021	31	Ft	\$1.65	\$50
CHIDESTER	775	L & T CR	Medium	344	Ft	2.38	Crack Sealing - AC	Residential	AC	20	724	06-03-2021	344	Ft	\$1.65	\$568
CHIDESTER	775	ALLIGATOR CR	Medium	436	SqFt	3.01	Patching - AC Deep	Residential	AC	20	724	06-03-2021	523	SqFt	\$6.16	\$3,225
CHIDESTER	775	ALLIGATOR CR	High	36	SqFt	0.25	Patching - AC Deep	Residential	AC	20	724	06-03-2021	65	SqFt	\$6.16	\$397
CHIDESTER	775	RUTTING	Medium	24	SqFt	0.16	Patching - AC Shallow	Residential	AC	20	724	06-03-2021	24	SqFt	\$2.44	\$58
CHIDESTER	775	L & T CR	High	131	Ft	0.90	Patching - AC Shallow	Residential	AC	20	724	06-03-2021	429	SqFt	\$2.44	\$1,047
CHIDESTER	775	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	724	06-03-2021	8	SqFt	\$6.16	\$44
CHIDESTER	776	L & T CR	Medium	17	Ft	0.17	Crack Sealing - AC	Residential	AC	20	485	06-03-2021	17	Ft	\$1.65	\$27
CLIFTONAV	223	RUTTING	High	116	SqFt	0.79	Patching - AC Shallow	Residential	AC	20	734	06-03-2021	116	SqFt	\$2.44	\$284
CollegeAve	112	POTHOLE	Low	4	Count	0.02	Patching - AC Deep	Collector	AC	36	628	06-03-2021	13	SqFt	\$6.16	\$77
CollegeAve	112	ALLIGATOR CR	Medium	24	SqFt	0.11	Patching - AC Deep	Collector	AC	36	628	06-03-2021	48	SqFt	\$6.16	\$297

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
CollegeAve	112	RUTTING	Medium	28	SqFt	0.12	Patching - AC Shallow	Collector	AC	36	628	06-03-2021	28	SqFt	\$2.44	\$68
CollegeAve	112	L & T CR	Medium	30	Ft	0.13	Crack Sealing - AC	Collector	AC	36	628	06-03-2021	30	Ft	\$1.65	\$50
CollegeAve	112	L & T CR	High	7	Ft	0.03	Patching - AC Shallow	Collector	AC	36	628	06-03-2021	23	SqFt	\$2.44	\$55
COOLIDGE	803	L & T CR	Medium	72	Ft	0.24	Crack Sealing - AC	Residential	AC	24	1222	06-03-2021	72	Ft	\$1.65	\$118
COOLIDGE	803	RUTTING	Medium	68	SqFt	0.23	Patching - AC Shallow	Residential	AC	24	1222	06-03-2021	68	SqFt	\$2.44	\$166
COTTAGEAve	705	RUTTING	High	21	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	875	06-03-2021	20	SqFt	\$2.44	\$51
CottageAve	706	RUTTING	High	23	SqFt	0.17	Patching - AC Shallow	Residential	AC	20	697	06-03-2021	24	SqFt	\$2.44	\$57
CottageAve	707	L & T CR	High	18	Ft	0.26	Patching - AC Shallow	Residential	AC	20	344	06-03-2021	58	SqFt	\$2.44	\$141
CottageAve	707	L & T CR	Medium	63	Ft	0.91	Crack Sealing - AC	Residential	AC	20	344	06-03-2021	63	Ft	\$1.65	\$104
CottageAve	708	RUTTING	Medium	7	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	438	06-03-2021	6	SqFt	\$2.44	\$17
CottageAve	708	L & T CR	High	9	Ft	0.10	Patching - AC Shallow	Residential	AC	20	438	06-03-2021	29	SqFt	\$2.44	\$72
CottageAve	708	L & T CR	Medium	141	Ft	1.61	Crack Sealing - AC	Residential	AC	20	438	06-03-2021	141	Ft	\$1.65	\$233
CottageAve	710	RUTTING	Medium	7	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	386	06-03-2021	6	SqFt	\$2.44	\$17
CottageAve	710	L & T CR	Medium	4	Ft	0.05	Crack Sealing - AC	Residential	AC	20	386	06-03-2021	4	Ft	\$1.65	\$6
CottageAve	711	L & T CR	High	11	Ft	0.09	Patching - AC Shallow	Residential	AC	20	607	06-03-2021	34	SqFt	\$2.44	\$84
CottageAve	711	RUTTING	Medium	23	SqFt	0.19	Patching - AC Shallow	Residential	AC	20	607	06-03-2021	24	SqFt	\$2.44	\$57
CottageAve	711	POTHOLE	Low	5	Count	0.04	Patching - AC Deep	Residential	AC	20	607	06-03-2021	14	SqFt	\$6.16	\$86
CottageAve	711	ALLIGATOR CR	Medium	12	SqFt	0.10	Patching - AC Deep	Residential	AC	20	607	06-03-2021	30	SqFt	\$6.16	\$188
CottageAve	711	L & T CR	Medium	121	Ft	1.00	Crack Sealing - AC	Residential	AC	20	607	06-03-2021	121	Ft	\$1.65	\$200
CountryClu	173	RUTTING	Medium	10	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	376	06-03-2021	10	SqFt	\$2.44	\$24
CountryClu	173	L & T CR	Medium	39	Ft	0.43	Crack Sealing - AC	Residential	AC	24	376	06-03-2021	39	Ft	\$1.65	\$64
CountryClu	173	L & T CR	High	9	Ft	0.10	Patching - AC Shallow	Residential	AC	24	376	06-03-2021	28	SqFt	\$2.44	\$69
CountryClu	174	L & T CR	Medium	47	Ft	0.79	Crack Sealing - AC	Residential	AC	24	248	06-03-2021	47	Ft	\$1.65	\$77
COURTLAN	194	L & T CR	Medium	66	Ft	1.24	Crack Sealing - AC	Residential	AC	24	222	06-03-2021	66	Ft	\$1.65	\$109
COURTLAN	194	RUTTING	High	16	SqFt	0.31	Patching - AC Deep	Residential	AC	24	222	06-03-2021	16	SqFt	\$6.16	\$101
COURTLAN	194	RUTTING	Medium	16	SqFt	0.31	Patching - AC Shallow	Residential	AC	24	222	06-03-2021	16	SqFt	\$2.44	\$40
COURTLAN	194	L & T CR	High	15	Ft	0.28	Patching - AC Shallow	Residential	AC	24	222	06-03-2021	48	SqFt	\$2.44	\$119
CRANSTON	558	L & T CR	Medium	47	Ft	0.26	Crack Sealing - AC	Residential	AC	24	755	06-03-2021	47	Ft	\$1.65	\$77
CRANSTON	558	L & T CR	High	83	Ft	0.46	Patching - AC Shallow	Residential	AC	24	755	06-03-2021	271	SqFt	\$2.44	\$661
CrescentBl	029	L & T CR	High	41	Ft	0.35	Patching - AC Shallow	Collector	AC	24	477	06-03-2021	133	SqFt	\$2.44	\$325
CrescentBl	029	L & T CR	Medium	246	Ft	2.15	Crack Sealing - AC	Collector	AC	24	477	06-03-2021	246	Ft	\$1.65	\$406
CrescentBl	029	RUTTING	Medium	9	SqFt	0.08	Patching - AC Shallow	Collector	AC	24	477	06-03-2021	10	SqFt	\$2.44	\$22
CrescentBl	029	ALLIGATOR CR	Medium	16	SqFt	0.14	Patching - AC Deep	Collector	AC	24	477	06-03-2021	36	SqFt	\$6.16	\$219
CrescentBl	031	RUTTING	High	10	SqFt	0.23	Patching - AC Shallow	Collector	AC	24	186	06-03-2021	11	SqFt	\$2.44	\$25
CrescentBl	034	L & T CR	High	46	Ft	0.50	Patching - AC Shallow	Collector	AC	24	383	06-03-2021	150	SqFt	\$2.44	\$364
CrescentBl	034	L & T CR	Medium	253	Ft	2.76	Crack Sealing - AC	Collector	AC	24	383	06-03-2021	254	Ft	\$1.65	\$418
CrescentBl	034	POTHOLE	Low	6	Count	0.06	Patching - AC Deep	Collector	AC	24	383	06-03-2021	17	SqFt	\$6.16	\$105
CrescentBl	034	RUTTING	Medium	9	SqFt	0.10	Patching - AC Shallow	Collector	AC	24	383	06-03-2021	10	SqFt	\$2.44	\$23

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
CrescentBl	035	RUTTING	High	106	SqFt	0.40	Patching - AC Shallow	Collector	AC	24	1100	06-03-2021	105	SqFt	\$2.44	\$259
CrescentBl	142	RUTTING	High	9	SqFt	0.08	Patching - AC Shallow	Residential	AC	24	466	06-03-2021	10	SqFt	\$2.44	\$23
CrestCt	916	L & T CR	Medium	37	Ft	0.74	Crack Sealing - AC	Residential	AC	26	191	06-03-2021	37	Ft	\$1.65	\$60
CrestCt	916	RUTTING	High	64	SqFt	1.30	Patching - AC Deep	Residential	AC	26	191	06-03-2021	65	SqFt	\$6.16	\$397
CrestCt	916	POTHOLE	Low	3	Count	0.06	Patching - AC Deep	Residential	AC	26	191	06-03-2021	9	SqFt	\$6.16	\$51
CRESTRD	348	RUTTING	High	71	SqFt	0.56	Patching - AC Shallow	Residential	AC	20	628	06-03-2021	71	SqFt	\$2.44	\$173
CRESTRD	349	RUTTING	Medium	7	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	568	06-03-2021	6	SqFt	\$2.44	\$16
CRESTRD	349	L & T CR	Medium	295	Ft	2.60	Crack Sealing - AC	Residential	AC	20	568	06-03-2021	295	Ft	\$1.65	\$487
CRESTRD	349	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	568	06-03-2021	8	SqFt	\$6.16	\$43
CRESTRD	349	L & T CR	High	12	Ft	0.10	Patching - AC Shallow	Residential	AC	20	568	06-03-2021	38	SqFt	\$2.44	\$93
CRESTRD	350	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	530	06-03-2021	9	SqFt	\$2.44	\$20
CRESTRD	350	L & T CR	High	96	Ft	0.90	Patching - AC Shallow	Residential	AC	20	530	06-03-2021	314	SqFt	\$2.44	\$767
CRESTRD	350	L & T CR	Medium	92	Ft	0.87	Crack Sealing - AC	Residential	AC	20	530	06-03-2021	92	Ft	\$1.65	\$152
CRESTRD	350	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	530	06-03-2021	8	SqFt	\$6.16	\$45
CUMNORA	276	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	958	06-03-2021	6	SqFt	\$6.16	\$43
CUMNORA	276	RUTTING	High	23	SqFt	0.12	Patching - AC Deep	Residential	AC	20	958	06-03-2021	24	SqFt	\$6.16	\$143
CUMNORA	276	L & T CR	High	25	Ft	0.13	Patching - AC Shallow	Residential	AC	20	958	06-03-2021	82	SqFt	\$2.44	\$198
CUMNORA	276	L & T CR	Medium	590	Ft	3.08	Crack Sealing - AC	Residential	AC	20	958	06-03-2021	590	Ft	\$1.65	\$974
CUMNORA	276	RUTTING	Medium	31	SqFt	0.16	Patching - AC Shallow	Residential	AC	20	958	06-03-2021	31	SqFt	\$2.44	\$75
CUMNORA	276	ALLIGATOR CR	Medium	3	SqFt	0.01	Patching - AC Deep	Residential	AC	20	958	06-03-2021	13	SqFt	\$6.16	\$81
CUMNORA	277	RUTTING	High	176	SqFt	0.67	Patching - AC Shallow	Residential	AC	20	1321	06-03-2021	175	SqFt	\$2.44	\$429
CUMNORA	221	RUTTING	High	78	SqFt	1.01	Patching - AC Shallow	Residential	AC	20	386	06-03-2021	78	SqFt	\$2.44	\$190
CUMNORA	222	RUTTING	Medium	50	SqFt	0.47	Patching - AC Shallow	Residential	AC	20	536	06-03-2021	51	SqFt	\$2.44	\$122
CUMNORA	222	POTHOLE	Low	7	Count	0.06	Patching - AC Deep	Residential	AC	20	536	06-03-2021	20	SqFt	\$6.16	\$127
CUMNORA	222	L & T CR	High	93	Ft	0.86	Patching - AC Shallow	Residential	AC	20	536	06-03-2021	304	SqFt	\$2.44	\$742
CUMNORA	222	ALLIGATOR CR	High	50	SqFt	0.47	Patching - AC Deep	Residential	AC	20	536	06-03-2021	83	SqFt	\$6.16	\$510
CUMNORA	222	L & T CR	Medium	25	Ft	0.23	Crack Sealing - AC	Residential	AC	20	536	06-03-2021	25	Ft	\$1.65	\$41
CUMNORA	222	RUTTING	High	82	SqFt	0.76	Patching - AC Deep	Residential	AC	20	536	06-03-2021	82	SqFt	\$6.16	\$504
CumnorAv	947	ALLIGATOR CR	Medium	455	SqFt	4.00	Patching - AC Deep	Residential	AC	24	474	07-07-2021	545	SqFt	\$6.16	\$3,356
CumnorAv	947	L & T CR	Medium	228	Ft	2.00	Crack Sealing - AC	Residential	AC	24	474	07-07-2021	227	Ft	\$1.65	\$375
DanbyDr	944	RUTTING	Medium	21	SqFt	0.19	Patching - AC Shallow	Residential	AC	24	448	06-03-2021	20	SqFt	\$2.44	\$51
DAVISTER	470	RUTTING	High	98	SqFt	1.39	Patching - AC Shallow	Residential	AC	20	354	06-03-2021	98	SqFt	\$2.44	\$240
DAWESAV	804	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	429	06-03-2021	4	SqFt	\$2.44	\$11
DAWESAV	804	L & T CR	Medium	115	Ft	1.12	Crack Sealing - AC	Residential	AC	24	429	06-03-2021	115	Ft	\$1.65	\$191
DAWESAV	805	L & T CR	High	17	Ft	0.09	Patching - AC Shallow	Residential	AC	24	788	06-03-2021	57	SqFt	\$2.44	\$138
DAWESAV	805	L & T CR	Medium	2	Ft	0.01	Crack Sealing - AC	Residential	AC	24	788	06-03-2021	2	Ft	\$1.65	\$4
DeerGlenc	938	L & T CR	Medium	232	Ft	2.41	Crack Sealing - AC	Residential	AC	20	482	06-03-2021	232	Ft	\$1.65	\$383
DeerGlenc	938	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	482	06-03-2021	8	SqFt	\$2.44	\$19

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
DeerGlenC	938	ALLIGATOR CR	High	2	SqFt	0.02	Patching - AC Deep	Residential	AC	20	482	06-03-2021	11	SqFt	\$6.16	\$67
DeerGlenC	938	RUTTING	High	39	SqFt	0.40	Patching - AC Deep	Residential	AC	20	482	06-03-2021	39	SqFt	\$6.16	\$239
DeerGlenC	938	L & T CR	High	164	Ft	1.70	Patching - AC Shallow	Residential	AC	20	482	06-03-2021	537	SqFt	\$2.44	\$1,310
DeerGlenC	938	ALLIGATOR CR	Medium	25	SqFt	0.26	Patching - AC Deep	Residential	AC	20	482	06-03-2021	50	SqFt	\$6.16	\$306
DERBYGLE	146	L & T CR	Medium	21	Ft	0.15	Crack Sealing - AC	Residential	AC	26	523	06-03-2021	21	Ft	\$1.65	\$34
DERBYGLE	146	ALLIGATOR CR	Medium	46	SqFt	0.34	Patching - AC Deep	Residential	AC	26	523	06-03-2021	78	SqFt	\$6.16	\$477
DERBYGLE	147	L & T CR	Medium	6	Ft	0.05	Crack Sealing - AC	Residential	AC	26	458	06-03-2021	6	Ft	\$1.65	\$9
DORSETAV	521	RUTTING	Medium	9	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	405	06-03-2021	10	SqFt	\$2.44	\$23
DORSETAV	521	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	20	405	06-03-2021	9	SqFt	\$6.16	\$52
DORSETAV	521	L & T CR	Medium	2	Ft	0.03	Crack Sealing - AC	Residential	AC	20	405	06-03-2021	2	Ft	\$1.65	\$3
DorsetCt	520	CORNER BREAK	Medium	2	Slabs	2.50	Crack Sealing - PCC	Residential	PCC	24	468	06-03-2021	16	Ft	\$1.65	\$26
DuaneSt	677	L & T CR	High	6	Ft	0.06	Patching - AC Shallow	Residential	AC	24	408	06-03-2021	19	SqFt	\$2.44	\$46
DuaneSt	677	L & T CR	Medium	146	Ft	1.49	Crack Sealing - AC	Residential	AC	24	408	06-03-2021	146	Ft	\$1.65	\$240
DuaneSt	677	RUTTING	Medium	19	SqFt	0.19	Patching - AC Shallow	Residential	AC	24	408	06-03-2021	19	SqFt	\$2.44	\$47
DuaneSt	678	L & T CR	Medium	217	Ft	2.27	Crack Sealing - AC	Residential	AC	24	399	06-03-2021	217	Ft	\$1.65	\$358
DuaneSt	678	RUTTING	Medium	9	SqFt	0.10	Patching - AC Shallow	Residential	AC	24	399	06-03-2021	10	SqFt	\$2.44	\$23
DuaneSt	678	L & T CR	High	44	Ft	0.46	Patching - AC Shallow	Residential	AC	24	399	06-03-2021	143	SqFt	\$2.44	\$349
DuaneSt	679	RUTTING	Medium	18	SqFt	0.18	Patching - AC Shallow	Residential	AC	24	418	06-03-2021	18	SqFt	\$2.44	\$44
DuaneSt	679	L & T CR	Medium	338	Ft	3.37	Crack Sealing - AC	Residential	AC	24	418	06-03-2021	338	Ft	\$1.65	\$558
DuaneSt	679	L & T CR	High	27	Ft	0.27	Patching - AC Shallow	Residential	AC	24	418	06-03-2021	89	SqFt	\$2.44	\$217
DuaneSt	680	RUTTING	Medium	26	SqFt	0.20	Patching - AC Shallow	Residential	AC	24	529	06-03-2021	26	SqFt	\$2.44	\$62
DuaneSt	680	L & T CR	Medium	63	Ft	0.50	Crack Sealing - AC	Residential	AC	24	529	06-03-2021	63	Ft	\$1.65	\$104
DuaneSt	680	POTHOLE	Low	11	Count	0.09	Patching - AC Deep	Residential	AC	24	529	06-03-2021	33	SqFt	\$6.16	\$208
DuaneSt	680	L & T CR	High	69	Ft	0.54	Patching - AC Shallow	Residential	AC	24	529	06-03-2021	226	SqFt	\$2.44	\$550
DuaneSt	682	RUTTING	High	156	SqFt	1.01	Patching - AC Shallow	Residential	AC	24	644	06-03-2021	156	SqFt	\$2.44	\$380
DuaneSt	684	RUTTING	High	12	SqFt	0.08	Patching - AC Shallow	Residential	AC	30	461	06-03-2021	12	SqFt	\$2.44	\$28
DuaneSt	685	RUTTING	Medium	9	SqFt	0.09	Patching - AC Shallow	Residential	AC	24	407	06-03-2021	9	SqFt	\$2.44	\$22
DuaneSt	685	L & T CR	Medium	55	Ft	0.56	Crack Sealing - AC	Residential	AC	24	407	06-03-2021	55	Ft	\$1.65	\$90
DuaneSt	686	L & T CR	Medium	152	Ft	1.72	Crack Sealing - AC	Residential	AC	24	367	06-03-2021	152	Ft	\$1.65	\$250
DuaneSt	686	L & T CR	High	63	Ft	0.72	Patching - AC Shallow	Residential	AC	24	367	06-03-2021	208	SqFt	\$2.44	\$508
DuaneSt	688	RUTTING	High	83	SqFt	0.52	Patching - AC Shallow	Residential	AC	24	666	06-03-2021	83	SqFt	\$2.44	\$203
DuaneSt	690	L & T CR	Medium	64	Ft	0.73	Crack Sealing - AC	Residential	AC	24	364	06-03-2021	64	Ft	\$1.65	\$105
DuaneSt	690	RUTTING	Medium	35	SqFt	0.40	Patching - AC Shallow	Residential	AC	24	364	06-03-2021	34	SqFt	\$2.44	\$84
DuaneSt	690	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	364	06-03-2021	9	SqFt	\$6.16	\$50
DuaneSt	690	L & T CR	High	13	Ft	0.15	Patching - AC Shallow	Residential	AC	24	364	06-03-2021	44	SqFt	\$2.44	\$107
DUANETER	159	RUTTING	High	91	SqFt	1.11	Patching - AC Shallow	Residential	AC	24	344	06-03-2021	91	SqFt	\$2.44	\$223
DUPAGEBL	530	L & T CR	Medium	140	Ft	2.20	Crack Sealing - AC	Residential	AC	20	318	06-03-2021	140	Ft	\$1.65	\$231
DUPAGEBL	530	L & T CR	High	15	Ft	0.23	Patching - AC Shallow	Residential	AC	20	318	06-03-2021	48	SqFt	\$2.44	\$119

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
DUPAGEBL	526	RUTTING	High	8	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	387	06-03-2021	9	SqFt	\$2.44	\$21
DUPAGEBL	527	RUTTING	Medium	44	SqFt	0.21	Patching - AC Shallow	Residential	AC	34	614	06-03-2021	44	SqFt	\$2.44	\$108
DUPAGEBL	527	POTHOLE	Low	4	Count	0.02	Patching - AC Deep	Residential	AC	34	614	06-03-2021	12	SqFt	\$6.16	\$71
DUPAGEBL	527	L & T CR	High	33	Ft	0.16	Patching - AC Shallow	Residential	AC	34	614	06-03-2021	107	SqFt	\$2.44	\$260
DUPAGEBL	527	L & T CR	Medium	67	Ft	0.32	Crack Sealing - AC	Residential	AC	34	614	06-03-2021	67	Ft	\$1.65	\$110
DUPAGEBL	528	POTHOLE	Low	4	Count	0.04	Patching - AC Deep	Residential	AC	34	321	06-03-2021	12	SqFt	\$6.16	\$75
DUPAGEBL	528	RUTTING	Medium	25	SqFt	0.23	Patching - AC Shallow	Residential	AC	34	321	06-03-2021	26	SqFt	\$2.44	\$62
DUPAGEBL	528	L & T CR	High	109	Ft	1.00	Patching - AC Shallow	Residential	AC	34	321	06-03-2021	357	SqFt	\$2.44	\$871
DUPAGEBL	528	L & T CR	Medium	72	Ft	0.66	Crack Sealing - AC	Residential	AC	34	321	06-03-2021	72	Ft	\$1.65	\$119
DUPAGEBL	529	L & T CR	Medium	7	Ft	0.06	Crack Sealing - AC	Residential	AC	34	362	06-03-2021	7	Ft	\$1.65	\$12
DUPAGEBL	529	POTHOLE	Low	8	Count	0.07	Patching - AC Deep	Residential	AC	34	362	06-03-2021	24	SqFt	\$6.16	\$149
DUPAGEBL	529	RUTTING	Medium	54	SqFt	0.44	Patching - AC Shallow	Residential	AC	34	362	06-03-2021	54	SqFt	\$2.44	\$131
EasternAve	296	L & T CR	Medium	52	Ft	0.54	Crack Sealing - AC	Residential	AC	20	477	06-03-2021	52	Ft	\$1.65	\$85
EasternAve	296	RUTTING	Medium	24	SqFt	0.25	Patching - AC Shallow	Residential	AC	20	477	06-03-2021	24	SqFt	\$2.44	\$57
EasternAve	296	POTHOLE	Low	4	Count	0.04	Patching - AC Deep	Residential	AC	20	477	06-03-2021	11	SqFt	\$6.16	\$65
EasternAve	296	ALLIGATOR CR	Medium	10	SqFt	0.10	Patching - AC Deep	Residential	AC	20	477	06-03-2021	27	SqFt	\$6.16	\$163
EASTRD	346	RUTTING	High	15	SqFt	0.13	Patching - AC Deep	Residential	AC	20	573	06-03-2021	15	SqFt	\$6.16	\$93
EASTRD	346	L & T CR	Medium	30	Ft	0.26	Crack Sealing - AC	Residential	AC	20	573	06-03-2021	30	Ft	\$1.65	\$49
EASTRD	346	L & T CR	High	78	Ft	0.68	Patching - AC Shallow	Residential	AC	20	573	06-03-2021	254	SqFt	\$2.44	\$621
EASTRD	346	ALLIGATOR CR	High	3	SqFt	0.03	Patching - AC Deep	Residential	AC	20	573	06-03-2021	15	SqFt	\$6.16	\$90
EASTRD	347	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	20	533	06-03-2021	6	SqFt	\$2.44	\$17
EASTRD	347	L & T CR	Medium	1	Ft	0.01	Crack Sealing - AC	Residential	AC	20	533	06-03-2021	1	Ft	\$1.65	\$2
ELLYNWOC	225	L & T CR	High	122	Ft	0.76	Patching - AC Shallow	Residential	AC	20	806	06-03-2021	401	SqFt	\$2.44	\$980
ELLYNWOC	225	L & T CR	Medium	117	Ft	0.72	Crack Sealing - AC	Residential	AC	20	806	06-03-2021	116	Ft	\$1.65	\$192
ELLYNWOC	225	RUTTING	High	61	SqFt	0.38	Patching - AC Deep	Residential	AC	20	806	06-03-2021	61	SqFt	\$6.16	\$377
ELLYNWOC	225	RUTTING	Medium	76	SqFt	0.47	Patching - AC Shallow	Residential	AC	20	806	06-03-2021	76	SqFt	\$2.44	\$187
ELLYNWOC	715	L & T CR	Medium	28	Ft	1.65	Crack Sealing - AC	Residential	AC	20	85	06-03-2021	28	Ft	\$1.65	\$46
ELM	786	L & T CR	Medium	32	Ft	0.23	Crack Sealing - AC	Residential	AC	20	680	06-03-2021	32	Ft	\$1.65	\$53
ELM	786	RUTTING	High	56	SqFt	0.41	Patching - AC Deep	Residential	AC	20	680	06-03-2021	56	SqFt	\$6.16	\$344
ELM	786	ALLIGATOR CR	Medium	14	SqFt	0.10	Patching - AC Deep	Residential	AC	20	680	06-03-2021	33	SqFt	\$6.16	\$206
ELM	786	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	680	06-03-2021	10	SqFt	\$2.44	\$23
ELM	787	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	20	449	06-03-2021	2	SqFt	\$2.44	\$5
ELM	787	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	449	06-03-2021	8	SqFt	\$2.44	\$18
ELM	787	L & T CR	Medium	127	Ft	1.41	Crack Sealing - AC	Residential	AC	20	449	06-03-2021	127	Ft	\$1.65	\$209
ELM	788	L & T CR	Medium	59	Ft	0.67	Crack Sealing - AC	Residential	AC	20	437	06-03-2021	58	Ft	\$1.65	\$97
ELM	788	RUTTING	Medium	8	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	437	06-03-2021	9	SqFt	\$2.44	\$20
ELMST	778	RUTTING	Medium	45	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	1750	06-03-2021	45	SqFt	\$2.44	\$110
ELMST	778	L & T CR	High	457	Ft	1.31	Patching - AC Shallow	Residential	AC	20	1750	06-03-2021	1499	SqFt	\$2.44	\$3,660

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
ELMST	778	L & T CR	Medium	581	Ft	1.66	Crack Sealing - AC	Residential	AC	20	1750	06-03-2021	581	Ft	\$1.65	\$958
ELMST	778	ALLIGATOR CR	Medium	0	SqFt	0.00	Patching - AC Deep	Residential	AC	20	1750	06-03-2021	5	SqFt	\$6.16	\$32
ELMST	778	RUTTING	High	271	SqFt	0.77	Patching - AC Deep	Residential	AC	20	1750	06-03-2021	271	SqFt	\$6.16	\$1,670
ElmSt	779	RUTTING	High	17	SqFt	0.22	Patching - AC Deep	Residential	AC	20	385	06-03-2021	17	SqFt	\$6.16	\$103
ElmSt	779	L & T CR	Medium	177	Ft	2.29	Crack Sealing - AC	Residential	AC	20	385	06-03-2021	177	Ft	\$1.65	\$292
ElmSt	779	L & T CR	High	69	Ft	0.90	Patching - AC Shallow	Residential	AC	20	385	06-03-2021	226	SqFt	\$2.44	\$553
ElmSt	780	L & T CR	Medium	32	Ft	0.40	Crack Sealing - AC	Residential	AC	20	402	06-03-2021	32	Ft	\$1.65	\$53
ElmSt	780	POTHOLE	Low	7	Count	0.09	Patching - AC Deep	Residential	AC	20	402	06-03-2021	23	SqFt	\$6.16	\$138
ElmSt	780	RUTTING	High	25	SqFt	0.31	Patching - AC Deep	Residential	AC	20	402	06-03-2021	25	SqFt	\$6.16	\$153
ElmSt	780	RUTTING	Medium	25	SqFt	0.31	Patching - AC Shallow	Residential	AC	20	402	06-03-2021	25	SqFt	\$2.44	\$60
ElmSt	780	L & T CR	High	38	Ft	0.47	Patching - AC Shallow	Residential	AC	20	402	06-03-2021	125	SqFt	\$2.44	\$305
ElmSt	781	RUTTING	High	54	SqFt	0.68	Patching - AC Shallow	Residential	AC	20	395	06-03-2021	54	SqFt	\$2.44	\$132
ElmSt	782	L & T CR	Medium	571	Ft	7.30	Crack Sealing - AC	Residential	AC	20	391	06-03-2021	571	Ft	\$1.65	\$943
ElmSt	782	RUTTING	High	8	SqFt	0.10	Patching - AC Deep	Residential	AC	20	391	06-03-2021	8	SqFt	\$6.16	\$50
ElmSt	782	L & T CR	High	75	Ft	0.95	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	244	SqFt	\$2.44	\$597
ElmSt	782	RUTTING	Medium	8	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	8	SqFt	\$2.44	\$20
ElmSt	784	ALLIGATOR CR	High	1	SqFt	0.01	Patching - AC Deep	Residential	AC	20	733	06-03-2021	9	SqFt	\$6.16	\$56
ElmSt	784	RUTTING	High	90	SqFt	0.62	Patching - AC Deep	Residential	AC	20	733	06-03-2021	90	SqFt	\$6.16	\$557
ElmSt	784	L & T CR	High	108	Ft	0.74	Patching - AC Shallow	Residential	AC	20	733	06-03-2021	354	SqFt	\$2.44	\$863
ElmSt	784	RUTTING	Medium	30	SqFt	0.21	Patching - AC Shallow	Residential	AC	20	733	06-03-2021	30	SqFt	\$2.44	\$74
ElmSt	784	L & T CR	Medium	669	Ft	4.56	Crack Sealing - AC	Residential	AC	20	733	06-03-2021	669	Ft	\$1.65	\$1,103
ElmSt	784	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	733	06-03-2021	6	SqFt	\$6.16	\$42
ElmSt	785	RUTTING	High	176	SqFt	2.14	Patching - AC Shallow	Residential	AC	20	410	06-03-2021	175	SqFt	\$2.44	\$428
ESSEXCT	328	RUTTING	Medium	8	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	294	06-03-2021	8	SqFt	\$2.44	\$19
ESSEXCT	328	L & T CR	Medium	78	Ft	1.32	Crack Sealing - AC	Residential	AC	20	294	06-03-2021	77	Ft	\$1.65	\$128
ESSEXCT	328	L & T CR	High	35	Ft	0.59	Patching - AC Shallow	Residential	AC	20	294	06-03-2021	114	SqFt	\$2.44	\$277
ESSEXCT	328	RUTTING	High	31	SqFt	0.53	Patching - AC Deep	Residential	AC	20	294	06-03-2021	31	SqFt	\$6.16	\$191
ESSEXRD	751	JOINT SPALL	Medium	2	Slabs	5.00	Patching - PCC Partial Depth	Residential	PCC	20	414	06-03-2021	5	SqFt	\$7.70	\$42
ESSEXRD	752	JOINT SPALL	High	4	Slabs	10.00	Patching - PCC Partial Depth	Residential	PCC	20	412	06-03-2021	88	SqFt	\$7.70	\$680
ESSEXRD	752	JOINT SPALL	Medium	4	Slabs	10.00	Patching - PCC Partial Depth	Residential	PCC	20	412	06-03-2021	11	SqFt	\$7.70	\$85
ESSEXRD	752	CORNER BREAK	High	2	Slabs	5.00	Patching - PCC Full Depth	Residential	PCC	20	412	06-03-2021	67	SqFt	\$27.50	\$1,820
EUCLIDAV	426	RUTTING	High	90	SqFt	1.23	Patching - AC Shallow	Residential	AC	20	366	06-03-2021	90	SqFt	\$2.44	\$221
EUCLIDAV	427	RUTTING	High	141	SqFt	0.95	Patching - AC Shallow	Residential	AC	20	747	06-03-2021	141	SqFt	\$2.44	\$345
EUCLIDAV	428	RUTTING	Medium	15	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	682	06-03-2021	15	SqFt	\$2.44	\$37
EUCLIDAV	428	RUTTING	High	23	SqFt	0.17	Patching - AC Deep	Residential	AC	20	682	06-03-2021	23	SqFt	\$6.16	\$141
EUCLIDAV	428	L & T CR	Medium	24	Ft	0.17	Crack Sealing - AC	Residential	AC	20	682	06-03-2021	24	Ft	\$1.65	\$39
EUCLIDAV	428	L & T CR	High	28	Ft	0.21	Patching - AC Shallow	Residential	AC	20	682	06-03-2021	93	SqFt	\$2.44	\$227
EUCLIDAV	429	RUTTING	Medium	64	SqFt	0.49	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	65	SqFt	\$2.44	\$157

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
EUCLIDAV	429	L & T CR	High	29	Ft	0.22	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	96	SqFt	\$2.44	\$233
EUCLIDAV	429	L & T CR	Medium	39	Ft	0.30	Crack Sealing - AC	Residential	AC	20	658	06-03-2021	39	Ft	\$1.65	\$65
EUCLIDAV	430	POTHOLE	Low	23	Count	0.17	Patching - AC Deep	Residential	AC	20	668	06-03-2021	70	SqFt	\$6.16	\$429
EUCLIDAV	430	RUTTING	High	16	SqFt	0.12	Patching - AC Deep	Residential	AC	20	668	06-03-2021	15	SqFt	\$6.16	\$95
EUCLIDAV	430	RUTTING	Medium	7	SqFt	0.05	Patching - AC Shallow	Residential	AC	20	668	06-03-2021	6	SqFt	\$2.44	\$16
EUCLIDAV	430	L & T CR	High	37	Ft	0.28	Patching - AC Shallow	Residential	AC	20	668	06-03-2021	123	SqFt	\$2.44	\$299
EUCLIDAV	430	L & T CR	Medium	162	Ft	1.21	Crack Sealing - AC	Residential	AC	20	668	06-03-2021	162	Ft	\$1.65	\$267
EXMOORA	351	RUTTING	High	267	SqFt	1.81	Patching - AC Shallow	Residential	AC	20	738	06-03-2021	267	SqFt	\$2.44	\$651
EXMOORA	352	RUTTING	High	24	SqFt	0.19	Patching - AC Deep	Residential	AC	20	658	06-03-2021	25	SqFt	\$6.16	\$150
EXMOORA	352	L & T CR	Medium	117	Ft	0.89	Crack Sealing - AC	Residential	AC	20	658	06-03-2021	117	Ft	\$1.65	\$193
EXMOORA	352	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	658	06-03-2021	8	SqFt	\$6.16	\$45
EXMOORA	352	L & T CR	High	59	Ft	0.45	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	193	SqFt	\$2.44	\$471
EXMOORA	352	ALLIGATOR CR	Medium	13	SqFt	0.10	Patching - AC Deep	Residential	AC	20	658	06-03-2021	32	SqFt	\$6.16	\$196
EXMOORA	352	RUTTING	Medium	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	9	SqFt	\$2.44	\$20
EXMOORA	353	L & T CR	Medium	57	Ft	0.88	Crack Sealing - AC	Residential	AC	24	270	06-03-2021	57	Ft	\$1.65	\$94
EXMOORA	354	L & T CR	Medium	401	Ft	2.45	Crack Sealing - AC	Residential	AC	20	817	06-03-2021	401	Ft	\$1.65	\$661
EXMOORA	354	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	817	06-03-2021	6	SqFt	\$6.16	\$42
EXMOORA	354	RUTTING	High	6	SqFt	0.04	Patching - AC Deep	Residential	AC	20	817	06-03-2021	6	SqFt	\$6.16	\$40
EXMOORA	354	RUTTING	Medium	6	SqFt	0.04	Patching - AC Shallow	Residential	AC	20	817	06-03-2021	6	SqFt	\$2.44	\$16
EXMOORA	354	ALLIGATOR CR	Medium	13	SqFt	0.08	Patching - AC Deep	Residential	AC	20	817	06-03-2021	31	SqFt	\$6.16	\$195
EXMOORA	354	L & T CR	High	14	Ft	0.09	Patching - AC Shallow	Residential	AC	20	817	06-03-2021	46	SqFt	\$2.44	\$112
EXMOORA	355	RUTTING	High	105	SqFt	1.17	Patching - AC Shallow	Residential	AC	20	451	06-03-2021	105	SqFt	\$2.44	\$257
FAIRVIEWA	541	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	26	356	06-03-2021	0	SqFt	\$2.44	\$0
FAIRVIEWA	541	L & T CR	Medium	178	Ft	1.92	Crack Sealing - AC	Residential	AC	26	356	06-03-2021	178	Ft	\$1.65	\$294
FAIRVIEWA	541	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	26	356	06-03-2021	9	SqFt	\$6.16	\$56
FAIRVIEWA	542	L & T CR	High	3	Ft	0.03	Patching - AC Shallow	Residential	AC	24	325	06-03-2021	9	SqFt	\$2.44	\$21
FAIRVIEWA	542	L & T CR	Medium	23	Ft	0.30	Crack Sealing - AC	Residential	AC	24	325	06-03-2021	23	Ft	\$1.65	\$38
FAIRVIEWA	542	ALLIGATOR CR	Medium	73	SqFt	0.94	Patching - AC Deep	Residential	AC	24	325	06-03-2021	112	SqFt	\$6.16	\$689
FAIRVIEWA	543	ALLIGATOR CR	Medium	9	SqFt	0.11	Patching - AC Deep	Residential	AC	26	335	06-03-2021	26	SqFt	\$6.16	\$158
FAIRVIEWA	543	L & T CR	Medium	203	Ft	2.33	Crack Sealing - AC	Residential	AC	26	335	06-03-2021	203	Ft	\$1.65	\$335
FairviewAv	544	L & T CR	Medium	135	Ft	1.22	Crack Sealing - AC	Residential	AC	24	462	06-03-2021	135	Ft	\$1.65	\$223
FairviewAv	544	L & T CR	High	11	Ft	0.09	Patching - AC Shallow	Residential	AC	24	462	06-03-2021	34	SqFt	\$2.44	\$84
FairviewAv	544	ALLIGATOR CR	Medium	34	SqFt	0.30	Patching - AC Deep	Residential	AC	24	462	06-03-2021	61	SqFt	\$6.16	\$376
FairviewAv	544	RUTTING	Medium	10	SqFt	0.09	Patching - AC Shallow	Residential	AC	24	462	06-03-2021	10	SqFt	\$2.44	\$24
FairviewAv	545	L & T CR	High	25	Ft	0.31	Patching - AC Shallow	Residential	AC	24	335	06-03-2021	83	SqFt	\$2.44	\$202
FairviewAv	545	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	335	06-03-2021	9	SqFt	\$6.16	\$52
FairviewAv	545	L & T CR	Medium	180	Ft	2.24	Crack Sealing - AC	Residential	AC	24	335	06-03-2021	180	Ft	\$1.65	\$298
FairviewAv	547	L & T CR	Medium	158	Ft	1.54	Crack Sealing - AC	Residential	AC	24	427	06-03-2021	158	Ft	\$1.65	\$261

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
FairviewAv	547	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	427	06-03-2021	3	SqFt	\$2.44	\$8
FairviewAv	547	RUTTING	Medium	10	SqFt	0.10	Patching - AC Shallow	Residential	AC	24	427	06-03-2021	10	SqFt	\$2.44	\$24
FairviewAv	548	L & T CR	Medium	316	Ft	4.25	Crack Sealing - AC	Residential	AC	24	310	06-03-2021	316	Ft	\$1.65	\$522
FairviewAv	548	L & T CR	High	58	Ft	0.78	Patching - AC Shallow	Residential	AC	24	310	06-03-2021	191	SqFt	\$2.44	\$466
FairviewAv	549	L & T CR	Medium	68	Ft	0.84	Crack Sealing - AC	Residential	AC	24	337	06-03-2021	68	Ft	\$1.65	\$113
FairviewAv	549	POTHOLE	Low	6	Count	0.07	Patching - AC Deep	Residential	AC	24	337	06-03-2021	17	SqFt	\$6.16	\$104
FairviewAv	549	L & T CR	High	3	Ft	0.04	Patching - AC Shallow	Residential	AC	24	337	06-03-2021	10	SqFt	\$2.44	\$24
FairviewAv	549	RUTTING	Medium	9	SqFt	0.12	Patching - AC Shallow	Residential	AC	24	337	06-03-2021	10	SqFt	\$2.44	\$23
FairviewAv	550	L & T CR	Medium	171	Ft	1.73	Crack Sealing - AC	Residential	AC	24	411	06-03-2021	171	Ft	\$1.65	\$282
FairviewAv	550	L & T CR	High	36	Ft	0.36	Patching - AC Shallow	Residential	AC	24	411	06-03-2021	117	SqFt	\$2.44	\$285
FairviewAv	550	ALLIGATOR CR	Medium	7	SqFt	0.07	Patching - AC Deep	Residential	AC	24	411	06-03-2021	20	SqFt	\$6.16	\$129
FairviewAv	551	L & T CR	Medium	144	Ft	1.92	Crack Sealing - AC	Residential	AC	24	313	06-03-2021	144	Ft	\$1.65	\$238
FairviewAv	551	POTHOLE	Low	3	Count	0.04	Patching - AC Deep	Residential	AC	24	313	06-03-2021	9	SqFt	\$6.16	\$55
FairviewAv	551	L & T CR	High	24	Ft	0.32	Patching - AC Shallow	Residential	AC	24	313	06-03-2021	80	SqFt	\$2.44	\$195
FairviewAv	552	RUTTING	High	19	SqFt	0.25	Patching - AC Shallow	Residential	AC	24	312	06-03-2021	18	SqFt	\$2.44	\$45
FairviewAv	554	L & T CR	High	15	Ft	0.17	Patching - AC Shallow	Residential	AC	24	366	06-03-2021	47	SqFt	\$2.44	\$117
FairviewAv	554	L & T CR	Medium	132	Ft	1.50	Crack Sealing - AC	Residential	AC	24	366	06-03-2021	132	Ft	\$1.65	\$218
FairviewAv	557	L & T CR	Medium	208	Ft	1.23	Crack Sealing - AC	Residential	AC	24	705	06-03-2021	208	Ft	\$1.65	\$344
FairviewAv	557	POTHOLE	Low	6	Count	0.03	Patching - AC Deep	Residential	AC	24	705	06-03-2021	17	SqFt	\$6.16	\$105
FairviewAv	557	L & T CR	High	10	Ft	0.06	Patching - AC Shallow	Residential	AC	24	705	06-03-2021	32	SqFt	\$2.44	\$79
FawelBlvd	905	CORNER BREAK	Medium	4	Slabs	2.50	Crack Sealing - PCC	Collector	PCC	60	1329	06-03-2021	36	Ft	\$1.65	\$60
FawelBlvd	905	LINEAR CR	Medium	4	Slabs	2.50	Crack Sealing - PCC	Collector	PCC	60	1329	06-03-2021	99	Ft	\$1.65	\$164
FawelBlvd	906	LINEAR CR	Medium	4	Slabs	3.33	Crack Sealing - PCC	Collector	PCC	60	1006	06-03-2021	100	Ft	\$1.65	\$166
FawelBlvd	908	JOINT SPALL	High	3	Slabs	1.11	Patching - PCC Partial Depth	Collector	PCC	60	1997	06-03-2021	64	SqFt	\$7.70	\$490
FawelBlvd	908	CORNER BREAK	High	3	Slabs	1.11	Patching - PCC Full Depth	Collector	PCC	60	1997	06-03-2021	96	SqFt	\$27.50	\$2,625
FawelBlvd	908	JOINT SPALL	Medium	3	Slabs	1.11	Patching - PCC Partial Depth	Collector	PCC	60	1997	06-03-2021	8	SqFt	\$7.70	\$61
FawelBlvd	908	LINEAR CR	Medium	3	Slabs	1.11	Crack Sealing - PCC	Collector	PCC	60	1997	06-03-2021	67	Ft	\$1.65	\$110
FawelBlvd	208	L & T CR	High	154	Ft	1.76	Patching - AC Shallow	Residential	AC	20	436	06-03-2021	504	SqFt	\$2.44	\$1,230
FawelBlvd	208	L & T CR	Medium	67	Ft	0.77	Crack Sealing - AC	Residential	AC	20	436	06-03-2021	67	Ft	\$1.65	\$111
FawelBlvd	208	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	20	436	06-03-2021	9	SqFt	\$6.16	\$50
FawelBlvd	208	RUTTING	Medium	81	SqFt	0.93	Patching - AC Shallow	Residential	AC	20	436	06-03-2021	81	SqFt	\$2.44	\$197
FORESTAV	405	RUTTING	High	15	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	626	06-03-2021	15	SqFt	\$2.44	\$38
ForestAve	387	L & T CR	High	81	Ft	0.60	Patching - AC Shallow	Residential	AC	20	678	06-03-2021	265	SqFt	\$2.44	\$647
ForestAve	387	ALLIGATOR CR	Medium	54	SqFt	0.40	Patching - AC Deep	Residential	AC	20	678	06-03-2021	87	SqFt	\$6.16	\$538
ForestAve	387	L & T CR	Medium	651	Ft	4.80	Crack Sealing - AC	Residential	AC	20	678	06-03-2021	651	Ft	\$1.65	\$1,074
ForestAve	388	RUTTING	High	9	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	358	06-03-2021	10	SqFt	\$2.44	\$23
ForestAve	390	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	502	06-03-2021	8	SqFt	\$2.44	\$19
ForestAve	390	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	20	502	06-03-2021	4	SqFt	\$2.44	\$10

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
ForestAve	390	L & T CR	Medium	354	Ft	3.52	Crack Sealing - AC	Residential	AC	20	502	06-03-2021	354	Ft	\$1.65	\$583
ForestAve	390	RUTTING	High	16	SqFt	0.15	Patching - AC Deep	Residential	AC	20	502	06-03-2021	15	SqFt	\$6.16	\$95
ForestAve	391	RUTTING	High	193	SqFt	2.57	Patching - AC Shallow	Residential	AC	20	375	06-03-2021	193	SqFt	\$2.44	\$470
ForestAve	392	L & T CR	High	132	Ft	0.97	Patching - AC Shallow	Residential	AC	20	681	06-03-2021	434	SqFt	\$2.44	\$1,060
ForestAve	392	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	681	06-03-2021	6	SqFt	\$6.16	\$42
ForestAve	392	L & T CR	Medium	411	Ft	3.01	Crack Sealing - AC	Residential	AC	20	681	06-03-2021	410	Ft	\$1.65	\$677
ForestAve	392	RUTTING	High	31	SqFt	0.22	Patching - AC Deep	Residential	AC	20	681	06-03-2021	30	SqFt	\$6.16	\$188
ForestAve	393	RUTTING	High	7	SqFt	0.04	Patching - AC Deep	Residential	AC	20	789	06-03-2021	6	SqFt	\$6.16	\$41
ForestAve	393	L & T CR	High	87	Ft	0.55	Patching - AC Shallow	Residential	AC	20	789	06-03-2021	284	SqFt	\$2.44	\$694
ForestAve	393	L & T CR	Medium	477	Ft	3.02	Crack Sealing - AC	Residential	AC	20	789	06-03-2021	477	Ft	\$1.65	\$787
ForestAve	394	RUTTING	Medium	44	SqFt	0.32	Patching - AC Shallow	Residential	AC	20	694	06-03-2021	44	SqFt	\$2.44	\$108
ForestAve	394	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	694	06-03-2021	6	SqFt	\$6.16	\$42
ForestAve	394	RUTTING	High	38	SqFt	0.27	Patching - AC Deep	Residential	AC	20	694	06-03-2021	38	SqFt	\$6.16	\$232
ForestAve	394	L & T CR	Medium	4	Ft	0.03	Crack Sealing - AC	Residential	AC	20	694	06-03-2021	4	Ft	\$1.65	\$6
ForestAve	394	L & T CR	High	26	Ft	0.19	Patching - AC Shallow	Residential	AC	20	694	06-03-2021	86	SqFt	\$2.44	\$209
ForestAve	396	L & T CR	High	18	Ft	0.20	Patching - AC Shallow	Residential	AC	20	447	06-03-2021	58	SqFt	\$2.44	\$142
ForestAve	396	L & T CR	Medium	467	Ft	5.22	Crack Sealing - AC	Residential	AC	20	447	06-03-2021	467	Ft	\$1.65	\$771
ForestAve	396	RUTTING	Medium	16	SqFt	0.18	Patching - AC Shallow	Residential	AC	20	447	06-03-2021	16	SqFt	\$2.44	\$38
ForestAve	396	RUTTING	High	24	SqFt	0.26	Patching - AC Deep	Residential	AC	20	447	06-03-2021	24	SqFt	\$6.16	\$146
ForestAve	396	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	447	06-03-2021	8	SqFt	\$6.16	\$44
ForestAve	397	L & T CR	Medium	515	Ft	4.43	Crack Sealing - AC	Residential	AC	20	580	06-03-2021	515	Ft	\$1.65	\$849
ForestAve	397	L & T CR	High	17	Ft	0.14	Patching - AC Shallow	Residential	AC	20	580	06-03-2021	55	SqFt	\$2.44	\$134
ForestAve	397	ALLIGATOR CR	Medium	75	SqFt	0.65	Patching - AC Deep	Residential	AC	20	580	06-03-2021	114	SqFt	\$6.16	\$704
ForestAve	397	RUTTING	Medium	15	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	580	06-03-2021	15	SqFt	\$2.44	\$37
ForestAve	398	RUTTING	High	42	SqFt	0.40	Patching - AC Shallow	Residential	AC	20	527	06-03-2021	42	SqFt	\$2.44	\$102
ForestAve	399	RUTTING	High	74	SqFt	1.23	Patching - AC Shallow	Residential	AC	24	250	06-03-2021	73	SqFt	\$2.44	\$179
ForestAve	400	RUTTING	High	175	SqFt	1.86	Patching - AC Shallow	Residential	AC	20	470	06-03-2021	175	SqFt	\$2.44	\$428
ForestAve	402	RUTTING	Medium	15	SqFt	0.17	Patching - AC Shallow	Residential	AC	20	449	06-03-2021	15	SqFt	\$2.44	\$37
ForestAve	402	POTHOLE	Low	5	Count	0.05	Patching - AC Deep	Residential	AC	20	449	06-03-2021	14	SqFt	\$6.16	\$84
ForestAve	402	L & T CR	Medium	92	Ft	1.03	Crack Sealing - AC	Residential	AC	20	449	06-03-2021	92	Ft	\$1.65	\$152
ForestAve	402	RUTTING	High	23	SqFt	0.25	Patching - AC Deep	Residential	AC	20	449	06-03-2021	23	SqFt	\$6.16	\$139
ForestAve	403	L & T CR	High	9	Ft	0.08	Patching - AC Shallow	Residential	AC	20	552	06-03-2021	30	SqFt	\$2.44	\$74
ForestAve	403	L & T CR	Medium	67	Ft	0.61	Crack Sealing - AC	Residential	AC	20	552	06-03-2021	67	Ft	\$1.65	\$111
ForestAve	403	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	552	06-03-2021	6	SqFt	\$6.16	\$42
ForestAve	404	RUTTING	High	174	SqFt	2.75	Patching - AC Shallow	Residential	AC	24	264	06-03-2021	174	SqFt	\$2.44	\$425
ForestAve	882	RUTTING	High	10	SqFt	0.23	Patching - AC Shallow	Residential	AC	20	209	06-03-2021	10	SqFt	\$2.44	\$24
Georgetow	209	POTHOLE	Low	4	Count	0.02	Patching - AC Deep	Residential	AC	24	712	06-03-2021	12	SqFt	\$6.16	\$76
Georgetow	209	L & T CR	Medium	145	Ft	0.85	Crack Sealing - AC	Residential	AC	24	712	06-03-2021	145	Ft	\$1.65	\$240

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
Georgetown	209	RUTTING	High	14	SqFt	0.08	Patching - AC Deep	Residential	AC	24	712	06-03-2021	14	SqFt	\$6.16	\$85
Georgetown	209	RUTTING	Medium	151	SqFt	0.89	Patching - AC Shallow	Residential	AC	24	712	06-03-2021	151	SqFt	\$2.44	\$369
GLENBARD	872	L & T CR	Medium	230	Ft	3.41	Crack Sealing - AC	Residential	AC	20	338	06-03-2021	230	Ft	\$1.65	\$380
GLENBARD	872	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	20	338	06-03-2021	2	SqFt	\$2.44	\$5
GLENBARD	873	L & T CR	High	12	Ft	0.04	Patching - AC Shallow	Residential	AC	24	1273	06-03-2021	39	SqFt	\$2.44	\$93
GLENBARD	873	RUTTING	Medium	8	SqFt	0.03	Patching - AC Shallow	Residential	AC	24	1273	06-03-2021	8	SqFt	\$2.44	\$19
GLENBARD	873	ALLIGATOR CR	Medium	16	SqFt	0.05	Patching - AC Deep	Residential	AC	24	1273	06-03-2021	36	SqFt	\$6.16	\$222
GLENBARD	873	L & T CR	Medium	39	Ft	0.13	Crack Sealing - AC	Residential	AC	24	1273	06-03-2021	39	Ft	\$1.65	\$65
GLENBARD	873	RUTTING	High	9	SqFt	0.03	Patching - AC Deep	Residential	AC	24	1273	06-03-2021	9	SqFt	\$6.16	\$55
GLENBARD	874	L & T CR	Medium	304	Ft	4.37	Crack Sealing - AC	Residential	AC	20	348	06-03-2021	304	Ft	\$1.65	\$502
GLENBARD	874	RUTTING	Medium	6	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	348	06-03-2021	6	SqFt	\$2.44	\$16
GLENBARD	874	L & T CR	High	2	Ft	0.03	Patching - AC Shallow	Residential	AC	20	348	06-03-2021	6	SqFt	\$2.44	\$15
GLENBARD	875	L & T CR	Medium	283	Ft	2.39	Crack Sealing - AC	Residential	AC	20	593	06-03-2021	283	Ft	\$1.65	\$468
GLENBARD	875	L & T CR	High	8	Ft	0.06	Patching - AC Shallow	Residential	AC	20	593	06-03-2021	25	SqFt	\$2.44	\$61
GLENBARD	875	RUTTING	Medium	8	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	593	06-03-2021	8	SqFt	\$2.44	\$19
GLENBARD	876	L & T CR	Medium	1	Ft	0.01	Crack Sealing - AC	Residential	AC	24	680	06-03-2021	1	Ft	\$1.65	\$2
GLENBARD	876	L & T CR	High	10	Ft	0.06	Patching - AC Shallow	Residential	AC	24	680	06-03-2021	34	SqFt	\$2.44	\$83
GLENCOES	145	L & T CR	Medium	6	Ft	0.03	Crack Sealing - AC	Residential	AC	26	691	06-03-2021	6	Ft	\$1.65	\$10
GlenCrest	922	RUTTING	High	9	SqFt	0.07	Patching - AC Deep	Residential	AC	24	513	06-03-2021	9	SqFt	\$6.16	\$54
GlenCrest	922	L & T CR	Medium	2	Ft	0.02	Crack Sealing - AC	Residential	AC	24	513	06-03-2021	2	Ft	\$1.65	\$3
GlenCrest	922	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	513	06-03-2021	9	SqFt	\$2.44	\$21
GlenCrest	923	L & T CR	High	16	Ft	0.13	Patching - AC Shallow	Residential	AC	24	513	06-03-2021	51	SqFt	\$2.44	\$125
GLENHAVE	822	RUTTING	High	30	SqFt	0.53	Patching - AC Shallow	Residential	AC	20	281	06-03-2021	30	SqFt	\$2.44	\$72
Glenwood	418	RUTTING	High	57	SqFt	0.46	Patching - AC Shallow	Residential	AC	24	511	06-03-2021	57	SqFt	\$2.44	\$138
Glenwood	419	RUTTING	High	9	SqFt	0.09	Patching - AC Deep	Residential	AC	24	428	06-03-2021	10	SqFt	\$6.16	\$58
Glenwood	419	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	428	06-03-2021	9	SqFt	\$6.16	\$53
Glenwood	419	L & T CR	High	51	Ft	0.49	Patching - AC Shallow	Residential	AC	24	428	06-03-2021	166	SqFt	\$2.44	\$404
Glenwood	420	L & T CR	High	24	Ft	0.34	Patching - AC Shallow	Residential	AC	20	353	06-03-2021	80	SqFt	\$2.44	\$195
Glenwood	420	RUTTING	Medium	8	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	353	06-03-2021	9	SqFt	\$2.44	\$20
Glenwood	421	RUTTING	Medium	8	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	353	06-03-2021	8	SqFt	\$2.44	\$19
Glenwood	421	L & T CR	Medium	1	Ft	0.01	Crack Sealing - AC	Residential	AC	20	353	06-03-2021	1	Ft	\$1.65	\$1
Glenwood	422	RUTTING	Medium	8	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	439	06-03-2021	8	SqFt	\$2.44	\$19
Glenwood	422	L & T CR	Medium	49	Ft	0.56	Crack Sealing - AC	Residential	AC	20	439	06-03-2021	49	Ft	\$1.65	\$81
Glenwood	422	L & T CR	High	99	Ft	1.13	Patching - AC Shallow	Residential	AC	20	439	06-03-2021	325	SqFt	\$2.44	\$792
Glenwood	422	ALLIGATOR CR	High	15	SqFt	0.17	Patching - AC Deep	Residential	AC	20	439	06-03-2021	34	SqFt	\$6.16	\$210
Glenwood	422	POTHOLE	Low	5	Count	0.05	Patching - AC Deep	Residential	AC	20	439	06-03-2021	14	SqFt	\$6.16	\$86
Glenwood	422	RUTTING	High	43	SqFt	0.49	Patching - AC Deep	Residential	AC	20	439	06-03-2021	43	SqFt	\$6.16	\$266
Glenwood	424	L & T CR	Medium	13	Ft	0.14	Crack Sealing - AC	Residential	AC	24	410	06-03-2021	13	Ft	\$1.65	\$22

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
Glenwood	425	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	24	355	06-03-2021	6	SqFt	\$2.44	\$15
Glenwood	425	RUTTING	Medium	9	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	355	06-03-2021	10	SqFt	\$2.44	\$23
Glenwood	425	L & T CR	Medium	326	Ft	3.82	Crack Sealing - AC	Residential	AC	24	355	06-03-2021	326	Ft	\$1.65	\$538
GRANDAV	322	RUTTING	High	15	SqFt	0.15	Patching - AC Shallow	Residential	AC	20	489	06-03-2021	15	SqFt	\$2.44	\$36
GRANDVIE	253	L & T CR	High	54	Ft	0.30	Patching - AC Shallow	Residential	AC	24	751	06-03-2021	178	SqFt	\$2.44	\$434
GRANDVIE	253	L & T CR	Medium	140	Ft	0.78	Crack Sealing - AC	Residential	AC	24	751	06-03-2021	140	Ft	\$1.65	\$231
GRANDVIE	253	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	751	06-03-2021	9	SqFt	\$6.16	\$51
GRANDVIE	253	RUTTING	Medium	19	SqFt	0.10	Patching - AC Shallow	Residential	AC	24	751	06-03-2021	18	SqFt	\$2.44	\$45
GRANDVIE	254	POTHOLE	Low	3	Count	0.01	Patching - AC Deep	Residential	AC	24	912	06-03-2021	9	SqFt	\$6.16	\$51
GRANDVIE	254	RUTTING	Medium	28	SqFt	0.13	Patching - AC Shallow	Residential	AC	24	912	06-03-2021	28	SqFt	\$2.44	\$67
GRANDVIE	254	L & T CR	High	49	Ft	0.22	Patching - AC Shallow	Residential	AC	24	912	06-03-2021	161	SqFt	\$2.44	\$394
GRANDVIE	254	L & T CR	Medium	943	Ft	4.31	Crack Sealing - AC	Residential	AC	24	912	06-03-2021	943	Ft	\$1.65	\$1,556
GRANDVIE	254	ALLIGATOR CR	Medium	131	SqFt	0.60	Patching - AC Deep	Residential	AC	24	912	06-03-2021	181	SqFt	\$6.16	\$1,112
GRANDVIE	255	RUTTING	High	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	528	06-03-2021	10	SqFt	\$2.44	\$23
GREENBRI	814	RUTTING	High	21	SqFt	0.13	Patching - AC Shallow	Residential	AC	26	628	06-03-2021	20	SqFt	\$2.44	\$51
Greenfield	572	RUTTING	High	18	SqFt	0.21	Patching - AC Shallow	Residential	AC	24	368	06-03-2021	18	SqFt	\$2.44	\$44
Greenfield	576	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	402	06-03-2021	9	SqFt	\$6.16	\$55
Greenfield	576	RUTTING	Medium	40	SqFt	0.41	Patching - AC Shallow	Residential	AC	24	402	06-03-2021	40	SqFt	\$2.44	\$97
Greenfield	576	ALLIGATOR CR	Medium	70	SqFt	0.72	Patching - AC Deep	Residential	AC	24	402	06-03-2021	108	SqFt	\$6.16	\$663
Greenfield	576	L & T CR	Medium	182	Ft	1.88	Crack Sealing - AC	Residential	AC	24	402	06-03-2021	182	Ft	\$1.65	\$300
Greenfield	576	L & T CR	High	6	Ft	0.06	Patching - AC Shallow	Residential	AC	24	402	06-03-2021	18	SqFt	\$2.44	\$45
Greenfield	577	L & T CR	Medium	537	Ft	3.51	Crack Sealing - AC	Residential	AC	24	638	06-03-2021	537	Ft	\$1.65	\$886
Greenfield	577	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	638	06-03-2021	9	SqFt	\$6.16	\$51
Greenfield	577	L & T CR	High	59	Ft	0.39	Patching - AC Shallow	Residential	AC	24	638	06-03-2021	194	SqFt	\$2.44	\$472
Greenfield	578	RUTTING	High	10	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	375	06-03-2021	10	SqFt	\$2.44	\$24
GREENWO	454	L & T CR	Medium	6	Ft	0.06	Crack Sealing - AC	Residential	AC	24	373	06-03-2021	6	Ft	\$1.65	\$9
GROVEAV	837	L & T CR	Medium	183	Ft	1.39	Crack Sealing - AC	Residential	AC	20	658	06-03-2021	183	Ft	\$1.65	\$302
GROVEAV	837	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	1	SqFt	\$2.44	\$3
GROVEAV	838	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	856	06-03-2021	6	SqFt	\$6.16	\$43
GROVEAV	838	L & T CR	Medium	394	Ft	2.30	Crack Sealing - AC	Residential	AC	20	856	06-03-2021	394	Ft	\$1.65	\$651
HARDINGA	800	RUTTING	Medium	30	SqFt	0.32	Patching - AC Shallow	Residential	AC	20	463	06-03-2021	30	SqFt	\$2.44	\$73
HARDINGA	800	L & T CR	High	3	Ft	0.04	Patching - AC Shallow	Residential	AC	20	463	06-03-2021	11	SqFt	\$2.44	\$26
HARDINGA	800	L & T CR	Medium	7	Ft	0.07	Crack Sealing - AC	Residential	AC	20	463	06-03-2021	7	Ft	\$1.65	\$11
HARDINGA	801	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	983	06-03-2021	6	SqFt	\$6.16	\$42
HARDINGA	801	L & T CR	Medium	711	Ft	3.61	Crack Sealing - AC	Residential	AC	20	983	06-03-2021	711	Ft	\$1.65	\$1,172
HARDINGA	801	L & T CR	High	40	Ft	0.20	Patching - AC Shallow	Residential	AC	20	983	06-03-2021	130	SqFt	\$2.44	\$318
HARDINGA	801	ALLIGATOR CR	Medium	124	SqFt	0.63	Patching - AC Deep	Residential	AC	20	983	06-03-2021	173	SqFt	\$6.16	\$1,068
HARDINGA	802	L & T CR	Medium	24	Ft	0.26	Crack Sealing - AC	Residential	AC	20	461	06-03-2021	24	Ft	\$1.65	\$40

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
HATTEGRA	152	L & T CR	Medium	28	Ft	0.45	Crack Sealing - AC	Residential	AC	26	238	06-03-2021	28	Ft	\$1.65	\$46
HATTEGRA	153	L & T CR	Medium	34	Ft	0.44	Crack Sealing - AC	Residential	AC	26	296	06-03-2021	34	Ft	\$1.65	\$56
HEATHERL	537	L & T CR	Medium	54	Ft	0.20	Crack Sealing - AC	Residential	AC	26	1049	06-03-2021	54	Ft	\$1.65	\$90
HEATHERL	537	RUTTING	Medium	20	SqFt	0.07	Patching - AC Shallow	Residential	AC	26	1049	06-03-2021	20	SqFt	\$2.44	\$49
HEDGECT	858	RUTTING	Medium	40	SqFt	0.79	Patching - AC Shallow	Residential	AC	20	250	06-03-2021	40	SqFt	\$2.44	\$97
HEDGECT	858	L & T CR	Medium	25	Ft	0.51	Crack Sealing - AC	Residential	AC	20	250	06-03-2021	25	Ft	\$1.65	\$42
HIGHGATE	148	L & T CR	Medium	8	Ft	0.06	Crack Sealing - AC	Residential	AC	26	559	06-03-2021	8	Ft	\$1.65	\$14
HIGHLAND	156	RUTTING	High	13	SqFt	0.15	Patching - AC Shallow	Residential	AC	20	428	06-03-2021	13	SqFt	\$2.44	\$32
HighlandA	211	L & T CR	Medium	75	Ft	0.48	Crack Sealing - AC	Residential	AC	20	790	06-03-2021	75	Ft	\$1.65	\$124
HighlandA	211	L & T CR	High	9	Ft	0.06	Patching - AC Shallow	Residential	AC	20	790	06-03-2021	29	SqFt	\$2.44	\$72
HighlandA	211	RUTTING	Medium	44	SqFt	0.28	Patching - AC Shallow	Residential	AC	20	790	06-03-2021	44	SqFt	\$2.44	\$107
HighlandA	211	RUTTING	High	8	SqFt	0.05	Patching - AC Deep	Residential	AC	20	790	06-03-2021	8	SqFt	\$6.16	\$46
HighlandA	212	RUTTING	Medium	8	SqFt	0.15	Patching - AC Shallow	Residential	AC	20	270	06-03-2021	9	SqFt	\$2.44	\$20
HighlandA	213	L & T CR	Medium	6	Ft	0.07	Crack Sealing - AC	Residential	AC	20	379	06-03-2021	6	Ft	\$1.65	\$9
HighlandA	213	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	20	379	06-03-2021	2	SqFt	\$2.44	\$6
HIGHLAND	412	RUTTING	High	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	652	06-03-2021	8	SqFt	\$2.44	\$18
HIGHLAND	413	RUTTING	High	65	SqFt	0.49	Patching - AC Shallow	Residential	AC	20	673	06-03-2021	66	SqFt	\$2.44	\$160
HIGHLAND	414	ALLIGATOR CR	Medium	60	SqFt	0.44	Patching - AC Deep	Residential	AC	20	676	06-03-2021	96	SqFt	\$6.16	\$587
HIGHLAND	414	L & T CR	Medium	119	Ft	0.88	Crack Sealing - AC	Residential	AC	20	676	06-03-2021	119	Ft	\$1.65	\$196
HIGHLAND	414	RUTTING	High	38	SqFt	0.28	Patching - AC Deep	Residential	AC	20	676	06-03-2021	38	SqFt	\$6.16	\$234
HIGHLAND	414	L & T CR	High	119	Ft	0.88	Patching - AC Shallow	Residential	AC	20	676	06-03-2021	392	SqFt	\$2.44	\$956
HIGHLAND	414	RUTTING	Medium	37	SqFt	0.27	Patching - AC Shallow	Residential	AC	20	676	06-03-2021	37	SqFt	\$2.44	\$90
HIGHLAND	414	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	676	06-03-2021	6	SqFt	\$6.16	\$42
HIGHLAND	415	RUTTING	High	56	SqFt	0.71	Patching - AC Shallow	Residential	AC	20	397	06-03-2021	56	SqFt	\$2.44	\$137
HighRd	579	L & T CR	High	5	Ft	0.05	Patching - AC Shallow	Residential	AC	20	526	06-03-2021	16	SqFt	\$2.44	\$40
HighRd	579	L & T CR	Medium	51	Ft	0.49	Crack Sealing - AC	Residential	AC	20	526	06-03-2021	51	Ft	\$1.65	\$84
HighRd	580	L & T CR	Medium	97	Ft	1.37	Crack Sealing - AC	Residential	AC	20	354	06-03-2021	97	Ft	\$1.65	\$160
HighRd	580	L & T CR	High	36	Ft	0.51	Patching - AC Shallow	Residential	AC	20	354	06-03-2021	117	SqFt	\$2.44	\$287
HighRd	581	RUTTING	Medium	8	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	356	06-03-2021	8	SqFt	\$2.44	\$19
HighRd	581	L & T CR	Medium	69	Ft	0.96	Crack Sealing - AC	Residential	AC	20	356	06-03-2021	69	Ft	\$1.65	\$113
HighRd	581	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	356	06-03-2021	6	SqFt	\$6.16	\$43
HighRd	582	L & T CR	Medium	63	Ft	0.88	Crack Sealing - AC	Residential	AC	20	358	06-03-2021	63	Ft	\$1.65	\$103
HIGHVIEW	610	RUTTING	High	19	SqFt	0.19	Patching - AC Shallow	Residential	AC	24	401	06-03-2021	18	SqFt	\$2.44	\$46
HIGHVIEW	612	RUTTING	High	70	SqFt	0.93	Patching - AC Shallow	Residential	AC	20	378	06-03-2021	70	SqFt	\$2.44	\$171
HIGHVIEW	613	RUTTING	High	57	SqFt	0.81	Patching - AC Shallow	Residential	AC	20	353	06-03-2021	57	SqFt	\$2.44	\$140
HIGHVIEW	614	RUTTING	High	100	SqFt	1.32	Patching - AC Shallow	Residential	AC	20	379	06-03-2021	100	SqFt	\$2.44	\$245
HIGHVIEW	615	RUTTING	High	120	SqFt	1.98	Patching - AC Shallow	Residential	AC	20	302	06-03-2021	119	SqFt	\$2.44	\$292
HIGHVIEW	618	RUTTING	High	83	SqFt	0.99	Patching - AC Shallow	Residential	AC	20	418	06-03-2021	83	SqFt	\$2.44	\$202

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
HillAve	040	LINEAR CR	Medium	19	Slabs	18.00	Crack Sealing - PCC	Collector	PCC	24	808	06-03-2021	262	Ft	\$1.65	\$433
HillAve	040	LINEAR CR	High	9	Slabs	8.00	Patching - PCC Partial Depth	Collector	PCC	24	808	06-03-2021	1555	SqFt	\$7.70	\$11,975
HillAve	040	CORNER BREAK	Medium	4	Slabs	4.00	Crack Sealing - PCC	Collector	PCC	24	808	06-03-2021	35	Ft	\$1.65	\$58
HillAve	040	CORNER SPALL	Medium	4	Slabs	4.00	Patching - PCC Partial Depth	Collector	PCC	24	808	06-03-2021	12	SqFt	\$7.70	\$90
HillAve	041	JOINT SPALL	Medium	8	Slabs	10.00	Patching - PCC Partial Depth	Collector	PCC	24	586	06-03-2021	22	SqFt	\$7.70	\$162
HillAve	041	CORNER SPALL	High	2	Slabs	2.50	Patching - PCC Partial Depth	Collector	PCC	24	586	06-03-2021	5	SqFt	\$7.70	\$40
HillAve	041	LINEAR CR	Medium	2	Slabs	2.50	Crack Sealing - PCC	Collector	PCC	24	586	06-03-2021	26	Ft	\$1.65	\$43
HillAve	041	CORNER BREAK	Medium	2	Slabs	2.50	Crack Sealing - PCC	Collector	PCC	24	586	06-03-2021	16	Ft	\$1.65	\$26
HillAve	042	CORNER BREAK	High	3	Slabs	10.00	Patching - AC Leveling	Collector	PCC	24	254	06-03-2021	0	SqFt	\$0.00	\$0
HillAve	043	LINEAR CR	High	5	Slabs	5.00	Patching - PCC Partial Depth	Collector	PCC	24	695	06-03-2021	837	SqFt	\$7.70	\$6,445
HillAve	043	LINEAR CR	Medium	2	Slabs	2.50	Crack Sealing - PCC	Collector	PCC	24	695	06-03-2021	32	Ft	\$1.65	\$52
HillAve	043	CORNER SPALL	High	5	Slabs	5.00	Patching - PCC Partial Depth	Collector	PCC	24	695	06-03-2021	13	SqFt	\$7.70	\$96
HillAve	045	CORNER BREAK	Medium	5	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	24	353	06-03-2021	39	Ft	\$1.65	\$64
HillAve	045	FAULTING	Medium	9	Slabs	20.00	Grinding (Localized)	Collector	PCC	24	353	06-03-2021	113	Ft	\$4.40	\$496
HillAve	046	CORNER BREAK	Medium	3	Slabs	6.67	Crack Sealing - PCC	Collector	PCC	24	374	06-03-2021	27	Ft	\$1.65	\$45
HillAve	049	CORNER SPALL	High	3	Slabs	2.50	Patching - PCC Partial Depth	Collector	PCC	24	879	06-03-2021	8	SqFt	\$7.70	\$61
HillAve	049	LINEAR CR	Medium	12	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	24	879	06-03-2021	158	Ft	\$1.65	\$261
HillAve	049	JOINT SPALL	Medium	6	Slabs	5.00	Patching - PCC Partial Depth	Collector	PCC	24	879	06-03-2021	16	SqFt	\$7.70	\$121
HillAve	051	LINEAR CR	High	5	Slabs	4.00	Patching - PCC Partial Depth	Collector	PCC	24	901	06-03-2021	864	SqFt	\$7.70	\$6,653
HillAve	051	LINEAR CR	Medium	2	Slabs	2.00	Crack Sealing - PCC	Collector	PCC	24	901	06-03-2021	32	Ft	\$1.65	\$53
HillAve	051	CORNER BREAK	High	2	Slabs	2.00	Patching - PCC Full Depth	Collector	PCC	24	901	06-03-2021	78	SqFt	\$27.50	\$2,131
HillAve	052	CORNER SPALL	High	2	Slabs	3.33	Patching - PCC Partial Depth	Collector	PCC	24	530	06-03-2021	6	SqFt	\$7.70	\$49
HillAve	052	CORNER SPALL	Medium	2	Slabs	3.33	Patching - PCC Partial Depth	Collector	PCC	24	530	06-03-2021	6	SqFt	\$7.70	\$49
HillAve	053	LINEAR CR	Medium	6	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	24	473	06-03-2021	85	Ft	\$1.65	\$140
HillAve	053	LINEAR CR	High	4	Slabs	6.67	Patching - PCC Partial Depth	Collector	PCC	24	473	06-03-2021	756	SqFt	\$7.70	\$5,821
HillAve	054	CORNER BREAK	Medium	3	Slabs	5.00	Crack Sealing - PCC	Collector	PCC	24	459	06-03-2021	25	Ft	\$1.65	\$41
HillAve	054	LINEAR CR	High	2	Slabs	2.50	Patching - PCC Partial Depth	Collector	PCC	24	459	06-03-2021	274	SqFt	\$7.70	\$2,114
HillAve	054	LINEAR CR	Medium	3	Slabs	5.00	Crack Sealing - PCC	Collector	PCC	24	459	06-03-2021	41	Ft	\$1.65	\$68
HillAve	055	SMALL PATCH	High	6	Slabs	10.00	Patching - PCC Partial Depth	Collector	PCC	24	478	06-03-2021	17	SqFt	\$7.70	\$133
HillAve	055	CORNER BREAK	Medium	6	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	24	478	06-03-2021	52	Ft	\$1.65	\$87
HillAve	056	JOINT SPALL	Medium	4	Slabs	6.67	Patching - PCC Partial Depth	Collector	PCC	24	400	06-03-2021	10	SqFt	\$7.70	\$73
HillAve	058	CORNER BREAK	Medium	2	Slabs	12.50	Crack Sealing - PCC	Collector	PCC	24	92	06-03-2021	12	Ft	\$1.65	\$20
HillAve	940	JOINT SPALL	Medium	6	Slabs	10.00	Patching - PCC Partial Depth	Collector	PCC	24	424	06-03-2021	15	SqFt	\$7.70	\$118
HillAve	941	RUTTING	High	98	SqFt	0.16	Patching - AC Shallow	Collector	AC	24	2558	06-03-2021	98	SqFt	\$2.44	\$239
HILLCREST	180	L & T CR	Medium	26	Ft	0.29	Crack Sealing - AC	Residential	AC	24	376	06-03-2021	26	Ft	\$1.65	\$43
HILLCREST	465	L & T CR	Medium	227	Ft	2.23	Crack Sealing - AC	Residential	AC	24	425	06-03-2021	227	Ft	\$1.65	\$375
HILLCREST	465	L & T CR	High	77	Ft	0.75	Patching - AC Shallow	Residential	AC	24	425	06-03-2021	253	SqFt	\$2.44	\$616
HILLCREST	465	RUTTING	Medium	21	SqFt	0.21	Patching - AC Shallow	Residential	AC	24	425	06-03-2021	20	SqFt	\$2.44	\$51

Details of the 2022 Localized Distress Maintenance Plan

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HILLCREST	466	L & T CR	High	1	Ft	0.02	Patching - AC Shallow	Residential	AC	24	200	06-03-2021	3	SqFt	\$2.44	\$8
HILLCREST	466	L & T CR	Medium	3	Ft	0.06	Crack Sealing - AC	Residential	AC	24	200	06-03-2021	3	Ft	\$1.65	\$5
HILLCREST	467	L & T CR	Medium	35	Ft	0.92	Crack Sealing - AC	Residential	AC	24	157	06-03-2021	34	Ft	\$1.65	\$57
HILLCREST	467	L & T CR	High	7	Ft	0.19	Patching - AC Shallow	Residential	AC	24	157	06-03-2021	24	SqFt	\$2.44	\$57
HILLCREST	467	RUTTING	Medium	12	SqFt	0.31	Patching - AC Shallow	Residential	AC	24	157	06-03-2021	12	SqFt	\$2.44	\$28
HillsideAv	656	RUTTING	Medium	56	SqFt	0.53	Patching - AC Shallow	Residential	AC	24	438	06-03-2021	56	SqFt	\$2.44	\$136
HillsideAv	657	RUTTING	Medium	18	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	669	06-03-2021	18	SqFt	\$2.44	\$44
HillsideAv	657	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	669	06-03-2021	9	SqFt	\$6.16	\$50
HillsideAv	659	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	525	06-03-2021	9	SqFt	\$6.16	\$52
HillsideAv	659	RUTTING	Medium	28	SqFt	0.22	Patching - AC Shallow	Residential	AC	24	525	06-03-2021	28	SqFt	\$2.44	\$68
HillsideAv	661	RUTTING	Medium	18	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	1036	06-03-2021	18	SqFt	\$2.44	\$45
HillsideAv	661	RUTTING	High	64	SqFt	0.26	Patching - AC Deep	Residential	AC	24	1036	06-03-2021	65	SqFt	\$6.16	\$397
HillsideAv	664	RUTTING	Medium	26	SqFt	0.30	Patching - AC Shallow	Residential	AC	24	361	06-03-2021	26	SqFt	\$2.44	\$62
HillsideAv	665	L & T CR	Medium	171	Ft	1.94	Crack Sealing - AC	Residential	AC	24	367	06-03-2021	171	Ft	\$1.65	\$282
HillsideAv	665	RUTTING	High	10	SqFt	0.12	Patching - AC Deep	Residential	AC	24	367	06-03-2021	10	SqFt	\$6.16	\$63
HillsideAv	666	L & T CR	High	6	Ft	0.06	Patching - AC Shallow	Residential	AC	24	412	06-03-2021	18	SqFt	\$2.44	\$45
HillsideAv	666	L & T CR	Medium	69	Ft	0.70	Crack Sealing - AC	Residential	AC	24	412	06-03-2021	70	Ft	\$1.65	\$115
HillsideAv	667	L & T CR	Medium	114	Ft	1.21	Crack Sealing - AC	Residential	AC	24	393	06-03-2021	114	Ft	\$1.65	\$188
HillsideAv	667	L & T CR	High	16	Ft	0.16	Patching - AC Shallow	Residential	AC	24	393	06-03-2021	51	SqFt	\$2.44	\$124
HillsideAv	667	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	393	06-03-2021	9	SqFt	\$6.16	\$51
HillsideAv	668	RUTTING	High	9	SqFt	0.10	Patching - AC Deep	Residential	AC	24	404	06-03-2021	10	SqFt	\$6.16	\$58
HillsideAv	668	POTHOLE	Low	6	Count	0.06	Patching - AC Deep	Residential	AC	24	404	06-03-2021	17	SqFt	\$6.16	\$105
HillsideAv	668	L & T CR	High	24	Ft	0.25	Patching - AC Shallow	Residential	AC	24	404	06-03-2021	79	SqFt	\$2.44	\$193
HillsideAv	668	RUTTING	Medium	27	SqFt	0.28	Patching - AC Shallow	Residential	AC	24	404	06-03-2021	27	SqFt	\$2.44	\$66
HillsideAv	668	L & T CR	Medium	80	Ft	0.82	Crack Sealing - AC	Residential	AC	24	404	06-03-2021	80	Ft	\$1.65	\$131
HillsideAv	669	L & T CR	Medium	471	Ft	4.69	Crack Sealing - AC	Residential	AC	24	418	06-03-2021	471	Ft	\$1.65	\$777
HillsideAv	669	L & T CR	High	45	Ft	0.44	Patching - AC Shallow	Residential	AC	24	418	06-03-2021	146	SqFt	\$2.44	\$356
ILLINOISST	533	L & T CR	Medium	131	Ft	1.69	Crack Sealing - AC	Residential	AC	24	322	06-03-2021	131	Ft	\$1.65	\$216
ILLINOISST	533	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	24	322	06-03-2021	6	SqFt	\$2.44	\$15
ILLINOISST	536	ALLIGATOR CR	Medium	51	SqFt	0.61	Patching - AC Deep	Residential	AC	24	350	06-03-2021	84	SqFt	\$6.16	\$517
ILLINOISST	536	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	350	06-03-2021	2	SqFt	\$2.44	\$5
ILLINOISST	536	L & T CR	Medium	27	Ft	0.32	Crack Sealing - AC	Residential	AC	24	350	06-03-2021	27	Ft	\$1.65	\$44
INDIANDR	284	RUTTING	High	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	651	06-03-2021	8	SqFt	\$2.44	\$18
JennaCt	930	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	499	06-03-2021	1	SqFt	\$2.44	\$1
JennaCt	930	L & T CR	Medium	53	Ft	0.53	Crack Sealing - AC	Residential	AC	20	499	06-03-2021	53	Ft	\$1.65	\$87
JONATHAN	196	L & T CR	Medium	6	Ft	0.11	Crack Sealing - AC	Residential	AC	24	229	06-03-2021	6	Ft	\$1.65	\$10
JONATHAN	197	L & T CR	Medium	50	Ft	0.40	Crack Sealing - AC	Residential	AC	24	523	06-03-2021	50	Ft	\$1.65	\$82
JONATHAN	197	L & T CR	High	43	Ft	0.34	Patching - AC Shallow	Residential	AC	24	523	06-03-2021	141	SqFt	\$2.44	\$343

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
Kenilworth	297	RUTTING	Medium	8	SqFt	0.05	Patching - AC Shallow	Residential	AC	20	845	06-03-2021	8	SqFt	\$2.44	\$19
Kenilworth	297	L & T CR	Medium	1	Ft	0.00	Crack Sealing - AC	Residential	AC	20	845	06-03-2021	1	Ft	\$1.65	\$1
Kenilworth	297	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	845	06-03-2021	6	SqFt	\$6.16	\$42
Kenilworth	298	L & T CR	Medium	27	Ft	0.14	Crack Sealing - AC	Residential	AC	20	962	06-03-2021	27	Ft	\$1.65	\$45
Kenilworth	298	POTHOLE	Low	34	Count	0.18	Patching - AC Deep	Residential	AC	20	962	06-03-2021	102	SqFt	\$6.16	\$630
Kenilworth	298	L & T CR	High	93	Ft	0.48	Patching - AC Shallow	Residential	AC	20	962	06-03-2021	306	SqFt	\$2.44	\$745
Kenilworth	298	RUTTING	High	23	SqFt	0.12	Patching - AC Deep	Residential	AC	20	962	06-03-2021	23	SqFt	\$6.16	\$140
Kenilworth	298	RUTTING	Medium	83	SqFt	0.43	Patching - AC Shallow	Residential	AC	20	962	06-03-2021	83	SqFt	\$2.44	\$203
Kenilworth	495	LINEAR CR	Medium	18	Slabs	28.57	Crack Sealing - PCC	Residential	PCC	20	316	06-03-2021	180	Ft	\$1.65	\$297
Kenilworth	495	CORNER BREAK	Medium	5	Slabs	7.14	Crack Sealing - PCC	Residential	PCC	20	316	06-03-2021	37	Ft	\$1.65	\$61
Kenilworth	496	CORNER SPALL	High	3	Slabs	5.00	Patching - AC Leveling	Residential	PCC	20	335	06-03-2021	0	SqFt	\$0.00	\$0
Kenilworth	496	DIVIDED SLAB	High	3	Slabs	5.00	Patching - AC Leveling	Residential	PCC	20	335	06-03-2021	0	SqFt	\$0.00	\$0
Kenilworth	497	CORNER BREAK	Medium	3	Slabs	5.00	Crack Sealing - PCC	Residential	PCC	20	335	06-03-2021	28	Ft	\$1.65	\$45
Kenilworth	497	JOINT SPALL	Medium	13	Slabs	20.00	Patching - PCC Partial Depth	Residential	PCC	20	335	06-03-2021	37	SqFt	\$7.70	\$278
Kenilworth	497	SMALL PATCH	High	3	Slabs	5.00	Patching - PCC Partial Depth	Residential	PCC	20	335	06-03-2021	9	SqFt	\$7.70	\$69
Kenilworth	497	DIVIDED SLAB	High	3	Slabs	5.00	Slab Replacement - PCC	Residential	PCC	20	335	06-03-2021	335	SqFt	\$16.50	\$5,528
Kenilworth	498	RUTTING	High	15	SqFt	0.37	Patching - AC Shallow	Residential	AC	20	208	06-03-2021	15	SqFt	\$2.44	\$38
Kenilworth	499	RUTTING	High	114	SqFt	0.92	Patching - AC Shallow	Residential	AC	20	621	06-03-2021	114	SqFt	\$2.44	\$278
Kenilworth	500	POTHOLE	Low	7	Count	0.10	Patching - AC Deep	Residential	AC	20	373	06-03-2021	22	SqFt	\$6.16	\$135
Kenilworth	501	LINEAR CR	High	3	Slabs	10.00	Patching - PCC Partial Depth	Residential	PCC	20	187	06-03-2021	375	SqFt	\$7.70	\$2,888
Kenilworth	502	CORNER SPALL	Medium	3	Slabs	5.00	Patching - PCC Partial Depth	Residential	PCC	20	310	06-03-2021	9	SqFt	\$7.70	\$64
Kenilworth	502	LINEAR CR	Medium	9	Slabs	15.00	Crack Sealing - PCC	Residential	PCC	20	310	06-03-2021	93	Ft	\$1.65	\$153
Kenilworth	503	JOINT SPALL	Medium	24	Slabs	15.00	Patching - PCC Partial Depth	Residential	PCC	20	795	06-03-2021	65	SqFt	\$7.70	\$494
Kenilworth	503	CORNER BREAK	Medium	4	Slabs	2.50	Crack Sealing - PCC	Residential	PCC	20	795	06-03-2021	32	Ft	\$1.65	\$54
Kenilworth	504	CORNER BREAK	High	3	Slabs	5.00	Patching - PCC Full Depth	Residential	PCC	20	291	06-03-2021	94	SqFt	\$27.50	\$2,575
Kenilworth	504	LINEAR CR	Medium	12	Slabs	20.00	Crack Sealing - PCC	Residential	PCC	20	291	06-03-2021	116	Ft	\$1.65	\$191
Kenilworth	506	CORNER SPALL	High	6	Slabs	5.00	Patching - PCC Partial Depth	Residential	PCC	20	552	06-03-2021	15	SqFt	\$7.70	\$114
Kenilworth	506	CORNER SPALL	Medium	3	Slabs	2.50	Patching - PCC Partial Depth	Residential	PCC	20	552	06-03-2021	8	SqFt	\$7.70	\$57
Kenilworth	506	JOINT SPALL	Medium	17	Slabs	15.00	Patching - PCC Partial Depth	Residential	PCC	20	552	06-03-2021	44	SqFt	\$7.70	\$342
Kenilworth	506	CORNER BREAK	Medium	3	Slabs	2.50	Crack Sealing - PCC	Residential	PCC	20	552	06-03-2021	23	Ft	\$1.65	\$37
Kenilworth	509	LINEAR CR	Medium	2	Slabs	1.43	Crack Sealing - PCC	Residential	PCC	24	845	06-03-2021	22	Ft	\$1.65	\$36
Kenilworth	510	RUTTING	Medium	54	SqFt	0.21	Patching - AC Shallow	Residential	AC	24	1077	06-03-2021	54	SqFt	\$2.44	\$132
Kenilworth	510	L & T CR	High	462	Ft	1.79	Patching - AC Shallow	Residential	AC	24	1077	06-03-2021	1517	SqFt	\$2.44	\$3,700
Kenilworth	510	POTHOLE	Low	3	Count	0.01	Patching - AC Deep	Residential	AC	24	1077	06-03-2021	9	SqFt	\$6.16	\$51
Kenilworth	510	L & T CR	Medium	489	Ft	1.89	Crack Sealing - AC	Residential	AC	24	1077	06-03-2021	489	Ft	\$1.65	\$806
Kenilworth	510	RUTTING	High	153	SqFt	0.59	Patching - AC Deep	Residential	AC	24	1077	06-03-2021	153	SqFt	\$6.16	\$940
Kenilworth	512	RUTTING	High	11	SqFt	0.15	Patching - AC Shallow	Residential	AC	26	273	06-03-2021	11	SqFt	\$2.44	\$27
Kenilworth	513	RUTTING	High	8	SqFt	0.04	Patching - AC Shallow	Residential	AC	26	752	06-03-2021	9	SqFt	\$2.44	\$20

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
LAKERD	329	POTHOLE	Low	3	Count	0.01	Patching - AC Deep	Residential	AC	24	2237	06-03-2021	9	SqFt	\$6.16	\$50
LAKERD	329	ALLIGATOR CR	Medium	39	SqFt	0.07	Patching - AC Deep	Residential	AC	24	2237	06-03-2021	68	SqFt	\$6.16	\$420
LAKERD	329	L & T CR	High	220	Ft	0.41	Patching - AC Shallow	Residential	AC	24	2237	06-03-2021	722	SqFt	\$2.44	\$1,762
LAKERD	329	RUTTING	Medium	89	SqFt	0.17	Patching - AC Shallow	Residential	AC	24	2237	06-03-2021	89	SqFt	\$2.44	\$217
LAKERD	329	L & T CR	Medium	568	Ft	1.06	Crack Sealing - AC	Residential	AC	24	2237	06-03-2021	568	Ft	\$1.65	\$937
LAKERD	329	RUTTING	High	345	SqFt	0.64	Patching - AC Deep	Residential	AC	24	2237	06-03-2021	344	SqFt	\$6.16	\$2,123
LAKEVIEW	597	RUTTING	Medium	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	629	06-03-2021	8	SqFt	\$2.44	\$19
LAKEVIEW	597	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	629	06-03-2021	6	SqFt	\$6.16	\$43
LAKEVIEW	597	L & T CR	Medium	500	Ft	3.97	Crack Sealing - AC	Residential	AC	20	629	06-03-2021	500	Ft	\$1.65	\$824
LAKEVIEW	597	L & T CR	High	44	Ft	0.35	Patching - AC Shallow	Residential	AC	20	629	06-03-2021	144	SqFt	\$2.44	\$352
LAKEVIEW	597	ALLIGATOR CR	Medium	3	SqFt	0.02	Patching - AC Deep	Residential	AC	20	629	06-03-2021	13	SqFt	\$6.16	\$82
LAKEVIEW	598	RUTTING	High	269	SqFt	3.15	Patching - AC Shallow	Residential	AC	20	428	06-03-2021	269	SqFt	\$2.44	\$657
LambertRd	064	POTHOLE	Low	5	Count	0.04	Patching - AC Deep	Collector	AC	40	324	06-03-2021	14	SqFt	\$6.16	\$89
LambertRd	065	L & T CR	Medium	690	Ft	0.90	Crack Sealing - AC	Collector	AC	36	2140	06-03-2021	690	Ft	\$1.65	\$1,138
LambertRd	065	L & T CR	High	85	Ft	0.11	Patching - AC Shallow	Collector	AC	36	2140	06-03-2021	279	SqFt	\$2.44	\$681
LambertRd	065	POTHOLE	Low	10	Count	0.01	Patching - AC Deep	Collector	AC	36	2140	06-03-2021	30	SqFt	\$6.16	\$186
LambertRd	065	ALLIGATOR CR	Medium	299	SqFt	0.39	Patching - AC Deep	Collector	AC	36	2140	06-03-2021	372	SqFt	\$6.16	\$2,293
LambertRd	065	RUTTING	Medium	12	SqFt	0.02	Patching - AC Shallow	Collector	AC	36	2140	06-03-2021	13	SqFt	\$2.44	\$30
LambertRd	066	POTHOLE	Low	5	Count	0.02	Patching - AC Deep	Collector	AC	40	689	06-03-2021	14	SqFt	\$6.16	\$86
LambertRd	067	POTHOLE	Low	5	Count	0.03	Patching - AC Deep	Collector	AC	40	386	06-03-2021	14	SqFt	\$6.16	\$86
LambertRd	067	L & T CR	High	26	Ft	0.17	Patching - AC Shallow	Collector	AC	40	386	06-03-2021	84	SqFt	\$2.44	\$205
LambertRd	067	L & T CR	Medium	170	Ft	1.10	Crack Sealing - AC	Collector	AC	40	386	06-03-2021	170	Ft	\$1.65	\$281
LambertRd	068	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Collector	AC	36	464	06-03-2021	0	SqFt	\$2.44	\$1
LambertRd	068	L & T CR	Medium	23	Ft	0.13	Crack Sealing - AC	Collector	AC	36	464	06-03-2021	23	Ft	\$1.65	\$37
LambertRd	069	POTHOLE	Low	18	Count	0.02	Patching - AC Deep	Collector	AC	40	2589	06-03-2021	54	SqFt	\$6.16	\$332
LambertRd	070	POTHOLE	Low	5	Count	0.02	Patching - AC Deep	Collector	AC	40	510	06-03-2021	14	SqFt	\$6.16	\$86
LambertRd	070	L & T CR	High	97	Ft	0.47	Patching - AC Shallow	Collector	AC	40	510	06-03-2021	318	SqFt	\$2.44	\$774
LambertRd	070	RUTTING	Medium	14	SqFt	0.07	Patching - AC Shallow	Collector	AC	40	510	06-03-2021	14	SqFt	\$2.44	\$35
LambertRd	070	L & T CR	Medium	222	Ft	1.09	Crack Sealing - AC	Collector	AC	40	510	06-03-2021	222	Ft	\$1.65	\$366
LambertRd	071	L & T CR	High	81	Ft	0.61	Patching - AC Shallow	Collector	AC	40	332	06-03-2021	265	SqFt	\$2.44	\$647
LambertRd	071	L & T CR	Medium	26	Ft	0.20	Crack Sealing - AC	Collector	AC	40	332	06-03-2021	26	Ft	\$1.65	\$43
LambertRd	071	POTHOLE	Low	7	Count	0.05	Patching - AC Deep	Collector	AC	40	332	06-03-2021	20	SqFt	\$6.16	\$124
LambertRd	071	RUTTING	Medium	22	SqFt	0.17	Patching - AC Shallow	Collector	AC	40	332	06-03-2021	23	SqFt	\$2.44	\$54
LambertRd	072	RUTTING	Medium	15	SqFt	0.06	Patching - AC Shallow	Collector	AC	40	673	06-03-2021	15	SqFt	\$2.44	\$36
LambertRd	072	L & T CR	High	5	Ft	0.02	Patching - AC Shallow	Collector	AC	40	673	06-03-2021	16	SqFt	\$2.44	\$38
LambertRd	072	L & T CR	Medium	191	Ft	0.71	Crack Sealing - AC	Collector	AC	40	673	06-03-2021	191	Ft	\$1.65	\$316
LambertRd	072	POTHOLE	Low	4	Count	0.02	Patching - AC Deep	Collector	AC	40	673	06-03-2021	13	SqFt	\$6.16	\$83
LambertRd	493	POTHOLE	Low	9	Count	0.03	Patching - AC Deep	Residential	AC	40	755	06-03-2021	28	SqFt	\$6.16	\$172

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
LAWRENCE	516	L & T CR	Medium	14	Ft	0.30	Crack Sealing - AC	Residential	AC	20	226	06-03-2021	14	Ft	\$1.65	\$23
LENOXRD	218	L & T CR	High	5	Ft	0.04	Patching - AC Shallow	Residential	AC	20	627	06-03-2021	16	SqFt	\$2.44	\$39
LENOXRD	218	RUTTING	High	69	SqFt	0.55	Patching - AC Deep	Residential	AC	20	627	06-03-2021	69	SqFt	\$6.16	\$423
LENOXRD	218	RUTTING	Medium	17	SqFt	0.14	Patching - AC Shallow	Residential	AC	20	627	06-03-2021	17	SqFt	\$2.44	\$42
LENOXRD	380	RUTTING	High	8	SqFt	0.07	Patching - AC Deep	Residential	AC	20	612	06-03-2021	9	SqFt	\$6.16	\$52
LENOXRD	380	L & T CR	Medium	196	Ft	1.60	Crack Sealing - AC	Residential	AC	20	612	06-03-2021	196	Ft	\$1.65	\$323
LENOXRD	380	RUTTING	Medium	75	SqFt	0.62	Patching - AC Shallow	Residential	AC	20	612	06-03-2021	75	SqFt	\$2.44	\$184
LENOXRD	380	L & T CR	High	38	Ft	0.31	Patching - AC Shallow	Residential	AC	20	612	06-03-2021	126	SqFt	\$2.44	\$307
LENOXRD	381	ALLIGATOR CR	Medium	59	SqFt	0.76	Patching - AC Deep	Residential	AC	20	385	06-03-2021	94	SqFt	\$6.16	\$578
LENOXRD	381	L & T CR	High	15	Ft	0.19	Patching - AC Shallow	Residential	AC	20	385	06-03-2021	48	SqFt	\$2.44	\$118
LENOXRD	381	L & T CR	Medium	89	Ft	1.15	Crack Sealing - AC	Residential	AC	20	385	06-03-2021	89	Ft	\$1.65	\$146
LENOXRD	381	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	385	06-03-2021	8	SqFt	\$6.16	\$44
LENOXRD	382	L & T CR	High	7	Ft	0.09	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	23	SqFt	\$2.44	\$56
LENOXRD	382	RUTTING	Medium	16	SqFt	0.21	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	16	SqFt	\$2.44	\$39
LENOXRD	382	ALLIGATOR CR	Medium	43	SqFt	0.55	Patching - AC Deep	Residential	AC	20	391	06-03-2021	73	SqFt	\$6.16	\$449
LENOXRD	382	L & T CR	Medium	89	Ft	1.14	Crack Sealing - AC	Residential	AC	20	391	06-03-2021	89	Ft	\$1.65	\$147
LENOXRD	382	RUTTING	High	32	SqFt	0.41	Patching - AC Deep	Residential	AC	20	391	06-03-2021	32	SqFt	\$6.16	\$198
LENOXRD	383	L & T CR	Medium	375	Ft	3.41	Crack Sealing - AC	Residential	AC	20	550	06-03-2021	375	Ft	\$1.65	\$618
LENOXRD	383	ALLIGATOR CR	Medium	3	SqFt	0.03	Patching - AC Deep	Residential	AC	20	550	06-03-2021	14	SqFt	\$6.16	\$84
LENOXRD	383	RUTTING	Medium	16	SqFt	0.15	Patching - AC Shallow	Residential	AC	20	550	06-03-2021	16	SqFt	\$2.44	\$40
LENOXRD	383	L & T CR	High	65	Ft	0.59	Patching - AC Shallow	Residential	AC	20	550	06-03-2021	213	SqFt	\$2.44	\$520
LENOXRD	384	RUTTING	Medium	54	SqFt	0.37	Patching - AC Shallow	Residential	AC	20	729	06-03-2021	54	SqFt	\$2.44	\$132
LENOXRD	384	L & T CR	Medium	467	Ft	3.20	Crack Sealing - AC	Residential	AC	20	729	06-03-2021	468	Ft	\$1.65	\$771
LENOXRD	384	ALLIGATOR CR	Medium	102	SqFt	0.70	Patching - AC Deep	Residential	AC	20	729	06-03-2021	146	SqFt	\$6.16	\$901
LENOXRD	384	L & T CR	High	2	Ft	0.01	Patching - AC Shallow	Residential	AC	20	729	06-03-2021	5	SqFt	\$2.44	\$14
LENOXRD	385	ALLIGATOR CR	High	153	SqFt	0.95	Patching - AC Deep	Residential	AC	20	809	06-03-2021	207	SqFt	\$6.16	\$1,275
LENOXRD	385	ALLIGATOR CR	Medium	67	SqFt	0.41	Patching - AC Deep	Residential	AC	20	809	06-03-2021	104	SqFt	\$6.16	\$640
LENOXRD	385	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	809	06-03-2021	6	SqFt	\$6.16	\$42
LENOXRD	385	L & T CR	Medium	596	Ft	3.68	Crack Sealing - AC	Residential	AC	20	809	06-03-2021	595	Ft	\$1.65	\$983
LENOXRD	385	RUTTING	Medium	75	SqFt	0.46	Patching - AC Shallow	Residential	AC	20	809	06-03-2021	75	SqFt	\$2.44	\$183
LENOXRD	385	L & T CR	High	117	Ft	0.72	Patching - AC Shallow	Residential	AC	20	809	06-03-2021	383	SqFt	\$2.44	\$934
LINCOLNAV	307	L & T CR	Medium	32	Ft	0.42	Crack Sealing - AC	Residential	AC	20	386	06-03-2021	32	Ft	\$1.65	\$53
LINDENAV	738	RUTTING	High	30	SqFt	0.25	Patching - AC Deep	Residential	AC	20	613	06-03-2021	30	SqFt	\$6.16	\$186
LINDENAV	738	L & T CR	High	33	Ft	0.27	Patching - AC Shallow	Residential	AC	20	613	06-03-2021	108	SqFt	\$2.44	\$263
LINDENAV	738	L & T CR	Medium	200	Ft	1.63	Crack Sealing - AC	Residential	AC	20	613	06-03-2021	200	Ft	\$1.65	\$330
LINDENAV	738	RUTTING	Medium	30	SqFt	0.25	Patching - AC Shallow	Residential	AC	20	613	06-03-2021	30	SqFt	\$2.44	\$74
LINDENAV	739	RUTTING	High	296	SqFt	1.66	Patching - AC Shallow	Residential	AC	20	890	06-03-2021	296	SqFt	\$2.44	\$723
LINDENAV	741	L & T CR	High	4	Ft	0.05	Patching - AC Shallow	Residential	AC	20	347	06-03-2021	12	SqFt	\$2.44	\$29

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
LINDENAV	741	L & T CR	Medium	259	Ft	3.72	Crack Sealing - AC	Residential	AC	20	347	06-03-2021	259	Ft	\$1.65	\$427
LINDENAV	741	RUTTING	Medium	16	SqFt	0.23	Patching - AC Shallow	Residential	AC	20	347	06-03-2021	16	SqFt	\$2.44	\$39
LINDENAV	741	ALLIGATOR CR	Medium	21	SqFt	0.30	Patching - AC Deep	Residential	AC	20	347	06-03-2021	43	SqFt	\$6.16	\$268
LindenSt	742	RUTTING	High	132	SqFt	1.85	Patching - AC Shallow	Residential	AC	20	357	06-03-2021	132	SqFt	\$2.44	\$323
LindenSt	743	RUTTING	High	164	SqFt	2.10	Patching - AC Shallow	Residential	AC	20	390	06-03-2021	164	SqFt	\$2.44	\$400
LindenSt	744	L & T CR	Medium	8	Ft	0.11	Crack Sealing - AC	Residential	AC	20	383	06-03-2021	8	Ft	\$1.65	\$14
LindenSt	745	L & T CR	Medium	96	Ft	1.17	Crack Sealing - AC	Residential	AC	20	412	06-03-2021	96	Ft	\$1.65	\$159
LindenSt	745	ALLIGATOR CR	Medium	0	SqFt	0.00	Patching - AC Deep	Residential	AC	20	412	06-03-2021	5	SqFt	\$6.16	\$30
LindenSt	745	L & T CR	High	118	Ft	1.44	Patching - AC Shallow	Residential	AC	20	412	06-03-2021	389	SqFt	\$2.44	\$948
LindenSt	745	RUTTING	Medium	8	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	412	06-03-2021	8	SqFt	\$2.44	\$19
LindenSt	745	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	412	06-03-2021	6	SqFt	\$6.16	\$42
LindenSt	746	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	385	06-03-2021	8	SqFt	\$6.16	\$44
LindenSt	746	L & T CR	Medium	18	Ft	0.24	Crack Sealing - AC	Residential	AC	20	385	06-03-2021	18	Ft	\$1.65	\$30
LindenSt	747	L & T CR	Medium	3	Ft	0.03	Crack Sealing - AC	Residential	AC	20	401	06-03-2021	3	Ft	\$1.65	\$4
LindenSt	748	L & T CR	Medium	2	Ft	0.03	Crack Sealing - AC	Residential	AC	20	401	06-03-2021	2	Ft	\$1.65	\$4
LindenSt	749	RUTTING	High	49	SqFt	0.93	Patching - AC Shallow	Residential	AC	20	264	06-03-2021	48	SqFt	\$2.44	\$119
LOMBARD	540	L & T CR	Medium	4	Ft	0.06	Crack Sealing - AC	Residential	AC	20	317	06-03-2021	4	Ft	\$1.65	\$6
LONDONB	531	L & T CR	High	6	Ft	0.02	Patching - AC Shallow	Residential	AC	26	1044	06-03-2021	18	SqFt	\$2.44	\$45
LONDONB	531	POTHOLE	Low	3	Count	0.01	Patching - AC Deep	Residential	AC	26	1044	06-03-2021	9	SqFt	\$6.16	\$55
LONDONB	531	L & T CR	Medium	17	Ft	0.06	Crack Sealing - AC	Residential	AC	26	1044	06-03-2021	17	Ft	\$1.65	\$28
LONGFELL	251	RUTTING	Medium	28	SqFt	0.15	Patching - AC Shallow	Residential	AC	24	765	06-03-2021	28	SqFt	\$2.44	\$69
LONGFELL	251	L & T CR	Medium	113	Ft	0.61	Crack Sealing - AC	Residential	AC	24	765	06-03-2021	113	Ft	\$1.65	\$186
LONGFELL	251	L & T CR	High	53	Ft	0.29	Patching - AC Shallow	Residential	AC	24	765	06-03-2021	172	SqFt	\$2.44	\$421
LONGFELL	251	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	765	06-03-2021	9	SqFt	\$6.16	\$52
LONGFELL	252	RUTTING	High	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	763	06-03-2021	10	SqFt	\$2.44	\$22
LorraineRd	063	JOINT SPALL	Medium	3	Slabs	2.50	Patching - PCC Partial Dept	Collector	PCC	24	1026	06-03-2021	10	SqFt	\$7.70	\$71
LorraineRd	063	LINEAR CR	High	3	Slabs	2.50	Patching - PCC Partial Dept	Collector	PCC	24	1026	06-03-2021	617	SqFt	\$7.70	\$4,747
LorraineRd	484	LINEAR CR	Medium	4	Slabs	10.00	Crack Sealing - PCC	Residential	PCC	24	320	06-03-2021	58	Ft	\$1.65	\$96
LorraineRd	485	JOINT SPALL	Medium	3	Slabs	5.00	Patching - PCC Partial Dept	Residential	PCC	24	487	06-03-2021	9	SqFt	\$7.70	\$67
LorraineRd	485	LINEAR CR	Medium	2	Slabs	2.50	Crack Sealing - PCC	Residential	PCC	24	487	06-03-2021	22	Ft	\$1.65	\$36
LorraineRd	486	CORNER SPALL	High	3	Slabs	2.50	Patching - PCC Partial Dept	Residential	PCC	24	882	06-03-2021	8	SqFt	\$7.70	\$61
LorraineRd	486	CORNER BREAK	Medium	3	Slabs	2.50	Crack Sealing - PCC	Residential	PCC	24	882	06-03-2021	24	Ft	\$1.65	\$40
LorraineRd	486	JOINT SPALL	Medium	3	Slabs	2.50	Patching - PCC Partial Dept	Residential	PCC	24	882	06-03-2021	8	SqFt	\$7.70	\$61
LorraineRd	486	LINEAR CR	High	3	Slabs	2.50	Patching - PCC Partial Dept	Residential	PCC	24	882	06-03-2021	531	SqFt	\$7.70	\$4,089
LOWDENA	806	L & T CR	Medium	16	Ft	0.15	Crack Sealing - AC	Residential	AC	20	533	06-03-2021	16	Ft	\$1.65	\$26
LOWDENA	807	L & T CR	Medium	39	Ft	0.24	Crack Sealing - AC	Residential	AC	20	796	06-03-2021	39	Ft	\$1.65	\$64
LOWELLAV	236	POTHOLE	Low	6	Count	0.03	Patching - AC Deep	Residential	AC	24	772	06-03-2021	17	SqFt	\$6.16	\$103
LOWELLAV	236	RUTTING	Medium	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	772	06-03-2021	10	SqFt	\$2.44	\$23

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
LOWELLAV	236	ALLIGATOR CR	Medium	3	SqFt	0.01	Patching - AC Deep	Residential	AC	24	772	06-03-2021	13	SqFt	\$6.16	\$83
LOWELLAV	236	L & T CR	High	249	Ft	1.34	Patching - AC Shallow	Residential	AC	24	772	06-03-2021	817	SqFt	\$2.44	\$1,993
LOWELLAV	236	L & T CR	Medium	359	Ft	1.94	Crack Sealing - AC	Residential	AC	24	772	06-03-2021	359	Ft	\$1.65	\$593
LOWELLAV	237	RUTTING	Medium	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	765	06-03-2021	10	SqFt	\$2.44	\$23
LOWELLAV	237	L & T CR	Medium	49	Ft	0.27	Crack Sealing - AC	Residential	AC	24	765	06-03-2021	49	Ft	\$1.65	\$81
LOWELLAV	237	L & T CR	High	7	Ft	0.04	Patching - AC Shallow	Residential	AC	24	765	06-03-2021	24	SqFt	\$2.44	\$58
LynnRd	937	L & T CR	High	13	Ft	0.10	Patching - AC Shallow	Residential	AC	24	553	06-03-2021	42	SqFt	\$2.44	\$102
LynnRd	937	RUTTING	Medium	10	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	553	06-03-2021	10	SqFt	\$2.44	\$24
MACINTOS	192	L & T CR	Medium	3	Ft	0.05	Crack Sealing - AC	Residential	AC	24	246	06-03-2021	3	Ft	\$1.65	\$5
MAIDENLN	524	L & T CR	Medium	10	Ft	0.10	Crack Sealing - AC	Residential	AC	20	501	06-03-2021	10	Ft	\$1.65	\$16
MAIDENLN	524	RUTTING	High	89	SqFt	0.89	Patching - AC Deep	Residential	AC	20	501	06-03-2021	88	SqFt	\$6.16	\$546
MAIDENLN	524	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	20	501	06-03-2021	6	SqFt	\$2.44	\$16
MAIDENLN	525	L & T CR	Medium	39	Ft	0.66	Crack Sealing - AC	Residential	AC	20	294	06-03-2021	39	Ft	\$1.65	\$64
MAIDENLN	525	RUTTING	High	25	SqFt	0.43	Patching - AC Deep	Residential	AC	20	294	06-03-2021	25	SqFt	\$6.16	\$155
MainSt	005	RUTTING	Medium	11	SqFt	0.48	Patching - AC Shallow	Arterial	AC	24	91	06-03-2021	11	SqFt	\$2.44	\$26
MainSt	006	JOINT SPALL	Medium	2	Slabs	3.33	Patching - PCC Partial Dept	Arterial	PCC	24	463	06-03-2021	5	SqFt	\$7.70	\$43
MainSt	007	RUTTING	High	19	SqFt	0.15	Patching - AC Shallow	Arterial	AC	24	521	06-03-2021	18	SqFt	\$2.44	\$45
MainSt	010	LINEAR CR	Medium	5	Slabs	10.00	Crack Sealing - PCC	Arterial	PCC	26	372	06-03-2021	70	Ft	\$1.65	\$116
MainSt	011	RUTTING	High	19	SqFt	0.25	Patching - AC Shallow	Arterial	AC	24	329	06-03-2021	19	SqFt	\$2.44	\$47
MainSt	012	LINEAR CR	High	4	Slabs	6.67	Patching - PCC Partial Dept	Arterial	PCC	24	430	06-03-2021	684	SqFt	\$7.70	\$5,267
MainSt	013	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Arterial	AC	24	762	06-03-2021	9	SqFt	\$6.16	\$51
MainSt	013	RUTTING	High	26	SqFt	0.14	Patching - AC Deep	Arterial	AC	24	762	06-03-2021	26	SqFt	\$6.16	\$161
MainSt	013	RUTTING	Medium	26	SqFt	0.14	Patching - AC Shallow	Arterial	AC	24	762	06-03-2021	26	SqFt	\$2.44	\$64
MainSt	013	L & T CR	High	112	Ft	0.61	Patching - AC Shallow	Arterial	AC	24	762	06-03-2021	366	SqFt	\$2.44	\$894
MainSt	013	L & T CR	Medium	650	Ft	3.56	Crack Sealing - AC	Arterial	AC	24	762	06-03-2021	651	Ft	\$1.65	\$1,073
MainSt	017	L & T CR	Medium	414	Ft	3.02	Crack Sealing - AC	Arterial	AC	24	570	06-03-2021	414	Ft	\$1.65	\$682
MainSt	017	RUTTING	Medium	64	SqFt	0.47	Patching - AC Shallow	Arterial	AC	24	570	06-03-2021	65	SqFt	\$2.44	\$157
MainSt	019	FAULTING	Medium	3	Slabs	5.00	Grinding (Localized)	Arterial	PCC	20	339	07-07-2021	28	Ft	\$4.40	\$123
MainSt	020	RUTTING	Medium	10	SqFt	0.08	Patching - AC Shallow	Arterial	AC	24	477	06-03-2021	10	SqFt	\$2.44	\$23
MainSt	020	L & T CR	Medium	11	Ft	0.10	Crack Sealing - AC	Arterial	AC	24	477	06-03-2021	11	Ft	\$1.65	\$19
MainSt	020	L & T CR	High	6	Ft	0.05	Patching - AC Shallow	Arterial	AC	24	477	06-03-2021	19	SqFt	\$2.44	\$49
MainSt	021	LINEAR CR	Medium	1	Slabs	1.67	Crack Sealing - PCC	Arterial	PCC	26	690	06-03-2021	19	Ft	\$1.65	\$31
MainSt	022	LINEAR CR	High	4	Slabs	5.00	Patching - PCC Partial Dept	Arterial	PCC	26	798	06-03-2021	1040	SqFt	\$7.70	\$8,008
MainSt	023	LINEAR CR	High	2	Slabs	3.33	Patching - PCC Partial Dept	Arterial	PCC	26	689	06-03-2021	598	SqFt	\$7.70	\$4,605
MainSt	023	LINEAR CR	Medium	3	Slabs	5.00	Crack Sealing - PCC	Arterial	PCC	26	689	06-03-2021	57	Ft	\$1.65	\$94
MainSt	024	LINEAR CR	Medium	4	Slabs	6.67	Crack Sealing - PCC	Arterial	PCC	26	440	06-03-2021	58	Ft	\$1.65	\$96
MainSt	024	JOINT SPALL	Medium	4	Slabs	6.67	Patching - PCC Partial Dept	Arterial	PCC	26	440	06-03-2021	12	SqFt	\$7.70	\$93
MainSt	025	SMALL PATCH	High	2	Slabs	1.67	Patching - PCC Partial Dept	Arterial	PCC	26	683	06-03-2021	4	SqFt	\$7.70	\$31

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
MainSt	409	ALLIGATOR CR	Medium	6	SqFt	0.05	Patching - AC Deep	Residential	AC	36	325	06-03-2021	19	SqFt	\$6.16	\$122
MainSt	409	L & T CR	Medium	381	Ft	3.25	Crack Sealing - AC	Residential	AC	36	325	06-03-2021	381	Ft	\$1.65	\$629
MainSt	409	L & T CR	High	14	Ft	0.12	Patching - AC Shallow	Residential	AC	36	325	06-03-2021	46	SqFt	\$2.44	\$114
MainSt	409	RUTTING	Medium	12	SqFt	0.10	Patching - AC Shallow	Residential	AC	36	325	06-03-2021	12	SqFt	\$2.44	\$28
MainSt	409	POTHOLE	Low	4	Count	0.03	Patching - AC Deep	Residential	AC	36	325	06-03-2021	12	SqFt	\$6.16	\$75
MainSt	411	RUTTING	High	43	SqFt	0.49	Patching - AC Shallow	Residential	AC	24	363	06-03-2021	43	SqFt	\$2.44	\$105
MAPLEST	753	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	1527	06-03-2021	6	SqFt	\$6.16	\$42
MAPLEST	753	L & T CR	High	1	Ft	0.00	Patching - AC Shallow	Residential	AC	20	1527	06-03-2021	2	SqFt	\$2.44	\$6
MAPLEST	753	RUTTING	High	8	SqFt	0.02	Patching - AC Deep	Residential	AC	20	1527	06-03-2021	8	SqFt	\$6.16	\$46
MAPLEST	753	RUTTING	Medium	23	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	1527	06-03-2021	23	SqFt	\$2.44	\$55
MAPLEST	753	L & T CR	Medium	409	Ft	1.34	Crack Sealing - AC	Residential	AC	20	1527	06-03-2021	409	Ft	\$1.65	\$674
MapleSt	754	L & T CR	High	63	Ft	0.80	Patching - AC Shallow	Residential	AC	20	392	06-03-2021	207	SqFt	\$2.44	\$504
MapleSt	754	L & T CR	Medium	188	Ft	2.40	Crack Sealing - AC	Residential	AC	20	392	06-03-2021	188	Ft	\$1.65	\$311
MapleSt	754	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	392	06-03-2021	8	SqFt	\$6.16	\$45
MapleSt	755	ALLIGATOR CR	Medium	4	SqFt	0.05	Patching - AC Deep	Residential	AC	20	390	06-03-2021	16	SqFt	\$6.16	\$99
MapleSt	755	L & T CR	Medium	232	Ft	2.97	Crack Sealing - AC	Residential	AC	20	390	06-03-2021	232	Ft	\$1.65	\$383
MapleSt	756	L & T CR	Medium	154	Ft	2.00	Crack Sealing - AC	Residential	AC	20	386	06-03-2021	155	Ft	\$1.65	\$255
MapleSt	756	L & T CR	High	5	Ft	0.07	Patching - AC Shallow	Residential	AC	20	386	06-03-2021	18	SqFt	\$2.44	\$44
MapleSt	757	RUTTING	Medium	24	SqFt	0.29	Patching - AC Shallow	Residential	AC	20	403	06-03-2021	24	SqFt	\$2.44	\$57
MapleSt	758	ALLIGATOR CR	Medium	2	SqFt	0.03	Patching - AC Deep	Residential	AC	20	381	06-03-2021	12	SqFt	\$6.16	\$73
MapleSt	758	RUTTING	Medium	16	SqFt	0.21	Patching - AC Shallow	Residential	AC	20	381	06-03-2021	16	SqFt	\$2.44	\$38
MapleSt	758	L & T CR	High	55	Ft	0.73	Patching - AC Shallow	Residential	AC	20	381	06-03-2021	182	SqFt	\$2.44	\$443
MapleSt	758	L & T CR	Medium	92	Ft	1.21	Crack Sealing - AC	Residential	AC	20	381	06-03-2021	92	Ft	\$1.65	\$152
MapleSt	758	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	381	06-03-2021	8	SqFt	\$6.16	\$43
MapleSt	759	RUTTING	High	116	SqFt	1.39	Patching - AC Deep	Residential	AC	20	416	06-03-2021	115	SqFt	\$6.16	\$711
MapleSt	760	L & T CR	Medium	19	Ft	0.22	Crack Sealing - AC	Residential	AC	20	427	06-03-2021	19	Ft	\$1.65	\$31
MapleSt	760	L & T CR	High	23	Ft	0.27	Patching - AC Shallow	Residential	AC	20	427	06-03-2021	75	SqFt	\$2.44	\$185
MarastonA	911	L & T CR	Medium	8	Ft	0.03	Crack Sealing - AC	Residential	AC	24	1072	06-03-2021	8	Ft	\$1.65	\$13
MarastonA	912	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	26	396	06-03-2021	6	SqFt	\$2.44	\$16
MarastonA	912	L & T CR	Medium	43	Ft	0.42	Crack Sealing - AC	Residential	AC	26	396	06-03-2021	43	Ft	\$1.65	\$71
MarastonA	917	L & T CR	High	11	Ft	0.15	Patching - AC Shallow	Residential	AC	26	277	06-03-2021	34	SqFt	\$2.44	\$84
MarastonA	917	POTHOLE	Low	3	Count	0.04	Patching - AC Deep	Residential	AC	26	277	06-03-2021	10	SqFt	\$6.16	\$57
MarastonA	918	RUTTING	Medium	13	SqFt	0.37	Patching - AC Shallow	Residential	AC	26	130	06-03-2021	13	SqFt	\$2.44	\$31
MarastonA	918	L & T CR	High	19	Ft	0.57	Patching - AC Shallow	Residential	AC	26	130	06-03-2021	62	SqFt	\$2.44	\$154
MARIONA	750	RUTTING	High	115	SqFt	0.37	Patching - AC Deep	Residential	AC	20	1540	06-03-2021	115	SqFt	\$6.16	\$706
MARIONA	750	RUTTING	Medium	35	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	1540	06-03-2021	36	SqFt	\$2.44	\$86
MARIONA	750	ALLIGATOR CR	Medium	64	SqFt	0.21	Patching - AC Deep	Residential	AC	20	1540	06-03-2021	101	SqFt	\$6.16	\$620
MARIONA	750	L & T CR	Medium	229	Ft	0.74	Crack Sealing - AC	Residential	AC	20	1540	06-03-2021	229	Ft	\$1.65	\$377

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
MARIONA	750	L & T CR	High	210	Ft	0.68	Patching - AC Shallow	Residential	AC	20	1540	06-03-2021	690	SqFt	\$2.44	\$1,684
MARIONA	750	ALLIGATOR CR	High	10	SqFt	0.03	Patching - AC Deep	Residential	AC	20	1540	06-03-2021	26	SqFt	\$6.16	\$161
MARSTON	820	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	533	06-03-2021	8	SqFt	\$6.16	\$46
MARSTON	820	L & T CR	Medium	40	Ft	0.37	Crack Sealing - AC	Residential	AC	20	533	06-03-2021	40	Ft	\$1.65	\$65
MARSTON	820	L & T CR	High	4	Ft	0.04	Patching - AC Shallow	Residential	AC	20	533	06-03-2021	13	SqFt	\$2.44	\$31
MARSTON	820	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	533	06-03-2021	9	SqFt	\$2.44	\$20
MARSTON	821	L & T CR	High	159	Ft	1.69	Patching - AC Shallow	Residential	AC	20	472	06-03-2021	522	SqFt	\$2.44	\$1,275
MARSTON	821	L & T CR	Medium	176	Ft	1.86	Crack Sealing - AC	Residential	AC	20	472	06-03-2021	176	Ft	\$1.65	\$290
MARSTON	821	RUTTING	Medium	47	SqFt	0.49	Patching - AC Shallow	Residential	AC	20	472	06-03-2021	46	SqFt	\$2.44	\$113
MARSTON	821	RUTTING	High	8	SqFt	0.08	Patching - AC Deep	Residential	AC	20	472	06-03-2021	8	SqFt	\$6.16	\$49
MarstonAve	813	RUTTING	Medium	8	SqFt	0.14	Patching - AC Shallow	Residential	AC	20	293	06-03-2021	9	SqFt	\$2.44	\$20
MarstonAve	813	L & T CR	Medium	24	Ft	0.40	Crack Sealing - AC	Residential	AC	20	293	06-03-2021	24	Ft	\$1.65	\$39
MarstonAve	890	RUTTING	Medium	11	SqFt	0.23	Patching - AC Shallow	Residential	AC	24	201	06-03-2021	11	SqFt	\$2.44	\$27
MARYKNO	841	L & T CR	Medium	153	Ft	0.97	Crack Sealing - AC	Residential	AC	24	655	06-03-2021	153	Ft	\$1.65	\$252
MARYKNO	841	L & T CR	High	3	Ft	0.02	Patching - AC Shallow	Residential	AC	24	655	06-03-2021	11	SqFt	\$2.44	\$27
MARYKNO	841	ALLIGATOR CR	High	20	SqFt	0.13	Patching - AC Deep	Residential	AC	24	655	06-03-2021	42	SqFt	\$6.16	\$256
MayaCt	928	RUTTING	Medium	16	SqFt	0.16	Patching - AC Shallow	Residential	AC	20	487	06-03-2021	16	SqFt	\$2.44	\$38
MayaCt	928	RUTTING	High	23	SqFt	0.24	Patching - AC Deep	Residential	AC	20	487	06-03-2021	24	SqFt	\$6.16	\$145
MayaCt	928	L & T CR	Medium	9	Ft	0.09	Crack Sealing - AC	Residential	AC	20	487	06-03-2021	9	Ft	\$1.65	\$14
MayAve	240	L & T CR	High	3	Ft	0.03	Patching - AC Shallow	Residential	AC	24	395	06-03-2021	11	SqFt	\$2.44	\$26
MayAve	240	ALLIGATOR CR	Medium	36	SqFt	0.38	Patching - AC Deep	Residential	AC	24	395	06-03-2021	65	SqFt	\$6.16	\$398
MayAve	240	L & T CR	Medium	92	Ft	0.97	Crack Sealing - AC	Residential	AC	24	395	06-03-2021	92	Ft	\$1.65	\$152
MayAve	240	POTHOLE	Low	9	Count	0.09	Patching - AC Deep	Residential	AC	24	395	06-03-2021	26	SqFt	\$6.16	\$162
MayAve	242	RUTTING	High	28	SqFt	0.19	Patching - AC Shallow	Residential	AC	24	603	06-03-2021	28	SqFt	\$2.44	\$68
MayAve	245	L & T CR	Medium	218	Ft	8.28	Crack Sealing - AC	Residential	AC	24	110	06-03-2021	218	Ft	\$1.65	\$359
McCreedyAve	228	L & T CR	Medium	2	Ft	0.02	Crack Sealing - AC	Residential	AC	20	444	06-03-2021	2	Ft	\$1.65	\$4
McCreedyAve	229	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	428	06-03-2021	1	SqFt	\$2.44	\$2
MELROSE	456	RUTTING	High	231	SqFt	1.89	Patching - AC Shallow	Residential	AC	24	510	06-03-2021	230	SqFt	\$2.44	\$563
MENORYCt	633	RUTTING	High	9	SqFt	0.23	Patching - AC Shallow	Residential	AC	20	186	06-03-2021	9	SqFt	\$2.44	\$21
MEREDITH	789	RUTTING	High	90	SqFt	1.16	Patching - AC Shallow	Residential	AC	20	389	06-03-2021	90	SqFt	\$2.44	\$219
MERTONA	330	ALLIGATOR CR	Medium	10	SqFt	0.05	Patching - AC Deep	Residential	AC	24	735	06-03-2021	26	SqFt	\$6.16	\$160
MERTONA	330	L & T CR	High	6	Ft	0.03	Patching - AC Shallow	Residential	AC	24	735	06-03-2021	18	SqFt	\$2.44	\$44
MERTONA	330	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	735	06-03-2021	9	SqFt	\$6.16	\$53
MERTONA	330	L & T CR	Medium	46	Ft	0.26	Crack Sealing - AC	Residential	AC	24	735	06-03-2021	46	Ft	\$1.65	\$76
MERTONA	330	RUTTING	Medium	19	SqFt	0.11	Patching - AC Shallow	Residential	AC	24	735	06-03-2021	19	SqFt	\$2.44	\$47
MERTONA	331	L & T CR	High	45	Ft	0.27	Patching - AC Shallow	Residential	AC	20	840	06-03-2021	149	SqFt	\$2.44	\$363
MERTONA	331	RUTTING	High	15	SqFt	0.09	Patching - AC Deep	Residential	AC	20	840	06-03-2021	15	SqFt	\$6.16	\$93
MERTONA	331	L & T CR	Medium	214	Ft	1.28	Crack Sealing - AC	Residential	AC	20	840	06-03-2021	215	Ft	\$1.65	\$354

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
MERTONA	331	RUTTING	Medium	53	SqFt	0.32	Patching - AC Shallow	Residential	AC	20	840	06-03-2021	53	SqFt	\$2.44	\$130
MERTONA	332	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	518	06-03-2021	8	SqFt	\$2.44	\$19
MERTONA	332	L & T CR	Medium	191	Ft	1.85	Crack Sealing - AC	Residential	AC	20	518	06-03-2021	191	Ft	\$1.65	\$315
MERTONA	332	L & T CR	High	11	Ft	0.10	Patching - AC Shallow	Residential	AC	20	518	06-03-2021	34	SqFt	\$2.44	\$84
MERTONA	332	RUTTING	High	48	SqFt	0.46	Patching - AC Deep	Residential	AC	20	518	06-03-2021	48	SqFt	\$6.16	\$295
MillerCt	455	RUTTING	High	194	SqFt	1.78	Patching - AC Shallow	Residential	AC	20	544	06-03-2021	194	SqFt	\$2.44	\$473
MILTONAV	333	L & T CR	Medium	11	Ft	0.18	Crack Sealing - AC	Residential	AC	24	256	06-03-2021	11	Ft	\$1.65	\$18
MILTONAV	333	RUTTING	High	9	SqFt	0.15	Patching - AC Deep	Residential	AC	24	256	06-03-2021	10	SqFt	\$6.16	\$58
MILTONAV	333	RUTTING	Medium	9	SqFt	0.15	Patching - AC Shallow	Residential	AC	24	256	06-03-2021	10	SqFt	\$2.44	\$23
MILTONAV	335	RUTTING	Medium	138	SqFt	0.53	Patching - AC Shallow	Residential	AC	20	1295	06-03-2021	138	SqFt	\$2.44	\$337
MILTONAV	335	ALLIGATOR CR	High	2	SqFt	0.01	Patching - AC Deep	Residential	AC	20	1295	06-03-2021	13	SqFt	\$6.16	\$78
MILTONAV	335	RUTTING	High	8	SqFt	0.03	Patching - AC Deep	Residential	AC	20	1295	06-03-2021	8	SqFt	\$6.16	\$48
MILTONAV	335	L & T CR	High	17	Ft	0.06	Patching - AC Shallow	Residential	AC	20	1295	06-03-2021	55	SqFt	\$2.44	\$134
MILTONAV	335	L & T CR	Medium	832	Ft	3.21	Crack Sealing - AC	Residential	AC	20	1295	06-03-2021	832	Ft	\$1.65	\$1,373
MiltonAve	896	L & T CR	High	4	Ft	0.09	Patching - AC Shallow	Residential	AC	20	208	06-03-2021	12	SqFt	\$2.44	\$30
MontclairA	336	L & T CR	High	3	Ft	0.07	Patching - AC Shallow	Residential	AC	24	198	06-03-2021	11	SqFt	\$2.44	\$26
MontclairA	336	RUTTING	High	59	SqFt	1.23	Patching - AC Deep	Residential	AC	24	198	06-03-2021	58	SqFt	\$6.16	\$361
MontclairA	336	L & T CR	Medium	59	Ft	1.25	Crack Sealing - AC	Residential	AC	24	198	06-03-2021	59	Ft	\$1.65	\$98
MontclairA	337	L & T CR	Medium	270	Ft	2.13	Crack Sealing - AC	Residential	AC	24	528	06-03-2021	270	Ft	\$1.65	\$446
MontclairA	337	L & T CR	High	133	Ft	1.05	Patching - AC Shallow	Residential	AC	24	528	06-03-2021	435	SqFt	\$2.44	\$1,062
MontclairA	337	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	528	06-03-2021	10	SqFt	\$2.44	\$23
MontclairA	338	RUTTING	High	187	SqFt	1.66	Patching - AC Shallow	Residential	AC	24	471	06-03-2021	187	SqFt	\$2.44	\$457
MontclairA	339	RUTTING	High	27	SqFt	0.22	Patching - AC Shallow	Residential	AC	24	512	06-03-2021	27	SqFt	\$2.44	\$67
MontclairA	340	RUTTING	High	106	SqFt	0.65	Patching - AC Shallow	Residential	AC	20	820	06-03-2021	107	SqFt	\$2.44	\$259
MontclairA	341	RUTTING	High	88	SqFt	0.78	Patching - AC Shallow	Residential	AC	20	563	06-03-2021	88	SqFt	\$2.44	\$215
MontclairA	342	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	536	06-03-2021	9	SqFt	\$6.16	\$51
MontclairA	342	L & T CR	Medium	61	Ft	0.48	Crack Sealing - AC	Residential	AC	24	536	06-03-2021	61	Ft	\$1.65	\$101
MontclairA	342	L & T CR	High	6	Ft	0.05	Patching - AC Shallow	Residential	AC	24	536	06-03-2021	20	SqFt	\$2.44	\$51
MontclairA	343	L & T CR	Medium	218	Ft	2.86	Crack Sealing - AC	Residential	AC	24	317	06-03-2021	218	Ft	\$1.65	\$359
MontclairA	343	POTHOLE	Low	3	Count	0.04	Patching - AC Deep	Residential	AC	24	317	06-03-2021	9	SqFt	\$6.16	\$52
MontclairA	343	L & T CR	High	63	Ft	0.83	Patching - AC Shallow	Residential	AC	24	317	06-03-2021	207	SqFt	\$2.44	\$505
MontclairA	344	RUTTING	High	29	SqFt	0.43	Patching - AC Shallow	Residential	AC	24	282	06-03-2021	29	SqFt	\$2.44	\$71
MONTCLA	869	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	311	06-03-2021	0	SqFt	\$2.44	\$0
MONTCLA	869	L & T CR	Medium	42	Ft	0.68	Crack Sealing - AC	Residential	AC	20	311	06-03-2021	42	Ft	\$1.65	\$70
MONTCLA	870	L & T CR	Medium	16	Ft	0.12	Crack Sealing - AC	Residential	AC	20	658	06-03-2021	16	Ft	\$1.65	\$27
MONTCLA	870	RUTTING	Medium	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	9	SqFt	\$2.44	\$20
MONTCLA	870	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	20	658	06-03-2021	8	SqFt	\$2.44	\$20
MONTCLA	871	RUTTING	Medium	8	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	315	06-03-2021	8	SqFt	\$2.44	\$19

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
MONTCLA	871	L & T CR	Medium	45	Ft	0.72	Crack Sealing - AC	Residential	AC	20	315	06-03-2021	45	Ft	\$1.65	\$75
MUIRWOC	791	L & T CR	Medium	26	Ft	0.59	Crack Sealing - AC	Residential	AC	20	218	06-03-2021	26	Ft	\$1.65	\$42
MUIRWOC	791	RUTTING	High	9	SqFt	0.21	Patching - AC Deep	Residential	AC	20	218	06-03-2021	9	SqFt	\$6.16	\$55
MUIRWOC	791	RUTTING	Medium	9	SqFt	0.21	Patching - AC Shallow	Residential	AC	20	218	06-03-2021	9	SqFt	\$2.44	\$22
NEWTONA	483	L & T CR	High	18	Ft	0.21	Patching - AC Shallow	Residential	AC	24	360	06-03-2021	59	SqFt	\$2.44	\$145
NEWTONA	483	L & T CR	Medium	27	Ft	0.31	Crack Sealing - AC	Residential	AC	24	360	06-03-2021	27	Ft	\$1.65	\$44
NEWTONA	483	RUTTING	Medium	11	SqFt	0.12	Patching - AC Shallow	Residential	AC	24	360	06-03-2021	11	SqFt	\$2.44	\$26
NewtonAv	473	RUTTING	High	95	SqFt	0.72	Patching - AC Shallow	Residential	AC	20	662	06-03-2021	95	SqFt	\$2.44	\$232
NewtonAv	474	RUTTING	High	84	SqFt	0.60	Patching - AC Shallow	Residential	AC	20	702	06-03-2021	84	SqFt	\$2.44	\$205
NewtonAv	475	L & T CR	Medium	201	Ft	3.03	Crack Sealing - AC	Residential	AC	20	331	06-03-2021	201	Ft	\$1.65	\$331
NewtonAv	475	L & T CR	High	6	Ft	0.10	Patching - AC Shallow	Residential	AC	20	331	06-03-2021	22	SqFt	\$2.44	\$51
NewtonAv	475	RUTTING	Medium	8	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	331	06-03-2021	9	SqFt	\$2.44	\$20
NewtonAv	476	RUTTING	Medium	8	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	375	06-03-2021	8	SqFt	\$2.44	\$19
NewtonAv	476	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	20	375	06-03-2021	5	SqFt	\$2.44	\$14
NewtonAv	476	L & T CR	Medium	62	Ft	0.82	Crack Sealing - AC	Residential	AC	20	375	06-03-2021	62	Ft	\$1.65	\$102
NewtonAv	476	RUTTING	High	54	SqFt	0.72	Patching - AC Deep	Residential	AC	20	375	06-03-2021	54	SqFt	\$6.16	\$333
NewtonAv	477	ALLIGATOR CR	Medium	5	SqFt	0.15	Patching - AC Deep	Residential	AC	20	184	06-03-2021	19	SqFt	\$6.16	\$117
NewtonAv	477	L & T CR	High	2	Ft	0.04	Patching - AC Shallow	Residential	AC	20	184	06-03-2021	5	SqFt	\$2.44	\$13
NewtonAv	477	RUTTING	Medium	9	SqFt	0.23	Patching - AC Shallow	Residential	AC	20	184	06-03-2021	9	SqFt	\$2.44	\$21
NewtonAv	477	L & T CR	Medium	198	Ft	5.37	Crack Sealing - AC	Residential	AC	20	184	06-03-2021	198	Ft	\$1.65	\$327
NewtonAv	479	ALLIGATOR CR	Medium	16	SqFt	0.30	Patching - AC Deep	Residential	AC	24	218	06-03-2021	36	SqFt	\$6.16	\$218
NewtonAv	479	RUTTING	Medium	29	SqFt	0.56	Patching - AC Shallow	Residential	AC	24	218	06-03-2021	29	SqFt	\$2.44	\$71
NewtonAv	479	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	218	06-03-2021	2	SqFt	\$2.44	\$4
NewtonAv	479	L & T CR	Medium	32	Ft	0.61	Crack Sealing - AC	Residential	AC	24	218	06-03-2021	32	Ft	\$1.65	\$53
NewtonAv	480	RUTTING	High	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	759	06-03-2021	10	SqFt	\$2.44	\$23
NewtonAv	481	RUTTING	High	83	SqFt	1.16	Patching - AC Shallow	Residential	AC	20	358	06-03-2021	83	SqFt	\$2.44	\$203
NewtonAv	482	L & T CR	Medium	256	Ft	1.44	Crack Sealing - AC	Residential	AC	20	890	06-03-2021	256	Ft	\$1.65	\$422
NewtonAv	482	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	890	06-03-2021	6	SqFt	\$6.16	\$43
NewtonAv	482	RUTTING	High	8	SqFt	0.04	Patching - AC Deep	Residential	AC	20	890	06-03-2021	8	SqFt	\$6.16	\$47
NewtonAv	482	ALLIGATOR CR	Medium	54	SqFt	0.30	Patching - AC Deep	Residential	AC	20	890	06-03-2021	87	SqFt	\$6.16	\$539
NewtonAv	482	RUTTING	Medium	98	SqFt	0.55	Patching - AC Shallow	Residential	AC	20	890	06-03-2021	99	SqFt	\$2.44	\$240
NewtonAv	482	L & T CR	High	65	Ft	0.37	Patching - AC Shallow	Residential	AC	20	890	06-03-2021	213	SqFt	\$2.44	\$520
NewtonAv	862	RUTTING	High	66	SqFt	1.23	Patching - AC Shallow	Residential	AC	26	205	06-03-2021	66	SqFt	\$2.44	\$161
NewtonAv	863	L & T CR	Medium	53	Ft	0.37	Crack Sealing - AC	Residential	AC	26	550	06-03-2021	53	Ft	\$1.65	\$87
NICOLLAV	324	RUTTING	Medium	11	SqFt	0.17	Patching - AC Shallow	Residential	AC	24	277	06-03-2021	11	SqFt	\$2.44	\$27
NICOLLAV	325	RUTTING	Medium	79	SqFt	0.23	Patching - AC Shallow	Residential	AC	34	1005	06-03-2021	79	SqFt	\$2.44	\$192
NICOLLAV	325	ALLIGATOR CR	Medium	10	SqFt	0.03	Patching - AC Deep	Residential	AC	34	1005	06-03-2021	27	SqFt	\$6.16	\$163
NICOLLAV	325	L & T CR	High	46	Ft	0.13	Patching - AC Shallow	Residential	AC	34	1005	06-03-2021	151	SqFt	\$2.44	\$367

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
NICOLLAV	325	L & T CR	Medium	318	Ft	0.93	Crack Sealing - AC	Residential	AC	34	1005	06-03-2021	318	Ft	\$1.65	\$525
NICOLLAV	325	RUTTING	High	27	SqFt	0.08	Patching - AC Deep	Residential	AC	34	1005	06-03-2021	27	SqFt	\$6.16	\$166
NICOLLAV	326	L & T CR	High	5	Ft	0.06	Patching - AC Shallow	Residential	AC	24	360	06-03-2021	16	SqFt	\$2.44	\$40
NICOLLAV	326	L & T CR	Medium	78	Ft	0.90	Crack Sealing - AC	Residential	AC	24	360	06-03-2021	78	Ft	\$1.65	\$129
NICOLLAV	327	RUTTING	Medium	16	SqFt	0.08	Patching - AC Shallow	Residential	AC	24	823	06-03-2021	16	SqFt	\$2.44	\$39
NICOLLAV	327	POTHOLE	Low	10	Count	0.05	Patching - AC Deep	Residential	AC	24	823	06-03-2021	29	SqFt	\$6.16	\$176
NICOLLAV	327	L & T CR	Medium	233	Ft	1.18	Crack Sealing - AC	Residential	AC	24	823	06-03-2021	233	Ft	\$1.65	\$385
NICOLLAV	327	L & T CR	High	15	Ft	0.08	Patching - AC Shallow	Residential	AC	24	823	06-03-2021	50	SqFt	\$2.44	\$121
NicollWay	931	POTHOLE	Low	8	Count	0.07	Patching - AC Deep	Residential	AC	32	330	06-03-2021	24	SqFt	\$6.16	\$144
NicollWay	931	L & T CR	High	24	Ft	0.23	Patching - AC Shallow	Residential	AC	32	330	06-03-2021	80	SqFt	\$2.44	\$194
NicollWay	931	RUTTING	Medium	26	SqFt	0.25	Patching - AC Shallow	Residential	AC	32	330	06-03-2021	26	SqFt	\$2.44	\$63
NicollWay	931	L & T CR	Medium	101	Ft	0.96	Crack Sealing - AC	Residential	AC	32	330	06-03-2021	101	Ft	\$1.65	\$167
NicollWay	932	RUTTING	Medium	12	SqFt	0.09	Patching - AC Shallow	Residential	AC	32	413	06-03-2021	12	SqFt	\$2.44	\$30
NicollWay	932	L & T CR	High	21	Ft	0.16	Patching - AC Shallow	Residential	AC	32	413	06-03-2021	70	SqFt	\$2.44	\$172
NicollWay	932	RUTTING	High	12	SqFt	0.09	Patching - AC Deep	Residential	AC	32	413	06-03-2021	12	SqFt	\$6.16	\$75
NicollWay	932	L & T CR	Medium	142	Ft	1.07	Crack Sealing - AC	Residential	AC	32	413	06-03-2021	141	Ft	\$1.65	\$234
NicollWay	932	POTHOLE	Low	7	Count	0.06	Patching - AC Deep	Residential	AC	32	413	06-03-2021	22	SqFt	\$6.16	\$136
NicollWay	933	RUTTING	Medium	70	SqFt	0.31	Patching - AC Shallow	Residential	AC	32	700	06-03-2021	70	SqFt	\$2.44	\$170
NicollWay	933	POTHOLE	Low	7	Count	0.03	Patching - AC Deep	Residential	AC	32	700	06-03-2021	22	SqFt	\$6.16	\$135
NicollWay	933	L & T CR	Medium	553	Ft	2.47	Crack Sealing - AC	Residential	AC	32	700	06-03-2021	553	Ft	\$1.65	\$913
NicollWay	933	L & T CR	High	93	Ft	0.42	Patching - AC Shallow	Residential	AC	32	700	06-03-2021	305	SqFt	\$2.44	\$745
NicollWay	933	ALLIGATOR CR	Medium	124	SqFt	0.56	Patching - AC Deep	Residential	AC	32	700	06-03-2021	173	SqFt	\$6.16	\$1,068
OakSt	761	RUTTING	High	595	SqFt	1.70	Patching - AC Shallow	Residential	AC	20	1746	06-03-2021	595	SqFt	\$2.44	\$1,451
OakSt	762	RUTTING	High	108	SqFt	1.38	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	109	SqFt	\$2.44	\$264
OakSt	763	RUTTING	High	68	SqFt	0.88	Patching - AC Shallow	Residential	AC	20	388	06-03-2021	68	SqFt	\$2.44	\$166
OakSt	764	L & T CR	Medium	64	Ft	0.81	Crack Sealing - AC	Residential	AC	20	391	06-03-2021	64	Ft	\$1.65	\$105
OakSt	764	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	391	06-03-2021	8	SqFt	\$6.16	\$45
OakSt	764	RUTTING	Medium	8	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	8	SqFt	\$2.44	\$20
OakSt	766	RUTTING	High	23	SqFt	0.31	Patching - AC Deep	Residential	AC	20	379	06-03-2021	24	SqFt	\$6.16	\$144
OakSt	766	L & T CR	High	48	Ft	0.63	Patching - AC Shallow	Residential	AC	20	379	06-03-2021	157	SqFt	\$2.44	\$383
OakSt	766	RUTTING	Medium	23	SqFt	0.31	Patching - AC Shallow	Residential	AC	20	379	06-03-2021	24	SqFt	\$2.44	\$57
OakSt	766	L & T CR	Medium	36	Ft	0.47	Crack Sealing - AC	Residential	AC	20	379	06-03-2021	36	Ft	\$1.65	\$59
OakSt	769	L & T CR	High	90	Ft	0.77	Patching - AC Shallow	Residential	AC	20	586	06-03-2021	296	SqFt	\$2.44	\$722
OakSt	769	L & T CR	Medium	215	Ft	1.84	Crack Sealing - AC	Residential	AC	20	586	06-03-2021	215	Ft	\$1.65	\$355
OakSt	770	LINEAR CR	Medium	2	Slabs	5.00	Crack Sealing - PCC	Residential	PCC	20	272	06-03-2021	25	Ft	\$1.65	\$41
OrchardLn	909	RUTTING	Medium	19	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	1530	06-03-2021	18	SqFt	\$2.44	\$45
OrchardLn	909	L & T CR	Medium	5	Ft	0.01	Crack Sealing - AC	Residential	AC	24	1530	06-03-2021	5	Ft	\$1.65	\$8
OrchardLn	909	L & T CR	High	50	Ft	0.14	Patching - AC Shallow	Residential	AC	24	1530	06-03-2021	164	SqFt	\$2.44	\$400

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
OrchardLn	909	RUTTING	High	9	SqFt	0.03	Patching - AC Deep	Residential	AC	24	1530	06-03-2021	10	SqFt	\$6.16	\$57
OttAve	235	L & T CR	Medium	8	Ft	0.09	Crack Sealing - AC	Residential	AC	20	476	06-03-2021	9	Ft	\$1.65	\$14
OXFORDRD	590	RUTTING	High	42	SqFt	0.51	Patching - AC Shallow	Residential	AC	20	410	06-03-2021	42	SqFt	\$2.44	\$103
OXFORDRD	591	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	388	06-03-2021	6	SqFt	\$6.16	\$42
OXFORDRD	591	RUTTING	High	15	SqFt	0.19	Patching - AC Deep	Residential	AC	20	388	06-03-2021	15	SqFt	\$6.16	\$93
OXFORDRD	591	L & T CR	Medium	97	Ft	1.25	Crack Sealing - AC	Residential	AC	20	388	06-03-2021	97	Ft	\$1.65	\$161
OXFORDRD	591	L & T CR	High	138	Ft	1.78	Patching - AC Shallow	Residential	AC	20	388	06-03-2021	454	SqFt	\$2.44	\$1,108
OXFORDRD	591	ALLIGATOR CR	Medium	24	SqFt	0.31	Patching - AC Deep	Residential	AC	20	388	06-03-2021	47	SqFt	\$6.16	\$292
OXFORDRD	592	RUTTING	High	81	SqFt	1.16	Patching - AC Shallow	Residential	AC	20	348	06-03-2021	81	SqFt	\$2.44	\$197
ParkBlvd	085	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Collector	AC	42	340	06-03-2021	8	SqFt	\$6.16	\$47
ParkBlvd	085	RUTTING	High	7	SqFt	0.05	Patching - AC Deep	Collector	AC	42	340	06-03-2021	8	SqFt	\$6.16	\$45
ParkBlvd	085	L & T CR	Medium	152	Ft	1.06	Crack Sealing - AC	Collector	AC	42	340	06-03-2021	152	Ft	\$1.65	\$250
ParkBlvd	085	RUTTING	Medium	32	SqFt	0.22	Patching - AC Shallow	Collector	AC	42	340	06-03-2021	31	SqFt	\$2.44	\$77
ParkBlvd	085	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Collector	AC	42	340	06-03-2021	3	SqFt	\$2.44	\$9
ParkBlvd	086	RUTTING	High	39	SqFt	0.23	Patching - AC Deep	Collector	AC	42	416	06-03-2021	40	SqFt	\$6.16	\$243
ParkBlvd	086	RUTTING	Medium	8	SqFt	0.05	Patching - AC Shallow	Collector	AC	42	416	06-03-2021	8	SqFt	\$2.44	\$19
ParkBlvd	086	L & T CR	High	3	Ft	0.02	Patching - AC Shallow	Collector	AC	42	416	06-03-2021	10	SqFt	\$2.44	\$22
ParkBlvd	086	L & T CR	Medium	124	Ft	0.71	Crack Sealing - AC	Collector	AC	42	416	06-03-2021	124	Ft	\$1.65	\$204
ParkBlvd	087	RUTTING	High	126	SqFt	0.90	Patching - AC Deep	Collector	AC	42	335	06-03-2021	126	SqFt	\$6.16	\$779
ParkBlvd	087	L & T CR	Medium	42	Ft	0.30	Crack Sealing - AC	Collector	AC	42	335	06-03-2021	42	Ft	\$1.65	\$69
ParkBlvd	087	RUTTING	Medium	87	SqFt	0.62	Patching - AC Shallow	Collector	AC	42	335	06-03-2021	87	SqFt	\$2.44	\$212
ParkBlvd	090	L & T CR	Medium	118	Ft	1.50	Crack Sealing - AC	Collector	AC	42	187	06-03-2021	118	Ft	\$1.65	\$195
ParkBlvd	090	RUTTING	High	46	SqFt	0.58	Patching - AC Deep	Collector	AC	42	187	06-03-2021	46	SqFt	\$6.16	\$283
ParkBlvd	090	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Collector	AC	42	187	06-03-2021	2	SqFt	\$2.44	\$6
ParkBlvd	091	RUTTING	High	7	SqFt	0.04	Patching - AC Deep	Collector	AC	42	364	06-03-2021	6	SqFt	\$6.16	\$42
ParkBlvd	091	L & T CR	High	2	Ft	0.01	Patching - AC Shallow	Collector	AC	42	364	06-03-2021	8	SqFt	\$2.44	\$18
ParkBlvd	091	L & T CR	Medium	180	Ft	1.18	Crack Sealing - AC	Collector	AC	42	364	06-03-2021	180	Ft	\$1.65	\$297
ParkBlvd	091	RUTTING	Medium	20	SqFt	0.13	Patching - AC Shallow	Collector	AC	42	364	06-03-2021	20	SqFt	\$2.44	\$49
ParkBlvd	092	L & T CR	Medium	40	Ft	0.26	Crack Sealing - AC	Collector	AC	42	368	06-03-2021	40	Ft	\$1.65	\$66
ParkBlvd	092	RUTTING	High	8	SqFt	0.05	Patching - AC Deep	Collector	AC	42	368	06-03-2021	9	SqFt	\$6.16	\$50
ParkBlvd	092	RUTTING	Medium	17	SqFt	0.11	Patching - AC Shallow	Collector	AC	42	368	06-03-2021	17	SqFt	\$2.44	\$43
ParkBlvd	093	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Collector	AC	42	318	06-03-2021	8	SqFt	\$6.16	\$44
ParkBlvd	093	L & T CR	Medium	110	Ft	0.83	Crack Sealing - AC	Collector	AC	42	318	06-03-2021	110	Ft	\$1.65	\$182
ParkBlvd	093	RUTTING	Medium	30	SqFt	0.22	Patching - AC Shallow	Collector	AC	42	318	06-03-2021	29	SqFt	\$2.44	\$72
ParkBlvd	094	RUTTING	Medium	52	SqFt	0.10	Patching - AC Shallow	Collector	AC	42	1258	06-03-2021	52	SqFt	\$2.44	\$126
ParkBlvd	094	L & T CR	High	12	Ft	0.02	Patching - AC Shallow	Collector	AC	42	1258	06-03-2021	39	SqFt	\$2.44	\$94
ParkBlvd	094	L & T CR	Medium	92	Ft	0.17	Crack Sealing - AC	Collector	AC	42	1258	06-03-2021	92	Ft	\$1.65	\$152
ParkBlvd	094	RUTTING	High	152	SqFt	0.29	Patching - AC Deep	Collector	AC	42	1258	06-03-2021	152	SqFt	\$6.16	\$935

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
ParkBlvd	095	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Collector	AC	42	347	06-03-2021	8	SqFt	\$6.16	\$45
ParkBlvd	095	L & T CR	Medium	66	Ft	0.45	Crack Sealing - AC	Collector	AC	42	347	06-03-2021	66	Ft	\$1.65	\$108
ParkBlvd	095	RUTTING	Medium	66	SqFt	0.45	Patching - AC Shallow	Collector	AC	42	347	06-03-2021	66	SqFt	\$2.44	\$160
ParkBlvd	096	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Collector	AC	42	625	06-03-2021	6	SqFt	\$6.16	\$42
ParkBlvd	096	L & T CR	Medium	152	Ft	0.58	Crack Sealing - AC	Collector	AC	42	625	06-03-2021	152	Ft	\$1.65	\$251
ParkBlvd	096	L & T CR	High	4	Ft	0.01	Patching - AC Shallow	Collector	AC	42	625	06-03-2021	12	SqFt	\$2.44	\$29
ParkBlvd	096	RUTTING	Medium	30	SqFt	0.12	Patching - AC Shallow	Collector	AC	42	625	06-03-2021	30	SqFt	\$2.44	\$74
ParkBlvd	098	RUTTING	Medium	20	SqFt	0.09	Patching - AC Shallow	Collector	AC	26	817	06-03-2021	19	SqFt	\$2.44	\$48
ParkBlvd	099	RUTTING	High	203	SqFt	1.42	Patching - AC Shallow	Collector	AC	26	547	06-03-2021	202	SqFt	\$2.44	\$495
ParkBlvd	100	L & T CR	Medium	467	Ft	3.41	Crack Sealing - AC	Collector	AC	26	526	06-03-2021	467	Ft	\$1.65	\$771
ParkBlvd	100	L & T CR	High	32	Ft	0.24	Patching - AC Shallow	Collector	AC	26	526	06-03-2021	107	SqFt	\$2.44	\$260
ParkBlvd	101	L & T CR	High	277	Ft	1.38	Patching - AC Shallow	Collector	AC	26	772	06-03-2021	908	SqFt	\$2.44	\$2,216
ParkBlvd	101	RUTTING	High	117	SqFt	0.58	Patching - AC Deep	Collector	AC	26	772	06-03-2021	117	SqFt	\$6.16	\$723
ParkBlvd	101	RUTTING	Medium	59	SqFt	0.29	Patching - AC Shallow	Collector	AC	26	772	06-03-2021	58	SqFt	\$2.44	\$143
ParkBlvd	101	L & T CR	Medium	9	Ft	0.04	Crack Sealing - AC	Collector	AC	26	772	06-03-2021	9	Ft	\$1.65	\$14
ParkBlvd	102	RUTTING	High	30	SqFt	0.19	Patching - AC Shallow	Collector	AC	26	628	06-03-2021	30	SqFt	\$2.44	\$74
ParkBlvd	103	L & T CR	High	147	Ft	1.32	Patching - AC Shallow	Collector	AC	26	429	06-03-2021	482	SqFt	\$2.44	\$1,177
ParkBlvd	103	L & T CR	Medium	94	Ft	0.84	Crack Sealing - AC	Collector	AC	26	429	06-03-2021	94	Ft	\$1.65	\$155
ParkBlvd	104	L & T CR	Medium	219	Ft	3.99	Crack Sealing - AC	Collector	AC	26	211	06-03-2021	219	Ft	\$1.65	\$361
ParkBlvd	104	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Collector	AC	26	211	06-03-2021	1	SqFt	\$2.44	\$2
ParkBlvd	105	L & T CR	High	42	Ft	0.28	Patching - AC Shallow	Collector	AC	26	579	06-03-2021	138	SqFt	\$2.44	\$335
ParkBlvd	105	L & T CR	Medium	57	Ft	0.38	Crack Sealing - AC	Collector	AC	26	579	06-03-2021	57	Ft	\$1.65	\$94
ParkBlvd	107	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Collector	AC	26	385	06-03-2021	2	SqFt	\$2.44	\$6
ParkBlvd	107	L & T CR	Medium	203	Ft	2.03	Crack Sealing - AC	Collector	AC	26	385	06-03-2021	203	Ft	\$1.65	\$335
ParkBlvd	109	L & T CR	Medium	10	Ft	0.09	Crack Sealing - AC	Collector	AC	26	424	06-03-2021	10	Ft	\$1.65	\$16
ParkBlvd	110	L & T CR	High	61	Ft	0.70	Patching - AC Shallow	Collector	AC	26	338	06-03-2021	201	SqFt	\$2.44	\$491
ParkBlvd	110	RUTTING	Medium	20	SqFt	0.23	Patching - AC Shallow	Collector	AC	26	338	06-03-2021	20	SqFt	\$2.44	\$50
ParkBlvd	110	RUTTING	High	30	SqFt	0.35	Patching - AC Deep	Collector	AC	26	338	06-03-2021	30	SqFt	\$6.16	\$188
ParkBlvd	110	L & T CR	Medium	2	Ft	0.02	Crack Sealing - AC	Collector	AC	26	338	06-03-2021	2	Ft	\$1.65	\$3
ParkBlvd	110	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Collector	AC	26	338	06-03-2021	10	SqFt	\$6.16	\$56
PARKBLVD	362	RUTTING	High	62	SqFt	0.45	Patching - AC Deep	Residential	AC	20	696	06-03-2021	62	SqFt	\$6.16	\$385
PARKBLVD	362	RUTTING	Medium	16	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	696	06-03-2021	15	SqFt	\$2.44	\$38
PARKBLVD	362	L & T CR	Medium	247	Ft	1.78	Crack Sealing - AC	Residential	AC	20	696	06-03-2021	247	Ft	\$1.65	\$408
PARKBLVD	363	L & T CR	High	27	Ft	0.17	Patching - AC Shallow	Residential	AC	20	773	06-03-2021	88	SqFt	\$2.44	\$215
PARKBLVD	363	L & T CR	Medium	197	Ft	1.27	Crack Sealing - AC	Residential	AC	20	773	06-03-2021	197	Ft	\$1.65	\$325
PARKBLVD	363	POTHOLE	Low	2	Count	0.01	Patching - AC Deep	Residential	AC	20	773	06-03-2021	6	SqFt	\$6.16	\$42
PARKBLVD	363	RUTTING	High	53	SqFt	0.34	Patching - AC Deep	Residential	AC	20	773	06-03-2021	53	SqFt	\$6.16	\$325
PARKBLVD	363	RUTTING	Medium	30	SqFt	0.19	Patching - AC Shallow	Residential	AC	20	773	06-03-2021	30	SqFt	\$2.44	\$73

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
PARKBLVD	364	RUTTING	Medium	8	SqFt	0.06	Patching - AC Shallow	Residential	AC	20	680	06-03-2021	8	SqFt	\$2.44	\$19
PARKBLVD	364	ALLIGATOR CR	High	9	SqFt	0.07	Patching - AC Deep	Residential	AC	20	680	06-03-2021	25	SqFt	\$6.16	\$156
PARKBLVD	364	POTHOLE	Low	5	Count	0.03	Patching - AC Deep	Residential	AC	20	680	06-03-2021	14	SqFt	\$6.16	\$85
PARKBLVD	364	RUTTING	High	46	SqFt	0.34	Patching - AC Deep	Residential	AC	20	680	06-03-2021	45	SqFt	\$6.16	\$282
PARKBLVD	364	L & T CR	High	83	Ft	0.61	Patching - AC Shallow	Residential	AC	20	680	06-03-2021	272	SqFt	\$2.44	\$664
PARKBLVD	364	ALLIGATOR CR	Medium	16	SqFt	0.12	Patching - AC Deep	Residential	AC	20	680	06-03-2021	36	SqFt	\$6.16	\$220
PARKBLVD	364	L & T CR	Medium	377	Ft	2.77	Crack Sealing - AC	Residential	AC	20	680	06-03-2021	377	Ft	\$1.65	\$622
PARKBLVD	365	RUTTING	High	23	SqFt	0.16	Patching - AC Deep	Residential	AC	20	703	06-03-2021	23	SqFt	\$6.16	\$141
PARKBLVD	365	L & T CR	Medium	116	Ft	0.83	Crack Sealing - AC	Residential	AC	20	703	06-03-2021	116	Ft	\$1.65	\$192
PARKBLVD	365	L & T CR	High	54	Ft	0.38	Patching - AC Shallow	Residential	AC	20	703	06-03-2021	175	SqFt	\$2.44	\$429
PARKBLVD	365	RUTTING	Medium	46	SqFt	0.33	Patching - AC Shallow	Residential	AC	20	703	06-03-2021	46	SqFt	\$2.44	\$112
ParkBlvd	366	RUTTING	High	75	SqFt	1.23	Patching - AC Shallow	Residential	AC	20	303	06-03-2021	74	SqFt	\$2.44	\$182
ParkBlvd	367	RUTTING	High	53	SqFt	0.93	Patching - AC Deep	Residential	AC	26	219	06-03-2021	53	SqFt	\$6.16	\$325
ParkBlvd	367	L & T CR	Medium	55	Ft	0.96	Crack Sealing - AC	Residential	AC	26	219	06-03-2021	55	Ft	\$1.65	\$91
ParkBlvd	367	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	26	219	06-03-2021	0	SqFt	\$2.44	\$1
ParkBlvd	368	L & T CR	Medium	1	Ft	0.05	Crack Sealing - AC	Residential	AC	26	121	06-03-2021	1	Ft	\$1.65	\$2
ParkBlvd	369	RUTTING	High	346	SqFt	3.03	Patching - AC Shallow	Residential	AC	20	571	06-03-2021	347	SqFt	\$2.44	\$845
PARKPLAZA	518	L & T CR	Medium	100	Ft	0.72	Crack Sealing - AC	Residential	AC	20	697	06-03-2021	100	Ft	\$1.65	\$165
PARKPLAZA	518	L & T CR	High	93	Ft	0.66	Patching - AC Shallow	Residential	AC	20	697	06-03-2021	304	SqFt	\$2.44	\$741
PARKPLAZA	518	RUTTING	Medium	75	SqFt	0.54	Patching - AC Shallow	Residential	AC	20	697	06-03-2021	75	SqFt	\$2.44	\$183
ParksideAv	360	L & T CR	Medium	4	Ft	0.04	Crack Sealing - AC	Residential	AC	24	399	06-03-2021	4	Ft	\$1.65	\$6
ParksideAv	361	L & T CR	Medium	184	Ft	2.10	Crack Sealing - AC	Residential	AC	24	365	06-03-2021	183	Ft	\$1.65	\$303
ParksideAv	361	RUTTING	Medium	32	SqFt	0.37	Patching - AC Shallow	Residential	AC	24	365	06-03-2021	32	SqFt	\$2.44	\$79
ParksideAv	370	L & T CR	High	7	Ft	0.06	Patching - AC Shallow	Residential	AC	20	644	06-03-2021	25	SqFt	\$2.44	\$60
ParksideAv	370	L & T CR	Medium	137	Ft	1.06	Crack Sealing - AC	Residential	AC	20	644	06-03-2021	137	Ft	\$1.65	\$226
ParksideAv	370	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	20	644	06-03-2021	8	SqFt	\$6.16	\$49
ParksideAv	370	RUTTING	High	26	SqFt	0.21	Patching - AC Deep	Residential	AC	20	644	06-03-2021	27	SqFt	\$6.16	\$163
ParksideAv	370	RUTTING	Medium	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	644	06-03-2021	9	SqFt	\$2.44	\$22
ParksideAv	371	L & T CR	Medium	64	Ft	0.61	Crack Sealing - AC	Residential	AC	24	441	06-03-2021	64	Ft	\$1.65	\$106
ParksideAv	371	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	24	441	06-03-2021	1	SqFt	\$2.44	\$3
ParksideAv	372	L & T CR	Medium	16	Ft	0.33	Crack Sealing - AC	Residential	AC	20	233	06-03-2021	15	Ft	\$1.65	\$26
ParksideAv	373	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	499	06-03-2021	0	SqFt	\$2.44	\$1
ParksideAv	373	RUTTING	High	28	SqFt	0.28	Patching - AC Deep	Residential	AC	20	499	06-03-2021	28	SqFt	\$6.16	\$171
ParksideAv	373	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	20	499	06-03-2021	9	SqFt	\$6.16	\$51
ParksideAv	373	L & T CR	Medium	15	Ft	0.15	Crack Sealing - AC	Residential	AC	20	499	06-03-2021	15	Ft	\$1.65	\$24
ParksideAv	374	L & T CR	Medium	0	Ft	0.01	Crack Sealing - AC	Residential	AC	20	187	06-03-2021	0	Ft	\$1.65	\$1
ParksideAv	374	L & T CR	High	9	Ft	0.25	Patching - AC Shallow	Residential	AC	20	187	06-03-2021	30	SqFt	\$2.44	\$73
ParksideAv	375	L & T CR	Medium	11	Ft	0.32	Crack Sealing - AC	Residential	AC	20	164	06-03-2021	11	Ft	\$1.65	\$18

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
Pennsylvar	113	L & T CR	Medium	33	Ft	0.22	Crack Sealing - AC	Collector	AC	36	405	06-03-2021	33	Ft	\$1.65	\$54
Pennsylvar	113	POTHOLE	Low	4	Count	0.03	Patching - AC Deep	Collector	AC	36	405	06-03-2021	12	SqFt	\$6.16	\$75
Pennsylvar	113	RUTTING	Medium	13	SqFt	0.09	Patching - AC Shallow	Collector	AC	36	405	06-03-2021	14	SqFt	\$2.44	\$33
Pennsylvar	114	RUTTING	High	69	SqFt	0.26	Patching - AC Deep	Collector	AC	42	620	06-03-2021	69	SqFt	\$6.16	\$424
Pennsylvar	114	ALLIGATOR CR	Medium	19	SqFt	0.07	Patching - AC Deep	Collector	AC	42	620	06-03-2021	41	SqFt	\$6.16	\$254
Pennsylvar	114	L & T CR	High	14	Ft	0.05	Patching - AC Shallow	Collector	AC	42	620	06-03-2021	46	SqFt	\$2.44	\$113
Pennsylvar	114	L & T CR	Medium	389	Ft	1.49	Crack Sealing - AC	Collector	AC	42	620	06-03-2021	389	Ft	\$1.65	\$641
Pennsylvar	114	POTHOLE	Low	5	Count	0.02	Patching - AC Deep	Collector	AC	42	620	06-03-2021	14	SqFt	\$6.16	\$88
Pennsylvar	114	RUTTING	Medium	77	SqFt	0.29	Patching - AC Shallow	Collector	AC	42	620	06-03-2021	76	SqFt	\$2.44	\$187
Pennsylvar	115	L & T CR	Medium	26	Ft	0.15	Crack Sealing - AC	Collector	AC	36	474	06-03-2021	26	Ft	\$1.65	\$43
Pennsylvar	116	L & T CR	Medium	438	Ft	1.73	Crack Sealing - AC	Collector	AC	36	705	06-03-2021	438	Ft	\$1.65	\$723
Pennsylvar	116	RUTTING	Medium	40	SqFt	0.16	Patching - AC Shallow	Collector	AC	36	705	06-03-2021	40	SqFt	\$2.44	\$96
Pennsylvar	116	L & T CR	High	27	Ft	0.10	Patching - AC Shallow	Collector	AC	36	705	06-03-2021	87	SqFt	\$2.44	\$212
Pennsylvar	119	RUTTING	High	17	SqFt	0.09	Patching - AC Shallow	Collector	AC	42	470	06-03-2021	17	SqFt	\$2.44	\$42
PERSHING	796	L & T CR	High	54	Ft	0.15	Patching - AC Shallow	Residential	AC	24	1520	06-03-2021	179	SqFt	\$2.44	\$435
PERSHING	796	L & T CR	Medium	351	Ft	0.96	Crack Sealing - AC	Residential	AC	24	1520	06-03-2021	351	Ft	\$1.65	\$579
PERSHING	796	RUTTING	Medium	28	SqFt	0.08	Patching - AC Shallow	Residential	AC	24	1520	06-03-2021	28	SqFt	\$2.44	\$68
PERSHING	843	POTHOLE	Low	4	Count	0.01	Patching - AC Deep	Residential	AC	32	1073	06-03-2021	11	SqFt	\$6.16	\$67
PERSHING	843	L & T CR	High	1	Ft	0.00	Patching - AC Shallow	Residential	AC	32	1073	06-03-2021	2	SqFt	\$2.44	\$5
PERSHING	843	L & T CR	Medium	224	Ft	0.65	Crack Sealing - AC	Residential	AC	32	1073	06-03-2021	224	Ft	\$1.65	\$369
PERSHING	845	L & T CR	High	21	Ft	0.21	Patching - AC Shallow	Residential	AC	32	306	06-03-2021	68	SqFt	\$2.44	\$164
PERSHING	845	L & T CR	Medium	28	Ft	0.28	Crack Sealing - AC	Residential	AC	32	306	06-03-2021	28	Ft	\$1.65	\$46
PhillipsAv	637	RUTTING	High	262	SqFt	1.83	Patching - AC Shallow	Residential	AC	20	717	06-03-2021	263	SqFt	\$2.44	\$640
PhillipsAv	638	RUTTING	High	53	SqFt	0.30	Patching - AC Deep	Residential	AC	20	880	06-03-2021	53	SqFt	\$6.16	\$327
PhillipsAv	638	L & T CR	High	254	Ft	1.44	Patching - AC Shallow	Residential	AC	20	880	06-03-2021	832	SqFt	\$2.44	\$2,030
PhillipsAv	638	RUTTING	Medium	14	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	880	06-03-2021	14	SqFt	\$2.44	\$34
PhillipsAv	638	L & T CR	Medium	618	Ft	3.51	Crack Sealing - AC	Residential	AC	20	880	06-03-2021	618	Ft	\$1.65	\$1,020
PhillipsAv	638	ALLIGATOR CR	Medium	56	SqFt	0.32	Patching - AC Deep	Residential	AC	20	880	06-03-2021	90	SqFt	\$6.16	\$557
PhillipsAv	639	L & T CR	Medium	81	Ft	0.88	Crack Sealing - AC	Residential	AC	20	463	06-03-2021	81	Ft	\$1.65	\$134
PhillipsAv	639	ALLIGATOR CR	Medium	0	SqFt	0.00	Patching - AC Deep	Residential	AC	20	463	06-03-2021	5	SqFt	\$6.16	\$30
PhillipsAv	639	RUTTING	Medium	39	SqFt	0.42	Patching - AC Shallow	Residential	AC	20	463	06-03-2021	39	SqFt	\$2.44	\$95
PhillipsAv	639	RUTTING	High	39	SqFt	0.42	Patching - AC Deep	Residential	AC	20	463	06-03-2021	39	SqFt	\$6.16	\$240
PhillipsAv	639	L & T CR	High	28	Ft	0.30	Patching - AC Shallow	Residential	AC	20	463	06-03-2021	91	SqFt	\$2.44	\$223
PhillipsAv	640	L & T CR	Medium	235	Ft	2.18	Crack Sealing - AC	Residential	AC	20	539	06-03-2021	235	Ft	\$1.65	\$387
PhillipsAv	640	RUTTING	Medium	22	SqFt	0.21	Patching - AC Shallow	Residential	AC	20	539	06-03-2021	23	SqFt	\$2.44	\$54
PhillipsAv	640	L & T CR	High	30	Ft	0.28	Patching - AC Shallow	Residential	AC	20	539	06-03-2021	99	SqFt	\$2.44	\$241
PhillipsAv	640	POTHOLE	Low	4	Count	0.04	Patching - AC Deep	Residential	AC	20	539	06-03-2021	13	SqFt	\$6.16	\$82
PhillipsAv	640	RUTTING	High	59	SqFt	0.55	Patching - AC Deep	Residential	AC	20	539	06-03-2021	59	SqFt	\$6.16	\$364

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
PhillipsAv	641	RUTTING	High	94	SqFt	1.01	Patching - AC Shallow	Residential	AC	20	464	06-03-2021	94	SqFt	\$2.44	\$229
PLEASANT	432	L & T CR	High	129	Ft	1.25	Patching - AC Shallow	Residential	AC	20	514	06-03-2021	422	SqFt	\$2.44	\$1,029
PLEASANT	432	L & T CR	Medium	264	Ft	2.57	Crack Sealing - AC	Residential	AC	20	514	06-03-2021	264	Ft	\$1.65	\$436
PLEASANT	432	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	514	06-03-2021	9	SqFt	\$2.44	\$20
PLEASANT	432	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	514	06-03-2021	8	SqFt	\$6.16	\$46
PLEASANT	433	RUTTING	High	61	SqFt	0.45	Patching - AC Shallow	Residential	AC	20	679	06-03-2021	61	SqFt	\$2.44	\$149
PLEASANT	434	RUTTING	High	45	SqFt	0.30	Patching - AC Shallow	Residential	AC	20	745	06-03-2021	45	SqFt	\$2.44	\$109
PLEASANT	435	L & T CR	Medium	6	Ft	0.08	Crack Sealing - AC	Residential	AC	20	334	06-03-2021	6	Ft	\$1.65	\$9
PLEASANT	436	RUTTING	High	30	SqFt	0.23	Patching - AC Deep	Residential	AC	20	657	06-03-2021	30	SqFt	\$6.16	\$187
PLEASANT	436	L & T CR	High	23	Ft	0.18	Patching - AC Shallow	Residential	AC	20	657	06-03-2021	76	SqFt	\$2.44	\$188
PLEASANT	436	L & T CR	Medium	36	Ft	0.28	Crack Sealing - AC	Residential	AC	20	657	06-03-2021	36	Ft	\$1.65	\$60
PLEASANT	436	RUTTING	Medium	15	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	657	06-03-2021	15	SqFt	\$2.44	\$37
PLEASANT	437	L & T CR	High	11	Ft	0.08	Patching - AC Shallow	Residential	AC	20	671	06-03-2021	37	SqFt	\$2.44	\$89
PLEASANT	437	RUTTING	Medium	7	SqFt	0.05	Patching - AC Shallow	Residential	AC	20	671	06-03-2021	6	SqFt	\$2.44	\$16
PLEASANT	437	L & T CR	Medium	166	Ft	1.24	Crack Sealing - AC	Residential	AC	20	671	06-03-2021	166	Ft	\$1.65	\$274
PLEASANT	438	RUTTING	High	8	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	371	06-03-2021	9	SqFt	\$2.44	\$20
PLUMTREE	304	L & T CR	Medium	65	Ft	0.41	Crack Sealing - AC	Residential	AC	20	797	06-03-2021	65	Ft	\$1.65	\$108
PRAIRIEAV	446	L & T CR	High	14	Ft	0.23	Patching - AC Shallow	Residential	AC	20	315	06-03-2021	47	SqFt	\$2.44	\$115
PRAIRIEAV	446	ALLIGATOR CR	Medium	40	SqFt	0.64	Patching - AC Deep	Residential	AC	20	315	06-03-2021	70	SqFt	\$6.16	\$431
PRAIRIEAV	446	RUTTING	Medium	8	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	315	06-03-2021	9	SqFt	\$2.44	\$20
PRAIRIEAV	446	L & T CR	Medium	59	Ft	0.94	Crack Sealing - AC	Residential	AC	20	315	06-03-2021	59	Ft	\$1.65	\$98
PRAIRIEAV	446	POTHOLE	Low	3	Count	0.04	Patching - AC Deep	Residential	AC	20	315	06-03-2021	8	SqFt	\$6.16	\$46
PRAIRIEAV	447	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	502	06-03-2021	8	SqFt	\$2.44	\$20
PRAIRIEAV	447	RUTTING	High	40	SqFt	0.40	Patching - AC Deep	Residential	AC	20	502	06-03-2021	41	SqFt	\$6.16	\$249
PRAIRIEAV	447	L & T CR	High	55	Ft	0.55	Patching - AC Shallow	Residential	AC	20	502	06-03-2021	182	SqFt	\$2.44	\$444
PRAIRIEAV	447	L & T CR	Medium	272	Ft	2.71	Crack Sealing - AC	Residential	AC	20	502	06-03-2021	272	Ft	\$1.65	\$448
PRAIRIEAV	448	RUTTING	High	54	SqFt	0.41	Patching - AC Shallow	Residential	AC	20	670	06-03-2021	54	SqFt	\$2.44	\$133
PRAIRIEAV	449	RUTTING	High	61	SqFt	0.40	Patching - AC Shallow	Residential	AC	20	762	06-03-2021	61	SqFt	\$2.44	\$149
PRAIRIEAV	450	RUTTING	High	38	SqFt	0.29	Patching - AC Shallow	Residential	AC	20	660	06-03-2021	38	SqFt	\$2.44	\$93
PRAIRIEAV	451	RUTTING	Medium	65	SqFt	0.50	Patching - AC Shallow	Residential	AC	20	655	06-03-2021	65	SqFt	\$2.44	\$158
PRAIRIEAV	451	L & T CR	Medium	15	Ft	0.12	Crack Sealing - AC	Residential	AC	20	655	06-03-2021	15	Ft	\$1.65	\$25
PRAIRIEAV	451	RUTTING	High	186	SqFt	1.42	Patching - AC Deep	Residential	AC	20	655	06-03-2021	186	SqFt	\$6.16	\$1,146
PRAIRIEAV	451	L & T CR	High	3	Ft	0.02	Patching - AC Shallow	Residential	AC	20	655	06-03-2021	11	SqFt	\$2.44	\$26
PRAIRIEAV	451	POTHOLE	Low	7	Count	0.05	Patching - AC Deep	Residential	AC	20	655	06-03-2021	20	SqFt	\$6.16	\$126
PRINCEED	406	L & T CR	Medium	16	Ft	0.19	Crack Sealing - AC	Residential	AC	26	318	06-03-2021	16	Ft	\$1.65	\$26
PRINCEED	406	RUTTING	Medium	11	SqFt	0.13	Patching - AC Shallow	Residential	AC	26	318	06-03-2021	11	SqFt	\$2.44	\$27
PRINCEED	407	L & T CR	Medium	30	Ft	0.08	Crack Sealing - AC	Residential	AC	26	1477	06-03-2021	30	Ft	\$1.65	\$50
PRINCEED	407	RUTTING	Medium	20	SqFt	0.05	Patching - AC Shallow	Residential	AC	26	1477	06-03-2021	19	SqFt	\$2.44	\$48

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
PRINCEED	408	L & T CR	Medium	20	Ft	0.24	Crack Sealing - AC	Residential	AC	26	325	06-03-2021	20	Ft	\$1.65	\$34
PRINCEED	408	RUTTING	Medium	21	SqFt	0.25	Patching - AC Shallow	Residential	AC	26	325	06-03-2021	20	SqFt	\$2.44	\$51
PRINCEED	815	RUTTING	Medium	43	SqFt	0.93	Patching - AC Shallow	Residential	AC	26	180	06-03-2021	43	SqFt	\$2.44	\$105
PRINCEED	815	L & T CR	Medium	7	Ft	0.14	Crack Sealing - AC	Residential	AC	26	180	06-03-2021	7	Ft	\$1.65	\$11
PRINCEED	816	ALLIGATOR CR	Medium	2	SqFt	0.02	Patching - AC Deep	Residential	AC	26	417	06-03-2021	11	SqFt	\$6.16	\$70
PRINCEED	816	L & T CR	Medium	32	Ft	0.30	Crack Sealing - AC	Residential	AC	26	417	06-03-2021	32	Ft	\$1.65	\$54
ProspectA	125	LINEAR CR	Medium	5	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	20	361	06-03-2021	60	Ft	\$1.65	\$99
ProspectA	126	LINEAR CR	Medium	3	Slabs	7.50	Crack Sealing - PCC	Collector	PCC	20	342	06-03-2021	43	Ft	\$1.65	\$71
ProspectA	128	RUTTING	High	46	SqFt	0.56	Patching - AC Shallow	Collector	AC	24	338	06-03-2021	45	SqFt	\$2.44	\$111
ProspectA	445	L & T CR	Medium	193	Ft	2.19	Crack Sealing - AC	Residential	AC	20	441	06-03-2021	194	Ft	\$1.65	\$319
ProspectA	445	RUTTING	Medium	39	SqFt	0.44	Patching - AC Shallow	Residential	AC	20	441	06-03-2021	39	SqFt	\$2.44	\$95
ProspectA	445	L & T CR	High	13	Ft	0.15	Patching - AC Shallow	Residential	AC	20	441	06-03-2021	42	SqFt	\$2.44	\$103
RAINTREE	832	POTHOLE	Low	4	Count	0.03	Patching - AC Deep	Residential	AC	32	368	06-03-2021	12	SqFt	\$6.16	\$71
RAINTREE	832	L & T CR	High	72	Ft	0.61	Patching - AC Shallow	Residential	AC	32	368	06-03-2021	236	SqFt	\$2.44	\$576
RAINTREE	832	L & T CR	Medium	6	Ft	0.05	Crack Sealing - AC	Residential	AC	32	368	06-03-2021	6	Ft	\$1.65	\$9
RAINTREE	832	RUTTING	Medium	13	SqFt	0.11	Patching - AC Shallow	Residential	AC	32	368	06-03-2021	13	SqFt	\$2.44	\$31
RAINTREE	833	RUTTING	Medium	12	SqFt	0.04	Patching - AC Shallow	Residential	AC	32	934	06-03-2021	12	SqFt	\$2.44	\$30
RAINTREE	833	L & T CR	Medium	16	Ft	0.05	Crack Sealing - AC	Residential	AC	32	934	06-03-2021	16	Ft	\$1.65	\$26
RAINTREE	834	L & T CR	High	3	Ft	0.03	Patching - AC Shallow	Residential	AC	32	305	06-03-2021	11	SqFt	\$2.44	\$27
RAINTREE	835	RUTTING	Medium	25	SqFt	0.25	Patching - AC Shallow	Residential	AC	32	312	06-03-2021	25	SqFt	\$2.44	\$60
RAINTREE	835	L & T CR	Medium	87	Ft	0.87	Crack Sealing - AC	Residential	AC	32	312	06-03-2021	87	Ft	\$1.65	\$144
RAINTREE	836	L & T CR	Medium	43	Ft	0.26	Crack Sealing - AC	Residential	AC	32	528	06-03-2021	43	Ft	\$1.65	\$71
Ramblewo	825	L & T CR	Medium	49	Ft	0.56	Crack Sealing - AC	Residential	AC	32	270	06-03-2021	49	Ft	\$1.65	\$80
REGENTST	452	L & T CR	High	5	Ft	0.05	Patching - AC Shallow	Residential	AC	24	370	06-03-2021	15	SqFt	\$2.44	\$36
REGENTST	452	L & T CR	Medium	158	Ft	1.78	Crack Sealing - AC	Residential	AC	24	370	06-03-2021	158	Ft	\$1.65	\$260
REGENTST	452	RUTTING	Medium	19	SqFt	0.22	Patching - AC Shallow	Residential	AC	24	370	06-03-2021	19	SqFt	\$2.44	\$47
REGENTST	452	RUTTING	High	10	SqFt	0.11	Patching - AC Deep	Residential	AC	24	370	06-03-2021	10	SqFt	\$6.16	\$60
RevereRd	559	RUTTING	High	100	SqFt	1.11	Patching - AC Shallow	Residential	AC	20	450	06-03-2021	100	SqFt	\$2.44	\$244
RevereRd	560	L & T CR	Medium	7	Ft	0.10	Crack Sealing - AC	Residential	AC	20	353	06-03-2021	7	Ft	\$1.65	\$11
RevereRd	560	L & T CR	High	4	Ft	0.06	Patching - AC Shallow	Residential	AC	20	353	06-03-2021	14	SqFt	\$2.44	\$33
RevereRd	561	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	410	06-03-2021	8	SqFt	\$6.16	\$44
RevereRd	561	L & T CR	Medium	28	Ft	0.34	Crack Sealing - AC	Residential	AC	20	410	06-03-2021	28	Ft	\$1.65	\$46
RevereRd	561	L & T CR	High	20	Ft	0.24	Patching - AC Shallow	Residential	AC	20	410	06-03-2021	66	SqFt	\$2.44	\$160
RevereRd	562	L & T CR	High	5	Ft	0.06	Patching - AC Shallow	Residential	AC	20	442	06-03-2021	17	SqFt	\$2.44	\$42
RevereRd	562	L & T CR	Medium	25	Ft	0.29	Crack Sealing - AC	Residential	AC	20	442	06-03-2021	25	Ft	\$1.65	\$42
RevereRd	563	L & T CR	High	7	Ft	0.10	Patching - AC Shallow	Residential	AC	20	355	06-03-2021	25	SqFt	\$2.44	\$59
RevereRd	563	RUTTING	Medium	8	SqFt	0.11	Patching - AC Shallow	Residential	AC	20	355	06-03-2021	8	SqFt	\$2.44	\$19
RevereRd	563	POTHOLE	Low	5	Count	0.07	Patching - AC Deep	Residential	AC	20	355	06-03-2021	14	SqFt	\$6.16	\$86

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
RevereRd	563	L & T CR	Medium	73	Ft	1.03	Crack Sealing - AC	Residential	AC	20	355	06-03-2021	73	Ft	\$1.65	\$121
RevereRd	564	RUTTING	High	217	SqFt	2.83	Patching - AC Shallow	Residential	AC	20	384	06-03-2021	216	SqFt	\$2.44	\$529
RevereRd	565	RUTTING	High	40	SqFt	0.44	Patching - AC Shallow	Residential	AC	20	456	06-03-2021	40	SqFt	\$2.44	\$98
RevereRd	566	L & T CR	Medium	184	Ft	2.08	Crack Sealing - AC	Residential	AC	20	442	06-03-2021	184	Ft	\$1.65	\$304
RevereRd	566	L & T CR	High	48	Ft	0.54	Patching - AC Shallow	Residential	AC	20	442	06-03-2021	158	SqFt	\$2.44	\$385
RevereRd	566	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	442	06-03-2021	8	SqFt	\$6.16	\$43
RevereRd	566	RUTTING	High	39	SqFt	0.44	Patching - AC Deep	Residential	AC	20	442	06-03-2021	39	SqFt	\$6.16	\$240
RevereRd	567	RUTTING	High	95	SqFt	1.06	Patching - AC Deep	Residential	AC	20	450	06-03-2021	95	SqFt	\$6.16	\$586
RevereRd	567	RUTTING	Medium	8	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	450	06-03-2021	8	SqFt	\$2.44	\$19
RevereRd	567	ALLIGATOR CR	Medium	56	SqFt	0.62	Patching - AC Deep	Residential	AC	20	450	06-03-2021	90	SqFt	\$6.16	\$554
RevereRd	567	L & T CR	High	12	Ft	0.13	Patching - AC Shallow	Residential	AC	20	450	06-03-2021	39	SqFt	\$2.44	\$95
RevereRd	567	L & T CR	Medium	233	Ft	2.59	Crack Sealing - AC	Residential	AC	20	450	06-03-2021	233	Ft	\$1.65	\$385
RidgeRd	921	L & T CR	Medium	0	Ft	0.00	Crack Sealing - AC	Residential	AC	24	469	06-03-2021	0	Ft	\$1.65	\$0
Ridgewood	628	L & T CR	Medium	284	Ft	3.05	Crack Sealing - AC	Residential	AC	20	465	06-03-2021	284	Ft	\$1.65	\$468
Ridgewood	628	RUTTING	High	23	SqFt	0.25	Patching - AC Deep	Residential	AC	20	465	06-03-2021	24	SqFt	\$6.16	\$145
Ridgewood	628	RUTTING	Medium	7	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	465	06-03-2021	6	SqFt	\$2.44	\$16
Ridgewood	628	ALLIGATOR CR	Medium	5	SqFt	0.06	Patching - AC Deep	Residential	AC	20	465	06-03-2021	18	SqFt	\$6.16	\$115
Ridgewood	628	L & T CR	High	128	Ft	1.37	Patching - AC Shallow	Residential	AC	20	465	06-03-2021	420	SqFt	\$2.44	\$1,024
Ridgewood	629	L & T CR	Medium	67	Ft	0.73	Crack Sealing - AC	Residential	AC	20	460	06-03-2021	67	Ft	\$1.65	\$111
Ridgewood	630	RUTTING	High	144	SqFt	1.51	Patching - AC Shallow	Residential	AC	20	475	06-03-2021	144	SqFt	\$2.44	\$351
RIFORDRD	132	L & T CR	High	59	Ft	0.67	Patching - AC Shallow	Collector	AC	20	442	06-03-2021	193	SqFt	\$2.44	\$471
RIFORDRD	132	RUTTING	Medium	17	SqFt	0.19	Patching - AC Shallow	Collector	AC	20	442	06-03-2021	17	SqFt	\$2.44	\$42
RIFORDRD	132	L & T CR	Medium	217	Ft	2.46	Crack Sealing - AC	Collector	AC	20	442	06-03-2021	218	Ft	\$1.65	\$359
RIFORDRD	134	L & T CR	High	17	Ft	0.23	Patching - AC Shallow	Collector	AC	20	374	06-03-2021	56	SqFt	\$2.44	\$137
RIFORDRD	134	RUTTING	Medium	7	SqFt	0.10	Patching - AC Shallow	Collector	AC	20	374	06-03-2021	8	SqFt	\$2.44	\$18
RIFORDRD	134	L & T CR	Medium	250	Ft	3.34	Crack Sealing - AC	Collector	AC	20	374	06-03-2021	250	Ft	\$1.65	\$412
RIFORDRD	135	L & T CR	Medium	202	Ft	2.38	Crack Sealing - AC	Collector	AC	20	424	06-03-2021	202	Ft	\$1.65	\$333
RIFORDRD	135	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Collector	AC	20	424	06-03-2021	0	SqFt	\$2.44	\$0
RIFORDRD	136	RUTTING	High	239	SqFt	0.88	Patching - AC Shallow	Collector	AC	24	1137	06-03-2021	239	SqFt	\$2.44	\$583
ROSLYNRD	619	L & T CR	High	10	Ft	0.13	Patching - AC Shallow	Residential	AC	20	380	06-03-2021	32	SqFt	\$2.44	\$79
ROSLYNRD	619	L & T CR	Medium	69	Ft	0.91	Crack Sealing - AC	Residential	AC	20	380	06-03-2021	69	Ft	\$1.65	\$114
ROSLYNRD	619	RUTTING	Medium	15	SqFt	0.19	Patching - AC Shallow	Residential	AC	20	380	06-03-2021	14	SqFt	\$2.44	\$35
ROSLYNRD	619	ALLIGATOR CR	Medium	5	SqFt	0.07	Patching - AC Deep	Residential	AC	20	380	06-03-2021	18	SqFt	\$6.16	\$111
ROSLYNRD	620	RUTTING	Medium	7	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	403	06-03-2021	8	SqFt	\$2.44	\$18
ROSLYNRD	620	ALLIGATOR CR	Medium	165	SqFt	2.04	Patching - AC Deep	Residential	AC	20	403	06-03-2021	221	SqFt	\$6.16	\$1,356
ROSLYNRD	620	L & T CR	High	4	Ft	0.04	Patching - AC Shallow	Residential	AC	20	403	06-03-2021	12	SqFt	\$2.44	\$29
ROSLYNRD	620	L & T CR	Medium	169	Ft	2.09	Crack Sealing - AC	Residential	AC	20	403	06-03-2021	169	Ft	\$1.65	\$278
ROSLYNRD	621	RUTTING	Medium	10	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	375	06-03-2021	10	SqFt	\$2.44	\$24

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
ROSLYNRD	621	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	20	375	06-03-2021	2	SqFt	\$2.44	\$5
ROSLYNRD	621	L & T CR	Medium	96	Ft	1.28	Crack Sealing - AC	Residential	AC	20	375	06-03-2021	96	Ft	\$1.65	\$158
ROSLYNRD	622	ALLIGATOR CR	Medium	60	SqFt	0.76	Patching - AC Deep	Residential	AC	20	392	06-03-2021	95	SqFt	\$6.16	\$584
ROSLYNRD	622	L & T CR	Medium	128	Ft	1.63	Crack Sealing - AC	Residential	AC	20	392	06-03-2021	128	Ft	\$1.65	\$211
ROSLYNRD	622	L & T CR	High	39	Ft	0.50	Patching - AC Shallow	Residential	AC	20	392	06-03-2021	127	SqFt	\$2.44	\$311
SAWYERA	623	POTHOLE	Low	3	Count	0.06	Patching - AC Deep	Residential	AC	24	227	06-03-2021	9	SqFt	\$6.16	\$56
SAWYERA	623	L & T CR	Medium	65	Ft	1.19	Crack Sealing - AC	Residential	AC	24	227	06-03-2021	65	Ft	\$1.65	\$108
SAWYERA	624	RUTTING	High	41	SqFt	0.67	Patching - AC Shallow	Residential	AC	24	254	06-03-2021	41	SqFt	\$2.44	\$100
SCOTTAV	282	RUTTING	High	183	SqFt	0.84	Patching - AC Shallow	Residential	AC	20	1093	06-03-2021	183	SqFt	\$2.44	\$447
SCOTTAVE	224	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	20	452	06-03-2021	9	SqFt	\$6.16	\$55
SCOTTAVE	224	RUTTING	Medium	49	SqFt	0.54	Patching - AC Shallow	Residential	AC	20	452	06-03-2021	50	SqFt	\$2.44	\$120
SCOTTAVE	224	L & T CR	Medium	80	Ft	0.89	Crack Sealing - AC	Residential	AC	20	452	06-03-2021	80	Ft	\$1.65	\$132
SCOTTAVE	224	L & T CR	High	181	Ft	2.00	Patching - AC Shallow	Residential	AC	20	452	06-03-2021	593	SqFt	\$2.44	\$1,448
SEllyn Ave	376	ALLIGATOR CR	Medium	19	SqFt	0.07	Patching - AC Deep	Residential	AC	20	1340	06-03-2021	40	SqFt	\$6.16	\$246
SEllyn Ave	376	POTHOLE	Low	7	Count	0.03	Patching - AC Deep	Residential	AC	20	1340	06-03-2021	20	SqFt	\$6.16	\$127
SEllyn Ave	376	L & T CR	Medium	322	Ft	1.20	Crack Sealing - AC	Residential	AC	20	1340	06-03-2021	322	Ft	\$1.65	\$531
SEllyn Ave	376	RUTTING	Medium	69	SqFt	0.26	Patching - AC Shallow	Residential	AC	20	1340	06-03-2021	69	SqFt	\$2.44	\$168
SEllyn Ave	376	L & T CR	High	15	Ft	0.05	Patching - AC Shallow	Residential	AC	20	1340	06-03-2021	48	SqFt	\$2.44	\$117
SEllyn Ave	377	RUTTING	High	8	SqFt	0.14	Patching - AC Shallow	Residential	AC	20	290	06-03-2021	9	SqFt	\$2.44	\$20
SEllyn Ave	378	ALLIGATOR CR	Medium	3	SqFt	0.01	Patching - AC Deep	Residential	AC	20	1285	06-03-2021	15	SqFt	\$6.16	\$91
SEllyn Ave	378	RUTTING	Medium	23	SqFt	0.09	Patching - AC Shallow	Residential	AC	20	1285	06-03-2021	23	SqFt	\$2.44	\$55
SEllyn Ave	378	L & T CR	Medium	608	Ft	2.36	Crack Sealing - AC	Residential	AC	20	1285	06-03-2021	608	Ft	\$1.65	\$1,003
SEllyn Ave	378	L & T CR	High	43	Ft	0.17	Patching - AC Shallow	Residential	AC	20	1285	06-03-2021	142	SqFt	\$2.44	\$346
SEllyn Ave	379	L & T CR	Medium	35	Ft	0.47	Crack Sealing - AC	Residential	AC	20	371	06-03-2021	35	Ft	\$1.65	\$58
SEllyn Ave	379	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	371	06-03-2021	1	SqFt	\$2.44	\$2
SEllyn Ave	895	L & T CR	Medium	205	Ft	3.06	Crack Sealing - AC	Residential	AC	20	335	06-03-2021	205	Ft	\$1.65	\$338
ShehanAve	129	RUTTING	High	8	SqFt	0.08	Patching - AC Shallow	Collector	AC	20	464	06-03-2021	8	SqFt	\$2.44	\$19
ShehanAve	130	RUTTING	High	18	SqFt	0.05	Patching - AC Shallow	Collector	AC	24	1552	06-03-2021	18	SqFt	\$2.44	\$44
ShehanAve	808	L & T CR	High	1	Ft	0.03	Patching - AC Shallow	Residential	AC	24	234	06-03-2021	4	SqFt	\$2.44	\$11
ShehanAve	808	ALLIGATOR CR	Medium	45	SqFt	0.79	Patching - AC Deep	Residential	AC	24	234	06-03-2021	75	SqFt	\$6.16	\$464
ShehanAve	808	L & T CR	Medium	116	Ft	2.07	Crack Sealing - AC	Residential	AC	24	234	06-03-2021	116	Ft	\$1.65	\$192
ShehanAve	809	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	24	238	06-03-2021	1	SqFt	\$2.44	\$2
ShehanAve	812	L & T CR	Medium	56	Ft	0.40	Crack Sealing - AC	Residential	AC	24	582	06-03-2021	55	Ft	\$1.65	\$92
SMITHST	632	POTHOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	469	06-03-2021	9	SqFt	\$6.16	\$55
SNOWHILL	839	L & T CR	High	5	Ft	0.06	Patching - AC Shallow	Residential	AC	24	397	06-03-2021	17	SqFt	\$2.44	\$43
SNOWHILL	839	L & T CR	Medium	196	Ft	2.05	Crack Sealing - AC	Residential	AC	24	397	06-03-2021	196	Ft	\$1.65	\$323
SPARKSIDE	203	L & T CR	Medium	122	Ft	1.39	Crack Sealing - AC	Residential	AC	24	366	06-03-2021	122	Ft	\$1.65	\$202
SPARKSIDE	203	L & T CR	High	4	Ft	0.05	Patching - AC Shallow	Residential	AC	24	366	06-03-2021	14	SqFt	\$2.44	\$34

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
SpringAve	265	L & T CR	High	22	Ft	0.16	Patching - AC Shallow	Residential	AC	20	659	06-03-2021	71	SqFt	\$2.44	\$174
SpringAve	265	RUTTING	Medium	15	SqFt	0.12	Patching - AC Shallow	Residential	AC	20	659	06-03-2021	15	SqFt	\$2.44	\$37
SpringAve	265	ALLIGATOR CR	Medium	135	SqFt	1.02	Patching - AC Deep	Residential	AC	20	659	06-03-2021	185	SqFt	\$6.16	\$1,142
SpringAve	265	L & T CR	Medium	200	Ft	1.52	Crack Sealing - AC	Residential	AC	20	659	06-03-2021	200	Ft	\$1.65	\$330
SpringAve	266	L & T CR	Medium	53	Ft	0.31	Crack Sealing - AC	Residential	AC	20	835	06-03-2021	52	Ft	\$1.65	\$87
SpringAve	268	L & T CR	Medium	19	Ft	0.60	Crack Sealing - AC	Residential	AC	24	131	06-03-2021	19	Ft	\$1.65	\$31
SpringAve	270	RUTTING	High	119	SqFt	0.41	Patching - AC Shallow	Residential	AC	24	1196	06-03-2021	119	SqFt	\$2.44	\$291
SpringAve	271	ALLIGATOR CR	Medium	25	SqFt	2.50	Patching - AC Deep	Residential	AC	24	42	07-13-2021	50	SqFt	\$6.16	\$304
SpringAve	271	L & T CR	Medium	24	Ft	2.40	Crack Sealing - AC	Residential	AC	24	42	07-13-2021	24	Ft	\$1.65	\$40
SpringAve	273	L & T CR	Medium	152	Ft	4.38	Crack Sealing - AC	Residential	AC	24	144	06-03-2021	152	Ft	\$1.65	\$250
SpringAve	274	RUTTING	High	9	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	532	06-03-2021	10	SqFt	\$2.44	\$23
STABLEFOR	150	L & T CR	Medium	102	Ft	0.50	Crack Sealing - AC	Residential	AC	26	785	06-03-2021	102	Ft	\$1.65	\$168
STABLEFOR	150	ALLIGATOR CR	Medium	23	SqFt	0.11	Patching - AC Deep	Residential	AC	26	785	06-03-2021	45	SqFt	\$6.16	\$281
STABLEFOR	150	L & T CR	High	15	Ft	0.07	Patching - AC Shallow	Residential	AC	26	785	06-03-2021	48	SqFt	\$2.44	\$118
STABLEFOR	151	L & T CR	Medium	123	Ft	2.02	Crack Sealing - AC	Residential	AC	26	234	06-03-2021	123	Ft	\$1.65	\$203
STACYCT	214	L & T CR	Medium	2	Ft	0.02	Crack Sealing - AC	Residential	AC	20	523	06-03-2021	2	Ft	\$1.65	\$4
STAFFORD	416	RUTTING	Medium	41	SqFt	0.15	Patching - AC Shallow	Residential	AC	26	1063	06-03-2021	41	SqFt	\$2.44	\$100
STAFFORD	416	L & T CR	Medium	72	Ft	0.26	Crack Sealing - AC	Residential	AC	26	1063	06-03-2021	72	Ft	\$1.65	\$119
STAFFORD	416	L & T CR	High	2	Ft	0.01	Patching - AC Shallow	Residential	AC	26	1063	06-03-2021	6	SqFt	\$2.44	\$15
STAFFORD	416	POTHOLE	Low	3	Count	0.01	Patching - AC Deep	Residential	AC	26	1063	06-03-2021	10	SqFt	\$6.16	\$57
STAGECOA	865	L & T CR	Medium	313	Ft	3.84	Crack Sealing - AC	Residential	AC	24	340	06-03-2021	313	Ft	\$1.65	\$517
STAGECOA	865	L & T CR	High	5	Ft	0.06	Patching - AC Shallow	Residential	AC	24	340	06-03-2021	15	SqFt	\$2.44	\$37
STEPHANIE	356	L & T CR	Medium	66	Ft	0.85	Crack Sealing - AC	Residential	AC	20	391	06-03-2021	67	Ft	\$1.65	\$110
STEPHANIE	356	L & T CR	High	6	Ft	0.08	Patching - AC Shallow	Residential	AC	20	391	06-03-2021	20	SqFt	\$2.44	\$49
STONEGAT	857	L & T CR	Medium	15	Ft	0.31	Crack Sealing - AC	Residential	AC	20	251	06-03-2021	15	Ft	\$1.65	\$25
STONEGAT	857	RUTTING	High	31	SqFt	0.61	Patching - AC Deep	Residential	AC	20	251	06-03-2021	30	SqFt	\$6.16	\$189
STONEGAT	857	L & T CR	High	30	Ft	0.60	Patching - AC Shallow	Residential	AC	20	251	06-03-2021	98	SqFt	\$2.44	\$240
SUMMERD	210	RUTTING	High	36	SqFt	0.14	Patching - AC Deep	Residential	AC	20	1241	06-03-2021	36	SqFt	\$6.16	\$221
SUMMERD	210	ALLIGATOR CR	Medium	14	SqFt	0.06	Patching - AC Deep	Residential	AC	20	1241	06-03-2021	32	SqFt	\$6.16	\$201
SUMMERD	210	L & T CR	Medium	321	Ft	1.29	Crack Sealing - AC	Residential	AC	20	1241	06-03-2021	321	Ft	\$1.65	\$530
SUMMERD	210	L & T CR	High	86	Ft	0.34	Patching - AC Shallow	Residential	AC	20	1241	06-03-2021	281	SqFt	\$2.44	\$685
SUMMERD	210	RUTTING	Medium	34	SqFt	0.14	Patching - AC Shallow	Residential	AC	20	1241	06-03-2021	33	SqFt	\$2.44	\$83
SUMMERD	210	POTHOLE	Low	6	Count	0.03	Patching - AC Deep	Residential	AC	20	1241	06-03-2021	19	SqFt	\$6.16	\$119
SUMMITST	140	L & T CR	Medium	21	Ft	0.19	Crack Sealing - AC	Residential	AC	26	428	06-03-2021	21	Ft	\$1.65	\$34
Sunnybroo	888	L & T CR	Medium	1	Ft	0.04	Crack Sealing - AC	Residential	AC	20	128	06-03-2021	1	Ft	\$1.65	\$2
Sunnybroo	889	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	20	810	06-03-2021	0	SqFt	\$2.44	\$1
Sunnybroo	889	L & T CR	Medium	44	Ft	0.27	Crack Sealing - AC	Residential	AC	20	810	06-03-2021	44	Ft	\$1.65	\$73
Sunnybroo	929	RUTTING	High	8	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	546	06-03-2021	8	SqFt	\$2.44	\$19

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
Sunnybrook	943	RUTTING	High	31	SqFt	0.26	Patching - AC Shallow	Residential	AC	20	615	06-03-2021	31	SqFt	\$2.44	\$77
SUNSETAV	439	RUTTING	High	402	SqFt	1.97	Patching - AC Shallow	Residential	AC	24	852	06-03-2021	403	SqFt	\$2.44	\$982
SUNSETAV	440	RUTTING	High	143	SqFt	0.46	Patching - AC Shallow	Residential	AC	24	1297	06-03-2021	143	SqFt	\$2.44	\$348
SUNSETAV	441	L & T CR	Medium	20	Ft	0.89	Crack Sealing - AC	Residential	AC	24	93	06-03-2021	20	Ft	\$1.65	\$33
SUNSETAV	442	RUTTING	High	17	SqFt	0.13	Patching - AC Shallow	Residential	AC	24	560	06-03-2021	17	SqFt	\$2.44	\$42
SUNSETAV	443	L & T CR	Medium	22	Ft	0.17	Crack Sealing - AC	Residential	AC	24	533	06-03-2021	22	Ft	\$1.65	\$36
SUNSETAV	443	RUTTING	Medium	10	SqFt	0.08	Patching - AC Shallow	Residential	AC	24	533	06-03-2021	10	SqFt	\$2.44	\$24
SUNSETAV	443	RUTTING	High	186	SqFt	1.45	Patching - AC Deep	Residential	AC	24	533	06-03-2021	186	SqFt	\$6.16	\$1,146
SUNSETAV	443	POTHOLE	Low	6	Count	0.05	Patching - AC Deep	Residential	AC	24	533	06-03-2021	18	SqFt	\$6.16	\$109
SUNSETAV	444	RUTTING	High	206	SqFt	1.27	Patching - AC Shallow	Residential	AC	24	675	06-03-2021	207	SqFt	\$2.44	\$504
SUNSETCT	523	ALLIGATOR CR	Medium	15	SqFt	0.27	Patching - AC Deep	Residential	AC	24	231	06-03-2021	34	SqFt	\$6.16	\$214
SUNSETCT	523	L & T CR	Medium	14	Ft	0.25	Crack Sealing - AC	Residential	AC	24	231	06-03-2021	14	Ft	\$1.65	\$23
SUNSETCT	523	L & T CR	High	4	Ft	0.07	Patching - AC Shallow	Residential	AC	24	231	06-03-2021	12	SqFt	\$2.44	\$29
SURREYDR	286	ALLIGATOR CR	Medium	30	SqFt	0.17	Patching - AC Deep	Residential	AC	26	669	06-03-2021	56	SqFt	\$6.16	\$343
SURREYDR	286	L & T CR	High	26	Ft	0.15	Patching - AC Shallow	Residential	AC	26	669	06-03-2021	86	SqFt	\$2.44	\$209
SURREYDR	286	L & T CR	Medium	488	Ft	2.81	Crack Sealing - AC	Residential	AC	26	669	06-03-2021	489	Ft	\$1.65	\$806
SURREYDR	287	RUTTING	High	49	SqFt	0.15	Patching - AC Shallow	Residential	AC	26	1274	06-03-2021	48	SqFt	\$2.44	\$119
SURREYDR	288	L & T CR	Medium	4	Ft	0.05	Crack Sealing - AC	Residential	AC	26	275	06-03-2021	4	Ft	\$1.65	\$6
TAFTAV	794	L & T CR	Medium	13	Ft	0.09	Crack Sealing - AC	Residential	AC	24	595	06-03-2021	13	Ft	\$1.65	\$22
TAFTAV	794	L & T CR	High	3	Ft	0.02	Patching - AC Shallow	Residential	AC	24	595	06-03-2021	11	SqFt	\$2.44	\$26
TAFTAV	795	RUTTING	High	29	SqFt	0.13	Patching - AC Deep	Residential	AC	24	941	06-03-2021	28	SqFt	\$6.16	\$175
TAFTAV	795	RUTTING	Medium	66	SqFt	0.29	Patching - AC Shallow	Residential	AC	24	941	06-03-2021	67	SqFt	\$2.44	\$162
TAFTAV	795	L & T CR	Medium	123	Ft	0.54	Crack Sealing - AC	Residential	AC	24	941	06-03-2021	123	Ft	\$1.65	\$203
TAFTAV	795	POTHOLE	Low	9	Count	0.04	Patching - AC Deep	Residential	AC	24	941	06-03-2021	26	SqFt	\$6.16	\$158
TAFTAV	795	L & T CR	High	2	Ft	0.01	Patching - AC Shallow	Residential	AC	24	941	06-03-2021	6	SqFt	\$2.44	\$15
TaftAve	792	L & T CR	Medium	35	Ft	0.30	Crack Sealing - AC	Residential	AC	36	317	06-03-2021	35	Ft	\$1.65	\$57
TANGLEW	187	RUTTING	High	44	SqFt	1.03	Patching - AC Shallow	Residential	AC	20	216	06-03-2021	44	SqFt	\$2.44	\$109
TANGLEW	188	L & T CR	High	93	Ft	0.20	Patching - AC Shallow	Residential	AC	20	2264	06-03-2021	304	SqFt	\$2.44	\$741
TANGLEW	188	L & T CR	Medium	733	Ft	1.62	Crack Sealing - AC	Residential	AC	20	2264	06-03-2021	733	Ft	\$1.65	\$1,209
TANGLEW	188	RUTTING	High	82	SqFt	0.18	Patching - AC Deep	Residential	AC	20	2264	06-03-2021	82	SqFt	\$6.16	\$507
TAYLORAV	320	L & T CR	High	9	Ft	0.07	Patching - AC Shallow	Residential	AC	20	615	06-03-2021	29	SqFt	\$2.44	\$70
TAYLORAV	320	L & T CR	Medium	121	Ft	0.98	Crack Sealing - AC	Residential	AC	20	615	06-03-2021	121	Ft	\$1.65	\$200
TAYLORAV	320	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	615	06-03-2021	8	SqFt	\$6.16	\$45
TAYLORAV	320	RUTTING	High	72	SqFt	0.59	Patching - AC Deep	Residential	AC	20	615	06-03-2021	72	SqFt	\$6.16	\$443
TAYLORAV	320	RUTTING	Medium	16	SqFt	0.13	Patching - AC Shallow	Residential	AC	20	615	06-03-2021	16	SqFt	\$2.44	\$40
TAYLORAV	321	RUTTING	High	9	SqFt	0.14	Patching - AC Shallow	Residential	AC	24	257	06-03-2021	9	SqFt	\$2.44	\$21
TaylorAve	313	RUTTING	High	46	SqFt	0.28	Patching - AC Deep	Residential	AC	20	826	06-03-2021	46	SqFt	\$6.16	\$283
TaylorAve	313	L & T CR	High	3	Ft	0.02	Patching - AC Shallow	Residential	AC	20	826	06-03-2021	10	SqFt	\$2.44	\$23

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
TaylorAve	313	L & T CR	Medium	186	Ft	1.13	Crack Sealing - AC	Residential	AC	20	826	06-03-2021	186	Ft	\$1.65	\$308
TaylorAve	314	RUTTING	High	230	SqFt	1.78	Patching - AC Shallow	Residential	AC	24	538	06-03-2021	229	SqFt	\$2.44	\$560
TaylorAve	315	RUTTING	Medium	9	SqFt	0.08	Patching - AC Shallow	Residential	AC	24	489	06-03-2021	9	SqFt	\$2.44	\$22
TaylorAve	315	L & T CR	High	7	Ft	0.06	Patching - AC Shallow	Residential	AC	24	489	06-03-2021	23	SqFt	\$2.44	\$56
TaylorAve	315	L & T CR	Medium	57	Ft	0.49	Crack Sealing - AC	Residential	AC	24	489	06-03-2021	57	Ft	\$1.65	\$94
TaylorAve	316	RUTTING	High	7	SqFt	0.04	Patching - AC Deep	Residential	AC	24	659	06-03-2021	6	SqFt	\$6.16	\$42
TaylorAve	316	L & T CR	High	64	Ft	0.40	Patching - AC Shallow	Residential	AC	24	659	06-03-2021	209	SqFt	\$2.44	\$510
TaylorAve	316	L & T CR	Medium	44	Ft	0.28	Crack Sealing - AC	Residential	AC	24	659	06-03-2021	44	Ft	\$1.65	\$73
TaylorAve	316	RUTTING	Medium	7	SqFt	0.04	Patching - AC Shallow	Residential	AC	24	659	06-03-2021	6	SqFt	\$2.44	\$17
TaylorAve	318	L & T CR	Medium	53	Ft	5.00	Crack Sealing - AC	Residential	AC	20	53	07-13-2021	53	Ft	\$1.65	\$88
TaylorAve	319	RUTTING	High	383	SqFt	2.50	Patching - AC Shallow	Residential	AC	20	766	06-03-2021	383	SqFt	\$2.44	\$935
TraverAve	517	RUTTING	High	38	SqFt	0.19	Patching - AC Shallow	Residential	AC	20	994	06-03-2021	39	SqFt	\$2.44	\$93
TURNERAV	606	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	24	494	06-03-2021	6	SqFt	\$2.44	\$16
TURNERAV	606	RUTTING	Medium	8	SqFt	0.07	Patching - AC Shallow	Residential	AC	24	494	06-03-2021	9	SqFt	\$2.44	\$20
TURNERAV	606	L & T CR	Medium	27	Ft	0.23	Crack Sealing - AC	Residential	AC	24	494	06-03-2021	27	Ft	\$1.65	\$45
TURNERAV	606	POTHOLE	Low	3	Count	0.02	Patching - AC Deep	Residential	AC	24	494	06-03-2021	9	SqFt	\$6.16	\$53
TURNERAV	607	L & T CR	Medium	60	Ft	0.55	Crack Sealing - AC	Residential	AC	24	451	06-03-2021	60	Ft	\$1.65	\$99
TURNERAV	607	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	24	451	06-03-2021	6	SqFt	\$2.44	\$17
TURNERAV	608	L & T CR	Medium	53	Ft	0.62	Crack Sealing - AC	Residential	AC	24	362	06-03-2021	53	Ft	\$1.65	\$88
TURNERAV	608	L & T CR	High	0	Ft	0.00	Patching - AC Shallow	Residential	AC	24	362	06-03-2021	0	SqFt	\$2.44	\$1
TURNERAV	609	L & T CR	Medium	22	Ft	0.83	Crack Sealing - AC	Residential	AC	20	129	06-03-2021	22	Ft	\$1.65	\$36
TurnerAve	599	RUTTING	High	172	SqFt	0.88	Patching - AC Shallow	Residential	AC	20	972	06-03-2021	172	SqFt	\$2.44	\$419
TurnerAve	601	L & T CR	Medium	7	Ft	0.08	Crack Sealing - AC	Residential	AC	20	471	06-03-2021	7	Ft	\$1.65	\$12
TurnerAve	602	RUTTING	Medium	24	SqFt	0.23	Patching - AC Shallow	Residential	AC	20	526	06-03-2021	24	SqFt	\$2.44	\$58
TurnerAve	602	POTHOLE	Low	2	Count	0.02	Patching - AC Deep	Residential	AC	20	526	06-03-2021	6	SqFt	\$6.16	\$42
TurnerAve	602	L & T CR	Medium	50	Ft	0.48	Crack Sealing - AC	Residential	AC	20	526	06-03-2021	50	Ft	\$1.65	\$83
TurnerAve	602	L & T CR	High	29	Ft	0.28	Patching - AC Shallow	Residential	AC	20	526	06-03-2021	96	SqFt	\$2.44	\$233
TurnerAve	602	RUTTING	High	15	SqFt	0.14	Patching - AC Deep	Residential	AC	20	526	06-03-2021	15	SqFt	\$6.16	\$92
TurnerAve	603	L & T CR	Medium	111	Ft	1.52	Crack Sealing - AC	Residential	AC	20	365	06-03-2021	111	Ft	\$1.65	\$183
TurnerAve	603	L & T CR	High	3	Ft	0.04	Patching - AC Shallow	Residential	AC	20	365	06-03-2021	9	SqFt	\$2.44	\$22
TurnerAve	604	POTHOLE	Low	2	Count	0.07	Patching - AC Deep	Residential	AC	20	176	06-03-2021	8	SqFt	\$6.16	\$45
TurnerAve	604	L & T CR	Medium	1	Ft	0.02	Crack Sealing - AC	Residential	AC	20	176	06-03-2021	1	Ft	\$1.65	\$1
TurnerAve	604	L & T CR	High	1	Ft	0.03	Patching - AC Shallow	Residential	AC	20	176	06-03-2021	4	SqFt	\$2.44	\$9
TurnerAve	605	RUTTING	High	56	SqFt	1.00	Patching - AC Shallow	Residential	AC	20	282	06-03-2021	56	SqFt	\$2.44	\$137
VALLEYAV	595	ALLIGATOR CR	Medium	1	SqFt	0.01	Patching - AC Deep	Residential	AC	24	363	06-03-2021	9	SqFt	\$6.16	\$55
VALLEYAV	595	L & T CR	High	2	Ft	0.02	Patching - AC Shallow	Residential	AC	24	363	06-03-2021	5	SqFt	\$2.44	\$14
VALLEYAV	595	L & T CR	Medium	14	Ft	0.16	Crack Sealing - AC	Residential	AC	24	363	06-03-2021	14	Ft	\$1.65	\$23
VALLEYRD	226	L & T CR	Medium	144	Ft	0.51	Crack Sealing - AC	Residential	AC	20	1402	06-03-2021	144	Ft	\$1.65	\$237

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
VALLEYRD	226	L & T CR	High	8	Ft	0.03	Patching - AC Shallow	Residential	AC	20	1402	06-03-2021	25	SqFt	\$2.44	\$61
VALLEYRD	226	RUTTING	Medium	68	SqFt	0.24	Patching - AC Shallow	Residential	AC	20	1402	06-03-2021	68	SqFt	\$2.44	\$165
VANDAMN	305	RUTTING	High	10	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	498	06-03-2021	10	SqFt	\$2.44	\$24
VANDAMN	306	RUTTING	High	149	SqFt	0.99	Patching - AC Deep	Residential	AC	20	753	06-03-2021	150	SqFt	\$6.16	\$920
VANDAMN	306	L & T CR	Medium	172	Ft	1.14	Crack Sealing - AC	Residential	AC	20	753	06-03-2021	172	Ft	\$1.65	\$284
VANDAMN	306	RUTTING	Medium	16	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	753	06-03-2021	15	SqFt	\$2.44	\$38
VANDAMN	306	L & T CR	High	164	Ft	1.09	Patching - AC Shallow	Residential	AC	20	753	06-03-2021	537	SqFt	\$2.44	\$1,310
WALNUTS	693	L & T CR	High	1	Ft	0.01	Patching - AC Shallow	Residential	AC	24	423	06-03-2021	2	SqFt	\$2.44	\$5
WALNUTS	693	L & T CR	Medium	213	Ft	2.10	Crack Sealing - AC	Residential	AC	24	423	06-03-2021	213	Ft	\$1.65	\$351
WALNUTS	693	ALLIGATOR CR	Medium	38	SqFt	0.38	Patching - AC Deep	Residential	AC	24	423	06-03-2021	68	SqFt	\$6.16	\$414
WALNUTS	693	RUTTING	Medium	38	SqFt	0.37	Patching - AC Shallow	Residential	AC	24	423	06-03-2021	38	SqFt	\$2.44	\$92
WALNUTS	694	L & T CR	High	32	Ft	0.32	Patching - AC Shallow	Residential	AC	24	405	06-03-2021	103	SqFt	\$2.44	\$252
WALNUTS	694	L & T CR	Medium	74	Ft	0.77	Crack Sealing - AC	Residential	AC	24	405	06-03-2021	74	Ft	\$1.65	\$123
WALNUTS	695	L & T CR	High	40	Ft	0.39	Patching - AC Shallow	Residential	AC	24	418	06-03-2021	130	SqFt	\$2.44	\$317
WALNUTS	695	L & T CR	Medium	223	Ft	2.22	Crack Sealing - AC	Residential	AC	24	418	06-03-2021	223	Ft	\$1.65	\$367
WALNUTS	695	POT HOLE	Low	3	Count	0.03	Patching - AC Deep	Residential	AC	24	418	06-03-2021	10	SqFt	\$6.16	\$57
WALNUTS	696	POT HOLE	Low	3	Count	0.04	Patching - AC Deep	Residential	AC	24	336	06-03-2021	9	SqFt	\$6.16	\$55
WALNUTS	697	RUTTING	Medium	10	SqFt	0.09	Patching - AC Shallow	Residential	AC	24	430	06-03-2021	10	SqFt	\$2.44	\$23
WAVERLYR	643	RUTTING	High	8	SqFt	0.10	Patching - AC Shallow	Residential	AC	20	403	06-03-2021	8	SqFt	\$2.44	\$19
WAVERLYR	644	L & T CR	Medium	529	Ft	5.06	Crack Sealing - AC	Residential	AC	20	523	06-03-2021	530	Ft	\$1.65	\$874
WAVERLYR	644	L & T CR	High	62	Ft	0.59	Patching - AC Shallow	Residential	AC	20	523	06-03-2021	202	SqFt	\$2.44	\$494
WAVERLYR	644	RUTTING	Medium	8	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	523	06-03-2021	8	SqFt	\$2.44	\$20
WesternAv	073	L & T CR	Medium	7	Ft	0.13	Crack Sealing - AC	Collector	AC	20	277	06-03-2021	7	Ft	\$1.65	\$12
WesternAv	074	LINEAR CR	High	2	Slabs	2.50	Patching - PCC Partial Dept	Collector	PCC	20	510	06-03-2021	255	SqFt	\$7.70	\$1,964
WesternAv	075	DIVIDED SLAB	High	3	Slabs	2.50	Slab Replacement - PCC	Collector	PCC	20	755	06-03-2021	379	SqFt	\$16.50	\$6,249
WesternAv	075	LINEAR CR	High	8	Slabs	7.50	Patching - PCC Partial Dept	Collector	PCC	20	755	06-03-2021	1137	SqFt	\$7.70	\$8,749
WesternAv	079	LINEAR CR	Medium	1	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	20	91	06-03-2021	15	Ft	\$1.65	\$25
WesternAv	080	CORNER BREAK	Medium	4	Slabs	10.00	Crack Sealing - PCC	Collector	PCC	20	270	06-03-2021	30	Ft	\$1.65	\$49
WesternAv	083	LINEAR CR	Medium	3	Slabs	5.00	Crack Sealing - PCC	Collector	PCC	20	496	06-03-2021	41	Ft	\$1.65	\$68
WESTERN	877	RUTTING	High	32	SqFt	0.40	Patching - AC Shallow	Residential	AC	24	339	06-03-2021	32	SqFt	\$2.44	\$79
WESTERN	878	L & T CR	Medium	354	Ft	2.56	Crack Sealing - AC	Residential	AC	24	576	07-13-2021	354	Ft	\$1.65	\$585
WESTERN	879	L & T CR	Medium	6	Ft	0.18	Crack Sealing - AC	Residential	AC	24	146	06-03-2021	7	Ft	\$1.65	\$11
WhittierAv	261	L & T CR	High	2	Ft	0.06	Patching - AC Shallow	Residential	AC	24	147	06-03-2021	6	SqFt	\$2.44	\$17
WhittierAv	261	L & T CR	Medium	4	Ft	0.11	Crack Sealing - AC	Residential	AC	24	147	06-03-2021	4	Ft	\$1.65	\$6
WhittierAv	263	RUTTING	Medium	9	SqFt	0.05	Patching - AC Shallow	Residential	AC	24	768	06-03-2021	10	SqFt	\$2.44	\$22
WhittierAv	263	L & T CR	High	7	Ft	0.04	Patching - AC Shallow	Residential	AC	24	768	06-03-2021	22	SqFt	\$2.44	\$53
WhittierAv	263	L & T CR	Medium	46	Ft	0.25	Crack Sealing - AC	Residential	AC	24	768	06-03-2021	46	Ft	\$1.65	\$76
WILLIAMS	817	L & T CR	Medium	19	Ft	0.35	Crack Sealing - AC	Residential	AC	26	209	06-03-2021	19	Ft	\$1.65	\$31

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
WILLIAMS	818	RUTTING	High	45	SqFt	0.46	Patching - AC Shallow	Residential	AC	26	378	06-03-2021	45	SqFt	\$2.44	\$111
WILLIAMS	819	POTHOLE	Low	6	Count	0.02	Patching - AC Deep	Residential	AC	26	1195	06-03-2021	18	SqFt	\$6.16	\$110
WILLIAMS	819	L & T CR	Medium	320	Ft	1.03	Crack Sealing - AC	Residential	AC	26	1195	06-03-2021	320	Ft	\$1.65	\$528
WILLIAMS	819	L & T CR	High	12	Ft	0.04	Patching - AC Shallow	Residential	AC	26	1195	06-03-2021	39	SqFt	\$2.44	\$94
WILLIAMS	819	RUTTING	Medium	149	SqFt	0.48	Patching - AC Shallow	Residential	AC	26	1195	06-03-2021	149	SqFt	\$2.44	\$363
WILSONAve	798	RUTTING	Medium	36	SqFt	0.15	Patching - AC Shallow	Residential	AC	24	992	06-03-2021	36	SqFt	\$2.44	\$88
WILSONAve	798	L & T CR	High	27	Ft	0.11	Patching - AC Shallow	Residential	AC	24	992	06-03-2021	88	SqFt	\$2.44	\$214
WILSONAve	798	ALLIGATOR CR	Medium	183	SqFt	0.77	Patching - AC Deep	Residential	AC	24	992	06-03-2021	241	SqFt	\$6.16	\$1,484
WILSONAve	798	L & T CR	Medium	505	Ft	2.12	Crack Sealing - AC	Residential	AC	24	992	06-03-2021	505	Ft	\$1.65	\$833
WilsonAve	181	L & T CR	High	4	Ft	0.05	Patching - AC Shallow	Residential	AC	26	338	06-03-2021	14	SqFt	\$2.44	\$34
WilsonAve	181	L & T CR	Medium	168	Ft	1.91	Crack Sealing - AC	Residential	AC	26	338	06-03-2021	168	Ft	\$1.65	\$277
WilsonAve	181	RUTTING	Medium	23	SqFt	0.26	Patching - AC Shallow	Residential	AC	26	338	06-03-2021	24	SqFt	\$2.44	\$57
WILSONAve	189	L & T CR	High	42	Ft	0.35	Patching - AC Shallow	Residential	AC	24	500	06-03-2021	137	SqFt	\$2.44	\$334
WILSONAve	189	RUTTING	High	19	SqFt	0.16	Patching - AC Deep	Residential	AC	24	500	06-03-2021	19	SqFt	\$6.16	\$119
WILSONAve	189	L & T CR	Medium	499	Ft	4.16	Crack Sealing - AC	Residential	AC	24	500	06-03-2021	498	Ft	\$1.65	\$823
WILSONAve	189	RUTTING	Medium	39	SqFt	0.32	Patching - AC Shallow	Residential	AC	24	500	06-03-2021	39	SqFt	\$2.44	\$94
WILSONAve	201	L & T CR	Medium	30	Ft	0.42	Crack Sealing - AC	Residential	AC	24	297	06-03-2021	30	Ft	\$1.65	\$49
WILSONAve	201	L & T CR	High	1	Ft	0.02	Patching - AC Shallow	Residential	AC	24	297	06-03-2021	4	SqFt	\$2.44	\$11
WINCHELL	204	RUTTING	High	754	SqFt	2.62	Patching - AC Shallow	Residential	AC	30	960	06-03-2021	755	SqFt	\$2.44	\$1,840
WINDSOR	515	RUTTING	High	13	SqFt	0.07	Patching - AC Shallow	Residential	AC	20	920	06-03-2021	13	SqFt	\$2.44	\$32
WINGATER	583	RUTTING	Medium	32	SqFt	0.39	Patching - AC Shallow	Residential	AC	20	408	06-03-2021	32	SqFt	\$2.44	\$78
WINGATER	583	RUTTING	High	103	SqFt	1.27	Patching - AC Deep	Residential	AC	20	408	06-03-2021	103	SqFt	\$6.16	\$637
WINGATER	583	POTHOLE	Low	2	Count	0.03	Patching - AC Deep	Residential	AC	20	408	06-03-2021	8	SqFt	\$6.16	\$44
WINGATER	583	L & T CR	Medium	21	Ft	0.26	Crack Sealing - AC	Residential	AC	20	408	06-03-2021	21	Ft	\$1.65	\$34
WINGATER	583	ALLIGATOR CR	Medium	13	SqFt	0.16	Patching - AC Deep	Residential	AC	20	408	06-03-2021	32	SqFt	\$6.16	\$198
WINGATER	584	RUTTING	High	47	SqFt	0.58	Patching - AC Deep	Residential	AC	20	399	06-03-2021	46	SqFt	\$6.16	\$287
WINGATER	584	L & T CR	High	4	Ft	0.05	Patching - AC Shallow	Residential	AC	20	399	06-03-2021	14	SqFt	\$2.44	\$34
WINGATER	584	L & T CR	Medium	13	Ft	0.16	Crack Sealing - AC	Residential	AC	20	399	06-03-2021	13	Ft	\$1.65	\$21
WINGATER	585	L & T CR	Medium	67	Ft	0.98	Crack Sealing - AC	Residential	AC	20	341	06-03-2021	67	Ft	\$1.65	\$110
WINGATER	585	POTHOLE	Low	5	Count	0.07	Patching - AC Deep	Residential	AC	20	341	06-03-2021	14	SqFt	\$6.16	\$87
WINGATER	585	RUTTING	Medium	39	SqFt	0.58	Patching - AC Shallow	Residential	AC	20	341	06-03-2021	40	SqFt	\$2.44	\$96
WINGATER	585	L & T CR	High	2	Ft	0.03	Patching - AC Shallow	Residential	AC	20	341	06-03-2021	5	SqFt	\$2.44	\$14
WINGATER	586	L & T CR	High	2	Ft	0.03	Patching - AC Shallow	Residential	AC	20	400	06-03-2021	8	SqFt	\$2.44	\$19
WINGATER	586	L & T CR	Medium	44	Ft	0.55	Crack Sealing - AC	Residential	AC	20	400	06-03-2021	44	Ft	\$1.65	\$73
WINGATER	587	RUTTING	High	33	SqFt	0.53	Patching - AC Shallow	Residential	AC	20	310	06-03-2021	32	SqFt	\$2.44	\$80
WINGATER	588	ALLIGATOR CR	Medium	7	SqFt	0.16	Patching - AC Deep	Residential	AC	20	204	06-03-2021	20	SqFt	\$6.16	\$128
WINGATER	588	L & T CR	High	2	Ft	0.06	Patching - AC Shallow	Residential	AC	20	204	06-03-2021	8	SqFt	\$2.44	\$20
WINGATER	588	L & T CR	Medium	4	Ft	0.10	Crack Sealing - AC	Residential	AC	20	204	06-03-2021	4	Ft	\$1.65	\$7

Details of the 2022 Localized Distress Maintenance Plan

BranchID	Section ID	Description	Severity	Distress Qty	Distress Unit	Percent Distress	Work Description	Functional Class	Surface Type	Width (ft)	Length (ft)	Last Insp Date	Work Qty	Work Unit	Unit Cost	Work Cost
WINGATER	589	L & T CR	Medium	3	Ft	0.10	Crack Sealing - AC	Residential	AC	20	133	06-03-2021	3	Ft	\$1.65	\$5
WINSLOW	864	L & T CR	High	28	Ft	0.07	Patching - AC Shallow	Residential	AC	26	1546	06-03-2021	90	SqFt	\$2.44	\$220
WINSLOW	864	L & T CR	Medium	109	Ft	0.27	Crack Sealing - AC	Residential	AC	26	1546	06-03-2021	109	Ft	\$1.65	\$179
WOODSTO	278	RUTTING	High	15	SqFt	0.08	Patching - AC Shallow	Residential	AC	20	964	06-03-2021	15	SqFt	\$2.44	\$37
WOODSTO	279	RUTTING	High	222	SqFt	0.84	Patching - AC Shallow	Residential	AC	20	1322	06-03-2021	222	SqFt	\$2.44	\$541
WOODVIE	183	L & T CR	High	17	Ft	0.31	Patching - AC Shallow	Residential	AC	20	275	06-03-2021	56	SqFt	\$2.44	\$136
WOODVIE	183	RUTTING	Medium	9	SqFt	0.15	Patching - AC Shallow	Residential	AC	20	275	06-03-2021	9	SqFt	\$2.44	\$21
WOODVIE	183	RUTTING	High	25	SqFt	0.46	Patching - AC Deep	Residential	AC	20	275	06-03-2021	26	SqFt	\$6.16	\$156
WOODVIE	185	ALLIGATOR CR	Medium	22	SqFt	0.15	Patching - AC Deep	Residential	AC	20	715	06-03-2021	44	SqFt	\$6.16	\$272
WOODVIE	185	L & T CR	Medium	179	Ft	1.25	Crack Sealing - AC	Residential	AC	20	715	06-03-2021	179	Ft	\$1.65	\$296
WOODVIE	185	L & T CR	High	73	Ft	0.51	Patching - AC Shallow	Residential	AC	20	715	06-03-2021	239	SqFt	\$2.44	\$583
WOODVIE	186	L & T CR	High	9	Ft	0.11	Patching - AC Shallow	Residential	AC	20	382	06-03-2021	28	SqFt	\$2.44	\$69
WOODVIE	186	L & T CR	Medium	73	Ft	0.96	Crack Sealing - AC	Residential	AC	20	382	06-03-2021	73	Ft	\$1.65	\$121



Chicago Metropolitan
Agency for Planning

AECOM



Village of Glen Ellyn, IL Pavement Management System Implementation

Presented to:
Village of Glen Ellyn
Capital Improvement Commission



Presented by:
Joe Stefanski, P.E.
Lax Premkumar, P.E.
Shahriar Alam, P.E.

November 9, 2021

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NATIONAL SECURITY



ENERGY & ENVIRONMENT



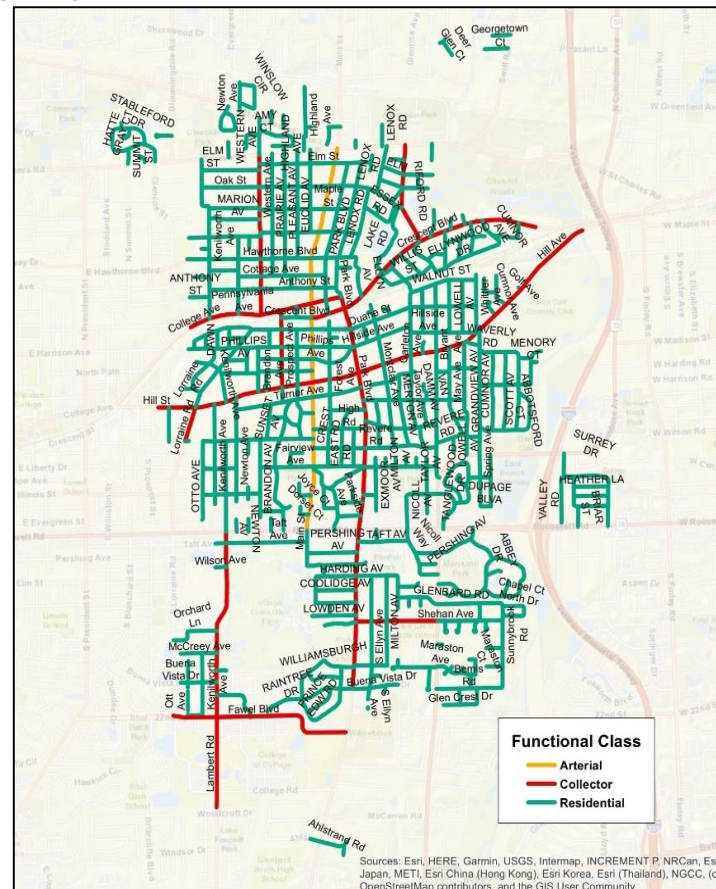
INFRASTRUCTURE



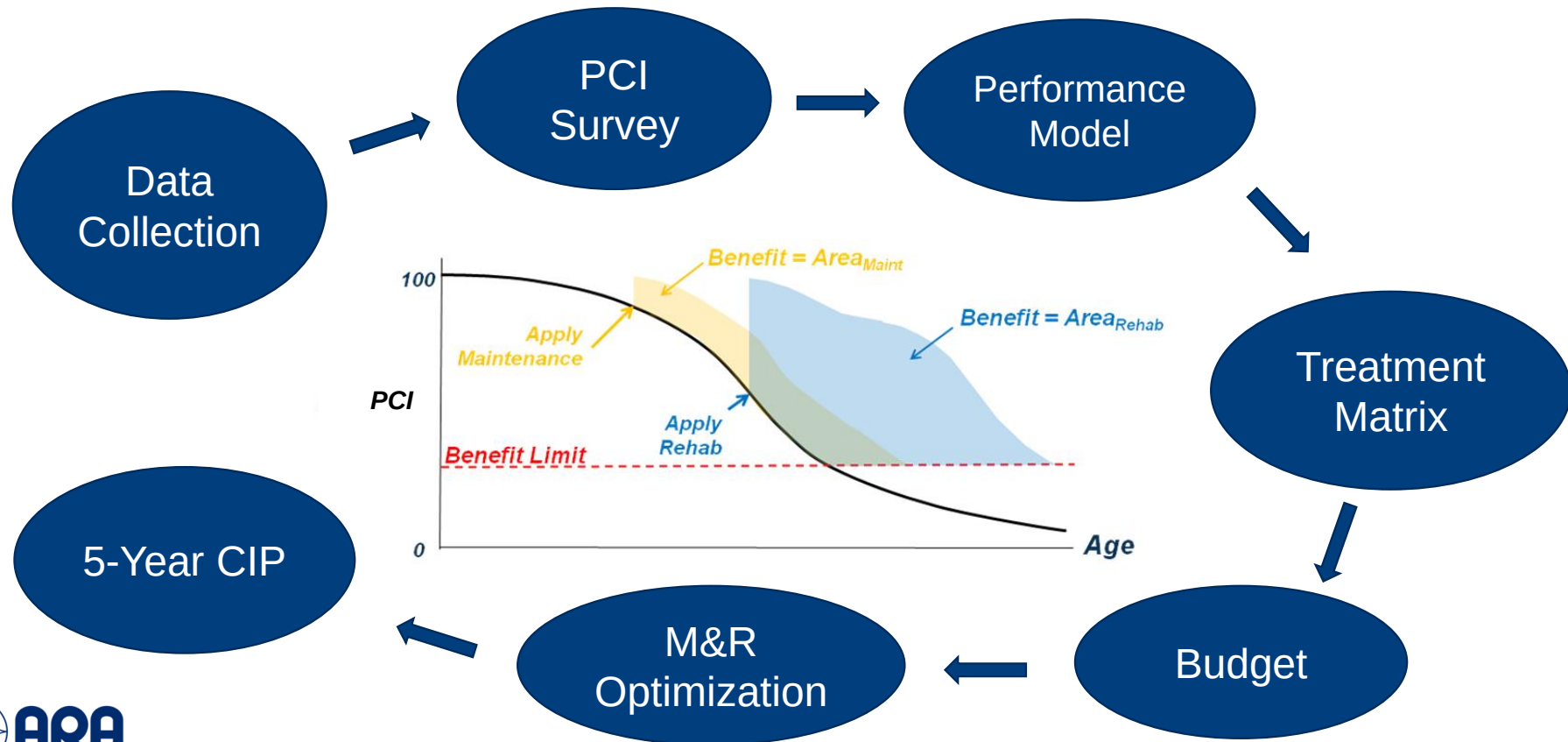
HEALTH SOLUTIONS

Project Background

- ❖ Chicago Metropolitan Agency for Planning (CMAP)
- ❖ AECOM
- ❖ ARA was selected to implement Pavement Management System (PMS) for the Village of Glen Ellyn, IL



Pavement Management System-Components



Pavement Distress Survey

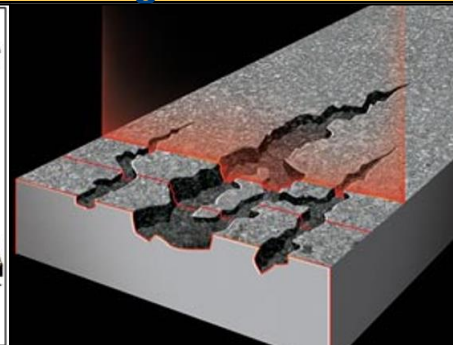
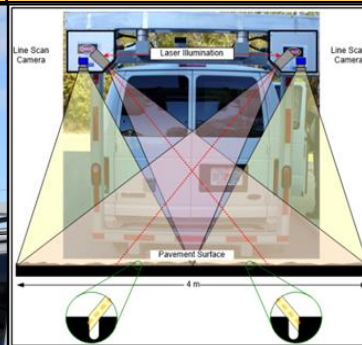
The Vehicle



The Lasers



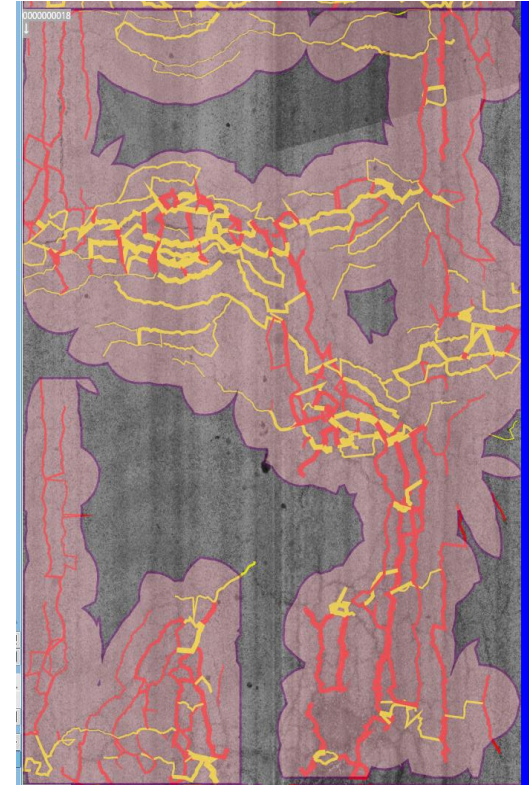
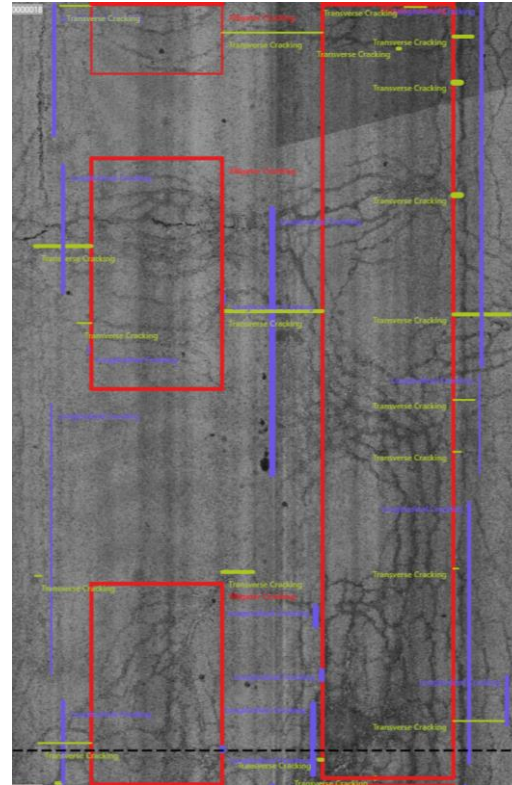
Schematic Diagrams



ARA's Laser Crack Measurement System (LCMS)

- Automated crack measurement
- Automated roughness measurement
- Pictures of the Right of Way (ROW) and surroundings taken every 20-ft
- Linearly referenced and associated with GPS coordinates

Field Data Collection & Pavement Condition Rating



Pavement Condition Rating



Pavement Condition Rating



Pavement Condition Rating

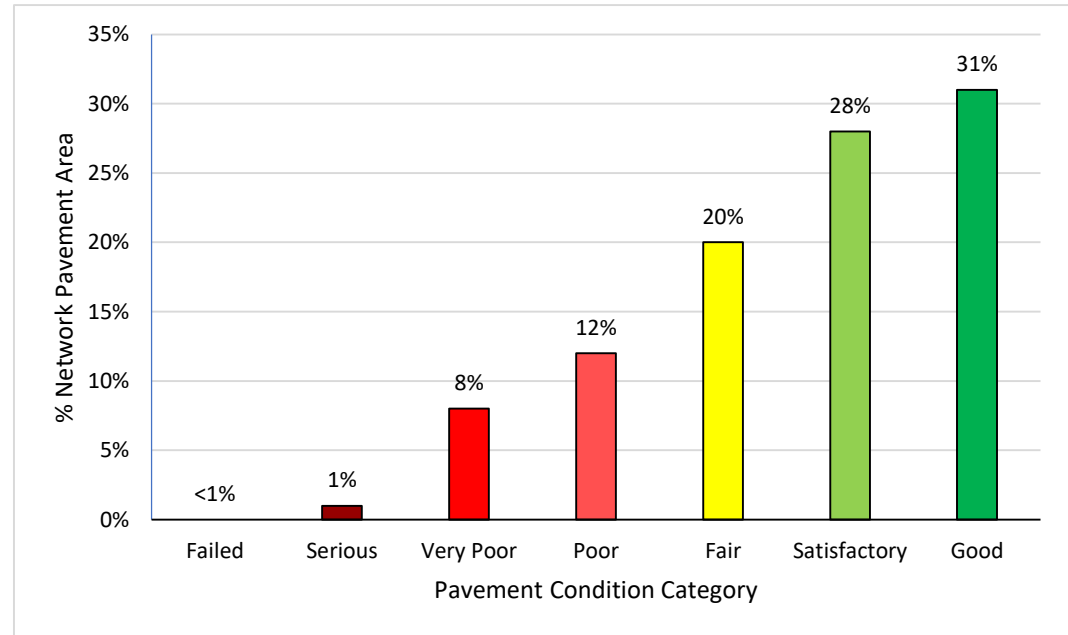
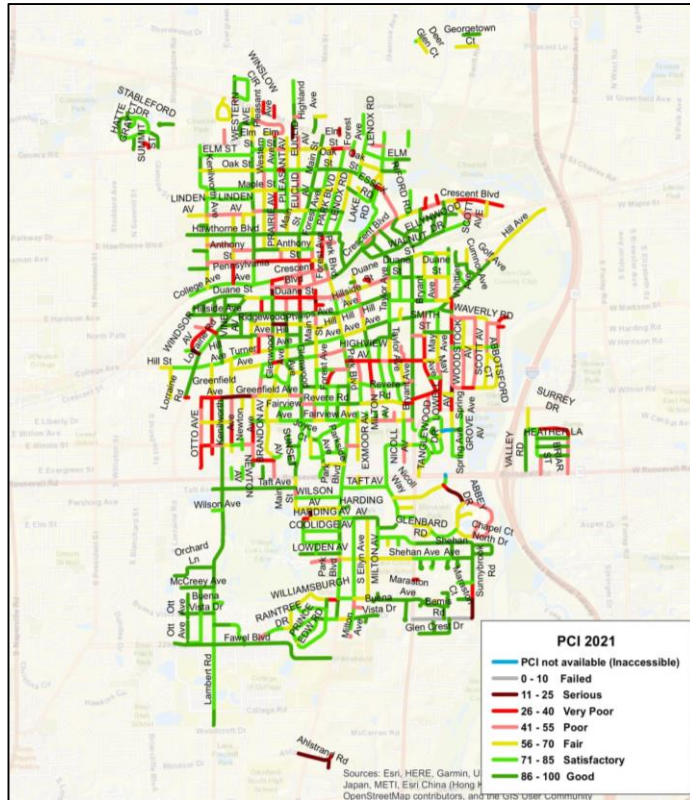


Pavement Condition Rating



PCI = 7(Failed), Bemis Rd, Ridge Rd - Greenview Dr

Pavement Condition Results

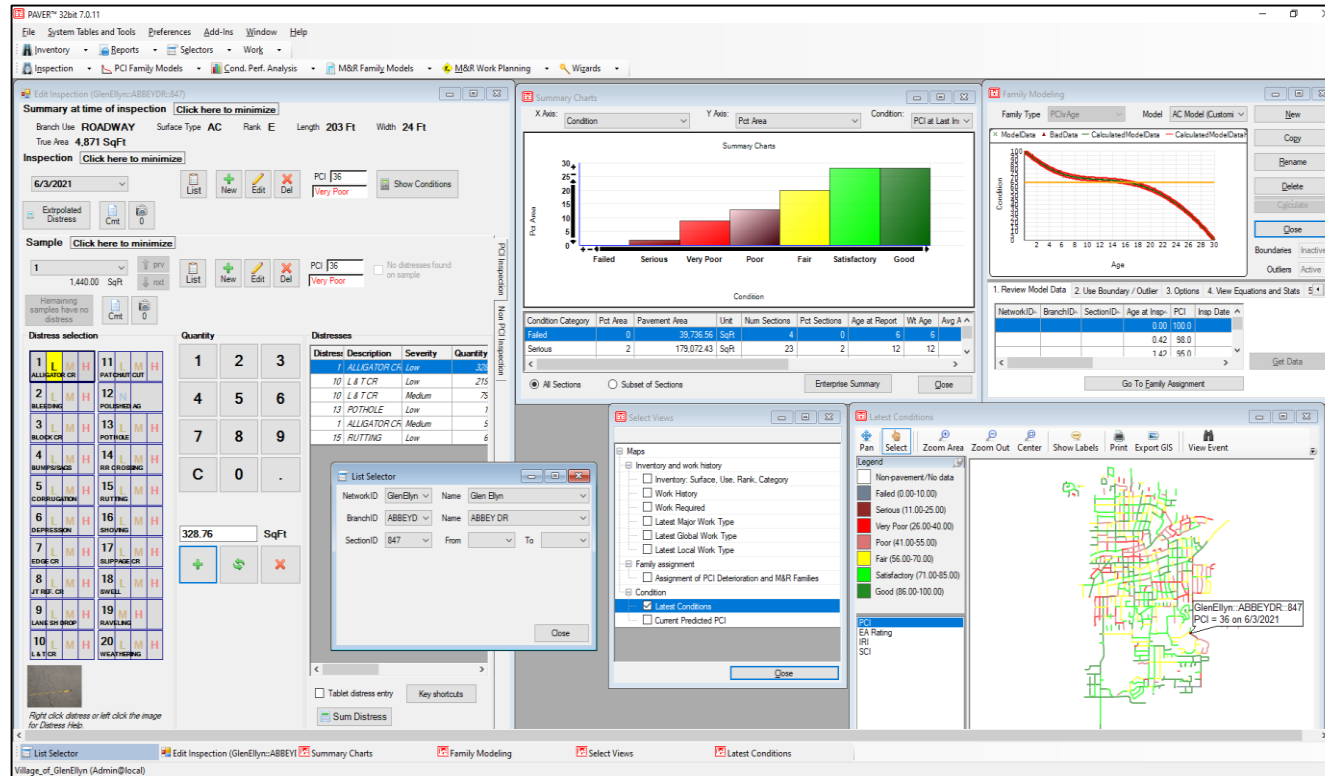


Average PCI = 72.6*

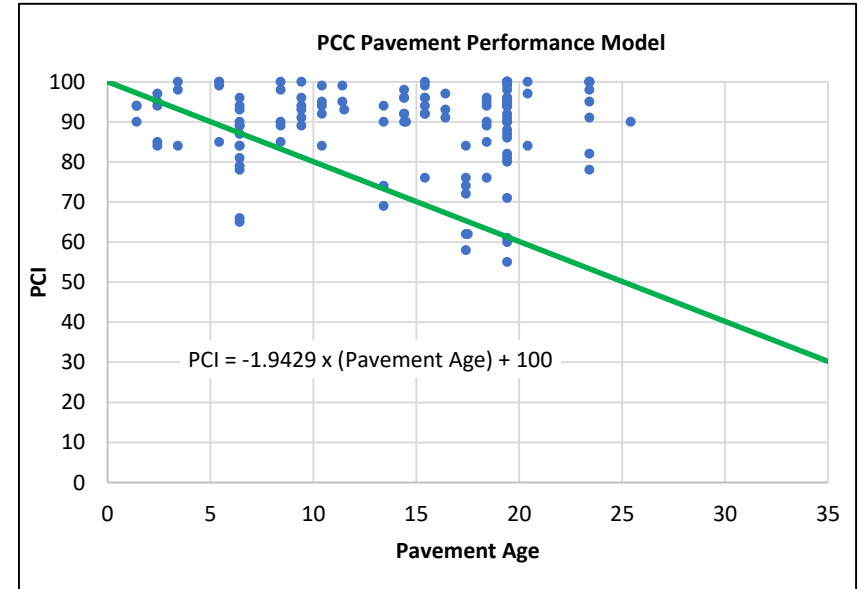
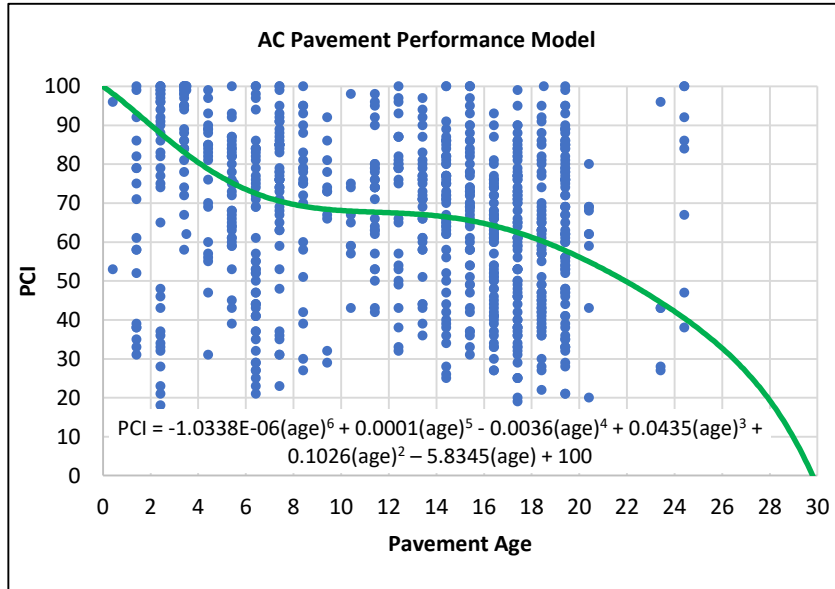
Network Mileage = 88.82 miles

*Based on pavement inspections performed in April 2021

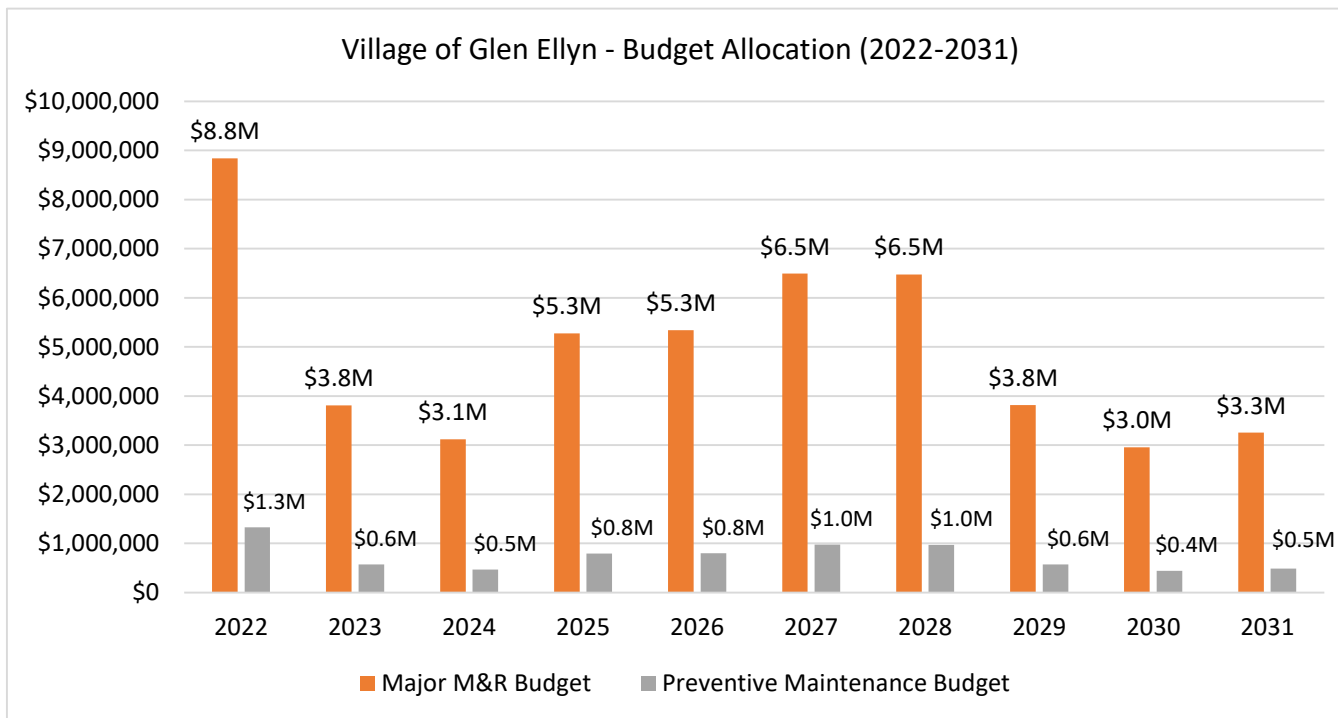
Pavement Management Software-PAVER



Pavement Performance Models



Budget Allocation (2022-2031)



Treatment Matrix - AC

Treatment Matrix for Residential Roads (AC)			
PCI	Localized Preventive	Localized Stop Gap	Major M&R
0 30	No Localized Preventive Treatment Recommended	Patching and Repair	Reconstruction
50			4.0" Mill & Overlay (Type IB Equivalent)
60			3.0" Mill & Overlay (Type IA Equivalent)
100	Crack Seal and Distress Repair	No Localized Stop Gap/ Major M&R Recommended	

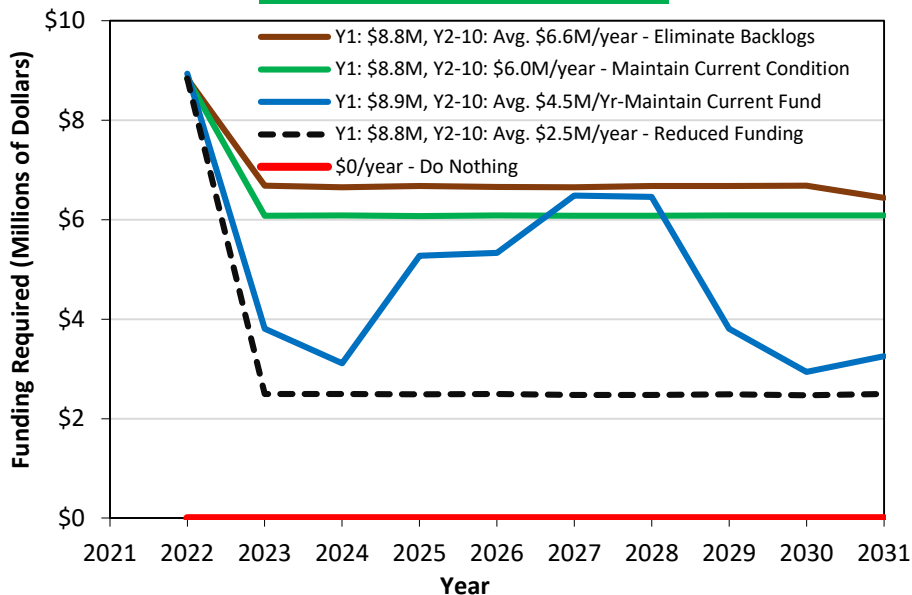
Treatment Matrix for Arterial/Collector Roads			
PCI	Localized Preventive	Localized Stop Gap	Major M&R
0 30	No Localized Preventive Treatment Recommended	Patching and Repair	Reconstruction
50			5.0" Mill & Overlay (Type IC Equivalent)
65			4.0" Mill & Overlay (Type IB Equivalent)
100	Crack Seal and Distress Repair	No Localized Stop Gap/ Major M&R Recommended	

Treatment Matrix - PCC

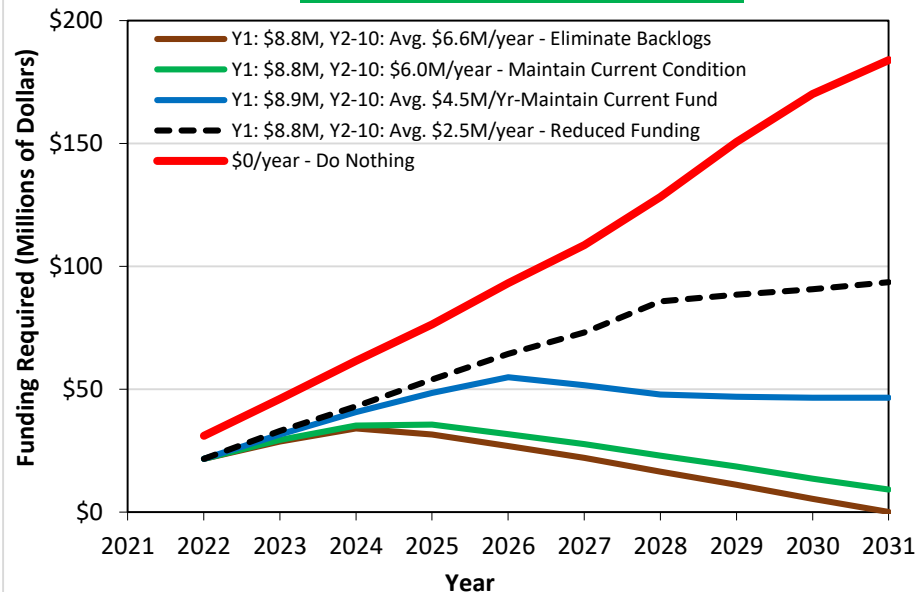
PCI Value	PCC Treatments
0	Reconstruction
40	
70	Slab Replacement
85	Crack Seal & Distress Repair

Budget Analysis (2022-2031)

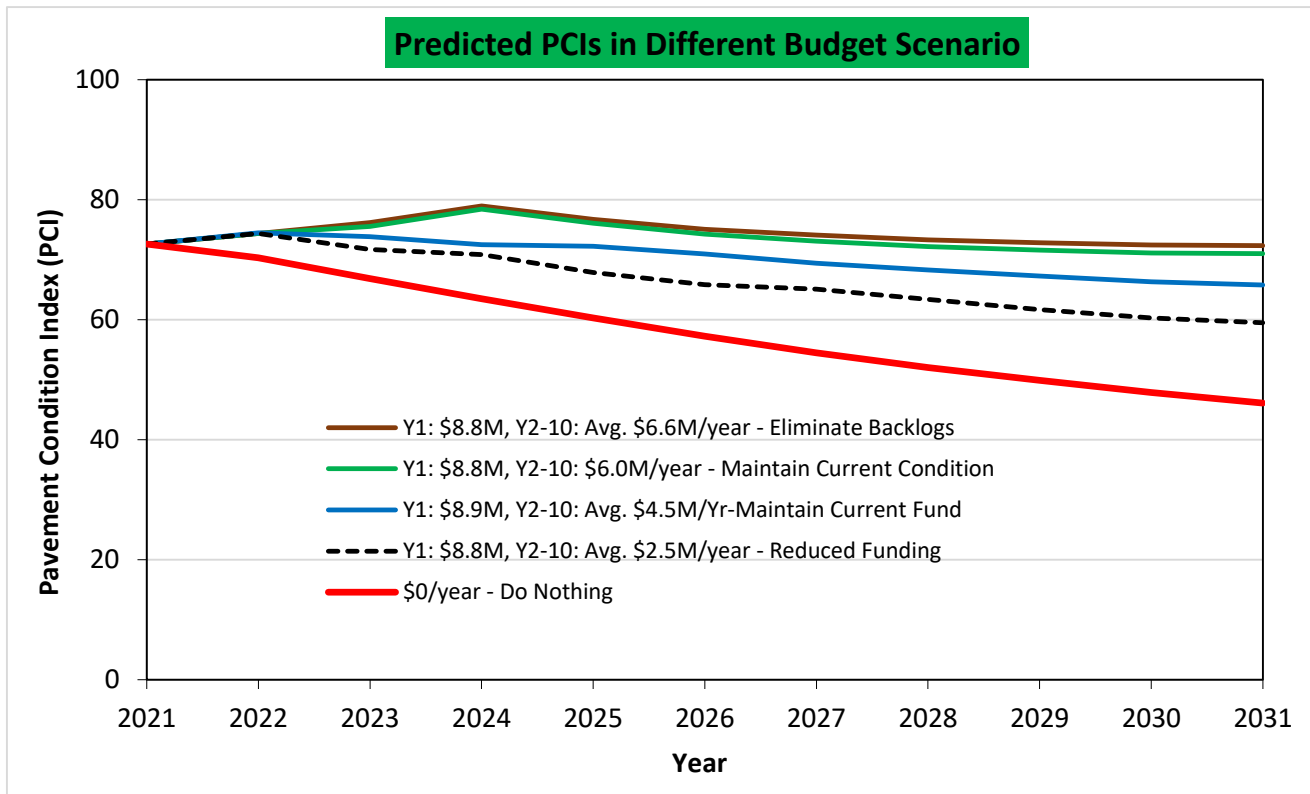
Funded Budget Requirements



Unfunded Budget Requirements



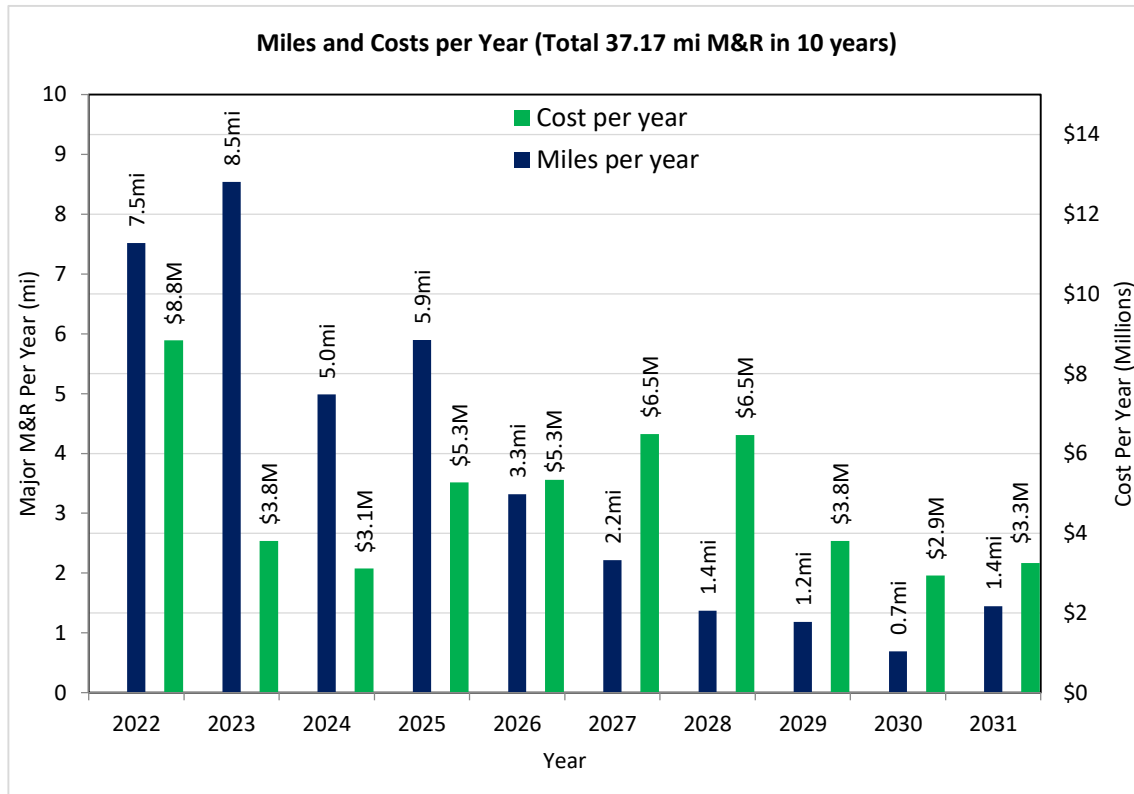
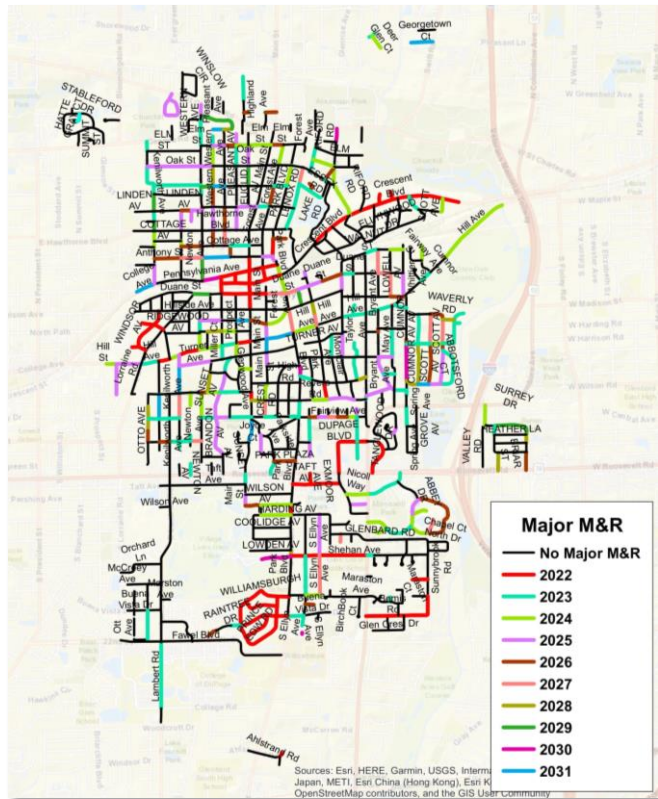
Budget Analysis (2022-2031)



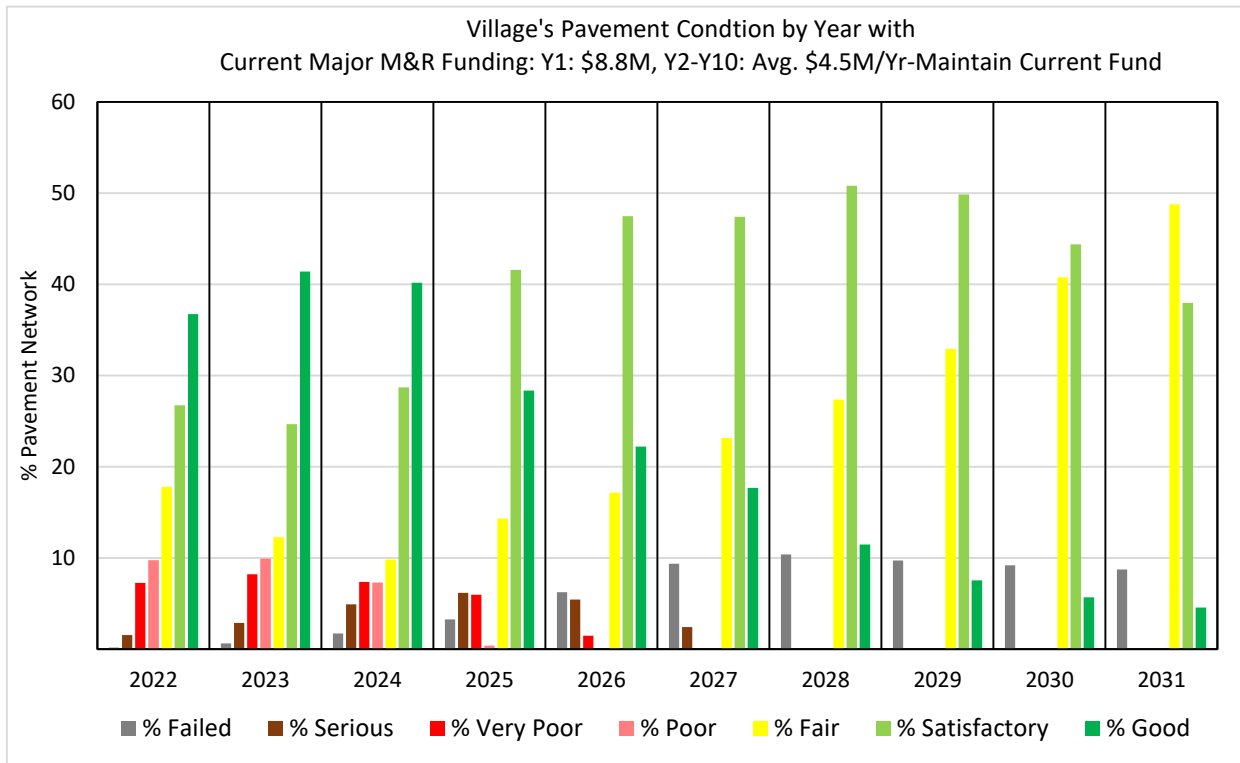
Budget Analysis (2022-2031)

Funding Scenario	Total 10-Year M&R Costs (2022-2031)	Remaining M&R Backlogs in 2031	Total 10-Year Costs	Predicted PCI 2031
Y1: \$8.8M, Y2-10: Avg. \$6.6M/year - Eliminate Backlogs	\$68.6 M	\$0	\$68.6 M	72.3
Y1: \$8.8M, Y2-10: \$6.0M/year - Maintain Current Condition	\$63.6 M	\$9.1 M	\$72.7 M	71.0
Y1: \$8.9M, Y2-10: Avg. \$4.5M/Yr-Maintain Current Fund	\$49.4 M	\$46.5 M	\$96. M	65.8
Y1: \$8.8M, Y2-10: Avg. \$2.5M/year - Reduced Funding	\$31.2 M	\$93.6 M	\$124.8 M	59.5
\$0/year - Do Nothing	\$0	\$184.0 M	\$184.0 M	46.1
1. 'M&R Backlogs' refers to the amount required to resurface/reconstruct all pavements at or below their critical PCI value. 2. 'Total 10-Year Costs' refers to the sum of 10-year major M&R expenses and remaining backlogs at the end of 10-year period. 3. Current network weighted average PCI is 72.6				

Current Funding Scenario CIP (2022-2031)



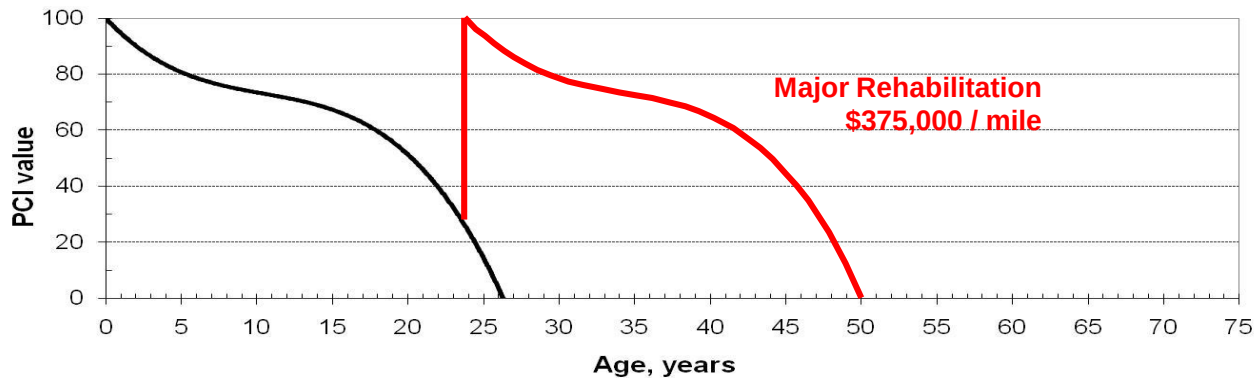
Current Funding Scenario CIP (2022-2031)



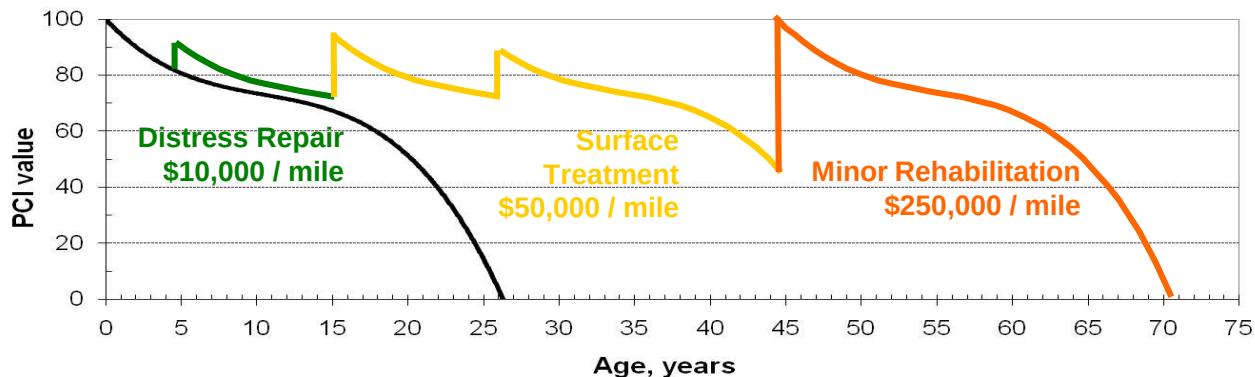
PCI Value	Pavement Rating
100	Good
85	
70	Satisfactory
55	Fair
40	Poor
25	Very Poor
10	Serious
0	Failed

Pavement Preservation

“Worst-First”



Preventive Maintenance



* Representative costs in initial year USD; no inflation or discounting

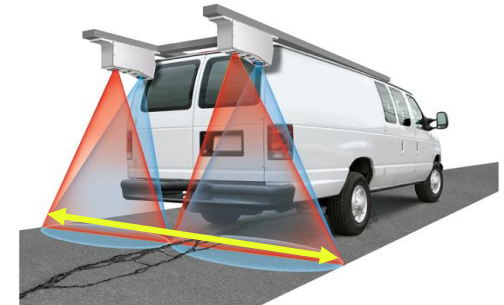
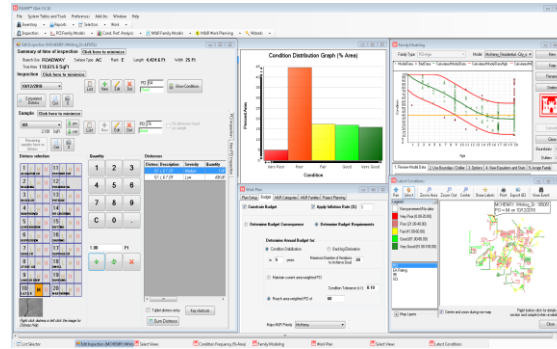
Localized Maintenance Recommendations-2022

Miles of Sections	Policy Cost	Wt. Avg. of PCI before Maintenance	Wt. Avg. of PCI after Maintenance
49.14 mi (Localized Preventive)	\$390,186	79.6	86.6
15.67 mi (Localized Stopgap)	\$33,792	45.6	50.9

Work Description	Work Quantity	Work Units	Work Cost
Crack Sealing – AC & PCC	59,090	Ft	\$97,499
Patching (Shallow) - AC & PCC	66,225	SqFt	\$214,727
Patching (Deep) - AC & PCC	14,724	SqFt	\$99,355
Grinding (Localized)	141	Ft	\$620
Slab Replacement - PCC	714	SqFt	\$11,777
Total =			\$423,978

Recommendations

- 🧭 **Pavement preservation**
- 🧭 **Update PMS regularly**
- 🧭 **Include structural analysis as part of PMS**
- 🧭 **Perform routine pavement condition inspections (3-5 years)**



Thank You!

Questions??

Joe Stefanski, P.E. (Senior Engineer)
Lax Premkumar, P.E. (Senior Engineer)
Shahriar Alam, P.E. (Staff Engineer)
 Applied Research Associates, Inc.
 100 Trade Centre Dr., Suite 200
 Champaign, IL 61820
 (217) 356-4500





**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 11/9/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Report
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1641)**

DOC ID: 2021-1641

CBD SUI - November 2021 Update

Statement of the Issue:

Please see the attached memorandum and its associated attachments pertaining to this agenda item.

Analysis:

Budget Impact:

Action Requested:

Attachments:

1. 11.9.2021.CIC CBD Streetscape Memo
2. Full Plan Set.CBD SUI 1-Prefinal.Reviewd10.27.2021_Optimized
3. 02_2021_09_28 CBD SUI Prjct PhI Special Provisions-Prefinal.Reviewd10.27.2021



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer
Tom Topor, Senior Civil Engineer

DATE: November 5, 2021

RE: CBD Streetscape and Utility Improvements
Project Update

INTRODUCTION

The purpose of this agenda item is to provide an update to the CIC on the status of the CBD Streetscape and Utility Improvements Project with a focus on the following project items:

- Status of Pre-Final Plans
- Utility undergrounding on Hillside and Main
- Advanced procurement of Brick Pavers
- Procurement of parkway trees for the project
- Historic Plaques Update
- Procurement of Phase III Engineering Services

BACKGROUND

Status of Pre-Final Plans

Prefinal plans for the first phase of the streetscape and utility improvements has been submitted to the Village on September 28th. Public Works Engineering, along with other divisions have reviewed the plans and provided comments on the various elements of the documents including plan and profile sheets, grading plans, detailed maintenance of traffic plans, erosion control, utility plans, pavement marking, signage, landscaping, irrigation, and streetlight plans. The sections of the plans depicting the proposed site materials (street furniture), landscaping, and irrigation have been included with October 12th CIC agenda. Staff greatly appreciates CIC's comments on the plans, in particular Commissioner's Baldin's expert review and offering review comments of the plans and landscaping related details. The review comments have been compiled and forwarded to Civiltech on November 5th. The review plans and special provisions are included as attachments.

Utility undergrounding on Hillside and Main

Staff is working with ComEd's External Affairs on preparing the Rider LGC – Local Government Compliance Adjustment for the proposed burying of overhead utilities. The Rider LGC is an additional fee assessed on elected customers located within the boundaries of a Local Government Unit. Local Government Unit enacts an ordinance to compel the ComEd, directly or indirectly, to perform the desired improvements. The Rider LGC allows ComEd to recover the costs it incurs to implement the project. A rough estimate for ComEd's portion of the project is \$300,000 and if Rider LGC is applied, would be spread out over Glen Ellyn electric users, based on kilowatts used. The number of months that the Rider would be assessed typically parallels the duration of construction. The next step is completion of the ComEd's engineering and preparation of detailed cost estimate.

Advanced procurement of Brick Pavers

Staff has been periodically checking in with Whitacre Greer, manufacturer of the selected brick pavers. In late October, staff was informed that the current lead times for the production of the specialty 12"x4" 'north shore' blend pavers increased from 22 weeks projected back in September to 30 weeks now. The increased time was attributed to backlog, labor shortage and strong product demand. If the brick order is placed by a contractor after the construction project is awarded, then the pavers would not be available during for the anticipated late June installation on Main Street. To combat this issues, Lurvey Landscape Supply (local distributor who provided pavers for prior mockup and Pennsylvania Ave installation) is willing to put in the order with Whitacre Greer next week to secure our place in a manufacturer's queue. Lurvey would then supply the pavers to the awarded contractor. Lurvey is aware that the Village is not making a commitment to obtaining the brick pavers in an unlikely event that the project is not awarded. Public Works staff believes that this a good way to avoid potential delays in material delivery.

Procurement of parkway tress for the project

On October 1, 2021 Public Works issued an RFP for Furnishing Parkway Trees for the Central Business District Streetscape and Utility Improvements (CBD SUI). Two responses were received to the RFP. Additionally, staff is working with another nursery, specializing in large diameter trees on obtaining a quote for the large trees for the project. This quote is expected to arrive by the end of the day Friday, November 5th. Staff will compile the results including quotes previously received from the Suburban Tree Consortium and will prepare recommendations on nurseries to furnish the trees for the project.

Historic Plaques Update

Glen Ellyn Historical Society has continued its efforts on design, research and appearance of the historic plaques. The Historical Society is working on the design of the plaque and potential inclusion of a horse through graphics on the granite plaques as well as working with Frank Troost at Troost Monument Company to determine our options regarding type fonts to be included on the granite plaques. Based on direction received from Dan Anderson, Civiltech has included 14 Decorative Granite Plaques on the Site Materials Layout Plans L-1.01 – L-1.09.

Procurement of Phase III Engineering (Construction Engineering) Services

With staff having completed its review of the prefinal plans for the project, a Request for Proposals will now be prepared and issued to firms for the procurement of Phase III Engineering (Construction Engineering) Services for the project. Staff's goal is to issue the RFP in late November/early December as to engage the most responsive firm for the assignment well in advance of the 2022 construction season.

ACTION REQUESTED

The memo is intended to provide an update on the project. Staff appreciates any input from the CIC on the items included in the memorandum.

Attachments

- 1) Reviewed Pre-final Plans
- 2) Reviewed Pre-final Specs
- 3) Rider LGC summary

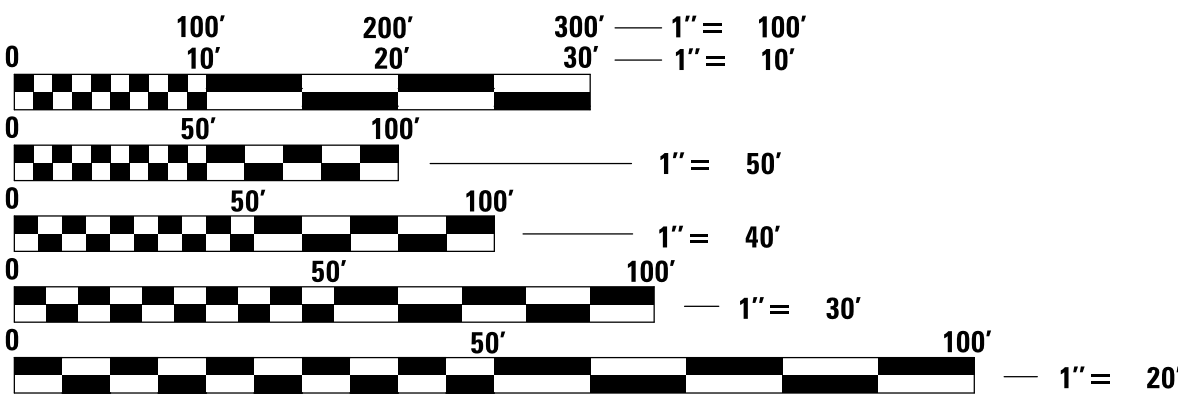
Desired Project Name? →

PLANS FOR PROPOSED DUANE STREET, HILLSIDE AVENUE AND MAIN STREET IMPROVEMENTS VILLAGE OF GLEN ELLYN

INDEX OF DRAWINGS

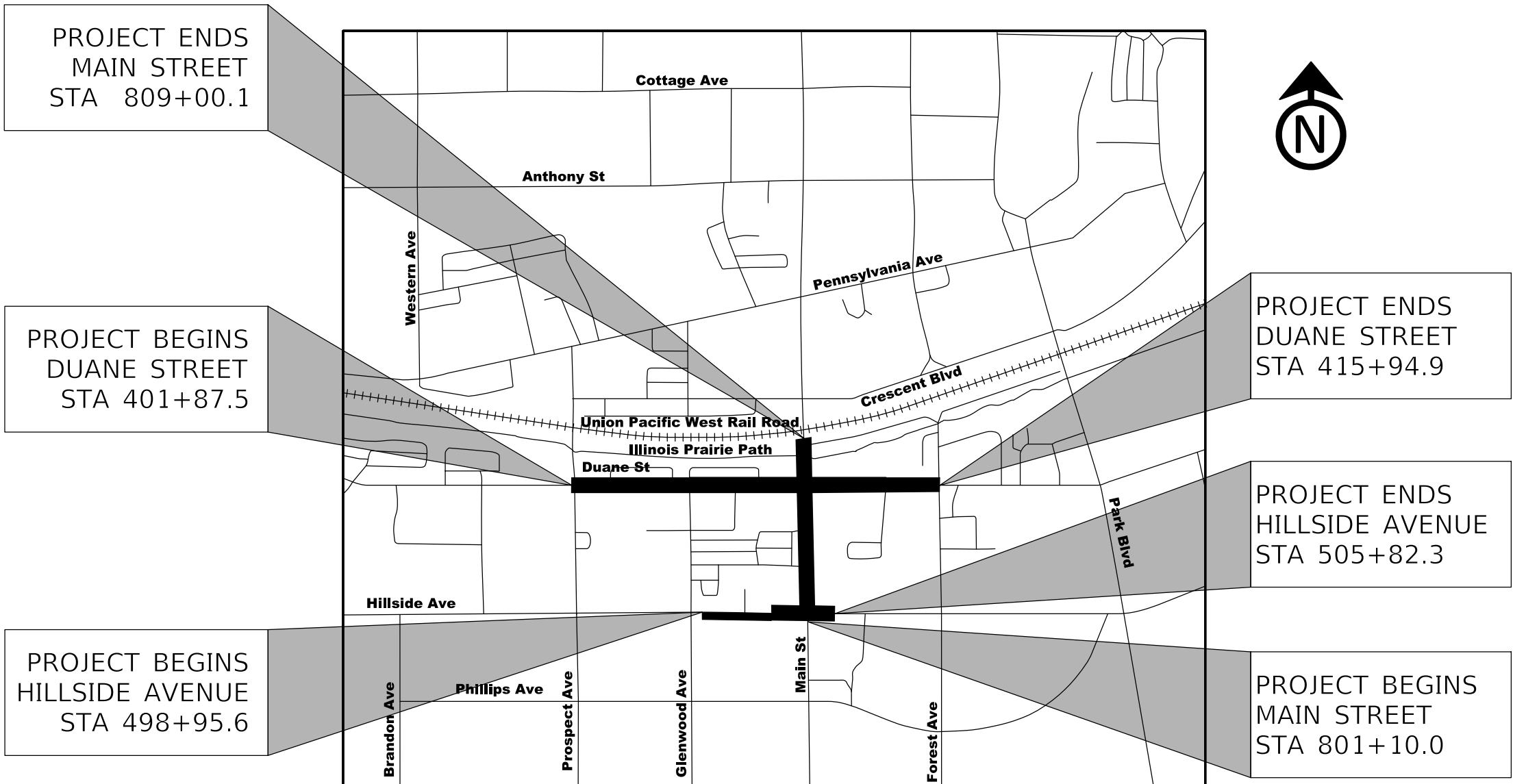
SHEET NO.	DESCRIPTION
1	COVER SHEET WITH INDEX
2 - 3	GENERAL NOTES, AND STANDARDS
4 - 6	SUMMARY OF QUANTITIES
7 - 10	TYPICAL SECTIONS
11	ALIGNMENT AND BENCHMARKS
12 - 14	REMOVAL PLANS
15 - 21	PLAN AND PROFILE
22 - 38	MAINTENANCE OF TRAFFIC PLANS
39 - 45	DETOUR PLANS
46 - 47	EROSION CONTROL PLANS
48 - 58	DRAINAGE AND UTILITIES
59 - 61	INTERSECTION GRADING PLANS
62 - 67	SIDEWALK GRADING PLANS
68	PAVEMENT MARKING PLANS
69	SIGNING PLANS
70 - 103	SITE LANDSCAPING PLANS
104 - 114	LIGHTING PLANS
115 - 119	CONSTRUCTION DETAILS
120 - 125	IDOT DISTRICT ONE DETAILS
126 - 137	CROSS SECTIONS

DESIGN AND POSTED SPEED LIMIT: 30 MPH
ROADWAY CLASSIFICATION:VILLAGE LOCAL ROADS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811



LOCATION MAP
NOT TO SCALE

PROJECT LENGTH:

DUANE AVENUE	(STA 401+87.5 TO STA 415+94.9) – 1,407.4 FT (0.267 MI)
HILLSIDE AVENUE	(STA 498+95.6 TO STA 505+82.3) – 686.7 FT (0.130 MI)
MAIN STREET	(STA 801+10.0 TO STA 809+00.1) – 790.1 FT (0.150 MI)

PROJECT TOTAL – 2,884.2 FT (0.546 MI)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	1
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LOCATION OF SECTION INDICATED THUS: — ■ —

APPLIES TO SHEETS 1 – 47 , 59 – 137

REGISTERED P.E., STATE OF ILLINOIS EXPIRES 11/30/2021

APPLIES TO SHEETS 104 – 114

REGISTERED P.E., STATE OF ILLINOIS EXPIRES 11/30/2021

APPLIES TO SHEETS 48 – 58

REGISTERED P.E., STATE OF ILLINOIS EXPIRES 11/30/2021

PLANS PREPARED BY:



Two Pierce Place, Suite 1400 - Itasca, Illinois 60143
Tel: 630.773.3900 - Fax: 630.773.3975
www.civiltechinc.com

GENERAL NOTES

1. ALL PAVEMENT AND STORM SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS; ADOPTED JANUARY 1, 2022 BY ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO; AND IN ACCORDANCE WITH THE LATEST EDITION OF THE CODE OF THE MUNICIPALITY, EXCEPT AS MODIFIED HEREIN.
2. ALL SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, PUBLISHED MAY 2013, AND IN ACCORDANCE WITH THE CODE OF THE MUNICIPALITY; EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK. IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY.
3. ALL SIDEWALK AND PUBLIC AREAS MUST BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA, PROWAG, ILLINOIS ACCESSIBILITY CODE AND ANY APPLICABLE LOCAL ORDINANCES. WHEN CONFLICTS EXIST BETWEEN THE GOVERNING AGENCIES, THE MORE STRINGENT SHALL GOVERN.
4. THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THIS CONTRACT.
5. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE VILLAGE, DEPARTMENT, AND THE ENGINEERS DO NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING THE CONSTRUCTION OPERATION SO AS NOT TO DAMAGE THEM. IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 107.20 OF THE 'STANDARD SPECIFICATIONS' THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY PRIOR TO THE START OF CONSTRUCTION OPERATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E.. AT 800-892-0123 AND THE MUNICIPALITY, FOR UTILITY LOCATIONS.
7. THE OWNER AND THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION REQUIRING COOPERATION WITH OTHERS. ALL AGENCIES, UNLESS OTHERWISE NOTED, SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR TEN (10) DAYS PRIOR TO THE START OF ANY SUCH OPERATION.
8. NO PLAN SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION". PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
9. ALL ELEVATIONS SHOWN ARE BASED ON NGS BENCH MARK 0105, P.I.D. DK3188 3 1/2" BRASS DISK ON TOP OF A 3 FOOT HIGH CONCRETE RETAINING WALL SURROUNDING AN ELECTRICAL CONTROL BOX, STAMPED "DUPAGE COUNTY GEODETIC SURVEY MONUMENT, HEIGHT MODERNIZATION PROGRAM 2006, 0105". PUBLISHED NAVD '88 ELEVATION 745.28. ALL PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK. HOWEVER, IF THE OWNER HAS A SOILS REPORT, THE RESULTS WILL BE AVAILABLE FROM THE OWNER, UPON REQUEST.
11. CONTRACTOR SHALL VIDEO TAPE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS. THIS WORK SHALL BE PAID FOR AT LUMP SUM UNIT PRICE FOR "PRE-CONSTRUCTION VIDEO TAPING."
12. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND THE AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT. IN ADDITION, THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES, EITHER MUNICIPALITY'S OR THE OWNER'S, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.
13. ALL THE MATERIAL TESTING SHALL MEET THE APPROVAL OF THE OWNER. FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN TESTING COMPANIES TO BE UNABLE TO VISIT SITE AND PERFORM TESTING WILL CAUSE CONTRACTOR TO SUSPEND OPERATION (PERTAINING TO TESTING) UNTIL TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF THE WORK TO BE BORNE BY THE CONTRACTOR.
14. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIME FOR ALL TYPES OF TRAFFIC. AT NO TIME SHALL ACCESS BE DENIED TO HOMES SURROUNDING THE SITE. SEE SPECIAL PROVISIONS REGARDING TRAFFIC.
15. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT THEIR OWN EXPENSE AS SHOWN ON THE ENGINEERING PLANS OR AS DIRECTED BY THE OWNER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

16. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HER/HIS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.
17. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR SHALL BE RESTORED TO PROPER OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER, OR MUNICIPAL ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
18. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.
19. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR HAULING AND DISPOSAL REQUIRED FOR CLEAN- UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
20. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENTS AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS SPECIFICALLY NOTED ON THE PLANS.
21. TREES SHALL BE PROTECTED UNDER THE SPECIAL PROVISIONS DESCRIBED IN THE SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.
22. SLOPE ALL SIDES OF EXCAVATIONS TO COMPLY WITH CODES AND ORDINANCES HAVING JURISDICTION. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE EITHER BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING.
23. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UPRIGHTS, STRINGERS AND CROSS BRACES, IN GOOD SERVICEABLE CONDITION. PROVIDE MINIMUM REQUIREMENTS FOR TRENCH SHORING AND BRACING TO COMPLY WITH CODES AND AUTHORITIES HAVING JURISDICTION. MAINTAIN SHORING AND BRACING AS EXCAVATION PROGRESSES IN ACCORDANCE WITH OSHA AND GOVERNING AUTHORITY.
24. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE DURING THAT PERIOD. THIS GUARANTEE SHALL BE PROVIDED IN THE FORM OF LABOR AND MATERIALS BOND.
25. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.
26. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY OR HIS REPRESENTATIVE. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY OR THEIR REPRESENTATIVE PRIOR TO INSTALLING BINDER, SURFACE, AND PRIOR TO PLACING ANY CONCRETE AFTER FORMS HAVE BEEN SET.
27. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.
28. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT.
29. ANY DEWATERING OF SEWER AND THAT MAY BE REQUIRED SHALL BE CONSIDERED EXTRA WORK UNLESS THAT SOFT MATERIALS WITH UNCON- ENCOUNTED IN SEWER CONSTRU- AND/OR ENGINEER) OVER -EXCAVAT- AND BACKFILL WITH COMPACTED CL- PIPE. THIS WORK WILL BE PAID FOR PER CU. YD. OF UNDERCUTTING FOR UTILITIES."
30. TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING IDOT CA-6 GRADATION UNLESS OTHERWISE SHOWN DIFFERENTLY ON THE PLANS. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH (IDOT) SPECIFICATIONS. JETTING WITH WATER SHALL NOT BE PERMITTED. COST OF TRENCH BACKFILL IS INCIDENTAL TO COST OF PIPE BEING INSTALLED.
31. TRENCH BACKFILL SHALL BE PROVIDED TO THE TOP OF THE TRENCH AND FLUSH WITH ADJACENT PAVEMENT DURING THE INSTALLATION OF UNDERGROUND UTILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY (UNDER TEMPORARY AGGREGATE) AND SHALL BE CONSIDERED AS INCIDENTAL TO THE PERTINENT UTILITY PAY ITEMS.
32. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT INLET LOCATIONS, AND AT OTHER LOCATIONS SELECTED BY THE ENGINEER, TO MINIMIZE THE AMOUNT OF SILTATION WHICH NORMALLY WOULD ENTER THE STORM SEWER SYSTEM.

33. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ON THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM (IF AVAILABLE). DAMAGE TO THE ROAD SUBGRADE DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR AT HIS/HER COST.
34. ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS ARE TO BE ADJUSTED TO MEET FINAL FINISH GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR AND THE COST WILL BE PAID SEPARATELY AS SPECIFIED IN THE SPECIAL PROVISIONS. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. (FINAL GRADES TO BE DETERMINED BY THE MUNICIPALITY AT THE TIME OF FINAL INSPECTION AND MAY VARY FROM PLAN GRADE).
35. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK. NOTIFY OWNER OF ANY DISCREPANCIES.
36. THE JOINTS IN THE PVC SEWER INSTALLED AT WATER MAIN CROSSINGS AND WITHIN THE LIMITS OF THE MINIMUM WATER MAIN HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS SHALL BE PRESSURE TESTED BY APPLYING PRESSURE EQUIVALENT TO THE STATIC WATER HEAD OF 2/3RD AVERAGE DEPTH OF STORM SEWER TO THE JOINT. IN NO CASE SHALL THIS PRESSURE BE LESS THAN 4.6 PSIG. AFTER THE REQUIRED PRESSURE HAS BEEN APPLIED TO THE JOINT, THE APPLIED PRESSURE SHALL BE SHUT OFF AND THE PRESSURE OBSERVED FOR 30 SECONDS. IF THE PRESSURE DROPS 1 PSIG WITHIN 30 SECONDS, THE JOINT SHALL BE CONSIDERED DEFECTIVE. NECESSARY REPAIRS SHALL BE MADE AND THE PRESSURE TEST REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED. THIS WORK IS INCIDENTAL TO THE COST OF THE SEWER.
37. THE COST OF CONNECTING EXISTING STORM SEWER AND SUMP PUMP LINES TO NEW STORM SEWERS AND STRUCTURES SHALL BE CONSIDERED INCIDENTAL.
38. EXCAVATION: NO MORE THAN 25' OF ROADWAY EXCAVATION SHALL BE LEFT OPEN WITHOUT INSTALLATION OF GEOFABRIC AND AT LEAST SIX-INCHES (6") OF COMPACTED AGGREGATE BASE COURSE.

Not realistic and "open" is not clearly defined. Perhaps strike this note.

EROSION CONTROL NOTES

1. SOIL EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICATION PROVISIONS OF THE "PROCEDURES AND STANDARDS FOR URBAN EROSION AND SEDIMENTATION CONTROL IN ILLINOIS".
2. STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD, AND OTHER DEBRIS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY DIRT, MUD, OR DEBRIS THAT MAY BECOME DEPOSITED UPON ADJACENT STREETS.
3. HAULING WILL NOT BE ALLOWED WHEN THE WORK SITE IS TOO WET TO MAINTAIN ACCEPTABLE CONDITIONS ON ADJACENT STREETS.
4. ADJACENT STREETS SHALL BE MECHANICALLY SWEEP PERIODICALLY AS DIRECTED BY THE ENGINEER.
5. NO SEDIMENT SHALL BE ALLOWED TO ENTER THE STORM SEWER SYSTEM.
6. ALL STORM SEWER STRUCTURES SHALL BE PROVIDED WITH STAKED BALES, SILT FENCE, OR INLET FILTERS AS DIRECTED BY THE ENGINEER AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE. INLET FILTERS SHALL CONSIST OF A REPLACEABLE REINFORCED FILTER BAG SUSPENDED FROM A RETAINER RING OR FRAME AS FURNISHED BY MARMAC MANUFACTURING CO., OR APPROVED EQUAL. THIS ITEM WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER EACH, FOR "INLET AND PIPE PROTECTION", WHICH WILL BE PAYMENT FOR ALL WORK SPECIFIED.
7. ALL STORM SEWER, CATCH BASINS, AND INLETS PROVIDED WITHIN THIS PROJECT ARE TO BE CLEANED AT THE END OF CONSTRUCTION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE. CLEANING MAY ALSO BE REQUIRED DURING THE COURSE OF CONSTRUCTION OF THE PROJECT IF IT IS DETERMINED THAT THE SILT AND DEBRIS TRAPS ARE NOT PROPERLY FUNCTIONING AND THEIR PERFORMANCE IS IMPAIRED.
8. IF FOUND BY INSPECTION THAT CONDITIONS ARE NOT SUBSTANTIALLY AS STATED OR SHOWN IN THE APPROVED EROSION AND SEDIMENT CONTROL PLANS, THE ENGINEER MAY STOP FURTHER WORK UNTIL DEFICIENT CONDITIONS ARE CORRECTED.
9. ALL ABOVE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS OTHERWISE NOTED.

CIVILTECH Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN	GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JRR	REVISED -					DUPAGE	137	2
	CHECKED - KRK	REVISED -							
	DATE -	REVISED -							
						SHEET NO. 1	OF	2	SHEETS
					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

UTILITY NOTES

1.

THE CONTRACTOR SHALL ARRANGE WITH THE VARIOUS UTILITY COMPANIES FOR THE LOCATION AND ANY NECESSARY ADJUSTING OF THE OVERHEAD OR UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
2.

THE LOCATION, SIZE AND DEPTH OF THE WATER MAINS, STORMS SEWERS AND/OR VARIOUS UTILITIES, AS SHOWN ON THE PLANS, ARE FROM THE LATEST AND BEST AVAILABLE INFORMATION TO THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE UTILITIES LOCATED.
3.

THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH ALL UTILITY COMPANIES IN ORDER TO MAINTAIN SERVICES DURING CONSTRUCTION AT NO ADDITIONAL EXPENSE TO THE CONTRACT.
4.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 811 FOR FIELD LOCATION OF BURIED UTILITIES 48-HOURS NOTIFICATION IS REQUIRED).
5.

ANY EXISTING OR PROPOSED UTILITY DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE OWNER.
6.

THE VILLAGE WILL LOCATE EXISTING SANITARY AND WATER SERVICES TO THE INDIVIDUAL RESIDENCES WITHIN THE PROJECTS LIMITS. THESE SERVICES WILL BE LOCATED ONE TIME ONLY. FROM THEN ON, THE CONTRACTOR SHALL DOCUMENT AND BE RESPONSIBLE FOR MAINTAINING KNOWLEDGE OF THE LOCATIONS OF THESE SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AS-BUILT KNOWLEDGE OF THE LOCATION (INCLUDING ELEVATIONS) OF THE NEWLY INSTALLED SERVICES AND MAINS. THE VILLAGE WILL NOTE BE RESPONSIBLE FOR LOCATING NEW MAINS OR SERVICES FOR THE CONTRACTOR. THIS IS IN EFFECT UNTIL FINAL PAYMENT FROM THE VILLAGE. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAKE THE AS-BUILT UNDERGROUND UTILITY INFORMATION AVAILABLE TO THE VILLAGE WHENEVER REQUESTED. IN THE EVENT OF A "JULIE" CALL WITHIN THE PROJECT LIMITS, THE VILLAGE OR ITS AGENT WILL NOTIFY THE CONTRACTOR TO MARK ANY UTILITIES STILL UNDER THE CONTRACTORS RESPONSIBILITY.

POINTS OF CONTACT

VILLAGE OF GLEN ELLYN
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Specify Contact Information (Engineering, Utilities (Add), Electric (Add), and General Public Works (Add)).

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WATER AND SEWER NOTES

1.

COARSE AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING IDOT CA-6 GRADATION FOR SANITARY AND STORM SEWER PIPES. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. RECYCLED MATERIAL WILL NOT BE ALLOWED.
2.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES FLOWS THROUGH EXISTING STORM AND SANITARY SEWER SYSTEMS.
3.

THE EXISTING STRUCTURES SHALL BE INSPECTED BEFORE CONSTRUCTION STARTS. DEBRIS DEPOSITED IN THE FLOW LINE OF ANY STRUCTURE, OR GUTTER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CLOSE OF CONSTRUCTION OPERATIONS ALL STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. ANY ACCUMULATION OF MATERIAL IN THE STRUCTURE DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AT HIS EXPENSE.
4.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR STRUCTURES. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS, AND DISCHARGE THE SAME. THE CONTRACOR SHALL BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE.
5.

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY FOR DEWATERING TRENCH EXCAVATIONS AS WELL AS SHORING TRENCH WALL DURING CONSTRUCTION. COMPLIANCE WITH THE ABOVE WILL BE INCLUDED IN THE COST OF CONSTRUCTION.
6.

ALL FRAMES WITH SELF-SEALING CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, VALVE VAULT, OR METER VAULT SHALL HAVE CAST INTO THE LID "VILLAGE OF GLEN ELLYN" AND ONE OF THE FOLLOWING WORDS: ALL LIDS TO BE USED ON SANITARY SEWER STRUCTURES SHALL BEAR THE WORD "SANITARY". ALL LIDS TO BE USED ON WATER SYSTEM STRUCTURES SHALL BEAR THE WORD "WATER". ALL CURB BOXES SHALL SAY "DUMP NO WASTE" OR "DRAINS TO RIVERS" OR SIMILAR. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE FRAME AND GRATE.
7.

UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FOOT LONG BRICK AND NON-SHRINK/MORTAR AND MECHANICAL PLUG. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
8.

CONTRACTOR SHALL DETERMINE WHEN FLAT SLAB TOPS ARE REQUIRED ON MANHOLES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE USE OF FLAT SLAB TOPS.
9.

FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES OF ALL NEW, ADJUSTED, OR RECONSTRUCTED STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE, ADJUSTMENT OR RECONSTRUCTION COST.
10.

ANY EXISTING OR PROPOSED SEWER OR WATERMAIN DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE VILLAGE.
11.

ALL STRUCTURES, FRAMES, LIDS, GRATES, AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED BEFORE FINAL INSPECTION AND ACCEPTANCE.

Replace with PROPERTIES. Also, check with utilities to see if they are comfortable with this approach for this project.

Consider specifying TBF everywhere. See sheet 2 for further clarity.

Okay minus block outs; specify roundouts and include standard

Not a water and sewer note but elsewhere specify what we want on electrical and street lighting handholes, if anything.

VILLAGE OF GLEN ELLYN STANDARDS

STANDARD NO.	DESCRIPTION
PV-01	B-6.12 CURB & GUTTER
PV-02	DEPRESSED CURB
PV-05	PCC CURB & GUTTER EXPANSION JOINT DETAIL
PV-06	CONCRETE SIDEWALK DETAIL
PV-08	CONCRETE DRIVEWAY DETAIL
PV-10	TYPICAL PAVEMENT RESTORATION
PV-12	B-6.12 CURB & GUTTER WITH ADJACENT WALK

IDOT DISTRICT ONE STANDARDS

STANDARD NO.	DESCRIPTION
BD-07	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING

IDOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-10	PAVEMENT JOINTS
420101-07	24' JOINTED PCC PAVEMENT
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
601001-05	PIPE UNDERDRAINS
604001-05	FRAME AND LIDS TYPE 1
604051-04	FRAME AND GRATE TYPE 11
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A&B METAL POSTS (FOR SIGNS & MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS

 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN	GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JRR	REVISED -					DUPAGE	137	3
	CHECKED - KRK	REVISED -							
	DATE -	REVISED -							
	SHEET NO. 2 OF 2 SHEETS				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
		20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	338
		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	63
		20101000	TEMPORARY FENCE	FOOT	960
		20101200	TREE ROOT PRUNING	EACH	24
		20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	9
		20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	15
		21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	9,969
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	40
X		28000500	INLET AND PIPE PROTECTION	EACH	42
		28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	1,921
X		30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	9,415
X		35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	929
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	40
X		40600990	TEMPORARY RAMP	SQ YD	156
X		40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	11
X		40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	8
X		40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	5,709
		40701886	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 1/4"	SQ YD	8,399
X		42000300	PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	723
X		42001300	PROTECTIVE COAT	SQ YD	6,064
		42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	145
X		42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	422
X		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	30,096
X		42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	454
X		42400410	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	SQ FT	431
X		44000100	PAVEMENT REMOVAL	SQ YD	10,019
		44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	87
X		44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	505
X		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	4,937
X		44000600	SIDEWALK REMOVAL	SQ FT	30,733
		44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	5
		44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	22

SEE ESTIMATE FOR ADDITIONAL COMMENTS ON PAY ITEMS

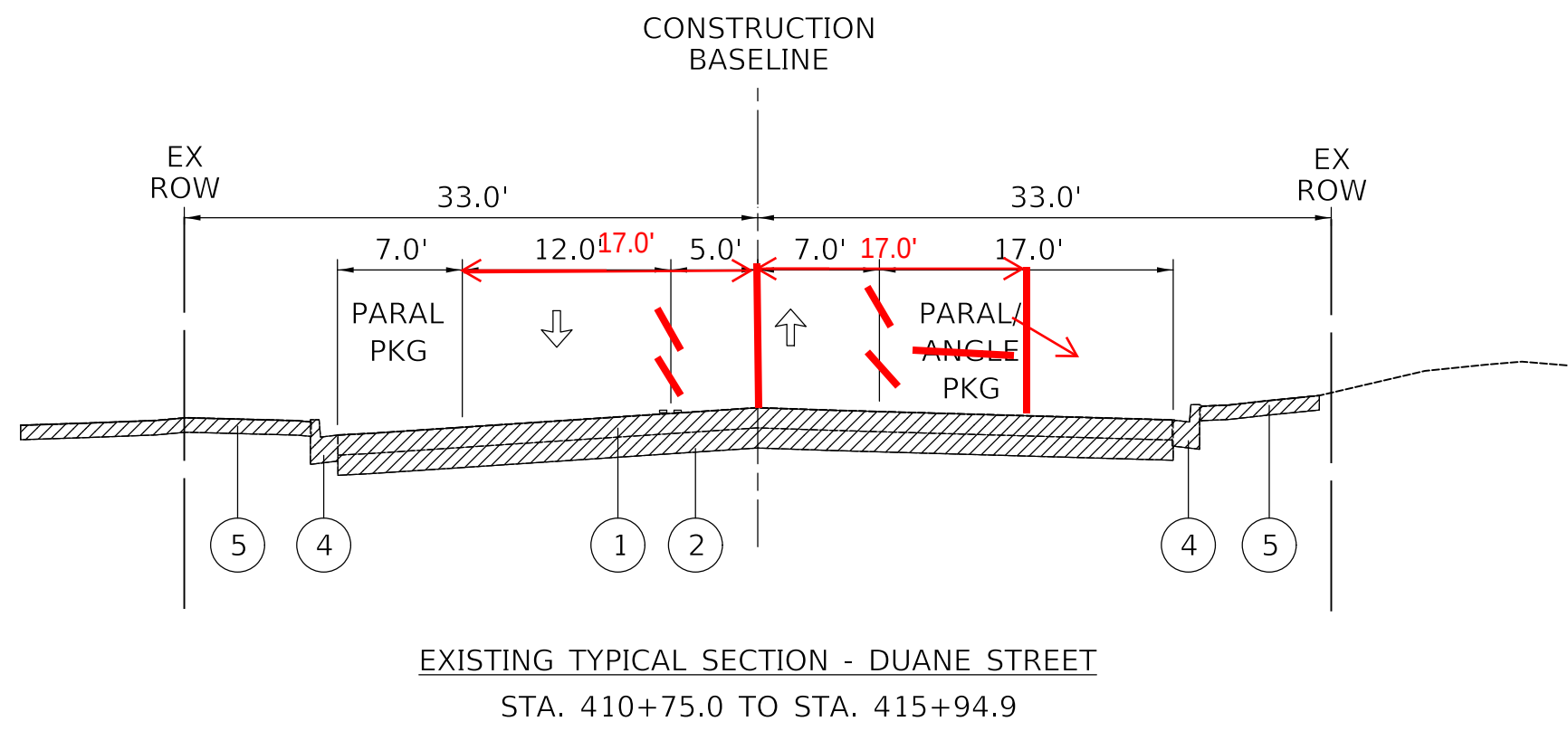
SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	X	1	TRENCH BACKFILL	CU YD	2,981
	x	2	CLASS D PATCHES, SPECIAL	SQ YD	763
	X	6	DUCTILE IRON WATER MAIN, CLASS 52, OPEN CUT, 10"	LF	467
	X	7	CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), 10"	EACH	1
	X	8	CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), 12"	EACH	1
	X	9	DUCTILE IRON WATER MAIN FITTINGS (R.J.T)	POUND	4,000
	X	10	WATER VALVE, 10"	EACH	2
	X	11	VALVE VAULT, 48-60" DIAMETER	EACH	2
	X	12	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	5
	X	13	WATER VALVE TO BE REMOVED/ABANDONED	EACH	4
	X	14	FLOWABLE FILL ABANDONED UTILITY	CU YD	11
	X	15	TAPPING SLEEVE AND LINE STOP, 8"	EACH	5
	X	16	FIRE HYDRANT TO BE REMOVED	EACH	5
	X	17	REMOVE EXISTING VALVE BOXES	EACH	2
	X	18	WATER SERVICE REPLACEMENT WITH NEW BUFFALO BOX, 2"	EACH	30
	X	19	ADDITIONAL WATER SERVICE LINE, 2"	LF	100
	X	20	PRE-CONSTRUCTION SEWER CLEANING AND TELEVISIONING	LF	679
	X	21	CIPP SEWER LINER, 8" DIAMETER	LF	103
	X	22	CIPP SEWER LINER, 10" DIAMETER	LF	576
	X	23	INTERNAL SERVICE REINSTATEMENT	EACH	15
	X	24	PROTRUDING TAP REMOVAL	EACH	5
	X	25	REMOVAL OF SANITARY SEWER, 10"	LF	470
	X	26	SANITARY SEWERS, 10", OPEN CUT, PVC, SDR 26, ASTM D3034, 8 TO 12 FEET DEEP	LF	470
	X	27	SANITARY SEWERS, 6"(WATER MAIN QUALITY), PVC, SDR 26, ASTM 2241	LF	50
	X	28	SANITARY MANHOLES, 4' DIAMETER, 8 TO 12 FEET DEEP	EACH	2
	X	29	SANITARY SERVICE CONNECTION	EACH	14
	X	30	ADDITIONAL SANITARY SEWER LATERAL, 6"	LF	350
	X	31	LATERAL CLEANING AND TELEVISIONING	EACH	16
	X	32	ADDITIONAL LATERAL CLEANING AND TELEVISIONING	LF	100
	X	33	10-FOOT T-LINER, 8"X6"	EACH	14
	X	34	10-FOOT T-LINER, 10"X6"	EACH	2
	X	35	ADDITIONAL LATERAL LINER, 6"	LF	320

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	X	36	LATERAL SEAL INSTALLATION, 6"	EACH	15
	X	37	LATERAL SEAL INSTALLATION, 8"	EACH	13
	X	38	CLEANOUT INSTALLATION	EACH	10
	X	39	SEAL & ADJUST SANITARY MANHOLE FRAME	EACH	8
	X	40	STRUCTURAL LINING	VERT. FT	28
	X	41	REMOVAL OF STORM SEWER, 6"	LF	209
	X	42	REMOVAL OF STORM SEWER, 8"	LF	514
	X	43	REMOVAL OF STORM SEWER, 10"	LF	276
	X	44	REMOVAL OF STORM SEWER, 12"	LF	372
	X	45	REMOVAL OF STORM SEWER, 15"	LF	142
	X	46	STORM SEWERS, PVC, SDR 26, ASTM 2241, 6"	LF	130
	X	47	STORM SEWERS, PVC, SDR 26, ASTM 2241, 8"	LF	165
	X	48	STORM SEWERS, PVC, SDR 26, ASTM 2241, 12"	LF	643
	X	49	STORM SEWERS, RCP, CL IV, ASTM C76, 12"	LF	1,103
	X	50	DETENTION STORAGE 5'-DIAM-RCP	LF	90
	X	51	STORM MANHOLE, 48" DIAMETER	EACH	20
	X	52	DOGHOUSE MANHOLE, 72" DIAMETER	EACH	1
	X	53	FRAME AND GRATES TO BE ADJUSTED	EACH	19
	X	54	STRUCTURES TO BE REMOVED	EACH	35
	X	55	CATCH BASINS, TYPE A, 4' DIAMETER, TYPE 11 FRAME AND GRATE	EACH	11
	X	56	INLETS, TYPE A, 2' DIAMETER, TYPE 11 FRAME AND GRATE	EACH	9
	X	57	PLUG PIPE	EACH	1
	X	58	TRANSVERSE UNDERDRAIN, 4"	LF	71
	X	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	4,585
	X	60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	460
	X		NON SPECIAL WASTE DISPOSAL	CU YD	50
		70106800	CHANGEABLE MESSAGE SIGN	CAL MO	36
		72000100	SIGN PANEL - TYPE 1	SQ FT	23
		72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	6
		72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	1
		72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	7
	X	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	36

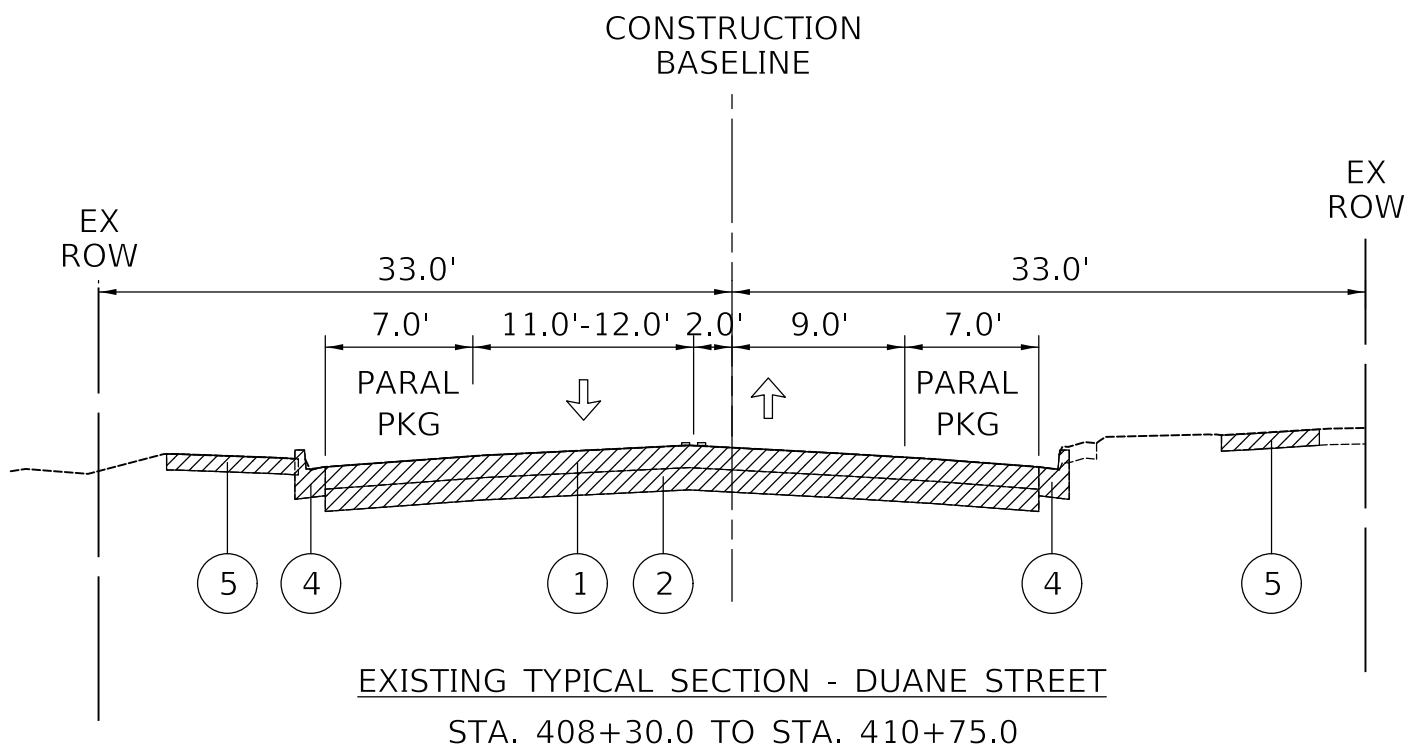
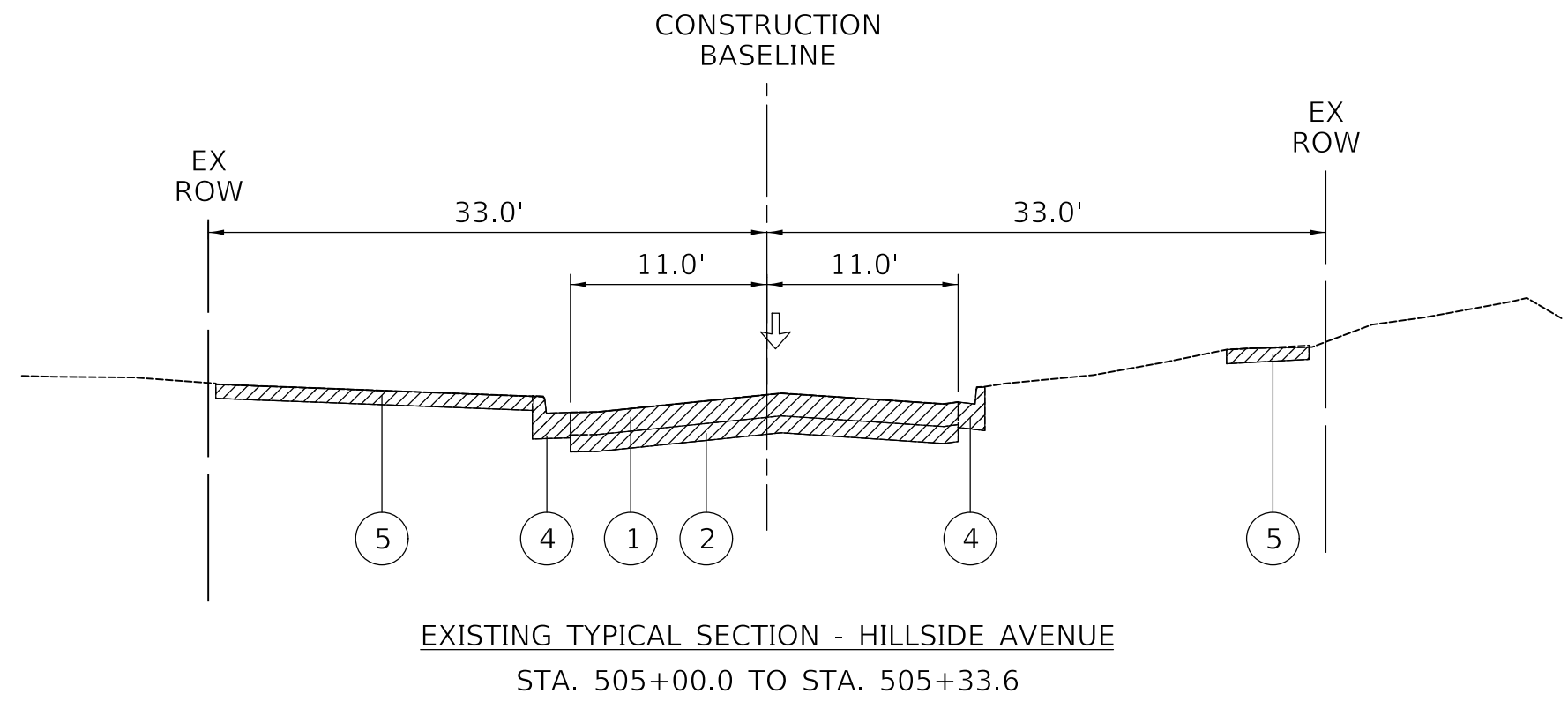
SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	X	72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	7
		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	287
		72900100	METAL POST - TYPE A	FOOT	12
		72900200	METAL POST - TYPE B	FOOT	16
		73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	23
	X		SIGN TO BE RELOCATED	EQCH	1
		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	214
		78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	385
		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	981
		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	406
		78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	63
		78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	786
		78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	721
		78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	56
		78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	60
	X	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	495
	X	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	300
	X		TRAFFIC CONTROL AND PROTECTION	L SUM	1
	X	X4201600	PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH)	SQ YD	139
	*	X6060505	CONCRETE CURB (SPECIAL)	FOOT	50
	X	XX003668	PRECONSTRUCTION VIDEO TAPING	L SUM	1
	X	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
	X	Z0019598	DUST CONTROL, SPECIAL	GALLON	5,936
	X	Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	6,261
	X	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
	X		STREET SWEEPING	DAY	18
	X		PORTLAND CEMENT CONCRETE CARRIAGE WALK	SQ FT	2,539
	X		TEMPORARY DRIVEWAY RAMP	EACH	17
	X		TEMPORARY INTERSECTION RAMP	EACH	11
	X		UNDERDRAIN	FOOT	2,525
	X		SOIL CELLS	CU FT	9,372
	X		PLANTER SOIL	CU FT	17,738
	X		SEAT WALL	FOOT	251

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	X		GRANITE CURB PLANTER 6'X6'	EACH	2
	X		GRANITE CURB PLANTER 5'X7'	EACH	34
	X		GRANITE CURB PLANTER 5'X15'	EACH	14
	X		GRANITE CURB PLANTER CUSTOM	EACH	1
	X		IRRIGATION SYSTEM	L SUM	1
	X		BACKFLOW PREVENTER (RPZ)	EACH	3
	X		WATER TAP	EACH	3
	X		WATER METER IN VAULT	EACH	3
	X		WATER VALVE (B-BOX)	EACH	6
	X		PAVER GRATES (5X5)	EACH	5
	X		BRICK PAVERS: CROSSWALK	SQ FT	1,957
	X		BRICK PAVERS: 5FT FURNITURE ZONE	SQ FT	9,041
	X		BRICK PAVERS: NARROW BAND	SQ FT	238
	X		DECORATIVE GRANITE PLAQUES (INSTALL ONLY)	EACH	13
	X		DETECTABLE WARNING	SQ FT	335
	X		LARGE CALIPER TREE (CONTRACTOR DELIVER AND INSTALL)	EACH	3
	X		LARGE CALIPER TREE (VILLAGE PURCHASE PRICE)	EACH	3
	X		4" CALIPER TREE (CONTRACTOR DELIVER AND INSTALL)	EACH	70
	X		4" CALIPER TREE (VILLAGE PURCHASE PRICE)	EACH	70
	X		SHRUB ITEA VIRGINIA 'LITTLE HENRY'	EACH	13
	X		SHRUB HYDRANGEA SERRATA SMNMAKTSR	EACH	17
	X		SHRUB ARONIA MELANOCARPA 'MORTON'	EACH	6
	X		SHRUB CEANOTHUS AMERICANUS	EACH	16
	X		PERENNIAL BAPTISIA 'BLUEBERRY SUNDAE'	EACH	6
	X		PERENNIAL COREOPSIS LANCEOLATA	EACH	51
	X		PERENNIAL DALEA PURPUREA	EACH	19
	X		PERENNIAL ECHINACEA PURPUREA	EACH	12
	X		PERENNIAL HEUCHERA X VILLOSA 'CARNIVAL WATERMELON'	EACH	24
	X		PERENNIAL LIATRIS SPICATA 'KOBOLD'	EACH	71
	X		PERENNIAL LOBELIA CARDINALIS	EACH	8
	X		PERENNIAL NEPETA X FAASENII 'KIT KAT'	EACH	52
	X		PERENNIAL PENSTEMON DIGITALIS	EACH	26

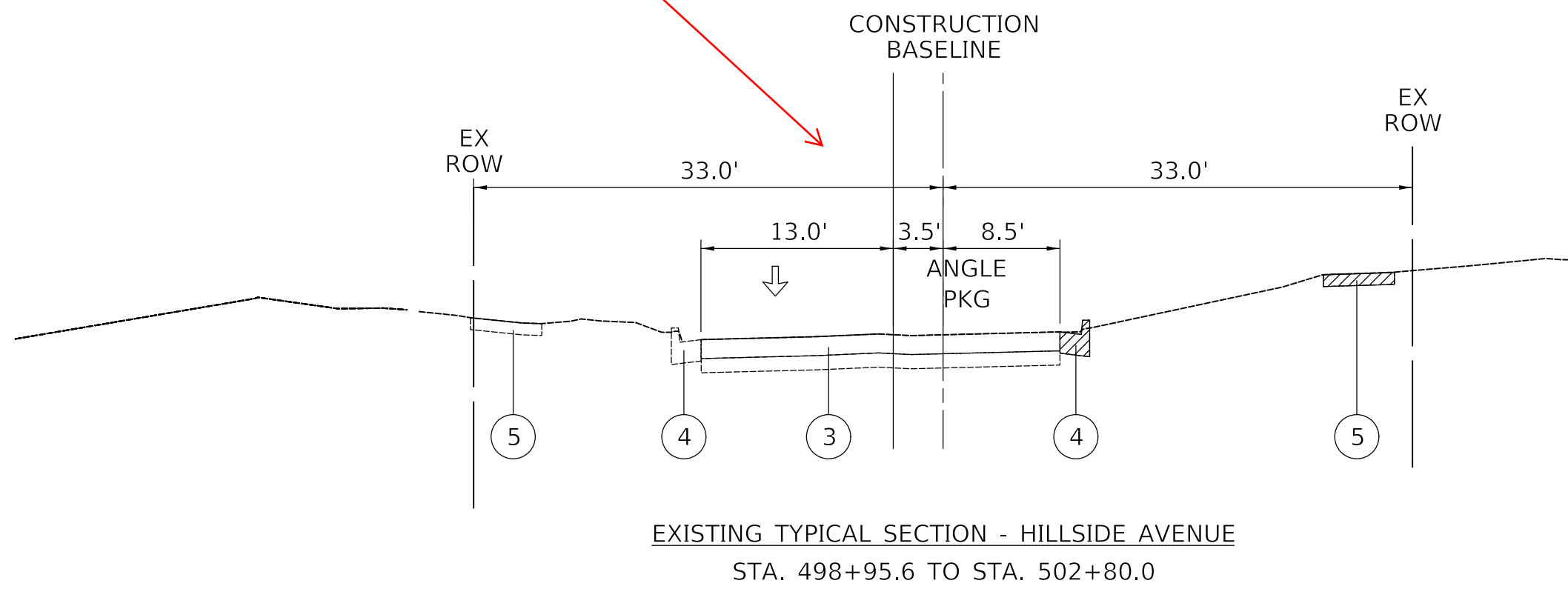
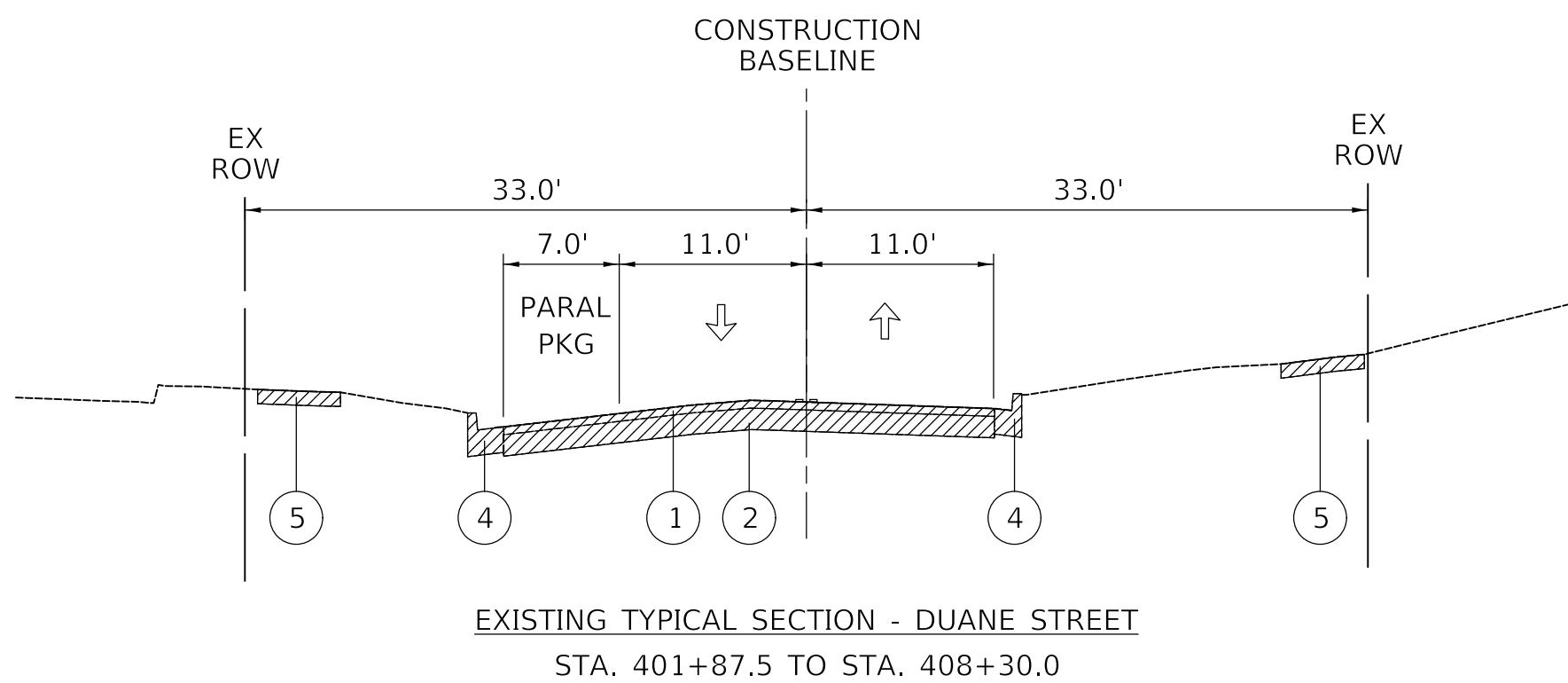
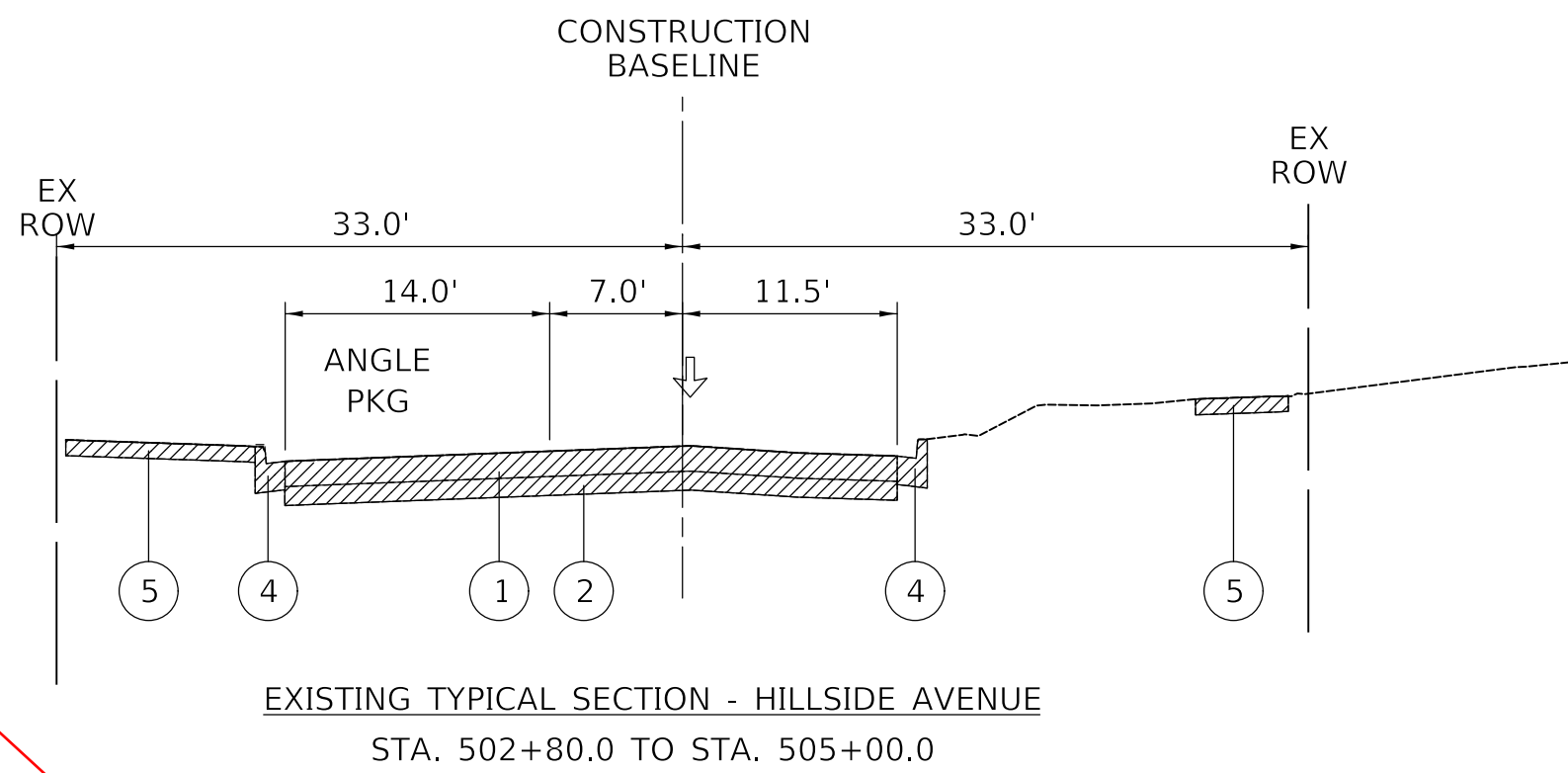
SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	X		PERENNIAL SALVIA NEMEROSA 'BLUE HILL'	EACH	48
	X		GRASS SCHYZACHYRIUM SCOPARIUM	EACH	36
	X		GRASS CAREX FLACCA	EACH	14
	X		GROUNDCOVER SEDUM KAMTSCHATICUM	EACH	235
	X		GROUNDCOVER VINCA MINOR	EACH	153
	X		SHREDDED HARDWOOD BARK MULCH	CU YD	666
	X		SOD, SALT TOLERANT	SQ YD	1,226
	X		BENCHES 4' (VILLAGE PURCHASE AND INSTALL)	EACH	13
	X		BENCHES 6' (VILLAGE PURCHASE AND INSTALL)	EACH	17
	X		BIKE RACK (VILLAGE PURCHASE AND INSTALL)	EACH	42
	X		TRASH RECEPTACLE (VILLAGE PURCHASE AND INSTALL)	EACH	27
	X		BOLLARDS	EACH	12
	X		ELECTRICAL - LIGHTING SYSTEM	LSUM	1
	X		ELECTRICAL - TREE OUTLETS	LSUM	1



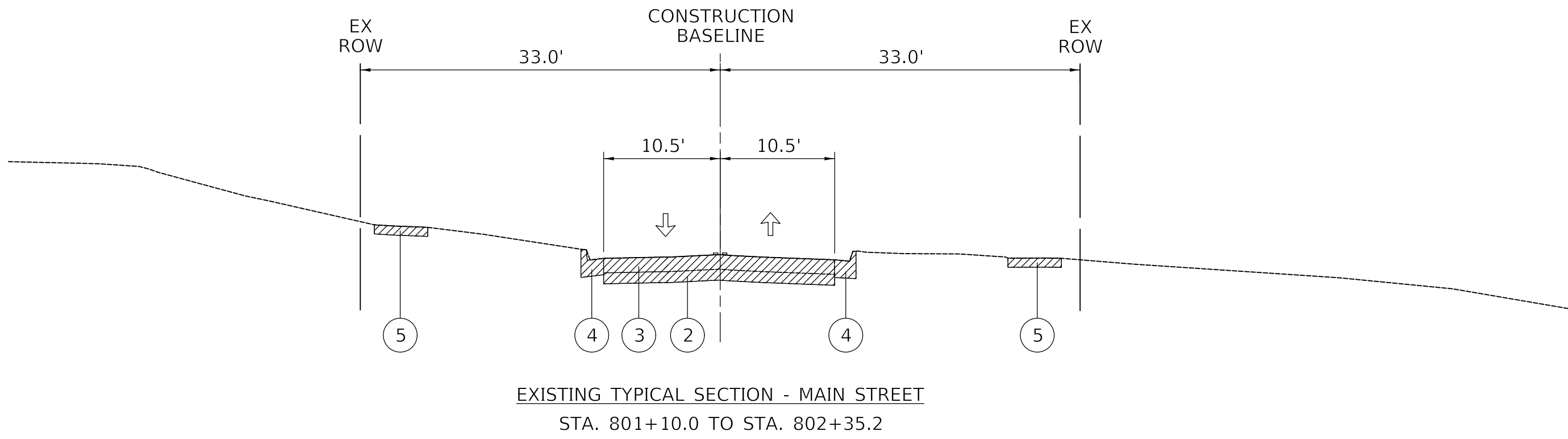
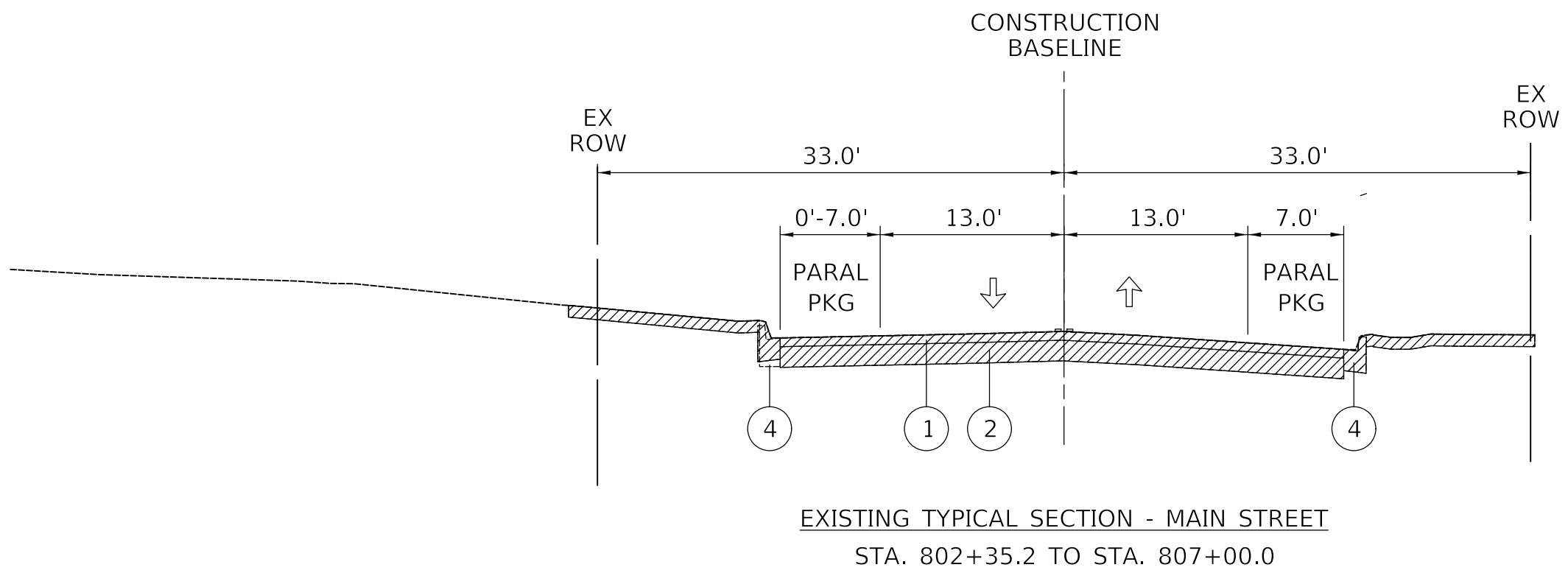
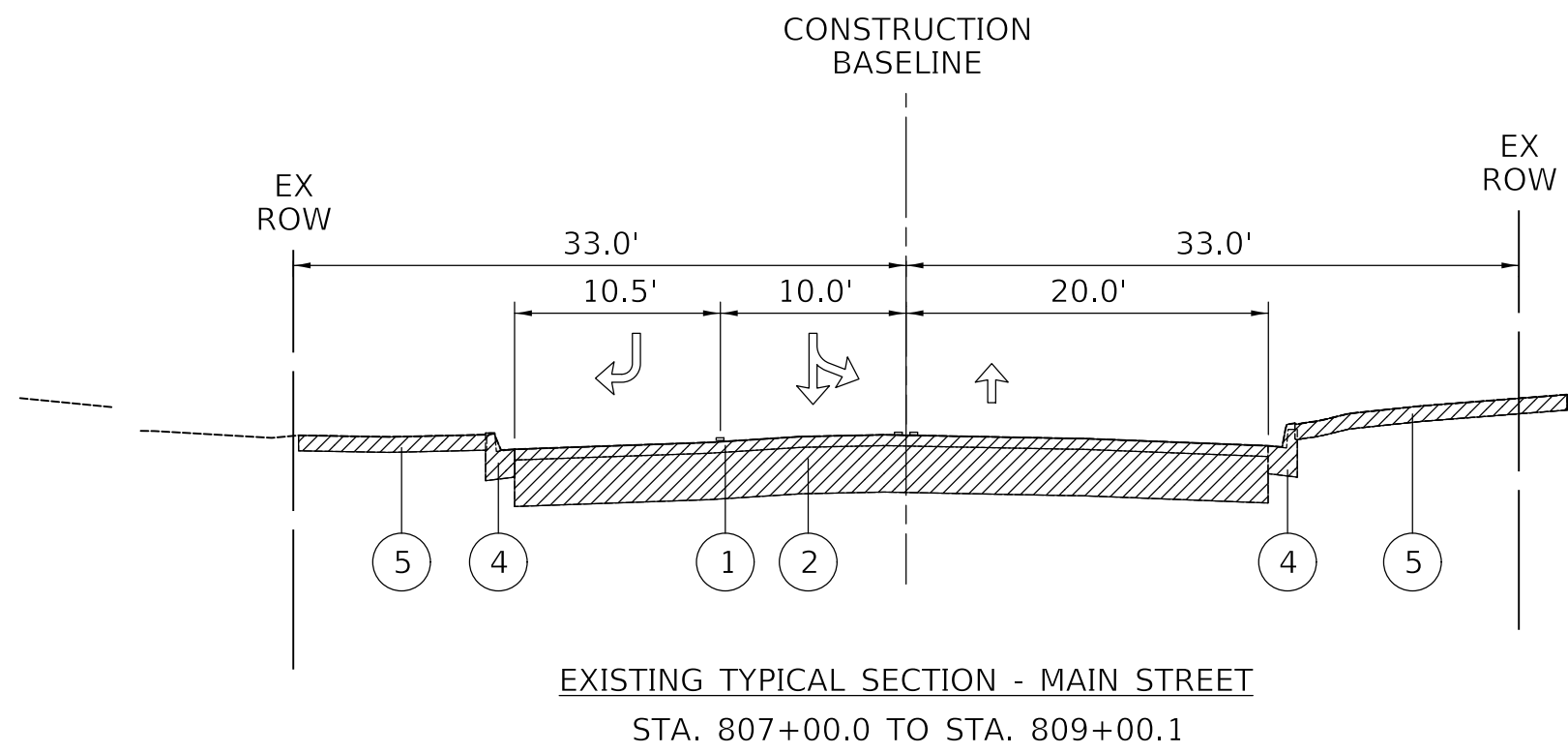
- LEGEND
- 1 EXISTING HOT-MIX ASPHALT PAVEMENT, THICKNESS VARIES FROM 2" TO 7"" (MSET SUBSURFACE EXPLORATION AND ANALYSIS, Dated 12/5/2018)
 - 2 EXISTING PORTLAND CEMENT CONCRETE, THICKNESS VARIES FROM 6" TO 15" (MSET SUBSURFACE EXPLORATION AND ANALYSIS, Dated 12/5/2018)
 - 3 EXISTING PORTLAND CEMENT CONCRETE PAVEMENT
 - 4 EXISTING BARRIER CURB AND GUTTER
 - 5 EXISTING PORTLAND CEMENT CONCRETE SIDEWALK
- REMOVAL ITEMS (SEE REMOVAL AND ROADWAY PLANS FOR LIMITS)

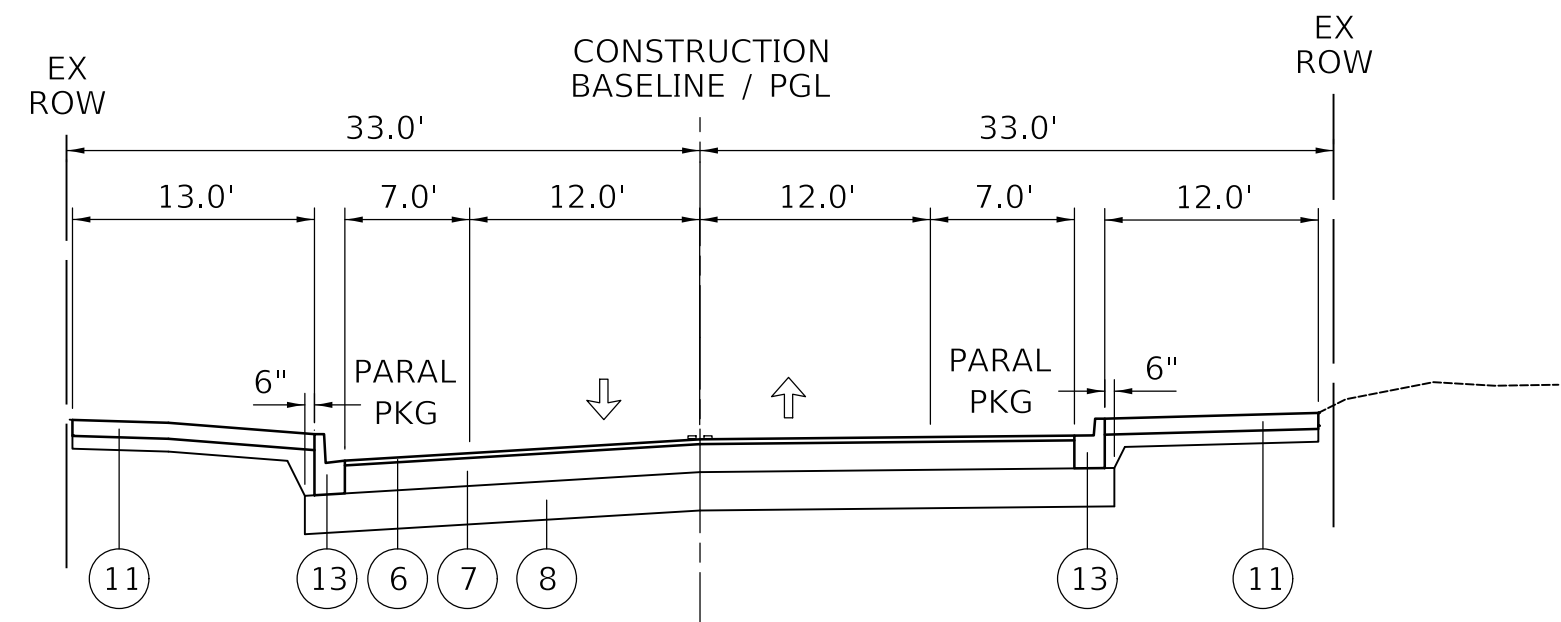


Minor but this is not representative of existing conditions. (there is only parallel parking from ~Station 498+00 to 500+00.)

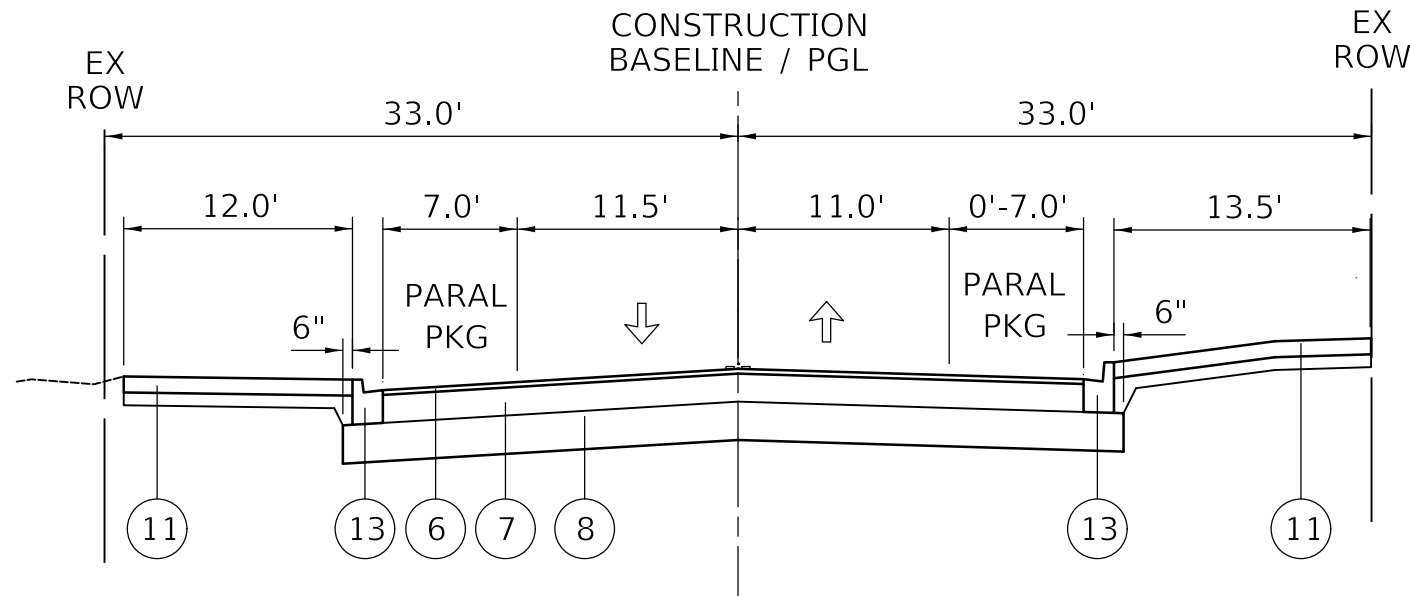


- LEGEND
- ① EXISTING HOT-MIX ASPHALT PAVEMENT, THICKNESS VARIES FROM 2" TO 7"" (MSET SUBSURFACE EXPLORATION AND ANALYSIS, Dated 12/5/2018)
 - ② EXISTING PORTLAND CEMENT CONCRETE, THICKNESS VARIES FROM 6" TO 15" (MSET SUBSURFACE EXPLORATION AND ANALYSIS, Dated 12/5/2018)
 - ③ EXISTING PORTLAND CEMENT CONCRETE PAVEMENT
 - ④ EXISTING BARRIER CURB AND GUTTER
 - ⑤ EXISTING PORTLAND CEMENT CONCRETE SIDEWALK
-  REMOVAL ITEMS

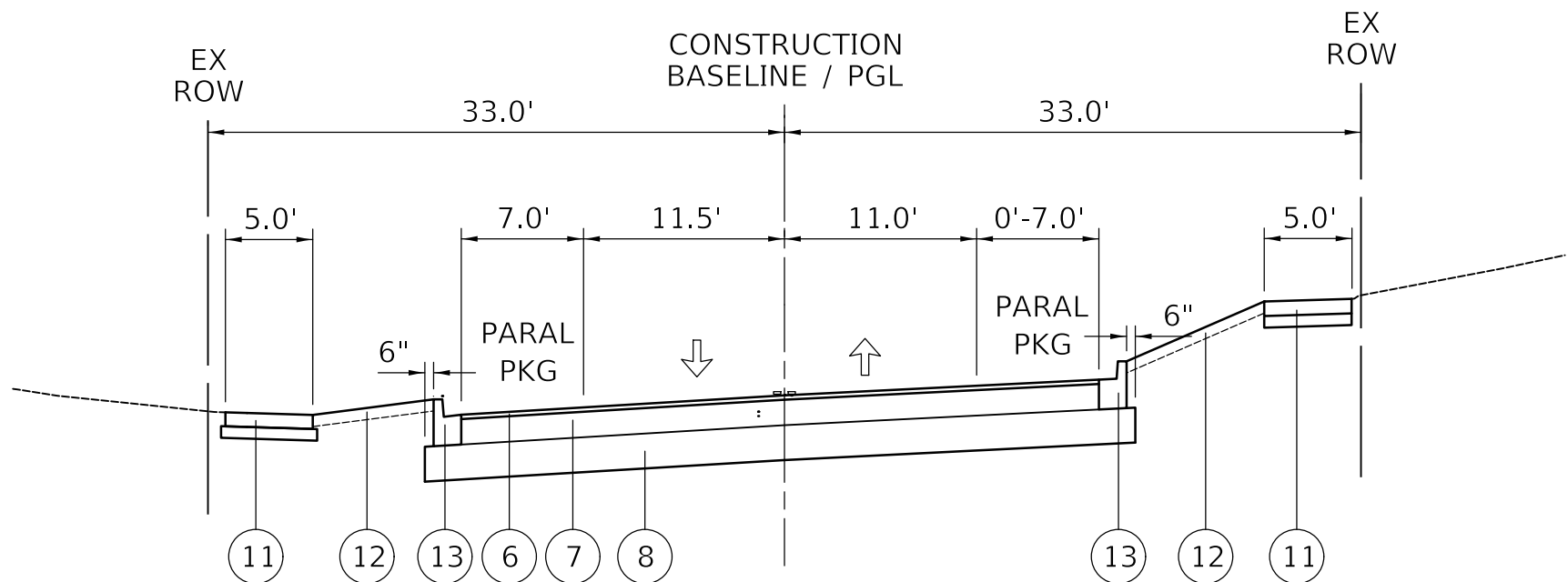




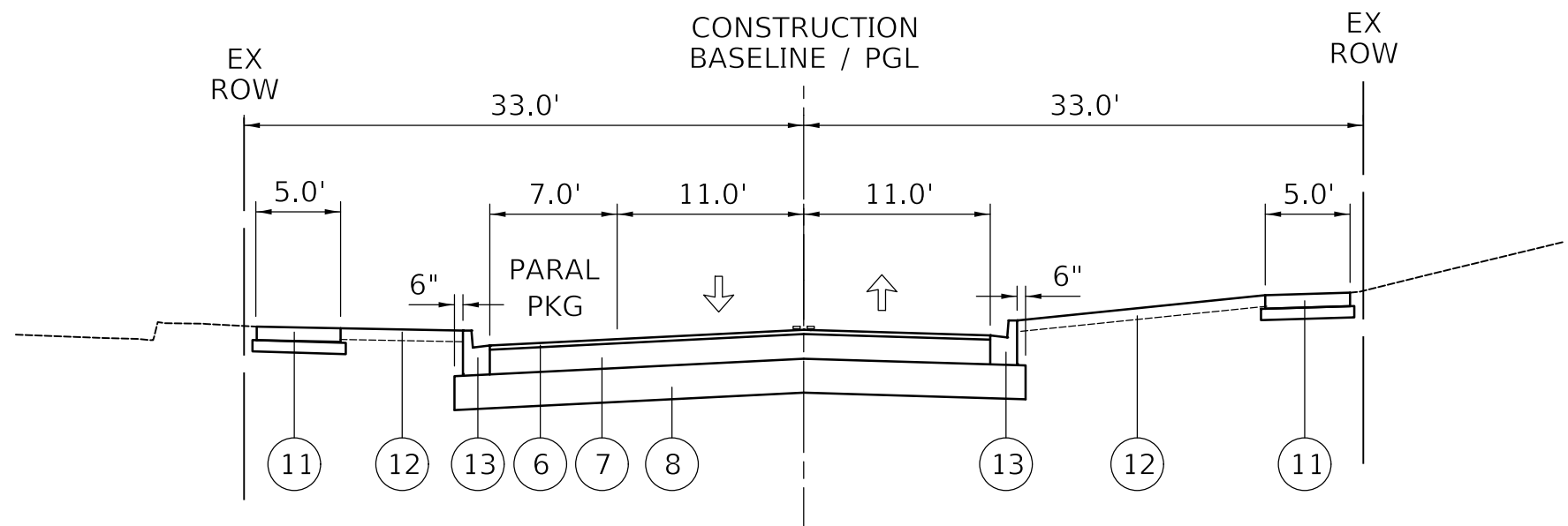
PROPOSE TYPICAL SECTION - DUANE STREET
STA. 410+75.0 TO STA. 415+94.9



PROPOSE TYPICAL SECTION - DUANE STREET
STA. 408+60.0 TO STA. 410+75.0

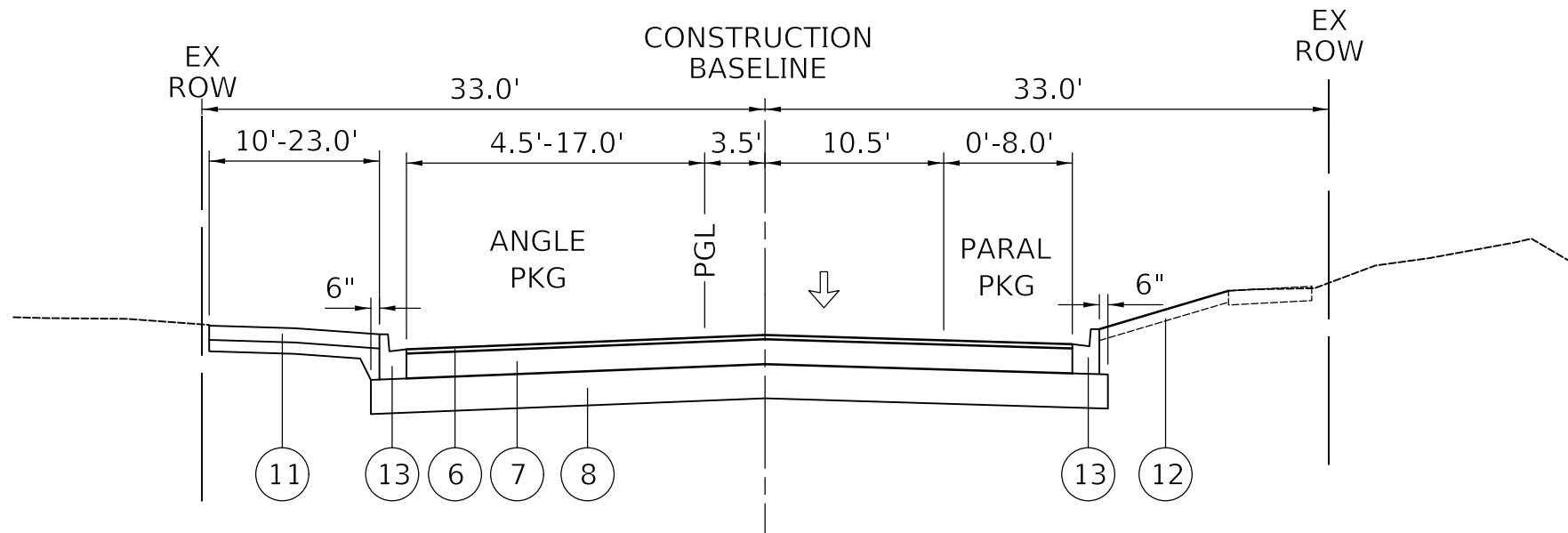


PROPOSE TYPICAL SECTION - DUANE STREET
STA. 405+00.0 TO STA. 408+60.0

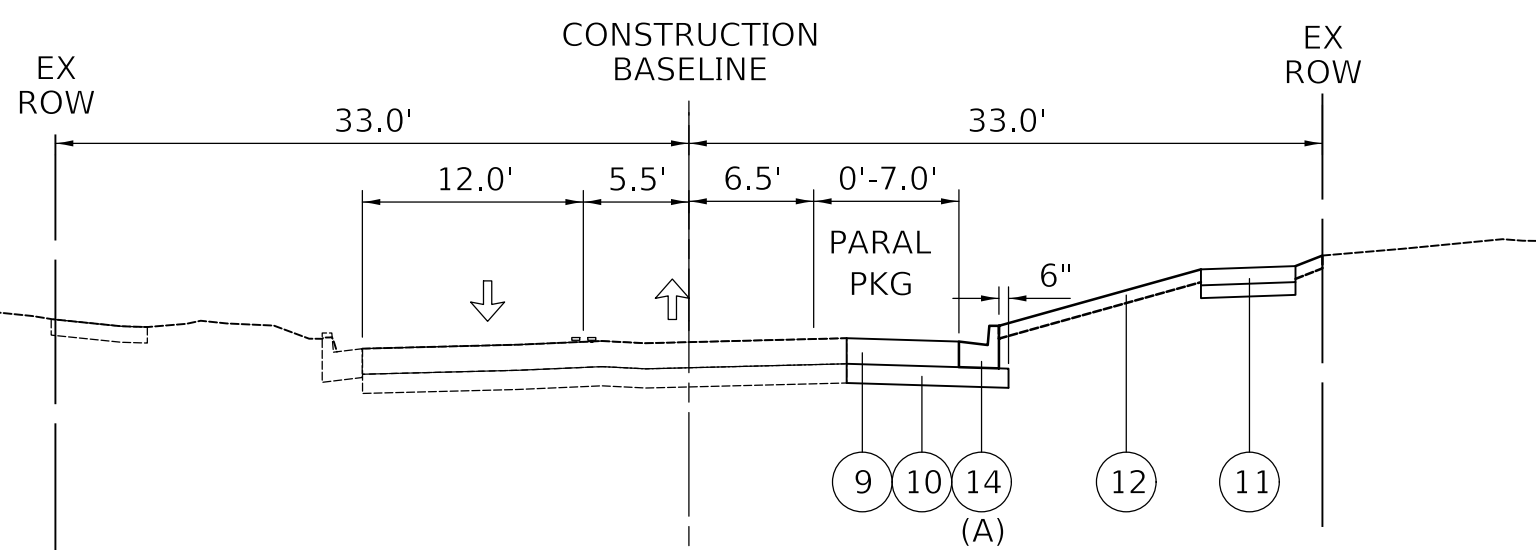


PROPOSED TYPICAL SECTION - DUANE STREET
STA. 401+87.5 TO STA. 405+00.0

- LEGEND
- 6 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50, 1-1/2" (PAID FOR AS "HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10-1/4")
 - 7 PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 8-3/4" (PAID FOR AS "HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10-1/4")
 - 8 PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12" AND PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
 - 9 PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
 - 10 PROPOSED AGGREGATE BASE COURSE, TYPE B 6"
 - 11 PROPOSED PCC SIDEWALK, 5 INCH (PCC SIDEWALK, 6 INCH THROUGH RESIDENTIAL DRIVEWAYS, PCC SIDEWALK, 8 INCH THROUGH COMMERCIAL DRIVEWAYS) (AGGREGATE BASE COURSE, TYPE B 4"-COST INCIDENTAL TO PCC SIDEWALK)
 - 12 PROPOSED TOPSOIL PLACEMENT 4", SEEDINGS, CLASS 1A
 - 13 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - 14 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18

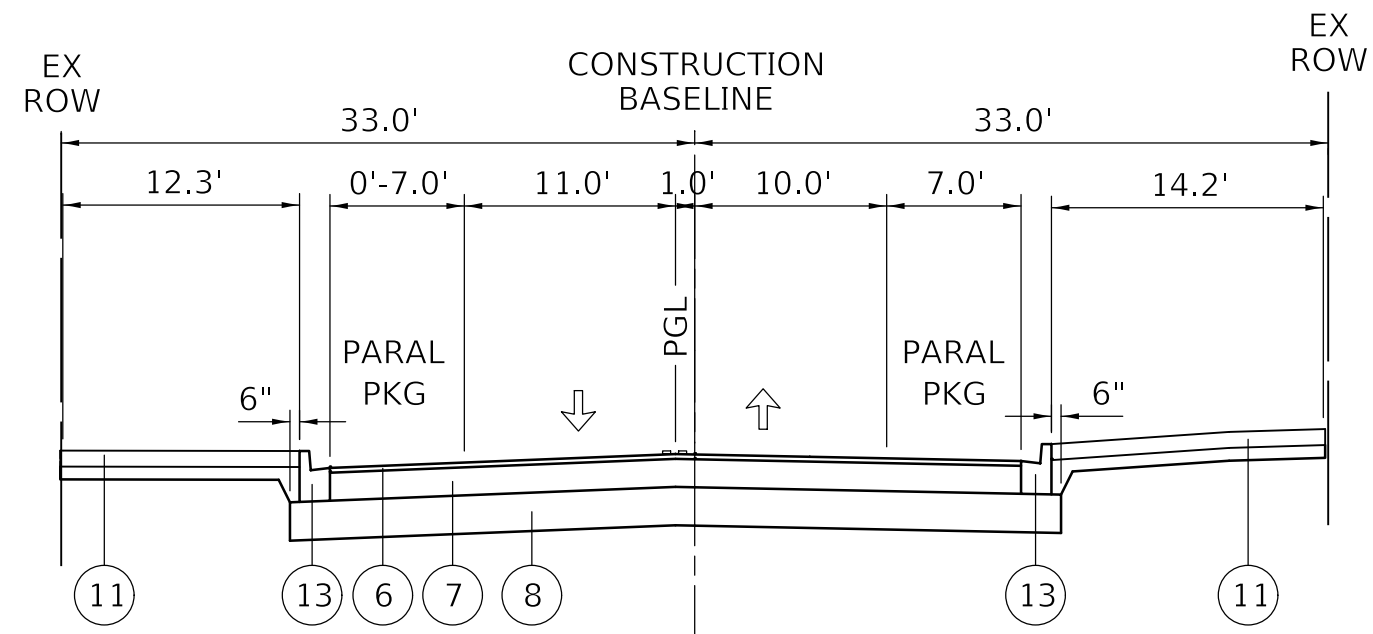


PROPOSED TYPICAL SECTION - HILLSIDE AVENUE
STA. 502+80.0 TO STA. 505+33.6

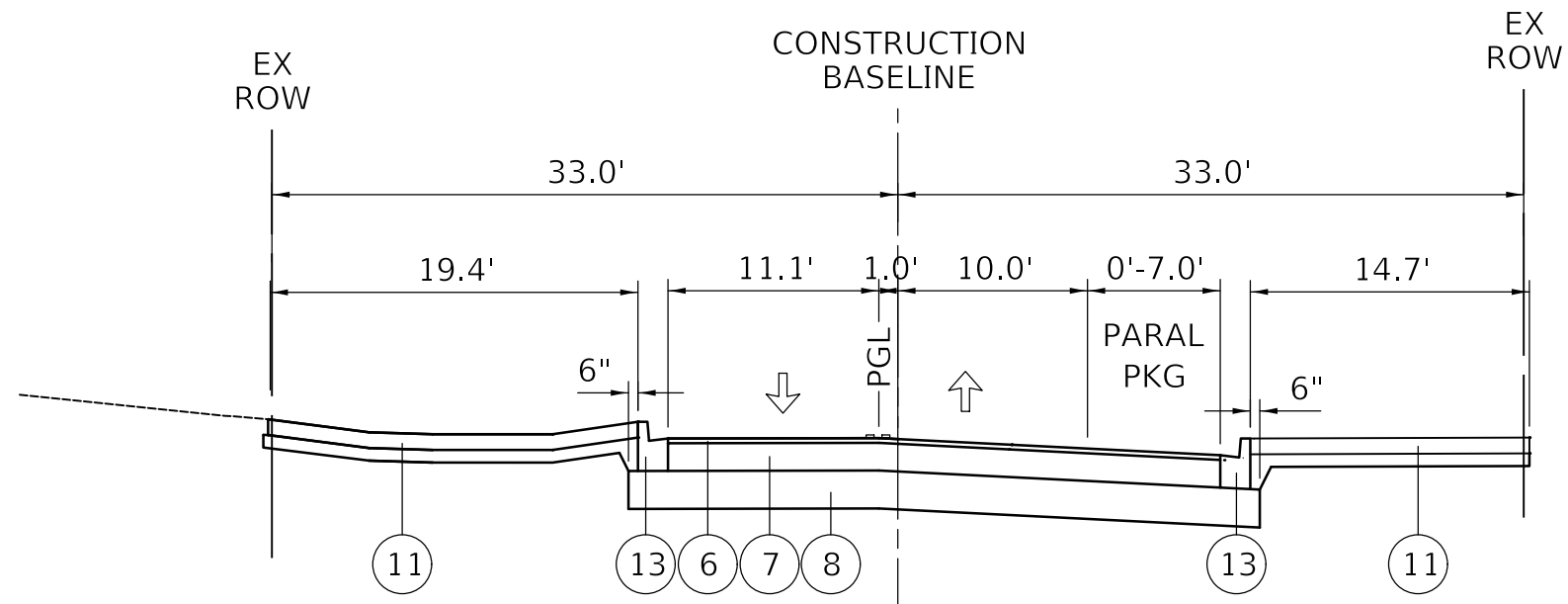


PROPOSED TYPICAL SECTION - HILLSIDE AVENUE
STA. 498+95.6 TO STA. 502+80.0

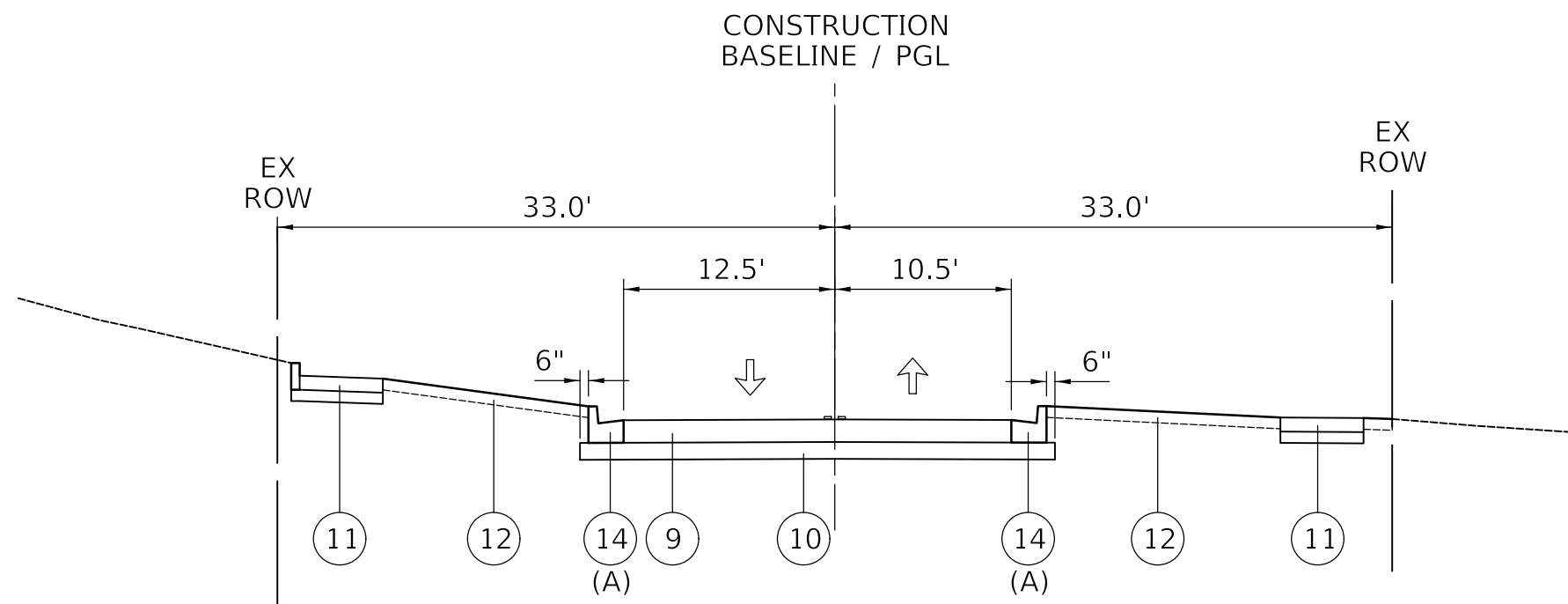
(A) GUTTER FLAG THICKNESS SHALL MATCH ADJACENT PCC PAVEMENT THICKNESS



PROPOSED TYPICAL SECTION - MAIN STREET
STA. 805+00.0 TO STA. 807+00.0



PROPOSED TYPICAL SECTION - MAIN STREET
STA. 802+00.0 TO STA. 805+00.0



PROPOSED TYPICAL SECTION - MAIN STREET
STA. 801+10.0 TO STA. 802+00.0

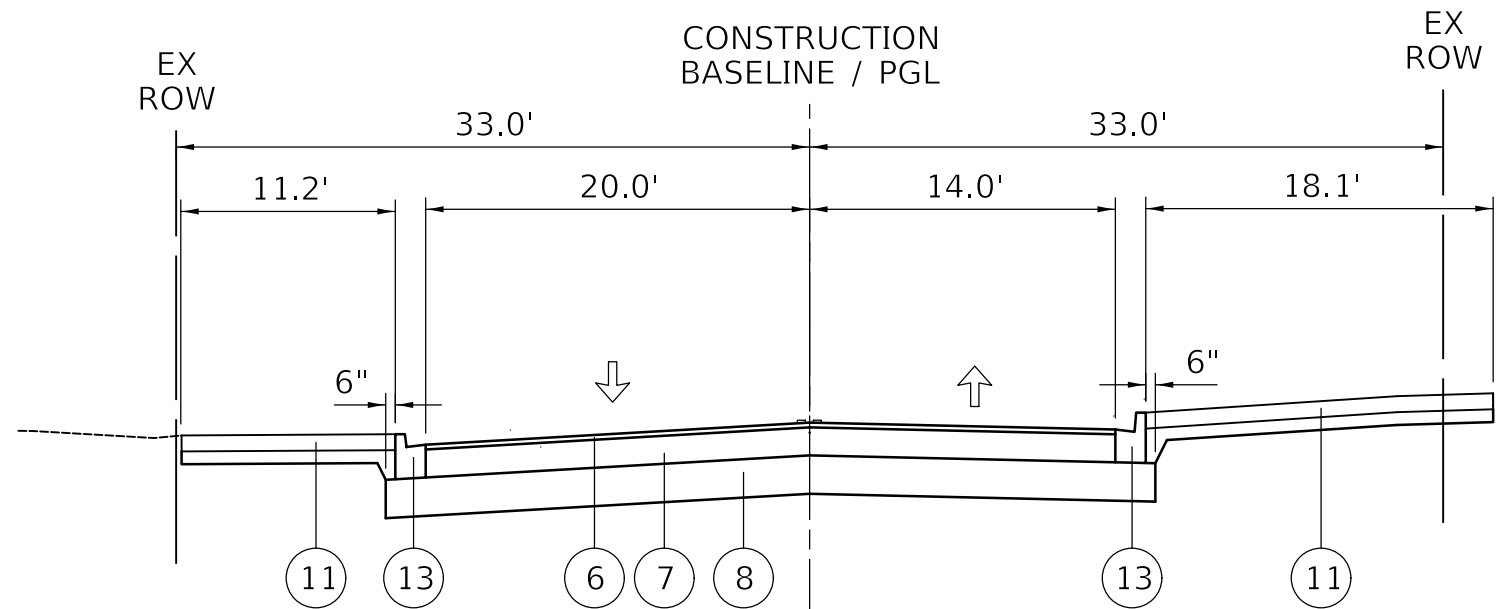
(A) GUTTER FLAG THICKNESS SHALL MATCH ADJACENT PCC PAVEMENT THICKNESS

- LEGEND
- 6 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50, 1-1/2" (PAID FOR AS "HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10-1/4")
 - 7 PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 8-3/4" (PAID FOR AS "HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10-1/4")
 - 8 PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12" AND PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
 - 9 PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
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 - 12 PROPOSED TOPSOIL PLACEMENT 4", SEEDINGS, CLASS 1A
 - 13 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - 14 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

PAY ITEM	PERCENT AIR VOIDS @ Ndes.
HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10-1/4"	
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 1-1/2"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 8-3/4" (3 LIFTS)	4% @ 50 GYR.
HOT-MIX ASPHALT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 1-1/2"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 2-1/4"	4% @ 50 GYR.
HOT-MIX ASPHALT DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3"	4% @ 50 GYR.
CLASS D PATCHES, 10"	
CLASS D PATCH (HMA BINDER IL-19 MM); 10"	4% @ 70 GYR.

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LB/SY-IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- LONGITUDINAL JOINT SEALANT SHALL BE PLACED AT PAVEMENT JOINT LINES, UNDER THE SURFACE LIFT AND UNDER THE TOP BINDER LIFT.



PROPOSED TYPICAL SECTION - MAIN STREET
STA. 807+00.0 TO STA. 809+00.1



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DATE -	9/24/2021	REVISED -	

VILLAGE OF GLEN ELLYN

PROPOSED TYPICAL SECTIONS

SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	10
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GLEN ELLYN CONTROL POINT COORDINATE TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
TS1	5/8" IRON ROD W/ CAP SET	1,896,783.7189	1,056,855.8842
TS2	5/8" IRON ROD W/ CAP SET	1,897,715.5751	1,055,364.9689
TS3	5/8" IRON ROD W/ CAP SET	1,898,291.7560	1,057,742.4081
TS4	X-CUT IN WALK SET	1,897,349.0291	1,056,836.5356
TS5	FND. X-CUT IN WALK	1,897,344.8962	1,055,973.1398
TS6	X-CUT IN WALK SET	1,897,833.8573	1,055,957.6908
TS7	X-CUT IN WALK SET	1,897,948.0963	1,056,163.1404
TS9	5/8" IRON ROD W/ CAP SET	1,897,346.1729	1,058,051.0602
TS11	X-CUT IN WALK SET	1,896,836.3141	1,057,374.3260
TS17	5/8" IRON ROD W/ CAP SET	1,898,542.0303	1,056,873.7656
TS23	X-CUT IN WALK SET	1,897,690.4104	1,056,896.8852
TS27	5/8" IRON ROD W/ CAP SET	1,897,629.5295	1,055,915.5729
TS28	X-CUT SET	1,897,634.8909	1,056,381.5587
CP 500	MAGNAIL SET	1,897,648.7980	1,056,869.0570
CP 501	X-CUT SET	1,897,680.2450	1,057,170.8310
CP 502	X-CUT SET	1,897,989.8580	1,057,912.2830
CP 503	X-CUT SET	1,897,803.7070	1,057,937.8690
CP 504	X-CUT SET	1,897,600.6810	1,057,431.0630
CP 505	X-CUT SET	1,897,466.5560	1,056,833.0420
CP 506	X-CUT SET	1,897,792.2310	1,057,373.2090
CP 507	X-CUT SET	1,897,573.9190	1,057,391.3140
CP 508	MAGNAIL SET	1,897,557.0420	1,057,122.9450

GLENWOOD AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	700+00.00	1,897,659.8389	1,056,399.4036
PI	702+71.29	1,897,931.1118	1,056,395.9553
EOA	703+08.12	1,897,967.9345	1,056,395.4872

ANTHONY STREET ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	100+00.00	1,898,515.8907	1,056,326.1218
EOA	109+34.26	1,898,527.3124	1,057,260.3138

PENNSYLVANIA AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	203+69.62	1,897,734.0164	1,055,332.9125
PI	222+22.79	1,898,132.4379	1,057,142.7452
EOA	228+62.58	1,898,264.4683	1,057,768.7632

NORTH FOREST AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	1000+00.00	1,897,779.2544	1,057,375.0060
PI	1000+28.47	1,897,807.0508	1,057,368.8558
EOA	1003+93.53	1,898,163.4927	1,057,289.9904

CRESCENT BOULEVARD ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	300+00.00	1,897,654.3323	1,055,937.1569
PC	310+86.07	1,897,667.2694	1,057,023.1513
PI	311+11.72	1,897,667.5750	1,057,648.8012
PT	311+36.94	1,897,675.8836	1,057,021.2454
EOA	320+99.76	1,897,987.7430	1,057,983.9809

PROSPECT AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	600+00.00	1,897,165.9892	1,055,944.2220
PI	600+39.51	1,897,205.4933	1,055,943.6505
EOA	607+00.45	1,897,866.3611	1,055,934.0894

DUANE STREET ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	400+00.00	1,897,312.7345	1,055,791.0757
EOA	418+98.06	1,897,325.3029	1,057,689.0942

SOUTH FOREST AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	900+00.00	1,897,181.5863	1,057,396.7813
PI	901+41.89	1,897,323.4717	1,057,397.4240
EOA	904+14.34	1,897,595.8959	1,057,393.7653

HILLSIDE AVENUE ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	498+00.00	1,896,802.6114	10,565,355.1896
PI	501+68.39	1,896,805.4903	1,056,723.5640
PI	505+01.17	1,896,808.0910	1,057,056.3412
EOA	506+96.87	1,896,011.9093	1,057,555.1530

MAIN STREET ALIGNMENT TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
BOA	800+00.00	189,615.9542	1,056,876.8428
PI	807+03.98	1,897,319.8575	1,056,866.7619
PI	809+99.80	1,897,615.6503	1,056,866.7619
PI	821+21.81	1,898,737.5477	1,056,846.6622
EOA	821+55.90	1,898,771.6307	1,056,846.1521

BENCHMARKS			
BENCHMARK NAME	DESCRIPTION	ELEVATION	DETAIL
TBM #1	CROSS CUT (SET) IN NORTHEAST FLANGE BOLT OF FIRE HYDRANT IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF MAIN STREET AND HILLSIDE AVENUE.	722.58	NAVD '88
TBM #2	CROSS CUT (SET) IN SOUTHWEST FLANGE BOLT OF FIRE HYDRANT IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF MAIN STREET AND ANTHONY STREET.	757.02	NAVD '88
TBM #3	CROSS CUT (SET) IN CONCRETE BASE FOR LIGHT POLE IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF MAIN STREET AND ANTHONY STREET.	743.90	NAVD '88
TBM #4	CROSS CUT (SET) IN SOUTHEAST FLANGE BOLT OF FIRE HYDRANT IN THE NORTHWEST CORNER OF THE INTERSECTION OF WESTERN AVENUE & PENNSYLVANIA AVENUE	761.84	NAVD '88
TBM #5	CROSS CUT (SET) IN SOUTH FLANGE BOLT OF FIRE HYDRANT ON THE NORTH SIDE OF PENNSYLVANIA AVENUE AND 56' WEST OF THE CENTER OF GLENWOOD	753.98	NAVD '88
TBM #6	CROSS CUT (SET) IN SOUTHWEST FLANGE BOLT OF FIRE HYDRANT IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF DUANE STREET AND FOREST AVENUE.	750.20	NAVD '88
TBM #7	BOX CUT (SET) IN CONCRETE BASE FOR LIGHT POLE IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF PENNSYLVANIA AVENUE AND PARK BOULEVARD.	723.58	NAVD '88

BASIS OF BEARINGS

COORDINATES AND BEARING ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83), ADJUSTED TO GROUND VALUES AS ESTABLISHED BY A REAL-TIME KINEMATIC (RTK) GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) UTILIZING THE TRIMBLE VRS NOW NETWORK.

BASIS OF ELEVATIONS

NGS BENCH MARK 0105. P.I.D. DK3188 3 1/2" BRASS DISK ON TOP OF A 3FOOT HIGH CONCRETE RETAINING WALL SURROUNDING AN ELECTRICAL CONTROL BOX, STAMPED "DUPAGE COUNTY GEODETIC SURVEY MONUMENT, HEIGHT MODERNIZATION PROGRAM 2006, 0105". PUBLISHED NAVD '88 ELEVATION 745.28

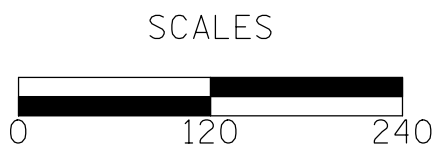
ALL MEASURED AND COMPUTED DISTANCES ARE GRID NOT GROUND. TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINED FACTOR OF 0.999950799.



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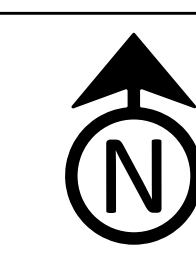
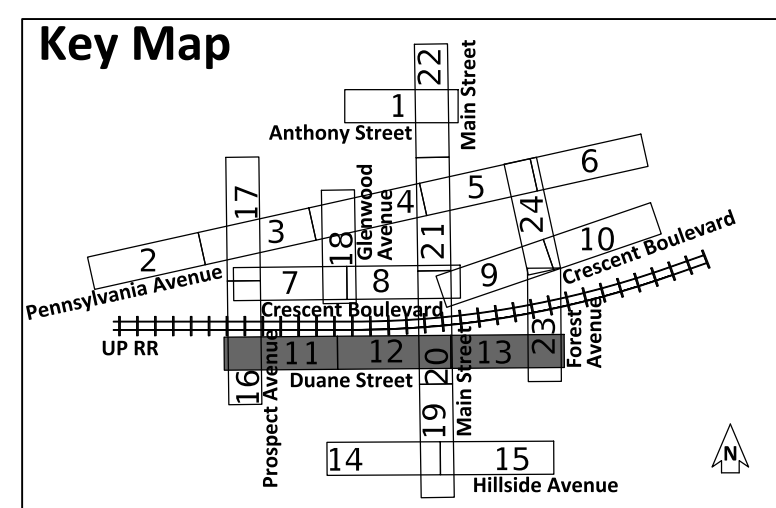
VILLAGE OF GLEN ELLYN



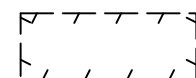
ALIGNMENT, TIES AND BENCHMARKS

SHEET NO.	1	OF	1	SHEETS	STA.	TO	STA.
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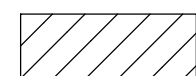
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	11
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



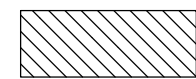
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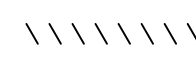
PAVEMENT REMOVAL



DRIVEWAY PAVEMENT REMOVAL



SIDEWALK REMOVAL



COMBINATION CURB AND GUTTER REMOVAL

XX" ~~3~~ TREE REMOVAL

BEGIN ROADWAY
RECONSTRUCTION
STA. 401+87.5

REMOVE

POTENTIALLY
ABLE TO SAVE
SOME SIDE-
WALK. RE TO
REVIEW

MATCH LINE STA 406+00
SEE ABOVE

GLENWOOD AVENUE

MATCH LINE STA 411+50
SEE ABOVE

530-532 Duane Street

534 Duane Street

540 Duane Street

412

413

414

415+00

416

DUANE STREET

535 Duane Street

454 Forest Ave

901

END ROADWAY RECONSTRUCTION STA. 415+94.9

END ROADWAY
RECONSTRUCTION
STA. 415+94.9

DUANE STREET



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DATE - 9/24/2021	REVISED -

VILLAGE OF GLEN ELLYN

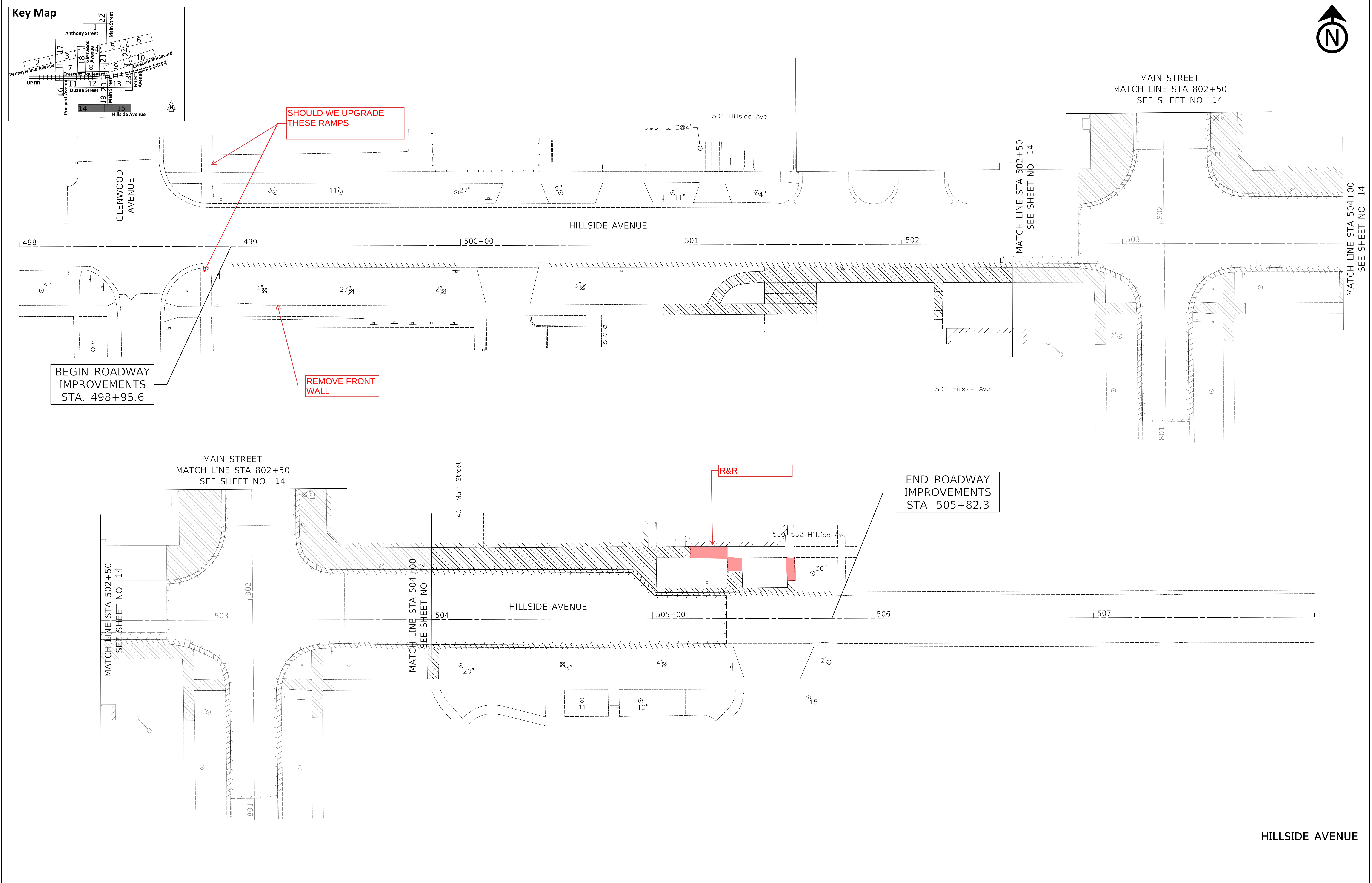
SCALE

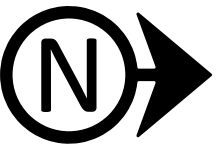
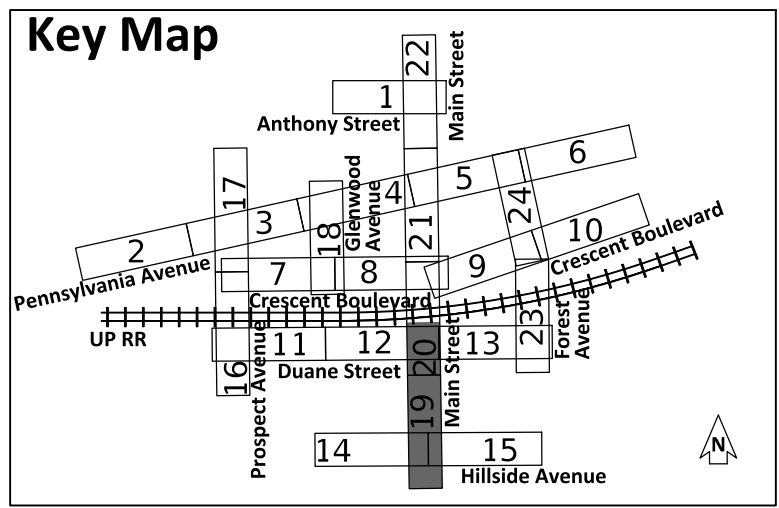


REMOVAL PLANS

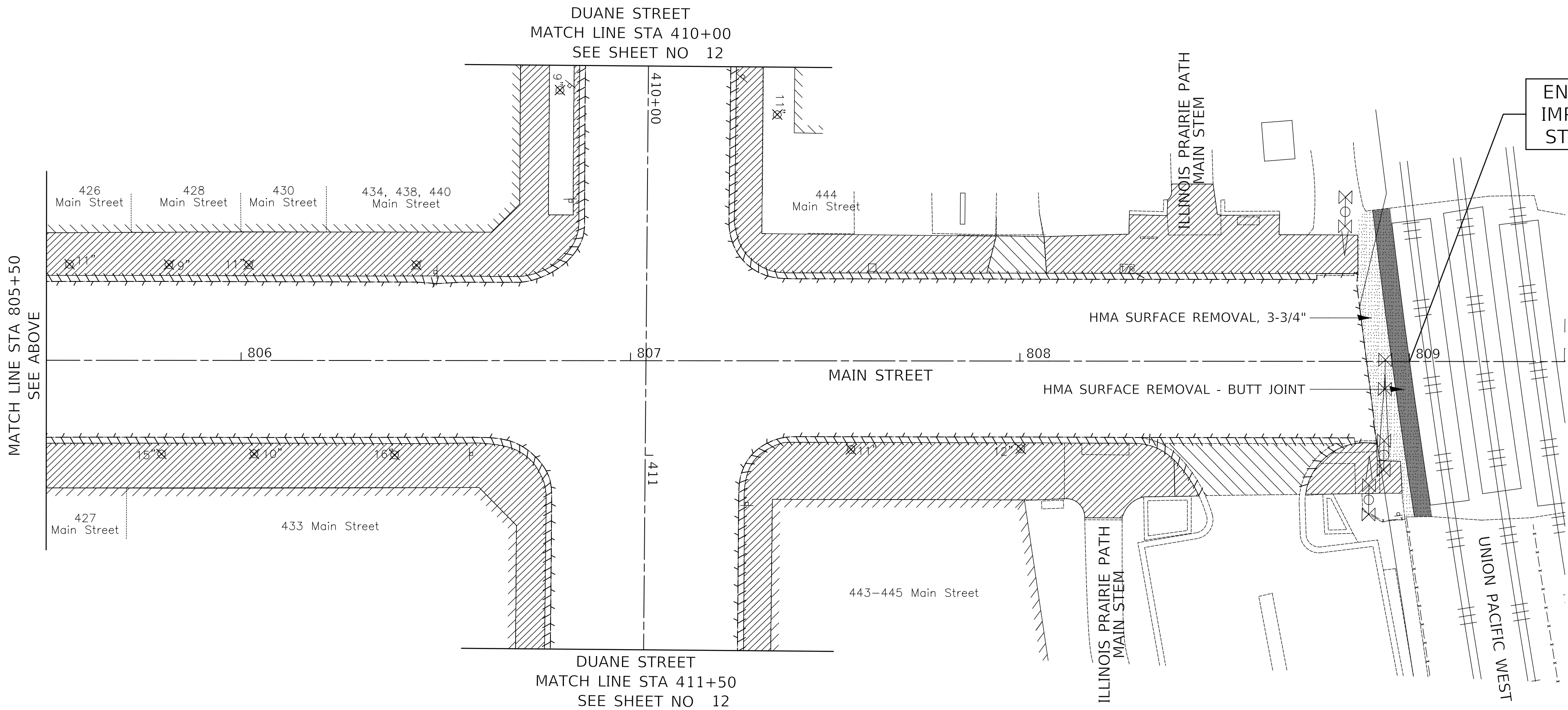
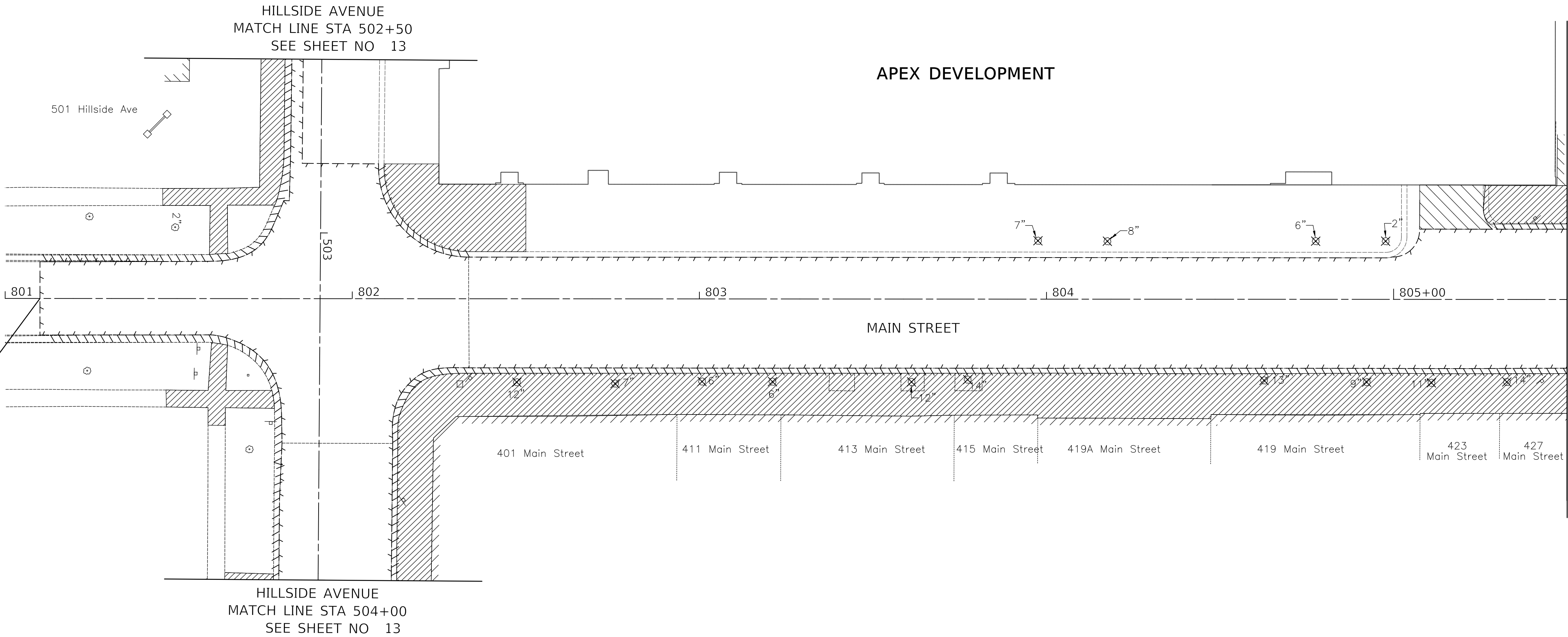
SHEET NO. 1 OF 3 SHEETS	STA. 401+87.5 TO STA. 415+94.9
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F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
			DUPAGE	137	12
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			





BEGIN ROADWAY
RECONSTRUCTION
STA. 801+10.0



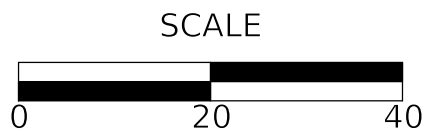
END ROADWAY
IMPROVEMENTS
STA. 809+00.1



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DATE -	9/24/2021	REVISED -	

VILLAGE OF GLEN ELLYN



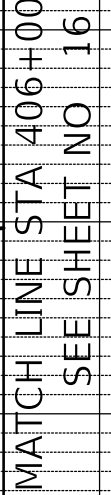
REMOVAL PLANS
MAIN STREET

SHEET NO. 3 OF 3 SHEETS STA. 801+10.0 TO STA. 809+00.1

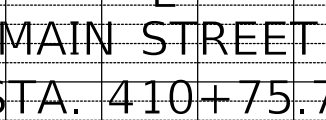
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	14
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

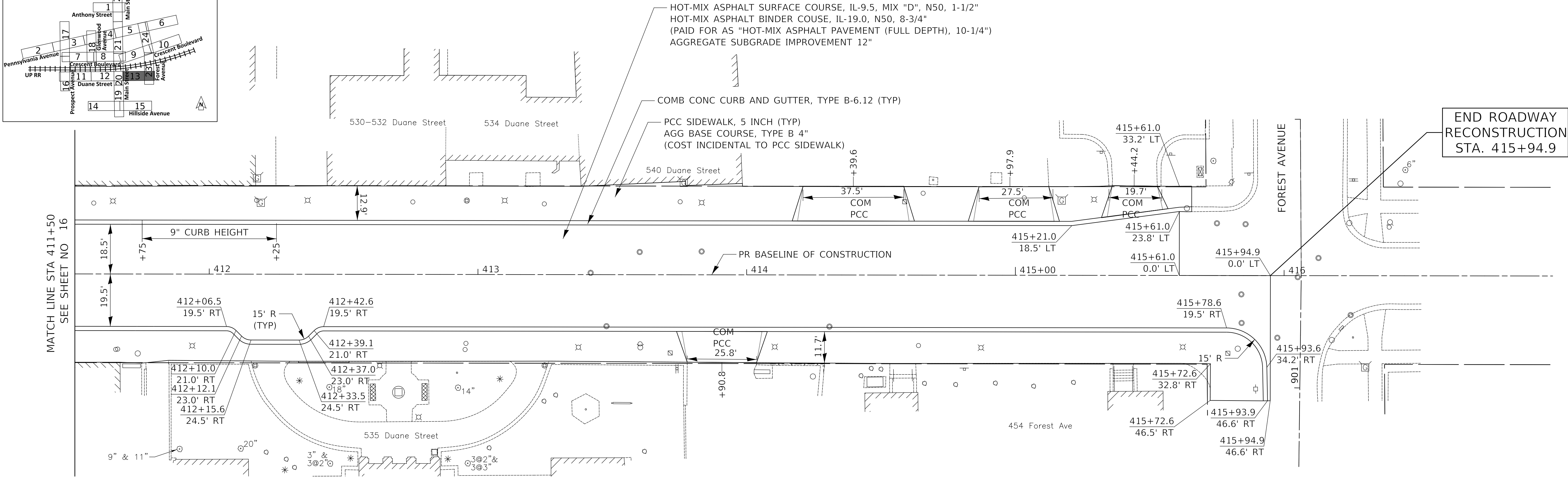
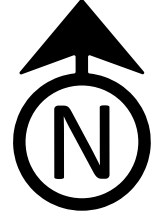
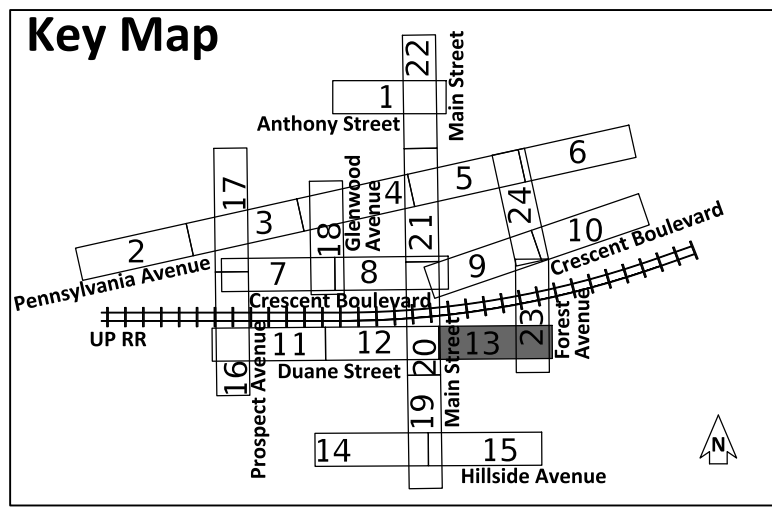


RES HMA	RESIDENTIAL HMA DRIVEWAY HOT-MIX ASPHALT SURFACE COURSE, IL9.5, MIX "D", N50, 3 INCH AGG BASE COURSE, TYPE B 6 INCH	
RES PCC	RESIDENTIAL PCC DRIVEWAY PCC DRIVEWAY PAVEMENT 6 INCH AGG BASE COURSE, TYPE B, 4 INCH (INCLUDED IN COST OF DRIVEWAY)	
COM PCC	COMMERCIAL PCC DRIVEWAY PCC DRIVEWAY PAVEMENT 8 INCH AGG BASE COURSE, TYPE B, 4 INCH (INCLUDED IN COST OF DRIVEWAY)	DUAL

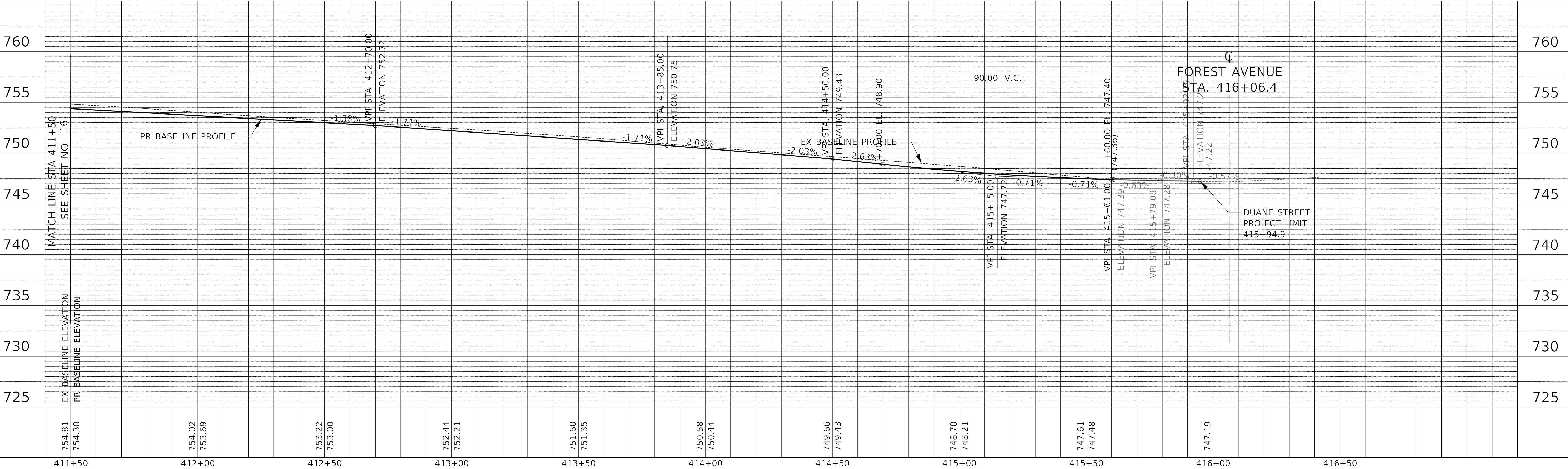


 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN 	PLAN AND PROFILE DUANE STREET			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JRR	REVISED -							DUPAGE	137	15
	CHECKED - KRK	REVISED -									
	DATE - 9/24/2021	REVISED -									
				SHEET NO. 1 OF 7 SHEETS	STA. 401+50 TO STA. 406+00	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

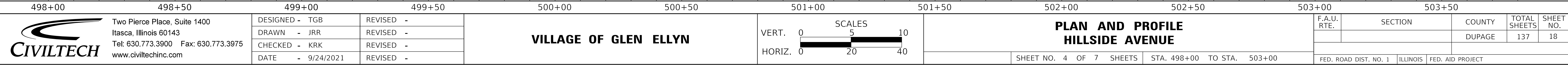
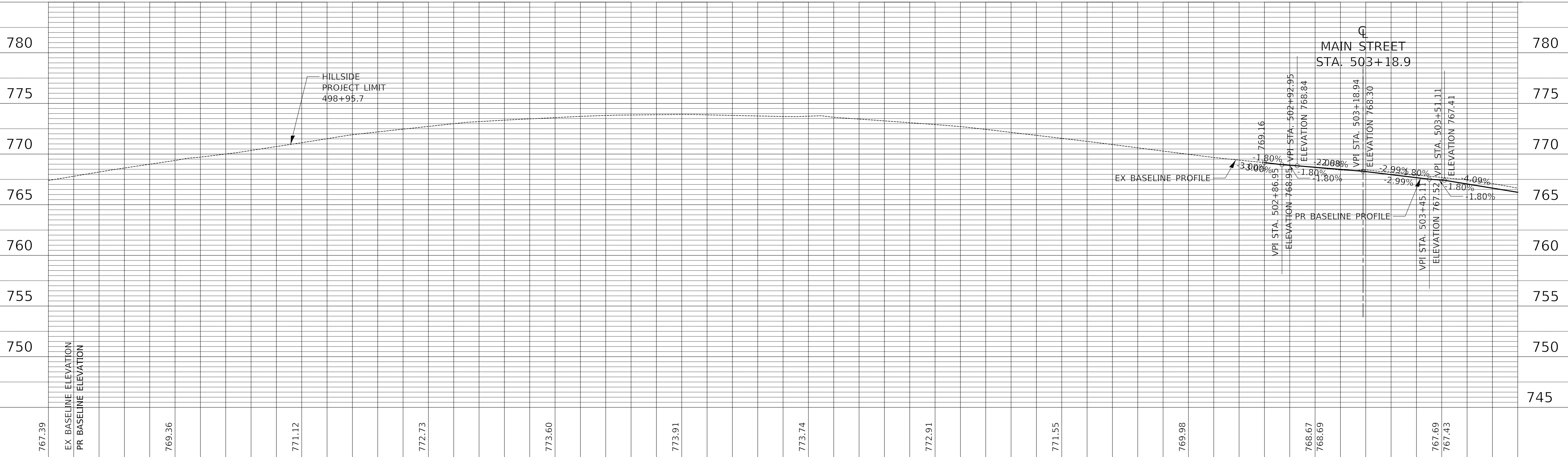


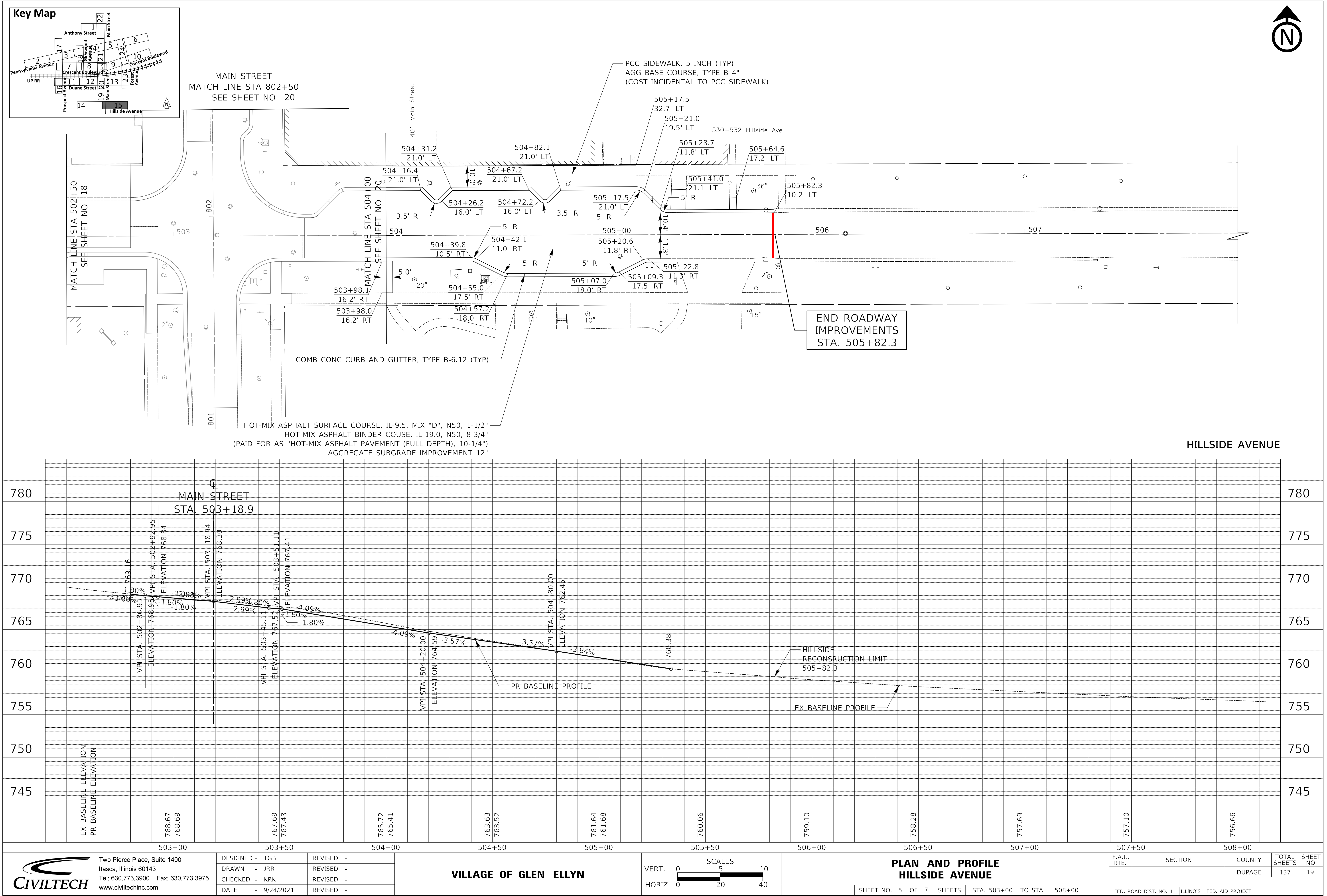


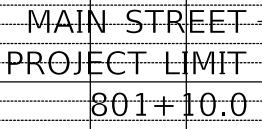
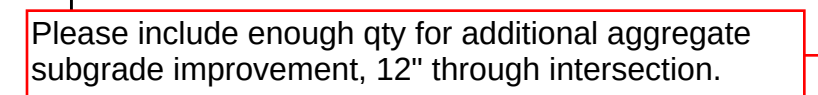
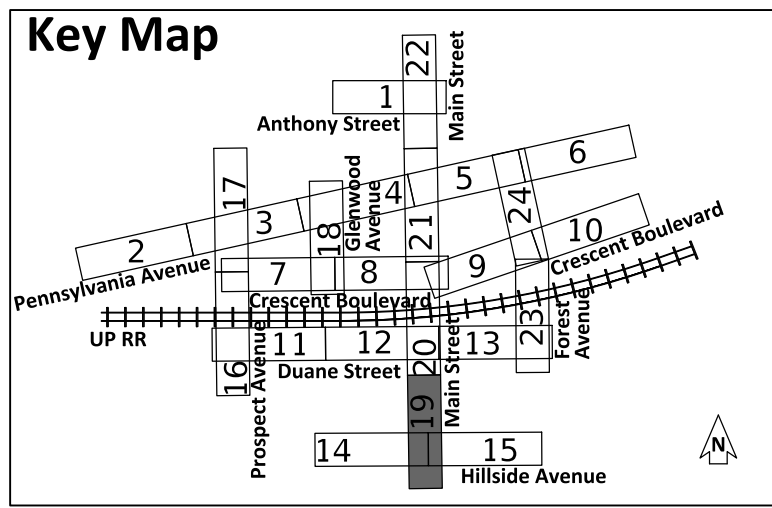
DUANE STREET

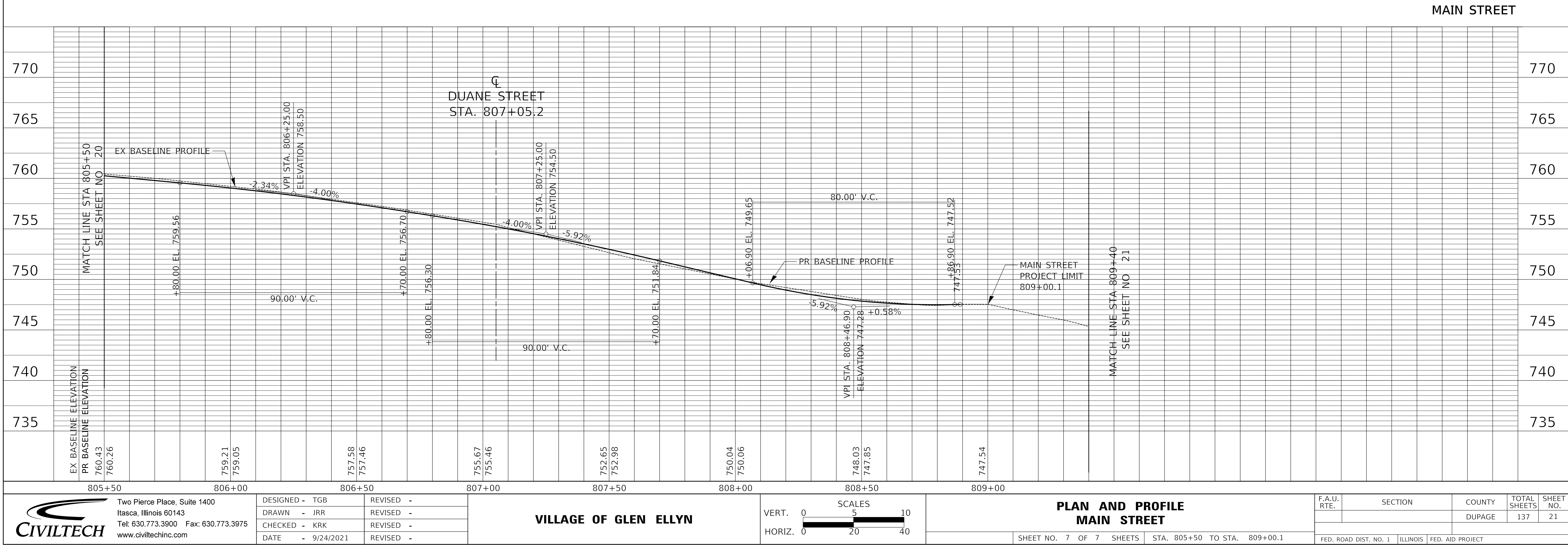
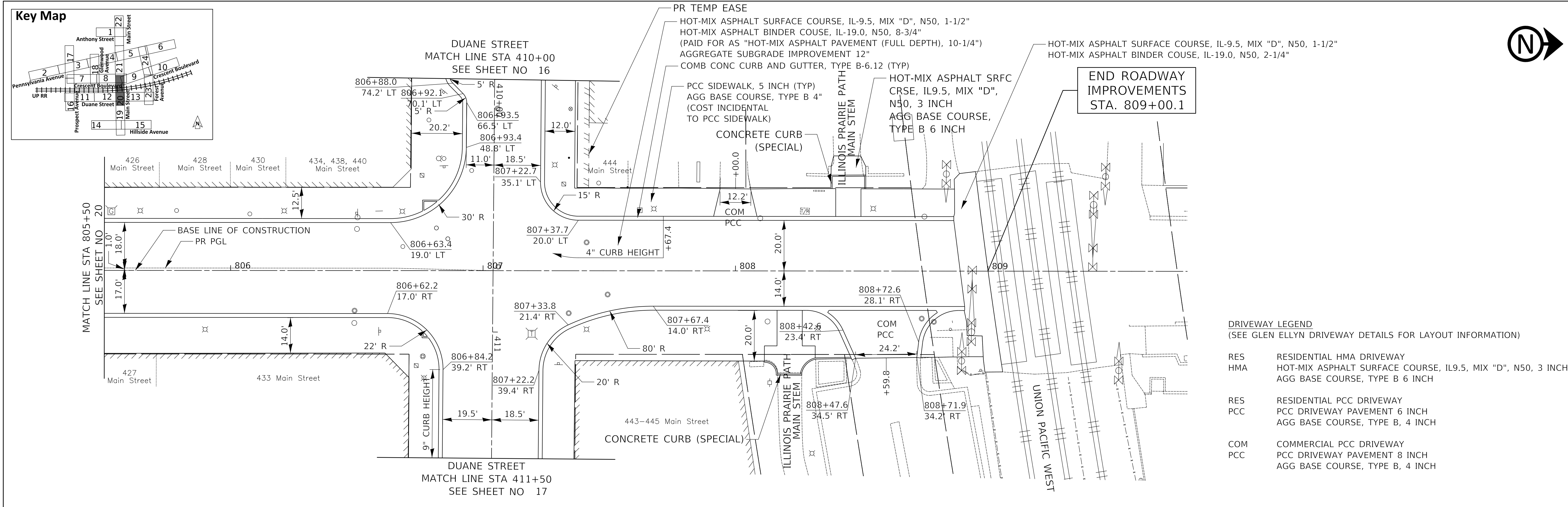


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			DUPAGE						137	17			
	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												









MAINTENANCE OF TRAFFIC GENERAL NOTES

- NO WORK SHALL BEGIN UNTIL THE TRAFFIC CONTROL MEASURES ARE IN PLACE. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE TRAFFIC PROTECTION BY THE APPLICATION OF TRAFFIC CONTROL DEVICES ACCORDING TO THE "STANDARD SPECIFICATIONS" AND AS SHOWN ON THE PLANS.
- THE PERMANENT TRAFFIC CONTROL SHOWN ON THE PLANS IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED BY THE ABOVE HIGHWAY STANDARDS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE LUMP SUM PAY ITEM "TRAFFIC CONTROL AND PROTECTION" UNLESS OTHERWISE SHOWN ON THE PLANS OR IN THE SPECIAL PROVISIONS.
- ALL TRAFFIC CONTROL WARNING SIGNS AND ASSOCIATED SIGNING MOUNTED WITH THE WARNING SIGNS SHALL HAVE BLACK LEGENDS AND BORDERS ON FLUORESCENT ORANGE REFLECTIVE SHEETING.
- ALL CONSTRUCTION SIGNS, BARRICADES AND OTHER DEVICES REQUIRED TO CONTROL TRAFFIC SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CONTRACTOR.
- "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL TYPE A AMBER FLASHING LIGHTS.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- ALL SIGNS SHALL BE MOUNTED ON METAL POSTS, 7 FEET ABOVE THE EXISTING GROUND AND DRIVEN A MINIMUM OF 3 FEET INTO THE GROUND. A J.U.L.I.E. LOCATE SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF THE POSTS.
- BARRICADES WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS WILL BE REQUIRED ADJACENT TO PAVEMENT EDGES WHERE WIDENING, CURB AND GUTTER OR OVERLAYING WORK IS BEING DONE, AS SPECIFIED IN SECTION 701 OF THE STANDARD SPECIFICATIONS. SPACING SHALL BE AS SHOWN ON THE CONSTRUCTION STAGING PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOPS OF THE BARRICADES ARE IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STANDARD 701901.
- BARRICADES EQUIPPED WITH ONE-WAY FLASHING LIGHTS WILL BE REQUIRED AT ALL OPEN TRENCHES, EXCAVATIONS, OPEN OR EXPOSED SEWER STRUCTURES, AND AT ANY OTHER LOCATIONS DESIGNATED BY THE ENGINEER OR LAW ENFORCEMENT AGENCIES. BARRICADES SHALL BE PLACED AT 50' CENTERS ALONG TANGENTS, 25' ALONG TAPERS AND 10' AROUND RADII.
- TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZED BY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT.
- EXISTING TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE REMOVED OR RELOCATED BY THE CONTRACTOR AFTER THE TRAFFIC CONTROL REQUIREMENTS ARE MET OR AS AUTHORIZED BY THE ENGINEER; ANY SIGNS OR DEVICES LEFT IN PLACE ARE TO BE PROTECTED FROM DAMAGE AND MAINTAINED. ANY DAMAGE CAUSED BY HIS WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- THE FIRST TWO WARNING SIGNS IN EACH DIRECTION OF TRAVEL SHALL BE EQUIPPED WITH MONO-DIRECTIONAL AMBER FLASHING LIGHTS DURING HOURS OF DARKNESS. FLAGS ARE OPTIONAL.
- EXCEPT FOR APPROVED CLOSURES AS DEPICTED ON THE MAINTENANCE OF TRAFFIC PLANS, ALL ROADS SHALL BE KEPT OPEN TO TRAFFIC DURING THE ENTIRE CONSTRUCTION PERIOD.
- "WORKERS" SIGNS SHALL ONLY BE ERECTED WHEN WORKERS ARE PRESENT. SIGN MUST BE COVERED OR REMOVED WHEN NO WORKERS ARE PRESENT. THIS WORK SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- THE CONTRACTOR SHALL ERECT TEMPORARY STREET NAME SIGNS ON METAL POSTS THROUGHOUT CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER. THE COST OF THESE SIGNS SHALL BE INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION".
- ALL AREAS UNDERCUT FOR AGGREGATE SUBGRADE IMPROVEMENT SHALL NOT BE LEFT UNFILLED OVERNIGHT. DROP-OFFS GREATER THAN 24 INCHES SHALL NOT BE LEFT UNFILLED OVERNIGHT.
- UTILITY TRENCHES SHALL BE COVERED OR FILLED AT THE END OF EACH DAY. THIS WORK SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- SEE HIGHWAY STANDARDS AND DISTRICT ONE DETAILS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
- A QUANTITY FOR "TEMPORARY RAMP" HAS BEEN INCLUDED TO PROVIDE TEMPORARY RAMPS AT SIDE STREETS AND DRIVEWAYS TO ACCOMMODATE THE DIFFERENCES IN ELEVATION BETWEEN THE EXISTING PAVEMENT AND THE NEWLY CONSTRUCTED PAVEMENT DURING STAGED CONSTRUCTION. REMOVAL OF THIS MATERIAL SHALL BE INCLUDED IN THE COST OF "TEMPORARY RAMP".
- ALL CONSTRUCTION AND TRUCK TRAFFIC AS WELL AS PERSONAL VEHICLES OF THE CONSTRUCTION CREW SHALL ADHERE TO THE POSTED DIRECTION OF TRAVEL, DETOUR ROUTE, LOCAL PARKING RESTRICTIONS, AND ALL APPLICABLE REGULATORY LAWS. EACH INFRACTION NOTED BY THE ENGINEER SHALL BE SUBJECT TO A TRAFFIC CONTROL DEFICIENCY DEDUCTION IN ACCORDANCE WITH ARTICLE 105.03 OF THE STANDARD SPECIFICATIONS.

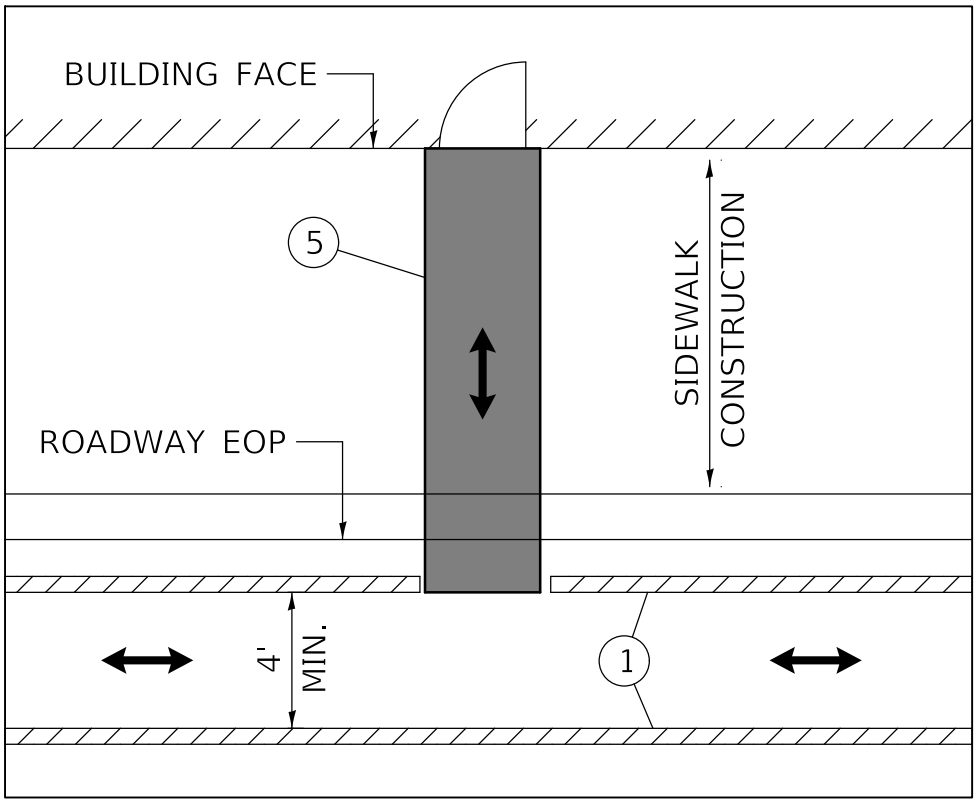
PEDESTRIAN ACCESS NOTES

- CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES. THE EXISTING SIDEWALK AT ENTRANCES SHALL REMAIN IN PLACE UNTIL IMMEDIATELY PRIOR TO THE CONSTRUCTION OF THE PROPOSED SIDEWALK UNLESS OTHERWISE COORDINATED WITH THE ENGINEER.
- CONSTRUCTION OPERATIONS TO REPLACE SIDEWALK IN FRONT OF DOORWAYS SHALL BE COORDINATED WITH THE PROPERTY OWNER TO OCCUR DURING OFF PEAK HOURS.
- PEDESTRAIN ACCESS AT INTERSECTIONS SHALL BE MAINTAINED THROUGH THE USE OF TEMPORARY AGGREGATE PAID FOR AS "TEMPORARY INTERSECTION RAMP".
- PEDESTRIAN ACCESS AT DOORWAYS AND AROUND SERVICE LINE CONSTRUCTION SHALL BE MAINTAINED THROUGH THE USE OF TEMPORARY AGGREGATE AND ADA COMPLIANT TEMPORARY PEDESTRIAN RAMPS THAT ARE PREFABRICATED OR CONSTRUCTED ON SITE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- ADA COMPLIANT PEDESTRIAN CHANNELIZATION BARRICADES SHALL BE USED TO SEPARATE PEDESTRIANS FROM THE WORK ZONE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- ON DUANE STREET BETWEEN PROSPECT AND GLENWOOD, THE SIDEWALK ON ONE SIDE OF THE STREET MUST REMAIN OPEN AND ACCESSIBLE AT ALL TIMES. ON MAIN STREET AND ON DUANE STREET EAST OF GLENWOOD, A WALKWAY THAT ACCESSES ALL BUSINESSES AND DOORWAYS MUST REMAIN OPEN AND ACCESSIBLE AT ALL TIMES. THIS WALKWAY MAY BE THE EXISTING SIDEWALK OR THE PROPOSED SIDEWALK, OR SHALL BE CREATED WITHIN THE ROADWAY USING ADA COMPLIANT PEDESTRIAN CHANNELIZATION BARRICADES. CONSTRUCTION STAGING SHALL BE COORDINATED WITH THE ENGINEER AND CONTRACTOR TO ENSURE SIDEWALK OR OTHER WALKWAY ACCESS REMAINS OPEN. SIGNING DIRECTING PEDESTRIANS TO THE OPEN SIDEWALK OR WALKWAY SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 701801. THE WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- SIDEWALK AND PARKWAY SPACE IS LIMITED. THE CONTRACTOR SHALL ENSURE THAT NO TRAFFIC CONTROL SIGNS BLOCK PEDESTRIAN ACCESS ROUTES DURING RAMP.

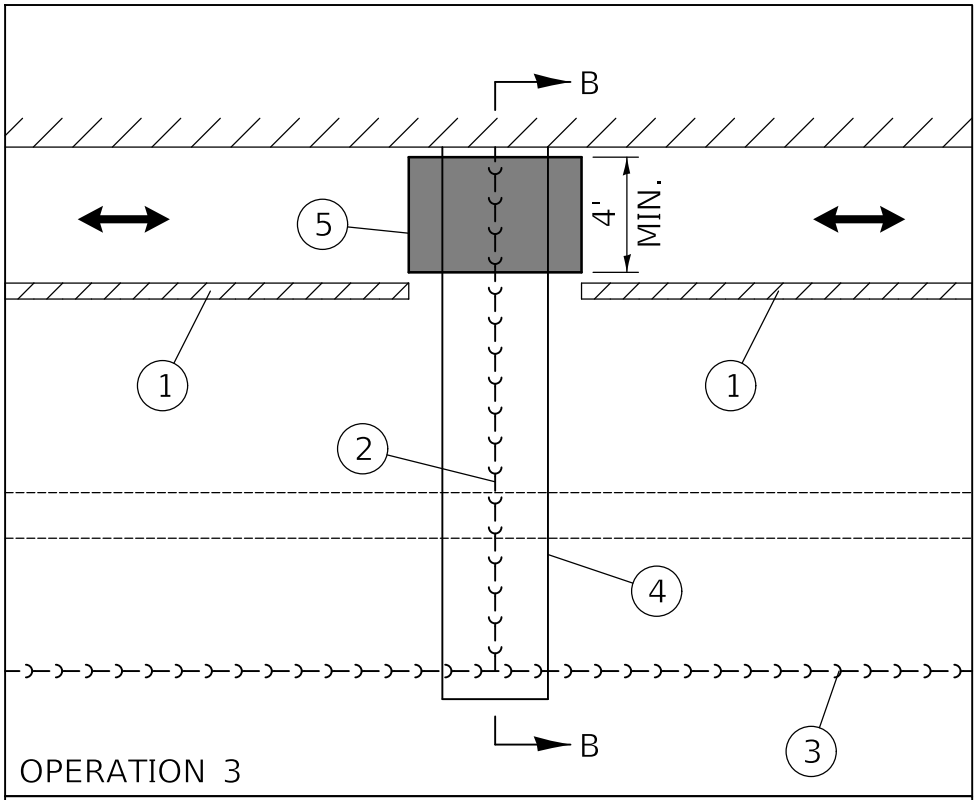
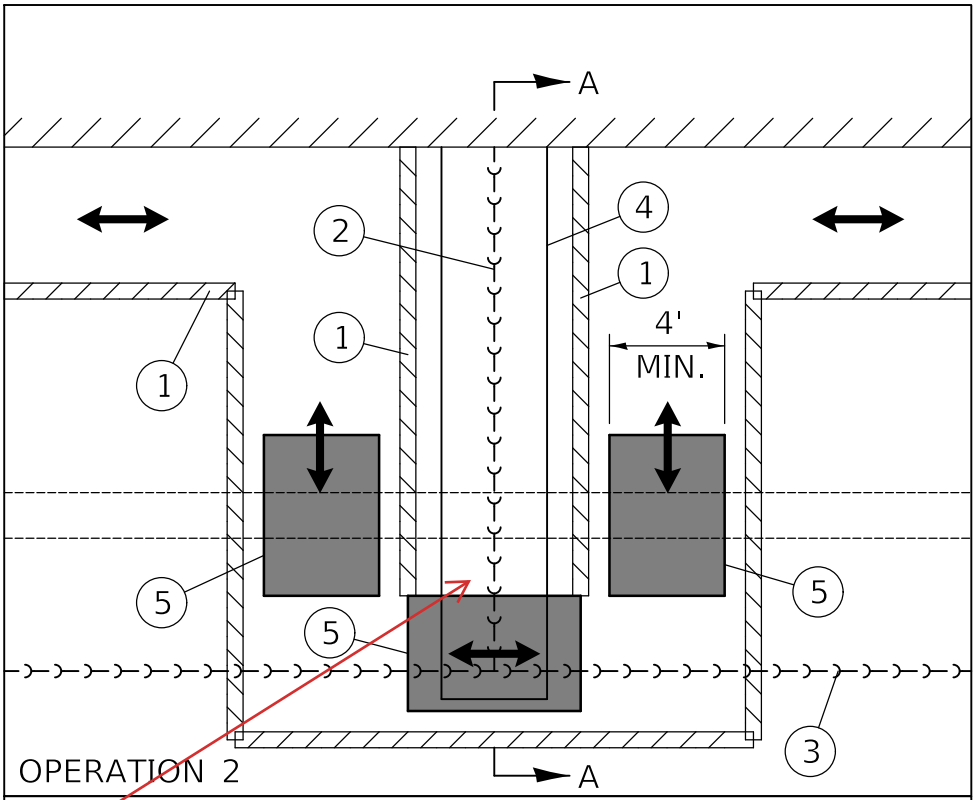
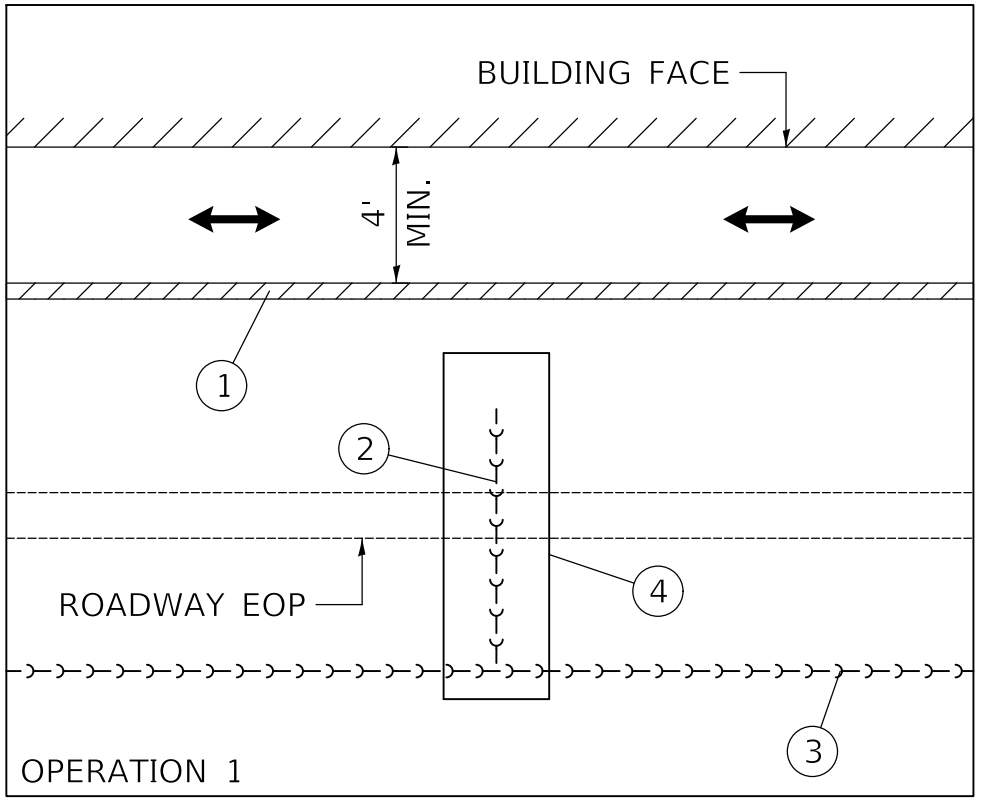
ACCESS MAINTENANCE NOTES

MAINTAINING ACCESS TO DRIVEWAYS AND SIDE ROADS IS OF THE UTMOST IMPORTANCE TO THE VILLAGE. ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUB-STAGING THE CONSTRUCTION OF DRIVEWAYS AND SIDE ROADS. THE CONTRACTOR SHALL FOLLOW THESE PROCEDURES TO ENSURE PROPER ACCESS WHEN DIRECTED BY THE ENGINEER:

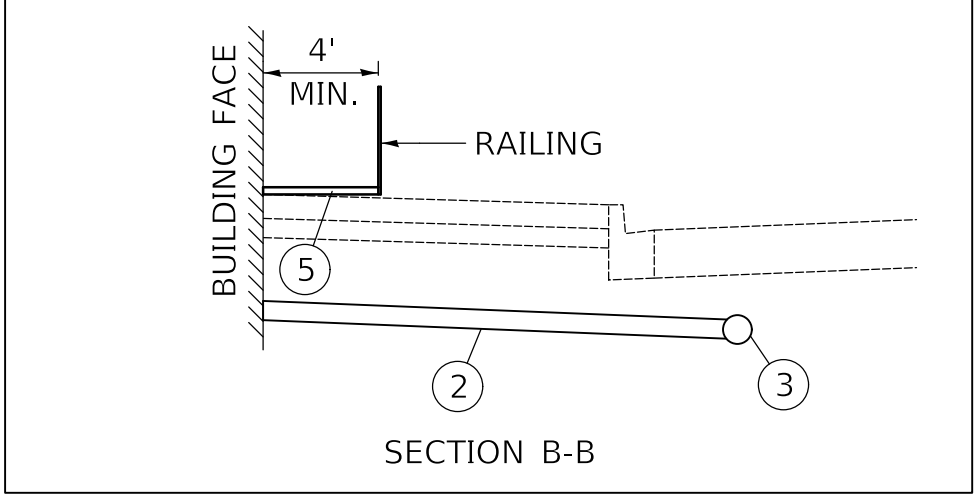
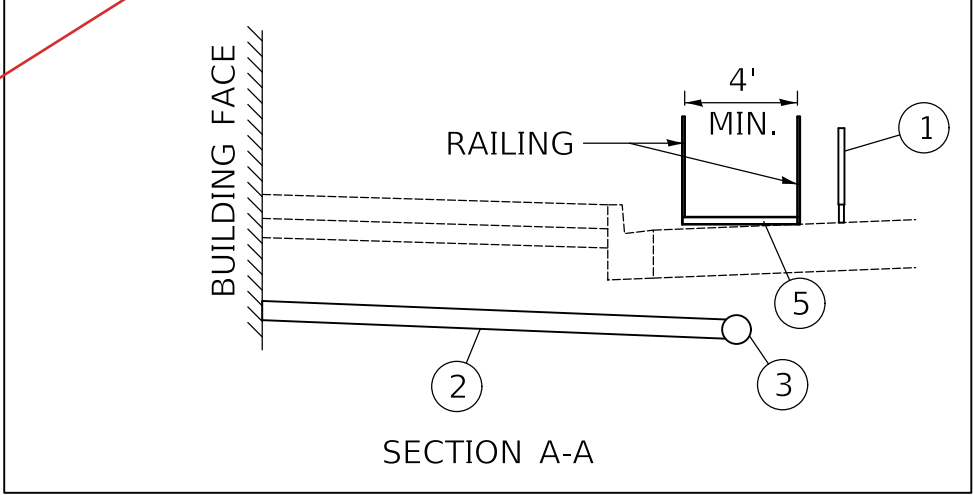
- THE CONTRACTOR SHALL WORK WITH ADJACENT BUSINESS OWNERS AND THE VILLAGE TO DETERMINE DRIVEWAY AND SIDE ROAD RECONSTRUCTION SCHEDULING. ALL DRIVEWAY CLOSURES SHALL BE APPROVED BY THE ENGINEER.
- ALL BARRICADES REQUIRED TO SUB-STAGE DRIVEWAY AND SIDE ROAD CONSTRUCTION AND MAINTAIN ACCESS TO DRIVEWAYS AND SIDE ROADS SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION".
- DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES THROUGH THE USE OF TEMPORARY AGGREGATE PAID FOR AS "TEMPORARY DRIVEWAY RAMP". AT THE DIRECTION OF THE ENGINEER, DRIVEWAYS MAY BE CLOSED FOR A MAXIMUM OF TWO WEEKS TO FACILITATE DRIVEWAY, SIDEWALK, AND CURB AND GUTTER CONSTRUCTION. THE CONTRACTOR SHALL WORK COOPERATIVELY WITH THE RESIDENTS, BUSINESSES, AND ENGINEER TO ACCOMMODATE ACCESS THROUGHOUT THE PROJECT.



PEDESTRIAN ACCESS DURING SIDEWALK CONSTRUCTION DETAIL



ACTUAL PED DETOUR ROUTE WILL NEED TO BE SUBSTANTIALLY LONGER TO ALLOW FOR EQUIPMENT, MATERIALS AND TRUCKING. FLAGGERS SHOULD BE POSTED AT ENTRANCES AND EXISTS FROM WORKS ZONE CROSSING PED WALKING ROUTE.



PEDESTRIAN ACCESS FOR SERVICE LINE CONNECTION DETAIL

	Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN		MAINTENANCE OF TRAFFIC GENERAL NOTES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JRR	REVISED -									
		CHECKED - KRK	REVISED -									
		DATE - 9/24/2021	REVISED -									
								SHEET NO. 1 OF 3 SHEETS			STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SEQUENCE OF CONSTRUCTION

DUANE STREET

STAGE 2

- PLACE ALL ADVANCE CONSTRUCTION SIGNS PER IDOT HIGHWAY STANDARD 701501. FURNISH AND INSTALL ADDITIONAL TRAFFIC CONTROL AND PROTECTION MEASURES.
- INSTALL EROSION CONTROL MEASURES AND TREE PROTECTION FOR TREES TO REMAIN. PERFORM TREE ROOT PRUNING.
- IMPLEMENT DUANE STREET VEHICLE TRAFFIC DETOUR.
- INSTALL SERVICE LINES WEST OF MAIN STREET. ROUTE VEHICLES AROUND SERVICE CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD 701601. A QUANTITY FOR "CLASS D PATCHES, SPECIAL" (4") HAS BEEN INCLUDED FOR PATCHING THE EXISTING PAVEMENT AT EACH SERVICE TO BE REPLACED.

STAGE 2A

- IMPLEMENT DUANE STREET VEHICLE TRAFFIC DETOUR.
- INSTALL SERVICE LINES EAST OF MAIN STREET. ROUTE VEHICLES AROUND SERVICE CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD 701601. A QUANTITY FOR "CLASS D PATCHES, SPECIAL" (4") HAS BEEN INCLUDED FOR PATCHING THE EXISTING PAVEMENT AT EACH SERVICE TO BE REPLACED.
- INSTALL STORM SEWER EAST OF MAIN STREET.

STAGE 3

- SHIFT TRAFFIC AS SHOWN.
- INSTALL STORM SEWER AND LATERALS WEST OF MAIN STREET. A QUANTITY FOR "CLASS D PATCHES, SPECIAL" (4") HAS BEEN INCLUDED FOR PATCHING THE EXISTING PAVEMENT AT EACH LATERAL TO BE INSTALLED.
- REMOVE EXISTING ROADWAY PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS. REMOVE EXISTING SIDEWALK LEAVING 4' MINIMUM WIDTH OF EXISTING SIDEWALK ALONG THE BUILDING FACE TO MAINTAIN PEDESTRIAN ACCESS.
- INSTALL SOIL CELLS, LIGHTING FOUNDATIONS AND CONDUIT, AND IRRIGATION PIPES.
- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT ROADWAY PAVEMENT UP TO BINDER.
- PLACE PEDESTRIAN BARRICADES WITHIN ROADWAY TO ACCOMMODATE THE PEDESTRIAN ACCESS ROUTE. MOVE PEDESTRIANS TO THE ROADWAY. CONSTRUCT SIDEWALK ADJACENT TO BUILDINGS AND ELSEWHERE ON THE NORTH SIDE AS SHOWN.
- PLACE PEDESTRIAN BARRICADES ALONG NEW SIDEWALK ALONG BUILDINGS MAINTAINING 4' MINIMUM WIDTH. MOVE PEDESTRIANS TO THE SIDEWALK.

STAGE 4A

- SHIFT TRAFFIC AS SHOWN AT MAIN/DUANE INTERSECTION.
- INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, SEAT WALLS, LIGHT POLES, AND REMAINING STREET FURNITURE. CONTRACTOR MAY SWITCH TO STAGE 4B CONFIGURATION PRIOR TO COMPLETION OF THESE ITEMS.

STAGE 4B

- IMPLEMENT DUANE STREET VEHICLE TRAFFIC DETOUR FOR DUANE STREET. TRAFFIC IS NOW TWO WAY BETWEEN THE PARKING GARAGE AND FOREST.
- REMOVE EXISTING ROADWAY PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS. REMOVE EXISTING SIDEWALK LEAVING 4' MINIMUM WIDTH OF EXISTING SIDEWALK ALONG THE BUILDING FACE TO MAINTAIN PEDESTRIAN ACCESS.
- INSTALL SOIL CELLS, LIGHTING FOUNDATIONS AND CONDUIT, AND IRRIGATION PIPES.
- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT ROADWAY PAVEMENT UP TO BINDER.
- PLACE PEDESTRIAN BARRICADES WITHIN ROADWAY TO ACCOMMODATE THE PEDESTRIAN ACCESS ROUTE. MOVE PEDSTRIANS TO THE ROADWAY. CONSTRUCT SIDEWALK ADJACENT TO BUILDINGS AND ELSEWHERE ON THE NORTH SIDE AS SHOWN.
- PLACE PEDESTRIAN BARRICADES ALONG NEW SIDEWALK ALONG BUILDINGS MAINTAINING 4' MINIMUM WIDTH. MOVE PEDSTRIANS TO THE SIDEWALK.
- INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, LIGHT POLES, AND REMAINING STREET FURNITURE.

STAGE 5

- SHIFT TRAFFIC AS SHOWN.
- REMOVE EXISTING ROADWAY PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS. REMOVE EXISTING SIDEWALK LEAVING 4' MINIMUM WIDTH OF EXISTING SIDEWALK ALONG THE BUILDING FACE TO MAINTAIN PEDESTRIAN ACCESS.
- INSTALL SOIL CELLS, LIGHTING FOUNDATIONS AND CONDUIT, IRRIGATION PIPES, AND SEAT WALL FOUNDATIONS.

DUANE STREET (CONTINUED)

- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT ROADWAY PAVEMENT UP TO BINDER.
- PLACE PEDESTRIAN BARRICADES WITHIN ROADWAY TO ACCOMMODATE THE PEDESTRIAN ACCESS ROUTE. MOVE PEDSTRIANS TO THE ROADWAY. CONSTRUCT SIDEWALK ADJACENT TO BUILDINGS AND ELSEWHERE ON THE SOUTH SIDE AS SHOWN.
- PLACE PEDESTRIAN BARRICADES ALONG NEW SIDEWALK ALONG BUILDINGS MAINTAINING 4' MINIMUM WIDTH. MOVE PEDSTRIANS TO THE SIDEWALK.
- INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, SEAT WALLS, LIGHT POLES, AND REMAINING STREET FURNITURE. CONTRACTOR MAY SWITCH TO STAGE 5A CONFIGURATION PRIOR TO COMPLETION OF THESE ITEMS WEST OF THE PARKING GARAGE.

STAGE 5A/B

- IMPLEMENT DUANE STREET VEHICLE TRAFFIC DETOUR. SHIFT TRAFFIC AS INDICATED. OPEN DUANE STREET TO TWO WAY TRAFFIC BETWEEN THE PARKING GARAGE AND FOREST.
- CONTINUE TO INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, SEAT WALLS, LIGHT POLES, AND REMAINING STREET FURNITURE.
- PLACE TEMPORARY PAVEMENT MARKINGS IN THE CONFIGURATION OF THE PERMANENT PAVEMENT MARKINGS.
- OPEN DUANE STREET TO TRAFFIC AND PARKING.
- INSTALL TREES AND OTHER PLANTINGS.
- PLACE FINAL ROADWAY SURFACE AND PAVEMENT MARKINGS.

HILLSIDE AVENUE

WORK ON HILLSIDE AVENUE SHALL NOT BEGIN UNTIL MAIN STREET IS OPEN TO TWO WAY TRAFFIC UNLESS DIRECTED BY THE ENGINEER, WITH THE EXCEPTION OF THE WORK SHOWN AT THE INTERSECTION OF MAIN/HILLSIDE.

STAGE 1/2/2A/3

- NO WORK SHALL BE PERFORMED ON HILLSIDE.

STAGE 4A

- PLACE ALL ADVANCE CONSTRUCTION SIGNS PER IDOT HIGHWAY STANDARD 701501. FURNISH AND INSTALL ADDITIONAL TRAFFIC CONTROL AND PROTECTION MEASURES.
- INSTALL EROSION CONTROL MEASURES.
- IMPLEMENT MAIN STREET VEHICLE TRAFFIC DETOUR. CLOSE MAIN STREET AT MAIN/HILLSIDE INTERSECTION.
- SHIFT TRAFFIC AS INDICATED.
- CONSTRUCT SOUTH HALF OF MAIN/HILLSIDE INTERSECTION.

STAGE 4B

- SHIFT TRAFFIC AS INDICATED. OPEN MAIN STREET SOUTH OF HILLSIDE.
- CONSTRUCT NORTH HALF OF MAIN/HILLSIDE INTERSECTION.

STAGE 5A

- SHIFT TRAFFIC AS INDICATED.
- INSTALL SERVICE LINES EAST OF MAIN STREET. ROUTE VEHICLES AROUND SERVICE CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD 701601. A QUANTITY FOR "CLASS D PATCHES, SPECIAL" (4") HAS BEEN INCLUDED FOR PATCHING THE EXISTING PAVEMENT AT EACH SERVICE TO BE REPLACED.
- INSTALL STORM SEWER.
- REMOVE EXISTING ROADWAY PAVEMENT, CURB AND GUTTER AND SIDEWALK AS SHOWN ON PLANS. PEDESTRIANS SHALL BE DETOURED TO NORTH SIDE OF HILLSIDE WEST OF MAIN.
- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT PCC WIDENING PAVEMENT AND ROADWAY PAVEMENT UP TO BINDER. CONSTRUCT SOUTH SIDE SIDEWALK.

STAGE 5B

- SHIFT TRAFFIC AS INDICATED.
- REMOVE EXISTING ROADWAY PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS. REMOVE EXISTING SIDEWALK LEAVING 4' MINIMUM WIDTH OF EXISTING SIDEWALK ALONG THE BUILDING FACE TO MAINTAIN PEDESTRIAN ACCESS.
- INSTALL SOIL CELLS, LIGHTING FOUNDATIONS AND CONDUIT, IRRIGATION PIPES, AND SEAT WALL FOUNDATIONS.

HILLSIDE AVENUE (CONTINUED)

- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT ROADWAY PAVEMENT UP TO BINDER.
- PLACE PEDESTRIAN BARRICADES WITHIN ROADWAY TO ACCOMMODATE THE PEDESTRIAN ACCESS ROUTE. MOVE PEDESTRIANS TO THE ROADWAY. CONSTRUCT SIDEWALK ADJACENT TO BUILDINGS AND ELSEWHERE ON THE NORTH SIDE AS SHOWN.
- PLACE PEDESTRIAN BARRICADES ALONG NEW SIDEWALK MAINTAINING 4' MINIMUM WIDTH. MOVE PEDESTRIANS TO THE SIDEWALK.
- INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, SEAT WALLS, LIGHT POLES, AND REMAINING STREET FURNITURE.
- PLACE TEMPORARY PAVEMENT MARKINGS IN THE CONFIGURATION OF THE PERMANENT PAVEMENT MARKINGS.
- OPEN HILLSIDE AVENUE TO TRAFFIC AND PARKING.
- INSTALL TREES AND OTHER PLANTINGS.
- PLACE FINAL ROADWAY SURFACE AND PAVEMENT MARKINGS.

MAIN STREET

STAGE 1

- PLACE ALL ADVANCE CONSTRUCTION SIGNS PER IDOT HIGHWAY STANDARD 701501. FURNISH AND INSTALL ADDITIONAL TRAFFIC CONTROL AND PROTECTION MEASURES.
- INSTALL EROSION CONTROL MEASURES.
- PLACE PEDESTRIAN BARRICADES ALONG EXISTING SIDEWALK ON MAIN STREET SOUTH OF DUANE.
- IMPLEMENT MAIN STREET VEHICLE TRAFFIC DETOUR. CLOSE MAIN STREET BETWEEN HILLSIDE AND DUANE.
- CONSTRUCT SANITARY SEWER AND WATER MAIN. INSTALL SERVICE LINES.

STAGE 2/2A

- CONSTRUCT STORM SEWER.

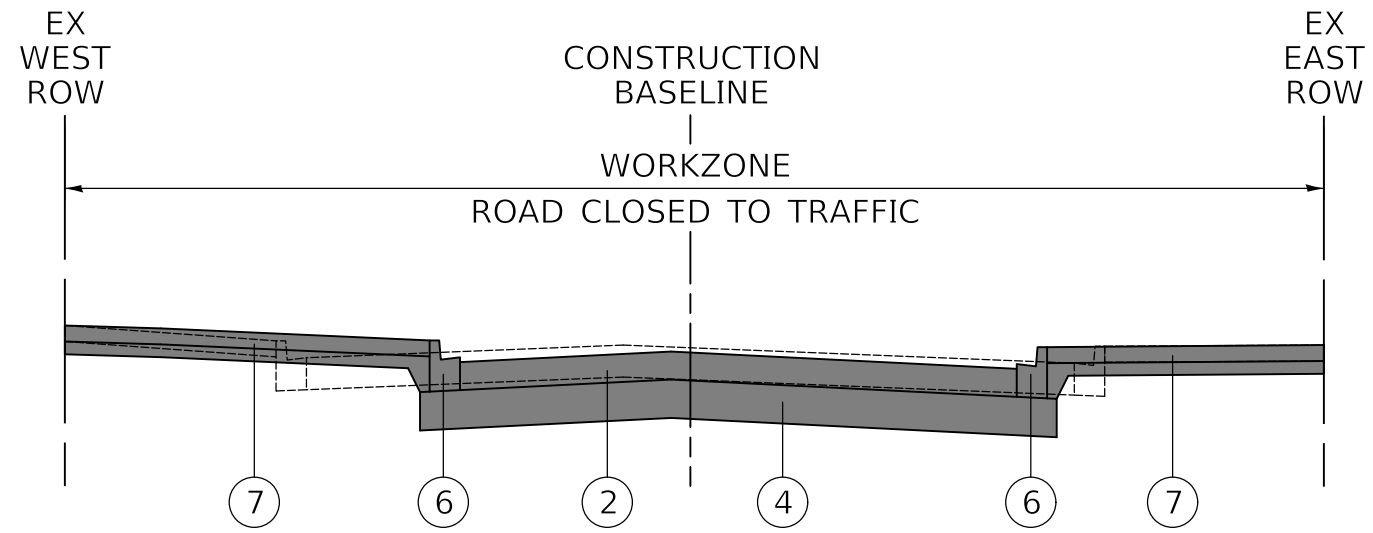
STAGE 3/4A/4B

- IMPLEMENT MAIN STREET VEHICLE TRAFFIC DETOUR. CLOSE MAIN STREET BETWEEN DUANE AND THE RAILROAD TRACKS. CLOSURE OF THIS SECTION OF MAIN STREET SHALL BE ALLOWED FOR 6 WEEKS DURING WHICH TIME ALL APPLICABLE WORK ITEMS BELOW SHALL BE COMPLETED AND THE AREA REOPENED TO TWO WAY TRAFFIC.
- COMPLETE STORM SEWER WORK ON MAIN STREET.
- REMOVE EXISTING MAIN STREET ROADWAY PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS. REMOVE EXISTING SIDEWALK LEAVING 4' MINIMUM WIDTH OF EXISTING SIDEWALK ALONG THE BUILDING FACE TO MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDES OF MAIN STREET.
- INSTALL SOIL CELLS, LIGHTING FOUNDATIONS AND CONDUIT, IRRIGATION PIPES, AND SEAT WALL FOUNDATIONS.
- CONSTRUCT AGGREGATE SUBGRADE FOR CURB AND GUTTER AND ROADWAY. CONSTRUCT CURB AND GUTTER. CONSTRUCT ROADWAY PAVEMENT UP TO BINDER.
- PLACE PEDESTRIAN BARRICADES WITHIN ROADWAY TO ACCOMMODATE THE PEDESTRIAN ACCESS ROUTE. MOVE PEDSTRAINS TO THE ROADWAY. CONSTRUCT SIDEWALK ADJACENT TO BUILDINGS.
- PLACE PEDESTRIAN BARRICADES ALONG NEW SIDEWALK ALONG BUILFINGS MAINTAINING 4' MINIMUM WIDTH. MOVE PEDSTRIANS TO THE SIDEWALK.
- INSTALL CONCRETE BASE FOR BRICKS, CONCRETE CARRIAGE WALK, BRICKS, TREE PLANTER CURBS, SEAT WALLS, LIGHT POLES, AND REMAINING STREET FURNITURE.
- PLACE TEMPORARY PAVEMENT MARKINGS IN THE CONFIGURATION OF THE PERMANENT PAVEMENT MARKINGS.
- OPEN MAIN STREET TO TRAFFIC AND PARKING.

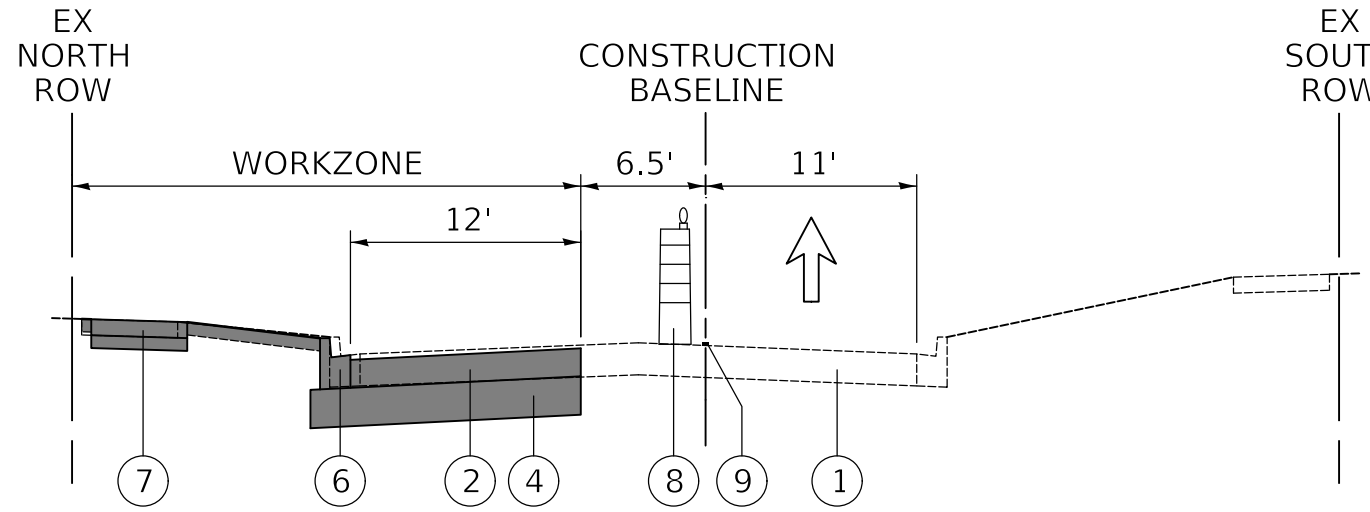
STAGE 5/5A/5B

- INSTALL TREES AND OTHER PLANTINGS.
- PLACE FINAL ROADWAY SURFACE AND PAVEMENT MARKINGS.

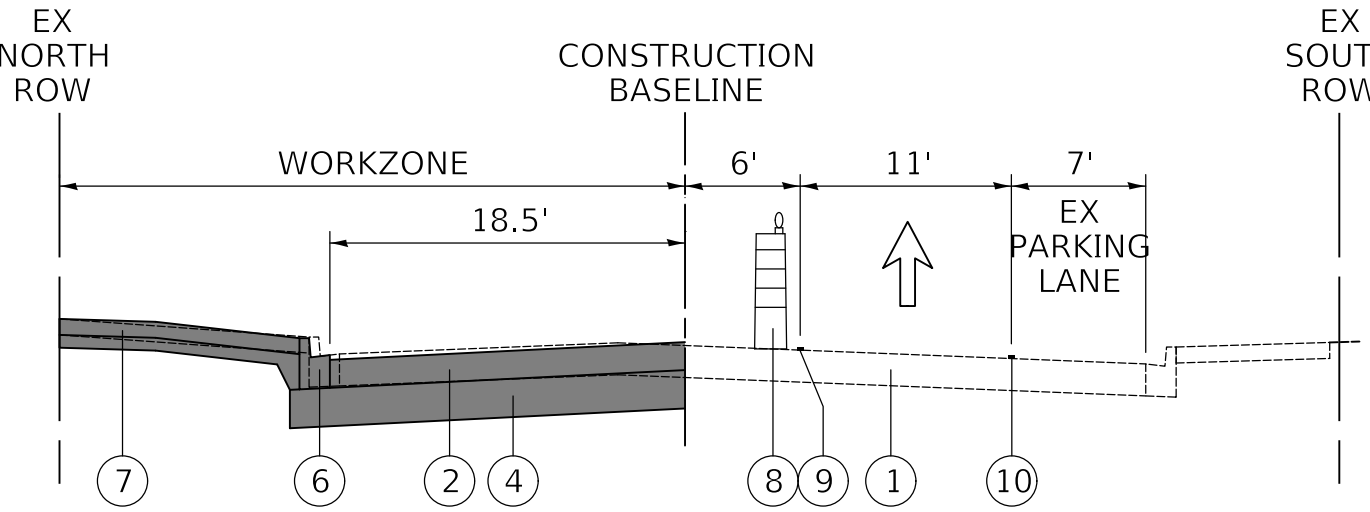
 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN		MAINTENANCE OF TRAFFIC GENERAL NOTES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JRR	REVISED -							DUPAGE	137	23
	CHECKED - KRK	REVISED -									
	DATE - 9/24/2021	REVISED -				SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



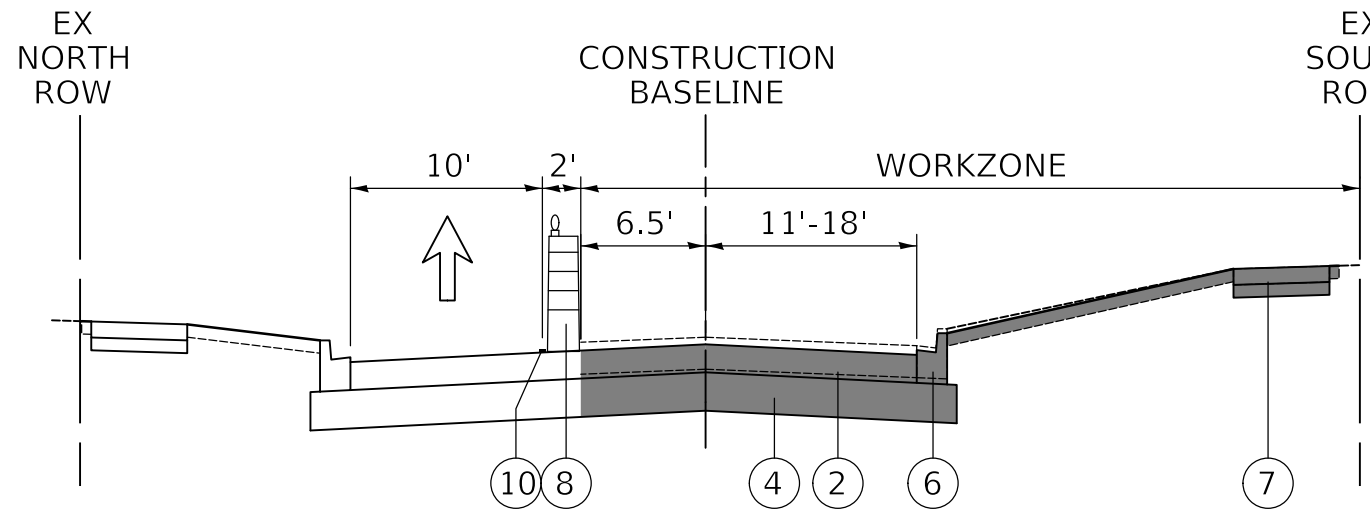
MAIN STREET - STAGES 1 THROUGH 4
STA. 802+35.2 TO STA. 806+62.2



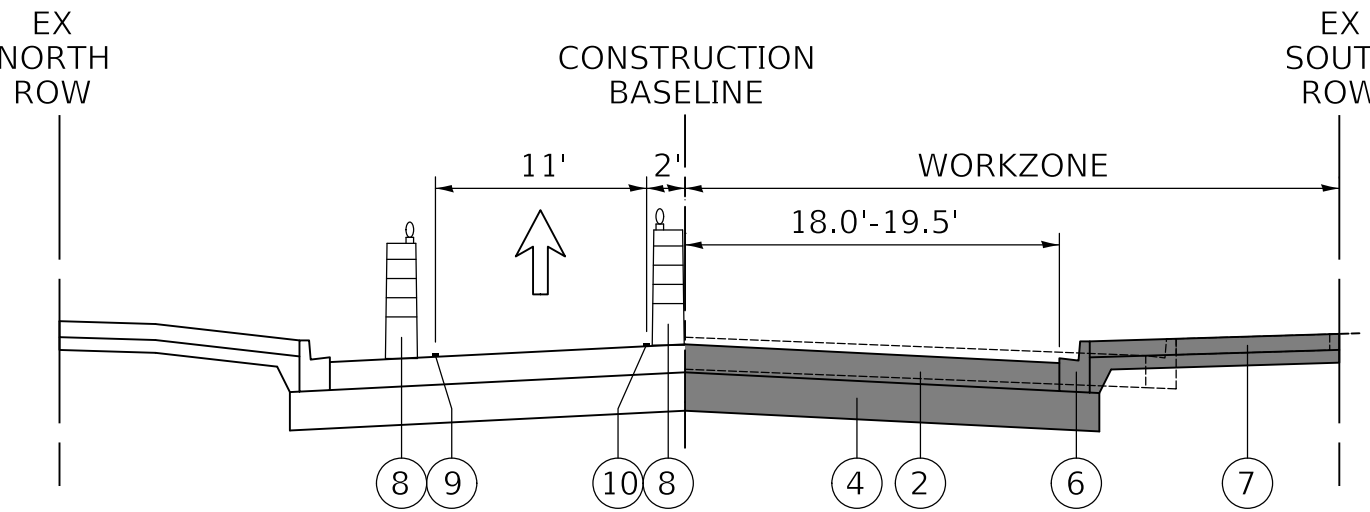
DUANE STREET - STAGE 3
STA. 401+97.5 TO STA. 408+65.7



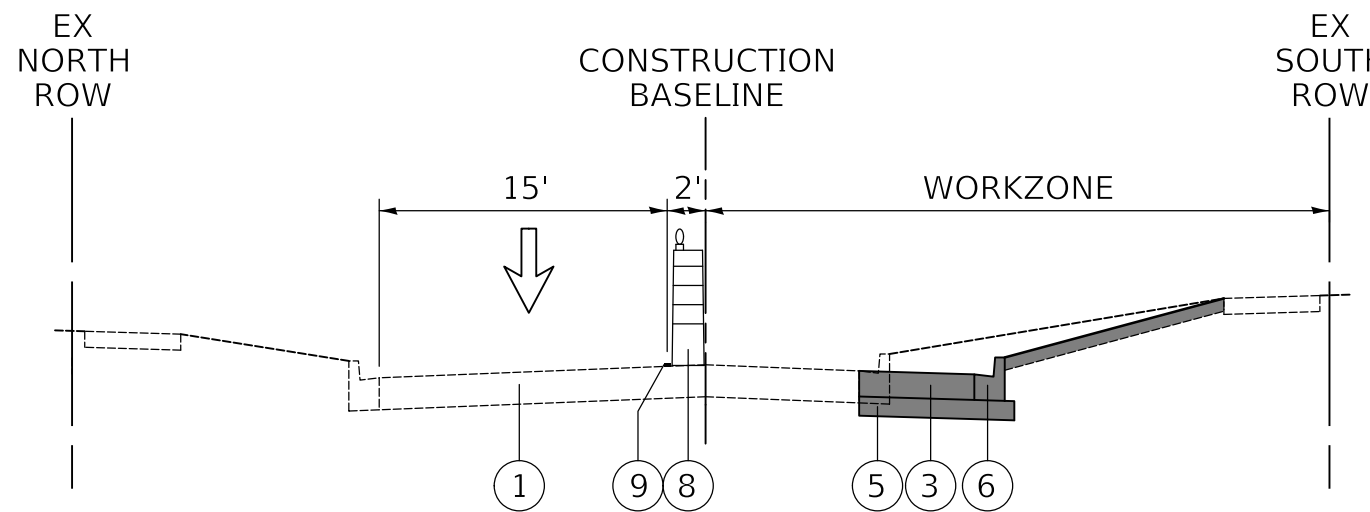
DUANE STREET - STAGE 3
STA. 408+65.7 TO STA. 413+72.2



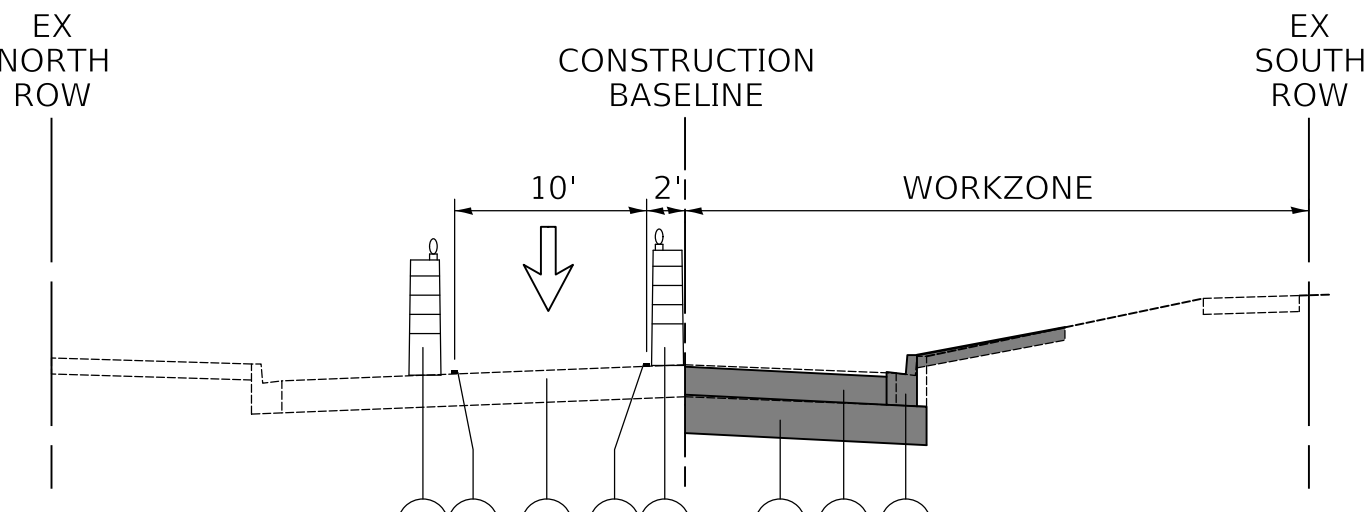
DUANE STREET - STAGE 5
STA. 401+97.5 TO STA. 408+65.7



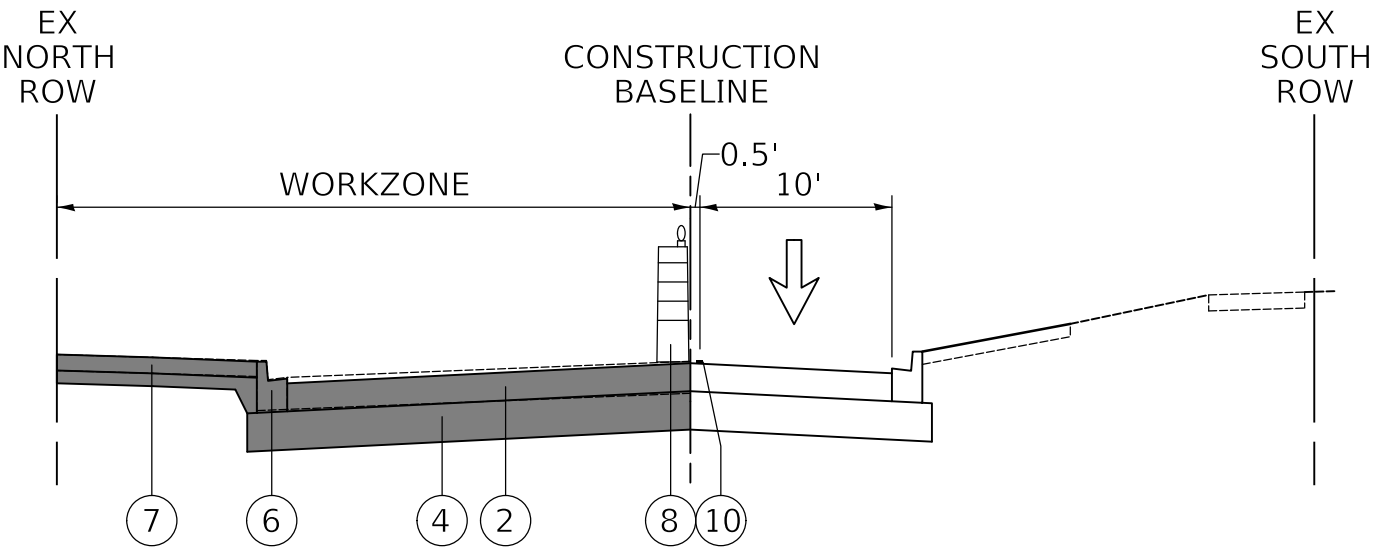
DUANE STREET - STAGE 5
STA. 408+65.7 TO STA. 415+94.9



HILLSIDE AVENUE - STAGE 5A
STA. 498+95.7 TO STA. 503+19

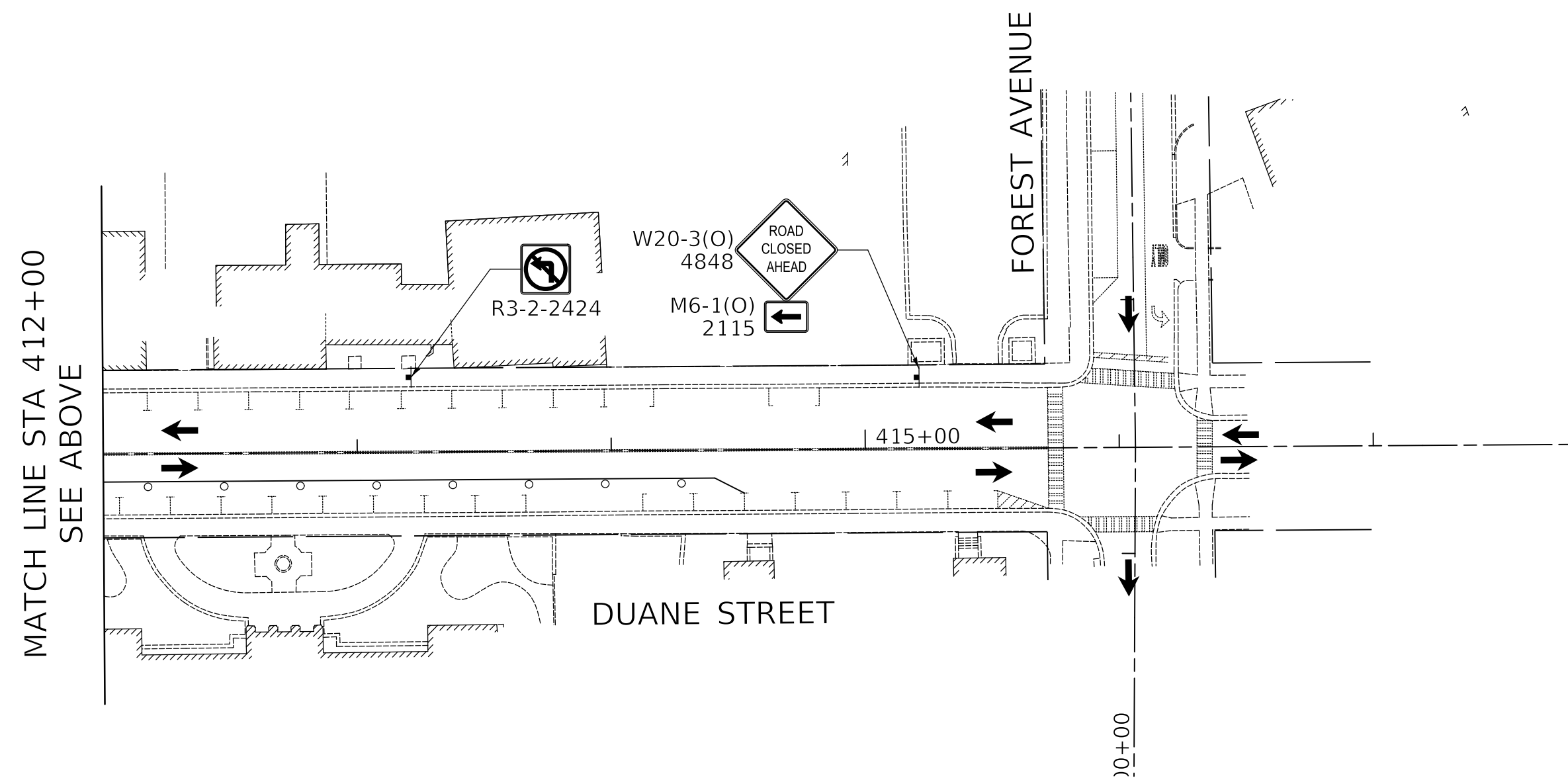
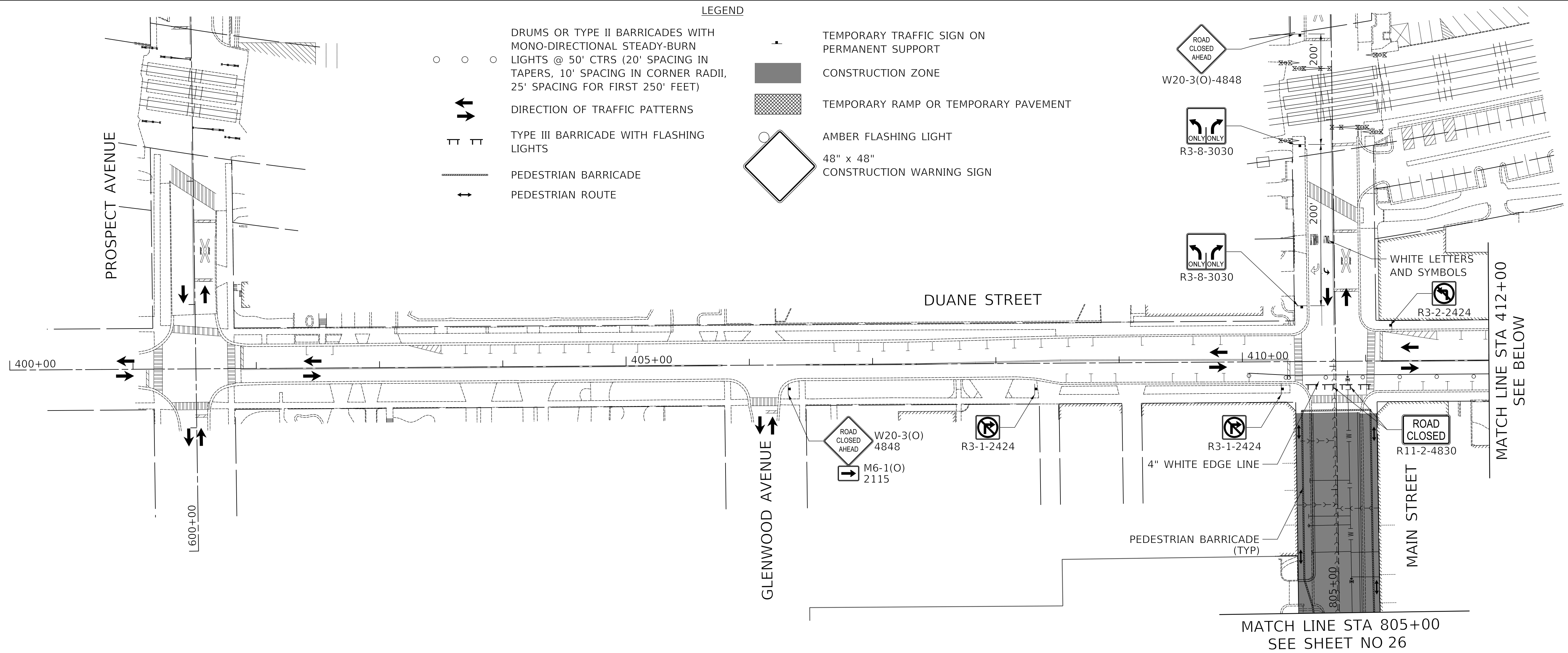


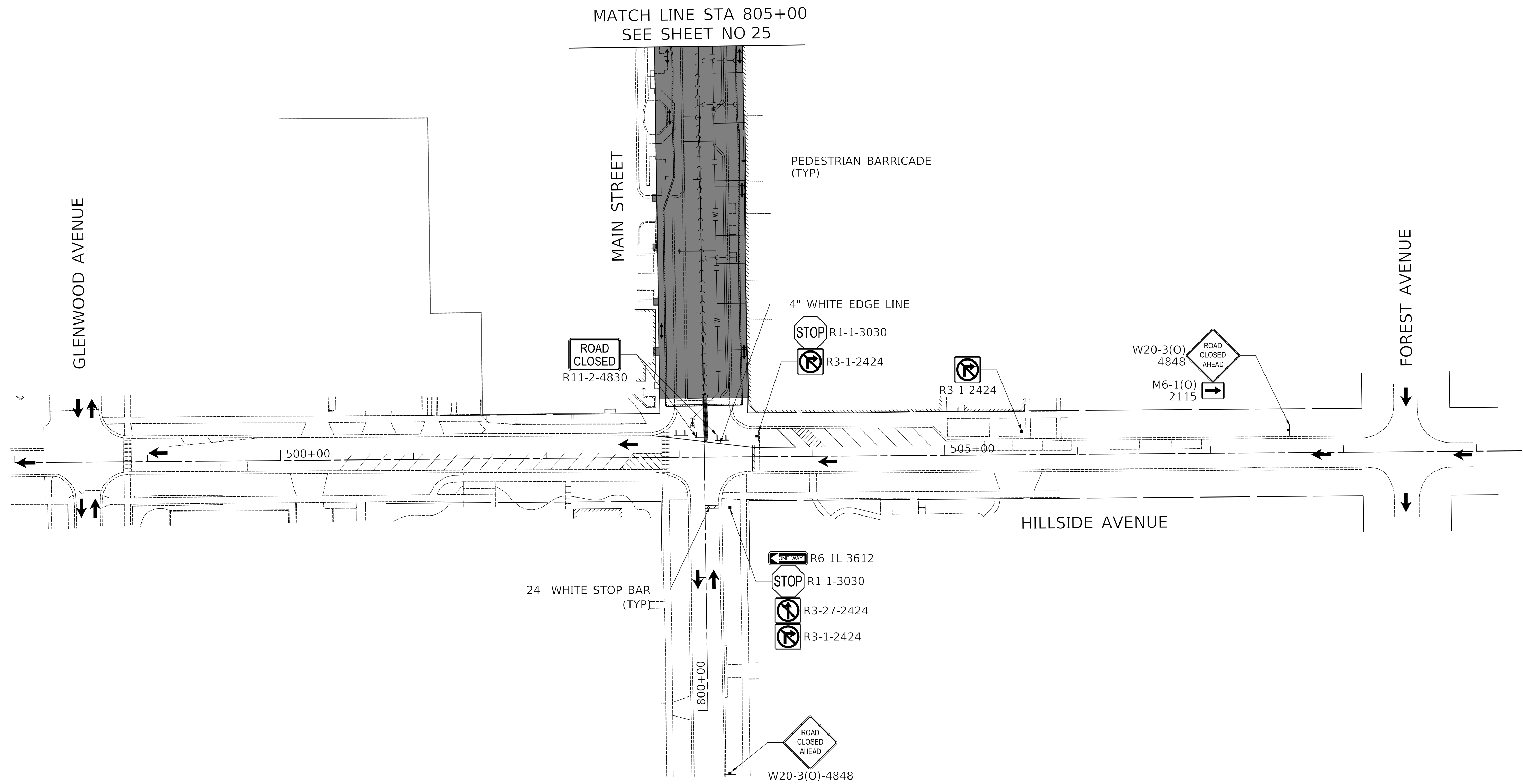
HILLSIDE AVENUE - STAGE 5A
STA. 503+19 TO STA. 505+33.8



HILLSIDE AVENUE - STAGE 5B
STA. 503+19 TO STA. 505+33.8

- LEGEND
- ① EXISTING PAVEMENT
 - ② PROPOSED HMA BINDER
 - ③ PROPOSED PCC PAVEMENT
 - ④ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT
 - ⑤ PROPOSED AGGREGATE BASE COURSE
 - ⑥ PROPOSED CURB AND GUTTER
 - ⑦ PROPOSED SIDEWALK
 - ⑧ DRUMS WITH MONO-DIRECTIONAL STEADY-BURN LIGHT
 - ⑨ LINE 4" (YELLOW EDGE LINE)
 - ⑩ LINE 4" (WHITE EDGE LINE)





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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

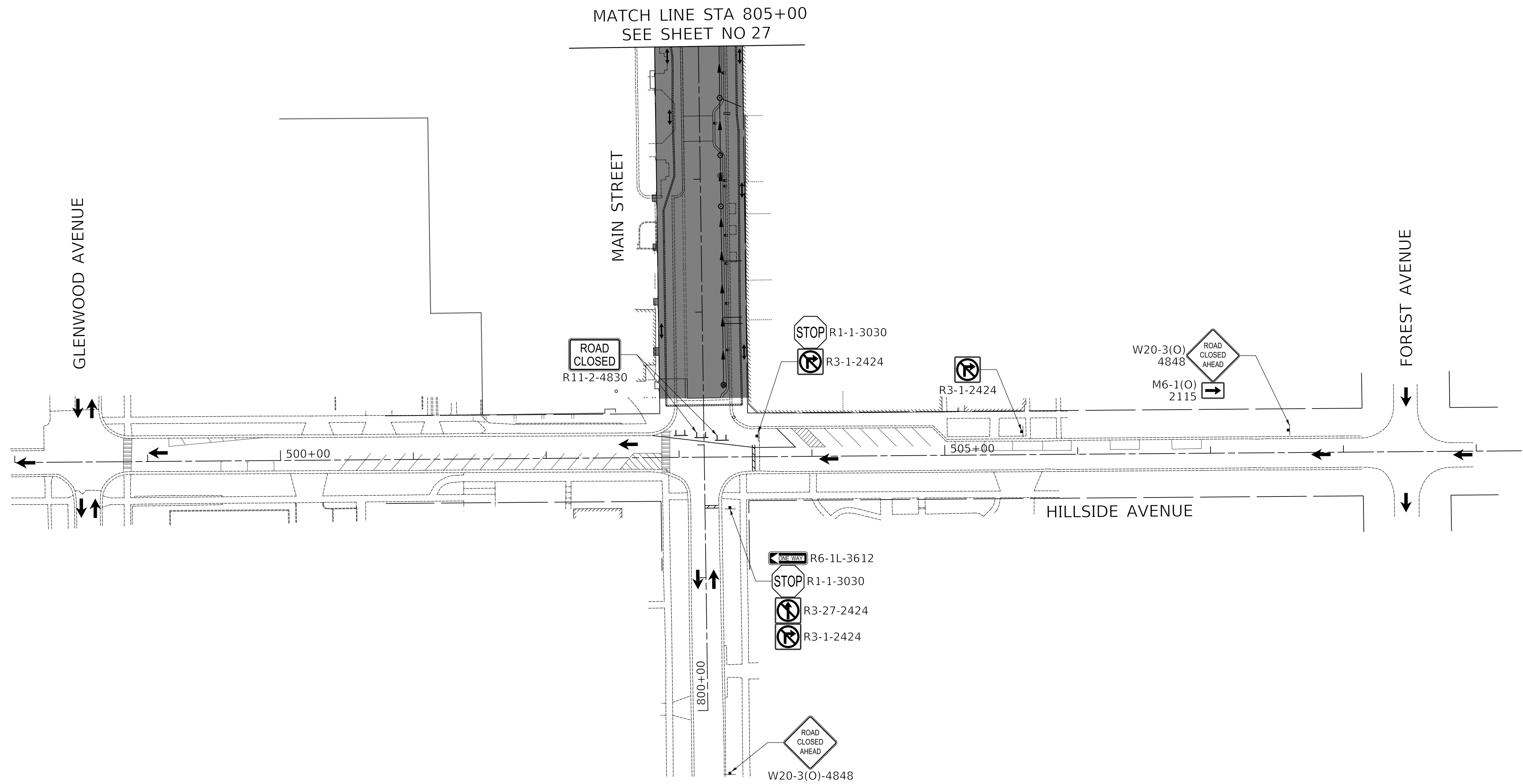
VILLAGE OF GLEN ELLYN



MAINTENANCE OF TRAFFIC PLAN
STAGE 1

SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	26
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

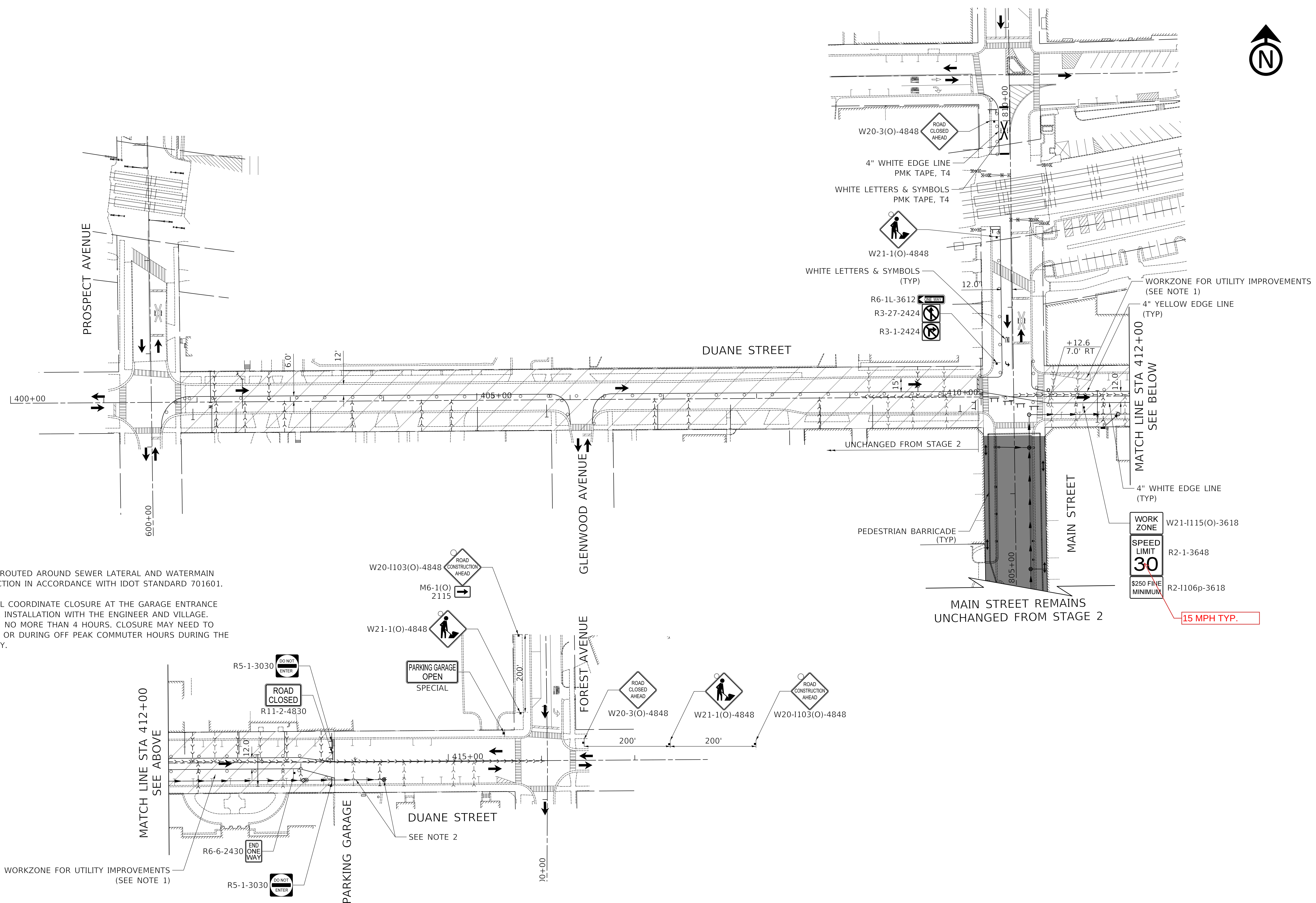
VILLAGE OF GLEN ELLYN



MAINTENANCE OF TRAFFIC PLAN STAGE 2

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	28
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

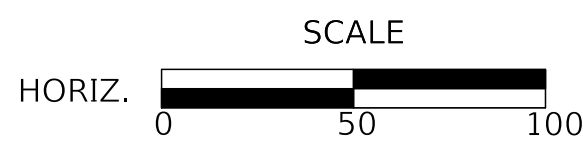
1. TRAFFIC SHALL BE ROUTED AROUND SEWER LATERAL AND WATERMAIN SERVICE CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD 701601.
2. CONTRACTOR SHALL COORDINATE CLOSURE AT THE GARAGE ENTRANCE FOR STORM SEWER INSTALLATION WITH THE ENGINEER AND VILLAGE. CLOSURE SHALL BE NO MORE THAN 4 HOURS. CLOSURE MAY NEED TO OCCUR OVERNIGHT OR DURING OFF PEAK COMMUTER HOURS DURING THE MIDDLE OF THE DAY.



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DESIGNED -	TGB	REVISED -	
DRAWN -	JRR	REVISED -	
CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

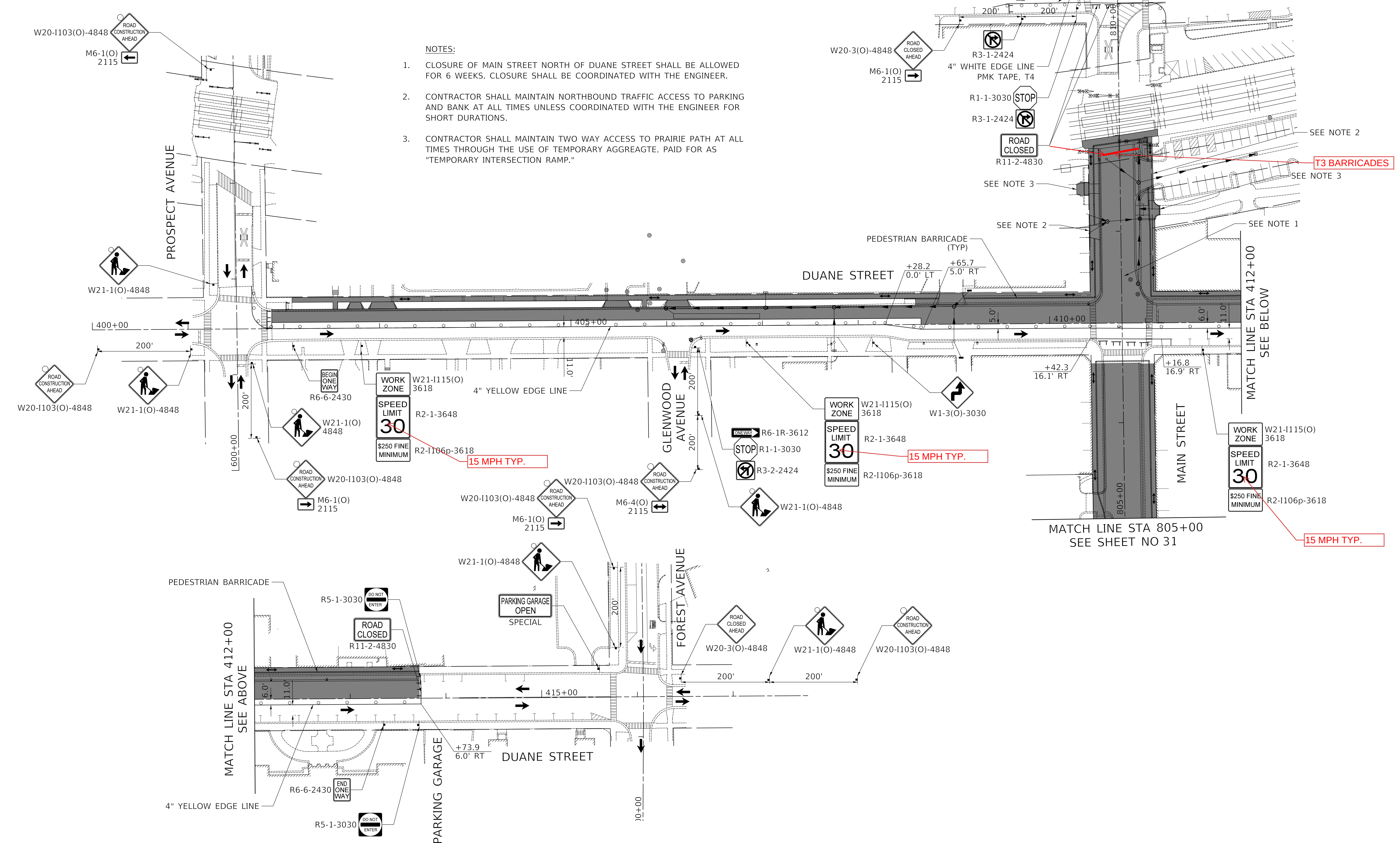
VILLAGE OF GLEN ELLYN



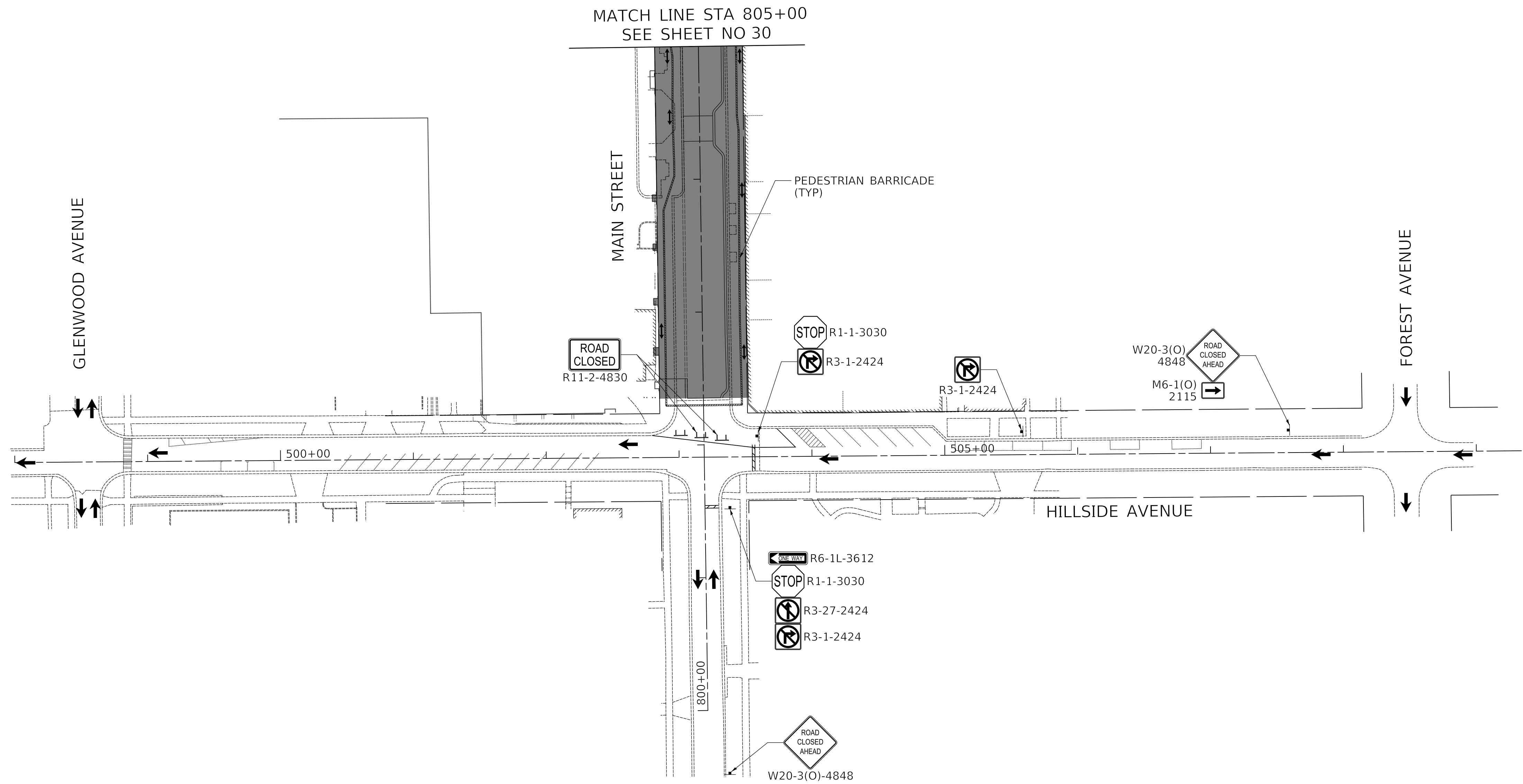
MAINTENANCE OF TRAFFIC PLAN
STAGE 2A

SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	29
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:
1. CLOSURE OF MAIN STREET NORTH OF DUANE STREET SHALL BE ALLOWED FOR 6 WEEKS. CLOSURE SHALL BE COORDINATED WITH THE ENGINEER.
 2. CONTRACTOR SHALL MAINTAIN NORTHBOUND TRAFFIC ACCESS TO PARKING AND BANK AT ALL TIMES UNLESS COORDINATED WITH THE ENGINEER FOR SHORT DURATIONS.
 3. CONTRACTOR SHALL MAINTAIN TWO WAY ACCESS TO PRAIRIE PATH AT ALL TIMES THROUGH THE USE OF TEMPORARY AGGREGATE, PAID FOR AS "TEMPORARY INTERSECTION RAMP."



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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

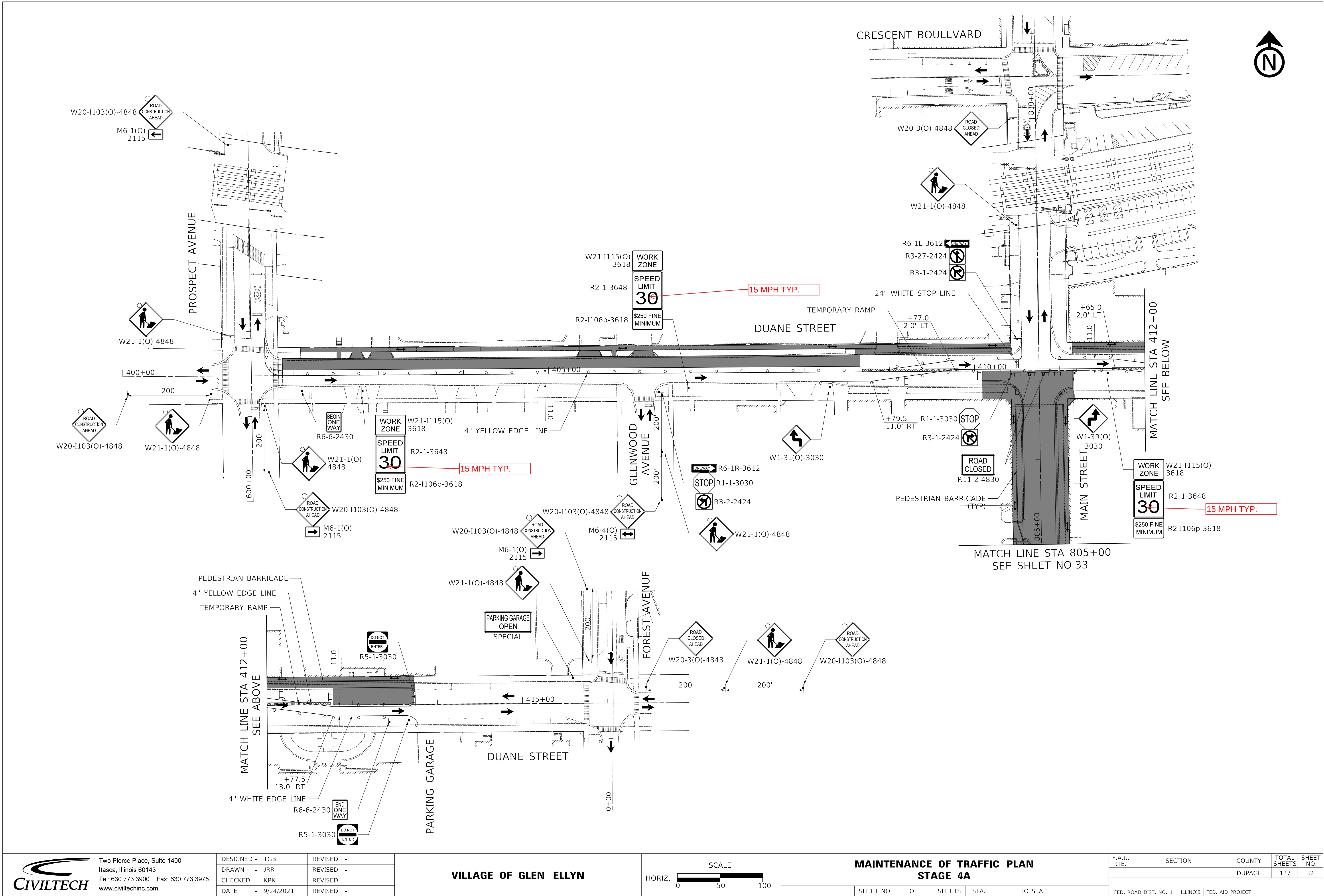
VILLAGE OF GLEN ELLYN

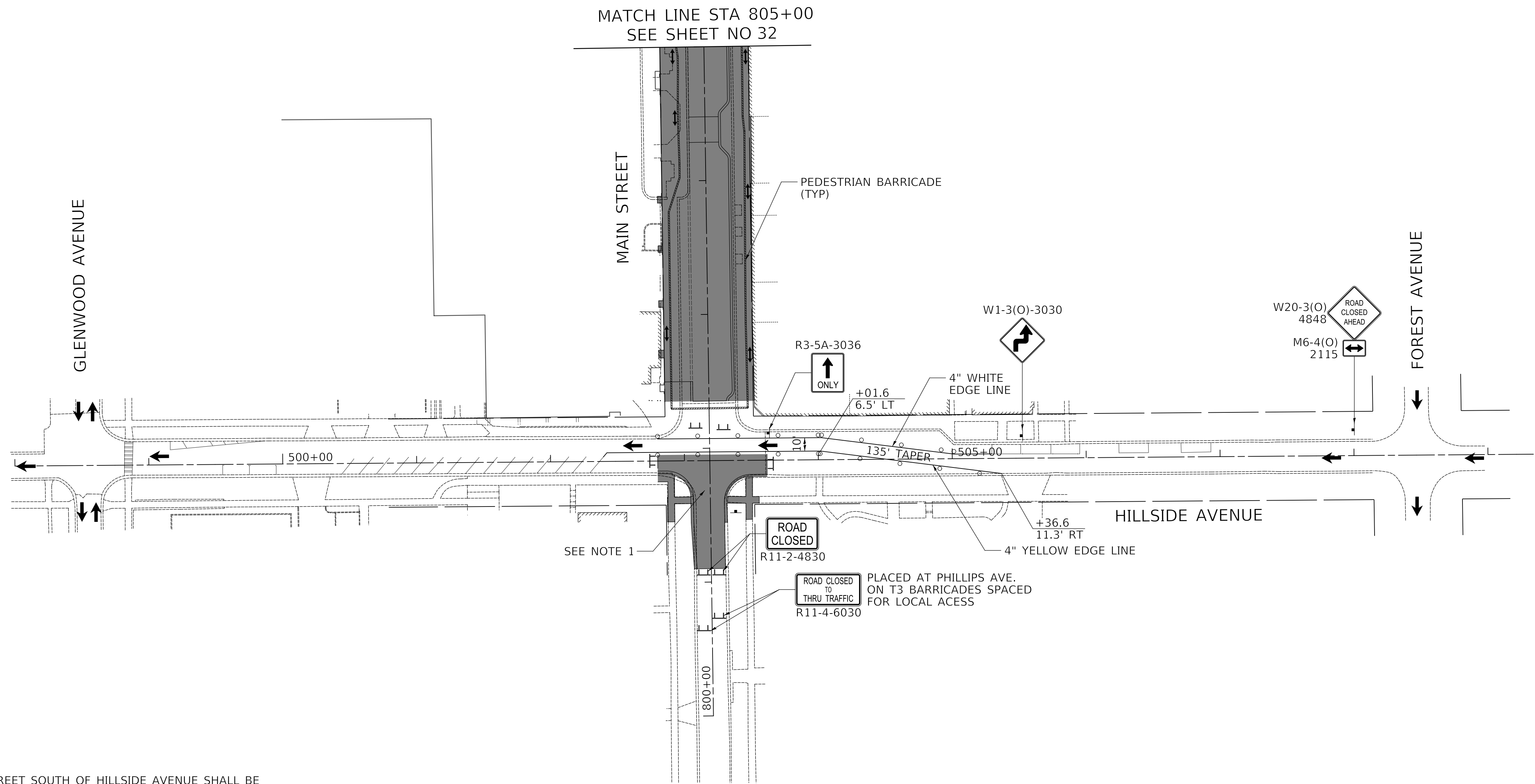


MAINTENANCE OF TRAFFIC PLAN
STAGE 3

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	31
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





NOTES:

1. CLOSURE OF MAIN STREET SOUTH OF HILLSIDE AVENUE SHALL BE ALLOWED FOR TWO WEEKS. CLOSURE SHALL BE COORDINATED WITH THE ENGINEER.



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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

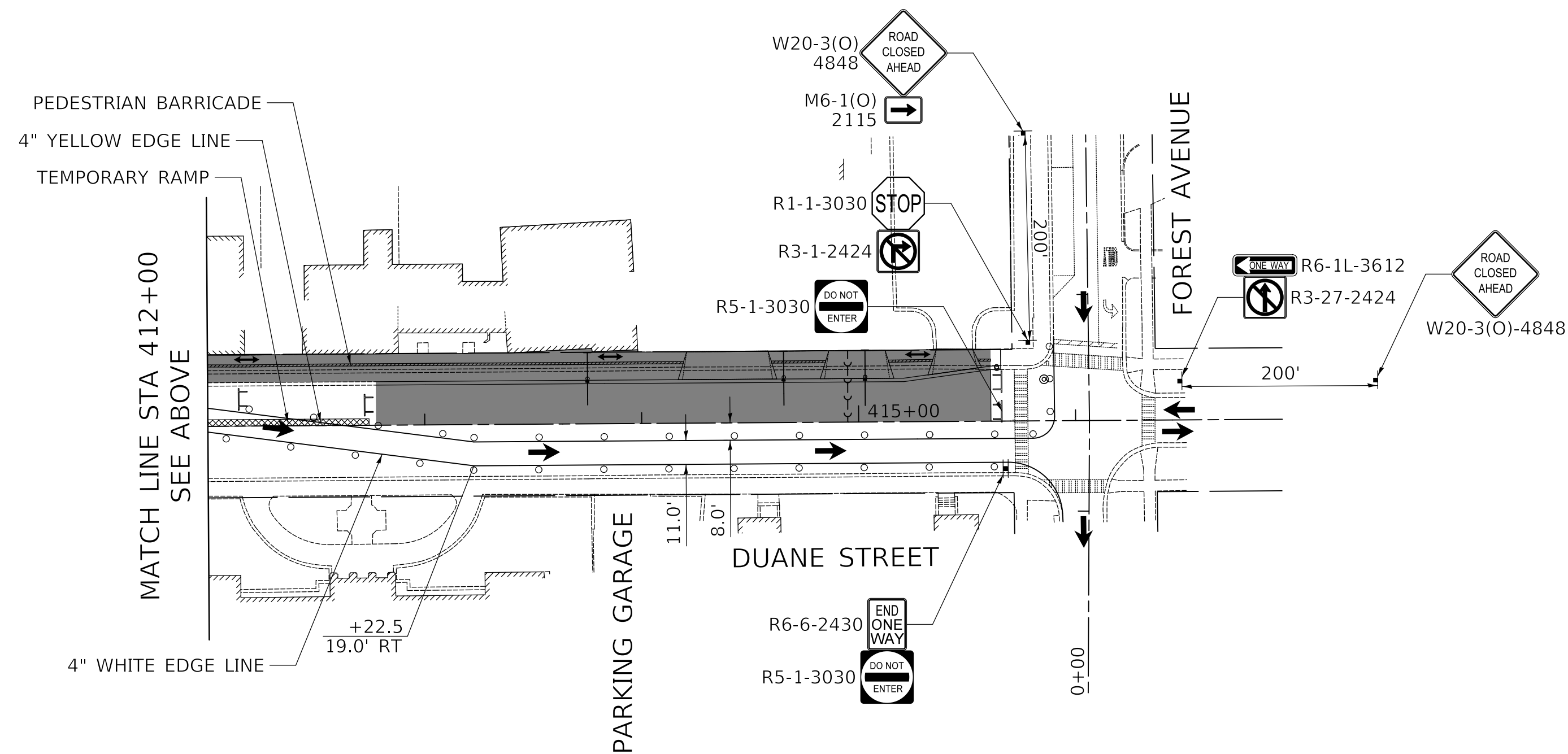
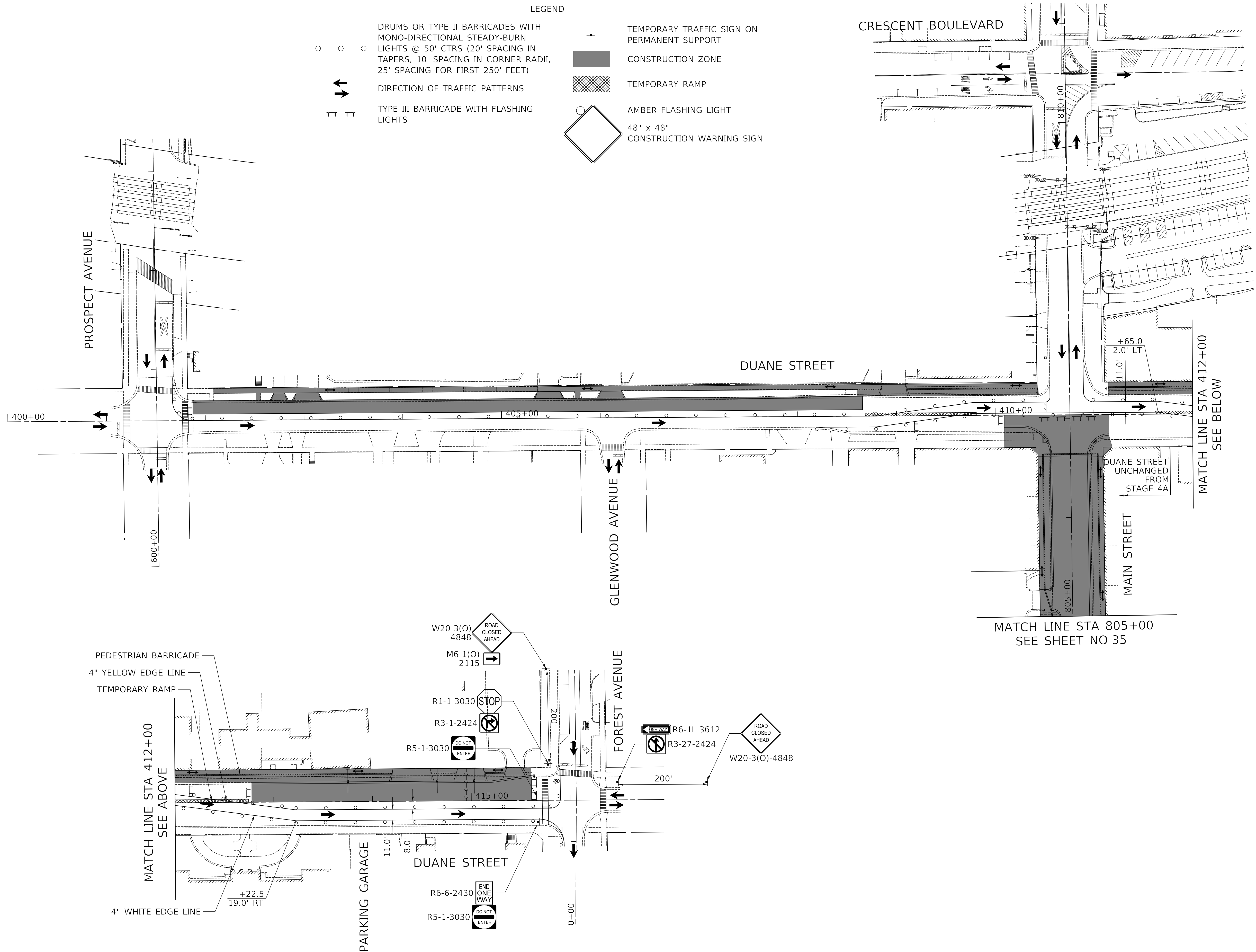
VILLAGE OF GLEN ELLYN

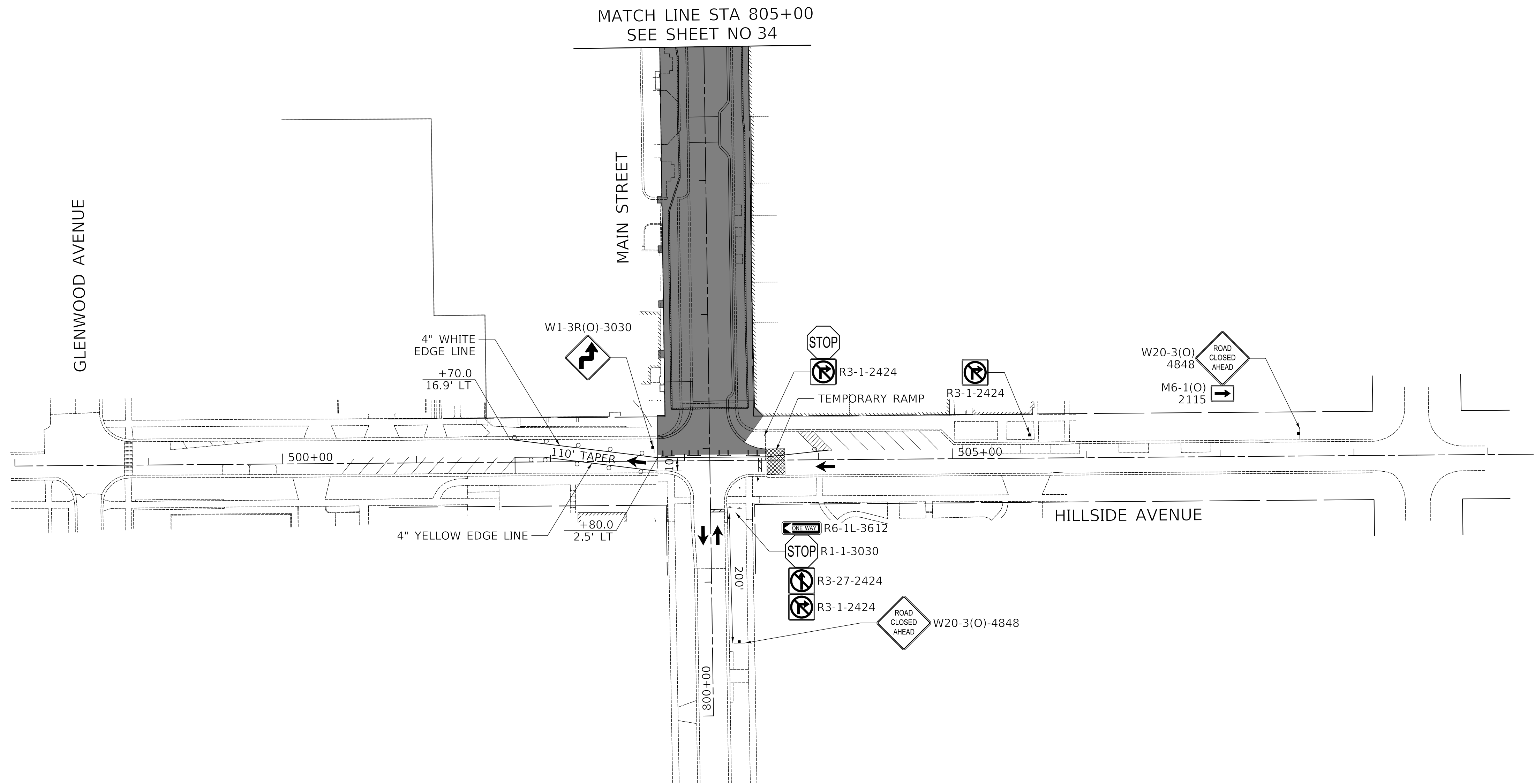


MAINTENANCE OF TRAFFIC PLAN
STAGE 4A

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	33
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





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DATE -	9/24/2021	REVISED -	

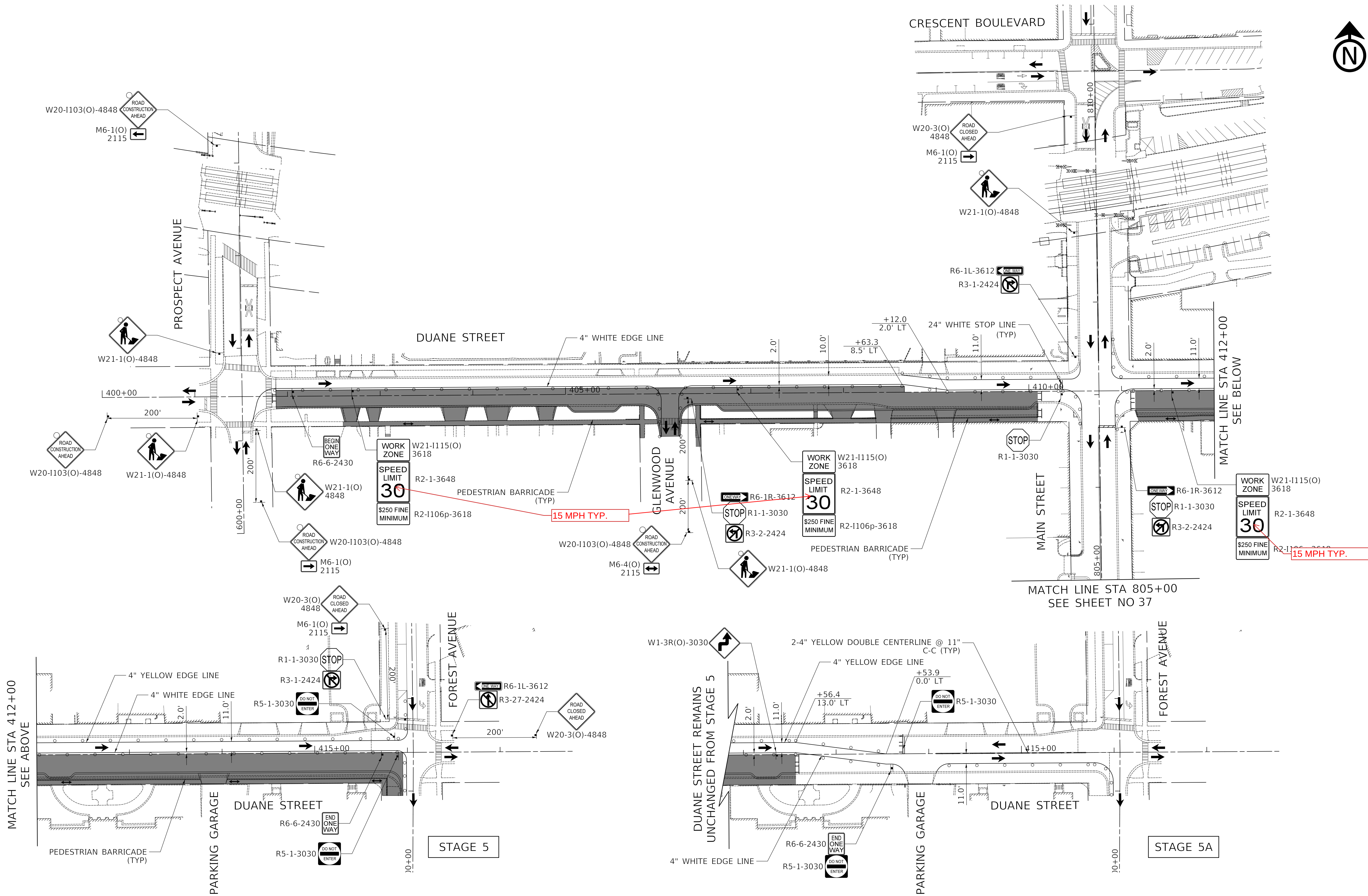
VILLAGE OF GLEN ELLYN



MAINTENANCE OF TRAFFIC PLAN
STAGE 4B

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	35
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

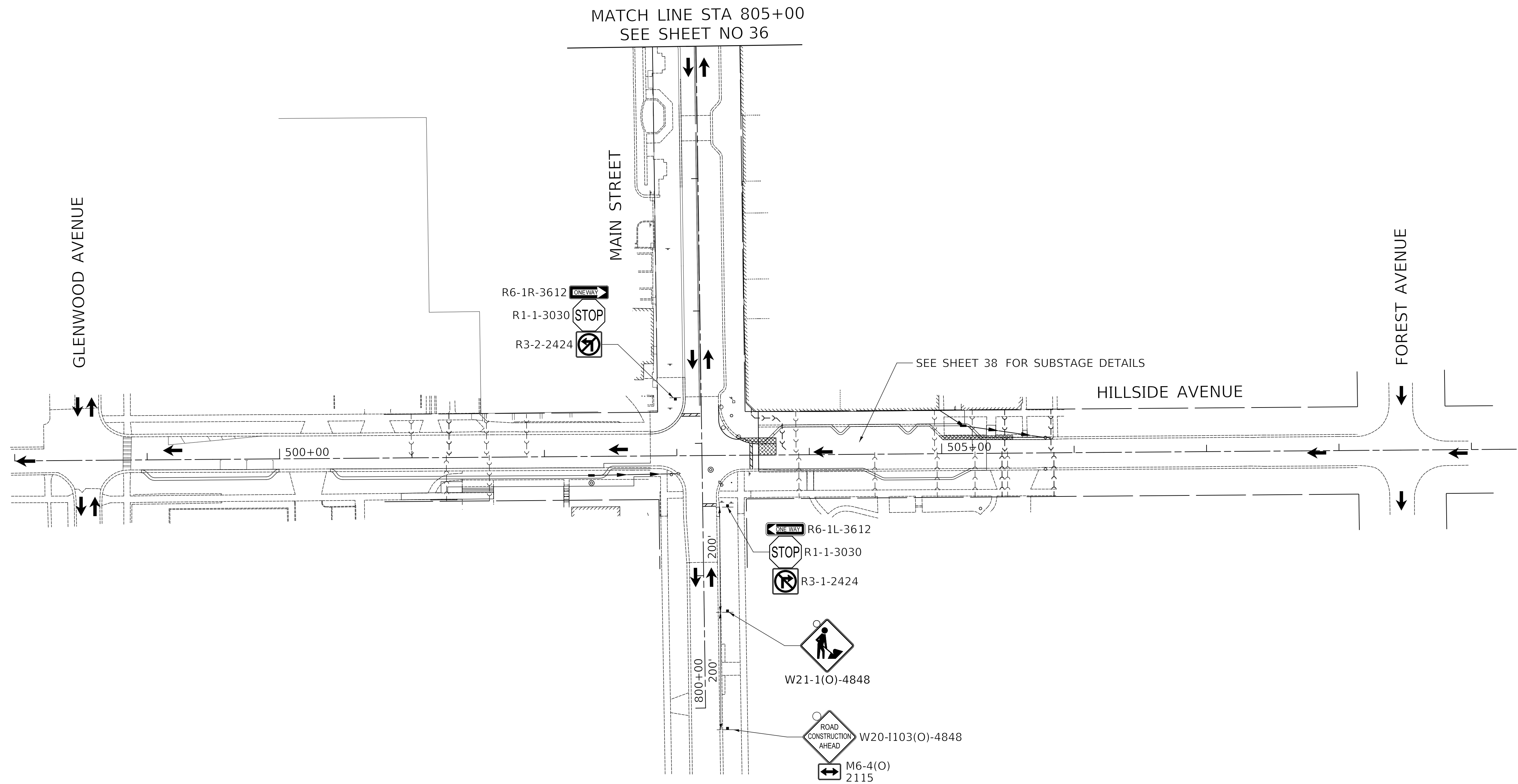
VILLAGE OF GLEN ELLYN



MAINTENANCE OF TRAFFIC PLAN
STAGE 5 / 5A

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	36
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

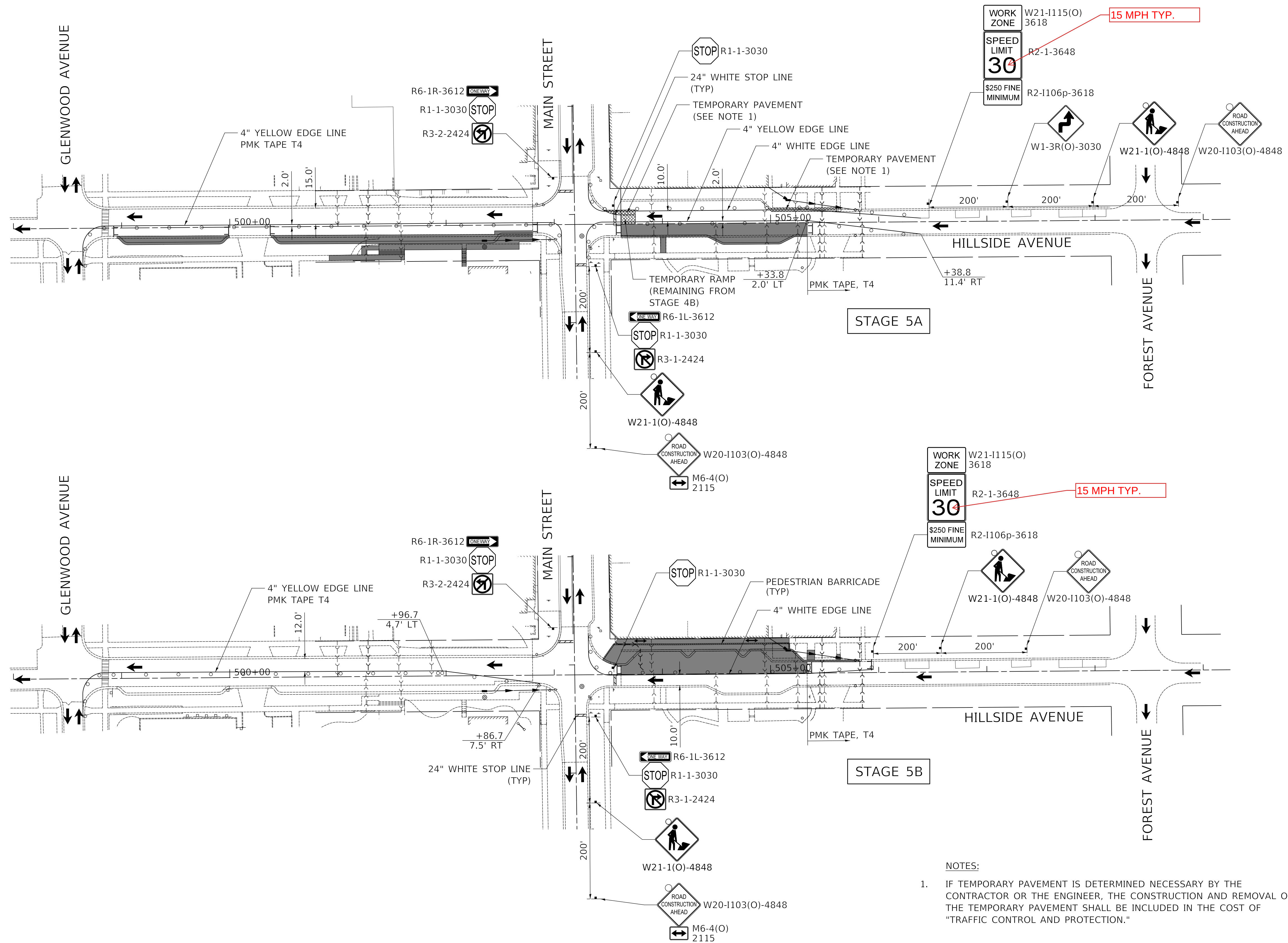
VILLAGE OF GLEN ELLYN



MAINTENANCE OF TRAFFIC PLAN
STAGE 5 / 5A

SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	37
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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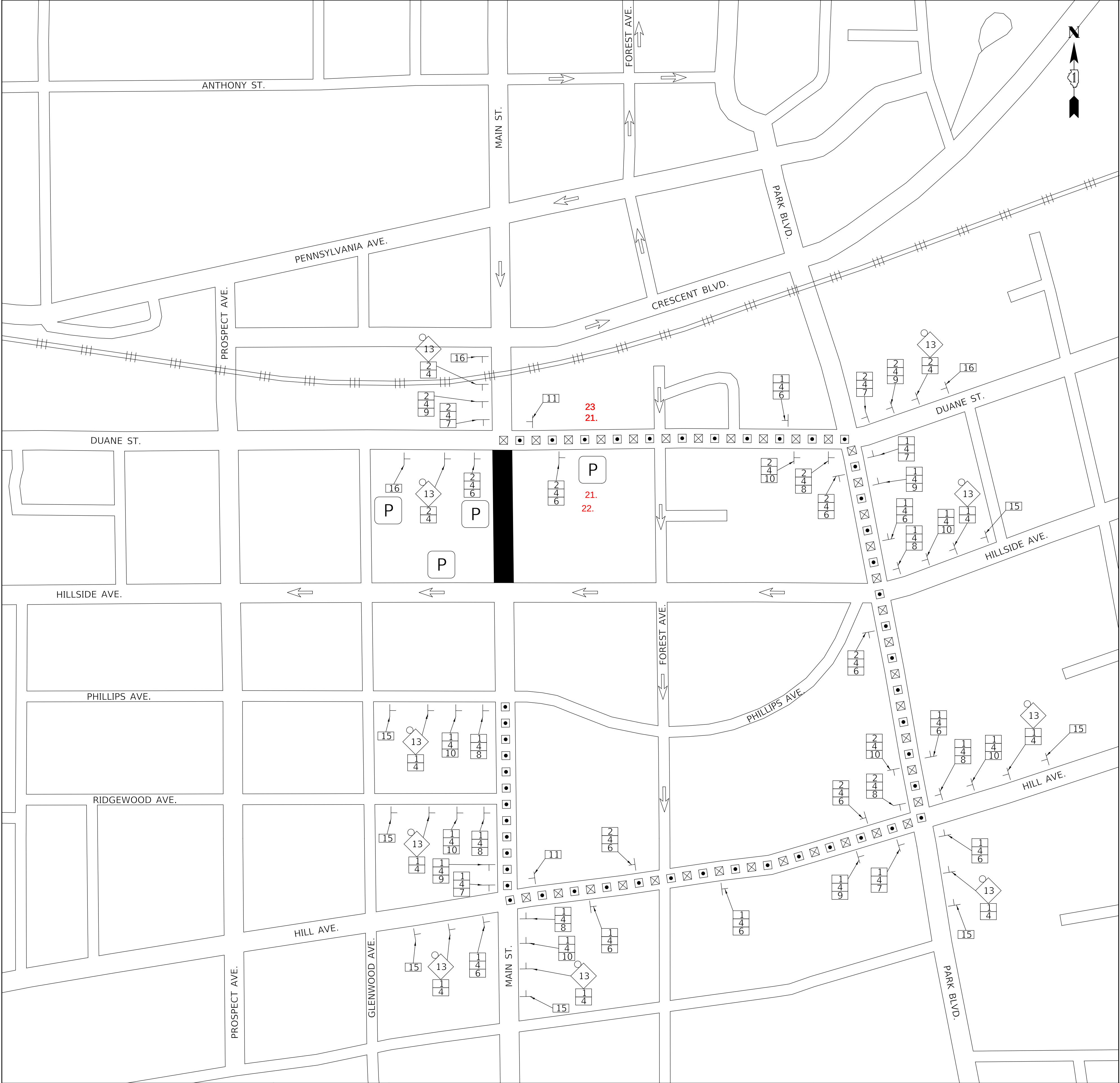
VILLAGE OF GLEN ELLYN



**MAINTENANCE OF TRAFFIC PLAN
STAGE 5A / 5B**

SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	38
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

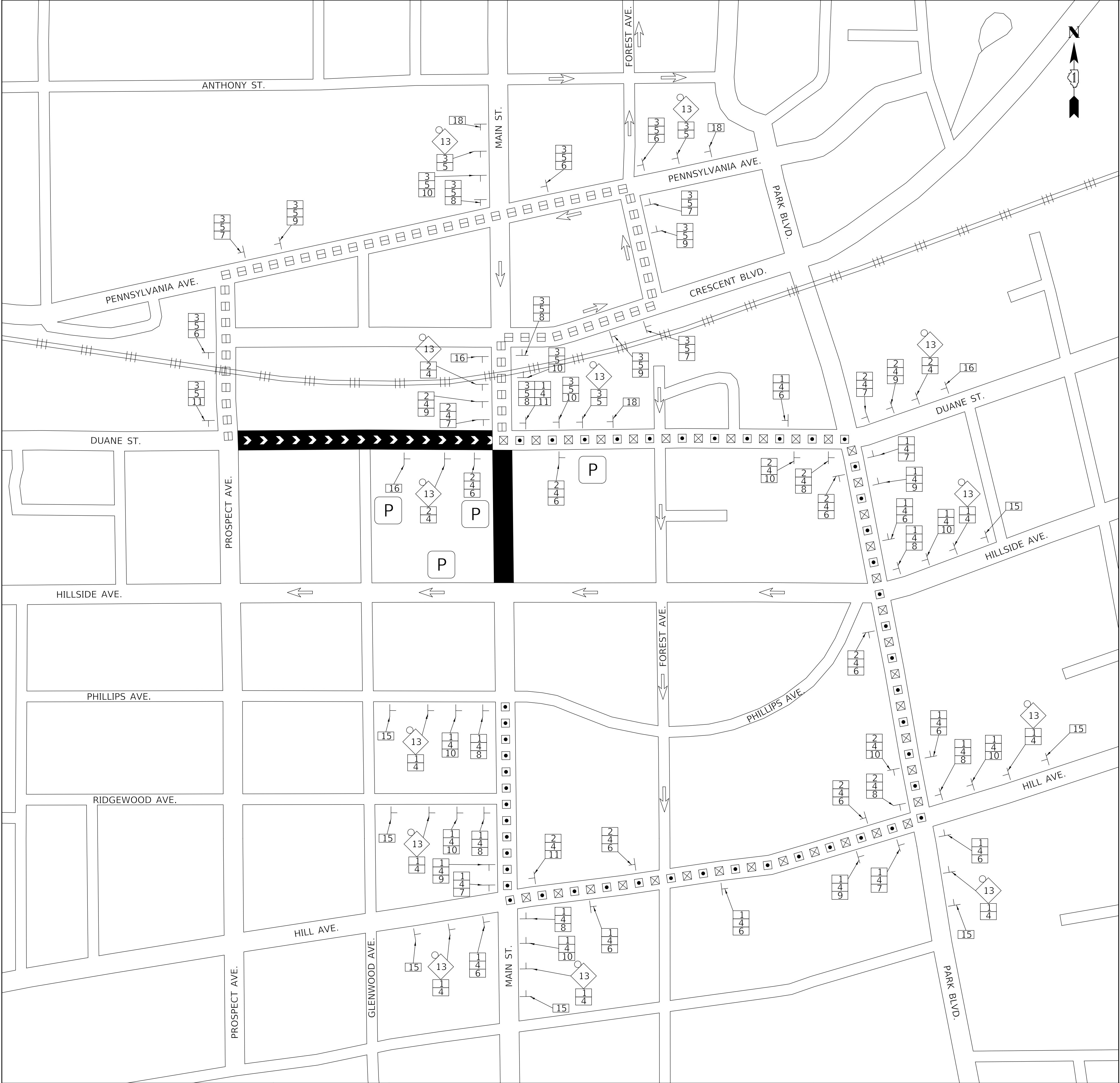


- LEGEND**
- 48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE
 - M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE
 - OTHER DETOUR SIGNS, NUMBER DENOTES TYPE
 - FULL ROADWAY CLOSURE
 - HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC
 - DETOUR ROUTE
 - SOUTHBOUND MAIN STREET DETOUR
 - NORTHBOUND MAIN STREET DETOUR
 - WESTBOUND DUANE STREET DETOUR
 - PARKING GARAGE ENTRANCE
 - EXISTING ONE-WAY ROAD
 - CHANGEABLE MESSAGE SIGN

SCHEDULE OF SIGNS		
SIGN NO.	SIGN TYPE	
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-1100-2412
5		W17-1100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836
21.		

ALL STAGES

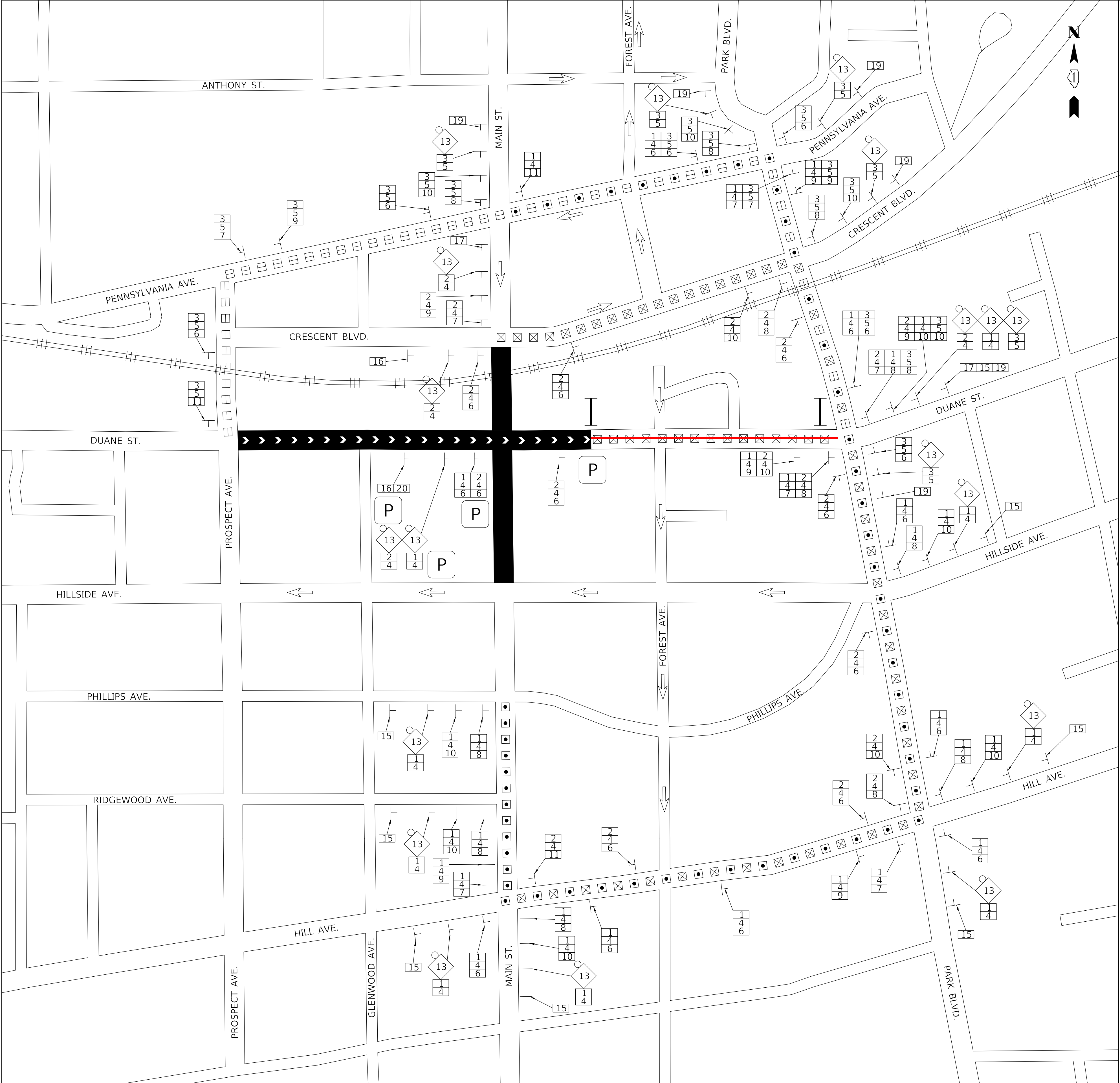
22.
23.



LEGEND

- 48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE
- M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE
- OTHER DETOUR SIGNS, NUMBER DENOTES TYPE
- FULL ROADWAY CLOSURE
- HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC
- DETOUR ROUTE
- SOUTHBOUND MAIN STREET DETOUR
- NORTHBOUND MAIN STREET DETOUR
- WESTBOUND DUANE STREET DETOUR
- PARKING GARAGE ENTRANCE
- EXISTING ONE-WAY ROAD
- CHANGEABLE MESSAGE SIGN

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-1100-2412
5		W17-1100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836



LEGEND

48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE

M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE

OTHER DETOUR SIGNS, NUMBER DENOTES TYPE

FULL ROADWAY CLOSURE

HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC

DETOUR ROUTE

SOUTHBOUND MAIN STREET DETOUR

NORTHBOUND MAIN STREET DETOUR

WESTBOUND DUANE STREET DETOUR

PARKING GARAGE ENTRANCE

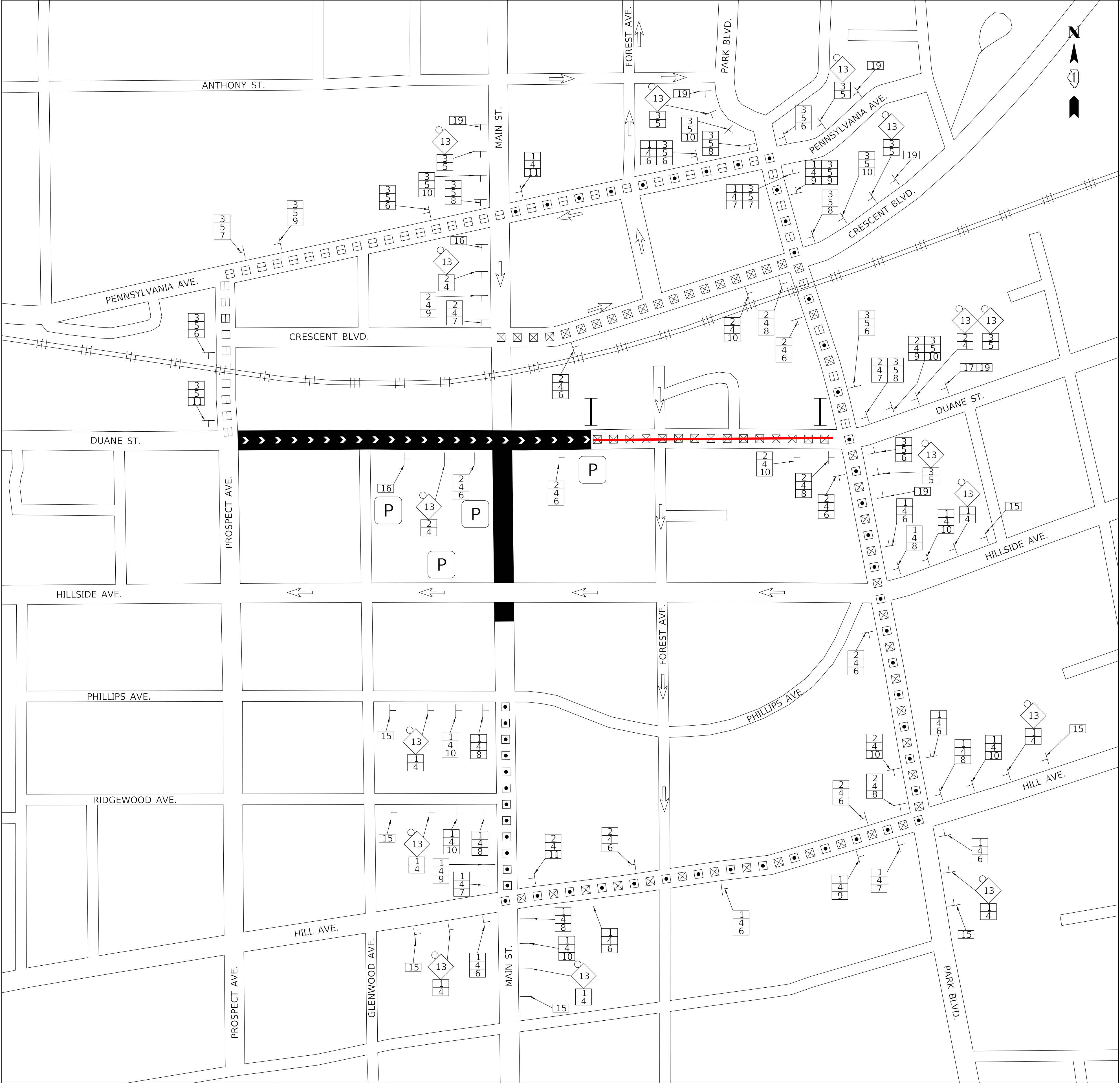
EXISTING ONE-WAY ROAD

CHANGEABLE MESSAGE SIGN

NOTE

1. CHANGEABLE MESSAGE SIGNS DIRECTING TRAFFIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER. MESSAGES SHALL AID VEHICLES ACCESSING AND EXITING THE GARAGE AS DIRECTED BY THE ENGINEER.

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-1100-2412
5		W17-1100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836



LEGEND

48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE

M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE

OTHER DETOUR SIGNS, NUMBER DENOTES TYPE

FULL ROADWAY CLOSURE

HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC

DETOUR ROUTE

SOUTHBOUND MAIN STREET DETOUR

NORTHBOUND MAIN STREET DETOUR

WESTBOUND DUANE STREET DETOUR

PARKING GARAGE ENTRANCE

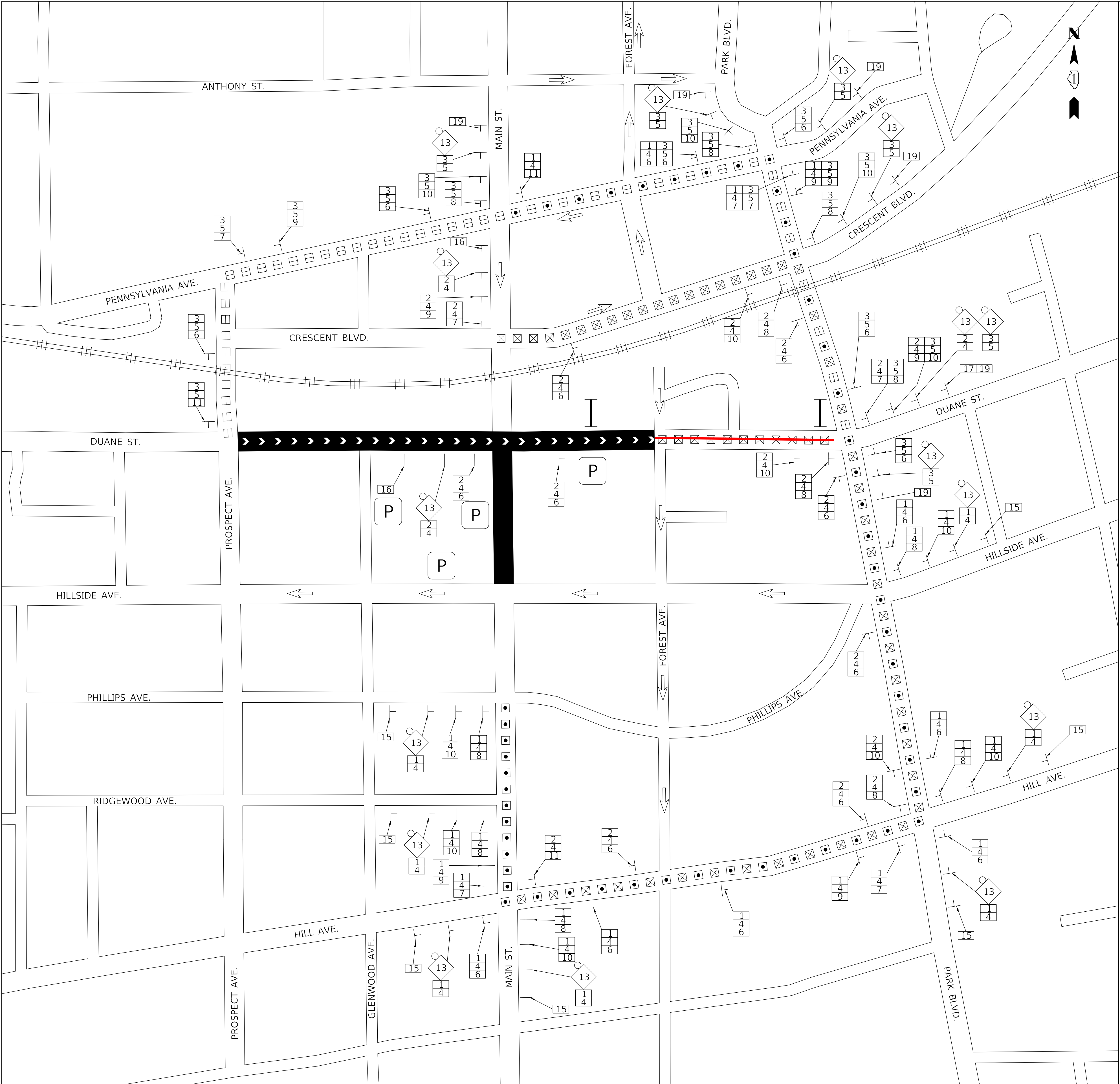
EXISTING ONE-WAY ROAD

CHANGEABLE MESSAGE SIGN

NOTE

1. CHANGEABLE MESSAGE SIGNS DIRECTING TRAFFIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER. MESSAGES SHALL AID VEHICLES ACCESSING AND EXITING THE GARAGE AS DIRECTED BY THE ENGINEER.

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-I100-2412
5		W17-I100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836



LEGEND

48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE

M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE

OTHER DETOUR SIGNS, NUMBER DENOTES TYPE

FULL ROADWAY CLOSURE

HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC

DETOUR ROUTE

SOUTHBOUND MAIN STREET DETOUR

NORTHBOUND MAIN STREET DETOUR

WESTBOUND DUANE STREET DETOUR

PARKING GARAGE ENTRANCE

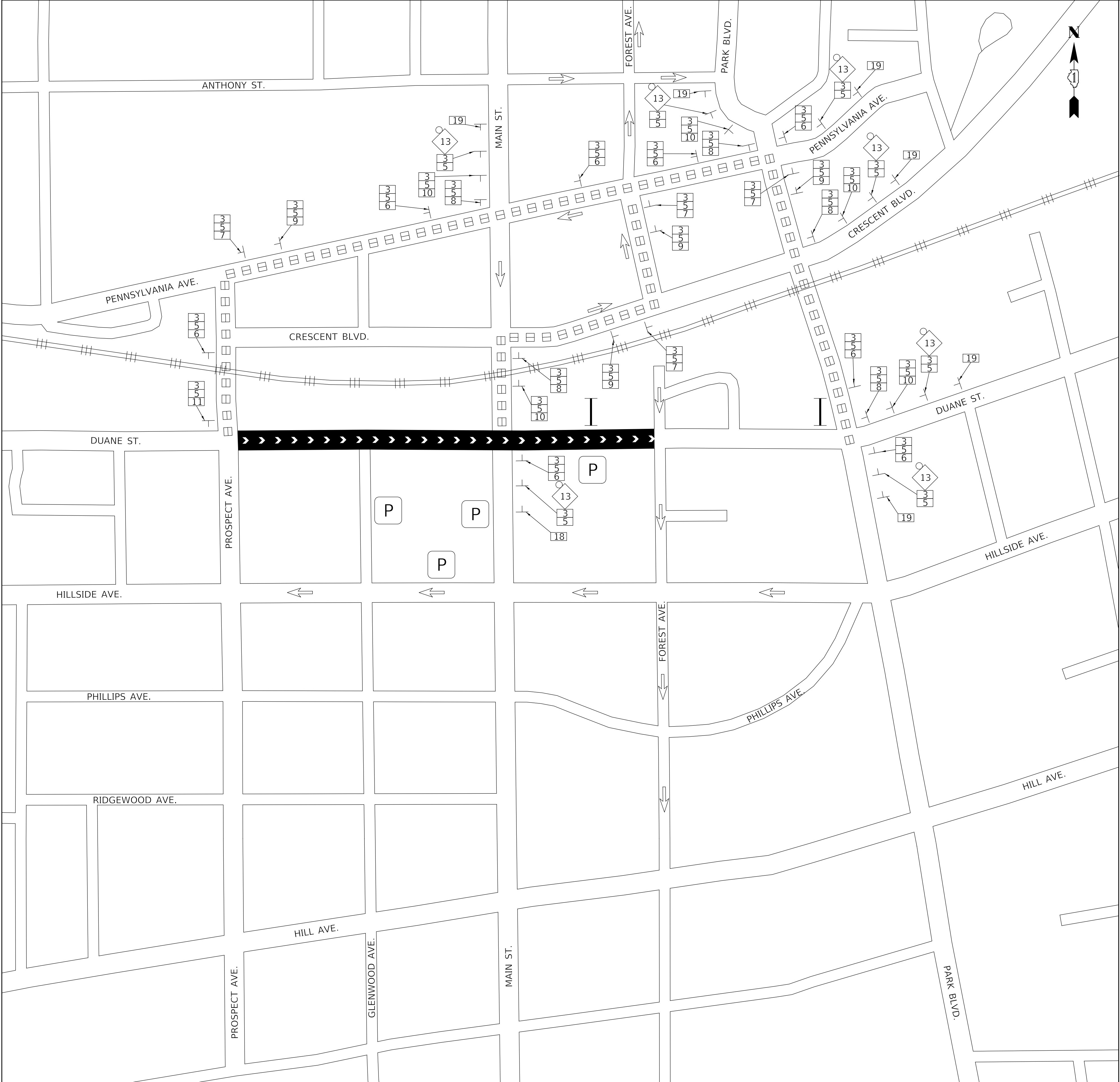
EXISTING ONE-WAY ROAD

CHANGEABLE MESSAGE SIGN

NOTE

1. CHANGEABLE MESSAGE SIGNS DIRECTING TRAFFIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER. MESSAGES SHALL AID VEHICLES ACCESSING AND EXITING THE GARAGE AS DIRECTED BY THE ENGINEER.

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-I100-2412
5		W17-I100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
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18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836

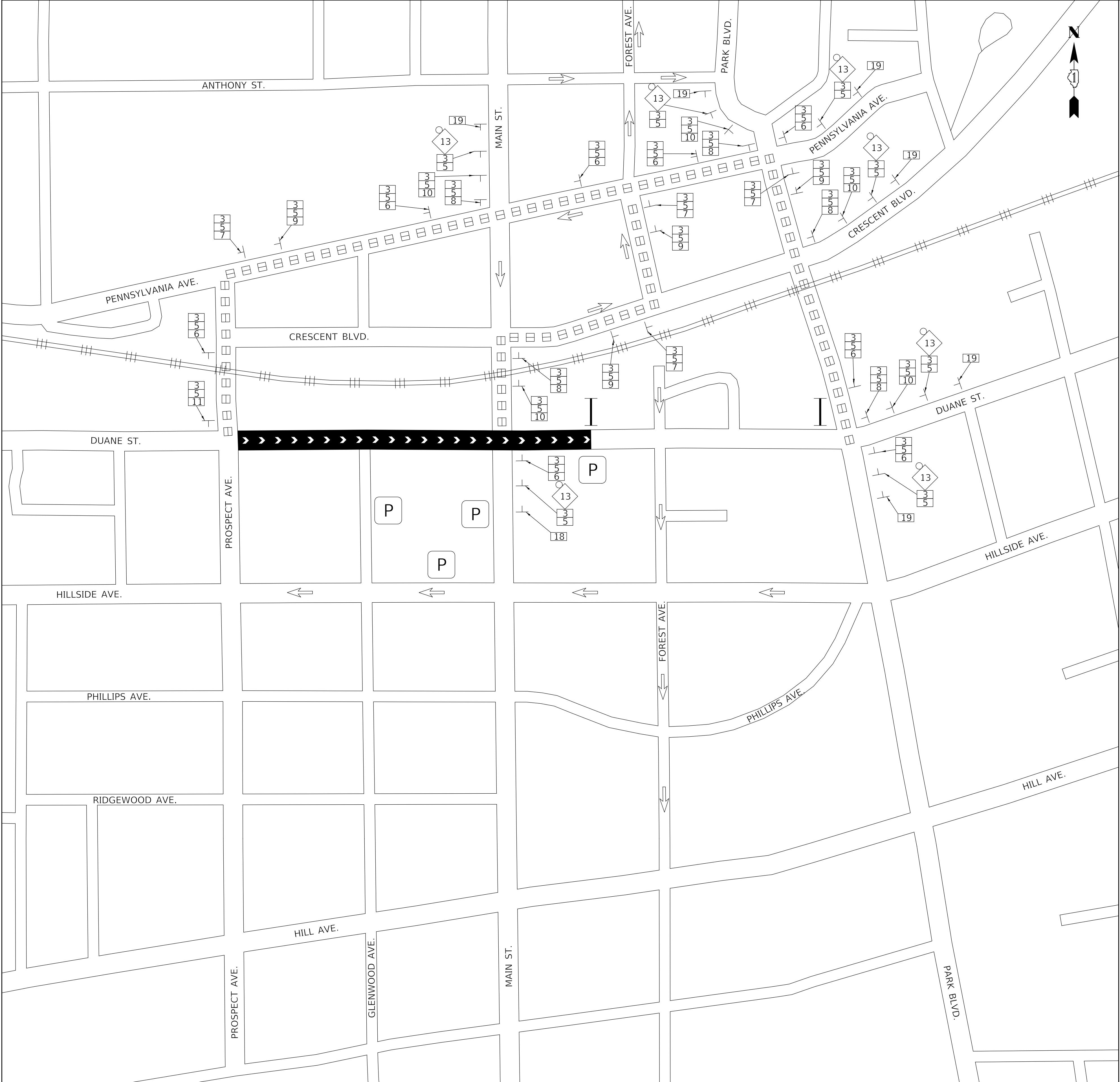


- LEGEND**
- 48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE
 - M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE
 - OTHER DETOUR SIGNS, NUMBER DENOTES TYPE
 - FULL ROADWAY CLOSURE
 - HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC
 - DETOUR ROUTE
 - SOUTHBOUND MAIN STREET DETOUR
 - NORTHBOUND MAIN STREET DETOUR
 - WESTBOUND DUANE STREET DETOUR
 - PARKING GARAGE ENTRANCE
 - EXISTING ONE-WAY ROAD
 - CHANGEABLE MESSAGE SIGN

NOTE

1. CHANGEABLE MESSAGE SIGNS DIRECTING TRAFFIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER. MESSAGES SHALL AID VEHICLES ACCESSING AND EXITING THE GARAGE AS DIRECTED BY THE ENGINEER.

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-1100-2412
5		W17-1100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836



LEGEND

48"X48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT, NUMBER DENOTES TYPE

M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE

OTHER DETOUR SIGNS, NUMBER DENOTES TYPE

FULL ROADWAY CLOSURE

HALF ROAD CLOSURE, MAINTAIN ONE-WAY TRAFFIC

DETOUR ROUTE

SOUTHBOUND MAIN STREET DETOUR

NORTHBOUND MAIN STREET DETOUR

WESTBOUND DUANE STREET DETOUR

PARKING GARAGE ENTRANCE

EXISTING ONE-WAY ROAD

CHANGEABLE MESSAGE SIGN

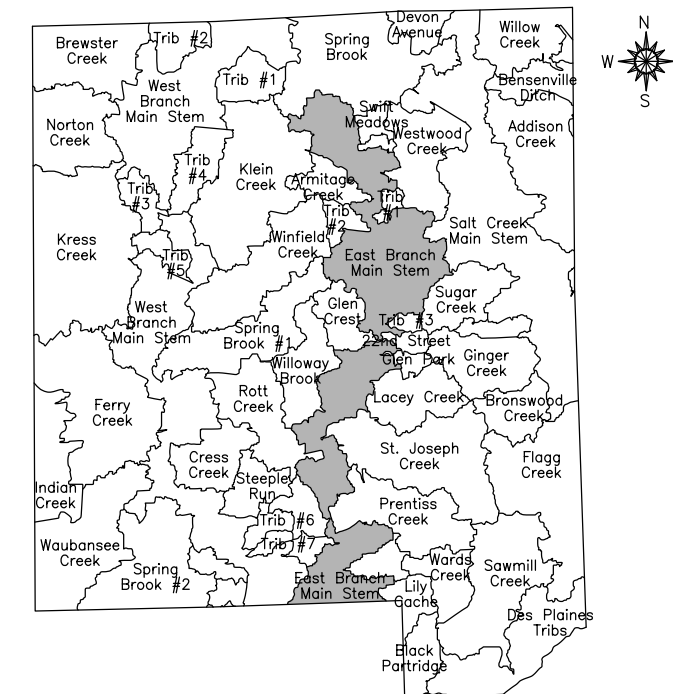
NOTE

1. CHANGEABLE MESSAGE SIGNS DIRECTING TRAFFIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER. MESSAGES SHALL AID VEHICLES ACCESSING AND EXITING THE GARAGE AS DIRECTED BY THE ENGINEER.

SCHEDULE OF SIGNS		
SIGN NO.		SIGN TYPE
1		M3-1-(O)-2412
2		M3-3-(O)-2412
3		M3-4-(O)-2412
4		W17-1100-2412
5		W17-1100-3012
6		M4-9(O)-3030
7		M4-9L(O)-3024
8		M4-9R(O)-3024
9		M4-9L(O)-3030
10		M4-9R(O)-3030
11		M4-8A(O)-2418
12		W20-3(O)-4848
13		W20-2-3636
14		W20-3-3636
15		SPECIAL-4836
16		SPECIAL-4836
17		SPECIAL-4836
18		SPECIAL-4836
19		SPECIAL-4836
20		SPECIAL-4836

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION AND SHALL BE INCIDENTAL TO THE COST OF EACH RESPECTIVE EROSION/SEDIMENT CONTROL PAY ITEM.
2. EROSION CONTROL WORK ITEMS ARE CONSIDERED TO BE HIGH PRIORITY ITEMS ON THIS CONTRACT. THE CONTRACTOR WILL IMPLEMENT ALL PROVISIONS OF THE SPECIFICATION NECESSARY TO ASSURE THAT EROSION CONTROL ITEMS ARE CONSTRUCTED AND MAINTAINED IN TIMELY WAY. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WHICH WILL POTENTIALLY CREATE ERODIBLE CONDITIONS.
3. THE EROSION CONTROL MEASURES SHOWN ARE A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOB SITE INSPECTION BETWEEN THE CONTRACTOR AND THE RESIDENT ENGINEER.
4. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, LATEST EDITION, AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITIONS.
5. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KANE-DUPAGE SWCD AND CORPS OF ENGINEERS.
7. ALL EROSION CONTROL MEASURES MUST BE INSPECTED BY THE VILLAGE OF ADDISON OR THE VILLAGE'S REPRESENTATIVE, AND THE INSPECTION REPORT MUST BE SIGNED BY THE CONTRACTOR EVERY SEVEN DAYS AND AFTER EACH 1/2" RAIN EVENT OR EQUIVALENT SNOWFALL.
8. IN AREAS WHERE WORK IS COMPLETED, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WHERE WORK HAS TEMPORARILY CEASED FOR 14 DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE 7TH DAY AFTER WORK HAS CEASED.
9. NO WORK SHALL BE PERFORMED IN FLOWING WATER, WORK IN AND NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW. THE STREAM BANKS SHOULD BE STABILIZED AT THE END OF EACH DAY. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.
10. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDED BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
11. IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS, ASSURE COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS, AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.
12. LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF THE GUTTERS OR DRAINAGE STRUCTURES SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY SO THAT THE NATURAL FLOW OF WATER IS NOT OBSTRUCTED.
13. INLETS EXPOSED TO TRAFFIC WITH INLET FILTER PROTECTION SHALL HAVE FILTER BASKETS WITH OVERFLOW TO ALLOW FOR THE POSITIVE DRAINAGE OF WATER OFF THE ROADWAY. THESE INLETS SHALL BE CLEANED WHEN NECESSARY.

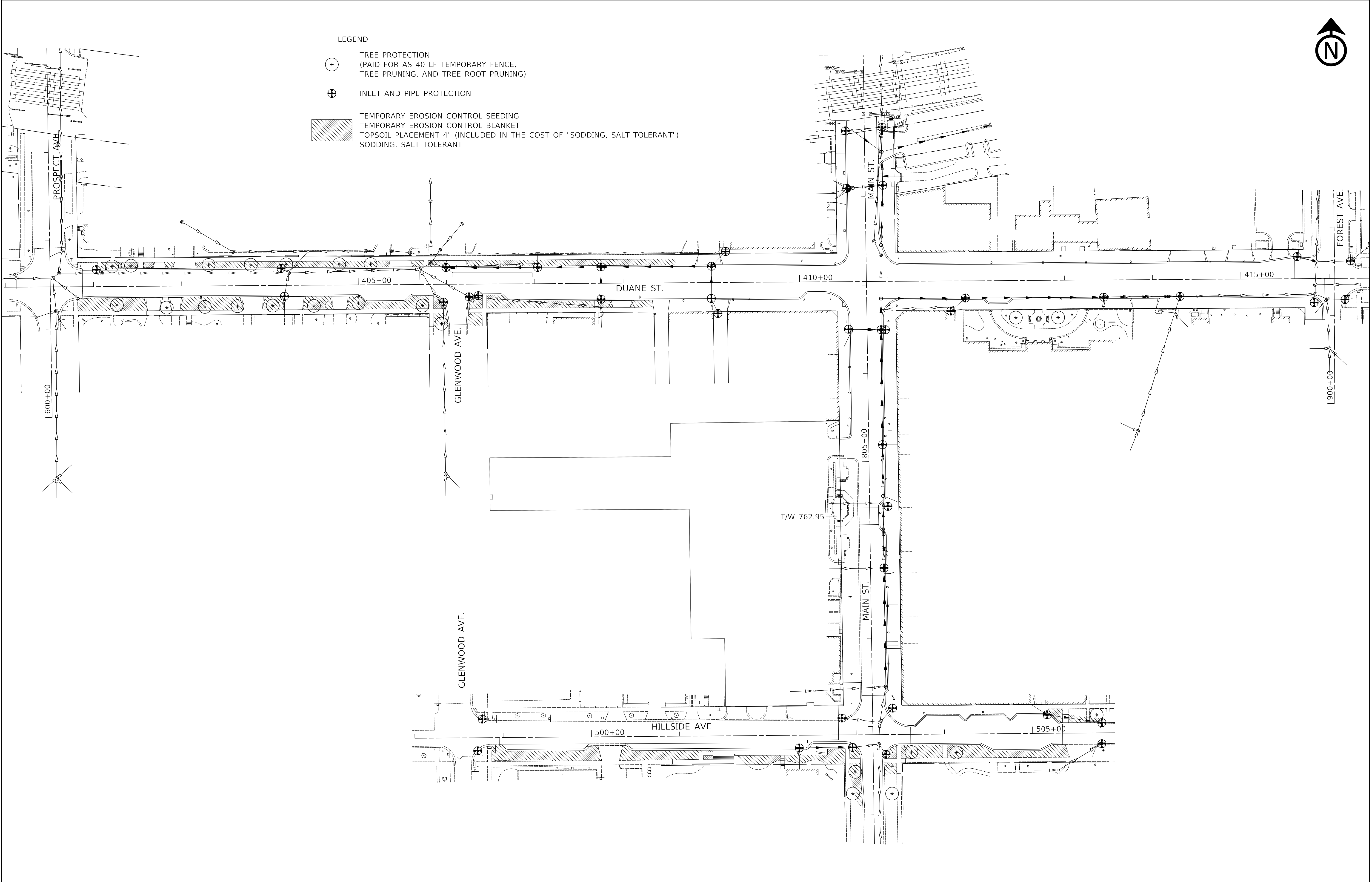


EAST BRANCH DUPAGE RIVER BASIN WATERSHEDS

- | | |
|-----|---------------------------|
| 1. | East Branch Mainstem |
| 2. | Armitage Creek |
| 3. | Army Trail Road Tributary |
| 4. | Crabtree Creek |
| 5. | East Branch Tributary #2 |
| 6. | Glencrest Creek |
| 7. | Lacey Creek |
| 8. | Prentiss Creek |
| 9. | Rott Creek |
| 10. | St. Joseph Creek |
| 11. | Swift Meadow |
| 12. | Willoway Brook |
| 13. | East Branch Tributary #1 |
| 14. | East Branch Tributary #3 |
| 15. | East Branch Tributary #6 |
| 16. | East Branch Tributary #7 |
| 17. | 22nd Street Tributary |
| 18. | Glen Park Tributary |

NPDES STATEMENT:

THIS PROJECT DISTURBS 3.295 ACRES OF TOTAL LAND AREA. COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IS ONLY NECESSARY IF A PROJECT DISTURBS 1.0 OR MORE ACRES OF TOTAL LAND AREA; AN NPDES STORMWATER PERMIT IS REQUIRED FOR THIS PROJECT.



1. ALL CONSTRUCTION SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, APRIL 1, 2016. THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD) THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS," (SSTCI), THE DETAILS IN THESE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS. THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION, SHALL APPLY. SOIL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS AND AS DIRECTED BY THE VILLAGE/ENGINEER.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
3. CONTRACTOR SHALL HAVE ONE SET OF APPROVED PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES AND STORAGE OF EQUIPMENT OR MATERIALS TO THE AREAS SHOWN ON PLAN. ANY DAMAGE TO PROPERTY OR FENCES SHALL BE REPLACED IN KIND OR REPAIRED AT THE CONTRACTOR'S EXPENSE. NO STOCK PILES WILL BE ALLOWED OVERNIGHT OR OVER WEEKENDS.
5. THE CONTRACTOR, AT HIS EXPENSE, SHALL BE REQUIRED TEMPORARILY TO REMOVE AND RELOCATE STREET SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO RE-ERECT THEM AT THE PROPER LOCATIONS AFTER CONSTRUCTION OPERATIONS ARE COMPLETED. ANY SUCH SIGNS DAMAGED OR LOST BY THE CONTRACTOR WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WHERE SECTION OR SUB-SECTION MONUMENTS OR BENCH MARKS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY IRON PIPES AND MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
7. REMOVE DIRT AND DEBRIS FROM THE STREET AT THE END OF THE DAY OR AS DIRECTED BY THE ENGINEER, MECHANICAL STREET SWEEPING OF ALL AREAS DISTURBED SINCE THE LAST STREET SWEEPING MUST BE COMPLETED ONCE PER WEEK OR AS DIRECTED BY THE ENGINEER.
8. ALL TREES ARE DESIGNATED TO BE SAVED UNLESS OTHERWISE NOTED ON THE PLANS, AND SHALL BE PROTECTED IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 201.05 OF THE STANDARD SPECIFICATIONS. ALL CLEARING AND REMOVAL OF BUSHES, HEDGES, AND TREES UNDER 6" IN DIAMETER SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
9. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
10. THE CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS TO ADJACENT PROPERTIES AND THROUGH THE PROJECT AS DESCRIBED IN THE SPECIAL PROVISIONS. ALL PEDESTRIAN ROUTES DURING CONSTRUCTION SHALL BE ADA COMPLIANT WITH ADA COMPLIANT DETECTABLE BARRICADES.
11. THE CONTRACTOR SHALL REFER TO THE GRADING PLANS FOR DETAILS REGARDING ADJUSTED ELEVATIONS AND THE LIMITS OF ROADWORK.

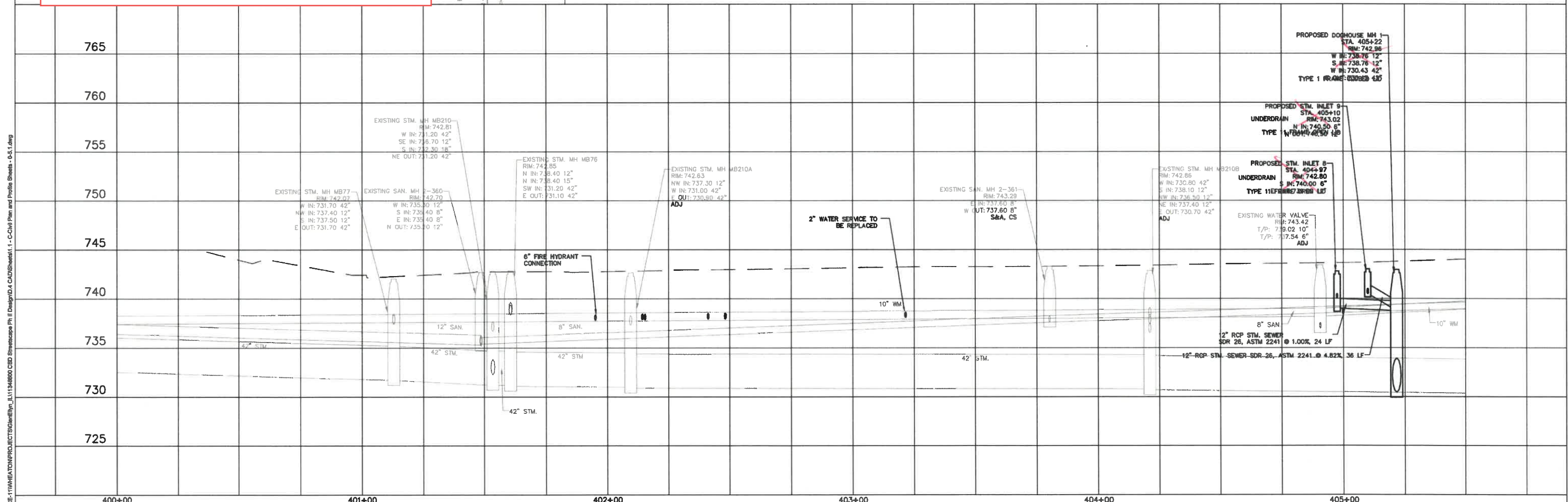
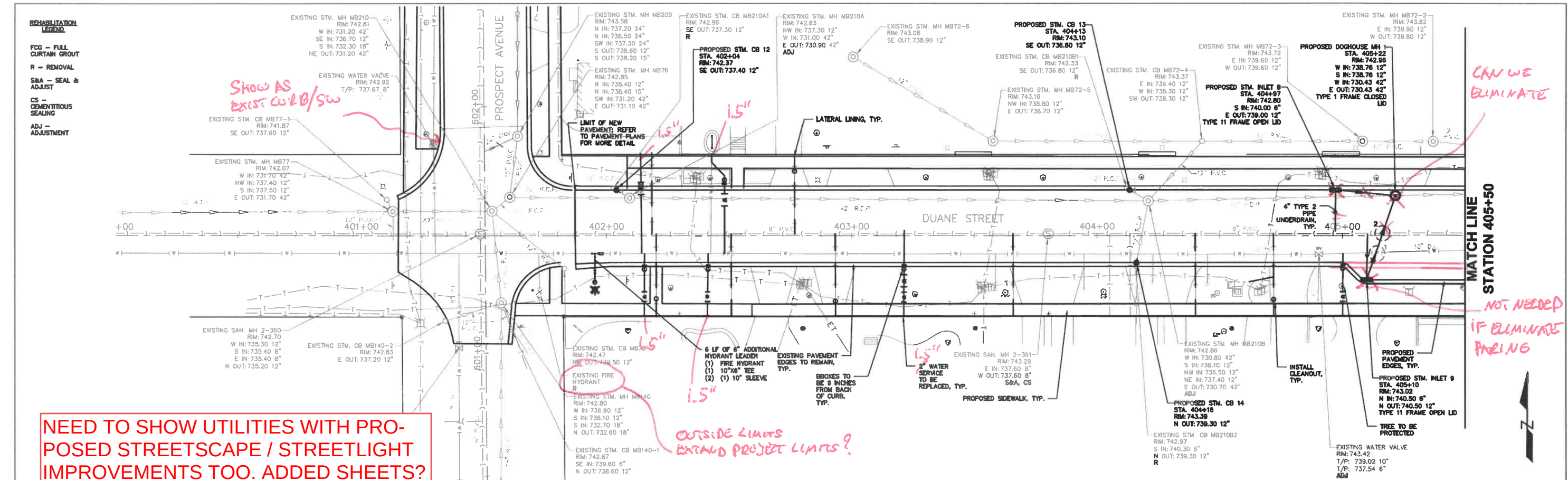
1. THE CONTRACTOR SHALL ARRANGE WITH THE VARIOUS UTILITY COMPANIES FOR THE LOCATION AND ANY NECESSARY ADJUSTING OF THE OVERHEAD OR UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
2. THE LOCATION, SIZE AND DEPTH OF THE WATER MAINS, STORM SEWERS AND/OR VARIOUS UTILITIES, AS SHOWN ON THE PLANS, ARE FROM THE LATEST AND BEST AVAILABLE INFORMATION TO THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE UTILITIES LOCATED.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH ALL UTILITY COMPANIES IN ORDER TO MAINTAIN SERVICES DURING CONSTRUCTION AT NO ADDITIONAL EXPENSE TO THE CONTRACT.
4. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 811 FOR FIELD LOCATIONS OF BURIED UTILITIES (48-HOURS NOTIFICATION IS REQUIRED).
5. ANY EXISTING OR PROPOSED UTILITY DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE OWNER.
6. THE VILLAGE WILL LOCATE EXISTING SANITARY AND WATER SERVICES TO THE INDIVIDUAL RESIDENCES WITHIN THE PROJECTS LIMITS. THESE SERVICES WILL BE LOCATED ONE TIME ONLY. FROM THEN ON, THE CONTRACTOR SHALL DOCUMENT AND BE RESPONSIBLE FOR MAINTAINING KNOWLEDGE OF THE LOCATIONS OF THESE SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AS-BUILT KNOWLEDGE OF THE LOCATION (INCLUDING ELEVATIONS) OF THE NEWLY INSTALLED SERVICES AND MAINS. THE VILLAGE WILL NOT BE RESPONSIBLE FOR LOCATING NEW MAINS OR SERVICES FOR THE CONTRACTOR. THIS IS IN EFFECT UNTIL FINAL PAYMENT FROM THE VILLAGE. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAKE THE AS-BUILT UNDERGROUND UTILITY INFORMATION AVAILABLE TO THE VILLAGE WHENEVER REQUESTED. IN THE EVENT OF A "JULIE" CALL WITHIN THE PROJECT LIMITS, THE VILLAGE OR ITS AGENT WILL NOTIFY THE CONTRACTOR TO MARK ANY UTILITIES STILL UNDER THE CONTRACTORS RESPONSIBILITY.

1. COARSE AGGREGATE TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING IDOT CA-6 GRADATION FOR SANITARY AND STORM SEWER PIPES. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. RECYCLED MATERIAL WILL NOT BE ALLOWED.
2. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES FLOWS THROUGH EXISTING STORM AND SANITARY SEWER SYSTEMS.
3. THE EXISTING STRUCTURES SHALL BE INSPECTED BEFORE CONSTRUCTION STARTS. DEBRIS DEPOSITED IN THE FLOW LINE OF ANY STRUCTURE OR GUTTER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CLOSE OF CONSTRUCTION OPERATIONS ALL STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. ANY ACCUMULATION OF MATERIAL IN THE STRUCTURE DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AT HIS EXPENSE.
4. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR STRUCTURES. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS, AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET. HE SHALL BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE.
5. THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY FOR DEWATERING TRENCH EXCAVATIONS AS WELL AS SHORING TRENCH WALLS DURING CONSTRUCTION. COMPLIANCE WITH THE ABOVE WILL BE INCLUDED IN THE COST OF CONSTRUCTION.
6. ALL FRAMES WITH SELF-SEALING CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, VALVE VAULT, OR METER VAULT SHALL HAVE CAST INTO THE LID "VILLAGE OF CARPENTERSVILLE" AND ONE OF THE FOLLOWING WORDS: ALL LIDS TO BE USED ON STORM SEWER STRUCTURES SHALL BEAR THE WORD "STORM". ALL LIDS TO BE USED ON SANITARY SEWER STRUCTURES SHALL BEAR THE WORD "SANITARY". ALL LIDS TO BE USED ON WATER SYSTEM STRUCTURES SHALL BEAR THE WORD "WATER". ALL CURB BOXES SHALL SAY "DUMP NO WASTE!" OR "DRAINS TO RIVERS" OR SIMILAR. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE FRAME AND GRATE.
7. UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FOOT LONG BRICK AND NON-SHRINK/MORTAR PLUG. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN COST OF THE CONTRACT.
8. CONTRACTOR SHALL DETERMINE WHEN FLAT SLAB TOPS ARE REQUIRED ON MANHOLES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE USE OF FLAT SLAB TOPS.
9. FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES OF ALL NEW, ADJUSTED OR RECONSTRUCTED STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE, ADJUSTMENT OR RECONSTRUCTION COST.
10. ANY EXISTING OR PROPOSED SEWER OR WATERMAIN DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE VILLAGE
11. ALL STRUCTURES, FRAME, LID, GRATE, AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

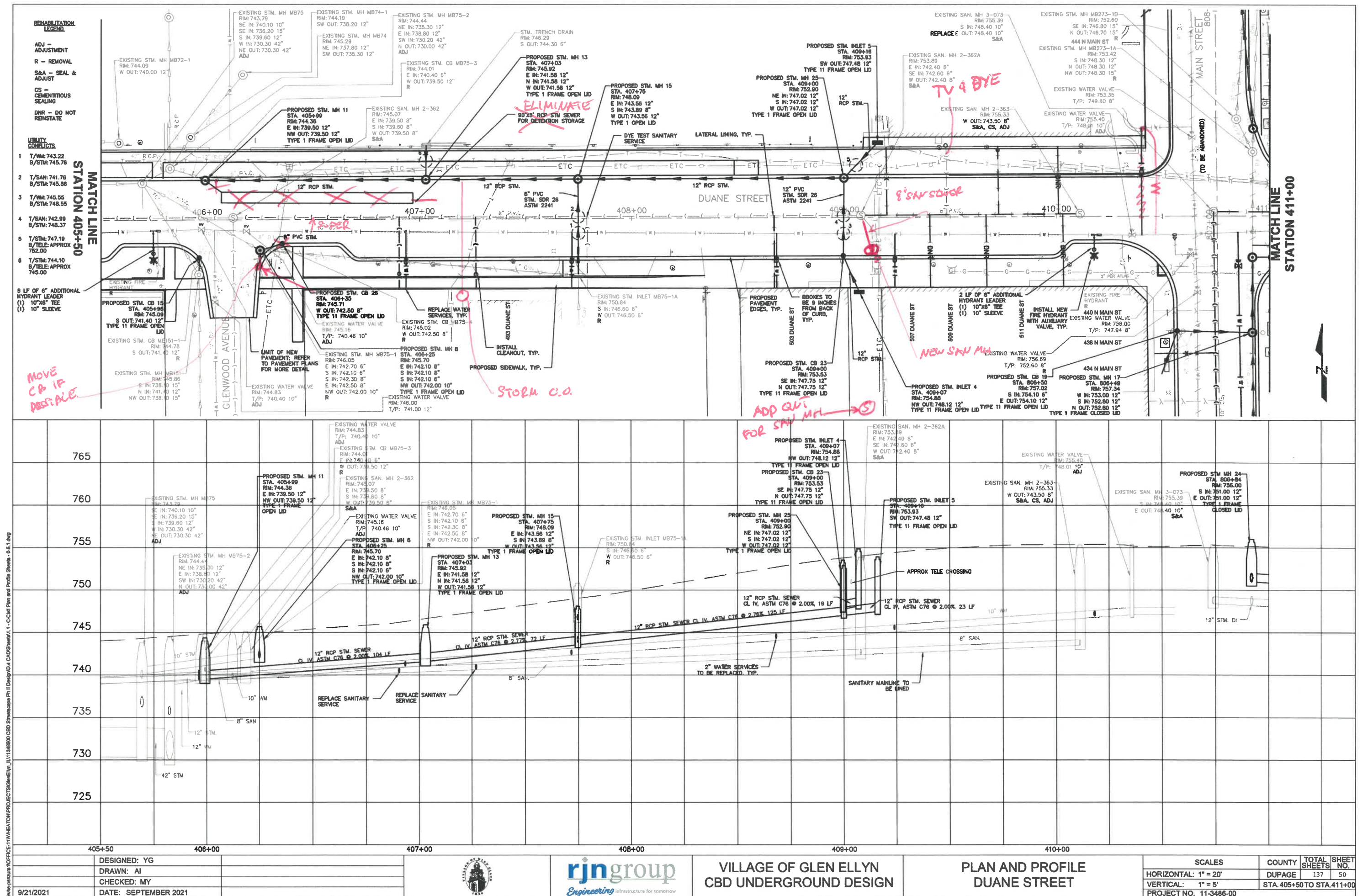
GLENN
ELLYN

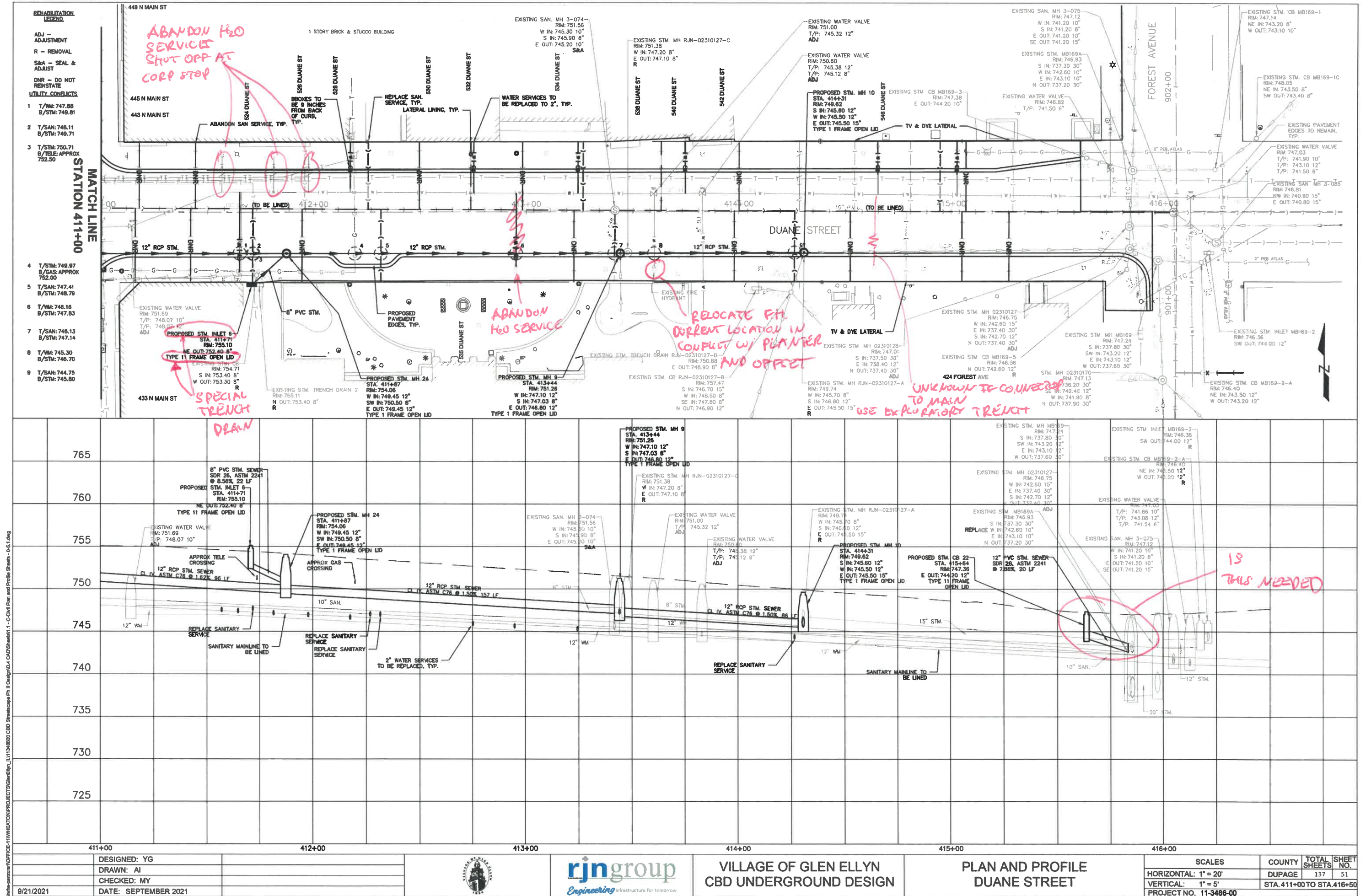
	EXISTING	PROPOSED
ADJUSTMENT		ADJ
B-BOX		
BUSH/SHRUB		
CEMENTITIOUS SEALING		CS
ELECTRIC	— ETC —	
DO NOT REINSTATE		DNR
FULL CURTAIN GROUT		FCG
GAS PIPE	— G —	
GAS VALVE		
HYDRANT		
LINING		
LINE STOP		
REMOVE STRUCTURE		R
SAN. MANHOLE		
SAN. SEWER	—) —	
SEAL & ADJUST		S&A
SEAL LATERAL		
STORM INLET		
STORM CB		
STORM MANHOLE		
STORM SEWER		
TELECOMMUNICATION WIRE	— T —	
TELECOMMUNICATION RISER		
TRAFFIC SIGN		
TRANSVERSE UNDERDRAIN		
TREE - BUSH/SHRUB		
TREE - CONIFER		
TREE - DECIDUOUS		
WATER MAIN	— W —	
WATER MAIN - CAP		
WATER MAIN - SLEEVE		
WATER MAIN - TEE		
VALVE VAULT		
SAN LATERAL		
STORM LATERAL		
WATER SERVICE		

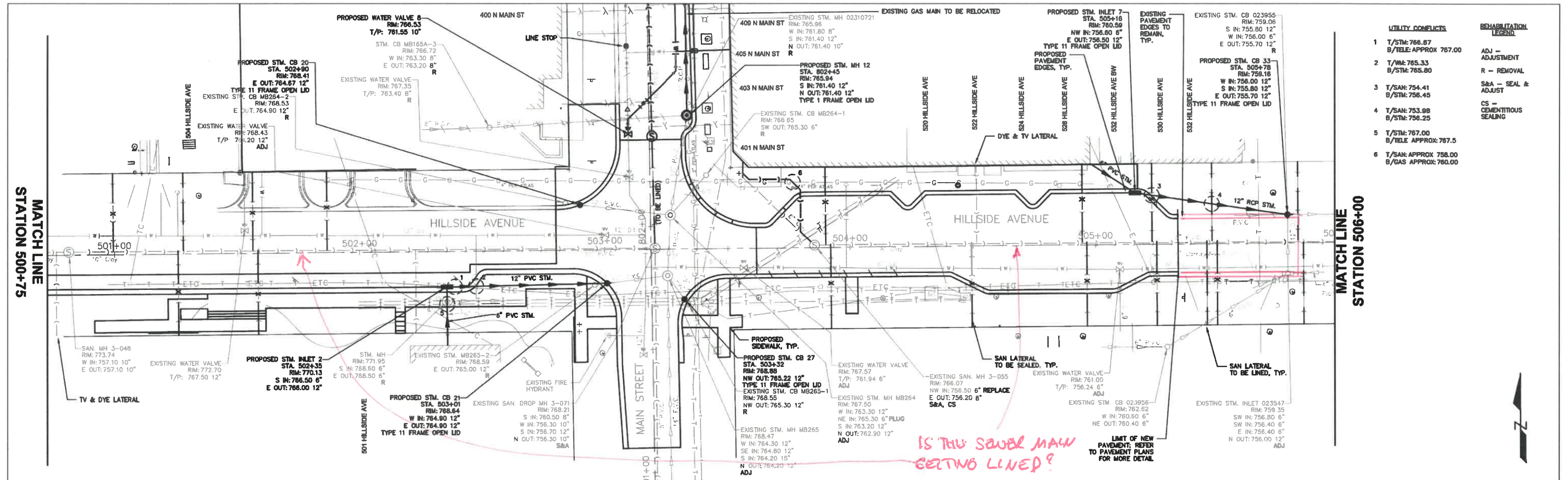
Page 196 of 563



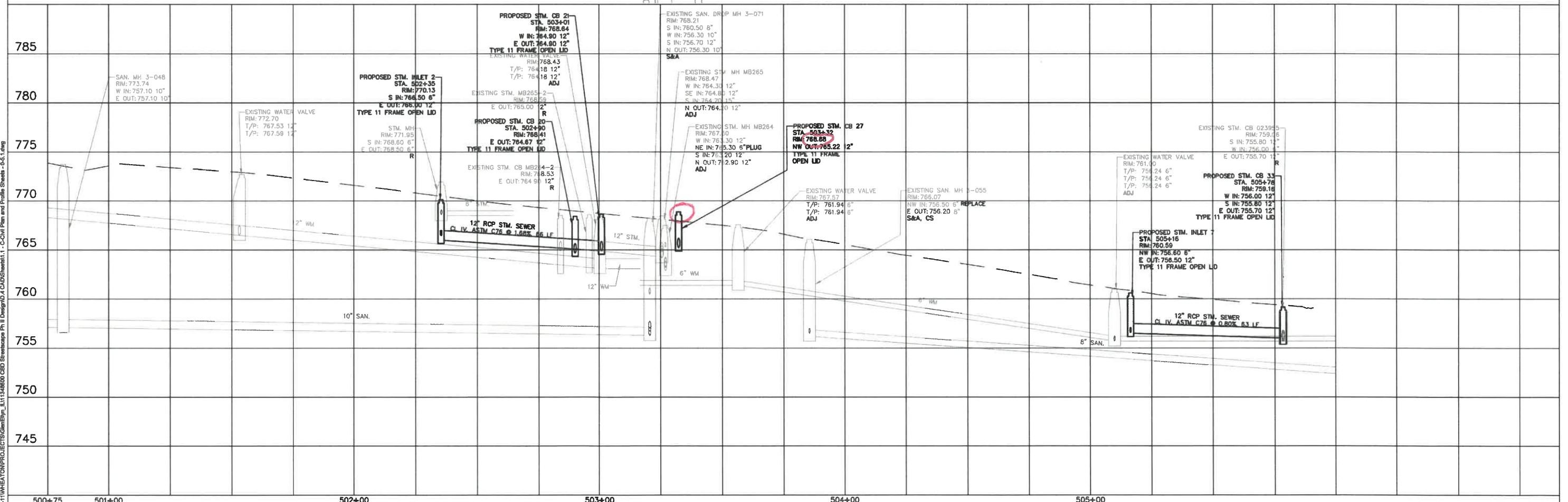
DESIGNED: YG				VILLAGE OF GLEN ELLYN CBD UNDERGROUND DESIGN	PLAN AND PROFILE DUANE STREET	SCALES		COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN: AI						HORIZONTAL: 1" = 20'				
CHECKED: MY						VERTICAL: 1" = 5'				
DATE: SEPTEMBER 2021						PROJECT NO. 11-3488-00				
9/21/2021								DUPAGE		



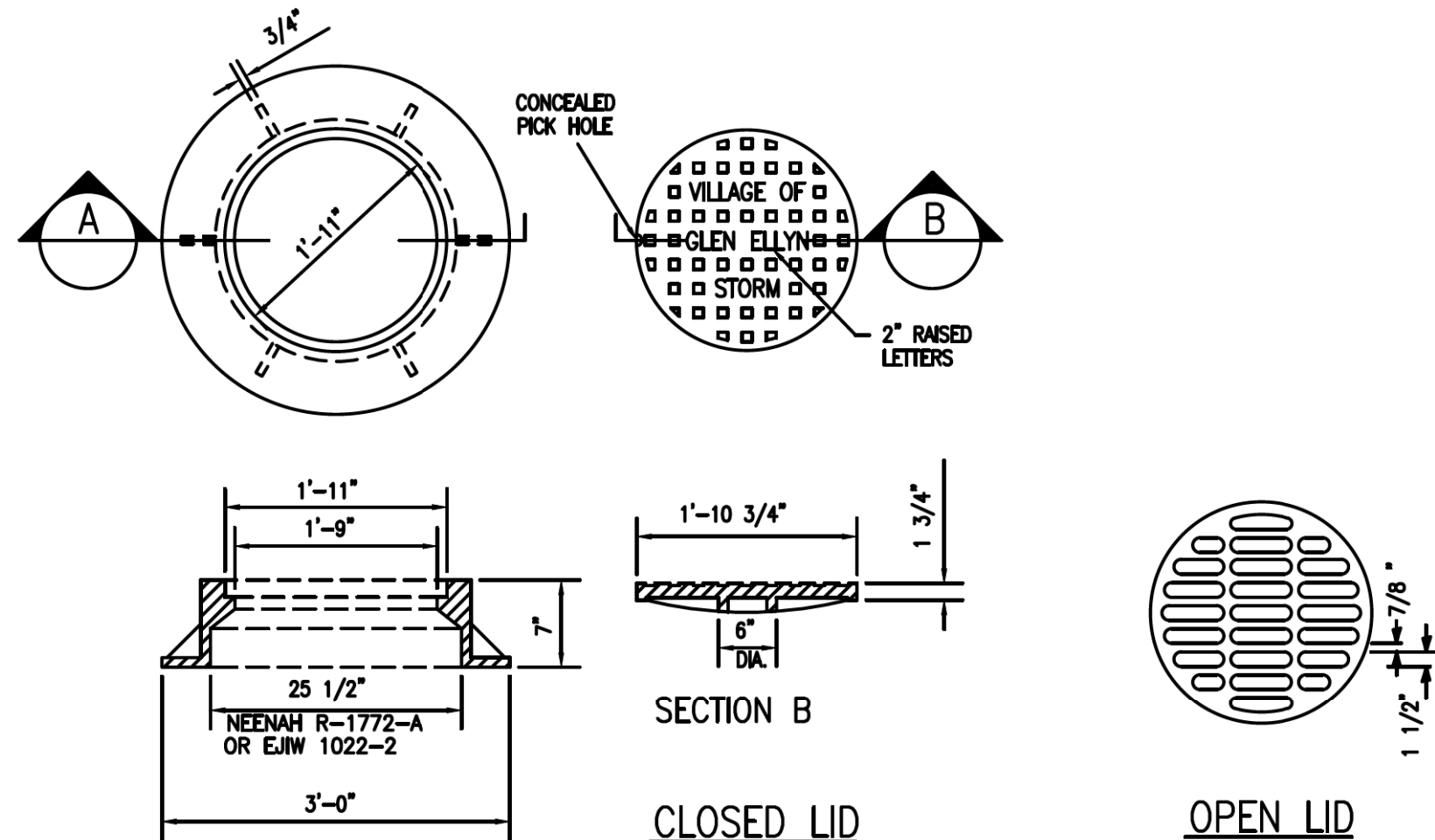




- UTILITY CONFLICTS**
- 1 T/STM: 766.67
B/TELE: APPROX 767.00
 - 2 T/WA: 765.33
B/STM: 765.80
 - 3 T/SAN: 754.41
B/STM: 756.45
 - 4 T/SAN: 753.08
B/STM: 756.25
 - 5 T/STM: 767.00
B/TELE: APPROX 767.5
 - 6 T/SAN: APPROX 758.00
B/GAS: APPROX 760.00
- REHABILITATION LEGEND**
- ADJ - ADJUSTMENT
R - REMOVAL
S&A - SEAL & ADJUST
CS - CEMENTITIOUS SEALING



500+75		501+00	502+00	503+00	504+00	505+00
DESIGNED: YG		DRAWN: AI		CHECKED: MY		DATE: SEPTEMBER 2021
9/22/2021		VILLAGE OF GLEN ELLYN CBD UNDERGROUND DESIGN		PLAN AND PROFILE HILLSIDE AVENUE		SCALES HORIZONTAL: 1" = 20' VERTICAL: 1" = 5'
COUNTY		TOTAL SHEET		SHEET NO.		NO.
DUPAGE		137		52		STA. 500+75 TO STA. 506+00
PROJECT NO. 11-3486-00						



- NOTES:
1. DUCTILE IRON CASTING SHALL BE GRADE 60-40-18 AND SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
 2. ALL FRAMES AND LIDS SHALL BE MACHINED.
 3. THE MANHOLE LIDS SHALL HAVE RAISED LETTERS AS SHOWN.
 4. ALTERNATIVE TO DUCTILE IRON LID, GRAY IRON LID MAY BE USED.
 5. FRAME AND LID TO BE EJW-1022-2 OR NEENAH R-1772-A
 6. CLOSED LID SHALL HAVE A CONCEALED PICK HOLE.
 7. SANITARY MANHOLE LID SHALL BE "SELF-SEALING"
 8. LID SHALL BE IMPRINTED WITH THE DESIGNATION "VILLAGE OF GLEN ELLYN STORM", "VILLAGE OF GLEN ELLYN SANITARY" OR "VILLAGE OF GLEN ELLYN WATER".

TYPE 1 FRAME & LID
NOT TO SCALE

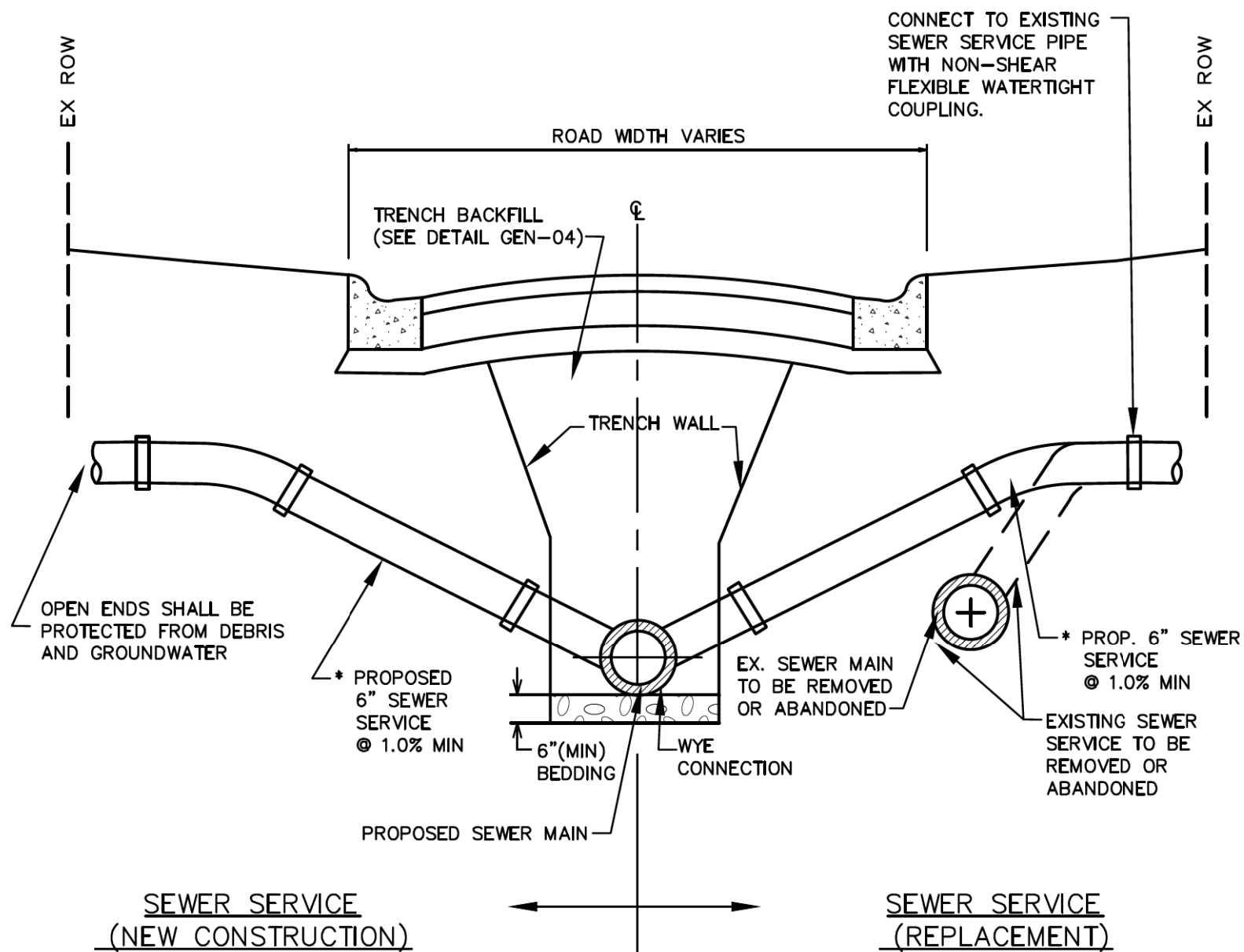


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TYPE 1
FRAME & LID

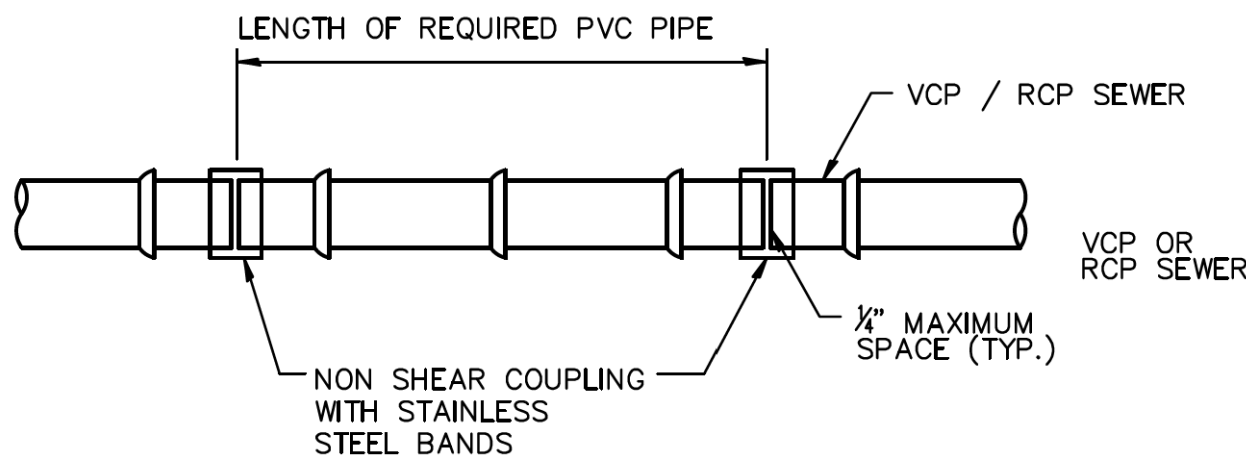
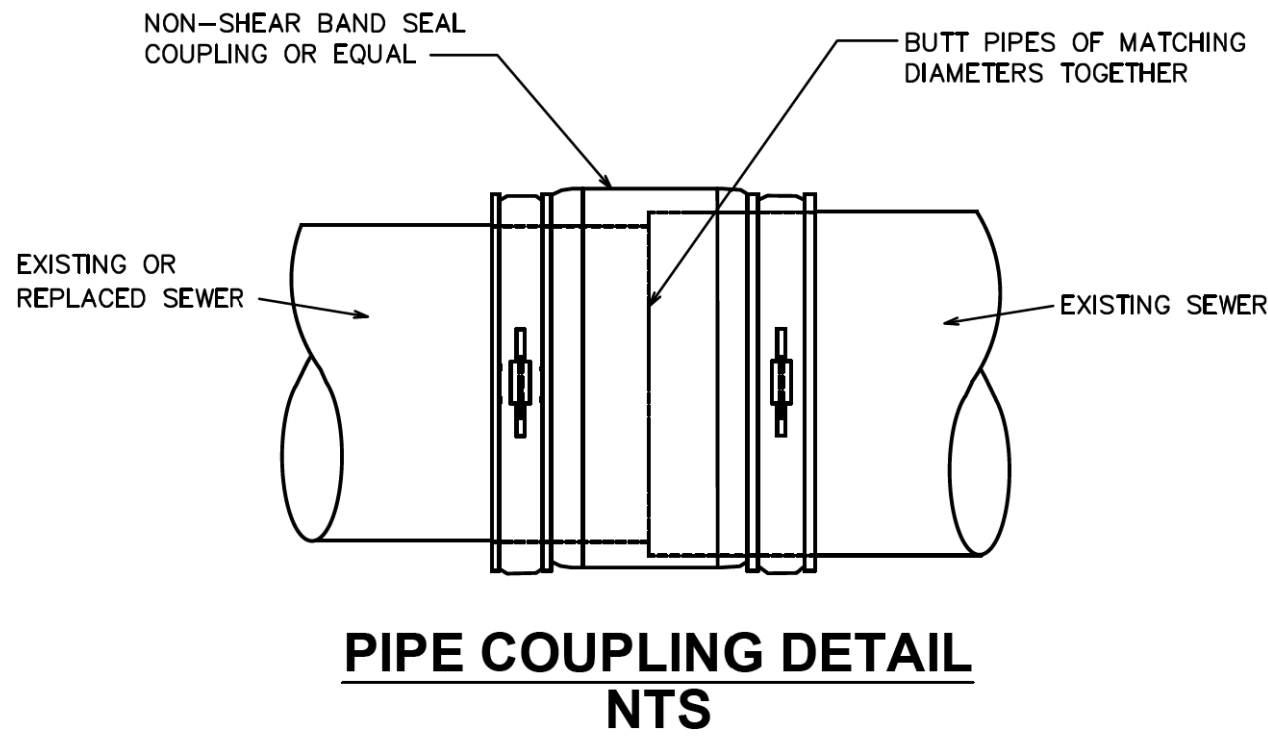
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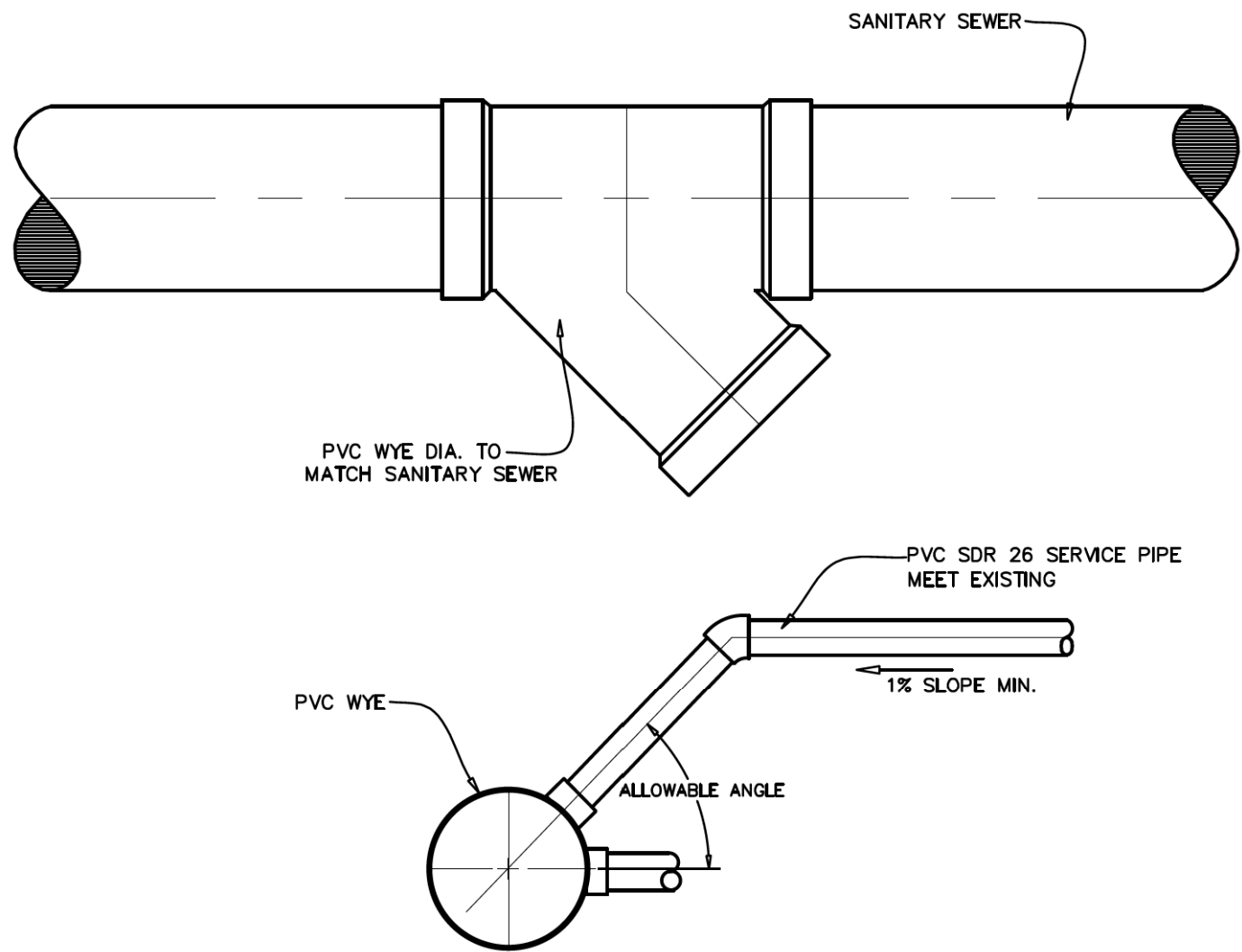


* SERVICE PIPE MATERIAL: PVC SDR 26, ASTM D2241

SANITARY SEWER SERVICE
NTS



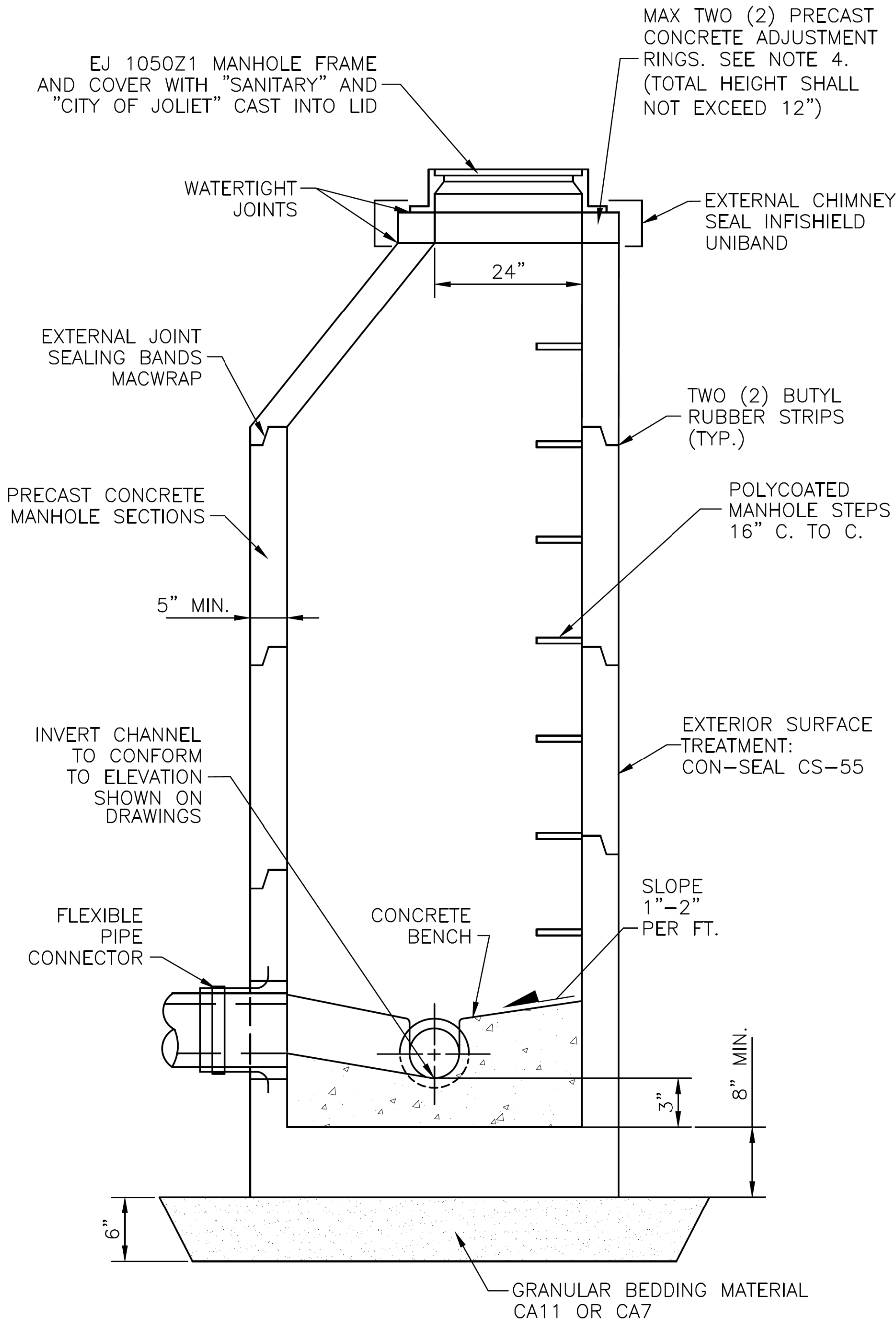
CONNECTING SEWER PIPES OF DISSIMILAR MATERIAL
NTS



GENERAL NOTES:

1. WYE CAN BE INSTALLED ONLY DURING NEW SEWER INSTALLATION
2. ALL FITTINGS MUST MEET OR EXCEED:
FITTINGS: ASTM F1336
MATERIALS: ASTM D1784
JOINTS: ASTM D3212
GASKETS: ASTM F477
INSTALLATION: ASTM D2321
3. FITTINGS SHALL BE HARCO SDR-26 AS MANUFACTURED BY HARRINGTON CORPORATION, OR APPROVED EQUAL

SANITARY SERVICE CONNECTION WYE
NTS



- NOTE:
1. ECCENTRIC CONES REQUIRED, FLAT SLAB TOPS PERMITTED ONLY FOR MANHOLES TOO SHALLOW FOR CONES.
 2. MANHOLE DIAMETER SHALL BE DETERMINED BY THE SEWER DEPTH, THE SEWER OUTSIDE DIAMETER, RELATIVE ANGLES OF SEWERS TO EACH OTHER, THE SIZE OF HOLES CORED/CAST FOR BOOTS, AND A MINIMUM OF 8" BETWEEN CORED/CAST HOLES. FOR SEWER SIZES 8" THROUGH 15", USE 4'-0" DIAMETER. FOR SEWER DEPTHS 15' AND GREATER, USE 5'-0" DIAMETER.
 3. ALL LIFT HOLES ARE TO BE GROUTED FROM THE INSIDE AND OUTSIDE BEFORE BACKFILLING.
 4. FOR MANHOLES INSTALLED IN PAVEMENT, PROVIDE ONE RUBBER COMPOSITE ADJUSTMENT RING DIRECTLY UNDER FRAME. EJ INFRA-RISER OR APPROVED EQUAL.

SANITARY MANHOLE
NTS

DESIGNED: YG	
DRAWN: AI	
CHECKED: MY	
DATE: SEPTEMBER 2021	

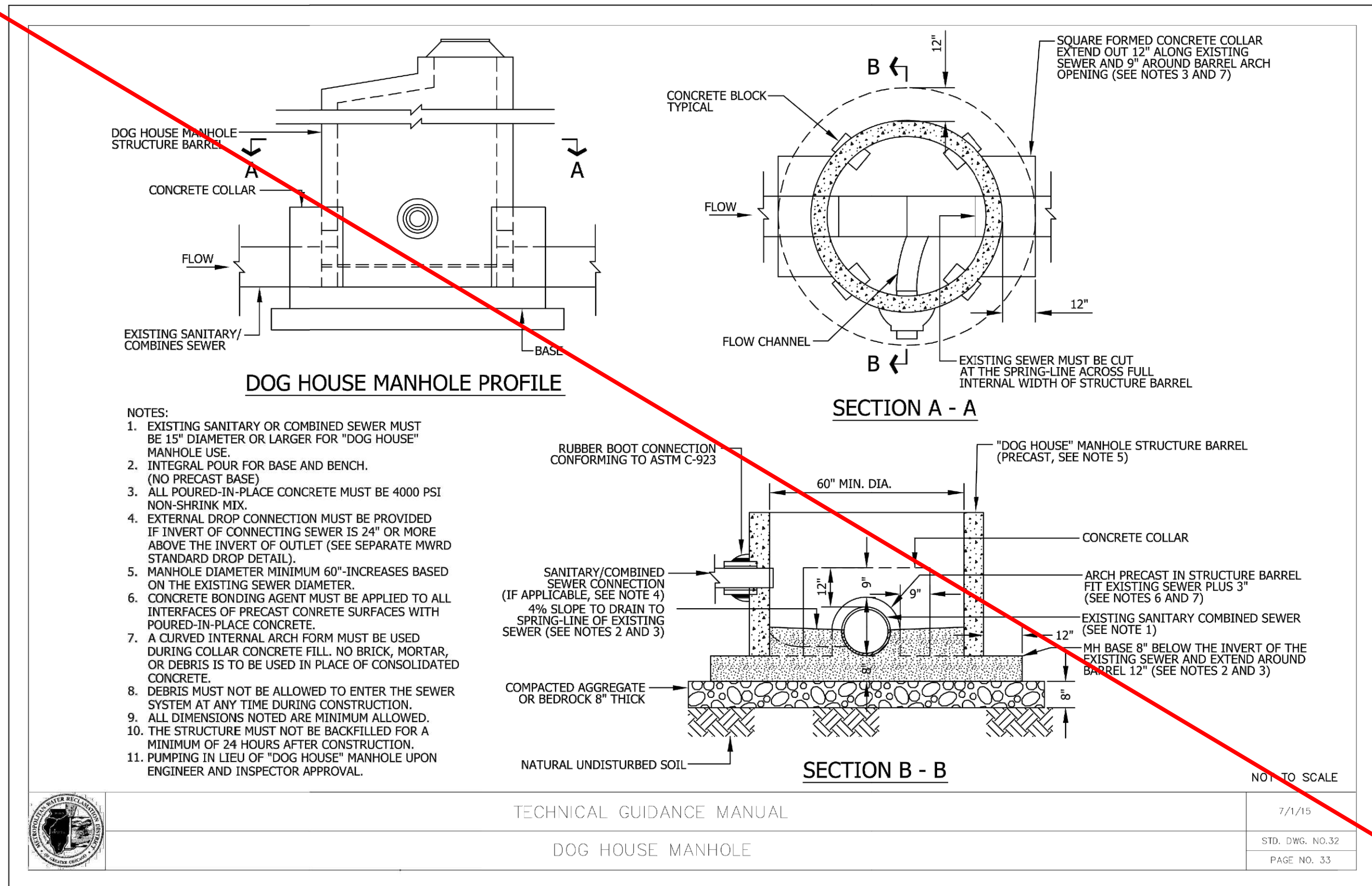
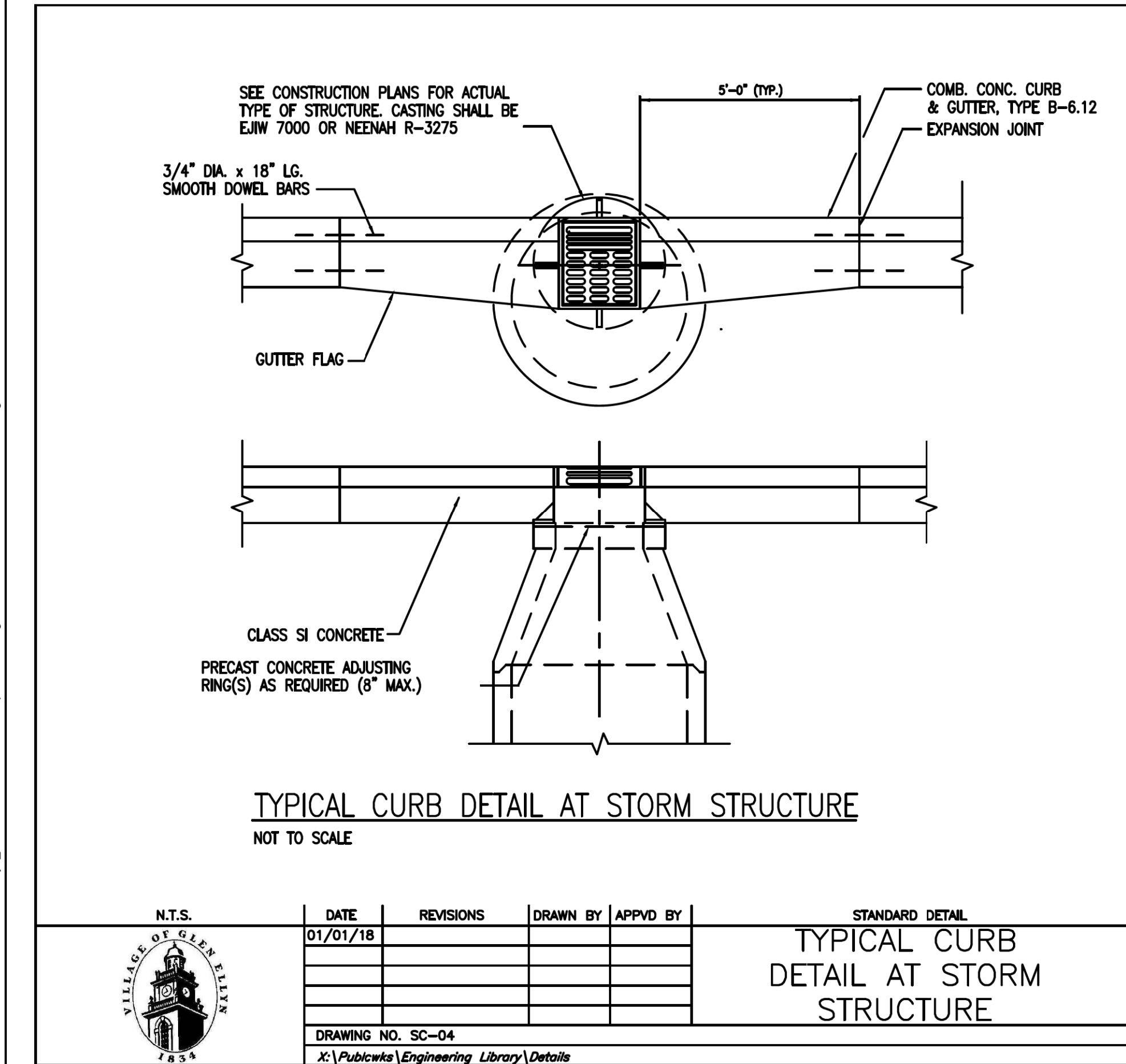
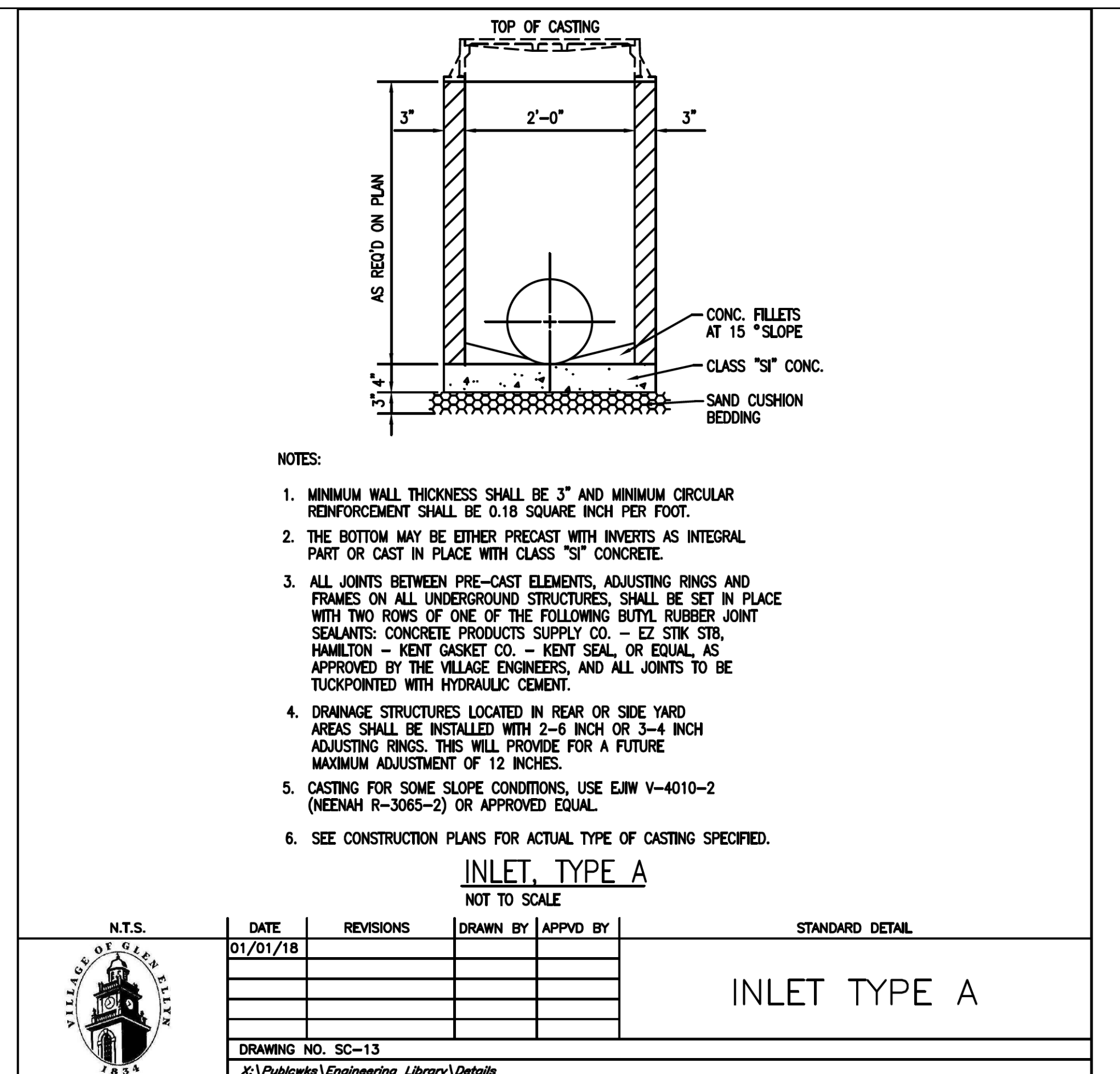
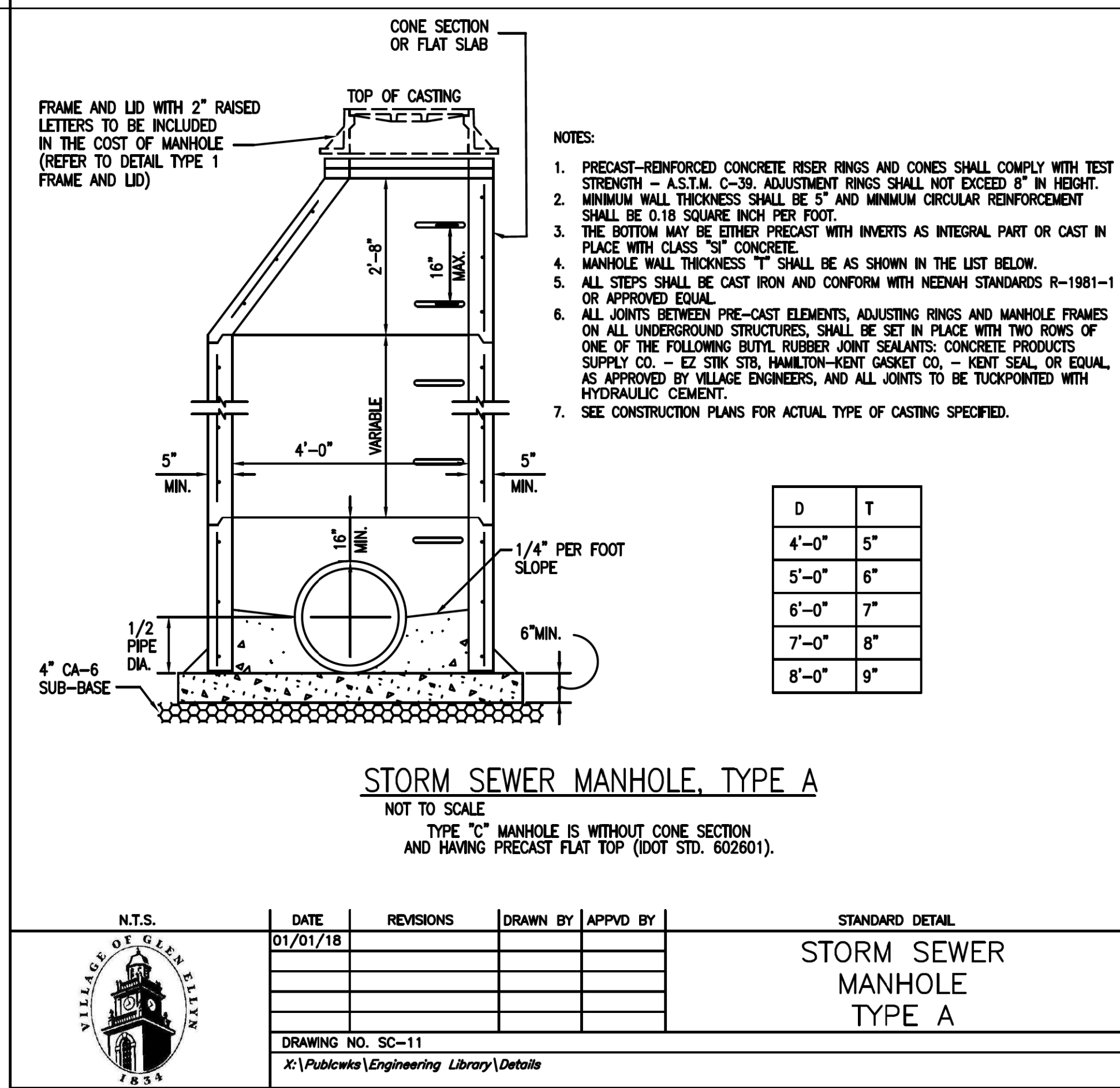
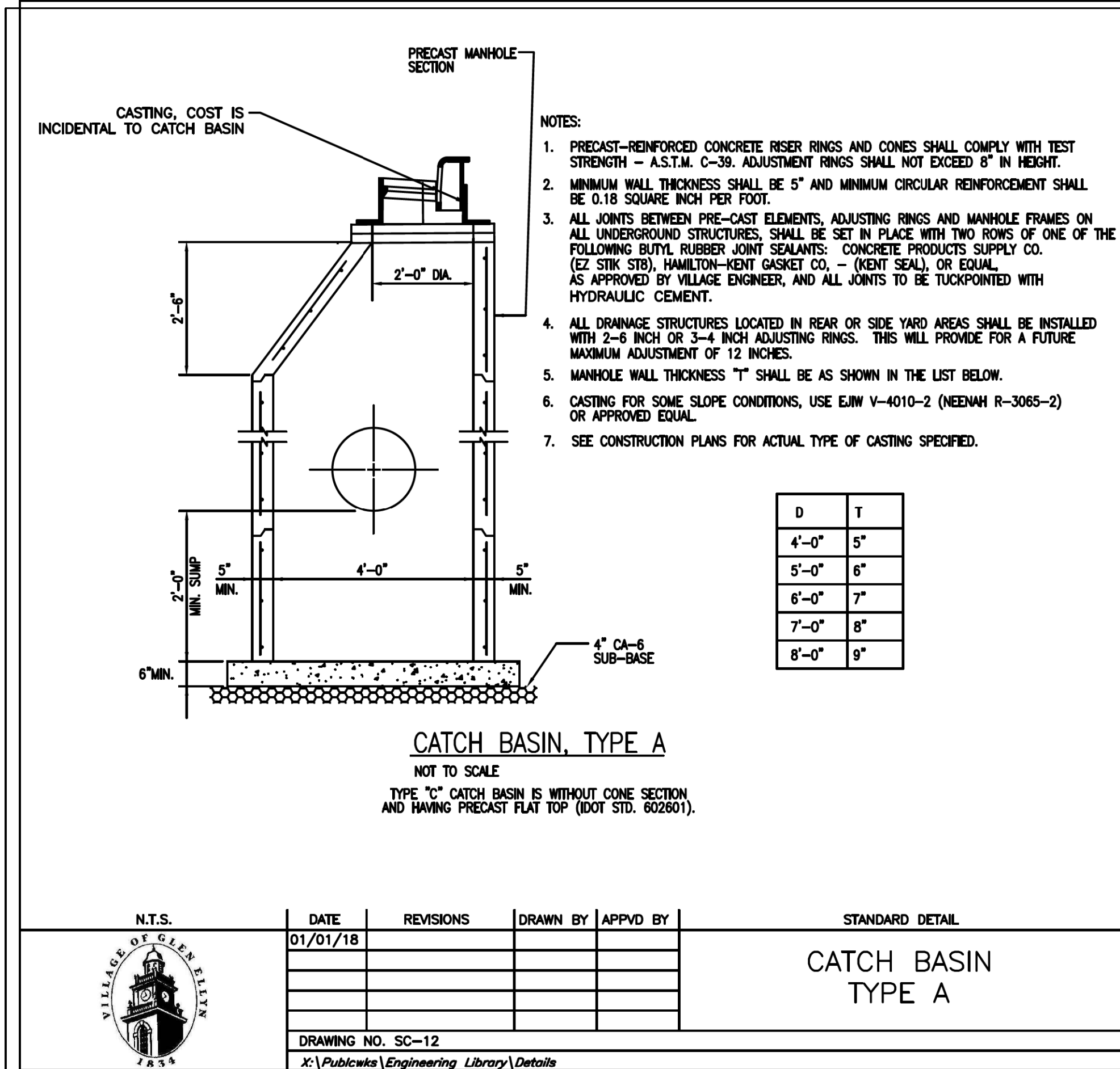


VILLAGE OF GLEN ELLYN
CBD UNDERGROUND DESIGN

CONSTRUCTION DETAILS

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS	DUPAGE	137	55
VERTICAL: NTS			
PROJECT NO. 11-3486-00			

\\vhq\arcuat\office\11\WHEATON\PROJECTS\GlenEllyn_IL\1134860 CBD Streetscape Ph. I Design\04 CAD\Sheet2.1 - C-Details.dwg



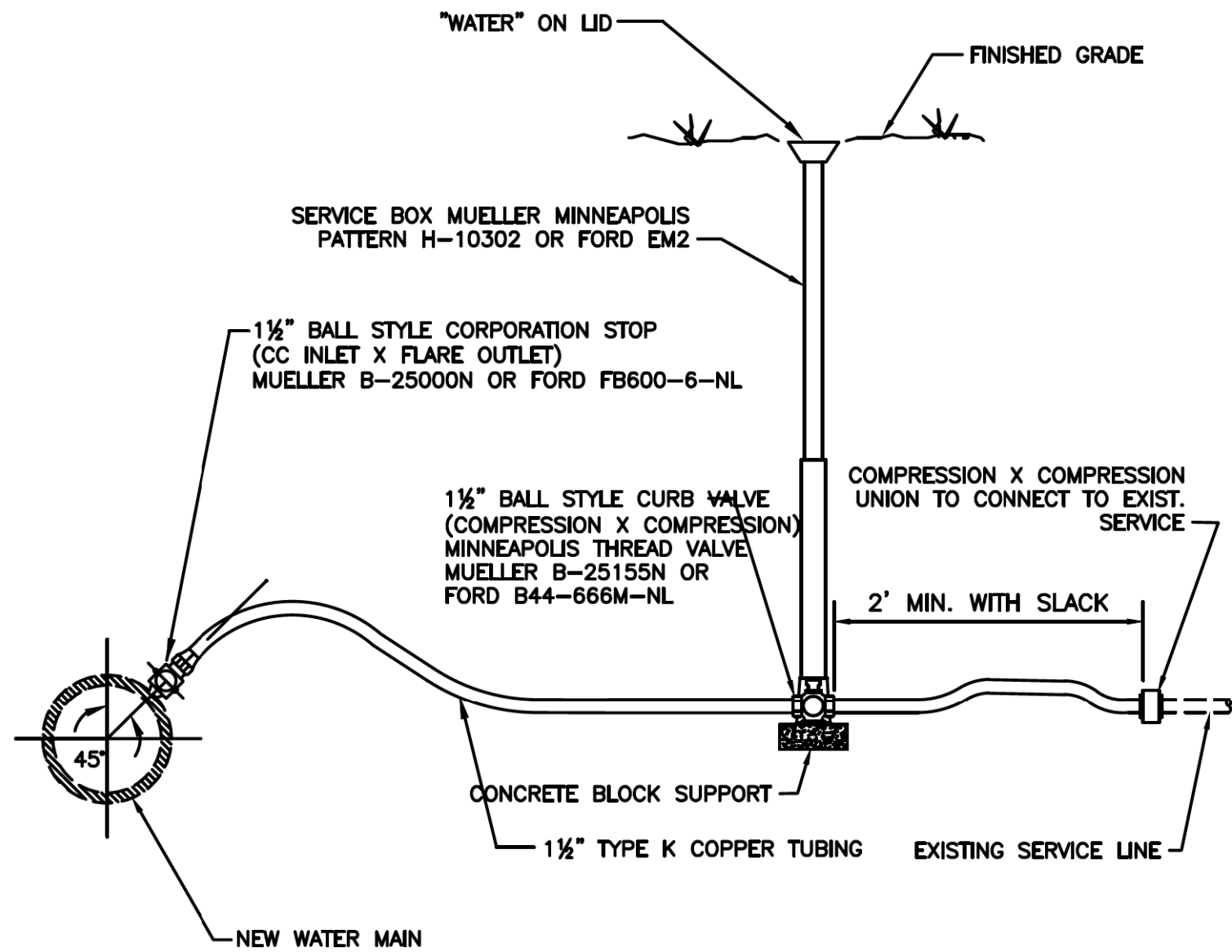
DESIGNED: YG	
DRAWN: AI	
CHECKED: MY	
DATE: SEPTEMBER 2021	



VILLAGE OF GLEN ELLYN
CBD UNDERGROUND DESIGN

CONSTRUCTION DETAILS

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS	DUPAGE	137	57
VERTICAL: NTS			
PROJECT NO. 11-3486-00			



- NOTES:
- SERVICE SADDLE AS PER SPECIFICATIONS, IS REQUIRED AS FOLLOWS:
FOR CAST IRON OR PVC WATER MAIN, USE STAINLESS STEEL SMITH-BLAIR 372 SERIES
FOR DUCTILE WATER MAIN, USE BRONZE DOUBLE STRAP MUELLER BR2B SERIES
 - THE WATER MAIN SERVICE FITTINGS & B-BOX SHALL BE AS APPROVED BY THE GLEN ELLYN WATER DEPARTMENT AND SHALL BE INCIDENTAL TO THE COST OF "WATER SERVICE CONNECTION" PAY ITEMS.

WATER SERVICE CONNECTION

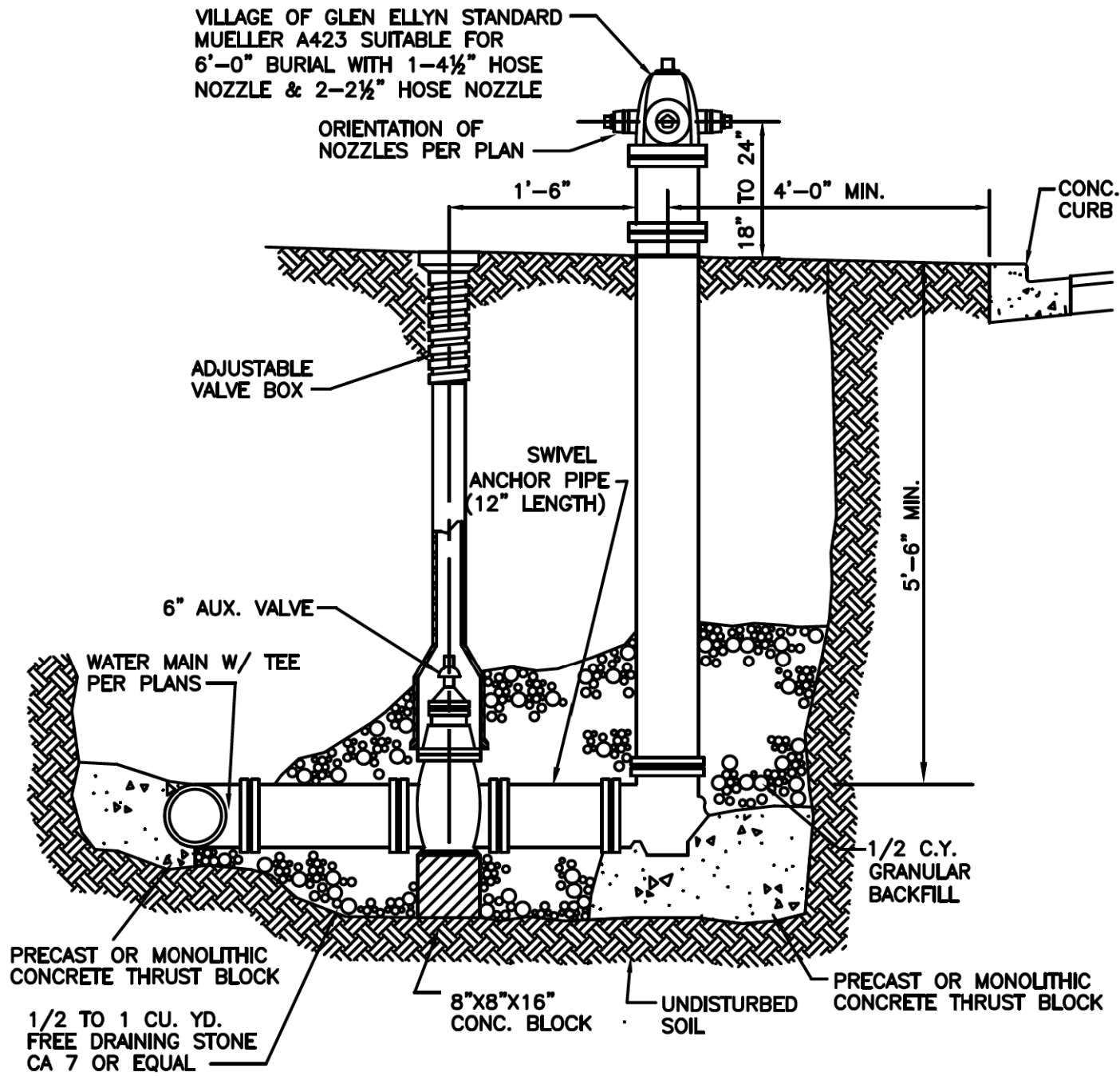
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01/01/18					

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FIRE HYDRANT

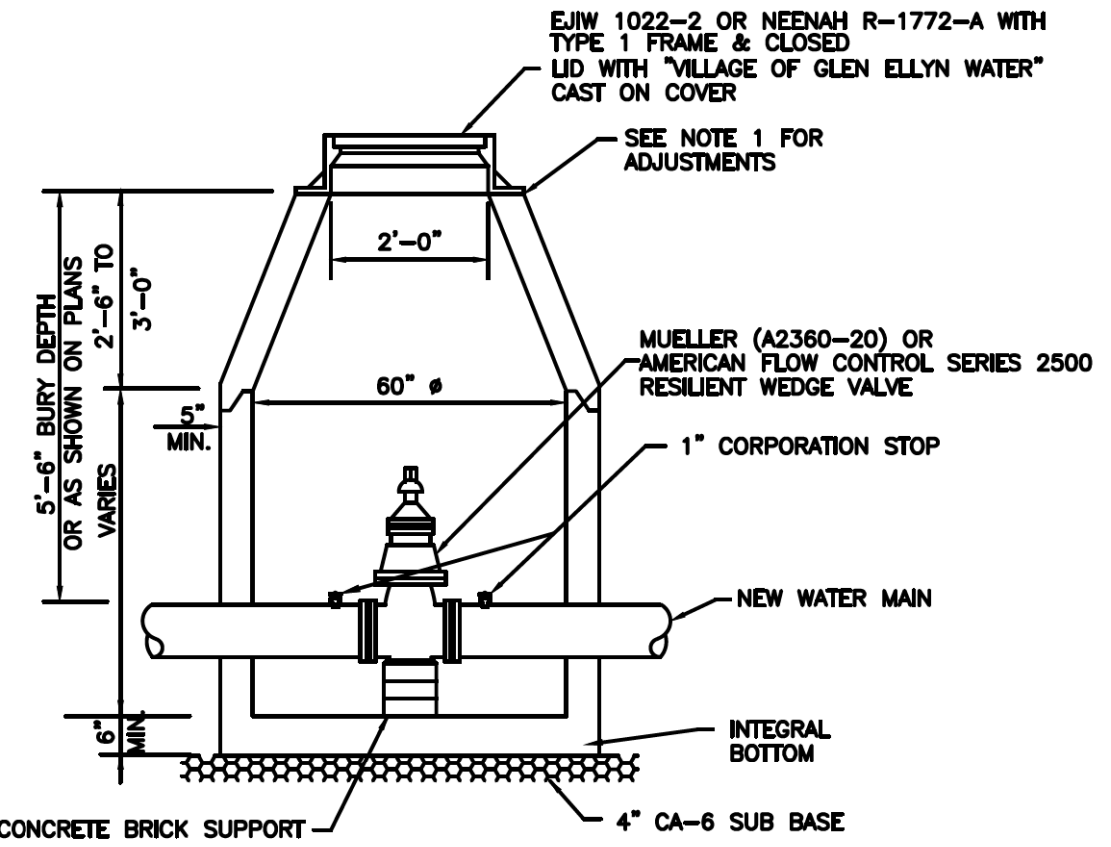
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01/01/18					

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NOTES:

- PRECAST-REINFORCED CONCRETE RISER RINGS AND CONES SHALL COMPLY WITH TEST STRENGTH - A.S.T.M. C-39. ADJUSTMENT RINGS SHALL NOT EXCEED 8" IN HEIGHT.
- WALL THICKNESS SHALL BE - 5" FOR 4" DIA. & 6" FOR 5" DIA. MANHOLE. MINIMUM CIRCULAR REINFORCEMENT SHALL BE 0.18 SQUARE INCH PER FOOT.
- PRECAST ADJUSTMENT RINGS WILL BE REQUIRED FOR ALL ADJUSTMENTS WITH MAX. ADJUSTMENT EQUAL TO 1 1/2".
- ALL VALVES SHALL BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
- VALVE WITH VAULT INCLUDING FRAME AND LID SHALL BE PAID FOR AS ITEM "VALVE AND VAULT" OF THE SIZE SPECIFIED IN THE PLANS AND SHALL INCLUDE CORPORATION STOP AS SHOWN.
- ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES ON ALL UNDERGROUND STRUCTURES, SHALL BE SET IN PLACE WITH ONE OF THE FOLLOWING: BUTYL RUBBER JOINT SEALANTS AS MANUFACTURED BY CONCRETE PRODUCTS SUPPLY CO. - EZ STIK STB, HAMILTON-KENT GASKET CO. - KENT SEAL, OR EQUAL, AS APPROVED BY THE VILLAGE ENGINEER, AND ALL JOINTS TO BE TUCKPOINTED W/ ANTI-HYDRAULIC CEMENT.

VALVE VAULT TYPE A

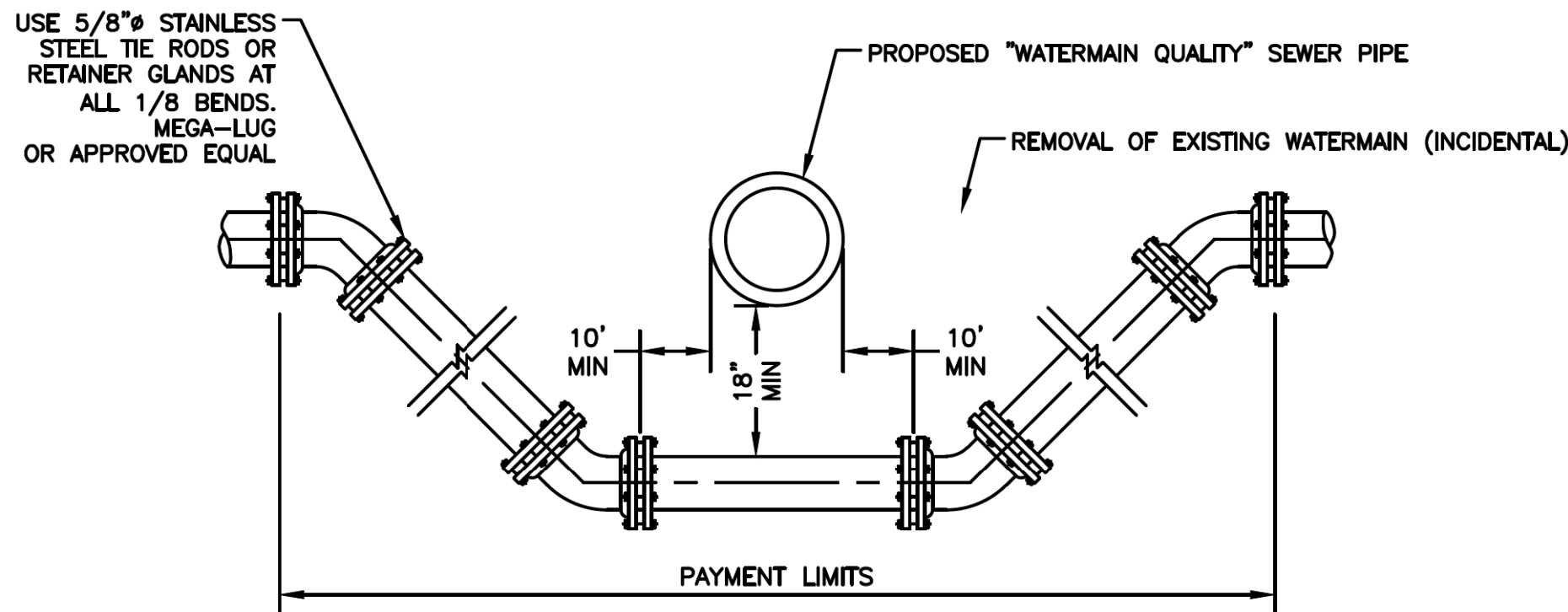
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N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
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01/01/18					

DRAWING NO. SC-04
X:\Public\Engineering Library\Details



ADJUST WATERMAIN DETAIL

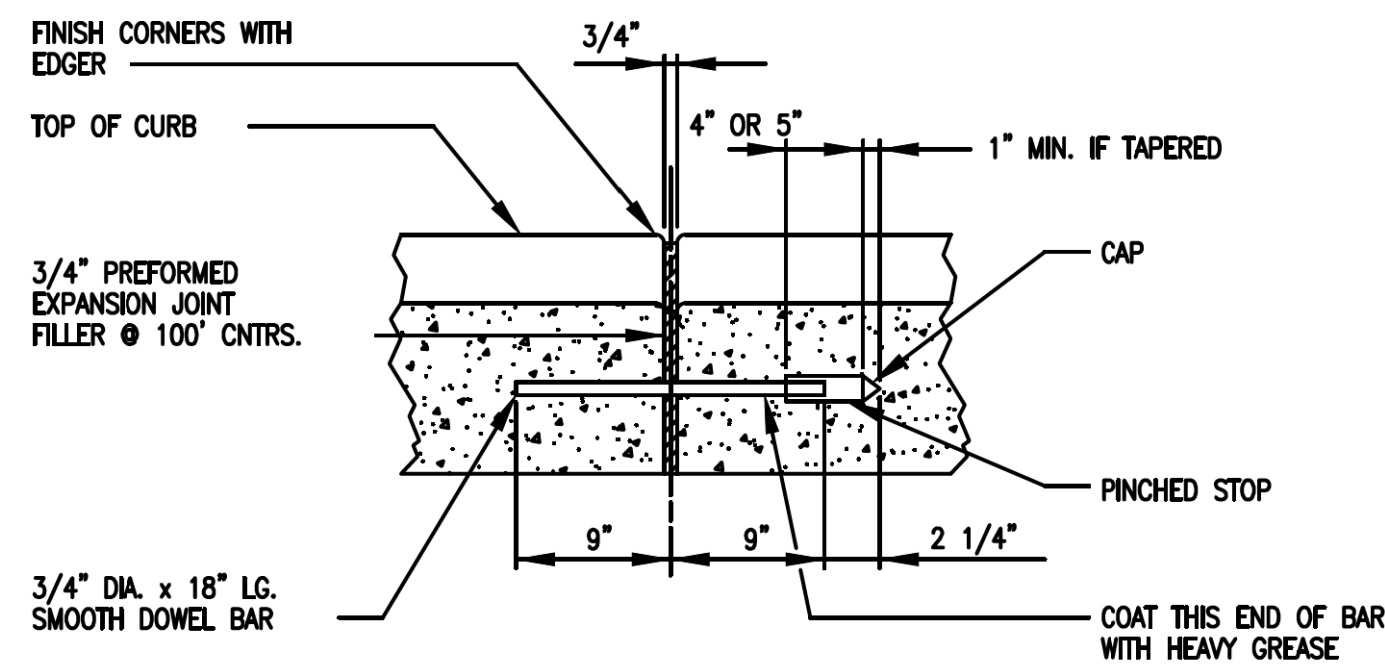
NOT TO SCALE



N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
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01/01/18					

DRAWING NO. SC-05
X:\Public\Engineering Library\Details



P.C.C. CURB & GUTTER EXPANSION JOINT DETAIL

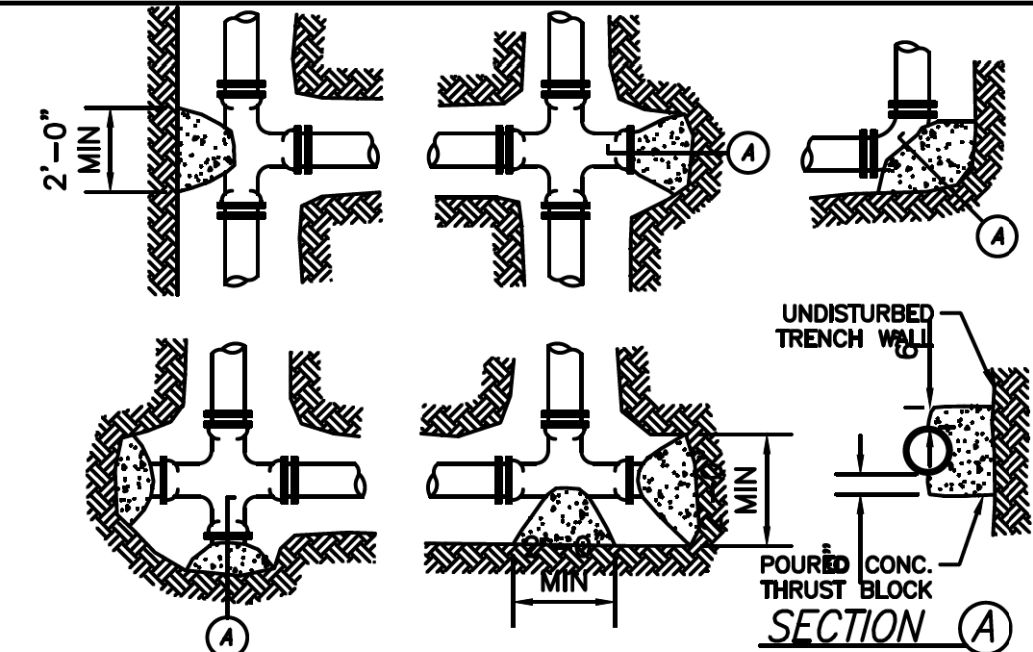
NOT TO SCALE



N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
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01/01/18					

DRAWING NO. SC-05
X:\Public\Engineering Library\Details



THRUST BLOCK DETAIL

NOT TO SCALE

SIZE (DIA. IN INCH.)	DEAD END OR TEE (SQ. FT.)	1/4 BEND (SQ. FT.)	1/8 BEND (SQ. FT.)	1/16 BEND (SQ. FT.)	1/32 BEND (SQ. FT.)
6	3.9	5.5	3.0	1.5	1.5
8	6.7	9.4	5.1	2.6	2.6
10	10.9	15.4	8.4	4.3	4.3
12	15.5	21.8	11.9	6.1	6.1
14	21.0	29.6	16.1	8.2	8.2
16	28.5	37.9	20.8	12.5	12.5
18	38.6	54.4	29.7	14.9	14.9
20	47.8	67.4	36.7	18.6	18.6
24	69.0	97.2	52.9	26.8	26.8

NOTES:

- THE ABOVE TABLE IS BASED ON 2,000 PSF SOIL BEARING AGAINST THE UNDISTURBED TRENCH WALL AND ARE TO REPRESENT THE MINIMUM VERTICAL AREA OF THE THRUST BLOCK PERPENDICULAR TO THE FITTING INCLUDING THE ANGLE OF THE FITTING.
- THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS AND AT POINTS SPECIFIED SHALL BE CLASS "SI" CONCRETE. A MIN. OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OF 11 1/4" OR MORE. RETAINER GLANDS MAY BE USED IN PLACE OF THRUST BLOCKS. THE COST OF THRUST BLOCKS OR RETAINER GLANDS SHALL BE INCLUDED IN THE COST OF THE FITTING.
- PROVIDE POLYETHYLENE ENCASEMENT THROUGHOUT THE ENTIRE LENGTH OF THE WATERMAIN.



N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
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01/01/18					

DRAWING NO. SC-07
X:\Public\Engineering Library\Details

DESIGNED: YG
DRAWN: AI
CHECKED: MY
DATE: SEPTEMBER 2021

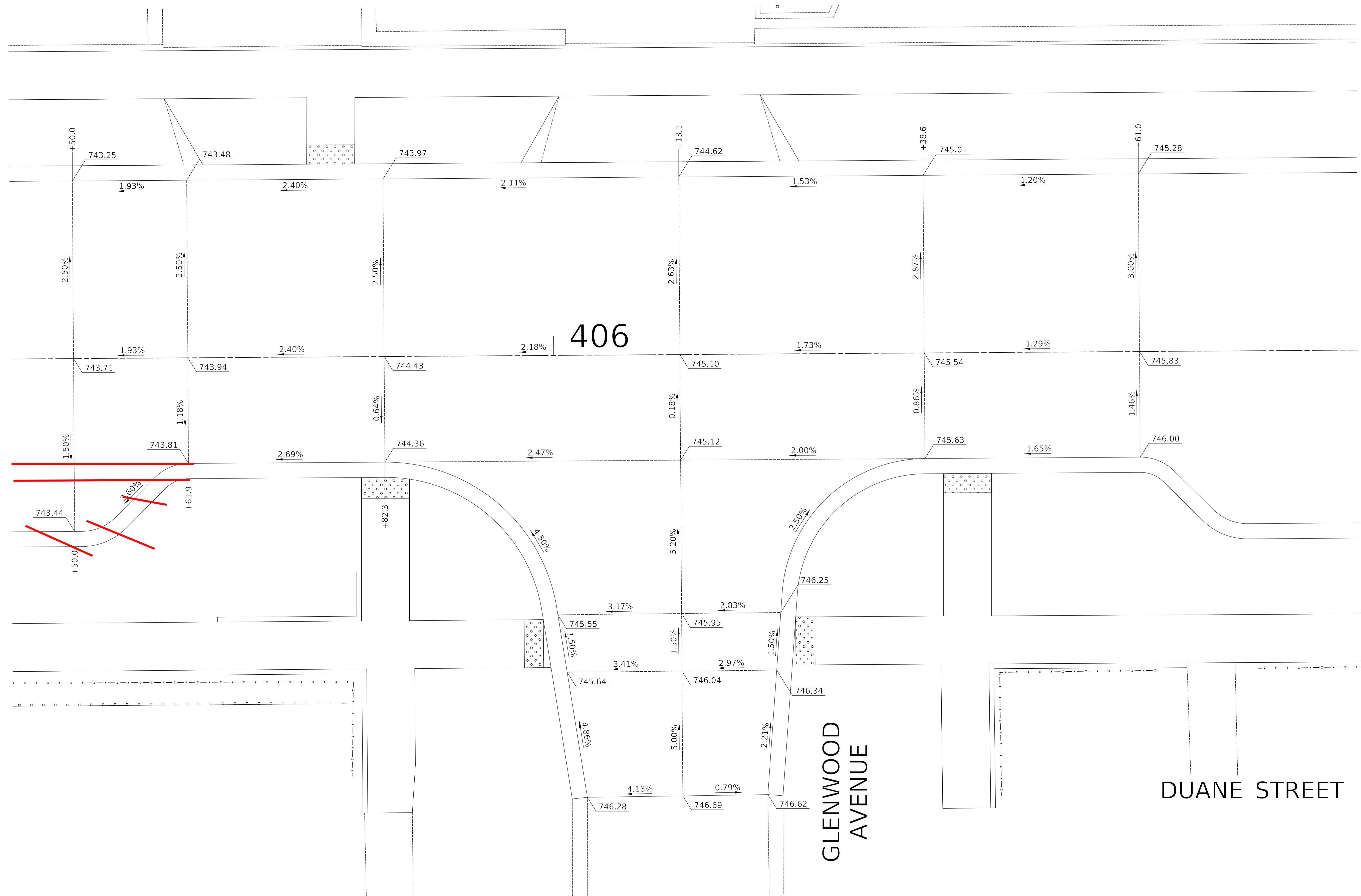
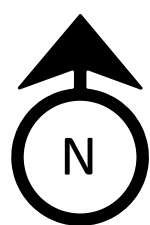


rjngroup
The Choice for Collection System Solutions

VILLAGE OF GLEN ELLYN
CBD UNDERGROUND DESIGN

CONSTRUCTION DETAILS

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS VERTICAL: NTS PROJECT NO. 11-3486-00	DUPAGE	137	58



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DESIGNED -	TGB	REVISED -	
DRAWN -	JRR	REVISED -	
CHECKED -	KRK	REVISED -	
DATE -	9/24/2021	REVISED -	

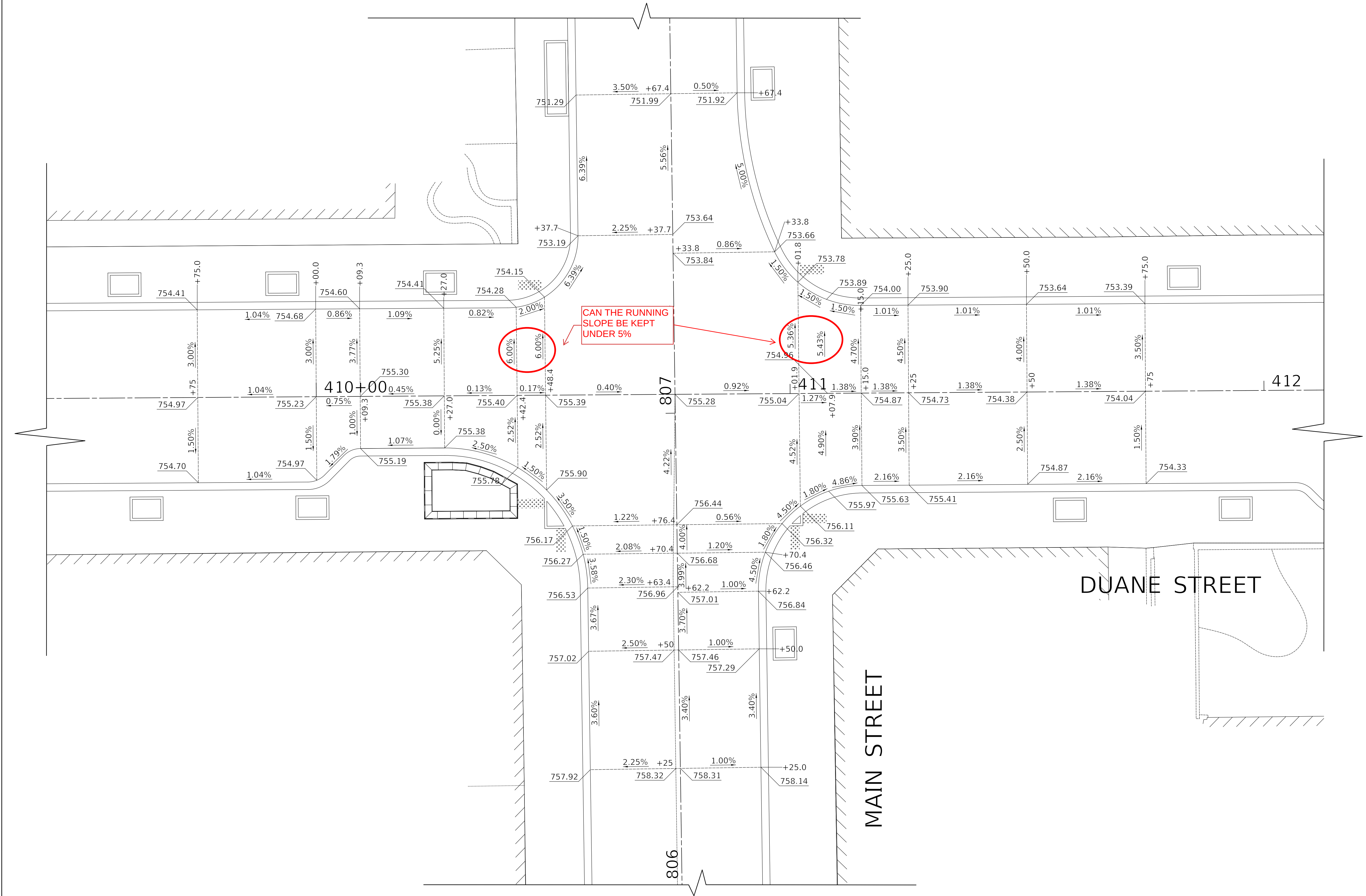
VILLAGE OF GLEN ELLYN

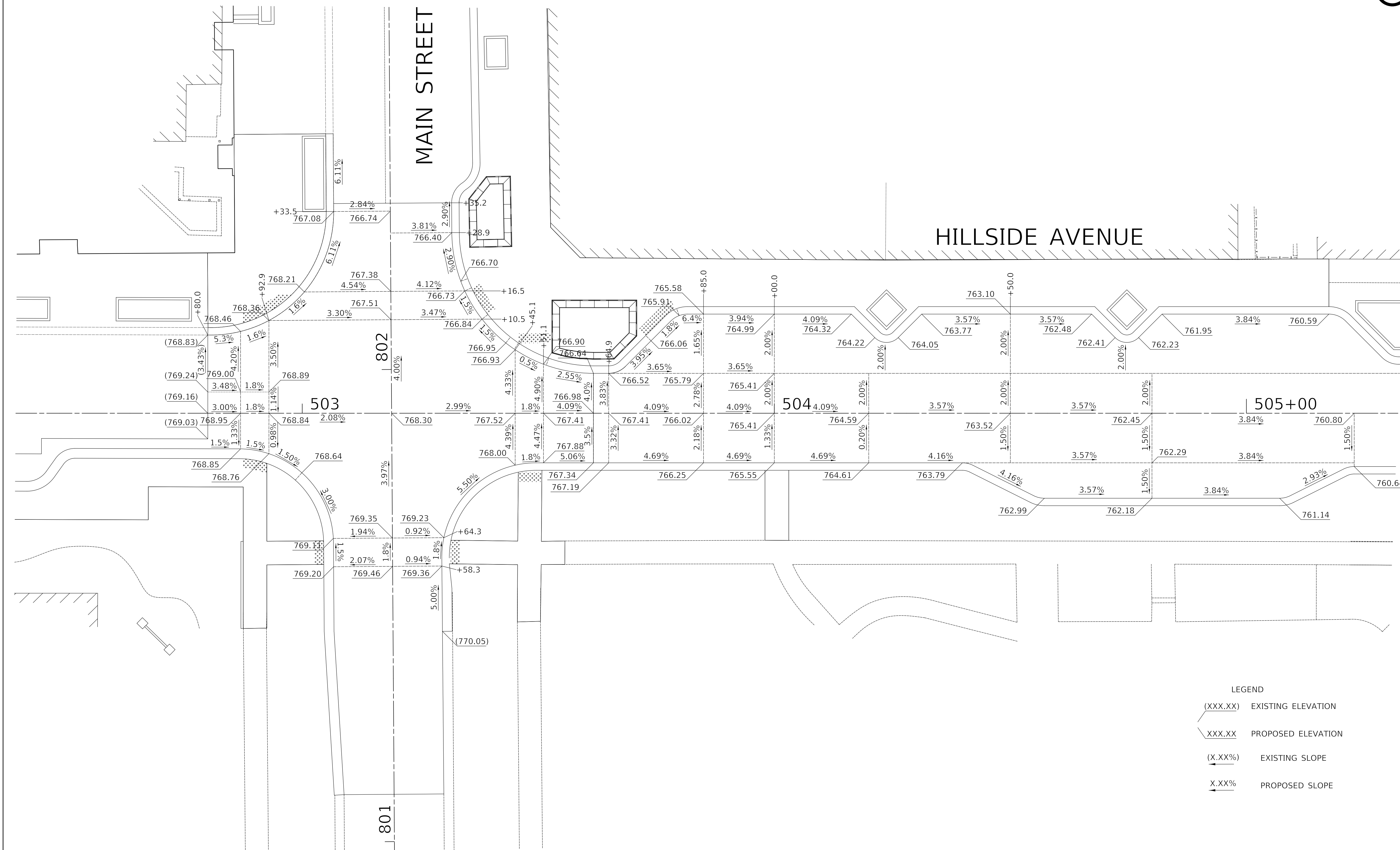


INTERSECTION GRADING PLAN
DUANE STREET & GLENWOOD AVENUE

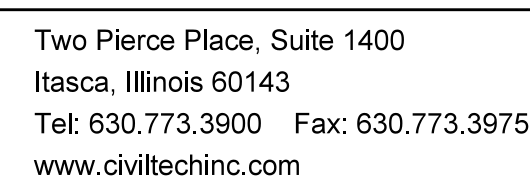
SHEET NO. 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	59
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





	EXISTING ELEVATION
	PROPOSED ELEVATION
	EXISTING SLOPE
	PROPOSED SLOPE

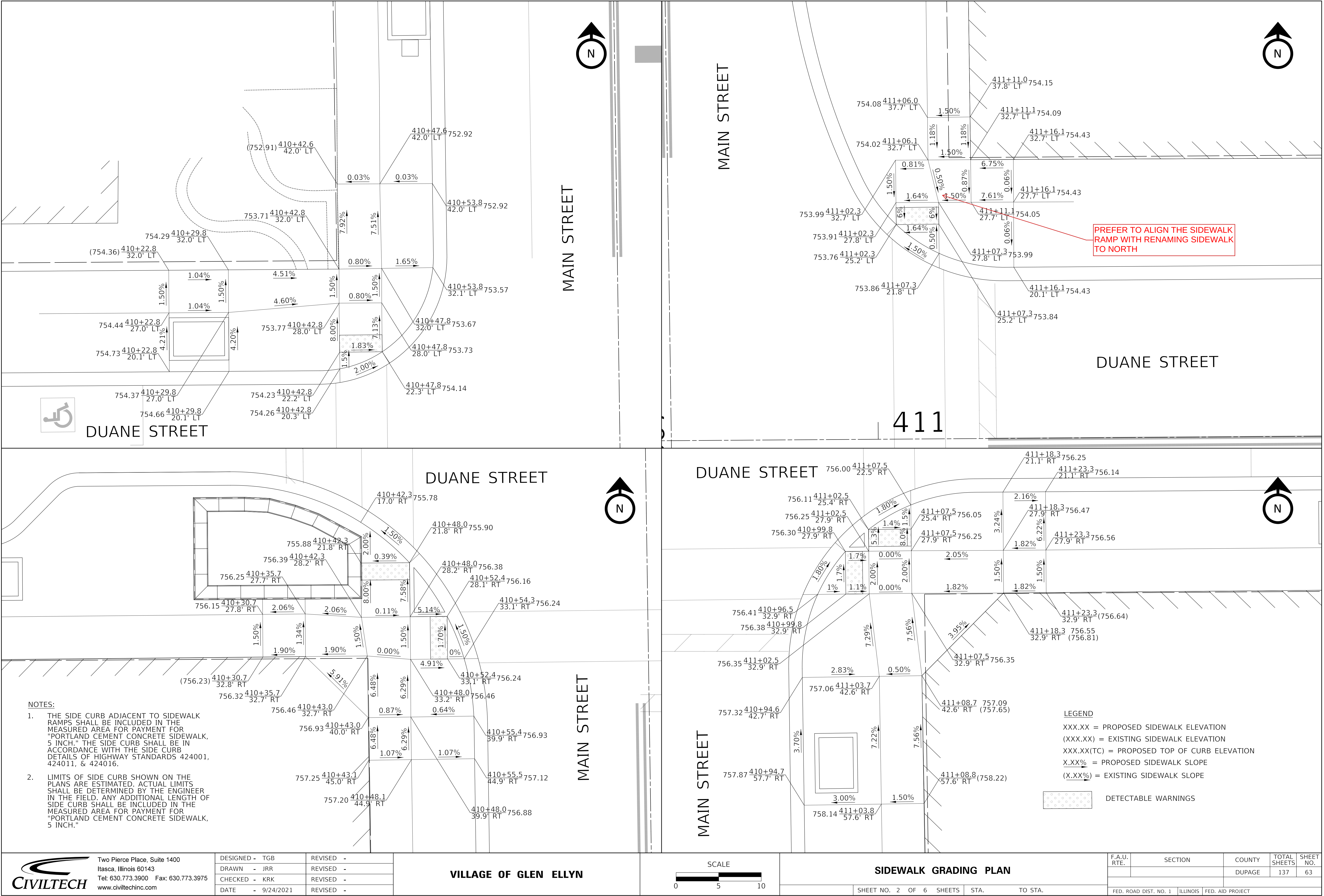


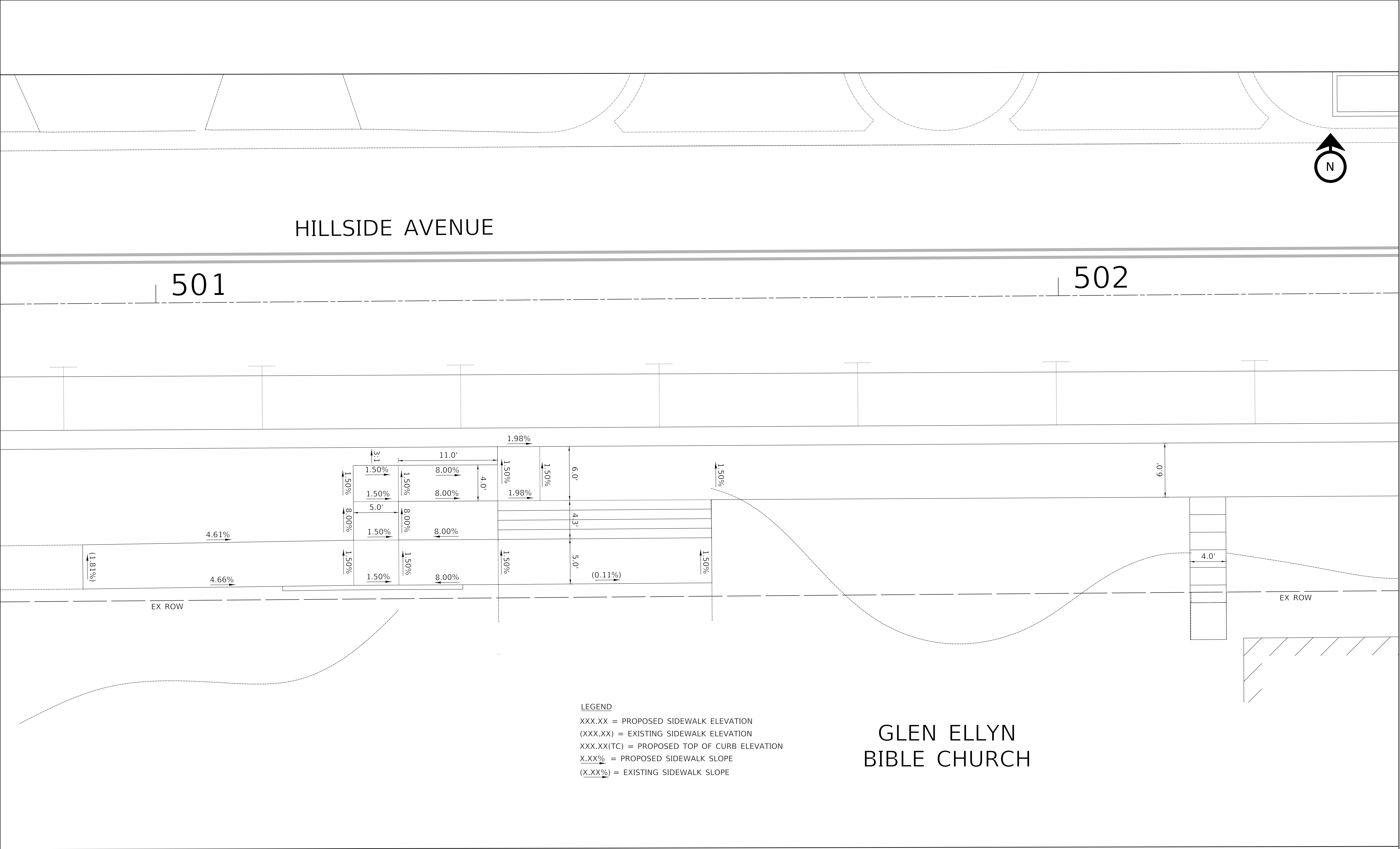
VILLAGE OF GLEN ELLYN

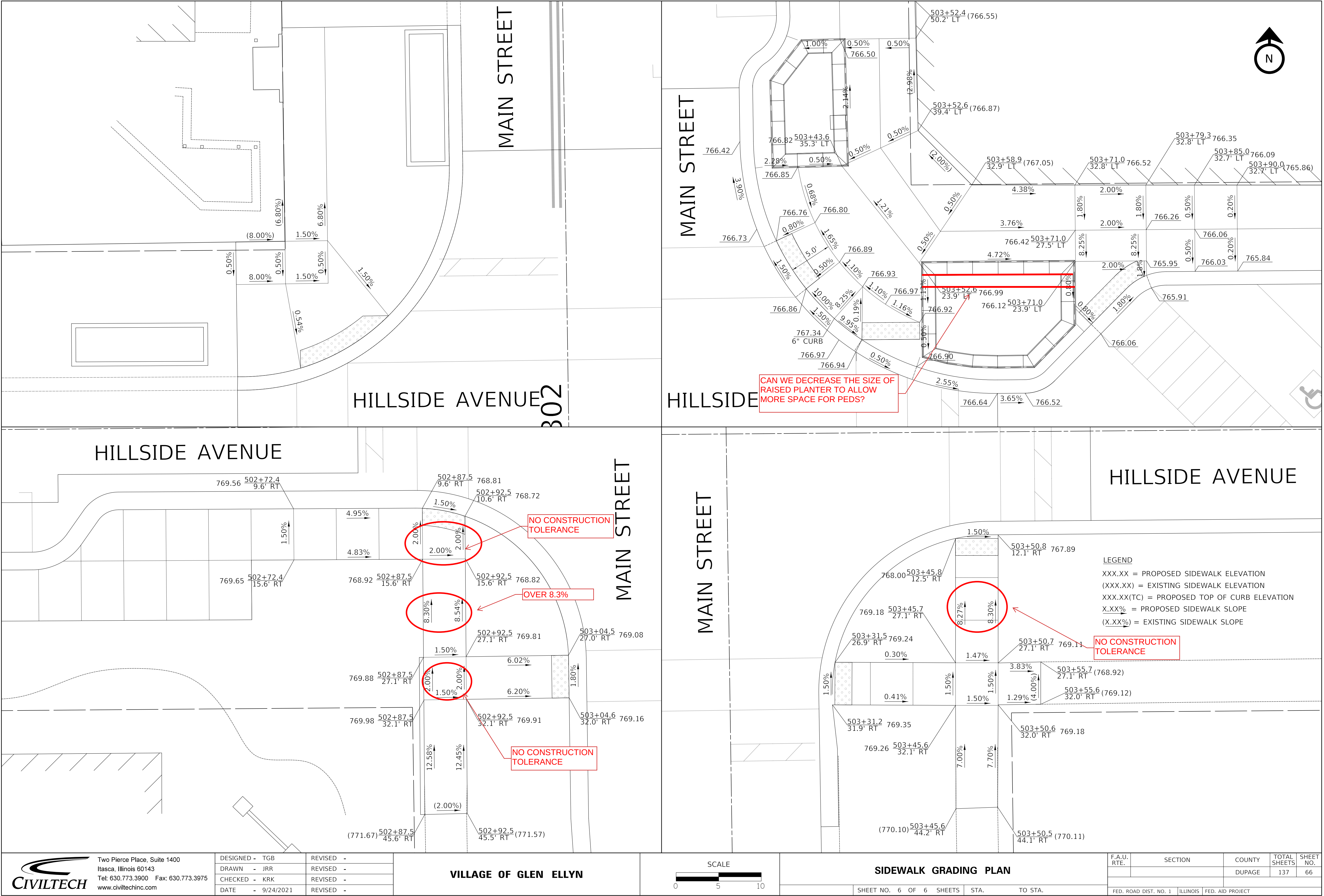


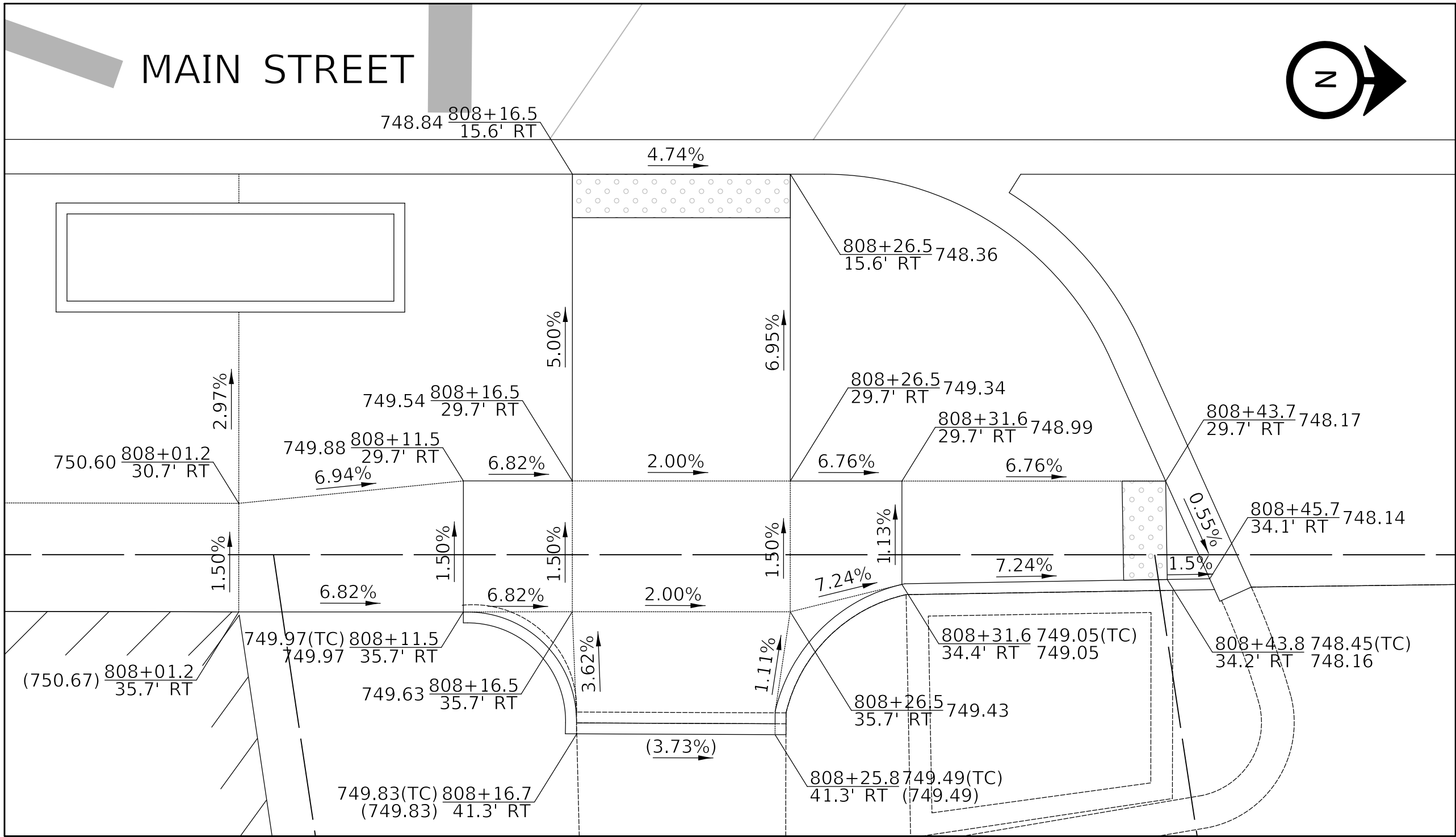
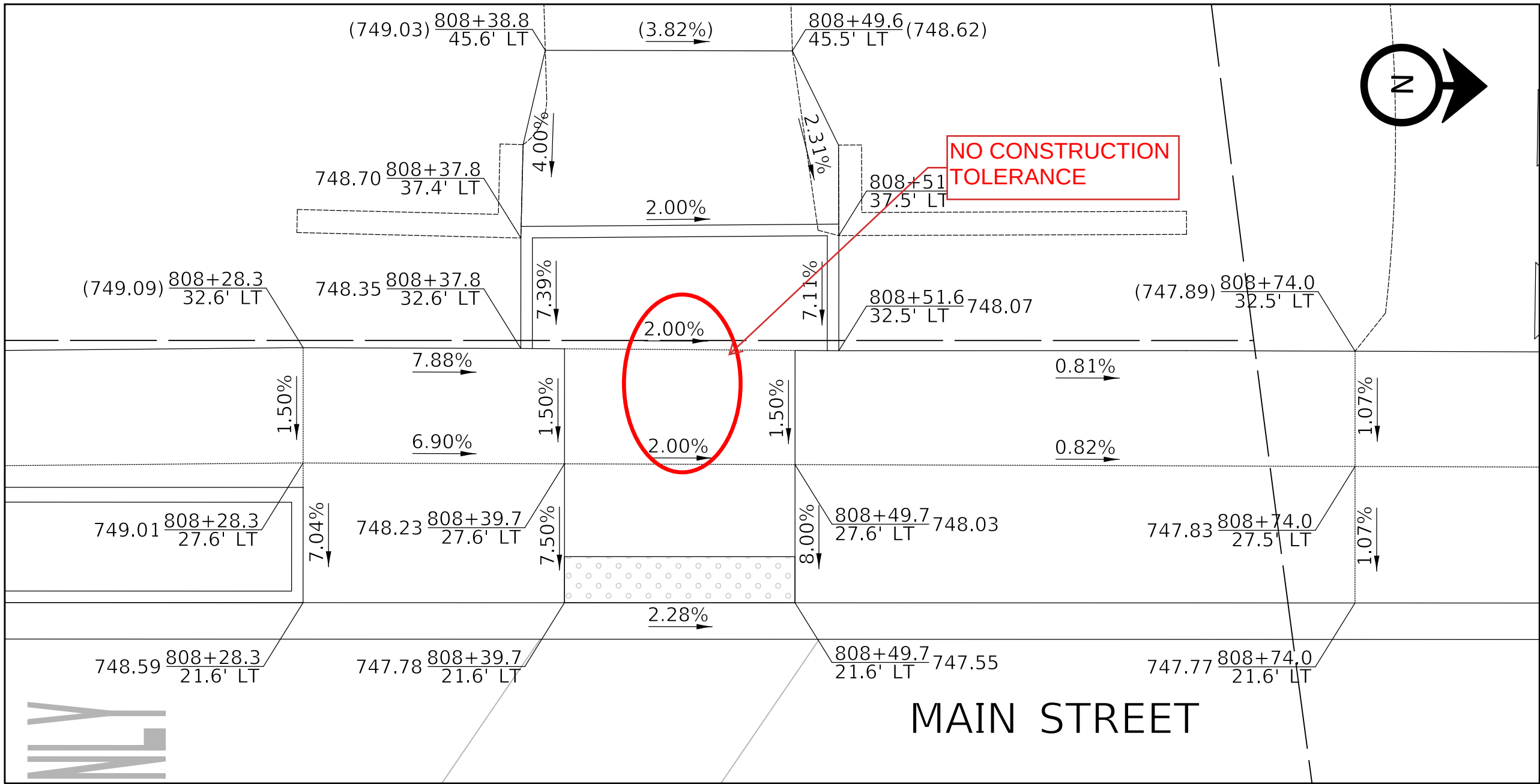
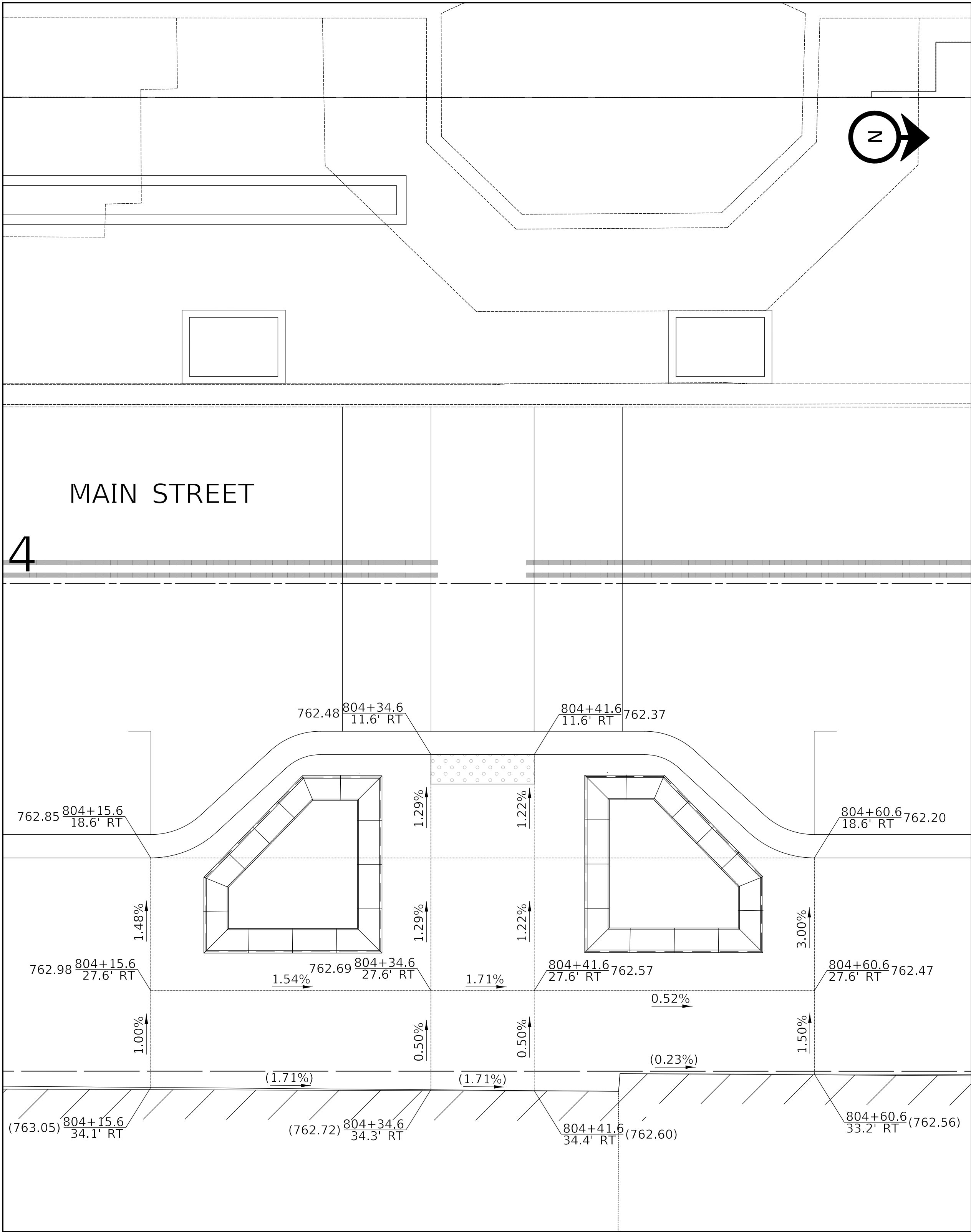
SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.
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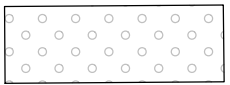


NOTES:

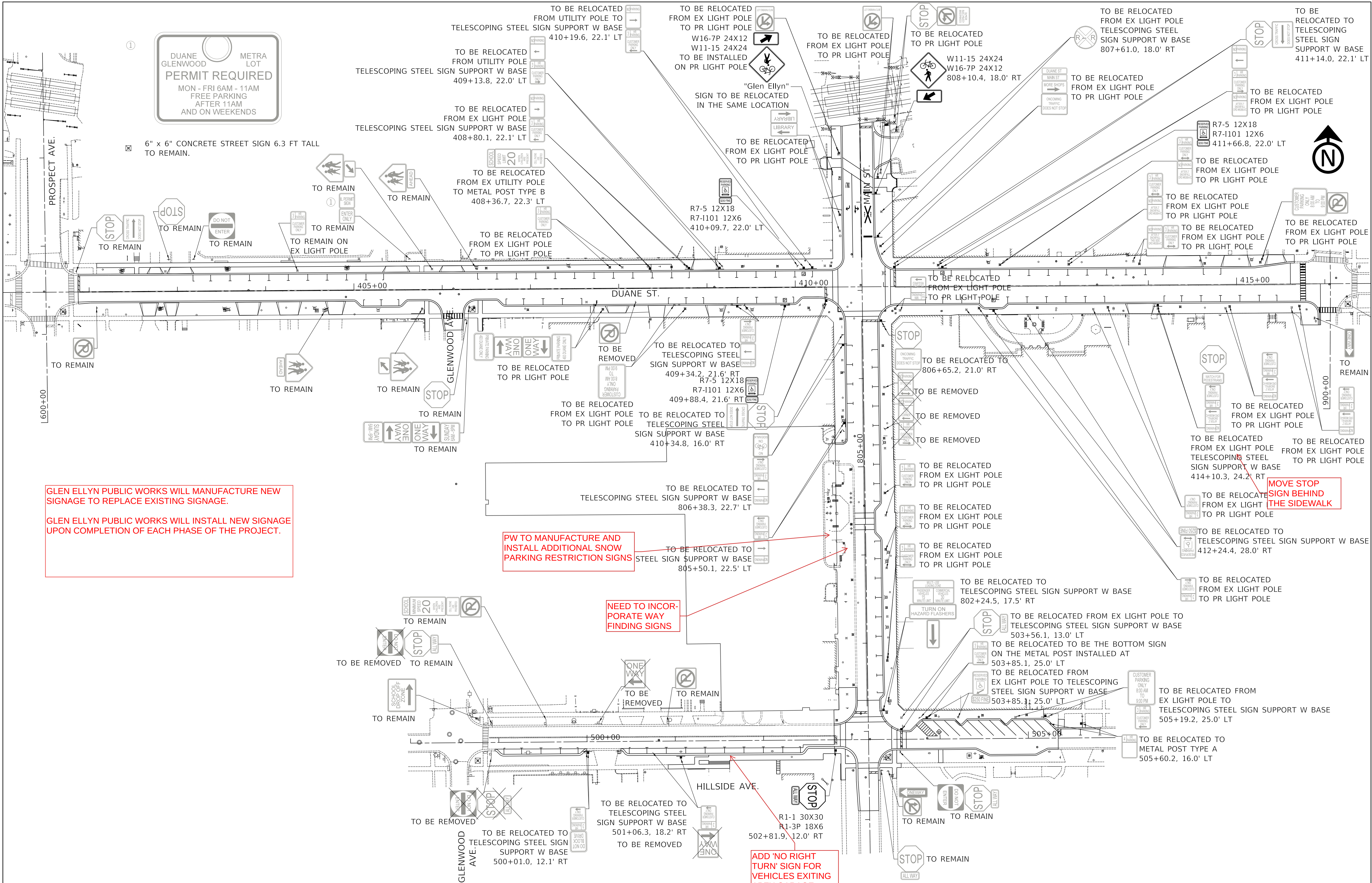
1. THE SIDE CURB ADJACENT TO SIDEWALK RAMPS SHALL BE INCLUDED IN THE MEASURED AREA FOR PAYMENT FOR "PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH." THE SIDE CURB SHALL BE IN ACCORDANCE WITH THE SIDE CURB DETAILS OF HIGHWAY STANDARDS 424001, 424011, & 424016.
2. LIMITS OF SIDE CURB SHOWN ON THE PLANS ARE ESTIMATED. ACTUAL LIMITS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ANY ADDITIONAL LENGTH OF SIDE CURB SHALL BE INCLUDED IN THE MEASURED AREA FOR PAYMENT FOR "PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH."

LEGEND

XXX.XX = PROPOSED SIDEWALK ELEVATION
(XXX.XX) = EXISTING SIDEWALK ELEVATION
XXX.XX(TC) = PROPOSED TOP OF CURB ELEVATION
X.XX% = PROPOSED SIDEWALK SLOPE
(X.XX%) = EXISTING SIDEWALK SLOPE



DETECTABLE WARNINGS



GLEN ELLYN PUBLIC WORKS WILL MANUFACTURE NEW SIGNAGE TO REPLACE EXISTING SIGNAGE.

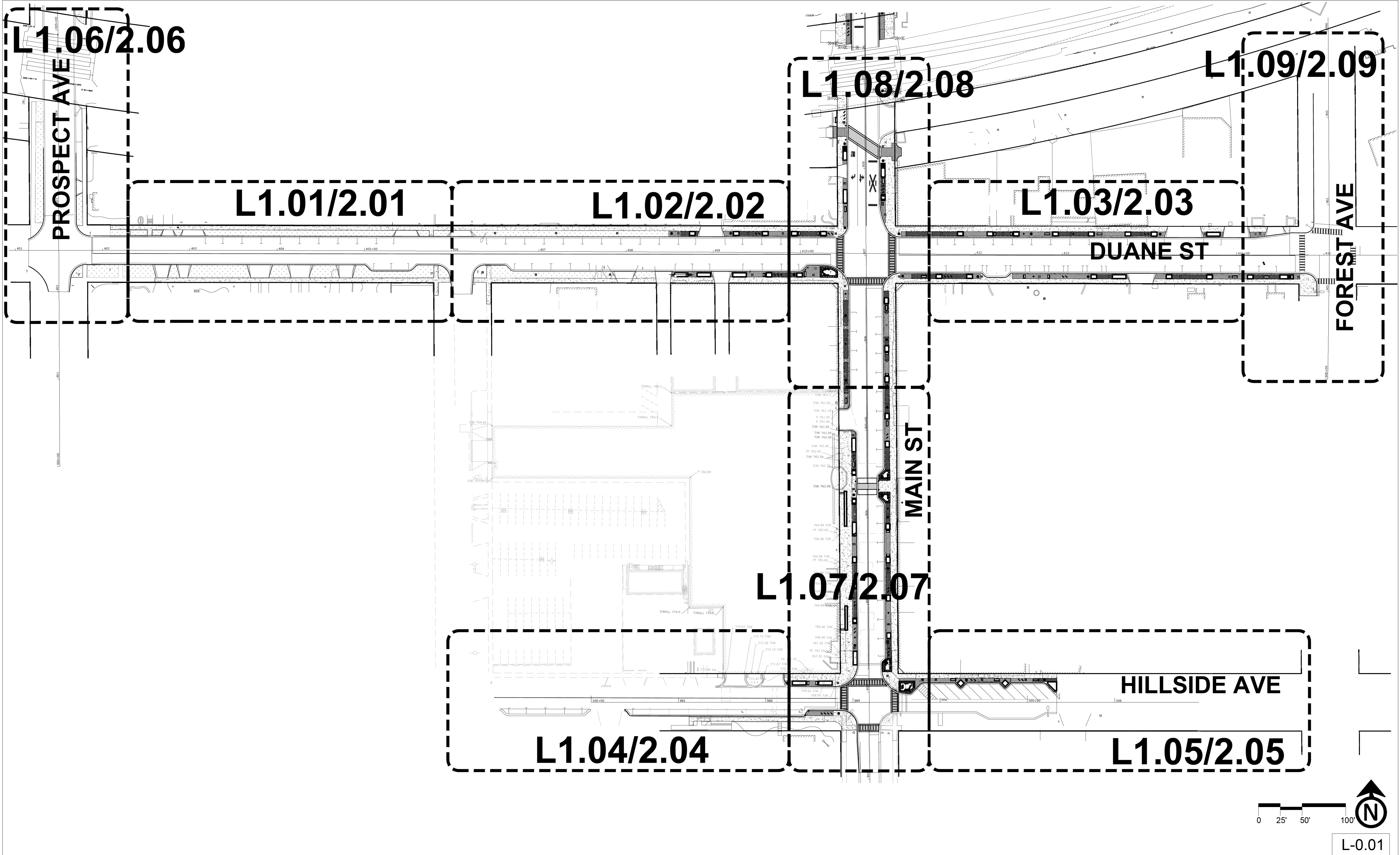
GLEN ELLYN PUBLIC WORKS WILL INSTALL NEW SIGNAGE UPON COMPLETION OF EACH PHASE OF THE PROJECT.

PW TO MANUFACTURE AND INSTALL ADDITIONAL SNOW PARKING RESTRICTION SIGNS

NEED TO INCORPORATE WAY FINDING SIGNS

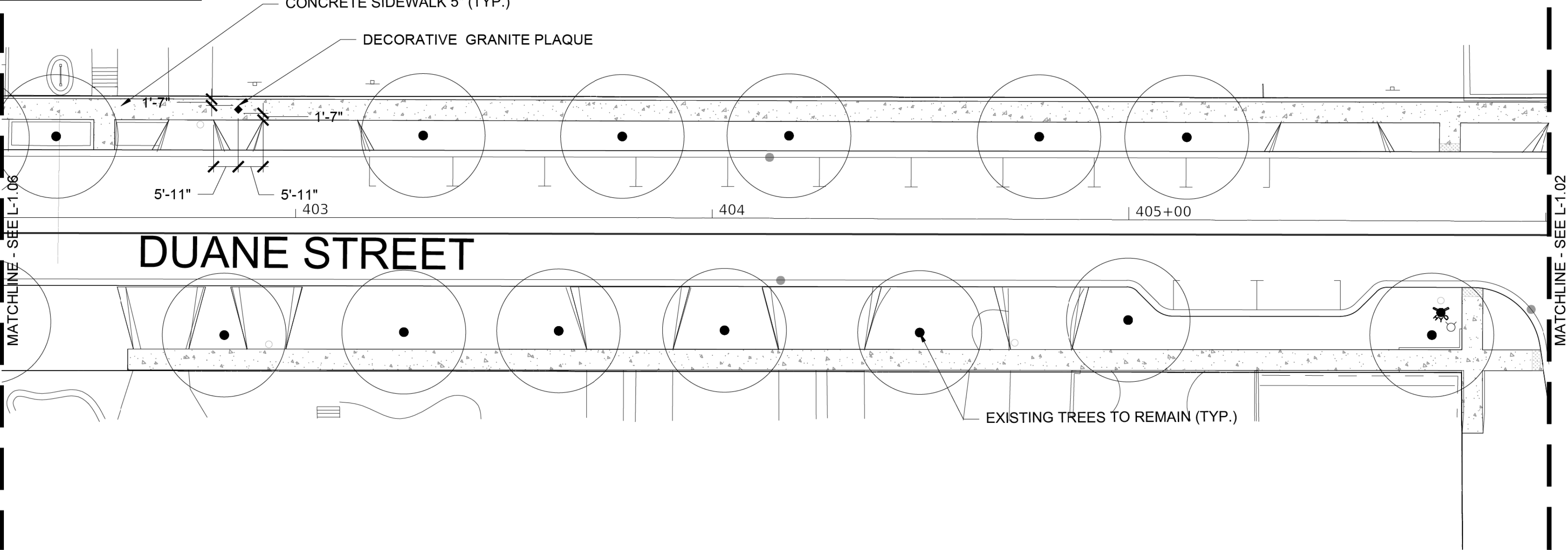
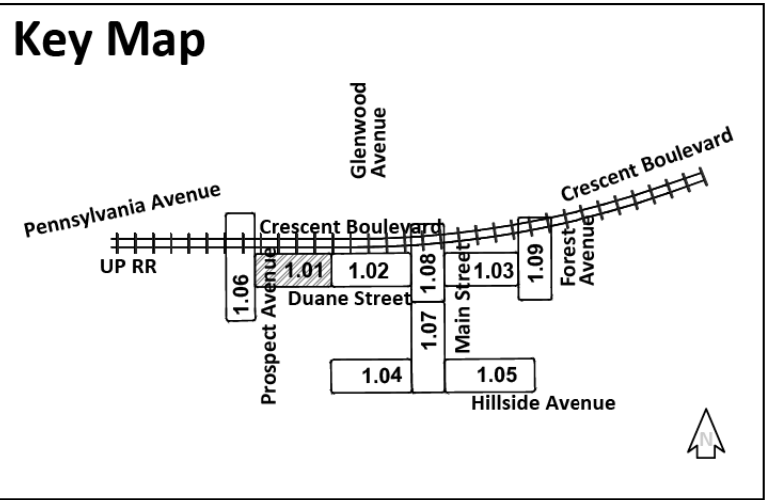
ADD 'NO RIGHT TURN' SIGN FOR VEHICLES EXITING APEX GARAGE

MOVE STOP SIGN BEHIND THE SIDEWALK

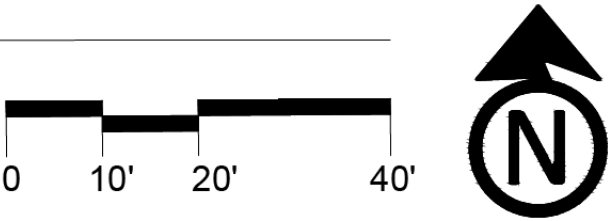


FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



LEGEND

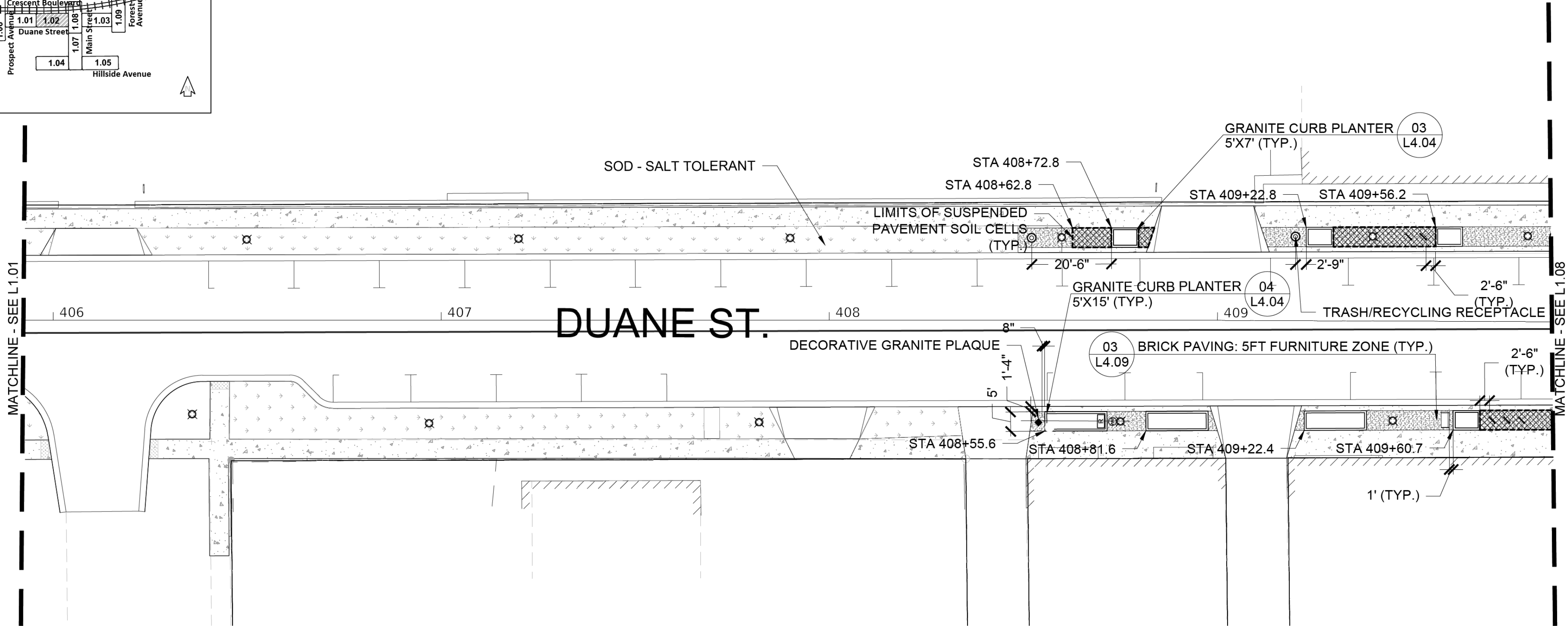
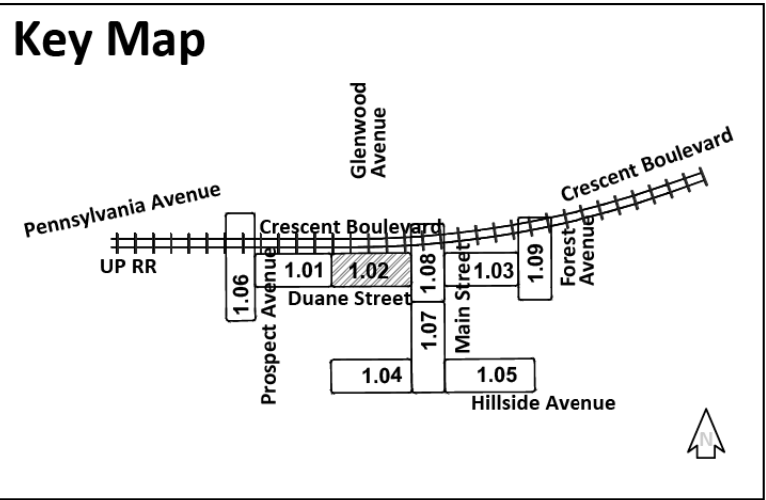
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-1.01

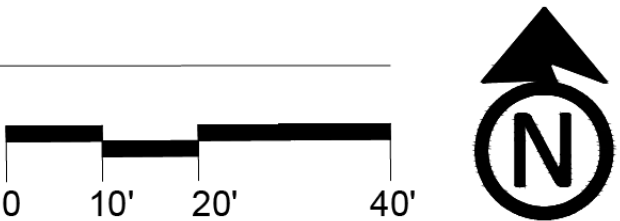
 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED — PJH	REVISED —	VILLAGE OF GLEN ELLYN		SITE MATERIALS LAYOUT PLAN DUANE STREET - WEST		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN — PJH, JDM	REVISED —					XXXX	XX-XXXX-XX-XX	DUPAGE	137	71
	CHECKED — KRK, JRR	REVISED —					CONTRACT NO. XXXXX				
	DATE —	REVISED —					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
		SHEET NO.	OF	SHEETS	STA.	TO	STA.				

FINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



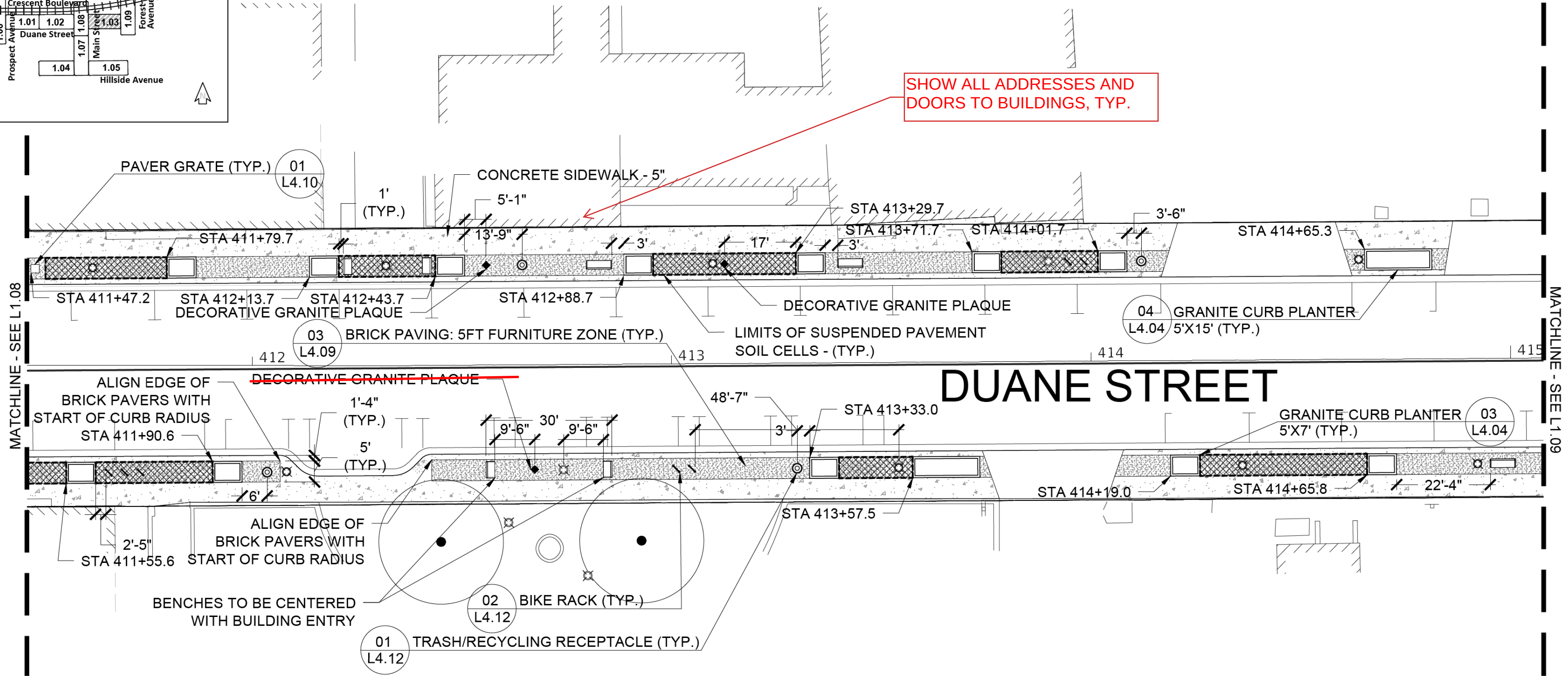
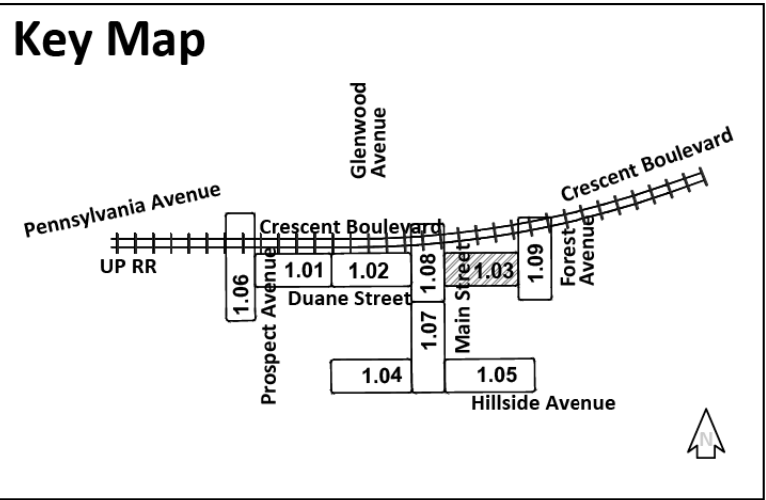
LEGEND

	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

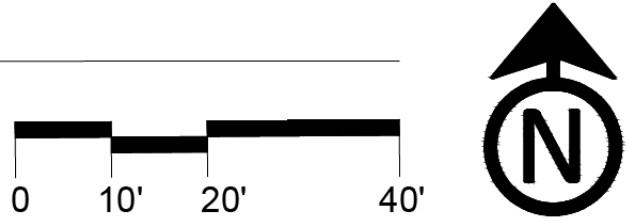
L-1.02

DATE	BY	SURVEYED	PLOTTED	NO.
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SURVEY		NO.	NO.	NO.
NOTE BOOK		NO.	NO.	NO.
AREAS CHECKED		NO.	NO.	NO.

DATE	BY	SURVEYED	PLOTTED	NO.
ORIGINAL		NO.	NO.	NO.
SURVEY		NO.	NO.	NO.
NOTE BOOK		NO.	NO.	NO.
AREAS CHECKED		NO.	NO.	NO.



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



LEGEND

	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-1.03



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DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, JRR	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

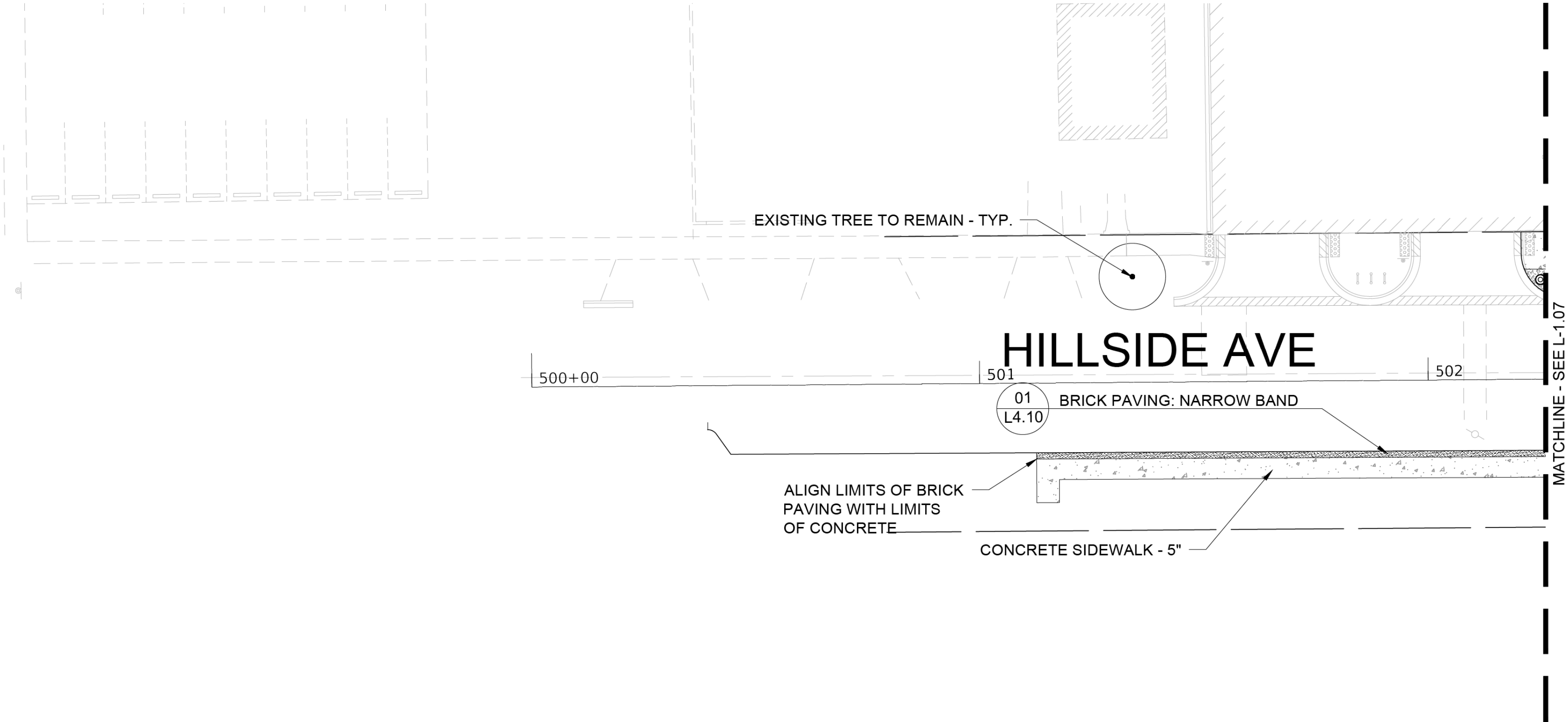
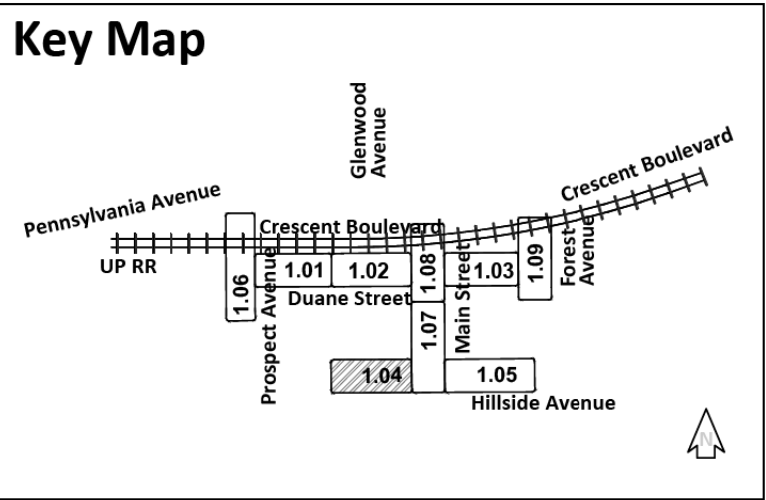
SITE MATERIALS LAYOUT PLAN DUANE STREET - EAST

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	73
CONTRACT NO. XXXXX				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"

LEGEND

	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-1.04



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DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, JRR	REVISED —
DATE —	REVISED —

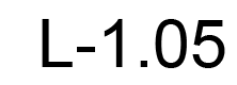
VILLAGE OF GLEN ELLYN

SITE MATERIALS LAYOUT PLAN HILLSIDE AVE - WEST

SITE MATERIALS LAYOUT PLAN HILLSIDE AVE - WEST					F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
					XXXX	XX-XXXX-XX-XX		DUPAGE	137	74
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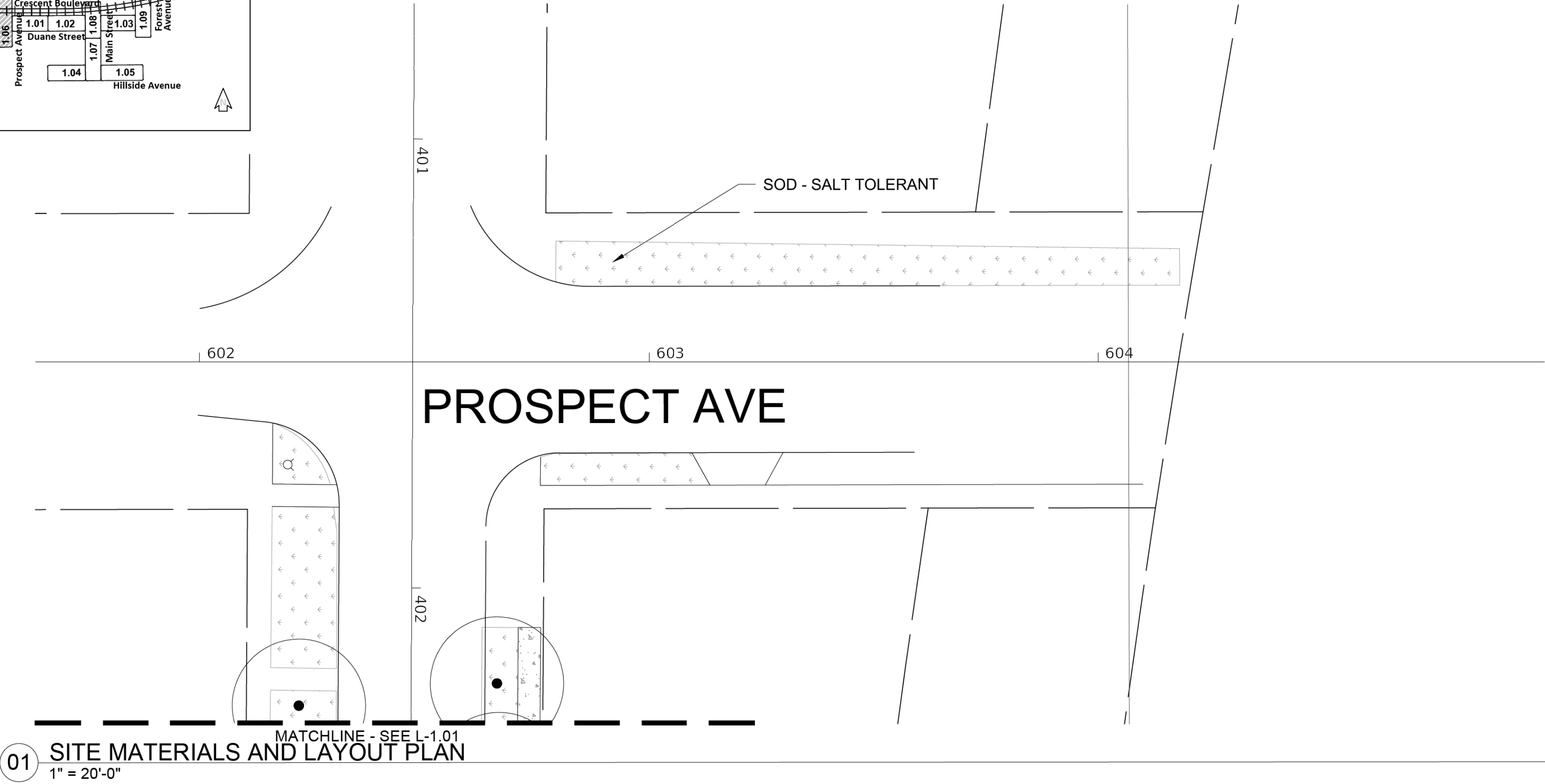
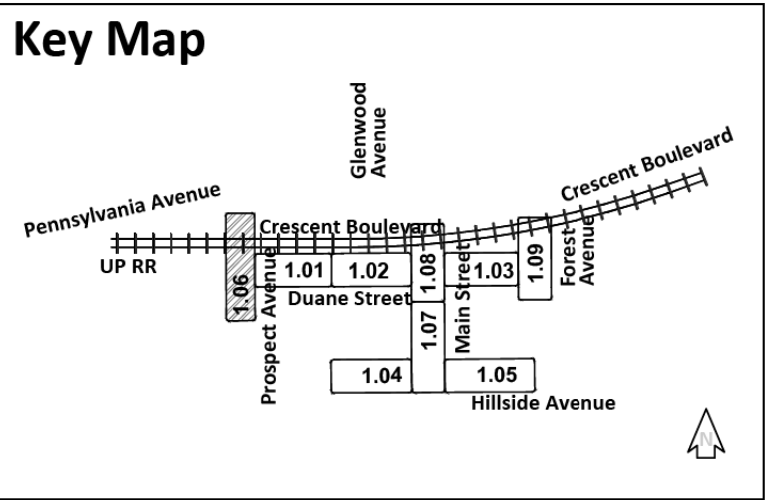
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Two Pierce Place, Suite 1400
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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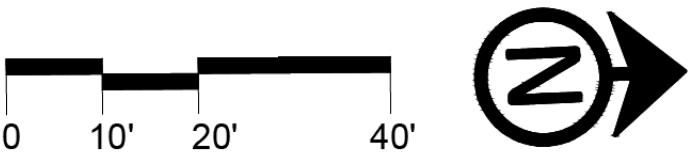
VILLAGE OF GLEN ELLYNPage 223 of 563

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



LEGEND

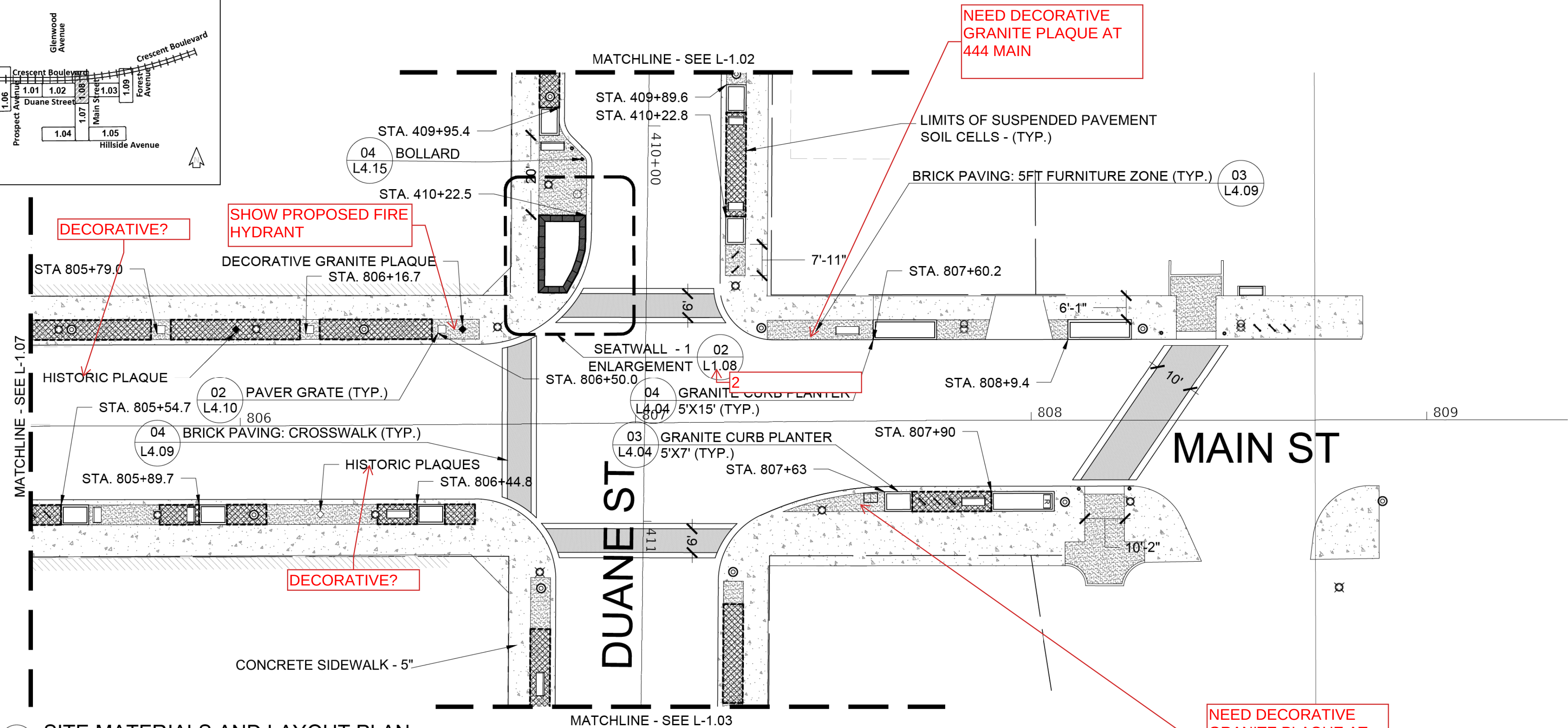
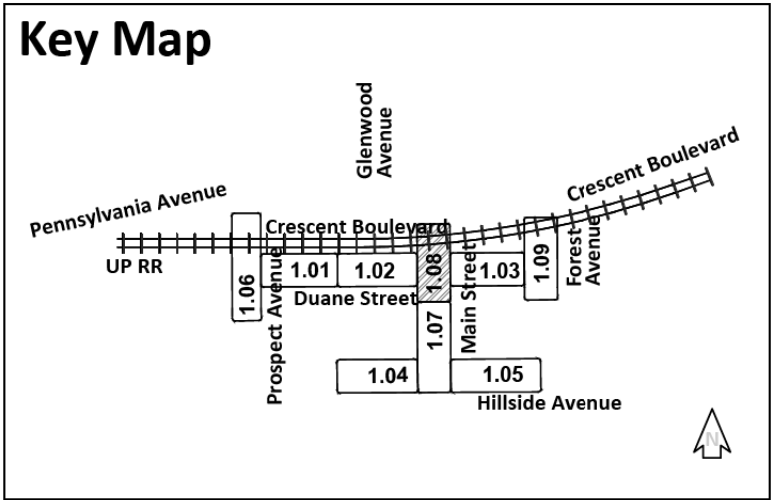
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-1.06

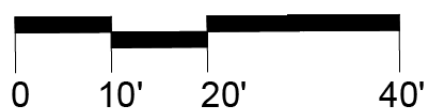
ORIGINAL		BY	DATE
SURVEY			
PLOTTED			
TEMPLATE			
AREAS			
AREAS CHECKED			
NO.			

DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS CHECKED
FINAL		SURVEY	NOTE BOOK		

DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS CHECKED
ORIGINAL		SURVEY	NOTE BOOK		

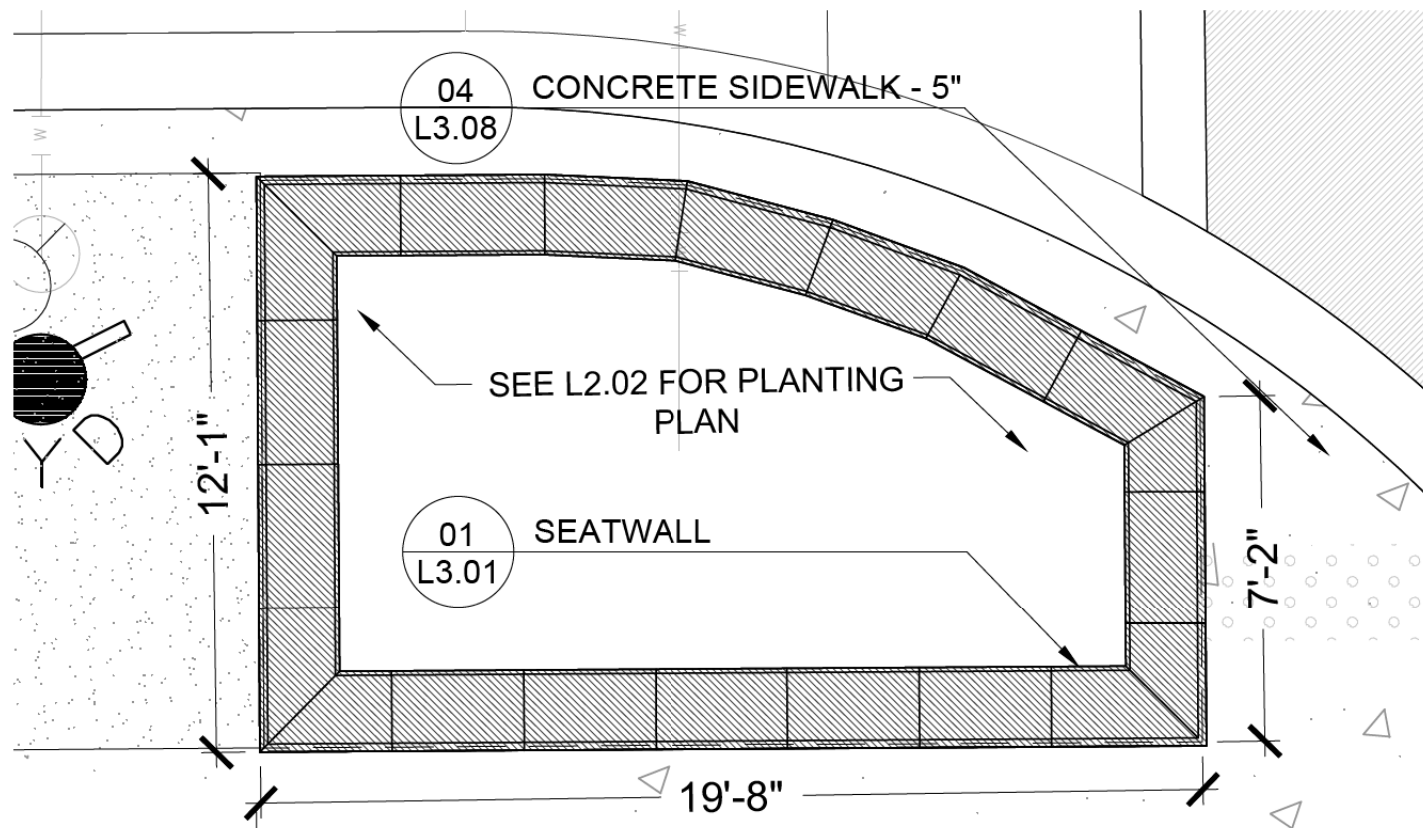


01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



LEGEND

	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE



03 SEAT WALL 1 - LAYOUT ENLARGEMENT
1/4" = 1'-0"

NOTE: SEE L3.03 FOR DETAILED LAYOUT OF LIMESTONE CAP.

L-1.08



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DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, JRR	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

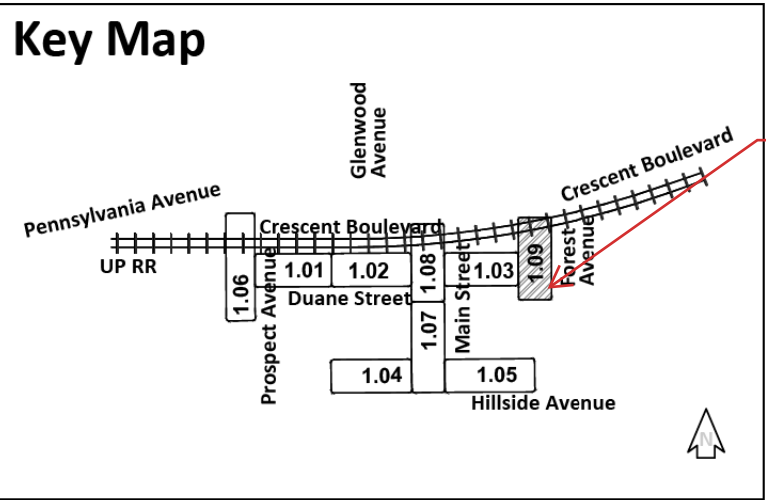
SITE MATERIALS LAYOUT PLAN
MAIN ST - NORTH

SHEET NO. OF SHEETS STA. TO STA.

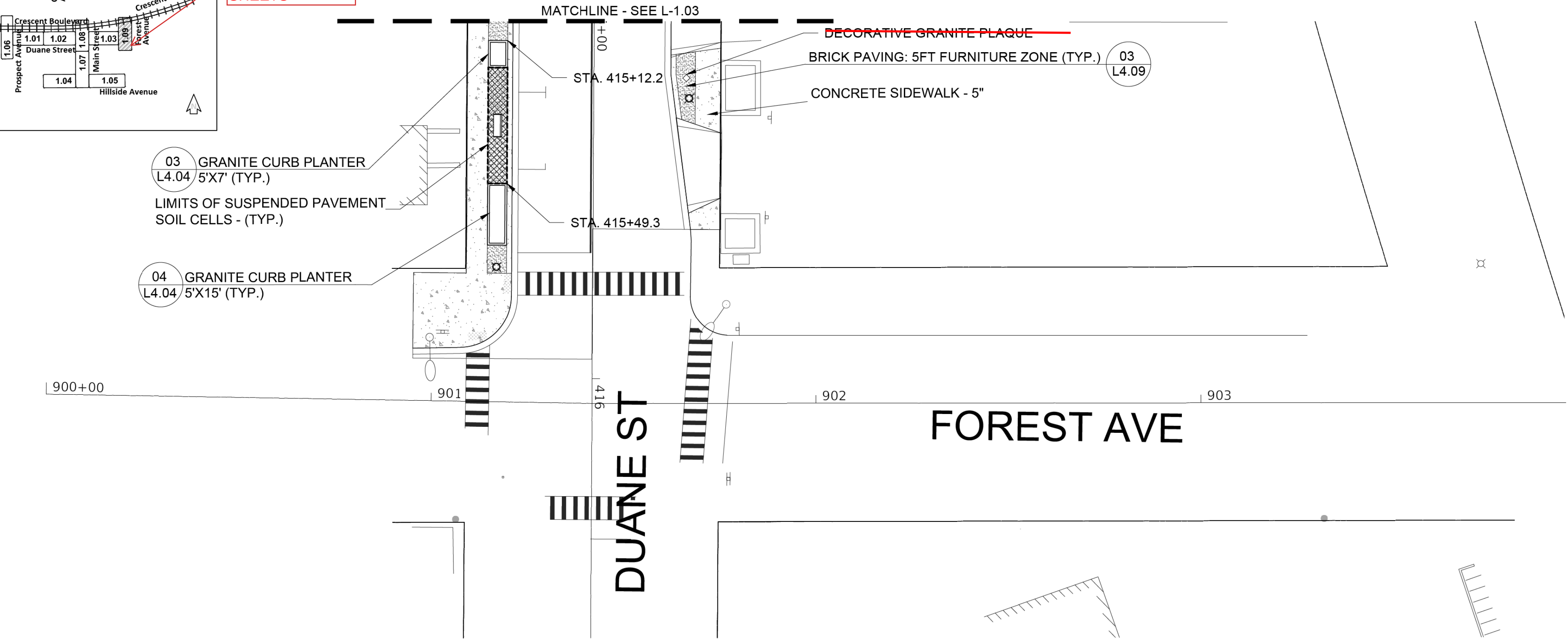
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	78
				CONTRACT NO. XXXXX
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

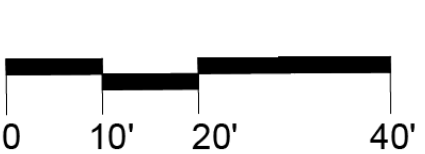
ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



2.09 TYP. ALL SHEETS



01 SITE MATERIALS AND LAYOUT PLAN
1" = 20'-0"



LEGEND

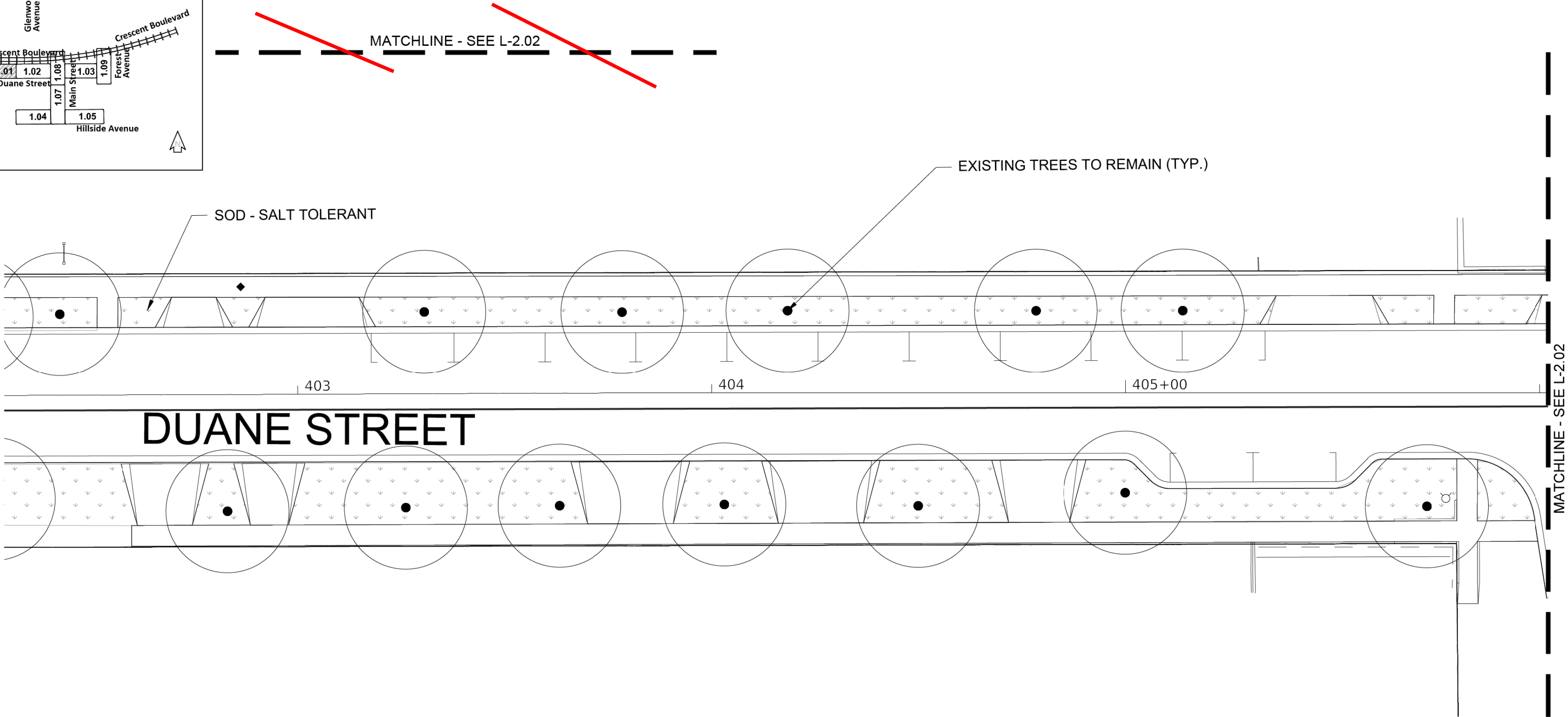
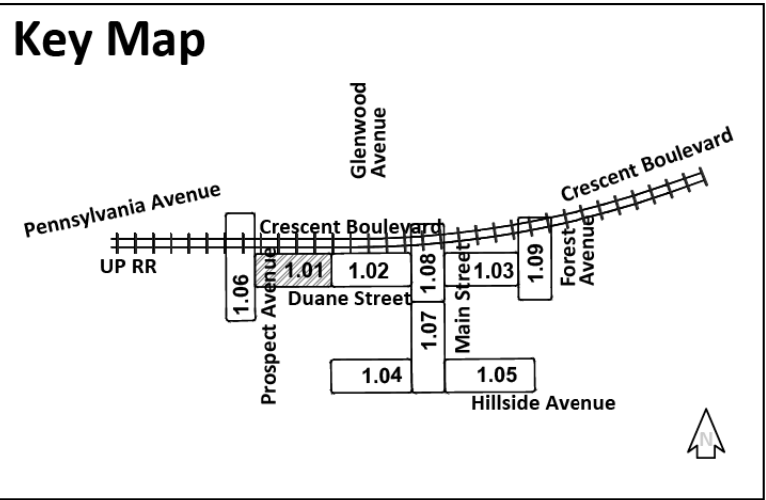
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ WITHIN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-1.09

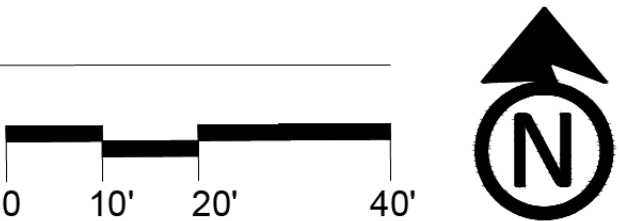
 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED — PJH	REVISED —	VILLAGE OF GLEN ELLYN	SITE MATERIALS LAYOUT PLAN FOREST AVE	F.A.U. SECTION COUNTY TOTAL SHEETS SHEET NO. RTE.				
	DRAWN — PJH, JDM	REVISED —			XXXX	XX-XXXX-XX-XX	DUPAGE	137	79
	CHECKED — KRK, JRR	REVISED —			CONTRACT NO. XXXXX				
	DATE —	REVISED —			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
					SHEET NO.	OF	SHEETS	STA.	TO

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE PLANTING PLAN
1" = 20'-0"



LEGEND

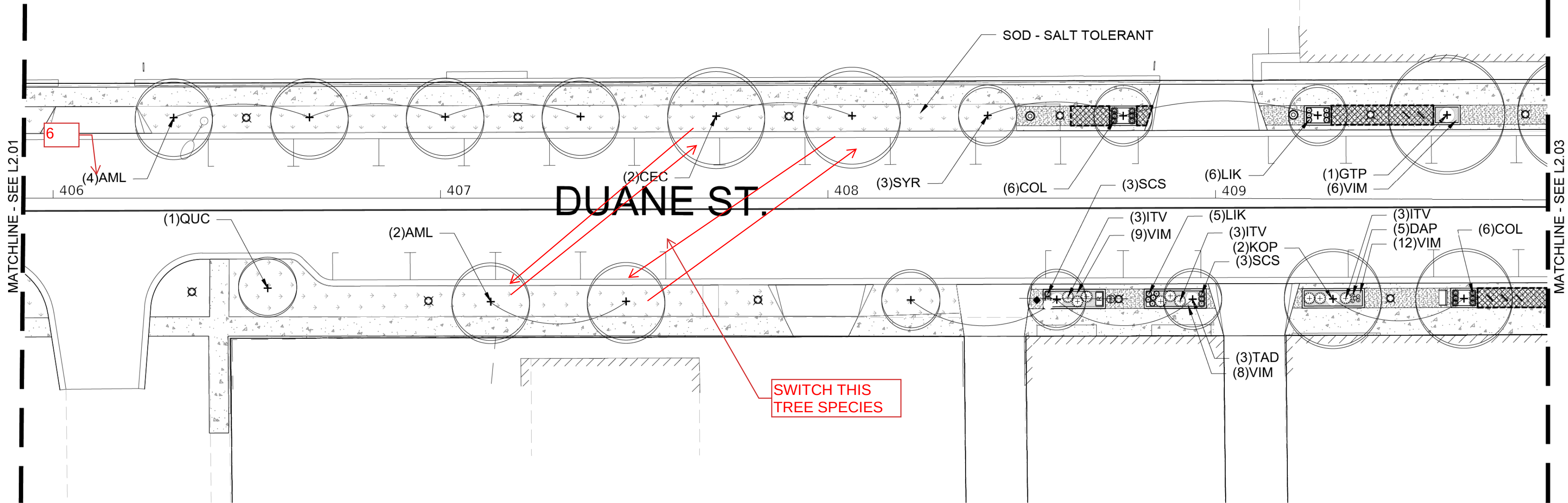
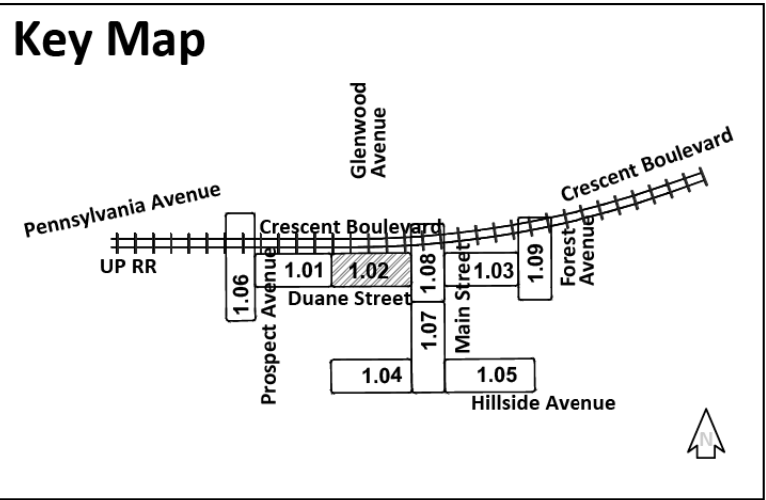
	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.01

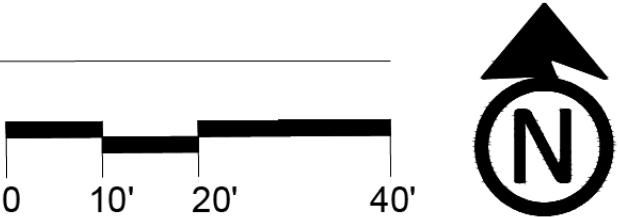
 CIVILTECH	Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED — PJH	REVISED —	VILLAGE OF GLEN ELLYN	SITE MATERIALS PLANTING PLAN DUANE - WEST	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN — PJH, JDM	REVISED —			XXXX	XX-XXXX-XX-XX	DUPAGE	137	80
		CHECKED — KRK, JRR	REVISED —			CONTRACT NO. XXXXX				
		DATE —	REVISED —			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
						SHEET NO.	OF	SHEETS	STA.	TO STA.

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
--	--	----	------



01 SITE PLANTING PLAN
1" = 20'-0"



LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

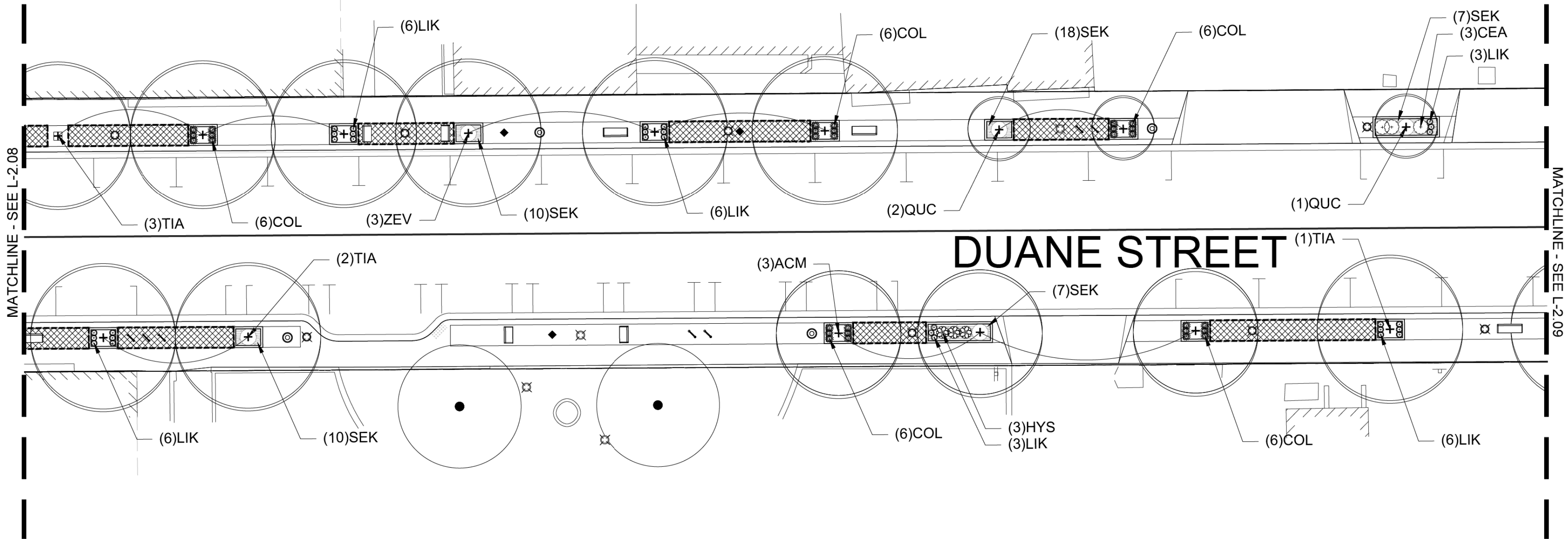
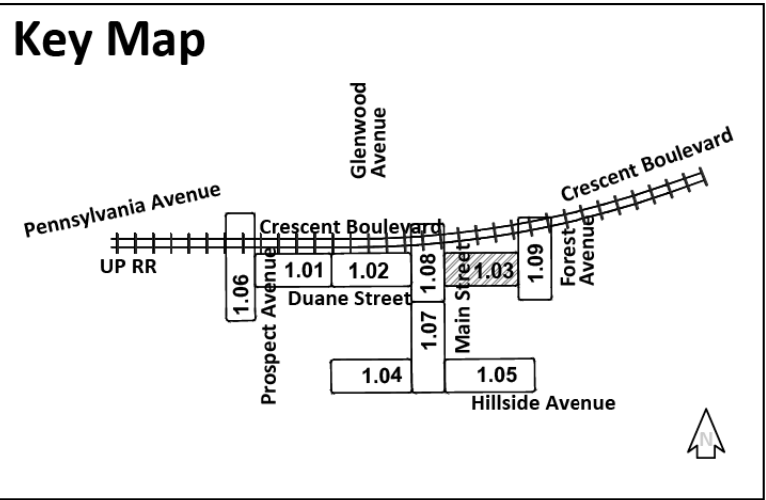
L-2.02 PLANT LIST

Code	Quantity	Latin Name	Common Name	Size	Spacing	Comments
Trees						
AML	6	Amelanchier laevis	Allegheny Serviceberry	4" CAL.		
CEC	2	Cercis canadensis	Eastern Redbud	4" CAL.		
GTP	1	Gleditsia triacanthos 'Perfection'	Perfection Honeylocust	4" CAL.		
KOP	2	Koeleruteria paniculata	Golden Raintree	4" CAL.		
QUC	1	Quercus alba x robur 'Crimschmidt'	Crimson Spire Oaks	4" CAL.		
SYR	3	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	4" CAL.		
TAD	3	Taxodium distichum 'Mickelson' SHAWNEE BRAVE	Shawnee Brave Baldcypress	4" CAL.		
Shrubs						
ITV	9	Itea virginia 'Little Henry'	Little Henry Sweetspire	#3		
Perennials						
COL	12	Coreopsis lanceolata	Lance-leaved Coreopsis	#1		
DAP	5	Dalea purpurea	Purple Prairie Clover	#1		
UK	11	Liatris spicata 'Kobold'	Kobold Gayfeather	#1		
Ornamental Grasses						
SCS	6	Schyzachyrium scoparium	Little Bluestem	#1		
Groundcovers						
VIM	35	Vinca minor	Periwinkle	4" Pot	18" O.C.	10 Flat

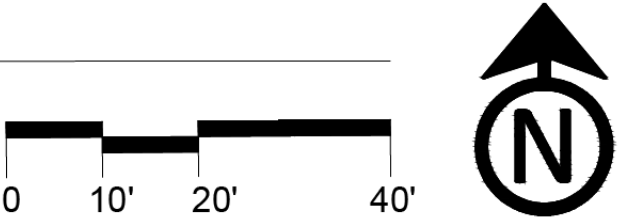
L-2.02

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



01 SITE PLANTING PLAN
1" = 20'-0"



LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.03 PLANT LIST						
Code	Quantity	Latin Name	Common Name	Size	Spacing	Comments
Trees						
ACM	3	Acer miyabei 'Morton' STATE STREET	State Street Maple	4"		
QUC	3	Quercus alba x robur 'Crimschmidt'	Crimson Spire Oaks	4"		
TIA	6	Tilia americana 'Redmond'	Redmond American Linden	4"		
ZEV	3	Zelkova serrata 'Village Green'	Village Green Zelkova	4"		
Shrubs						
CEA	3	Ceanothus americanus	New Jersey Tea	#3		
HYS	3	Hydrangea serrata SMNMAKTSR	Tuff Stuff Red Mountain Hydrangea	#3		
Perennials						
COL	30	Coreopsis lanceolata	Lance-leaved Coreopsis	#1		
LIK	30	Liatris spicata 'Kobold'	Kobold Gayfeather	#1		
Groundcovers						
SEK	52	Sedum kamtschaticum	Russian Stonecrop	4" Pot	10" O.C.	24 Flat

L-2.03



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DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, JRR	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

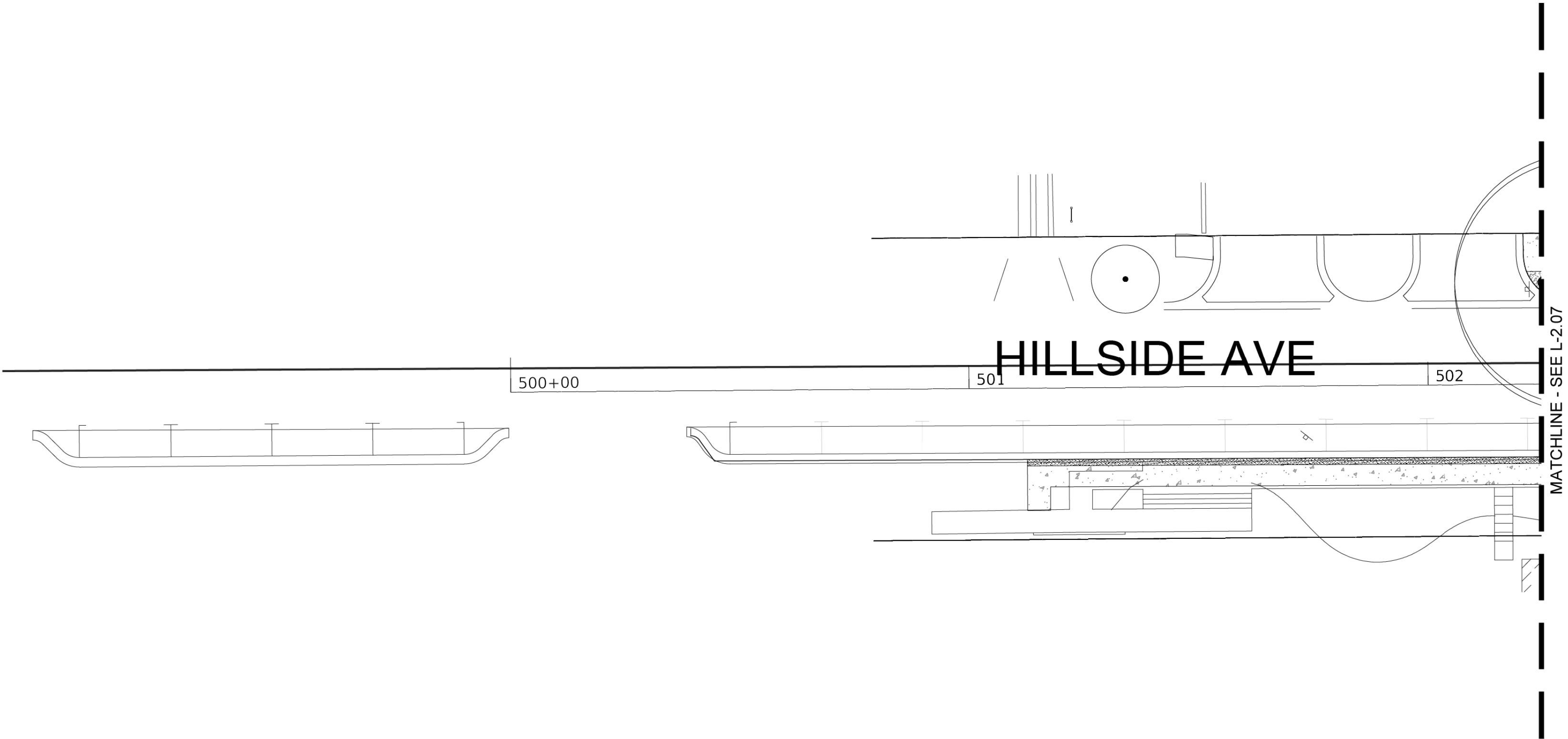
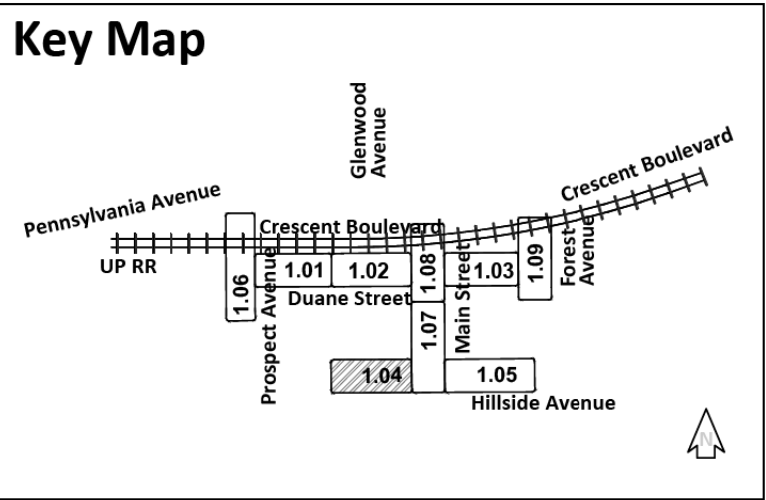
SITE MATERIALS PLANTING PLAN DUANE - EAST

SHEET NO. OF SHEETS STA. TO STA.

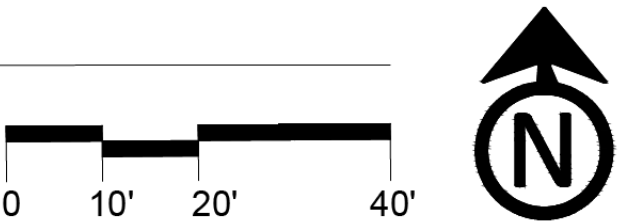
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXXX-XX-XX	DUPAGE	137	82
FED. ROAD DIST. NO. 1				ILLINOIS
FED. AID PROJECT				CONTRACT NO. XXXXX

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE PLANTING PLAN
1" = 20'-0"



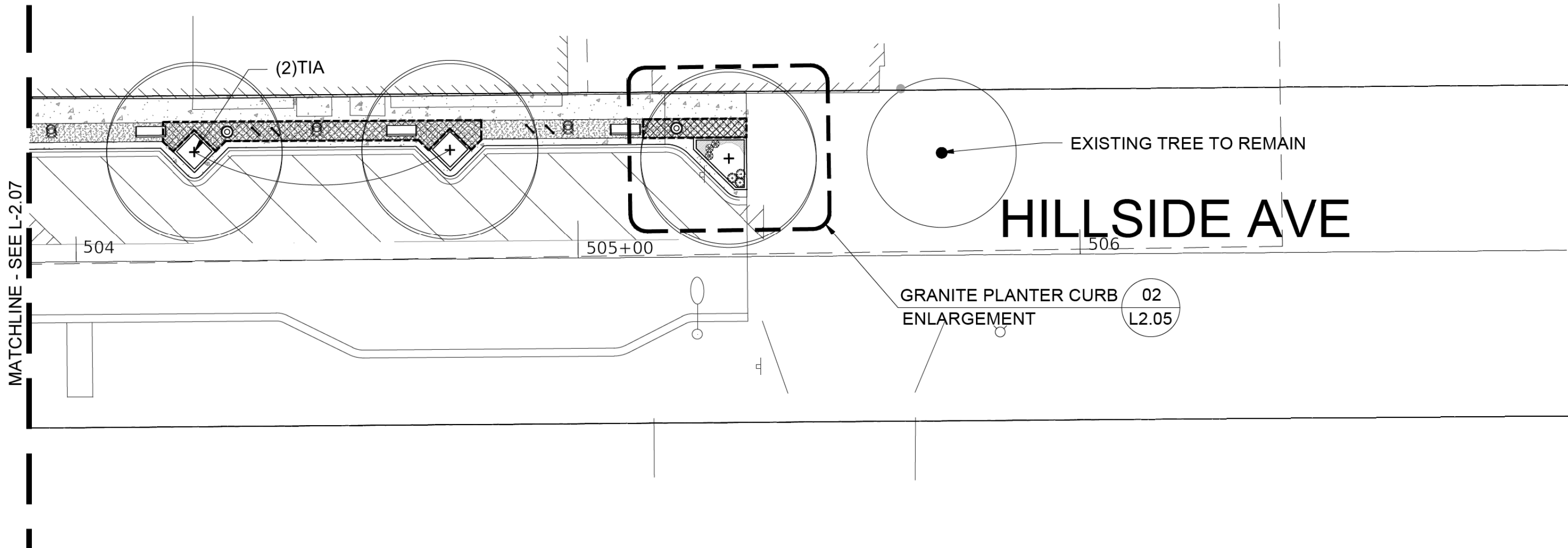
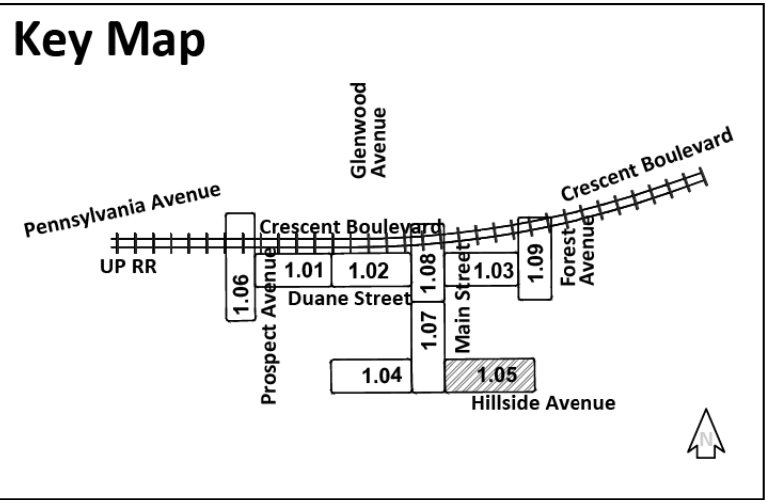
LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.04

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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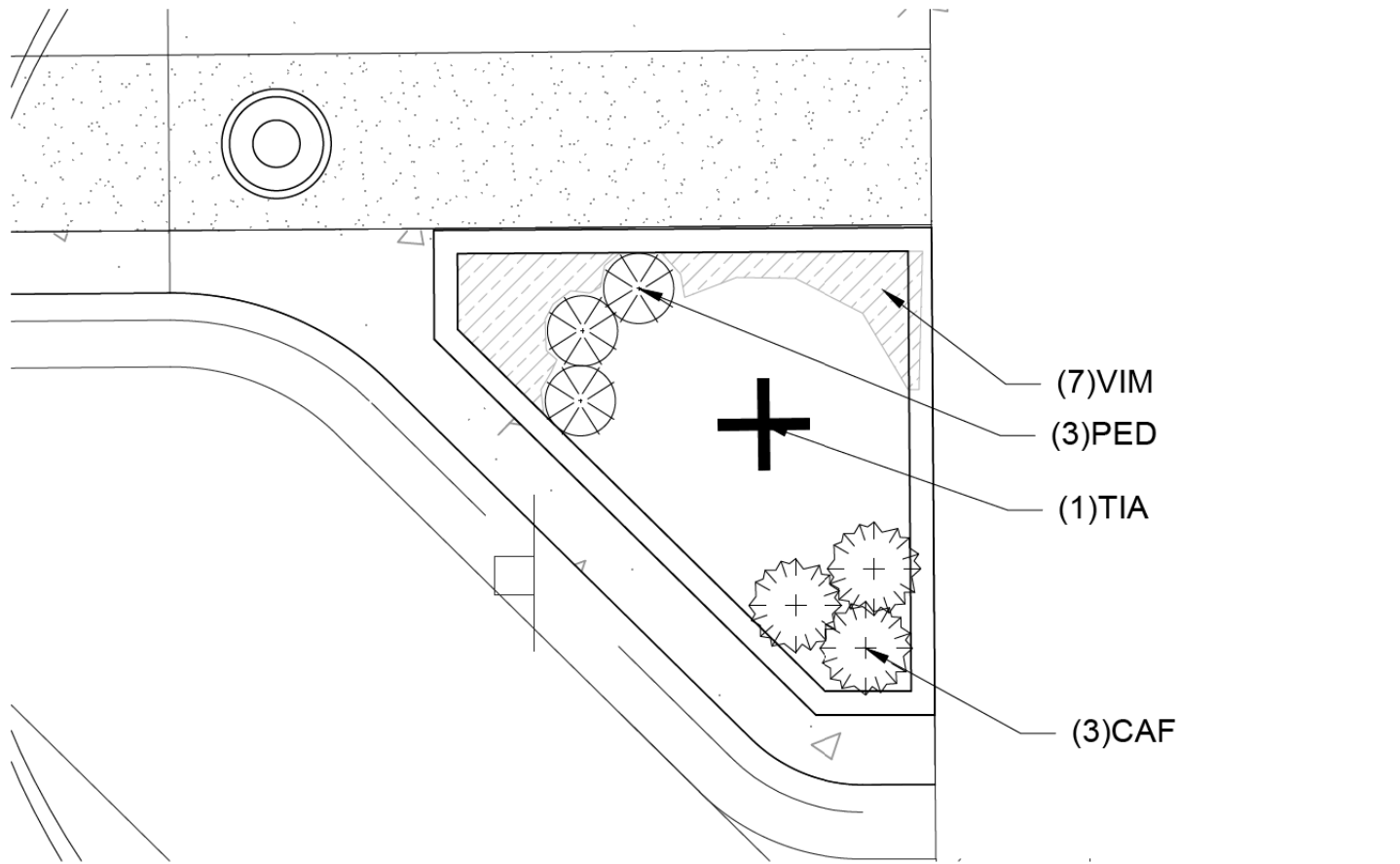
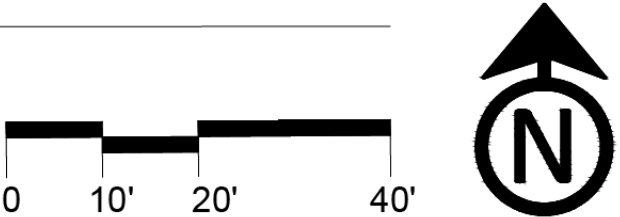


01 SITE PLANTING PLAN
1" = 20'-0"

LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.05 PLANT LIST						
Code	Quantity	Latin Name	Common Name	Size	Spacing	Comments
Trees						
TIA	3	Tilia americana 'Redmond'	Redmond American Linden	4" CAL		
Perennials						
PED	3	Penstemon digitalis	Beardtongue	#1		
Ornamental Grasses						
CAF	3	Carex flacca	Blue Sedge	10 Flat		
Groundcovers						
VIM	7	Vinca minor	Periwinkle	4" Pot	18" O.C.	10 Flat

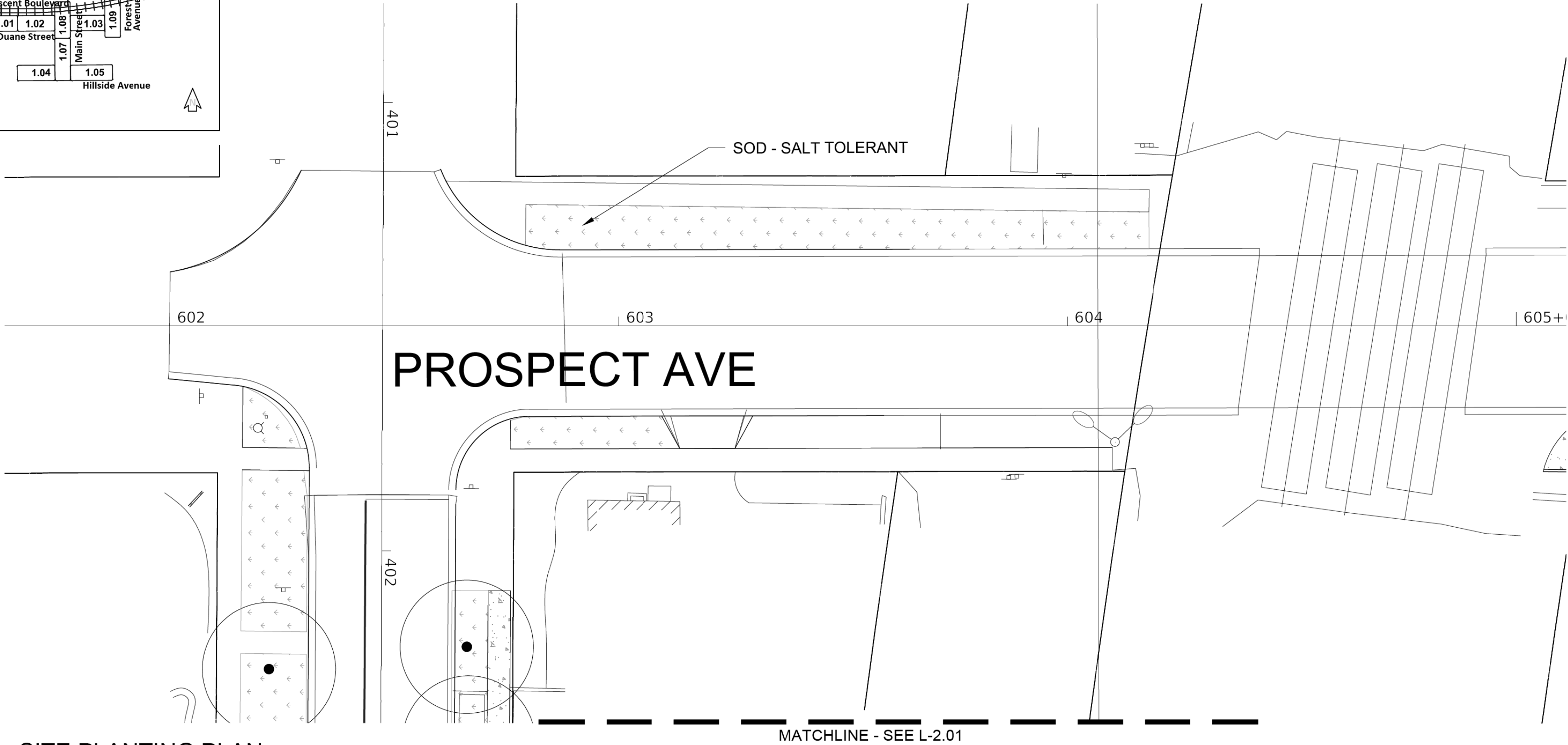
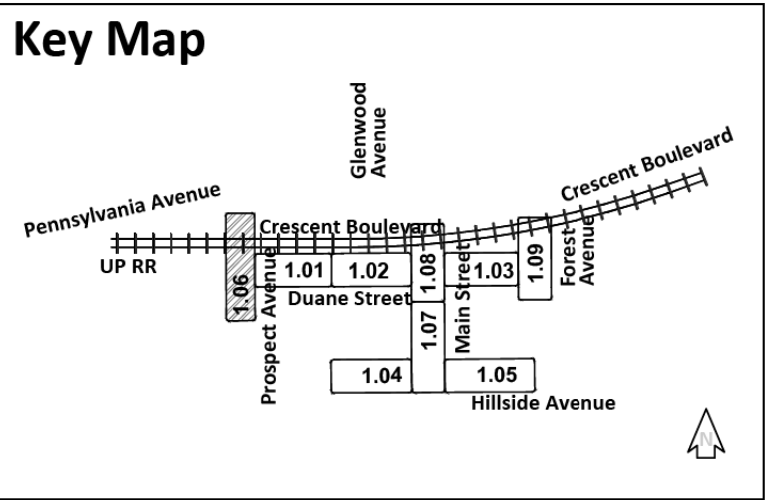


02 GRANITE PLANTER CURB PLANTING ENLARGEMENT
1/4" = 1'-0"

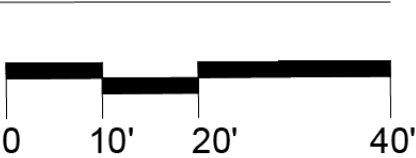
L-2.05

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE PLANTING PLAN
1" = 20'-0"



LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.06

 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED — PJH	REVISED —	VILLAGE OF GLEN ELLYN	SITE MATERIALS PLANTING PLAN PROSPECT	F.A.U. SECTION COUNTY TOTAL SHEETS SHEET NO. RTE.				
	DRAWN — PJH, JDM	REVISED —			XXXX	XX-XXXX-XX-XX	DUPAGE	137	85
	CHECKED — KRK, JRR	REVISED —			CONTRACT NO. XXXXX				
	DATE —	REVISED —			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
	SHEET NO. OF SHEETS STA. TO STA.								

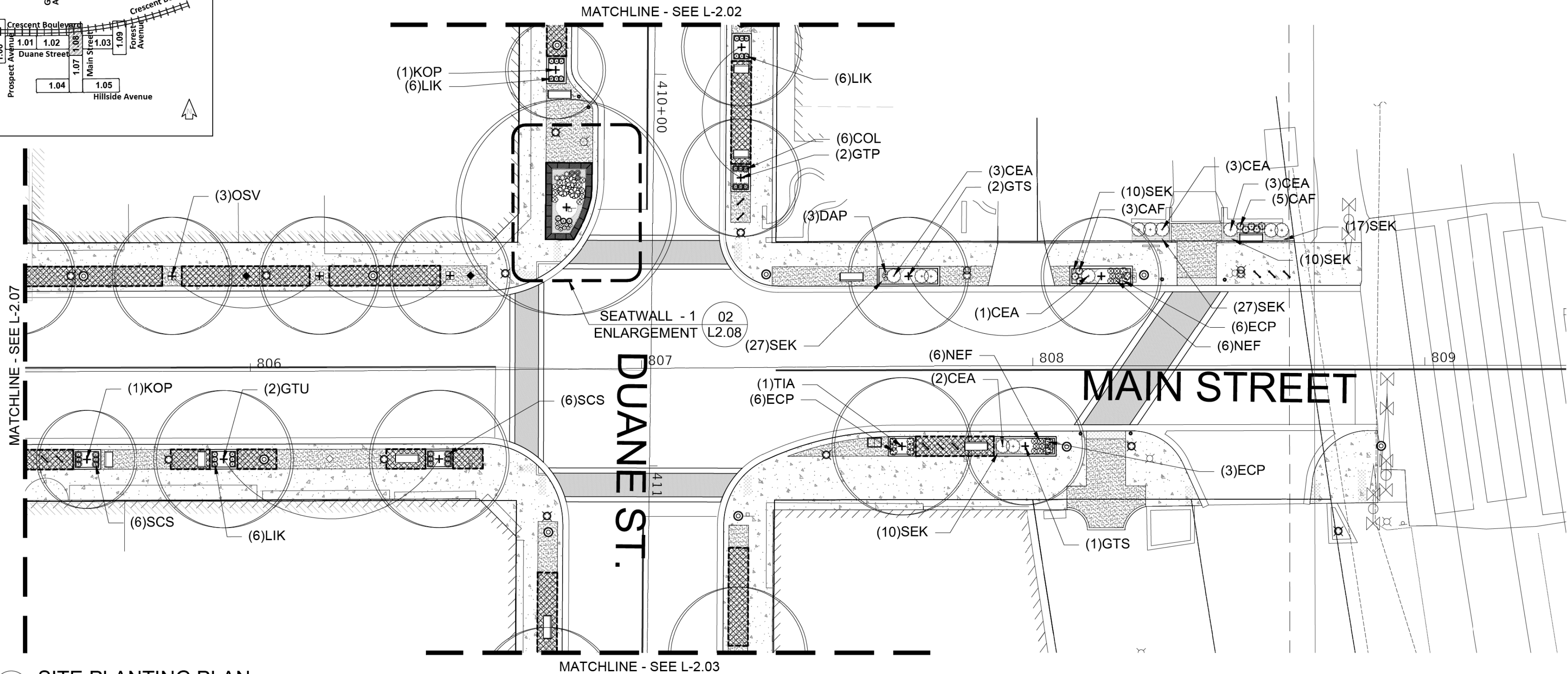
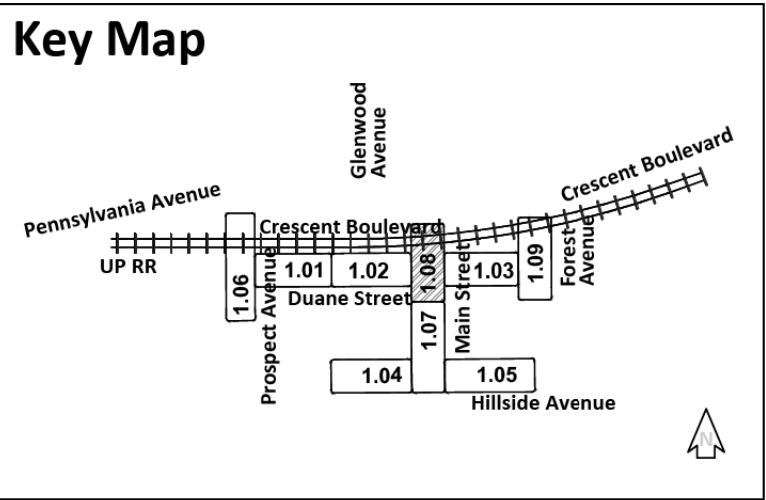
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L-2.07

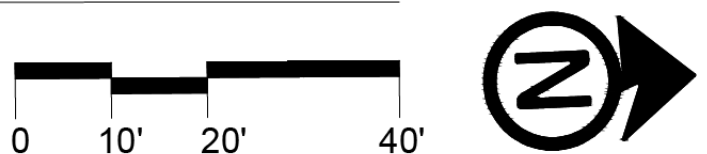
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		CONTRACT NO. XXXXX		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE	NO.

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE	NO.



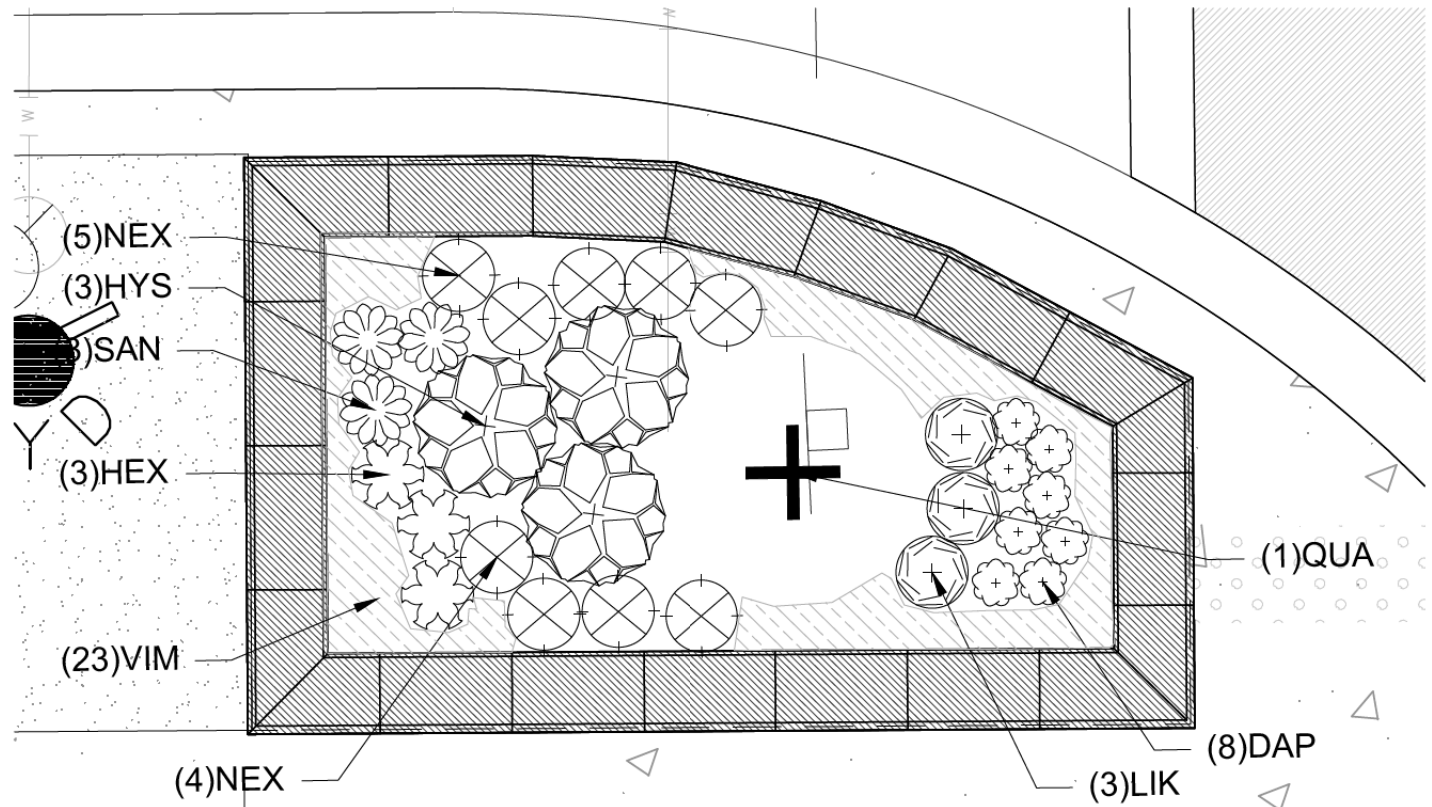
01 SITE PLANTING PLAN
1" = 20'-0"



LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.08 PLANT LIST						
Code	Quantity	Latin Name	Common Name	Size	Spacing	Comments
Trees						
GTP	2	Gleditsia triacanthos 'Perfection'	Perfection Honeylocust	4"		
GTS	3	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	4"		
GTU	2	Gleditsia triacanthos 'Sunburst'	Sunburst Honeylocust	4"		
KOP	2	Koelreuteria paniculata	Golden Raintree	4"		
OSV	3	Ostrya virginiana	American Hophornbeam	4"		
TIA	1	Tilia americana 'Redmond'	Redmond American Linden	4"		
QUA	1	Quercus alba	White Oak	8"		108" Max. Rootball
Shrubs						
CEA	12	Ceanothus americanus	New Jersey Tea	#3		3' Tall
HYS	3	Hydrangea serrata 'Tuff Stuff Red Mountain'	Tuff Stuff Red Mountain Hydrangea	#5		
Perennials						
COL	6	Coreopsis lanceolata	Lance-leaved Coreopsis	#1		
DAP	11	Dalea purpurea	Purple Prairie Clover	#1		
ECP	12	Echinacea purpurea	Purple Coneflower	#1		
HEX	3	Heuchera x villosa 'Carnival Watermelon'	Carnival Watermelon Heuchera	#1		
LK	21	Liatris spicata 'Kobold'	Kobold Gayfeather	#1		
NEX	21	Nepeta x faassenii 'Kit Kat'	Kit Kat Catmint	#1		
SAN	3	Salvia nemerosa 'Blue Hill'	Blue Hill Sage	#1		
Ornamental Grasses						
CAF	8	Carex flacca	Blue Sedge	4" Pot		10 Flat
SCS	12	Schyzachyrium scoparium	Little Bluestem	#1		
Groundcovers						
SEK	101	Sedum kamtschaticum	Russian Stonecrop	4" Pot	10" O.C.	24 Flat
VIM	23	Vinca minor	Periwinkle	4" Pot	18" O.C.	10 Flat



02 SEAT WALL 1 - PLANTING ENLARGEMENT
3/4" = 1'-0"

L-2.08



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www.civiltechinc.com

DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, JRR	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

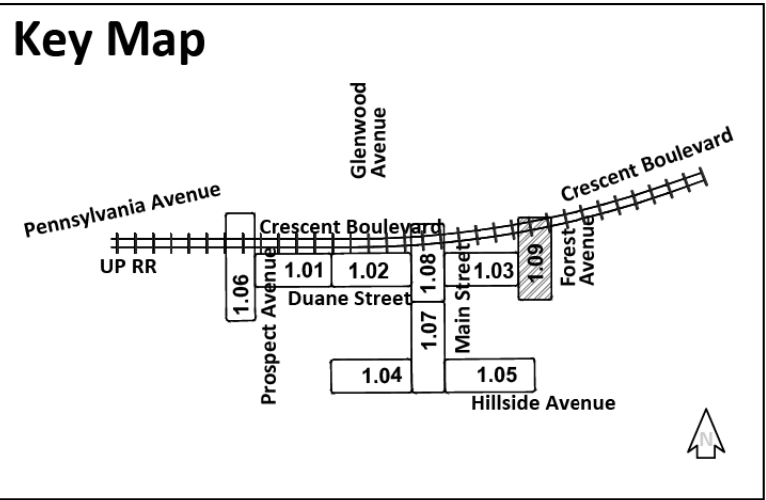
SITE MATERIALS PLANTING PLAN MAIN ST - NORTH

SHEET NO. OF SHEETS STA. TO STA.

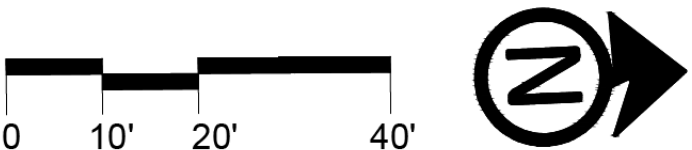
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	87
CONTRACT NO. XXXXX				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



01 SITE PLANTING PLAN
1" = 20'-0"

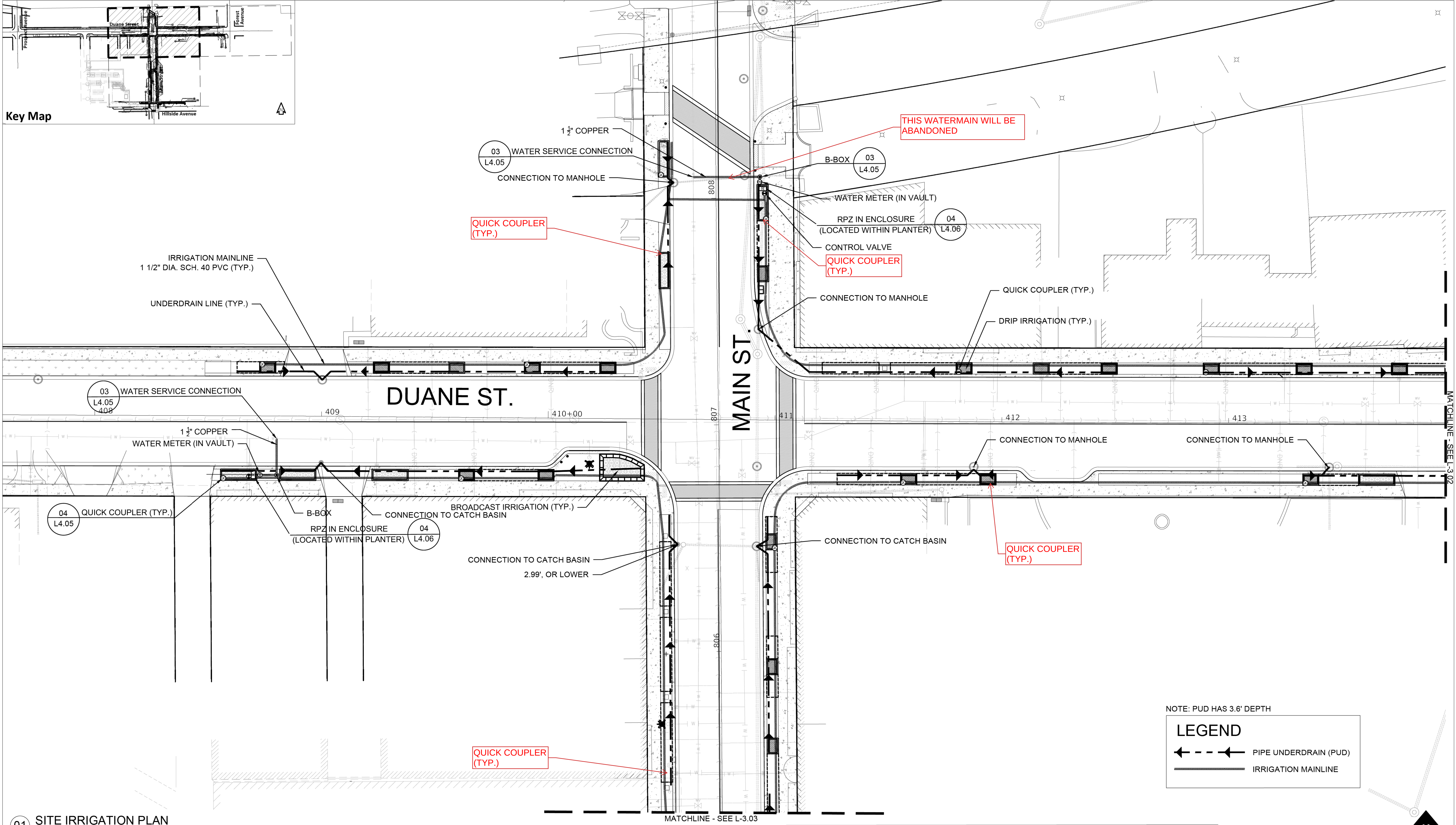
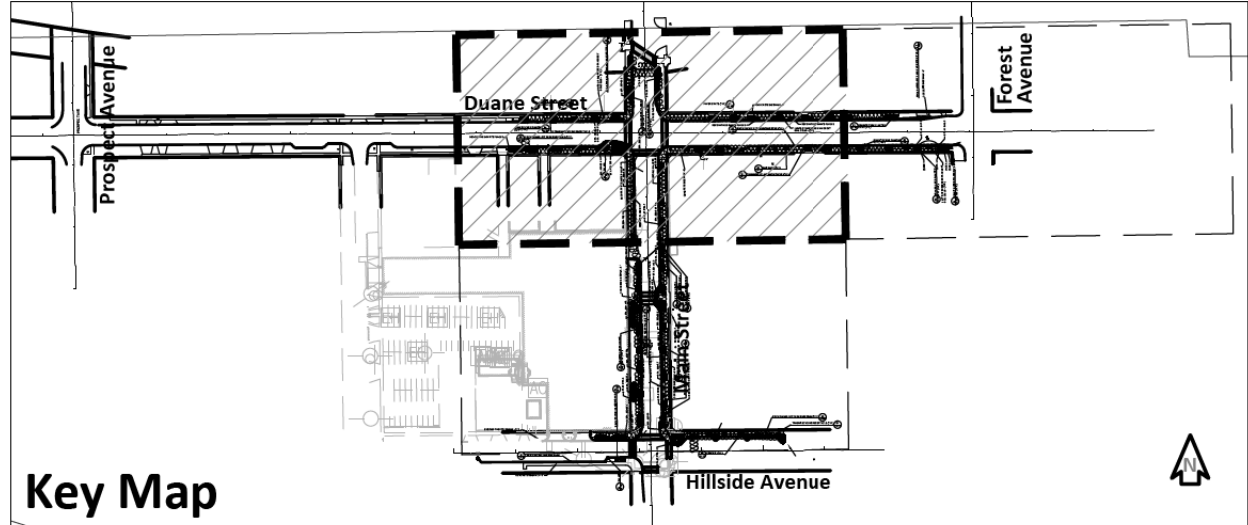


LEGEND

	EXISTING TREE TO REMAIN
	PROPOSED TREE
	CONCRETE SIDEWALK
	BRICK PAVING
	LIMITS OF SOIL CELLS
	STREET LIGHT
	BIKE RACKS
	4' AND 6' BENCHES
	BOLLARD
	TRASH/RECYCLING RECEPTACLES
	RPZ IN ENCLOSURE
	DECORATIVE GRANITE PLAQUE

L-2.09 PLANT LIST						
Code	Quantity	Latin Name	Common Name	Size	Spacing	Comments
Trees						
TIA	2	Tilia americana 'Redmond'	Redmond American Linden	4" Cal.		
Shrubs						
CEA	3	Ceanothus americanus	New Jersey Tea			
Perennials						
LIK	3	Liatris spicata 'Kobold'	Kobold Gayfeather	#1		
Groundcovers						
SEK	16	Sedum kamtschaticum	Russian Stonecrop	4" Pot	10" O.C.	24 Flat

L-2.09



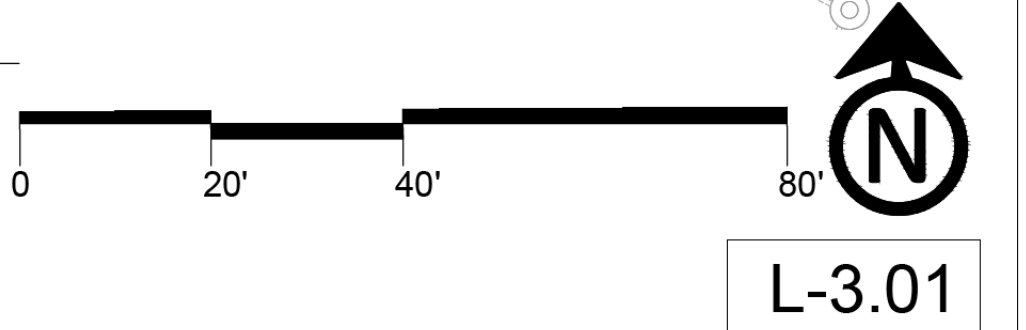
01 SITE IRRIGATION PLAN
1" = 20'-0"

NOTE: PUD HAS 3.6' DEPTH

LEGEND

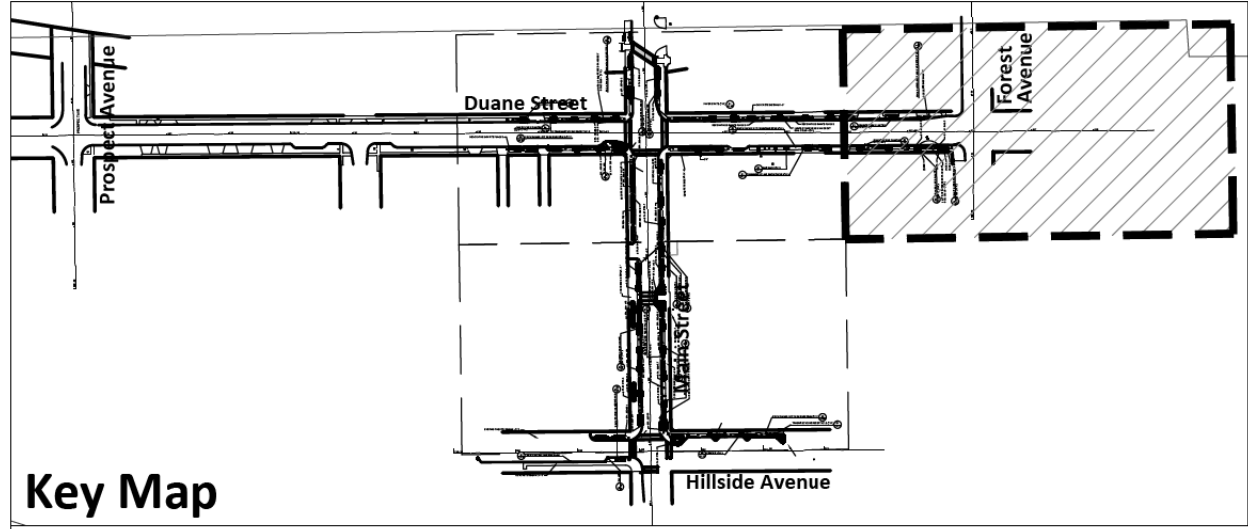
← - - - → PIPE UNDERDRAIN (PUD)

—— IRRIGATION MAINLINE



L-3.01

 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED — PJH	REVISED —	VILLAGE OF GLEN ELLYN	IRRIGATION PLANS					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN — PJH, JDM	REVISED —							XXXX	XX-XXXX-XX-XX	DUPAGE	137	89
	CHECKED — KRK, MJF	REVISED —											
	DATE —	REVISED —											
				SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



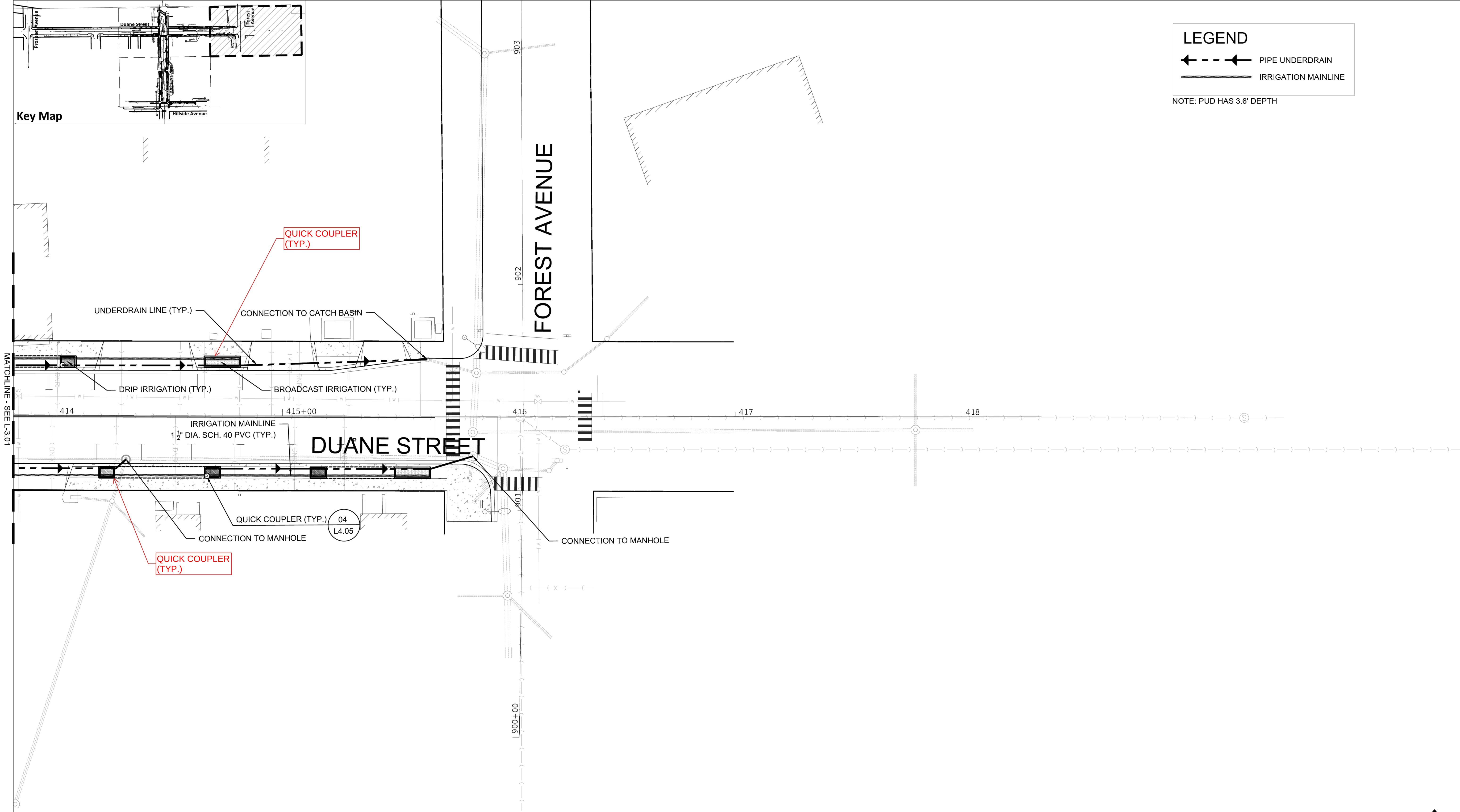
Key Map

LEGEND

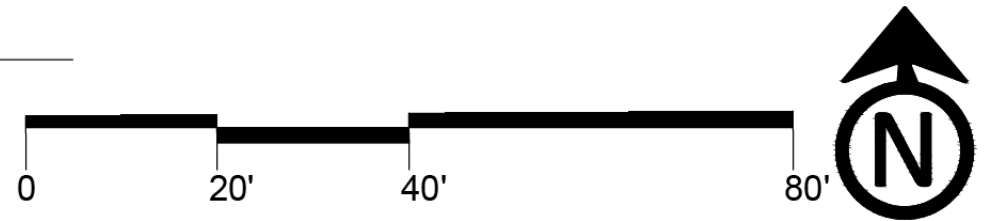
PIPE UNDERDRAIN

IRRIGATION MAINLINE

NOTE: PUD HAS 3.6' DEPTH



01 SITE IRRIGATION PLAN
1" = 20'-0"



L-3.02



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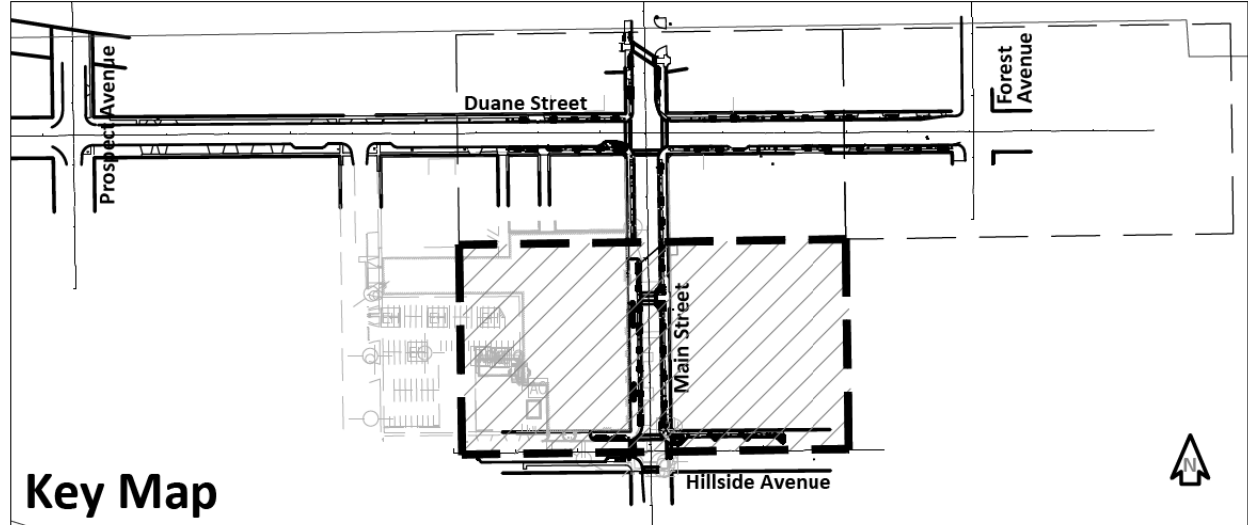
DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

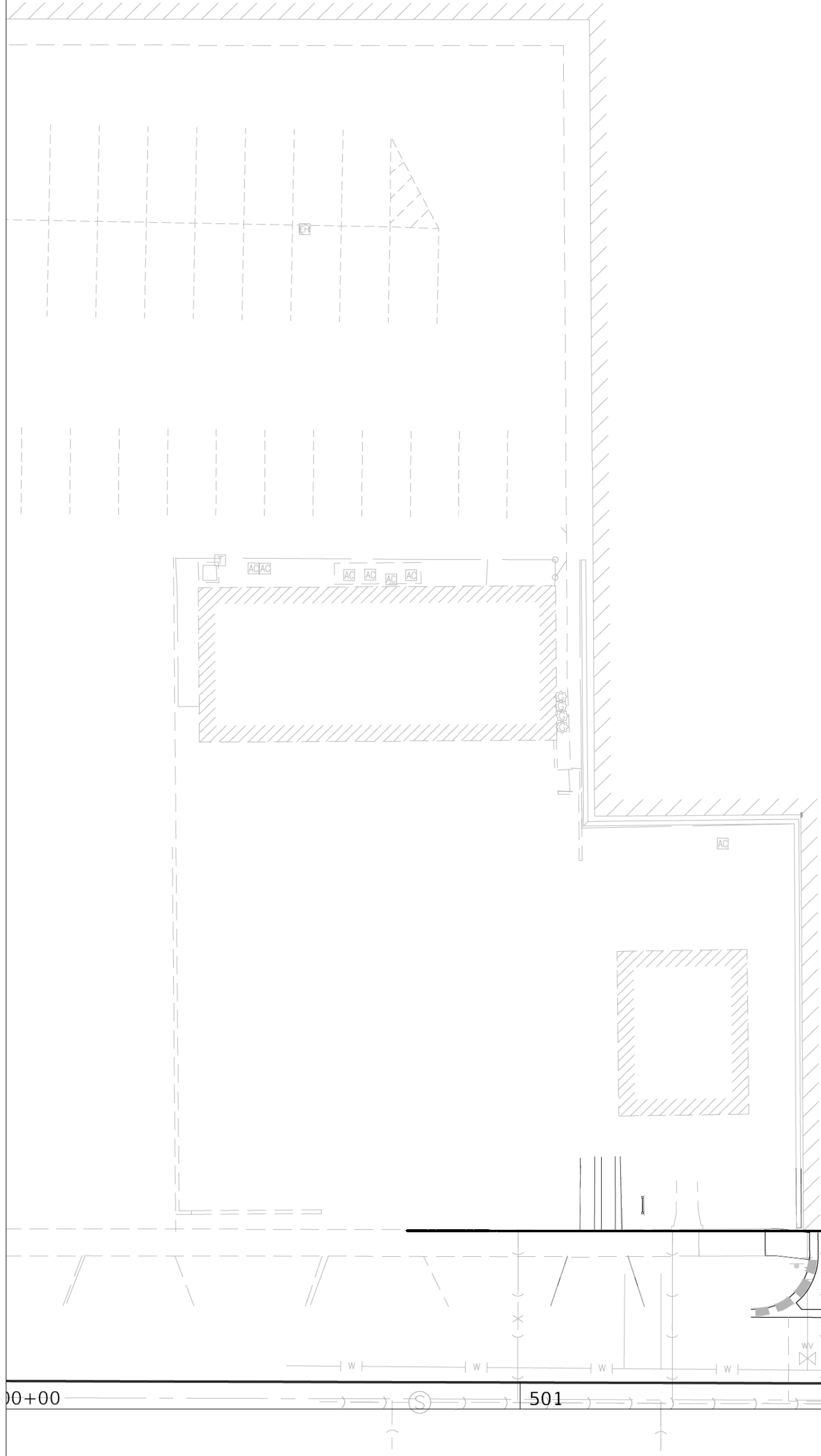
IRRIGATION PLANS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXXX-XX-XX	DUPAGE	137	90
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



Key Map



HILLSIDE AVE

MAIN STREET

01 SITE IRRIGATION PLAN
1" = 20'-0"

LEGEND

← - - - ← PIPE UNDERDRAIN

—— IRRIGATION MAINLINE

NOTE: PUD HAS 3.6' DEPTH

QUICK COUPLER (TYP.)

QUICK COUPLER (TYP.)

CAN CONNECT UNDERDRAIN TO THIS INLET

IRRIGATION MAINLINE
1 1/2" DIA. SCH. 40 PVC (TYP.)

T/W 762.95

QUICK COUPLER (TYP.)

QUICK COUPLER (TYP.)

UNDERDRAIN LINE (TYP.)
IRRIGATION MAINLINE
1 1/2" DIA. SCH. 40 PVC (TYP.)

QUICK COUPLER (TYP.)

CONNECTION TO MANHOLE

CONNECTION TO CATCH BASIN

CONTROL VALVE

RPZ IN ENCLOSURE
(LOCATED WITHIN PLANTER)

WATER METER (IN VAULT)

B-BOX

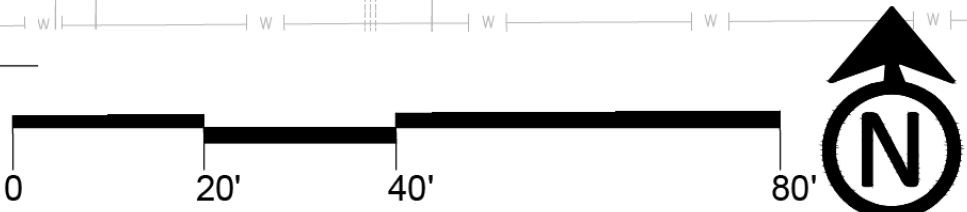
QUICK COUPLER (TYP.)

1 1/2" COPPER

WATER SERVICE CONNECTION

CONNECTION TO INLET

BROADCAST IRRIGATION (TYP.)



L-3.03

CIVILTECH

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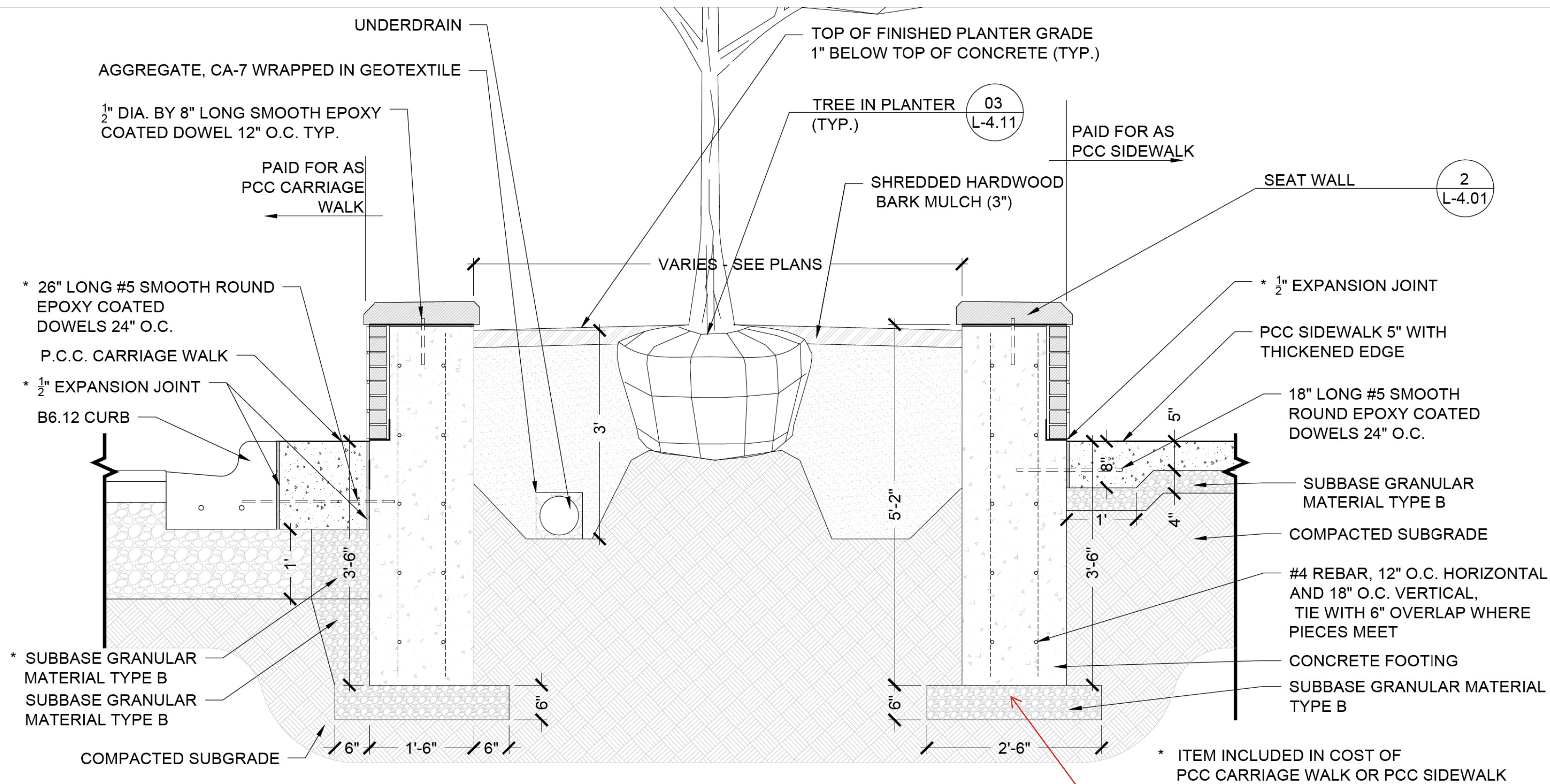
DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

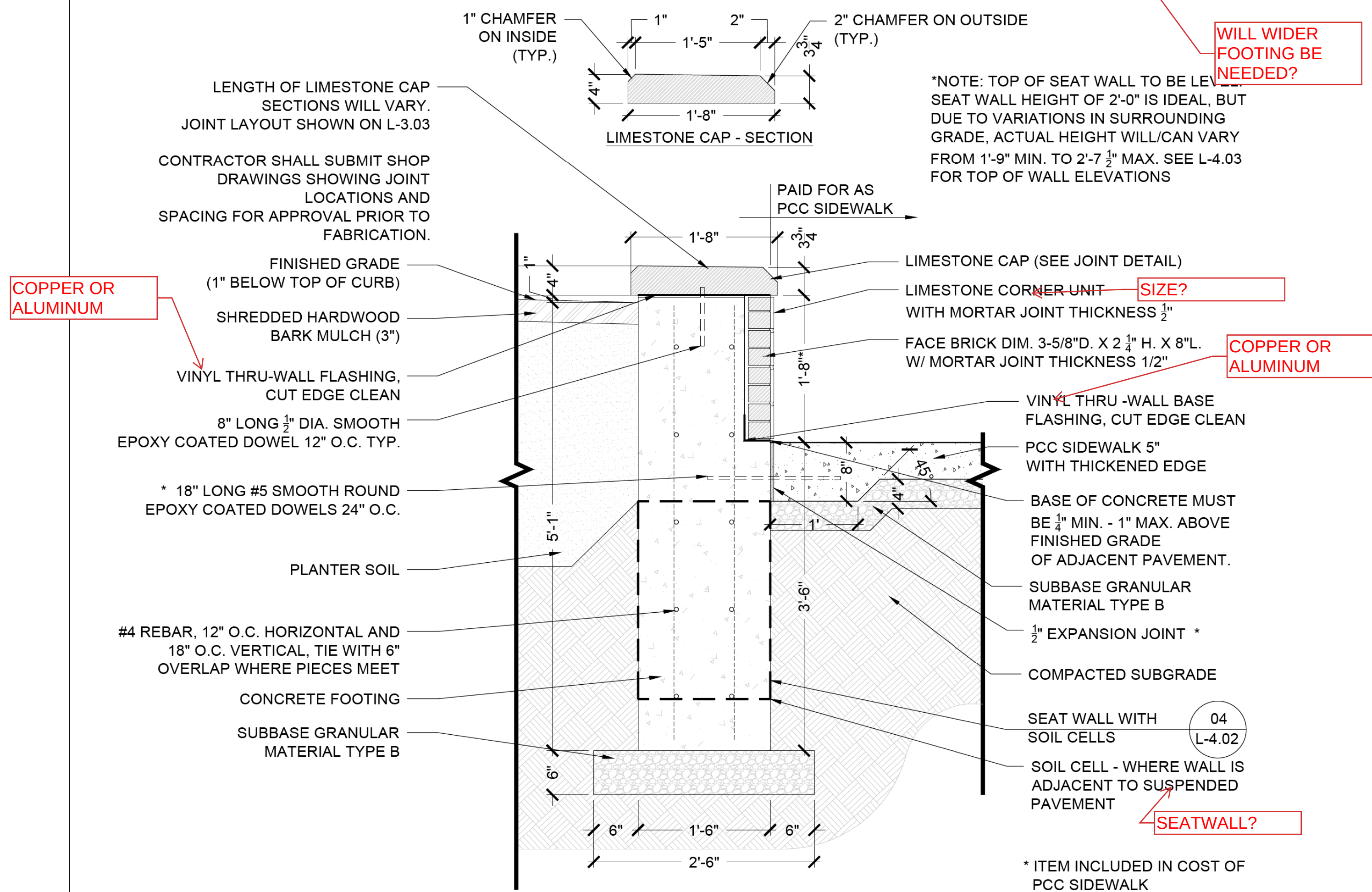
IRRIGATION PLANS

SHEET NO. OF SHEETS STA. TO STA.

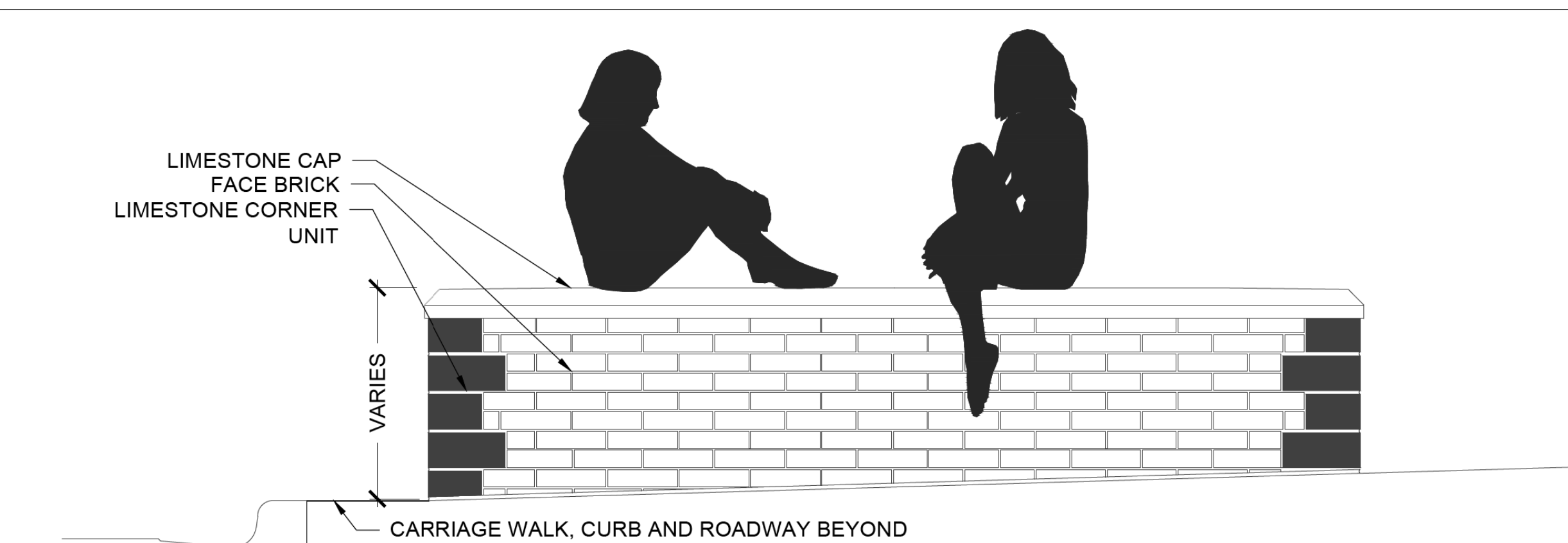
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	91
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



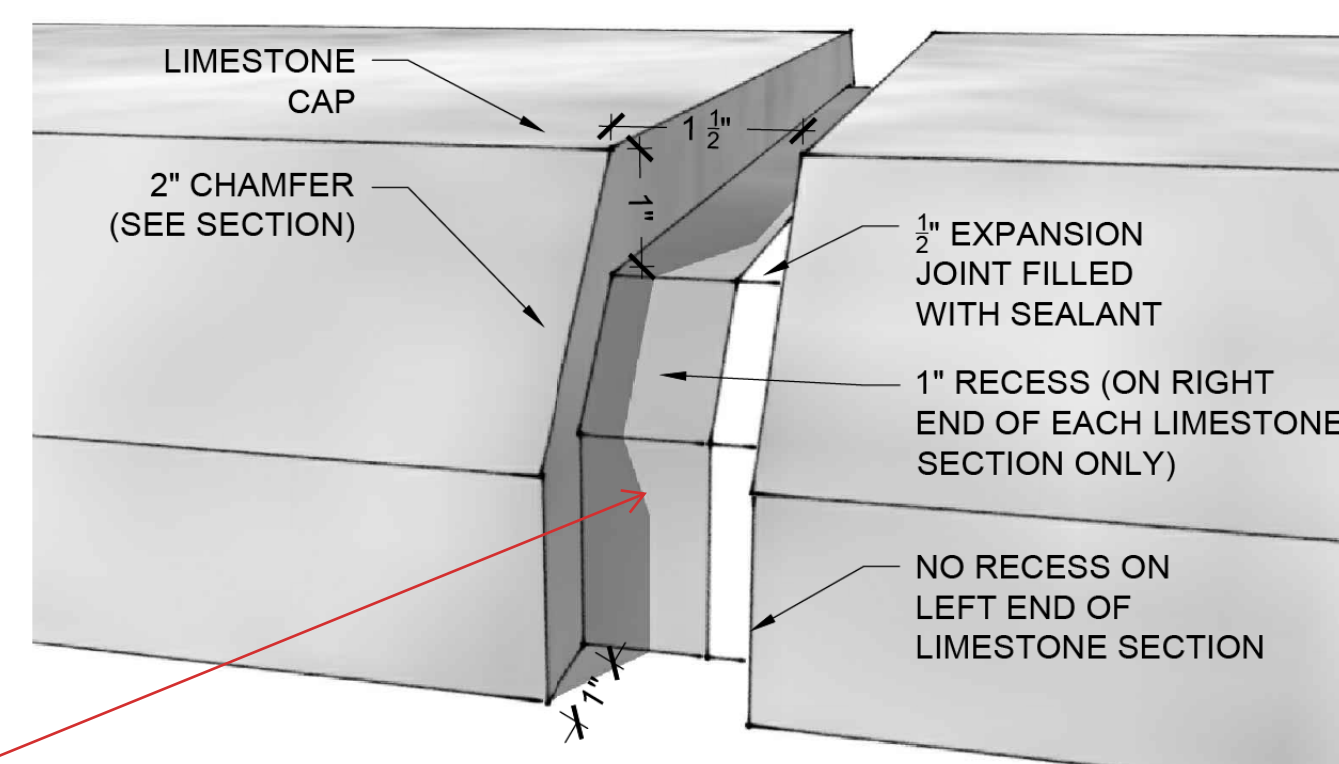
01 SEAT WALL - SECTION A (TYP.)
3/4" = 1' - 0"



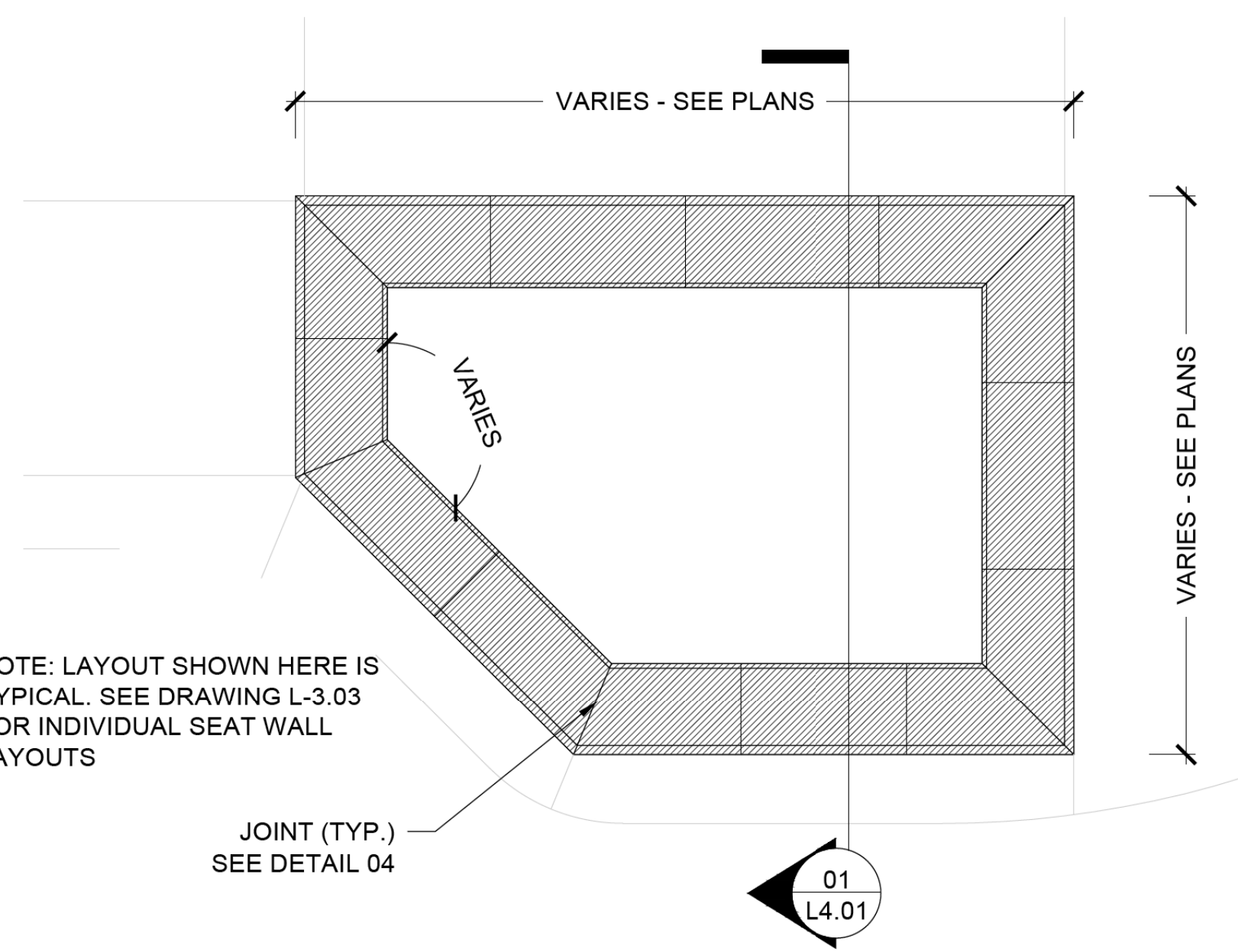
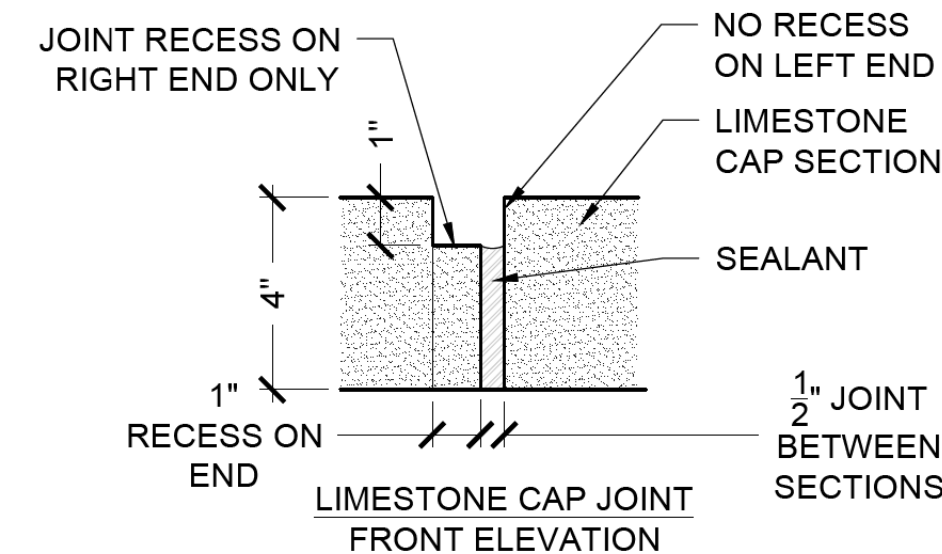
02 SEAT WALL - TYP. SECTION
1" = 1' - 0"



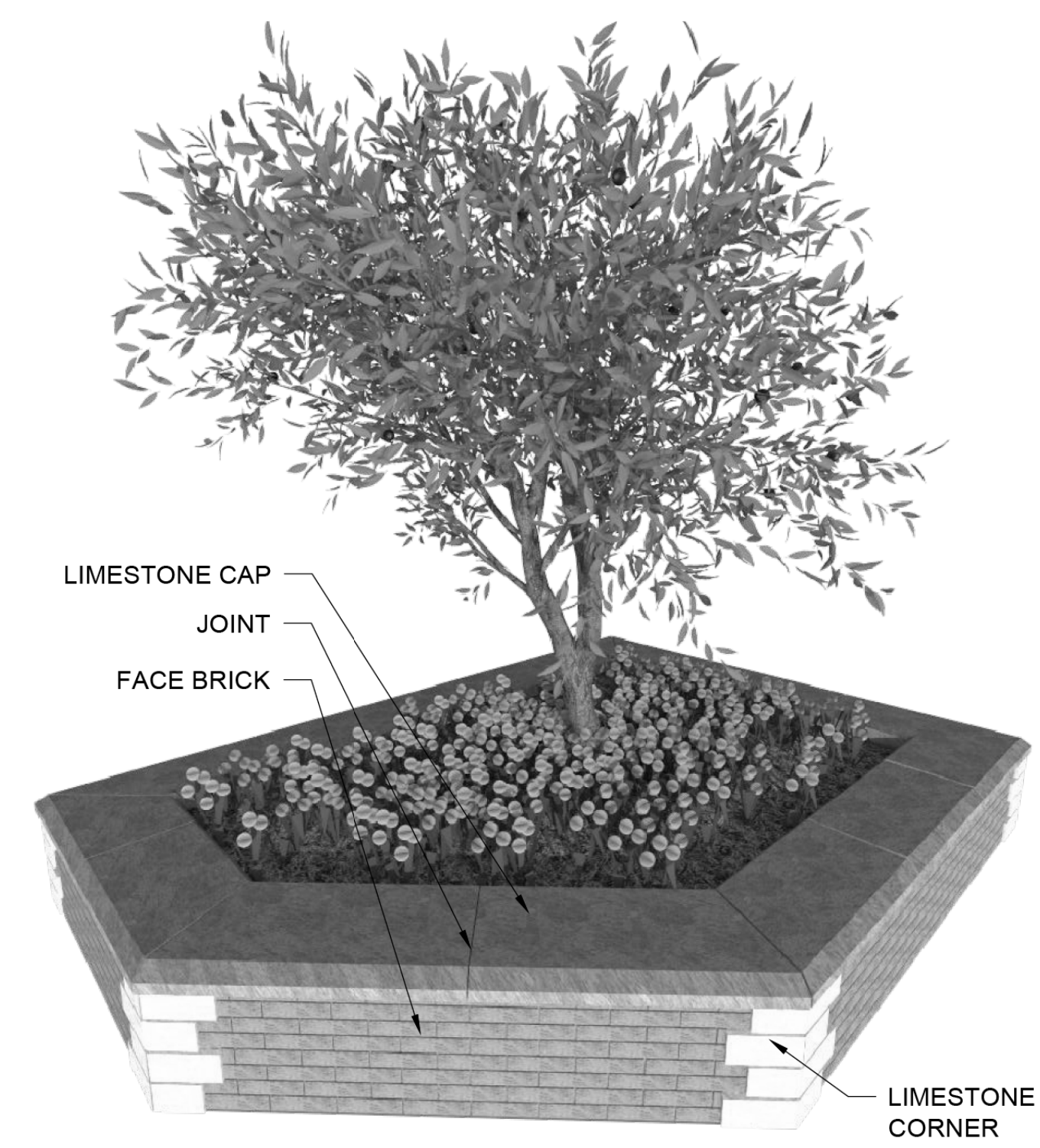
03 SEAT WALL - TYP. ELEVATION
3/4" = 1' - 0"



04 SEAT WALL - JOINT DETAIL
NTS



05 SEAT WALL - TYP. LAYOUT
3/8" = 1' - 0"



05 SEAT WALL - OVERALL
SCALE= NTS



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DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

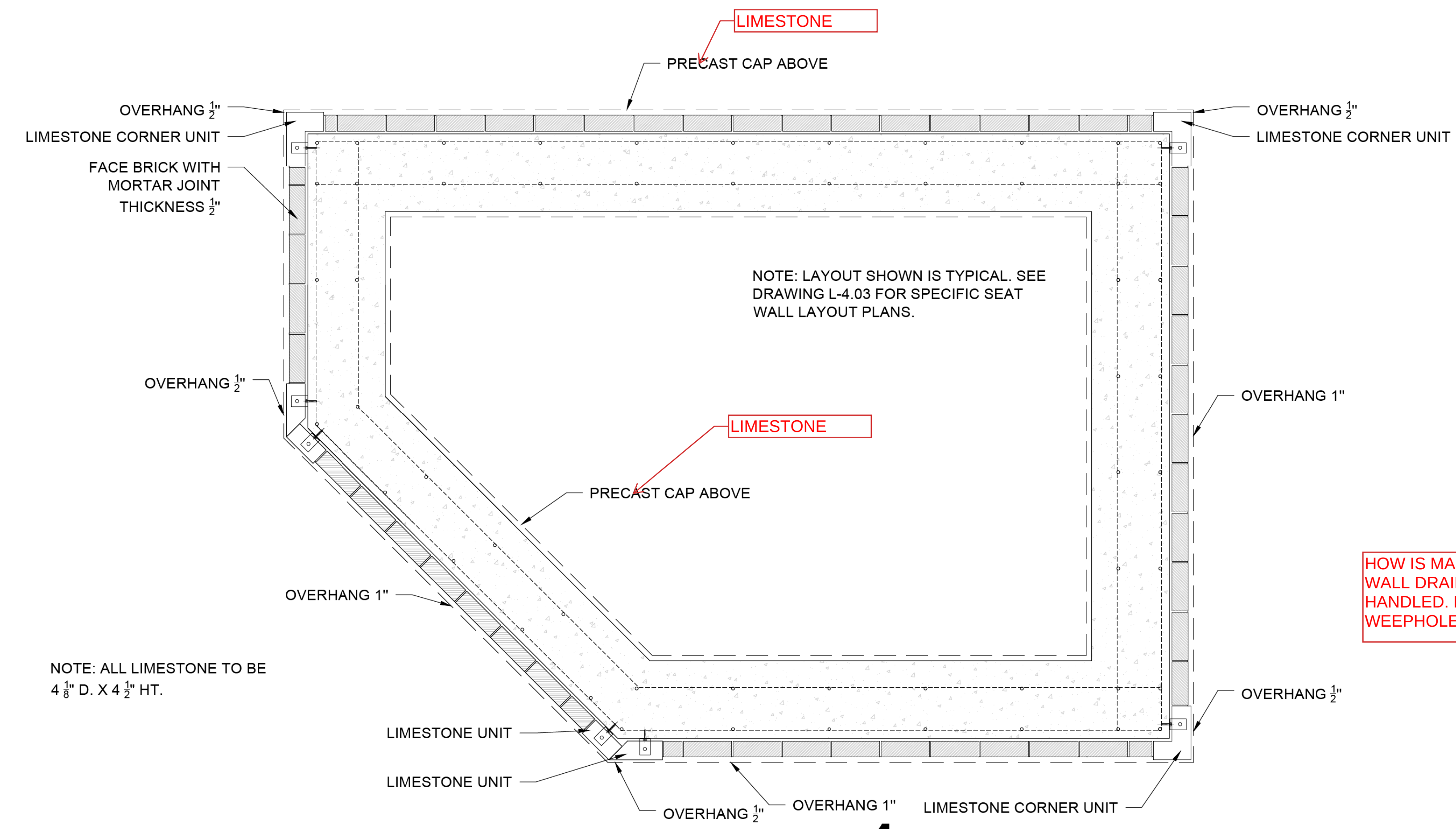
VILLAGE OF GLEN ELLYN

SEAT WALL DETAILS

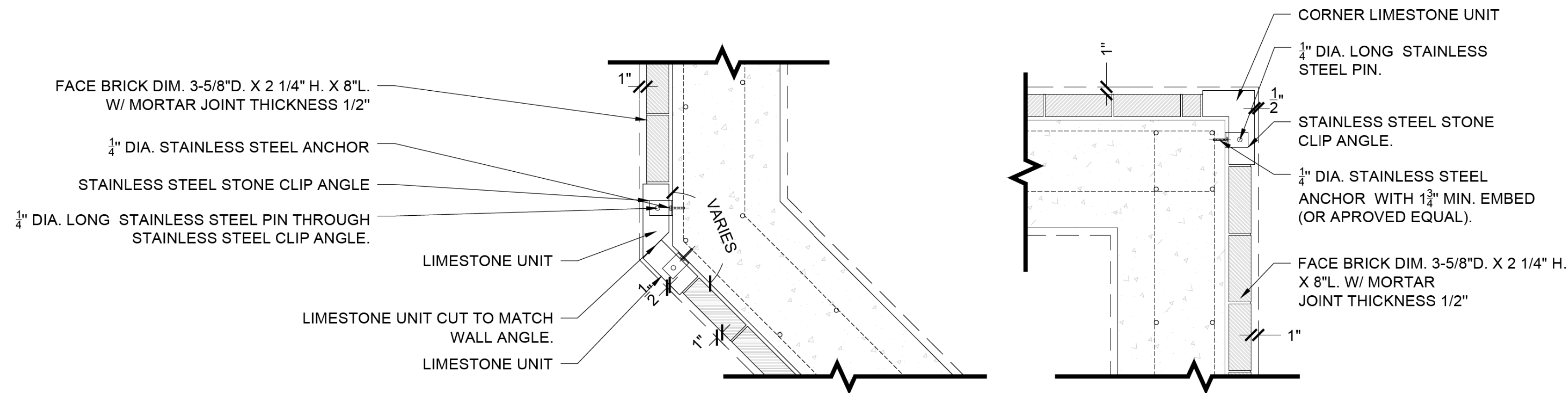
SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	92
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

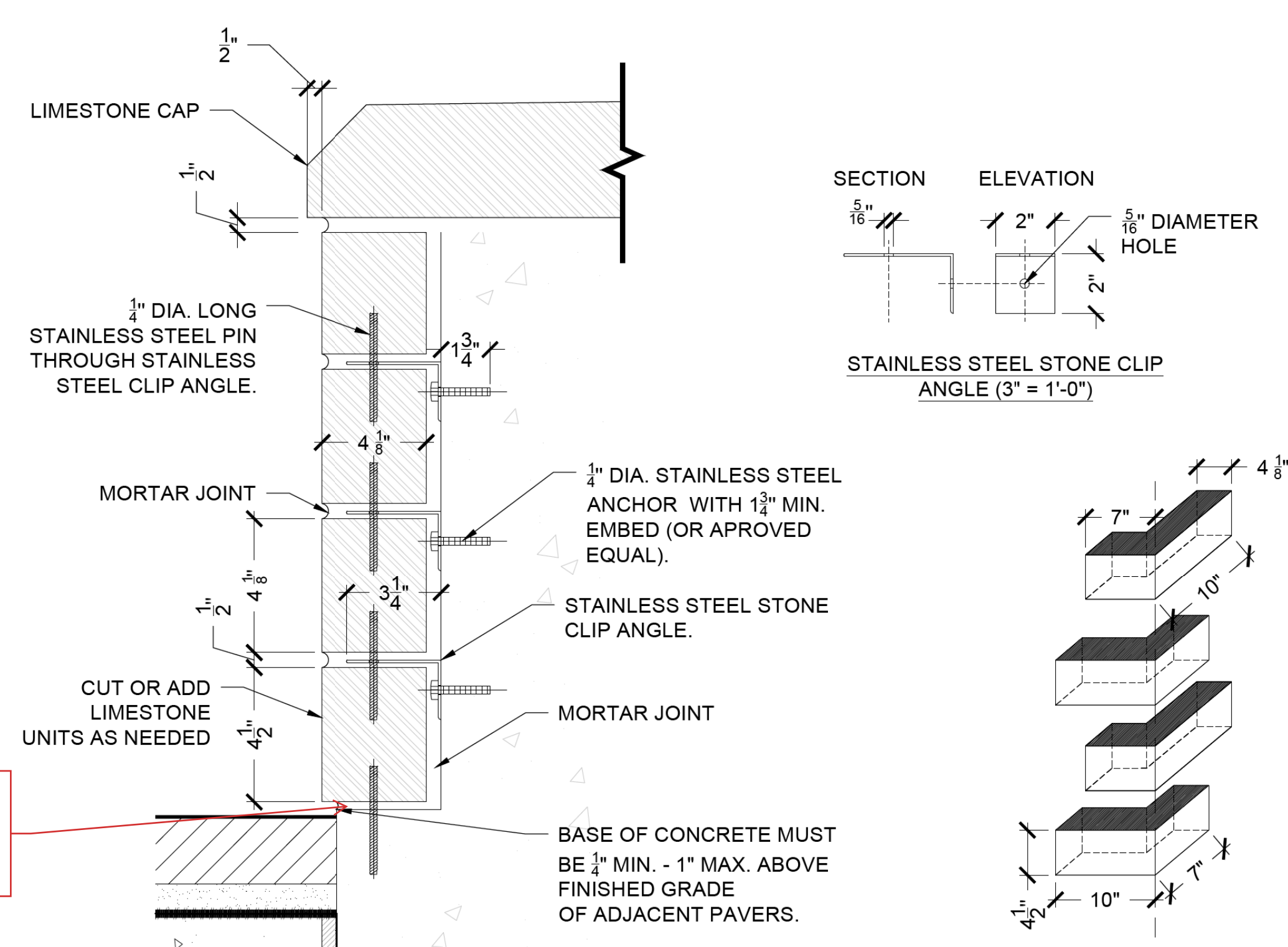
L-4.01



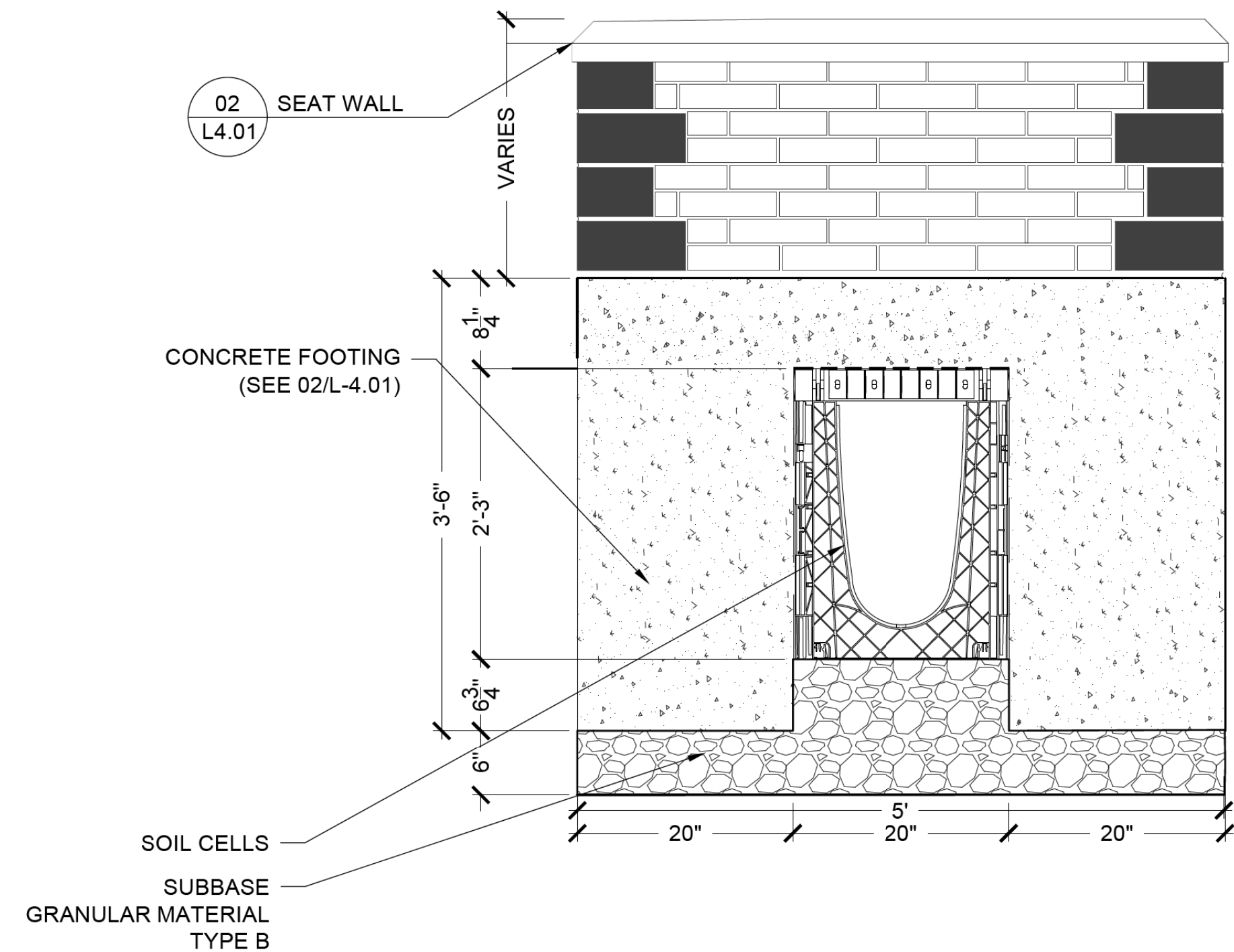
01 SEAT WALL - PLAN VIEW (TYP. LIMESTONE AND BRICK WALL ATTACHMENT)
3/4" = 1' - 0"



03 SEAT WALL LIMESTONE AND BRICK WALL ATTACHMENT - PLAN
1" = 1' - 0"



02 SEAT WALL LIMESTONE CORNER - SECTION
3" = 1' - 0"



04 SEATWALL WITH SOIL CELLS
1" = 1' - 0"

L-4.02



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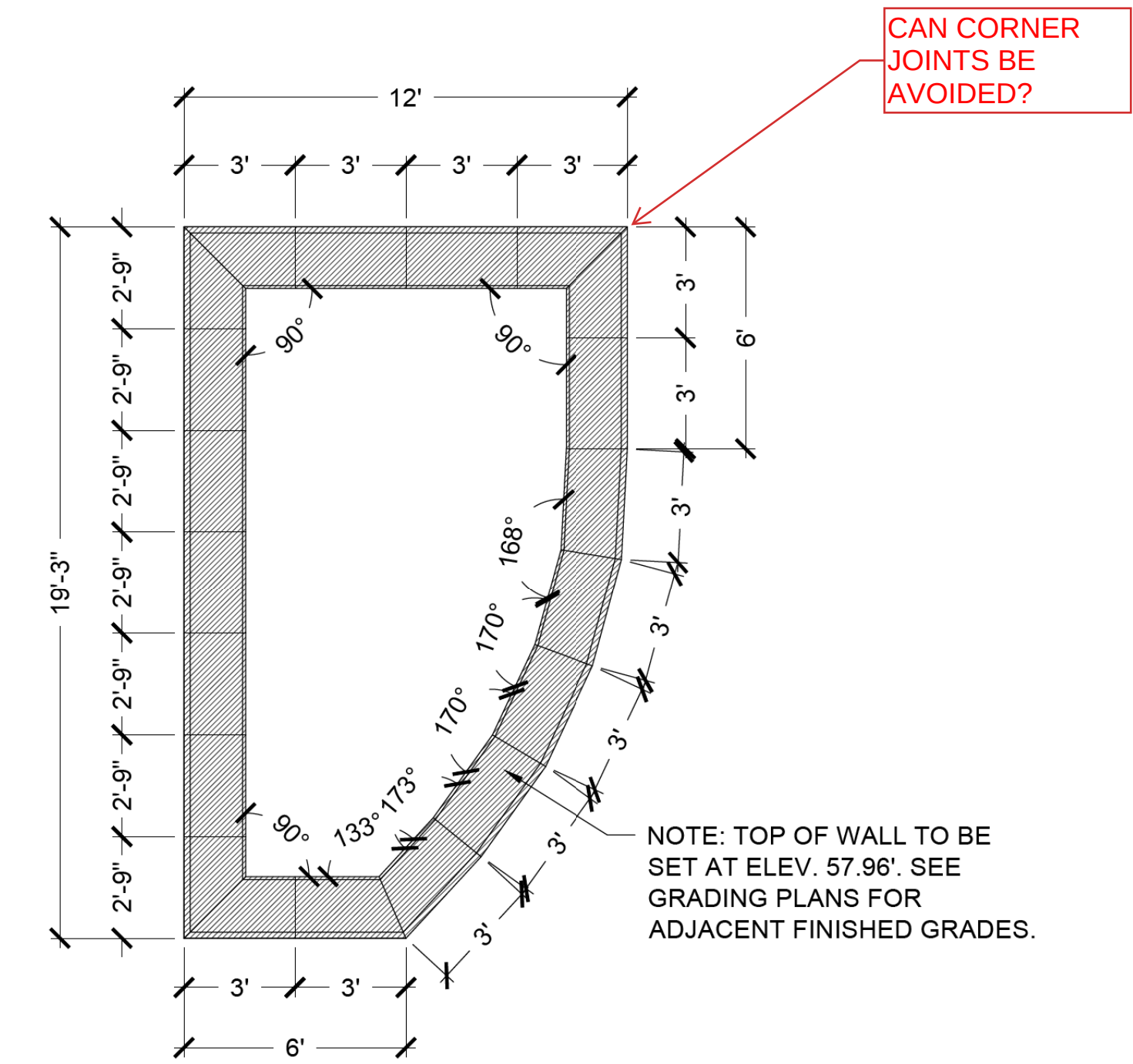
DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

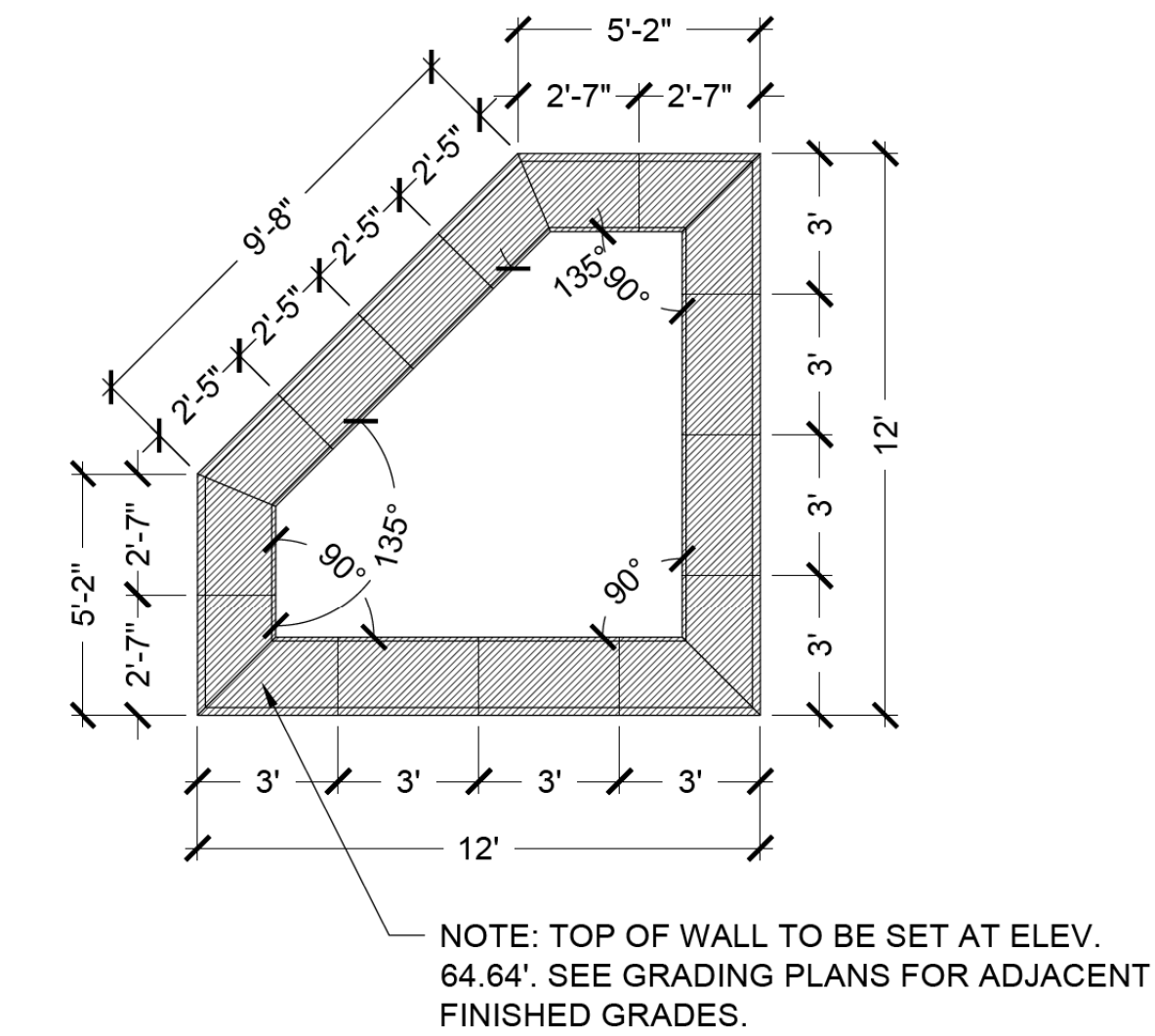
SEAT WALL DETAILS

SHEET NO. OF SHEETS STA. TO STA.

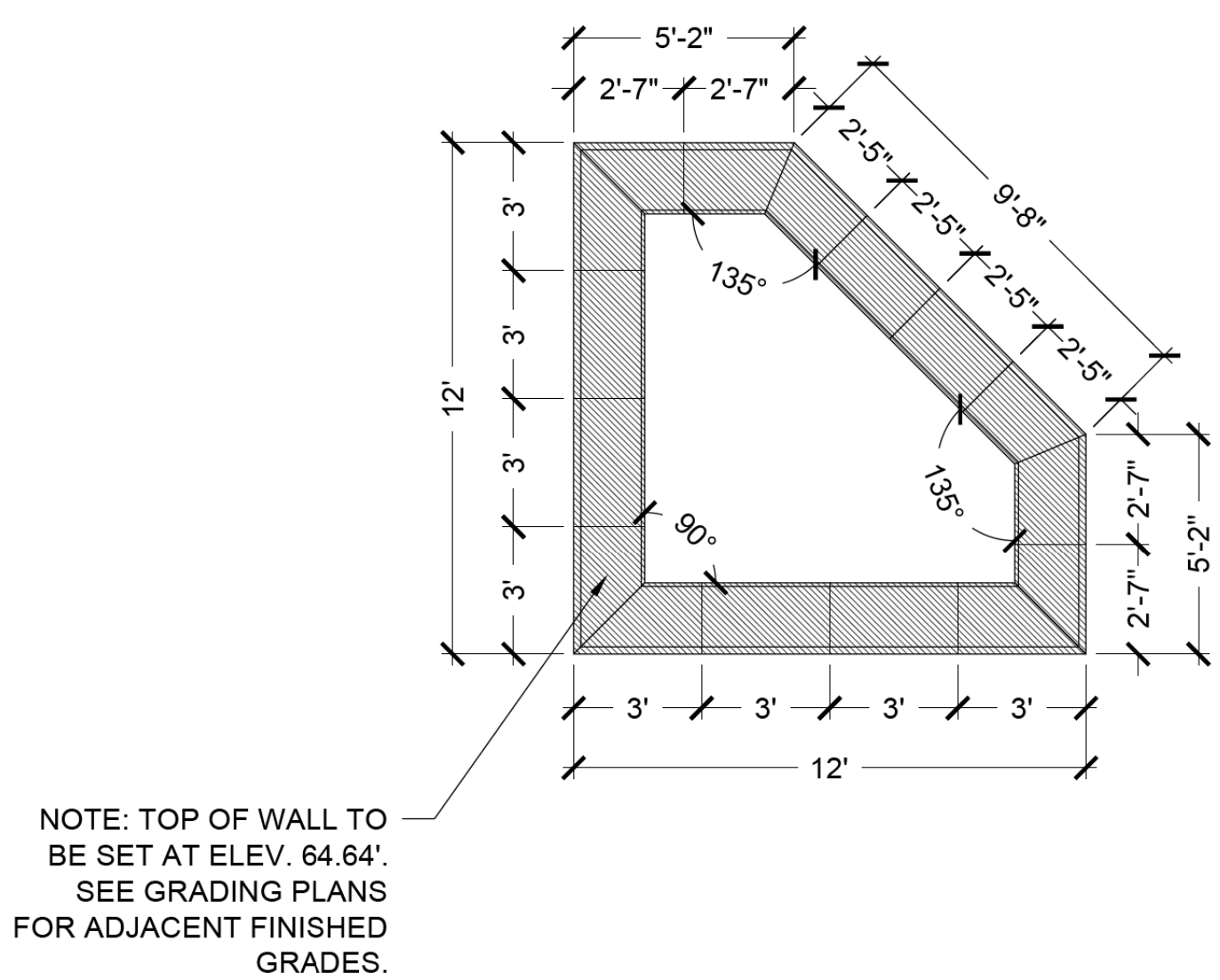
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	93
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



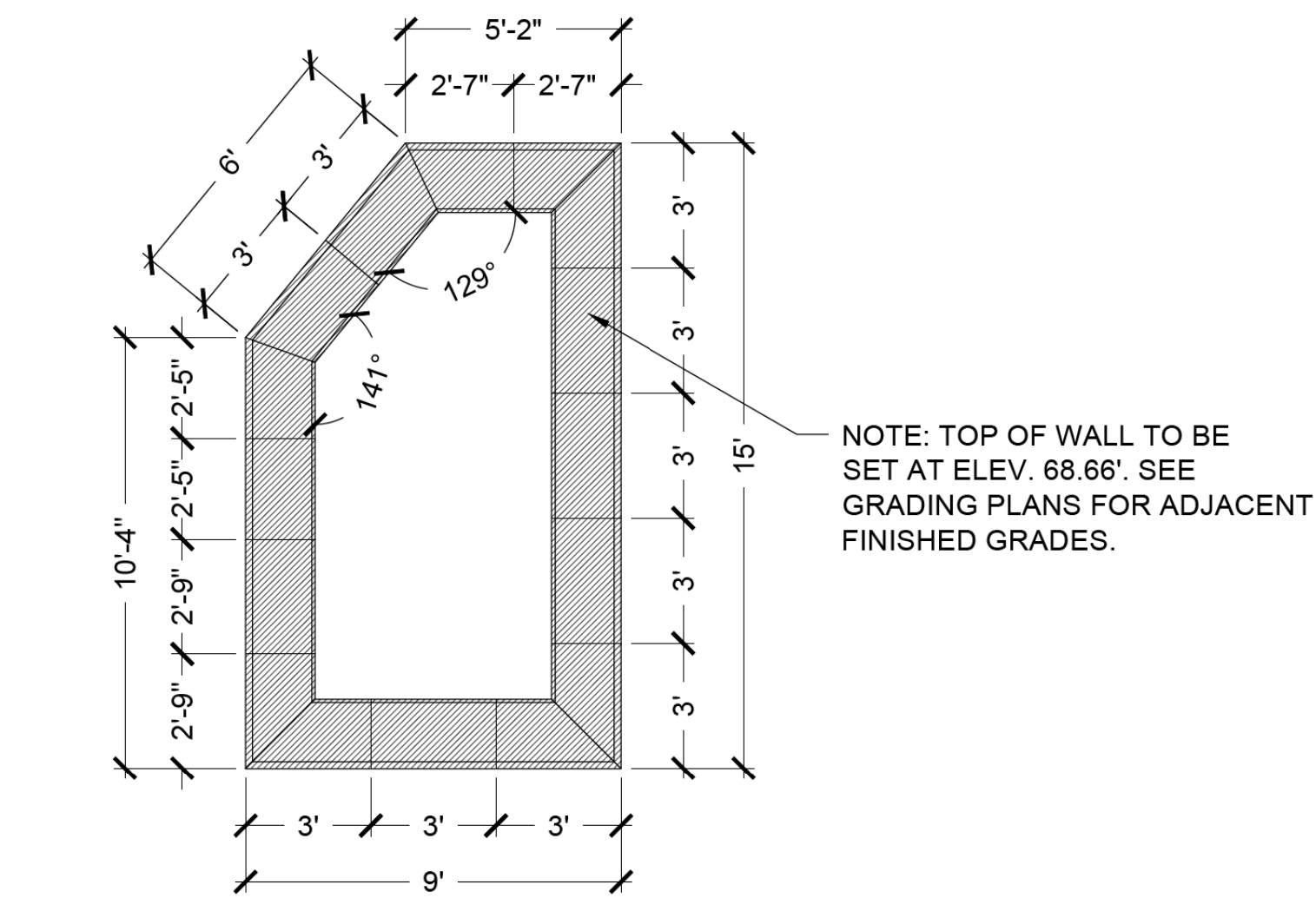
01 SEAT WALL LIMESTONE CAP LAYOUT - TYPE 1
1/4" = 1' - 0"



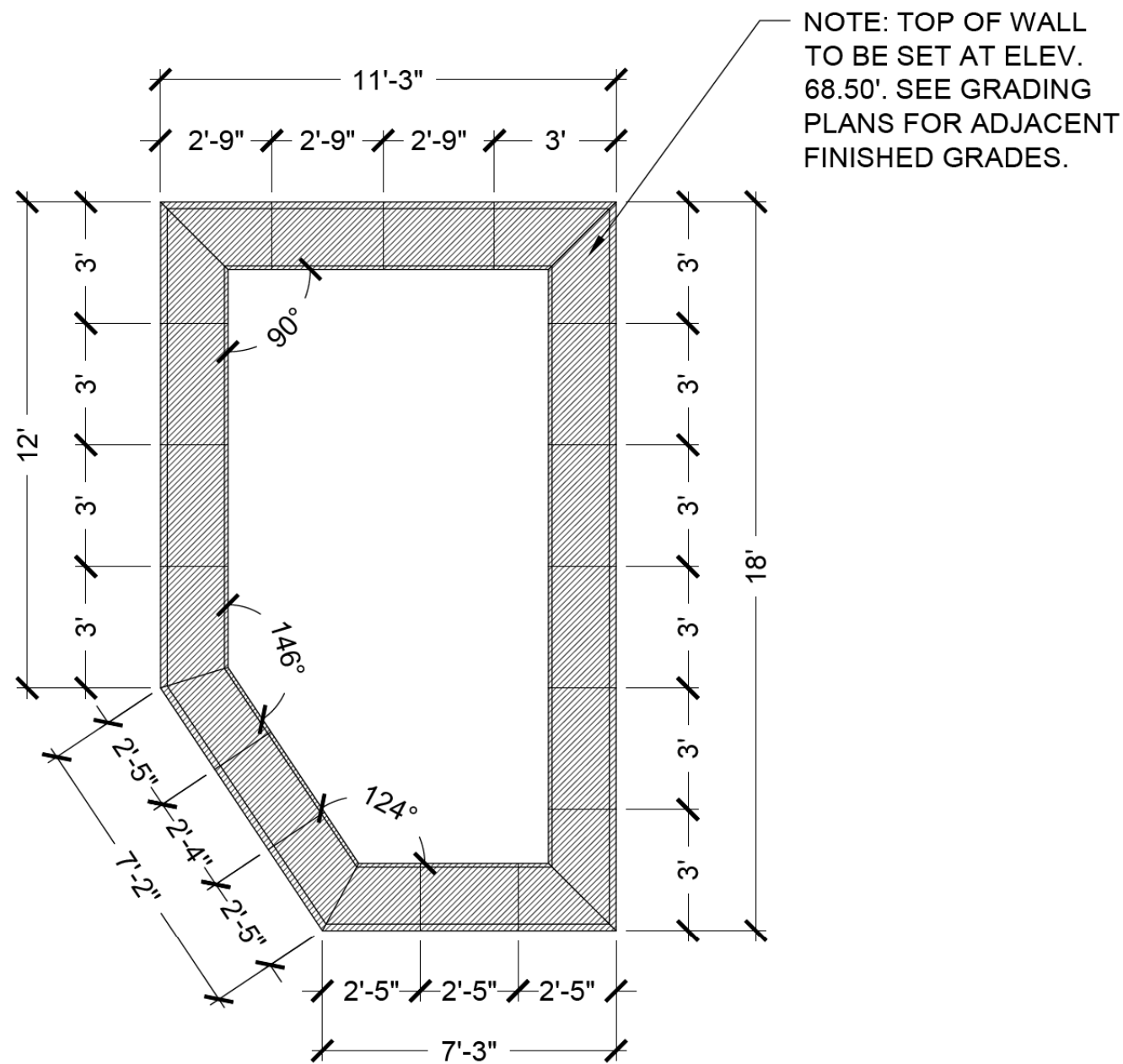
02 SEAT WALL LIMESTONE CAP LAYOUT - TYPE 2
1/4" = 1' - 0"



03 SEAT WALL LIMESTONE CAP LAYOUT - TYPE 3
1/4" = 1' - 0"

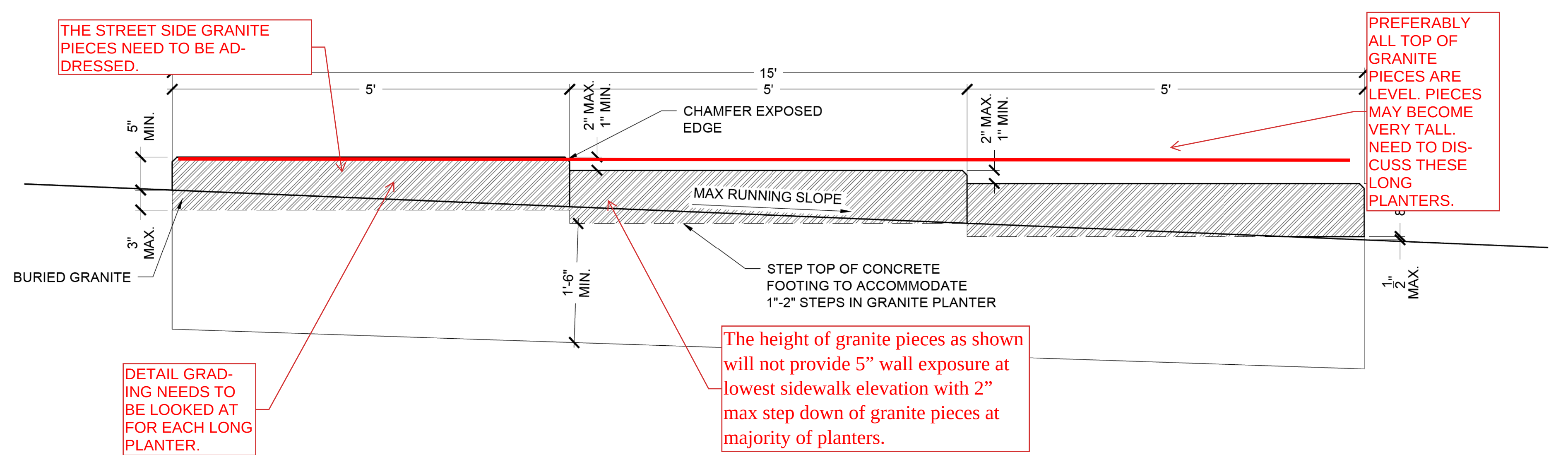
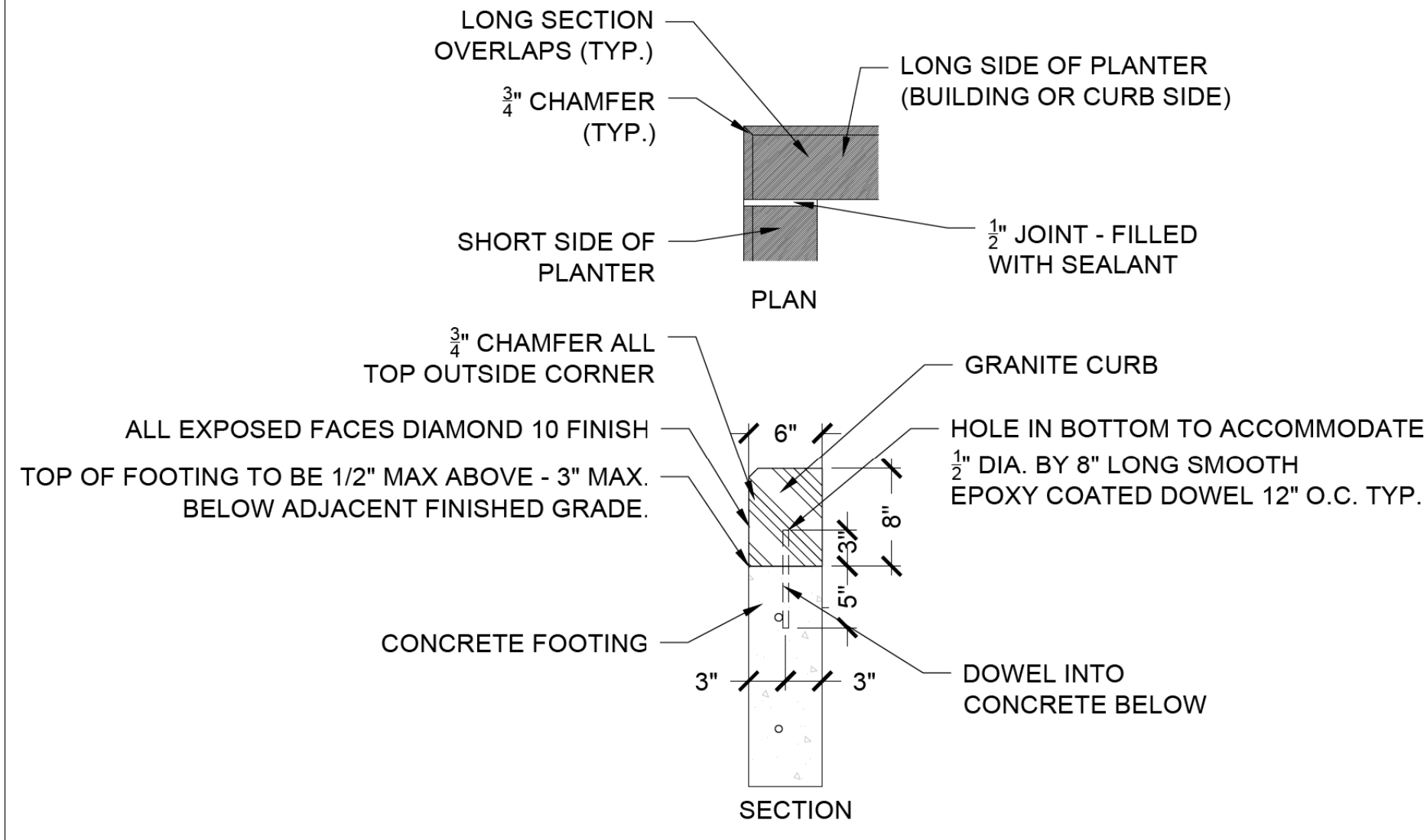
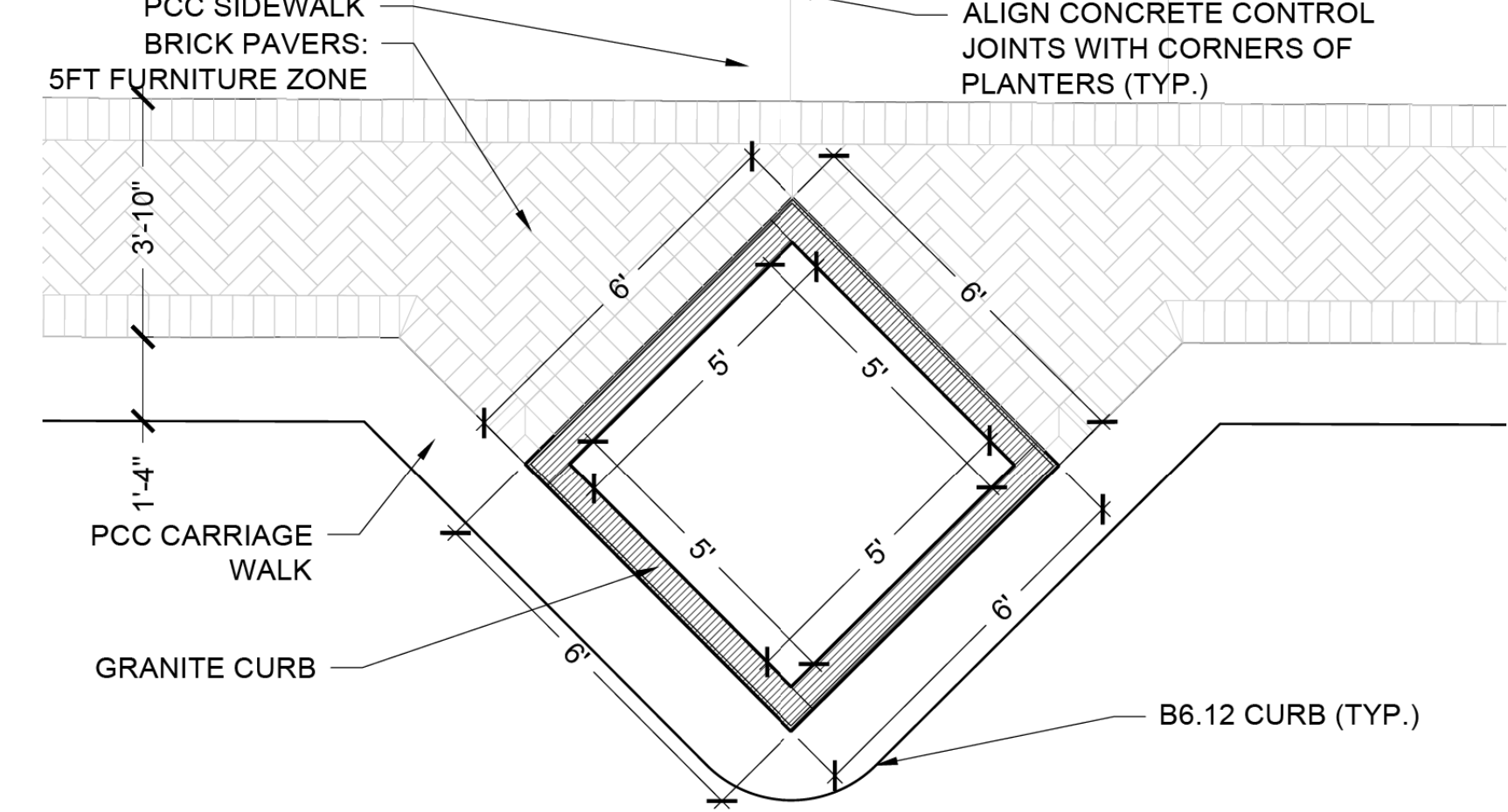
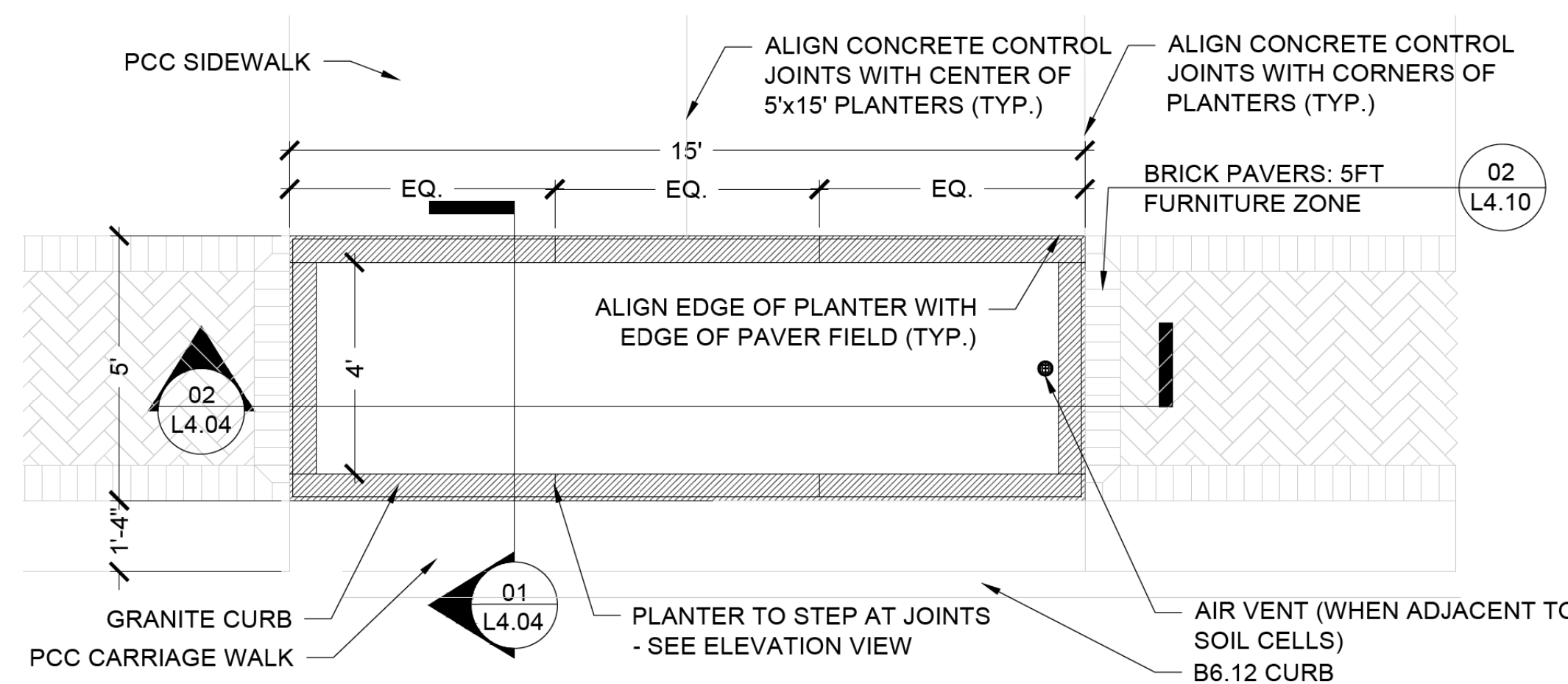
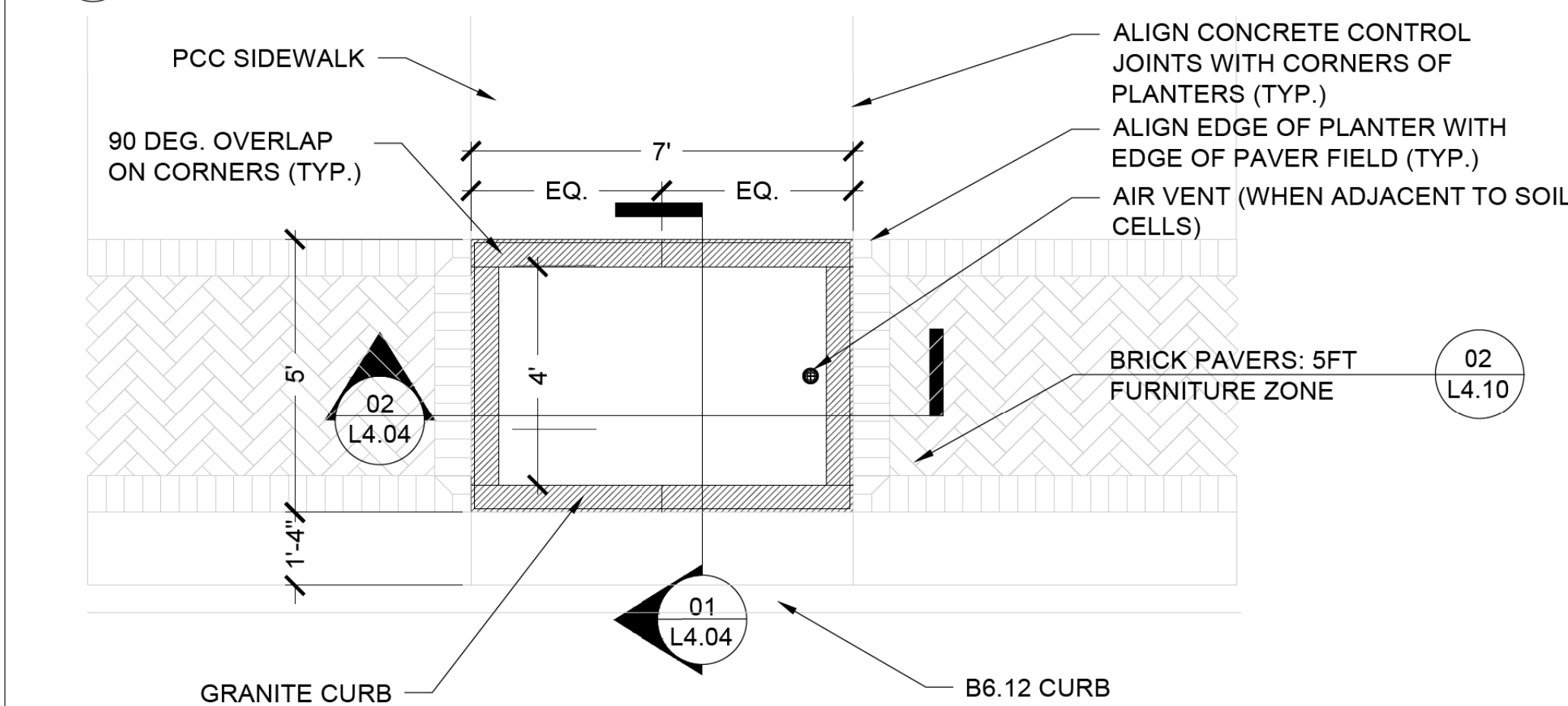
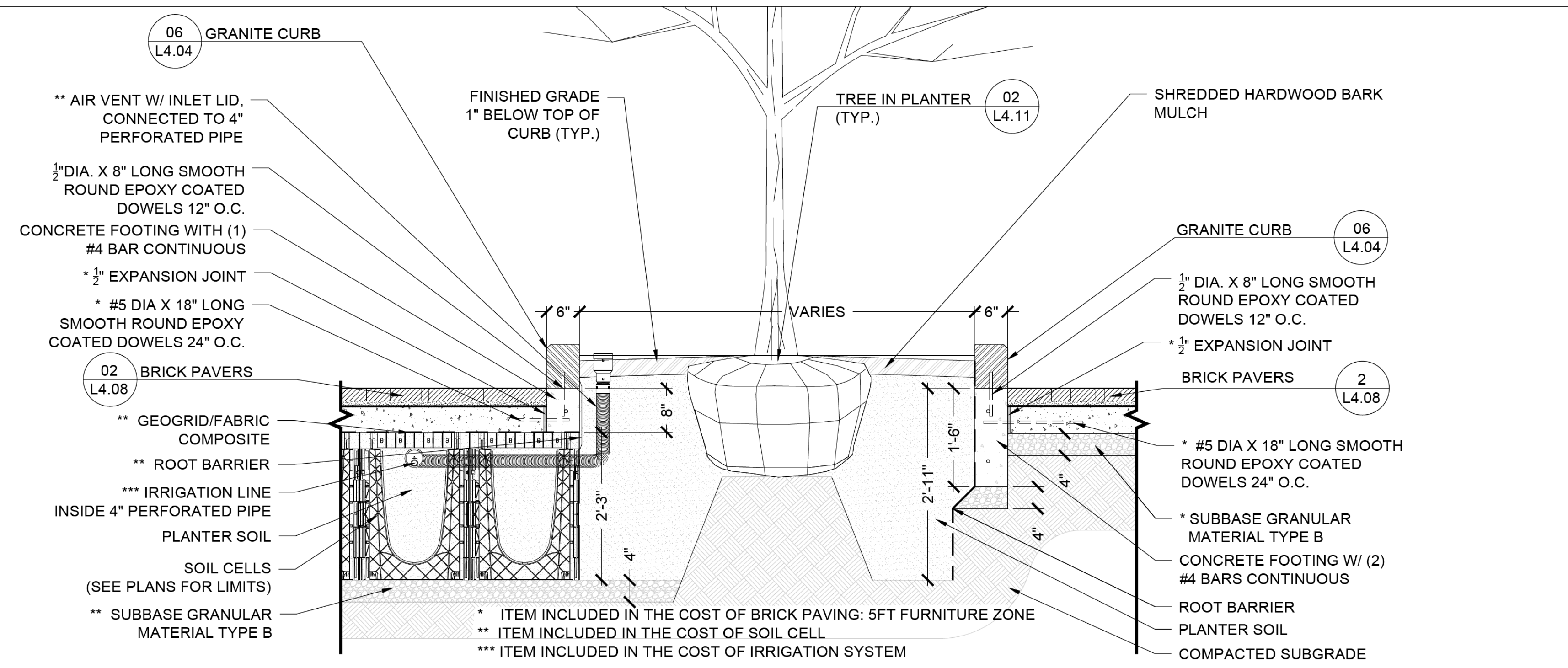
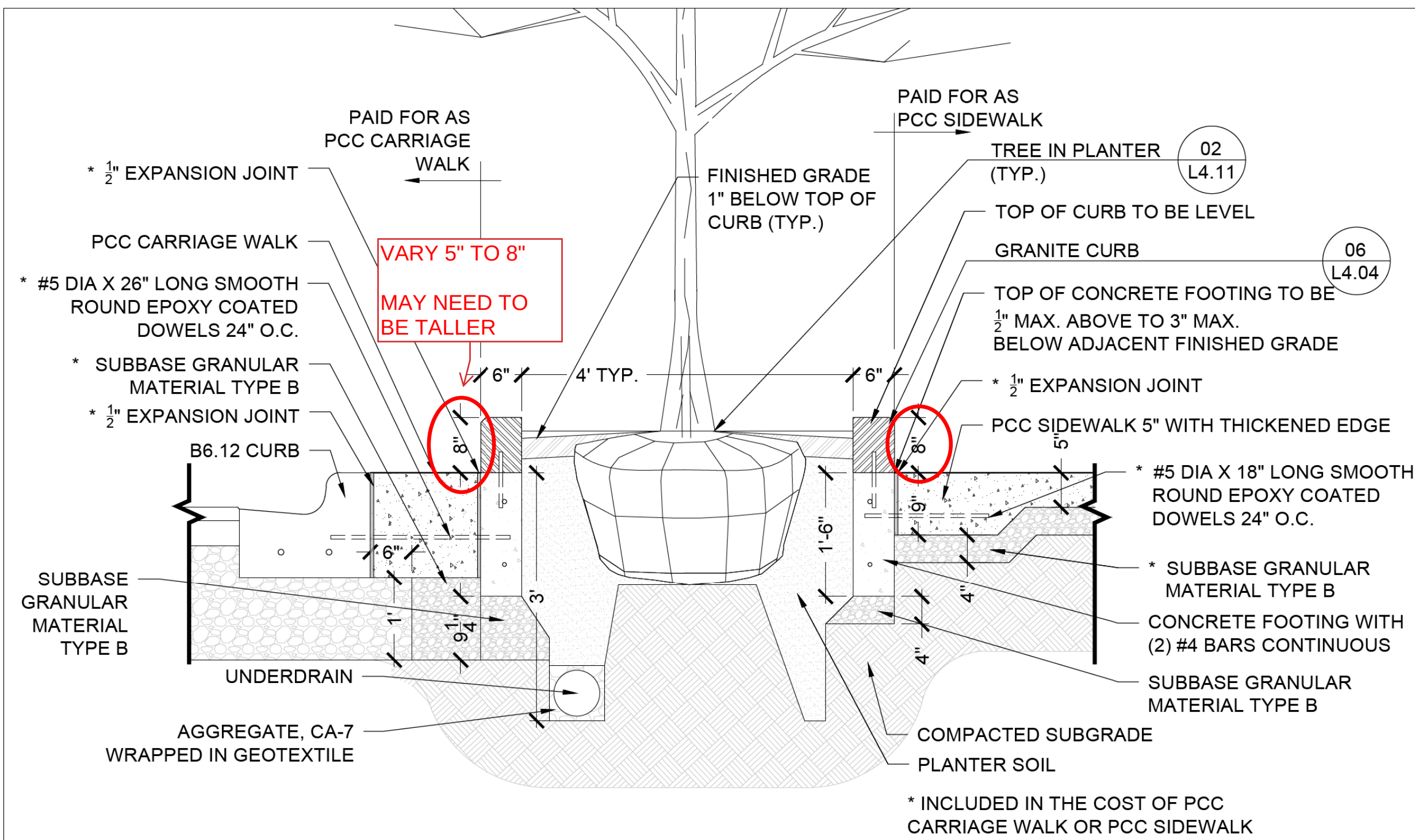


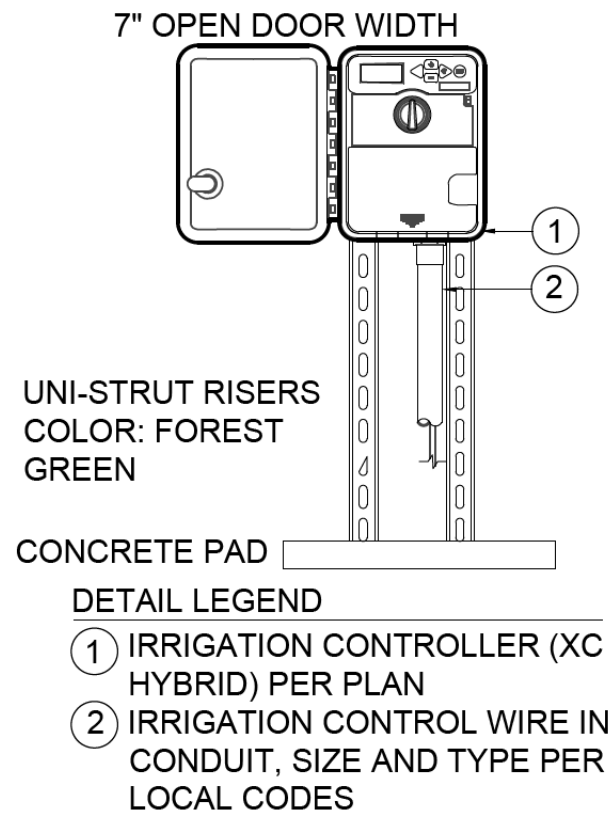
04 SEAT WALL LIMESTONE CAP LAYOUT - TYPE 4
1/4" = 1' - 0"



05 SEAT WALL LIMESTONE CAP LAYOUT - TYPE 5
1/4" = 1' - 0"

NOTE: SIZES PROVIDED FOR REFERENCE -
CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR
LIMESTONE PRIOR TO FABRICATION.





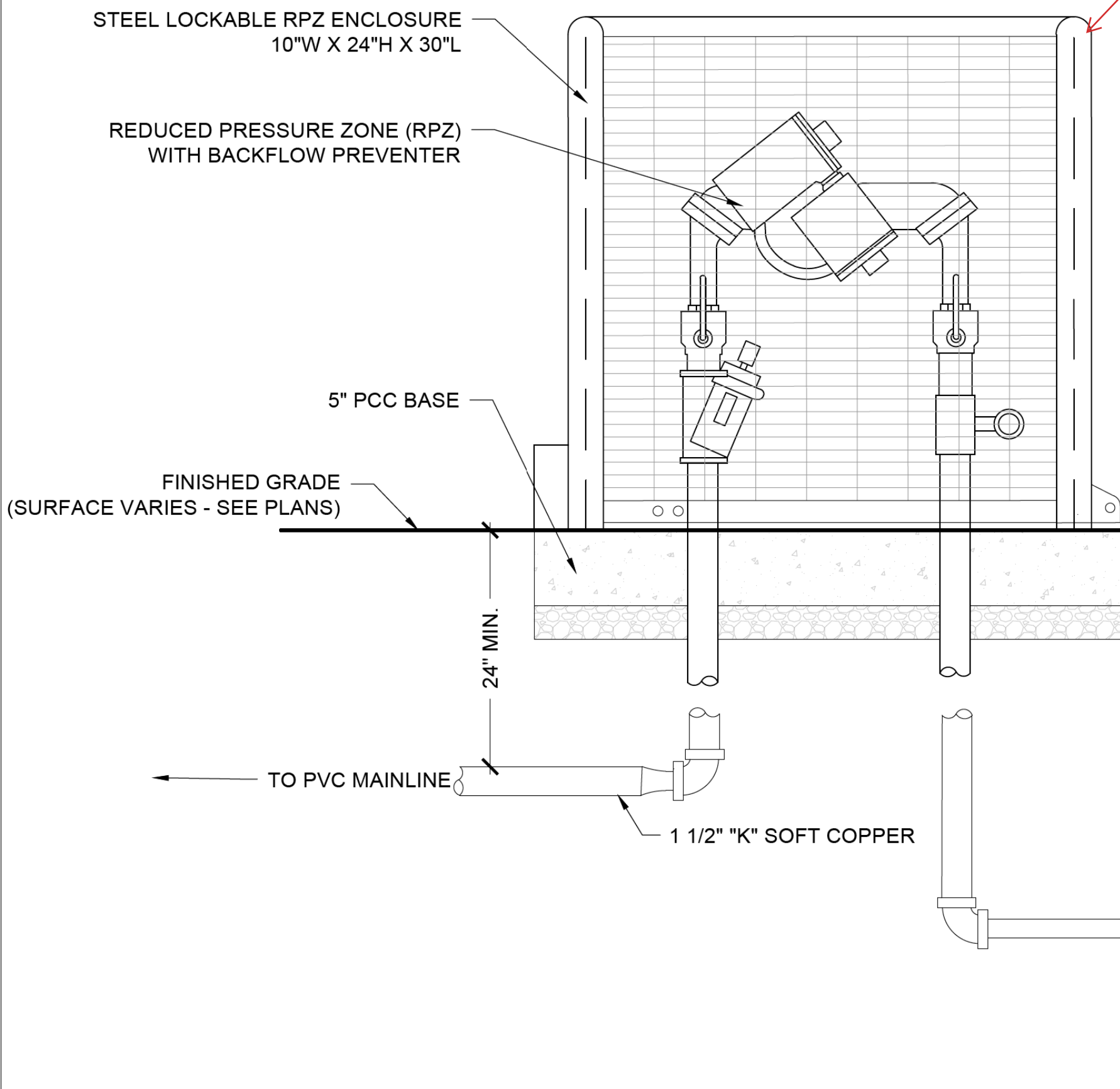
NOTES:

- A. MOUNT CONTROLLER WITH LCD SCREEN AT EYE LEVEL WHERE NOTED. ALL OTHER CONTROLLERS TO BE MOUNTED WITHIN RPZ ENCLOSURE
- B. SPECIFY 4, 6, 8, 10 OR 12 STATION MODEL CONTROLLER, MOUNT CONTROLLER INSIDE RPZ ENCLOSURE. CONTRACTOR TO VERIFY THAT THE RPZ AND CONTROLLER FIT IN THE ENCLOSURE AND ORDER THE RIGHT SIZE.

01 IRRIGATION CONTROLLER

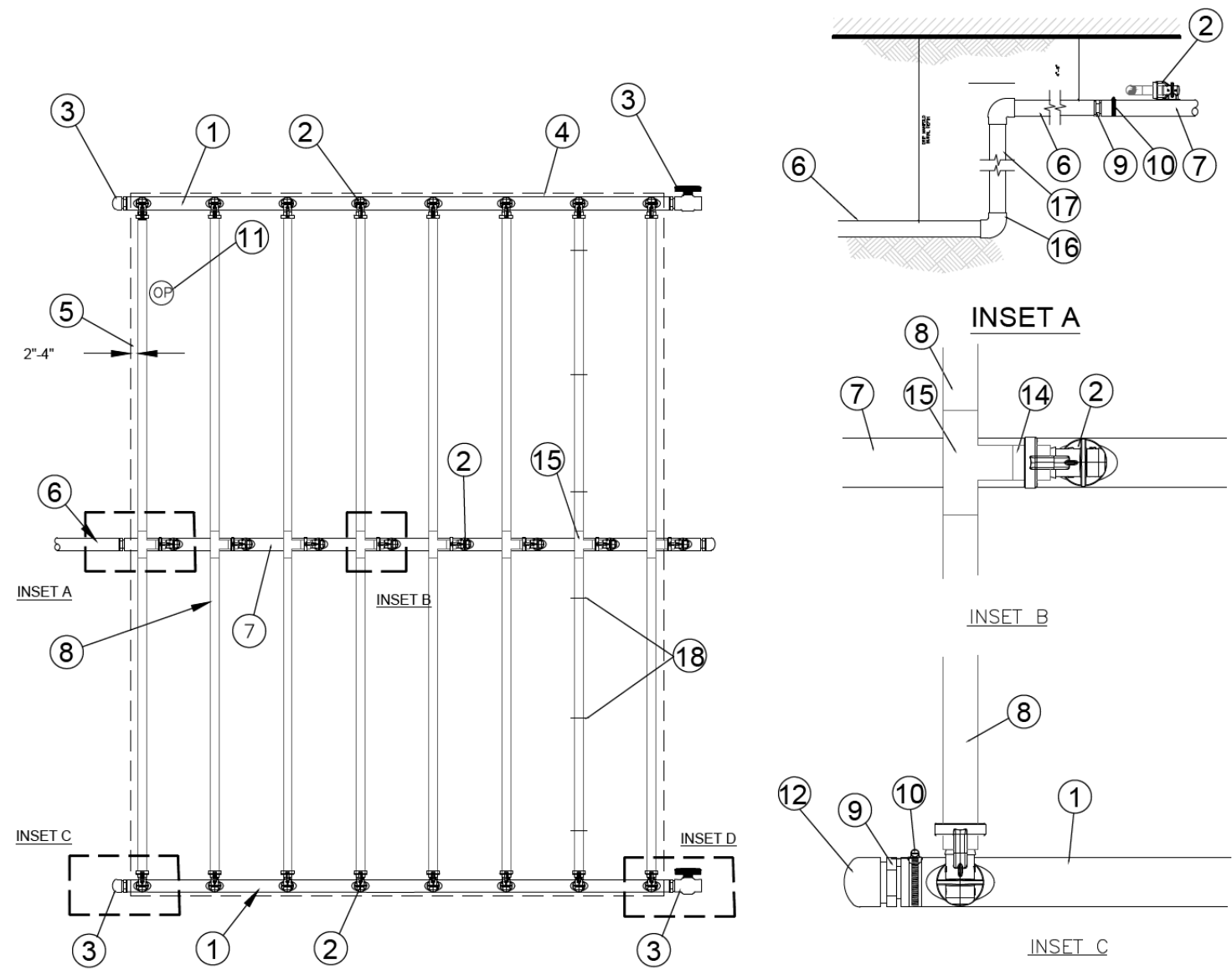
1 1/2" = 1' - 0"

COLOR?



03 IRRIGATION SYSTEM CONNECTION

3/4" = 1' - 0"



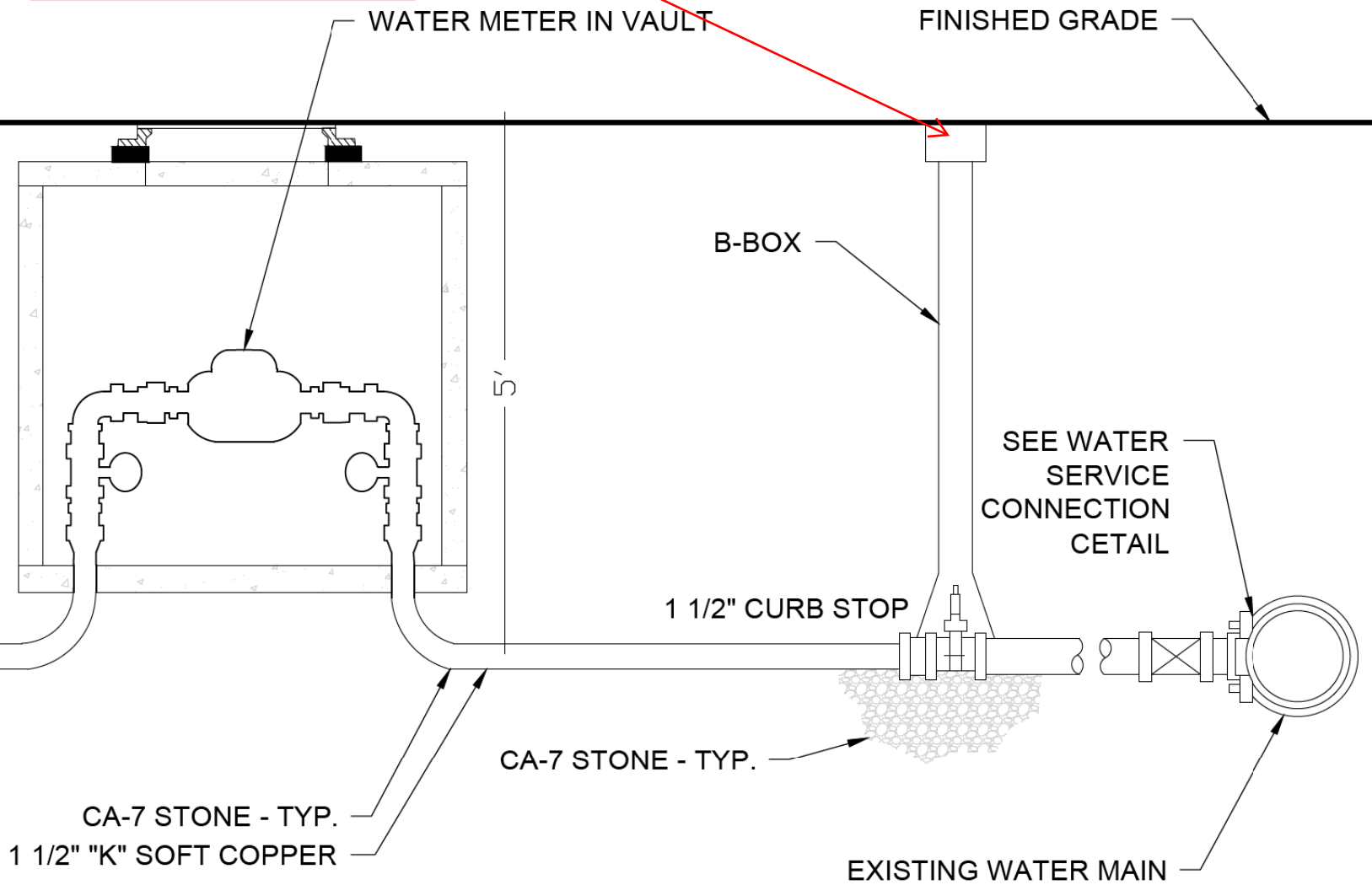
NOTES:

1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.

02 SUB-SURFACE DRIPLINE - TYPICAL LAYOUT

1 1/2" = 1' - 0"

ARE WE SHOWING TWO B-BOXES ON PLANS. NOT OPPOSED TO HAVING MORE WAYS TO ISOLATE THE SYSTEM.



- 1 QF-FLUSH HEADER
- 2 PRE-INSTALLED BARB FITTING
- 3 FLUSH POINT WITH PVC CAP OR OPTIONAL PVC BALL VALVE
- 4 PERIMETER OF AREA
- 5 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2" - 4" FROM PERIMETER OF AREA
- 6 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 7 QF SUPPLY HEADER
- 8 RAIN BIRD XFS SERIES DRIPLINE (TYPICAL)
- 9 MALE ADAPTER INSERT
- 10 STAINLESS STEEL, OETIKER OR MURRAY CLAMP
- 11 OPERATION INDICATOR RAIN BIRD MODEL: OPERIND
- 12 PVC SCH 40 CAP
- 13 PVC SCH 40 BALL VALVE
- 14 RAIN BIRD XF SERIES BLANK TUBING
- 15 BARB X BARB INSERT TEE: RAIN BIRD XFF-TEE (TYPICAL)
- 16 PVC SCH 40 ELL (TYPICAL)
- 17 PVC SCH 40 RISER PIPE
- 18 XF SERIES TIE-DOWN STAKES (TDS-050) REFER TO RAIN BIRD DRIPLINE DESIGN GUIDE FOR PROPER SPACING

LENGTH OF RUN CHART (FEET)

INLET PRESSURE (PSI)	EMITTER FLOW RATE (GPH)			
	0.58	0.58	0.92	0.92
EMITTER SPACING (INCHES)				
	12 IN	18 IN	12 IN	18 IN
15	169	236	125	175
20	230	323	171	239
25	270	379	200	282
30	301	424	222	314
35	327	460	242	341
40	349	492	258	364
45	369	521	273	386
50	387	547	286	405
55	404	570	299	422
60	420	593	310	439

04 QUICK COUPLER IN BOX - DETAIL

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DATE —	REVISED —

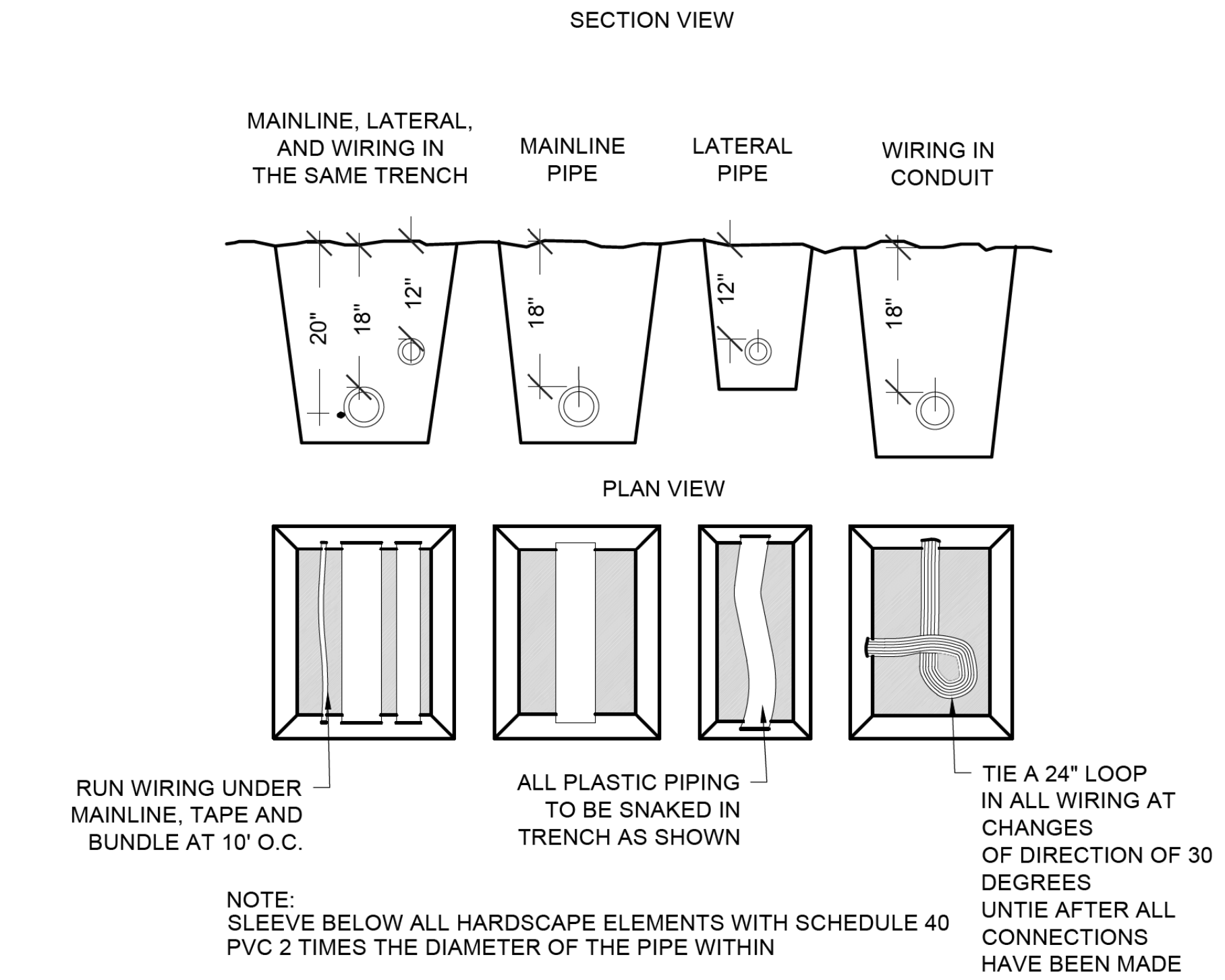
VILLAGE OF GLEN ELLYN

IRRIGATION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

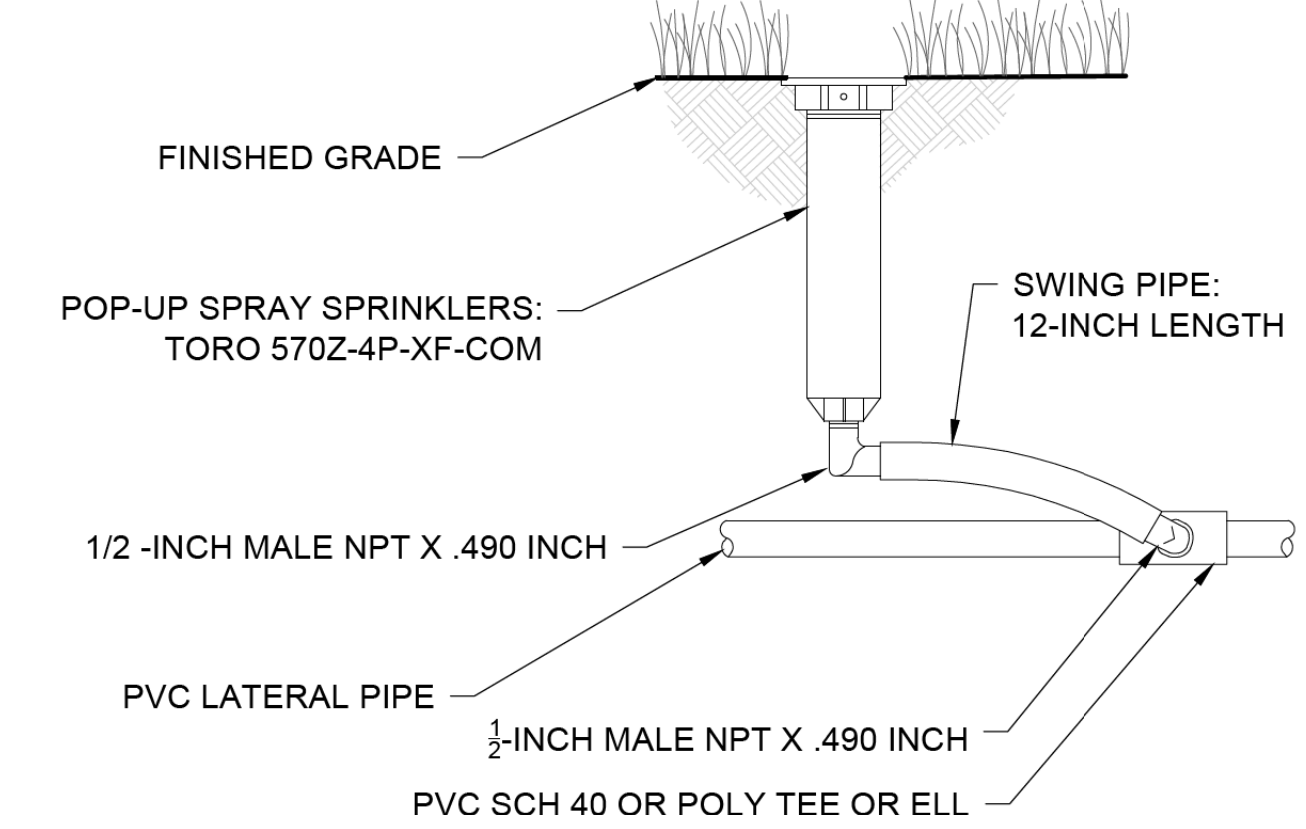
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	96
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

L-4.05



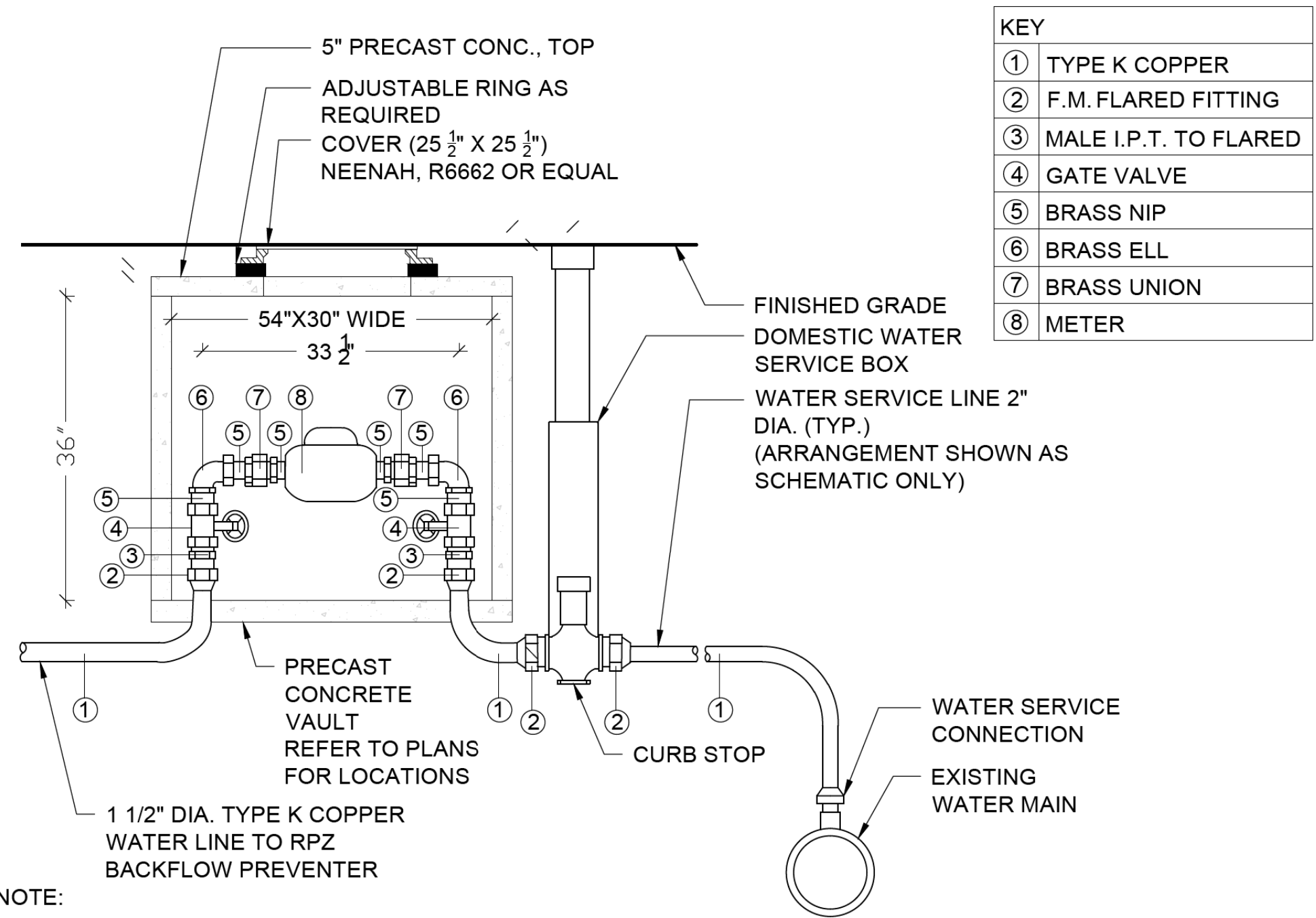
01 PIPE & WIRE TRENCHING

NTS



02 POP-UP SPRAY HEAD WITH SWING ARM - TYP.

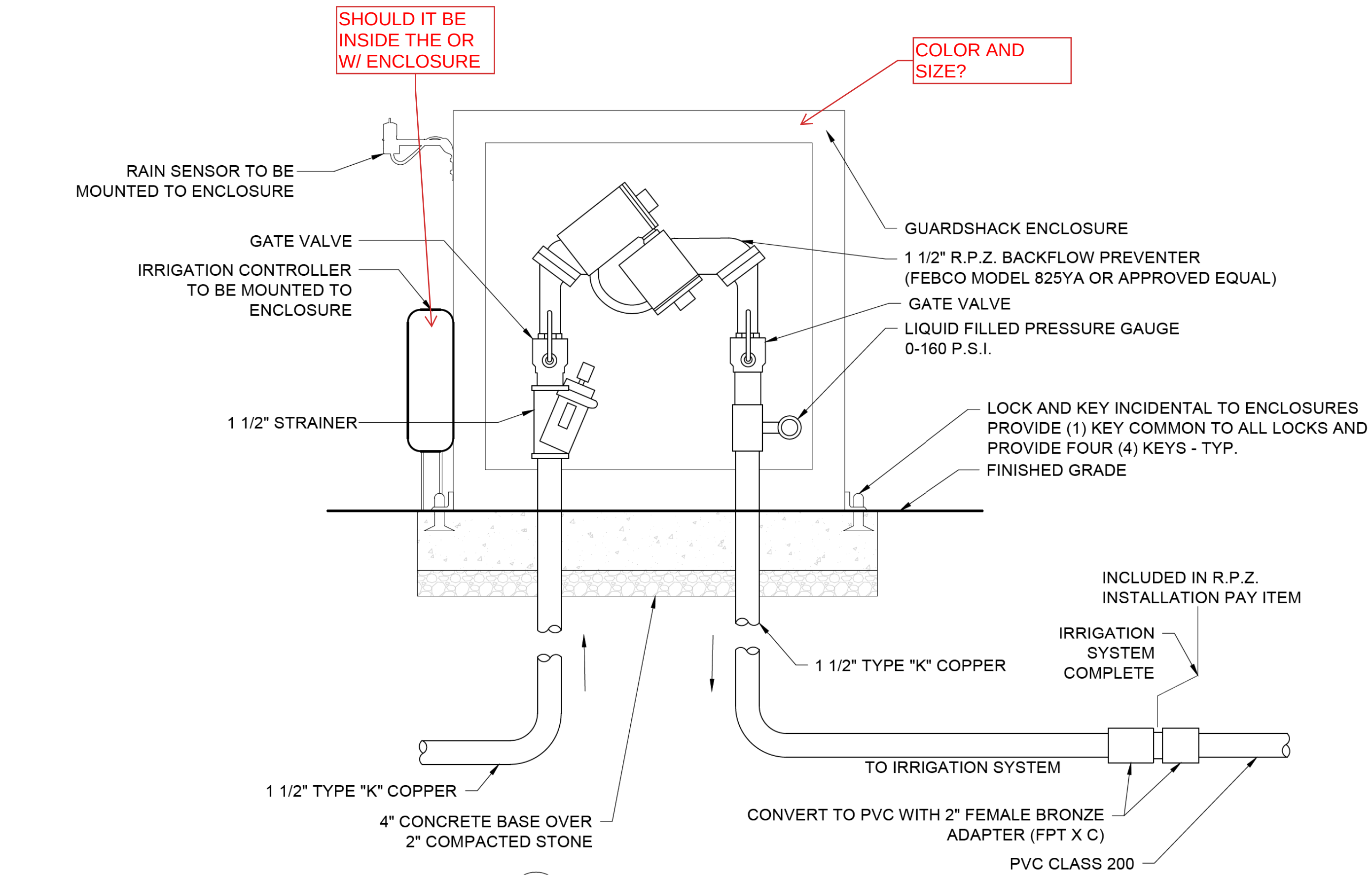
1 1/2" = 1' - 0"



03 WATER METER IN VAULT

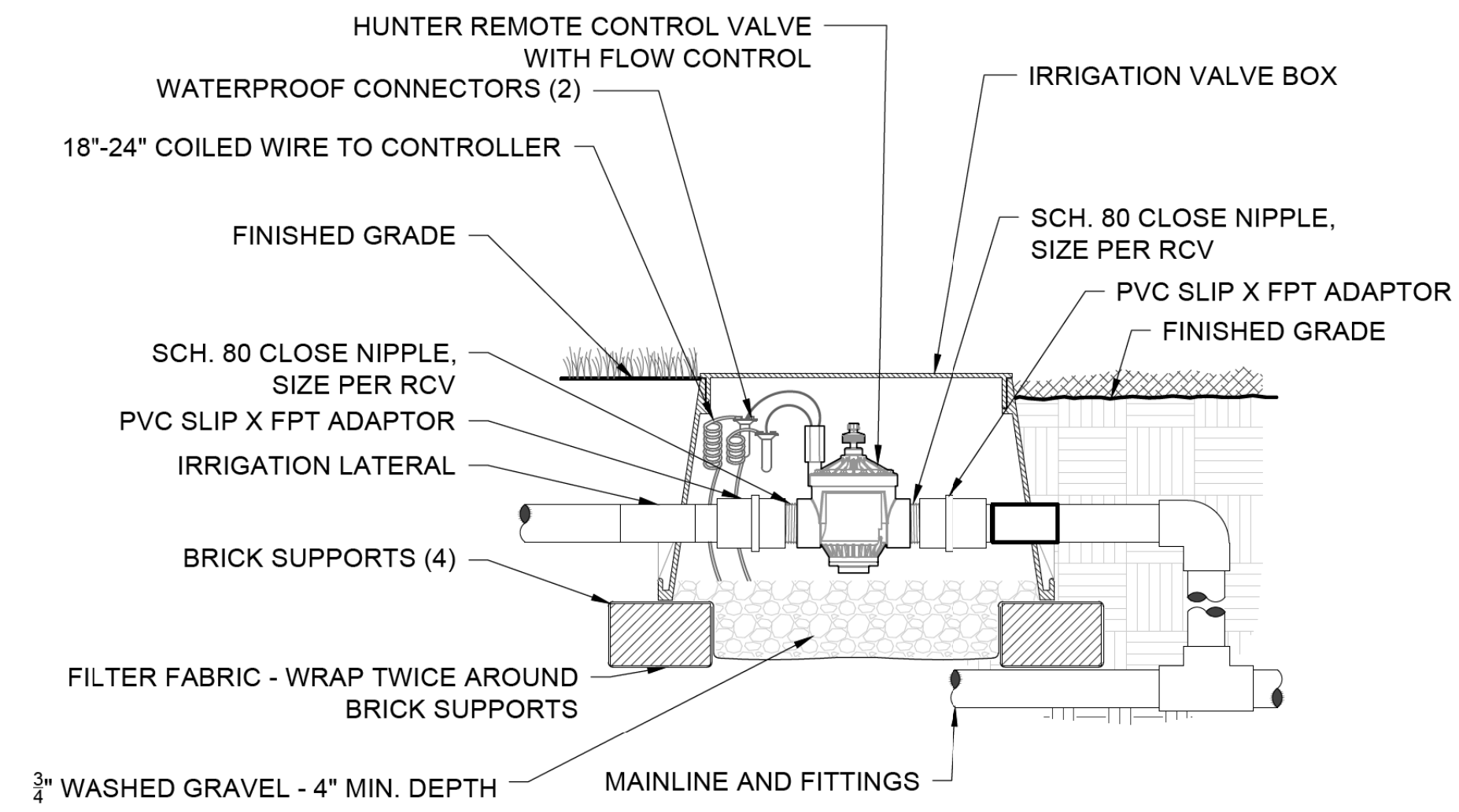
NTS

KEY	
①	TYPE K COPPER
②	F.M. FLARED FITTING
③	MALE I.P.T. TO FLARED
④	GATE VALVE
⑤	BRASS NIP
⑥	BRASS ELL
⑦	BRASS UNION
⑧	METER



04 RPZ INSTALLATION DETAIL - TYP.

1 1/2" = 1' - 0"



05 CONTROL VALVE - TYP.

1 1/2" = 1'-0"



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CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

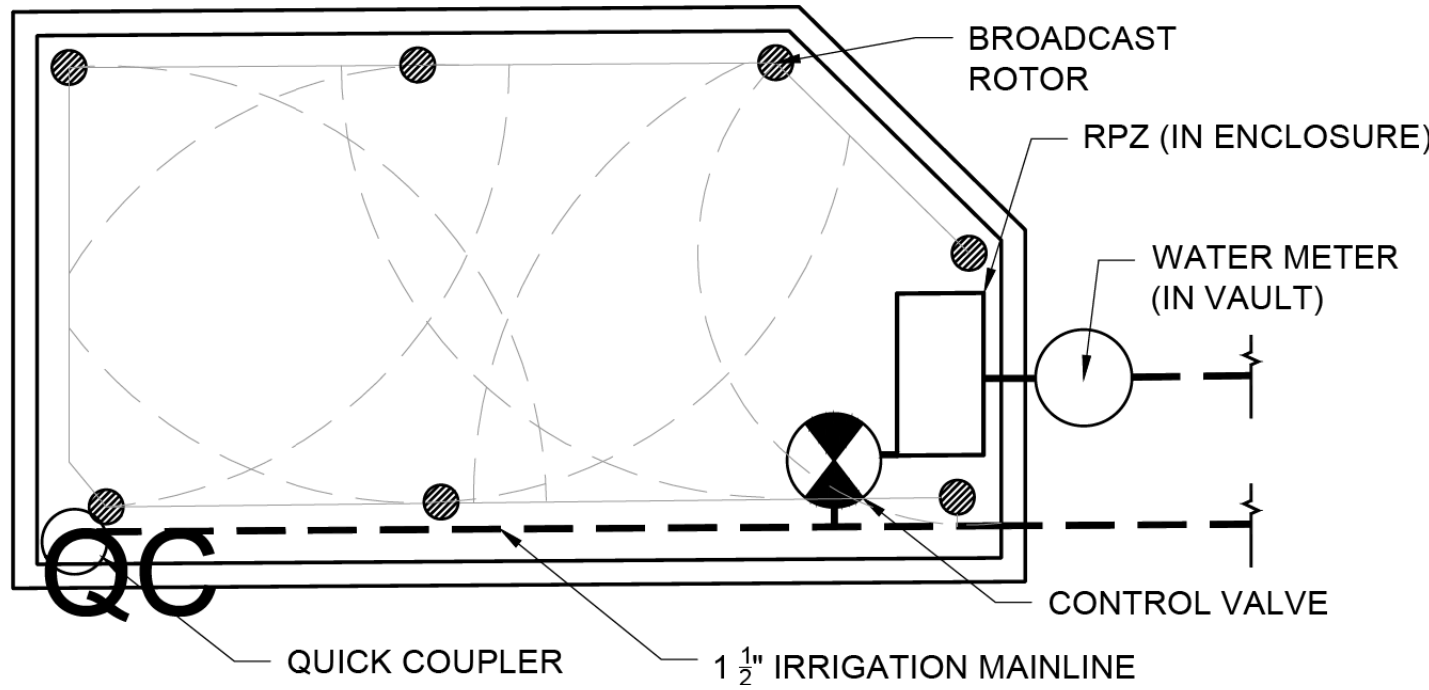
IRRIGATION LAYOUT

SHEET NO. OF SHEETS STA. TO STA.

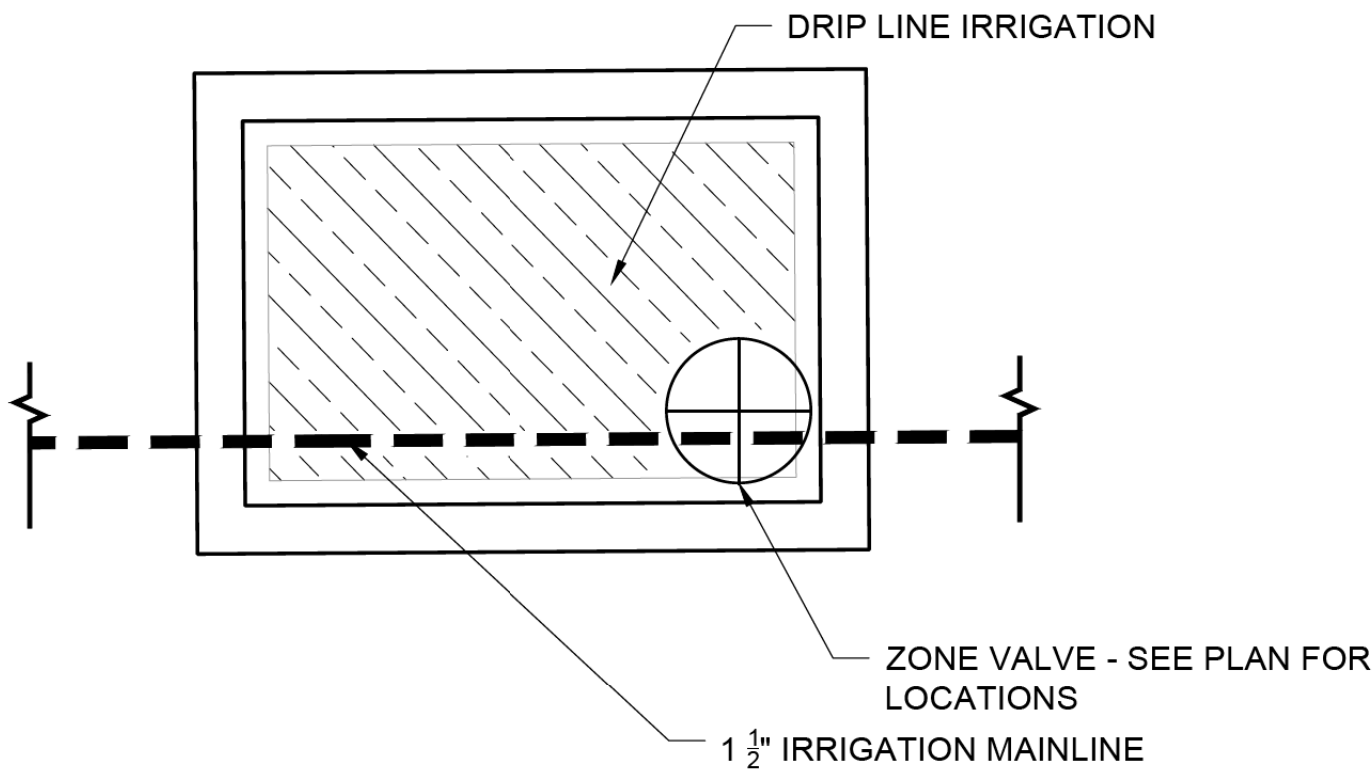
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXXX-XX-XX	DUPAGE	137	97
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

L-4.06

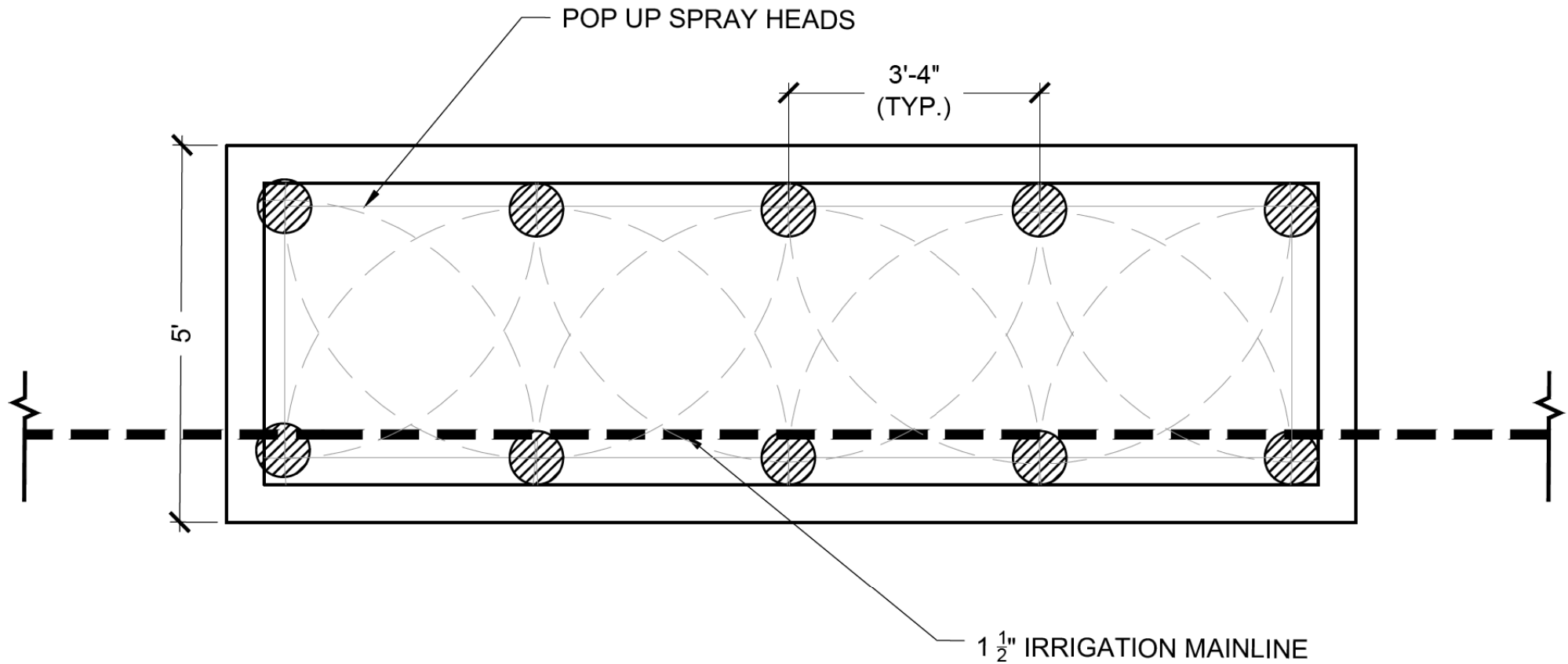
NOTE: SPRAY PATTERNS SHOWN AT AN APPROXIMATE RADIUS FOR ILLUSTRATIVE PURPOSES ONLY. ALL SPRAY HEADS SHALL BE FIELD ADJUSTED AT THE TIME OF INSTALL TO ENSURE THAT WATER DOES NOT SPRAY BEYOND THE INTENDED AREA OF IRRIGATION. CONTRACTOR SHALL PROVIDE HEAD-TO-HEAD COVERAGE. CONTRACTOR SHALL SUBMIT SHOP DRAWING OF LAYOUT.



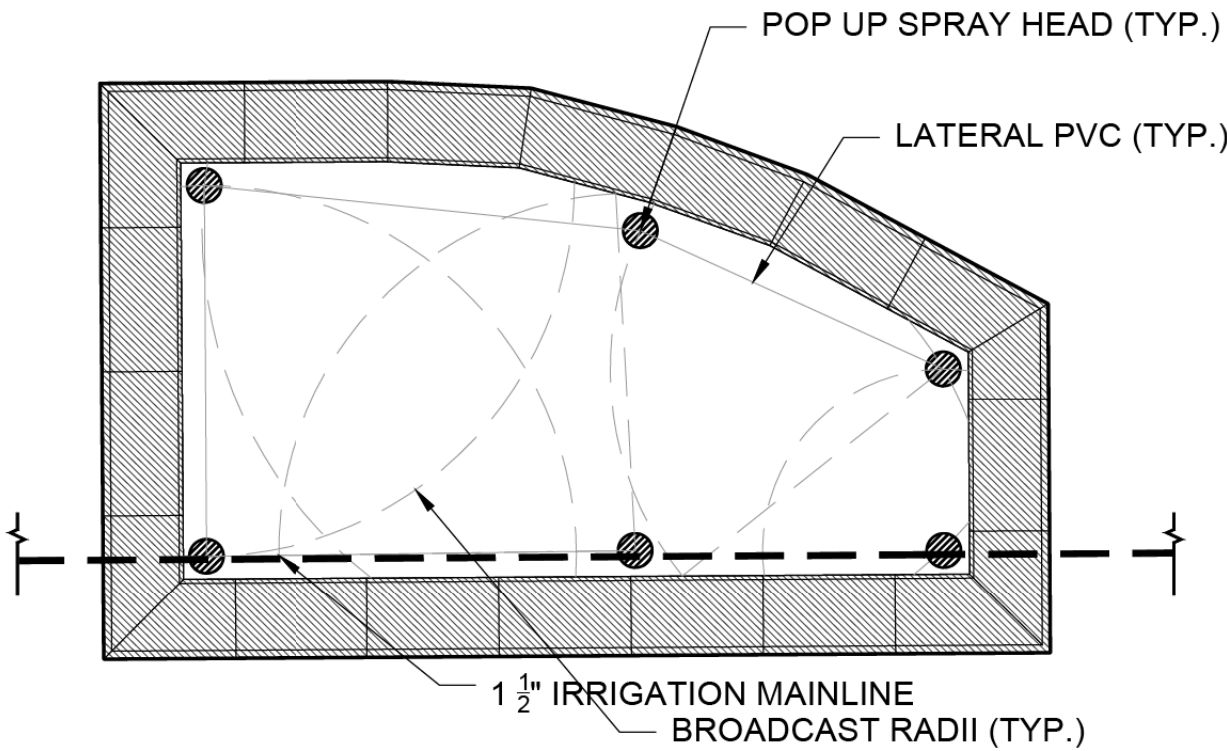
01 IRRIGATION LAYOUT - GRANITE CURB PLANTER - TYP.
1/4" = 1'-0"



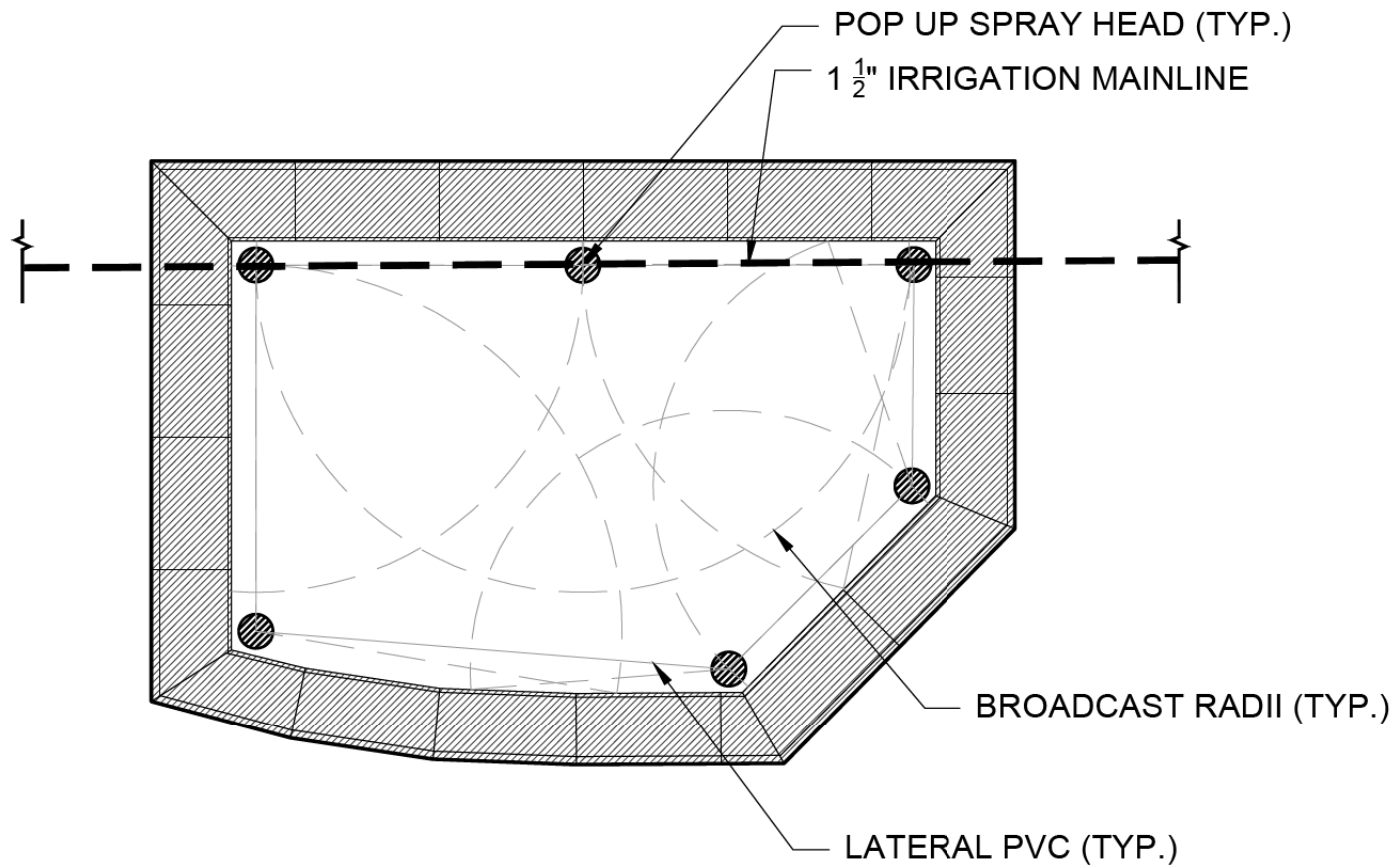
02 IRRIGATION LAYOUT - GRANITE CURB PLANTER 5X7 - TYP.
NTS



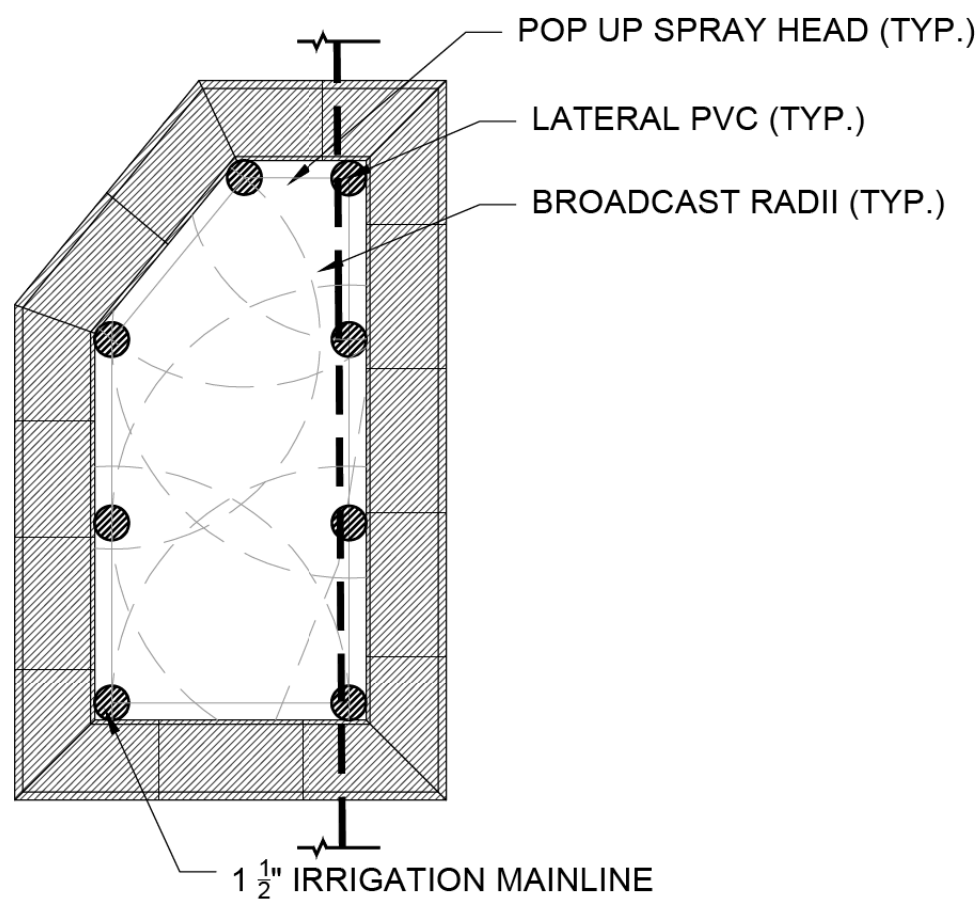
03 IRRIGATION LAYOUT - GRANITE CURB PLANTER 5X15 - TYP.
NTS



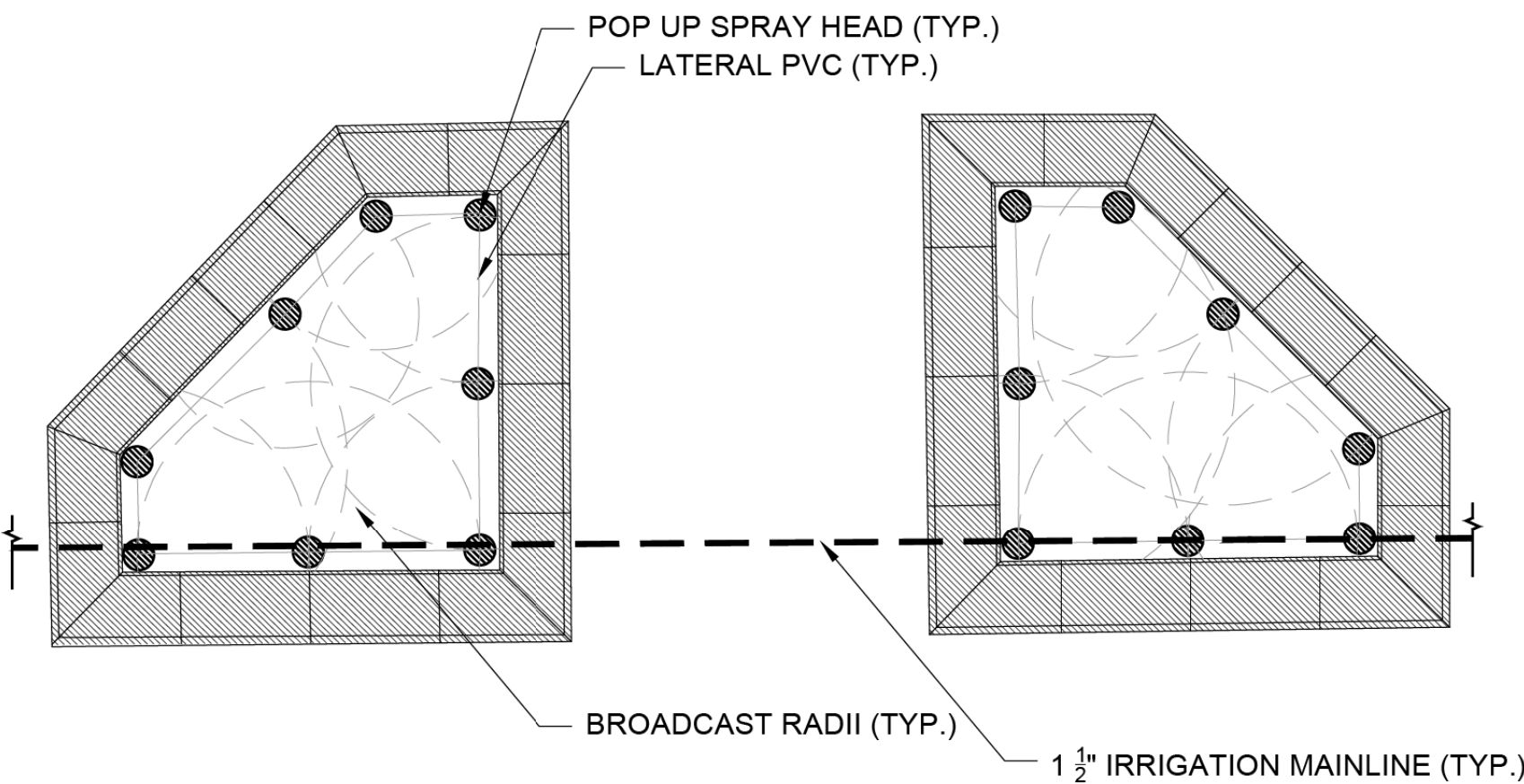
04 IRRIGATION LAYOUT - SEATWALL PLANTER 1 - TYP.
1/4" = 1'-0"



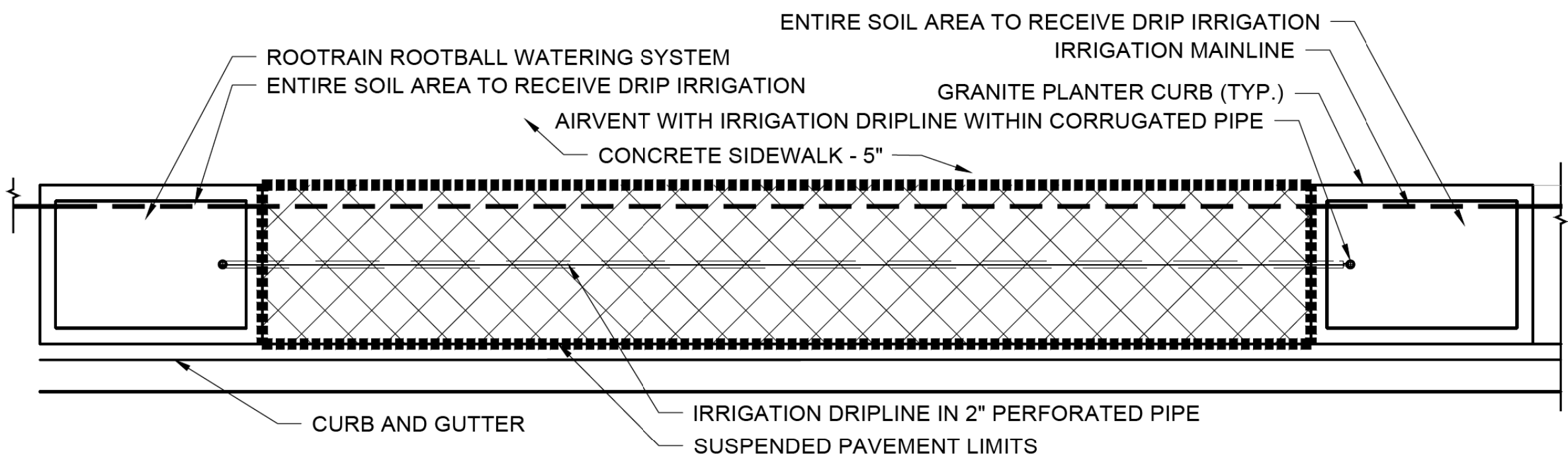
05 IRRIGATION LAYOUT - SEATWALL PLANTER 2 - TYP.
1/4" = 1'-0"



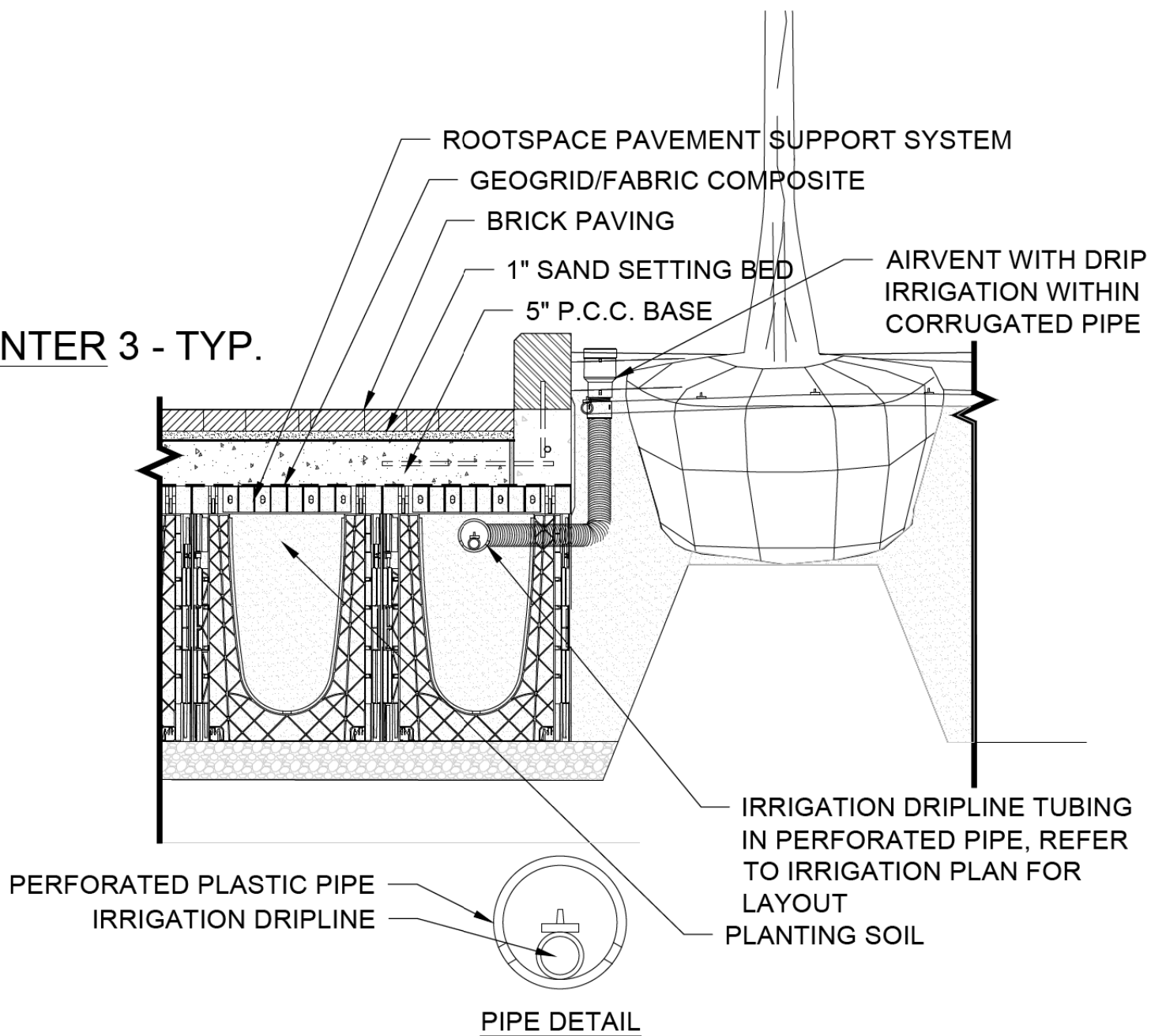
06 IRRIGATION LAYOUT - SEATWALL PLANTER 3 - TYP.
1/4" = 1'-0"



07 SEATWALL PLANTERS 4 AND 5 - TYP.
1/4" = 1'-0"



08 IRRIGATION LAYOUT - SUSPENDED PAVEMENT AREAS
1/4" = 1'-0"



NOTE: IRRIGATION DRIPLINE TUBING PLACED IN PERFORATED PIPE. PERFORATED PIPE DRAINAGE HOLES TO FACE DOWNWARD. USE ONLY LONG SWEEP 90 DEGREE OR 45 DEGREE FITTINGS TO FACILITATE THE INSTALLATION AND MAINTENANCE OF THE DRIPLINE TUBING. PLACE PERFORATED PIPE JUST BELOW THE TOP OF SOIL WITHIN SOIL CELL

09 IRRIGATION SECTION - SUSPENDED PAVEMENT AREAS
NTS



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CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

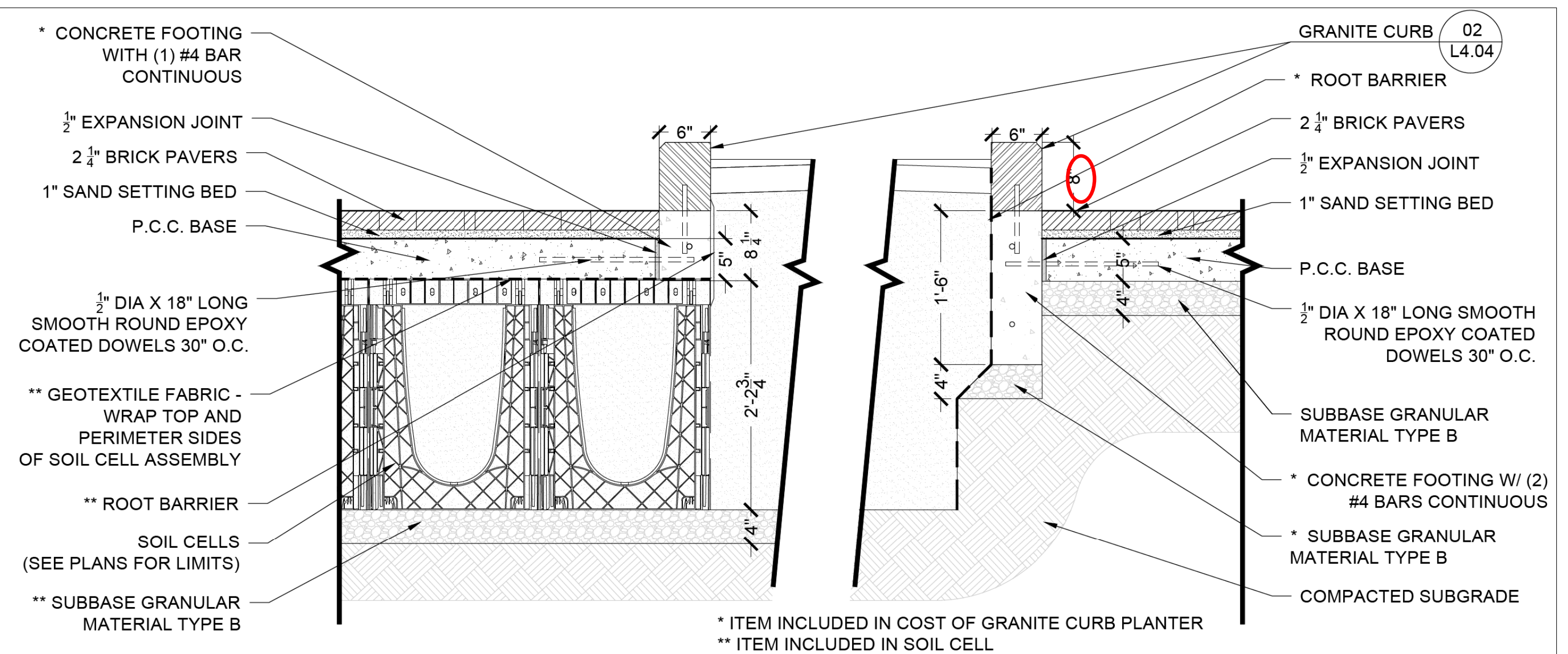
VILLAGE OF GLEN ELLYN

IRRIGATION LAYOUT

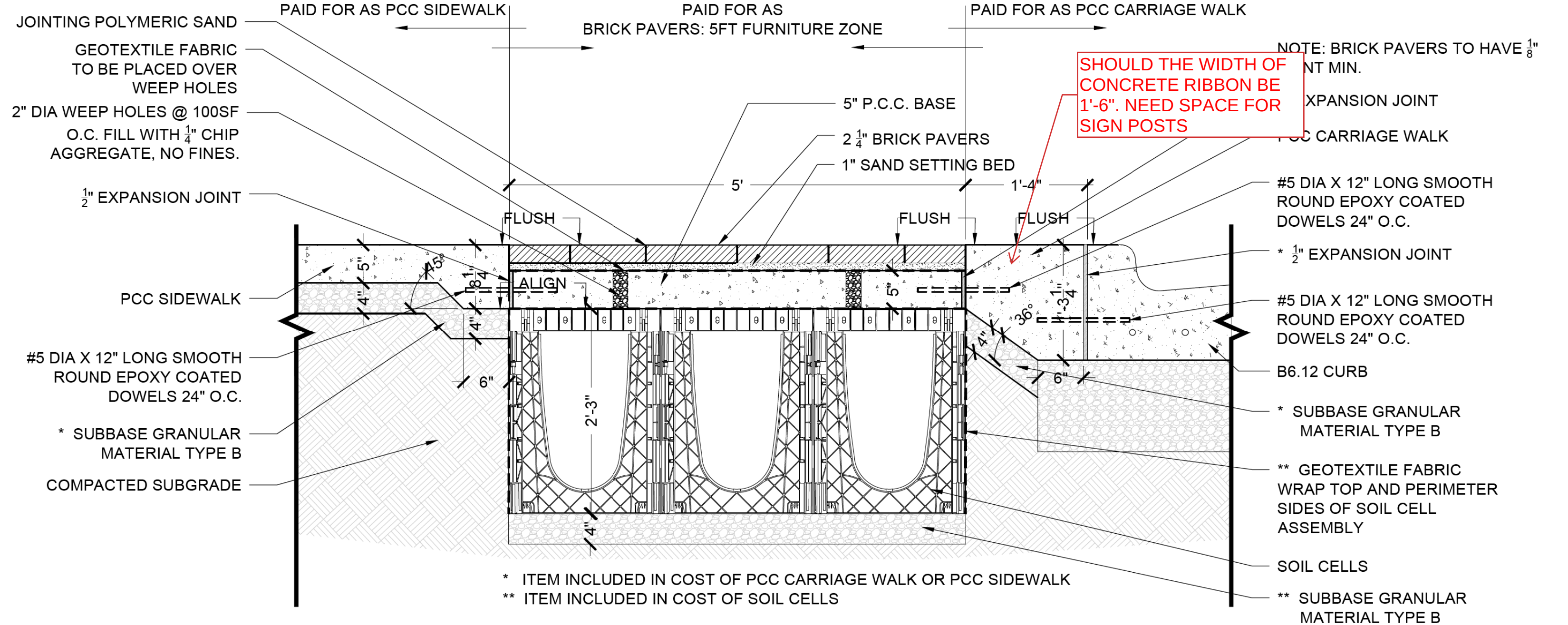
SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXXX-XX-XX	DUPAGE	137	98

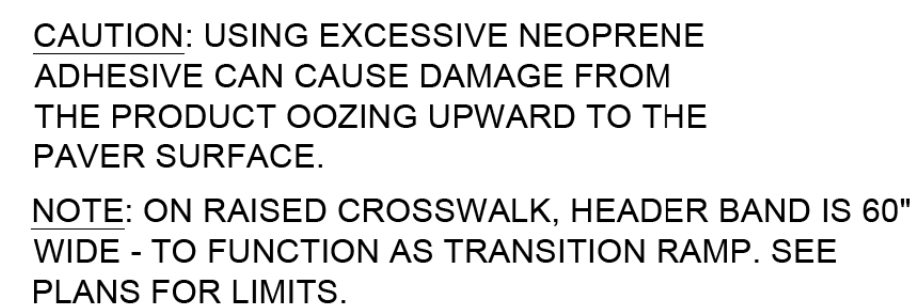
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



02 BRICK PAVERS - TYP. SECTION B
1" = 1' - 0"

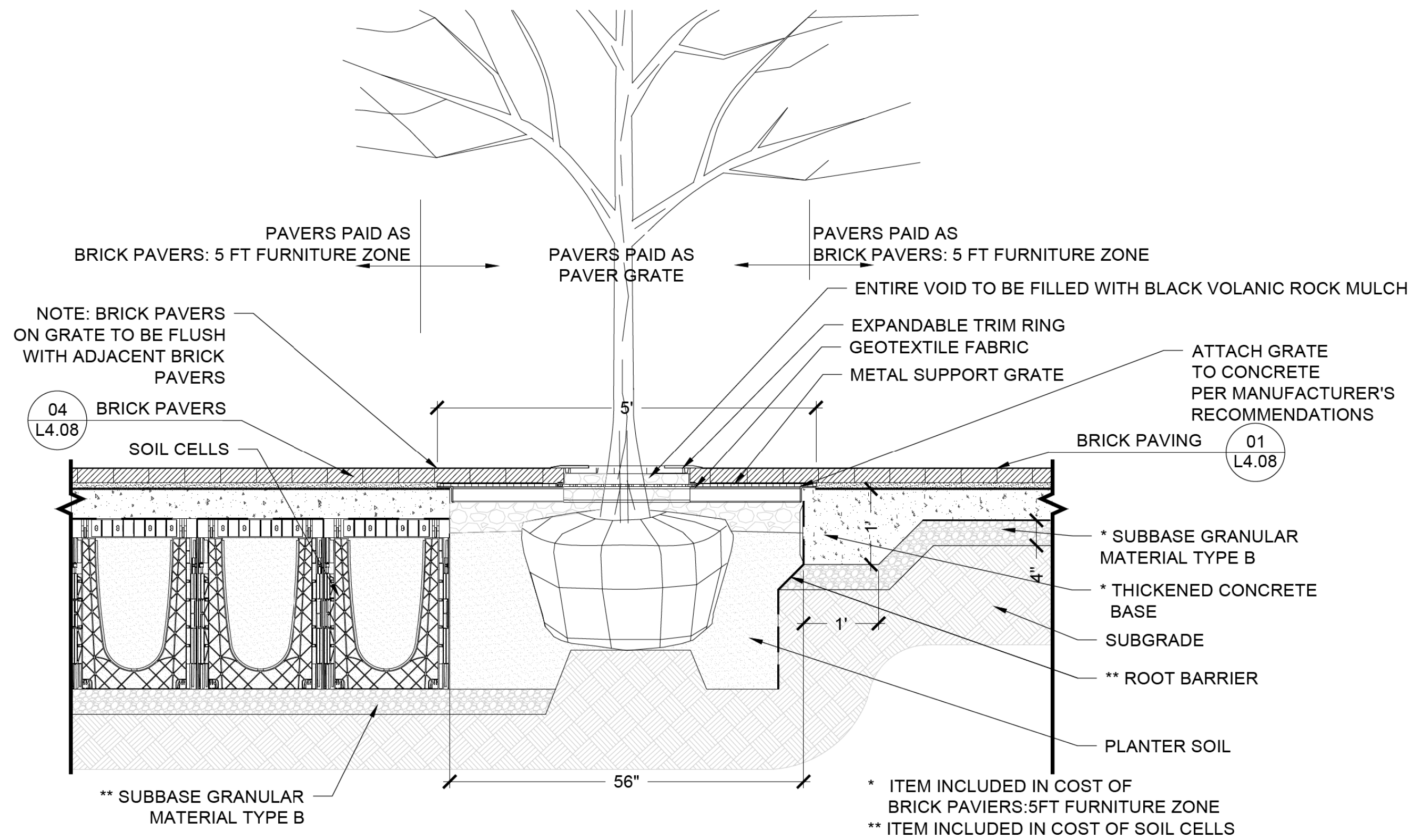


04 BRICK PAVERS - TYP. SECTION A (WITH SOIL CELLS)
1" = 1' - 0"

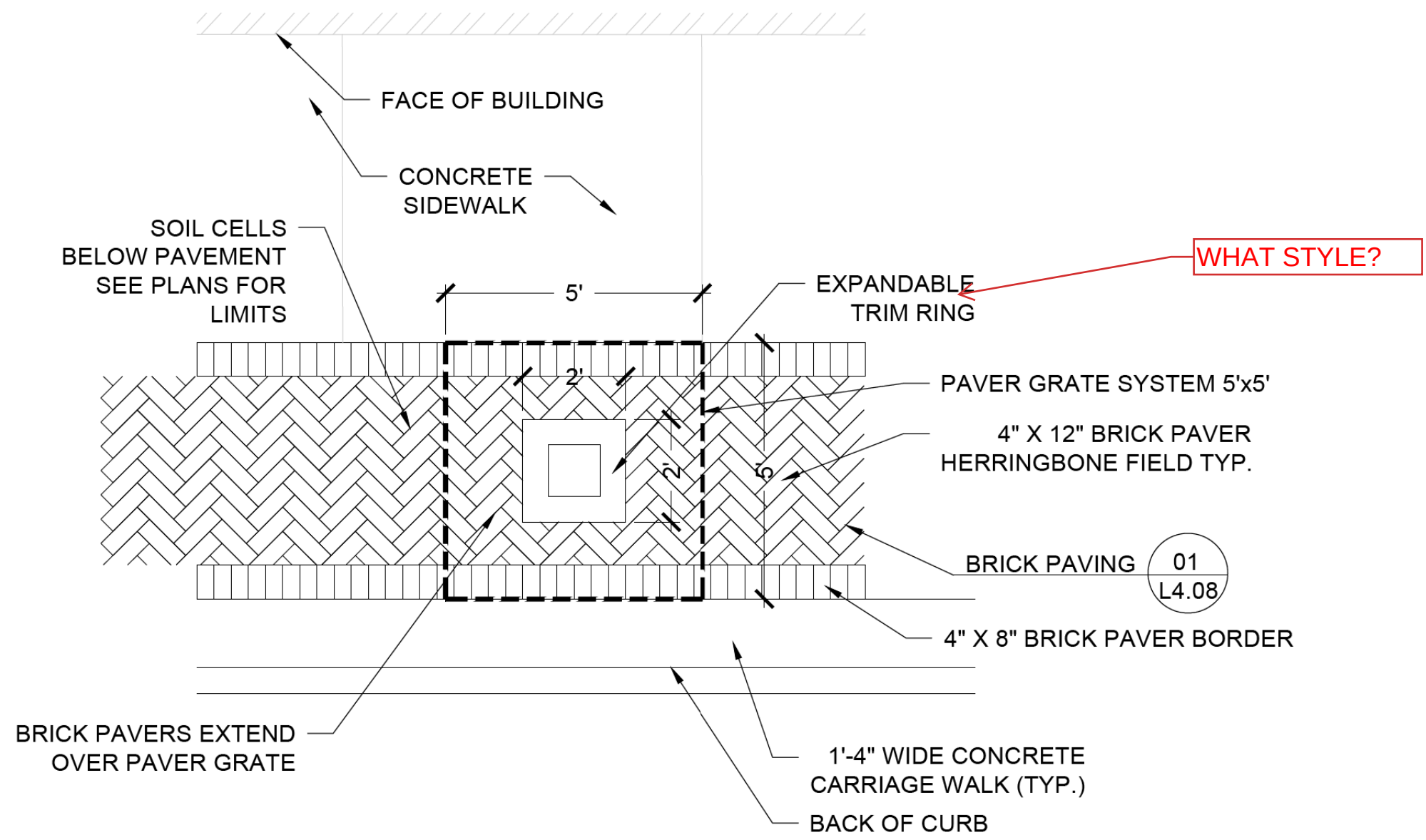
[illegible]

06 CONCRETE CURB (SPECIAL)
1" = 1' - 0"

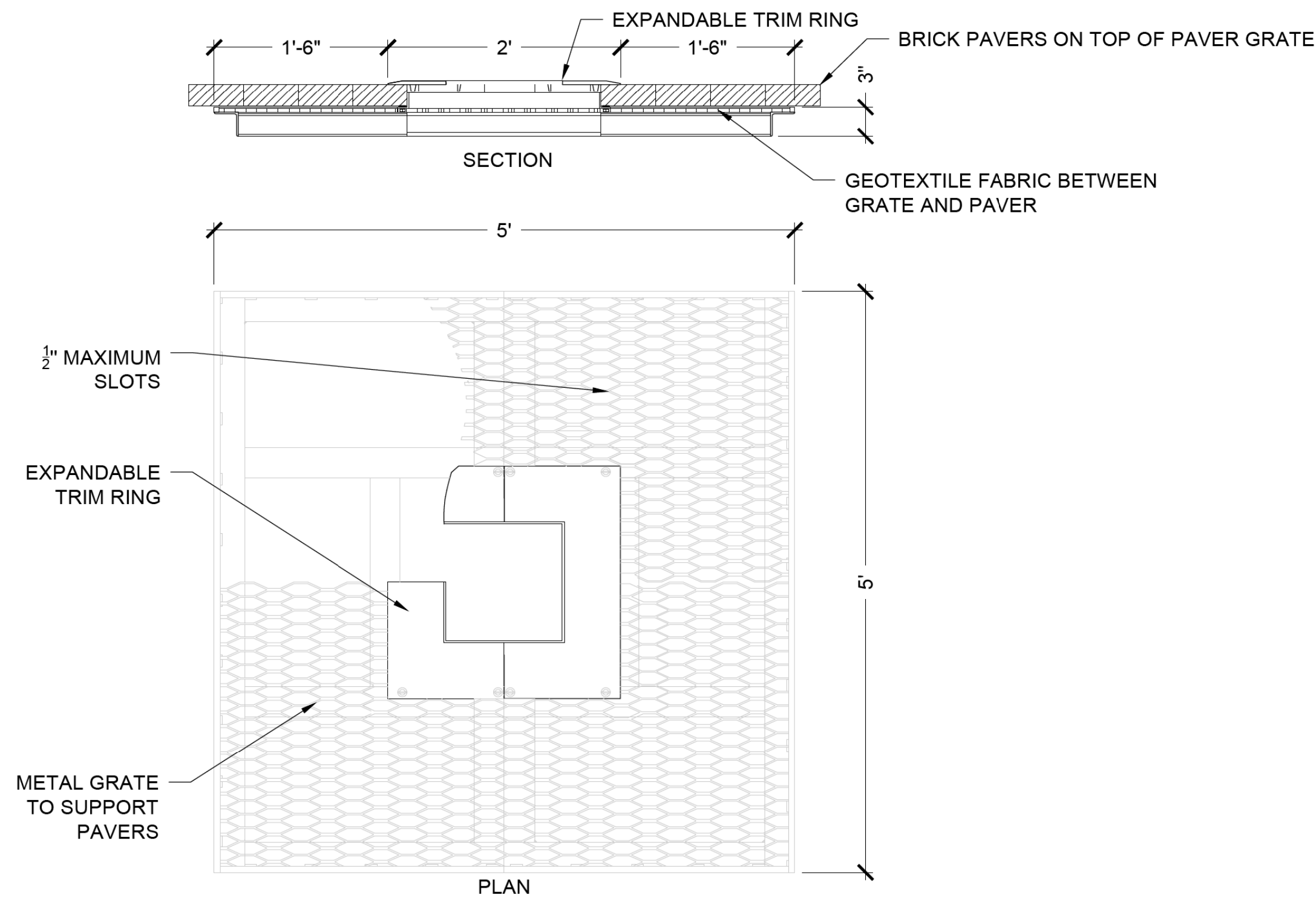




01 PAVER GRATE - TYP. SECTION
3/4" = 1' - 0"



02 PAVER GRATE - TYP. LAYOUT
3/8" = 1' - 0"



03 PAVER-GRATE - DETAIL
1" = 1' - 0"

L-4.10



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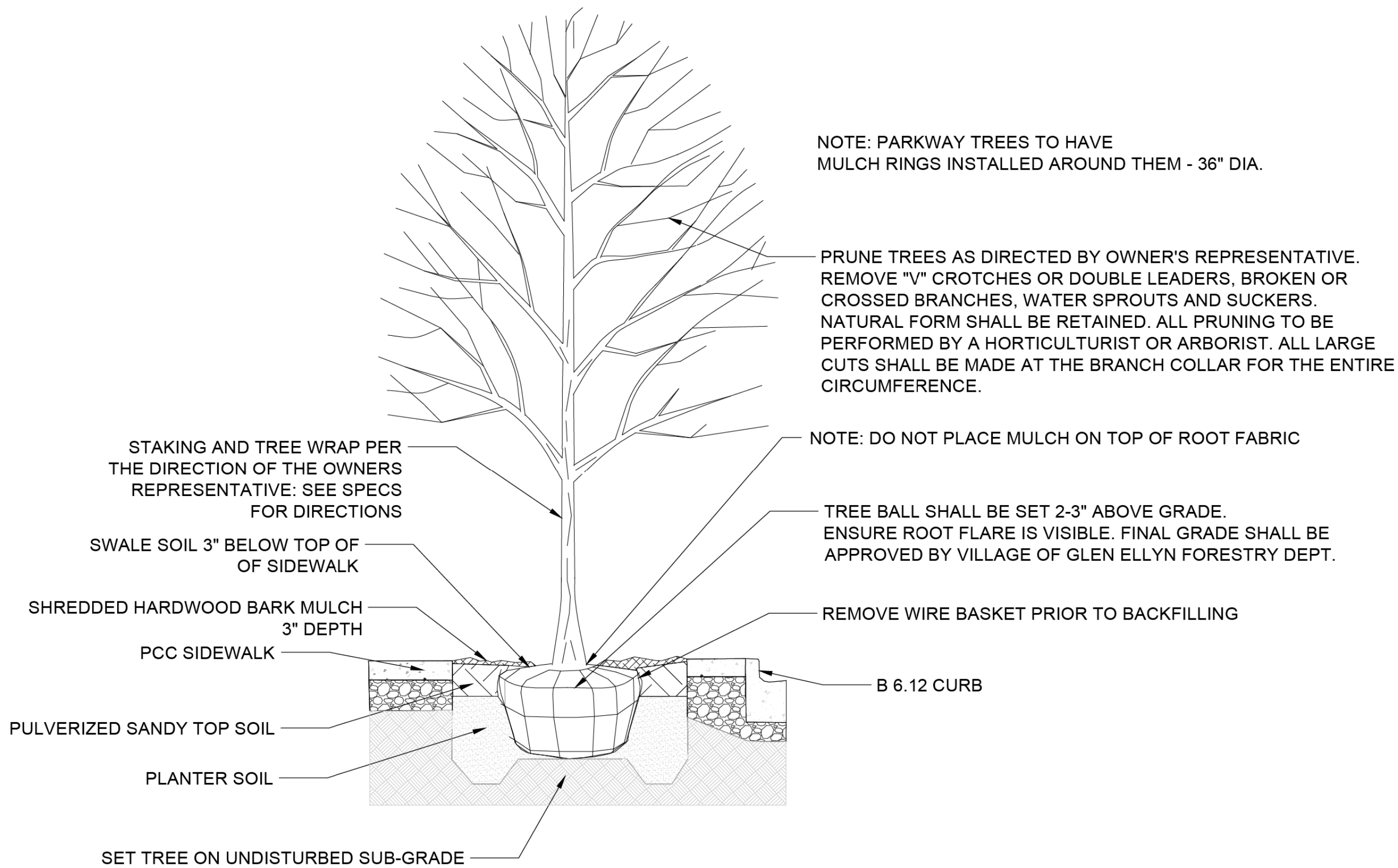
DESIGNED — PJH	REVISED —
DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

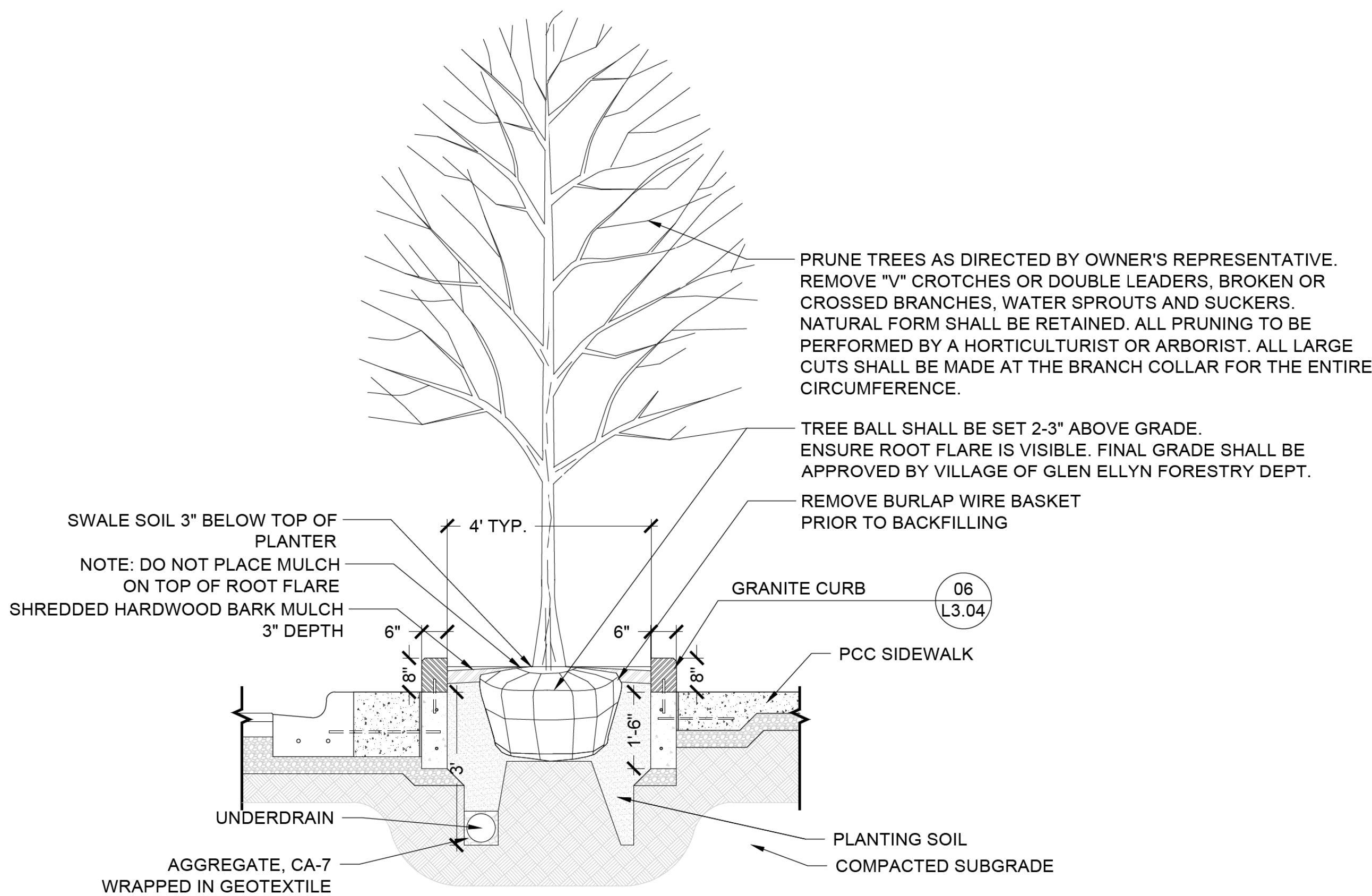
PAVER GRATE DETAILS

SHEET NO. OF SHEETS STA. TO STA.

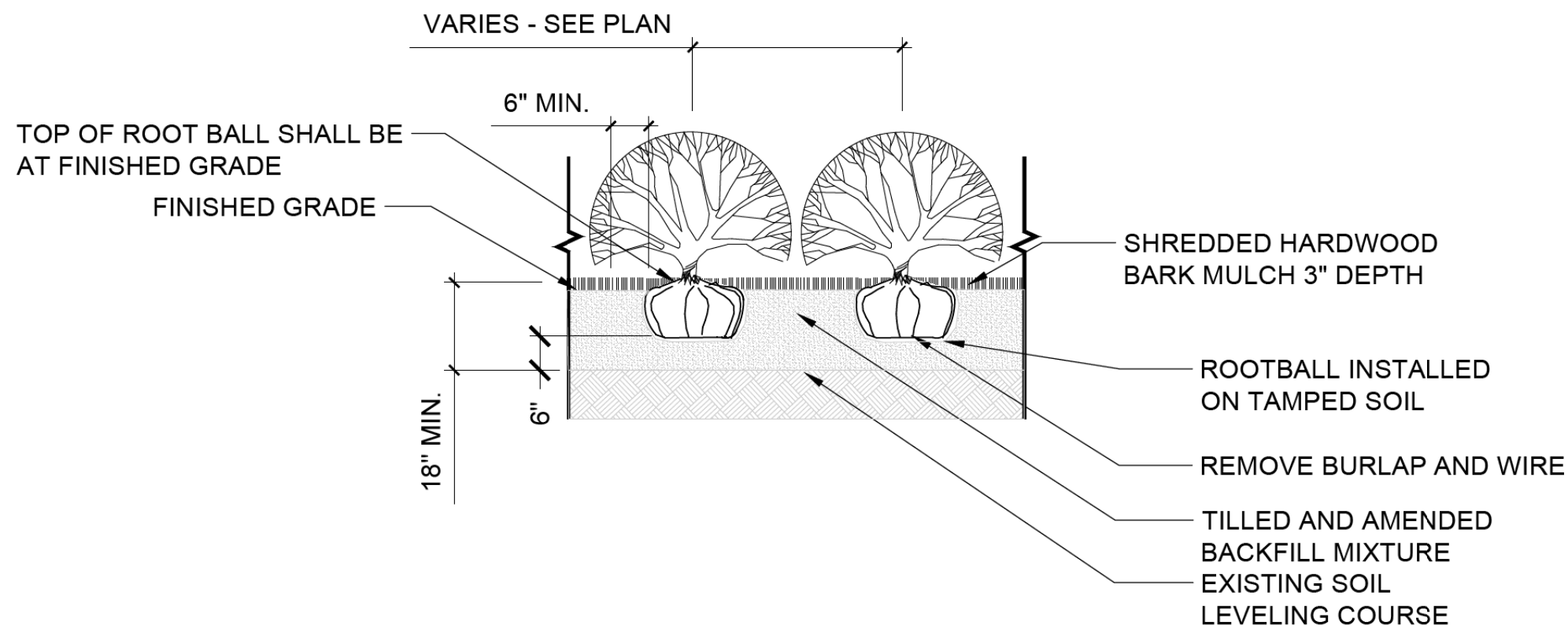
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	101
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



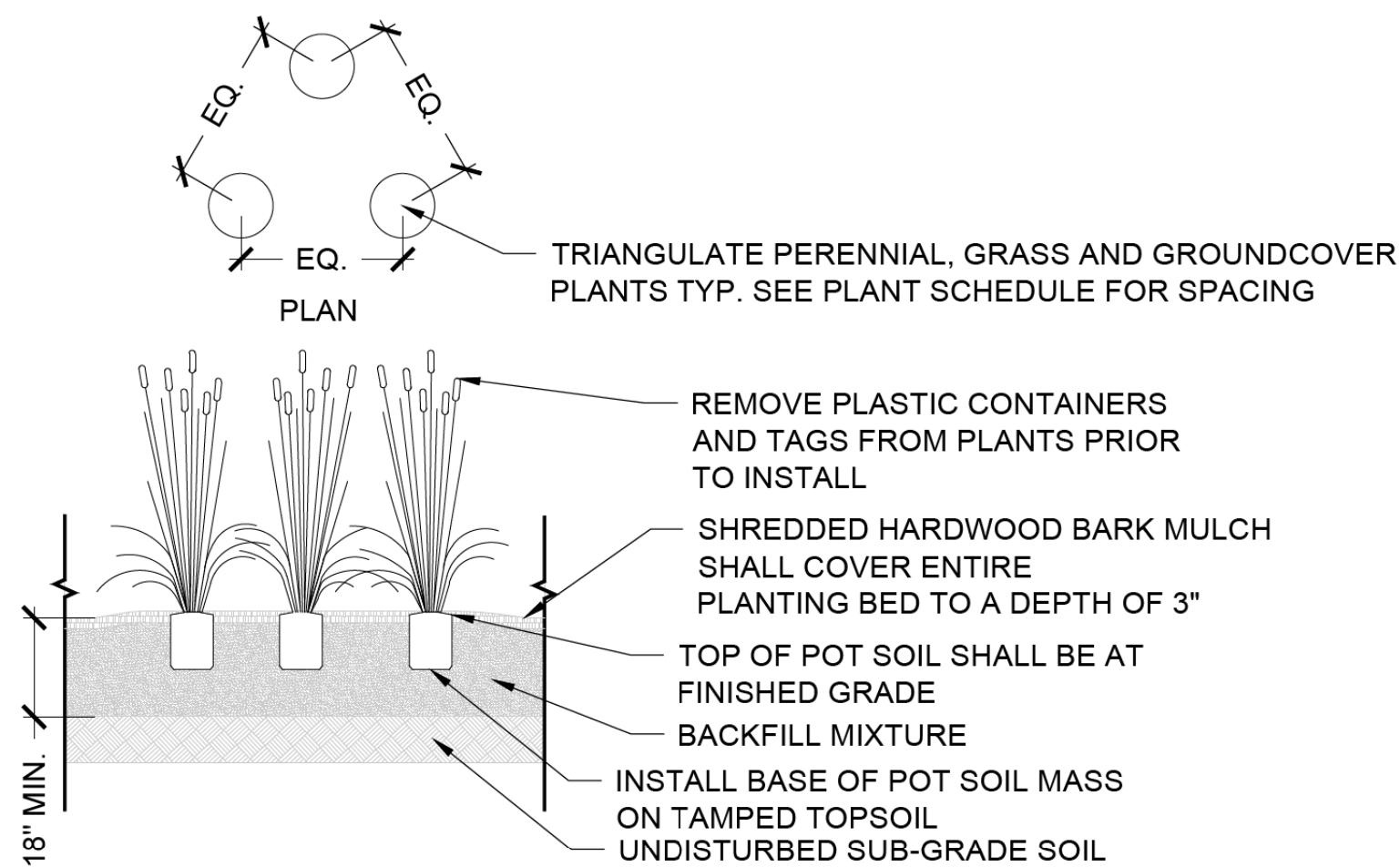
01 TREE IN PARKWAY
1/2" = 1'-0"



02 TREE IN PLANTER
SCALE= NTS



03 SHRUB PLANTING
SCALE= NTS



04 ORNAMENTAL GRASS/PERENNIAL PLANTING
3/8" = 1'-0"

Master Plant List						
CODE	QTY	LATIN NAME	COMMON NAME	SIZE	SPACING	COMMENTS
Trees						
ACF	2	Acer x freemanii 'Marmo'	Marmo Maple	4" CAL.		48" Max Rootball
ACX	1	Acer x freemanii 'Marmo'	Marmo Maple	7" CAL.		70" Max Rootball
ACY	1	Acer x freemanii 'Marmo'	Marmo Maple	8" CAL.		108" Max Rootball
ACM	3	Acer miyabei 'Morton' STATE STREET	State Street Maple	4" CAL.		48" Max Rootball
AML	6	Amelanchier laevis	Allegheny Serviceberry	4" CAL.		48" Max Rootball
BTW	2	Betula Nigra 'Whit XXV'	City Slicker River Birch	4" CAL.		48" Max Rootball
CEC	4	Cercis canadensis	Eastern Redbud	4" CAL.		48" Max Rootball
GTP	3	Gleditsia triacanthos 'Perfection'	Perfection Honeylocust	4" CAL.		48" Max Rootball
GTS	3	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	4" CAL.		48" Max Rootball
GTU	2	Gleditsia triacanthos 'Sunburst'	Sunburst Honeylocust	4" CAL.		48" Max Rootball
KOP	6	Koelreuteria paniculata	Golden Raintree	4" CAL.		48" Max Rootball
OSV	4	Ostrya virginiana	American Hophornbeam	4" CAL.		48" Max Rootball
QUA	1	Quercus alba	White Oak	8" CAL.		93" Max Rootball
QUB	3	Quercus bicolor	Swamp White Oak	4" CAL.		48" Max Rootball
QUC	4	Quercus alba x robur 'Crimschmidt'	Crimson Spire Oaks	4" CAL.		48" Max Rootball
STJ	4	Styphnolobium japonicum	Japanese Pagodatree	4" CAL.		48" Max Rootball
SYR	3	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	4" CAL.		48" Max Rootball
TAD	3	Taxodium distichum 'Micklelson' SHAWNEE BRAVE	Shawnee Brave Baldcypress	4" CAL.		48" Max Rootball
TIA	12	Tilia americana 'Redmond'	Redmond American Linden	4" CAL.		48" Max Rootball
ZEV	6	Zelkova serrata 'Village Green'	Village Green Zelkova	4" CAL.		48" Max Rootball
Shrubs						
ITV	13	Itea virginia 'Little Henry'	Little Henry Sweetspire	#3		3' Tall
HYS	17	Hydrangea serrata SMNMAKTSR	Tuff Stuff Red Mountain Hydrangea	#3		3' Tall
ARO	6	Aronia melanocarpa 'Morton'	Morton Black Chokeberry	#3		2-3' Tall
CEA	16	Ceanothus americanus	New Jersey Tea	#3		3' Tall
Perennials						
BAA	6	Baptisia 'Blueberry Sundae'	Decadence Blueberry Sundae Baptisia	#1		36" Tall
COL	51	Coreopsis lanceolata	Lance-leaved Coreopsis	#1		
DAP	19	Dalea purpurea	Purple Prairie Clover	#1		
ECP	12	Echinacea purpurea	Purple Coneflower	#1		
HEX	24	Heuchera x villosa 'Carnival Watermelon'	Carnival Watermelon Heuchera	#1		
LIK	71	Liatris spicata 'Kobold'	Kobold Gayfeather	#1		
LOC	8	Lobelia cardinalis	Cardinal Flower	#1		
NEX	52	Nepeta x faassenii 'Kit Kat'	Kit Kat Catmint	#1		
PED	26	Penstemon digitalis	Beardtongue	#1		
SAN	48	Salvia nemerosa 'Blue Hill'	Blue Hill Sage	#1		
Ornamental Grasses						
SCS	36	Schyzachyrium scoparium	Little Bluestem	#1		
CAF	14	Carex flacca	Blue Sedge	4" Pot		10 Flat
Groundcovers						
SEK	235	Sedum kamtschaticum	Russian Stonecrop	4" Pot	10" O.C.	24 Flat
VIM	153	Vinca minor	Periwinkle	4" Pot	18" O.C.	10 Flat

L-4.11



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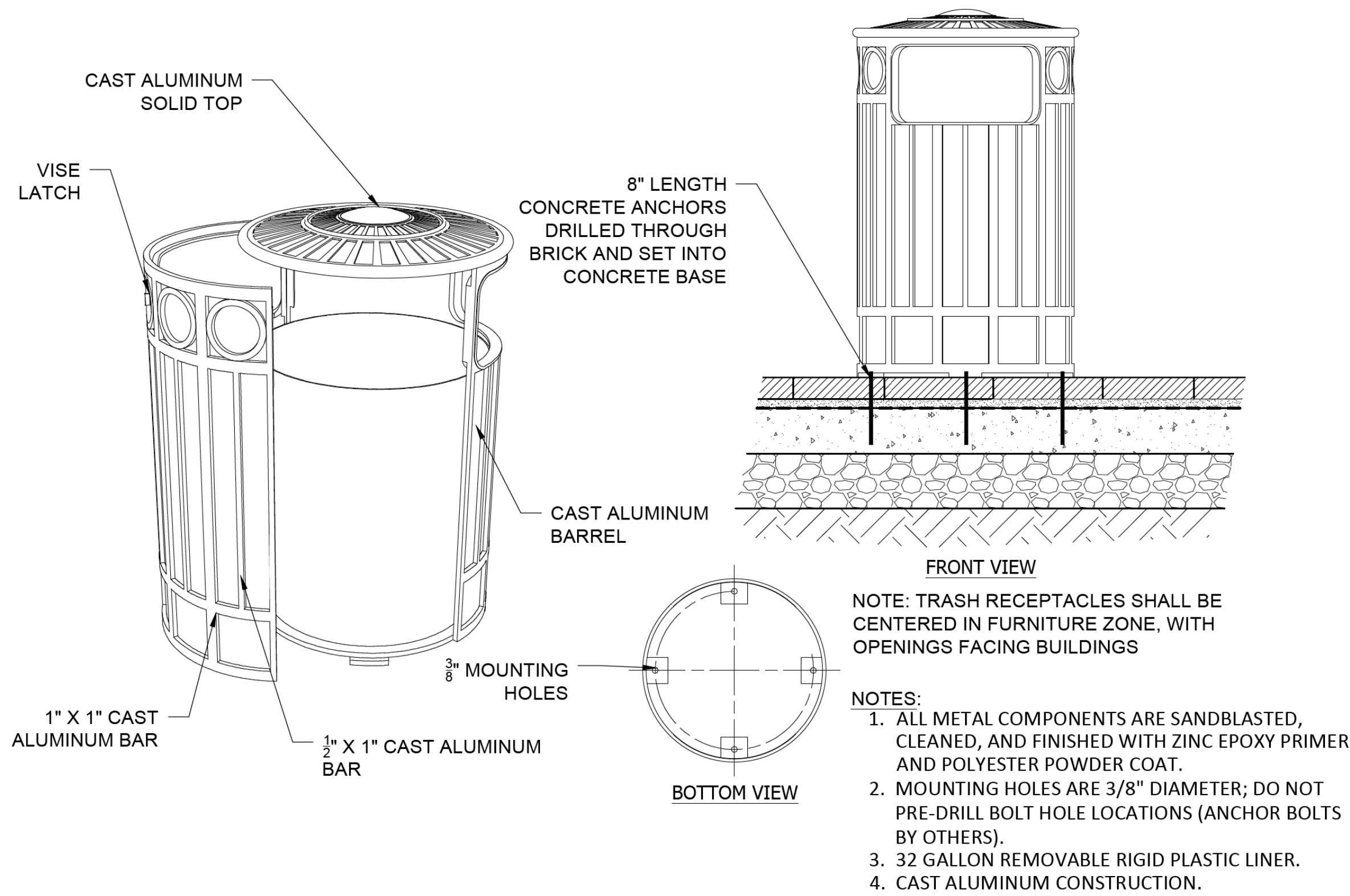
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DRAWN — PJH, JDM	REVISED —
CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

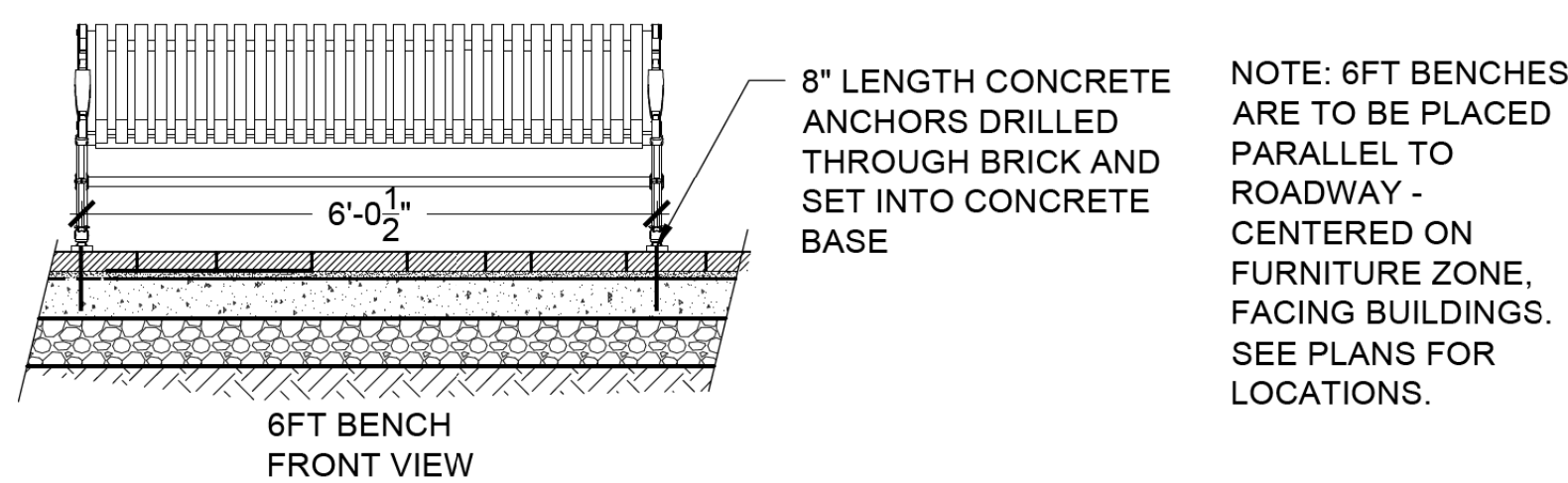
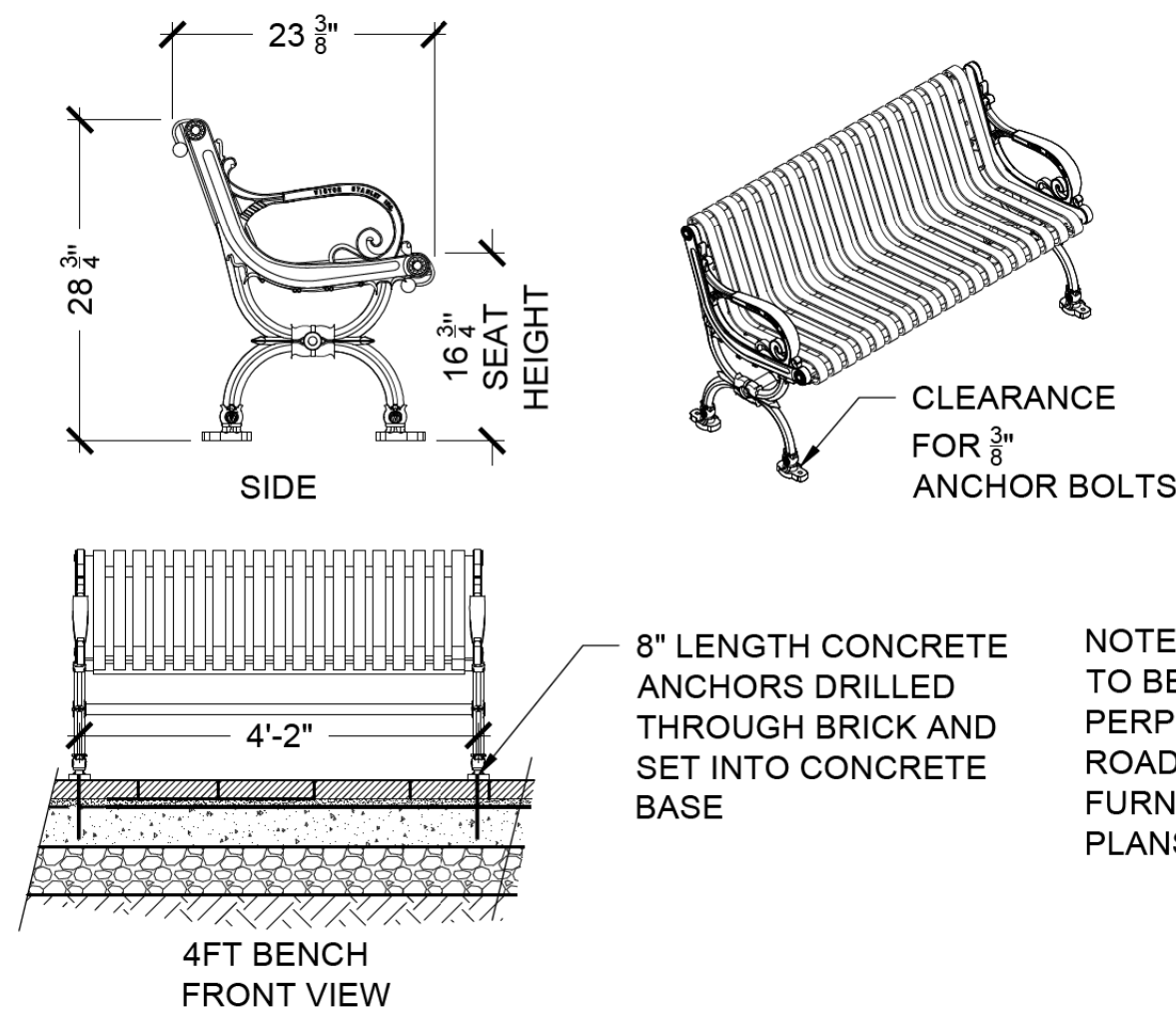
PLANTING DETAILS

SHEET NO. OF SHEETS STA. TO STA.

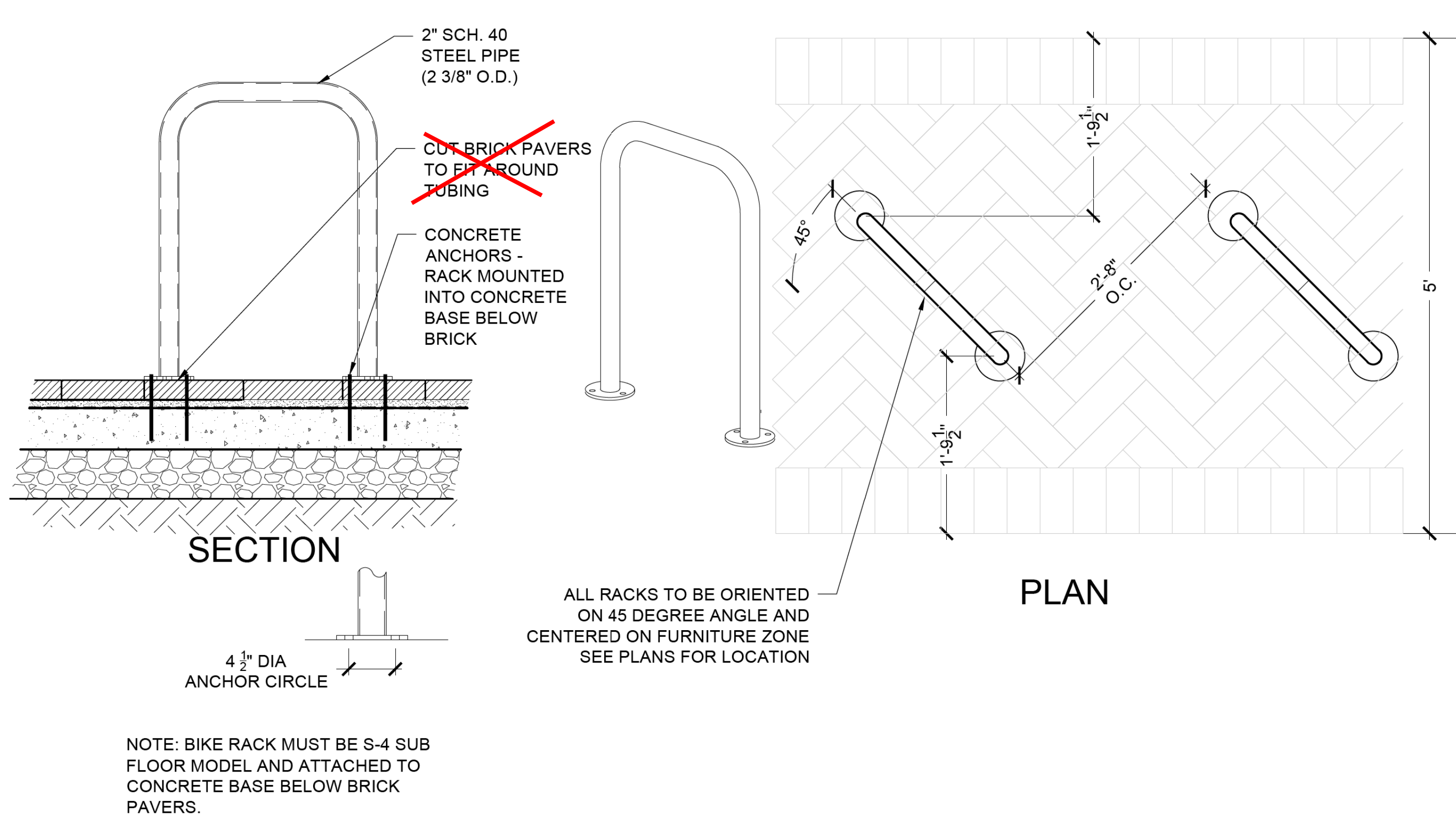
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	102
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



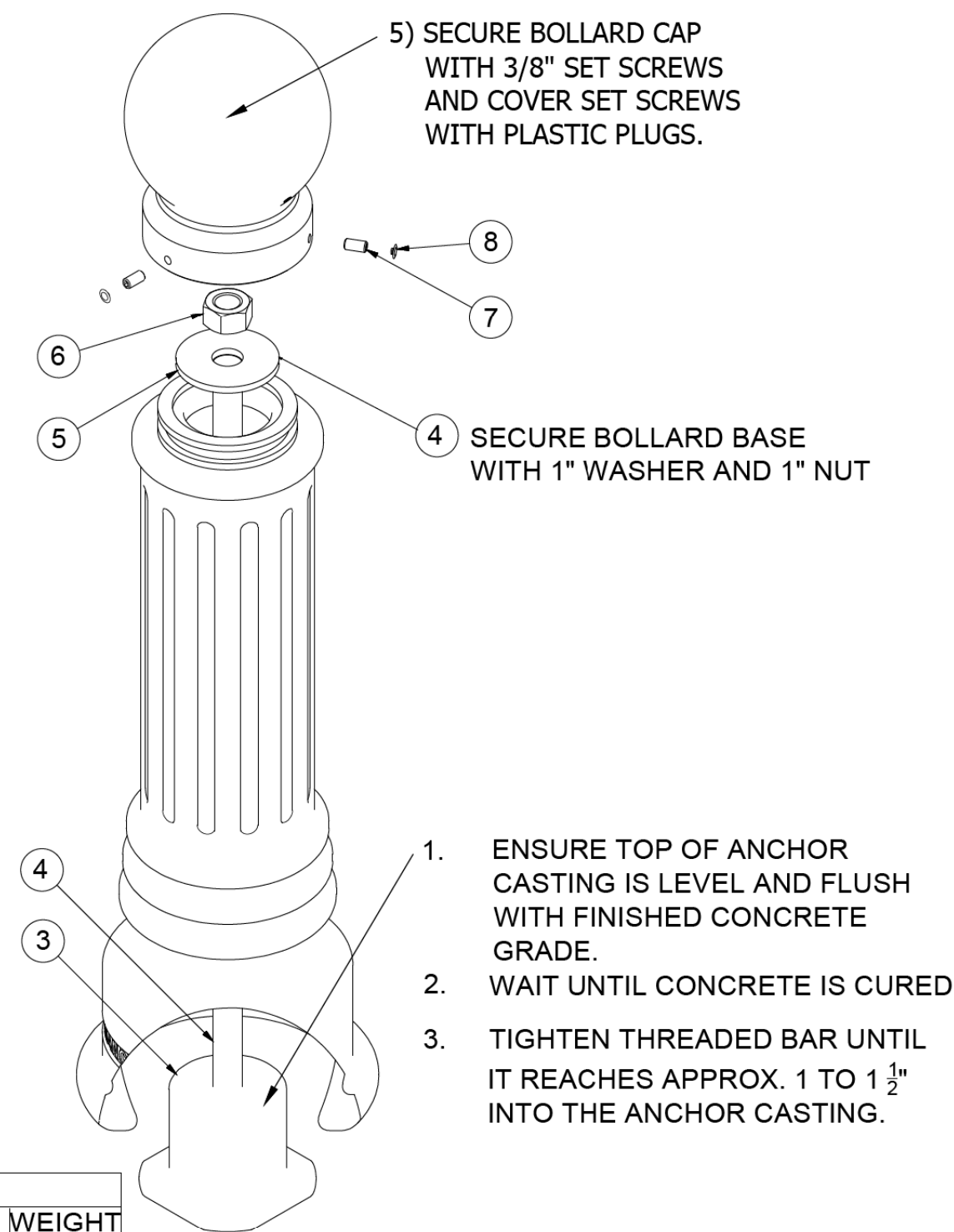
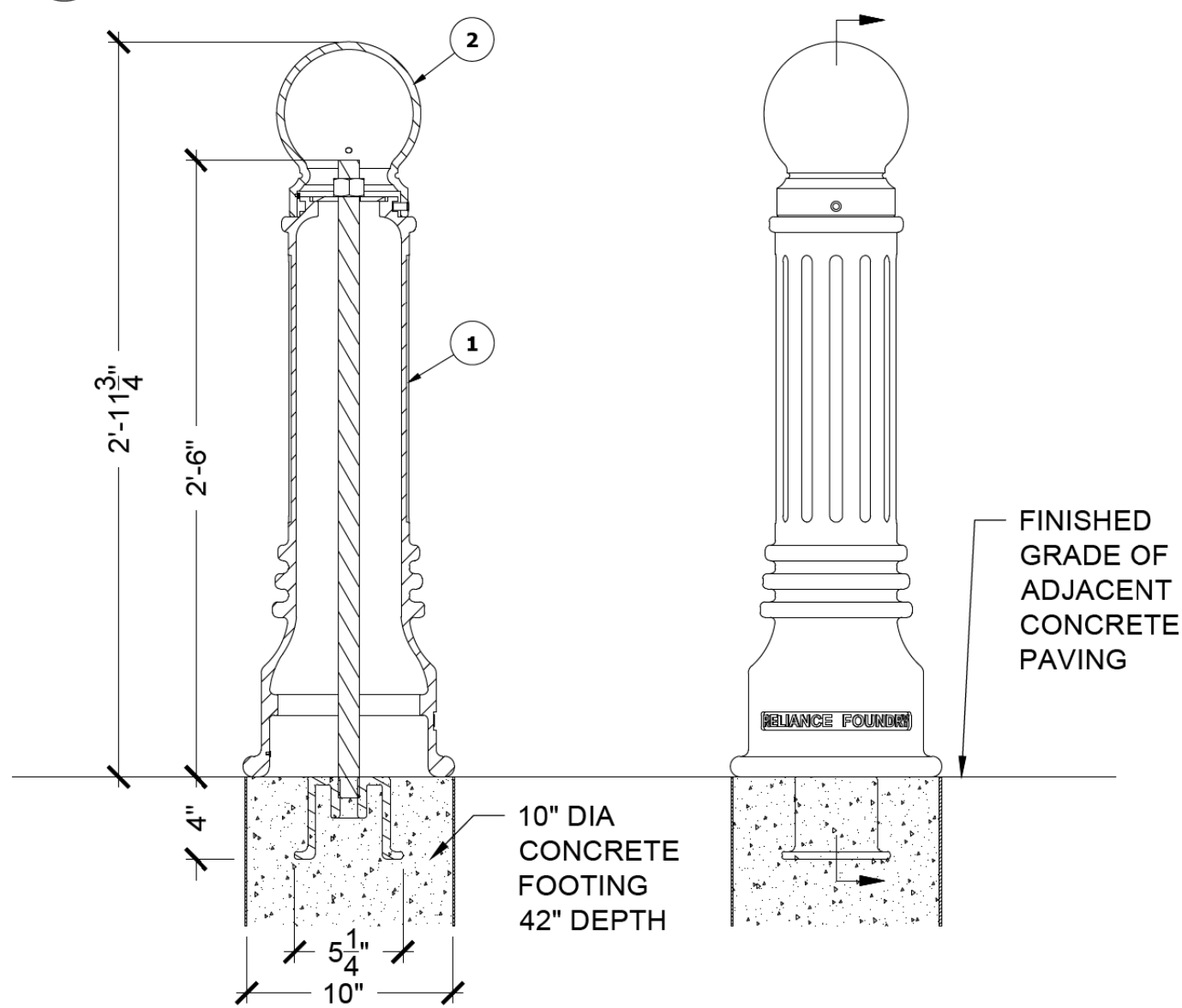
01 TRASH / RECYCLE RECEPTACLE
SCALE= NTS



03 BENCH
SCALE= NTS



02 BIKE RACK
SCALE= NTS



PARTS					
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R7539B	R7539 BASE	DUCTILE IRON POWDER COATED	60 lbs
2	1	R7539C	R7539 CAP	DUCTILE IRON POWDER COATED	15 lbs
3	1	R7500AN 1"	R7500 ANCHOR CASTING 1"	DUCTILE IRON HOT DIP GALVANIZED	8 3/8 lbs
4	1	R7500BAR 1"	R7500 THREADED BAR 1" x 31"	STEEL PLATED	6 3/4 lbs
5	1	WASHER 1" OD 3 1/2"	WASHER 1" OD 3 1/2" Thick	STEEL PLATED	5/8 lbs
6	1	HEX NUT 1"	HEX NUT 1" - REQUIRES 1 1/2" WRENCH	STEEL PLATED	1/4 lbs
7	3	HEXAGON SOCKET SET SCREW 3/8" x 3/4"	HEXAGON SOCKET SET SCREW 3/8" x 3/4" - REQUIRES 3/16" HEX KEY	STAINLESS STEEL	
8	3	POLYETHYLENE PLUG 3/8"	POLYETHYLENE PLUG 3/8"	LDPE BLACK	

04 BOLLARD
SCALE= NTS

L-4.12



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CHECKED — KRK, MJF	REVISED —
DATE —	REVISED —

VILLAGE OF GLEN ELLYN

STREET FURNITURE DETAILS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	103
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LIGHTING GENERAL NOTES

1.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2.

PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, ANY WORK IS NOT REQUIRED, THAT ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
3.

EXISTING AND TEMPORARY LIGHTING WILL REMAIN OPERATIONAL UNTIL THE PROPOSED LIGHTING IS INSTALLED AND OPERATIONAL. TRANSITION TO PROPOSED LIGHTING WILL BE COORDINATED AND COMPLETED ON THE SAME DAY WITHOUT ANY INTERRUPTION OF OPERATION FOR THAT SAME EVENING.
4.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND LIGHTING CONTROLLERS FOR EXAMINATION AND CONFIRMATION WITH THE RESIDENT ENGINEER.
5.

THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGURING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS FOR ALL ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER.
6.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF FOUNDATIONS HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
7.

NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
8.

FOR ALL CONCRETE FOUNDATIONS, A MINIMUM OF 2 SLEEVES SHALL BE PROVIDED REGARDLESS OF WHAT IS BEING INSTALLED. THE SLEEVES SHALL BE SEALED AND CAPPED TO PREVENT MOISTURE OR CONTAMINANTS. MATERIAL AND LABOR WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE PAY ITEM FOR LIGHT POLE FOUNDATION.
9.

FOUNDATION TYPE IS BASED ON KNOWN UTILITY INFORMATION. OFFSET FOUNDATION LOCATIONS WERE BASED ON ATLAS AND ABOVE GROUND STRUCTURES FOR LOCATION OF UTILITIES. WHERE POSSIBLE, OFFSET FOUNDATIONS SHOULD BE REPLACED WITH LIGHT POLE FOUNDATION, SPECIAL APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. CONTRACTOR WILL BE PAID FOR THE FOUNDATION TYPE INSTALLED WITH NO ADDITIONAL COMPENSATION FOR CHANGE FROM CONTRACT PLAN.
10.

CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS, OTHER UTILITIES, AND LANDSCAPING.
11.

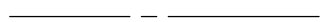
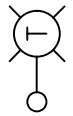
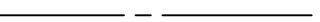
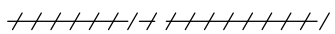
SPLICING OF PROPOSED AND EXISTING CABLES IN EXISTING POLE SHALL BE IN THE LIGHT POLE HANDHOLE WITH NEW WATERPROOF SPLICES AND NEW FUSE KIT. FUSE SIZE SHALL MATCH EXISTING. THIS WORK INCLUDE RUNNING THE PROPOSED CABLES INTO EXISTING POLE FOUNDATION SLEEVE WILL BE COVERED AND INCLUDED IN THE PAY ITEM FOR ELECTRIC CABLE IN CONDUIT.
12.

THE INSTALLATION OF BURIED WARNING TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER.
13.

ANY DAMAGE TO PAVEMENT, SIDEWALK, CURB, OR ANY OTHER PORTION OF THE ROADWAY NOT SPECIFICALLY TO BE REMOVED AND REPLACED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST AND REPLACEMENT SHALL MEET THE APPROVAL OF THE ENGINEER.
14.

OFFSET CALL-OFFS FOR TEMPORARY LIGHT POLES ARE FROM THE CENTER OF POLES TO EXISTING FACE OF CURB (F.O.C.). OFFSETS CALL-OFFS FOR PROPOSED LIGHT POLES ARE FROM THE CENTER OF POLES TO PROPOSED F.O.C.

LEGEND

	EXISTING LIGHTING UNIT 11 FT. LIGHT POLE 58 WATT LED 3000K LUMINAIRE, 240V
	EXISTING LIGHTING CABLES
	PROPOSED LIGHTING UNIT METAL LIGHT POLE, INSTALL ONLY RELOCATE EXISTING LUMINAIRE (58 WATT LED, 240V)
	PROPOSED HANDHOLE, COMPOSITE CONCRETE
	TEMPORARY LIGHTING UNIT TEMPORARY LUMINAIRE, LED, ROADWAY 25 FT WOOD POLE (19 FT. MOUNTING HEIGHT), 4 FT MAST ARM
	PROPOSED UNDERGROUND CONDUIT, PVC WITH ELECTRIC CABLE IN CONDUIT AS SPECIFIED IN PLANS
	REMOVAL OF ELECTRIC CABLE FROM CONDUIT

SEQUENCE OF CONSTRUCTION

1.

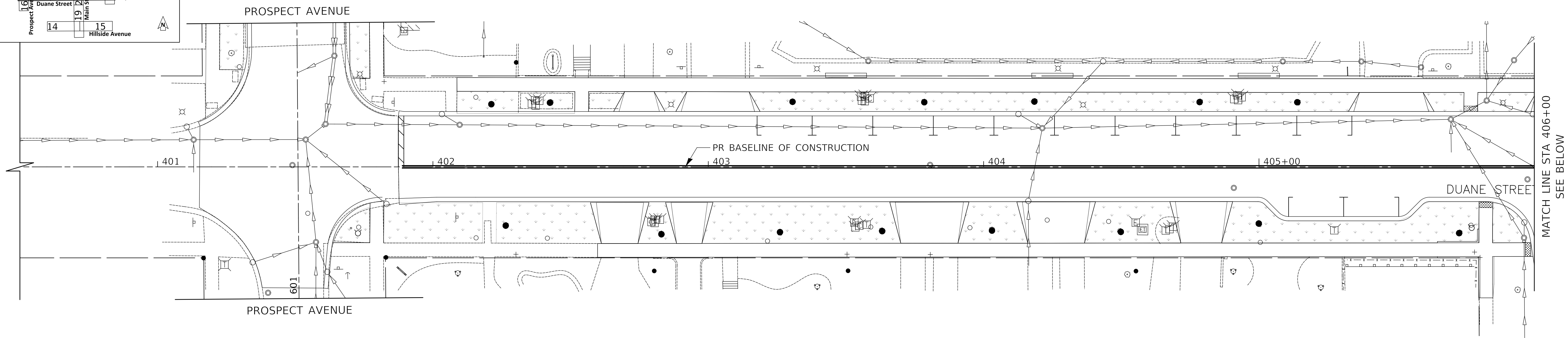
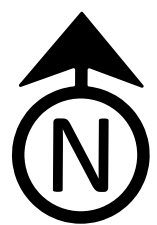
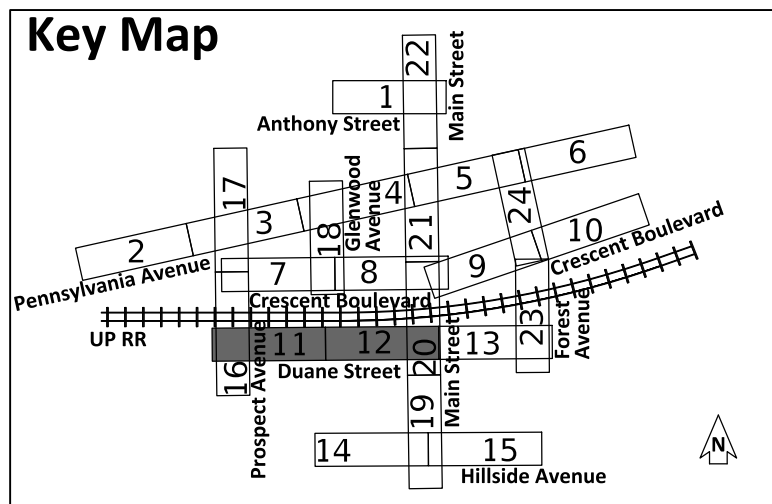
INSTALL TEMPORARY LIGHTING
2.

REMOVE LIGHT POLE AT STA. 219+76 (RT)
3.

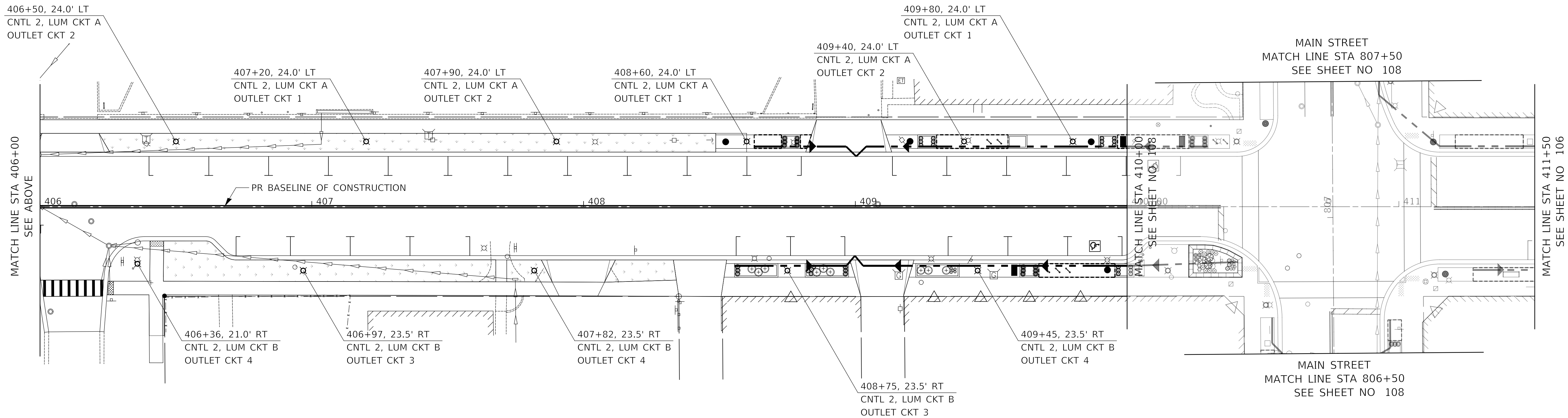
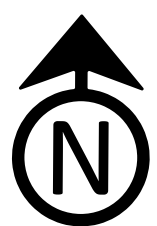
INSTALL PROPOSED FOUNDATIONS, CONDUIT, CABLING, AND HANDHOLE.
4.

INSTALL PROPOSED LIGHT POLES WITH EXISTING LUMINAIRES. SPLICE PROPOSED LIGHTING INTO EXISTING LIGHTING SYSTEM.
5.

REMOVE EXISTING HANDHOLE, FOUNDATIONS AND CABLING.



DUANE STREET



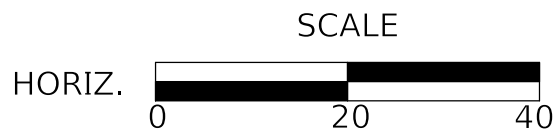
DUANE STREET



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CHECKED -	DNM	REVISED -	
DATE -	9/24/2021	REVISED -	

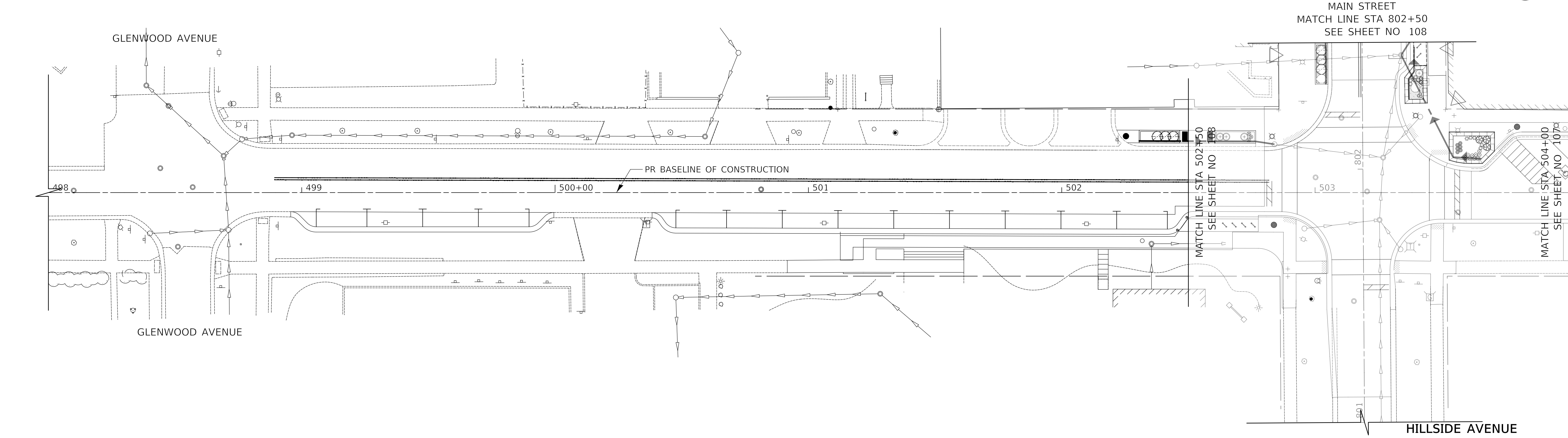
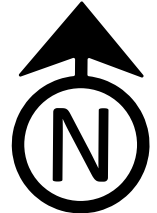
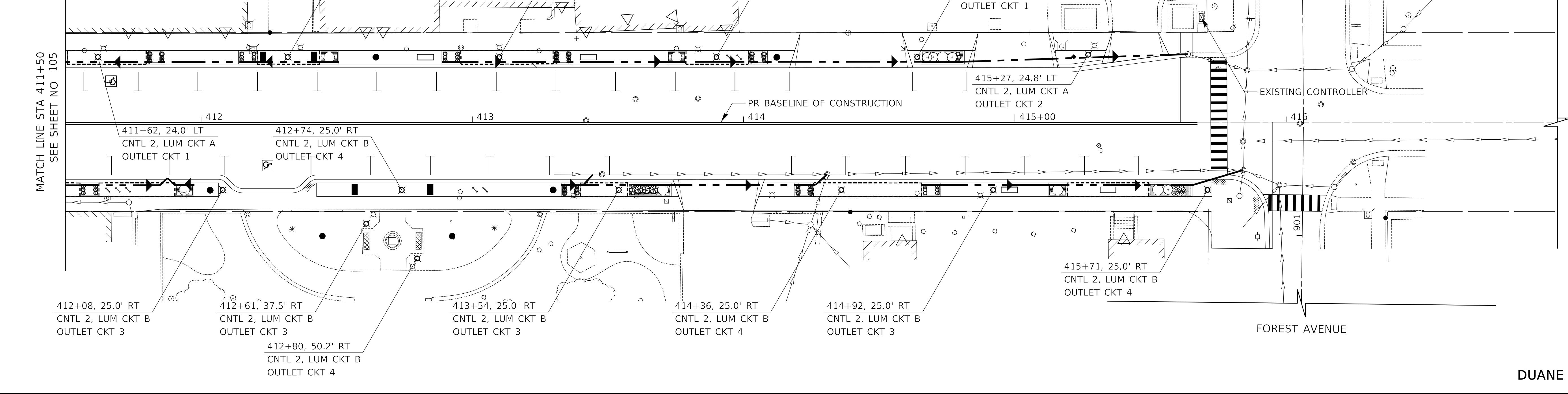
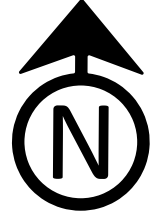
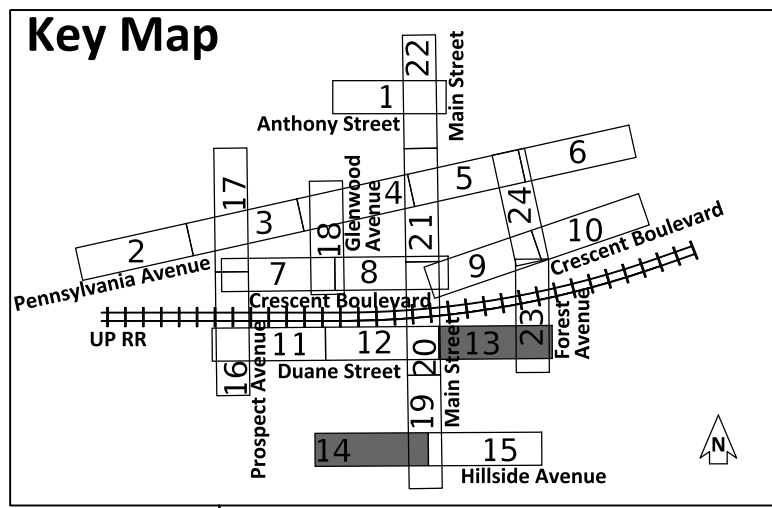
VILLAGE OF GLEN ELLYN

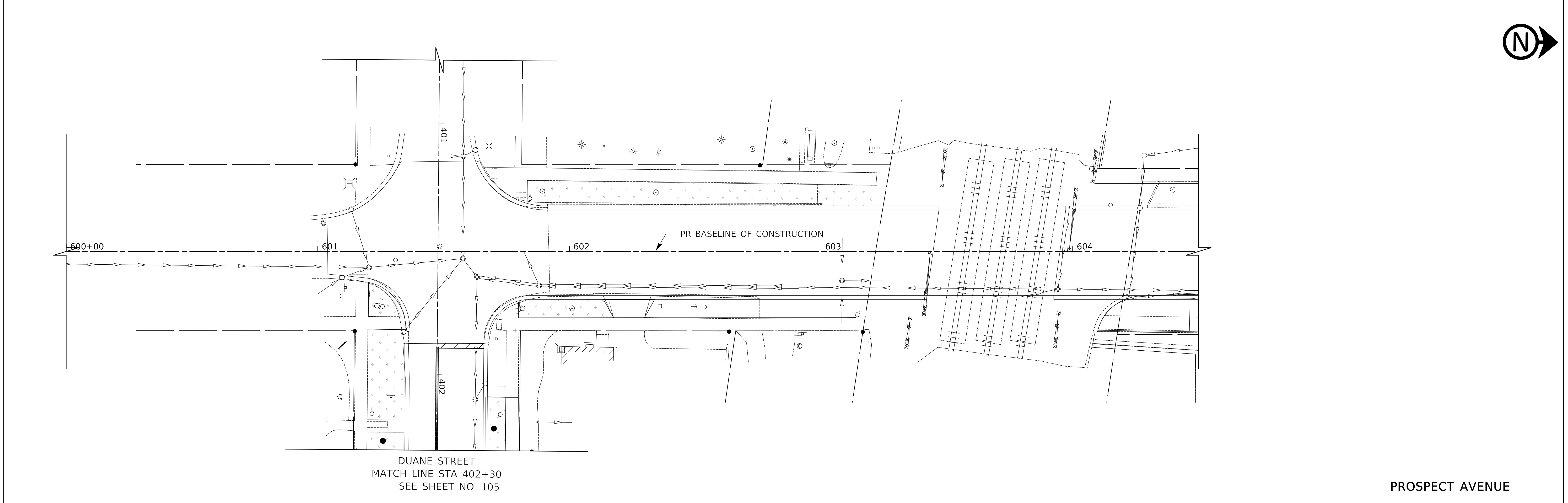
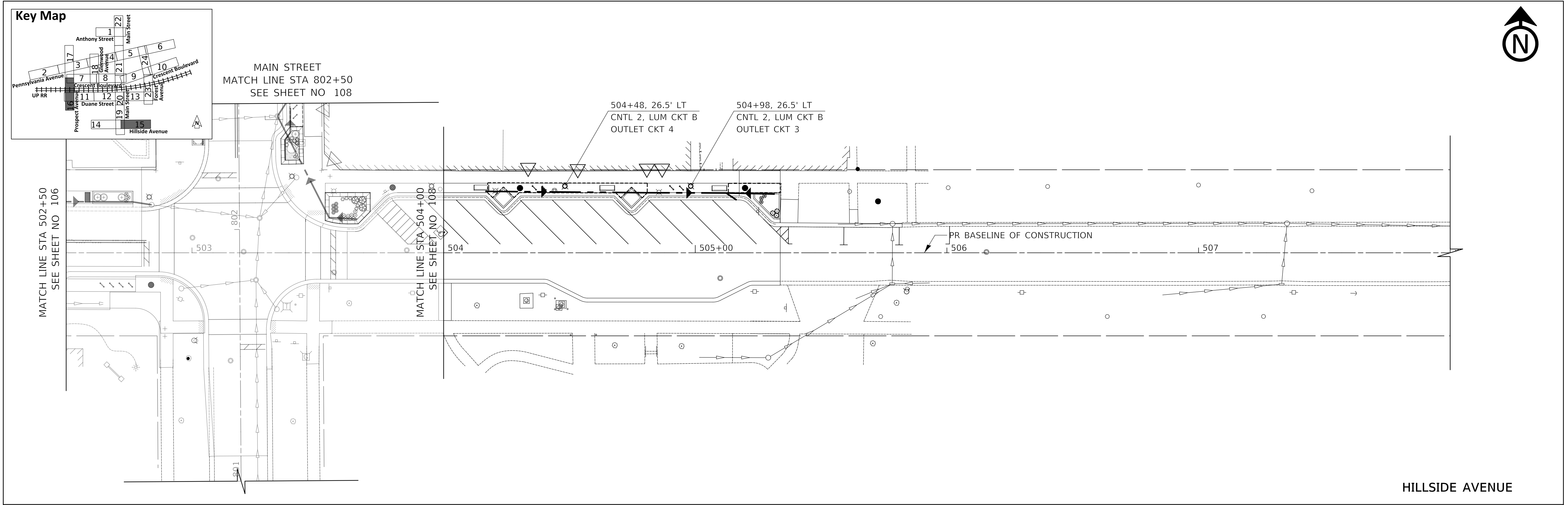


**LIGHTING PLAN
DUANE STREET**

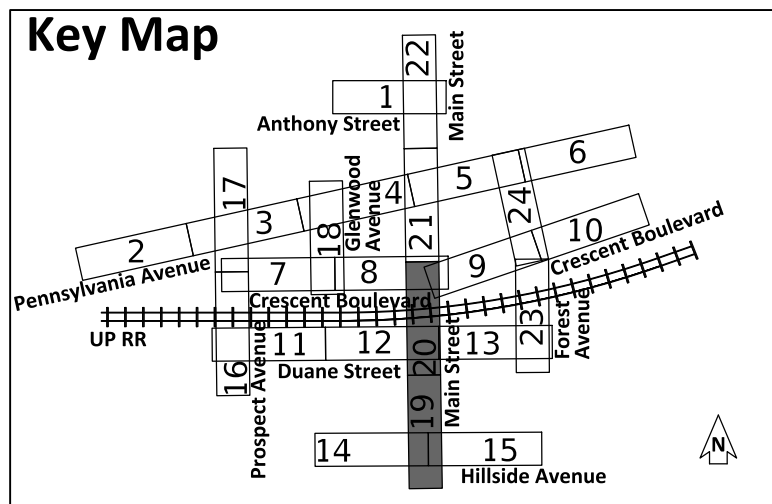
SHEET NO. 1 OF 5 SHEETS STA. 401+50 TO STA. 411+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	105
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

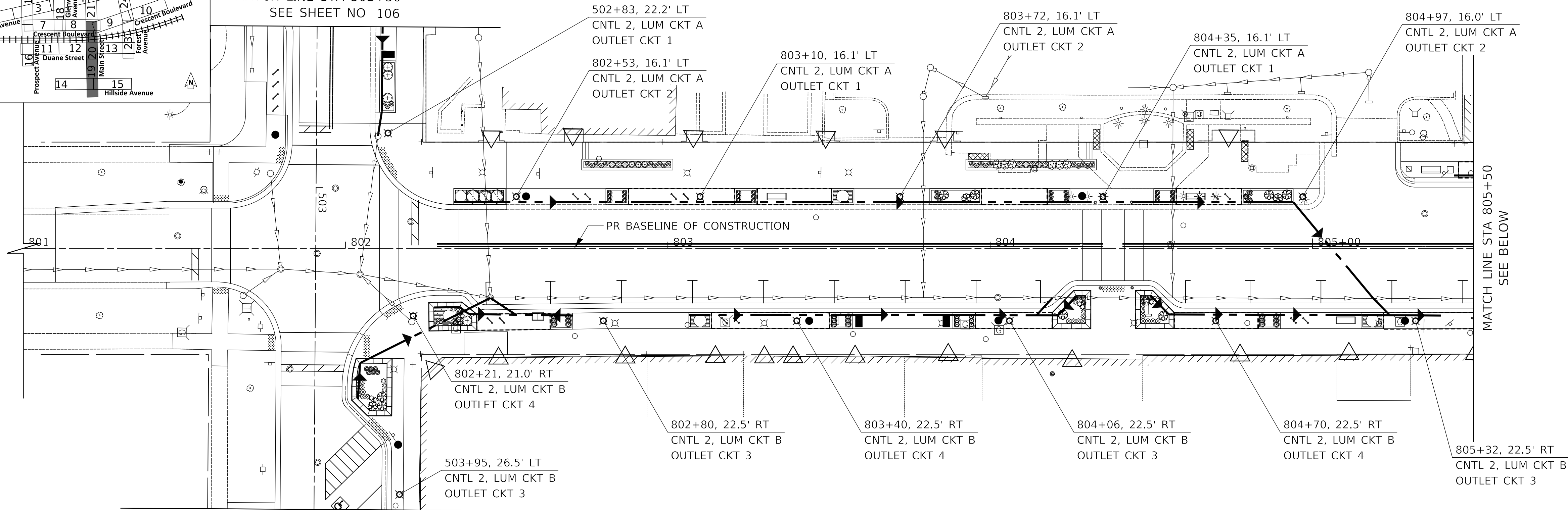




Key Map



HILLSIDE AVENUE
MATCH LINE STA 502+50
SEE SHEET NO 106

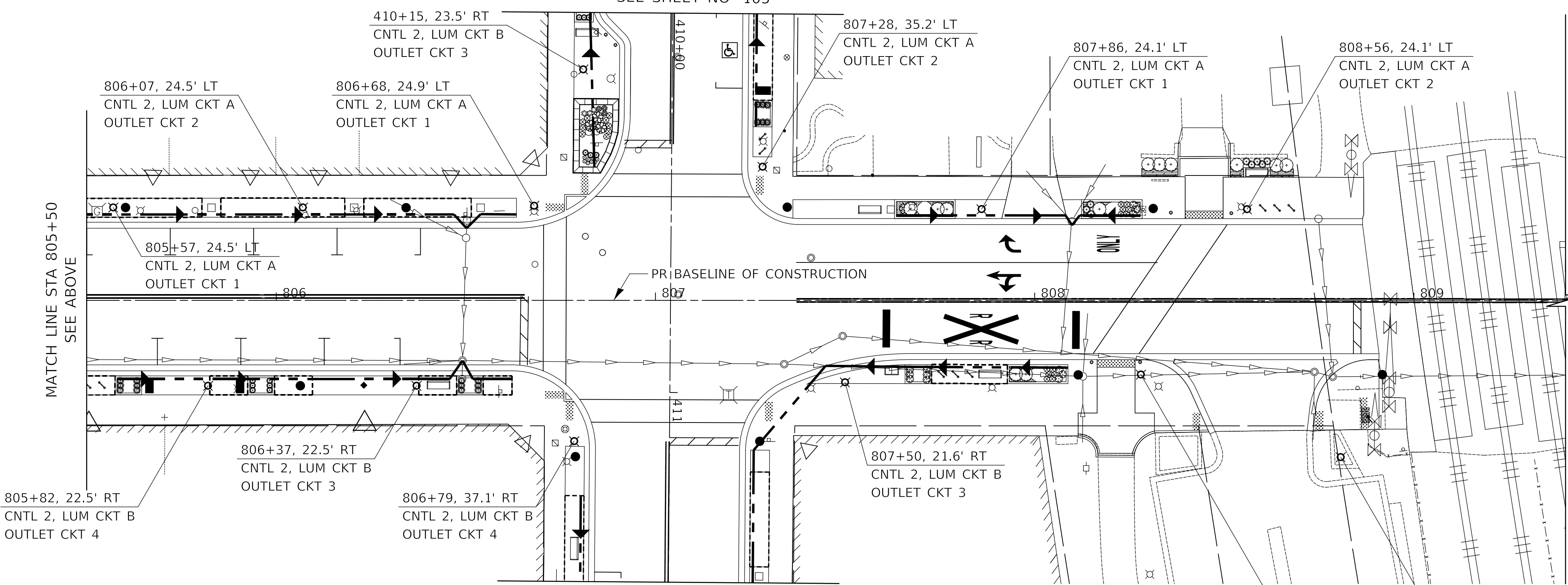


HILLSIDE AVENUE
MATCH LINE STA 504+00
SEE SHEET NO 107

MAIN STREET



DUANE STREET
MATCH LINE STA 410+00
SEE SHEET NO 105



DUANE STREET
MATCH LINE STA 411+50
SEE SHEET NO 106

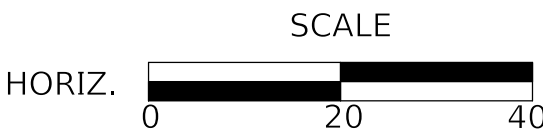
MAIN STREET



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CHECKED -	DNM	REVISED -	
DATE -	9/24/2021	REVISED -	

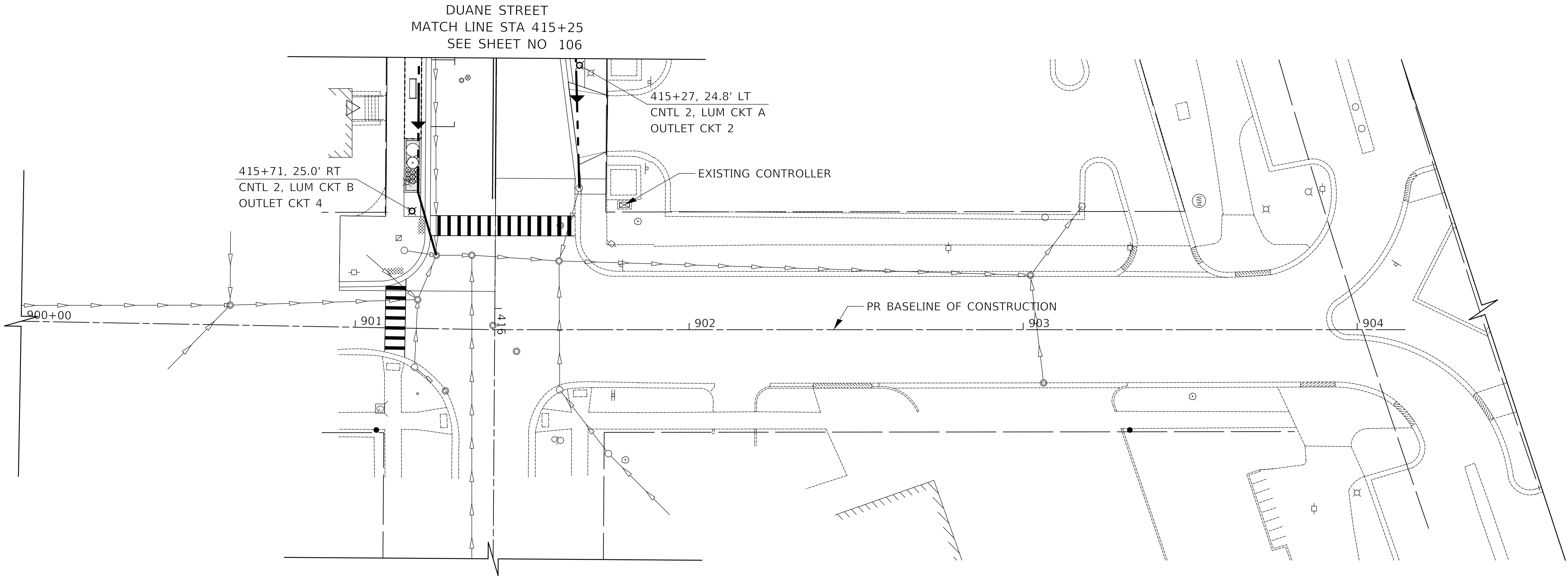
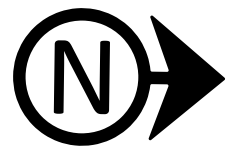
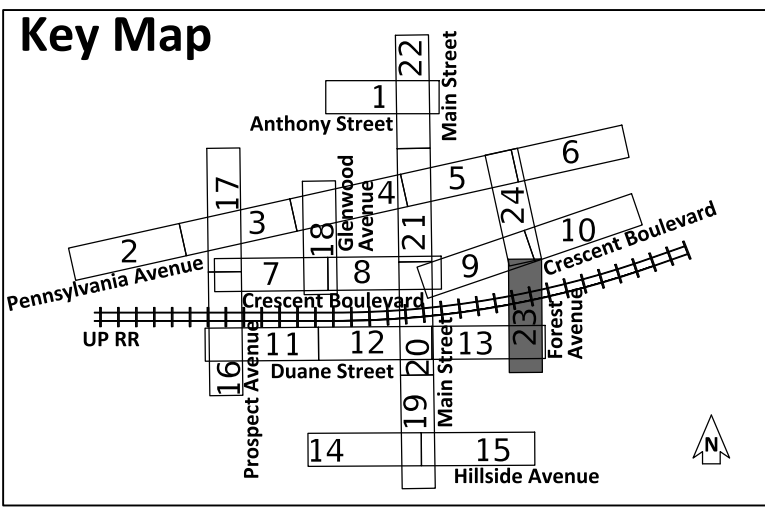
VILLAGE OF GLEN ELLYN



LIGHTING PLAN
MAIN STREET

SHEET NO. 4 OF 5 SHEETS STA. 801+10 TO STA. 809+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		ILLINOIS	137	108
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FOREST AVENUE



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DATE -	9/24/2021	REVISED -	

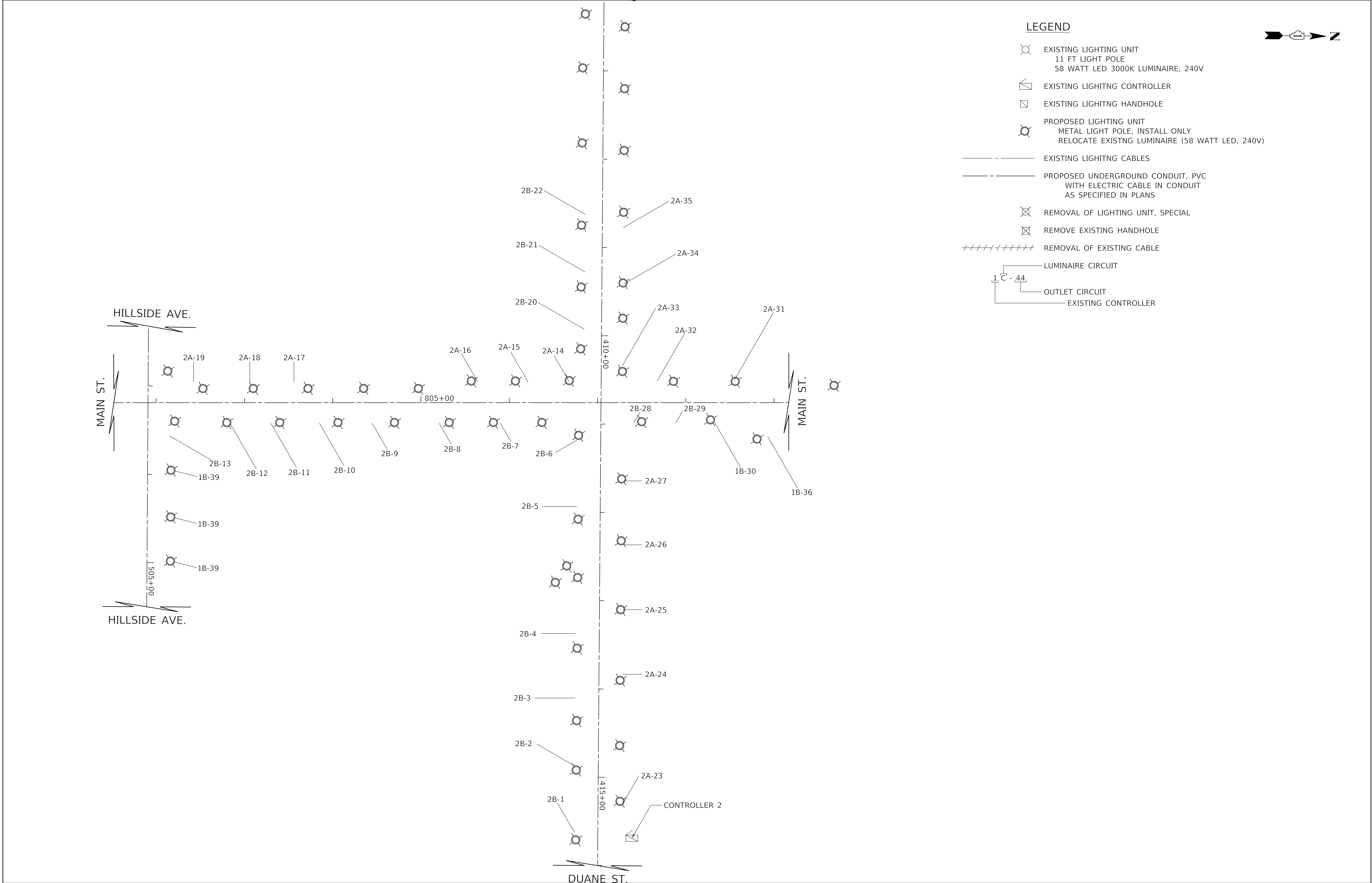
VILLAGE OF GLEN ELLYN



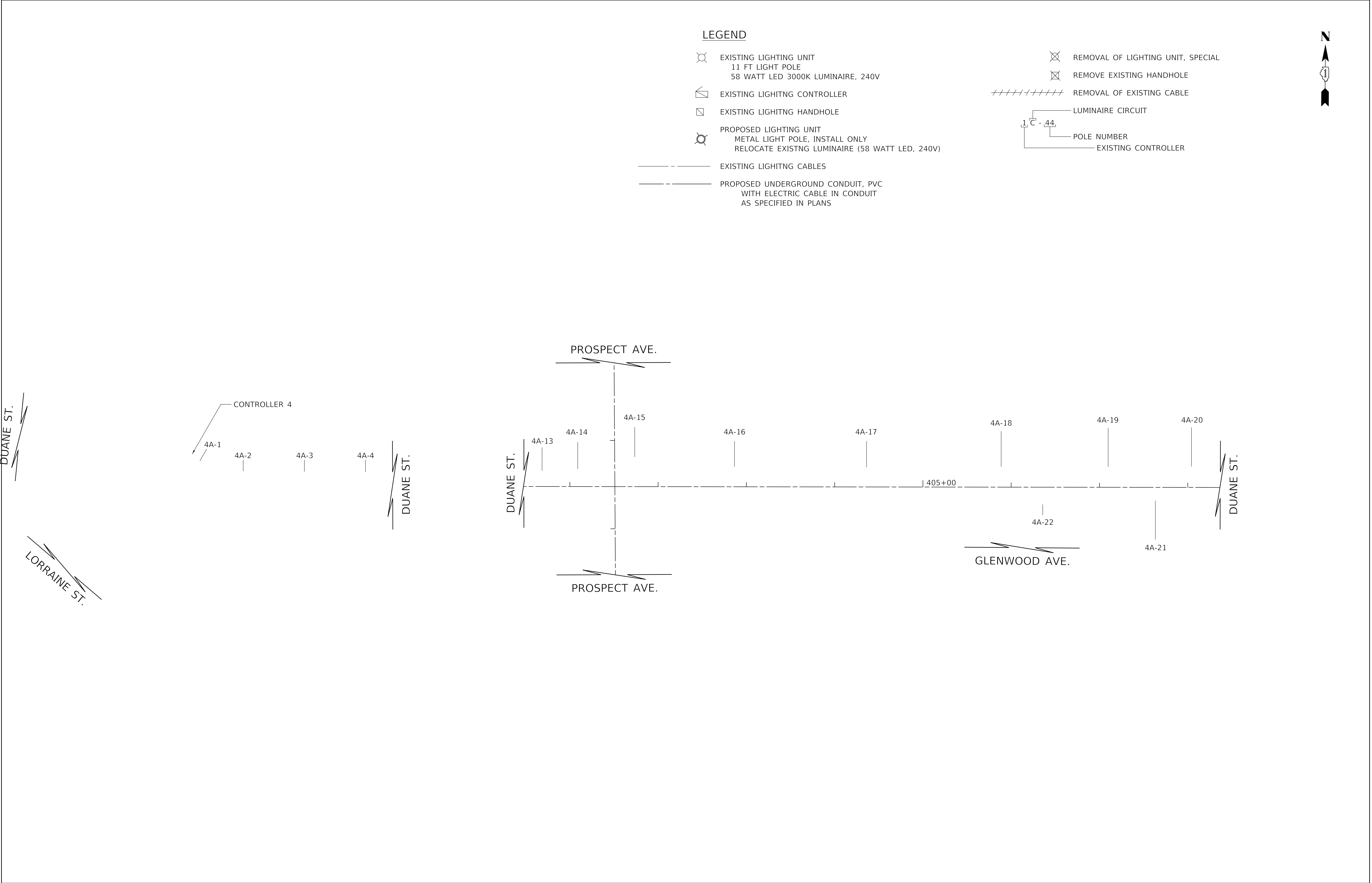
LIGHTING PLAN
FOREST AVENUE

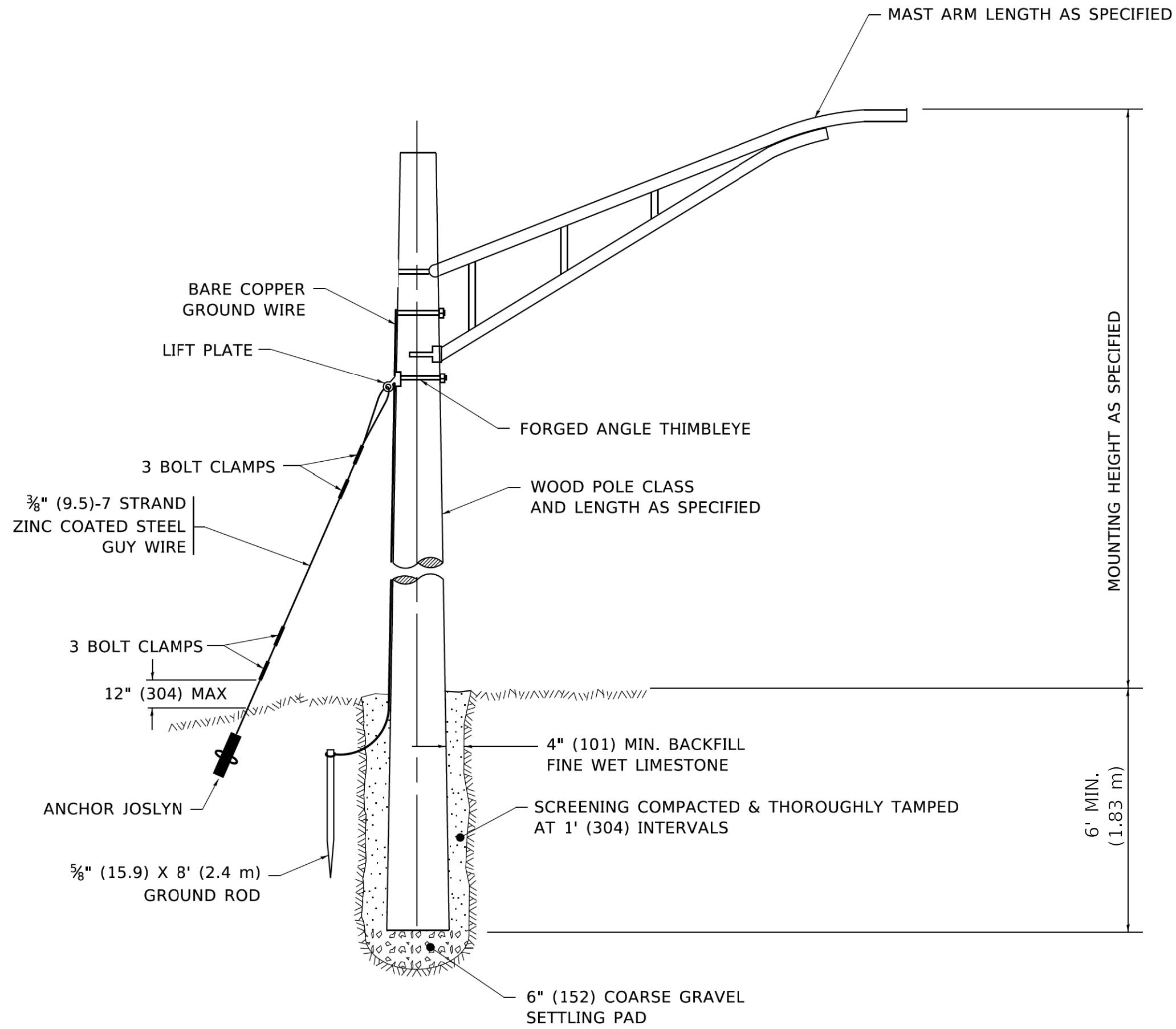
SHEET NO. 5 OF 5 SHEETS STA. 901+00 TO STA. 904+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	109
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



 CIVILTECH	Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - SJC	REVISED -	VILLAGE OF GLEN ELLYN		DUANE STREET, HILLSIDE AVENUE AND MAIN STREET PROPOSED WIRING DIAGRAM		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SJC	REVISED -							DUPAGE	109	\$L T 7
		CHECKED - DNM	REVISED -									
		DATE - 9/24/2021	REVISED -									
										SHEET NO. 1	OF 1	SHEETS

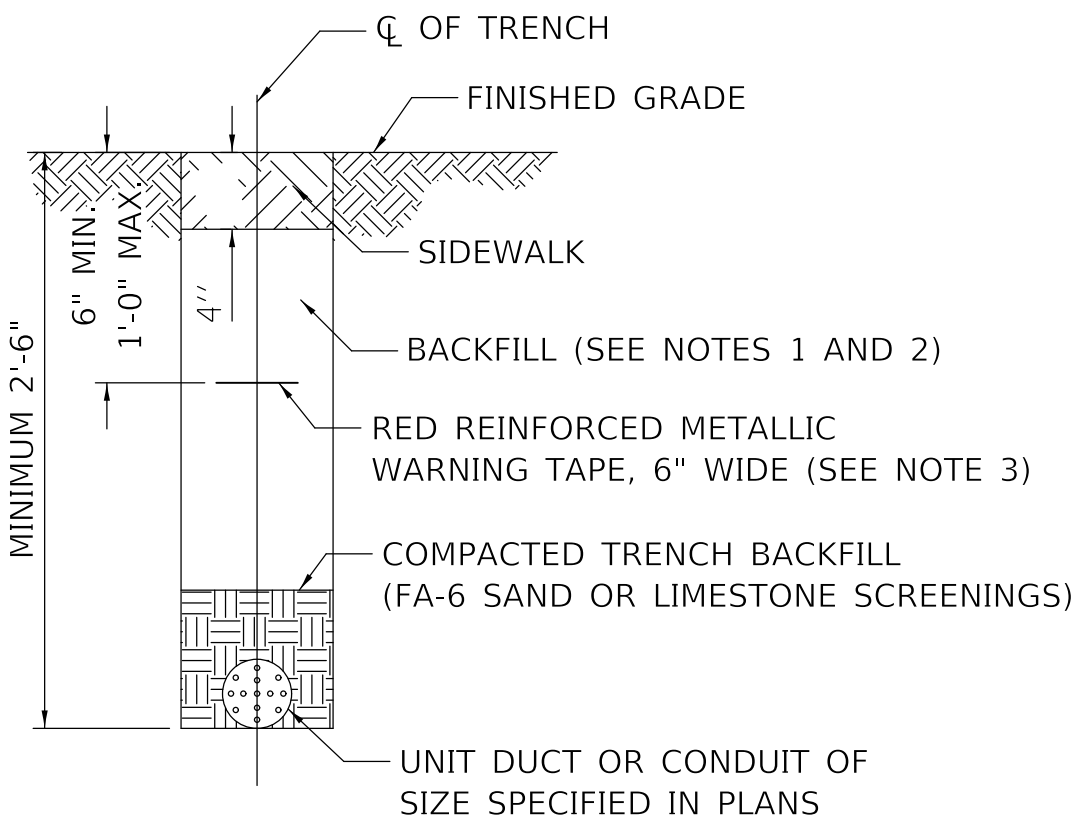




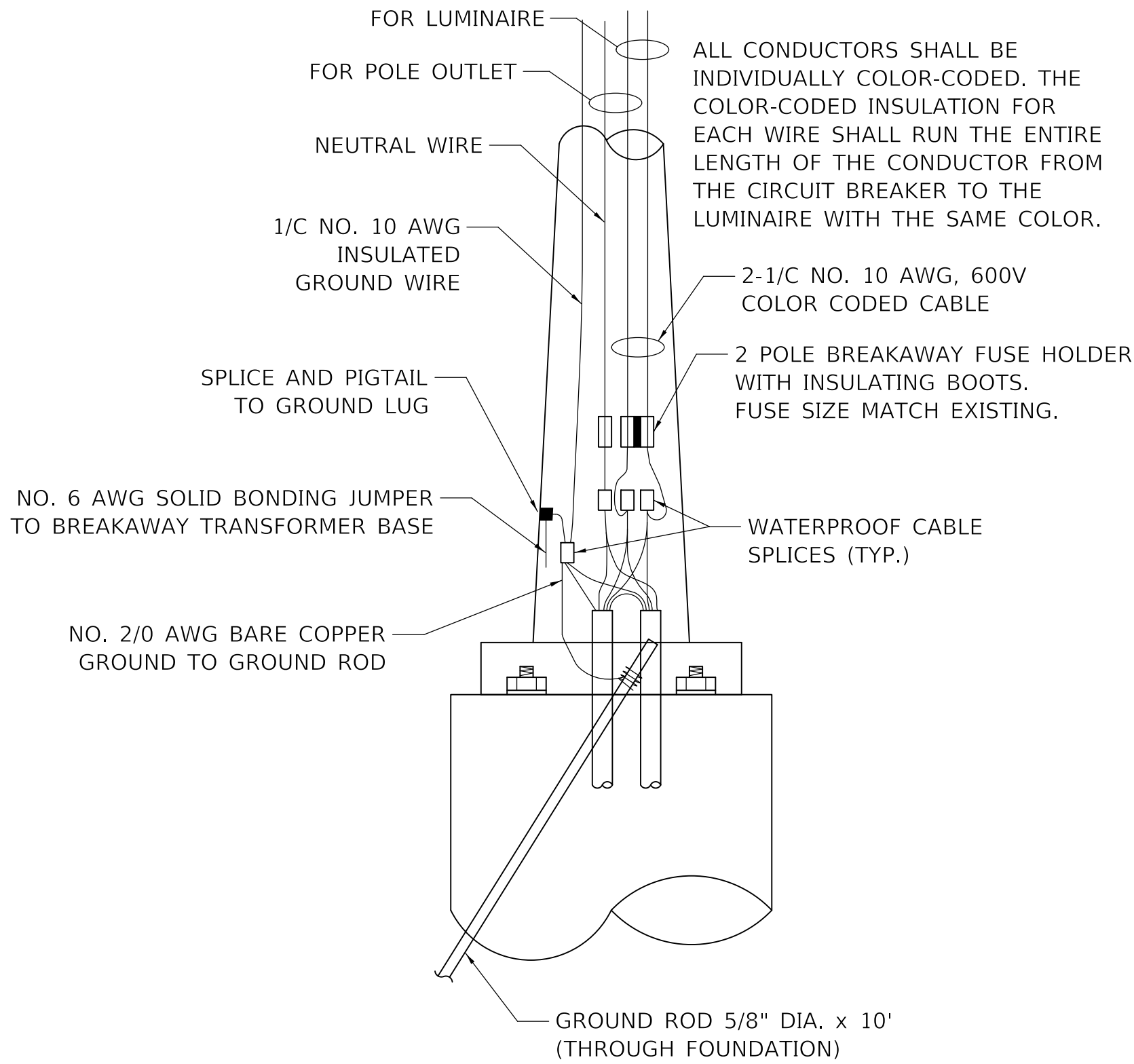
NOTE:
DIMENSION IN INCHES (MILLIMETER) UNLESS OTHERWISE INDICATED.

TEMPORARY LIGHT POLE DETAIL

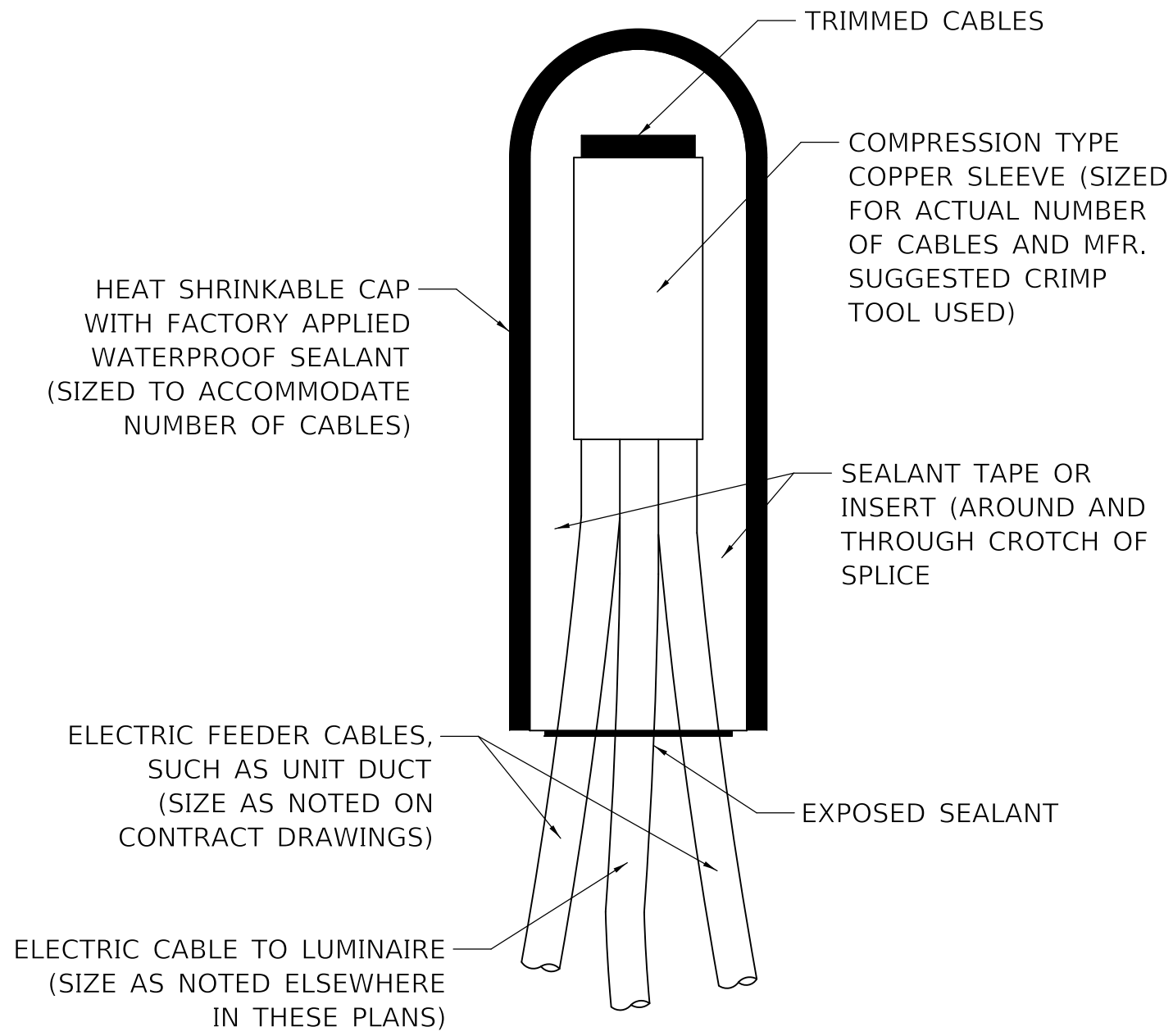
- NOTES:
- TRENCHES WITHIN 2' OF PROPOSED OR EXISTING STREETS, DRIVEWAYS, OR SIDEWALKS WILL BE BACKFILLED WITH COMPACTED FA-6 SAND OR LIMESTONE SCREENINGS.
 - WARNING TAPE WILL BE RED WITH BLACK LETTERING TO READ "CAUTION - ELECTRIC LINE BURIED BELOW".
 - MINIMUM UNIT DUCT AND CONDUIT DEPTH IS 30". NOTIFY RESIDENT ENGINEER AND VILLAGE ENGINEER WITH CONFLICTS.



TYPICAL TRENCH CROSS SECTION

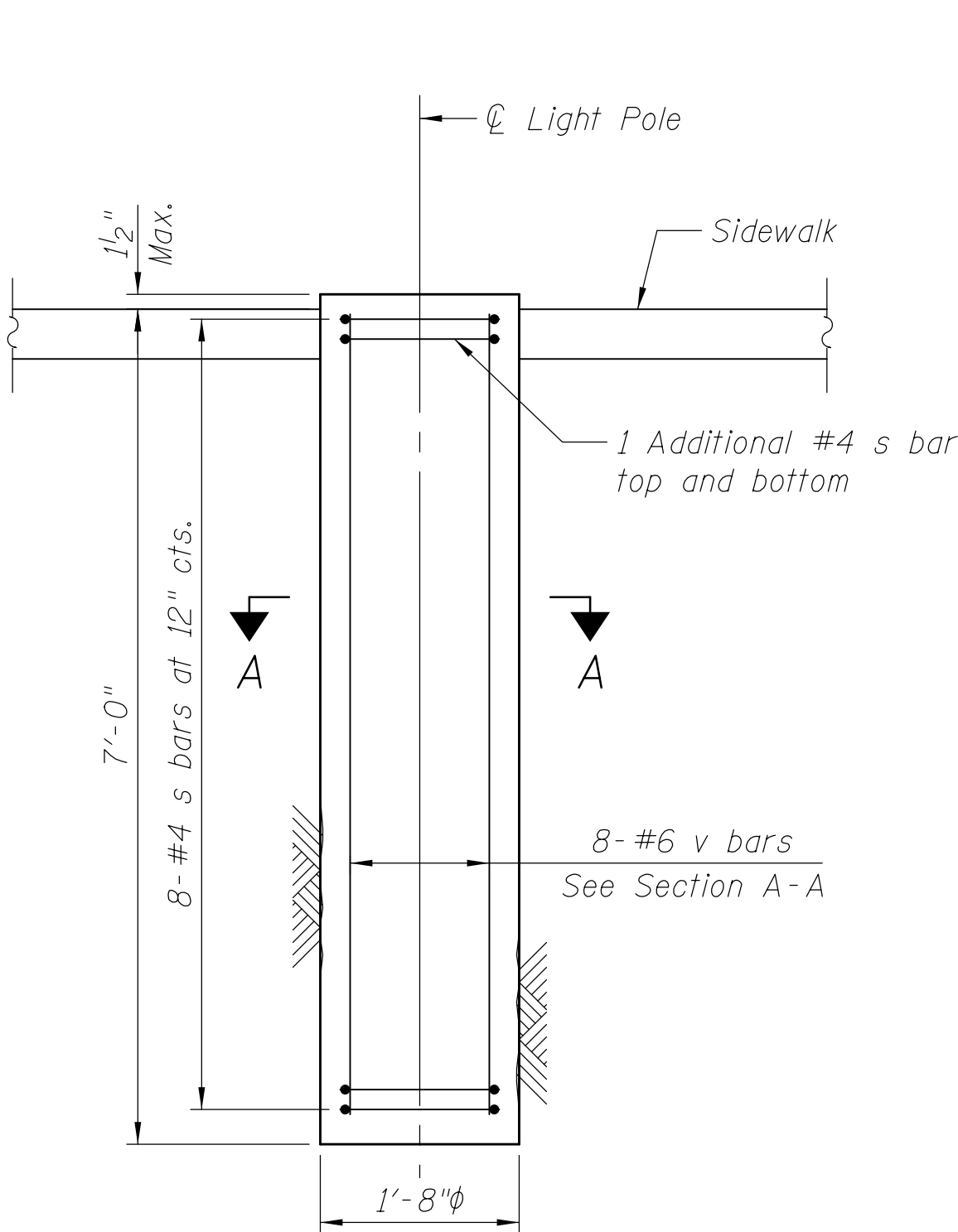


POLE HANDHOLE WIRING DIAGRAM

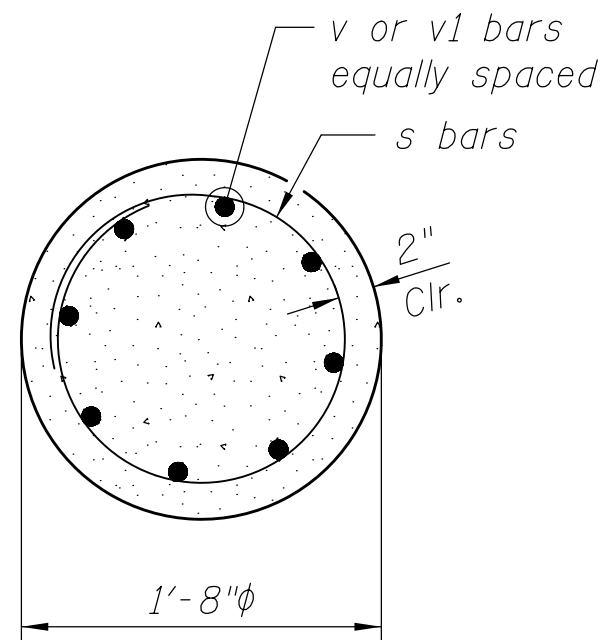


NOTE: NUMBER OF CABLES IN SPLICE MAY VARY

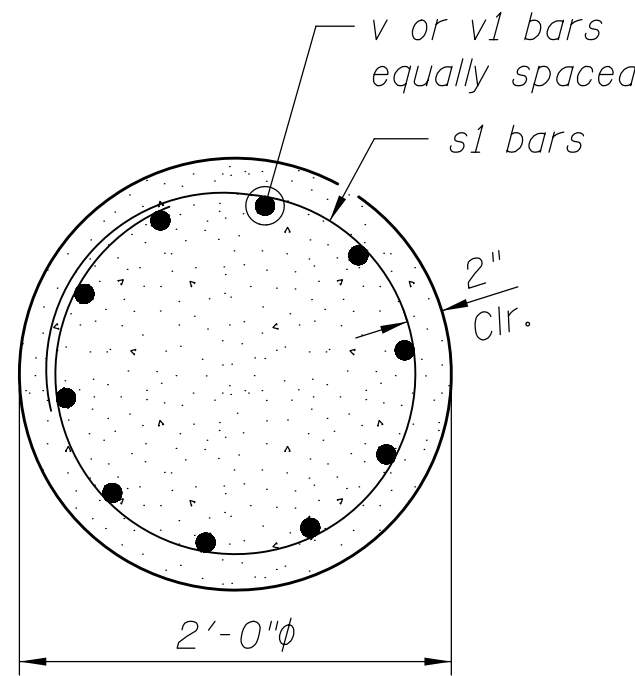
SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS



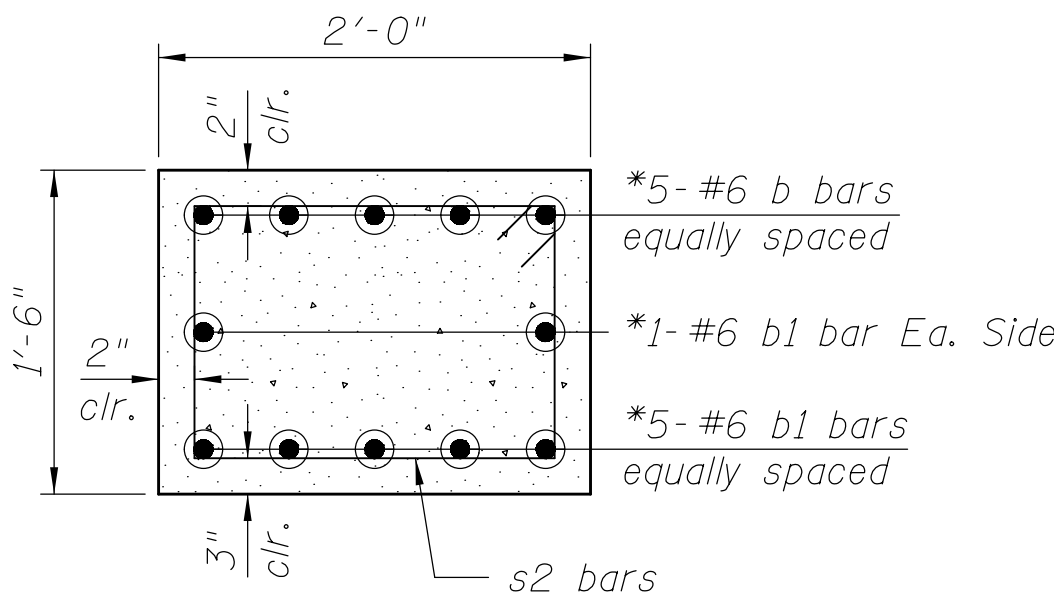
LIGHT POLE FOUNDATION, SPECIAL



SECTION A-A

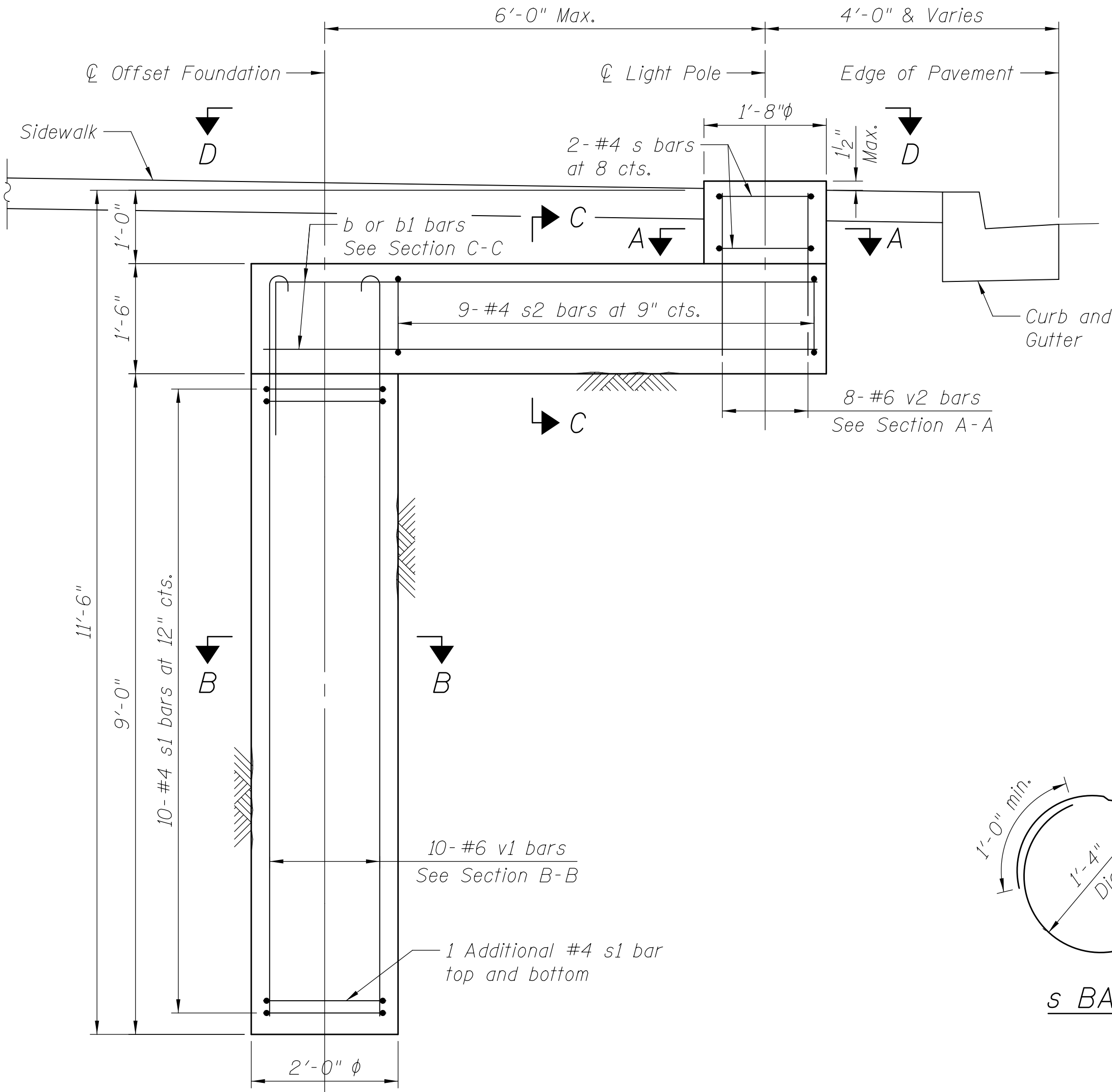


SECTION B-B

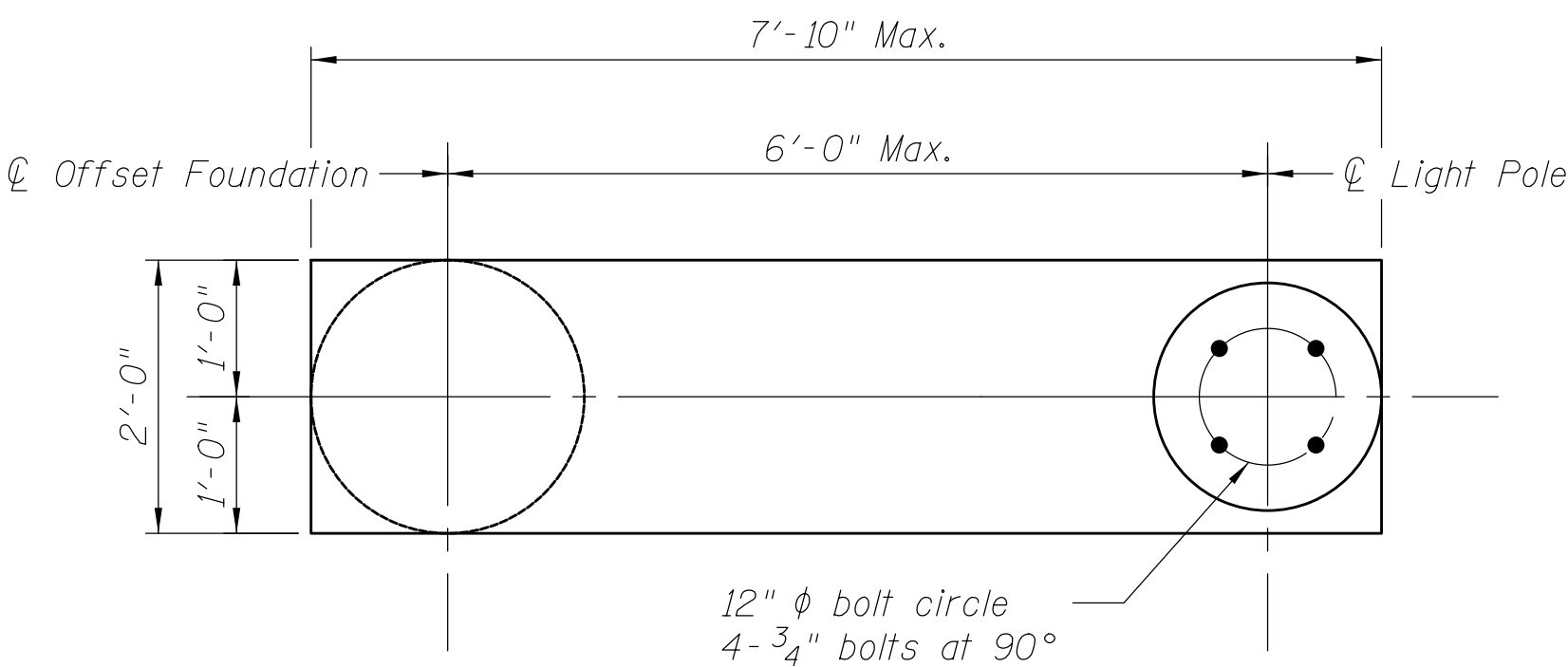


SECTION C-C

*Cut bars to fit in field



LIGHT POLE FOUNDATION, OFFSET, SPECIAL



VIEW D-D

LIGHT POLE FOUNDATION
BAR SCHEDULE

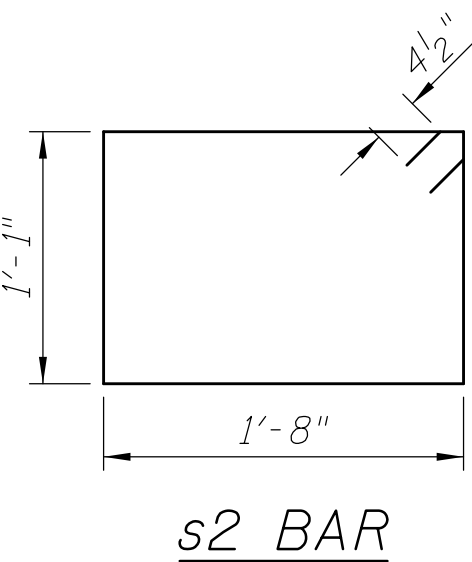
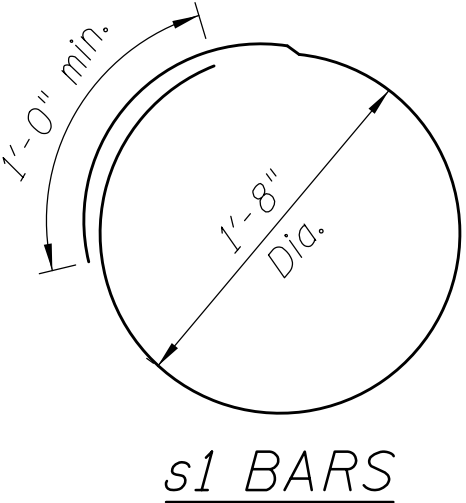
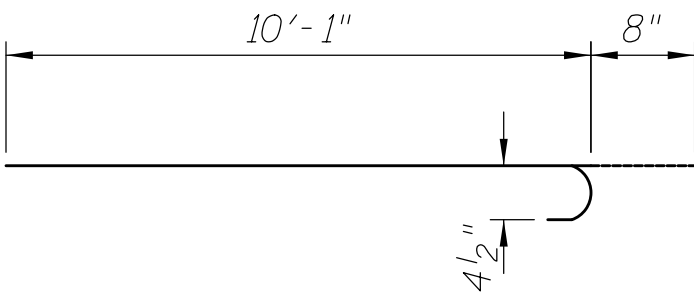
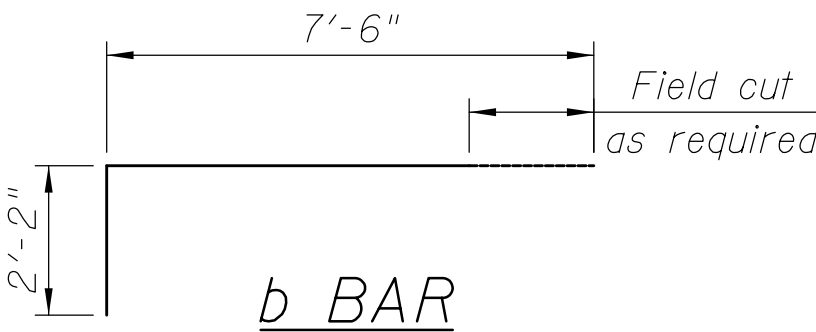
(For Information Only)

Bar	No.	Size	Length	Shape
s	10	#4	5'-3"	○
v	8	#6	6'-7"	—
Concrete Superstructure			Cu. Yd.	0.6
Reinforcement Bars			Pound	110

OFFSET LIGHT POLE FOUNDATION
BAR SCHEDULE

(For Information Only)

Bar	No.	Size	Length	Shape
b	5	#6	9'-8"	┐
b1	7	#6	7'-6"	—
s	2	#4	5'-3"	○
s1	12	#4	6'-3"	○
s2	9	#4	6'-3"	□
Concrete Superstructure			Cu. Yd.	2.1
Reinforcement Bars			Pound	430

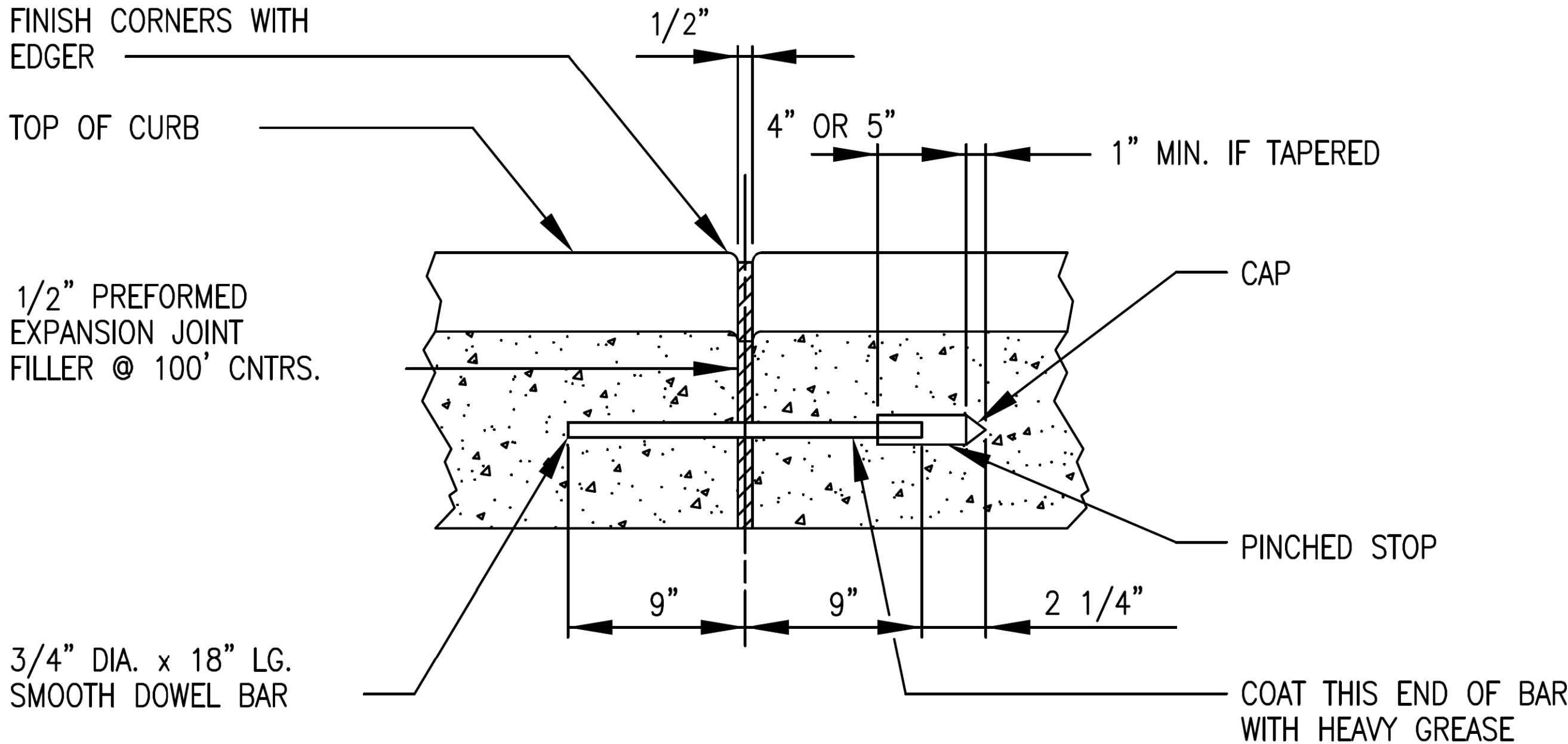


Notes:

- These offset foundations are designed for sites which have cohesive soils (clayey silt, sandy clay, etc) along the length of the shaft with an average unconfined compressive strength (Qu) > 0.75 TSF. The strength and classification of the soil shall be determined by the Engineer during foundation drilling.
- The anchors shall be a tack weld type bolt or hook type bolt and shall meet the Light Pole Manufacturer's requirements. Cold bending of the hook bolt will not be allowed.
- The anchor bolts and raceways shall be properly secured in place before the concrete is placed in the form.
- The entire length of the anchor bolts as well as the nuts and washers shall be hot dip galvanized in accordance with the requirements of ASTM designation A153.
- Concrete shall be class "SI". Concrete foundation must be cured for (10) ten days before the light standard is erected.
- The contractor shall coordinate the extension, size and material of anchor bolts above top of foundation with the Light Pole Manufacturer's requirements. Anchor bolts shall be approved by the Engineer prior to ordering the material.
- All exposed edges shall a 3/4" chamfer.
- See lighting details for conduits, anchor, bolt circle, ground rod, etc.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.



 CIVILTECH	Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN	CONSTRUCTION DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - JRR	REVISED -								
		CHECKED - KRK	REVISED -								
		DATE - 9/24/2021	REVISED -								
						SHEET NO. 1 OF 5 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT

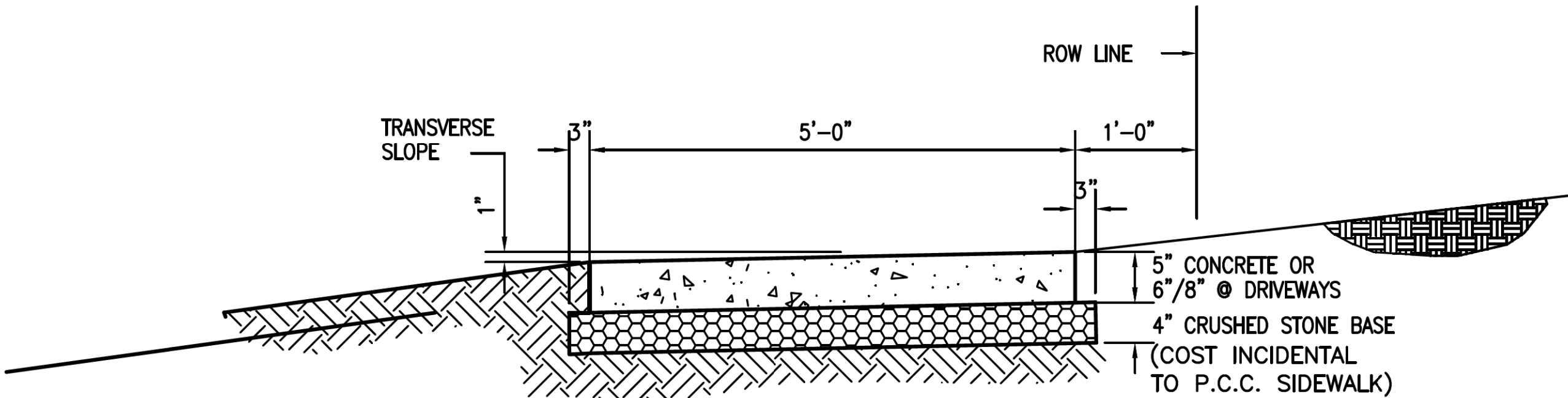


ALL EXPANSION JOINTS SHALL BE PROVIDED WITH A 3/4" DIA. x 18" LONG COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 710.14B OF THE STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION. JOINTS SHALL CONSTRUCTED AT 100 FT. INTERVALS, AT ALL POINTS OF TANGENCY AND AT THE END OF EACH DAY'S POUR. SAWED JOINTS SHALL BE PROVIDED AT 25 FT. INTERVALS.

P.C.C. CURB & GUTTER
EXPANSION JOINT DETAIL
NOT TO SCALE

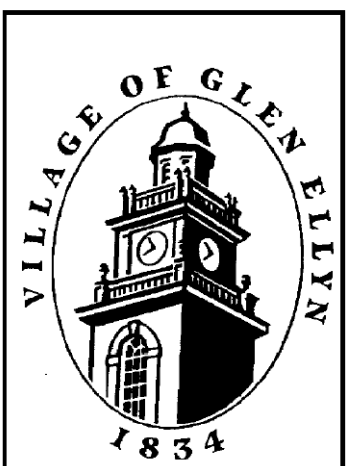
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	01/01/18				P.C.C. CURB & GUTTER EXPANSION JOINT DETAIL
DRAWING NO. PV-05					
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		DRAWN - JRR	REVISED -	
		CHECKED - KRK	REVISED -	
		DATE - 9/24/2021	REVISED -	

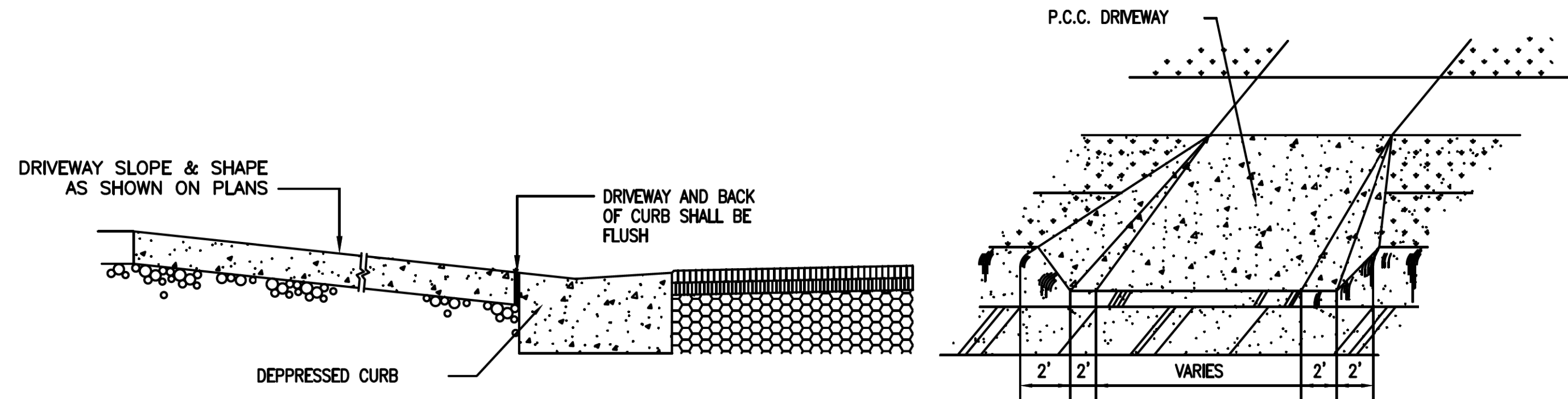


- NOTES:
- THE CONCRETE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 424 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 - THE CONCRETE SHALL CONFORM TO SECTION 1020 AND SHALL BE A CLASS SI AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS.
 - THE SIDEWALK PORTION OF THE RESIDENTIAL DRIVEWAY SHALL BE 6-INCHES THICK OR 8-INCHES FOR COMMERCIAL DRIVEWAY AND SHALL BE REINFORCED WITH FIBER MESH ADDITIVE. SEE P.C.C. SIDEWALK SPECIAL PROVISION FOR SYNTHETIC FIBER SPECIFICATIONS.
 - PLACEMENT WILL NOT BE PERMITTED UNLESS THE TEMPERATURE IS 28°F AND RISING. NO CHLORIDE ADDITIVE WILL BE PERMITTED IN THE CONCRETE.
 - MAXIMUM ALLOWABLE LONGITUDINAL SLOPE OF THE SIDEWALK SHALL BE 1:20 OR MATCH THE EXISTING GRADE OF THE ROAD.
 - CONTROL JOINTS SHALL BE INSTALLED AT 5 FOOT CENTERS.
 - 1/2" PREMOULDED FIBER EXPANSION JOINTS SHALL BE INSTALLED AT 100 FOOT CENTERS MAXIMUM OR WHERE THE SIDEWALK ABUTS CURB OR OTHER SIDEWALK, OR AT THE END OF EACH POUR.
 - THE SIDEWALK SHALL HAVE A BROOM FINISH.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
	01/01/18				CONCRETE SIDEWALK DETAIL
DRAWING NO. PV-06					
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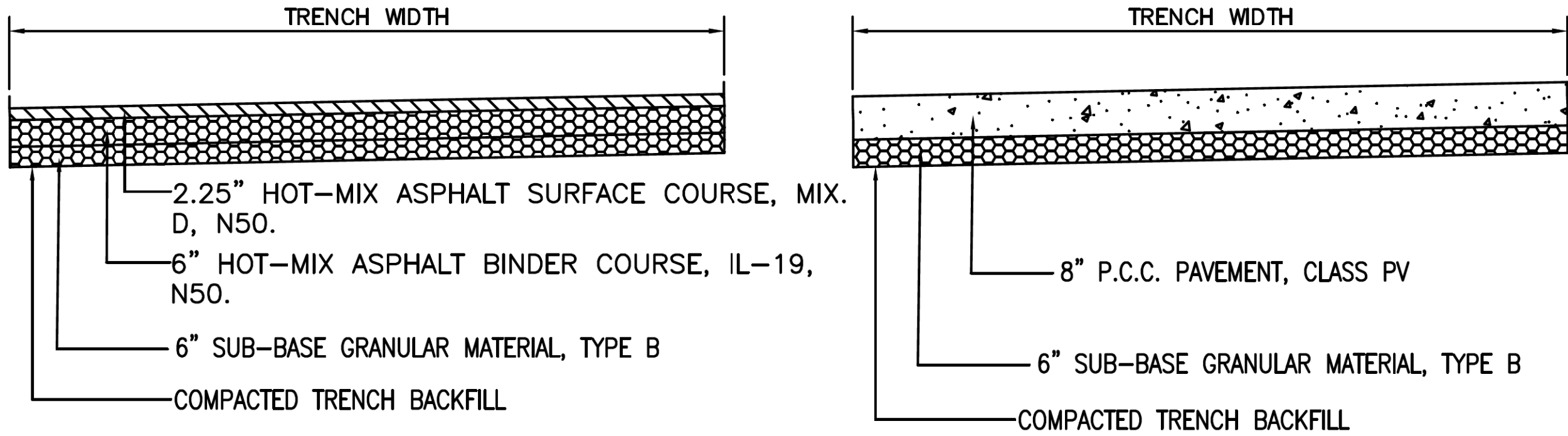
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						DUPAGE	137	116
SHEET NO. 2 OF 5 SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. THE CONCRETE DRIVEWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 423 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THE CONCRETE SHALL CONFORM TO SECTION 1020 AND SHALL BE CLASS PV AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS.
3. THE DRIVEWAY SHALL BE 6-INCHES THICK FOR RESIDENTIAL DRIVEWAY AND 8" THICK FOR COMMERCIAL DRIVEWAY OVER 4" AGGREGATE BASE AND SHALL BE REINFORCED WITH FIBER MESH ADDITIVE. SEE P.C.C. DRIVEWAY SPECIAL PROVISION FOR SYNTHETIC FIBER SPECIFICATIONS.
4. PREMOULDED FIBER EXPANSION JOINTS SHALL BE INSTALLED BETWEEN DRIVEWAY AND BACK OF CURB.
5. THE DRIVEWAY SHALL HAVE A BROOM FINISH.

CONCRETE DRIVEWAY DETAIL
NOT TO SCALE



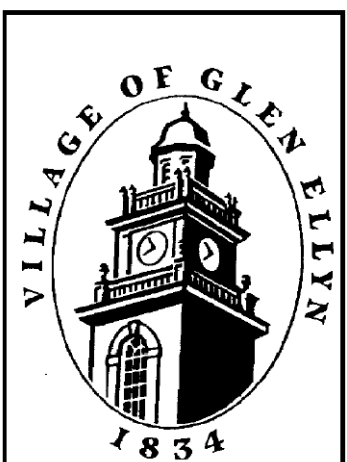
BITUMINOUS PAVEMENT

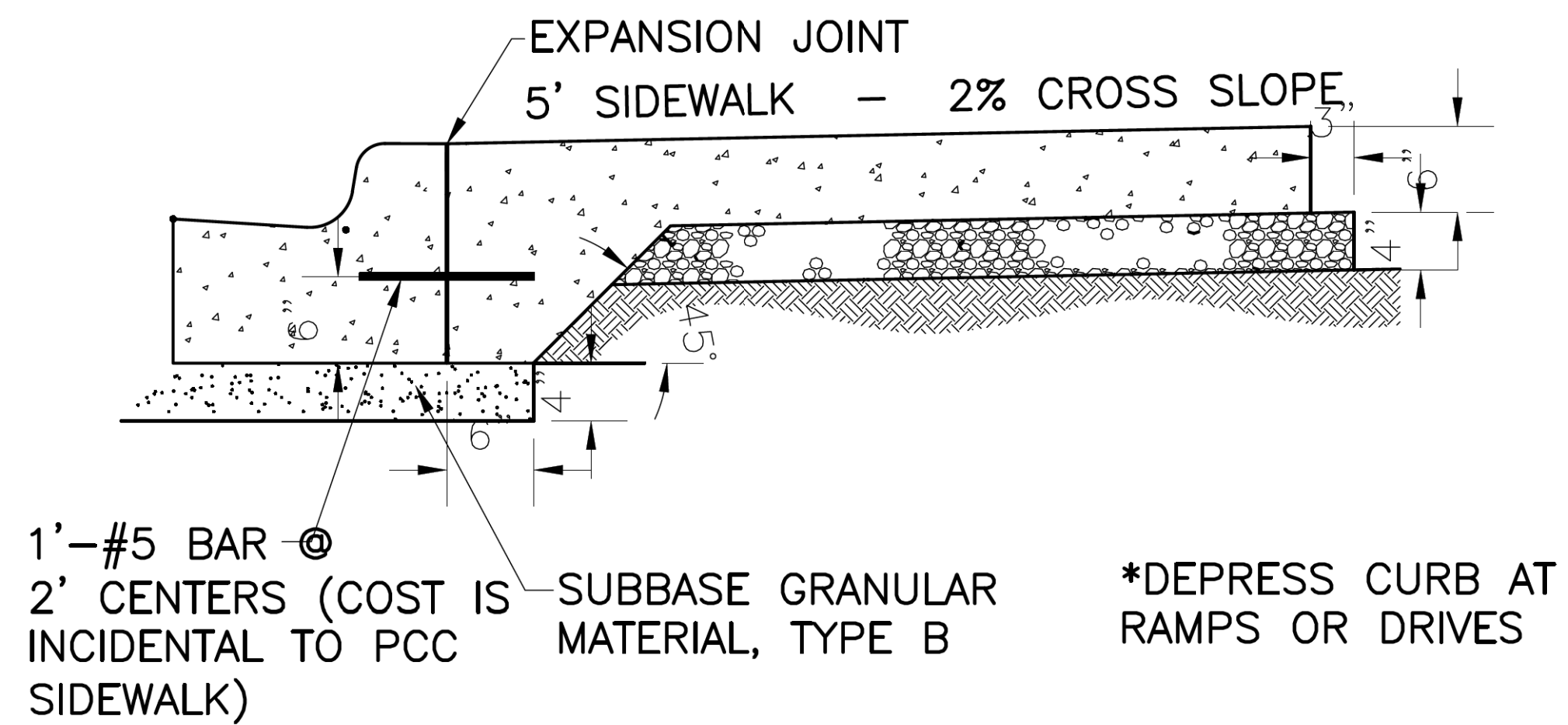
P.C.C. PAVEMENT

NOTE: INSTALL TRENCH BACKFILL UP TO THE EXISTING PAVEMENT SURFACE ELEVATION UNTIL THE INSTALLATION OF THE HMA SURFACE COURSES OR PCC PAVEMENT. REMOVE EXCESS BACKFILL PRIOR TO PAVING OPERATIONS. COST OF TRENCH BACKFILL IS CONSIDERED INCIDENTAL TO THE PIPE PAY ITEM.

TYPICAL PAVEMENT RESTORATION
NOT TO SCALE

N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
	01/01/18				CONCRETE DRIVEWAY DETAIL
DRAWING NO. PV-08					
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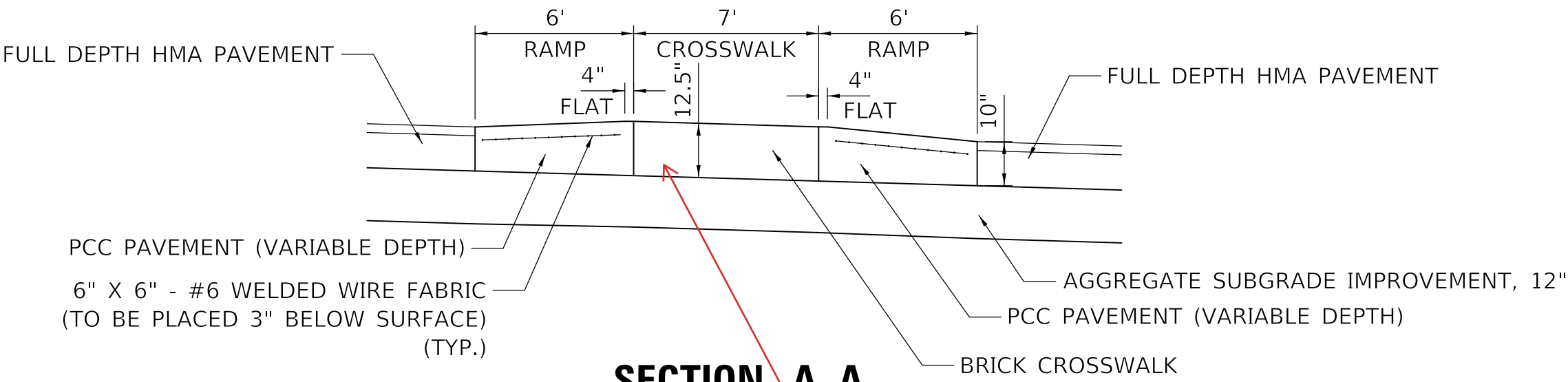
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	01/01/18				TYPICAL PAVEMENT RESTORATION
DRAWING NO. PV-10					
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B-6.12 CURB & GUTTER WITH ADJACENT WALK

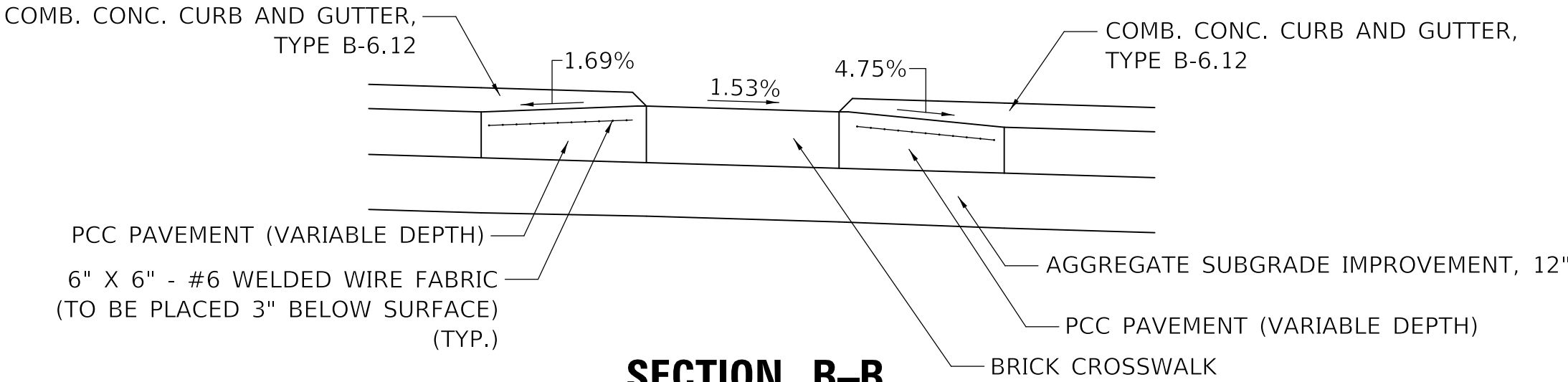
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	01/01/18				B-6.12 CURB & GUTTER WITH ADJACENT WALK
DRAWING NO. PV-12					
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		DRAWN - JRR	REVISED -					DUPAGE	137	118
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						DATE - 9/24/2021	REVISED -			SHEET NO. 4 OF 5 SHEETS

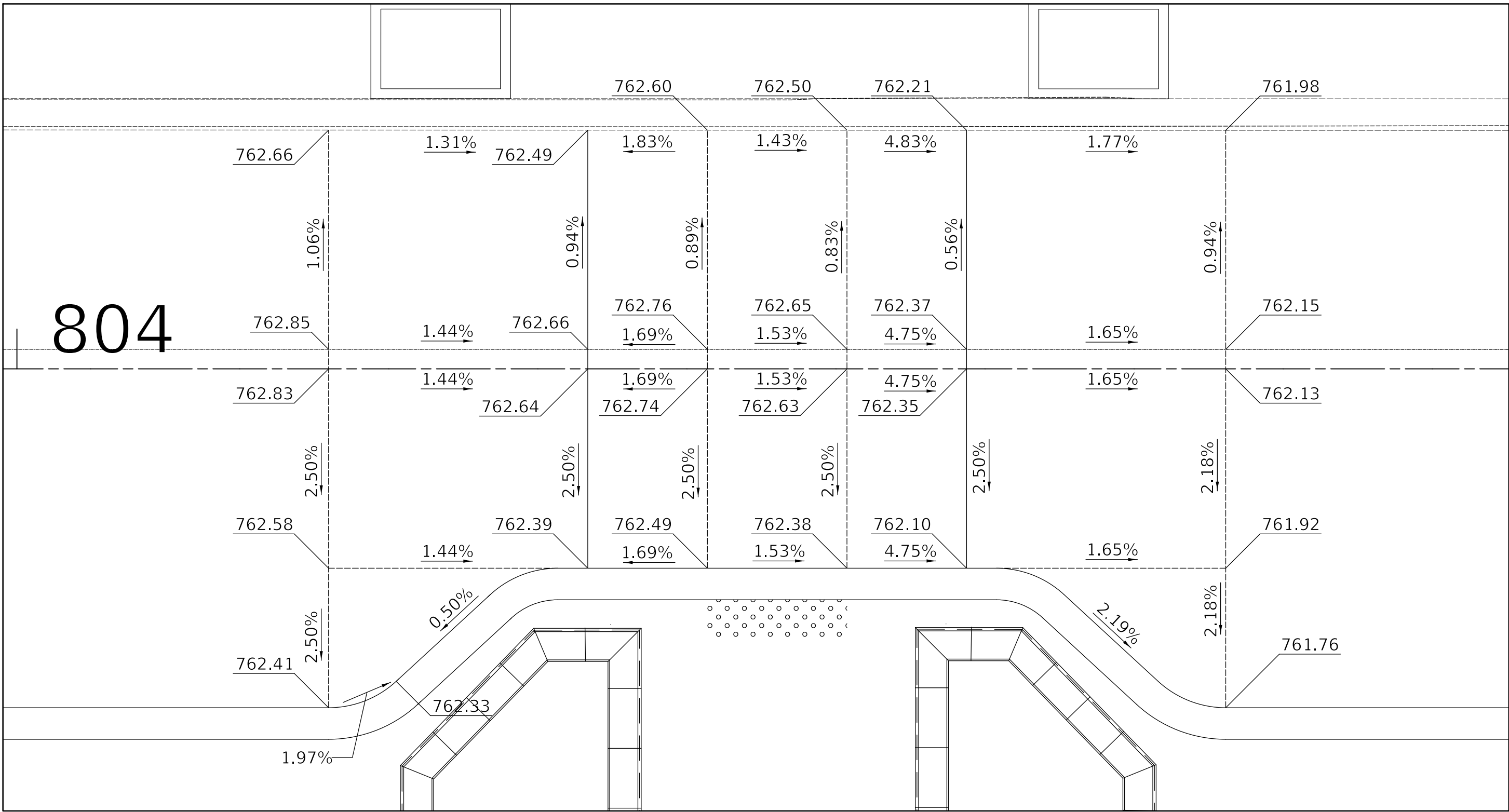
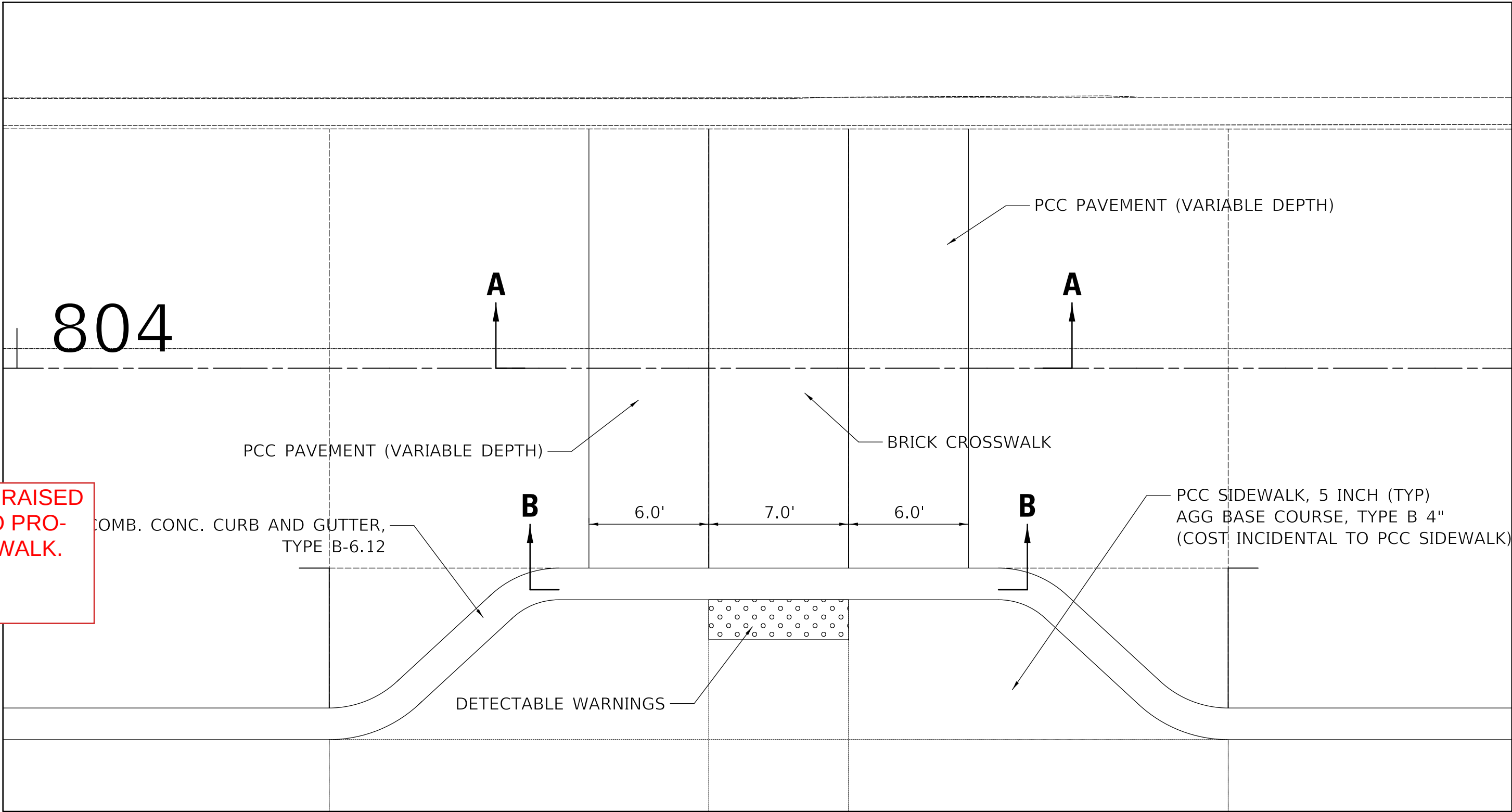


SECTION A-A

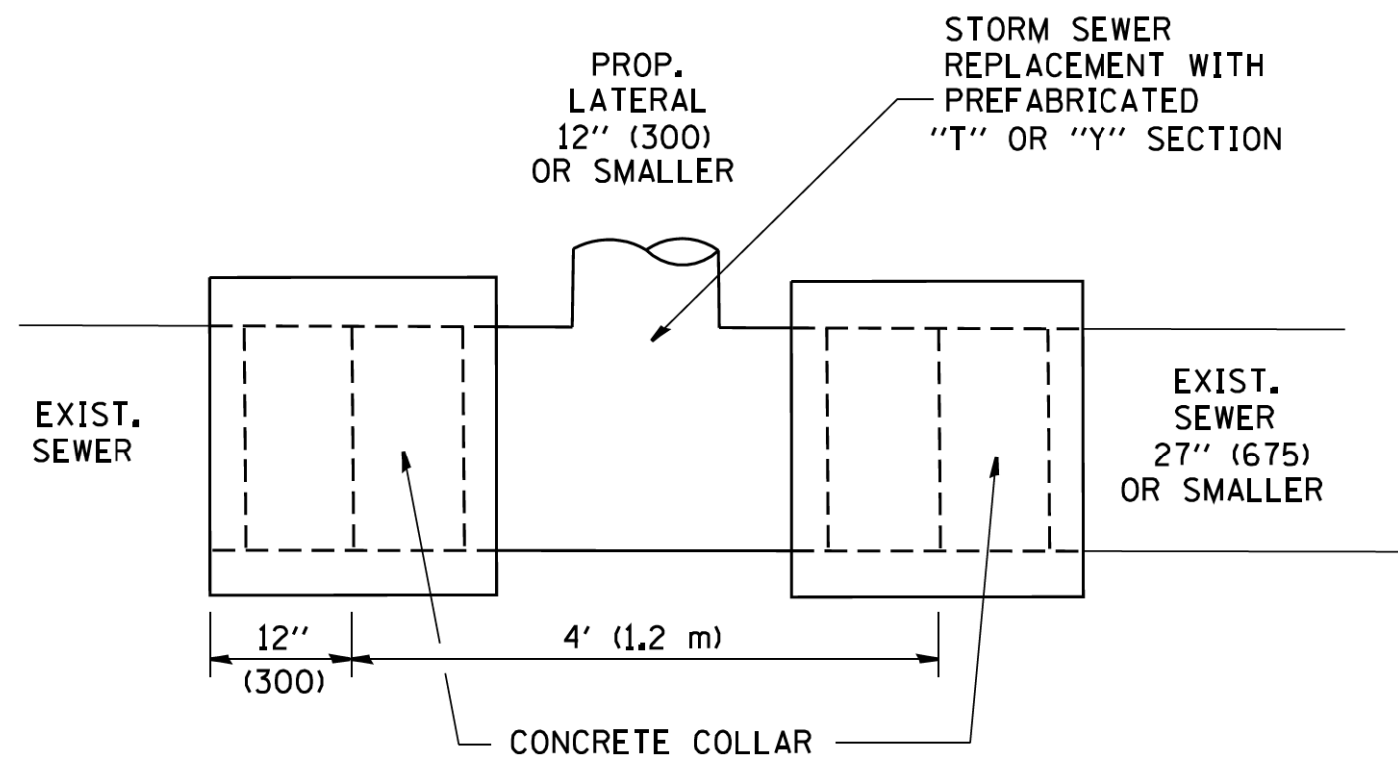
AFTER CAREFUL CONSIDERATION OF THE IMPACT OF RAISED CROSSWALK TO VEHICULAR TRAFFIC, WOULD LIKE TO PROPOSE ELIMINATION OF THE RAISED PORTION OF THE WALK. PLEASE REACH OUT TO DISCUSS.



SECTION B-B
ALONG GUTTER FLOWLINE

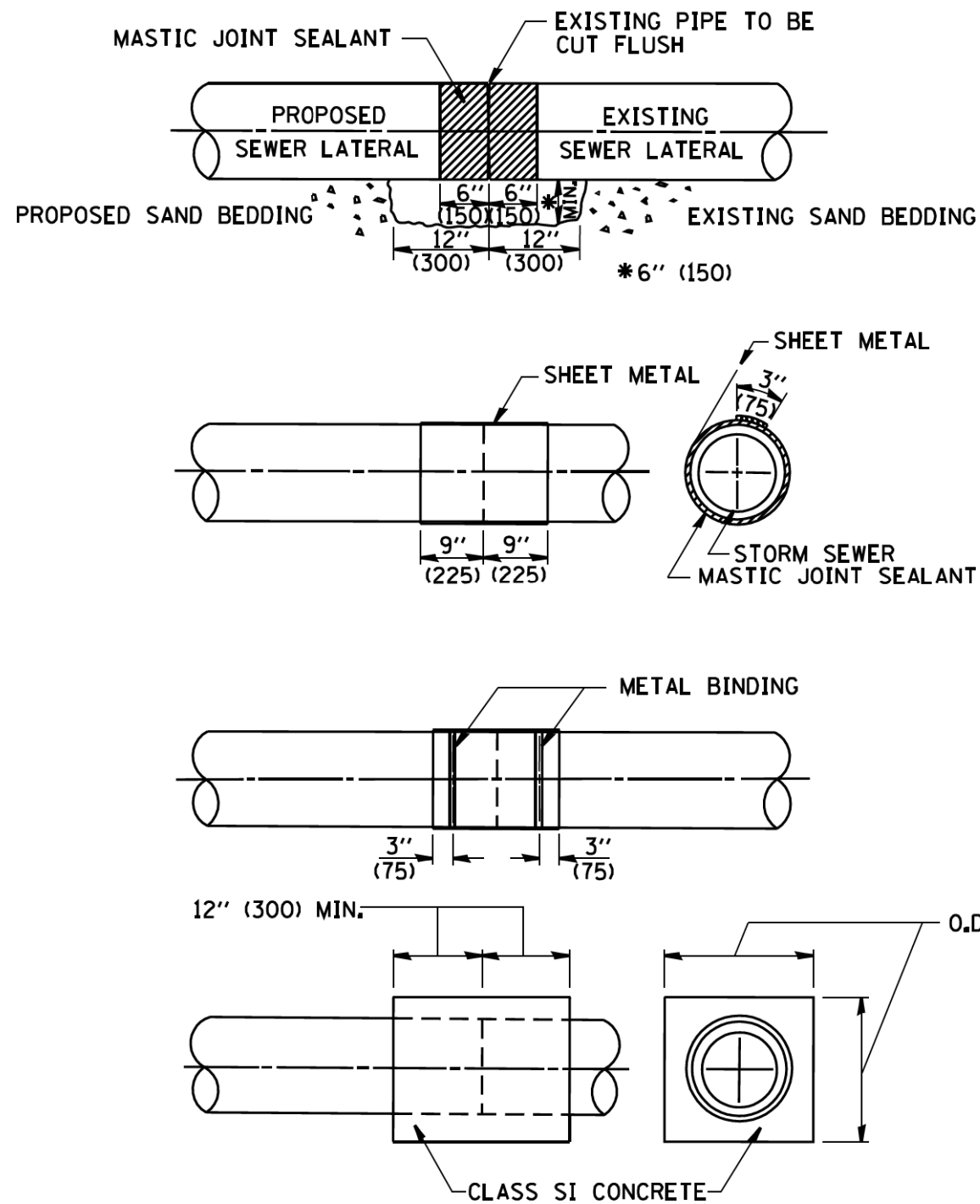


RAISED CROSSWALK DETAIL



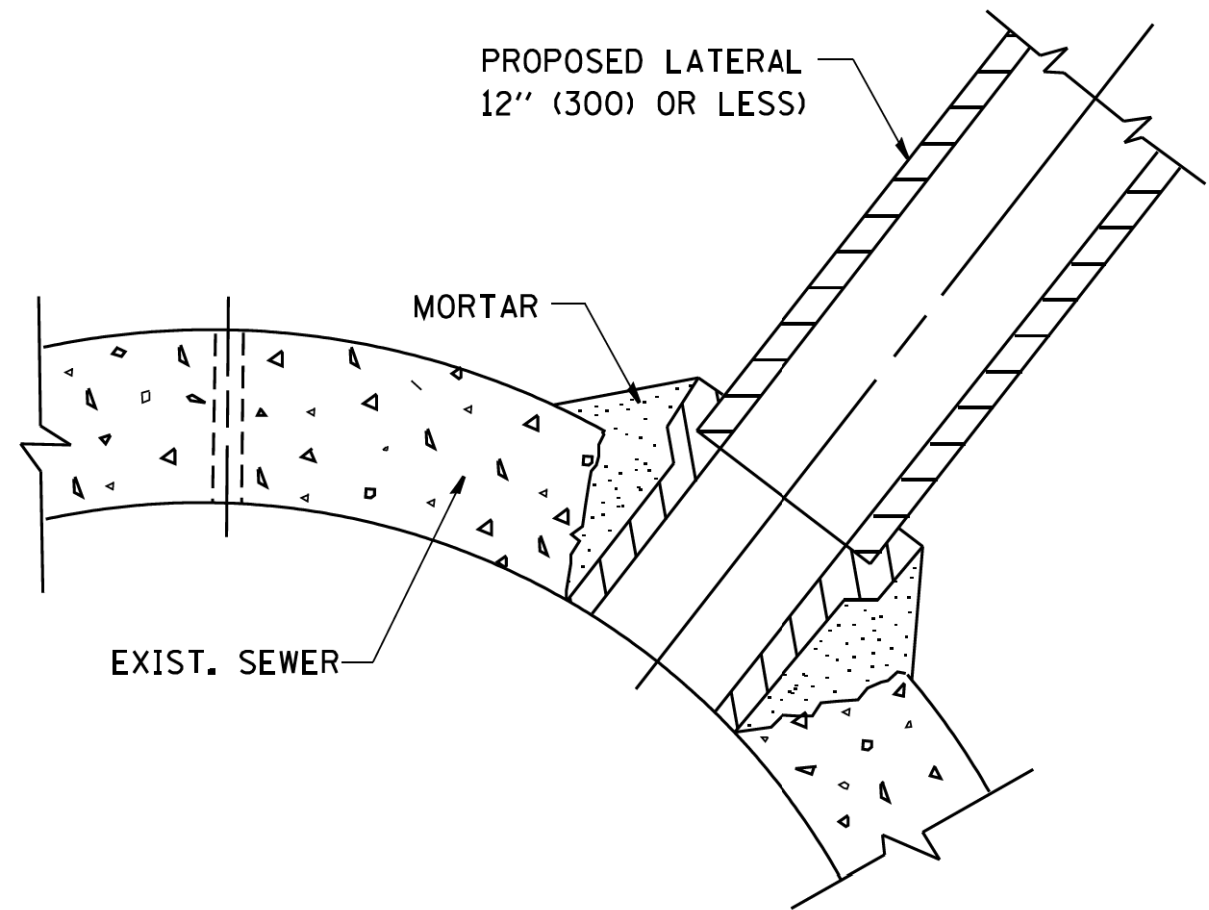
DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER



DETAIL "B"

CLASS SI CONCRETE COLLAR



DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd07.dgn	USER NAME = gaglienobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. SHAH 09-09-94										
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94										
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD500-01 (BD-7) CONTRACT NO.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT													



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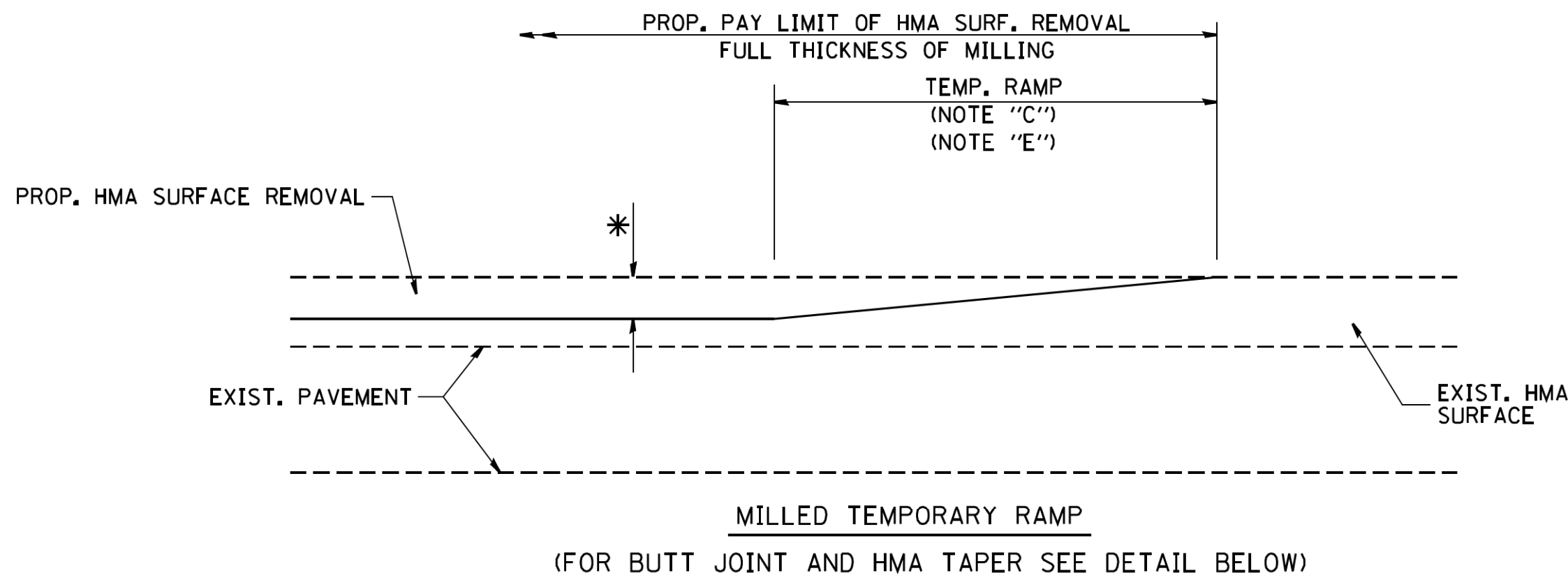
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 9/24/2021	REVISED -

VILLAGE OF GLEN ELLYN

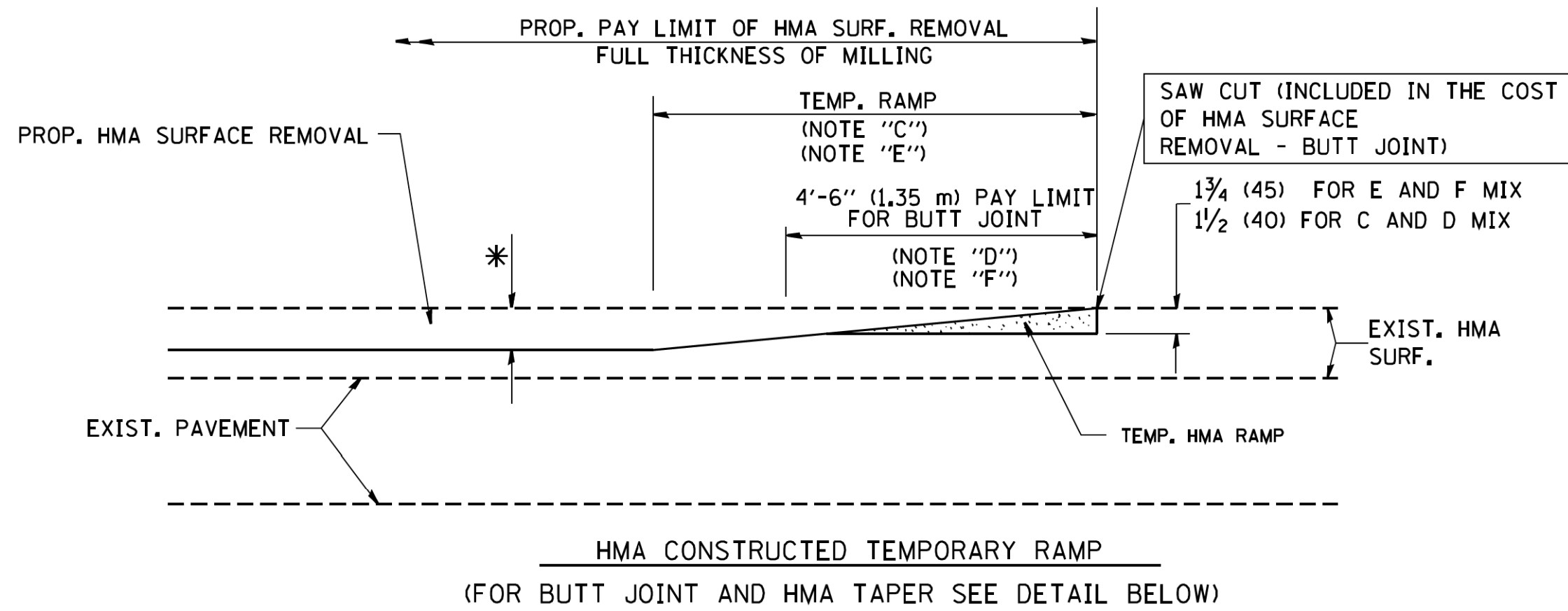
IDOT DISTRICT 1 CONSTRUCTION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	120
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

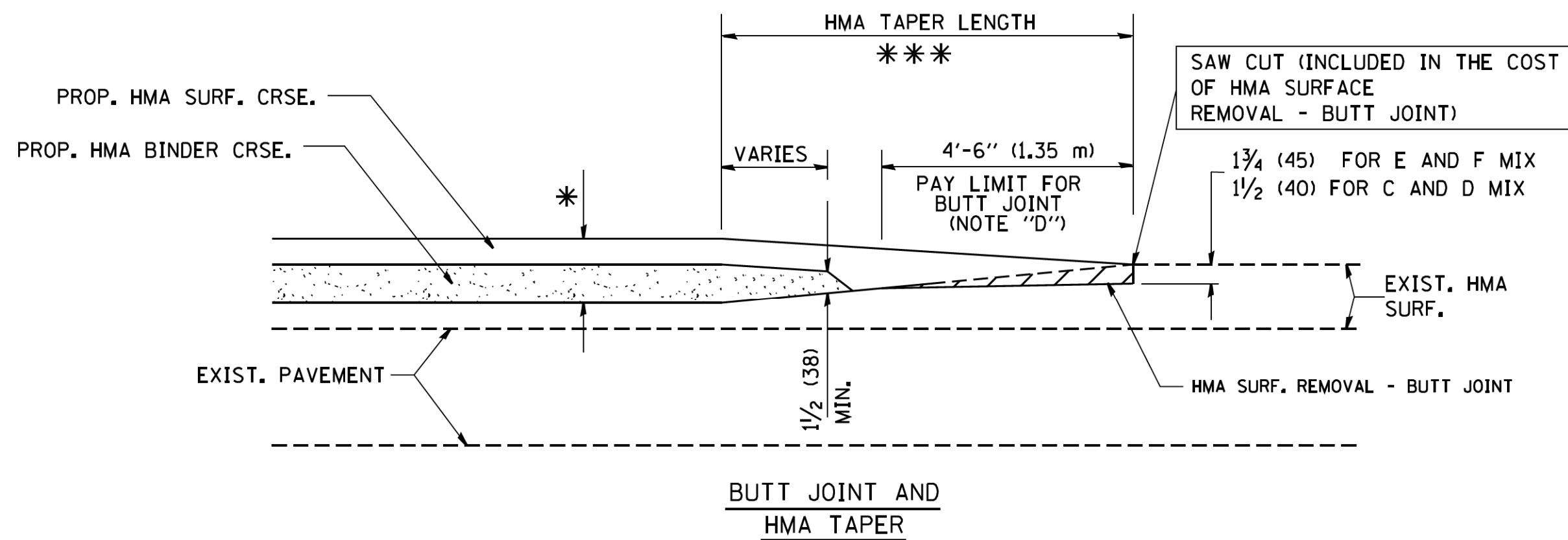


OPTION 1

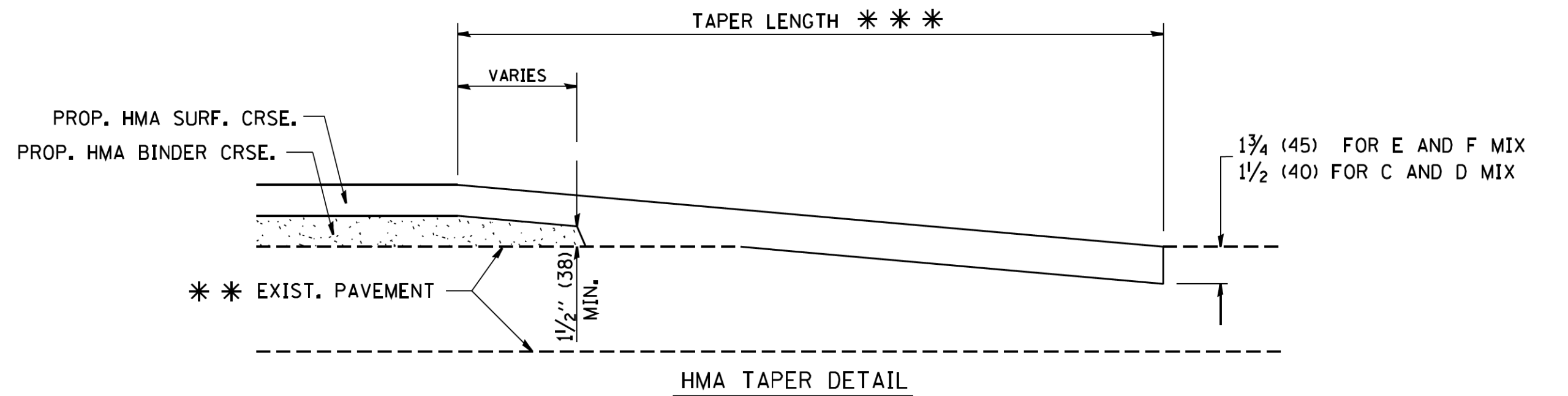
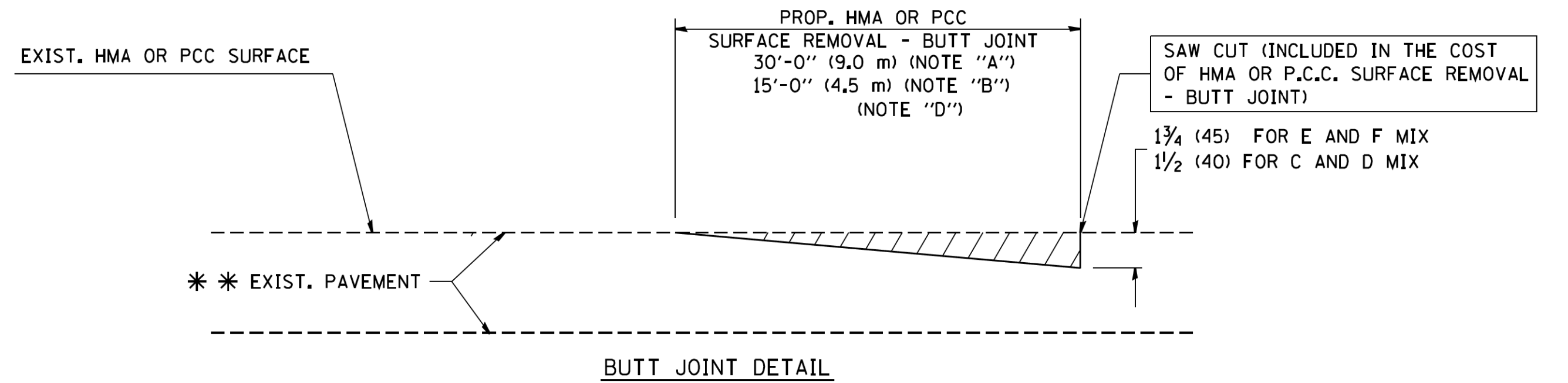


OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglienobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07												
					SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	BD400-05 BD32			CONTRACT NO.	
					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT										



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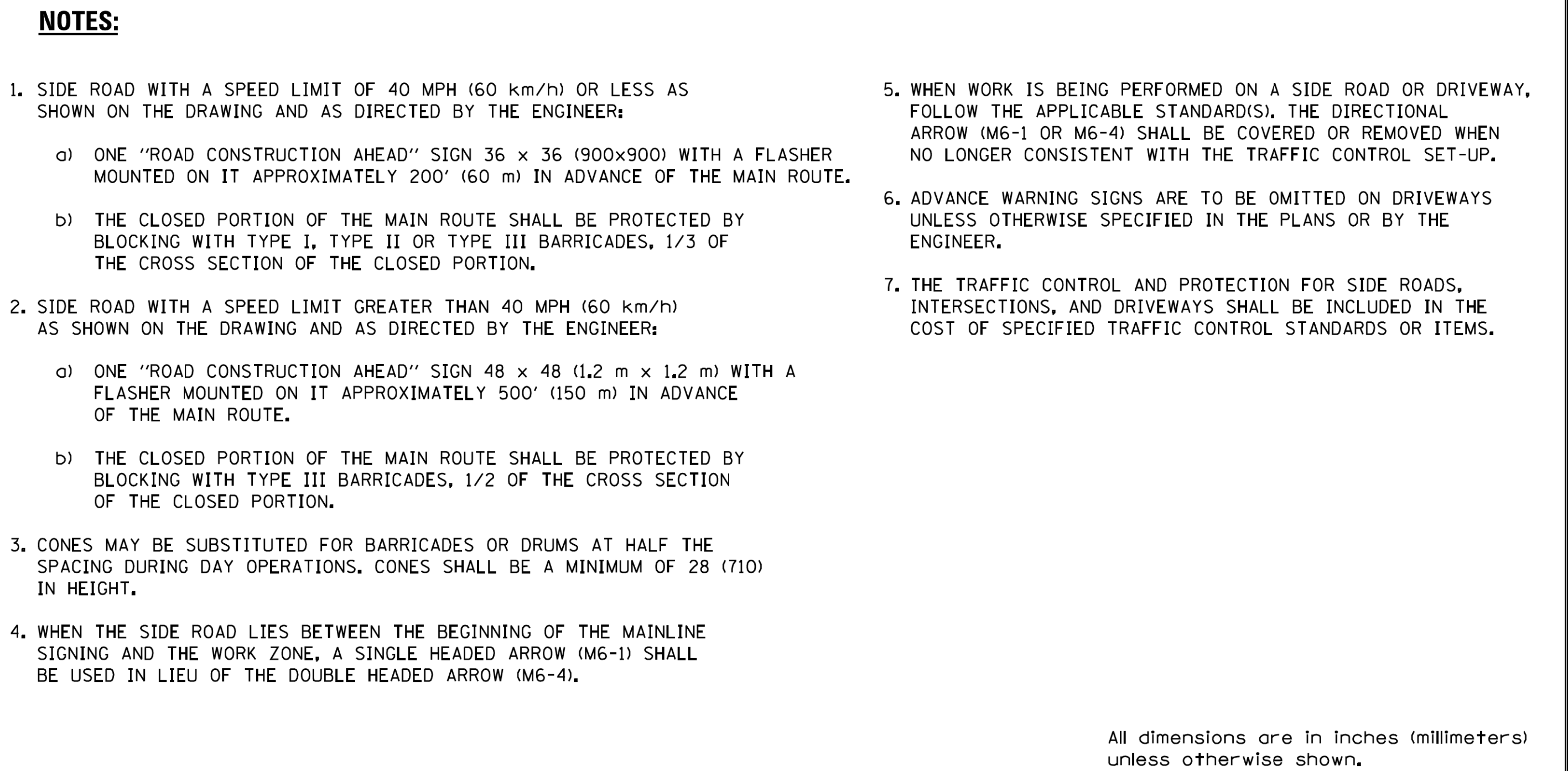
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 9/24/2021	REVISED -

VILLAGE OF GLEN ELLYN

IDOT DISTRICT 1 CONSTRUCTION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	121
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
pwt\l084EBIDINTEGallinois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\Dist		DRAWN CADDATE\CADsheets\c10.dgn	REVISED - T. RAMMACH 01-06-00
Default	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - A. SCHUETZ 07-01-13
	PLOT DATE = 9/15/2016	DATE = 06-89	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TC-10		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

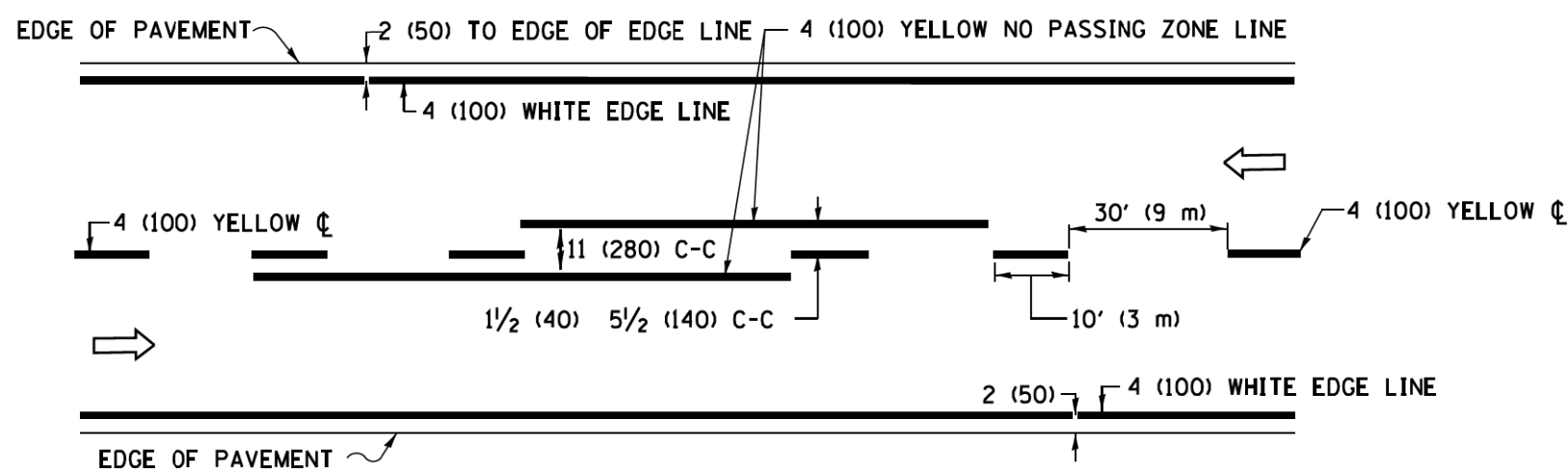
A.U. TE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DUPAGE	137	122
ED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 9/24/2021	REVISED -

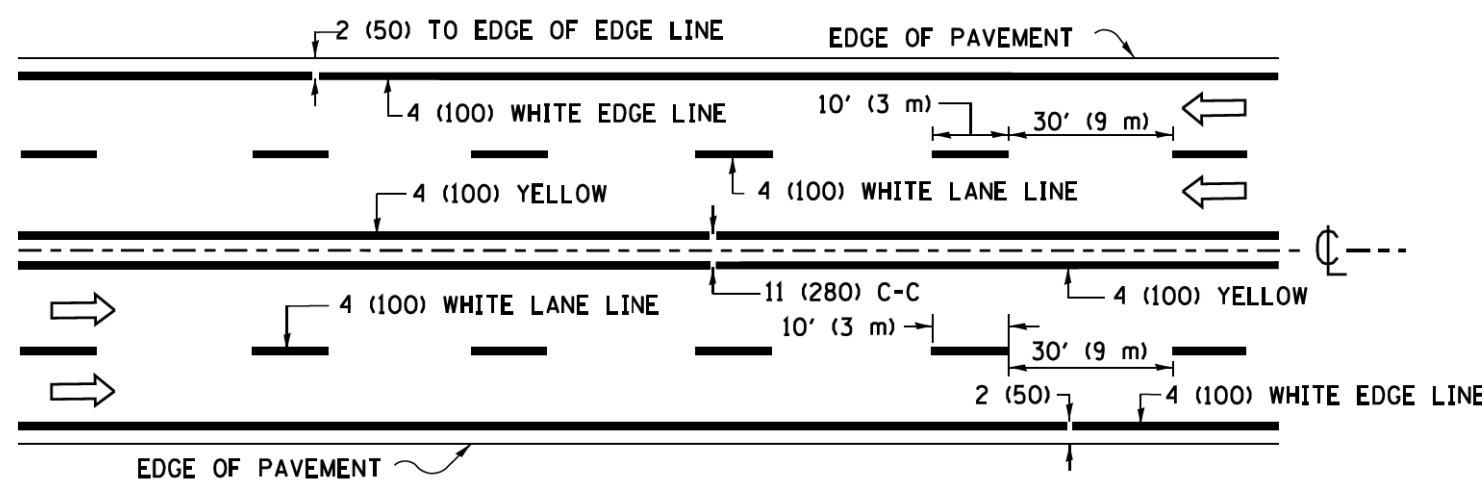
VILLAGE OF GLEN ELLYN

IDOT DISTRICT 1 CONSTRUCTION DETAILS

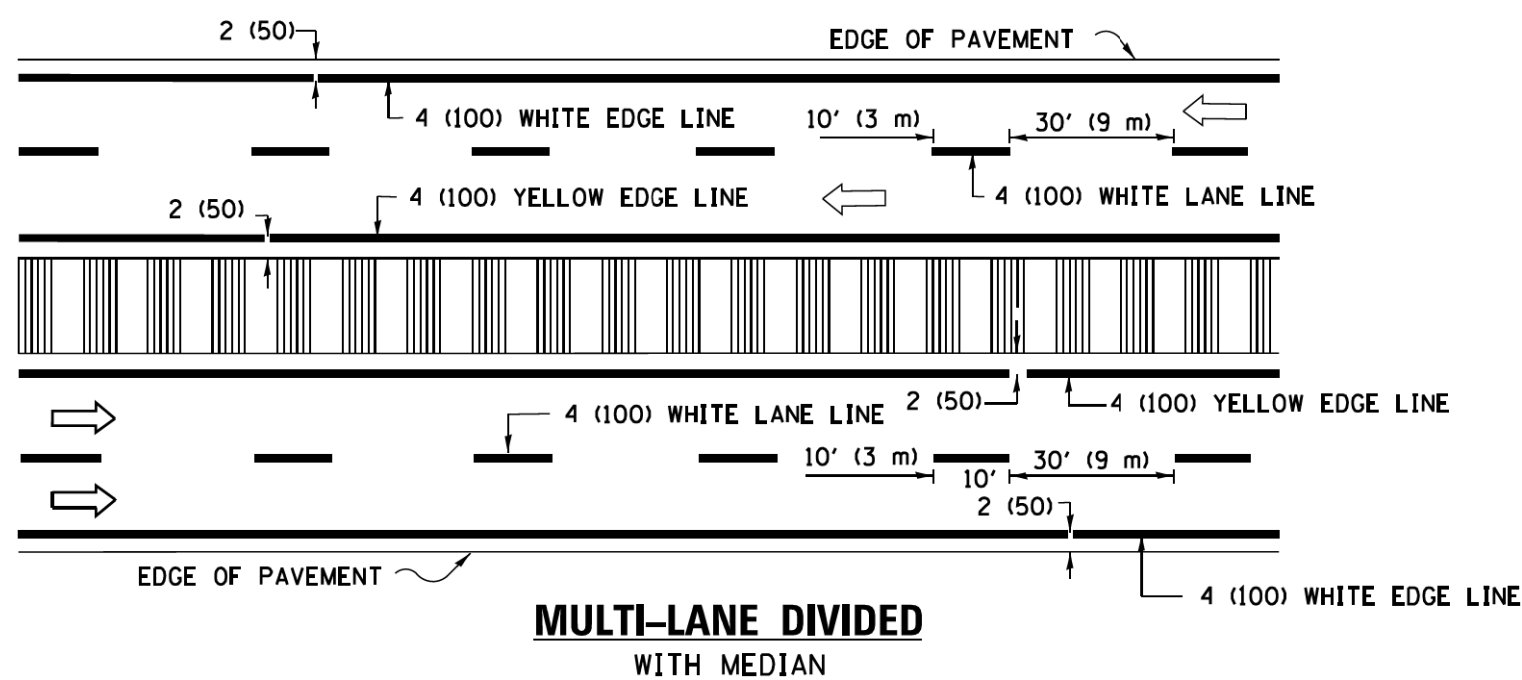
SHEET NO.	OF	SHEETS	STA.	TO STA.
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2-LANE ROADWAY

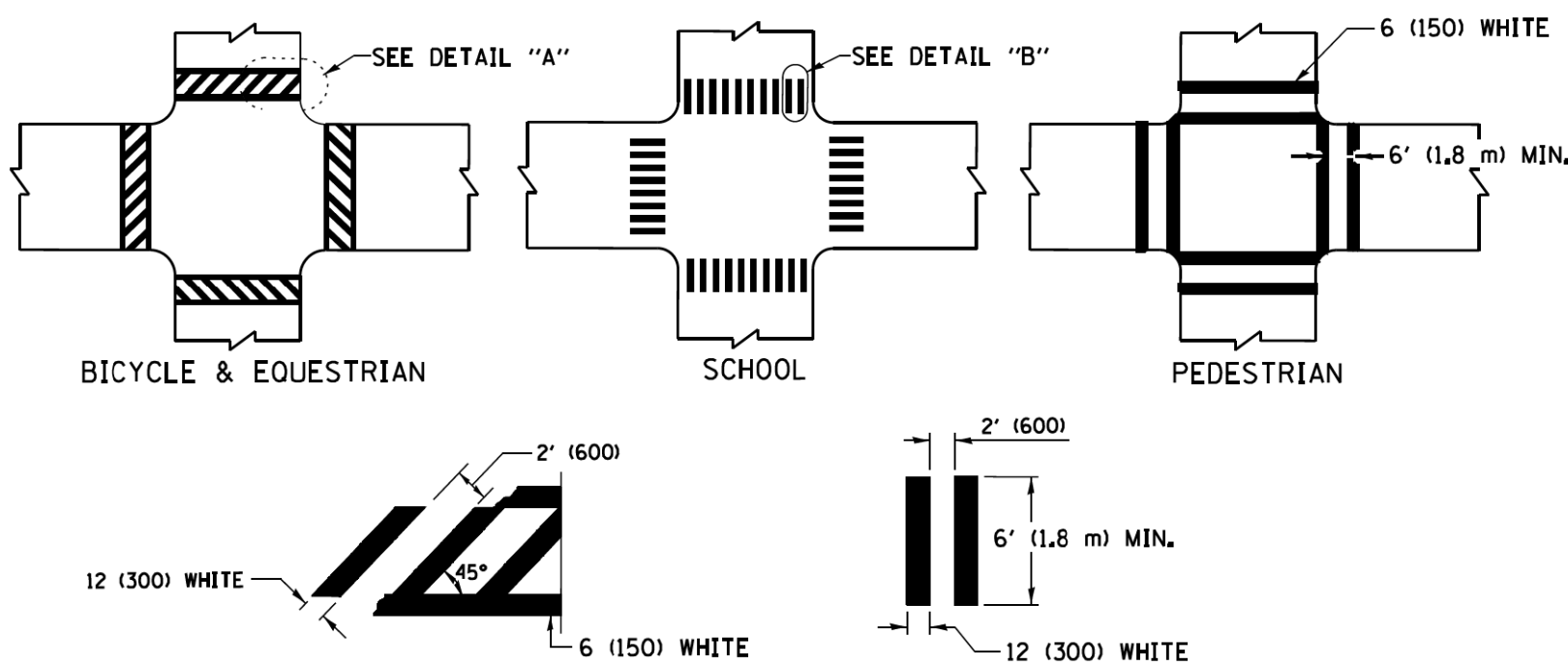


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

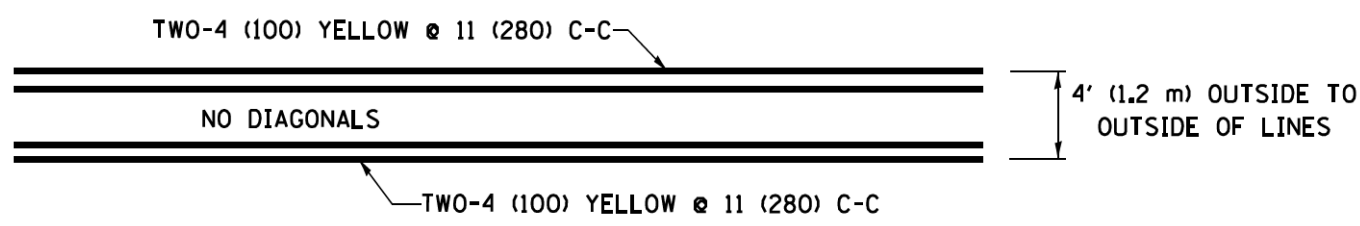


DETAIL "A"

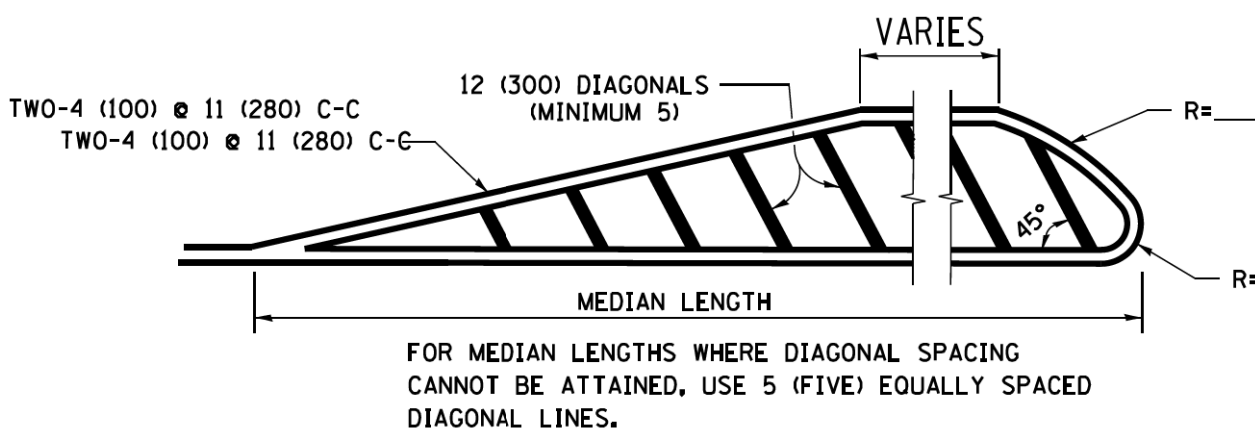
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

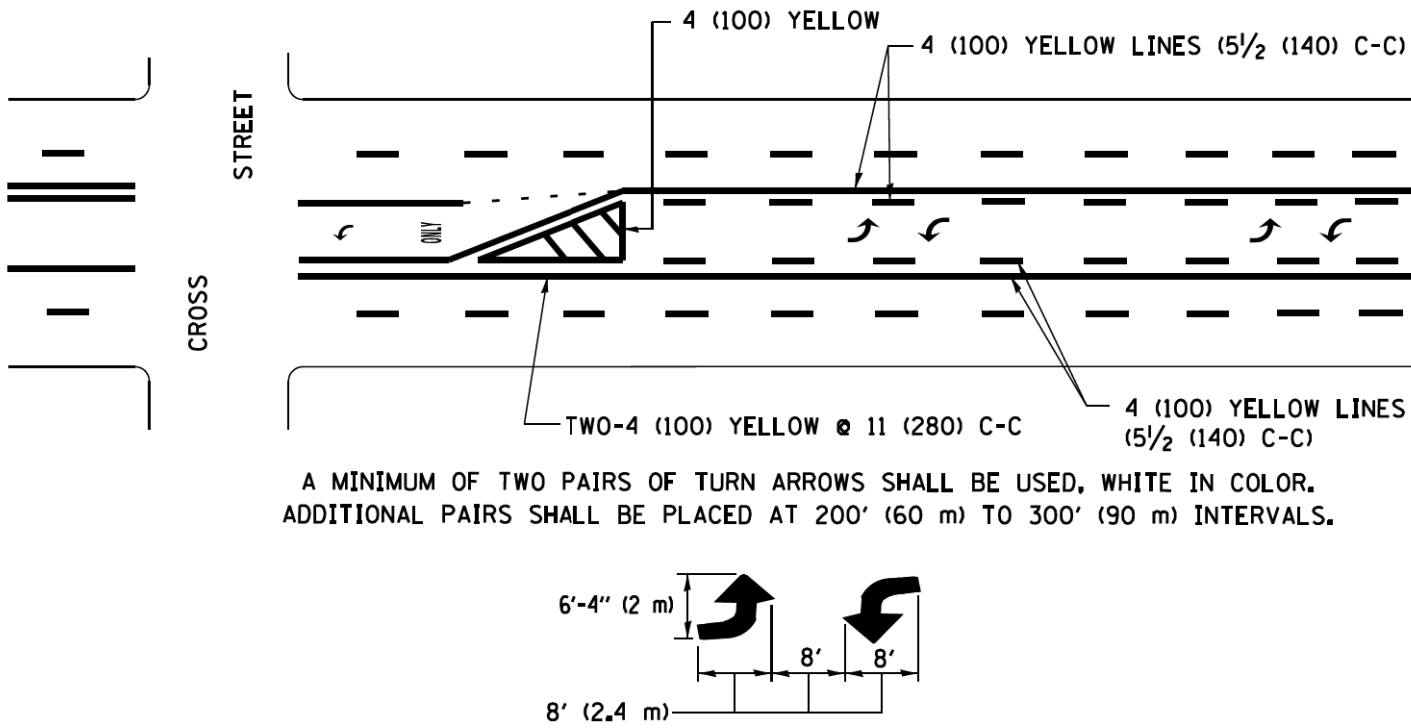


4' (1.2 m) WIDE MEDIANS ONLY



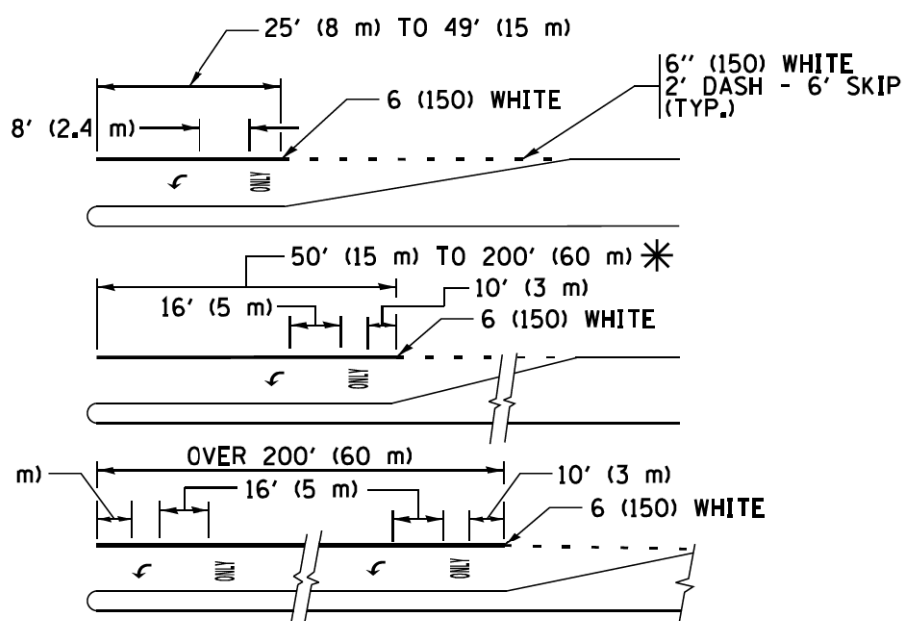
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



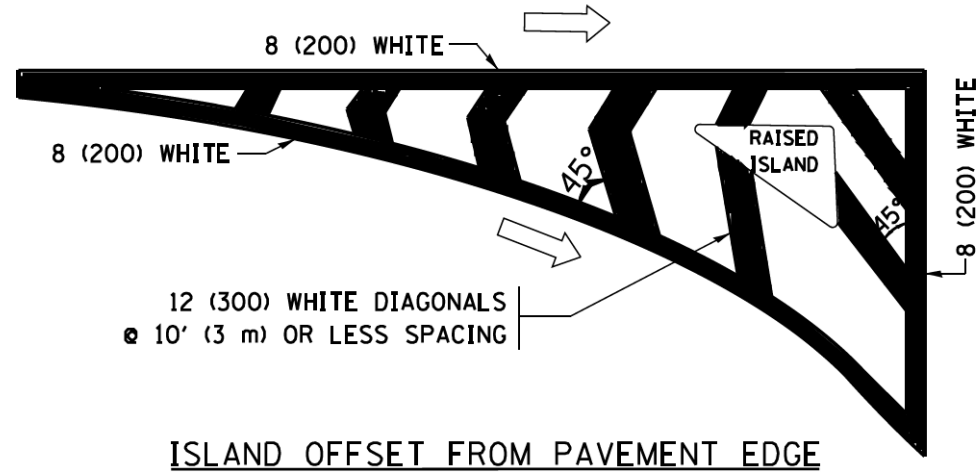
MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

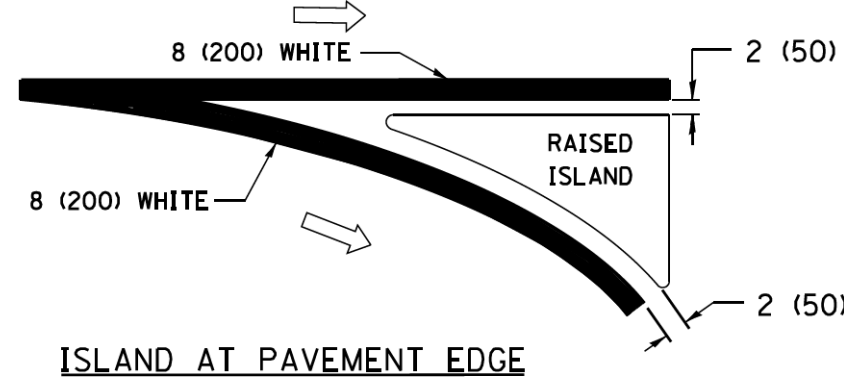


TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

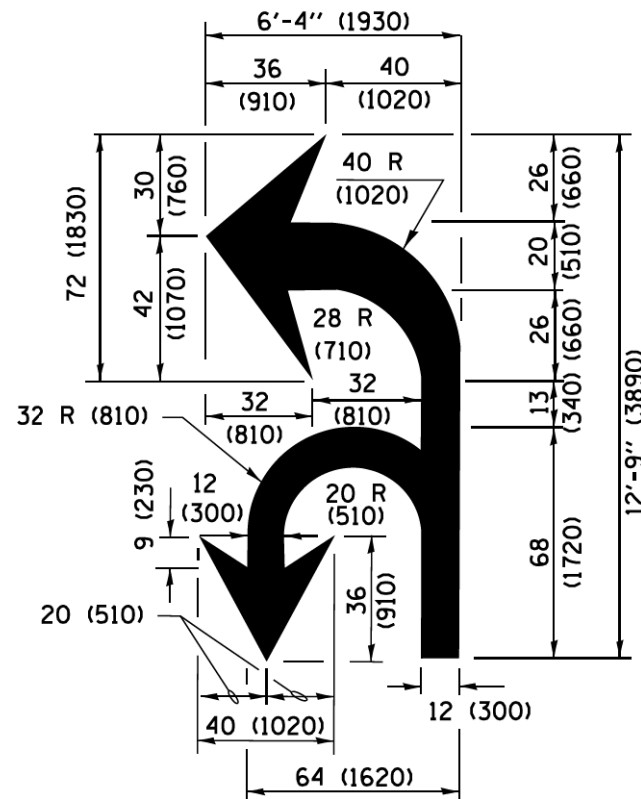


ISLAND OFFSET FROM PAVEMENT EDGE

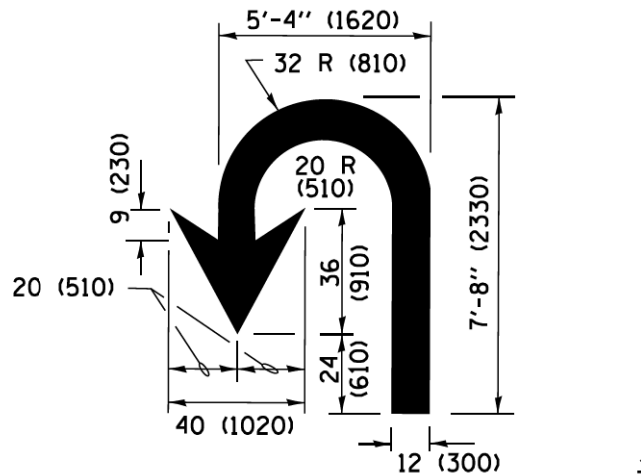


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES; FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS; 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = lryao	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
Wa\diststd\22x34\to13.dgn		DRAWN -	REVISED - C. JUCIUS 07-01-13
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	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-13			

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 9/24/2021	REVISED -

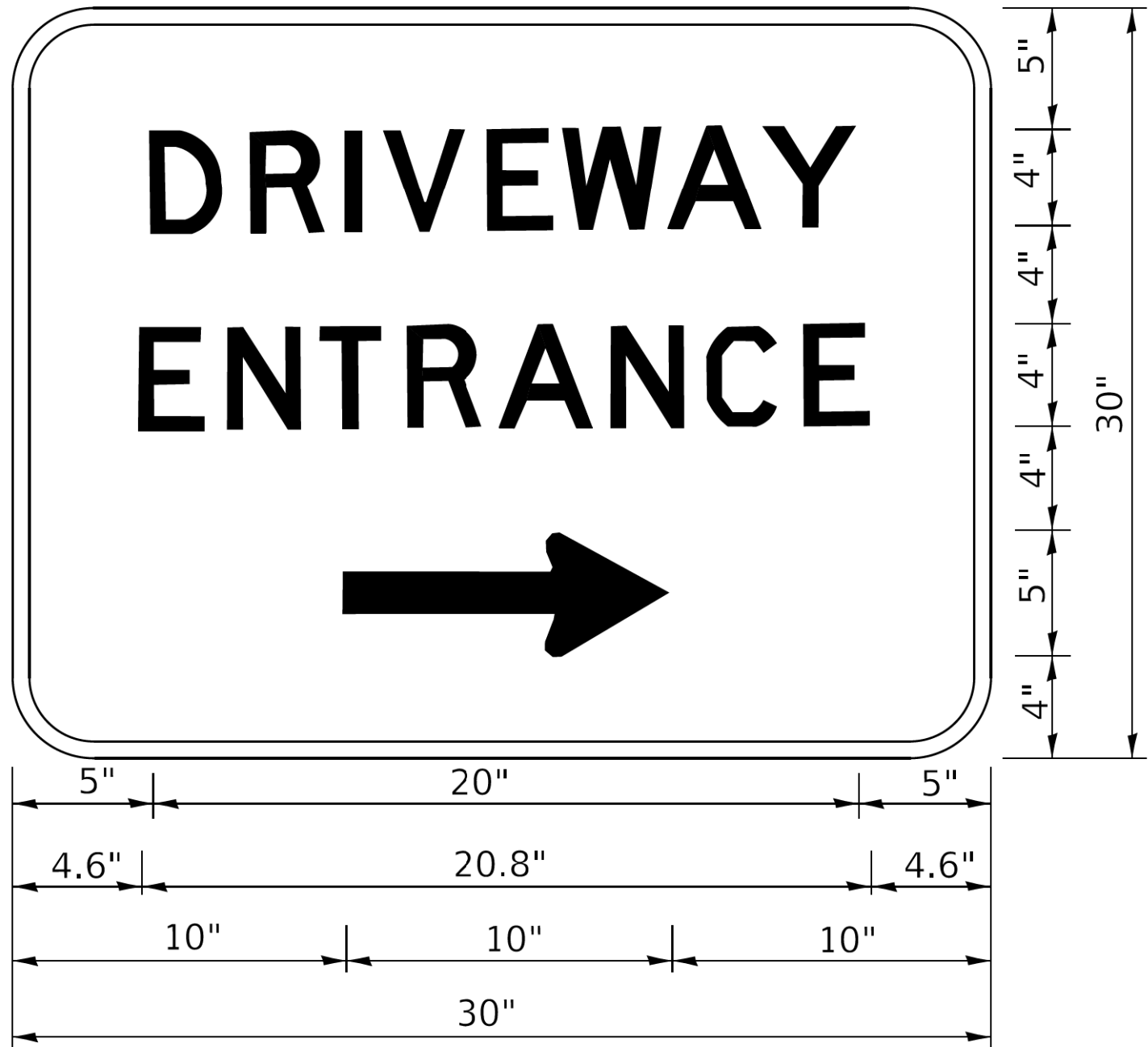
VILLAGE OF GLEN ELLYN

IDOT DISTRICT 1 CONSTRUCTION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN)
SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

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		DRAWN	-	REVISED	-	
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PLOT DATE	= 3/4/2019	DATE	-	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-26			CONTRACT NO.

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

12/20/2019 10:59:25 AM User:fo



Two Pierce Place, Suite 1400
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DESIGNED	-	REVISED	-
DRAWN	-	REVISED	-
CHECKED	-	REVISED	-
DATE	- 9/24/2021	REVISED	-

VILLAGE OF GLEN ELLYN

IDOT DISTRICT 1 CONSTRUCTION DETAILS

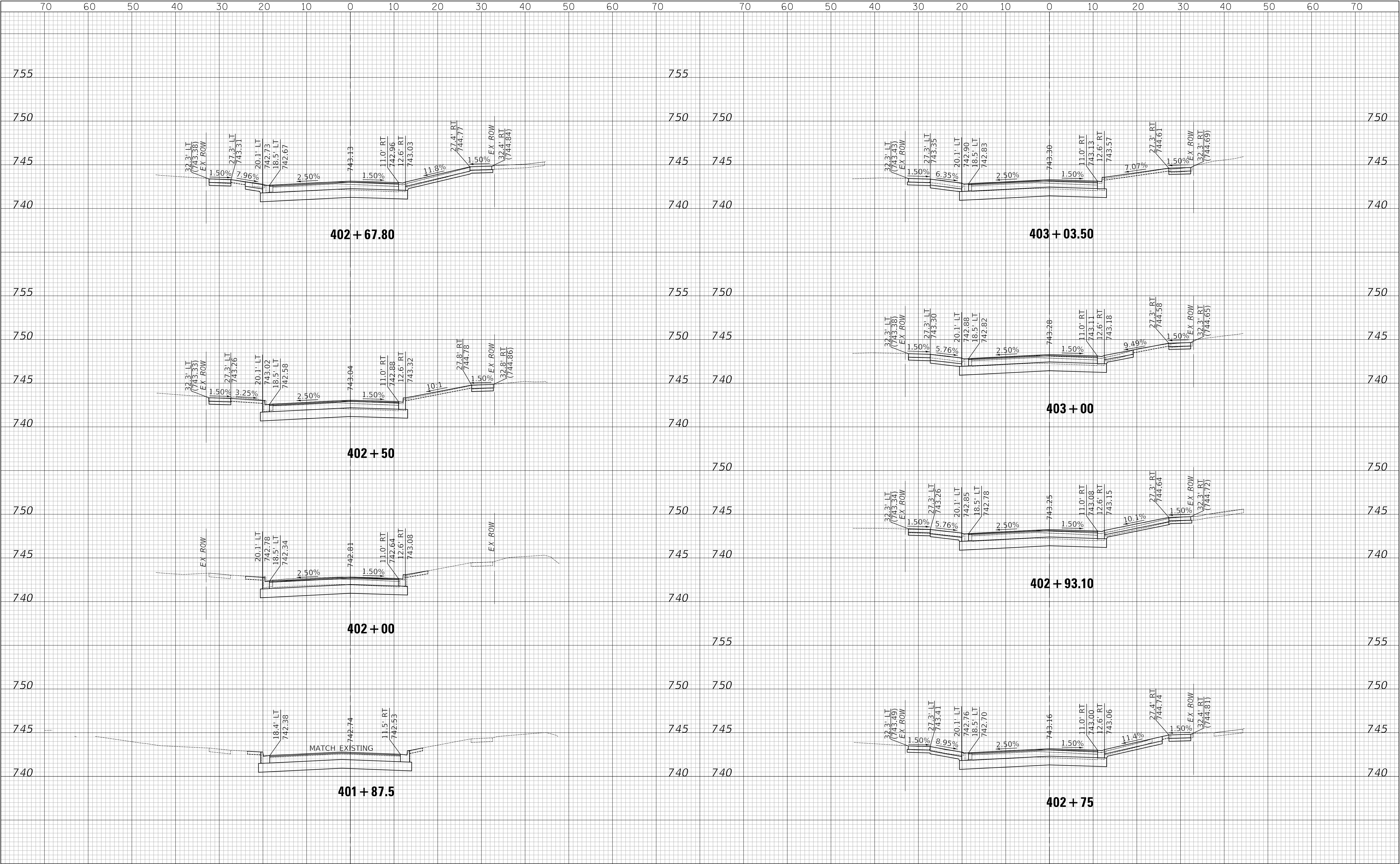
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	137	125

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL	SURVEY	DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS	CHECKED
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.

ORIGINAL	SURVEY	DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS	CHECKED
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.





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DESIGNED - TGB	REVISED -
DRAWN - JRR	REVISED -
CHECKED - KRK	REVISED -
DATE - 9/24/2021	REVISED -

VERT. 0 5 10

HORIZ. 0 10 20

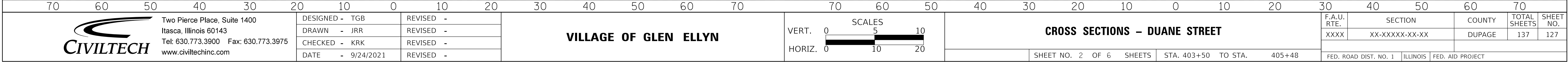
SCALES

CROSS SECTIONS - DUANE STREET

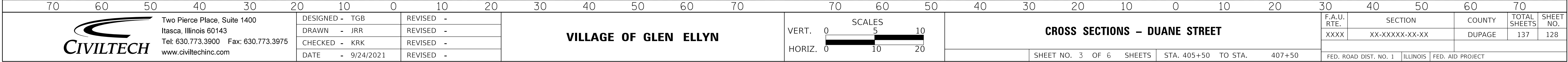
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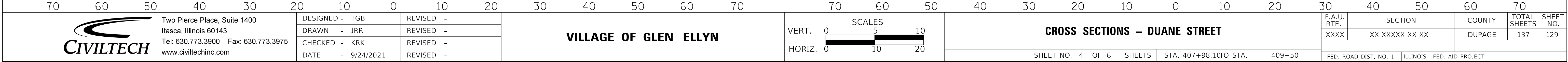
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NOTE BOOK	SURVEYED _____		
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NO. _____	AREAS CHECKED _____		



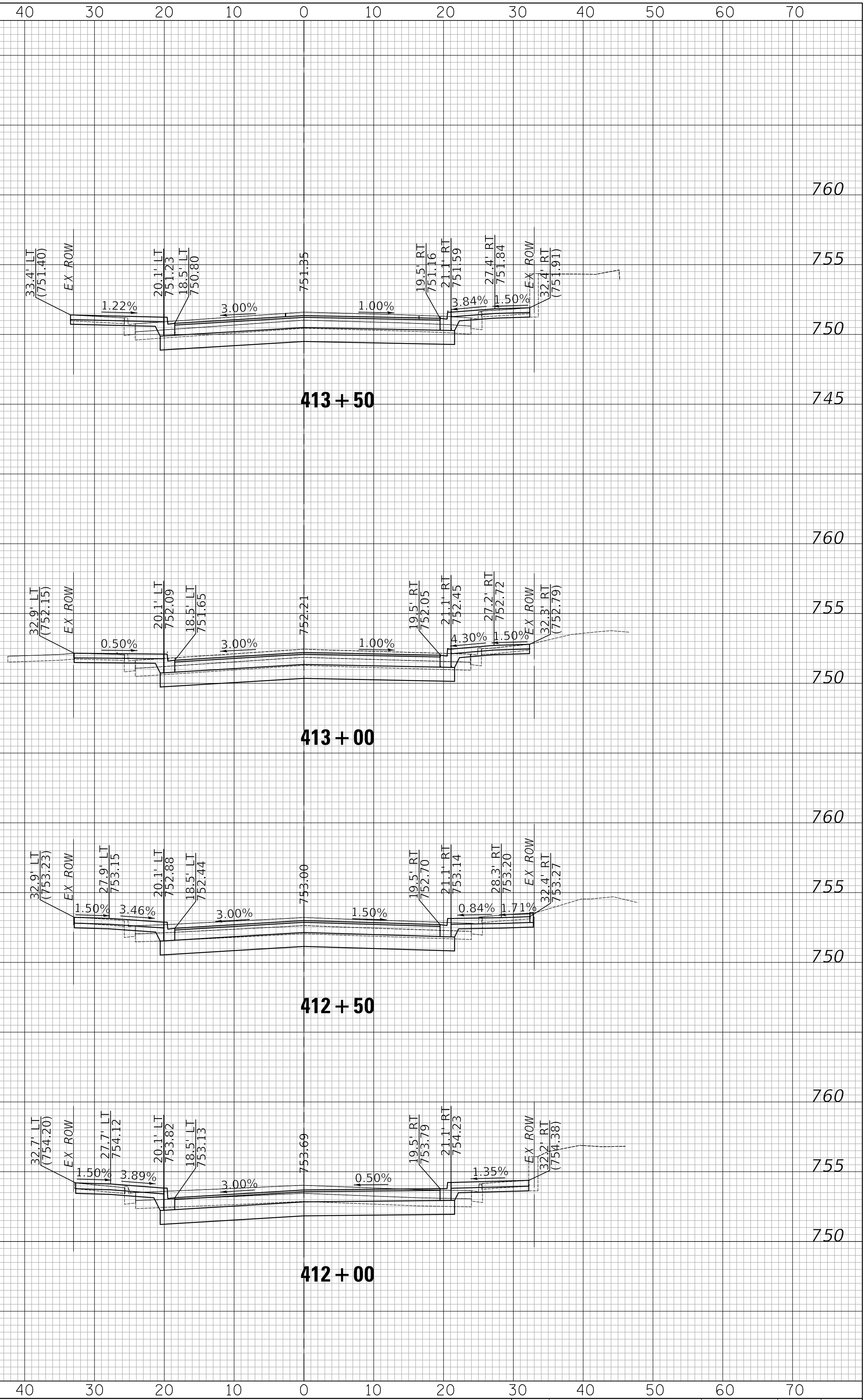
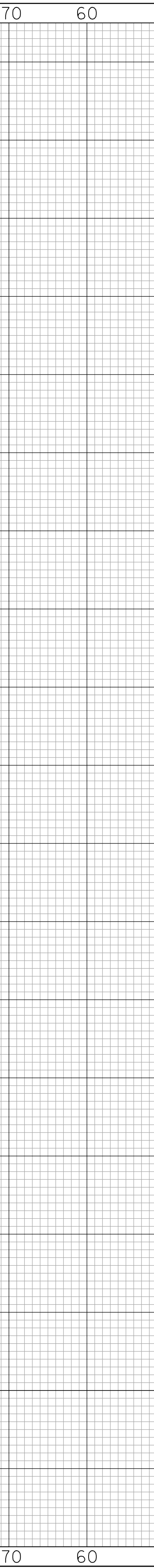
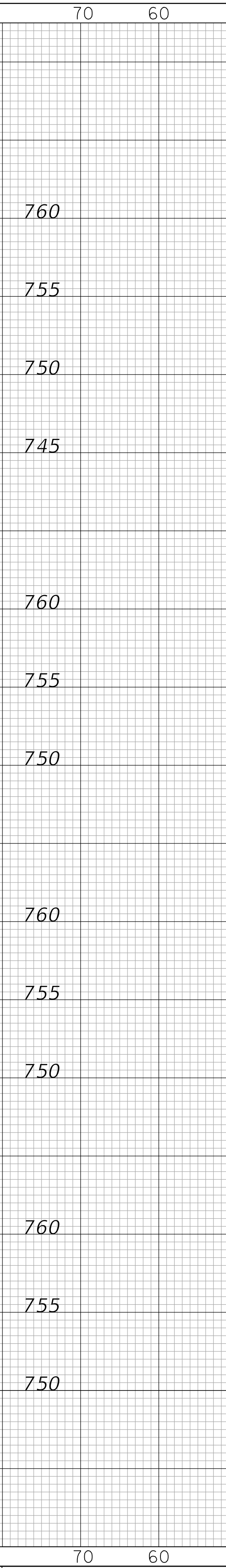
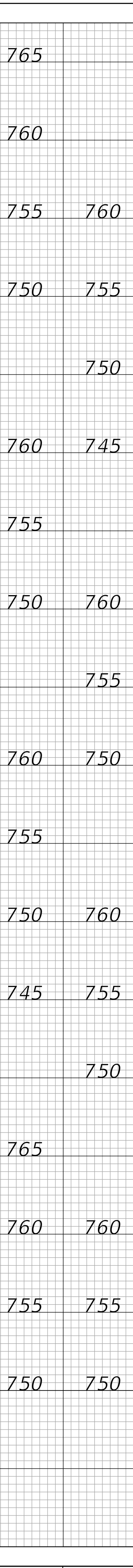
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	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



ORIGINAL SURVEY		BY _____	DATE _____
NOTE BOOK	SURVEYED _____		
	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



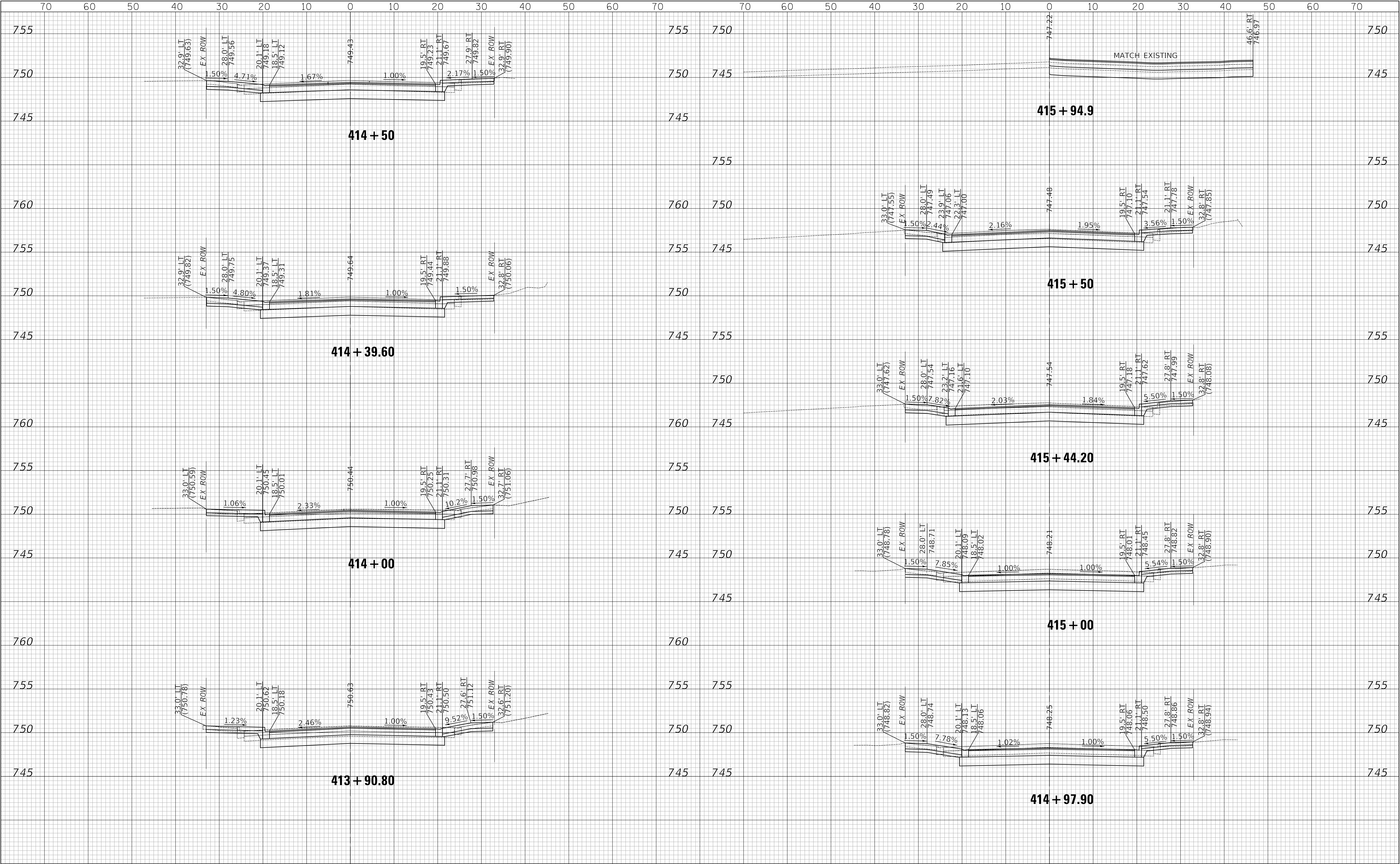
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	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	CHECKED _____		
	NO. _____		



 Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	DESIGNED - TGB	REVISED -	VILLAGE OF GLEN ELLYN		CROSS SECTIONS – DUANE STREET				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN - JRR	REVISED -							XXXX	XX-XXXX-XX-XX	DUPAGE	137	130	
	CHECKED - KRK	REVISED -												
	DATE - 9/24/2021	REVISED -												

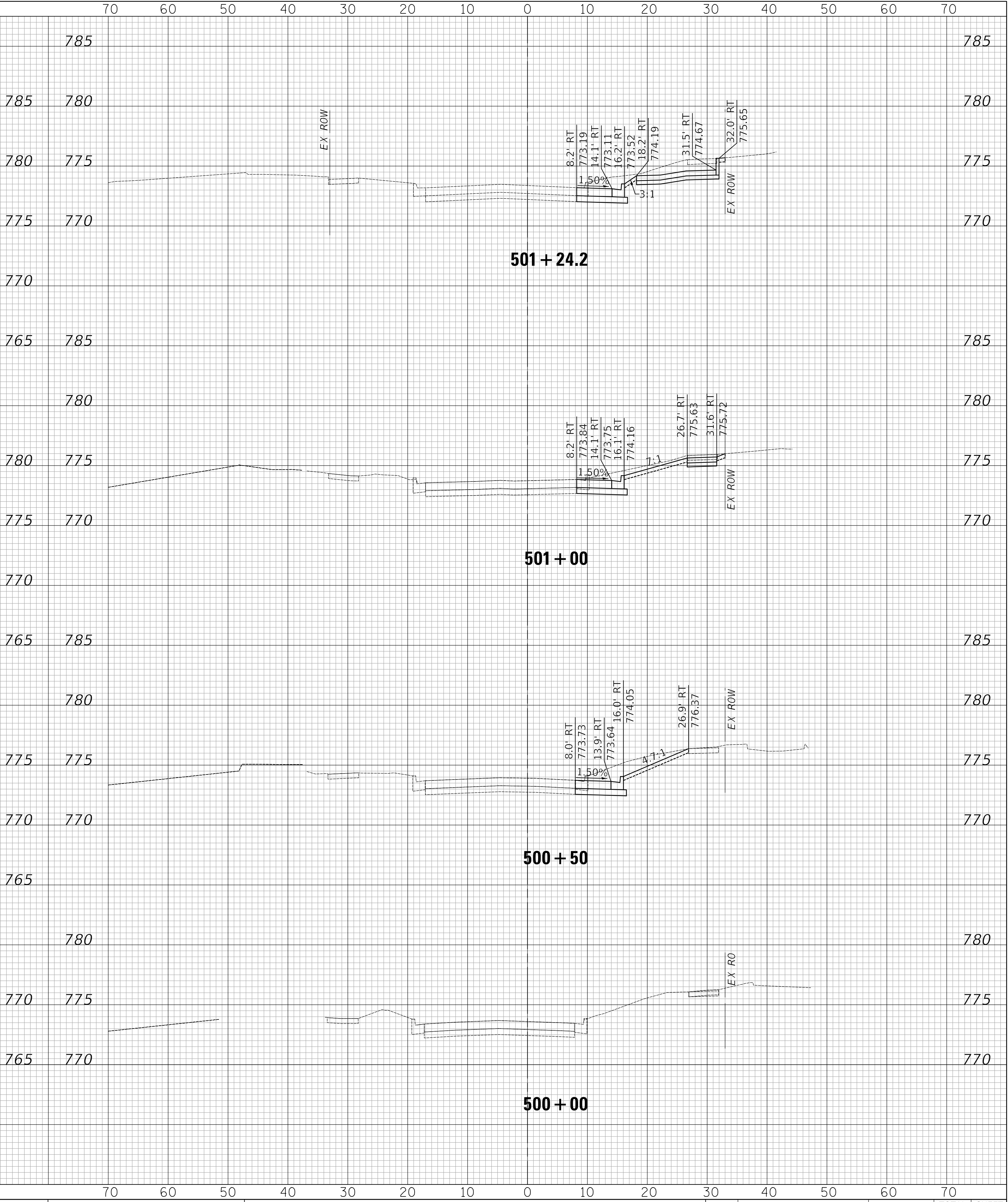
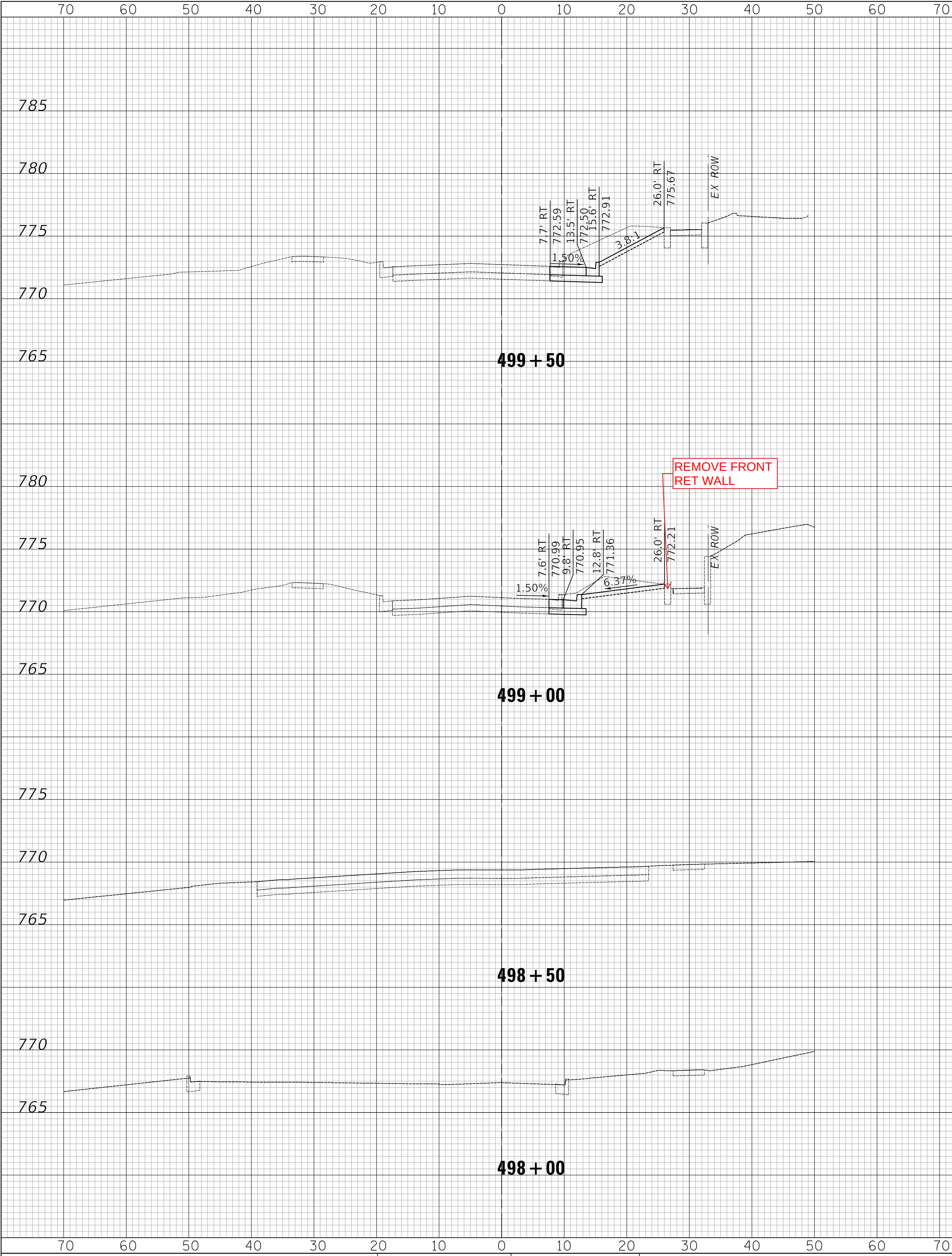
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FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

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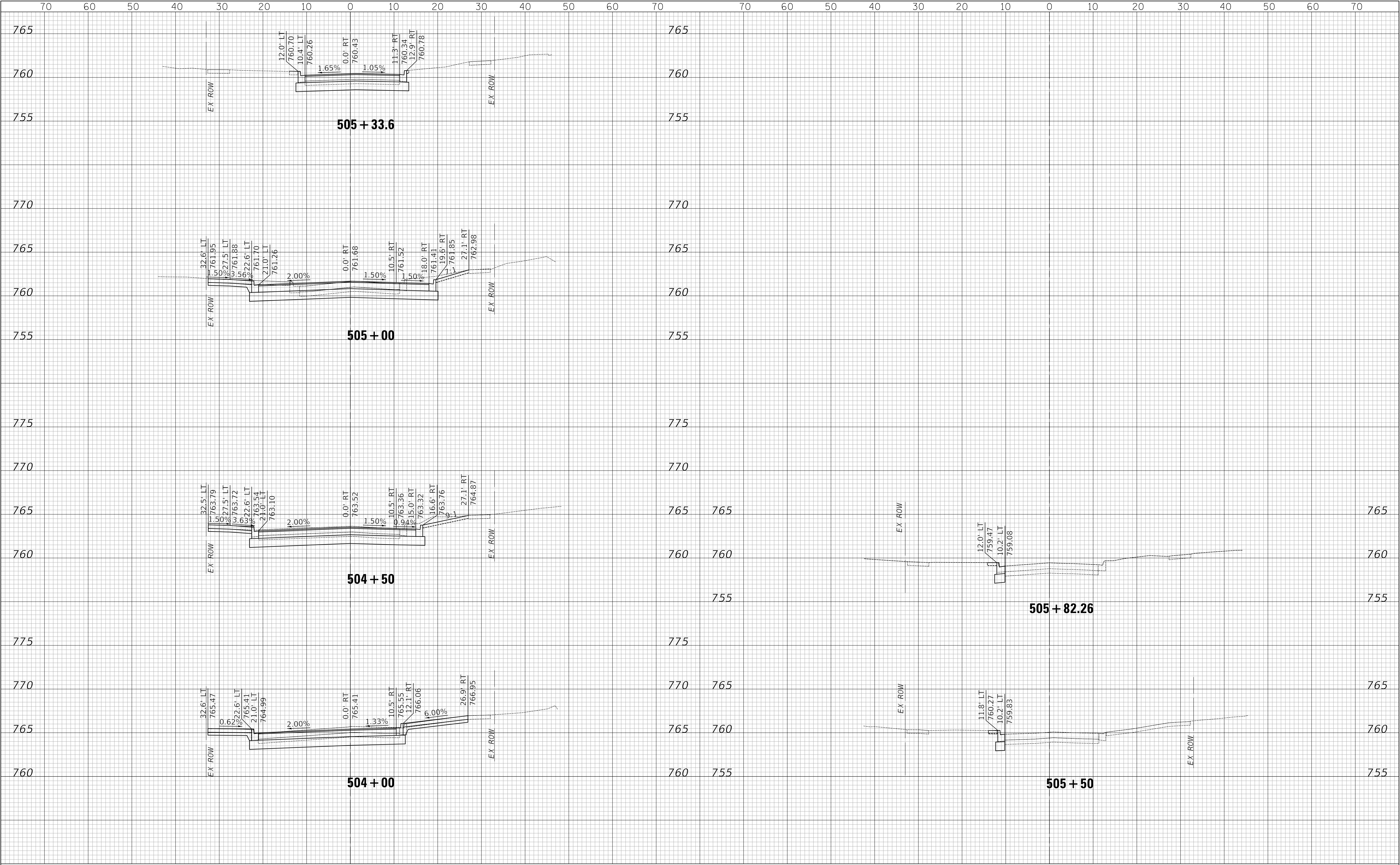


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NOTE BOOK	SURVEYED _____		
	PLOTTED _____		
	TEMPLATE _____		
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NO. _____	AREAS CHECKED _____		



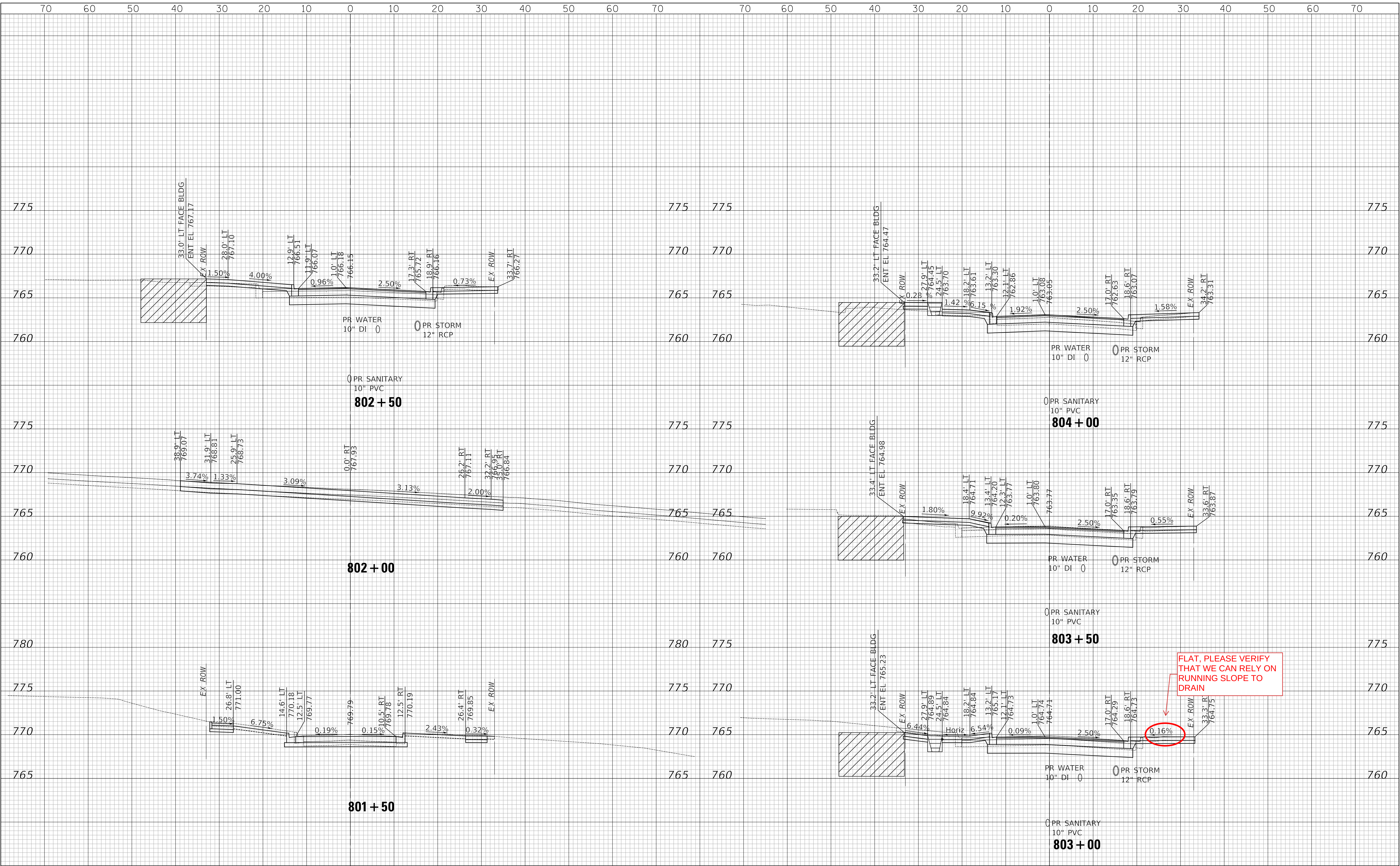
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NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		



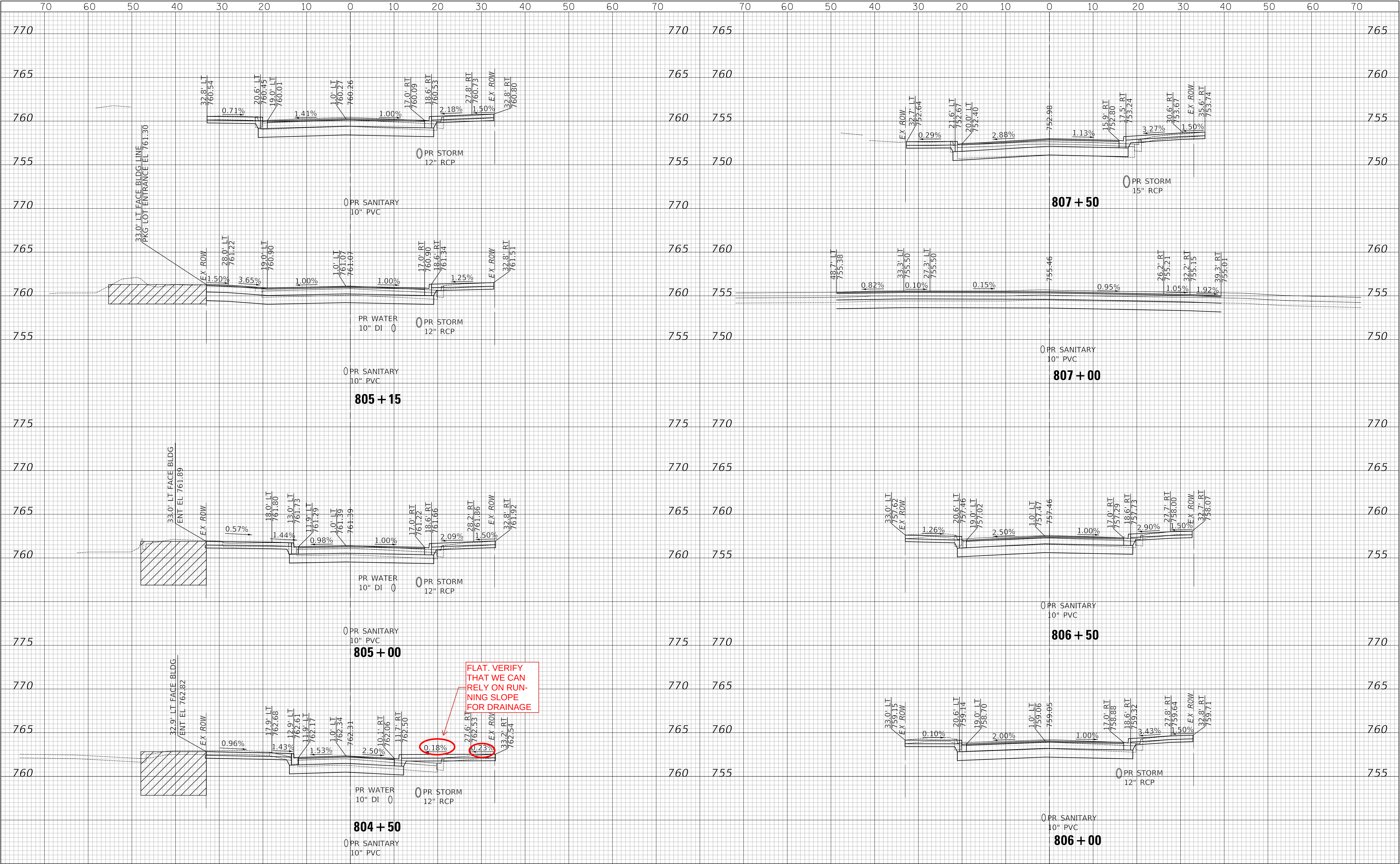
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SURVEY					
NOTE BOOK					
NO.					

DATE	BY	SURVEYED	PLOTTED	TEMPLATE	AREAS CHECKED
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SURVEY					
NOTE BOOK					
NO.					



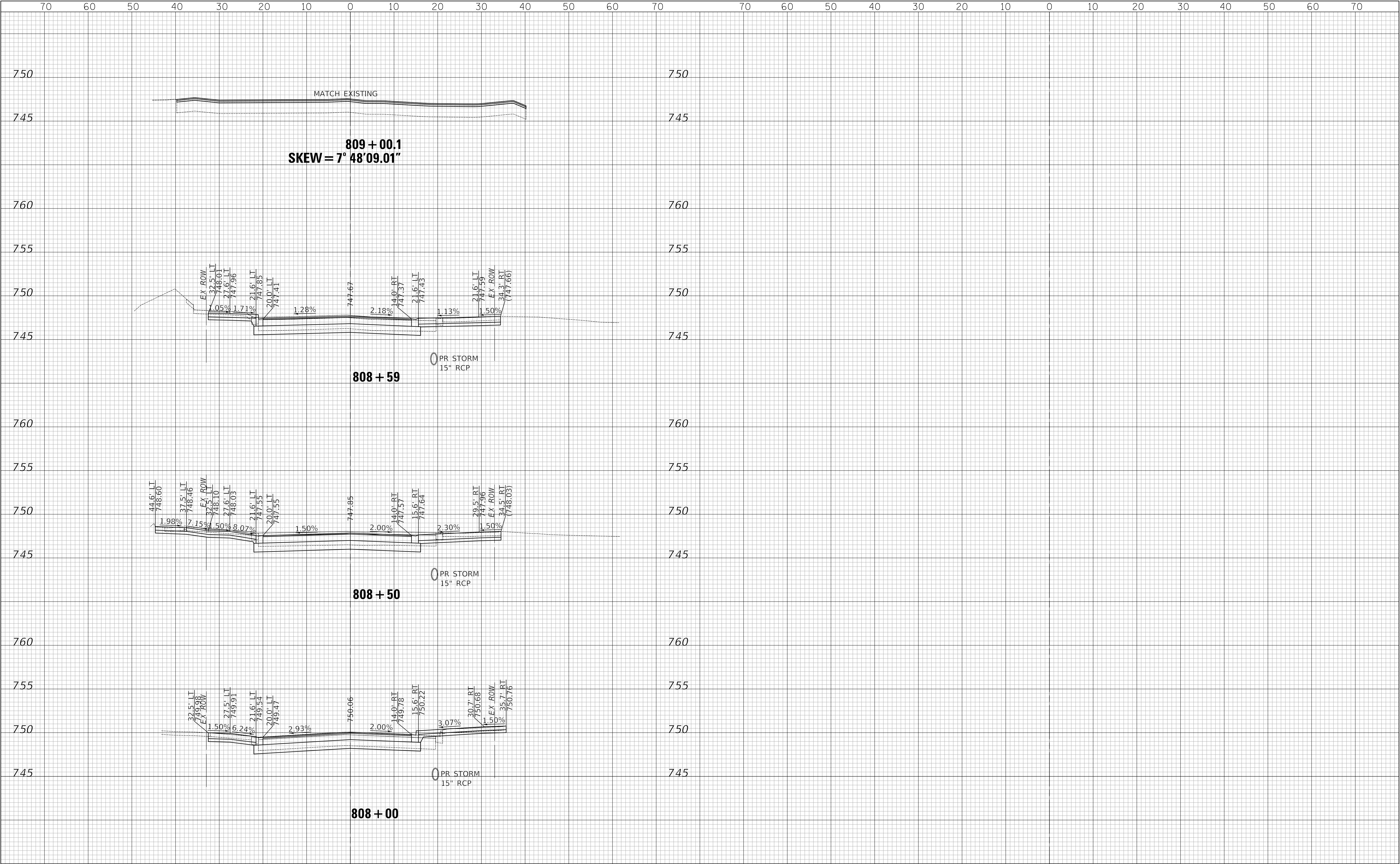
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FINAL	SURVEYED	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

ORIGINAL	SURVEYED	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	





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DATE -	REVISED -

VILLAGE OF GLEN ELLYN

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HORIZ. 0 10 20

SCALES

CROSS SECTIONS - MAIN STREET

SHEET NO. 3 OF 3 SHEETS STA. 808+00 TO STA. 809+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXXX	XX-XXXX-XX-XX	DUPAGE	137	137
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



BIDDING AND CONTRACT DOCUMENTS
FOR
DUANE STREET, HILLSIDE AVENUE AND
MAIN STREET IMPROVEMENTS PROJECT

VILLAGE OF GLEN ELLYN

CONSIDER RENAMING ADDING:

Pre
Civiltech
Two
Su

**'CBD STREETSCAPE AND UTILITY IMPROVEMENTS -
PHASE I' TO THE NAME OF THE PROEJCT**

Itasca, IL 60143

Bidding/Contract Document Fee: \$0.00 for Electronic Distribution Only

Advertise Date: December 1, 2021

Bid Opening: Friday, December 17, 2021 at 10:00 a.m., local time

Each sealed envelope containing a bid must be plainly marked on the outside:

**“DO NOT OPEN – SEALED BID FOR DUANE STREET, HILLSIDE AVENUE
AND MAIN STREET IMPROVEMENTS PROJECT”.**

The envelope should bear on the outside the name of the bidder, the bidder’s address and telephone number, and the bid opening date and time.

Bid Proposal Submitted by:

Contractor

Address

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VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

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J. Notice to Proceed.....	J-1 – J-2
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A - INVITATION TO BID

**VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE AND
MAIN STREET IMPROVEMENTS PROJECT**

1. TIME AND PLACE OF OPENING BIDS

Sealed Bids for the **DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT** in the Village of Glen Ellyn, Illinois, will be received by the Office of the Village Clerk, Glen Ellyn Civic Center, 535 Duane Street, Glen Ellyn, Illinois 60137, until **10:00 a.m. on Friday, December 17, 2021** and at that time will be opened and read.

All Bidders shall either submit bids in person, by mail, or by overnight shipping. Bids submitted by mail or overnight shipping are at the Bidder's risk. Bids submitted in person shall be delivered and placed in a bin labeled "BIDS" in the front (North) vestibule of the Glen Ellyn Civic Center, located at 535 Duane Street, Glen Ellyn, Illinois 60137. It is strongly recommended that all Bidders coordinate mailing or delivery times with the Village Clerk at 630-547-5202. The opening of bids will only be available for online viewing, in real time, on the Village Website at <http://www.glenellyn.org/Bids.aspx>.

All bid proposals shall be submitted in an opaque, sealed envelope clearly labeled to identify the bidder and project and marked **"DO NOT OPEN – SEALED BID FOR DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT"**.

2. DESCRIPTION OF WORK

The work for which proposals are invited consists of storm sewer and drainage structure installations; water main installation and connections; various utility structure adjustments; various pavement removals, concrete curb and gutter replacement; concrete sidewalk replacement; brick carriage walk; asphalt and gravel driveway replacement; hot-mix asphalt pavement replacement, concrete pavement widening, and collateral work necessary to complete the improvements.

Approximately 2,884.2 feet of streets will be improved in the project including:

- DUANE Street: Between Prospect Avenue and Forest Avenue.
- HILLSIDE Avenue: Glenwood Avenue to east side of Main Street.
- MAIN Street: Hillside Avenue to the Union Pacific West Rail Road

3. INSTRUCTIONS TO BIDDERS

All bids shall be made on the forms provided and will be made part of the contract documents to be executed with the Village. Copies of Instructions for Bidders, Bid Form, Plans, and Specifications will be available for download in digital format (PDF) beginning December 1, 2021 from the BHFX Plan Room website at www.bhfxplanroom.com. Bidders may also request printed sets of Contract Documents from the office of BHFX, 30W250 Butterfield Road, Warrenville, IL 60555 (telephone: 630-393-0777). Bidders shall be responsible for all downloading, printing, and shipping/mailing costs for all sets of Contract Documents obtained from BHFX. A plan holders list will also be maintained by BHFX and will be available for viewing on its website at www.bhfxplanroom.com.

Bid proposals submitted from Bidders that did not obtain the Bidding and Contract Documents directly from BHFX Plan Room (in electronic or paper copy form) will not be accepted.

General questions about the project can be addressed via email to Tom Topor, Glen Ellyn Senior Civil Engineer at ttoper@glenellyn.org.

4. BID SECURITY

Each bid shall be accompanied by a certified check or bank draft drawn on a solvent bank, payable without condition to the Village of Glen Ellyn or a satisfactory bid bond executed by the bidder and a Surety Company in an amount not less than five percent of the total bid (including Alternate Bids, if any) as a guarantee that the bidder will within fifteen working days after the date of the award of a contract execute an agreement as required by the contract documents if his bid is accepted.

Bid bonds shall be duly executed by the bidder as principal and having as surety thereon a surety company approved by the Village of Glen Ellyn, having the minimum equivalent of an A.M. Best Company Financial Strength Rating of A and Financial Size Category of Class V, and shall be prepared on the form attached within or an equivalent form.

If an intended awardee fails to execute and file all agreements, bonds and insurance as required by the Contract Documents, the amount of the security submitted with his bid shall be forfeited as liquidated damages. However, nothing shall be construed herein to prevent the Village of Glen Ellyn from electing to claim and prove damages in excess of the amount of the bid security.

5. RETURN OF BID SECURITIES

The bid security checks of all bidders, except the securities submitted with the two lowest acceptable bids will be returned within a seven (7) day period following the time of the opening of the bids. The bid securities of the two lowest bidders will be held until the

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

Contract has been executed by the successful bidder and he has filed with the Village of Glen Ellyn the required bonds and insurance, after which bid securities will be returned to the two lowest bidders. Bid bonds will not be returned.

6. BONDS AND INSURANCE

Each bid shall be accompanied by a letter from a surety company, licensed to do business in Illinois stating that it will execute the required bonds for the bidder upon award of the contract. The successful bidder will be required to furnish a satisfactory Performance and Completion Bond and Labor and Materials Bond, each in the sum of the full amount of the contract.

In addition, each bid shall be accompanied by a letter from the bidder's insurance representative, certifying that the said insurer has read the insurance requirements as set forth in the General and Special Conditions of the Contract, and will issue the required policies.

7. QUALIFICATION OF BIDDERS

It is the intention of the Village of Glen Ellyn to award a contract only to a bidder who furnishes satisfactory evidence that he has the requisite experience and ability and that he has sufficient capital, facilities and plant to enable him to prosecute the work successfully and promptly, and to complete the work within the time named in the Contract Documents. Interested bidders must provide a copy of their current Certificate of Eligibility issued by the Illinois Department of Transportation as a condition of receiving the bid documents. The Village will waive the IDOT Prequalification requirement if a contractor can otherwise adequately demonstrate the ability and experience to perform work of the nature and scope of the proposed project. Bidders must certify that they are not barred from bidding as a violation of Article 33E of the Criminal Code of 1961.

8. WAGE AND LABOR REQUIREMENTS

Not less than the prevailing minimum rate of wages as found by the Village of Glen Ellyn, or the Department of Labor, or determined by the court on review shall be paid to all laborers and workmen performing work under this contract. Preference shall be given to the employment of Illinois laborers for all work under this contract in compliance with current State law. The Contractor shall comply with the "Equal Employment Opportunity" requirements of the Illinois Fair Employment Practices Act (IL Rev. Stat., Ch. 48, Section No. 854, 854A).

In calculating its bid hereunder, Contractor (including all subcontractors) is advised that the Illinois Prevailing Wage Act will apply to the work set forth hereunder and to the Contractor. Accordingly, to the extent that the Act applies, Contractor shall comply with

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

the provisions of the Act. Failure of Contractor to comply with the Act, including, but not limited to the inspection of records, and any rules or regulations promulgated by the State of Illinois with regard to the Act, can result in the cancellation of the Contract. Contractor expressly waives any right for recovering damages due to such Contract cancellation. Contractor's bonds shall include such provision and will guarantee the faithful performance of such prevailing wage clause as provided by this contract. Contractor shall maintain accurate records of the names, occupations, and wages paid to each laborer, worker, and mechanic employed in connection with the work and either file certified payroll, as required by the Act, or a letter setting forth the reasons for why Contractor is excused from having to file certified payroll with the Village of Glen Ellyn.

9. REJECTION OF BIDS

The Board of Trustees reserves the right to reject any and all bids and to waive technicalities. Unless the bids are rejected in the exercise of discretion by the Board of Trustees, award of the contract shall be made to the lowest responsible and qualified bidder. The Owner reserves the right to award the work proposed herein based on its determination of which is in the best interest of the Village and the public health, safety and welfare.

Dated at Glen Ellyn, Illinois this 25th day of February 2021

By Order of the PRESIDENT AND BOARD OF TRUSTEES
THE VILLAGE OF GLEN ELLYN, ILLINOIS

UPDATE FOR FINAL



Caren Cosby, Village Clerk

B - INSTRUCTIONS TO BIDDERS

**VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS
PROJECT**

1. GENERAL

All bids shall be made on the forms provided and will be made part of the contract documents to be executed with the Village. Copies of Instructions for Bidders, Bid Form, Plans, and Specifications will be available for download in digital format (PDF) beginning December 1, 2021 from the BHFX Plan Room website at www.bhfxplanroom.com. Bidders may also request printed sets of Contract Documents from the office of BHFX, 30W250 Butterfield Road, Warrenville, IL 60555 (telephone: 630-393-0777). Bidders shall be responsible for all downloading, printing, and shipping/mailing costs for all sets of Contract Documents obtained from BHFX. A plan holders list will also be maintained by BHFX and will be available for viewing on its website at www.bhfxplanroom.com.

Bid proposals submitted from Bidders that did not obtain the Bidding and Contract Documents directly from BHFX Plan Room (in electronic or paper copy form) will not be accepted.

General questions about the project can be addressed via email to Tom Topor, Glen Ellyn Senior Civil Engineer at ttoper@glenellyn.org.

2. QUALIFICATIONS OF BIDDERS

To demonstrate qualifications to perform the Work, each Bidder must submit written evidence, such as financial data, previous experience, present commitments and other such data as may be called for in the Contractor's Information Report (Section N) or as requested by the Owner.

3. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

3.1 It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work, (c) consider any permits which are required for the Work and the insurance and bonding required of the Contract, (d) consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the Work, (e) study and carefully correlate Bidder's observations with the discrepancies in the Contract Documents, and (f) notify Owner of all conflicts, errors or discrepancies in the Contract Documents.

- 3.2 The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor.
- 3.3 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Contract, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

4. INTERPRETATIONS AND ADDENDA

- 4.1 All questions about the meaning or intent of the Contract Documents are to be directed to Owner. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda delivered via email or facsimile transmission to all parties recorded by the Engineer as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda, transmitted as described herein, will be binding. Oral and other interpretations or classifications will be without legal effect.
- 4.2 Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner.

5. BID GENERAL REQUIREMENTS

- 5.1 All Bids must be submitted on the Bid Proposal Form (Section E) supplied by the Village of Glen Ellyn and shall be subject to all requirements of the Contract Documents. Bid proposals submitted from Bidders that did not obtain the Bidding and Contract Documents directly from the Village (Owner) will not be accepted. All Bids must be regular in every respect and no interlineation, excisions, or special conditions shall be made or included in the Bid Form by the Bidder.

6. BID SECURITY

- 6.1 Each Bid must be accompanied by Bid security made payable to Owner in an amount of 5% of the Bidder's maximum Bid price (including Alternate Bids, if any) and in the form of a certified or bank check or a Bid Bond.
- 6.2 Bid bonds shall be duly executed by the Bidder as principal and having as surety thereon a surety company approved by the Owner, having the minimum equivalent of an A.M. Best Company Financial Strength Rating of A and Financial Size Category of Class V, and shall be prepared on the form attached within or an equivalent form.

7. MODIFICATION AND WITHDRAWAL OF BIDS

- 7.1 Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- 7.2 If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

8. TIME FOR RECEIVING BIDS

- 8.1 Every effort will be made to properly receive unopened any bid received prior to the bid receive date and time. However, the Village assumes no liability for bids lost or misplaced that could result in a bid not opened at the appropriate time by the Village or bids opened in error and resealed with an affidavit of the error. The Village Clerk or designee, whose duty it is to open the bids, will decide when the specified time has arrived, and no Bid received thereafter will be considered.

9. OPENING OF BIDS

- 9.1 Bids will be opened and (unless obviously non-responsive) read aloud via an online video-recording, in real time, available on the Village website at <http://www.glenellyn.org/Bids.aspx>. An abstract of the amounts of the Bids will be made available to Bidders after the opening of Bids.

10. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

10.1 All bids will remain subject to acceptance for forty-five days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid prior to that date.

11. ATTACHMENTS TO BIDDING AND CONTRACT DOCUMENTS

11.1 Drawings entitled “DUANE Street, HILLSIDE Avenue and MAIN Street –

12. ITEMS REQUIRED AT BID OPENING

- a. Bid Proposal Form
- b. Letter from Insurance Broker or Company stating that the Bidder will be able to purchase all surety bonds and meet the insurance requirements of the contract
- c. Non-Collusion Certificate
- d. Contractor’s Information Report
- e. Bid bond or check
- f. Sub-Contractor’s Certificate

13. AWARD OF CONTRACT

13.1 Owner reserves the right to reject any and all Bids, to waive any and all informalities and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, non-responsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that the Bid is not responsive or the Bidder is unqualified or of doubtful financial or technical ability or fails to meet any other pertinent standard or criteria established by Owner in determining the lowest responsible bid.

13.2 Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner’s satisfaction within the prescribed time.

13.3 In the event an award is made, it will be made to one contractor. The award will be made to the low, responsive, responsible bidder based upon the parts of the work to be performed. The Owner reserves the right to award the work proposed under the Base Bid or the Base Bid plus Alternate Bid 1 based on its determination of which is in the best interest of the Village and the public health, safety and welfare.

14. SIGNING OF AGREEMENT

14.1 When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within fifteen days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and fully executed insurance certificates, surety bonds and any other attached documents to Owner. Within 15 days thereafter Owner shall deliver one fully signed counterpart to Contractor.

14.2 Failure on the part of the successful Bidder to execute a contract within 15 days after the date the contract was mailed or otherwise delivered to it, will be just cause for the annulment of the award.

15. CONTRACT TIME AND LIQUIDATED DAMAGES

The numbers of days within which, or the dates by which, the Work is to be completed and ready for final payment (the Contract Time) and any provisions liquidated damages are set forth in the General Provisions.

16. BONDS

16.1 The successful Bidder shall be required to furnish a Performance Bond and Completion Bond (sample included as Section K) and Labor and Materials Bond (sample included as Section L) acceptable to the Village in an amount equal to 100% of the price bid for services for the term of the Contract.

16.2 Such Bonds shall guarantee the performance of the Contractor under the terms and conditions of the specifications.

17. SUBCONTRACTORS

17.1 Subcontractors will be permitted subject to Village approval.

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C – GENERAL PROVISIONS

**VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS
PROJECT**

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GENERAL PROVISIONS

VILLAGE OF GLEN ELLYN DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

The following General Provisions supplement the “Standard Specifications for Road and Bridge Construction”, adopted by the State of Illinois on January 1, 2022 and the “Supplemental Specifications and Recurring Special Provisions”, adopted by the State of Illinois on January 1, 2022, hereinafter referred to as the “IDOT Standard Specifications”. In case of conflict with any part or parts of said Specifications, these General Provisions shall take precedence and shall govern.

GP-1 GENERAL

All work shall conform to the Ordinances and Regulations of the Village of Glen Ellyn and in accordance with the permits received from any agency having specific jurisdictional responsibilities within the project areas.

GP-2 LOCATION OF WORK

This project is located in the Village of Glen Ellyn, DuPage County, Illinois. Specific work corridors include:

- Duane Street between Glenwood Avenue and Forest Avenue
- Hillside Avenue between Glenwood Avenue and the East side of Main Street.
- Main Street between Hillside Avenue and the Union Pacific West Rail Road.

GP-3 DESCRIPTION OF WORK

The work for which proposals are invited consists of storm sewer installation; water main service installation and connections; lighting installation and drainage structure improvements; various utility structure adjustments; various pavement removals, concrete curb and gutter replacement; concrete sidewalk replacement; concrete pavement widening; brick carriage walk; concrete and asphalt driveway replacement; hot-mix asphalt pavement replacement; and all incidental and collateral work necessary to complete the improvements.

Approximately 2,884.2 feet of street will be improved in the project including:

- DUANE Street: Between Glenwood Avenue and Forest Avenue for 1,407.4 feet.
- HILLSIDE Avenue: Between Glenwood Avenue and the East side of Main Street for 686.7 feet.
- MAIN Street: Hillside Avenue to the Union Pacific West Rail Road for 790.1 feet.

GP-4 CONTRACT DATES

Interim Completion Date – July 29, 2022

Main Street construction shall be substantially complete and opened to two way vehicle traffic.

Completion Date – October 28, 2022

All improvements shall be substantially completed by October 28, 2022. Substantial completion shall mean all work excluding punch list items.

Final Completion Date – November 11, 2022.

All punch list work must be completed. The Engineer shall be notified two weeks prior to the Final Completion Date if any landscaping items will require a spring planting.

The completion date will remain binding throughout the duration of the Contract unless revised in writing by the Village.

GP-5 LIQUIDATED DAMAGES

Should the Contractor fail to complete the work on or before the specified dates of completion or within such extended time allowed by the Village, the Contractor shall be liable to the Village in the amount, at a minimum, as shown in the schedule contained in Article 108.09 of the IDOT Standard Specifications, not as a penalty but as liquidated and ascertained damages for each calendar day beyond the date of completion or extended time as may be allowed. Such damages may be deducted by the Village from any monies due the Contractor. If the deduction does not satisfy the full extent of Contractor's liquidated damage obligation, then Contractor shall pay the difference to the Village.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work since the Village's actual loss, in the event of delay, cannot be predetermined, would be difficult to ascertainment, and a matter of argument and unprofitable litigation. The Village shall not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar starting at 12:00 midnight and ending the following 12:00 midnight, twenty-four hours later. Any portion of a day will be counted as a day.

GP-6 PROSECUTION OF THE WORK

Diligent prosecution of the work shall be an essence of this contract. Once work has commenced, the Contractor shall work every weekday, weather permitting, until the project is complete. The project shall be considered as Complete (Final Completion) when all the pay items have been

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completed, including the removal of all spoil, surplus materials, and debris of any kind from the project site and correction of any deficiencies (punch list items).

Monetary damages will be assessed against the Contractor if he fails to complete each phase of construction as described in this contract and the overall completion of this project within the stipulated time frames, not as a penalty but liquidated damages for delay in completion of work.

GP-7 HOURS OF WORK

The Village's working hours designated for this project are as follows:

Monday through Friday	7:00 a.m. to 7:00 p.m.
Saturday (with Village permission)	7:00 a.m. to 4:00 p.m.
Sundays and Holidays	No work allowed

GP-8 SCHEDULE OF WORK AND PUBLIC CONVENIENCE

- A. The Contractor acknowledges that a great inconvenience to the public, added cost and immeasurable burden to the Owner, residents, and businesses, as well as other tangible and intangible losses, will result from delay in the performance of any aspect or phase of the work. Further, in order to protect the health and safety of the residents of the Village of Glen Ellyn, the Contractor shall maintain maximum accessibility to the residents bordering the construction site during the construction of this Project and minimize the disruption to access.
- B. Care should be taken to minimize the disruption to traffic while utilities are being constructed. It is the express intent of the Village to maintain the existing pavement in place as long as possible during construction. To that end, only the minimum amount of pavement shall be removed for the installation of each underground utility, such pavement to be removed after saw cutting. Saw cutting shall be performed by method(s) approved by the Engineer and is incidental to the contract. The limits and timing of pavement removal shall be as directed by the Engineer. Utilities shall be installed in a sequence based upon their depth, constructing the deepest utilities first and working up in elevation. All underground utilities must be completed before any work can begin on the roadway construction.

During any phase of underground construction, the use of TEMPORARY AGGREGATE for maintaining access shall not be paid for by the Village, but shall be at the sole expense of the Contractor, unless otherwise agreed to and documented by the Engineer.

- C. Time is of the essence in this Contract. The Contractor shall recognize that the sequence of operations requires simultaneous operations on several classes of work. It may be necessary for the Contractor to work longer hours or use additional crews in order to

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complete the work within the required time limit. The Contractor shall at all times employ sufficient labor and equipment to prosecute the work as specified without interruption.

- D. The Contractor may propose an alternate sequence of construction, which will complete the project within the time specified, for approval by the Owner.
- E. Contractor shall complete driveway pavement pouring and curing and restore driveway access within 10 calendar days of the start of curb & gutter installation unless otherwise agreed to in writing by the Engineer. Should the Contractor fail to have the driveway open to vehicular traffic within the specified timeframe, the Contractor shall be liable to the Village in the amount of \$50 per driveway per calendar day, not as a penalty but as liquidated and ascertained damages. Such damages may be deducted by the Village from any monies due to the Contractor.

The Village reserves the right to direct that curb and gutter, sidewalk and driveway construction to be performed only on one side of the street at a time or to have driveways poured in halves or to perform certain work operations in a manner that will allow continuous access for residents, especially those with special needs.

- F. The Contractor shall provide a progress schedule updated on a regular basis and will be required to attend progress meetings as necessary and as called for by the Village in regards to the prosecution of the work.
- G. Contractor shall submit a detailed schedule of activities prior to the pre-construction meeting for Village approval.
- H. The Contractor shall cooperate fully with the Village to minimize the road closure times to reduce resident and institution inconvenience during the course of the project. Every effort shall be put forth to permit the safe use of all roadways during weekends.

GP-9 NOTIFICATION TO RESIDENTS

The Contractor shall notify all residences affected by water service disruption or where assistance is needed in the verification of the location of the sanitary sewer service, a minimum of 24 hours and a maximum of 72 hours before the disruption or the assistance is needed. The Contractor shall also provide timely notice (24 hours in advance) of any restrictions to driveway access during all phases of the project.

GP-10 ACCESS TO ABUTTING PROPERTIES

Every possible effort shall be made to minimize those times when the residents, businesses, and customers on these streets will not have access to their property. The following criteria shall govern:

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DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

A. Contractor shall furnish and erect all required traffic control devices before starting construction on each street and repair section.

B. ~~Sewer trenches in streets, driveways, approaches shall be backfilled with granular trench backfill within two hours of excavation. Driveway approaches shall be backfilled with granular backfill whichever comes first. Driveway approaches shall be backfilled with new curb and gutter can take traffic by placing traffic cones and barriers in front of and behind the curb and gutter as directed by the Engineer. Driveways shall be closed overnight without prior agreement of the Village of Glen Ellyn.~~

The Contractor shall maintain temporary access to all buildings within the project limits, for the entirety of each construction stage. The temporary access shall consist of temporary walkways and temporary building ramps consistent with construction staging plans

C. Curb and gutter shall be completed and driveway approaches shall be completed on one side of a street before curb and gutter work begins on the opposite side of the street. On streets where complete curb and gutter and driveway approach replacement will be performed, both the curb and gutter and driveway approaches must be completed and adequately cured to permit use prior to beginning similar work on the opposite side of the street.

D. Curb and gutter construction across driveways and driveway approach construction shall be done in halves where appropriate and as directed by the Engineer.

E. Residents will be allowed to park on one side of the street when they cannot use their driveways.

All work shall be performed in accordance with the requirements of the permits issued by Illinois Environmental Protection Agency, Village of Glen Ellyn, and any other permits as required

GP-11 PERMITS

All work shall be performed in accordance with the Village of Glen Ellyn and any other permitting agencies as required. The Contractor will be subject to permitting requirements of the ~~Illinois Department of Transportation~~ and DuPage County Department of Transportation when work is being performed within these respective agencies rights-of-way.

Union Pacific Railroad

GP-12 SOIL EROSION AND SEDIMENT CONTROL

The erosion and sediment control measures shall be in accordance with Article 20-2.12 of the Illinois Water and Sewer Specifications and the standards and ordinances of the local, state and/or federal government agencies having jurisdiction over such matters.

Where dewatering is required to construct this sewer project. The Sewer Contractor shall provide Bandy Products and from each individual trash dewatering pump placed in or along the trench, unless other acceptable methods are approved by the Engineer. Dewatering is considered incidental to the cost of construction and no separate payment will be made to the Contractor.

Erosion and sedimentation control measures

Throughout each and every phase of the project, all storm sewers shall be protected from the run-off of roadway surfaces, excavations, and other construction activities generating the movement of dirt, mud, dust and debris. This work shall consist of constructing temporary erosion and sedimentation control systems as shown on the plans or as directed by the Engineer. The work shall be placed by methods and with materials in accordance with Sections 280, 1080 and 1081 of the Standard Specifications, except as amended herein.

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Approval will be required for the groundwater control method plan from the Engineer, as set forth in Article 20-2.12, before construction starts. In order to obtain approval, acceptable means of erosion control shall be provided at the discharge point of each dewatering well or discharge pipeline system such as but not limited to silt basins, rock dams, etc. or a combination of such devices, if needed. As a minimum, the erosion and sediment control measures shall be in accordance with the Illinois Environmental Protection Agency's Standards and Specifications for Soil Erosion and Sediment Control, latest edition.

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be constructed according to minimum standards and specifications in the Illinois Urban Manual, latest edition.

During dewatering operations, water will be pumped into sediment basins or silt traps. Dewatering directly into field tiles or stormwater structures is prohibited.

It is the responsibility of the Contractor to inform any sub-contractor(s) who may perform work on this project, of the requirements in implementing and maintaining these erosion control plans. While National Pollutant Discharge Elimination System (NPDES) standards will be met, this project disturbs 3.295 a

only necessary if a project **Concrete Washout** required for this project. This shall be INCIDENT AL to the project and must follow all SWPPP requirements.

Contractor shall be required to check the course of the project facilities shall be checked

1/2 inch or greater magnitude. Upon completion of the improvements, the Contractor shall remove all erosion and sediment controls installed and restore the areas to their original condition.

GP-13 WORK IN EASEMENTS AND RIGHT-OF-WAY

Construction work in easements and right-of-way shall be in accordance, but not limited to Sections 20-2.14C and 20-2.18 of the Water and Sewer Specifications. Contractor shall notify the property owner at least 48 hours in advance prior to starting the work on their property.

GP-14 RESTORATION OF DAMAGED AREAS

Whenever public or private property is unnecessarily damaged or destroyed and not included for replacement or restoration in this contract, the Contractor shall, at his own expense, restore such property to a condition equal to that existing before such damage or injury was done by repairing, rebuilding, or replacing it as may be directed, or he shall otherwise make good such damage or destruction in an acceptable manner. If he fails to do so the Owner may, after the expiration of a period of 48 hours after giving him notice in writing, proceed to repair, rebuild, or

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otherwise restore such property as may be deemed necessary, and the cost thereof shall be deducted from any compensation due, or which may become due the Contractor under his Contract.

GP-15 PAVEMENT SMOOTHNESS

The Contractor is advised that the Village is seeking a finished pavement surface that is not only devoid of obvious surface variations but also without slight ripples or waves that can be detected by a vehicle operator. As such, the IDOT Standard Specifications, while serving as a basic guide to the determination of pavement smoothness, will be modified as described below, to emphasize and ensure that the smoothest pavement is produced.

The following procedures are established, the cost of which shall be included in the cost of the various hot-mix asphalt (HMA) pavement items and no additional compensation will be allowed.

- A. Pre-Paving Meeting - Prior to start of paving operations, the engineer shall meet with the paving foreman and a responsible member of the Contractor's organization to review the Village smoothness criteria and to establish procedures to achieve a smooth pavement.
- B. Equipment Review - The Contractor shall verify that the paving equipment is in good working order and that all machine operating parameters are within manufacturer's specifications. Pavement installation procedures will also be reviewed. It should be noted that the paver speed shall not exceed 25 feet per minute unless it can be conclusively demonstrated that a smooth and dense pavement is being constructed.
- C. Surface Testing - The completed surface course shall be tested for smoothness in the wheel paths with a 16 ft. straightedge provided by the Contractor. Surface variations in the pavement shall not exceed 1/8 inch.

For each variation in the surface course that exceeds 1/8 inch, a deduction of 5 tons will be made in the tonnage of surface course mixture measured for payment. If the total deduction for the pavement tested in a section exceeds 25% of the installed surface course tonnage, the entire area shall be removed and replaced at the entire expense of the Contractor, and the section re-tested for smoothness.

- D. Payment - No payment for surface course HMA pavement shall be made until the surface testing has been performed and the installed pavement is acceptable.

GP-16 SAW CUTTING

Unless otherwise indicated in the Special Provisions, saw cutting operations associated with the conduct of the project shall be considered incidental to the work item being performed. The Contractor shall be responsible for removing the residue created by saw cutting operations in a

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manner acceptable to the Engineer. The resulting surface shall be sufficiently clean so that no tracking of residue by vehicles or pedestrians occurs.

GP-17 LAWS TO BE OBSERVED

The Contractor shall at all times observe and comply with all Federal and State laws, local laws, ordinances, and regulations which in any manner affect the conduct of the Work, of legislative bodies or tribunals having legal jurisdiction or authority over the Work, and no plea of misunderstanding or ignorance thereof will be considered.

GP-18 VENUE

If any legal action should arise out of this Contract, venue shall only lie in the Nineteenth Judicial Circuit, DuPage County, State of Illinois.

GP-19 PRE-CONSTRUCTION MEETING

Following the award of the Contract, the Contractor will be required to attend a pre-construction meeting to be scheduled by the Owner prior to beginning work. In attendance to this meeting will be representatives from Village Staff, Utility Companies, Engineering Firm(s) and the Contractor. The purpose of this meeting will be to:

1. Receive and review the Contractor's proposed construction sequence and schedule.
2. Identify key personnel, their home addresses and home telephone numbers.
3. Identify key Owner personnel and representatives, their home addresses and telephone numbers.
4. Identify emergency telephone numbers and channels of communication, particularly for traffic control.
5. Review safety obligations and responsibilities.
6. Schedule walk-thru with Engineer, Village Forester and Village Project Coordinator.
7. Discuss other items as required.

GP-20 CERTIFICATES OF INSURANCE

The Contractor shall furnish the Village of Glen Ellyn with certificates of insurance issued by the companies carrying the risk, covering all items of insurance required by these Specifications, which said certificates shall be in form and substance satisfactory to and approved by the Owner, and shall include the Village of Glen Ellyn, Engineer(s), and Property Owners of all Private Property, if any, where Work will be conducted as named Additional Insured.

In addition to providing Certificates of Insurance as required by the Contract Documents, the Contractor shall submit a signed certification with each Request for Payment, stating that all

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insurance required of the Contractor remains in force. Failure to submit such a certification shall be grounds to withhold payment in full or in part.

Contractor shall notify Owner, in writing, of any actual or possible claim for personal injury or property damage relating to the work, or of any occurrence which might give rise to such a claim, promptly upon obtaining first knowledge of same.

Builders Risk Insurance will not be required for this project and is not provided by the Owner. The Contractor and Subcontractors will be responsible for any loss that would be insured by such coverage.

GP-21 INSURANCE REQUIREMENTS

The Contractor shall not commence work under the Contract until all the insurance required under the Contract has been obtained. Certificates of insurance showing coverage as required to be in affect will be filed with the Owner at the time of entering into the Contract. Certificates of Insurance will be on Insurance Service Office's (ISO) Form. The certificates will be signed by the insurance companies or their authorized agents. The insurance companies must be authorized to do business in the State of Illinois. All insurance shall be provided in companies which are rated at least A/VI by the Bests Rating Service provided, however, that the Village may, in writing, waive this requirement.

The Contractor shall maintain in force the coverage required in this section for the term of the Contract. Also, the Contractor shall not allow any subcontractor to commence work on any portion of the project without evidence that the subcontractor has insurance coverage equal to the coverage required in this section.

The minimum amounts of insurance shall be as follows:

A. Worker's Compensation - Statutory Limits

Employer's Liability - \$1,000,000 Bodily Injury per Occurrence

B. Commercial Automobile Liability

Combined Single Limit Coverage - \$1,000,000

If requested by the Village, the Contractor shall be required to provide the prior three year loss history for automobile liability.

C. Commercial General Liability

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Policy shall include coverage for Premises and Operations, Contractor's Protective Liability, Completed Operations, Broad Form Blanket Contractual Liability, Broad Form Property Damage including Completed Operations and Personal Injury Liability. Where the hazard exists, the coverage shall protect against claims of explosive, collapse, or underground damage.

1. \$2,000,000 Combined Single Limit for Bodily Injury and Property Damage
2. \$4,000,000 General Aggregate

D. Umbrella Liability Policy

\$5,000,000 Bodily Injury and Property Damage Per Occurrence

E. Owner's and Contractor's Protective Liability Insurance

1. Bodily Injury Per Person - \$1,000,000
2. Bodily Injury Per Occurrence - \$1,000,000
3. Property Damage Per Occurrence Aggregate Limit - \$500,000

For coverage C and D, the Village of Glen Ellyn, Engineer(s), and Property Owners of all Private Property, if any, where Work will be conducted retained for this project by the Village shall be named as additional insured and Certificate Holder(s). The Engineer shall be provided with Certificates of Insurance. The Village may also require the Contractor to have other governmental bodies or entities from which the Village procures easements or other rights named as additional named insured. A copy of OCP insurance policy shall be provided to the Village.

Notwithstanding, any other provision in any Contract Document, the Owner shall not, in any manner, be deemed or intended to have waived any right of subrogation which either it, or its insurance carrier or any self-insured risk pool of which it is a member, may have against the Contractor or Subcontractor of any tier, for any property or other damage caused by any Contractor, Subcontractor of any tier, or any of their employees, agents, consultants, officers and directors.

Notwithstanding any other provision in any Contract Document, the Owner shall not, in any manner, be deemed or intended to have waived any claim by making a final payment or a progress payment of any amount.

In addition to providing Certificates of Insurance as required by the Contract Documents, the Contractor shall submit a signed certification with each Request for Payment, stating that all the insurance required of the Contractor remains in force. Failure to submit such a certification shall be grounds to withhold payment in full or in part.

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The Contractor shall require that every Subcontractor of any tier obtain insurance of the same character as the Contractor, naming the same Additional Insured as the insurance required of the Contractor. Before the commencement of any Work by any Subcontractor of any tier, the Contractor shall obtain and furnish the Owner and the Owner's representative with Certificates of Insurance naming the Owner, the Owner's representative, and all of their officers, directors, commissioners, officials, employees, consultants, volunteers and agents, as Additional Insured on the insurance required to be obtained by each Subcontractor of any tier. The Contractor shall also submit a certification, signed by each Subcontractor of any tier, with each Request for Payment, stating that all required insurance is in force for each and every respective Subcontractor of any tier. Failure to submit such a certification signed by all Subcontractors shall be grounds to withhold payment in full or in part.

All Certificates of Insurance and all insurance policies required to be obtained by the Contractor and every Subcontractor of any tier shall provide the coverage afforded under the policies will not be canceled, reduced or allowed to expire without at least thirty (30) days prior to written notice given to the Owner. If any of the insurance coverages are required to remain in force after final payment, all additional Certificates evidencing continuation of such coverage shall be submitted with the final application for payment.

All insurance required of the Contractor and all Subcontractors of any tier shall state that the coverage afforded to Additional Insured shall be primary insurance of the Additional Insured with respect to claims arising out of operations performed by or on their behalf. If the Additional Insured have other insurance which is applicable to the loss, it shall be on an excess or contingent basis.

All insurance required of the Contractor and all Subcontractors of any tier shall provide that any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Owner, its officers, directors, commissioners, officials, employees, consultants, volunteers, or agents.

All insurance required of the Contractor and all Subcontractors of any tier shall provide that the insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

Under no circumstances shall the Owner be deemed to have waived any of the insurance requirements of this Contract by any action or omission, including, but not limited to:

- A. allowing any work to commence by the Contractor or any Subcontractor of any tier before receipt of Certificates of Insurance;
- B. failing to review any Certificates of Insurance received;

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- C. failing to advise the Contractor or any Subcontractor of any tier that any Certificate of Insurance fails to contain all the required insurance provisions, or is otherwise deficient in any manner; or
- D. issuing any payment without receipt of a sworn certification from the Contractor and all Subcontractors of any tier stating that all the required insurance is in force.

The Contractor agrees that the obligation to provide the insurance required by these documents is solely its responsibility and that this is a requirement which cannot be waived by any conduct, action, inaction or omission by the Owner. Contractor shall also protect the Owner by specifically incorporating this Paragraph into every subcontract entered into and also requiring that every Subcontractor incorporate this Paragraph into every sub-subcontract it enters into.

Nothing contained in the insurance requirements of the Contract Documents is to be construed as limiting the liability of the Contractor, the liability of any Subcontractor of any tier or either of their respective insurance carriers. Owner does not, in any way, represent that the coverage or limits of insurance specified is sufficient or adequate to protect the Owner, Contractor or any Subcontractor's interest or liabilities, but are merely minimums. The obligation of the Contractor and every Subcontractor of any tier to purchase insurance shall not, in any way, limit their obligations to the Owner in the event that the Owner should suffer an injury or loss in excess of the amount recoverable through insurance, or any loss or portion of the loss which is not covered by either the Contractor's or any Subcontractor's insurance.

Contractor shall notify Owner, in writing, of any actual or possible claim for personal injury or property damage relating to the work, or of any occurrence which might give rise to such a claim, promptly upon obtaining first knowledge of same.

GP-22 CONTRACTOR'S STATUS

The Contractor expressly understands and agrees that he (it) is an independent contractor and he (it) is not an employee of the Village and that the Village is not to provide Worker's Compensation, health or accident insurance, general liability insurance or any other form of insurance coverage of any kind which would cover the Contractor or his (its) employees in and under the terms of this agreement.

GP-23 EQUAL EMPLOYMENT OPPORTUNITY

The Contractor shall comply with all State and Federal Statutes, rules and regulations relating to non-discrimination against employees or applicants. In the event of the Contractor's non-compliance with such statutes, rules or regulations, the Contractor may be declared not responsible and therefore ineligible for future contracts with the Village.

GP-24 WAGE AND LABOR REQUIREMENTS

In calculating its bid hereunder, Contractor (including all sub-contractors of any tier) is advised that the Illinois Prevailing Wage Act will apply to the work set forth hereunder and to the Contractor. Accordingly, to the extent that the Act applies, Contractor shall comply with the provisions of the Act. Failure of Contractor to comply with the Act, including, but not limited to the inspection of records, and any rules or regulations promulgated by the State of Illinois with regard to the Act, can result in the cancellation of the Contract. Contractor expressly waives any right for recovering damages due to such Contract cancellation. Contractor's bonds shall include such provision and will guarantee the faithful performance of such prevailing wage clause as provided by this contract. Contractor shall maintain accurate records of the names, occupations, and wages paid to each laborer, worker, and mechanic employed in connection with the work and either file certified payroll, as required by the Act, or a letter setting forth the reasons for why Contractor is excused from having to file certified payroll with the Village of Glen Ellyn.

Not less than the prevailing minimum rate of wages as found by the Village of Glen Ellyn, or the Department of Labor or determined by the court on review shall be paid to all laborers and workmen performing work under this contract. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and revisions thereto. If the Department of Labor revises the wage rates, the revised rate shall apply to this contract and the Contractor will not be allowed additional compensation on account of said revisions. The Illinois Department of Labor publishes the prevailing wage rates on its website at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/prevailing-wage-rates.aspx>. The Contractor shall review the wage rates applicable to the work of the contract at regular intervals in order to ensure the timely payment of current wage rates. The Contractor agrees that no additional notice is required.

The Contractor and each subcontractor shall submit monthly, in person, by mail, or electronically, a certified payroll to the public body in charge of the project. The certified payroll shall consist of records of all laborers, mechanics, and other workers employed by them on the project. The records shall include each worker's name, address, telephone number when available, classification or classifications, the gross and net wages paid in each period, the number of hours worked each day, and the starting and ending times of work each day. Any Contractor or subcontractor, who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organizations in accordance with the federal Labor Management Relations Act, shall also include the worker's hourly wage rate, hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable, in the certified payroll record.

The worker's full social security number and home address shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each worker (e.g., the

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last four digits of the worker's social security number). The certified payroll shall be accompanied by a statement signed by the contractor or subcontractor which avers that:

- such records are true and accurate;
- the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and
- the contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor.

The public body is required to keep the certification records submitted for a period of not less than five years. Furthermore, these records, except an employee's address, telephone number, and social security number, shall be made available in accordance with the Freedom of Information Act.

Upon two business days' notice, the Contractor and each subcontractor shall make available for inspection the records to the Village of Glen Ellyn, its officers and agents, and to the Department of Labor and his deputies and agents at all reasonable hours at a location within this State. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Village or the Department of Labor.

To the extent permitted by law, preference shall be given to the employment of Illinois laborers for all work under this contract in compliance with State law (Ill. Rev. Stat. 1985, Chap. 48 I to 275).

If at the time this contract is executed, or if during the term of this contract, there is excessive unemployment in Illinois as defined in the employment of Illinois Workers on Public Works Act, 30 ILCS 570-0.01 et seq., as two consecutive months of unemployment exceeding 5%, the Contractor agrees to employ Illinois laborers. An Illinois laborer is defined as any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

GP-25 CONTRACTOR PAYMENTS

The Village of Glen Ellyn is a home-rule community and is not subject to the provisions of the Local Government Prompt Payment Act. The provisions of the Local Government Prompt Payment Act shall not apply to this Contract.

The Village will endeavor to provide payment to the Contractor within 30 working days of receipt of an approved invoice complete in every respect with the required waivers, updated schedule and all other requested and needed information. If expedited payment within 10 working days of the receipt of an approved and complete payment request is desired and the

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Village confirms the possibility of such an expedited payment service, the Contractor shall show a deduct in the invoice amount in a percentage not less than 0.25%.

GP-26 PARTIAL PAYMENT

Partial payment for work completed will be made by the Owner to the Contractor on a monthly basis. Requests for partial payment shall be prepared by the Contractor and submitted to the Engineer for review and recommendation of payment. The Owner shall receive this request by the third (3rd) Monday of the month or at such other time as agreed to by the Engineer.

A retainage of ten percent (10%) will be made from the partial payments. Invoices will include partial and final waivers of lien. An updated project schedule MUST also be included with each partial payment request. Failure to submit such a schedule shall be grounds to withhold payment in full or in part.

GP-27 FINAL PAYMENT

The work will be paid for at the contract price. Before payment for completed work will be processed by the Village, the job sites will be inspected by the Village.

Upon final completion of the Work, the Engineer will make a final inspection of the work completed. After final inspection, the Contractor shall be paid by the Village of Glen Ellyn consistent with the terms and condition of this Contract, provided that the work has been satisfactorily completed in accordance with terms of the specifications of the Contract and the final contract change order has been executed by all parties. If there are any deficiencies, the Contractor will be notified in writing within 14 days of receipt of the invoice of those deficiencies and payment will be withheld on those deficiencies until they are corrected.

GP-28 WAIVER OF LIEN

Prior to receiving final payment for this work, the Contractor shall submit a Waiver of Lien to the Owner in the amount of the final payment. If any part of the work is subcontracted, the Contractor shall furnish final waivers of lien from his subcontractors and material suppliers showing that they have received final payment from the Contractor. The Village retains the right to request waivers of lien from second tier (and lower) contractors and suppliers as evidence of payment.

GP-29 INCIDENTAL WORK

All work shown on the engineering drawings or called for in the Specifications and these General and Special Provisions, shall be included in the unit prices bid even though a specific bid item is not shown in the proposal, unless otherwise noted herein.

GP-30 CHANGE ORDERS/EXTRA WORK

In the event change orders/extra work are required on the project, payment will be made by the Owner to the Contractor on a monthly basis. Requests for change order/extra work payment shall be prepared by the Contractor and submitted to the Engineer for review and recommendation of approval. The Owner shall receive this request on the first (1st) Monday of the month and submit to the Village Board for final approval.

Upon board approval, the Contractor shall submit an invoice for the approved amount of the change order/extra work request less ten percent (10%) retainage. Invoices will include partial and final waivers of lien.

GP-31 EXTRA ENGINEERING SERVICES

Extra Engineering Services are defined as all additional engineering services required as a result of the Contractor not completing the improvements by the date specified in the project documents. The cost of such extra Engineering Services shall include the entire cost of construction engineering services, including travel expenses and overtime charges for employees of the Engineer, both in the office and on the job site, necessary for proper administration of the Project and which would not have been incurred if the Work had been completed within the time allowed on the Contract (including Village's extension of the completion time).

The Village will continue to pay engineering costs, but the costs of all extra engineering services as defined above shall be deducted from payments due to the Contractor. If the amounts due to the Contractor are insufficient to cover the costs of such extra engineering services, the Contractor shall reimburse the Village in the amount necessary to cover these costs. Extra engineering services shall be billed at the Engineer's standard hourly rates.

GP-32 EXTRA SERVICES PERFORMED BY VILLAGE PERSONNEL

The Village will make every effort to assist the Contractor during the course of the project. The standard workday for Village personnel is 7:00 AM to 3:30 PM. The Village will make the necessary provisions to assist the contractor after hours for planned activities such as water shutdowns.

Extra services performed by Village personnel are defined as all additional services required by Village employees as a result of Contractor error or negligence. The cost of such extra services shall include the entire cost of Village personnel services, including overtime charges for employees of the Village.

The Village will continue to pay Village personnel costs, but the costs of all extra services as defined above shall be deducted from payments due to the Contractor. If the amounts due to the

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Contractor are insufficient to cover the costs of such extra services, the Contractor shall reimburse the Village in the amount necessary to cover these costs.

GP-33 FIRE COMPANY FEES FOR SERVICE

It is the policy of the Glen Ellyn Volunteer Fire Company to bill contractors of the Village of Glen Ellyn when said contractor creates a situation whereby the Fire Company must standby and/or provide emergency service. The prime contractor shall be billed even if the fault of the incident rests with a sub-contractor. The following are the terms and conditions of such charges:

- A. Minimum time at which a bill will be issued is 1/2 hour on the scene. Times will be determined via the official fire report from DuComm, the Fire Company dispatch center. A copy of the fire report will be included with the invoice. Time will be billed in one-hour increments, with the minimum time billed being one hour.

- B. Hourly charges for equipment and manpower are:

Equipment	Vehicle Charge	Personnel Charge	Total Charge
Engine/Tower/Snorkel/Squad	\$250.00	\$150.00	\$400.00
Command Vehicle	\$150.00	\$50.00	\$200.00
Brush Fire Unit	\$150.00	\$100.00	\$250.00
Ambulance	\$150.00	\$100.00	\$250.00

- C. Copies of all bills will be forwarded to the Village. When the contractor pays a service invoice to the Fire Company a paid receipt will be given to the Village. If an outstanding invoice remains unpaid at time of final payout to the contractor, the Village shall deduct that amount from their final payment to the contractor and forward that amount to the Fire Company.
- D. Examples of situations that may incur a service bill are natural gas leaks and fires, electrical poles or wires down, hazardous material spills or leaks, structure fires, rescues such as trench collapses, high angle and confined space.
- E. The Fire Company will determine what apparatus is needed at any incident based on Fire Company Standard Operating Procedures.

Replacement cost of expendable materials and any charges for collecting and disposing of hazardous materials shall also be billed at Fire Company cost.

GP-34 FINAL ACCEPTANCE

Acceptance of work shall be made upon final completion of all construction activity, including correction of all punch list items, and shall be to the satisfaction of the Village.

GP-35 SAFETY/SUBSTANCE ABUSE POLICY

The importance the Village attaches to safety cannot be overemphasized. The Village reserves the right, at its discretion, to disallow payment for any work performed where the proper safety precautions were not being observed.

The Contractor shall be responsible for providing workers who have completed an OSHA 10-hour safety program within the last 12 months. Individuals that are performing sub-surface work shall have completed an OSHA approved trenching, shoring and confined space program. Credentials shall be provided at the request of the Engineer.

The Contractor shall be responsible for the cost of any fines levied against the Owner due to the Contractor's failure to comply with any safety regulations.

In addition to all other labor requirements set forth in this proposal and in the Standard Specification for Road and Bridge Construction, adopted by the Department, during the performance of this contract, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

Substance Abuse Prevention Program

Before the Contractor and any Subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in P. A. 95-0635 or shall have a collective bargaining agreement in effect dealing with the subject matter of P. A. 95- 0635.

The Contractor and any Subcontractor shall file with a public body: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act, or a letter certifying that the Contractor or a Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act.

GP-36 CONTRACTOR'S DUTIES

The Contractor shall supervise and direct the Work, using his best skill and attention and he shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract. Unless otherwise specifically provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

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The Contractor shall at all times enforce strict discipline and good order among his employees and those of subcontractors, if allowed, and shall not employ on the Work or permit to be employed any unfit person or anyone not skilled in the task assigned to him. All work will be performed in a business-like manner following reasonable safety procedures and using necessary safety equipment, such as traffic cones and street barricades.

The Contractor warrants to the Owner that all materials incorporated in the Work will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements may be considered defective.

The Contractor shall be responsible to the Owner for the acts and omissions of his employees, subcontractors, if allowed, and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.

GP-37 OWNER'S RIGHT TO TERMINATE OR SUSPEND WORK FOR CONVENIENCE

- A. Termination or Suspension for Convenience. Owner shall have the right, for its convenience, to terminate or suspend the Work in whole or in part at any time by written notice to Contractor. Every such notice shall state the extent and effective date of such termination or suspension. On such effective date, Contractor shall, and to the extent directed, stop Work under this Contract, cease all placement of further orders or subcontracts, terminate or suspend Work under existing orders and subcontracts, cancel any outstanding orders or subcontracts that may be cancelled, and take any action necessary to protect any property in its possession in which Owner has or may acquire any interest and to dispose of such property in such manner as may be directed by Owner. Any termination or suspension of Contractor's rights under this Contract for an alleged default that is ultimately held unjustified shall automatically be deemed to be a termination or suspension for the convenience of Owner.
- B. Payment for Completed Work. In the event of any termination pursuant to Subsection A above, Owner shall pay Contractor (1) such direct costs, excluding overhead, as Contractor shall have paid or incurred for all Work done in compliance with, and as required by or pursuant to, this Contract up to the effective date of termination together with ten percent of such costs for overhead and profit; and (2) such other costs pertaining to the Work, exclusive of overhead and profit, as Contractor may have reasonably and necessarily incurred as the result of such termination. Any such payment shall be offset by any prior payment or payments and shall be subject to Owner's rights to withhold and deduct as provided in this Contract.

GP-38 VERIFICATION OF WORK

It shall be the responsibility of the Engineer to guarantee the execution of the Contract in accordance with its terms and specifications. To this end, he/she may appoint a designee who shall be responsible for the inspection and monitoring of the work performed under the Contract.

The Contractor is expected to work diligently and safely. Any deficiency in the Contractor's performance shall be reported in writing to the Contractor within 12 hours following completion of work, and such deficiencies shall be corrected by the Contractor no later than 24 hours following receipt of such notice or the Contract will be terminated.

The Engineer will verify completion of the Contractor's work with the Contractor during the term of the Contract.

In addition to the procedure for verification of work performed as described herein, the Contractor shall lend whatever necessary assistance the Village may request with respect to verifications of work performed.

GP-39 GUARANTEE AND MAINTENANCE OF WORK

The Contractor warrants and guarantees to the Owner and to the Engineer that all materials and equipment will be new unless otherwise specified, and that all Work will be of good quality and free from faults or defects, and in accordance with the requirements of the Contract Documents. All unsatisfactory Work, all faulty or defective Work, and all Work not conforming to the requirements of the Contract Documents at the time of Acceptance thereof shall be considered defective. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided herein.

If required by the Engineer prior to approval of final payment, the Contractor shall promptly, without cost to the Owner and as specified by the Engineer, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Engineer, remove it from the site and replace it with non-defective Work. If the Contractor does not correct such defective Work or remove and replace such rejected Work within a reasonable time, or as specified in a written notice from the Engineer, the Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services, shall be paid by the Contractor, and an appropriate deduction shall be made to payments due to the Contractor for Work completed. The Contractor shall also bear the expense of making good all Work of others destroyed or damaged by his correction, removal or replacement of this defective Work.

If, after the approval of final payment for each class of work, and prior to the expiration of 1 year after the date of approval of said final payment, or such longer period of time as

may be prescribed by law or by terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with written directions of the Owner, either correct such defective work, or, if it has been rejected by the Owner, remove it from the site and replace it with non-defective work.

If, instead of requiring correction or removal and replacement of defective Work, the Owner (and, prior to approval of final payment, also the Engineer) prefers to accept it, he may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price; or, if the acceptance occurs after approval of the final payment, an appropriate amount shall be paid by the Contractor to the Owner.

GP-40 HOLD HARMLESS

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Engineer, and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim for damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right of obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. In any and all claims against the Owner or any of its agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed, by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

GP-41 COMPLIANCE WITH FREEDOM OF INFORMATION ACT REQUESTS

Contractor agrees to maintain all records and documents for projects of the Village of Glen Ellyn in compliance with the Freedom of Information Act, 5 ILCS 140/1 et seq. In addition, Contractor shall produce, without cost to the Village, records which are responsive to a request received by the Village under the Freedom of Information Act so that the Village may provide records to those requesting them within the time frames required. If additional time is necessary to compile records in response to a request, then Contractor shall so notify the Village and if possible, the Village shall request an extension so as to comply with the Act. In the event that the Village is found to have not complied with the Freedom of Information Act, based upon Contractor's

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failure to produce documents or otherwise appropriately respond to a request under the Act, then Contractor shall indemnify and hold the Village harmless, and pay all amounts determined to be due including but not limited to fines, costs, attorneys' fees and penalties.

GP-42 EQUIPMENT CLEANING

No equipment cleaning will be allowed on any street, parkway, or in any sewer.

GP-43 STORAGE OF CONSTRUCTION MATERIALS

No construction materials shall be stored at a work site for longer than one week without permission of the Village. The risk of loss of stored materials shall remain with the Contractor. No stockpiling of construction materials will be allowed on parkways, without permission of the Engineer. Restoration of sites damaged due to storage shall be the responsibility of the Contractor.

GP-44 PROTECTION

It shall be the responsibility of the Contractor to fully protect the work from physical damage (structural or cosmetic). Barricades, covers, watchmen, etc., shall be provided as necessary to adequately protect the work and the public. This item includes, but is not limited to, concrete sidewalk, driveway aprons, concrete pavement and landscaping.

GP-45 PROTECTION OF EXISTING PAVEMENT

The Contractor shall not drive equipment other than rubber tired vehicles across any pavement, curb and gutter, driveways, or sidewalk unless suitable protection is provided in the form of planks or mats, and unless said pavement, curb and gutter, driveways or sidewalk is scheduled to be removed. All surface damaged during construction shall be removed and replaced as directed by the Owner at the Contractor's expense.

GP-46 USE OF VILLAGE STREETS

Contractor's truck traffic is restricted to certain streets to be designated by the Village.

GP-47 DAMAGE TO PROPERTY

The Contractor shall be responsible for any damage to properties caused by the acts of his work in the course of performance of this contract and shall replace or restore to its original condition any such damaged property at no cost to the Village. The Village shall be harmless for all liability under the Scope of Work of this contract. The contractor is advised that work will be taking place near private property where distinct boundary lines may not be readily distinguished.

GP-48 SOLICITATION

The Contractor shall not be allowed to solicit additional work from adjoining homeowners while working on the construction project.

GP-49 USE OF VILLAGE WATER

The Contractor shall be allowed the use of the Village of Glen Ellyn's water supply without cost for all water, whether used for tree watering, sod watering, or any other needs, but this water shall be obtained only at the Public Works Department, 30 S. Lambert Road, Glen Ellyn.

The Contractor shall provide all necessary labor, tools and equipment including water wagon truck, as needed, to perform the necessary work.

GP-50 VILLAGE WATER SYSTEM OPERATIONS

Only Village Water Division personnel shall operate any hydrant, valve, water service shutoff valve or any other appurtenance of the existing water system.

GP-51 LOCATION OF EXISTING UTILITIES

Locations of all utilities shown on the engineering drawings are approximate only and are not necessarily complete. The Contractor shall make his own investigations as to the locations of all existing underground structures, cables, and pipe lines. The Contractor shall have the responsibility to determine from the public utilities the locations of underground pipes, conduits or cables adjoining or crossing the construction area during all phases of the construction project. The Contractor shall call J.U.L.I.E. at 1-800-892-0123 or 811 for utility location and stake-out.

GP-52 NOTIFICATION TO UTILITIES

The Contractor shall notify all utility companies including the local electrical, telephone, gas, cable T.V., and Village Street, Water, and Sewer Departments, a minimum of 72 hours prior to beginning any construction or taking any preliminary bores. If utility pole bracing is required, arrangements with the appropriate utility must be made at least six weeks in advance of the time such bracing is required.

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GP-53 UTILITIES TO BE ADJUSTED

The following utilities may be involved in this project:

NAME OF UTILITY AND CONTACT	POSSIBLE WORK TO BE PROVIDED
Crown Castle Fiber Mike Kyriazakos (630) 480-5203 Office (847) 370-7617 Mobile Michael.kyriazakos@crowncastle.com	
Nicor Gas Sakibul Forah DOT Liaison Engineering 1844 Ferry Road Naperville, IL 60563 (630) 388-2903 Office (224) 242-4043 Mobile sforah@southernco.com	
Wide Open West Kevin Rhodes (630) 930-7597 Mobile Kevin.rhodes@wowinc.com	
AT&T Hector Garcia Manager- OSP Plng & Design Technology Operations, Construction & Engineering – MW 1000 Commerce Dr. Flr 1, Oak Brook, Il. 60523 {630} 573.5465 Office (630) 639-8372 Mobile hg292@att.com	
Com Ed Likowo Ndobedi (630) 890-0883 Likowo.ndobedi@comed.com	
Sprint Steven Hughes (814) 553-2300 Steven.hughes1@t-mobile.com	

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NAME OF UTILITY AND CONTACT	POSSIBLE WORK TO BE PROVIDED
AT&T TTCG (Teleport) Tim Lapointe –CCSI Networks LLC (713) 830-7437 Tl0695@att.com	
Comcast Ted Wyman (630) 600-6349 Ted_wyman@comcast.com	
Verizon Joe Chaney (312) 617-2131 Joe.Chaneyh@Verizon.com	

The Contractor shall extend every courtesy and cooperate fully with other contractors performing any public utility relocations. The Village of Glen Ellyn will coordinate and monitor the construction activities of all contractors. Any conflicts, impediments or coordination needs shall be brought to the immediate attention of the Village.

The above represents the best information available to the department and is included for the convenience of the bidder. The applicable portions of Article 105.07 of the IDOT Standard Specifications shall apply.

If utility pole bracing is required, the Contractor shall make arrangements with the appropriate utility company at least six weeks in advance of the time such bracing is required.

GP-54 COORDINATION WITH PUBLIC WORKS DEPARTMENT

All construction performed shall be coordinated with the Professional Engineer and other representatives, all of the Public Works Department of the Village of Glen Ellyn, to minimize inconvenience to the public.

GP-55 MOBILIZATION/DEMobilIZATION

The Contractor shall be responsible for mobilizing all of the proper and necessary equipment necessary to complete the contract work and for demobilizing and removing all equipment from the work site upon completion of the contract work. Mobilization/Demobilization shall be considered included in the contract.

GP-56 BORINGS

When taking any preliminary borings prior to bidding or during construction, the Contractor shall obtain the approval of the Village of Glen Ellyn within whose right-of-way said boring is located and obtain approval to take such borings in the location desired.

Soils borings obtained by the Village for this project are included as Appendix 1 without endorsement and are provided for whatever benefit may be derived there from.

GP-57 MATERIAL CERTIFICATION

The Contractor shall furnish certifications to the Engineer from suppliers stating that all materials comply with the requirements of the IDOT Standard Specifications and Supplemental Specifications. All materials installed with this project shall be new and be manufactured only in the United States. As requested by Owner, the Contractor shall promptly furnish proof that USA only materials are utilized.

GP-58 QUALITY CONTROL AND QUALITY ASSURANCE MATERIAL TESTING

The project is subject to all IDOT requirements for Quality Control and Quality Assurance Material Testing. The Contractor shall be responsible for performing all required Quality Control Testing. The Contractor shall cooperate fully with the Owner's Quality Assurance testing firm in order to obtain the necessary samples or to perform the necessary testing procedures during the conduct of the project. The Contractor shall furnish all Quality Control Material Testing reports to the Engineer. This work will not be paid for separately and shall be incidental to the contract.

GP-59 JOB SITE PROTECTION

The Contractor shall be responsible for the proper and safe protection of his work at all times during construction and also during the guarantee period after the acceptance of the completed work by the Owner.

The Contractor will be responsible for all traffic control, including but not limited to barricades, signs, flagmen, etc., to maintain use of the project corridor at all times during the project.

The Contractor shall provide, erect and maintain barricades, red flags, and lights at all places where work is in progress, and wherever else required by the Owner's representative.

The Contractor shall ensure that all traffic control devices installed by him are operational 24 hours a day including Sundays and holidays. This also applies to barricades placed along the sidewalk to provide warning to pedestrian traffic.

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Throughout the duration of the project, all existing street and traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the IDOT Standard Specifications shall apply except the next to last paragraph shall be revised to read:

“The Village will provide and replace any sign damaged or lost by the Contractor at a cost of \$150.00 per sign. The Village will collect this payment in the form of a deduction from the contract.”

The Contractor shall maintain an emergency phone number where he can be notified at any time, Sundays and holidays included, of an emergency condition due to the work which requires immediate repair or protection. Upon such notification by the Owner’s representative, the Contractor shall be given a two-hour time limit to provide whatever barricades, flags, and lights are required to mark and protect the hazard.

If the Contractor fails to provide necessary protection within the two-hour period from time of notification, the Owner will provide the necessary protection. Should the Village be required to provide additional or supplemental traffic control devices or barricading for pedestrians the Contractor shall be charged at the following rates: \$10.00 per barricade per day plus a \$200.00 delivery and pick-up charge. All barricades shall be IDOT Type II with reflective striping and either blinking or steady burning lighting.

Upon notification by the Owner’s representative, the Contractor shall be given a 24-hour time limit to begin to make any repairs to the work. If the Contractor fails to begin such repairs as are required within the 24-hour period from time of notification, the Owner will make the necessary repairs to the work and deduct the cost of labor and materials, including engineering costs, for each repair incident from the monies due and payable to the Contractor for completed work.

GP-60 SITE CLEANLINESS/SPOIL DISPOSAL

The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. In order to minimize the potential damage to parkways, adjoining private property and tree root systems, the Contractor shall remove debris which is removed from the project area. Debris shall not be stockpiled or stored within any parkway or on any street pavement under any circumstances.

All material removed in the conduct of the work shall be removed and disposed of off the site at location or locations provided by the Contractor at the end of each work day. Disposal of all spoil materials, either vegetative or soils, shall be considered included in the contract unit prices for the several removal items. The Village will not provide any site(s) for any spoil materials on a temporary or permanent basis.

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If the Contractor is found to be in violation of criteria stated above, a penalty shall be levied against the Contractor with the monies being deducted from the contract. The amount of the penalty shall be two hundred fifty dollars (\$250.00) per occurrence per day.

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D – SPECIAL PROVISIONS

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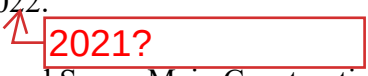
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1. GENERAL

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction”, adopted by the State of Illinois on January 1, 2022 and the “Supplemental Specifications and Recurring Special Provisions”, adopted by the State of Illinois on January 1, 2022, hereinafter referred to as the “IDOT Standard Specifications”. In case of conflict with any part or parts of said Specifications, these Special Provisions shall take precedence and shall govern.

Standard Specifications

All construction performed shall conform to the applicable sections of:

- A. The General Provisions and Special Provisions provided in the Contract Documents.
- B. Illinois Department of Transportation “Standard Specifications for Road and Bridge Construction”, adopted January 1, 2022 or latest edition. Hereinafter referred to as IDOT Standard Specifications. 
- C. Illinois Department of Transportation “Supplemental Specifications and Recurring Special Provisions”, adopted January 1, 2022. 
- D. Standard Specifications for Water and Sewer Main Construction in Illinois, 8th Edition, 2020.
- E. Federal Highway Administration “Manual on Uniform Traffic Control Devices” latest Edition.
- F. In case of conflict with the above Standard Specifications, the Village Code of the Village of Glen Ellyn, Illinois, shall take precedence and shall govern.

The items contained within this specification shall serve as a guide to items of specific requirements in the Village of Glen Ellyn.

Where reference is made to “The Engineer” it shall be interpreted to mean the Public Works Director or the Public Works Professional Engineer or a designated representative of the Public Works Director.

2. EQUIVALENT MATERIALS AND EQUIPMENT

Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, the specified item mentioned shall be understood as establishing the type, function, and quality desired. Other manufacturers' products will be accepted provided sufficient information is submitted to allow Engineer to determine that the products proposed are equivalent to those named. Such items shall be submitted for review by the procedure set forth in the submittals section.

Requests for review of equivalency will not be accepted from anyone except Contractor, and such requests will not be considered until after the contract has been awarded.

3. SUBMITTALS

Construction Schedule - Before work is started, Contractor shall submit to Engineer for review a schedule of the proposed construction operations. The schedule shall indicate the sequence of the Work and the time of starting and completion of each part.

Shop Drawings - Engineering data covering all equipment and fabricated materials which will become a permanent part of the Work under this contract shall be submitted to Engineer, at Engineer's address, for review. These data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices; the external connections, anchorages, and supports required, performance characteristics; and dimensions needed for installation and correlation with other materials and equipment.

All submittals, regardless of origin, shall be stamped with the approval of Contractor and identified with the name of this contract, Contractor's name, and references to applicable specification paragraphs and Contract Drawings. Each submittal shall indicate the intended use of the item in the Work. When catalog pages are submitted, applicable items shall be clearly identified. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data.

Contractor's stamp of approval is a representation to the Village and Engineer that Contractor accepts full responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, and that he has reviewed or coordinated each submittal with the requirements of the Work and the Contract Documents.

All deviations from the Contract Documents shall be identified on each submittal and shall be tabulated in Contractor's letter of transmittal. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of the deviation) and all required piping and wiring diagrams.

Contractor shall accept full responsibility for the completeness of each submission, and, in the case of a resubmission, shall verify that all exceptions previously noted by Engineer have been taken into account. In the event that more than one resubmission is required because of failure of Contractor to

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account for exceptions previously noted, Contractor shall reimburse the Village for the charges of Engineer for review of the additional re-submissions.

Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time unless delay of the Work is directly caused by a change in the Work authorized by a Change Order or by failure of Engineer to return any submittal within 14 days after its receipt in Engineer's office.

Contractor's letter of re-submittal shall list the date of his original submittal letter, the date of the Engineer's letter returning, the submittal, and the dates of submission and return of any previous re-submittals.

Engineer's review of drawings and data submitted by Contractor will cover only general conformity to the drawings and specifications, external connections, and dimensions which affect the layout. Engineer's review does not indicate a thorough review of all dimensions, quantities, and details of the material, equipment, device, or item shown. Engineer's review of submittals shall not relieve Contractor from responsibility for errors, omissions, or deviations, nor responsibility for compliance with the Contract Documents.

Five copies (or one reproducible copy) of each drawing and necessary data shall be submitted to Engineer. Engineer will not accept submittals from anyone but Contractor. Submittals shall be consecutively numbered in direct sequence of submittal and without division by subcontracts or trades. Re-submittals shall bear the number of the first submittal followed by a letter (A, B, etc.) to indicate the sequence of the re-submittal.

SP-1 TRAFFIC CONTROL AND PROTECTION

This work shall include furnishing, installing, maintaining, relocating, control devices used for the purpose of regulating, warning, or directing construction or maintenance of these improvements.

HOW DO SP#S
CORRESPOND
TO CODE NO. IN
SUMMARY OF
QUANTITIES?

All traffic control devices shall conform to the requirements of the "Illinois Manual on Uniform Traffic Control Devices". Traffic Control Devices include: signs and their supports, signals, pavement markings, barricades with sand bags, channelizing devices, temporary pavement, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, warning or guiding traffic through the construction zone.

Any temporary pavement shown in the plans or required by the Contractor or Engineer for accommodating traffic, and its subsequent removal, shall not be paid for separately but shall be included in the cost of this item.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The

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Contractor shall cover all traffic patterns.

Construction signs referring covered during non-working hours

Any signs or barricades that continuous burn warning lights

The Contractor shall maintain at least one lane of traffic at all times on Duane St, Hillside Ave. Two flaggers shall be required at all times for each separate operation where two-way traffic is maintained over one lane of pavement. The Contractor shall also maintain entrances, side roads, and pedestrian pathways along the proposed improvement. Interference with traffic and pedestrian movements and inconvenience to owners of abutting property and the public shall be kept to a minimum

The Contractor shall furnish, erect, and maintain advisory speed plates or signs. Placement of these plates or signs shall be in accordance with the Manual on Uniform Traffic Control Devices and as directed by the Engineer. The advisory speed plates or signs shall carry the legend 15 M.P.H. and shall conform to Manual on Uniform Traffic Control Devices.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished, installed and maintained by him under this contract, and such device shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation is received from the Engineer.

The Contractor shall ensure that all traffic control devices installed by him are operational 24 hours a day, including Saturdays, Sundays, and holidays.

To ensure a prompt response to situations involving the adequacy and integrity of the work zone traffic control devices, the Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. When the Engineer is notified or determines a deficiency exists, (s)he shall be the sole judge to whether the deficiency is an immediate safety hazard. The Contractor shall dispatch sufficient resources with 2 hours of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Engineer will impose a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Engineer's acceptance of the corrections. For this project, the daily deduction will be \$500.00.

When traveling in lanes open to public traffic, the Contractor's vehicles shall always move with and not against or across the flow of traffic. These vehicles shall enter or leave work areas in a manner that will not be hazardous to, or interfere with, traffic and shall not park or stop except within designated work areas. Personal vehicles shall not park within the right-of-way except in specific areas designated by the Engineer.

Delays to the Contractor caused by complying with these requirements will be included in the item for Traffic Control and Protection.

Due to some complexity to traffic during construction within the project corridor, the Owner may request the Contractor to divert traffic flow accordingly from time to time. The Contractor shall comply with these requests and consider the cost of this work in his bid price for this item.

This work will be paid for at the contract LUMP SUM price for TRAFFIC CONTROL AND PROTECTION, which price shall be payment in full for all work mentioned above and for all labor, materials, transportation, handling and incidentals necessary to furnish, install, maintain, and remove all traffic control devices indicated in the engineering drawings and specifications. No additional compensation will be allowed.

SP-2 STREET SWEEPING

This work shall consist of keeping roads in and around the construction area clean.

The Contractor shall have available a mechanical sweeper for pavement sweeping. The Contractor shall clean the pavement of project and surrounding streets of all dirt and debris at the end of each work week and at other times as deemed necessary by the Engineer.

The cost of this work shall be paid for at the contract unit price per DAY for STREET SWEEPING, which price shall include all labor, equipment, and water required to clean all construction areas as directed.

SP-3 DUST CONTROL, SPECIAL

This work, to performed only when directed by the Engineer, shall consist of the control of dust resulting from construction operations and is not intended for use in the compaction of earth embankments, as specified under Article 205.06 of the IDOT Standard Specifications.

Dust shall be controlled as often as necessary by the uniform application of dust control agent. The dust control agent shall be "Coherex" or equal as supplied and applied by CAM, LLC, 400 Daniel Boone Parkway, P.O. Box 861, South Roxana, IL (618-254-3855 or 800-374-5560).

The rate of application for dilute dust control agent shall be a minimum of 0.50 gallons per square yard. Dilution for the dust control agent shall be 4 to 6 parts of water to 1 part agent.

This work will be paid for at the contract unit price per undiluted GALLON of dust control agent for DUST CONTROL, SPECIAL.

If the Contractor does not meet the requirement of controlling dust as determined by the Engineer, the Owner shall make the necessary arrangements to control dust. The cost of such dust control will be deducted from any monies due or to become due to the Contractor.

SP-4 PRE-CONSTRUCTION VIDEO TAPING

The Contractor shall prepare pre-construction video documentation of all features in the areas affected by construction in the form of color videos in DVD format. All video cameras, recorders, media, accessories and appurtenances shall be high quality DVD format equipment. Pre-construction video documentation shall consist of a series of high-resolution color audio-video digital images showing all areas affected by construction. All pertinent exterior and interior features within the construction's zone of influence shall be shown in sufficient detail to document its pre-construction condition. Features to be shown shall include but not be limited to pavements, curbs, driveways, sidewalks, retaining walls, buildings, landscaping, trees, shrubbery, fences, light posts, interior features, and equipment, etc. View orientation shall be maintained by audio commentary on the audio track of each videotape to help explain what is being viewed.

The recording of the video shall be done by a competent and professional person familiar with this type of activity.

The pre-construction videotaping shall be completed after the initial walkthrough. Two copies of the DVD's depicting all filmed locations shall be submitted to the Village of Glen Ellyn. Construction activities, including material delivery, shall not be performed until the DVDs have been furnished to the Village of Glen Ellyn.

After delivery of the DVDs to the Village of Glen Ellyn, the work shall be paid for at the contract LUMP SUM price for PRE-CONSTRUCTION VIDEO TAPING, which price shall be payment in full for labor, equipment and material necessary to complete the work as specified herein.

SP-5 CONSTRUCTION LAYOUT

The Contractor shall furnish and place construction layout stakes for this project. Currently established alignments, ties and benchmarks are shown on the project engineering drawings. Any additional control points set by the Village will be identified in the field to the Contractor and all field notes will be kept in the office of the Engineer.

The Contractor shall provide field forces, equipment and material to set all additional stakes for this project needed to establish offset stakes, reference points, and any other horizontal or vertical controls, including supplementary benchmarks, necessary to obtain a correct layout of all portions of the work. The Contractor shall be responsible for having the finished work conform to the lines, grades, elevations, and dimensions called for in the engineering drawings.

The Contractor shall establish from the given survey points and benchmarks all the control points necessary to construct the individual project elements. The Contractor shall provide the Engineer sufficient control points in close proximity to each individual element to allow adequate checking of construction operations. This includes, but is not limited to, line and grade stakes, line and grade nails in form work, and/or filed or etched marks in substantially completed construction work. It is the Contractor's responsibility to tie in centerline control points in order to preserve them during

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construction operations. Stakes for line and grade of pavement and/or curb shall be set at sufficient station intervals (not exceeding 50 ft.) to assure conformance to plan line and grade and to allow checking of the work to the extent required by the Engineer.

It is not the responsibility of the Village to check the correctness of the Contractor's stakes. Any apparent errors will be immediately called to the Contractor's attention and corrected before the stakes are used for construction purposes. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades, and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and bench marks and shall have them reset at his/her expense when any are damaged, lost, displaced, removed, or other obliterated.

The Engineer will make random checks of the Contractor's staking to determine if the work is in conformance with the engineering drawings. Where the Contractor, in setting construction stakes, discovers discrepancies, the Engineer will check to determine their nature and make whatever revisions are necessary in the engineering drawings. Any additional re-staking required by the Engineer will be the responsibility of the Contractor. The additional re-staking done by the Contractor will be paid for in accordance with Article 109.04 of the IDOT Standard Specifications.

The Contractor shall provide the Engineer a copy of any field notes, cut/fill sheets, and layout diagrams produced during the course of the project. All work shall be in accordance with normally accepted self-checking surveying practices. Field notes shall be kept in standard survey field notebooks and those books shall become the property of the Village at the completion of the project. All notes shall be neat, orderly, and in accepted form.

The Engineer will make all measurements and take all cross-sections from which the various pay items will be measured.

The Contractor shall keep one (1) record copy of all Specifications, Drawings, Addenda, Modifications and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These documents shall be kept current at all times and will be subject to the Engineer's review prior to approval of partial payments.

This item will be paid for at the contract LUMP SUM price for CONSTRUCTION LAYOUT which price shall be payment in full for all services, materials, labor, equipment, tools, and incidentals to complete this item.

SP-6 INLET AND PIPE PROTECTION

This work shall consist of installing and maintaining inlet and pipe protection as described in the Plans in accordance with Section 280 in the IDOT Standard Specifications.

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The Inlet Protector shall be a reinforced sediment bag with a frame that is inserted between the existing frame and grate. The Inlet Protector shall have an overflow feature to prevent ponding during heavy storms.

The Engineer has pre-approved the IPP Inlet Filter as manufactured by Inlet & Pipe Protection, Inc., 1635 Tonne Road, Elk Grove Village, IL (847) 228-3884. Other manufacturers may be used with prior approval from the Engineer.

After receiving final acceptance of the restoration, the Contractor shall remove the installed inlet and pipe protection. The Contractor shall remove any sediment or other depositions which accumulated within the duration of the project and restore any disturbed areas to the satisfaction of the Engineer.

This work shall be paid for at the contract unit price per EACH for INLET AND PIPE PROTECTION, which price shall include all materials, labor, and equipment necessary to complete the work. Maintenance of the Inlet and Pipe Protection is considered incidental and is the sole responsibility of the Contractor perform to the satisfaction of the Engineer or governing agency.

SP-7 NON SPECIAL WASTE DISPOSAL

Description. This work shall consist of the satisfactory disposal of any Non Special Waste encountered during construction. In the event that Non Special Waste is encountered, the disposal of the material shall be compensated for as NON SPECIAL WASTE DISPOSAL.

This pay item is for contingency purposes only. The Owner reserves the right to increase or reduce the quantity or to delete this pay item from the Contract. The Contractor is not entitled to compensation for any changes in quantities for this pay item.

Work required for the excavation, removal and disposal of uncontaminated material necessary for the construction of the proposed improvements shall be considered included in the cost of associated contract pay items.

Excavated material shall be considered NON SPECIAL WASTE DISPOSAL after one (1) of the following conditions are met:

ARE WE PROVIDING 663 FORMS?

The Contractor's "clean-fill" dump facility rejects individual load of excavated material. The Contractor shall provide the Engineer with the CCDD Load Rejection Form.

A Contractor-employed environmental consultant performs on-site sampling and discovers areas of contamination. In this situation, the Contractor's environmental consultant shall coordinate with the Engineer to determine acceptable limits of the contamination. The Engineer reserves the right to independently perform their own soil tests. The cost for the Contractor-employed environmental consultant shall be included in the price for NON SPECIAL WASTE DISPOSAL.

The Contractor shall provide the Special Waste Tracking Receipt / Manifest and the Weight Ticket with tonnage to the Engineer for each load of Non Special Waste. These items shall include the truck number and date.

Basis of Payment. Regardless of actual quantity, this work shall be paid for at the Contract unit price per cubic yard for NON SPECIAL WASTE DISPOSAL, which price shall be considered full compensation for all sampling, testing, documentation, coordination, handling and transportation necessary for the disposal of all contaminated material. compensation will be due to the Contractor.”

SP-8 EARTH EXCAVATION

This item shall include the removal of any material above the design sub-grade not already part of another removal item (i.e. bituminous surface removal, pavement removal, driveway pavement removal, combination curb and gutter removal or sidewalk removal). Excavated areas shall be backfilled as designated in the specifications for paved and non-paved areas. No recycled materials are allowed.

This work shall not be paid for separately but shall be considered incidental to the various pay items.

SP-9 EXPLORATION TRENCH, SPECIAL

Description. This work shall be performed according to Article 611.03 and Section 213 of the Standard Specifications except as modified herein. This item shall consist of excavating a trench at the locations directed by the Engineer for the purpose of locating existing utilities and services within the construction limits of the proposed improvement.

General. The trench shall be deep enough to expose the utility, and the width of the trench shall be sufficient to allow proper investigation to determine if the utility needs to be replaced. The exploration trench shall be backfilled with trench backfill at the direction of the Engineer meeting the requirements of the Standard Specifications. This shall not be paid for separately but shall be included in the cost of this item.

Method of Measurement. An estimated length of exploration trench has been shown in the summary of quantities to establish a unit price only. Payment shall be based on the actual length of trench explored without a change in the unit price because of adjustment in the quantities.

Basis of Payment. This work shall be paid for at the contract unit price per foot (regardless of depth) for EXPLORATION TRENCH, SPECIAL, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work.

SP-10 BEDDING AND BACKFILL FOR UNDERGROUND CONDUITS

All PVC pipe shall be placed in granular bedding extending from 6 inches below the pipe to 12 inches above the pipe. Bedding for DIP or concrete pipe shall extend 6 inches below the pipe to the pipe spring line. Bedding material shall be crushed stone or crushed gravel of gradation CA-7 or CA-11 conforming to ASTM D2321 for Class I material. Granular bedding shall not be paid for separately, but shall be considered incidental to the cost of the water main or sewer pipe.

Selected Granular Backfill shall be required wherever a conduit crosses any pavement, curb and gutter, driveway, or sidewalk. Where the trench crosses a surfaced area transversely, the selected granular backfill shall extend 2 feet beyond the surface. Where the trench is parallel to the surfaced area, selected granular backfill shall be required when the trench wall is within 2 feet of the surface.

All trenches, including water and sewer services outside the pavement, shall be backfilled and compacted with Selected Granular Backfill in accordance with Article 20-4.06 of the Illinois Water and Sewer Main Specifications. For non-IDOT right-of-way areas, this material shall be crushed stone, gradation CA-6, meeting the requirements of Article 1004.05 of the IDOT Standard Specifications. Within IDOT right-of-way, the material shall be sand, FA-6. Recycled concrete materials from approved and tested stockpiles will be allowed if approved by the Engineer. The material shall be deposited in uniform layers not exceeding six inches thick (loose measure) and each layer shall be compacted by mechanical ramming or tamping in a manner approved by the Engineer. Compaction shall be not less than 95% of the standard proctor laboratory density.

Trench backfill for utility installations shall extend up to the matching street elevation and will not be paid for as temporary aggregate, rather will be incidental to the pay item(s) associated with the installation of the utility.

The cost of furnishing and placing Selected Granular Bedding and Selected Granular Backfill shall be included to the cost of installing the pipe.

SP-11 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS

Subgrade preparation shall include the removal of unsuitable surface conditions including pavement materials, vegetation, high organic content topsoil, root matter and other deleterious conditions which may be encountered. The subgrade soils (including soils in the conduit trenches) shall be compacted to a minimum of 95% compaction based on the standard proctor, AASHTO T-99 or ASTM D-698, within 1.0 foot of the surface.

All prepared sub-grades and aggregate sub-bases exposed after surface removal shall be proof-rolled. When proof-rolling reveals unstable sub-grade or sub-base conditions, these materials shall be removed. Removal and disposal of all surplus, unstable and unsuitable materials and organic waste below the design subgrade shall conform to applicable portions of Section 202 of the IDOT Standard Specifications. Areas where fill is required shall be prepared and filled using POROUS GRANULAR EMBANKMENT, SPECIAL as directed by the Engineer.

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This work shall be paid for at the contract unit price per CUBIC YARD for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS and shall include all labor, equipment and materials necessary to perform the work as specified. Proof-rolling will not be paid for separately, but will be considered as an incidental expense. POROUS GRANULAR EMBANKMENT, SPECIAL shall be paid for as described in these Special Provisions.

SP-12 POROUS GRANULAR EMBANKMENT, SPECIAL

This work shall consist of furnishing, placing and compacting porous granular material installed on geotextile fabric to the lines and grades shown on the engineering drawings or as directed by the Engineer in accordance with the applicable portions of Section 207 of the Standard Specifications. The material shall be used as a bridging layer over soft, unstable or loose soil areas and for placement under water.

The geotextile fabric shall be in accordance with the specifications contained in Article 1080.02 of the IDOT Standard Specifications. The PGE material shall conform to Article 1004.05 of the Standard Specifications except the gradation shall be as follows:

A. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete

Sieve Size	Percent Passing
*6"	97 ± 03
*4"	90 ± 10
2"	45 ± 25
#200	5 ± 5

B. Gravel, Crushed Gravel and Pit Run Gravel

Sieve Size	Percent Passing
*6"	97 ± 03
*4"	90 ± 10
2"	45 ± 25
#4	30 ± 20
#200	5 ± 5

*For undercut greater than eighteen inches (18"), the percent passing the 6" sieve may be 90 ± 10, and the 4 inch sieve requirements eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is 6 inches or less or as directed by the Engineer. Each lift of the porous granular material shall be rolled with a vibratory roller meeting the requirements of Article 1101.01 of the IDOT Standard Specifications to obtain the desired keying or interlock and compaction. The Engineer shall verify that adequate keying has been obtained.

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A 3 inch nominal thickness top lift of capping aggregate having a gradation of CA-6 will be required when Porous Granular Embankment will be used under the pavement and shoulders. Capping aggregate will not be required when a granular sub-base is placed on top of the porous granular material is included as a contract item.

Construction equipment not necessary for the completion of the replacement material shall not be allowed on the undercut areas until compaction of the recommended thickness of the porous granular sub-grade is accomplished.

Full-depth sub-grade undercut should occur at limits determined by the Engineer. A transition slope to the full depth of undercut shall be made outside of the undercut limits at a taper of 1 foot longitudinal per 1 inch depth below the proposed sub-grade or bottom of the proposed aggregate sub-grade when included in the contract.

This work shall be measured for payment in accordance with Article 207.04 of the IDOT Standard Specifications. When specified on the contract, the theoretical elevation of the bottom of the aggregate sub-grade shall be used to determine the upper limit of Porous Granular Embankment, Special. The volume will be computed by the method of average end areas.

This work will be paid for at the contract unit price per CUBIC YARD for POROUS GRANULAR EMBANKMENT, SPECIAL which price shall include all equipment, labor and materials required to complete this work as specified, including capping aggregate.

Removal and disposal of defective existing material will be paid for at the contract unit price per CUBIC YARD for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS.

The Porous Granular Embankment, Special shall be used as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for an increase or decrease in quantities from the estimated quantities shown on the engineering drawings.

SP-13 SUB-BASE GRANULAR MATERIAL, TYPE B

Description. This work shall consist of furnishing and placing sub-base granular material on a prepared subgrade.

Materials shall meet the requirements of Article 1004.04 of the IDOT Standard Specifications except as modified herein. The coarse aggregate used for this material shall be crushed gravel, crushed stone, crushed concrete or recycled HMA grindings from approved stockpiles. All materials shall have a gradation of CA-6 and shall have a quality of Class D or better. All recycled materials require the approval of the Engineer prior to use.

Construction requirements shall meet the requirements of Section 311 of the IDOT Standard Specifications.

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Except where specified as included within other pay items such as sidewalk, curb and gutter, driveway pavement, pavement patching, and other applicable items, sub-base granular material shall be measured in place and the area computed in square yards and shall be paid for at the contract price per SQUARE YARD for SUB-BASE GRANULAR MATERIAL, TYPE B, of the compacted thickness as specified or as shown on the on the project drawings. Said price shall include the cost of furnishing, placing and compacting the sub-base granular material.

SP-14 TEMPORARY INTERSECTION AND DRIVEWAY RAMPS

This work shall consist of the construction, maintenance and removal of ramps for temporary access to all abutting side streets, properties and sidewalk crossings per the applicable portions of Article 406.08 of the IDOT Standard Specifications except as amended herein.

This work consists of the installation and removal of temporary ramps at all intersections and driveways where roadways, driveways and sidewalks are completely reconstructed. The width of the ramps shall match the abutting street, driveway and sidewalk to allow access across the entire length of the area being reconstructed. The Contractor may use stone, steel plates or any other means approved by the Engineer to maintain access. All sidewalk ramps must provide transitions not exceeding ½ inches or more in depth. If stone is used and kept clean, it may be used in the construction of the permanent improvements, with permission of the Engineer.

Temporary ramps shall be installed by 5:00 p.m. of the same day of commencing the pavement removal at each intersection.

This work shall be paid for at the contract unit price per EACH per intersection for TEMPORARY INTERSECTION RAMP or per EACH per driveway for TEMPORARY DRIVEWAY RAMP which will include all labor, equipment and materials for installation and removal at each intersection and driveway and to maintain the ramp in good condition during its use. Any installation and removal more than once shall not be paid for, but will be considered as an incidental expense to the Contract.

SP-15 PAVEMENT REMOVAL

This work shall consist of the removal and satisfactory disposal of all existing pavement and stabilized sub-base as per the applicable portions of Section 440 and 442 of the IDOT Standard Specifications and as shown on the Plans or as directed by the Engineer. All required saw cutting shall be included. This item applies to all designated full depth pavement removal.

This work shall consist of the removal and disposal of the existing pavement, consisting of PCC pavement, bituminous surface, and adjacent integral curb, where required for the construction of new pavement, storm sewers, water main, water services, and sanitary services, as shown on the Plans. Integral curb removal that is not adjacent to a pavement removal area will be paid for separately.

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This work shall be measured in square yards and will be paid for at the contract unit price per SQUARE YARD for PAVEMENT REMOVAL which shall be full compensation.

SP-16 BITUMINOUS MATERIALS (TACK COAT AND PRIME COAT)

This work shall consist of the application of bituminous materials (prime coat) MC-30 to aggregate base courses, and bituminous materials (tack coat) RC-70 to Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete, HMA Lifts, IL-4.75, and Brick.

The bituminous material for priming of aggregate bases shall be prepared and applied in accordance with Article 406.05 of the IDOT Standard Specifications. Prime Coat shall be applied at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft for aggregate bases.

The bituminous material for tacking of concrete or hot-mix-asphalt shall be prepared and applied in accordance with Article 406.05 of the IDOT Standard Specifications. Tack Coat shall be applied at a rate that will provide a residual asphalt rate on the prepared surface of 0.05 lb/sq ft for Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete and 0.025 lb/sq ft for HMA lifts, IL-4.75 & Brick.

Payment for such will be at the contract unit price per POUND of residual asphalt for BITUMINOUS MATERIALS (PRIME COAT) and BITUMINOUS MATERIALS (TACK COAT).

SP-17 HMA-BINDER AND SURFACE COURSE (D-1)

Effective: November 1, 2019

Revised: November 1, 2020

Description. This work shall consist of constructing a hot-mix asphalt (HMA) binder and/or surface course on a prepared base. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1004.03(c) to read:

“ (c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
HMA High ESAL	IL-19.0; Stabilized Subbase IL-19.0	CA 11 ^{1/}
	SMA 12.5 ^{2/}	CA 13 ^{4/} , CA 14, or CA 16
	SMA 9.5 ^{2/}	CA 13 ^{3/4/} or CA 16 ^{3/}
	IL-9.5	CA 16, CM 13 ^{4/}
	IL-9.5FG	CA 16

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HMA Low ESAL	IL-19.0L	CA 11 ^{1/}
	IL-9.5L	CA 16

1/ CA 16 or CA 13 may be blended with the CA 11.

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ The specified coarse aggregate gradations may be blended.

4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.”

Revise Article 1004.03(e) of the Supplemental Specifications to read:

“(e) Absorption. For SMA the coarse aggregate shall also have water absorption
≤ 2.0 percent.”

HMA Nomenclature. Revise the “High ESAL” portion of the table in Article 1030.01 to read:

“High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, Stabilized Subbase IL-19.0
	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5”

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

“1030.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be a SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

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Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the Department's Qualified Producer List, "Technologies for the Production of Warm Mix Asphalt (WMA)".

Mixture Design. Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

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High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}										
Sieve Size	IL-19.0 mm		SMA 12.5		SMA 9.5		IL-9.5mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{4/}	16	32 ^{4/}	34 ^{5/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 µm)			12	16	12	18				
#50 (300 µm)	6	15					4	15	15	30
#100 (150 µm)	4	9					3	10	10	18
#200 (75 µm)	3	6	7.0	9.0 ^{3/}	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}
#635 (20 µm)			≤ 3.0		≤ 3.0					
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

1/ Based on percent of total aggregate weight.

2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.

5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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Revise Article 1030.04(b)(1) of the Standard Specifications to read:

- “(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent, for IL-4.75 it shall be 3.5 percent and for Stabilized Subbase it shall be 3.0 percent at the design number of gyrations. The voids in the mineral aggregate (VMA) and voids filled with asphalt binder (VFA) of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0; Stabilized Subbase IL- 19.0	IL-9.5	IL-4.75 ^{1/}	
50	13.5	15.0	18.5	65 – 78 ^{2/}
70				65 - 75
90				

1/ Maximum draindown for IL-4.75 shall be 0.3 percent.

2/ VFA for IL-4.75 shall be 72-85 percent.”

Revise the table in Article 1030.04(b)(3) to read:

“VOLUMETRIC REQUIREMENTS, SMA 12.5 ^{1/} and SMA 9.5 ^{1/}			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 ^{4/}	3.5	17.0 ^{2/}	75 - 83
		16.0 ^{3/}	

1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

2/ Applies when specific gravity of coarse aggregate is ≥ 2.760 .

3/ Applies when specific gravity of coarse aggregate is < 2.760 .

4/ Blending of different types of aggregate will not be permitted.
For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be

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crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

“During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production.”

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

“IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours.”

Quality Control/Quality Assurance (QC/QA). Revise the third paragraph of Article 1030.05(d)(3) to read:

“ If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure.”

Add the following paragraphs to the end of Article 1030.05(d)(3):

“ Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement). Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed.”

Revise the second table in Article 1030.05(d)(4) and its notes to read:

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"DENSITY CONTROL LIMITS			
Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density, minimum
IL-4.75	Ndesign = 50	93.0 – 97.4 % ^{1/}	91.0%
IL-9.5FG	Ndesign = 50 - 90	93.0 – 97.4 %	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0 %	90.0%
IL-9.5, IL-9.5L,	Ndesign < 90	92.5 – 97.4 %	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0 %	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4 %	90.0%
SMA	Ndesign = 80	93.5 – 97.4 %	91.0%

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade."

Equipment. Add the following to Article 1101.01 of the Standard Specifications:

“ (h)Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:

- (1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);
- (2) The minimum length of the drum(s) shall be 57 in. (1480 mm);
- (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and
- (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN).”

Construction Requirements.

Add the following to Article 406.03 of the Standard Specifications:

“(j) Oscillatory Roller 1101.01”

Revise the third paragraph of Article 406.05(a) to read:

“ All depressions of 1 in. (25 mm) or more in the surface of the existing pavement shall be filled with binder. At locations where heavy disintegration and deep spalling exists, the

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area shall be cleaned of all loose and unsound material, tacked, and filled with binder (hand method).”

Revise Article 406.05(c) to read.

- “ (c) Binder (Hand Method). Binder placed other than with a finishing machine will be designated as binder (hand method) and shall be compacted with a roller to the satisfaction of the Engineer. Hand tamping will be permitted when approved by the Engineer.”

Revise the special conditions for mixture IL-4.75 in Article 406.06(b)(2)e. to read:

- “ e. The mixture shall be overlaid within 5 days of being placed.”

Revise Article 406.06(d) to read:

- “ (d) Lift Thickness. The minimum compacted lift thickness for HMA binder and surface courses shall be as follows.

MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19) - over HMA surfaces ^{1/}
	1 (25) - over PCC surfaces ^{1/}
IL-9.5FG	1 1/4 (32)
IL-9.5, IL-9.5L	1 1/2 (38)
SMA 9.5	1 3/4 (45)
SMA 12.5	2 (51)
IL-19.0, IL-19.0L	2 1/4 (57)

1/ The maximum compacted lift thickness for mixture IL-4.75 shall be 1 1/4 in. (32 mm).”

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

“TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Binder and Surface ^{1/}	V _D , P ^{3/} , T _B , 3W, O _T , O _B	P ^{3/} , O _T , O _B	V _S , T _B , T _F , O _T	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA ^{4/ 5/}	T _B , 3W, O _T	- -	T _F , 3W, O _T	

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Bridge Decks ^{2/}	T _B	--	T _F	As specified in Articles 582.05 and 582.06.
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- 3/ A vibratory roller (V_D) or oscillatory roller (O_T or O_B) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.
- 5/ The Contractor shall provide two steel-wheeled tandem (T_B) or three-wheel (3W) rollers for breakdown, except one of the (T_B) or (3W) rollers shall be 84 inches (2.14 m) wide and a weight of 315 pound per linear inch (PLI) (5.63 kg/mm). 3W, T_B and T_F rollers shall be a minimum of 280 lb/in. (50 N/mm). The 3W and T_B rollers shall be operated at a uniform speed not to exceed 3 mph (5 km/h), with the drive roll for T_B rollers nearest the paver and maintain an effective rolling distance of not more than 150 ft (45 m) behind the paver.”

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

- “ O_T - Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).
- O_B - Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m).”

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

“As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

Production Testing. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

- “(a) High ESAL Mixtures. A test strip of 300 ton (275 metric tons), except for SMA mixtures it will be 400 ton (363 metric ton), will be required for each mixture on each contract at the beginning of HMA production for each construction year according to the Manual of Test Procedures for Materials “Hot Mix Asphalt Test Strip Procedures”. At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results.”

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

“The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design’s G_{mb} .”

Basis of Payment. Replace the second through the fifth paragraphs of Article 406.14 with the following:

“ HMA binder and surface courses will be paid for at the contract unit price per ton (metric ton) for MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS; HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition, friction aggregate, and Ndesign specified.”

SP-18 HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (CBM) (D-1)

Effective: March 1, 2016

Revised: March 15, 2018

Add the following to Article 406.02 of the Standard Specifications.

“ (d) Longitudinal Joint Sealant (LJS) (Note 2.)

Add the following to Section 1032 of the Standard Specifications.

“1032.12 Longitudinal Joint Sealant (LJS) Longitudinal joint sealant (LJS) will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, “Performance Graded Asphalt Binder Acceptance Procedure” with the following exceptions. Articles 3.1.9 and 3.4.1.4 of the policy memorandum will be excluded. The bituminous material used for the LJS shall be according to the following table. Elastomers shall be added to a base asphalt and shall be either a styrene-butadiene diblock or triblock copolymer without oil extension, or a styrene-butadiene rubber. Air blown asphalt, acid modification, or other modifiers will not be allowed. LJS in the form of pre-formed rollout banding may also be used.

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Test	Test Requirement	Test Method
Dynamic shear @ 82°C (unaged), G*/sin δ , kPa	1.00 min.	AASHTO T 315
Creep stiffness @ -18°C (unaged), Stiffness (S), MPa m-value	300 max. 0.300 min.	AASHTO T 313
Ash, %	1.0 - 4.0	AASHTO T 111
Elastic Recovery, 100 mm elongation, cut immediately, 25°C, %	70min.	ASTM D 6084 (Procedure A)
Separation of Polymer, Difference in °C of the softening point (ring and ball)	3 max.	ITP Separation of Polymer from Asphalt Binder”

Add the following to Article 406.03 of the Standard Specifications.

“(j) Longitudinal Joint Sealant (LJS) Pressure Distributor (Note 2.)

(k) Longitudinal Joint Sealant (LJS) Melter Kettle (Note 3.)

Note 2. When a pressure distributor is used to apply the LJS, the distributor shall be equipped with a heating and recirculating system along with a functioning auger agitating system or vertical shaft mixer in the hauling tank to prevent localized overheating. The distributor shall be equipped with a guide or laser system to aid in proper placement of the LJS application.

Note 3. When a melter kettle is used to transport and apply the LJS longitudinal joint sealant, the melter kettle shall be an oil jacketed double-boiler with agitating and recirculating systems. Material from the kettle may be dispensed through a pressure feed wand with an applicator shoe or through a pressure feed wand into a hand-operated thermal push cart.”

Revise Article 406.06(g) (2) of the Standard Specifications to read:

“(2) Longitudinal Joints. Unless prohibited by stage construction, any HMA lift shall be complete before construction of the subsequent lift. The longitudinal joint in all lifts shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

When stage construction prohibits the total completion of a particular lift, the longitudinal joint in one lift shall be offset from the longitudinal joint in the preceding lift by not less than 3 in. (75 mm). The longitudinal joint in the surface course shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

A notched wedge longitudinal joint shall be used between successive passes of HMA binder course that has a difference in elevation of greater than 2 in. (50 mm) between lanes on pavement that is open to traffic.

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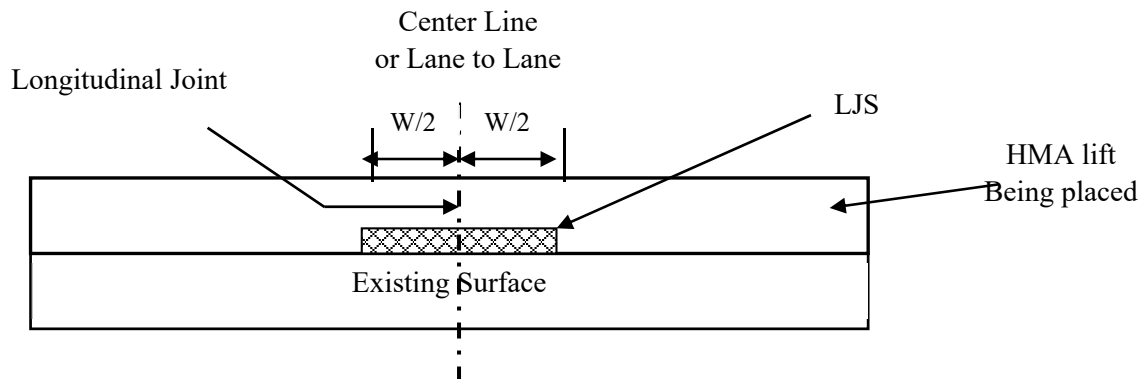
The notched wedge longitudinal joint shall consist of a 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the lane line, a 9 to 12 in. (230 to 300 mm) wide uniform taper sloped toward and extending into the open lane, and a second 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the outside edge.

The notched wedge longitudinal joint shall be formed by the strike off device on the paver. The wedge shall then be compacted by the joint roller.

When the use of longitudinal joint sealant (LJS) is specified, it shall be applied for all lifts of paving as shown on the plans. The surface to which the LJS is applied shall be dry and cleaned of all dust, debris, and any substances that will prevent the LJS from adhering. Cleaning shall be accomplished by means of a sweeper/vacuum truck, power broom, air compressor or by hand. The LJS may be placed before or after the tack or prime coat. When placed after the tack or prime coat, the tack or prime shall be fully cured prior to placement of the LJS.

The LJS application shall be centered under the joint of the HMA lift being constructed within 2 in. (50 mm) of the joint.

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The width and minimum application rate shall be according to the following table:

LJS Application Rate Table		
Overlay Thickness in. (mm)	LJS Width "W" in. (mm)	Application Rate ^{1/} lb/ft (kg/m)
HMA Mixtures ^{2/}		
3/4 (19)	18 (450)	0.88 (1.31)
1 (25)	18 (450)	1.15 (1.71)
1 1/4 (32)	18 (450)	1.31 (1.95)
1 1/2 (38)	18 (450)	1.47 (2.19)
1 3/4 (44)	18 (450)	1.63 (2.43)
2 (50)	18 (450)	1.80 (2.68)
2 1/4 (60)	18 (450)	1.96 (2.92)
2 1/2 (63)	18 (450)	2.12 (3.16)
2 3/4 (70)	18 (450)	2.29 (3.41)
3 (75)	18 (450)	2.45 (3.65)
3 1/4 (83)	18 (450)	2.61 (3.89)
3 1/2 (90)	18 (450)	2.78 (4.14)
3 3/4 (95)	18 (450)	2.94 (4.38)
4 (100)	18 (450)	3.10 (4.62)
SMA Mixtures ^{2/}		
1 1/2 (38)	18 (450)	1.26 (1.88)
1 3/4 (44)	18 (450)	1.38 (2.06)
2 (50)	18 (450)	1.51 (2.25)

- 1/ The application rate has a surface demand for liquid included within it. The nominal thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application. The width and weight/FOOT (mass/meter) shall be maintained.
- 2/ In the event of a joint between an SMA and HMA mixture, the SMA application rate will be used.

The Contractor shall furnish to the Engineer a bill of lading for each tanker supplying material to the project. The application rate of LJS will be verified within the first 1000 ft (300 m) of the day's scheduled application length and every 12000 ft (3600 m) the

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remainder of the day. For projects less than 3000 ft (900 m), the rate will be verified once. A suitable paper or pan shall be placed at a random location in the path of the placement for the LJS. After application of the LJS, the paper or pan shall be picked up and weighed. The weight per FOOT will be calculated. The tolerance from the plan target weight/FOOT (mass/meter) from the LJS Application Rate Table shall be ± 15 percent. The Contractor shall replace the LJS in the area where the sample was taken.

A one quart sample shall be taken from the pressure distributor or melting kettle at the jobsite once for each contract and sent to the Central Bureau of Materials.

The LJS shall be applied in a single pass with a pressure distributor, melter kettle, or hand applied from a roll for HMA lifts up to 2 in. (50 mm) in thickness. The LJS shall be applied in two passes for HMA lifts between 2 and 4 in. (50 and 100 mm) in thickness. At the time of installation the pavement surface temperature and the ambient temperature shall be a minimum of 40 °F (4 °C) and rising.

The LJS shall be applied at a width of not less than or greater than 1 ½ in. (38 mm) of the width specified. If the LJS flows more than 2 in. (50 mm) from the initial placement width, LJS placement shall stop and remedial action shall be taken.

When starting another run of LJS placement, suitable release paper shall be placed over the previous application of LJS to prevent doubling up of thickness of LJS.

The LJS shall be suitable for construction traffic to drive on without pickup or tracking of the LJS within 30 minutes of placement. If pickup or tracking occurs, LJS placement shall stop and damaged areas shall be repaired.

Prior to start of paving of pavement course, ensure the paver end plate and grade control device is adequately raised above the finished height of the LJS.

The LJS shall not flush to the final surface of the HMA pavement.”

Add the following paragraph after the second paragraph of Article 406.13(b) of the Standard Specifications.

“Bituminous material for longitudinal joint sealant will be measured for payment in place in feet.”

Add the following paragraph after the first paragraph of Article 406.14 of the Standard Specifications.

“Longitudinal joint sealant will be paid for at the contract unit price per FOOT for LONGITUDINAL JOINT SEALANT.”

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When the LJS is specified, the longitudinal joint density testing for QC/QA, QCP, or PFP will not be required on the joint(s) with the LJS and the pay adjustments will not be applied.

SP-19 FRICTION AGGREGATE (D-1)

Effective: January 1, 2011

Revised: November 1, 2019

Revise Article 1004.03(a) of the Standard Specifications to read:

“1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination</u> ^{5/ 6/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}

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Use	Mixture	Aggregates Allowed	
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 or IL-9.5L	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	
	SMA Ndesign 50 Surface		
HMA High ESAL	D Surface and Binder IL-9.5 SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		25% Limestone	Dolomite
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} : Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Dolomite ^{2/}	Any Mixture E aggregate

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Use	Mixture	Aggregates Allowed	
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone
		75% Crushed Gravel ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag
HMA High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} :	
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Crushed Gravel ^{2/} , Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume.”
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80.”

SP-20 GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006

Revised: April 1, 2016

Add the following to the end of article 1032.05 of the Standard Specifications:

“(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, a 50 g sample of the GTR shall conform to the following gradation requirements:

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 µm)	95 ± 5
No. 50 (300 µm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

“A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent.”

Revise 1030.02(c) of the Standard Specifications to read:

“(c) RAP Materials (Note 5)1031”

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

SP-21 HAMBURG WHEEL AND TENSILE STRENGTH RATIOS TESTING (D-1)

Effective: December 1, 2020

Revise Article 1030.04(d) of the Standard Specifications to read:

- “ (d) Verification Testing. During mixture design, prepared samples shall be submitted to the District laboratory for verification testing. The required testing, and number and size of prepared samples submitted, shall be according to the following tables.

High ESAL – Required Samples for Verification Testing	
Mixture	Hamburg Wheel Testing ^{1/ 2/}
Binder	total of 3 - 160 mm tall bricks
Surface	total of 4 - 160 mm tall bricks

- 1/ The compacted gyratory bricks for Hamburg wheel testing shall be 7.5 ± 0.5 percent air voids.
- 2/ If the Contractor does not possess the equipment to prepare the 160 mm tall brick(s), twice as many 115 mm tall compacted gyratory bricks will be acceptable.

New and renewal mix designs shall meet the following requirements for verification testing.

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- (1) Hamburg Wheel Test. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements ^{1/}	
PG Grade	Minimum Number of Wheel Passes
PG 58-xx (or lower)	5,000
PG 64-xx	7,500
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

- 1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or below, loose warm mix asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg wheel specimens.
- 2/ For IL-4.75 binder course, the minimum number of wheel passes shall be reduced by 5,000.
- (2) Tensile Strength. Tensile strength testing shall be according to the Illinois Modified AASHTO T 283 procedure. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder, except polymer modified PG XX-28 or lower asphalt binders which shall have a minimum tensile strength of 70 psi (483 kPa). The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa).

If a mix fails the Department's verification testing, the Contractor shall make necessary changes to the mix and provide passing Hamburg wheel and tensile strength test results from a private lab. The Department will verify the passing results."

Delete paragraph six, seven and eight of Article 1030.06(a).

Add the following to the end of Article 1030.06(a) of the Standard Specifications to read:

"Mixture sampled to represent the test strip shall include approximately 60 lb (27 kg) of additional material for the Department to conduct Hamburg wheel testing. Within two working days after sampling, the Contractor shall deliver prepared samples to the District laboratory for verification testing. The required number and size of prepared samples submitted for the Hamburg wheel testing shall be according to the "High ESAL - Required Samples for Verification Testing" table in Article 1030.04(d) above.

Mixture sampled during production for Hamburg wheel will be tested by the Department. The Hamburg wheel results shall meet the requirements specified in Article 1030.04(d) above.

Upon notification by the Engineer of a failing Hamburg wheel test and prior to restarting production, the Contractor shall make necessary adjustments approved by the Engineer to the mixture production and submit another mixture sample for the Department to conduct Hamburg wheel testing. Prior produced material may be paved out provided all other mixture criteria is being met. Upon consecutive failing Hamburg wheel tests, no additional mixture shall be produced until the Engineer receives passing Hamburg wheel test results.

The Department may conduct additional Hamburg wheel testing on production material as determined by the Engineer.”

SP-22 RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revised: January 2, 2021

Revise Section 1031 of the Standard Specifications to read:

“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

1031.01 Description. Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). RAS is the material produced from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material by weight of RAS, as defined in the Bureau of Materials Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Sources”. RAS shall come from a facility source on the Department’s “Qualified Producer List of Certified Sources for Reclaimed Asphalt Shingles” where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

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- (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
- (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual RAP stockpiles meeting one of the following definitions. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. “Homogeneous Surface”).

Prior to milling, the Contractor shall request the Department provide documentation on the quality of the RAP to clarify the appropriate stockpile.

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the No. 4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mixture composition of the mix design.
- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered “homogeneous” with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. Conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate “D” Quality (Conglomerate DQ). Conglomerate DQ RAP stockpiles shall be according to Articles 1031.02(a)(1)-1031.02(a)(3), except they may also consist of RAP from HMA shoulders, bituminous stabilized subbases, or HMA (High or Low ESAL) binder

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mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content.

- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as “Non-Quality”.

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, non-bituminous surface treatment (i.e. high friction surface treatments), pavement fabric, joint sealants, plant cleanout, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) or fine FRAP up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be B quality or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

Additional processed RAP/FRAP/RAS shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the original stockpile after the test results for the working pile are found to meet the requirements specified in Articles 1031.03 and 1031.04.

1031.03 Testing. RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
- (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2,000 tons (1,800 metric tons) and one sample per 2,000 tons (1,800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4,000 tons (3,600 metric tons).
 - (2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the Department proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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Each sample shall be split to obtain two equal samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction on the other test sample according to Illinois Modified AASHTO T 164. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to the Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1,000 tons (900 metric tons) and one sample per 500 tons (450 metric tons) or a minimum of once per week, whichever is more frequent, thereafter. A minimum of five samples are required for stockpiles less than 1,000 tons (900 metric tons).

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The

Contractor shall perform a washed extraction and test for unacceptable materials on the other test sample according to Illinois Modified AASHTO T 164. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

The Contractor shall obtain and make available all of the test results from the start of the original stockpile.

1031.04 Evaluation of Tests. Evaluation of test results shall be according to the following.

- (a) Limits of Precision. The limits of precision between the Contractor's and the Department's split sample test results shall be according to the following.

Test Parameter	Limits of Precision		
	RAP	FRAP	RAS
% Passing			
½ IN. (12.5 mm)	6.0 %	5.0 %	
# 4 (4.75 mm)	6.0 %	5.0 %	
# 8 (2.36 mm)	4.0 %	3.0 %	4.0 %
# 30 (600 µm)	3.0 %	2.0 %	4.0 %
# 200 (75 µm)	2.5 %	2.2 %	4.0 %
Asphalt Binder	0.4 %	0.3 %	3.0 %
G _{mm}	0.035	0.030	

If the test results are outside the above limits of precision, the Department will immediately investigate.

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- (b) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
½ in. (12.5 mm)	± 8 %
# 4 (4.75 mm)	± 6%
# 8 (2.36 mm)	± 5 %
# 16 (1.18 mm)	
# 30 (600 µm)	± 5 %
# 200 (75 µm)	± 2.0 %
Asphalt Binder	± 0.4 % ^{1/}
G_{mm}	± 0.03 % ^{2/}

1/ The tolerance for FRAP shall be $\leq$ 0.3 percent.

2/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, “Determination of Aggregate Bulk (Dry) Specific Gravity (G_{sb}) of Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)”.

If more than 20 percent of the test results for an individual parameter (individual sieves, G_{mm} , and/or asphalt binder content) are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the Department for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for solvent extractions according to the document “Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)”.

- (c) Evaluation of RAS and RAS Blended with Manufactured Sand or Fine FRAP Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
# 8 (2.36 mm)	± 5 %
# 16 (1.18 mm)	± 5 %
# 30 (600 µm)	± 4 %
# 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If more than 20 percent of the test results for an individual parameter (individual sieves and/or asphalt binder content) are out of the above tolerances, or if the unacceptable material exceeds

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0.5 percent by weight of material retained on the No. 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the Department for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

(a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate DQ stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

(1) RAP from Class I, HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Class I binder, HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C quality coarse aggregate.

(3) RAP from BAM stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

(b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus No. 4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate sample to the District Office. Consultant laboratory services will be at no additional cost to the Department. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

1031.06 Use of RAP/FRAP and/or RAS in HMA. The use of RAP/FRAP and/or RAS shall be the Contractor's option when constructing HMA in all contracts.

(a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

(1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

(2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) surface and binder mixture applications.

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- (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. FRAP from conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus No. 4 (4.75 mm) homogeneous FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
- (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
- (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement (ABR) shall not exceed the amounts listed in the following table.

HMA Mixtures - RAP/RAS Maximum ABR % ^{1/ 2/}			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

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- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

HMA Mixtures - FRAP/RAS Maximum ABR % ^{1/2/}

Ndesign	Binder	Surface	Polymer Modified Binder or Surface
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA	- -	- -	25

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS stockpiles are tested and found that no more than 20 percent of the individual parameter test results, as defined in Article 1031.04, are outside of the control tolerances set for the original RAP/FRAP and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

The RAP, FRAP, and RAS stone bulk specific gravities (Gsb) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity (Gsb) of Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

1031.08 HMA Production. HMA production utilizing RAP/FRAP and/or RAS shall be as follows.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP/FRAP and/or RAS feed system to remove or reduce oversized material.

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If the RAP/FRAP and/or RAS control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and/or RAS and either switch to the virgin aggregate design or submit a new mix design.

- (a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.
- (b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of batch sizes. The portion of RAS shall be controlled accurately to within batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
 - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate and RAP/FRAP/RAS moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP/RAS are recorded in a wet condition.)

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- i. A positive dust control system shall be utilized when the combined contribution of reclaimed material passing the No. 200 sieve exceeds 1.5 percent.

(2) Batch Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.09 RAP in Aggregate Applications. RAP in aggregate applications shall be according to the Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications" and the following.

- (a) RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders, Type B shall be as follows.
 - (1) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply.
 - (2) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted.
- (b) RAP in Aggregate Subgrade Improvement (ASI). RAP in ASI shall be according to Article 1031.06, except "Conglomerate DQ" and "Non-Quality" may be used."

SP-23 COMBINATION CONCRETE CURB & GUTTER REMOVAL

This work shall consist of the removal existing curb and gutter (various types) at the locations shown on the plans or as directed and marked by the Engineer in the field in accordance with Sections 202 and 606 of the Standard Specifications for Road and Bridge Construction and as amended and described herein.

The Contractor shall machine-saw cut a perpendicular clean joint between that portion of the curb or gutter to be removed and that, which is to remain in place. If the Contractor removes or damages the existing curb or gutter outside the limits designated by the Engineer for removal and replacement, he will be required to remove and replace that portion at his own expense to the satisfaction of the Engineer. The Contractor shall also machine saw cut a longitudinal joint where necessary and/or otherwise directed by the Engineer to remove curb tied to adjacent concrete pavement.

At those locations where curb removal operations fall within the Critical Root Zone (CRZ) the Contractor will be required to root prune 6-inches behind the curbing so as to neatly cut the tree roots. Depth of cut shall be 12 inches for curb removal and replacement and 24 inches for structural work.

During removal operations, Contractor shall take special care not to damage or extend sawed joint into adjacent appurtenances such as driveways and sidewalks which are to remain in place. During machine sawing operations Contractor shall also take special care to remove, clean, or otherwise account for any residue / slurry produced by the sawing so material will not be tracked by either vehicular or foot traffic onto adjacent appurtenances which are to remain in place.

This work will be paid for at the contract unit price per FOOT for COMBINATION CURB AND GUTTER REMOVAL which price shall be payment in full for all work specified herein.

SP-24 COMBINATION CONCRETE CURB AND GUTTER

This work shall consist of constructing combination curb and gutter as shown on the engineering drawings in accordance with Section 606 of the IDOT Standard Specifications and the details shown on the engineering drawings. Curb and gutter in the driveway shall be depressed. The thickness of the gutter section at the pavement edge shall match existing curb where spot repairs are performed or as shown on the typical cross-section(s), but not less than 10-inches unless approved by the Engineer. The concrete shall be Class SI as specified on Article 1020 of the IDOT Standard Specifications. Unless an existing aggregate base is present and considered suitable by the Engineer, a minimum 4 inch CA-6 Aggregate Base shall be excavated for, and constructed, under the curb and gutter at no additional cost.

Expansion joints shall be located at locations where the new curb joins the existing curb. Expansion joints shall consist of two No. 6 plain round bars each 18-inches long with expansion caps on one end of each bar and a 1/2-inch preformed expansion joint filler materials cut to the same shape as

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the curb or curb and gutter. Contraction joints shall be located at not more than 12-1/2 feet intervals between expansion joints. Contraction joints shall be saw cut 2-inches in depth within 48 hours of the placement of concrete. Joints shall be sealed in accordance with Article 420.12 of the IDOT Standard Specifications and as directed by the Engineer. Curbs constructed over a utility trench shall be reinforced with three #5 reinforcing bars for a length of 10 ft. centered on the trench.

New finished curbing shall be cured by the Membrane Curing Methods in accordance with Section of the IDOT Standard Specifications using Membrane Curing Compound Type II.

In order to protect existing trees and utility poles, the Contractor shall hand form curb and gutter at locations directed by the Engineer.

This work will be paid for at the contract unit price per FOOT for COMBINATION CONCRETE CURB AND GUTTER for the type of curb specified and as shown in the drawings. No additional payment will be made for expansion joints, reinforcement over utility trenches, finishing, curing, sealing, backfilling and other appurtenant work, all of which items shall be considered as incidental. Depressed curb will be paid as Combination Curb & Gutter for the type being installed. In addition, all work associated with the excavation after removal of the existing curb and gutter, disposal of excavated materials and the placement and compaction of 6-inch sub-base granular materials shall be included.

SP-25 CONCRETE CURB (SPECIAL)

This work shall consist of constructing concrete curb adjacent to brick paver areas as shown on the plans or as directed by the Engineer in accordance with Section 606 of the IDOT Standard Specifications and the detail shown in the plans.

The concrete shall be Class SI as specified on Article 1020 of the IDOT Standard Specifications. A minimum 4 inch CA-6 Aggregate Base shall be excavated for, and constructed, under the curb at no additional cost. The bottom of the curb shall match the bottom of the adjacent concrete base for the bricks. The top of the curb shall be flush with the top of the adjacent bricks or sidewalk.

Expansion joints shall be located at locations where the new curb joins other curb or sidewalk. Expansion joints shall consist of two No. 6 plain round bars each 18-inches long with expansion caps on one end of each bar and a 1/2-inch preformed expansion joint filler materials cut to the same shape as the curb or curb and gutter. Contraction joints shall be provided at the direction of the Engineer. Contraction joints shall be saw cut 2-inches in depth within 48 hours of the placement of concrete.

New finished curbing shall be cured by the Membrane Curing Methods in accordance with Section of the IDOT Standard Specifications using Membrane Curing Compound Type II.

This work will be paid for at the contract unit price per FOOT for CONCRETE CURB (SPECIAL). No additional payment will be made for expansion joints, finishing, curing, sealing, backfilling and other appurtenant work, all of which items shall be considered as incidental.

SP-26 DRIVEWAY PAVEMENT AND SIDEWALK REMOVAL

This work shall consist of saw cutting, removal and satisfactory disposal of all existing driveway pavement (PCC or Bituminous) and sidewalk designated for removal per the applicable portions of Section 440 of the IDOT Standard Specifications as modified herein and as shown on the engineering drawings or as directed by the Engineer.

The existing pavement shall be saw cut full depth along the existing contraction joints or where specified otherwise by the Engineer. All saw-cutting will be considered included in this pay item and will not be paid for separately.

Any damage to private driveways shall be repaired at the Contractor's expense. If additional sidewalk is removed or damaged due to negligence on the part of the Contractor, the additional quantity of sidewalk removal and replacement will not be measured for payment and shall be repaired at Contractor's expense. Extent of any repair required shall be determined by the Engineer.

DOES NOT APPLY

~~Those areas where it is intended for the surface course of the pavement to flare into existing driveways beyond the limits of the fully improved areas will not be included for payment as Driveway Pavement Removal but will be paid for under the square yard item for HMA Surface Removal. Saw cutting of driveways shall be considered incidental to HMA Surface removal.~~

Owner calls to Contractor's attention that earth excavation required to achieve the required dimensions and depth of the proposed driveway and sidewalk installation as shown on the engineering drawings or as directed by the Engineer is incidental to the contract unit price items for sidewalk and driveway pavement as specified in these Special Provisions.

This work will be paid for at the contract unit price per SQUARE YARD for DRIVEWAY PAVEMENT REMOVAL, and per SQUARE FOOT for SIDEWALK REMOVAL, which prices shall be payment in full for furnishing all materials, labor and equipment, and disposal necessary for the completion of this work.

SP-27 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

This item shall consist of the construction of driveway pavements as per detail and at locations shown on the engineering drawings or as directed by the Engineer. This item shall include all earth excavation that is required including lowering, widening, and/or relocating to construct the driveway pavement as depicted in the engineering drawings and/or directed by the Engineer.

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The driveway shall be constructed on an aggregate base consisting of a 4-inch (minimum) thickness of compacted CA-6 on a dry natural or compacted subgrade. Driveways shall have a minimum thickness of 6 inches for residential area and 8" for commercial driveways.

The concrete shall meet the requirements of Article 1020 of the IDOT Specifications for Class PV Portland Cement Concrete and reinforced with fiber mesh additive.

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Fiber mesh shall be uniformly dispersed in concrete mix at manufacturer's recommended rate, but not less than 1.5 lb/cu. yd. Synthetic fiber shall be fibrillated polypropylene fibers engineered and designed for use in concrete, complying with ASTM C 1116, Type III, 1/2 to 1-1/2 inches long. Subject to compliance with requirements, products that may be incorporated into the Work include but are not limited to the following:

1. Fibrasol F; Axim Concrete Technologies
2. Fibermesh; Fibermesh, Division Of Synthetic Industries
3. Forta; Forta Corporation
4. Grace Fibers; W. R. Grace & Co., Construction Products Division

Formwork for PCC Driveway Pavement shall be a minimum of 2x6. No 2x4 forms will be allowed during construction.

Owner calls to Contractor's attention that earth excavation required to achieve the required dimensions and depth of the proposed driveway installation as shown on the engineering drawings or as directed by the Engineer is incidental to the contract unit price items for driveway pavement as specified in these Special Provisions.

This work will be paid for at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6" or PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8", which shall include payment for the earth excavation, aggregate base, fiber mesh additive and all work specified herein.

SP-28 PORTLAND CEMENT CONCRETE SIDEWALK

This item shall consist of the construction of sidewalks as per plan details and at locations shown on the engineering drawings or as directed by the Engineer. This item shall include all earth excavation that is required including lowering, widening, and/or relocating to construct the sidewalk as depicted in the engineering drawings and/or directed by the Engineer.

The Concrete shall conform to Section 1020 of the IDOT Specifications for Class SI Portland Cement Concrete.

Construction shall conform to all the applicable requirements of Section 424 of the IDOT Specifications except as modified herein.

The sidewalk shall be constructed on an aggregate base consisting of a 4-inch (minimum) thickness of compacted CA-6 on a dry natural or compacted subgrade. Unless an existing aggregate base is present and considered suitable by the Engineer, a minimum 4 inches CA-6 Aggregate Base shall be excavated for, and constructed, under the sidewalk at no additional cost. The sidewalk shall have a minimum thickness of 5 inches which shall be increased to 6 inches at residential driveways and key walks or 8 inches at commercial driveways.

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Formwork for P.C.C. Sidewalk shall be a minimum of 2x6. No 2x4 forms will be allowed during construction.

Sidewalk at driveways shall be reinforced with fiber mesh additive. Fiber mesh shall be as specified under the Special Provision PCC Driveway Pavement.

The sidewalk shall be constructed with saw cut contraction joints spaced evenly to create a square jointing pattern. The contraction joints shall be laid out by the Contractor for approval by the Engineer. The contraction shall be one inch in depth.

Sidewalk shall have light broom finish perpendicular to path of travel.

An isolation joint filler strip is to be used between the new concrete and all existing building elevations, per Section 1053 for Preformed Elastomeric Seals for Concrete of IDOT Standard Specifications.

Expansion joints consisting of ½ inches preformed joint filter shall be placed wherever the sidewalk abuts all curbs, driveways, poles, seat wall planters, granite planters or other structures. The expansion material shall extend for the full depth of the concrete. Expansion material adjacent to brick paving concrete base is included in the cost of BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

Sidewalks constructed along the back of combination concrete curb and gutter shall have thickened edges and 12" long No. 5 dowel bars to tie the sidewalk to the adjacent curb and therein prevent settlement. Sidewalks constructed along the seat wall planters and granite planters paving shall have thickened edges and 18" long No. 5 dowel bars to tie the sidewalk to the adjacent planters and therein prevent settlement. Sidewalks constructed along brick paving shall have thickened edges. The tie bars for tying the thickened sidewalk to the brick paving concrete base are included in the cost of BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

Curb ramps will be measured for payment as SIDEWALK, 5". Where required by the engineering drawings and/or Engineer, side curbs shall be incidental to the applicable pay items. No deduction will be made for detectable warnings located within the ramp.

Owner calls to Contractor's attention that earth excavation required to achieve the required dimensions and depth of the proposed sidewalk installation as shown on the engineering drawings or as directed by the Engineer is incidental to the contract unit price items for sidewalk as specified in these Special Provisions.

This work will be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified, which shall include payment for the excavation, aggregate base, fiber mesh additive, expansion joints, saw cut contraction joints, tie dowel bars, excavation and disposal of extra soil materials, and all work specified herein.

SP-29 PORTLAND CEMENT CONCRETE CARRIAGE WALK

Description. This item shall consist of the construction of carriage walks as per plan details and at locations shown on the engineering drawings or as directed by the Engineer. This item shall include all earth excavation that is required including lowering, widening, and/or relocating to construct the carriage walk as depicted in the engineering drawings and/or directed by the Engineer.

Materials. The Concrete shall conform to Section 1020 of the IDOT Specifications for Class SI Portland Cement Concrete.

Installation. Construction shall conform to all the applicable requirements of Section 424 of the IDOT Specifications except as modified herein.

The carriage walk shall be constructed on an aggregate base consisting of compacted CA-6 that extends down to the depth of the adjacent subgrade of the roadway. Unless an existing aggregate base is present and considered suitable by the Engineer, a minimum 4 inches CA-6 Aggregate Base shall be excavated for, and constructed, under the sidewalk at no additional cost. The carriage walk depth shall align with the bottom of the adjacent curb and gutter.

Carriage walk shall have light broom finish perpendicular to path of travel.

Formwork for P.C.C. Carriage Walk shall be a minimum of 2x6. No 2x4 forms will be allowed during construction.

Carriage walk at driveways shall be reinforced with fiber mesh additive. Fiber mesh shall be as specified under the Special Provision PCC Driveway Pavement.

The carriage walk shall be constructed with saw cut contraction joints spaced evenly. The contraction joints shall be laid out by the Contractor for approval by the Engineer. The contraction shall be one inch in depth.

Expansion joints consisting of ½ inches preformed joint filter shall be placed wherever the carriage walk abuts all curbs, driveways, poles, seat wall planters, granite planters or other structures. The expansion material shall extend for the full depth of the concrete. Expansion material adjacent to brick paving concrete base is included in the cost of BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

Carriage walks constructed between the back of combination concrete curb and gutter and the seatwall planters or granite planters shall have 26" long No. 5 dowel bars to tie the carriage walk to the adjacent curb and planter and therein prevent settlement. Carriage walks constructed between the back of combination concrete curb and gutter and the brick paving areas shall have 12" long No. 5 dowel bars to tie the carriage walk to the adjacent curb and therein prevent settlement. The tie bars for tying the carriage walk to the brick paving concrete base are included in the cost of BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

Owner calls to Contractor's attention that earth excavation required to achieve the required dimensions and depth of the proposed carriage walk installation as shown on the engineering drawings or as directed by the Engineer is incidental to the contract unit price items for sidewalk as specified in these Special Provisions.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE CARRAIGE WALK which shall include payment for the excavation, aggregate base, fiber mesh additive, expansion joints, saw cut contraction joints, tie dowel bars, excavation and disposal of extra soil materials, and all work specified herein.

SP-30 PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH)

Description. This item consists of the installation of variable depth Portland cement concrete pavement adjacent to a decorative brick cross walk.

Materials. The concrete shall meet the requirements of Section 1020 of the Standard Specifications for class PV concrete.

Installation. The concrete pavement shall not be installed until the Aggregate Subgrade Improvement, 12" and Hot-Mix Asphalt Binder Course has been constructed. The pavement shall be saw cut to the dimensions shown on the plans and the pavement removed to the subgrade elevation. The removal of the pavement shall be paid for separately as PAVEMENT REMOVAL. The top lift of the Aggregate Subgrade Improvement shall be repaired, as determined by the Engineer, and recompacted. This work shall be included in the pay item PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH).

The concrete pavement shall be placed on the prepared sub-base to a depth ranging from 10" adjacent to the HMA Pavement to 12.5" adjacent to the decorative brick crosswalk. Placement and curing of the concrete shall be in accordance with Section 420. A 6" X 6" - #6 welded wire pavement fabric is to be placed 3" below the surface of the PORTLAND CEMENT CONCRETE (VARIABLE DEPTH). The cost of this fabric and it's installation will be included in the cost of the PORTLAND CEMENT CONCRETE (VARIABLE DEPTH).



During the time the approach roadways are open to traffic, and before the final surface course is placed, the Contractor shall provide and maintain temporary bituminous ramps at both upstream and downstream ends of the concrete pavement, in accordance with the applicable portions of Article 406.08. The cost of the installation and removal of the temporary ramps shall be included in the cost of PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH).

Method of Measurement. Portland cement concrete pavement (variable depth) will be measured for payment in place and the area computed in SQUARE YARDS.

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Basis of Payment. This work will be paid for at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH) which price shall include all labor, equipment, and materials necessary to perform said work.

SP-31 PROTECTIVE COAT

Protective Coat shall be applied to all new concrete gutter flags, faces and tops of curbs, sidewalks and driveway pavements in accordance with the requirements of Article 420.18 of the IDOT Standard Specifications except that it shall be applied regardless of the time of year.

The Portland Cement Concrete surface shall be cured in accordance with Article 1020.13 of the IDOT Standard Specifications with the following exception: "On non-traffic Portland Cement Concrete surface areas, the use of linseed oil emulsion curing compound will be permitted. The linseed oil curing compound shall meet the requirements of Article 1022.01 of the IDOT Standard Specifications. In addition, the oil phase of the emulsion shall consist of 85 percent by volume boiled linseed oil and 15 percent by volume Z-8 bodied linseed oil. The linseed oil emulsion curing compound shall be applied with a mechanical sprayer meeting the requirements of Article 1101.09(b). Membrane curing will not be permitted between November 1 and April 15."

The protective coat will be paid for at the contract unit price per SQUARE YARD for PROTECTIVE COAT, which price shall be payment in full for furnishing all materials, labor and equipment necessary to complete the work as herein specified and to the satisfaction of the Engineer. The curing will not be paid for separately but shall be included in the item requiring curing.

SP-32 RELOCATE SIGN PANEL ASSEMBLY

Description. This work shall be according to Section 724 of the Standard Specifications and the following:

Hardware required to relocate sign panel to light poles shall be included in the cost of the relocate sign panel unit price. Light pole sign panel relocation methods and means to be approved by the Engineer prior to commencement of work.

Method of Measurement: Relocate Sign Panel Assembly will be measured per each post regardless of the number of signs on the cluster. New posts, when required, will be paid for separately as METAL POST of the Type specified.

This work will be paid for at the contract unit price for each RELOCATE SIGN PANEL ASSEMBLY, of the type specified.

SP-33 SIGN TO BE RELOCATED

Description. This work shall of removing, storing, and reinstalling the decorative directional sign at the Prairie Path on Main Street.

Just prior to construction operations on Main Street between Duane Street and the UPRR, Contractor shall remove and store the decorative sign. Upon completion of constructions operations in the area, Contractor shall reinstall the decorative sign. Contractor shall reinstall using a method that matches the current installation. Any foundation or new black anchor bolts that are needed shall be obtained and sued by the Contractor. Contractor shall coordinate when the sign will be removed and reinstalled with the Engineer to minimize the time it is in storage.

Any damage to the sign shall be the responsibility of the Contractor to repair or replace any damaged components at no cost to the Contract.

This work will be paid for at the contract unit price per EACH for SIGN TO BE RELOCATED, which price shall include all labor, equipment, and materials necessary to perform said work.

SP-34 TRENCH BACKFILL

Description. This work shall be according to Article 208 of the Standard Specifications and the following:

All trench backfill materials furnished under this contract shall be virgin, non-recycled materials. All trench backfill shall be crushed aggregate of CA-7 gradation. The aggregate material shall be placed in lifts not exceeding 8 in. in depth, loose measurement, and compacted by mechanical means to the satisfaction of the Engineer. The trench backfill shall be compacted only by Method 1 as defined in Article 550.07 of the Standard Specifications.

The standard test to define maximum densities of all compaction work shall be ASTM D-1557. All densities shall be expressed as a percentage of the maximum density obtained in the laboratory by the ASTM D-1557 standard procedure. Each layer shall be compacted by mechanical means to 95 percent of the maximum dry density.

Construction Requirements. The bedding, haunching and backfilling for pipe installation shall be as shown on the Drawings and as specified in Section 20 of the Water and Sewer Specifications except as modified in these Special Provisions. Bedding and haunching material will not be measured for payment but will be considered included in the cost of the associated pipe. The granular material required for initial backfill, from the spring-line of the pipe to 12 inches above the pipe, will not be eligible for payment but shall be considered included in the cost of the pipe.

For bedding and haunching requirements, refer to the pipe bedding details shown in the plans and associated specifications found in these Special Provisions.

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Trench backfill shall be installed at locations shown in the Drawings to the existing finished grade elevation. The select granular backfill material shall be placed and compacted in 12-inch maximum layers of the specified materials as shown on the Drawings and installed from one foot above the top of the pipe to the existing finished grade.

Basis of Payment. This work shall be paid for at the contract unit price per CUBIC YARD for TRENCH BACKFILL and shall include all labor, equipment and materials necessary to perform the work as specified.

SP-35 CLASS D PATCHES, SPECIAL

Description: This work shall be performed in accordance with Section 442 of the Standard Specifications. The work includes saw cutting of the existing pavement, removal of the pavement, compaction of the existing aggregate subgrade, and placement of the required pavement materials.

Materials. The patch shall be 4" thick.

Method of Measurement: Pavement patching will be measured for payment in place, and the area of the patch shall be computed in square yards.

Basis of Payment: This work will be paid for at the contract unit price per square yard for CLASS D PATCHES, SPECIAL, regardless of the size of the patch. Payment shall be full compensation for all materials, labor, saw cutting, pavement removal, equipment and incidentals to complete the item as shown on the details and as specified.

SP-36 DUCTILE IRON WATER MAIN, CLASS 52, OPEN CUT, DIAMETER SPECIFIED

Description. Ductile iron pipe water main shall be class 52 with push-on joints having a minimum wall thickness of 0.31 inches. Fittings are not included in this item and will be paid for in a separate item.

SHOULD BE INCIDENTAL

5.5 FOOT

Water main shall be laid with 5 foot minimum cover to the proposed finish grade unless shown otherwise on the engineering drawings.

All ductile iron pipe, fittings, valves, and hydrants shall receive a 8-mil polyethylene encasement in accordance with AWWA C105. Encasement shall be U.S. Pipe V-Bio Enhanced Polywrap or an approved equal.

The encasement material shall be an eight (8) mil thick polyethylene tube designed for water main application and in the size recommended by the manufacturer for the size of force main or water main installed. The casing shall be lapped 12 inches and held in place with polyethylene adhesive tape. Repair any rips, punctures, or other damage to the polyethylene with tape or cutting open a short length of tube, wrapping it around the pipe and securing with tape.

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Wrap valves, tees, crosses, and special fittings with a flat sheet obtained by splitting open a length of polyethylene tube. Pass the sheet under the valve or fitting and bringing it up around the body. Join the seams by bringing the edges together, folding over twice and securing in place with tape. The sheet shall be adequate to provide a 12-inch lap with the tubing.

The backfill material shall be free of rocks and debris which may damage the polyethylene. All existing water mains and other facilities shall be kept in service during construction, except where permission is granted otherwise by the Owner.

Disinfection of Water Mains

Upon completion of the newly installed water main the new water main shall be flushed by the Contractor, prior to chlorination, at its extremities at a rate of not less than 2.5 fps, to remove any foreign matter that might be in the main. Following chlorination, all treated water shall be thoroughly flushed from the newly laid water main at its extremities until the replacement water throughout its length shall equal in quality, both chemically and bacteriologically, the water to be served to the public by the water system. This work shall be in accordance with AWWA Specification C651 as well as State and Municipal Specifications and shall be accomplished in a manner acceptable to the State Board of Health.

The contractor shall demonstrate how adequate flushing velocities will be obtained for all pipe segments. As required, temporary flushing hydrants shall be installed to achieve adequate flushing of mains.

Only first-day samples in the two-sample testing protocol may be taken Monday through Wednesday upon adequate notice from the Contractor that the water main is ready for sampling and there are no holidays during the week. The Contractor will not be charged for the initial series of water samples for any water main segment test. If the water main segment fails to pass the second disinfection test, the Contractor will be charged a water sample testing fee according to the following schedule, such fees to be deducted from monies owned to the Contractor.

Test Series Number	Water Sample Testing Fee Charged to Contractor
1	\$0
2	lab costs only
3	\$2,500 plus lab costs
4	\$5,000 plus lab costs
5 and subsequent tests	\$10,000 + \$5,000 plus lab costs for each test beyond 5

This work will not be paid for separately but shall be included in the cost of water mains.

Corporation stop used for flushing shall be included in the price of the water main. Type of corporation stop shall be as specified by the Glen Ellyn Public Works Department. All mains will be

DECHLORINATED at the furthest extremity following chlorination and prior to flushing and sampling.

Upon completion of the pressure test, the duration of the test shall be a minimum of one hour and the allowable leakage shall

Upon completion of the pressure test, a leakage test shall be conducted. The duration of the test shall be a minimum of two hours at a nominal pressure of 150 pounds per square inch (gauge). The testing allowance shall be defined as the maximum quantity of makeup water that can be added into a pipeline undergoing hydrostatic pressure testing, or any valved section thereof, to maintain pressure within 5 psi of the specified test pressure (after the pipeline has been filled with water and the air has been expelled*). The testing allowance is exceeded if the quantity of makeup water is greater than that determined by the following formula:

Where:

L= Allowable leakage in gallons per hour

D = Nominal Diameter of pipe in inches

P = Average test pressure in pounds per square inch (gauge)

S = Length of pipe line tested in feet

Leakage is defined as the quantity of water to be supplied in the section under test which is necessary to maintain the test pressure after the pipe has been filled with water and the air expelled.

Basis of Payment. Payment will be made at the contract unit price per foot for DUCTILE IRON WATER MAIN, CLASS 52, OPEN CUT, of the size specified, which shall include the cost of all excavation and selected granular backfill, ~~tracer wire~~, disinfection, testing, post-televising and all other labor, materials, and equipment necessary to complete all the work as described above and as indicated in the engineering drawings.

SP-37 NON-PRESSURE CONNECTION TO EXISTING WATER MAIN

Description. This work shall consist of making non-pressure, cut-in connections to existing water mains. This work shall be in accordance with Section 561 and Section 563 of the Standard Specifications and with the Standard Specifications for Water and Sewer Construction in Illinois, except as modified herein.

Materials. Water main pipe shall be ductile iron pipe conforming to ANSI/AWWA C151/A21.51, Class 52 standard thickness, with push-on joints conforming to AWWA C111, of the diameter required.

Water main fittings shall be ductile iron conforming to ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53. Fittings shall be cement mortar lined and tar coated in accordance with AWWA C104. Fittings shall have mechanical joint end connections unless otherwise specified. Fittings shall include tees, crosses, reducers, and all other fittings as may be necessary to construct a connection to an existing water main. Fittings are not included in this item and will be paid for in a separate item.

Water main transition couplings shall be ~~Ford FC2W or Cascade CRCER~~ with alloy bolts and fusion bonded epoxy coating of the diameter required or approved equal.

INCIDENTAL

D-59

solid sleeve coupling
(Duo-Sleeve or equal)

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Mechanical joint restraints shall be EBAA Iron, Inc., MEGALUG Mechanical Joint Restraints for Ductile Iron Pipe, or approved equal.

All bolts, nuts, washers, and other hardware to be installed below grade shall be Type 304 stainless steel.

Construction. The connection to the existing water main shall be accomplished by the use of fittings of the proper types and sizes, sections of new water main pipe of the proper lengths and diameters, water main couplings of the proper sizes, and mechanical joint restraints. The connection shall be made in the most direct configuration possible. The connection may be made to the existing water main or to existing valves or fittings.

Thrust blocking of all fittings shall be in accordance with Article 41-2.08 of the Water and Sewer Specifications and the details in the plans.

The water main pipe and fittings shall be placed on a bedding of crushed aggregate of CA-7 or CA-11 gradation having a minimum thickness of 4 inches. The bedding shall be placed to a minimum of 12 inches above the water main pipe and fittings.

Excavation, bedding, and backfilling will not be paid for separately but shall be included in the cost of this work.

Method of Measurement. This work will be measured for payment as each connection made, regardless of the depth of the connection, the number or type of fittings required, or any other factors.

Basis of Payment. This work will be paid for at the contract unit price per each for NON-PRESSURE CONNECTION TO EXISTING WATER MAIN, of the diameter specified.

SP-38 DUCTILE IRON WATER MAIN FITTINGS (R.J.T.)

Description. Work for this item consists of ductile iron pipe restrained joint type (R.J.T.) fittings complete in place in water mains installed by open cut methods, including additional excavation beyond standard trench width if necessary, and removal and disposal of waste excavated materials.

Fittings shall be ductile iron compact fittings with mechanical joints conforming to the requirements of ANSI/AWWA C153/A21.53. All fittings bolts and nuts shall be grade 304 stainless steel with anti-gall coatings.

Thrust blocking of all fittings shall be in accordance with Article 41-2.08 of the Water and Sewer Specifications and the details in the plans and shall be included with the fittings.

Contractor should be aware that there are fittings shown on the engineering drawings that require a joint restraint device. This mechanical joint restraint shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1 and shall be MEGALUG as manufactured by EBAA Iron, Inc. or approved equal. Megalug will not be paid for separately but shall be considered included in the cost of fittings.

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Basis of Payment. The work shall be paid for at the contract unit price per pound for DUCTILE IRON WATER MAIN FITTINGS (R.J.T.).

INCIDENTAL TO WATER MAIN

SP-39 WATER VALVE, DIAMETER SPECIFIED

Description. All main line valves size 4 inch to 12 inch shall be Mueller A 2360-20 or Waterous 500RW resilient wedge, fused epoxy coated with stainless steel bonnet bolts. These valves shall meet the requirements of Article 42-2.01, and 42-2.02 of the Water and Sewer Main Specifications.

Materials. All valves shall be furnished with either cast iron valve boxes or installed in precast reinforced concrete valve manholes with frame and lid, as shown on the engineering drawings. Valve boxes shall be Tyler 664- S, 3-piece, screw type with 5-1/4 inch shaft and no-tilt drop cover marked with the legend "WATER" and installed with a rubber stabilizer manufactured by Adaptor Inc. or approved equal. Valve vault frame and cover shall be East Jordan Iron Works (EJIW) Catalog Number 1022-2 with Heavy Duty solid Cover (minimum assembled weight of 300 lbs.) or approved equal. "VILLAGE OF GLEN ELLYN" and the word "WATER" shall be cast in the cover in 2-inch raised letters.

Compacted crushed stone (CA-6 gradation) shall be utilized to backfill all around the base of valve box to prevent mud from entering the valve box.

All valves not in manholes shall be encased in polyethylene.

Basis of Payment. Payment will be made at the contract unit price Each for WATER VALVE of the size specified, which price shall include the cost of all work specified herein.

SP-40 VALVE VAULT, DIAMETER SPECIFIED

Description. This work shall be performed in accordance with Section 602 of the Standard Specifications, the "Standard Specifications for Water and Sewer Main Construction in Illinois," latest edition and applicable ordinances of the Village of Carpentersville, with the following modifications:

The work will consist of installing valve vaults complete in place, including ASTM C-923 mechanical boot connection as shown in the detail on the Plans. This work shall include excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of utilities; frames and lids; final adjustment of the frame to meet finished grade; joint protection; trench dewatering; erosion and siltation control methods and devices to protect the environment; backfilling with and compacting trench backfill material around the new vault; finish grading.

Materials. Valve vault frame and cover shall be East Jordan Iron Works (EJIW) Catalog Number 1022-2 with Heavy Duty solid Cover (minimum assembled weight of 300 lbs.) or approved equal. "VILLAGE OF GLEN ELLYN" and the word "WATER" shall be cast in the cover in 2-inch raised letters.

or Neenah R-1772

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DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

Basis of Payment. This work will be paid for at the Contract unit price per Each for VALVE VAULT, DIAMETER SPECIFIED.

SP-41 FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

Description. This work shall consist of furnishing and installing a Mueller Super Centurion 250, A-423 fire hydrant approved by the Village of Glen Ellyn in accordance with Section 45 of the Illinois Water and Sewer Main Specifications and the details included in the engineering drawings, complete with auxiliary resilient seat gate valve, valve box, and 6" connecting pipe. Hydrants shall be OPEN LEFT and have National Standard Threads. Hydrants shall be painted yellow.

Materials. Fire hydrant valves shall be Tyler 664-S, 3 piece, screw type with five and one-quarter (5-1/4") inch shaft and no-tilt drop cover marked with the legend "WATER".

Connecting pipe shall match the water main pipe (DI, Class 52). Fittings shall be ductile iron reduced fittings with mechanical joints conforming to the requirements of ANSI/AWWA C153/A21.53.

All existing water mains and other facilities shall be kept in service during construction, except where permission is granted otherwise by the Owner.

Basis of Payment. This work will be paid for at the contract unit price EACH for FIRE HYDRANT WITH AUXILIARY VALVE & VALVE BOX, with auxiliary valve, valve box and connecting pipe (up to 10 feet long), which shall be payment in full for all work specified herein, including thrust concrete blocking and the connection to the existing main.

Connecting pipe will be paid for per FOOT of WATER MAIN, 6" DI, CLASS 52 & FITTINGS.

ADD PAY ITEM FOR WM 6" DI

SP-42 WATER VALVE TO BE REMOVED/ABANDONED

Description. This work shall consist of the removal and disposal of existing water valves.

Construction. Prior to their removal, the valves to be removed shall be isolated by the closing of other adjacent valves. After the valves to be removed are isolated, they shall be removed in their entirety. Any cutting of existing water main, water main pipe repair couplings, or fittings to remove the water valves shall be included in the cost of the work. Any existing valve boxes that are to be abandoned due to the installation of new water main shall have the box extensions removed and the surrounding area patched or landscaped as the case may be. The water valves/valve boxes/valve vaults that are removed shall be disposed of in accordance with Article 202.03 of the Standard Specifications.

Basis of Payment. This work shall be paid for at the contract unit price each for WATER VALVE TO BE REMOVED/ABANDONED.

SP-43 FLOWABLE FILL, ABANDONED UTILITY

Description. This work shall be according to Article 593. CONTROLLED LOW-STRENGTH MATERIAL, BACKFILL of the Standard Specifications.

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Flowable fill refers to a cementitious slurry consisting of a mixture of fine aggregate or filler, water, and cementitious material(s), which is used as a fill or backfill in lieu of compacted earth. This mixture is capable of filling all voids in irregular excavations and hard to reach places (such as casings), is self-leveling, and hardens in a matter of a few hours without the need for compaction in layers. Flowable fill is sometimes referred to as controlled density fill (CDF), controlled low strength material (CLSM), lean concrete slurry, and unshrinkable fill.

Construction Requirements. Flowable fill shall be used as an alternative of compacted granular fill for filling inaccessible areas where compacted fill cannot be placed properly.

Basis of Payment. Payment for this item shall be at the Contract unit price per Cubic Yard for FLOWABLE FILL for the abandoned utility.

SP-44 TAPPING SLEEVE AND LINE STOP, 8"

Description. This work shall consist of the furnishing of all labor, tools, and equipment necessary to install a line stop to perform the installation of new water main. Work includes locating of existing main; sawcutting, and removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of existing utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; sheeting; shoring; tapping of pipe to install temporary line stop bladder; installation of line stop; and temporary barricades, and other items needed to provide traffic control and protection and to protect excavation while line stop is being installed.

Work includes removal of the line stop bladder, and capping of the tapping valve once new water main and valve is in place; backfilling of the excavation with compacted granular trench backfill material; but not including surface restoration.

General. Connections to Village water mains must be by pressure tap or with the use of line stop(s) unless otherwise approved by the Village Engineer, as shown on the approved engineering plans.

When connecting to the end of an existing line, work must be coordinated with the Village with 48-hour notice. Personnel from the Village are the only ones who are to operate water main valves.

A representative from the Village must be present at all connections to existing water mains. Contractor to provide Public Works with 48-hour notice (Monday-Friday).

Construction. Tapping sleeve shall be made of cast iron, ductile iron or heavy-duty stainless steel. All approved stainless-steel heavy-duty tapping sleeves shall be Cascade CST-EX, Ford FTSS, Romac Industries SST III, or Smith Blair Model 665. All nuts, bolts and washers shall be stainless steel. Type 304 or better.

Line stop sleeves shall be stainless steel. Approved sleeves include Hydra Stop Premier or Severn Trent Premier line stop fitting of all stainless-steel construction with drop-in bolt option and Smith Blair Model 685 all stainless-steel line stop tapping sleeve. All bolts, nuts, washers and blind flanges are to be 18-8 Type 304 Stainless. Stopple (completion) plug is to be ductile iron.

All tapping and line stop sleeves shall conform to the following:

- Sleeve to be pressure rated at 150 psi working pressure and 225 psi test pressure.
- Construction to be T-304, 18-8 stainless steel, 14 gauge minimum.
- Gaskets to provide 360-degree pipe coverage in addition to a full circumference branch seal gasket.
- A stainless-steel test port and plug shall be provided and the sleeve installation shall be tested prior to cutting the existing pipe.
- V-lugs shall be fabricated to the sleeve and drop-in stainless-steel bolts, nuts and washers provided. Nuts shall be coated to prevent galling.

Before a tapping sleeve is installed, the exterior of the main to be tapped, as well as the interior surface of the sleeve, shall be thoroughly cleaned and swabbed with a 1 percent hypochlorite solution.

After the surface disinfection, the tapping saddle or sleeve shall be mounted to the main and tapping valve to form a pressure-tight connection. The installation shall be pressure tested at operating pressure plus 50 percent, to ensure the integrity of the installation. This shall be a hydrostatic test, introduced through a port on the tapping machine, or through a tapped mechanical joint plug on the outlet side of the tapping valve. The tapping machine and the tapping valve and sleeve assembly shall be externally supported so that no additional weight is placed upon the main(s).

Prior to installation, the insert valve shall be operated in the position that it will assume in service and for the full length of gate travel in both directions to demonstrate the free and perfect functioning of all parts in the intended manner. Any defects of workmanship shall be corrected and tested repeated until satisfactory performance is demonstrated.

Basis of Payment. The work shall be paid for at the contract unit price per each for TAPPING SLEEVE AND LINE STOP, of the diameter specified, which price shall be payment in full for all work as specified.

SP-45 FIRE HYDRANTS TO BE REMOVED

Description. This work shall consist of removing fire hydrants in locations where new fire hydrants are not to be installed. This work shall be in accordance with Section 564 of the Standard Specifications and with the Standard Specifications for Water and Sewer Construction in Illinois, except as modified herein.

Where an existing fire hydrant is to be removed and replaced with a new fire hydrant in substantially the same location, removal of the existing fire hydrant will not be paid for separately but shall be included in the cost of the fire hydrant installation.

Materials. Water main pipe shall be ductile iron pipe conforming to ANSI/AWWA C151/A21.51, Class 52 standard thickness.

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Water main couplings shall be Ford FC2W or Cascade CRCER with alloy bolts and fusion bonded epoxy coating of the diameter required or approved equal.

All bolts, nuts, washers, and other hardware to be installed below grade shall be Type 304 stainless steel.

Construction. The existing fire hydrant, auxiliary valve, valve box, hydrant lead, tee, and a portion of the adjoining water main shall be excavated and exposed. The existing water main shall be cut on both sides of the tee by an approved method and a section of existing water main shall be removed along with the tee, hydrant lead, valve box, auxiliary valve and fire hydrant. A section of new water main pipe of the proper length shall be positioned in place between the two cut ends of the existing water main and the ends of the existing water main shall be joined to the new section of water main pipe with water main couplings of the proper size.

The excavation shall be backfilled with crushed aggregate of CA-6 gradation and mechanically compacted in lifts not exceeding 12 inches.

Excavation and backfilling will not be paid for separately but shall be included in the cost of this work.

Fire hydrants which are removed and are selected by the Engineer to be salvaged shall remain the property of the Village and shall be delivered by the Contractor to the Village of Glen Ellyn Public Works Department located at 30 S Lambert Rd. in Glen Ellyn. Delivery shall be made during the normal working hours of the Village of Glen Ellyn Public Works Department and the Contractor shall coordinate the day, time and other details of delivery with the Village. Fire hydrants which are not selected by the Engineer to be salvaged shall become the property of the Contractor and shall be removed from the site by the end of the workday and properly disposed of by the Contractor. The delivery or disposal of fire hydrants will not be paid for separately but shall be included in the cost of this work.

Basis of Payment. This work will be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED.

SP-46 REMOVE EXISTING VALVE BOXES

Description. This work shall consist of the removal of water valve boxes.

Construction. This work shall consist of the removal of the water valve stem. The Contractor shall ensure that the water valves are fully open before the stems are removed. Any damage to the water main that is to remain shall be repaired by the Contractor. The valve stems that are removed shall be disposed of in accordance with Article 202.03 of the Standard Specifications.

Basis of Payment. This work shall be paid for at the contract unit price each for WATER VALVE BOXES TO BE REMOVED

**SP-47 WATER SERVICE REPLACEMENT WITH NEW BUFFALO BOX AND
ADDITIONAL WATER SERVICE LINE**

Description. This work shall be performed in accordance the “Standard Specifications for Water and Sewer Main Construction in Illinois,” latest edition and applicable ordinances of the Village of Glen Ellyn.

This work shall consist of all labor, equipment and materials required to provide and install new water services of the specified size as per plan details and at locations shown on the engineering drawings and as directed by the Engineer. Included in this item are the excavation, water service line, tapping, saddles, repair sleeves, corporation stops, curb stops, domestic water service boxes, pipe fittings, joint materials, trench backfill, and all necessary and collateral work required to complete the work as specified herein.

Water service line shall be copper, Type K, soft temper for underground service, conforming to the requirements of ASTM Standards B88 and B251. The pipe shall be marked with the manufacturer’s name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe shall conform to ASTM Standard B251, Table 2.

Trench backfill shall be selected granular backfill conforming to the requirements of these Special Provisions.

Corporation stops and curb stops shall be fabricated of brass and provided with outlets suitable for copper connection in accordance with the requirements of AWWA Standard C-800. Curb stops shall be of the round-way type. Tapping saddles shall be utilized: for new 6-inch and larger DIP mains, the saddle shall be Mueller BR2B Series, bronze double strap with AWWA taper thread (CC); for existing water mains and new PVC mains, the saddle shall be Smith-Blair 372 Series “TaperSeal” stainless steel service saddle, double bolt, CC thread. Fittings for water service line shall be copper and of the compression type.

Domestic water service curb boxes shall be cast iron, screw-type, with the base set over the curb stop and of such construction that it can be extended in length to fit the particular location with 18 inches of adjustment left. The cover of the domestic water service box shall be marked “WATER”.

B-Boxes shall be installed within 8” cast iron valve boxes top section and lid. The top section and lid shall be EJ 8555 Series, Slip Type ASTM A48, CL35B.

Water service connections shall be installed in accordance with the requirements of Sections 41-2.12 and 41-2.13 of the Water and Sewer Specifications and the details included in the engineering drawings. The proposed water main shall be tapped at an angle of 45 degrees with the vertical, and the stop turned so that the T-handle is on top. The water service line shall extend horizontally at right angles with the water main to the proposed curb stop and/or point of connection. Water service re-connections shall be at the same location as they are at present or as directed by the Engineer. The copper tubing shall be one continuous length (no coupling of the new copper tubing will be allowed) laid in the trench sufficiently weaving to allow not less than one (1) foot of extra length between the corporation and curb stops. A new domestic water service box shall be set over the proposed curb stop at the location shown on the engineering drawings or as directed by the Engineer. The new copper water service line shall be flushed to remove all debris before it is coupled to the existing service line

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approximately eighteen inches (18") beyond the new curb stop. Existing curb stops and water service boxes shall be removed and legally disposed off-site after the new water service connection is completed.

The Contractor shall minimize any interruption of service to customers in order to install new water service connections. A minimum of 2-hour notice shall be made to the Engineer and customer before any water shutoff occurs. No shutoff may take place until the Contractor has contacted a responsible individual at each location.

Basis of payment. This work will be paid for at the Contract unit price per Each for WATER SERVICE REPLACEMENT WITH NEW BUFFALO BOX, of the diameter specified, which price shall include the cost of all excavation, tapping, saddles, clamps, corporation stops, curb stops, domestic water service boxes, copper pipe, pipe fittings, joint materials, and trench backfill.

Water service line of the specified diameter for a length up to the existing b-box will not be measured for payment but shall be considered to be part of the work required for the above Water Service Connections. At locations determined by the Engineer to meet field conditions, the Contractor will provide and install an additional length of water service line. This additional service pipe will be paid per FOOT for ADDITIONAL WATER SERVICE LINE of the size indicated.

Removal and disposal of existing curb stops and domestic water service boxes will not be measured for payment but shall be included in the contract unit price for Water Service Connections.

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Village specifications for water service lines 2-inches or less:

Item		Specification		
Service Line and Meter Size		For potable usage, per Illinois Plumbing Code (Appendix A - Table N); One Inch (1”) minimum diameter pipe size		
Saddle		REQUIRED For PVC pipe (and as required or specified for ductile/cast iron pipe): Smith-Blair 372 Series “TaperSeal” stainless steel service saddle, double bolt, CC thread. With permission of the Utilities Division for DIP only , Mueller BR2B Series, bronze double strap with AWWA taper thread (CC)		
Pipe Material		Type K Copper		
Fittings – Must meet No-Lead Brass Requirement and have “NL” marking		Mueller	Ford	McDonald
Corporation Stop		Corporation stop shall be Mueller B-25000, with Ford L04-665-NL(90°)/LA04-665-NL(45°) or A.Y. McDonald 74776-ST-66(90°)/74750-ST-66(45°) or approved equal flare x compression mechanical bend that is securely blocked or Mueller B-25008 or approved equal, 1 to 2 inches in size.		
Curb Stop (Quarter Turn Check and Minneapolis Top Thread)	1 inch	B-25155	B44-444M	6100T or –22 6100WT or –22
	1-1/4 inch	H-10287 + two H-15428	B44-555M	6105+(4753T or –22, 6104-55, 6110-55)
	1-1/2 inch	B-25155	B44-666M	6100-33, 6104-33
	2 inch	B-25155	B44-777M	6100-44, 6104-44
Curb Box (Minneapolis Pattern 1-1/2” diameter; cast iron top and pentagon plug)	5.5’ bury	H-10302	EM2-55-67	5622, 5623
	6’ bury	H-10302	EM2-60-67	5622, 5623
	6.5’ bury	H-10302	EM2-65-67	5610, 5611
Unions	Use Appropriate Mueller, Ford or McDonald Couplings			
Fittings that are in vaults should be flare connections.				

All materials shall have the appropriate no lead markings “NL”, “N”, as specified by the manufacturer.

SP-48 PRE-CONSTRUCTION SEWER CLEANING AND TELEVISIONING

Description. This section governs all work required for sewer cleaning and sewer inspection by closed circuit televising done in preparation for cured-in-place pipelining, grouting. Cleaning and televising shall be performed on the entire section of sewer between upstream and downstream manhole structures and shall be completed to the industry standard of 95% clean.

Notice to Residents. The Contractor shall provide and hang notices on doors of all residences and businesses with service lines connected to sewer mains to be cleaned. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Village shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

Damage to Property. The Contractor shall be responsible to take all necessary precautions to prevent surcharging or other damage to private residences / businesses. Any damage to public or private property caused by the cleaning or televising operation shall be the sole responsibility of the Contractor. The Contractor shall be responsible for cleaning needed as the result of sewer backups caused by the jetting operation. any repairs, restoration, or cleaning that is necessitated by project shall be the sole responsibility of the Contractor.

Equipment. The Contractor is responsible to provide and maintain all industry-standard equipment required to complete the project. Each crew shall have a vacuum or jetter combination truck equipped with a high velocity gun for washing and scouring manholes and a TV truck capable of seating a minimum of 2 people including the Village and Engineer. For easement work, the Contractor shall be required to have off-road equipment as necessary to access off-street sewer areas.

If any equipment gets stuck in the sewer and needs to be dug up, the Contractor is solely responsible for the cost of the dig, complete restoration and repair of sewer and any other costs associated with the retrieval of the equipment.

1. Hydraulic Sewer Cleaning Equipment Requirements:

- a. Hydraulic sewer cleaning equipment shall be the movable dam type constructed such that a portion of the dam may be collapsed during cleaning to prevent flooding of the sewer.
- b. The movable dam shall be the same diameter as the pipe being cleaned and shall provide a flexible scraper around the outer periphery to ensure total removal of grease.
- c. The Contractor shall take special precautions against flooding prior to using sewer cleaning balls or other equipment that cannot be collapsed instantly.

2. High Velocity Hydro-Cleaning Equipment Requirements:

- a. A minimum of 700 feet of high-pressure hose.
- b. Two or more high velocity nozzles capable of producing a scouring action from 10 degrees to 45 degrees in all size lines to be cleaned.
- c. A high velocity gun for washing and scouring manhole walls and floor with the capability of producing flows from a fine spray to a long-distance solid stream.

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- d. A 1,500-gallon minimum water tank, auxiliary engines and pumps, and a hydraulically driven hose reel.
 - e. Equipment operating controls located above ground.
 - f. Minimum working pressure of 1,000 pounds per square inch at a 50 gpm rate.
3. Mechanical Cleaning Equipment Requirements:
- a. Bucket Machines:
 - i. Furnish with buckets in pairs and with enough dragging power to perform the work efficiently.
 - ii. Use V-belts for power transmission or have an overload device. No direct drive machines will be permitted.
 - iii. Be equipped with a take up drum and a minimum of 500 feet of cable.
 - b. Rodding Machines:
 - i. Either sectional or continuous.
 - ii. Hold a minimum of 750 feet of rod.
 - iii. The rod shall be specifically heat-treated steel.
 - iv. The machine shall be fully enclosed and have an automatic safety throw out clutch or relief valve.
 - c. Lumberjack & Impact Cutters
 - i. Lumberjack high speed low torque multi-purpose cutters
 - ii. Speeds up to 50,000 rpm
 - iii. Paikert low-speed, high-torque auger cutter
4. Closed Circuit Television Equipment:
- a. Television equipment shall include television camera, television monitor, cables, power source, lights and other equipment necessary to the televising operation. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection and pipe joint sealing and testing.
 - b. Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. The camera shall be able to operate efficiently in 100% humidity conditions.
 - c. The TV camera shall have a rotating head with a high-resolution lens, capable of spanning 360-degrees circumference and 270-degrees on horizontal axis to televise sewer lines 6-inch diameter and larger. Focal distance shall be adjustable through a range of 1 inch to infinity. The purpose of the rotating head camera is to view all service connections, and to locate all defects, as well as any questionable problem areas. The camera shall be zoom capable.
 - d. The TV camera shall be equipped with remote control devices to adjust the light intensity and at a minimum one thousand (1,000) feet of continuous cable shall be provided. The camera shall be able to transmit a continuous image to the television monitor as it is being

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- pulled through the sewer segments. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.
- e. For manholes that may be difficult to access or where lamp holes are present in the place of manholes, the Contractor shall have available a self-propelled crawler transporter on which to mount the color television camera so as to be able to inspect the sewer as required.
 - f. The TV camera shall be able to provide a continuous image of no less than ninety-five percent (95%) of the internal pipe surface for sewers 8" through 48" in diameter. Maximum acceptable speed of camera through sewer shall be thirty (30) feet per minute.
 - g. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500-line resolution color video picture.
 - h. Electronic media shall visually display and include a narrative noting:
 - i. Date, time of day, and depth of flow.
 - ii. Sewer segment number "from manhole to manhole".
 - iii. Distance from upstream manhole.
 - iv. Locations of service connections into sewer.
 - v. Location of obstructions, structural defects, joint deterioration, leakage or evidence thereof, and other abnormalities with respect to the sewer condition and distance in feet from the upstream manhole centerline.
 - i. The remote reading footage counter shall be accurate to two-tenths of a foot over the length of the section being inspected and shall be mounted over the television monitor.
 - j. Digital images should be provided in the common format accessible by Windows Media Player or approved equal.

Sewer Cleaning. The sewer manhole sections designated for sewer cleaning shall be cleaned using hydraulically propelled, high-velocity jet, or mechanically powered equipment. Selection of the equipment used shall be based on the conditions of the sewer lines at the time the work commences. The equipment and methods selected shall be satisfactory to the Engineer. Sewer cleaning shall consist of root cutting, removal of dirt, grease, rocks, sand and other materials and obstructions from sewer lines and manhole troughs. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set on the other manhole and cleaning again attempted.

The Contractor shall perform all work in accordance with the latest OSHA confined space entry regulations.

Satisfactory precautions shall be taken to protect the sewer segments and sewer manholes from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force, or any tools which retard the flow of water in the sewer segment are used, precautions shall be taken to ensure that the water pressure created does not cause any damage or flooding to public or private property being served by the sewer segment involved.

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When hydraulic or high velocity cleaning equipment is used, a suitable sand trap, weir, or dam shall be constructed in the downstream manhole in such a manner that all solids and debris are trapped and removed, thereby preventing such material from passing into the next sewer segment.

If conditions such as broken pipe and major blockages are encountered that prevent cleaning from being accomplished or where damage would result if cleaning were attempted or continued, the Contractor shall immediately notify the Engineer. The Engineer shall be notified of any conditions which warrant termination of cleaning activities.

Heavy Cleaning: Heavy cleaning shall be required where it has been determined that large deposits of debris remain in the sewer lines and complete cleaning of the segment would require more than the industry standard three (3) passes through the line with high pressure water jetting equipment. The heavy cleaning equipment to be used shall facilitate the removal of such accumulation of sediment, debris, blockages, mineral deposits, bricks, grease, etc. The pipe must be free flowing with no obstructions, in order to permit a thorough and complete examination of the condition of the sewer through internal closed-circuit color television inspection.

Bucket machines, rodding machines, lumberjacks, augers and 120 gpm or higher hydro jetting equipment can be utilized in this heavy-duty cleaning. Where bucket machines and buckets are to be used, caution should be taken that a proper sized flexible cable be used so that breakage will not occur hanging the cleaning equipment up within the sewer lines. No debris shall be allowed to pass into downstream segments during the cleaning operation.

The video inspection must begin before the heavy cleaning takes place, in order to get visual confirmation of the initial pipe condition.

Heavy cleaning will be considered incidental to this Contract item and will not be paid for separately.

Root cutting. Root cutting shall be required where it has been determined that root growth is substantial and cutting would be required to facilitate a thorough and complete examination of the condition of the sewer through internal closed-circuit color television inspection.

The root cutting tools shall be the industry standard concave saws, flat saws, water blasters or chain knockers and shall be carefully selected to ensure no damage is caused to the sewer main or any portion of the lateral including protruding laterals. Extreme caution should be taken when operating root cutters in the sewer and a video inspection shall always be on the root cutter to ensure damage is not caused from root cutting.

Root cutting will be considered incidental to the Contract and will not be paid for separately.

Debris Removal and Disposal. The Contractor shall remove all sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation from the downstream manhole of the sewer segment being cleaned prior to beginning television inspection. Passing material from sewer segment to sewer segment shall not be permitted. In the event that sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation are observed and/or detected, as passing to downstream sewer segment(s), the Contractor shall clean such sewer segment(s) at no additional cost.

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Debris catchers or baskets will be required to be set in the channel of the downstream manhole during all cleaning operations. Additionally, a “Vactor” or similar vacuum truck must be onsite during all cleaning operations and will be required to be setup on the downstream manhole to pull debris out of the sewer during all cleaning operations. As the sewer jet or other cleaning equipment is in use, the vacuum equipment shall be running in order to prevent debris from moving further downstream. The use of the vacuum truck does not constitute heavy cleaning.

When bucket machines are being used, a suitable container shall be provided to receive the materials dumped from the buckets. The Contractor at his discretion may use an approved container (roll off) for the storage of debris removed from the line segments. All material resulting from the cleaning operations shall be removed from the site when the container has reached 1/2 of its volume, or at least once each working day and disposed of at the permitted disposal site.

Disposal of all sewer debris shall be the responsibility of the Contractor and shall be done in accordance with the Illinois Environmental Protection Agency (IEPA) and all other regulating agencies. Under no circumstances shall the removed sewage or solids be dumped onto streets or into ditches, catch basins, storm drains, sanitary, combined sewer manholes or otherwise improperly disposed. Improper disposal of sewage or solids removed from the sewers may subject the Contractor to fines imposed by the Village. In addition, the Contractor may be subject to civil and/or criminal penalties for improper disposal under the law. Removal and disposal of all sewer debris shall be incidental to the contract and will not be paid for separately.

Internal Closed-Circuit TV Inspection. The Inspection of sewer lines by CCTV shall be performed on all lines prior to and after all rehabilitation work by trained experienced PACP certified personnel. The Contractor shall take all necessary measures to televise the internal surface of each sewer segment in its entirety.

The Contractor shall furnish all labor, electronic equipment and technicians schooled and licensed in PACP with latest format, to perform the closed-circuit television inspection of the sewers. Operation of the equipment is to be controlled from above ground with a skilled technician at the control panel in the television studio, controlling the movement of the television camera through the sewer in either direction one segment at a time.

The video operator(s) shall be Pipeline Assessment Certification Program (PACP) certified by the National Association of Sewer Service Companies (NASSCO) and will be required to show proof of PACP ID or certification before performing work on this project. Certification dates must be current including renewal every three years. Operators with expired PACP ID numbers will not be allowed to work on the project until they have undergone the renewal process. The Contractor shall provide copies of each equipment operator’s Certification Number at the preconstruction conference.

The Contractor shall begin each inspection with an onscreen written and verbal explanation of the project name, a detailed description of the location, the manhole to manhole segment, the direction of flow, the direction of camera setup and date. The depth (rim-invert) measurement of each manhole shall be recorded on the PDF report as well. A continuous footage counter shall be provided during the entire inspection and shall be used to accurately record the locations of defects, connections, or objects in the pipe. The counter shall be accurate to two tenths of a foot. Maintain verbal commentary to identify any item that is called out on the report.

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All inspections shall begin and end in the center of the manhole. The start of the video shall NOT begin already in the pipe segment. At the end of each inspection, the Contractor shall pan the camera around the ending manhole to get a view of what it looks like for identification purposes as well as documenting all incoming pipes.

The camera shall be moved through the line in either direction at a uniform rate of no more than 30 feet per minute, stopping when necessary to ensure proper documentation of the sewer's condition. The Contractor shall take all necessary measures to televise 95% of the internal surface of each sewer segment in its entirety. If dewatering with the jet truck is required to see 95% of the pipe, this shall be done at no additional charge to the Village. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.

If any obstruction in the sewer segment such as a protruding building lateral prohibits the passage of the television camera, the Contractor shall attempt to inspect the remainder of the sewer segments by making a reverse set up at the next downstream manhole. No additional payment shall be made for reverse setups.

All obstructions in the sewer segment that prohibit passage of the television camera shall be immediately reported to the Engineer by the Contractor referencing the location and nature of the obstruction.

The Contractor shall be responsible for any damage to public or private property resulting from his/her televising activities and shall repair or otherwise make whole such damage at no cost to the Village.

Digital Video & Report Deliverables. Electronic media of all sections shall be provided to the Village together with the respective television inspection reports. TV reports shall legibly show the location of each point of significance in relation to an identified manhole. Points of significance are, but not limited to the following: private service connections, unusual conditions, roots, storm sewer connections, sags, grease, broken pipe, presence of scale and corrosion, structural failures and other discernable features.

The Contractor shall provide a color digital video of all pipeline segments in “.mpeg” format on two (2) external hard drives with USB 2.0 connections. Each video shall be named according to the “upstream manhole number – downstream number.mpg” format. For example, a pipe segment video with an upstream manhole of 12345 and downstream manhole 67890 would be named “12345 - 67890.mpg”. Separate MPEG files and PDF reports shall be created for each manhole to manhole pipe segment inspected.

Video recordings shall be one file per sewer line section and shall be included on the external hard drives submitted. Total drives submitted for final acceptance at the end of the project shall be two (2).

The pipeline inspection shall consist of identifying a location both within the pipe segment (physical location) and within the digital recording (video frame location) for each defect or observation. The use of time codes for defect location shall NOT be deemed equivalent or acceptable. The digital recording and inspection data is to be cross-referenced for instant access to any point of interest within the digital recording. The inspection information shall include the digital recording of video and audio, segment identification information (starting manhole, date, time, etc.) including a pointer from each

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observation to the digital recording (video frame number), and any accompanying digital still images (JPEG or BMP).

Any out-of-focus video recordings, or portions thereof, shall be cause for rejection of the video recording and will necessitate re-televising at the Contractor's expense. Televising shall be done one section at a time. Inspections shall be performed using NASSCO's PACP Version 6.0 or later. The sewer pipe video inspection reports must be saved with the PACP overview report.

Audio and video observation documentation is to be provided in the most up-to-date form of a NASSCO PACP coding methodology database. The PACP data base shall include all header information as well as any observations recorded. Links to the videos and the ".pdf" format of the reports shall be included within the data base. This data base shall be updated monthly and shall contain every observation from the beginning of the project through current delivery date.

The deliverable video files shall be full-color, high-resolution, and shall include all pipe surfaces above the water line. At each lateral and connected service line, the camera shall stop, rotate, and record a clear image of the lateral or service line to determine condition and if it is active or inactive. The inspection and database shall be fully compatible with PACP latest format (V7.0).

Contractor shall record inspection in a PACP format. Video recordings and inspection shall visually display and include a narrative noting:

- a. Date, time of day, and depth of flow
- b. Sewer segment number "from manhole to manhole"
- c. Direction of Flow
- d. Distance from upstream manhole
- e. Locations of service connections into sewer
- f. All other information encountered during the inspection i.e. obstructions, structural defects, leakage, sags, collapses etc.

The television inspection reports shall be provided both electronically in Adobe Acrobat Reader ".pdf" format as well as two bound hardcopies of the printed paper report. The file naming format shall follow a similar format to the video naming format. Each inspection report shall be named according to the "upstream manhole number – downstream manhole number.pdf" format. For example, a pipe segment with an upstream manhole of 12345 and downstream manhole 67890 would be named "12345 - 67890.pdf".

The final report files, in paper and electronic ".pdf" formats, shall include a still shot image of every observation. These detailed reports shall include the following information at a minimum:

- Project Name
- System Owner Name
- Survey Customer Name
- Contractor Name, Phone Number & Address

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- Surveyor's Name & PACP Certification Number
- Date and Time of Televising
- Location (Street Name and Number)
- Address (nearest to each manhole)
- Pipe Segment ID Number
- Upstream Manhole Number & Downstream Manhole Number
- Manhole Depth
- Segment Length
- Joint Length
- Pipe Material
- Pipe Height (and Width if not Circular)
- Total Pipe Length
- Total Length Surveyed
- Tape/Media Number
- Pre-Cleaning / Cleaning method
- Pipe condition observations (i.e. grease, roots, deposits, cracks, fractures, sags voids etc.)
- Location of all service connections (description of active vs. inactive)
- Location of all manholes
- NASSCO – Structural, O&M and Overall Ratings

Measurement. The Contractor shall measure from center of upstream manhole to center of downstream manhole.

Basis of Payment. Sewer cleaning and television inspection in preparation for cured-in-place pipelining shall be PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR PRE-CONSTRUCTION SEWER CLEANING AND TELEVISIONING.

SP-49 CIPP SEWER LINER AND INTERNAL SERVICE REINSTATEMENTS

Description. This work shall include the repair of defective sewer by the installation of a resin impregnated flexible felt tube in all segments as shown on the plans. The tube shall be saturated with a thermosetting resin and installed into the existing sewer using an inversion process. Curing shall be accomplished by circulating hot water or steam to cure the resin into a hard impermeable cured-in-place pipe. When cured, the liner shall be a continuous, tight fitting, and watertight pipe-within-a-pipe.

This specification references American Society for Testing and Materials (ASTM) standard specifications, Insituform of North America, Inc. (INA), and Inliner USA, Inc., or the Village approved equal, manufacturer's standards which are made a part hereof by such reference and shall be the latest edition and revision thereof.

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Materials. The Tube shall consist of one or more layers of a flexible needled felt or an equivalent nonwoven or woven material, or a combination of nonwoven and woven materials, capable of carrying resin and withstanding the installation pressures and curing temperatures. The tube should be compatible with the resin system to be used on this project. The material should be able to stretch to fit irregular pipe sections and negotiate bends.

The tube should be fabricated to a size that, when installed, will tightly fit the internal circumference and the length of the original conduit. Allowances should be made for the longitudinal and circumferential stretching that occurs during placement of the tube. The tube shall be uniform in thickness and when subjected to the installation pressures will meet or exceed the required finish wall thickness. The tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall also include the lining manufacturer's name or identifying symbol.

Any plastic film (including polyethylene, polyurethane, and polypropylene layers) applied to the tube on what will become the interior wall of the finished Cured-In-Place Pipe (CIPP) shall be compatible with the resin system used, translucent enough that the resin is clearly visible, firmly bonded to the felt material, and shall be capable of withstanding installation pressures and curing temperatures.

The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured meets the minimum requirements given herein or those that are to be utilized in the design of the CIPP for this project. The manufacturer shall be Insituform, Inliner USA, National Liner or an approved equal.

Sizing of the Liner. The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the sewer to be lined. Allowance for circumferential stretching of the liner during insertion shall be made as per manufacturer's standards. The length of the liner shall be that deemed necessary by the Contractor to effectively carry out the insertion and seal the liner at the inlet and outlet points. The Contractor shall verify the lengths in the field. Individual installation runs can be made over one or more access points as determined in the field by the Contractor and approved by the Engineer.

The liner thickness shall be based on the condition of the existing pipe which shall be classified as fully deteriorated pipe and structurally unsound. The liner shall be designed to withstand all imposed loads. The liner thickness shall have sufficient wall thickness to withstand the anticipated external pressures and loads which will be imposed after installation. The design of the liner shall include considerations for ring bending, deflection, combined loading, buckling, and ovality. Liner thickness shall be based on the use of the standard flexible pipe equations, as detailed in ASTM F-1216 and shall account for the effects of ovality.

The design parameters to determine the liner thickness shall be as follows:

- Existing pipe fully deteriorated
- Safety Factor of 2
- Ovality: 5%
- Ground Water Table: ground water table at surface
- Soil Density: 120 lb./cu. ft.

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- The following parameters will depend on locations and shall be determined specifically for each sewer segment to be lined: Depth to invert, Live Loads, Soil Modulus.
- A minimum cured wall thickness of 6 mm (+/- 10%).

Structural Requirements. The materials properties of the finished CIPP shall meet or exceed the following structural standards:

Minimum Physical Properties

Property	ASTM Test Method	Polyester System	Filled Polyester System	Vinyl Ester System
Flexural Strength	D790	4,500 psi	4,500 psi	5,000 psi
Flexural Modulus (Initial)	D790	250,000 psi	400,000 psi	300,000 psi
Flexural Modulus (50 Yr)	D790	125,000 psi	200,000 psi	150,000 psi
Tensile Strength (for pressure pipes only)	D638	3,000 psi	3,000 psi	4,000 psi

Execution. Installation shall be in accordance with standard practice for rehabilitation of existing pipelines and conduits and curing of a resin – impregnated tube ASTM F-1216. The Contractor may use either hot water or steam cure as deemed necessary for the installation, however specific installations may warrant the designation of a certain curing method and the Contractor is to allow for the installation using either technique.

The Contractor when required shall provide for the transfer of flow around the section or sections of pipe that are to be lined. The bypass shall be made by diversion of the flow at an existing upstream access point and pumping the flow into a downstream access point or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The proposed bypassing system shall be approved in advance by the Village.

No lining will be permitted during periods of high flow.

Prior to any lining of designated sanitary sewer line segments the Contractor shall remove internal deposits and roots as necessary to assure proper liner installation. Television inspection shall be performed to verify extent of damage, and location of service connections. Cleaning and inspection shall be in accordance with these specifications.

Public Notice. A public notification program shall be implemented, and shall as a minimum, require the Contractor to be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line. The Contractor shall also provide the following:

- a. Written notice to be delivered to each home or business describing the work, schedule, how it affects them, and a local telephone number of the Contractor they can call to discuss the project or any problems that could arise.
- b. Personal contact and attempted written notice 24-48 hours prior to the beginning of work being conducted on the section of sewer relative to the residents affected.
- c. Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

Flexible Liner Installation. The Contractor shall designate a location where the uncured resin in the original containers and the un-impregnated fiber felt tube will be vacuum impregnated prior to installation. The Contractor shall allow the Engineer to inspect the materials and procedure. A resin and catalyst system compatible with the requirement of this method shall be used. The quantities of the liquid thermosetting materials shall be per manufacturer's standards to provide the lining thickness specified and shall be sufficient to fill the volume of air voids in the tube with additional allowances being made for polymerization shrinkage and the anticipated loss of any resin through cracks and irregularities in the original pipe wall.

The wet out (inversion) fiber felt tube shall be inserted through an existing manhole or other approved access point. The manufacturer's standards shall be closely followed during the elevated curing temperatures so as not to over stress the felt fiber and cause damage or failure during the cure.

If the Contractor installs a shot through an existing manhole, it is the Village's intention for the Contractor to provide a liner through the manhole channel. The Contractor shall extend the liner to cover as much of the manhole channel as possible. The liner seam, along the manhole bottom, between bench and trough, shall be sealed with an epoxy compatible with CIPP resin.

The finished cured-in-place pipe shall be continuous over the entire length of the insertion run and be as free as commercially practicable from significant defects. Any defects which will affect, in the foreseeable future, or warranty period, the integrity, maintenance, or strength of the cured-in-place pipe, including foreign inclusions, dry spots, pinholes, delaminations, wrinkles, bubbles and blisters shall be repaired at Contractor's expense, in a manner mutually agreed upon by the Village and the Contractor.

Mechanical End Seal. All pipes shall be fitted with a hydrophilic gasket, the "Insignia" as manufactured by LMK or approved equal, at both ends of each segment prior to installation of the liner. In addition, the liner shall be neatly cut at least 4-inches from the manhole wall to allow for filling of the annular space at the manhole opening with an epoxy resin compatible to CIPP. This epoxy resin filling, along with a hand brushed hydraulic cement topcoat, shall be applied at all manhole wall to CIPP joints to ensure a water tight seal at the manhole. The cost for this work shall be incidental to the cured-in-place pipelining.

Lateral Reinstatements. After the cured-in-place pipe has been cured, the Contractor shall reconnect the existing active branch or service lines as designated by the Village. This shall be done without excavation and in the case of non-man entry pipes, from the interior of the pipelines by means of a television camera and a remote cutting device that re-establishes them to not less than 90 percent capacity and not more than 100% of the internal diameter of the lateral pipe. The surface of the opening shall be wire brushed to remove extraneous material and provide a smooth edge at each

lateral connection.

Testing. The Contractor shall prepare a sample for each installation of CIPP. The samples shall be restrained samples for diameters of CIPP less than 18"; and flat plate samples for diameters of CIPP 18" and larger. The flat plate samples shall be taken directly from the wet out tube, clamped between flat plates, and cured in the downtube. The restrained samples shall be tested for thickness and initial physical properties; flat plate samples shall be tested for initial physical properties only. The Contractor shall be responsible for providing one data set for each week of installation (testing sample to be determined by the Engineer). If that data set does not meet the testing criteria then all remaining samples for that week shall be tested for compliance and the liners not meeting the design criteria shall be rejected for payment and removed at the Contractor's expense.

The Contractor shall provide third-party test testing documents to the Engineer verifying the thickness and initial physical properties of the CIPP meet ASTM standards.

Inspection. The post-installation television inspection shall be used to confirm tightness of fit of the CIPP to the host pipe and to identify any imperfections; the finished liner shall be continuous over its entire length and to be free from visual defects such as foreign inclusions, dry spots, pinholes, delaminations, wrinkles, bubbles and blisters. All defects discovered during the post-installation television inspection shall be corrected by the Contractor at no additional cost, prior to completion of work. After defects are corrected, the sewer shall be televised again to show effectiveness of repairs.

Post-construction televising shall be performed after all rehabilitation work is completed and as described under the provision POST-CONSTRUCTION TELEVISIONING INSPECTION.

Basis of Payment. The work will be paid for at the Contract Unit Price per Linear Foot for CURED-IN-PLACE PIPE (CIPP) SEWER LINER of diameter specified. Measurement shall be made from face of upstream manhole to face of downstream manhole.

Internal service reinstatements shall be paid for at the Contract Unit Price per Each for INTERNAL SERVICE REINSTATEMENTS and shall include all labor, materials, and equipment including verification of the lateral location, cutting of the liner, brushing of liner and all appurtenances necessary to perform the work.

SP-50 PROTRUDING TAP REMOVAL

Description. For break-in service connections that protrude more than one inch into the sewer, the Contractor shall remove the protruding portion of the tap in preparation for cured-in-place pipelining, grouting or other rehabilitation work. Cutters used shall be power-driven cutting devices (lateral cutters) designed to remove protruding taps. Cutters shall be capable of slicing laterally through cast iron, 3/4" rebar and anchors, clay tile, and concrete protruding into sewer lines.

The Contractor shall cut protruding taps so that protrusions are no greater than 1/2 inch. While using a Root Saw with Carbide Tip Blades at a slow RPM will cut more effectively than rapid RPM. . The Contractor shall maintain a steady flow and RPM while cutting and shall hydro-flush cut and broken pieces out of the sewer before proceeding to the next protruding tap. The TV operator shall pan up the service before the tap is cut to show the existing conditions of the service. All tap cutting shall be

performed during televising operations. After the tap is cut, the TV operator shall pan up the service to show the extents of the cutting. If a protruding tap cannot be removed by the cutting device, then the Engineer shall be notified to determine if a point repair will be necessary. Obtain authorization from the Engineer before proceeding.

Basis of Payment: This work item shall be paid at the Contract Unit Price per Each for PROTRUDING TAP REMOVAL and shall include all material, and labor required. Protruding taps shall be cut with approved lateral cutters and shall not be cut with root saws. Any damages caused to the sewer main or sewer service lateral during tap cutting shall be the responsibility of the Contractor and shall be repaired at no additional expense to the Village.

SP-51 REMOVAL OF SANITARY SEWER, DIAMETER SPECIFIED

Description. This work shall consist of the removal and disposal of sanitary sewers.

This item shall consist of the removal of sanitary sewers at locations shown on the plans or as directed by the Engineer. The void left by the removal of the structure will be filled with trench backfill and compacted unless a sewer is proposed to be installed in place of the existing sanitary sewers.

Basis of Payment. This work will be paid for at the Contract unit price per Linear Foot for REMOVAL OF SANITARY SEWER, of the diameter specified.

SP-52 SANITARY SEWERS, OPEN CUT, PVC, SDR 26, ASTM D3034, 8 TO 12 FEET DEEP, DIAMETER SPECIFIED

Description. This work shall be according to the Standard Specifications for Sewer and Water Main Construction in Illinois Latest Edition and the following:

Materials. PVC Sewer Pipe and Fittings:

Pipe:

- 6 to 15 inch diameter: ASTM D 3034, SDR 26

Fittings such as saddles, elbows, tees, and wyes shall be factory produced and have joint design compatible with adjacent pipe. Gasketed SDR26 sewer fittings shall meet ASTM D3034. Provide approved adapters for transitions to other types of pipe materials.

Pipe Joints: Rubber Gasket ASTM F477. Bell and spigot joint conforming to ASTM D3139, sealed by rubber gasket so assembly remains watertight under conditions of service including movements resulting from expansion, contraction, settlement, and deformation of pipe. Field applied heat fusion or solvent welded joints between pipe sections, pipe and fittings or fitting components will not be permitted. Assembled joint shall pass performance tests as required in ASTM D3139.

Pipe Markings: Manufacturer's name or trademark; Nominal pipe size; PVC cell classification; ASTM and SDR/PS classification; Extrusion date, period of manufacture or lot number.

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Pipe shall be subject to rejection for fractures or cracks passing through pipe wall or socket; cracks sufficient to impair strength, durability of serviceability of pipe; variations of more than 1/8 inch/lineal foot in alignment in pipe intended to be straight; damaged ends.

Flexible connectors: shall be non-shear mission couplings or approved equal for joining pipes of dissimilar material and/or size.

Bedding. Bedding shall be per standard details – CA-11 (#6 Wash) minimum of 4” below the pipe and 12” above the pipe.

Backfill. Backfill requirements shall be per Trench Backfill.

Execution. Pipe Installation:

- Install pipe and gaskets in accordance with manufacturer's recommendations. Install PVC pipe in accordance with ASTM D2321.
- Trenching shall be provided – including sheeting, shoring, and bracing as necessary to be compatible with Contractor’s specific construction procedures.
- Dewatering shall be required so that excavations are kept free from water. Lay pipe only after trench is dewatered.
- Primary line and grade shall be provided by the Contractor. Contractor shall arrange work operations to avoid interference with establishment of primary lines and grades. Contractor shall bear sole responsibility for correct transfer of construction lines and grades and for correct alignment and grade of completed work, based upon lines and grades shown on drawings.
- Begin laying pipe from lowest point in proposed sewer line where possible. Lay pipe with bell end of bell and spigot pipe pointing upgrade. Lay pipe uniformly to line and grade so finished sewer will present uniform bore. Continuously monitor line and grade of pipe, and in event they do not meet specified limits described hereinafter, stop work immediately, notify Engineer, and remedy cause before proceeding with work.
- Retain pipe in position to maintain alignment and joint closure until backfill completed to hold pipe in place. Lay pipe to conform to prescribed line and grade shown on drawings with limits as follows: Variance from established line and grade shall not be greater than 1/32 inch per inch of pipe diameter and not to exceed maximum 2 inch, provided any such variation does not result in level or reverse sloping invert; provided also, variation in invert elevation between adjoining ends of pipe, due to non-concentricity of joining surface and pipe interior surfaces, does not exceed 1/64 inch per inch of pipe diameter, or 2 inch maximum.

Rubber Gasket Joints:

- Immediately before making joint, lubricate outside of gasket and inside of bell or groove of last pipe with approved vegetable lubricant. Take care that gasket and pipe ends are clean and

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free of sand, gravel, dirt or other foreign materials. Introduce spigot of pipe being laid with gasket in place, into bell of previously laid pipe.

- Set pipe to line and grade, and then jack or push completely home. During insertion of the spigot, pipe shall be partially supported by hand or crane to minimize unequal lateral pressure on the gasket and maintain concentricity until gasket is properly positioned. Employ whatever procedures necessary to seat spigots fully into bells without damaging or placing excessive stress on pipes.
- Connection of sanitary services shall include the filling of any voids which may be found to exist around the lateral. The void space shall be filled with hydraulic cement or other approved material for a minimum distance of three feet.
- Backfill in accordance with standard details and specifications.
- When the sewer has been backfilled, temporary aggregate is to be placed in the trench across driveways until sidewalk can be installed
- During surface restoration temporary aggregate is to be removed and replaced with sidewalk per these specifications

Sewer Testing. CONTRACTOR shall pull a "95%" mandrel through PVC pipes after pipes have been backfilled for 30 days to demonstrate roundness.

The CONTRACTOR shall perform a closed-circuit television inspection of the new sewer system, excepting sewer services. Televising shall show that the sewer system has been constructed in accordance with the approved plans and specifications, that the sewer is free and clear of all accumulations of foreign substance and debris so as to prevent clogging, and that there are no structural defects.

Prior to televising the sewer, the Contractor shall at his own expense, clean the sewer line with a jetter or other equipment approved by the Engineer.

Upon completion of such inspection, and upon receipt of a written report of such inspection, together with a DVD or external hard drive of the actual inspection, and, if satisfied that such sewer is free and clear of all foreign substance, and free of all structural defects, the Engineer shall give approval of the sanitary sewer. All inspection reports and video recordings shall remain the property of the Village.

Failure criteria for sewer testing.

- Visible infiltration at any joint which, in Engineer's opinion, exceeds one gallon per minute.
- Joints not "fully home" in accordance with pipe manufacturer's recommendations.
- Out-of-roundness in PVC pipes which, in Engineer's opinion, exceeds 5% of the pipe diameter.

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- Cracks or spall in pipe
- Displaced gaskets.

Correction of defects.

- Repair sections failing tests or quality requirements by removal and replacement of affected sections, internal or external grouting of failed joints or other defects not permitted.
- Correct sewers failing deflection tests by re-excavating to sewer at point of failure and 10 feet on either side, allowing sewer to return to original round cross-section, and re-backfilling according to specifications. Re-test deflection limits as described herein. Sewers failing to return to original round cross-section or failing second deflection test shall be removed and replaced at no additional cost to Owner. Use of devices generating internal pressures or vibrations to correct sewers failing deflection testing is expressly prohibited.

If replacing existing sewer, removal of existing sewer and plugging/abandoning of existing sewer is incidental to this item.

Basis of Payment. This work will be paid for at the Contract unit price per foot for SANITARY SEWERS, OPEN CUT, PVC, SDR 26, ASTM D3034, 8 TO 12 FEET DEEP of the diameter specified.

SP-53 SANITARY SEWERS, (WATER MAIN QUALITY), PVC, SDR 26, ASTM 2241, DIAMETER SPECIFIED

The construction for this item will be the same as “SANITARY SEWERS, OPEN CUT, PVC, SDR 26, ASTM D3034, 8 TO 12 FEET DEEP EXCEPT for the following:

When local conditions prevent vertical separation of at least 18 inches or horizontal separation of at least 10 feet between water main and sewer, then the sewers shall be constructed using water quality PVC pipes, SDR 26, ASTM 2241, 8 TO 12 FEET DEEP.

Basis of Payment. This work will be paid for at the Contract unit price per Linear Foot for SANITARY LATERAL (WATER MAIN QUALITY), PVC, SDR 26, ASTM 2241 of the specified diameter.

SP-54 SANITARY MANHOLES, 4' DIAMETER, DEPTH SPECIFIED

Description. This work shall be in accordance with Section 602 of the Standard Specifications and with the details in the plans, except as modified herein.

This work shall include furnishing and installing precast manhole structures as shown on the Plans.

Materials. Materials to be new and provided in unopened containers where applicable.

The base shall be 6-inch nominal thickness and integral with the structure. Provide channels in invert to direct flows from incoming to outgoing pipe.

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Flexible synthetic rubber boots meeting ASTM C-923 shall be installed on all pipe connections. Cast-in or pressed-on type boots are permitted. Cast-in type boot shall be installed in initial pouring of manhole section.

Walls shall be precast sections conforming to ASTM C478. Sections and component parts to be marked by manufacturer with trade name and/or trademark and ASTM designation. Wall thickness shall be 5" minimum. Holes shall be smooth, radial to centerline of manhole, and perpendicular to manhole wall.

Manhole opening shall be eccentric on cone.

All pre-cast manhole sections (wall and cone) are to be supplied with pre-applied coating of ConSeal CS-55 Water Based product or approved equal. All section joints shall be tongue and groove. All sections shall be laid on EZ-Stick gaskets or equal

All extrudable perform or plastic gaskets shall be Butyl rubber. Approved products are EZ Stik by Press Seal Gasket Company or equal.

All external joint sealing bands shall conform to ASTM C-877. Approved products are Canusa WrapidSeal, Infi-Shield Gator Wrap or approved equal. External joint seals shall consist of a collar 9 inches wide with an outer layer of polyethylene, with a minimum tensile strength of 4000 psi and a minimum tear resistance of 1500 psi, and an under layer of rubberized mastic that is reinforced with the collar 3/4 inches from the edge. The straps shall be confined in tubes that isolate them from the mastic and allow them to slip freely when mechanically tightened and locked around the manhole. The collar shall be furnished with a minimum 6 inches overlap and a closing flap to cover any remaining exposed strap.

The Contractor shall be responsible to verify the depth and orientation of all pipes (incoming and outgoing flow of structure) to allow for proper manufacture of manholes for holes to be precast with factory installed boots. Coring and booting work will be the only field modification allowed for manholes which are cast incorrectly.

Refer to General Special Provisions for specification of Frame and Lid.

Construction.

Connect pipe using flexible boots in accordance with boot manufacturer's instructions: 1. Center pipe in boot; 2. Take special care to ensure connections are watertight.

Place O-ring gasket or double row of extrudable pre-form plastic gasket between manhole sections. Place external Sealing Bands as shown on the detail at each joint between manhole sections in accordance with the manufacturer's instructions. Grout all lift holes from the inside and outside with a non-shrink grout, prior to backfilling.

Place appropriate top section, cone (depth > 6 feet). Place two adjusting rings maximum on manhole top.

Install manhole frame and cover and External Manhole Chimney Seal as shown on the detail, with extensions where needed to cover the entire chimney area, in accordance with the manufacturer's instructions. Provide digital photo of Manhole showing external chimney seal installed such that the manhole and its location are identified. For bolted cover provide bolts and ensure that the frame is securely fastened to the manhole.

Pour manhole invert. Provide poured-in-place channels (if manholes not furnished with precast inverts) to direct flows from in-coming pipes to outgoing pipes. Channels shall smoothly blend flows. Make channel horseshoe shaped. Width and depth equal to size of outlet sewer. To maintain flexibility of pipe connection boot, plug annular space between pipe and boot which falls in area where invert to be poured with extrudable preformed plastic gasket material. Plug shall prevent concrete from entering space between pipe and boot. Invert channels may be placed any time after manhole base section (and connecting pipe) is backfilled.

Testing. New manholes shall be tested for water tightness in accordance with ASTM C969-94 – "Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Pre-cast Concrete Pipe Sewer Lines", Vol. 04.05, Chemical Resistant Materials, Vitrified Clay, Concrete, Fiber-Cement Products; Mortars; Masonry (1996) (no later editions or amendments) or ASTM C1244-93 "Standard Test Method for Concrete Sewer Manholes by the Negative Pressure (Vacuum) Test", Vol. 04.05, Chemical Resistant Materials, Vitrified Clay, Concrete, Fiber-Cement Products; Mortars; Masonry (1996) (no later editions or amendments) prior to placing into service. See the provision Vacuum Testing.

Installation may be rejected because of: 1. Use of individual components subject to rejection; 2. Failure to conform to installation requirements; 3. Visible infiltration; 4. Variation from true vertical alignment by more than 2% of depth; 5. Variations in pipe and rim elevations greater than 0.5 inches from elevations shown on plans; 6. Test failure.

Manholes shall be tested after installation and when all connections are in place. Lift holes, if any, shall be plugged with an approved, non-shrinkable grout prior to testing. Drop connections shall be installed prior to testing. The vacuum test shall include testing of the seal between the cast iron frame and the concrete cone, slab or grade rings. Manhole vacuum testing shall be performed after all adjacent underground utilities have been installed and all manholes have been backfilled and finished to final grade.

Select backfilling and granular fill shall be incidental to the cost of this item.

Existing Pipe connections. Any pipe including the mainline sewer up to four feet (4') in length per each pipe used to connect existing pipes to the proposed structure shall be included in the cost of the proposed structure. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-3034. Connections to existing sewer lines shall be made using non-shear Fernco RC Series or Mission Flex-Seal adjustable repair couplings equipped with stainless steel bands and shall be included in the cost of this item.

Basis of Payment. This work will be paid for at the Contract unit price per Each for SANITARY MANHOLES, 4' DIAMETER of the specified depth.

SP-55 SANITARY SERVICE CONNECTION (PROPOSED OR EXISTING) SIZE AS SPECIFIED

Description. This work shall consist of all labor, material and equipment required to remove and replace the sanitary services as shown on the Plans and in accordance with the Standard Specifications for Sewer and Water Main Construction in Illinois Latest Edition. All sanitary services shall be connected using PVC pipe of the same type and thickness as the main line sanitary sewer.

Service locations shown on the plans are approximate only. Each property owner shall identify the desired location of the sanitary service stub at the owners' property line. It is the property owners' responsibility to verify property lines and locate the service stub within the limits of ownership.

Materials. PVC Sewer Pipe and Fittings:

Pipe:

- 6 inch diameter: ASTM D 3034, SDR 26

Fittings such as saddles, elbows, tees, and wyes shall be factory produced and have joint design compatible with adjacent pipe. Gasketed SDR26 sewer fittings shall meet ASTM D3034. Provide approved adapters for transitions to other types of pipe materials.

Pipe Joints: Rubber Gasket ASTM F477. Bell and spigot joint conforming to ASTM D3139, sealed by rubber gasket so assembly remains watertight under conditions of service including movements resulting from expansion, contraction, settlement, and deformation of pipe. Field applied heat fusion or solvent welded joints between pipe sections, pipe and fittings or fitting components will not be permitted. Assembled joint shall pass performance tests as required in ASTM D3139.

Pipe Markings: Manufacturer's name or trademark; Nominal pipe size; PVC cell classification; ASTM and SDR/PS classification; Extrusion date, period of manufacture or lot number.

Pipe shall be subject to rejection for fractures or cracks passing through pipe wall or socket; cracks sufficient to impair strength, durability of serviceability of pipe; variations of more than 1/8 inch/lineal foot in alignment in pipe intended to be straight; damaged ends.

Flexible connectors: shall be non-shear mission couplings or approved equal for joining pipes of dissimilar material and/or size.

Execution. Pipe Installation:

- Install pipe and gaskets in accordance with manufacturer's recommendations. Install PVC pipe in accordance with ASTM D2321.
- Trenching shall be provided – including sheeting, shoring, and bracing as necessary to be compatible with Contractor's specific construction procedures.
- Dewatering shall be required so that excavations are kept free from water. Lay pipe only after trench is dewatered.

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- Primary line and grade shall be provided by the Contractor. Contractor shall arrange work operations to avoid interference with establishment of primary lines and grades. Contractor shall bear sole responsibility for correct transfer of construction lines and grades and for correct alignment and grade of completed work, based upon lines and grades shown on drawings.
- Begin laying pipe from lowest point in proposed sewer line where possible. Lay pipe with bell end of bell and spigot pipe pointing upgrade. Lay pipe uniformly to line and grade so finished sewer will present uniform bore. Continuously monitor line and grade of pipe, and in event they do not meet specified limits described hereinafter, stop work immediately, notify Engineer, and remedy cause before proceeding with work.
- Retain pipe in position to maintain alignment and joint closure until backfill completed to hold pipe in place. Lay pipe to conform to prescribed line and grade shown on drawings with limits as follows: Variance from established line and grade shall not be greater than 1/32 inch per inch of pipe diameter and not to exceed maximum 2 inch, provided any such variation does not result in level or reverse sloping invert; provided also, variation in invert elevation between adjoining ends of pipe, due to non-concentricity of joining surface and pipe interior surfaces, does not exceed 1/64 inch per inch of pipe diameter, or 2 inch maximum.

Rubber Gasket Joints:

- Immediately before making joint, lubricate outside of gasket and inside of bell or groove of last pipe with approved vegetable lubricant. Take care that gasket and pipe ends are clean and free of sand, gravel, dirt or other foreign materials. Introduce spigot of pipe being laid with gasket in place, into bell of previously laid pipe.
- Set pipe to line and grade, and then jack or push completely home. During insertion of the spigot, pipe shall be partially supported by hand or crane to minimize unequal lateral pressure on the gasket and maintain concentricity until gasket is properly positioned. Employ whatever procedures necessary to seat spigots fully into bells without damaging or placing excessive stress on pipes.
- Connection of sanitary services shall include the filling of any voids which may be found to exist around the lateral. The void space shall be filled with hydraulic cement or other approved material for a minimum distance of three feet.
- Backfill in accordance with standard details and specifications.

Sewer Testing. CONTRACTOR shall pull a "95%" mandrel through PVC pipes after pipes have been backfilled for 30 days to demonstrate roundness.

The CONTRACTOR shall perform a closed-circuit television inspection of the new sewer system, excepting sewer services. Televising shall show that the sewer system has been constructed in accordance with the approved plans and specifications, that the sewer is free and clear of all accumulations of foreign substance and debris so as to prevent clogging, and that there are no structural defects.

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Prior to televising the sewer, the Contractor shall at his own expense, clean the sewer line with a jetter or other equipment approved by the Engineer.

Upon completion of such inspection, and upon receipt of a written report of such inspection, together with a DVD or external hard drive of the actual inspection, and, if satisfied that such sewer is free and clear of all foreign substance, and free of all structural defects, the Engineer shall give approval of the sanitary sewer. All inspection reports and video recordings shall remain the property of the Village.

Failure criteria for sewer testing.

- Visible infiltration at any joint which, in Engineer's opinion, exceeds one gallon per minute.
- Joints not "fully home" in accordance with pipe manufacturer's recommendations.
- Out-of-roundness in PVC pipes which, in Engineer's opinion, exceeds 5% of the pipe diameter.
- Cracks or spall in pipe
- Displaced gaskets.

Correction of defects.

- Repair sections failing tests or quality requirements by removal and replacement of affected sections, internal or external grouting of failed joints or other defects not permitted.
- Correct sewers failing deflection tests by re-excavating to sewer at point of failure and 10 feet on either side, allowing sewer to return to original round cross-section, and re-backfilling according to specifications. Re-test deflection limits as described herein. Sewers failing to return to original round cross-section or failing second deflection test shall be removed and replaced at no additional cost to Owner. Use of devices generating internal pressures or vibrations to correct sewers failing deflection testing is expressly prohibited.

Basis of Payment. Payment will be made for at the contract unit price each for ~~SANITARY SERVICE CONNECTION~~, which will be payment for all pipe, excavation, bedding, trench backfill (selected granular backfill), additional stone to temporarily fill to surface of existing roadway and subsequent removal, all sheeting, fittings, shoring, dewatering, concrete encasement, furnishing and installing the 6 inch PVC service pipe and fittings including cleanouts where required. Quantity shown on the plans is approximate only. No adjustment in unit price will be allowed for change in actual quantity.

SANITARY SERVICE CONNECTION (PROPOSED 10" MAIN) or SANITARY SERVICE CONNECTION (EXISTING 8" MAIN)

UP TO 5' OF

SP-56 ADDITIONAL SANITARY SEWER LATERAL, 6"

Description. This work shall be according to the Standard Specifications for Sewer and Water Main Construction in Illinois Latest Edition and the following:

Sewer Lateral shall be PVC 6" diameter, SDR 26 and conforming with ASTM D 2241.

Additional PVC lateral beyond 5 feet included in the SANITARY SERVICE CONNECTION will be paid under this pay item.

Basis of Payment. This work will be paid for at the Contract unit price per Foot for ADDITIONAL SANITARY SEWER LATERAL, 6".

SP-57 LATERAL CLEANING AND TELEVISION/ADDITIONAL LATERAL CLEANING AND TELEVISION

Description: Contractor shall furnish all equipment, supplies, and personnel to perform cleaning and internal television inspection of sanitary laterals. Each lateral receiving a T-Liner shall be cleaned and televised prior to lining. All the laterals listed shall be cleaned and televised up to 20 feet into the sewer lateral service regardless of the rehabilitation method. In doing so, this footage ensures the lateral can be lined based on before rehabilitation work conditions and provides insight into if additional repairs are needed farther up the sewer lateral service.

All data shall be collected per NASSCO specifications using current PACP and LACP codes and NASSCO trained and certified inspectors. Prior to start of inspections, Contractor shall provide crew training and certification documentation.

Locate all service lateral connections along the main line per PACP, including the modifiers capped, live, break-in, etc. Only direction of flow, direction of survey, start and end point information, and service lateral connections (their type, clock position, modifiers, and distance from manhole) need to be coded – no other main line pipe observations require identification.

Contractor shall perform lateral televising from the main or manhole first. Any lateral that can clearly be seen as capped or not receiving a T-liner is not to be inspected. If a blockage is encountered during inspection of the lateral, televising will be attempted from upstream structure such as cleanout. Reverse camera work will be governed by LATERAL TELEVISION (PUSH CAMERA). If televising cannot be complete from the main or cleanout the Contractor shall notify the Engineer.

At any time, if a collapse, cross bore, or other significant defect type is encountered in the lateral, the TV operator will immediately notify the Engineer and the Village of the observation.

In accordance with Pre-Construction Cleaning and Televising, debris catchers or vacuum trucks shall be used at the downstream manhole during all cleaning operations. All dirt, debris, roots and other material removed from the sewers shall be hauled away by the Contractor to a dump site furnished by the Village at no additional cost. Under no circumstances shall solids or semi-solids removed from the sewers be dumped into the street, catch basin, or manhole. For mainline televising the Pre-Cleaning and Televising specification govern the work and deliverables.

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Temporary plugging of sanitary sewers as needed to sufficiently reduce flows for proper inspection, shall be considered incidental and shall be provided at no additional compensation. Extended plugging and or bypass pumping shall proceed only upon approval by the Village.

Equipment: The Contractor shall have necessary playback equipment readily accessible for review by Resident Engineer Project Manager on site.

1. Lateral CCTV shall be required to have the following features.
 - a. Color Video Camera.
 - b. Camera, Television Monitor, and Other Components: Capable of producing a minimum of 470H-line resolution color video picture.
 - c. Ability to inspect laterals as small as 3-inches up to 120 feet in length from mainline sewer.
 - d. Lateral Camera must be able to be launched from the mainline.
 - e. Televising equipment must be capable of laterally launching in mainline sewers with diameters ranging from 8-inches to 30-inches
 - f. Lighting: Suitable to allow clear picture of entire periphery of the pipe extending at least 10 feet in front, including when the pipe material is black High-Density Polyethylene (HDPE).
 - g. Operative in 100 percent humidity conditions.
 - h. Image: Capable of self-righting during inspections.
 - i. Push Camera equipment must be available on site to complete reverse setups from cleanouts if there is blockage encountered in the lateral from the mainline.
2. Initial mainline sewer TV
 - a. Record view of manhole prior to starting mainline sewer TV.
 - b. Record view of manhole upon completion of mainline sewer TV.
 - c. Record position of lateral in mainline sewer or manhole and lateral connection prior to entering lateral.
 - d. Refer to Pre-Cleaning and Televising specification for this work.
3. Lateral Cleaning and Obstructions
 - a. If the TV camera cannot access all the designated laterals along a section of sewer main from the initial direction (the preferred direction for mainlines with wye connections is upstream) then an attempt must be made to access the laterals traveling in the reverse direction.
 - b. All roots, sludge, or sediment material impedes inspection of the lateral from the sewer main must be removed from the lateral and sewer.

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- c. Lateral cleaning will be performed from the sewer main using high velocity jetting type equipment and will not disrupt flow in adjacent laterals. The lateral cleaning shall be sufficient for subsequent televising as well as rehabilitation
- d. If the lateral cannot be sufficiently cleaned the cleaning operation must be attempted by the use of existing cleanout at no additional cost to the owner. If a cleanout does not exist, the Village will have the option to install one.
- e. If obstructions in either the mainline sewer or the lateral are impassible, cannot be resolved as listed above and cannot be removed by sewer cleaning, reaming or other approved methods, notify the Village for follow-up.
- f. The Contractor will implement steps to reduce the likelihood of a backup into the building connected to the lateral being cleaned. Cleanup that is necessary due to backflow into a building resulting from cleaning will be the responsibility of the Contractor. The Village will be notified of any occurrence of backup into a building.
- g. Pre-televising for each service lateral shall be performed after cleaning operations to ensure that the lateral has been sufficiently cleaned for rehabilitation

Deliverables: All electronic media and field logs will become property of the Village. The Contractor shall provide data on mutually agreed upon electronic media. The video shall be viewable on any personal computer equipped with Windows software. The video shall be supplied with footage and upstream to downstream manhole numbers displayed continuously on the computer screen along with all data and comments being displayed on the computer screen at the same time.

The Contractor shall provide video and audio format. An audio description of each line segment video recording shall be performed by the Contractor which identifies critical information such as date, location, including manhole numbers, direction of travel, and major defects.

The Contractor shall verbally describe or show on screen the location of the manholes that correspond to each line segment. This description must include a street address, street intersection, or a physical landmark that would enable someone to find these manholes without the manhole numbering system and the manhole atlas.

The Contractor shall supply an electronic copy of video data, database export containing all data to date and pdfs of observation reports and PACP/LACP reports to the Engineer before scheduling the service for T-lining or invoicing for lateral televising. The contractor shall also report quantities of the completed televising daily.

The Contractor shall provide data in standard NASSCO export, version 6.0.1.

The Contractor shall provide a color digital video of all pipeline segments in “.mpeg” format on four (4) external hard drives with USB 2.0 connections. The hard drives shall include a master Excel spreadsheet with hyperlinks to each video file and associated PDF report as well as a master digital database of all observation data. Two (2) copies of the digital video data and logs shall become the property of the Village and two (2) copies shall remain with the Engineer.

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- The Master Spreadsheet shall have a record for each line segment and lateral televised to date. The spreadsheet shall be in MS Excel format and shall have hyperlinks to both the video files and the associated “.pdf” of the PACP/LACP & Pipe Segment View report for each section of sewer televised. The spreadsheet shall include the following information for each record - Upstream and Downstream Structure Numbers, Date Televised, Televised Length, Pipe Size, location of each lateral, work performed, and links to both the Video and the “.pdf” report files.
- The Database in PACP 6.0.1 format shall detail location, type, and severity of all defects and shall be Microsoft Access V07 Database files with all tables linked by appropriate I.D. numbers, and links to video and “.pdf” report files. All data shall be linked to the pipe segment.

The Contractor shall label all video and report deliverables for Laterals as USMH-DSMH_DIR_FOOTAGE_CLOCK where USMH is upstream manhole number, DSMH is downstream manhole number, DIR will be either US for upstream or DS for downstream, FOOTAGE is the length in feet down the pipe from the upstream manhole, CLOCK is to indicate where the lateral is located relative to the mainline pipe from the downstream setup. The video must be a separate video from the mainline video.

For Laterals located within a manhole the label shall be MH_CLOCK where MH is the manhole number and the CLOCK is position based on MACP nomenclature with the main outgoing sewer pipe being in the 6 o'clock position.

The Contractor shall prepare and update an index of pipe segments on a weekly basis in a fashion to be determined by the Engineer.

1. Clearly label all electronic media as approved by Village.
2. Videos displaying poor quality (includes but not limited to; grease or debris on lens, camera under water, image too dark, washed out, distorted or out of focus, lines improperly cleaned or poor/no audio), may be rejected and the contractor may be required to re-televising line and resubmit at no additional cost.

Public Relations: It is the responsibility of the Contractor to notify all residents and businesses that could be affected by the lateral televising work. This notification shall consist of written information that outlines the process and the timing of the project. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Contractor shall customize the notice to include Village of Glen Ellyn logo and contact information. The notice shall be written in both English and Spanish. The Village shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

Notification shall be given prior to the start of the televising as follows:

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1. 24 hours prior to televising – with estimate of time (4-hour window) for work on their lateral.
 2. Notify the Village and Engineer of all interactions with building owner and/or resident.
- Exceeding quantities listed in the Bid Tabulation for Additional Lateral Cleaning will require approval of the Village.

Basis of Payment:

Lateral cleaning and televising shall be paid for at the Contract Unit Price per Each for LATERAL CLEANING AND TELEVISING and shall include all labor and material including cleaning lateral, root cutting and removal/disposal of debris, mineral deposits, grease and sewerage solids, reverse setup (if needed) televising and submission of digital database prior the liner or grout installation.

If additional TV is needed for full length T-Liners or additional liner, the additional TV over and above the first 20 feet of the lateral coming off the main shall be paid for at the Contract Unit Price per Linear Foot for ADDITIONAL LATERAL TELEVISING.

SP-58 CIPP T-LINER AND ADDITIONAL LATERAL LINER

Description. The Contractor shall repair defective mainline to lateral connections with LMK CIPP Lateral Liners, no substitutions. These CIPP Lateral Liners shall extend at a minimum of 5 feet up into the service lateral and at a maximum of up to 20 feet up into the service lateral depending on the defects. After cleaning and televising, the Contractor shall provide a list of defects past 5 feet in the service laterals to the Village and Engineer for final review. The Village and Engineer will review these defects and determine if an extension of certain CIPP lateral liners is necessary. The Village and Engineer will provide final lengths for all CIPP lateral liners.

Installation shall be a cured-in-place pipe inversion method using an approved full wrap CIPP lateral liner system. For all CIPP lateral liners of 20 feet or less, the Contractor shall install without the installation of cleanouts, unless noted and shall be required to navigate bends in the lateral service up to 45 degrees.

Cleaning and Televising. The lateral shall be cleaned and televised up to 20 feet into the sewer lateral service prior to the installation of the liner. The digital video of the lateral shall be provided to the Village and Engineer for review before the lateral can be approved for lining. This work is described hereinabove under item #31 & #32 LATERAL CLEANING AND TELEVISING and shall be paid for separately.

Notice to Residents. The Contractor shall provide and hang notices on doors of all residences / businesses with service lines connected to sewer mains to be T-lined. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Contractor shall customize the notice to include Village of Glen Ellyn logo and contact information. The notice shall be written in both English and Spanish. The Village shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

Materials.

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Liner Assembly: The liner assembly shall be continuous in length and consist of one or more layers of absorbent textile material i.e. needle punched felt, circular knit or circular braid that meet the requirements of ASTM F1216 and ASTM D5813 Sections 6 and 8. The textile tube and sheet shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe segments, and flexibility to fit irregular pipe sections. The wet-out textile tube and sheet shall meet ASTM F 1216, 7. 2 as applicable, and shall have a uniform thickness and 5% to 10% excess resin distribution that when compressed at installation pressures will meet or exceed the design thickness after cure.

Mainline Liner Tube: The main liner tube shall be formed from a flat sheet of resin absorbent material suitable for CIPP. The forming of the tube is accomplished by one end of the textile sheet overlapping the second end and sized accordingly to create a circular lining equal to the inner diameter of the lined main pipe. The interior of the textile sheet shall be laminated with an impermeable, translucent flexible membrane. The textile sheet before insertion shall be permanently marked on the membrane as a "Lateral Identification" correlating to the address of the building the lateral pipe provides service. The mainline tube shall have compressible ends which provide a tapered transition to the mainline liner or pipe.

Lateral Liner Tube: The exterior of the lateral liner tube shall be laminated with an impermeable, translucent flexible membrane. Longitudinal seams in the tube shall be stitched and thermally sealed. The lateral tube will be continuous in length. The lateral tube will be capable of conforming to offset joints, bends, bells and disfigured pipe sections. For pipe configurations that contain pipe diameter transitions, the transition liner tube must be formed by the manufacturer prior to installation to ensure proper wall thickness per ASTM F1216.

Mainline Connection: The main tube and lateral tube shall form a one-piece assembly by stitching the lateral tube to the mainsheet aperture. The connecting end of the lateral tube shall be shaped to match the aperture and curvature of the main tube. The lateral tube and main tube shall be sealed by use of a flexible UV cured adhesive/sealant applied in a factory-controlled setting.

The main/lateral tube assembly shall take the shape of a "TEE" or "WYE" with corresponding dimensions such as a curved circle or a curved elliptical opening in the pipefitting.

No intermediate or encapsulated elastomeric layers shall be in the textile that may cause de-lamination in the cured in-place pipe. The main sheet will be flat with one end overlapping the second end and sized accordingly to create a circular lining equal to the inner diameter of the main pipe. The lateral tube will be continuous in length and the wall thickness shall be uniform. The lateral tube will be capable of conforming to offset joints, bells, and disfigured pipe sections.

Hydrophilic Gasket Seals: The mainline tube shall include a seamless molded flange shaped (aka Hydrohat) gasket attached to the main liner tube at the connection or four (4) molded hydrophilic O-rings at the mainline termination ends. The gasket(s) must be a minimum of 2.5mm thick and must retain this consistent thickness under installation pressures. The lateral tube shall include two compression molded O-ring gaskets attached six inches from the terminating end of the lateral tube. Hydrophilic O-Rings between the liner and the host pipe shall be LMK Insignia or approved equal. Mainline tube shall also include hydrophilic O-Rings at both ends.

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Mainline End Seal Test Data: The hydrophilic gasket seals shall include test data that supports substantial expansion properties so to form a watertight compression end seal at the terminating ends of the CIP-lateral liner. The test protocol shall simulate subterranean conditions and hydraulic loading at surface. Gasket seal submittals must include tests data simulating hydration/dehydration conditions for a period of 10,000-hours and the test results must successfully demonstrate and document long-term performance without deterioration, loss of material, flexibility, and expansion of the gasket during repeated cycles of hydration and dehydration.

Bladder Assembly: The liner assembly shall be surrounded by a second impermeable, inflatable, invertible, flexible translucent membrane bladder that will form a liner/bladder assembly. The translucent bladder shall facilitate vacuum impregnation while monitoring the resin saturation process.

Resin system: The resin/liner system shall conform to ASTM D5813 Section 8. 2. 2 - 10,000-hour test. The resin shall be a corrosion resistant polyester, vinyl ester or epoxy resin and catalyst system that when properly cured within the composite liner assembly, meets the requirements of ASTM F1216, the physical properties herein, and those which are to be utilized in the design of the CIPP, for this project. The resin shall produce a CIPP, which will comply with the structural and chemical resistance requirements of ASTM F1216.

Table 1 CIPP INITIAL STRUCTURAL PROPERTIES

Property	ASTM Test	Minimum Value	
		PSI	(Mpa)
Flexural Strength	D 790	4,500	(31)
Flexural Modulus	D 790	250,000	(1,724)

The CIPP shall be designed per ASTM F1216, Appendix X1.

The design parameters to determine the CIPP lateral liner thickness shall be as follows:

- Existing pipe fully deteriorated
- Safety Factor of 2
- Ovality: 5%
- Ground Water Table: ground water table at surface
- Soil Density: 120 lb./cu. ft.
- The following parameters will depend on locations and shall be determined specifically for each sewer segment to be lined: Depth to invert, Live Loads, Soil Modulus.
- A minimum cured wall thickness of 4 mm

The CIPP design for the lateral tube shall assume no bonding to the original pipe.

The Contractor shall provide third party test testing documents to the Engineer verifying the thickness and initial physical properties of the CIPP Lateral Liners meet ASTM standards.

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CIPP Lateral Liner Installation. Installation shall be accomplished by the use of a resin impregnated one-piece main and lateral lining and by means of air inflation and inversion. The liner is pressed against the host pipe by pressurizing a bladder that is held in place until the thermo-set resins have cured. When cured, the liner shall extend over a predetermined length of the service lateral and a particular section of the main pipe as a continuous, one-piece, tight fitting, corrosion resistant and verifiable non-leaking cured in-place pipe.

The outside layer of the textile tube (before inversion) and interior of the textile sheet shall be coated with an impermeable, translucent flexible membrane. The textile sheet before insertion shall be permanently marked as a "Lateral Identification" correlating to the address of the building and the lateral pipe services. The sheet and tube shall be surrounded by a second impermeable, flexible translucent membrane (translucent bladder) that will contain the resin and facilitate vacuum impregnation while monitoring of the resin saturation during the resin impregnation (wet-out) procedure.

The mainline liner and bladder shall be wrapped around the "T" launching device and held firmly in place. The Main/Lateral bladder assembly shall extend past all ends of the liner, as no cutting shall be required.

The finished CIPP shall be continuous over the entire length of the rehabilitated sewer service lateral and 12" of the main pipe. The CIPP shall be smooth with minimal wrinkling and shall be free of dry spots, lifts, and delaminations. After the work is completed, the installer will provide the Village with video footage documenting each repair. The finished product must provide an airtight, watertight verifiable non-leaking connection between the main sewer and sewer service lateral. Upon completion, the installer will deliver digital video and a digital database (external hard drive) of the completed work to the Engineer. The Engineer will review the documentation and the site to determine that the scope of work is complete and the work is satisfactory.

The Contractor shall label all video and report deliverables for Laterals as USMH-DSMH_DIR_FOOTAGE_CLOCK where USMH is upstream manhole number, DSMH is downstream manhole number, DIR will be either US for upstream or DS for downstream, FOOTAGE is the length in feet down the pipe from the upstream manhole, CLOCK is to indicate where the lateral is located relative to the mainline pipe from the downstream setup.

Basis of Payment. This item shall be paid at the Contract Unit Price per Each for 10-FOOT T-LINER, of the length and size specified, and shall include all labor and material required for installation of the LMK CIPP lateral liner up to the length of lateral specified, including curing, testing, pre- and post-installation televising. Contractor shall provide television inspection of completed installation on an external hard drive.

Installation of lateral liner over the specified length shall be paid at the Contract Unit Price per Linear Foot for ADDITIONAL LATERAL LINER.

SP-59 LATERAL SEAL INSTALLATION, DIAMETER SPECIFIED

Description. Where indicated on the Lateral Lining schedule, the Contractor shall install a lateral seal, (CIPP liner) that covers an abandoned sewer service lateral pipe at the main-to-lateral interface without excavation.

Materials - LMK Cap-A-Connection or approved equal

The liner assembly shall be continuous in length and consist of one or more layers of absorbent needle punched felt, circular knit or circular braid that meet the requirements of ASTM F1216 and ASTM D5813 Sections 6 and 8. No intermediate or encapsulated elastomeric layers shall be in the textile that may cause delamination in the CIPP. The textile tube and sheet shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe segments and flexibility to fit irregular pipe sections. The resin saturated textile tube and sheet shall meet ASTM F1216, 7.2 as applicable, and the tube shall have 5-10% excess resin distribution (full resin contact with the host pipe) that when compressed and cured will meet or exceed the recommended thickness.

The main liner tube shall be formed from a flat sheet of resin absorbent material suitable for CIPP. The forming of the tube is accomplished by one end of the textile sheet overlapping the second end and sized accordingly to create a circular lining equal to the inner diameter of the lined main pipe. The interior of the textile sheet shall be laminated with an impermeable translucent flexible membrane.

The mainline tube shall include a seamless ring or disc shaped seal attached to the main liner tube. The hydrophilic seal must be manufactured and cured in a controlled factory environment with strict quality control and quality assurance protocols. A liquid sealant, adhesives or other fluid like materials having paste like consistency will not be accepted.

The hydrophilic seals shall include test data that supports substantial expansion properties to form a watertight compression end seal at the terminating ends of the CIP-lateral liner. The test protocol shall simulate subterranean conditions and hydraulic loading at surface. Seal submittals must include tests data simulating hydration/dehydration conditions for a period of 10,000-hours and the test results must successfully demonstrate and document long-term performance without deterioration, loss of material, flexibility and expansion of the seal during repeated cycles of hydration and dehydration.

Basis of Payment. This work will be paid at the Contract Unit Price per Each for LATERAL SEAL INSTALLATION, of the size specified, and shall include all labor and material required for installation of the LATERAL-SEAL, pre- and post-installation televising, traffic control, flow by passing (if necessary), etc. Contractor shall provide television inspection of completed installation on an external hard drive and associated reports.

SP-60 CLEANOUT INSTALLATION

Description. Contractor shall lateral launch services and mark the cleanout location prior to installing cleanouts. Cleanouts (where required) shall be Vac-a-Tee and shall conform to the following standards:

1. The material shall be a one-piece, molded PVC saddle and shall be compatible with the riser pipe. Solvent welding the riser pipe into the saddle boss. The saddle shall conform to the lateral pipe by a snap fit where the lateral pipe is either four (4") or six (6") in diameter. The riser pipe shall be SDR 26 PVC. The resin will be a two-part marine epoxy and the catalyst shall be designed for the specific application of a cleanout saddle adhered to the lateral pipe by a chemical bond.
2. The sod shall be neatly cut and removed. The vacuum excavated borehole shall be approximately sixteen inches (16") in diameter and all spoils shall be deposited in a vacuum truck.
3. A riser pipe of an appropriate length is solvent welded to the saddle. The adhesive/sealant shall be applied to the underside of the saddle at no less than a 1/4" thick layer. The saddle and riser pipe shall be carefully inserted into the bore hole, setting the saddle onto the pipe, applying a downward force causing the saddle to expand and snap onto the lateral pipe.
4. Immediately after the saddle has been affixed to the lateral pipe, the riser pipe should be secured by backfilling the bore hole with sand or pea-gravel to within 6-inches of the original grade.
5. An exfiltration test shall be performed by filling the riser pipe with a 6 - 20 foot column of water. The test shall be performed no less than 2-hours from the time of affixing the saddle to the pipe. The column of water shall be held for five minutes. The water level shall be measured from the top of the riser pipe. Zero leakage is allowed.
6. Diamond core saw shall be introduced into the riser pipe, the crown of the pipe is cut, and the crown of the lateral pipe shall be cut open a minimum of 90% equal to the diameter of the riser pipe.
7. An approved cap or cover is installed at ground level or below ground level.
8. Should soil conditions reveal running sand or similar conditions that would prohibit the installation, the installation shall be terminated, and the borehole filled with flowable grout. The surface area shall be restored to its original condition.
9. The site will always be left clean and the property restored to conditions equal to site conditions prior to the cleanout installation.
10. The Contractor must attempt to get approval from the homeowner to install the cleanout on their property, using the Project Management pay item. If several attempts have been made to get hold of the homeowner, the Contractor may install the cleanout in the parkway with approval from the City.

Basis of Payment: CLEANOUT INSTALLATION (various depths) shall be paid at the Contract Unit Price per Each and shall include all items necessary to identify the cleanout location and install the cleanout and restore the surface to its original condition.

SP-61 SEAL & ADJUST SANITARY MANHOLE FRAME

Description. For all frame adjustment work including replacements, adjustments, realignments and raises, the manhole adjustment rings shall be removed, replaced and sealed per the following specification. The Contractor may not reuse existing concrete rings during frame adjustment work. Frames that are indicated for adjustment and not replacement shall be removed, cleaned and sealed in accordance with the following specification. External chimney seals shall be included in this work. When the manhole is in the pavement, the Contractor shall be required to saw cut existing pavement to a minimum of a 5 foot by 5 foot square. This square cut shall allow for proper removal and replacement of the frame and adjustment rings and for the installation of external chimney seals.

The Contractor shall remove existing frame and cover, remove all gasket material between the cone, adjustment rings and frame, and shall wire brush clean all exposed surfaces. In addition, the Contractor shall dry all surfaces with a torch or other approved method. Existing manhole frames and covers in good condition will be cleaned and reinstalled unless specified elsewhere for replacement.

The Contractor shall remove all loose materials located at the top of the corbel and fill the voids.

Materials and Installation.

Adjustment rings. The Contractor shall replace all adjustment rings with new precast concrete rings and rubber composite adjustment rings depending on the height of adjustment as follows:

For height adjustment between 2" and 24", the contractor shall use precast concrete adjustment rings and a rubber composite ring on top. Precast concrete rings shall be 2", 3", 4", 6", or 12" and shall be installed concentrically above the manhole cone. In paved areas, the rubber composite ring shall be installed at the top of the adjustment and shall be at least 2" thick. The rubber composite ring shall be EJ Infra-riser or approved equal.

The Contractor shall use the minimum number of rings possible for the adjustment. No shims or other leveling devices, other than leveling rings provided by the manufacturer, will be permitted.

External chimney seal. External chimney seals are to be installed for all frame adjustment work requiring excavation including adjustments, replacements, realignments and raises unless indicated otherwise by the Engineer. This external sealing system shall prevent leakage of water into the manhole through the frame joint adjustment area.

Two types of external chimney seals will be used as directed by the Engineer. The acceptable external chimney seals are:

- Infi-Shield Uni-bands, or approved equal.
- WrapidSeal Canusa-CPS or approved equal.

The Contractor shall have both types of approved seals onsite, so that where needed, a WrapidSeal can be used in lieu of Infi-Shield seal. On all precast concrete manholes, Infi-Shield shall be used. The Contractor shall obtain approval from the Engineer prior to switching from Infi-Shield to WrapidSeal.

Frame seals shall remain flexible throughout a 50-year design life, allowing repeated vertical movement of the frame of not less than 2 inches and/or repeated horizontal movement of not less than one half 1/2 inch.

The seal shall be a continuous seamless band made of high-quality EPDM (Ethylene Propylene Diene Monomer) rubber with a minimum thickness of 65 mils. There shall be a preformed "L" shaped corner molded into the top of the seal. The top section and the side section will extend from the "L" shaped corner at a generally 90-degree angle to each other, wherein the seal is pre-formed in substantially the same shape as when attached to the manhole structure. The thickness of the "L" shaped corner extending 1" into the top section and 1" down the side section is increased and may be at least twice the thickness of the top section reinforcing the seal at this particular area. There shall be a 2" to 3" wide strip of butyl mastic attached to the underside of top section of the seal. There shall be a 2" wide strip of butyl mastic attached to the inside of the side section at the bottom of the seal. The mastic shall be non-hardening butyl rubber sealant, with a minimum thickness of 1/8", and shall seal to the cone/top of the manhole section and over the flange of the casting frame. An aerosol primer shall be used to enhance the bond strength of the seal to the structure.

The Contractor shall excavate around the frame to a depth of at least 12 inches below the top of the cone section to allow for proper installation. The Infi-Shield Uni-Band seal sealing system shall be installed according to the manufacturer's recommendations. The top section of the seal shall extend 3" attaching to the casting base/flange with the side section covering over the entire grade adjustment ring area and onto the cone section a minimum of 2". Install external manhole chimney seal as shown on the detail, with extensions where needed to cover the entire chimney area, in accordance with the manufacturer's instructions. External chimney seals installed shall not be buried until inspected by the Engineer.

Gasket Materials. EZ-STIK or an approved equal butyl mastic sealant shall be used when rejoining the manhole frame to the precast adjustments to provide a watertight structure. The sealing compound shall be produced from blends of refined hydrocarbon resins and plasticizing compounds reinforced with inert mineral filler, and shall contain no solvents, irritating fumes, or obnoxious odors. Avoid use of overly thick gasket material such as will likely produce after-settlement of manhole frame due to long-term cold flow of gasket materials. The compound shall not depend on oxidizing, evaporation, or chemical action for its adhesive or cohesive strength. It shall be supplied in extruded rope form of suitable cross section and in such sizes to seal the joint space. The Contractor shall use two (2) complete ropes at each joint.

Interior Finish Coat. After all other adjustment work has been completed, the interior surfaces of the adjustment, from the bottom of the frame to the top of the cone section, shall have a calcium aluminate high performance mortar finish applied which is then troweled and brushed to a smooth finish. Calcium Aluminate Cement shall be Strong Seal MS-2C or approved equal.

Basis of Payment. This item shall be paid at the Contract Unit Price per Each for SEAL AND ADJUST MANHOLE FRAME and shall include all work necessary for the complete adjustment and sealing of each manhole frame as specified in these provisions including measurement, procurement, installation, replacement, external chimney seals, adjustment rings and restoration including but not limited to full Depth Patching, PCC Sidewalk, Seeding and Curb and Gutter removal and replacement.

SP-62 STRUCTURAL LINING

Description. Structural lining shall be a cementitious material. It shall consist of all necessary measures to internally seal the manhole including cementitious wall coating, external or internal grouting, and reconstruction of bench/trough and shall establish structural integrity for the manhole and shall eliminate inflow and infiltration.

This work shall provide for a monolithic fiber-reinforced calcium aluminate structural cementitious spray liner applied in two ½ inch lifts intended to seal the entire manhole structure. The spray liner shall be a complete manhole reconstruction that stops inflow and infiltration, providing a leak free structure, restoring structural integrity and providing protection against corrosion.

This specification shall govern all work, materials, and equipment required for manhole rehabilitation for the purpose of eliminating infiltration, exfiltration, providing corrosion protection, repair of voids, and restoration of the structural integrity of the manhole as a result of applying a monolithic fiber-reinforced structural cementitious liner to the adjustment, cone, wall and bench surfaces of brick, block, pre-cast or poured concrete, or other masonry construction material.

Described are procedures for cleaning, preparation, application and testing. The applicator, approved and trained by the manufacturer, shall furnish all labor, equipment and materials for applying a cementitious mix to form two coats of a structural monolithic liner, with machinery specially designed for the application. All aspects of the installations shall be in accordance with the manufacturer's recommendation and per the following specifications which includes:

- A. Remove loose and unsound material
- B. Clean area to be sprayed
- C. Eliminate infiltration
- D. Repair and fill voids
- E. Repair and seal bench trough/inverts
- F. Spraying the cementitious monolithic liner

Remove loose and unsound material. Loose and protruding brick, mortar and concrete shall be removed using a mason's hammer and chisel and/or a scraper. Any loose debris on the benches, invert or walls of the manhole shall be removed by means of a scraper and vacuum machine or other approved method as long as it is taken from the manhole and not caused to go into the sewer. Any damaged manhole steps shall be removed prior to cleaning the interior of the manhole. Place covers over invert to prevent extraneous material from entering the sewer lines before cleaning.

Clean area to be sprayed. The Contractor shall clean the interior surfaces of the manhole by removing all debris, dirt, oil, grease, remains of old coating materials, and any other extraneous materials. The Contractor shall then pressure wash (minimum 3,000 psi) the manhole walls to remove loose mortar, concrete, roots, and debris. Heavy grease build-up or unusual conditions may require hydro-blasting

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or chemical cleaning. Loose and protruding brick, mortar and concrete shall be removed using a mason's hammer and chisel and or scraper.

Eliminate infiltration. The following are approved for patching material: Strong Seal QSR; Quadex Hyperform; or approved equal. This quick setting fiber reinforced calcium aluminate corrosion resistant cementitious material shall be used as a patching material and is to be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

Compressive Strength	ASTM C109	>1800 psi, 1 hr
Bond	ASTM C882	>2600 psi, 24 hrs
Calcium Aluminate Cement		>1600 psi, 28 days
Applied Density		Sulfate resistant
Shrinkage	ASTM C490	105 lbs/ft ³ ± 5
Placement Time		0% at 90% R. H.
Set Time		5 to 10 minutes
		15 to 30 minutes

Approved materials to stop visible infiltration are the following: Strong-Plug; Quadex Quad-Plug; or approved equal. This rapid setting cementitious product specifically formulated for leak control, shall be used to stop minor water infiltration and shall be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

Compressive Strength	ASTM C109	>1000 psi, 1hr
		>2500 psi, 24 hrs
Sulfate Resistance	ASTM C267	No wt loss, 15 cycles
		@2000 ppm
Freeze/Thaw	ASTM C666,	Method A 100 cycles
Pull Out Strength	ASTM C234	14,000 lbs.
Set Time		<1.0 minute

Approved materials to stop severe active infiltration are the following: Hydrostop-Flex 40/500; Avanti AV-100; Deneef Denepox 40; or approved equal. Grouting installation shall conform to ASTM F2414-04. Grouting shall be performed anywhere where active infiltration cannot be stopped with the cementitious grout. All grouting work shall be considered incidental to the unit price bid payment item for STRUCTURAL LINING.

Repair and fill voids. The Contractor shall fill any large voids using one of the approved patching materials. Active Leaks shall be stopped using quick-setting, specially formulated mixes, according to manufacturer's recommendations. Some leaks may require weep holes to localize infiltration during the application. After application the weep holes shall be plugged with quick setting material. After repairing and filling voids and preparations are complete, remove all loose material and wash again. Any bench or invert repairs shall be made at this time using the quick-setting patching mix.

Repair and seal bench trough/inverts. Invert repair shall be performed on all inverts with visible damage or where infiltration is present or when vacuum testing is specified. After blocking the flow through the manhole and thoroughly cleaning the invert, a quick-setting patch material shall be applied in an expeditious manner. The material shall be troweled uniformly onto the damaged invert at a

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minimum thickness of ½ inch at the invert extending out onto the bench of the manhole sufficiently to tie into the structural monolithic liner to be spray applied. The finished invert shall be smooth and free of ridges. The flow may be re-established in the manhole within 30 minutes after placement of the material.

Spraying the cementitious monolithic liner. Liner Material shall be Strong-Seal High Performance Mix or an approved equal and shall be made with calcium aluminate cement and shall be used according to manufacturer’s recommendations in applications where there is evidence of mild sulfide conditions (substrate surface of pH 2. 0 or higher). The cementitious liner shall be used to form a structural monolithic liner covering all interior manhole surfaces and shall have the following minimum requirements:

Compressive Strength	ASTM C109 28 days	>9000 psi
Tensile Strength	ASTM C496 28 days	>800 psi
Flexural Strength	ASTM C293 28 days	>1200 psi
Shrinkage @90% R. H.	ASTM C596 28 days	0%
Bond	ASTM C882 28 days	>2000 psi
Density, When Applied		134 ± 5lbs/ft3
Freeze/Thaw	ASTM C666	300 cycles no vis. damage

During application the surface shall be clean and free of all foreign material and shall be damp without noticeable free water droplets or running water, but totally saturated just prior to application of material. Materials shall be spray applied in two lifts, at least 24 hours apart. Minimum total thickness for each pass shall not be less than ½ inch and shall be from the bottom of the frame to the invert of the manhole. The surface shall then be troweled to a relatively smooth finish being careful not to over trowel. A brush finish shall be applied to the trowel-finished surface.

After the walls are coated, the invert covers shall be removed, and the bench sprayed with excess materials applied in such a manner that a gradual slope is produced from the walls to the invert with the thickness at the invert to be no less than ½ inch. The wall/bench intersection shall be rounded to a uniform radius the full circumference of the intersection. Trough area shall be coated as required to seal all cracks and to provide a smooth surface.

The material shall have minimum of four (4) hours cure time before being subjected to active flow. Ambient conditions in the manhole are adequate for curing as long as the manhole is covered. Traffic shall not be allowed over manholes for 12 hours after reconstruction is complete. Caution shall be taken to minimize exposure of applied product to sunlight, quick surface drying and air movement. At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes before replacing the cover. In extremely hot and arid climates, the manhole should be shaded while reconstruction is in process.

No application shall be made if ambient temperature is below 40 degrees Fahrenheit. No application shall be made to frozen surfaces or if freezing is expected to occur within the substrate within 24 hours after application. If the ambient temperatures are in excess of 95 degrees Fahrenheit, precautions shall be taken to keep the mix temperatures at time of application below 90 degrees Fahrenheit. Water temperature shall not exceed 80 degrees Fahrenheit. Chill with ice if necessary.

Quality control. Final acceptance shall be made upon successfully passing:

- Vacuum test as described under the provision VACUUM TESTING.
- Compressive Strength test: Sample and make five test cylinders per ASTM C 31 and analyze with ASTM C 39, or as specified by contract document, for testing compressive strength from each day's work (for Vertical Infrastructure) or every 32,000 lbs. of material (for Horizontal Infrastructure). Label the cylinders with the date, location, project, and product batch numbers. The product batch numbers are located on each geopolymer material bag. Send the cylinders to a third-party laboratory or the manufacturer for verification. Test in accordance with ASTM C 39, or as specified in contract documents. Test the geopolymer material for compressive strength at 7 days (1 cylinder) and 28 days (3 cylinders) and leave 1 cylinder for retainage. Performance and Material Testing for manholes:

i. Performance testing as directed in ASTM F 2551.

ii. Submit the following information to the engineer: Product data, including manufacturer and brand name along with laboratory test results to verify 28- day compressive strength in accordance with ASTM C 39 or ASTM C 109. The samples must be undisturbed for a period of at least 24 hours before they can be transported. The project superintendent will require that samples of applied material be taken representative of each day's work of material used. Samples shall be obtained from the pump, hose or nozzle, identified, and sent to an independent test laboratory to verify 28-day compression strength testing as described in ASTM C 39 or ASTM C 109 and shall have a minimum average of the strength set forth hereinabove in Section F.

Basis of Payment. This item shall be paid at the Contract Unit Price per Vertical Foot for STRUCTURAL LINING and shall include all labor and materials to rehabilitate the manhole as described in the above provisions. Measurement for payment shall be made from the invert to the bottom of the manhole frame and shall be measured to the nearest tenth of a foot. Vacuum testing shall be considered incidental.

SP-63 REMOVAL OF STORM SEWER PIPE

Description. This item is for the removal of storm sewers as shown on the Plans and as necessary, due to conditions determined during execution of planned work, and where approved by the Village and/or Field Inspector.

This item shall include all labor, equipment, and material necessary for the removal of storm sewer in accordance with the applicable portions of Sections 551 and 601 of the "Standard Specifications" at the locations as designated by the plans or as directed by the Engineer.

Basis of Payment. Payment will be made at the contract unit price per Linear Foot for REMOVAL OF STORM SEWERS, of the size, material and type specified, which shall be payment in full for all excavation, bedding, and backfill (including Selected Granular Backfill), for all sheeting, shoring, dewatering, closed circuit T.V. inspection, and connections between different pipe materials. Pipe connections to existing manhole or existing sewers will not be paid for separately but will be included in the cost of the proposed pipe.

SP-64 STORM SEWER PIPE, PVC, SDR 26, ASTM 2241, DIAMETER SPECIFIED

Description. This work shall be according to Article 550 of the Standard Specifications and the following:

In those locations indicated on the Plans, polyvinyl chloride (PVC) sewer pipe of the size indicated shall be installed. This item shall include all the works necessary to install new PVC pipes connecting from new structures along the curb line to the new Storm Manholes. This item may also be used in other locations as indicated on the plans or as directed by the Engineer. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241. The joints shall be rubber gasket and conform to ASTM designations D-3139. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction". The pipe bedding and backfill to twelve inches (12") above the top of pipe will be included in the cost of this pay item.

The price for this item shall also include plugging any existing abandoned storm laterals with two feet (2') of concrete inside the pipe, at both ends.

All excavation of earth required to access the sewer will be paid for under this item.

Basis of Payment. Payment shall be at the Contract unit price per Foot for STORM SEWER PIPE, PVC, SDR 26, ASTM 2241 of the specified diameter. Pipe connections to existing manhole or existing sewers will not be paid for separately but will be included in the cost of the proposed pipe.

SP-65 STORM SEWER/~~DETENTION STORAGE~~, RCP, CL IV, ASTM C76, DIAMETER SPECIFIED

Description. This work shall be in accordance with Section 550 of the Standard Specifications and with the details in the plans, except as modified herein.

This work shall consist of constructing storm sewers at the locations and depths shown on the plans or as directed by the Engineer.

Materials. Storm sewer pipe shall be round reinforced concrete pipe conforming with ASTM C76/AASHTO M170 and shall be of adequate strength to support the trench loads applied.

The sewer shall be constructed with rubber gasketed (O-ring) joints meeting the requirements of ASTM C-361 for Reinforced Concrete Low Head Pressure Pipe. The bell and spigot or tongue and groove ends shall be machine formed to ensure accurate joint surfaces and shall be stepped to accommodate a round compression type rubber gasket.

Rubber gaskets shall be extruded or molded in such a manner that any cross section will be dense, homogeneous, and free of porosity, blisters, pitting and other imperfections. The gaskets shall be fabricated from a high-grade rubber compound containing no reclaimed rubber. The basis polymer shall be natural rubber, synthetic rubber or a blend of both. The physical properties of the rubber

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gaskets and the permissible variations in dimensions shall conform to the requirements of those specified in the specifications for Rubber Gaskets, ASTM Designation C361.

The gaskets shall be seated on the joint in accordance with the manufacturer's specifications. Where adhesive is required to properly seat the gasket, the gasket shall be applied not less than 24 hours prior to installing the pipe.

When the pipe is lowered into the trench, installers shall make certain that no dirt is clinging to the jointing surface or lodged under the gasket. The gasket and inside surface of the groove shall be thoroughly lubricated as specified by the gasket manufacturer. The tongue end shall be carefully centered in the groove so as to avoid the displacement of the gasket, and the pipe shall be driven home, fully deforming the gasket, by use of a cable and winch set inside the pipeline, at least two pipe lengths back, or by other methods approved by the Engineer. Adjustment to line and grade shall be made in such a manner as not to disturb the deformed gasket.

If replacing existing sewer, removal of existing sewer and plugging/abandoning of existing sewer is incidental to this item.

Basis of Payment. Payment will be made at the contract unit price per Linear Foot for SEWER, RCP, CL IV, ASTM C76, of the size, material and type specified, which shall be payment in full for all excavation, bedding, and backfill (including Selected Granular Backfill), for all sheeting, shoring, dewatering, closed circuit T.V. inspection, and connections between different pipe materials. Pipe connections to existing manhole or existing sewers will not be paid for separately but will be included in the cost of the proposed pipe.

SP-66 STORM MANHOLE, TYPE 1 FRAME, CLOSED LID, DIAMETER SPECIFIED

Description. This work shall consist of constructing storm manholes at the locations and depths shown on the plans or as directed by the Engineer. All manholes shall be constructed of precast reinforced concrete in accordance with the details shown on the engineering drawings and shall be furnished complete with a frame and lid as shown on the engineering drawings.

All work shall be performed in accordance with the applicable requirements of Section 602 of the IDOT Standard Specifications. This work shall include excavation, hauling and disposal of excavated material, dewatering, sheeting, shoring, bracing, manhole bedding, manhole material and its installation, gaskets, trench backfill, and earth backfill and compaction where permitted

Any pipe including the mainline sewer up to four feet (4') in length per each pipe used to connect existing pipes to the proposed structure shall be included in the cost of the proposed structure. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). Connections to existing sewer lines shall be made using non-shear Fernco RC Series or Mission Flex-Seal adjustable repair couplings equipped with stainless steel bands and shall be included in the cost of this item.

Materials. Manhole walls, transition slabs, cones, tops and base sections shall meet or exceed the requirements of ASTM C478.

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Storm Manholes shall be installed with joint sealant made of butyl rubber material in flexible rope form in accordance with ASTM C-990. Approved products are EZ-Stik premium butyl sealant by Press Seal Corporation or equal.

Standard Village manhole frame and cover shall be East Jordan Iron Works (EJIW) Catalog Number 1022-2 with Heavy Duty solid Cover (minimum assembled weight of 300 lbs.) or approved equal. "VILLAGE OF GLEN ELLYN" and the word "STORM" shall be cast in the cover in 2-inch raised letters.

Basis of Payment. This work will be paid for at the contract unit price EACH for STORM MANHOLE, TYPE 1 FRAME, CLOSED LID, of the diameter specified which price shall include all frames, lids, sand cushion, flat slab tops, and all excavation, backfilling and connected to sewer.

SP-67 DOGHOUSE MANHOLE, DIAMETER SPECIFIED

The construction and Payment for this item will be the same as STORM MANHOLES, TYPE 1 FRAME, CLOSED LID EXCEPT for the designated difference in the size of the manhole, and the manhole shall be a "doghouse" manhole as shown on the construction standard details.

SP-68 FRAMES AND GRATES TO BE ADJUSTED

Description. This work shall consist of installing steel casing pipe in open cut trench at the Description. This work shall be according to Article 603 of the Standard Specifications and the following:

This item shall consist of the adjustment of existing storm manhole, catch basin, inlet, and valve vault frames on the streets to be resurfacing or at locations shown on the plans or as directed by the Engineer. All proposed and existing structures within the pavement area are to be adjusted to finish grade after the binder or level binder has been placed.

The pavement disturbed by the adjustment will be replaced with concrete base course to the grade of the bituminous concrete base course or level binder. The removal and replacement of this pavement shall be included as part of this item.

Structures, which are located in the curb and gutter, shall not be adjusted to final grade until the curb and gutter has been placed to within five feet (5') of each side of the structure. At this time the Contractor may adjust the structure to the proper elevation to achieve drainage of the curb and gutter.

The adjustment of frames and grates on newly installed structures shall not be paid for separately but shall be considered as part of the respective pay item for the installation of the proposed structures.

The Contractor will be responsible for coordinating with public utility companies to have any of their structures adjusted. The Contractor will not be paid for adjusting electrical hand-holes, communication vaults, or Nicor facilities; however, he must ensure the work is completed in partnership with his own schedule. This oversight and coordination are included in the cost of this item.

Basis of Payment. Payment shall be at the Contract unit price per Each for FRAMES AND GRATES TO BE ADJUSTED.

SP-69 STRUCTURES TO BE REMOVED

Description. This work shall be according to Article 605 of the Standard Specifications and the following:

This item shall consist of the removal of manholes, drainage structures, or valve vaults at locations shown on the plans or as directed by the Engineer. It shall also be the responsibility of the contractor to seal all pipes at both ends that connect to other structures with brick and mortar. The void left by the removal of the structure will be filled with trench backfill and compacted.

Structures being removed where a new structure is to be installed will not be paid for separately but shall be included in the cost of the new item.

Basis of Payment. This work will be paid for at the Contract unit price per Each for STRUCTURES TO BE REMOVED.

3

SP-70 CATCH BASINS, 2' DIAMETER, TYPE C, TYPE A FRAME AND GRATE

Description. This work shall be according to Article 602 of the Standard Specifications and the following:

A four-foot (2') diameter restricted depth catch basin shall be installed at the locations shown in the plans or as directed by the Engineer and in accordance with the details shown in the plans.

It will be the responsibility of the Contractor to ensure all pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. All elevations on proposed structures shall be field verified by Contractor prior to ordering of any structures. No additional compensation will be granted for the coring of any structures and/or restocking fees.

Frames and lids shall be furnished in accordance with the following (or equivalent) schedule:

- TYPE 3 EAST JORDAN IRON WORKS 7000 WITH TYPE T1 BACK (TYPE M3 FLAT GRATE IN DRIVEWAYS)
OR
TYPE 3 NEENAH R-3275

If constraints in the field such as frame height become an issue during installation, the Contractor will propose an alternate frame and grate or frame and lid to the Engineer for approval.

Any pipe including the mainline sewer up to four feet (4') in length per each pipe used to connect existing pipes to the proposed structure shall be included in the cost of the proposed structure. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). Connections to existing sewer lines shall be made using non-shear Fernco RC Series or Mission Flex-Seal adjustable repair couplings equipped with stainless steel bands and shall be included in the cost of this item.

All excavation, bedding and trench backfill material necessary to backfill the structure and the length of pipe shall also be included in the cost of the structure.

If replacing an existing structure, removal of existing structure is incidental to this item.

Basis of Payment. This work will be paid for at the Contract unit price per Each for CATCH BASINS, 4' DIAMETER, TYPE 11 FRAME AND GRATE.

SP-71 INLETS, TYPE A, 2' DIAMETER, TYPE 11 FRAME AND GRATE

Description. This work shall be according to Article 602 of the Standard Specifications and the following:

A two-foot (2') diameter inlet shall be installed at the locations shown on the Plans and in accordance with the details shown on the Plans.

It will be the responsibility of the Contractor to ensure all pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. All elevations on proposed structures shall be field verified by Contractor prior to ordering of any structures. No additional compensation will be granted for the coring of any structures and/or restocking fees.

Frames and lids shall be furnished in accordance with the following (or equivalent) schedule:

- TYPE 3 EAST JORDAN IRON WORKS 7000 WITH TYPE T1 BACK (TYPE M3 FLAT GRATE IN DRIVEWAYS)
OR
TYPE 3 NEENAH R-3275

If constraints in the field such as frame height become an issue during installation, the Contractor will propose an alternate frame and grate or frame and lid to the Engineer for approval.

Any pipe including the mainline sewer, up to four feet (4') in length per each pipe, used to connect existing pipes to the proposed structure shall be included in the cost of the proposed structure. The pipe shall have a minimum standard dimension ratio (SDR) of 26 and shall conform to ASTM designation D-2241 (water quality pipe). Connections to existing sewer lines shall be made using non-shear Fernco RC Series or Mission Flex-Seal adjustable repair couplings equipped with stainless steel bands and shall be included in the cost of this item.

All excavation, bedding and trench backfill material necessary to backfill the structure and the length of pipe shall also be included in the cost of the structure.

Basis of Payment. This work will be paid for at the Contract unit price per Each for INLETS, TYPE A, 2' DIAMETER, TYPE 11 FRAME AND GRATE.

SP-72 PLUG PIPE

Description. Sewer pipes to be abandoned shall be plugged with mechanical wing plugs of the specified diameter and topped with concrete plug. Brick and mortar plugs will not be acceptable in lieu of concrete. The Contractor shall install plugs in the sewers at locations shown on the Plans or where directed by the Engineer. All work shall be performed by competent personnel. The minimum install depth of the mechanical plug shall be two pipe diameters up to 24 inches. The minimum thickness of the concrete to the plug shall be two pipe diameters up to 24 inches. The Contractor shall submit data sheets for mechanical wing plugs for use on this project.

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Basis of Payment. This work will be paid for at the Contract Unit Price per Each for PLUG PIPE of the diameter specified, which price shall include the cost of all labor, materials and equipment necessary to complete the work.

SP-73 TRANVERSE UNDERDRAIN, 4"

Description. This work shall be according to Article 601 of the Standard Specifications and IDOT Highway Standard 601001-05. The Contractor shall install Type 2, 4" PVC underdrains at the locations shown on the plans.

The top of pipe underdrains shall be placed a minimum of 6" below the Aggregate Subgrade improvement layer. The cost of making pipe underdrain connections to drainage structures shall be included in the cost of Pipe Underdrains, of the type specified.

Basis of Payment. This work will be paid for at the Contract Unit Price per Linear Foot for TRAVERSE UNDERDRAIN, 4", which price shall include the cost of all labor, materials and equipment necessary to complete the work.

MANHOLE, CATCH BASIN, AND INLET CASTINGS

THE FOLLOWING CASTINGS OR EQUIVALENT, SHALL BE USED:

UTILITY	DESIGNATION IN CONTRACT DOCUMENTS	SPECIFIC FRAME AND GRATE/COVER	LETTERING	APPLICATION
STORM	TYPE 8	EAST JORDAN IRON WORKS 6527 OR NEENAH R-4340-B	DUMP NO WASTE DRAINS TO RIVER	INLETS AND CBS IN LAWN AREAS
STORM	TYPE 3	EAST JORDAN IRON WORKS 7000 WITH TYPE T1 BACK (TYPE M3 FLAT GRATE IN DRIVEWAYS) OR NEENAH R-3275	DUMP NO WASTE DRAINS TO RIVER	INLETS AND CBS IN BARRIER CURB
STORM	TYPE 1 CLOSED LID	EJIW 1022-2 OR NEENAH R-1772 WITH CLOSED LID WITH CONCEALED PICKHOLES	VILLAGE OF GLEN ELLYN STORM	ALL STORM MANHOLES
STORM	TYPE 1 OPEN LID	EJIW 1022-2 WITH M1 GRATE OR NEENAH R-2502 (R-1772 FRAME WITH D GRATE)	DUMP NO WASTE DRAINS TO RIVER	INLETS, CBS (AS DIRECTED)
STORM	ROLLED	EAST JORDAN IRON WORKS 7430M1 OR NEENAH R-3237-1	DUMP NO WASTE DRAINS TO RIVER	INLETS, CBS (AS DIRECTED)
STORM	TYPE 1 FRAME, OPEN LID (ADA ACCESSIBLE)	EAST JORDAN IRON WORKS 1022-2 WITH M3 ADA GRATE	DUMP NO WASTE DRAINS TO RIVER	PEDESTRIAN ACCESS ROUTE
SANITARY	TYPE 1 CLOSED LID	EAST JORDAN IRON WORKS 1022-2 OR NEENAH R-1772 WITH SELF-SEALING CLOSED LID WITH CONCEALED PICK HOLES	VILLAGE OF GLEN ELLYN SANITARY	ALL SANITARY MANHOLES
WATER	TYPE 1 CLOSED LID	EJIW 1022-2 OR NEENAH R-1772 WITH CLOSED LID WITH CONCEALED PICK HOLES	VILLAGE OF GLEN ELLYN WATER	ALL WATER VAULTS

SP-74 RAILROAD PROTECTIVE LIABILITY INSURANCE (5 and 10)

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
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DOT/AAR No.:
RR Division:

RR Mile Post:
RR Sub-Division:

For Freight/Passenger Information Contact:
For Insurance Information Contact:

Phone:
Phone:

DOT/AAR No.:
RR Division:

RR Mile Post:
RR Sub-Division:

For Freight/Passenger Information Contact:
For Insurance Information Contact:

Phone:
Phone:

Approval of Insurance. The original and one certified copy of each required policy shall be submitted to the following address for approval:

Illinois Department of Transportation
Bureau of Design and Environment
2300 South Dirksen Parkway, Room 326
Springfield, Illinois 62764

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The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

SP-75 UNDERDRAIN

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install perforated and rigid HDPE underdrains under planting areas and pavement areas as indicated in the contract plans or as directed by the Engineer.

General Requirements. The requirements shall be according to Article 601.04 of the Standard Specifications except as herein modified.

Article/Section

Pipe Underdrain

Installation.....601.04

PE

Pipe.....1

040.04

Fabric Envelope for Pipe

Underdrains.....1080.01

Material:

Underdrains shall be Corrugated PE Pipe with a Smooth Interior, and Perforated Corrugated PE Pipe with a Smooth Interior meeting the requirements of 1040.04.

All underdrain pipe to be 4" diameter. Perforated pipe is to be encased in CA-7 and wrapped with knitted fabric envelope per 1080.01 of the Standard Specifications, as shown on contract plans.

Perforated Corrugated PE Pipe with a Smooth Interior is to be used in all planting areas and within soil cells. This includes areas inside of SEAT WALLS and GRANITE CURB PLANTERS, as well as areas within SOIL CELLS.

Corrugated PE Pipe with a Smooth Interior (non perforated) is to be used in all other areas.

All underdrains are to be connected to drainage structures as indicated on contract plans or as directed by the Engineer.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed per LINEAR FOOT for UNDERDRAIN.

Basis of Payment. This work will be paid for at the contract unit price per LINEAR FOOT, for UNDERDRAIN which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-76 SOIL CELLS

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install a suspended pavement soil cell system, including soil cells, root barriers, geotextile fabric and air vents at locations specified in the Contract plans or as directed by the Engineer. Soil cells will be filled with PLANTER SOIL prior to completion of installation.

General Requirements. Soil cell system will be placed at the location indicated in the plans or as directed by the Engineer. The locations will be field marked and verified for approval by the Engineer.

SUMMARY

All work is to be completed to meet or exceed the manufacturer's design and installation requirements.

REFERENCES

A. Definitions:

1. Aeration/irrigation piping system: A system of small perforated piping that is placed within the soil cell system and has inlets within raised planters. This system is used to provide a means of getting air and water into the soil and rootzone, and a means of allowing organic gases, from the decay of organic matter within the soil, to escape. Automatic irrigation will be incorporated into this system.
2. Backfill material: Material that is placed around the outside perimeter of the soil cell system and the vertical walls of the excavation. It is installed in lifts and compacted to support the pavement surface above. These materials are to be open-graded, self-compacting, $\frac{3}{8}$ " (9 mm) to $\frac{3}{4}$ " (19 mm) angular crushed stone, or a clean, native excavated material, that is free from organic matter, frozen materials, stones larger than 3" (75mm) in diameter, trash, other debris and other toxic substances injurious to plant material.
3. Geotextile / geofabric / filter fabric: A fabric composed of high tenacity polypropylene or polyester fibers which are woven into a network such that the fibers retain their relative position and is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids. Used for reinforcement of aggregate pavement base.
4. Geogrid: Net-shaped woven polyester fabric with a coating, uniaxial or biaxial geogrid, inert to biological degradation, resistant to naturally occurring chemicals, alkalis, and acids; used to provide a stabilizing force within soil structure as the fill interlocks with the grid. Used for reinforcement of aggregate pavement base or sub-

base.

5. Geocomposite / geogrid with integrated non-woven geotextile: High strength geogrid comprised of stretched monolithic polypropylene flat bars with welded junctions and a mechanically bonded filter geotextile welded within the geogrid structure. Used for reinforcement of aggregate pavement base.
6. Finish grade: Elevation of the finished pavement or planting surface.
7. Native soil: Subsoils that are naturally present in a geographic area. Typically, these are naturally compacted, undisturbed soils.
8. **PLANTER SOIL**: As defined in PLANTER SOIL section, this is a correctly balanced soil mix consisting of silt, sand, clay and organic material soil mix that shall provide optimum growth conditions for tree roots within the soil cell system and other planting spaces.
9. Reinforcing collar: A trench between the soil cell system and surrounding soil, lined with geo-composite, filled with granular base course and compacted.
10. Ribbed root barrier: Linear Ribbed root barrier with vertical integral root training ribs. This product is used to redirect roots vertically.
11. Root & moisture barrier: Linear membrane to prevent root and moisture penetration into surrounding areas. This product is used to redirect roots laterally.
12. Soil cell system: A plastic modular, pavement support system comprising of interlocking vertical uprights, infill panels and a top deck that allows for air movement above the soil profile. This system is designed to be filled with planter soil for tree rooting. It is an engineered, load-bearing system that is designed to be used sub-surface under pedestrian rated pavement surfaces.
13. Soil inspection port: A plastic pipe extending from the pavement surface down into the top of the soil cell system. This port is used for the sampling and inspection - of the soil within the system and can be used as a means adding nutrients to the soil.
14. Underdrain: A concealed drain with openings through which the water enters when the water table reaches the level of the drain. The under drain is placed in the SUB-BASE GRANULAR MATERIAL TYPE B course, beneath the soil cell system. See UNDERDRAIN section.
15. Sub-grade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill.
16. Walked-in: A process for light foot compaction of soils by walking through the soil during and following placement.

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ADMINISTRATIVE REQUIREMENTS

A. Manufacturer

The manufacturer shall be responsible for coordinating the delivery of the soil cell system to the contractor. The system includes all components necessary for the assembly of the soil cell system as required per the drawings.

The Manufacturer shall provide a minimum of 4 hours on-site training and support during the system installation. This may be coordinated with a Pre-Installation Meeting.

Prior to the installation of the soil cell system and associated work, the manufacturer shall meet with the contractor, the installer of the soil cell system, and the Engineer at their discretion and other parties concerned with the system installation and performance.

The pre-installation meeting agenda will include, but is not limited to:

- a. The review of required submittals,
- b. Coordination and sequence of installation with other trades and the construction schedule,
- c. Review of materials, system details and methods of installation,
- d. Site specific considerations (ie: geotechnical, hydrology),
- e. System layout and installation procedures,
- f. Mock-up of the soil cell system.

Test work in this section in accordance with specified standards. In the absence of a specified standard, comply with the relevant ASTM standard.

SUBMITTALS

- A. Product Data: For each type of product, the manufacturer's product literature shall be submitted with technical data sufficient to demonstrate that the product meets these specifications.
- B. Test and Evaluation Reports: For soils and aggregates provide testing agency laboratory analysis.
- C. Shop Drawings: Drawings shall show all information needed to install the soil cell system including aggregate sub-base, horizontal and vertical dimensions and elevations.
- D. Qualification Data: The work shall be performed by an experienced installer with a successful track record in performing work of the same scope and quality as required by these specifications.
- E. Closeout Submittals: Provide manufacturer's warranty documentation.

QUALITY ASSURANCE

A. Manufacturer Qualifications

- a. The soil cell system manufacturer must have at least 20 years' experience in the design, manufacture and installation of soil cell systems.
- b. A manufacturer whose product is manufactured in an ISO/TS 16949 and ISO 9001 certified facility.

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B. Materials:

- a. All materials, methods of construction, and workmanship shall conform to applicable requirements of ASTM and AASHTO Standards, unless otherwise specified.
- b. The quality of material and the finished components shall be subject to inspection. Such inspection may be made on-site upon delivery or at any point thereafter. The components shall be subject to rejection at any time if material fails to meet any of the specification requirements, even though sample components may have been accepted as satisfactory. Components rejected after delivery to the site shall be marked for identification and shall be removed from the site at once.

C. Inspection:

- a. All components shall be inspected for general appearance, dimensions, soundness, etc.
- b. Upon completion of relevant excavation work, and prior to placement of geotextile and aggregate, the sub-base soil shall be inspected by authorized representative and be signed off on as acceptable and meeting manufacturer's recommendations.
- c. Upon completion of the placement of the soil cell system (as specified) and geotextile, and prior to backfilling, the structure shall be inspected by an authorized representative and signed off on as acceptable and meeting manufacturer's recommendations.

D. Defects

- a. Products with structural defects shall be immediately removed and replaced with acceptable parts.

DELIVERY, STORAGE & HANDLING

- A. Components shall be unloaded, handled and stored in an area protected from traffic and in a manner to prevent damage. Inspect materials to ensure that specified materials have been received.
- B. Plastic components may become brittle at cold temperatures. Use caution when handling plastic components below 15°F (-10°C).
- C. Store all material on pallets, with pallet wrap intact until required for installation. Unwrap pallets carefully ensuring unstable sections don't collapse dangerously. Store units to avoid damage from other construction activities.
- D. Protect geogrids and geofabrics from physical damage and from temperatures in excess of 150°F (65°C). Do not expose geogrids and geofabrics to direct sunlight for more than 7 days.
- E. Ensure that all unrelated construction traffic be kept away from the limits of excavation

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until project is complete and final surface materials are in place.

SITE CONDITIONS

- A. Do not proceed with installation when subgrades, soils and planter soils are in a wet, muddy or frozen condition.
- B. Before commencing work on site examine available documentation pertaining to site and determine nature and location of above ground and underground utilities.
- C. Before proceeding with full scale excavation work, confirm nature of existing soil conditions and the drainage characteristics of existing soil.
- D. Abandoned utilities encountered during excavation shall be removed and their ends plugged.
- E. Active utilities encountered during excavation and not indicated in Contract Documents shall be reported immediately to the Engineer and utility owner who shall determine measures necessary to repair (if damaged), relocate, remove or work around the utility.

WARRANTY

- A. Provide manufacturer's standard warranty against defects in materials and workmanship.
- B. Products will be free from defects in components and workmanship for a period of thirty (30) years from date of manufacture.

MATERIALS

A. SYSTEM DESCRIPTION

- a. The soil cell system shall be specifically designed for the purpose of providing large volumes of uncompacted soil for healthy tree growth and/or stormwater management (bioretention) under load-bearing pavement surfaces. At minimum, the soil cell system shall provide for uncompacted soil, soil and rootball aeration/irrigation, management of tree roots, and soil inspection.
- b. Specific to the site requirements, the soil cell system shall have the flexibility to be assembled around existing structures, utilities and in tight constraints to achieve the specified soil volume. The system shall allow for easy disassembly and reassembly to allow for utility repair and/or maintenance within and below the system.
- c. The soil cell system shall be a complete system that at minimum includes, but is not limited to the following integral components:
 - i. pavement support system
 - ii. geogrid/geofabric
 - iii. aeration/irrigation piping
 - iv. fittings and surface inlets

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- v. root management products
- vi. inspection portals.

COMPONENTS

A. Pavement support system / soil cell system

1. For ease of installation and for future utility repair and/or maintenance, the pavement support system shall consist of two main components, an upright and a top deck. An optional interlocking side infill panel shall be available and installed where additional lateral strength is required.
2. The pavement support system shall have the ability to be uniformly stacked to increase the cubic volume of soil per area of installation, and to work around existing below ground infrastructure. At minimum the following five depth configurations shall be available: ~16", ~24", ~32", ~40", and ~48". This project is designed around a 24" depth system.
3. The assembled soil cell system shall have a minimum accessible soil volume of 97% and be continuously open in both length and width.
4. The assembled soil cell system shall have the capability of accommodating utilities up to ~16" (400 mm) within the system.
5. As assembled, the soil cell system uprights shall interlock in both the vertical and horizontal axis, and the top deck shall interlock with the uprights. The soil cell system shall be designed to be assembled to form an interlocked soil cell matrix, or specific to site requirements, the soil cell system may be installed as independent or groups of soil cells. Spacing between the soil cells shall be determined based on pavement design and load requirements. The layout of the soil cell system shall have the ability to be field adjusted to meet specific site requirements.
6. The soil cell system shall have a minimum load bearing strength of 6,260 pounds per square foot / 30,564 kilograms per square meter, as tested by a third-party laboratory. The assembled soil cell system shall at minimum, be capable of supporting vehicle loads in accordance with AASHTO H-20/HS-20, including a safety factor of 1.5, when used in conjunction with approved vehicle rated pavement profiles.
7. The soil cell system shall meet the minimum load bearing strength of 6,260 pounds per square foot / 30,564 kilograms per square meter when installed on slopes up to 5%. For slopes greater than 5%, and less than 10%, please contact the manufacturer for design assistance.
8. The soil cell system shall be designed to be filled with PLANTER SOIL, with the top deck either on or off, and without the use of strong-backs to hold the uprights in position during soil installation.

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9. The soil cell system components shall be manufactured using 100% recycled plastic to the following sizes and specifications:
 - a. Upright: Injection molded, polypropylene or polyethylene, with nominal dimensions as follows: 24" upright ~20" x ~24" x ~4".
 - b. Top Deck (Quick Release): Injection molded, polypropylene or polyethylene deck with nominal dimensions as follows:
 - i. The top deck shall be designed to provide a 3" aeration layer above the planter soil within the soil cell system.
 - ii. Top deck dimensions: ~20" x ~20" x ~3"
 - c. Side Infill Panel: Injection molded, polypropylene or polyethylene with nominal dimensions as follows: ~13" x ~20.5" x ~1.5"

10. Products meeting this specification:

RootSpace® 600 (24") Pavement Support System (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com)

ARE WE NOT ALLOWING
SILVA CELL TO BID?

B. Ribbed root barrier

1. The ribbed root barrier shall be designed to redirect tree roots down and away from pavement surfaces. Ribbed root barrier shall be installed vertically at specified locations. Ribbed root barrier shall be manufactured to meet the following requirements:
 - a. Material shall be 100% recycled plastic.
 - b. Minimum Thickness: 0.04" (1.00 mm).
 - c. Form: Linear rolls with vertical integral root training ribs.
 - d. Depth: as required per plan detail.
 - e. Roll Length: 100'
 - f. Color: Black
 - g. Seams shall be overlapped ~8" and sealed on both sides with joining tape.

2. Products meeting this specification:

- a. ReRoot™ Ribbed Root Barrier (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com)

C. Soil aeration

1. The soil aeration shall be designed to provide a means of getting air and water into the soil a means of allowing organic gases, from the decay of organic matter within the soil, to escape. The soil aeration components shall be manufactured to meet the following requirements:

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- a. Pipe
 1. Material shall be 100% recycled plastic.
 2. Diameter: 4" (100 mm)
 3. Form: Precut non-perforated pipe.
 4. Length: as shown on drawings
 5. Color: Black
 - b. Aeration Inlet
 - i. Body: Stainless Steel
 - ii. Grate: Stainless Steel
2. Products meeting this specification: RootRain™ ArborVent™ 150 (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com)

F. Soil inspection portal

1. The soil inspection portal shall be designed to allow for the sampling and inspection of the soil and/or water levels within the soil cell system and can be used as a means adding nutrients to the soil. The soil inspection portal components shall be manufactured to meet the following requirements:
 - a. Material shall be polyvinyl chloride (PVC) pipe.
 - b. Diameter: 4" (100 mm)
 - c. Cap: Flush cap installed flush with pavement surface, rated for walk-over conditions. Cap color to be black.

G. Geogrid reinforcement for soil

1. A geogrid meeting the following meeting the following requirements shall be placed on top of the SUBBASE GRANULAR MATERIAL TYPE B, beneath the SOIL CELL system.
2. High-performance geogrid reinforcement for soil, constructed of high molecular weight and high tenacity polyester yarns utilizing a knitting process and polymeric coating to provide superior engineering properties. The geogrid shall be engineered to be mechanically and chemically durable, in both the harsh construction installation phase and in aggressive soil environments.
3. GeoGrid Physical Properties:

Property	Imperial
Ultimate Strength (MD) (ASTM D 6637 - Method A Single-Rib)	3,600 lbs/ft

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Creep Limited Strength (ASTM D 5262D 6992)	2,323 lbs/ft
Long-term Design Strength (Sands, Silt & Clay)	1,919 lbs/ft
Product Weight	6.5 oz/sy

4. Products meeting this specification:

- a. ArborGrid™ 200 (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com)

H. Geogrid with integrated non-woven geotextile:

1. A geogrid with integrated non-woven geotextile meeting the following meeting the following requirements shall be placed on top of the SOIL CELL system and beneath the BRICK PAVERS: 5FT FURNITURE ZONE concrete base.
2. The geogrid with integrated non-woven geotextile is a high strength geogrid comprised of stretched monolithic polypropylene flat bars with welded junctions and a mechanically bonded filter geotextile welded within the geogrid structure. It is used for reinforcement of the pavement base. The geogrid with integrated non-woven geotextile shall be manufactured to meet the following requirements:

a. GeoGrid Physical Properties:

Property	Units	Value
Mass per unit area	g/m ³	250
Max tensile strength (machine direction/cross machine direction)	kN/m	≥ 40 / ≥ 40
Elongation at nominal strength (machine direction/cross machine direction)	%	≤ 8 / ≤ 8

b. Geotextile Properties

Property	Units	Value
Mass per unit area	g/m ³	150
Max tensile strength (machine direction/cross machine direction)	kN/m	7.5 / 11
Elongation at nominal strength (machine direction/cross machine direction)	%	40 / 30
Puncture Force (x-s)	N	1,670

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Opening size	mm	0.13
Water Permeability – flow rate H50	l/sm ²	110

2. Products meeting this specification:

- a. CombiGrid (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com)

I. PLANTER SOIL (installed within the soil cell system)

1. As specified in PLANTER SOIL

J. Backfill material (installed around the perimeter of the soil cell system)

1. The backfill material shall meet one of the following specifications:

- a. Open-graded, self-compacting, $\frac{3}{8}$ " (9 mm) to $\frac{3}{4}$ " (19 mm) angular crushed stone.
- b. Clean, compactable, native excavated material (structural fill), that is free from organic matter, frozen materials, stones larger than 3" (75mm) in diameter, trash, other debris and other toxic substances injurious to plant material.
- c. Clean, compactable, coarse grained soil, meeting the following requirements,
- i. Unified Soil Classification system for soil type GW, GP, GC with less than 30% fines, SW, and SC with less than 30% fines.

K. Underdrain

1. Perforated PVC 4" diameter pipe, with filtersock.
2. Min. grade SDR-26
3. Connect to catch basins

EXECUTION

GENERAL CONDITIONS

- A. Coordinate the installation with the product manufacturer to have the manufacturer on-site during product installation.
- B. Locate all underground utilities before proceeding with excavation.
- C. Review manufacturer's installation procedures and coordinate soil cell system installation

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with other work affected, such as grading, excavation, utilities, construction access, erosion control, etc.

- D. Tree Planter Layout: Layout tree planter locations and dimensions using string lines, survey pegs and marking paint. Obtain Engineer's approval of layout before proceeding with excavation.
- E. Tree Planter Depths: Confirm excavation depths with reference to finished pavement elevations. Allow for granular base course layer and, where applicable, drainage layer.
- F. The assembled soil cell support system may be walked on, but vehicular traffic is prohibited until properly backfilled and covered per Manufacturer's recommendations. Protect personnel and the installation against damage with highly visible construction tape, fencing, or other means until construction is complete.

EXCAVATION BELOW GRADE

- A. Excavation required for the installation of all pipes and structures shall be made to the depths and widths indicated on the Drawings (a minimum of 12" (300 mm) beyond all sides of at the base of the soil cell system is required for proper backfill). The Contractor shall ensure that the bottom of the excavation is firm and dry and, in all respects, acceptable to the Engineer.
- B. All excavated material encountered within the limits indicated and not able to be reused on site shall be removed and disposed of by the Contractor.
- C. In excavation faces, all loose or protruding rocks shall be secured or otherwise removed to finished grade. All cut slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings or as directed by the Engineer.
- D. Furnish, install, monitor and maintain excavation support (e.g., shoring, sheeting, bracing, trench boxes, etc.) as required by Federal, State and Local Laws, Ordinances, Regulations and Safety Requirements. Support the sides of excavation, to prevent any movement which could in any way reduce the width of the excavation below that necessary for proper construction and protect adjacent structures from undermining, settlement or other damage.

SUB-GRADE PREPARATION AND GRADING

- A. The sub-grade shall be unfrozen, level, and free of lumps or debris with no standing water, mud or muck. Do not use frozen materials or materials mixed or coated with ice or frost. Unless otherwise specified by the Engineer, a minimum 2,000 pounds per square foot bearing capacity is required.
- B. If Contractor fails to maintain the sub-grade properly, the Contractor shall remove the unsuitable material. If the bottom of any portion of the excavation is removed below the

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limits shown on the Drawings, it shall be restored with additional subbase granular material per the Engineer to the elevation shown in the Drawings. Compacted native earthen fill is not acceptable.

- C. If in the opinion of the Engineer, the sub-grade, at or below the normal grade of the excavation as indicated on the Drawings, is unsuitable for construction; it shall be removed to such depth and width as the Engineer may direct and be replaced with suitable material.

SUB-BASE COURSE PREPARATION / INSTALLATION

- A. Install a 4" minimum thickness, leveling bed of subbase granular material type b across the bottom of the excavation. The subbase shall extend 6" beyond the base of the soil cell system in all directions. The subbase be flat surface, free from lumps, debris or any other sharp materials. Base may have up to a 5% slope.
- B. The subbase shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets.
- C. The subbase shall be compacted shall be compacted to a minimum of 95% of the Standard Proctor Density.
- D. Place the geogrid reinforcement for soil on top of the subbase granular material type b. The geogrid shall extend 6" beyond the base of the soil cell system in all directions. Overlap the geogrid reinforcement for soil a minimum 12" or as recommended by the manufacturer.

SOIL CELL SYSTEM INSTALLATION

- A. Installation procedure, as follows, shall be followed by the Contractor. The Contractor shall also reference the Manufacturer's Installation Guidelines, and where any discrepancy exists the Engineer reserves the right to contact the Manufacturer's Representative prior to continuation. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance.
- B. Use a soluble paint, chalk, or string to mark the footprint of the soil cell system. Prior to the installation of soil cell uprights, confirm tree pit dimensions and mark location of trees. Rectify discrepancies and errors. Ensure squareness prior to placement.
- C. Install uprights in strict accordance with manufacturer's written instructions and installation diagrams. Prior to placement, check each upright for damage. Reject cracked, chipped and otherwise damaged components. Ensure that uprights in contact with the subbase are firmly seated, with no rocking. Ensure that uprights are mechanically interconnected both horizontally and, in multiple layers, vertically.
- D. upon completion of the soil cell system, wrap the sides of the system with geogrid to

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prevent backfill material migration into the soil cells. Take great care to avoid damage to the geogrid during placement. If damage occurs, repair that portion per manufacturer specifications.

- E. The soil cell system should not be left exposed to extreme temperatures, high wind conditions, snow, ice or copious amounts of rainfall.

ACCOMMODATING UTILITIES WITHIN THE SOIL CELL SYSTEM

- A. Utilities within the soil cell system should meet specifications as required by utility company's standards. This may require special treatments, barriers and details to achieve this.

INSTALLATION OF PLANTER SOIL

- A. Obtain the Engineer's approval prior to filling the soil cell system with PLANTER SOIL. Install PLANTER SOIL after the installation of the subbase, underdrains, uprights, root barriers and backfill material is in place.
- B. Except as shown otherwise on Drawings completely fill all void spaces with PLANTER SOIL. Place PLANTER SOIL using an excavator bucket and spread with rakes or shovels
- C. Keep outside perimeter of the soil cell system free of PLANTER SOIL.
- D. PLANTER SOIL shall be placed in lifts of 8" (200 mm) to 12" (300mm) and foot compacted by walking through the PLANTER SOIL. In no case shall the PLANTER SOIL be compacted greater than foot compaction, after installation within the soil cell system. Note: the top deck is also an aeration layer allowing soil to be filled to top of the uprights.

INSTALLATION OF AERATION PIPING AND INSPECTION PORTAL

- A. Lateral Aeration/Irrigation Piping: Install piping within top layer of soil cell system uprights in a complete connected circuit, within 12" of outer edge of matrix. Fit junctions and risers at maximum spacing of 12'.
- B. Vertical Soil Inspection Portal: Place vertical piping within central opening of soil cell system lid.
- C. Trim vertical pipes to 6" above finished pavement and support in vertical position by temporary staking. Seal open ends of pipes.

INSTALLATION OF ROOT BARRIERS AND ROOT AND MOISTURE BARRIERS

- A. Install root barriers as shown on Drawings. Overlap barrier joints 8" (200mm) and tape

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both sides of joint. Top edge of barriers shall be level with adjacent construction. Ensure that earth surfaces in contact with barriers are flat and free of sharp debris and stones to avoid puncturing barriers. Install ribbed root barriers facing towards the tree.

BACKFILLING THE PERIMETER

- A. Place backfill material evenly around the perimeter of the soil cell system in 8" to 10" lifts and compact as specified below.
- B. For compactable materials, each lift shall be compacted shall be compacted using a vibratory plate or compaction equipment to a minimum of 95% of the Standard Proctor Density. For self-compacting stone materials, each lift shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets, or as specified by the Engineer.
- C. Take care to ensure that the compaction equipment doesn't damage the root barriers, geogrid or soil cell system.
- D. Continue backfilling the perimeter until it is backfilled within 10" to 12" of the top of the soil cell system uprights. No pavement base shall be placed on the top of the soil cell system until the side backfill has been placed and compacted.

INSTALLATION OF THE GEOGRID WITH INTEGRATED NON-WOVEN GEOTEXTILE

- A. Place the geogrid with integrated non-woven geotextile horizontally on top of the soil cell system, allowing it to extend 12" vertically down the sides of the system, and 12" horizontally away from the system. For seams, overlap geogrid with integrated non-woven geotextile a minimum 8".

INSTALLATION OF PAVEMENT BASE

- A. Continue backfilling the perimeter and top of the soil cell system in 4" (100 mm) lifts, until specified depth is reached.
- B. For compactable materials, each lift shall be compacted shall be compacted using a vibratory plate or compaction equipment to a minimum of 95% of the Standard Proctor Density. For self-compacting stone materials, each lift shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets, or as specified by the Consultant.
- C. Only low-pressure tire or track vehicles shall be operated over the soil cell system during construction. No machinery should drive on top of the soil cell system until a minimum backfill and compaction is achieved. Dump trucks and heavy equipment shall not be operated within the soil cell system limits of excavation at any time. Where necessary the heavy equipment should unload in an area adjacent to the soil cell system and the material should be moved over the system with low-pressure tire or track equipment.

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- D. Ensure that all unrelated construction traffic is kept away from the limits of excavation until the project is complete and final surface materials are in place. No non-installation related loading should be allowed over the soil cell system until the final design section has been constructed (including pavement).
- E. Place surfacing or paving materials over the soil cell system with care to avoid displacement of cover fill and damage to surrounding areas.

SITE QUALITY CONTROL

- A. Compaction Tests: Testing agency shall perform compaction testing on sub-grade and on each layer of fill to determine compliance with specified compaction. Determine method and frequency of testing in consultation with the Engineer.

CLEANING & PROTECTION

- A. Perform clean up during installation and upon completion of each phase of the work. Maintain the site free of soil, sediment, trash and debris. Remove excess soil materials, debris, and equipment from the site following completion of each phase of the work.
- C. Repair damage to adjacent materials and surfaces resulting from installation of this work using mechanics skilled in remedial work of the construction type and trades affected.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed by CUBIC FEET for SOIL CELLS.

Basis of Payment. This work will be paid for at the contract unit price per CUBIC FOOT, for SOIL CELLS which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above. UNDERDRAIN and PLANTER SOIL shall be paid for separately.

SP-77 PLANTER SOIL

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install planter soil at the locations specified in the Contract plans or as directed by the Engineer.

General Requirements. Planter soil will be installed within the soil cells, seat wall planters and granite curb planters. Planter soil will be a growing medium that supports tree and plant growth, and laboratory testing of supplied soil is necessary to determine adherence to specified soil mix design.

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Materials:

Planter soil is synonymous with growing medium. An amended existing topsoil that contains organic matter is capable of sustaining vigorous plant growth, contains a typical clay content of <18% by mass and is free from unwanted matter such as:

1. Stones, rock and pebbles in accordance with the specifications listed,
 2. Hard clods or objects in accordance with the specifications listed,
 3. Roots in accordance with the specifications listed,
 4. Sticks and rubbish,
 5. Material toxic to plants
 6. Materials that may pose a danger to human health, e.g. glass, hard plastic.
- A. To ensure effective infilling of the cells, the planter soils need to be friable and non-plastic during placement and installation. To help maintain a free-flowing soil, soil texture and moisture content are critical soil properties.
- B. Planter Soil shall meet the following requirements,
1. Purity: Free of pests, disease, and fungus.
 2. Foreign matter: On visual inspection, free from non-soil material, brick and other building materials and wastes, sharps, hydrocarbons, plant matter, weed roots, stolon's, rhizomes, and any other foreign matter or material or substance that would render the soil or soil ameliorant unsuitable for horticultural use.
 3. Contamination: Do not use soils contaminated with rubbish or other materials that are:
 - a. Corrosive, explosive or flammable.
 - b. Hazardous to human or animal life.
 - c. Detrimental to healthy plant growth.
- C. Planter Soil shall meet the following performance requirements,

Parameter	Unit	Lower Limit	Upper Limit
pH Value <i>(Optimal pH is highly dependent on the tree species to be planted and should be tested and adjusted based on species prior to planting.)</i>	Unit	5.5	8.5
Organic Material	% / weight	4.0	8.0
Clay <10% clods from 1" – 3" (250 mm - 750 mm) <5% clods 3" – 6" (75 mm - 150 mm)	% / weight	5.0	18.0

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Silt	% / weight	5.0	30.0
Sand <25% <i>fine sand</i>	% / weight	50.0	80.0
Stones ¼" to ½" (60mm to 125 mm)	% / dry weight	0.0	5.0
Stones ½" to 1" (125 mm to 250 mm)	% / dry weight	0.0	5.0
Stones >1" (25 mm) in the longest dimension	% / dry weight	0.0	0.0
Debris <1" (25 mm) in the longest dimension	% / weight	0.0	5.0

Submittals:

A. Test and Evaluation Reports:

- 1.. Submit required soil test analysis report for each sample of planter soil mixes from an approved soil-testing laboratory as follows:
 - a. If tests fail to meet the Specifications, obtain other sources of material, retest and resubmit until accepted by the Engineer.
 - b. All testing shall be performed following the requirements of Methods of Soil Analysis, The Soil Science Society of America.
2. Soil-testing laboratory shall provide tests and prepare test reports for all tests performed. Submit copies of test reports to the Engineer immediately upon their becoming available.
3. All soil testing costs shall be included in the Planter Soil pay item.

B. Supplier Qualifications:

1. Soil Supplier: Planter soil mixes shall be supplied by a firm that specializes in the production of mixes of planter soils and have at least 5 years' experience in providing planter soil mixes soils to projects of similar size and scope to this Work.
2. Submit documentation of the qualifications of the planter soil supplier and their field supervisor, sufficient to demonstrate that both meet the requirements of this specification.
3. Submit list of completed projects of similar scope and scale demonstrating capabilities and experience.

C. Testing Agency

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1. Testing agency shall have an established track record in testing the type of soil required by this specification and shall have soils testing facilities and personnel capable of performing the physical and chemical testing required by this specification. Testing agency personnel shall be experienced in soil mix design and in making soil recommendations.
2. Test materials in accordance with specified standard listed below. In the absence of a specified standard, comply with the relevant ASTM standard.
3. Test Reports: Testing agency shall prepare test reports for all tests performed. Submit copies of test reports to Consultant immediately upon their becoming available.

Installation:

DELIVERY, STORAGE & HANDLING

A. Bulk Materials:

1. When filler soil is being loaded, ensure that loading equipment does not pick up underlying material and that tires and tracks do not till other material into the mix.
2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
3. Protect stockpiled material from rain, wind erosion and other detrimental weather effects.
4. Do not move or handle materials when they are wet or frozen.

GENERAL

- A. Verify that planter soil meets specifications.
- B. Verify that the soil cell installation has been completed and approved by the Engineer.
- C. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, asphalt/concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, solid waste, or acid has been deposited in planter soil or Soil Cell system.
- D. Proceed with placement of planter soil only after unsatisfactory conditions have been corrected.

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INSTALLATION

- A. Place planter soil in the soil cell system $\leq 12''$ (300 mm) lifts or layers, in accordance with soil cell system manufacturer's specifications.
- D. Compaction: Compact each lift of soil media to ~70 percent of maximum Standard Proctor density according to ASTM D 698
- E. Finish Grading: Grade soil media so that it is flush with the top of the soil cell system. Rake to remove ridges, and fill depressions to meet finish grades.
- F. Install geocomposite on top of the soil cell system allowing it to extend 12'' (300 mm) vertical down the sides of the structural soil cell system, and 12'' (300 mm) horizontal away from the structural soil cell system. Overlap geocomposite a minimum 8'' (200 mm).

3.03 CLEANING & PROTECTION

- A. Perform cleaning during the installation of work and upon completion of the work.
- B. Remove from site all excess materials, debris, and equipment. Repair any damage to adjacent materials and surfaces resulting from installation of this work.

Method of Measurement. This work will be measured in place and the area computed as CUBIC FOOT for PLANTER SOIL.

Basis of Payment. This work will be paid for at the contract unit price per CUBIC FOOT for PLANTER SOIL and shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-78 SEAT WALL

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install a masonry seat wall planter with reinforced concrete core & footing, fired clay face brick, natural limestone corner units and natural limestone cap at locations specified in the Contract plans or as directed by the Engineer.

General Requirements. Each seat wall planter will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials:

Cast in place concrete core/footing: Shall be 4,000 p.s.i. min. with reinforcement as indicated on drawings.

Face Brick:

Material: Fired Clay Brick
Color: Queensport Blend

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Texture: Antique Colonial

Size: Standard 3-5/8" depth x 2 1/4" height x 8" length

Manufacturer: The Belden Brick Company

700 Tuscarawas St. W.

Canton, OH 44702

330-456-0031

All joints shall be concave 1/2" mortar joints

Mortar color: Solomon Colors 35X (medium grey)

Limestone Units and Cap:

Material: Indiana Limestone

Color: Buff

Texture: Standard

Note: Color and texture classification as established by Indiana Limestone Institute, Inc.

Size: All Units to be 4 1/8" depth x 4 1/2" ht – length varies (see drawings)

All Caps to be 20" depth with heights and lengths as noted on drawings.

All limestone unit joints shall be concave 1/2" mortar joints

Mortar color: Solomon Colors 35X (medium grey)

All Limestone Cap joints to be constructed as shown on drawings and comprised of a 1/2" compressible filler, bond breaker and NP1 polyurethane sealant, color to match mortar joints.

Limestone to comply with ASTM C568, classified as category II (medium density).

All cut limestone shall comply with thicknesses and dimensions shown on drawings and noted here. Cut joints are to be straight and at 90 degree angles to faces unless otherwise noted. Cut stones are to produce joints in uniform widths.

Obtain limestone from a single quarry source with resources to provide materials of specified consistent quality. The fabricator and the quarry shall have sufficient capacity to quarry, cut, and deliver the stonework on schedule. Both fabricator and quarry must be members in good standing of Indiana Limestone Institute.

Anchoring/mounting hardware: Masonry anchors and clips shall be stainless steel, 12" o.c.

Submittals:

The following items shall be submitted by the Contractor for approval by the Engineer:

1. Shop drawings illustrating all components of the planter wall including face brick, limestone units and limestone caps. Shop drawings for limestone units and caps shall be furnished by the limestone producer for approval by the Engineer. These drawings shall

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show complete design, installation and construction information in such detail as to enable the city to determine the adequacy of the proposed units for the intended purpose. The drawings must demonstrate that the design will comply with all applicable federal, state and local structural codes and standards. Installation and construction information shall be included on shop drawings. Shop drawings showing the layout and details of concrete footings and steel reinforcement size and placement shall be included.

2. Anchorage, lifting inserts and devices: The Contractor shall produce product data sheets and installation instructions. The face brick, limestone corner units and safe working load shall be clearly indicated.
3. For items including, but not limited to sealants, gaskets, connections, and other items, the Contractor shall provide product data and cut sheets for review.
4. 24"x24" samples of the face brick and mortar color for approval by the Engineer.
5. 8"x8" samples of the limestone corner units and cap for approval by the Engineer.

Assembly:

Face brick and limestone corner unit and cap sections shall be delivered to the project site clearly marked for proper identification. Items shall be protected from damage during delivery, storage and handling, and delivered to site when supporting concrete construction is completed and prepared for face brick and limestone installation. Products are to be stored in a clean, dry area in original, unopened containers and packaging until installation.

Field measurements: Contractor shall verify the dimensions of all supporting construction by field measurement before fabrication of limestone units and caps, and indicate measurements on shop drawings. Contractor shall coordinate fabrication schedule with construction progress to avoid delaying the Work. Cast in place concrete core and footing shall cure in place for a minimum of 14 days prior to installation of face brick, limestone corner units and limestone cap.

Seat wall top is to be level. Base of walls can vary with grades. Exposed concrete foundation at base of wall must be 0.25" min above finished grade, with a maximum exposure of 1". Contractor to supply shop drawings for review and approval by the Engineer.

Joints shall be sealed in-place after limestone cap sections are installed.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement: This work will be measured in place and the area computed per LINEAR FOOT for SEAT WALL

Basis of Payment: This work will be paid for at the contract unit price per LINEAR FOOT for SEAT WALL, which shall include all the material, labor, equipment and all incidental work necessary to perform the work described above.

SP-79 GRANITE CURB PLANTER

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install finished granite curb planters with joints, concrete footing, and doweling at locations specified in the Contract plans or as directed by the Engineer.

General Requirements. Each granite curb planter will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials:

Cast in place concrete footing:

Shall be 4,000 p.s.i. min. with horizontal doweling as indicated on drawings.

Granite curb:

Material: Granite dimensional stone curb meeting ASTM C 615-03

Color: Mesabi Black by Coldspring

Finish: Diamond 10 (on all exposed surfaces)

Size: 8" ht x 6" width – lengths as indicated on drawings – all outside edges to have 3/4" chamfered edge

Source: Coldspring Granite

Granite curb shall come from a single quarry, with sufficient reserves to satisfy the requirements of the project. The granite supplier shall have the capabilities to cut and finish the stone without delaying the project.

Curbs shall be cut stone from one block or contiguous, matched blocks in which natural markings occur. Fabricate stone to produce granite curb pieces as indicated on drawings. All edges and joints shall be straight and at right angles to face, except as noted on drawings.

Back, bottom and unexposed sides of granite are to be clean sawed. All exposed outside faces receive Diamond 10 finish. Overlapping corner sections on long sides of curb planters to include chamfered edge on front and side, as shown on drawings. Short sides of curb planter sections to include chamfered edge on front only. See drawings.

All joints between granite curb sections to be uniform 1/2" max width located as shown on drawings and comprised of a 1/2" compressible filler, bond breaker and NP1 polyurethane sealant, color to match granite.

Granite curbing to be drilled 12" on center on bottom to accept 1/2" diameter doweling inserted 3", as indicated on drawings.

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Submittals:

The following items shall be submitted by the Contractor for approval by the Engineer:

1. Shop drawings illustrating all components of the curb planter wall including dimensional stone, finished sides, location of doweling, chamfered edge, joint locations and overall layout. Shop drawings for granite curb planters shall be submitted for approval by the Engineer. These drawings shall show complete design, installation and construction information in such detail as to enable the city to determine the adequacy of the proposed units for the intended purpose. The drawings must demonstrate that the design will comply with all applicable federal, state and local structural codes and standards. Installation and construction information shall be included on shop drawings. Shop drawings showing the layout and details of concrete footings and placement shall be included.
2. For items including, but not limited to sealants, gaskets, connections, and other items, the Contractor shall provide product data and cut sheets for review by the Engineer.
3. 8"x8" samples of the granite planter curb material showing color and finish for approval by the Engineer.

Assembly:

Granite curb sections shall be delivered to the project site clearly marked for proper identification. Items shall be protected from damage during delivery, storage and handling, and delivered to site when supporting concrete construction is completed and prepared for granite curb installation. Products are to be stored in a clean, dry area in original, unopened containers and packaging until installation.

Field measurements: Contractor shall verify the dimensions of all supporting construction by field measurement before fabrication of granite curb planters and indicate measurements on shop drawings. Contractor shall coordinate fabrication schedule with construction progress to avoid delaying the work. Cast in place footing shall cure in place for a minimum of 14 days prior to installation of granite curb.

Granite curb planter tops shall be level, to the extent possible. To allow for variations in grading, the top of the concrete foundation can vary between a maximum of 1/2" above to a maximum of 3" below the adjacent finished grade, resulting in finished granite curb heights between 5" and 8.5" ht above finished grade. If pavement grading around a planter requires exceeds this tolerance, the planter curb and concrete footing can slope to maintain the tolerances noted.

Contractor to supply shop drawings showing granite profile, lengths and finished faces or review and approval by the Engineer.

Joints shall be sealed in-place after curb sections are installed.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed as EACH GRANITE CURB PLANTER: 6'x6'

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GRANITE CURB PLANTER: 5'x7'
GRANITE CURB PLANTER: 5'x15'
GRANITE CURB PLANTER: CUSTOM.

Basis of Payment. This work will be paid for at the contract unit price per EACH, for

GRANITE CURB PLANTER: 6'x6'
GRANITE CURB PLANTER: 5'x7'
GRANITE CURB PLANTER: 5'x15'
GRANITE CURB PLANTER: CUSTOM

Each of which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-80 IRRIGATION SYSTEM

Description:

- A. This work includes design and installation of the irrigation system as indicated on the drawings and as specified herein.
- A. Contractor shall prepare design drawings and shop drawings for approval by the Engineer Ellyn prior to commencement of any work on this item.
- B. This work shall include all labor, material, equipment, permits, and services to construct the irrigation system as designed in approved shop drawings, in accordance with sections 561, 562, 563, and 565 of the Standard Specification for Road and Bridge Construction and the Standard Construction Details, except as herein modified.
- A. The IRRIGATION SYSTEM item starts five (5) feet downstream of the BACKFLOW PREVENTER (RPZ) item. The Type K Copper pipe installed as part of the BACKFLOW PREVENTER (RPZ) may be converted to PVC pipe five (5) feet downstream of the backflow preventer.

Water Services:

- A. Work described in the items WATER TAP, WATER VALVE ASSEMBLY, WATER METER IN VAULT, BACKFLOW PREVENTER (R.P.Z.), and will collectively be described as Water Service Components within this specification.
- B. Water Service Components must be installed prior to the installation of the irrigation system, unless otherwise approved by the Engineer.
- C. The Water Service Components to be provided in this contract are shown in the plans. If it is determined the Irrigation System requires a greater water supply to conform with the requirements of this specification the Contractor must notify the Engineer immediately.
- D. The locations of Water Service Components are shown on the plans schematically. The location of the Water Service Components will be determined by the Engineer in the field. The irrigation system must be designed to accommodate the location of the Water

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Service Components as installed.

Electrical Services:

The irrigation system will be a battery powered system that does not require electrical connections.

Codes and Standards:

- A. Codes: All plumbing work shall be installed within applicable provisions of the Village's building codes.
- B. All devices and their installation must be in accordance with the Village's Plumbing Code.
- C. Standards: Items listed to conform to ASTM, ANSI, or manufactures recommendations, for installation.

Design:

The design will be completed, reviewed, and signed by a Licensed Professional Engineer or a Licensed Plumber. The design will follow these guidelines:

- A. Max velocity = 5 feet per second.
- B. Spray head distribution system shall be designed, unless the existing water main pressure is not sufficient. If main pressure is not sufficient a drip line system could be designed if approved by the Engineer.
- C. Spray Heads Minimum Height: 6"
Non-Turf Areas: 6 inches
- D. PSI variance:
All spray heads should operate at ± 3 psi of every spray head within a zone.
All zones should operate at ± 3 psi of every zone within a system.
- E. Isolation/Control Valves:
As shown on drawings
- F. Head Spacing:
Planters: 10 feet max spacing
- G. Angle of Trajectory: Should be calculated so that the spray will be above the mature plant height.
- H. Precipitation:
Planted areas: Minimum 1 ½ Inch per week
- I. Watering Run Times:

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Spray Head: Three (3) waterings per week, one (1) hour per watering maximum duration.

- J. Wiring size: calculations must be made to account for voltage drops and any splicing must be reflected on the shop drawings.
- K. Quick Couple Valve locations:
As shown on drawings

Submittals:

- A. Shop drawings shall be prepared by a Licensed Professional Engineer or a Licensed Plumber with proven experience in the design of irrigation systems of the magnitude of this project.
- B. Shop drawings shall include pipe detailing, controller layout, fabrication and installation of irrigation systems. Indicate plans, elevations and dimensions, including all accessories.
- C. Submittals shall identify pressure at the main and include hydraulic calculations for circuit pressure losses.
- D. Submittals shall include wiring sizes and electrical calculations.
- E. Submittals shall include a complete package of catalog cut sheets for all equipment used in this irrigation system.

MATERIALS

Manufacturers and Minimum Requirements:

Manufacturers: All products listed herein are acceptable. However, the Contractor can specify other products. These will be subject to review for approval prior to installation. Judgment of whether a product is equal to the approved will be based on the product information sheet, and the Village's past experiences with products.

1. PVC or Polyethylene Piping & Fittings:

All sprinkler piping mainlines and lateral pipe shall be SDR-21, Class 200, Polyvinyl Chloride (PVC) with a minimum pressure rating of 200 PSI. Pipe shall be permanently and continuously marked with the manufacturer's name, trademark, size, type, and National Sanitation Foundation (NSF) seal of approval. Pipe shall conform with the requirements of Commercial Standard CFS-256 and ASTM D-2241. PVC pipe shall be as manufactured by Crestline Industries ("Crestline"), Spears Manufacturing Company ("Spears") or J.M. Eagle Industries.

All PVC fittings shall be solvent weld, Schedule #40 and shall conform to ASTM D-2466. Fittings shall be manufactured from PVC Type I materials and shall meet National Sanitation Foundation (NSF) standards. PVC fittings shall be as manufactured by Spears,

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Crestline or North American Pipe Corp. PVC fittings shall be joined with an approved PVC primer and cement.

Polyethylene piping 1 inch thru 1 ½ inch can be used for lateral piping, (down stream of the control valve). The pipe shall be polyethylene NT80 irrigation pipe SIDR-15 PE2406 NSF-PW ASTM D 2239 PPFA manufactured by Crestline, Spears or North American Pipe Corp. The pipe must be permanently continuously labeled accordingly. The insert fittings are to be constructed of PVC and shall conform to ASTM D 2609 and National Sanitation Foundation Standard #14 plastic fittings for potable water. Insert fittings shall be clamped to pipe with two (2) stainless steel crimp type clamps on each pipe end.

Plastic insert fittings for polyethylene plastic pipe are manufactured by Spears, Crestline or approved equal. Clamps shall be manufactured by Oetiker, Murray or APG.

2. Installation Main & Lateral Piping:

All sprinkler main lines shall be installed prior to paved surface installation. Any excavation shall be done by open trench method using either a chain type trencher or hand excavated. Trenches shall be excavated so as to provide sufficient depth and width to permit proper handling and installation of pipe and fittings. Excavate the trench deep enough to provide a minimum of 18 inches of cover over the pipe. Ensure that the bottom of the trench is clean and smooth with all rock, loose soil and organic matter removed. Trench bottom must provide a smooth and continuous bearing surface to support the pipe.

When the cutting of pipe is required the pipes shall be cut clean and square with all burrs removed prior to solvent welding. Pipe must be free of all dust, dirt, moisture, grease, oil, or any other foreign material.

Pipe shall be joined by solvent welding method using a quality primer and cement applied according to the manufacturer's recommendation. Excess solvent shall be wiped cleaned from the pipe and fittings.

Sprinkler lateral piping may be installed by either open trench method or with an approved "vibratory plow". Where the open trench method is employed, the above specifications shall apply. In both the "open trench" method and the "vibratory plow" method, the minimum depth of cover for the lateral lines shall be 18 inches.

Where the "vibratory plow" method is used, the "mole" or "bullet" of the plow which precedes the pipe and is used to form the opening for the pipe shall not be less than 1 inch larger diameter than the outside diameter of the pipe. Starting and finishing holes shall be of sufficient size to allow for proper connection of the required fittings.

For polyethylene pipe, the insert fittings are to be clamped with stainless steel clamps. All fittings are to be double clamped securely over the barbs on fittings.

Detectable Warning Tape shall be installed over all pipes. The tape will be placed so that

it is 6 inches above the top of the pipe. Polyethylene film warning tape manufactured for marking and identifying underground utilities, 4 inches wide and 5 mils thick minimum, continuously inscribed with "Irrigation" detectable by metal detector when tape is buried up to 30 inches deep.

3a. Irrigation Controllers - Battery Operated:

1. A battery powered controller shall be used.
2. The controller shall be a 6 v, DC powered, have 3 independent programs that offer concurrent operation capability, have a large easy to read lcd display, have a nonvolatile memory that retains all program data, a 365-day calendar, and be able to skip up to 50 days.
The battery operated controller shall be as manufactured by Rain Bird, Hunter or Rain Master. If more than 12 stations are required, additional controllers shall be supplied at no additional cost to this pay item so that the entire irrigation system can be operated and regulated. If latching solenoids are needed to convert valves from ac to dc, their cost and any other costs incurred for having a battery operated controller for the irrigation controller for the irrigation system are included under this pay item.

4. Solenoid & Control Module for Control Valves (Battery Operated)

The irrigation system shall be operated with latching solenoids, control modules and field transmitters. The latching solenoid shall be supplied with an installed filtered adapter allowing installation of the solenoid to the appropriate solenoid valve.

The latching solenoid shall be a UNIK DC latching solenoid Rain Bird, Hunter or Toro. The control module will function properly if submerged in water. The control module will operate on one 9V alkaline battery for one full year. The control module shall be able to operate 1 to 4 stations either sequentially or independently. The control module shall have three independent programs with eight start times each, station run time capability by the minute up to twelve hours and a seven day calendar

The control module shall be IBOC as manufactured by Irritrol Mfg. Corp, Hunter or Toro.

5. Installation Solenoid and Control Module for Control Valves (Battery Operated)

The control module shall be mounted inside the valve box with stainless steel fasteners. It will be mounted for ease of accessibility and connection to irrigation controller.

6. Heads; Rotary, Spray, Swing Joints:

- a. Parkway Planters: The Sprinkler Heads shall be fixed spray type designed for in-ground installation. The body of the sprinkler shall be constructed of non-corrosive heavy -duty cyclac. The sprinkler heads shall have a riser screen filter to prevent entry of foreign materials to the nozzle. All parts shall be removable through the top of the sprinkler case. The sprinkler heads shall have a stainless

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steel retraction spring to ensure positive pop-down and shall have a conilip seal and cap to provide proper sealing.

The sprinkler heads shall be Toro 570Z XF Series and have a pop-up stroke of 6 inches.

- b. All heads will be installed with swing joints. Sprinkler head swing joints are to be factory assembled PVC swing joints constructed of 315-psi pressure rated materials. Swing joints shall be three-elbow construction with pre-lubricated buttress threaded connections and double O-Ring seals.

Sprinkler head swing joints shall be manufactured by Spears, Crestline or Rain Bird.

- 7. Installation Heads; Rotary, Spray, Swing Joints:
Sprinkler heads shall be installed flush and level with proposed grades. Where sprinkler heads are installed in plant beds, the sprinkler heads must be installed 2 inches from the edge of planter wall. Soil around sprinkler head shall be tightly compacted.

All lines are to be flushed clean of debris prior to the installation of sprinkler head. Sprinkler heads and spray arcs are to be adjusted so that spray does not encroach onto adjacent pavement, walls, roadways, buildings and other structures.

- 8. Quick Couple Valves:
Quick Couple Valves shall be 1 inch with one-piece body construction from heavy cast bronze.

Quick Couple Valves shall be model QCV100N manufactured by Storm irrigation Products, Rain Bird or approved equal.

Two quick Coupler Keys shall be provided. The keys shall be one (1) inch single lug coupler made from heavy cast bronze.

Quick Couple Keys shall be model C-100 with hose swivel model HS100 manufactured by Storm Irrigation Products, Rain Bird or Hunter.

- 9. Installation of Quick Couple Valves:
Quick coupler valves are to be installed plumb in a 10 inch round valve box. The quick coupler valves are to be secured with a 36 inch x 5/8 inch epoxy coated steel rebar driven into stable ground. The quick coupler valve and rebar are to be secured together with three separate heavy duty stainless hose clamps. All quick coupler valves shall be mounted on a prefabricated triple swing joint assembly.

The swing joint assembly shall be model 5806-01-012 manufactured by Spears, Crestline or Rain Bird.

10. Control Wiring:

The irrigation control wire shall be a minimum of 14 gauge, single conductor, low energy circuit cable. A single 12-gauge single conductor white control wire shall be utilized as the common wire and connected in series to each valve. Zone wire shall be red, yellow, or orange in color. Irrigation Control Wire shall be a 14 gauge minimum PVC jacketed, single conductor, 600 volt rated, low energy direct burial circuit cable. The irrigation control wire shall be UL listed.

Irrigation control wiring shall be manufactured by Paige Electric Company, Sierra or Regency.

12. Valve Boxes:

Valve Access Boxes shall be constructed of a combination of polyolefin and fibrous inorganic components (Superflexon Plastic) which is chemically inert and normally unaffected by moisture, corrosion and the effects of temperature change. Valve Boxes shall have a tensile strength of 3,400 psi.

For the automatic control valves, the Valve Box Base shall be #170101 and Valve Box Lid shall be #17314 as manufactured by Ametek Plymouth Products Division, Sheboygan, Wisconsin.

For the quick couple valves, the Valve Box shall be Model #181014 as manufactured by Ametek Plymouth Products Division, Sheboygan, Wisconsin or Rain Bird.

The lids and boxes will be brown for mulched areas.

13. Installation of Valve Boxes:

Each automatic control valve shall be installed in a valve box. A minimum of two valve boxes shall be stacked. The valve boxes shall be installed so that the valve is centered in the box allowing sufficient room for servicing of the valves. Clearance between the highest part of the valve and the bottom of the valve box lid shall be 2 inch minimum. The lid must not be too deep for convenient service. The valve box must not rest on the pipe. Clearance between the top of the piping and the bottom of the valve box shall be a minimum of 1 inch. Each valve box is to be installed flush and plumb to grade.

As a part of the valve box installation 3 to 4 inches of ½ to 1 inch stone, free of fines should be placed so that the top of the stone is 2" below the valve.

Hydrostatic Testing:

- A. The test shall consist of pressurizing the mainline piping system to a minimum of 150 psi for a period of four (4) hours.
- B. During the test, the piping system shall maintain 150 psi with an allowable pressure drop of not more than 5 psi, if any deficiencies in the piping system are found, the piping or

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fittings shall be repaired or replaced at no additional cost to the contract.

Pressure & Flow Testing:

- A. A test will be taken of the static pressure on the upstream and downstream sides of the RPZ valve.
- B. A pressure reading shall be taken at each zone while each zone is running.
- C. The flow rate shall be recorded from the water meter at each running zone for a 5-minute period.
- D. This information shall be recorded on the As-Built drawings.

As Built Drawings:

Upon completion of the installation the Contractor shall prepare and submit an "As-Built" drawing of the completed project. The drawings will show the accurate locations of all valves, quick couplers, mainline, wire splices, backflow devices, and controllers. The drawing shall also show the approximate location of sprinkler heads and lateral lines. Each controller shall be labeled on the plan alphabetically starting with A and the zones controlled by that controller shall be labeled A-1, A-2, A-3...etc.

The drawings must also show the locations of Water Service Components and Electrical Service Components.

Demonstration:

Demonstrate to Village maintenance personnel operation of equipment, sprinklers, specialties, and accessories. Review operating and maintenance information. Provide 7 days' notice to all parties in advance of each demonstration.

Material Acceptance: The Contractor must provide a Manufacturer's written certification that complies with these specifications.

Method of measurement: This work will be measured in place and the entire system computed as a LUMP SUM for IRRIGATION SYSTEM.

Basis of Payment: This work will be paid for at the contract unit price for LUMP SUM for IRRIGATION SYSTEM, which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-81 BACKFLOW PREVENTER (RPZ)

Description: This item shall consist of excavation, installation of ASSE Standard backflow preventers, installation Type K copper water pipe, concrete pad base and locking enclosure as indicated on the plans, and as directed by the Engineer.

General Requirements: Backflow preventers shall be of the size indicated for maximum flow rate

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and maximum pressure loss required. Village approved with AGD Series air gap.

1. Working Pressure: 150 psi minimum except where otherwise indicated.
2. 2 Inches and Smaller: Bronze body with threaded ends.
3. 2-1/2 Inches and Larger: Bronze, cast-iron, steel, or stainless-steel body with flanged ends. Provide AWWA C550, interior protective epoxy coating for backflow preventers with cast-iron or steel body.

Interior Components must be Corrosion-resistant materials.

Other incidental items:

1. Strainer supplied within RPZ and compatible with size and capacity of unit, on the inlet.
2. Winterizing pipe caps.
3. Lockable enclosure that accepts a pad lock, fastened to concrete base.

Products:

Reduced-Pressure-Principle Backflow Preventer: ASSE 1013, with (OS&Y) gate valves on inlet and outlet, and strainer on inlet. Include test cocks and pressure-differential relief valve with ASME A112.1.2 air-gap fitting located between 2 positive-seating check valves for continuous pressure application.

1. Pressure Loss: 15 psig maximum, through middle third of flow range.
2. Gate valves supplied with and compatible for size and testing of unit on inlet and outlet. Valves 2 inches (50 mm) and smaller may be ball valves if these are unit manufacturer's standard valve for this application.
3. Test Kit: Unit manufacturer supplied, complete calibrated backflow preventer testing equipment kit with carrying case.

Anti-siphon, Pressure-Type Vacuum Breakers: ASSE 1020, with valves, spring-loaded check valve, and spring-loaded floating disc. Include test cocks and atmospheric vent for continuous pressure application.

1. Pressure Loss: 6 psig maximum, through middle third of flow range.
2. Gate valves supplied with and compatible for size and testing of unit on inlet and outlet. Valves 2 inches and smaller may be ball valves if these are unit manufacturer's standard valve for this application.
3. Test Kit: Unit manufacturer supplied, complete calibrated backflow preventer testing equipment kit with carrying case.

Pressure Gauge:

ASME B40.1, 4-1/2-inch (115 mm) diameter dial, with dial range of 2 times system operating pressure and bottom outlet.

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Backflow Preventers: RPZ's shall be FEBCO Model No. 825YA, Watts or approved equal complete with shutoff valves, wye strainers shall be FEBCO Model 650, Watts or approved equal RPZ's shall be furnished with flanged unions to facilitate field removal for freeze protection or maintenance.

Valves for above ground installation shall be

- A. Grinnell Supply Sales Co., Grinnell Corp.
- B. Milwaukee Valve Co., Inc.
- C. Nibco, Inc.
- D. Hammond Valve Div., Prairie Manufacturing Corp.

This item includes excavation, furnishing and installing the Type K copper pipe, and trench backfill from the backflow preventer (RPZ) to a point five (5) feet downstream. From that point the system will be paid as IRRIGATION SYSTEM.

The copper piping may be converted to PVC pipe five (5) feet downstream of the backflow preventer.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item.

Lockable Enclosure: GSA-2 10"W x 24"H x 30"L lift off lockable enclosure manufactured by GuardShack. Color to be Obsidian.

Trench Backfill placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Material Acceptance: The Contractor must provide a Manufacturer's written certification that complies with these specifications.

Method of Measurement: This work will be measured in place and the area computed as EACH for Backflow Preventer (RPZ)

Basis of Payment: This work will be paid for at the unit price per EACH for BACKFLOW PREVENTER (RPZ) which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-82 WATER TAP

Description: This work shall consist of paying for and obtaining a water main tap permit from the Village, scheduling date and time for the Village to perform the tap, excavation to the existing water main, exposing the water main, cleaning the exterior of the water main, installing



incorporate water service language

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copper piping from the water tap to the water valve assembly, and placing and compacting trench backfill for each of the water service connections shown on drawings or as directed by the Engineer. Work shall be in accordance with Water Service Connect detail, and Irrigation System Connection detail on contract plans.

General Requirements: This work must be performed by a Licensed Plumbing Contractor.

The Contractor shall obtain a Water Tap Permit from the Village. The Contractor must supply approved irrigation shop drawings which indicate maximum flow rates, length of taps from property lines, and any other information required. The Contractor will be required to pay a fee in order to obtain the permit.

The Contractor shall not remove pavement or excavate trench to the water main more than one (1) working day prior to the scheduled tap, unless otherwise approved by the Engineer. The placement and anchoring of steel plates and all additional traffic control required shall be considered incidental to this item.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be the minimum area required to facilitate the water tap. All shoring required shall be considered incidental to this item. This item shall also include excavation required to install pipe from the water tap to the Water Valve Assembly.

The excavation for water taps to be installed under pavement shall be from the sub-grade elevation to the depth required to perform the water tap. The excavation for water taps under non-paved areas shall be from the existing surface elevation to the depth required to perform the tap. Excavation shall not be paid for separately but shall be considered incidental to this item.

The Contractor shall clean the exterior of the water main to facilitate placement of the “saddle” by Village to perform the water tap. The Contractor shall use equipment which will not damage the water main. If the water main is not prepared to the satisfaction of the Engineer, the tap will not be performed and must be rescheduled.

The Contractor shall install Type K Copper Pipe, 1.5 inch diameter from the water tap to the Water Valve Assembly. This work shall be considered incidental to this item.

Trench Backfill shall be placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Material Acceptance: The Contractor must provide a Manufacturer's written certification that complies with these specifications.

Method of Measurement. This work will be measured in place and the area computed per EACH for WATER TAP.

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Basis of Payment. This work will be paid for at the contract unit price per EACH, for WATER TAP which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-83 WATER METER IN VAULT

Description: This work shall consist of excavation, furnishing and installing water meter in a concrete vault, Type K, 1.5 inch copper pipe, and sand backfill at locations indicated on the plans or as directed by the Engineer.

The water meter type and brand shall be in accordance with the Village standards. The vault shall be a precast concrete as shown on the details in accordance with section 504 of IDOT Standard Specifications and as directed by the Engineer.

This item includes excavation, furnishing and installing the Type K, 1.5 inch copper pipe, and trench backfill from the water meter in vault to the backflow preventer (RPZ).

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item. Any dewatering required shall not be paid for separately but will be incidental to the contract unit price of this item.

Trench Backfill shall be placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation

The installation of the water service line shall conform to Section 562 of the Standard Specifications.

Material Acceptance: The Contractor must provide a Manufacturer's written certification that complies with these specifications.

Method of Measurement. This work will be measured in place and the area computed per EACH for WATER METER IN VAULT.

Basis of Payment. This work will be paid for at the contract unit price per EACH, for WATER METER IN VAULT which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-84 WATER VALVE ASSEMBLY (B-BOX)

Description: Work associated with this item shall include excavation, the furnishing and installation of water valves and water valve service boxes, installation Type K copper water pipe, and sand backfill as indicated on the plans, and as directed by the Engineer. Work shall be in accordance with the Water Service Connection detail and the Irrigation System Connection

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detail.

Water valves, 1.5 inch, shall be curb stops fabricated of brass and provided with outlets suitable for copper connections. Curb stops shall be of the round-way type conforming to AWWA Standard C800-89 Underground Service Line Valves and Fittings.

This item includes excavation, furnishing and installing the Type K, 1.5 inch copper pipe, and trench backfill from the valve assembly to the water meter in vault.

Excavation shall be in accordance with applicable portions of Article 550.04 of Standard Specifications. Excavation shall be limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item.

Trench Backfill shall be placed and compacted in accordance with Article 550.07 of the Standard Specifications and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation meeting the requirements Section 208 of the Standard Specifications.

Curb Stops shall be housed in curb boxes. Curb boxes shall be screw type, with the base threaded to attach to the curb stop or shall be Buffalo or "arch" type, and of such construction that it shall be capable of extension to finished grade. Base sections and lids shall be cast of heavy, high grade iron. "Water" shall be marked on lid. Curb stop and box shall be equipped with a shut-off rod, typically 2 inches shorter than the curb box at its maximum extension.

Material Acceptance: The Contractor must provide a Manufacturer's written certification that complies with these specifications.

Method of Measurement. This work will be measured in place and the area computed per EACH for WATER VALVE ASSEMBLY (B-BOX).

Basis of Payment. This work will be paid for at the contract unit price per EACH, for WATER VALVE ASSEMBLY (B-BOX) which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-85 PAVER GRATE

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install a suspended paver tree grate system at locations specified in the Contract plans or as directed by the Engineer. Paver grates will be installed adjacent to BRICK PAVERS: 5FT FURNITURE ZONE and construction sequencing must also be coordinated with the installation of tree planting.

General Requirements. Each PAVER GRATE will be placed at the location indicated in the plans or as directed by the Engineer. The locations will be field marked and verified for approval by the Engineer.

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Materials:

PAVER GRATE:

- A. Manufacturer: Paver grates shall be as supplied by IRONSMITH, INC., 41-701 Corporate Way, Unit 3, Palm Desert, CA 92260 (800) 338-4766
- B. Paver grates shall be: Model 5224 60" square galvanized steel Paver-Grate in halves for use with pavers. Patented U.S. Patent 5,787,637 With Expandable cast iron trim ring with 12" opening (expandable to 20").
- C. Suspended paver type tree grates shall be manufactured from standard steel shapes to ASTM A36 and expanded metal grating 3# to ASTM A569/569M. If required, Tubing to ASTM A500. Units shall be manufactured true to design and all components shall fit together in a satisfactory manner. Grates are to be of uniform quality, flat and free from distortion.
- D. Finish:
 - a. Grates are to be supplied galvanized by hot spray and / or hot dip method.
 - b. Trim ring to be cast iron, powder coated black.

Submittals:

The following items shall be submitted by the Contractor for approval by the Engineer:

- 6. Paver Grate product cut sheet and model number.
- 7. Trim ring product image, cut sheet and model number.

Assembly:

- A. Install grates where indicated on plans per details on plans and Manufacturer's instructions.
- B. Paver-Grate(tm) suspended pavement system footings must be flat and leveled so that grates do not rock or appear unstable before unit pavers are set. Surrounding concrete base (paid for under BRICK PAVING: 5FT FURNITURE ZONE) shall be set to ensure that unit pavers over the paver suspension system are flush and level with the surrounding areas.
- C. Cover paver grate suspended pavement system with permeable landscape fabric before setting unit pavers to permit sanding joints.
- D. Cut unit pavers to fit around tree opening ensuring a secure fit against paver grate suspended pavement system opening stop.
- E. Note: Construction sequencing will require coordination with installation of BRICK PAVING: 5FT FURNITURE ZONE, and tree planting.
 - a. Concrete base within BRICK PAVING: 5FT FURNITURE ZONE must be installed first.
 - b. PAVER GRATE is then attached to Concrete base
 - c. Brick Pavers in BRICK PAVING: 5FT FURNITURE ZONE and PAVER GRATE items get installed together.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed as EACH

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for PAVER GRATE

Basis of Payment. This work will be paid for at the contract unit price per EACH, for PAVER GRATE which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-86 BRICK PAVERS: CROSSWALK

Description. This work consists of furnishing and installing clay brick paver crosswalks on a concrete slab with concrete headers, weep holes, an asphalt setting bed, a prepared sub base and a prepared subgrade layer as shown on the plans or as directed by the Engineer.

General:

Section includes:

1. Clay Brick Pavers 2 3/4" thickness
2. Joint Sand
3. Bitumen setting bed
4. Asphalt tack coat
5. Cast-in-place concrete base
6. Geotextiles
7. Epoxy masonry adhesive
8. Expansion Joints
9. Dowels

References:

- A. ASTM International, latest edition:
 1. C 33, Standard Specification for Concrete Aggregates.
 2. C 67, Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile, Section 8, Freezing and Thawing.
 4. C 136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 5. C 144 Standard Specifications for Aggregate for Masonry Mortar.
 6. C 902, Standard Specification for Pedestrian and Light Traffic Paving Brick.
10. D 698 Test Methods for Moisture Density Relations of Soil and Soil Aggregate Mixtures Using a 5.5 lb (24.4 N) Rammer and 12 in. (305 mm) drop.
11. D 977, Standard Specification for Emulsified Asphalt.
12. D 1557 Test Methods for Moisture Density Relations of Soil and Soil Aggregate Mixtures Using a 10-lb (44.5 N) Rammer and 18 in. (457 mm) drop.
14. D 1883, Test Method for California Bearing Ratio of Laboratory-Compacted Soils.

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15. D 2940 Graded Aggregate Material for Bases or Subbases for Highways or Airports.
16. D 3381, Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction.
17. D 4254, Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

Note: In order to determine the latest version of the listed specifications and standards, please consult the ASTM web page (www.astm.com)

- B. Illinois Department of Transportation:
 1. Standard Specifications for Road and Bridge Construction, January 2022, including all addenda.

Submittals:

1. Clay Brick Pavers
 - A. Three representative full-size samples of each paver type, thickness, color and finish that indicate the range of color variation and texture expected upon project completion.
 - B. Accepted samples become the standard of acceptance for the product produced.
 - C. Test results from an independent testing laboratory for compliance of pavers with ASTM C 902.
 - D. Manufacturer's catalog product data, installation instructions, and material safety data sheets for the safe handling of the specified materials and products.
 - E. Submit shop drawings and details: Indicate materials, thicknesses, sizes, finishes, shapes, expansion and control joints.
 - i. Indicate layout and pattern describing materials, expansion joints, geotextile location, layout and drain locations and installation details and methods.
 - ii. Indicate relationships of paving joints to adjoining materials, fixtures and assemblies.
 - F. Joint Sand
 - i. Submit sieve analysis results in accordance with ASTM C 136 for bedding and joint sand.
 - ii. Provide three representative one pound samples in containers of jointing sand that indicate the range of color variation and texture expected upon project completion.
 - iii. Provide supplier name, source and types of sand used for bedding and jointing.
 - G. Accepted samples become the standard of acceptance for the product produced.
2. Neoprene modified asphalt adhesive product catalog sheets with specifications.

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3. Bitumen Setting Bed: asphalt cement mix design to be used in the Bitumen Setting Bed conforming to ASTM D 3381.
4. Sieve analysis per ASTM C 136 for bedding and joint sand between concrete pavers.
5. Cast-in-Place Concrete slab
6. Paving Installation Contractor:
 - A. Job references from a minimum of five projects similar in size and complexity.
Provide the Engineer with names, postal address, phone, fax, and email address.
 - B. Three years' experience, with at least 100,000 square feet of brick pavers installed.
7. Manuals:
 - A. Provide 4 copies of manufacturer, maintenances and reinstatement manuals for Clay Brick Paver units.
8. Material Acceptance:
 - A. The Contractor must provide a Manufacturer's written certification that the materials comply with these specifications.
9. Geotextiles
 - A. Provide copy of product information including supplier name, manufacturer name, material type and description.
10. Epoxy masonry adhesive
 - A. Provide copy of product information including supplier name, manufacturer name, material type and description.

Quality Assurance:

1. Utilize a Manufacturer having at least ten years of experience manufacturing interlocking concrete pavers on projects of similar nature or project size.
2. Source Limitations:
 - A. Obtain Concrete Pavers from one source location with the resources to provide products of consistent quality in appearance and physical properties.
 - B. Obtain joint sand from one source with the resources to provide materials and products of consistent quality in appearance and physical properties.
3. Paving Contractor Qualifications:
 - A. Utilize an installer having successfully completed concrete paver installation similar in design, material, and extent indicated on the project.
4. Mockup:
 - A. Install a min. 5 ft x 5ft wide paver area for BRICK PAVERS: CROSSWALK following the design type, color and pattern indicated on plans.
 - B. Use these areas to determine surcharge of the bedding aggregate layer, joint sizes, lines, laying pattern(s) and levelness.
 - C. These areas will be used as the standard by which the work will be judged.
 - D. Subject to acceptance by the Engineer, mock-up areas may be retained as part of finished work.

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E. If mock-up areas are not retained, remove and properly dispose.

Delivery, Storage & Handling:

1. General:

A. Deliver, store and handle in accordance with manufacturer and supplier's recommendations.

B. Deliver, store and handle in accordance with manufacturer and supplier's recommendations.

2. Delivery: Deliver materials in manufacturer's original, unopened, undamaged packaging with identification labels intact.

A. Unload pavers with proper equipment, so no damage occurs to pavers.

3. Storage: Store materials so they are protected from contamination by foreign substances and excessive moisture.

A. Store pavers to prevent damage and staining.

B. Do not store bedding sand and jointing sand on compacted aggregate base course or in areas that channel water into the sand.

C. Cover bedding sand and jointing sand with waterproof covering. Secure the covering in place.

Project/Site Conditions:

A. Environmental Requirements:

1. Install Clay Brick Pavers only on unfrozen Bitumen Setting Bed.

2. Install the Neoprene Tack Coat only to unfrozen Bitumen Setting Bed or when the temperature is within the manufacturer's recommended temperature range.

3. Install Bitumen Setting Bed materials only when the temperature is above freezing.

4. Install Bitumen Setting Bed materials only when there is no heaving rain or snowfall.

5. Install Setting Bed or Clay Brick Pavers only when there is no heavy rain or snowfall.

Paver Overage And Attic Stock:

A. Provide a minimum of 5% additional material for overage to be used during construction.

B. Contractor to provide 100 square feet of each product and size used to the Village for maintenance and repair. Furnish Pavers from the same production run as installed materials.

C. Manufacturer to supply maintenance and reinstatement manuals for Clay Brick Paver units.

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Products:

A. Clay Brick Pavers

Paver Type: Dry-Pressed Clay Brick Pavers. Straight edge cobbled 4"x8"x2 3/4"

- a. Standard: ASTM C902
- b. Classification: SX
- c. Blend Color: Northshore Blend
 - i. 32 Antique
 - ii. 33 Dark Antique
 - iii. 34 Mulberry
 - iv. 36 Sunset Red
 - v. 63 Charcoal
- d. 4" x 8" x 2 3/4" Border Color:
 - i. 63 Charcoal

As manufactured by:

Whitacre Greer Company

1400 South Mahoning Ave, Alliance, OH 44601

Phone (800)947-2837 Email info@wgpaver.com.

B. Joint Sand

1. Provide jointing sand as follows:

- a. Clean, well graded, sand free from soluble salts and other deleterious or foreign matter. Sand shall be natural silica sand or sand manufactured from crushed rock.
- b. Do not use screenings or stone dust for jointing sand.
- c. Joint Sand should be polymeric
- d. Joint Sand color should be Charcoal

Coarser sand than specified in ASTM C 144 may be used for jointing sand, including ASTM C 33 material with grading requirements shown below. ASTM C 33 sand is recommended for joint filling in heavy vehicular pavements. ASTM C 33 sand may require significant effort during joint filling in order to completely fill joints. Larger particles often will not enter joints and should be swept off the surface. Success has been obtained by passing ASTM C 33 sand through a No. 8 sieve. ASTM C 144 sand is more finely graded and more susceptible to removal from joints. Joint sand stabilizers should be considered when ASTM C 144 sand is used for joint filling in heavy vehicular pavements.

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1. Polymeric Joint Sand Material Requirements: Comply with ASTM C 33.

ASTM C 33

Sieve Size	Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	85 to 100
No. 16 (1.18 mm)	50 to 85
No. 30 (0.600 mm)	25 to 60
No. 50 (0.300 mm)	10 to 30
No. 100 (0.150 mm)	2 to 10
No. 200 (0.075)	2 to 10

C. Edge Restraints

Edge restraints are indicated on drawings and identified as:

1. Concrete Header

D. Neoprene Adhesive

Karnak 230 2% neo-asphalt paving block adhesive.

Note: Only apply enough Neoprene Tack Coat to completely cover the Bitumen Setting Bed. Applying an excessive amount of Neoprene Tack Coat can cause the material to expand during summer months and ooze up through the paver joint damaging the paver surface.

E. Bitumen Setting Bed Materials

A. Sand for asphalt bed:

1. Clean, non-plastic, free from deleterious or foreign matter, symmetrically shaped, natural or manufactured from crushed rock.
2. Graded according to ASTM C 136.
3. Bedding Sand Material Requirements: Conform to the grading requirements of ASTM C 33 with modifications as shown in Table 2.

Table 2 – Gradation Requirements For Bitumen Setting Bed

ASTM C 33	
Sieve Size	Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	85 to 100
No. 16 (1.18 mm)	50 to 85
No. 30 (0.600 mm)	25 to 60
No. 50 (0.300 mm)	10 to 30
No. 100 (0.150 mm)	2 to 10

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No. 200 (0.075)	2 to 10
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- B. Asphalt Cement:
1. Provide Asphalt Cement used in the bituminous setting bed conforming to ASTM D 946 with a penetration at 77 degrees F. 100G., 5 sec of minimum 85 millimeters and a maximum of 100 millimeters.
 2. Combine the dried fine aggregate with hot asphalt cement, and heat the mix to approximately 300 degrees Fahrenheit (150° C), at an asphalt plant. Mix the approximated proportion of materials including 7% asphalt cement and 93% fine aggregate. Proportioned by weight each ton of the batch in the approximate ratio of 145 lbs (66 kg) asphalt to 1,855 lbs (840 kg) sand.
- C. Primer for base:
1. Anionic asphalt emulsion SS-1h, per ASTM D 977.

F. Concrete Base and header bands

1. The concrete base and headers shall not be installed until the Aggregate Subgrade Improvement, 12" and Hot-Mix Asphalt Binder Course have been constructed. The pavement shall be saw cut to the dimensions shown on the plans and the pavement removed to the subgrade elevation. The removal of the pavement shall be paid for separately as PAVEMENT REMOVAL.
2. Concrete base and header bands shall comply with the requirements of item PCC SIDEWALK and Section 1020 of the Standard Specifications for Class SI Concrete.
3. Concrete base and header bands shall include placing and compacting of subbase granular material, type b on prepared subgrade, installing epoxy coated dowels and placing Portland cement concrete to dimensions indicated.
4. Weep holes shall be provided in the concrete base at the location of the low point of the paver field to allow water to drain to the base course material, with use of 2" PVC pipe. This work shall be constructed in accordance with Sections 351 and 424 of the Standard Specifications.
5. The cost of placing the subbase granular material, concrete base, header bands, weep holes and dowels shall be included in the cost of BRICK PAVERS: CROSSWALK.
6. The raised crosswalk on Main Street shall not have concrete header bands. PCC PAVEMENT (VARIABLE DEPTH) shall serve as the concrete header band at this location.

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G. Geotextiles

1. Geotextile fabric shall have a minimum 0.2 mm (No. 70) apparent opening size and permit water passage without allowing sand or soil migration.

H. Epoxy masonry adhesive

1. Epoxy masonry adhesive shall be suitable for exterior use on brick and concrete, and form a water resistant bond when cured.

Execution

Examination

- A. Examine areas indicated to receive paving for compliance with requirements for installation tolerances and other conditions affecting performance for the following items before placing the Concrete Pavers.
 1. Verify that Cast-in-Place Concrete Underlayment strength, thickness, surface tolerances and elevations conform to specified requirements.
 2. Verify that the Sand Setting Bed materials, thickness, compacted density, surface tolerances and elevations conform to specified requirements.
 3. Verify location, type, and elevations of edge restraints, concrete curbing.
 4. Verify that concrete surfaces to receive the bitumen bedding material are free of dust, oil, grease, paint, wax, curing compounds, primer, sealers, form release agents, from cracks over 3/16 in. (5 mm) in width, or any deleterious substances and debris which may prevent or reduce bonding.
 5. Conduct moisture tests to verify that concrete surfaces are cured, free from hydrostatic pressure and having a moisture content of less than 5%.
 6. Do not proceed with installation of Concrete base, header bands, asphalt setting or Clay Brick Pavers until base conditions are corrected by the Contractor or designated subcontractor.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
 1. Beginning of setting bed and Clay Brick Paver installation signifies acceptance of Cast-in-Place Concrete Underlayment.

Preparation

- A. Verify that Cast-in-Place Concrete header bands and base are clean and dry, weep holes are filled with 1/4" chip aggregate, geotextile fabric is in place, and base is ready to accept Asphalt Setting Bed, Clay Brick Pavers, and imposed loads.
 1. Do not use setting bed to correct deficiencies in base course surface.

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2. Do not proceed with setting bed or paver installation until satisfactory base course conditions are verified by the Engineer.
- B. Stockpile Joint Sand materials such that they are free from standing water, uniformly graded, free of any organic material or sediment, debris, and ready for placement.
- C. Remove any excess thickness of soil applied over the excavated soil subgrade to trap sediment from adjacent construction activities before placing the Aggregate Base.
- D. Keep area where pavement is to be constructed free from sediment during entire job. Remove and replace all Joint Sand contaminated with sediment with clean materials.
- E. Complete all subdrainage of underground services within the pavement area in conjunction with subgrade preparation and before the commencement of Cast-in-Place Concrete Underlayment construction.
- F. Prevent damage to underdrain pipes, overflow pipes, observation wells, or inlets and other drainage appurtenances during installation. Report all damage immediately.
- G. Compact soil subgrade uniformly to at least 95 percent of Standard Proctor Density per ASTM D 698 for pedestrian areas. Compact soil subgrade uniformly to at least 98 percent Modified Proctor per ASTM D 1557 for vehicular areas. Stabilization of the subgrade may be necessary with weak or saturated subgrade soils.
- H. Backfill all service trenches within the pavement area to the subgrade level with approved material placed in uniform lifts not exceeding 4 in. (100 mm) loose thickness. Compact each lift to at least 100 percent Standard Proctor Density as specified in ASTM D 698.
- I. Trim the subgrade to within 0 to 1/2 inch (0 to 13mm) of the specified grades. Do not deviate the surface of the prepared subgrade by more than 3/8 inch (10mm) from the bottom edge of a 39 inches (1m) straight edge laid in any direction.
- J. Do not proceed with further pavement construction, under any circumstances, until the subgrade has been inspected by the Engineer.
- K. Field Measurements: Determine actual paver dimensions (including tolerances) and coordinate with dimensions for pavement areas indicated on plans prior to any pavement installation. Adjust pavement area dimensions to eliminate unnecessary paver cutting.
- L. Geotextile: Install geotextile where indicated on plans to fully cover weep holes. Lap ends and edges a minimum of 12 inches.

Note: Base compaction of the subgrade soil on the recommendations of the Engineer. Request the Engineer to inspect subgrade preparations, elevations and conduct density tests for conformance to specifications.

Installation

- A. CONCRETE BASE:
 1. Fill any cracks under 3/16 in. (5 mm) wide with mortar.
 2. Sweep the surface clean.
- B. ASPHALT PRIMER:

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1. Apply Bitumen Setting Bed Asphalt primer to Cast-in-Place Concrete Underlayment to bond the bituminous bedding material to the concrete base.
 2. Apply according to manufacturer's recommendation
- Note: Utilize Cut Back Asphalt Specification (Rapid Curing Type), per ASTM D 2028-97 (2004) and AASHTO M-81.

C. BITUMEN SETTING BED:

1. Place in panels between 1 inch high screed rails spaced approximately 12 ft (4 m). Set the depth screed rails carefully to bring the Bitumen Bedding material to proper grade, to insure proper Concrete Paver finished height. Place Bitumen Bedding material between the parallel screed rails. Rake and screed smooth with strike board. Fill any depressions with fresh bituminous material to produce a smooth, firm and even setting bed after each pass.
2. Use screed rails to achieve a level setting bed conforming to elevations and slope shown on the drawings. After one panel is completed, advance screed rails to the next position in readiness for screeding adjacent panels with strike board. Fill depressions left from removed screed rails and smooth to height consistent with panel.
3. Place an area in size that will remain at least 270° F (130° C) during compaction.
4. Compact the Bitumen Setting Bed with a powered roller compactor to an even, nominal thickness of 1 inch after compaction while still hot. Adjusted the Bitumen Setting Bed to accommodate the required finished grade of the Concrete Pavers. Proper attention to elevations during the construction of the concrete base material will insure maintaining the required nominal 1 inch thick Bitumen Setting Bed.
5. Re-heat, fill, and compact low areas with Bitumen Setting Bed materials to conform to slope and elevation shown on the drawings.
6. Re-heat, remove, level, and compact Bitumen Setting Bed in high areas to conform to slope and elevation shown on the drawings.
7. Correct irregularities or evenness in the grade of the concrete base surface with Setting Bed materials only.

D. NEOPRENE MODIFIED ASPHALT ADHESIVE:

1. Apply to cold asphalt setting bed with notched trowel with serrations not exceeding 1/16 inch (2 mm). Do not apply pavers to adhesive until dry skin forms on surface of adhesive, approximately 2-3 hours depending on air temperature.

E. EDGE RESTRAINTS:

1. Provide concrete edge restraints as indicated on drawings
 - b. Install the face of the concrete edge restraint, where it abuts pavers vertical down to the subbase.
 - c. Construct concrete edge restraint to dimensions and level specified and support on a compacted subbase not less than 6 in (150 mm) thick.

F. CLAY BRICK PAVERS

1. Lay pavers in pattern(s) shown on Project Drawings.
 - a. Lay full pavers first.
 - b. Mix pavers from at least three palettes to produce uniform color blends. Follow manufacturer's recommendations for color blending.
 - c. Place units by hand without using hammers.
 - d. Adhere sides of pavers to concrete edge restraints with epoxy masonry adhesive

Joint width spacing is critical to establishing interlock and minimizing paver chippage. Studies show that 1/8 inch is optimal. Joint widths and bond lines are adjusted to meet specifications as paving proceeds. Pavers with insufficient joint spacing are subject to chipping during installation or service. Pavers with lugs may be placed in contact with each other.

Depending on the selected pattern and paver type, optimum joint widths are not always possible. This is something to be discussed in the pre-construction meeting. It is recommended that no more than 5% of joints exceed ¼ inch (6 mm) wide.

2. Provide 1/16 inch to 3/16 inch (2 to 5 mm) wide joints between pavers.
3. Adjust pavers to form straight bond lines and appropriate joint widths. Maximum bond line variation shall be $\pm \frac{1}{2}$ inch (13 mm) over a 50 foot (15 m) string line.
4. Fill gaps at paved area edges with cut pavers.
 - a. Cut pavers at edges as indicated on plans with a double blade paver splitter or wet cut masonry or vacuum saw.
 - b. Cut pavers shall be no smaller than one-third of a whole paver [except where pattern is to be maintained and smaller pieces are surrounded by a full paver and field paver border course]. Vehicular pavements shall have no pavers less than one-third size of the full paver.
5. Do not permit traffic, including construction equipment, on pavers before initial compaction and joint filling. Disturbed areas of pavers should be taken up, the sand re-screeded and pavers relaid.
6. Vibrate pavers into sand using a high frequency/low-amplitude plate compactor capable of 3,000 lbf to 5,000 lbf (13 to 22 kN) at a 75 to 100 Hz frequency. Protect pavers from chipping during compaction by using a plate compactor with a rubber matt, rubber rollers or other approved materials placed over pavers. Do not compact within 6 feet (2 m) of unrestrained edges. Remove cracked or damaged pavers and replace with new units.

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7. After pavers are fully settled and free from movement simultaneously spread, sweep and compact dry jointing sand into joints until they are completely filled and sand no longer falls into joints.
8. Protect areas not covered with cut and compacted pavers with waterproof covering overnight.
9. Discontinue laying operations, align and compact pavers prior to work suspension when weather conditions are such that pavement performance may be compromised.
10. On laying operations recommencement, verify acceptable setting bed condition before further pavers are laid. If water has entered bedding sand, remove pavers and saturated bedding sand, install unsaturated sand replace and compact pavers.
11. Sweep excess sand from pavement when installation is complete.
12. Return to site over a period of up to one year to add sand to fill joints as needed.

FIELD QUALITY CONTROL

Measure surface tolerances on flat slopes with a rigid straightedge. Measure tolerances on complex contoured slopes with a flexible straightedge capable of conforming to complex curves on the pavement surface.

- A. Finished pavement surface shall not deviate more than $\pm 3/8$ inch (10 mm) from specified elevations.
- B. Check final surface profile for conformance to Project Drawings.
- C. Pavement surface elevation shall be flush with adjacent construction
- D. Maximum variation from a specified surface profile shall be $\pm 3/16$ inch (5 mm) in 10 feet.
- E. Height difference between adjacent pavers shall not exceed $1/8$ inch (3 mm).

PROTECTION

- A. After work in this Section is complete, Contractor shall protect work from damage due to subsequent construction activity on site.

Method of Measurement. This work will be measured in place and the area computed in SQUARE FOOT for BRICK PAVERS: CROSSWALKS.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE FOOT for BRICK PAVERS: CROSSWALKS, which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-87 BRICK PAVERS PEDESTRIAN

Description. This work consists of furnishing and installing clay brick pavers on a concrete slab with weep holes, a sand setting bed, a prepared sub base and a prepared subgrade layer as shown on the plans or as directed by the Engineer.

General:

Section includes:

1. Clay Brick Pavers 2 1/4" thickness
2. Joint Sand
3. Sand setting bed
4. Cast-in-place concrete base
5. Geotextiles
6. Epoxy masonry adhesive
7. Expansion Joints
8. Dowels

References:

A. ASTM International, latest edition:

1. ASTM C 33, Standard Specification for Concrete Aggregates
2. ASTM C 136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
3. ASTM C 144, Standard Specification for Aggregate for Masonry Mortar.
4. ASTM C 902, Standard Specification for Pedestrian and Light Traffic Paving Brick.
5. ASTM C 1272, Standard Specification for Heavy Vehicular Paving Brick.
6. ASTM D 698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
7. ASTM D 1557, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).

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8. ASTM D 2940, Standard Specification for Graded Aggregate Material For
Bases or Subbases for Highways or Airports

Note: In order to determine the latest version of the listed specifications and
standards, please consult the ASTM web page (www.astm.com)

B. Illinois Department of Transportation:

1. Standard Specifications for Road and Bridge Construction, January 2022,
including all addenda.

Submittals:

11. Clay Brick Pavers

- A. Three representative full-size samples of each paver type, thickness, color and finish
that indicate the range of color variation and texture expected upon project completion.
- B. Accepted samples become the standard of acceptance for the product produced.
- C. Test results from an independent testing laboratory for compliance of pavers with
ASTM C 902.
- D. Manufacturer's catalog product data, installation instructions, and material safety data
sheets for the safe handling of the specified materials and products.
- E. Submit shop drawings and details: Indicate materials, thicknesses, sizes, finishes,
shapes, expansion and control joints.
 - i. Indicate layout and pattern describing materials, expansion joints,
geotextile location, layout and drain locations and installation details and
methods.
 - ii. Indicate relationships of paving joints to adjoining materials, fixtures and
assemblies.
- F. Bedding and Joint Sand
 - i. Submit sieve analysis results in accordance with ASTM C 136 for bedding
and joint sand.
 - ii. Provide three representative one pound samples in containers of jointing
sand that indicate the range of color variation and texture expected upon
project completion.
 - iii. Provide supplier name, source and types of sand used for bedding and
jointing.
- G. Accepted samples become the standard of acceptance for the product produced.

12. Sieve analysis per ASTM C 136 for bedding and joint sand between concrete pavers.

13. Cast-in-Place Concrete slab submittals per item PCC SIDEWALK.

14. Paving Installation Contractor:

- A. Job references from a minimum of five projects similar in size and complexity.
Provide the Engineer with names, postal address, phone, fax, and email address.
- B. Three years' experience, with at least 100,000 square feet of brick pavers installed.

15. Manuals:

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- A. Provide 4 copies of manufacturer, maintenances and reinstatement manuals for Clay Brick Paver units.
- 16. Material Acceptance:
 - A. The Contractor must provide a Manufacturer's written certification that the materials comply with these specifications.
- 17. Geotextiles
 - A. Provide copy of product information including supplier name, manufacturer name, material type and description.
- 18. Epoxy masonry adhesive
 - A. Provide copy of product information including supplier name, manufacturer name, material type and description.

Quality Assurance:

- 5. Utilize a Manufacturer having at least ten years of experience manufacturing interlocking concrete pavers on projects of similar nature or project size.
- 6. Source Limitations:
 - A. Obtain Concrete Pavers from one source location with the resources to provide products of consistent quality in appearance and physical properties.
 - B. Obtain joint sand from one source with the resources to provide materials and products of consistent quality in appearance and physical properties.
- 7. Paving Contractor Qualifications:
 - A. Utilize an installer having successfully completed concrete paver installation similar in design, material, and extent indicated on the project.
- 8. Mockups (2 areas):
 - A. Install a 5 ft x 5ft wide paver area for BRICK PAVERS: 5FT FURNITURE ZONE and a 5ft x 17" wide paver area for BRICK PAVERS: NARROW BAND following the design type, color and pattern indicated on plans.
 - B. Use these areas to determine surcharge of the bedding aggregate layer, joint sizes, lines, laying pattern(s) and levelness.
 - C. These areas will be used as the standard by which the work will be judged.
 - D. Subject to acceptance by the Engineer, mock-up areas may be retained as part of finished work.
 - E. If mock-up areas are not retained, remove and properly dispose.

Delivery, Storage & Handling:

- 1. General:
 - A. Deliver, store and handle in accordance with manufacturer and supplier's recommendations.
 - B. Deliver, store and handle in accordance with manufacturer and supplier's recommendations.

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2. Delivery: Deliver materials in manufacturer's original, unopened, undamaged packaging with identification labels intact.

A. Unload pavers with proper equipment, so no damage occurs to pavers.

3. Storage: Store materials so they are protected from contamination by foreign substances and excessive moisture.

A. Store pavers to prevent damage and staining.

B. Do not store bedding sand and jointing sand on compacted aggregate base course or in areas that channel water into the sand.

C. Cover bedding sand and jointing sand with waterproof covering. Secure the covering in place.

Project/Site Conditions:

A. Environmental Requirements:

1. Install Clay Brick Pavers only on unfrozen Sand Setting Bed.
2. Do not install sand or pavers during rain or snowfall
3. Do not install frozen materials
4. Do not install pavers on frozen or saturated sand.

Paver Overage And Attic Stock:

- A. Provide a minimum of 5% additional material for overage to be used during construction.
- B. Contractor to provide 100 square feet of each product and size used to the Village for maintenance and repair. Furnish Pavers from the same production run as installed materials.
- C. Manufacturer to supply maintenance and reinstatement manuals for Clay Brick Paver units.

Products:

B. Clay Brick Pavers

Paver Type: Dry-Pressed Clay Brick Pavers. Straight edge cobbled 4"x12"x2 1/4"

e. Standard: ASTM C902

f. Classification: SX

g. 4" X 12" X 2 1/4" Blend Color: Northshore Blend

i. 32 Antique

ii. 33 Dark Antique

iii. 34 Mulberry

iv. 36 Sunset Red

v. 63 Charcoal

h. 4" x 8" x 2 1/4" Border Color:

i. 63 Charcoal

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As manufactured by:
Whitacre Greer Company
1400 South Mahoning Ave, Alliance, OH 44601
Phone (800)947-2837 Email info@wgpaver.com.

B. Joint and Bedding Sand

1. Provide jointing and bedding sand and bedding sand as follows:
 - a. Clean, well graded, sand free from soluble salts and other deleterious or foreign matter. Sand shall be natural silica sand or sand manufactured from crushed rock.
 - b. Do not use screenings or stone dust for jointing sand or bedding sand.
 - c. Joint Sand should be polymeric
 - d. Joint Sand color should be Charcoal

Coarser sand than specified in ASTM C 144 may be used for jointing sand, including ASTM C 33 material with grading requirements shown below. ASTM C 33 sand is recommended for joint filling in heavy vehicular pavements. ASTM C 33 sand may require significant effort during joint filling in order to completely fill joints. Larger particles often will not enter joints and should be swept off the surface. Success has been obtained by passing ASTM C 33 sand through a No. 8 sieve. ASTM C 144 sand is more finely graded and more susceptible to removal from joints. Joint sand stabilizers should be considered when ASTM C 144 sand is used for joint filling in heavy vehicular pavements.

1. Polymeric Joint Sand Material Requirements: Comply with ASTM C 33.

ASTM C 33	
Sieve Size	Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	85 to 100
No. 16 (1.18 mm)	50 to 85
No. 30 (0.600 mm)	25 to 60
No. 50 (0.300 mm)	10 to 30
No. 100 (0.150 mm)	2 to 10
No. 200 (0.075)	2 to 10

C. Bedding Sand:

1. Comply with ASTM C 33 requirements for fine aggregate.
2. Do not use mason's sand, or sand conforming to ASTM C 144 for bedding sand.

D. Edge Restraints

Edge restraints are indicated on drawings and identified as:

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1. CONCRETE CURB (SPECIAL)
2. PCC SIDEWALK
3. PCC CARRIAGE WALK
4. GRANITE CURB PLANTER
5. PAVER GRATE

E. Concrete Base

1. Concrete base shall comply with the requirements of item PCC SIDEWALK and Section 1020 of the Standard Specifications for Class SI Concrete.
2. Concrete base shall include placing and compacting of subbase granular material, type B on prepared subgrade, installing epoxy coated dowels and placing Portland cement concrete to dimensions indicated.
3. Weep holes shall be provided in the concrete base at the location of the low point of the paver field to allow water to drain to the base course material, with use of 2" PVC pipe. This work shall be constructed in accordance with Sections 351 and 424 of the Standard Specifications.
4. The concrete base shall be constructed integrally with the adjacent PCC SIDEWALK.
5. The cost of placing the subbase granular material, concrete base, weep holes and dowels shall be included in the cost of BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

F. Geotextiles

1. Geotextile fabric shall have a minimum 0.2 mm (No. 70) apparent opening size and permit water passage without allowing sand or soil migration.

G. Epoxy masonry adhesive

1. Epoxy masonry adhesive shall be suitable for exterior use on brick and concrete, and form a water resistant bond when cured.

Execution

Examination

- A. Examine areas indicated to receive paving for compliance with requirements for installation tolerances and other conditions affecting performance for the following items before placing the Concrete Pavers.
 1. Verify that Cast-in-Place Concrete Underlayment strength, thickness, surface tolerances and elevations conform to specified requirements.
 2. Verify that the Sand Setting Bed materials, thickness, compacted density, surface tolerances and elevations conform to specified requirements.
 3. Verify location, type, and elevations of edge restraints, concrete curbing.
 4. Verify that concrete surfaces to receive the bitumen bedding material are free of dust, oil, grease, paint, wax, curing compounds, primer, sealers, form release

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- agents, from cracks over 3/16 in. (5 mm) in width, or any deleterious substances and debris which may prevent or reduce bonding.
- 5. Conduct moisture tests to verify that concrete surfaces are cured, free from hydrostatic pressure and having a moisture content of less than 5%.
- 6. Do not proceed with installation of Sand Setting Bed or Clay Brick Pavers until base conditions are corrected by the Contractor.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
 - 1. Beginning of Sand Setting Bed and Clay Brick Paver installation signifies acceptance of Cast-in-Place Concrete Underlayment.

Preparation

- B. Verify that Cast-in-Place Concrete Underlayment is clean and dry, weep holes are filled with 1/4" chip aggregate, geotextile fabric is in place, and base is ready to accept Sand Setting Bed, Clay Brick Pavers, and imposed loads.
 - 1. Do not use bedding sand to correct deficiencies in base course surface.
 - 2. Do not proceed with bedding sand or paver installation until satisfactory base course conditions are verified by the Engineer.
- B. Stockpile Joint Sand materials such that they are free from standing water, uniformly graded, free of any organic material or sediment, debris, and ready for placement.
- C. Remove any excess thickness of soil applied over the excavated soil subgrade to trap sediment from adjacent construction activities before placing the Aggregate Base.
- D. Keep area where pavement is to be constructed free from sediment during entire job. Remove and replace all Joint Sand contaminated with sediment with clean materials.
- E. Complete all subdrainage of underground services within the pavement area in conjunction with subgrade preparation and before the commencement of Cast-in-Place Concrete Underlayment construction.
- F. Prevent damage to underdrain pipes, overflow pipes, observation wells, or inlets and other drainage appurtenances during installation. Report all damage immediately.
- G. Compact soil subgrade uniformly to at least 95 percent of Standard Proctor Density per ASTM D 698 for pedestrian areas. Compact soil subgrade uniformly to at least 98 percent Modified Proctor per ASTM D 1557 for vehicular areas. Stabilization of the subgrade may be necessary with weak or saturated subgrade soils.
- H. Backfill all service trenches within the pavement area to the subgrade level with approved material placed in uniform lifts not exceeding 4 in. (100 mm) loose thickness. Compact each lift to at least 100 percent Standard Proctor Density as specified in ASTM D 698.
- I. Trim the subgrade to within 0 to 1/2 inch (0 to 13mm) of the specified grades. Do not deviate the surface of the prepared subgrade by more than 3/8 inch (10mm) from the bottom edge of a 39 inches (1m) straight edge laid in any direction.
- J. Do not proceed with further pavement construction, under any circumstances, until the subgrade has been inspected by the Commissioner.

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- K. Field Measurements: Determine actual paver dimensions (including tolerances) and coordinate with dimensions for pavement areas indicated on Contract Drawings prior to any pavement installation. Adjust pavement area dimensions to eliminate unnecessary paver cutting.
- L. Geotextile: Install geotextile where indicated on Contract Drawings to fully cover weep holes. Lap ends and edges a minimum of 12 inches.

Note: Base compaction of the subgrade soil on the recommendations of the Engineer. Request the Engineer to inspect subgrade preparations, elevations and conduct density tests for conformance to specifications.

Installation

- A. CONCRETE BASE:
 - 1. Fill any cracks under 3/16 in. (5 mm) wide with mortar.
 - 2. Sweep the surface clean.
- B. BEDDING SAND:
 - 1. Spread bedding sand evenly over base course and screed rails. Screed to 1 inch (25 mm) thickness.
 - a. Do not spread bedding sand beyond area to be covered by pavers the same day.
 - b. Prior to re-commencement of work remove, replace and re-screed bedding sand not covered with pavers the previous work day.
 - c. Do not disturb screeded sand. Re-screed disturbed bedding sand.
- C. EDGE RESTRAINTS:
 - 1. Provide concrete edge restraints as indicated on drawings
 - b. Install the face of the concrete edge restraint, where it abuts pavers vertical down to the subbase.
 - c. Construct concrete edge restraint to dimensions and level specified and support on a compacted subbase not less than 4 in thick.
- F. CLAY BRICK PAVERS
 - 1. Lay pavers in pattern(s) shown on Project Drawings.
 - a. Lay full pavers first.
 - b. Mix pavers from at least three palettes to produce uniform color blends. Follow manufacturer's recommendations for color blending.
 - c. Place units by hand without using hammers.
 - d. Adhere sides of pavers to concrete edge restraints with epoxy masonry adhesive

Joint width spacing is critical to establishing interlock and minimizing paver chippage. Studies show that 1/8 inch is optimal. Joint widths and bond lines are adjusted to meet specifications as paving proceeds. Pavers with insufficient joint spacing are subject to chipping during installation or service. Pavers with lugs may be placed in contact with each other.

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Depending on the selected pattern and paver type, optimum joint widths are not always possible. This is something to be discussed in the pre-construction meeting. It is recommended that no more than 5% of joints exceed ¼ inch (6 mm) wide.

2. Provide 1/16 inch to 3/16 inch (2 to 5 mm) wide joints between pavers.
3. Adjust pavers to form straight bond lines and appropriate joint widths. Maximum bond line variation shall be $\pm \frac{1}{2}$ inch (13 mm) over a 50 foot (15 m) string line.
4. Fill gaps at paved area edges with cut pavers.
 - a. Cut pavers at edges as indicated on Contract Drawings with a double blade paver splitter or wet cut masonry or vacuum saw.
 - b. Cut pavers shall be no smaller than one-third of a whole paver [except where pattern is to be maintained and smaller pieces are surrounded by a full paver and field paver border course]. Vehicular pavements shall have no pavers less than one-third size of the full paver.
5. Do not permit traffic, including construction equipment, on pavers before initial compaction and joint filling. Disturbed areas of pavers should be taken up, the sand re-screeded and pavers relaid.
6. Vibrate pavers into sand using a high frequency/low-amplitude plate compactor capable of 3,000 lbf to 5,000 lbf (13 to 22 kN) at a 75 to 100 Hz frequency. Protect pavers from chipping during compaction by using a plate compactor with a rubber matt, rubber rollers or other approved materials placed over pavers. Do not compact within 6 feet (2 m) of unrestrained edges. Remove cracked or damaged pavers and replace with new units.
7. After pavers are fully settled and free from movement simultaneously spread, sweep and compact dry jointing sand into joints until they are completely filled and sand no longer falls into joints.
8. Protect areas not covered with cut and compacted pavers with waterproof covering overnight.
9. Discontinue laying operations, align and compact pavers prior to work suspension when weather conditions are such that pavement performance may be compromised.
10. On laying operations recommencement, verify acceptable setting bed condition before further pavers are laid. If water has entered bedding sand, remove pavers and saturated bedding sand, install unsaturated sand replace and compact pavers.

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11. Sweep excess sand from pavement when installation is complete.
12. Return to site over a period of up to one year to add sand to fill joints as needed.

FIELD QUALITY CONTROL

Measure surface tolerances on flat slopes with a rigid straightedge. Measure tolerances on complex contoured slopes with a flexible straightedge capable of conforming to complex curves on the pavement surface.

A. Finished pavement surface shall not deviate more than $\pm 3/8$ inch (10 mm) from specified elevations.

B. Check final surface profile for conformance to Project Drawings.

C. Pavement surface elevation shall be flush with adjacent construction

D. Maximum variation from a specified surface profile shall be $\pm 3/16$ inch (5 mm) in 10 feet.

E. Height difference between adjacent pavers shall not exceed $1/8$ inch (3 mm).

PROTECTION

A. After work in this Section is complete, Contractor shall protect work from damage due to subsequent construction activity on site.

Method of Measurement. This work will be measured in place and the area computed in SQUARE FOOT for BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE FOOT for BRICK PAVERS: 5FT FURNITURE ZONE and BRICK PAVERS: NARROW BAND, which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-88 DECORATIVE GRANITE PLAQUE

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment

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and materials necessary to install finished and engraved decorative granite square plaques at locations specified in the Contract plans or as directed by the Engineer. Decorative plaques will be provided and delivered to the job site by the Village. This work is to be installed within the BRICK PAVERS: 5FT FURNITURE ZONE and PCC SIDEWALK.

General Requirements. Each granite plaque will be placed at the location indicated in the plans or as directed by the Engineer. The locations will be field marked and verified for approval by the Engineer.

Assembly:

Granite Plaques are to be installed alongside brick pavers within BRICK PAVERS: 5FT FURNITURE ZONE and PCC SIDEWALK. All elements to construct concrete base, setting bed and adjacent pavers shall be paid for under BRICK PAVERS: 5FT FURNITURE ZONE.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed as EACH for DECORATIVE GRANITE PLAQUE

Basis of Payment. This work will be paid for at the contract unit price per EACH, for DECORATIVE GRANITE PLAQUE which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-89 DETECTABLE WARNING

Description. Work under this item shall consist of furnishing all of the labor, tools, equipment and materials necessary to furnish, deliver and install finished and detectable warnings at curb ramp locations as indicated in the contract plans or as directed by the Engineer.

General Requirements. The requirements shall be according to Article 424 of the Standard Specifications except as herein modified.

Article/Section

Detectable

Warnings.....424.09

Gray Iron Castings ASTM

A48.....1006.14

Material:

Detectable warnings are to be cast grey iron plates 24"x24" with interlocking connections. Cast gray iron shall conform to ASTM A-48 class 30B. Detectable warnings must be made in USA.

Detectable warnings to be manufactured by Neenah Foundry, East Jordan Iron Works or

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Reliance Foundry.

Note: Upon exposure to moisture, the cast iron plates will form a temporary iron oxide scale, which is a normal part of the oxidation process. Following this, the warning plate will darken to a patina, which is permanent throughout the life of the installation.

To limit rust stains on adjacent concrete surfaces, the contractor shall “pre-weather” the cast iron detectable warning plates for a minimum of 60 days prior to installation. This pre-weathering period will expose the cast iron to outdoor moisture and start the oxidization process, allowing the finish to stabilize prior to installation.

Construction Requirements:

1. Surface Preparation:

The top surface shall be cleaned in accordance with Article 506.03 of the Standard Specifications and Steel Structures Painting Council SSPC-SP2 or 3 (hand tool or power cleaning method) and must be free of all loose rust and loose mill scale.

2. Sealer:

Before installation, contractor shall coat all surfaces (top, bottom, and edges) of the grates two applications of linseed oil to alleviate the initial rusty appearance of the untreated metal.

WARRANTY

A 5 year warranty shall be provided to cover all work and materials in this section.

Method of Measurement. This work will be measured in place and the area computed per SQUARE FOOT for DETECTABLE WARNING.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE FOOT, for DETECTABLE WARNING which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-90 SHRUBS AND GRASSES

Description. This work shall consist of the purchase, transportation, storage, preparation and all tools required to plant container grown (CG) shrubs, perennials, grasses, ground covers and bulbs. A one (1) year guarantee on all planted material is included under these pay items.

References:

ANSI Z60.1-2004 -- American Standard for Nursery Stock; 2004 (or latest edition)
Section 253 of the Standard Specifications

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Submittals:

Request for Materials Inspection Sheet.

Anti desiccant – Material Safety Data Sheet

Tree wrap – sample

Quality Assurance:

Provide plant materials complying with ANSI Z60.1-2004 (or latest edition).

All plants shall be obtained from Illinois Nurserymens Association or appropriate state chapter nurseries, in hardiness zones of comparable local climatic range to the Engineer and Village and approved by the Engineer and Village Forestry Department. All shrubs, perennials, grasses and groundcovers shall be container grown stock.

Inspections:

The Engineer will inspect plant materials at the nurseries prior to being delivered on site. This will be done upon submittal of “Request for Material Inspection” sheets. These sheets must be turned in at least 7 weeks prior to the expected date of installation. No plant material shall be delivered without prior approval of the Engineer. Plant material not installed within 60 days of initial inspection will be required to be re-inspected.

An on-site inspection will be made prior to the installation of plant material. Any plant material not meeting specification (that being of good health) must be moved off the site.

Plant Delivery, Storage and Handling:

Schedule delivery to avoid storage on site. If planting does not occur immediately, store plants in a location protected from sun, weather and theft.

Do not prune plant material unless directed by the Engineer.

Cover to protect stock during transport. Plant material transported without cover shall be automatically rejected.

Bind stock to protect branches, bark, and overall shape during transport.

E. Do not drop stock. Load and unload with care.

Guidelines:

Planting season: (As herein specified or as directed by the Engineer)

Herbaceous Plants:

Where Irrigated: April 15 to October 15

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Non-Irrigated: April 15 to June 15
September 15 to October 15

Woody Plants:

Where Irrigated: March 15 to November 30

Non-Irrigated: March 15 to June 30

October 1 to November 30

Do not plant when soil is muddy or during frost.

Dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer.

No plant material shall be installed prior to the final grade of the planting soil.

No plant material shall be installed before below-ground irrigation system components have been installed and operational.

Trees must be installed first to establish proper layout and to avoid damage to other plantings.

Warranties:

From the date of Final Punch-list Completion and acceptance, the Contractor shall warranty all plant material for a period of one (1) year.

During this warranty period, when so directed by the Engineer, the Contractor shall repair and replace at his own expense all defective or unsatisfactory landscape plant materials including those that are dead, dying, diseased or lacking vigor.

The Engineer shall transmit a list of plant material under warranty to be replaced. The Contractor must replace all items within 30 days from transmittal or as directed by the Engineer. Failure to replace plant material within the time allowed will result in liquidated damages being applied in the amount of \$250 per day.

At the end of the warranty period, plant material in borderline condition will either be replaced or an extension of the warrantee for one (1) year will be granted to the Village, for that specific plant.

If plant material is damaged by the Contractor during construction or the warranty period, the Contractor must replace the plants at his expense.

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Initial Maintenance:

Initial Maintenance: The Contractor is responsible for maintenance of each area until it has been accepted by the Engineer by issuance of Final Punch-List Completion letter, and the warranty period is formally started.

Begin maintenance when the final grade has been achieved in any one location.

Initial maintenance includes weeding, and trash removal from the area to be landscaped. The contractor will provide initial maintenance a minimum of once per week, or as directed by the Engineer.

Plants shall be watered immediately upon installation and on a regular basis thereafter. If the irrigation system is not able to provide enough water to establish the plants, the contractor will provide supplemental watering at no additional cost.

Initial Maintenance is intended to maintain all plants in a healthy and vigorous condition. This may require pruning, cultivating, replanting, tightening and repairing of supports, repair of wrapping, and furnishing and applying sprays as necessary to keep the plants free of insects and disease.

Initial Maintenance is incidental to these pay items.

Products:

A. Shrubs

Provide nursery grown stock unless specifically indicated otherwise.

General: Well-branched and well-formed, sound, fibrous, healthy and free from disease, sun-scall, wind burn, abrasion and harmful insects or insect eggs. Healthy, normal and unbroken root systems.

Deciduous trees and shrubs: Symmetrically developed of uniform habit of growth with straight trunks or stems and free from objectionable disfigurements.

Coniferous evergreen trees and shrubs: Well-developed symmetrical tops with typical spread of branches for each particular species or variety.

Provide stock complying in all respects with ANSI Z60.1 and in sizes indicated, measured in accordance with ANSI Z60.1. Larger sizes with larger roots and root containment may be furnished if approved by the Engineer.

Do not spread or compress branches when measuring. Measure main body of branches; do not measure extreme tips of single branches.

Pruning to size is not acceptable.

Up to 4 inches caliper, measure caliper at 5 inches above ground.

Tag each specimen of each variety of tree or shrub to indicate common and botanical name.

Deciduous shrubs: Container grown only

Coniferous evergreens: Container grown only

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B. Ground Cover, Perennials and Ornamental Grasses

1. General: Provide field-grown or acclimatized container-grown plants from a commercial nursery, healthy, vigorous, of sizes indicated, and in accordance with ANSI Z60.1, Section 6, Young Plants.

C. Miscellaneous Landscape Materials

1. Anti-desiccant: Film-forming emulsion, permeable to transpiration, while retarding excessive moisture loss. Anti-desiccant shall be Wilt-Proof or approved equal.

Preparation and Execution:

Installation cannot begin until the final grade has been achieved.

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan this will require the use of an engineer's scale to determine some dimensions. The tree locations must be marked by staking and bed limits must be painted. The Engineer will approve the layout prior to installation.

In temperatures above 84 F, all plant material will be treated with anti-desiccant prior to installation. The Engineer may direct the contractor to treat with anti-desiccant for installations after September 1st.

Excavation

1. Pits, beds and trenches: Excavate with sides vertical, bottom flat but with high center for drainage. Deglaze sides and loosen bottom.
2. Minimum dimensions, individual pits (unless prevented by planter wall):
 - a. The diameter of the hole shall be 1 foot wider than the root spread
 - b. The depth of the hole shall be such that the top of the root ball is 2 to 3 inches above finish grade (allow for settling).
3. Remove all excavated subsoil from the site and dispose of legally. Do not backfill excavation with subsoil.

Backfilling

1. Setting layer: Place and compact a layer of planting soil, of thickness indicated, in bottom of excavation.
 - a. Place backfill in 6" inch-thick layers. Work each layer by hand to compact backfill and eliminate voids. Maintain plumb during backfilling.
 - b. When backfilling is approximately 2/3 complete, saturate backfill with water and repeat until no more can be absorbed.
Place and compact remainder of backfill and water again.

F. Container-Grown Plants - place and backfill as specified above and as follows:

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1. Immediately before placing, remove container, taking care not to damage the root system.
2. Set and plumb plants even with grade. Place backfill to thoroughly cover all roots.
3. Inspect and, if necessary, treat plant material for physical damage or insect infestation.

G. Form watering basin around trunk with backfill holding at least 5 gallons for shrubs. Apply shredded hardwood bark mulch.

H. Pruning

Remove dead or broken branches.

Make cuts with sharp instruments within the branch collar. Do not

remove leaders from trees. All pruning must be performed under the direct supervision of a certified arborist.

Planting Ground Cover and Small Plants

1. Open holes sized to accommodate roots, place plants at proper elevation and backfill with planting soil, working carefully to avoid damage to roots and to leave no voids. Build up a small water basin of planting soil around each plant.
2. Immediately after planting water well. Do not wash soil onto crowns of plants.

Method of Measurement. This work will be measured in place and the area computed per EACH for

SHRUB, ITEA VIRGINIA 'LITTLE HENRY', #3 CG

SHRUB, HYDRANGEA SERRATA SMNMAKTSR, #3 CG

SHRUB, ARONIA MELANOCARPA 'MORTON', #3 CG

SHRUB, CEANOTHUS AMERICANUS, #3 CG

PERENNIAL, BAPTISIA 'BLUEBERRY SUNDAE', #1 CG

PERENNIAL, COREOPSIS LANCEOLATA, #1 CG

PERENNIAL, DALEA PURPUREA, #1 CG

PERENNIAL, ECHINACEA PURPUREA, #1 CG

PERENNIAL, HUCHERA X VILLOSA 'CARNIVAL WATERMELON', #1 CG

PERENNIAL, LIATRIS SPICATA 'KOBOLD', #1 CG

PERENNIAL, LOBELIA CRDINALIS, #1 CG

PERENNIAL, NEPETA X FAASENII 'KIT KAT', #1 CG

PERENNIAL, PENSTEMON DIGITALIS, #1 CG

PERENNIAL, SALVIA NEMEROSA 'BLUE HILL', #1 CG

ORN. GRASS, SCYZACHYRIUM SCOPARIUM, #1 CG

ORN. GRASS, BLUE SEDGE, 4" POT CG

GROUND COVER, SEDUM KAMTSCHATICUM, 4" POT CG

GROUND COVER, PERIWINKLE, 4" POT CG

Only acceptable plants will be measured for payment.

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Basis of Payment. This work will be paid for at the contract price per EACH, for
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SHRUB, HYDRANGEA SERRATA SMNMAKTSR, #3 CG
SHRUB, ARONIA MELANOCARPA ‘MORTON’, #3 CG
SHRUB, CEANOTHUS AMERICANUS, #3 CG
PERENNIAL, BAPTISIA ‘BLUEBERRY SUNDAE’, #1 CG
PERENNIAL, COREOPSIS LANCEOLATA, #1 CG
PERENNIAL, DALEA PURPUREA, #1 CG
PERENNIAL, ECHINACEA PURPUREA, #1 CG
PERENNIAL, HUCHERA X VILLOSA ‘CARNIVAL WATERMELON’, #1 CG
PERENNIAL, LIATRIS SPICATA ‘KOBOLD’, #1 CG
PERENNIAL, LOBELIA CRDINALIS, #1 CG
PERENNIAL, NEPETA X FAASENII ‘KIT KAT’, #1 CG
PERENNIAL, PENSTEMON DIGITALIS, #1 CG
PERENNIAL, SALVIA NEMEROSA ‘BLUE HILL’, #1 CG
ORN. GRASS, SCYZACHYRIUM SCOPARIUM, #1 CG
ORN. GRASS, BLUE SEDGE, 4” POT CG
GROUNDCOVER, SEDUM KAMTSCHATICUM, 4” POT CG
GROUNDCOVER, PERIWINKLE, 4” POT CG
which shall include all the material. Labor, equipment, maintenance and all incidental work
necessary to perform the work described above.

SP-91 TREE DELIVERY AND PLANTING

Description: Contractor will deliver and install balled and burlapped trees. Trees will be procured and tagged by the Village. Contractor will be responsible for the transportation and delivery of trees from local area nurseries, storage, preparation and all tools required to plant. Planting shall occur after SOIL CELLS, PLANTER SOIL, GRANITE CURB PLANTERS, and SEAT WALLS are in place. Planting of trees in PAVER GRATES will need to be coordinated and completed prior to the completion of that item.

A two (2) year period of establishment on all trees is included under this pay item.

General Requirements: Requirements shall be according to Article 253 of the Standard Specifications except as herein modified:

Article/Section
Planting woody Plants.....253.01

- A. Trees nursery stock will comply with American Standard for Nursery Stock ANSI Z60.1- 2014 (or latest edition). All trees shall be selected and tagged by Village and available for transport from local area nurseries.

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- i. Trees will be nursery grown stock unless specifically indicated otherwise.
 - ii. Trees will be well-branched and well-formed, sound, fibrous, healthy and free from disease, sun-scald, wind burn, abrasion and harmful insects or insect eggs with healthy, normal and unbroken root systems.
 - iii. Deciduous trees will have symmetrically developed of uniform habit of growth with straight trunks or stems and free from objectionable disfigurements.
 - iv. Coniferous evergreen trees will have well-developed symmetrical tops with typical spread of branches for each particular species or variety.
 - v. Nurseries will provide stock complying in all respects with ANSI Z60.1 and in sizes indicated, measured in accordance with ANSI Z60.1.
 - vi. The Village will tag each variety of tree to indicate common and botanical name, as well as size.
- B. All trees will be balled and burlapped.
- C. The Contractor will be provided with a list of trees and locations of nurseries immediately upon contract award. The contractor will be required to coordinate the digging, transportation, storage, layout, excavation, pruning, planting, and mulching of trees in accordance with the requirements of Article 253 of the Standard Specifications except as herein modified.
- D. The contractor will be required to provide the period of establishment and plant care in accordance with the requirements of Article 253 of the Standard Specifications, except as herein modified.

Materials:

1. Planting soil: Soil for trees in planters and soil within adjacent SOIL CELLS shall be PLANTER .
2. Anti-desiccant: Film-forming emulsion, permeable to transpiration, while retarding excessive moisture loss.
3. Tree wrap tape: Nurseryman's standard protective tape. Note: Trees to be wrapped at the discretion of the Village Forestry Department.

Substitutions:

The Contractor shall make no substitutions on trees without specific approval from the Village Forestry Department.

Inspections:

- A. Request for Inspection Plant Material ("RFIPM") and Request for Material Inspection Nursery Trees ("RFINT") must be turned in to the Engineer at least 6 weeks prior to the expected date of installation. No trees shall be delivered without Village tags. Plant material not installed within 60 days of initial inspection will be required to be re-inspected. RFIPM's for fall planting will not be accepted after September 1 unless

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otherwise approved by the Engineer.

- E. Trees will be inspected at the Nursery by the Village prior to digging and transport.
- F. After transport to the job site and upon delivery, an on-site inspection by Village will be made prior to the installation of plant material. Any plant material not meeting specification (that being of good health) must be moved off the site and immediately replaced at the contractor's expense.

Plant Delivery, Storage and Handling:

- A. Schedule delivery to avoid storage on site. If planting does not occur immediately, store plants in a location protected from sun, weather and theft for up to 72hrs max. Refer to article 235.06 in the Standard Specifications for storage requirements for Balled and Burlapped Plants.
- B. Do not prune trees unless directed by the Village Forestry Department.
- C. Cover to protect stock during transport. Plant material transported without cover shall be automatically rejected.
- D. Bind stock to protect branches, bark, and overall shape during transport.
- E. Balled and burlapped stock: Provide freshly dug stock unless otherwise approved. The maximum time lapse between digging and being properly loaded and delivered to the project site shall be 4 days.
- F. Do not drop stock. Load and unload with care.
- G. Protect tree trunks prior to loading and unloading. Damaged trees will be rejected on site.

Guidelines:

- A. Planting season: (As herein specified or as directed by the Engineer)
 - Woody Plants:
 - Where Irrigated: March 15 to November 30
 - Non-Irrigated: March 15 to June 30 or October 1 to November 30
- B. Do not plant when soil is muddy or during frost.
- C. Dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer.
- D. No plant material shall be installed prior to the final grade of the planting soil.

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- E. No plant material shall be installed before below-ground irrigation system, planters and/or soil cell components have been installed and operational.
- F. Trees must be installed first to establish proper layout and to avoid damage to other plantings.

Preparation and Execution:

- A. Installation cannot begin until the final grade has been achieved and soil has settled for a minimum of one week or as directed by the Engineer.
- B. The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan; use of an engineer's scale may be necessary to determine some dimensions. The tree locations must be marked by staking and bed limits must be painted. The Engineer will approve the layout prior to installation.
- C. After September 1 or in temperatures above 84 F, all plant material will be treated with anti-desiccant prior to installation or as directed by the Engineer.

Initial Maintenance:

- C. Initial Maintenance: The Contractor is responsible for maintenance of each area until it has been accepted by the Engineer by issuance of Final Punch-List Completion letter, and the time of establishment has formally started.
- D. Begin maintenance when the final grade has been achieved in any one location.
- E. Initial Maintenance includes weeding, staking and guying of trees and trash removal from the area to be landscaped. The Contractor will provide Initial Maintenance a minimum of once per week, or as directed by the Engineer.
- F. Plants shall be watered immediately upon installation and on a regular basis thereafter. If the irrigation system is not able to provide enough water to establish the plants, the contractor will provide supplemental watering at no additional cost.
- G. Initial Maintenance is intended to maintain all plants in a healthy and vigorous condition. This may require pruning, cultivating, replanting, tightening and repairing of supports, repair of wrapping, and furnishing and applying sprays as necessary to keep the plants free of insects and disease.
- H. Initial Maintenance is incidental to these pay items.

Submittals:

- A. Within 60 days of Contract Award, Contractor must submit proof that tree digging and transport has been arranged.

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- B. Request for Materials Inspection Plant Material and Nursery Trees.
- C. Anti-desiccant label and Material Safety Data Sheet
- D. Tree wrap – sample (if required)

Construction Requirements:

- A. Excavation for Trees
 - 1. Pits, beds and trenches: Excavate with sides vertical, bottom flat but with high center for drainage. Deglaze sides and loosen bottom.
 - 2. Minimum dimensions, individual pits (unless prevented by planter wall):
 - a. The diameter of the hole shall be 1 foot wider than the root spread.
 - b. The depth of the hole shall be such that the top of the root flare must be exposed and visible above grade.
 - 3. Remove all excavated subsoil from the site and dispose of legally. Do not backfill excavation with subsoil.
- B. Planting Trees
 - 1. Setting layer: Place and compact a layer of planting soil, of thickness indicated, in bottom of excavation.
 - 2. Balled and Burlapped Stock: Set trees in excavation with the root flare exposed and visible above finished grade. Add soil as required under ball to achieve plumb.
 - a. Untie and remove all cords binding burlap to trunk. Remove and dispose of wire basket. Remove any additional twine or cords that are not decomposable. Remove and dispose of burlap from top 1/3 of the root ball.
 - b. Place backfill in 6" inch-thick layers. Work each layer by hand to compact backfill and eliminate voids. Maintain plumb during backfilling.
 - c. When backfilling is approximately 2/3 complete, saturate backfill with water and repeat until no more can be absorbed.
 - d. Place and compact remainder of backfill and water again.
 - 3. Inspect and, if necessary, treat trunks for physical damage or insect infestation.
- C. Form watering basin around trunk with backfill holding at least 10 gallons for trees. Apply shredded hardwood bark mulch as shown on details to the depths specified. Mulch shall not be in contact with tree trunk or root flare.
- D. Pruning
 - 1. Remove dead or broken branches.
 - 2. Make cuts with sharp instruments within the branch collar. Do not remove leaders from trees. All pruning must be performed under the direct

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supervision of a certified arborist.

QC/QA Requirements:

- A. All trees shall be dug prior to leafing out (bud break) in the spring or when plants have gone dormant in the fall.
- B. Labor
 - 1. Qualifications
 - a. The landscape contractor shall provide proof that the firm has the experience, ability and equipment that the work requires.
 - b. The landscape contractor shall provide at least one supervisor who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials and design methods of the material being installed.
 - c. The designated supervisor shall be present at all pertinent construction meetings and shall be on-site throughout the duration of the landscape portion of the project. This designated supervisor is the main point of contact between all parties involved in the landscape installation and shall be responsible for all submittals, schedules and samples required pursuant to the plans and specifications.
 - d. The designated supervisor shall manage a minimum sized crew consisting of at least four (4) individuals. The crew shall not work on site without the designated supervisor present.
 - e. The designated supervisor shall be familiar with all pertinent plans and specifications and shall provide clear direction for all crew members involved.
 - 2. Experience Requirement: The landscape contractor and the designated supervisor outlined above must meet the following requirements:
 - a. Minimum of five (5) years of successful and continuous experience on projects of this type, size and scope.
 - b. Proof of the above requirements including photographic evidence of projects at installation and at different stages of maturity.
 - c. If applicable, demonstrate previous successful projects installed on behalf of the Village.

Period of Establishment

Prior to being accepted, the trees shall endure a period of establishment in accordance with 23 C.F.R. § 752.4 Landscape development and Section 253.14 of the Standard Specifications except that the period of establishment will be two (2) years for trees.

Method of Measurement. This work will be measured in place and the area computed per EACH for TREE DELIVERY AND PLANTING.

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Basis of Payment. This work will be paid for at the contract unit price per EACH, for TREE DELIVERY AND PLANTING which shall include all the material, labor, equipment, period of establishment and all incidental work necessary to perform the work described a

SP-92 SHREDDED HARDWOOD BARK MULCH

Description. This item shall include all labor, materials and equipment necessary to furnish, transport and place hardwood bark mulch at all new planting areas (within GRANITE CURB PLANTERS, and SEAT WALL PLANTERS) and around trees to be planted in grass parkways.

Submittals.

Shredded hardwood bark mulch – sample
Request for Material Inspection Sheet

Materials:

Shredded Hardwood Mulch

Hardwood bark mulch shall be clean, finely shredded mixed-hardwood bark, not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. All hardwood mulch shall be processed through a hammer mill. Hardwood bark not processed through a hammer mill shall not be accepted. A sample and request for material inspection form must be supplied to the Engineer for approval prior to performing any work.

Preparation and Execution:

- A. Place mulch as follows
- Three (3) inches deep in all locations.
 - Keep mulch away from all tree trunks.
 - Trees installed in grass parkways shall have a 3' minimum diameter mulch ring.

Contractor shall make inspections of all planting areas (every six months during the guarantee period as specified) to ensure that level of mulch has been maintained.

Method of Measurement. This work will be measured in place and the area computed per CUBIC FOOT for SHREDDED HARDWOOD BARK MULCH.

Basis of Payment. This work will be paid for at the contract unit price per CUBIC FOOT, for SHREDDED HARDWOOD BARK MULCH which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-93 SOD, ~~SALT TOLERANT~~

USE VILLAGE SPEC FOR SOD

Description.

Work under this item must be performed in accordance with Section 252 of the Standard Specifications and subsequent special provisions except as herein modified. This work must consist of preparing the ground surface and furnishing, transporting and placing sod and other materials required in the sodding operations at areas designated by the Engineer. Sod must be top quality, nursery grown salt tolerant sod, dense, well-rooted, and free from weeds and unsuitable grasses.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

General Requirements.

Prior to placing planting soil mix or pulverized top soil, the existing soil must be scarified to a depth of 4 inches. The existing soil must be free of rocks, sticks, and debris.

Planting soil mix or pulverized top soil must be added to bring the area to grade. Planting soil mix or pulverized top soil must be pulverized, natural, fertile, friable soil possessing characteristics of rich productive soil in the greater Chicago area. It must be obtained from naturally well-drained areas, not excessively acidic or alkaline and contain no toxic substances which may be harmful to plant and lawn growth. It must be free from clay lumps, roots, stones and other debris. Planting soil mix must not be handled in a frozen or muddy condition. Note that excavation for and placement of planting soil or pulverized topsoil is incidental to the cost of placement of SOD, ~~SALT TOLERANT~~.

New Sod Areas in Existing Side Street Parkways: Excavation area limits must end at the drip line of all existing trees specified to remain. If new sod is to be installed within a tree's dripline, care must be taken to protect tree roots. Excavate area of all unsuitable materials such as concrete, limestone base materials, subsoil, roots and other debris a depth of 4 inches. Add approved planting soil mix to excavated low areas, restore damage, and provide for smooth finish grades. Existing grade CAN NOT be changed either by excavation or addition of mulch or planting soil by more than 3 inches.

All materials must be removed each day from the site, no on-site storage of materials must be allowed. All sidewalks, driveways, alleys and pavements must be left in a broom-cleaned condition.

Fertilizer must conform to Article 1081.08 and have an analysis of 10-6-4, or have a different analysis but still meet the 5-3-2 ratio requirements. Fertilizer must be applied at such a rate that each square yard to be sodded must receive a total of 0.0324 pounds of Nitrogen, Phosphorous, and Potassium nutrients as specified. Agricultural ground limestone must be applied at the rate of 1.7 pounds per square yard and conform to Article 1081.07. No separate measurement or payment will be made for fertilizer or ground limestone, the cost of which will be incidental to the cost of SODDING, ~~SALT TOLERANT~~.

~~Salt tolerant sod~~ must conform to Article 1081.03(b), as shown in the following table:

<u>Variety</u>	<u>Percent by Weight</u>	
Buffalo Grass(Buchloe dactyloides)	30%	
Inferno tall fescue	20%	
Audubon Red fescue	15%	UPDATE
Rescue 911 Hard fescue	15%	
Rugby Kentucky Bluegrass	5%	
Fults Pucinnellia Distans	15%	

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

All other sod must conform to Article 1081.03(a)

The sod shall be weed-free nursery grown Kentucky Blue Grass conforming to the requirements of Article 1081.03. Sod must be grown on native mineral soil. No peat-based sod will be accepted.

With every shipment of SOD, SALT TOLERANT, the Contractor must provide to the Engineer a letter of certification from an authorized representative of the nursery stating the seed mixture used in the sod conforms to the specifications.

Sod must be subject to inspection and approval at place of growth and/or upon delivery for conformity to specification requirements. Approval at place of growth must not impair the right of inspection and rejection upon delivery at the site or during the process of the work.

Rejected material must be removed immediately from the site. Care must be taken to retain the native soil on the roots during the process of stripping, transporting and placing.

Prepared soil surfaces that became crusted must be reworked to an acceptable condition for sodding. All soil surfaces must be moist when the sod is placed. When directed by the Engineer, the Contractor must be required to apply water to dry soil surfaces at a minimum rate of 1 Gal/square yard immediately prior to placing the sod. Reworking and moistening the soil surface will not be measured separately for payment but considered incidental to the cost of SOD, SALT TOLERANT.

The sodding operations must be done in such manner that workmen will not walk on the prepared planting soil mix surface but must walk on the previously laid sod. Sod must be laid so that no voids or air pockets occur and with tight joints and staggered seams. Seams must be staggered a minimum of 15 to 18 inches. Immediately following the laying of the sod, it must be rolled and/or tamped to obtain a smooth firm surface and to prevent air pockets from forming between the underside of the sod strips and the surface of the soil. The sod must be pinned or staked, as necessary, to maintain the alignment of the sod when placed on slopes or embankment. Screened soil must be brushed or raked over the joints. The completed sod surface must be true to finished grade, even and firm over the entire area.

Within 2 hours after the sod has been placed 5 gals. of water per sq. yd. must be applied. Thereafter, on days designated by the Engineer, additional water must be applied at the rate of 3 gals. per sq. yd. The number of additional applications must not exceed 7 during the period of establishment, which is defined as the period of time between sod placement and when the sod becomes knitted to the soil and is growing in place. All watering described must be done with a spray application. An open-end hose will not be acceptable. The manner of watering must meet the approval of the Engineer. Water furnished for application must be free from oil, acid, alkali, salts or other impurities harmful to the best development of the sod. Water will not be paid for separately but will be incidental to the cost of SOD, ~~SALT TOLERANT~~.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

The Contractor must notify the Engineer in advance of installation of sod.

Guidelines:

- A. Planting season for sod installation: (As herein specified or as directed by the Engineer)
March 15 to June 15
August 15 to November 15
- B. Do not plant when soil is muddy or during frost.
- C. Dates are dependent on weather. Installation might begin or end prior or after above dates as approved by Engineer.
- D. No sod shall be installed prior to acceptance by the Engineer of the final grade of topsoil.
- E. No sod shall be installed before below-ground irrigation system components have been installed and operational.

Method of Measurement. This work will be measured in place and the area computed per SQUARE YARD for SOD, ~~SALT TOLERANT~~. To be accepted the sod must be in a fine healthy condition and knitted to the soil.

Basis of Payment. This work will be paid for at the contract unit price per SQUARE YARD, for SOD, ~~SALT TOLERANT~~ which includes furnishing all labor, materials and equipment, and all incidental work necessary to perform the work described above.

SP-94 BIKE RACK

Description: This work must consist of furnishing and installing new bike racks at the locations specified in the Contract plans or as directed by the Engineer.

General Requirements: Each bike rack will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials: Materials must be as specified in the plans and must be “black” in color, steel bike rack with by the following manufacturer:

DuMor, Inc

Model: 290

Color: Black

Installation must be completed in accordance to manufacturer’s specifications. Bike racks to be surface mounted on pavers and bolted into concrete slabs below pavers, per detail.

Submittals:

Submit manufacturer’s technical data for each manufactured product, including certification that each product complies with specified requirements. Submit shop drawings showing complete information for fabrication. Include anchoring/installation detail.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

Contractor shall submit a 4" x 6" finish sample of metal in black.

Method of Measurement. This work will be measured in place and the area computed per EACH for BIKE RACK.

Basis of Payment. This work will be paid for at the contract unit price per EACH, for BIKE RACK which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-95 BENCH

Description: This work must consist of furnishing and installing new benches at the locations specified in the Contract plans or as directed by the Engineer.

General Requirements: Each bench will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials: Materials must be as specified in the plans and must be "black" in color, steel benches in 4ft and 6ft lengths by the following manufacturer:

Victor Stanley, Inc.

Model: CR-10

Color: Black

Installation must be completed in accordance to manufacturer's specifications. Benches to be surface mounted on pavers and bolted into concrete slabs below pavers, per detail.

Benches shall be shimmed to be level – to the extent possible and as recommended by the manufacturer.

Submittals:

Submit manufacturer's technical data for each manufactured product, including certification that each product complies with specified requirements. Submit shop drawings showing complete information for fabrication. Include anchoring/installation detail.

Contractor shall submit a 4" x 6" finish sample of metal in black.

Method of Measurement. This work will be measured in place and the area computed per EACH for BENCH 4FT
BENCH 6FT

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

Basis of Payment. This work will be paid for at the contract unit price per EACH, for BENCH 4FT, BENCH 6FT which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-96 BOLLARD

Description: This work must consist of furnishing and installing new bollards at the locations specified in the Contract plans or as directed by the Engineer.

General Requirements: Each bollard will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials: Materials must be as specified in the plans and must be “black” in color, steel bollards by the following manufacturer:

Reliance Foundry

Model: R-7539

Color: Black

Installation must be completed in accordance to manufacturer’s specifications. Bollards shall be installed on concrete and anchored in place per detail.

Submittals:

Submit manufacturer’s technical data for each manufactured product, including certification that each product complies with specified requirements. Submit shop drawings showing complete information for fabrication. Include anchoring/installation detail.

Contractor shall submit a 4” x 6” finish sample of metal in black.

Method of Measurement. This work will be measured in place and the area computed per EACH for BOLLARD.

Basis of Payment. This work will be paid for at the contract unit price per EACH, for BOLLARD which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

SP-97 TRASH/RECYCLING RECEPTACLE

Description: This work must consist of furnishing and installing new trash and/or recycling receptacles at the locations specified in the Contract plans or as directed by the Engineer.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

General Requirements: Each trash/recycling receptacle will be placed at the location indicated in the plans. The locations will be field marked and verified for approval by the Engineer.

Materials: Materials must be as specified in the plans and must be “black” in color, cast aluminum trash/recycling receptacles by the following manufacturer:

Canterbury Designs

Model: Pennsylvania Ave – Model 102

Door: Hinged side opening

Color: Black

Note: Recycling Receptacles to have “Recycler” option from manufacturer, which includes the addition of “Recycling” text on the top of the receptacle. Locations of receptacles having this option are to be at the direction of the Village of Glen Ellyn.

Installation must be completed in accordance to manufacturer’s specifications. Receptacles to be installed on brick pavers and anchored in place into the concrete slab below, per detail.

Submittals:

Submit manufacturer’s technical data for each manufactured product, including certification that each product complies with specified requirements. Submit shop drawings showing complete information for fabrication. Include anchoring/installation detail.

Contractor shall submit a 4” x 6” finish sample of metal in black.

Method of Measurement. This work will be measured in place and the area computed per EACH for TRASH/RECYCLING RECEPTACLE.

Basis of Payment. This work will be paid for at the contract unit price per EACH, for TRASH/RECYCLING RECEPTACLE which shall include all the material, labor, equipment, and all incidental work necessary to perform the work described above.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

SP-98 UNION PACIFIC RAILROAD CONTRACTOR ENDORSEMENT

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

CONSENT LETTER



BUILDING AMERICA®

Date: 2-23-21

Folder 3264-76

DOT# 174950A

MP: 22.5

Sub/Ld: Geneva

TOM TOPOR, PE
VILLAGE OF GLEN ELLYN
30 SOUTH LAMBERT RD
GLEN ELLYN, IL 60137

Dear Sir/Madam:

It is the Village's ("Public Entity") intention to perform simple maintenance work which may include: remilling and repaving of the approaches and or existing sidewalks and concrete repair; restriping and repainting of this at-grade road crossing ("Work") at the location noted above. This letter serves as an acceptance by Union Pacific Railroad Company ("Railroad") of the proposed Work to be performed.

If a contractor is to do any of the Work on Railroad's property then the Public Entity shall require its contractor to execute and return the attached contractor endorsement ("Contractor Endorsement"). Under no circumstances will Public Entity's contractor be allowed on Railroad's property without first executing the Contractor Endorsement.

This Consent Letter shall be valid for one year or until the Work is complete or this Consent Letter is revoked by Railroad.

For safety reasons, the Public Entity and/or its contractor are required to notify the Railroad's Representative(s) ("Railroad Representative"), as noted below, at least 48-hours in advance prior to performing the Work described above.

MIPP: John Plebanek, 414-294-8685, japleban@upcontractor.up.com

Telecommunications ("Call Before You Dig"): 1-800-336-9193

Regards,

A handwritten signature in cursive script, appearing to read "David L. Plebanek".

Sr. Mgr. Public Projects - Real Estate

UNION PACIFIC RAILROAD
1400 Douglas Street
Omaha, Nebraska 68179

CONTRACTOR ENDORSEMENT

Date Folder 3264-76

DOT# 174950A	MP 22.5	Sub/Ld Geneva
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A. As a condition to entering upon Union Pacific Railroad Company's ("Railroad") property to perform WORK DESCRIPTION ("Work") described in Consent Letter dated the day of _____, 2021, ("Public Entity's") _____, contractor, _____ whose address is _____ (hereinafter "Contractor"), by signing below, acknowledges and agrees to comply with and be bound by the Contractor Endorsement – General Terms and Provisions, including the minimum safety standards, and insurance requirements set forth at:

https://www.up.com/real_estate/index.htm

Alternatively, cut and paste the following into browser:

https://www.up.com/cs/groups/public/@uprr/@realestate/documents/up_pdf_nativedocs/re_cont_endorsement.pdf

B. Upon request, all insurance documentation shall be provided to Railroad.

C. Please note that fiber optic cable may be buried on the Railroad's property. Prior to commencing the Work, the Contractor agrees to contact the Railroad's Telecommunications Operation Center as provided in the general terms and conditions to determine if any fiber optic cable is located on the Railroad's property on or near the location where the Work is to be performed.

D. The Contractor agrees to also provide notice to railroad representative ("Railroad Representative"):

MTM: Dan Elhosni, 402-677-5836, delhosni@up.com

E. The term of this Contractor Endorsement shall commence on the date of the execution of this Contractor Endorsement and continue for one year or until such time as Contractor has completed its work on Railroad's property, whichever is earlier, unless sooner terminated.

Please complete this Contractor Endorsement by executing below and submitting with the \$1,025.00 administrative fee payment with the Folder Number indicated to the following address:

Union Pacific Railroad Company
ATTN: Public Projects Manager
1400 Douglas Street
Mail Stop 1690
Omaha, NE 68179

(Name of Contractor)

By _____

Name: _____

Address _____

Email: _____

Date: _____

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

SP-99 WORK WITHIN UNION PACIFIC RAILROAD

Contractor shall be responsible for submitting the Contractor Endorsement Form to the Union Pacific Railroad. Contractor shall be responsible for the associated administrative fee payment.

SP-100 LIGHTING SPECIAL PROVISIONS TO BE ADDED

E - BID PROPOSAL FORM VILLAGE OF GLEN ELLYN

FORM MUST BE COMPLETED IN INK OR TYPEWRITTEN
SIGNATURES MUST BE SIGNED IN INK
AND NAME SPELLED OUT BELOW SIGNATURE

The following bid is submitted to President and Board of Trustees, Village of Glen Ellyn, 535 Duane Street, Glen Ellyn, Illinois 60137 in accordance with the specifications and contracts to furnish all labor, materials, tools, equipment and incidentals necessary to perform the work herein described as the **DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT**.

Sealed bids shall be submitted either in person, by mail, or by overnight shipping to the Village Clerk, 535 Duane Street, Glen Ellyn, Illinois 60137. Bids submitted by mail or overnight shipping are at the Bidder's risk. Bids submitted in person shall be delivered and placed in a bin labeled "BIDS" in the front (North) vestibule of the Glen Ellyn Civic Center, located at 535 Duane Street, Glen Ellyn, Illinois 60137. It is strongly recommended that all Bidders coordinate mailing or delivery times with the Village Clerk at 630-547-5202.

Bids shall be received by no later than 10:00 a.m. on March 12, 2021 at which time bids will be opened and read. This opening will be video-recorded and available for online viewing, in real time, on the Village Website at <http://www.glenellyn.org/Bids.aspx>.

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and in accordance with the other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders and the Contract Documents. This Bid will remain subject to acceptance for forty-five days after the day of Bid opening. Bidder will sign and submit the Agreement within fifteen days after the date of Owner's Notice of Award.
3. In submitting the Bid, Bidder represents, as more fully set forth in the Agreement, that:
 - a. Bidder has examined copies of all the Bidding Documents and any Addenda, receipt of which is hereby acknowledged.
 - b. Bidder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

- c. Bidder has given Owner written notice of all conflicts, errors or discrepancies that it has discovered in the Bid Documents and the written resolution thereof by Owner is acceptable to Bidder.
- d. This bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation.

Bidders shall complete the following schedule of prices table. The quantity shall be multiplied by the unit price to calculate the extension for each item. The extensions for all items shall thereafter be totaled to calculate the total bid price. The Owner will check the table in same form. Should there be any discrepancies, use of the unit prices to calculate the total bid price shall prevail.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

SCHEDULE OF PRICES

[illegible]

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

[illegible]

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENSION
PROJECT TOTAL					

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

(TOTAL BID PRICE IN WORDS)

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

The quantities set forth in the Schedule of Quantities for each Item are Owner's estimate only, that Owner reserves the right to increase or decrease such quantities, and that payment for each Item shall be made only on the actual number of acceptable units of Items installed complete in place, measured on the basis in the contract.

Bidder has examined copies of all the bidding documents and of the following addenda (receipt of all which is hereby acknowledged):

ADDENDUM NUMBER	DATE

4. The following documents are attached to and made a condition of this Bid:
- Letter from insurance representative certifying that the insurer has read the requirements as set forth in the General Conditions and will issue the required policies as specified in the General Requirements.
 - Non-Collusion Certificate
 - Contractor's Information Report
 - Bid bond or check
 - Sub-Contractor's Certificate

5. Communications concerning this Bid shall be addressed to:

(Individual Name)

(Company Name)

(Address)

(City - State - Zip Code)

(Telephone Number)

(Fax Number)

Submitted on: _____, 20____

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

THE UNDERSIGNED IS AWARE THAT PREVAILING WAGE RATES APPLY TO ALL
WORK PERFORMED ON THIS CONTRACT. IT IS THE CONTRACTOR'S
RESPONSIBILITY TO COMPLY WITH THESE REQUIREMENTS AND TO ASSURE
COMPLIANCE BY HIS/HER SUBCONTRACTORS AND/OR ANY LOWER TIER
SUBCONTRACTS REQUIRED BY THIS CONTRACT.

If Bidder is:

AN INDIVIDUAL

By _____ (SEAL)
(Individual's Signature)

(Individual's Name Printed)

doing business as _____

Business address: _____
and Phone number _____

A PARTNERSHIP

By _____ (SEAL)
(Firm Name)

(General Partner, Signature)

(Partner's Name, Printed)

doing business as _____

Business address: _____
and Phone number _____

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

A CORPORATION

By _____ (SEAL)
(Corporate Name)

(State of Incorporation)

By _____
(Authorized Signature)

(Authorized Signature's Name, Printed)

(Title)

Attest _____

Business address: _____
and Phone number _____

A JOINT VENTURE

By _____
(Name)

(Address)

By _____
(Name)

(Address)

(Each joint venture must sign and print name. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

F - CONTRACTOR'S BID BOND – VILLAGE OF GLEN ELLYN

KNOW ALL MEN BY THESE PRESENTS, That we _____

(hereinafter called the Principal) and _____

(hereinafter called the Surety), a corporation chartered and existing under the laws of the State of

_____ with its principal offices in the City of _____ and

authorized to do business in the State of _____ are held and firmly

bound unto the Village of Glen Ellyn (hereinafter called the Owner), in the full and just sum

of _____ Dollars

(\$_____) good and lawful money of the United States of America, to be paid upon demand of the Owner, to which payment well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, and assigns, jointly and severally and firmly by these present.

WHEREAS, the Principal is about to submit, or has submitted to the Owner, a bid for furnish all labor, materials, tools, equipment and incidentals necessary to install all improvements in the 2018 Street Resurfacing Project.

WHEREAS, The Principal desires to file this bond in accordance with law, in lieu of a certified bidder's check otherwise required to accompany this Bid.

NOW, THEREFORE, The conditions of this obligation are such that if the Bid be accepted, the Principal shall, within fifteen (15) days after the date of receipt of a written notice of award of contract, execute a contract in accordance with the Bid and upon the terms, conditions and price(s) set forth therein, of the form and manner required by the Owner, then this obligation to be void; otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid Owner, upon demand, the amount hereof in good and lawful money of the United States of America not as a penalty but as liquidated damages.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly
signed and sealed this _____ day of _____, 2021.

By: _____ (SEAL)
Principal

Witness:

(If Individual or Firm)

Attest:

(If Corporation)

SEAL

By: _____ (SEAL)
Surety

Witness:

(If Individual or Firm)

Attest:

(If Corporation)

SEAL

Countersigned _____

Local Resident Producing Agent for _____

G - NON-COLLUSION CERTIFICATE – VILLAGE OF GLEN ELLYN

CERTIFICATION THAT CONTRACTOR IS NOT BARRED FROM
PUBLIC CONTRACTING DUE TO BID-RIGGING OR
BID ROTATING CONVICTIONS

WHEREAS, a conviction for the offense of bid-rigging or bid rotating bars a person or entity from bidding on public contracts (*Ill. Rev. Stat. 1987, ch. 38, par. 33E-3, 33E-4*), and

WHEREAS, Section 33E-11 of the Criminal Code (*Ill. Rev. Stat. 1987, ch. 38, par. 33E-11*) requires bidders and contractors to certify on a form provided by the unit of local government or school district that they are not barred from public contracting due to bid-rigging or bid rotating convictions.

NOW, THEREFORE, IT IS HEREBY CERTIFIED THAT the undersigned,

(Individual, Firm, Corporation or Other Entity)

is not barred from bidding on or entering into public contracts due to having been convicted of bid rigging or bid rotating under paragraphs 33E-3 or 33E-4 of the Illinois Criminal Code. The undersigned also certifies that no officers or employees of the bidder or contractor have been so convicted and that the bidder or contractor is not the successor company or a new company created by the officers or owners of one so convicted. It is further certified that any such conviction occurring after the date of this certification will be reported to the above named public body, in writing, within 7 days of such conviction, if it occurs during any bidding process, contract term or otherwise prior to entering into any contract therewith.

DATE: _____

By: _____

Witness: _____

(If Individual or Firm)

Attest:

(If Corporation) SEAL

“In the event that circumstances certified to in this certificate should change, we will notify you of the change within 15 calendar days.”

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

H - SUBCONTRACTOR'S CERTIFICATE

Consistent with the laws of the State of Illinois, the undersigned does herewith certify that the following information regarding Sub-Contractors to this contract as complete and accurate.

<u>Name of Firm</u>	<u>Address</u>	<u>Phone Number</u>	<u>Contact Person</u>	<u>Dollar Value of Subcontract</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

IN WITNESS WHEREOF, the undersigned has caused this Certificate to be executed this
_____ day of _____, 2021.

Witness: _____
(If Individual or Firm)

By: _____

Attest: _____
(If Corporation)

SEAL

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

I - NOTICE OF AWARD

TO:

(Contractor)

(Address)

Services Description: **DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT**

The Village has considered the BID submitted by you for the above-described SERVICES in response to its Invitation to Bid dated_____.

You are hereby notified that your BID has been accepted for services in the amount of \$_____.

You are required by the Instructions to Bidders to execute the Contract and furnish the required certificates of insurance and performance bond within 15 calendar days from the date of this Notice to you.

If you fail to execute said Contract and to furnish said certificates and bond within 15 days from the date of this Notice, the Village will be entitled to consider all your rights arising out of the Village's acceptance of your BID as abandoned. The Village will be entitled to such other rights as may be granted by law and the right to receive any security which may have been submitted with the Bid.

You are required to return an acknowledged copy of this **NOTICE OF AWARD** to the Village.

Dated this_____day of_____, 2021.

Village of Glen Ellyn, Illinois

By_____

Title_____

Acknowledged:_____

Contractor

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

J - NOTICE TO PROCEED

TO:

(Contractor)

(Address)

Services Description: **DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT**

You are hereby notified to commence WORK in accordance with the Agreement dated

_____, 2021, on or before_____.

Village of Glen Ellyn, Illinois

By_____

Title_____

ACCEPTANCE OF NOTICE

Receipt of the above **NOTICE TO PROCEED** is hereby acknowledged

By_____, this the____ day of_____, 2021.

By_____

Title_____

Telephone_____

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K - PERFORMANCE BOND & COMPLETION BOND

KNOW ALL MEN BY THESE PRESENTS, that _____ as PRINCIPAL,

and _____ as SURETY,

are held and firmly bound unto the Village of Glen Ellyn in the full and just sum of

_____ Dollars

(\$_____), lawful money of the UNITED STATES OF AMERICA for the payment of which sum of money well and truly to be made, we bind ourselves, heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract dated, _____ day of

_____, A.D. 2021, with the Village of Glen Ellyn for the
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT complete, as described in the foregoing Contract and Articles of Agreement.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal shall in all respects well and truly keep and perform the said Contract, and shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the purpose of constructing the work provided in said Contract, and shall remove and replace any defects in workmanship or materials which may be apparent or may develop within a period of 1 year from the date of final acceptance, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed hereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

IN WITNESS WHEREOF, we have hereunto set our hands and seals this

_____ day of , _____ 2021.

_____(SEAL)

_____(SEAL)

_____(SEAL)

_____(SEAL)

Principal

Witness:

(If Individual or Firm)

Attest:

(If Corporation)

_____(SEAL)

_____(SEAL)

Attest:

(Surety)

L - LABOR AND MATERIALS BOND

KNOW ALL MEN BY THESE PRESENTS: That _____

as Principal, hereinafter called Contractor, and _____
as Surety, hereinafter called Surety, are held and firmly bound unto the Village of Glen Ellyn as Obligee, hereinafter called Owner, in the amount of \$ _____ (One Hundred Percent of the Contract Price) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by a written agreement dated the ____ day of _____, 2021 entered into a contract with Owner for:

**DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS
PROJECT**

In accordance with Contract Documents prepared by the Village of Glen Ellyn Public Works Department, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW THEREFORE, the condition of this obligation is such that if the said Contractor shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Contractor or with a Subcontractor of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have expenses of any such suit.
3. No suit of action shall be connected hereunder by any claimant:
 - a) Unless claimant, other than one having direct contract with the Contractor, shall have given written notice to any tow of the following: Contractor, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid in an envelope addressed to the Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

- b) After the expiration of one (1) year following the date on which Contractor ceased Work on said Contract it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - c) Other than in the state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by an to the extent of any payment or payments made in good faith hereunder, inclusive of the payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Surety companies executing Bonds must hold Certificates of Authority as Acceptable Sureties (31 CFR 223) and be authorized to transact business in the State where the Project is located.

Signed and sealed the _____ day of _____ 2021.

Contractor

(SEAL)

Witness

Title

Surety

(SEAL)

Witness

Title

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

M - AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT is dated as of the ____ day of _____ in the year
2021 by and between the Village of Glen Ellyn (hereinafter called Owner) and _____
_____ (hereinafter called Contractor).

Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. CONTRACT DOCUMENTS

1.1 The Contract Documents which comprise the entire agreement between Owner and Contractor concerning the Work consist of the following:

This Agreement;
Notice of Award;
Specifications bearing the title GENERAL PROVISIONS and SPECIAL PROVISIONS;
Design engineering drawings entitled **DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT**
Instructions to Bidders;
Non-Collusion certificate;
Addenda, if any;
Subcontractor's Certificates (if any);
Contractor's Bid Proposal;
Notice to Proceed; and
Other documents attached to the Agreement including but not limited to insurance, surety, bonds and financial information.

1.2 There are no Contract Documents other than those listed above in this Article 1. The Contract Documents may only be amended, modified or supplemented by Change Order approved, in writing, by the Owner and Contractor.

Article 2. WORK

2.1 Contractor shall complete all Work as specified or indicated in the Contract Documents.

2.2 If the Contractor fails to correct defective Work or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner, by a written order, may direct the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated;

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

2.3 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within 7 days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, after 7 days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate deduction may be taken by Owner from the payments then or thereafter due the Contractor for the cost of correcting such deficiencies. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

Article 3. EFFECTIVE DATE

The effective date of this contract is the date upon which the Village transmits a written notice to proceed to the Contractor. The notice to proceed shall be sent by the Village to the Contractor within 14 days after all parties to the contract have executed it provided that all other contractual requirements have been met.

Article 4. CONTRACT PRICE

Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents.

Article 5. CONTRACTOR'S REPRESENTATIONS

In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

5.1 Contractor has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

5.2 Contractor has given Owner written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by Owner is acceptable to Contractor.

Article 6. MISCELLANEOUS

6.1 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

6.2 Owner and Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor.

VILLAGE OF GLEN ELLYN

CONTRACTOR_____

By_____

Village Manager

By_____

Authorized Signatory

CORPORATE SEAL

If a corporation, affix CORPORATE SEAL

Attest_____

Village Clerk

Attest_____

Authorized Signatory

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N - CONTRACTOR'S INFORMATION REPORT

The bidder is requested to state below what work of similar magnitude or character he has done, and to give references that will enable the Owner to judge of his experience, skill and business standing and of his ability to conduct the work as completely and as rapidly as required under the terms of the contract. Please provide individual contact names and phone numbers.

Number	Project Location	Project Reference / Contact Information
1		
2		
3		
4		
5		

VILLAGE OF GLEN ELLYN
DUANE STREET, HILLSIDE AVENUE, AND MAIN STREET IMPROVEMENTS PROJECT

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**Glen Ellyn Capital
Improvements Commission**
535 Duane Street
Glen Ellyn, IL 60137

Meeting 11/9/2021 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Report
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2021-
1642)**

DOC ID: 2021-1642

Engineering Project Report Dated November 5, 2021

Statement of the Issue:

The Public Works Engineering Division Project Report Dated November 5, 2021 is attached hereto for review by the Capital Improvements Commission.

Analysis:

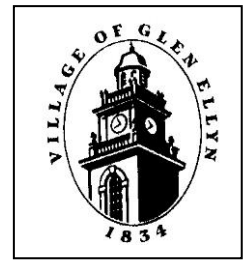
Budget Impact:

Action Requested:

Attachments:

1. Engineering Project Report 11-5-21

November 5, 2021



ENGINEERING DIVISION PROJECT ACTIVITY REPORT

CONSTRUCTION PROJECTS

UTILITY AND ROADWAY REHABILITATION PROJECT 20001 – Phase 1

Contractor: Copenhaver

(Project No. 20001; Value of Construction Contract = \$3,052,890)

The first phase of the project involves the rehabilitation of roadways in the central-west portion of the Village including: Phillips Avenue (Lorraine to Vine), Vine Street (Ridgewood to Hillside), Ridgewood (Kenilworth to Brandon), Evergreen (Hillside to Duane), and Center (Evergreen to Lorraine). The work includes sanitary sewer main line repairs and service line replacement, water main and service line replacement, storm sewer/drainage improvements, and reconstruction of the roadways.

The Contractor has made significant progress over the course of the last month with all curb & gutter, driveway approach, sidewalk replacement, and parkway restoration substantially completed on Phillips Avenue, Vine Street, and Ridgewood Avenue. In addition, the Contractor substantially completed all underground utility improvements along Evergreen Avenue and Center Street. Following the completion of the underground utility improvements, the Contractor completed the construction of the aggregate roadway base on Evergreen and Center, placed the new concrete curb & gutter, and paved the asphalt base course for the roadway. Driveway approaches as well as the sidewalk across driveway approaches were also replaced.

Pending favorable weather, over the course of the next week the Contractor will complete

the intermittent sidewalk removal and replacement work on Evergreen Avenue and Center Street; all parkway lawn restoration will be completed throughout the project area; all manhole frames & covers in the roadway areas will be raised to grade (only Evergreen Avenue and Center Street remain for completion); and the roadway surface course will be paved throughout all project streets. A final punch list will then be prepared to advance the project into the closeout stage.



Roadway Asphalt Base Course Paving On Center Street

2021 STREET IMPROVEMENTS PROJECT – Contractor: R.W. Dunteman

(Project No. 21002; Value of Construction Contract = \$1,624,277)

This project involves more limited utility (repairs) and roadway improvements (resurfacing) along approximately 3 miles of roadways generally located in northeast Glen Ellyn to be improved in 2021. The project has been split into two construction phases, with one being the concentrated project area within Crescent Boulevard, Roger Road, Park Row, and the Union Pacific railroad, while the second phase consists of all other streets included in the contract.

All concrete and asphalt paving work is now substantially completed. The restoration of disturbed parkway lawn areas with sod was substantially completed on Wednesday, November 3. An updated punch list has been provided to the contractor for completion as to advance the project into the closeout stage.

OTHER AGENCY PROJECTS IN GLEN ELLYN

BLOOMINGDALE ROAD AT GENEVA ROAD INTERSECTION IMPROVEMENT AND SIGNAL MODERNIZATION – Contractor: Schroeder Asphalt Services

This project is being implemented and administered by DuPage County and involves the widening of Bloomingdale Road at Geneva Road. The widening will support the addition of a secondary left turn lane for southbound Bloomingdale Road to eastbound Geneva Road. The project includes the installation of temporary traffic signal equipment which will allow for all the traffic signal equipment to be removed and replaced as part of the project (Traffic Signal Modernization). The Contractor has completed the pavement widening at the northwest corner of the intersection. It is anticipated that the contractor will progress the pavement widening operations to the northeast corner of the intersection next week.

CONSTRUCTION PROJECTS IN CLOSEOUT

PENNSYLVANIA AVE. IMPROVEMENT PROJECT – Contractor: John Neri Construction

(Project No. 15006 & 16005; Value of Construction Contract = \$252,502)

The project includes both underground utility improvements (storm sewer, sanitary sewer service line, water service line, and street lighting conduit and wiring upgrades) and sidewalk widening from 7' to 16.5' on the south side of Pennsylvania, just east of Main Street and will allow for A Toda Madre restaurant outdoor dining expansion. The A Toda Madre restaurant deck is completed as well. The punch list has been completed with the project now in closeout.

VILLAGE GREEN STORM SEWER PROJECT– Contractor: Mauro Sewer Construction

(Project No. 16007; Value of Construction Contract = \$169,715)

This project involved the replacement of approximately 1,200 linear feet of 12-inch storm sewer from Village Green Park to Lambert Lake. Construction has been completed including installation of topsoil, seed, and erosion control blanket. Staff has inspected the final restoration of the project and identified a few lawn restoration items requiring resolution by the contractor. Next steps for the project involve preparation of the balancing change order and invoicing the park district for their share of the project. Once the restoration items are addressed by the contractor, the final pay estimate will be prepared and processed to officially close the project out. The construction cost is anticipated to be approximately \$9,000 under the construction contract award amount.

NORTH PARK BLVD. / MAIN STREET IMPROVEMENTS – Contractor: R.W. Dunteman

(Project No. 13001; Value of Construction Contract = \$2,945,000)

Staff and the Resident Engineer have addressed all of IDOT's requests with project closeout in the court of IDOT District 1 Materials.

TAYLOR AVENUE PEDESTRIAN TUNNEL – Contractor: "D" Construction

(Project No. 15009; Value of Construction Contract = \$2,745,521)

The Engineer has transmitted the final pay estimate to IDOT. However, one last review of the project files noted one material certification deficiency for steel sign support. Staff has prepared and submitted an authorization to deduct payment for the item from the Contract due to the deficient certification. Once the authorization is approved, the final pay estimate will be revised and resubmitted to IDOT.

CRESCENT BOULEVARD RECONSTRUCTION – Contractor: Martam Construction

(Project No. 13002; Value of IDOT Contract = \$3,153,000; Local Share = \$1,480,000)

All paperwork is complete. Awaiting final invoicing from IDOT.

ENGINEERING PROJECTS

HILL AVENUE UTILITY IMPROVEMENTS – Engineer: Walter E. Deuchler Associates

(Project No. 00511)

Public Works Operations staff has completed an investigation of the routing of water services on the Elliot Construction property which was forwarded to the Engineer for updating the engineering drawings. At the request of Elliot Construction, a revised alignment for the water main extension on his property will be prepared and presented to Elliot Construction for consideration

GLEN ELLYN/IL AMERICAN WATER INTERCONNECT– Engineer: Donohue

This project involves the design of an emergency use interconnection between the Village and Illinois American Water Company (ILAWC) distributions systems, near Glenbard South High School. The interconnection would significantly reduce the water outage areas for the respective utilities in the event of water main breaks. The respective IEPA permits for the two agency projects have been submitted to the IEPA along with the applicable project engineering drawings and specifications. At the direction of staff, the Engineer will be meeting with DuPage County Stormwater to advanced the stormwater permitting required for the project. This meeting with DuPage County is scheduled for Wednesday, November 10.

CENTRAL BUSINESS DISTRICT PROJECTS

TRAIN STATION / PEDESTRIAN TUNNEL – Engineer: CDM Smith/KMI Architects

(Project No. 16016)

Staff submitted the 4(f) Evaluation Report and Section 106 Effects Assessment packet to IDOT/FHWA/SHPO last month. Staff and CDM Smith will be meeting with IDOT and FHWA at the November 16th FHWA Coordination Meeting to discuss the latest status of the Project Development Report, status of the receipt and review of the aforementioned 4(f) and S106 documents, and other critical path items for the completion of preliminary engineering. Staff met with IDOT and FHWA several times over the course of the last month to discuss the viability of the Village entering into an IGA for the potential advanced acquisition of the depot and adjoining parking lot areas on UP property. FHWA has advised staff that it is okay to

proceed with entering into an IGA; subject to the Village's interests being protected and any acquisition being in compliance with Federal Land Acquisition and Relocation Assistance parameters, as amended by IDOT. A resolution directing staff to work with Metra on developing the aforementioned IGA will be presented to the Village Board for consideration of approval on Monday, November 8.

CBD UTILITY AND STREETScape IMPROVEMENTS – Engineer: Civiltech Engineering, Inc.

(Project No. 15006)

The Village has completed its review of the prefinal Phase 1 plans, specifications and cost estimate. Additionally, Public Works issued and received proposals for Furnishing of Parkway Trees for the Central Business District Streetscape and Utility Improvements (CBD SUI). PW continued to review and refine the design of the proposed lightning system for Phase 1 area of the project. PW further coordinated with ComEd and other utility companies to pursue with the undergrounding of the overhead lines at Hillside and Main.

PROCUREMENT OF GOODS AND SERVICES

Public Works seeks the best vendor prices for various annual municipal and utility maintenance and operations activities. This effort includes local bidding of projects or joint purchasing initiatives, including the Municipal Partnering Initiative (MPI), a consortium of DuPage County communities.

Project	Estimated Glen Ellyn Cost	Status
2021 Sidewalk and Concrete Street Repairs	\$337,975 (2021)	This annual program includes repairs to deteriorated or damaged sidewalk and concrete roadway infrastructure throughout the Village. A first batch consisting of over 120 locations was poured the week of August 6, 2021 with asphalt patching and restorations completed the week of August 9, 2021. Sidewalk installations segments on Western Avenue and High Road were constructed the week of August 23 rd . A second and final batch of 60 repair locations was substantially completed the week of October 18, 2021. Punchlist items and three remaining repair locations are anticipated to be completed in the coming weeks. The project will then advance into the closeout stage.
2021 Parking Lot Resurfacing and Asphalt Roadway Patching	\$189,232 (2021)	Project scope includes roadway patching throughout the Village and resurfacing of the Park & Montclair parking lot. The contract was advertised on January 29, 2021 with bids opened on February 10, 2021. Award to the low bidder, J.A. Johnson Paving Company, was made at the February 22, 2021 Village Board meeting. Resurfacing and restriping of the Park & Montclair parking lot was completed the week of May 24, 2021 and the lot was reopened on May 29, 2021. Roadway patching work started on May 26, 2021 with all but four roadway patches being completed as of June 2, 2021. The remaining patches were completed on July 9, 2021. A list of pavement markings disturbed by roadway patching was restriped the

Project	Estimated Glen Ellyn Cost	Status
		week of July 26, 2021. Closeout of the project is currently being processed.
2021 Pavement Markings	\$30,000 (2022)	This contract is annually intended to be awarded to the low bidder of either the DuPage County contract or the Suburban Purchasing Cooperative. Staff recommended that the Village Manager execute a contract with the lower bidder of the two programs, Precision Pavement Markings, Inc. This contract was executed on June 30, 2021. Unfortunately, due to COVID and weather damages to chemical manufacturing industry facilities in Texas, there is a significant backlog for pavement marking materials. The Contractor has indicated that it cannot complete pavement markings for the Village this fall but will extend the pricing to the spring with the hope that material availability improves by then.
2021 Crack Sealing	\$25,000 (2022)	This year's program is anticipated to be procured once staff has compiled candidate locations using upcoming Pavement Condition Index (PCI) Study data. The 2021 PCI Study is discussed below.
2021 Asphalt Surface Rejuvenation	\$40,441 (2021)	Candidate locations include streets that have been resurfaced one to three years prior. Staff has finalized target locations and quantities and requested pricing from single source vendor Corrective Asphalt Materials. Recommendation and award for a single-source purchase was made at the August 23 rd Village Board Meeting. A contract was executed shortly after, and the work was completed the week of September 27, 2021. Final payment for the project was made in early October.
2021 Pavement Condition Index (PCI) Study	\$0 (2021)	The Village has obtained pavement condition data for all Village streets every four years since 2004. Unfortunately, COVID-19 caused staff to recommend deferral of a 2020 Study due to financial concerns at the time. However, on a positive note, Staff applied for participation in CMAP's Pavement Management Program and recently learned that CMAP was able to secure additional State Planning and Research Grants and has included Glen Ellyn in its next round of assisting communities with completing PCI Studies and developing Pavement Maintenance Programs. The Village will in turn receive an updated Pavement Condition Index Survey of all the Village's streets as well as a 5-year pavement management program; <u>both at no cost to the Village</u> . Staff met with ARA on June 9 to discuss preliminary results of the field data collection and provide feedback. Staff then met again with ARA on August 12, 2021 to review a draft report and again provide feedback for various report output scenarios. The most current iteration of the Pavement Management Report was received on September 21 and is currently under review by staff. Comments will be provided to ARA for finalization of the report. Staff also attended training on a PAVER software which is used to manage the pavement management plan in mid-October. To fulfill part of the CMAP grant requirement, staff and members of the ARA team also plan

Project	Estimated Glen Ellyn Cost	Status
		to present the report's findings at the November meeting of the CIC.

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