



Agenda
Village of Glen Ellyn
Capital Improvements Commission Meeting
Tuesday, June 13, 2023
7:00 PM
Glen Ellyn Civic Center, Room 301

Any individual with a disability requiring a reasonable accommodation in order to participate in a meeting should contact The Village of Glen Ellyn ADA Coordinator, 630-469-5000, at least five (5) business days in advance of the next scheduled meeting. All matters on the Agenda may be discussed, amended, and acted upon.

- A. Call to Order**
- B. Public Comment**
- C. Approval of Minutes**
 - 1) Motion to approve the May 9, 2023 Capital Improvements Commission Meeting Minutes
- D. Current Business**
 - 1) Central Business District Streetscape and Utility Improvements Project Update
 - 2) Metra Station and Multimodal Access Improvements Project - Brief Project Update and Value Engineering
 - 3) Lead Service Line Replacement Act Primer
- E. Trustee's Report**
- F. Other Business**
- G. Public Works Report**
- H. Project Report**
 - 1) Engineering Project Activity Report Dated June 9, 2023
- I. Adjournment**



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

Meeting 6/13/2023 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Minutes
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2023-
623)**

DOC ID: 2023-623

Motion to approve the May 9, 2023 Capital Improvements Commission Meeting Minutes

Statement of the Issue:

The draft meeting minutes for the May 9, 2023 Capital Improvements Commission Meeting are attached hereto for review and consideration of approval.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. CIC Meeting Minutes May 9 2023 - Draft

DRAFT

Village of Glen Ellyn



Meeting Minutes
Village of Glen Ellyn
Capital Improvements Commission
Regular Meeting
May 9, 2023
7:00 PM
Glen Ellyn Civic Center Room 301

Board or Commission: Capital Improvements

Date: May 9, 2023

Meeting: Regular

Called to Order: 7:07 p.m.

Quorum: Yes

Adjourned: 8:32 p.m.

Member Attendance:

Steve Szymanski	Chair	Present
Joel Baldin	Commissioner	Present
Arthur Foerster	Commissioner	Present
Orion Galey	Commissioner	Absent
Michael Lindquist	Commissioner	Absent
Adil Saeed	Commissioner	Present
Jill Ziegler	Commissioner	Present
Rocco Zucchero	Commissioner	Present
Temporarily Vacant	Trustee Liaison	Absent
Richard Daubert	Staff Liaison/Professional Engineer	Present

Also Present:

Dave Buckley	Public Works Director

A. CALL TO ORDER

The May 9, 2023 meeting of the Capital Improvements Commission was called to order by Chair Szymanski at 7:07 PM at the Glen Ellyn Civic Center.

B. PUBLIC COMMENT – None

C. APPROVAL OF MINUTES

APPROVAL OF APRIL 11, 2023 CAPITAL IMPROVEMENTS COMMISSION MEETING MINUTES

MOTION TO APPROVE MINUTES FROM APRIL 11, 2023 CAPITAL IMPROVEMENTS COMMISSION MEETING

MOTION BY: Commissioner Baldin

SECOND BY: Commissioner Foerster

AYES: Szymanski, Baldin, Foerster, Saed, Ziegler, Zucchero

RESULT: UNANIMOUS APPROVAL

D. CURRENT BUSINESS

1. *2023 Utility and Roadway Improvements Project – Construction Contract and Construction Engineering Services* – Engineer Daubert gave a presentation to the Capital Improvements Commission which included an update on the design and competitive bidding process for the 2023 Utility and Roadway Improvements Project, communicated staff's approach towards Construction Engineering Services for the project, and requested feedback and motions from the CIC pertaining to the construction contract and construction engineering services agreement.

Engineer Daubert presented a project location map which depicted the improvement of approximately 6.85 centerline miles of streets throughout the Village. He noted that the majority of the streets will receive spot curb & gutter and sidewalk repairs (replacement) followed by milling of the roadways, base patching, utility adjustments, parkway restoration, and then the placement of approximately 2-3 inches of new asphalt. He noted that we are utilizing polymerized asphalt throughout the project limits.

Engineer Daubert overviewed the design, competitive bidding, and contract award milestones and timelines. He noted that we are targeting award of the construction contract at the May 22nd Village Board Meeting. The construction contract bids were then reviewed by Engineer Daubert with the low bid being noted as R.W. Duntelman Company of Addison, Illinois in the amount of \$4,377,900.

Engineer Daubert noted that given the size and associated ground being covered by the project, we are proposing to utilize a consultant to perform construction engineering services for the project. He overviewed the duties of the consultant engineer including meetings, review of submittals, full time construction observation and inspection services, resident notifications, pay estimate processing, final inspection and project closeout including preparation of record drawings. He noted that the services also include a 1-year warranty inspection which is completed 1 year following the final payment to the contractor.

Engineer Daubert noted we followed our RFP Process for procuring the consultant construction engineering services proposals. He noted that the RFP was issued to 18 firms with 3 firms submitting proposals varying from approximately \$165,000 to \$400,000. He noted that staff is still in the process of formally evaluating the proposals given they were just received and opened today (May 9). He notes that staff feels that the assignment should not cost more than \$250,000 and that

staff respectfully requests the CIC grant staff the discretion to finalize its review and recommendation to the Village Board accordingly.

Engineer Daubert then reviewed the recommended funding for the construction contract and construction engineering services agreement. He noted that overall, the project is approximately \$104,000 under budget. He noted that the funds that are recommended to be allocated from the water fund are for contingency water service adjustment work should it be necessary for storm sewer installation work.

Commissioner Baldin inquired about the general schedule and approach for the project. Engineer Daubert noted that the Contractor has not laid out their exact approach yet but that they are likely looking to approach the projects in areas similar to how they have done with past projects. Engineer Daubert noted that the Contractor has indicated they want to get going as soon as possible and that the goal is to have construction coordinated to avoid event impacts while also hitting substantial completion in October and final completion in November. A discussion ensued on the July 4th Parade route with Commissioner Saed noting that this year's parade is being moved to the south side of the Village by College of DuPage due to the CBD Streetscape Project.

Engineer Daubert presented two motions for the CIC's consideration with the first being a motion to recommend award of the construction contract to R.W. Dunteman in the amount of \$4,377,900. The second motion presented to the CIC included a recommendation to award the construction engineering services in the not-to-exceed amount of \$250,000. The motions were considered by the CIC and ultimately approved as follows.

MOTION TO RECOMMEND AWARD OF A CONTRACT TO R.W. DUNTEMAN COMPANY OF ADDISON, ILLINOIS, IN THE AMOUNT OF \$4,377,900 FOR CONSTRUCTION OF THE 2023 UTILITY AND ROADWAY IMPROVEMENTS PROJECT TO BE EXPENSED TO THE CAPITAL PROJECTS AND WATER & SANITARY SEWER FUNDS.

MOTION BY: Commissioner Zuccherio

SECOND BY: Commissioner Saed

AYES: Szymanski, Baldin, Foerster, Saed, Ziegler, Zuccherio

RESULT: UNANIMOUS APPROVAL

MOTION TO RECOMMEND AWARD OF A CONTRACT WITH AN ENGINEERING FIRM SUBJECT TO STAFF EVALUATION AND SELECTION IN THE NOT-TO-EXCEED AMOUNT OF \$250,000 FOR CONSTRUCTION ENGINEERING SERVICES FOR THE 2023 UTILITY AND ROADWAY IMPROVEMENTS PROJECT TO BE EXPENSED TO THE CAPITAL PROJECTS AND SANITARY SEWER FUNDS.

MOTION BY: Commissioner Baldin

SECOND BY: Commissioner Ziegler

AYES: Szymanski, Baldin, Foerster, Saed, Ziegler, Zuccherio

RESULT: UNANIMOUS APPROVAL

2. *Petition for Construction of New Sidewalk on the East Side of Brandon Avenue – Fairview to Greenfield* – Engineer Daubert reported that residents along Brandon Avenue between Fairview and Greenfield have petitioned for the construction of sidewalk along the east side of the Block. He utilized aerial imagery to depict the general location which is proximate to Abraham Lincoln Elementary School. He also pointed out other sidewalk gaps in the area on Hillcrest Avenue south of Greenfield. He notes that all but one residence on the block are represented on the petition.

Engineer Daubert reviewed the photographs of the sidewalk corridor included within the packet. He emphasized that this is just a preliminary alignment that has been drawn into the photographs. Commission Baldin inquired about what we would do with the driveway approaches. Engineer Daubert noted that they would need to be replaced due to the grading changes and that we would replace them with concrete. Commissioner Foerster inquired about whether there would be any tree removal. Engineer Daubert noted there would be some tree removal required.

Engineer Daubert noted that the installation of the sidewalk would by default be reviewed as part of future street work which is planned for 2027. However, Daubert noted that given the location with young children on the block, it would make a lot of sense to consider advancing the project. Chair Szymanski inquired about how we might prioritize this among other requests and should we anticipate any push back for our approach to advancing this work. Chair Szymanski also inquired about the cost. Engineer Daubert noted that given we have an active petition, this is proximate to a school, and that there are general safety concerns in this area including on Newton Avenue, these would all be defensible reasons to advance this. Commissioner Foerster inquired about whether any work would need to be redone when the street is improved in the future. Engineer Daubert noted that there would potentially be some minimal rework required at the corners. Engineer Daubert noted that we have not done a cost estimate yet but from a high-level perspective we would be talking about approximately \$115,000. Engineer Daubert noted that the cost of the sidewalk itself is not the major expense, it's all the ancillary work such as regrading, curb and driveway approach replacement, and parkway restoration.

Chair Szymanski asks the Commissioners for their feedback. All members of the CIC present including Szymanski, Baldin, Foerster, Saed, Ziegler, and Zucchero express their support of advancing construction of the petitioned section of sidewalk on Brandon Avenue between Fairview and Greenfield.

- E. **TRUSTEE'S REPORT** – Engineer Daubert notes that Village Board Members Christianson and Thompson were sworn into the Board for another term last night along with a new Village Trustee Donna Jean (DJ) Simon. He notes that Trustee Simon will be assigned as the Board Liaison to the CIC. He notes that we may need to adjust our schedule to accommodate Trustee Simon.
- F. **OTHER BUSINESS** – Chair Szymanski noted that our list of CIC Candidates is getting pretty thin so please let folks know we are always looking for volunteers to be on our list. Chair Szymanski also noted that there's been an uptick in discussions on electric vehicle charging stations, grants, and inquired as to whether we should discuss that in the future. Commissioner Ziegler noted that there's been good seminars on the topic such as at DuPage County and it's something we should consider discussing in the future.

- G. PUBLIC WORKS REPORT** – Director Buckley notes we have 3 vacancies in Public Works that we are working to fill. He adds that we have lost about 180 years of experience across our Department in the past year. Director Buckley notes that Branch and Brush Pickup is back up and running for May through October. We are also planting about 300 trees this spring. Commissioners inquired about whether that's new trees or replacements. Director Buckley noted that our total tree count is fairly static. Director Buckley notes that fire hydrant painting is also underway. He notes that there will be an Arbor Day Celebration this Friday at 10 am at Panfish Park and Commissioners are welcome to attend. Director Buckley notes that our utilities team earned the Illinois Section of the American Water Works Association Water Ambassador GOLD level status. He noted that we are only one of twelve communities to earn such status in Illinois.
- H. PROJECT REPORT** – Engineer Daubert gave a brief update on the Central Business District Streetscape and Utility Improvements Project including Phase 1 and 2-3. He highlighted the ongoing utility work by the Village's contractor with a focus on the sanitary sewer and 60" storm sewer work at the intersection of Main Street and Pennsylvania Avenue. Daubert also emphasized that work being done by Nicor's Contractor NPL.
- Engineer Daubert also gave an update on the Metra Station and CBD Pedestrian Underpass project noting that the Phase II Engineering Agreement was executed with a kick-off meeting schedule for May 11.
- I. ADJOURNMENT** – Commissioner Baldin motions and Commissioner Foerster seconds to adjourn the meeting. The motion is unanimously approved, and meeting adjourned at 8:32 p.m.

Submitted by Richard Daubert, Professional Engineer



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

Meeting 6/13/2023 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2023-
624)**

DOC ID: 2023-624

Central Business District Streetscape and Utility Improvements Project Update

Statement of the Issue:

Assistant Village Engineer will give a brief update on the ongoing construction of Phase 2 of the Village's Central Business District Streetscape and Utility Improvements Project.

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:



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

Meeting 6/13/2023 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2023-
625)**

DOC ID: 2023-625

Metra Station and Multimodal Access Improvements Project - Brief Project Update and Value Engineering

Statement of the Issue:

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

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. Metra Station Update and VE Memo for June 13 CIC Meeting
2. VE Documents 1-6
3. Existing Site Plan
4. Most Recent Color Site Plan
5. Civil Site Plan
6. TSL_Tunnel
7. TSL_North Walls
8. TSL_South Walls



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer

DATE: June 9, 2023

RE: Glen Ellyn Metra Station and Multimodal Access Improvements Project
Brief Project Update and Value Engineering Introduction

Introduction

Phase II Engineering for the Glen Ellyn Metra Station and Multimodal Access Improvements Project is officially underway with the kickoff meeting held on May 11, 2023. Project Managers Bob Cheval and Rich Daubert have been working on advancing numerous items which are in-progress including:

- Topographic Survey Startup
- Union Pacific Railroad Coordination
- Metra Coordination
- Historic Information Building Survey
- Progress Schedule Update and Setup of Progress Tracking
- Utility Records
- Value Engineering Exercise

As a reminder, Phase I Engineering is still ongoing with the controlling item being IDOT's response to the Village's edits to the Section 106 Memorandum of Agreement concerning the demolition of the Depot. Staff submitted the MOA edits on February 7th with follow up still outstanding from IDOT's Bureau of Design and Environment. BDE is very understaffed, but staff kindly noted that there were just 4 pages of edits to what is an 11-page document submitted over 4 months ago.

With respect to grant applications, staff did speak to ICC about the Village securing the additional \$3M in State reimbursement funding for the underpass. Staff thanked the ICC for the additional funding but also inquired about requesting additional funding for the next 5-year program. ICC respectfully noted that staff should reach out in October to consult the Commission for whether or not additional funding is available. With respect to the Village's applications for the STP Shared Fund and Congestion Mitigation and Air Quality Improvement Program, draft scores are anticipated to be posted in June with the project selection committee to develop their recommendations for program funding in July. Staff also recently spoke to Metra about its \$4M

pledge towards the project. Metra noted most recently that it will most likely directly compensate UP for force account work associated with the project such as the reconstruction of platforms and railroad flagging. Subject to being acceptable to the State, this would be a positive for the Village in terms of funding management and allowing the Village to maximize federal project funding.

Value Engineering (VE) Introduction

In addition to the continued pursuit of project funding, one of the most critical project foci on this time is Project Value Engineering. This exercise is underway with the heavy lifting to be completed the week of June 12th. During this week, members of CDM Smith will work with staff, representatives from the CIC and Plan Commission, and members of the Village Board to complete this exercise. This exercise does not purely look at ways to reduce project cost but rather optimize the project objectives and cost. While reducing cost is very relevant to the Village's project, we also don't want to miss the mark on meeting the project deliverables. We also do not want to skimp on the quality of construction in such a manner that will increase life cycle costs.

CDM Smith Value Engineering expert Tom Williams provided the aforementioned VE Team with 5 Value Engineering handouts that have been tailored to the Village project including:

1. What is Value Engineering
2. What is Functional Analysis
3. Constraints
4. Biases
5. Transit Station Photos
6. Value Engineering Job Plan

Item Number 6 provides a brief overview of the VE process. The ultimate deliverable of the Value Engineering Exercise will be a Value Engineering Report with confirmed recommendations to optimize the project value and cost. Staff will be presenting to the VE Report to the Capital Improvements Commission and Village Board upon completion of the VE process.

Action Requested

Staff requests that the Capital Improvements Commission review the aforementioned materials relating to the forthcoming Value Engineering Exercise which are attached. The project update and VE Materials will be discussed with the Capital Improvements Commission as to facilitate future presentation of the VE report to the CIC. CIC input on the VE report will be important along with a pertinent recommendation to be made to the Village Board. Staff will review these materials with the CIC, particularly the plans and renderings, to get the CIC's thoughts rolling on critical project elements.

Attachments

VE Documents 1-6

Existing Site Plan

Most Recent Color Site Plan

Most Recent Renderings

Civil Plan – Note, these include progress review comments merely for context

TS&L Plans – Note, these include in progress review comments merely for context

What is Value Engineering?

Many people hear “Value Engineering” (VE) and immediately think “cost cutting.” This so-called VE occurs when a project is over budget, or occurs when a contractor wants to reduce cost. The problem is, when making the cuts, how do you know how you are impacting essential function?

So, what really is VE? Value Engineering, also called Value Methodology or Value Analysis, is a systematic and structured approach for improving projects by increasing value. Value Engineering helps to achieve an optimum balance between function, performance, quality, safety and cost. Achieving a proper balance results in maximum value for the project. (But to be clear, projects can be improved by eliminating low-worth project elements that reduce cost and don’t substantially change the functionality.)

This is especially true for transit projects. If the *sole aim* was to cut cost (and there were no constraints), any or all of the following could be done:

- Reduce the station building size including eliminating vendor space;
- If the existing platforms are functional, eliminate platform replacement (except at the pedestrian tunnel);
- Select a “stark” (utilitarian) building style to minimize building cost;
- Eliminate all canopies;
- Reduce automobile parking area; and/or
- Make the station open air (providing only shelter from rain/snow).

If you are a transit rider or a project stakeholder, you have likely already reacted to this list! These measures do cut cost, but they also cut function, cut performance, cut quality of service, cut customer acceptance, and customer satisfaction. **Value Engineering recognizes that function, performance, quality, safety and cost are all interrelated.** We must determine how one impacts the others as well as find an acceptable balance between them.

What is this systematic and structured approach?

Another way we could ask this is, why can’t we just put forward our ideas for cost reduction? Why do we need a whole week? (As the workshop begins and we talk about function, worth, and value, many participants begin to wonder, why did I commit to this?)

Steps (or phases) include:

- Information – understand the project (or piece of the project)
- Function Analysis – understand and clarify the required functions, and start to understand how the required and desired functions interrelate
- Creative – generate ideas on how to accomplish the required functions
- Evaluation – synthesize ideas and concepts, then select those that are feasible for further development
- Development – further development of the ideas to check for flaws, plus identification of benefits, impacts, and costs
- Presentation – review of the value recommendations by project stakeholders

Value Engineering has been used formally since the 1950s. The structured approach has been shown to result in better value recommendations as opposed to just listing ideas individually. The best results tend to be achieved when a multi-disciplinary team is used for the study. Members should have experience and expertise relevant to the project.

Value Engineering differences for Transit Projects

At the start of my last VE study, I was challenged by other VE professionals that the definition of the Value Engineering goal should be “lowest cost while still meeting the owner’s needs.” With this definition, VE is the same as cost cutting, as long as the end result still meets the owner’s requirements.

So, why doesn’t this apply to transit projects?

The two people insisting on this definition only work on industrial-type projects without a public-facing element. As long as the owner can function as desired and all government regulations are met, the owner wants a lower cost (and more specifically, lower life-cycle cost). Even if the owner’s requirements span multiple departments (including operations and maintenance), the “lowest cost” motivation still applies.

With transit, the difference is that function (or requirements) extend beyond the transit agency. The stakeholders include passengers (customers), neighbors, developers, and other city departments. Value can still be improved by lowering cost, but lowering cost may have impact on functions that directly impact some or all stakeholders. Additionally, this value often cannot be assigned monetary value, or at least not easily assigned a monetary value.

Perhaps a simple illustration is transit-oriented development. If the station was designed with no regard for support of existing adjacent businesses or potential for attracting additional businesses or residential development, we may be able to lower cost. Looking at the bigger picture, this may not be the best investment of local funds. The impact of the station extends beyond the curb line or parking lot.

Another illustration relates to utilities. While replacement of certain utilities may not be strictly part of the station project, looking at the bigger picture, there may be benefits to creating one construction phase rather than multiple. The total cost would be greater if the new pavement and new curb was ripped up a year later for utility work. (Beyond the construction cost, a second round of impacts to nearby businesses would not be desired.)

The challenge with VE for transit becomes, not lowest cost, but instead, a rather complex “best balance” between all the functions and all the stakeholder viewpoints surrounding a transit station. This added twist makes Value Engineering for transit projects more interesting!

Consider the Interrelated Functions, Goals, and Measures

- | | | |
|---|---------------------------|---|
| • Capital cost | • Customer convenience | • Risk |
| • Maintenance cost | • Support for development | • Utility impacts |
| • Operating cost (including heating, cooling, cleaning) | • Multi-modal operations | • Traffic impacts during construction |
| • Safety & security | • Constructability | • Health (of transit riders walking or bicycling) |
| • Sustainability | • Rail operations | • Energy use & Air quality |
| • Resiliency | • Aesthetics | |
| | • Public image | |

What is Functional Analysis?

Analysis of the function is often the most confusing or monotonous part of value engineering. But functional analysis often directly leads to the most valuable idea generation during the value engineering workshop!

The purpose of functional analysis is to answer the question, **what must this project do?** It helps identify any elements not needed as well as identifying elements that are vital. (Often, we end up with a spectrum ranging from essential components to, at the other end of the spectrum, “high cost/low value” items.)

Functional analysis does not need to be confusing! The exercise below attempts to lend clarity.

Let’s first picture a simple (or at least, small) project: a mid-route **electric bus charging station**.

Write (or imagine writing) this project on a sheet of paper with “Why?” on the left and “How?” on the right.

Why?	The Project: <i>Electric Bus Charging Station</i>	How?
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How is somewhat easy to list:

- Overhead contact charger for bus pantograph at an existing layover station.

Keep asking how:

- Mount charger on standard (readily replaceable) pole and arm
- Use cylindrical concrete foundation
- Provide necessary transformer at reasonable distance from charger
- Do not require bus operator actions except for raising pantograph

We could keep drilling down further. How is the foundation determined? Geotechnical boring. How is the pole and arm made durable? Pole and arm should be galvanized. Once you start to answer “how” with agency standards, standard drawings, specifications, and basic data, no further detail is needed.

Why may take more thought:

Why starts with, perhaps, electric buses need charging.

But there are likely more reasons:

- If a bus battery drops too low while on route, impacts customer service and bus operations.
- Some bus routes are long (or, technically, the “blocks” are too long), and some route take the bus far from the overnight storage. Intermediate charging of batteries is needed.
- Ability to hold charge is affected by weather, especially cold weather.

- The latest generation of electric buses do not seem to have the “miles per charge” as claimed in manufacturer literature.
- Ultimately, charging is needed for electric buses which are needed to meet clean-air goals (sustainability, air quality).

For any study, we generally have to determine where to “draw the line” as far as our project responsibility. If we were assigned the design of a bus charging station, our responsibility likely ends at the charging station itself. Changing bus routes, procuring different buses, changing Midwest weather, improving customer service, or addressing regional air quality goals would not be within the umbrella of our responsibility.

The basic function then should help you identify **what is needed for success**, and what project elements might be just “bells and whistles.”

Don't Skip this Section!

Questions for the Glen Ellyn Station Value Engineering Study:

Can you answer in five words or less, **what must a transit station do?** (If every other feature was included, but the transit station did not do this, it would be deemed a failure.)

Within some transit agencies, you hear the expression, “we operate a railroad.” What do you think regarding this as a basic function? What key aspects of a transit system does this perhaps miss?

Components of a transit station project often have secondary functions. Can you identify any elements of a transit station in any of the following categories?

- Safety & security
- Customer convenience
- Support for adjacent development
- Increasing ridership (and fare revenues)
- Sustainability

Can you identify any mandates or requirements applicable to transit stations?

- Emergency egress?
- ADA access?
- Energy use and energy savings?
- Stormwater management?
- Other? (Related to building codes? Grant funding requirements?)

The most difficult part of any VE workshop is typically agreement on a single, most basic function, typically answering the question, what function, if not attained, would mean the project is a failure?

With simple items, this is often a simple question.

- If a pencil did not write, is it a pencil?
- If a canoe did not float and allow you to move on the surface of the water from point to point, is it a canoe?

With transit projects, is the answer quite as simple? What is the essential function of the Glen Ellyn Metra Station?

Constraints

Our VE team is multi-disciplinary. We have construction personnel. We have architectural specialists. We have team members with extensive sustainability experience. Some have experience with multi-modal facilities. Some have experience with transit-oriented development. We have team members with substantial stormwater experience and expertise. Some have over 30 years of experience while others have less than 10.

Another feature of our team is geographic diversity. This brings experience from other cities and agencies, including how different agencies approach projects.

Our VE topic is the Glen Ellyn Metra Commuter Rail Station. Topics could include tunnel construction, rail operations during construction, parking, bicycle parking, pedestrian access, curb-side management, stormwater management, utility relocation (or replacement), building architecture, energy codes, and so forth. As we start the workshop, we will see that (a) some of these topics have very prescriptive requirements (such as ADA requirements), and (b) some of these topics have a high cost (and thus might be a good target for VE ideas).¹

Think about how different geographic areas approach project elements for commuter rail station projects. (If you are not familiar with some of these projects, you can search online for a few images or YouTube videos.) Consider:

- Denver RTD new commuter rail from the Airport to Union Station
- Boston MBTA Commuter Rail stations (in multiple directions from downtown Boston)
- Seattle Sound Transit South Commuter Rail (Sonder)
- Bright Line – West Palm, Fort Lauderdale, and Miami – with new construction all the way to Orlando International Airport (MCO) – expect to open to Orlando this summer!

Today's Question:

Are there certain “givens” about a transit rail station? What must the station do or be, or what must it not do or be? Try to think of what a transit station must do from different perspectives! I have listed some potential categories of thought, but there may be more. Some “musts” are related to regulations (laws). Other “musts” are related to equity or demographics. Perhaps some “musts” are just related to being a good neighbor!

- Code Requirements (NFPA-130, IBC, ADA, etc.)
- System Integration (meaning, how the station relates to Metra operations)
- Drainage / Stormwater Management

¹ Consider a highway project. Bridges, embankment, and pavement are high cost items. Typically, pavement marking is a low proportional cost. In other words, if you saved 10% on pavement marking on a \$40M highway interchange project, it wouldn't even affect the decimal places of cost. The same with this study. We will identify which project components are higher cost and worth examining.

- Inspection and Maintenance
- Appearance
- Surrounding Community
- Noise and Vibration
- Emergencies
- Support of Development
- Safety and Security
- Agency Budgets
- Aging Population
- “Light Pollution” – lighting impacting adjacent community
- Multimodal Connections (walk, bike, bus, parking, TNCs)
- Employee Needs

Do any of these constraints relate to functions of a rail transit system examined yesterday? (Which ones?)

Perhaps very overarching: How do you think the Metra station is as far as making the Village of Glen Ellyn a desirable place to live? (Has this changed historically?)

Make sure you spend at least a few minutes thinking on each perspective! As an example, from the “support of development” perspective: Transit should fit in with potential development, bring more people to the general station area (to support the businesses), should be a “good neighbor” with the development, be attractive, ... and so forth.

Biases

One basic fact for groups is that different team members bring different experiences and backgrounds to the discussion. We purposely have assembled a group with experience in different disciplines and different geographies. As part of our nature, we bring different biases to the study. Biases can have one of the most negative effects on reaching a high-value solution.

Today's workshop preparation exercise is not about windows, tunnels, function, or constraints. It is aimed at making you are more self-aware of what biases you might bring to the workshop. This is perhaps the most difficult of all the exercises because it requires self-examination!

Authority Bias

This is one of the leading causes of value engineering failures, but also the failure of many studies, including feasibility studies. Authority bias is "conceding to the most organizationally senior person at the table." The "highest paid person's opinion" often strongly influences VE brainstorming and evaluation.

Picture yourself in a meeting with your boss's boss. Perhaps this is the president of your corporate department, the CEO of your agency, or a Chair of a city department. Even if everyone is asked to give their open and honest input into a plan, once that leader has stated his or her opinion, the ideas and open feedback tend to stop. (If you think about this, you can probably remember at least two meetings where the "authority" gave an opinion and everyone in the room took the statement as direction, or the "authority" made a statement and 100% of his or her staff expressed agreement with the approach.)

In this VE study, we have at least one organizational hierarchy (internal to the consultant team), several hierarchies within the Village, plus at least two client-consultant hierarchies. To reach a "best value" solution, we need to recognize these and do our best to put them aside. Especially during evaluation of ideas, if there is a reason to keep an idea on the table, do not concede to this Authority Bias.

Anchoring Bias

Anchoring bias is leaning toward solutions that are the most recent.

If "alternative X" or "approach Y" was just used on the last project, there is a tendency to put forward the same alternative or approach for the next project. Since construction of an individual train station in a Village does not occur frequently, this bias may not occur with our study.

This does point to why we spend time in the Information Phase and the Function Phase. Certain solutions on another project may be innovative, cost-saving, and holistic, but those solutions were likely aimed at a different problem or function. *We must think about whether we even have the same problem, function, or set of constraints as this most recent project.*

While we may not have had a recent project in Glen Ellyn, is it possible that we could be influenced by other new (or recent) Metra station project in the Chicago suburbs? There are new stations on the Metra UP North Line that could be viewed as examples.

Confirmation Bias

We tend to agree with ideas that fit our preconceived notions. For instance, if we strongly believe that brick stations fit the “Chicago way,” then we will tend to agree with brick solutions (for the station house) since it fits our preconceived notions.

This can be especially true to more recent considerations in design. Do you have views on sustainability, permeable pavement, solar panels, green roofs based on preconceived notions (about the expense or the inability to maintain)? (Did you know there are more than 500 vegetated roofs in Chicago with a total of over 5 million square feet? Did you know solar panel costs have dropped 80% in the last ten years?)

Availability Heuristic Bias

This bias is caused by only looking at the most recent data (i.e., we remember the most recent data and events) or looking at past data only related to significant (i.e., memorable) events.

As an example, if you were charged with outlining new transit station security measures, were there any recent events which might influence your security planning?

Are there recent events or memorable events which might influence ideas related to use of glass panels? We do tend to avoid use of ideas which were related to failures or “bad press” in other geographies or for other agencies. Are there current “hot topics” with transit agencies and organizations that might influence decisions?

“Old Data” Bias

Perhaps the opposite of only looking at recent data, what happens when elements of the project are based on outdated data? For instance, with payment by mobile devices, are facilities to sell train tickets even needed today? With the ability to track the “next train” on a mobile app, have the average wait times at stations decreased in just the last several years? With an increase in Uber/Lyft use, has parking demand decreased but the need for curbside management increased? (*Note: I made up the name of this bias!*)

Your Biases

In a workshop, what biases could team members bring to the sessions? Are some biases related to a person’s field of expertise? Are some biases related to where you have had experience?

Might a particular bias lead toward avoidance of a potentially valid alternative?

If you work primarily with one agency, does that agency have any strong leaning toward any one particular design solution, or have they adopted quite a variety? Does your agency have a bias toward the absolute lowest capital cost solution? Or does your agency have a bias toward solution that completely minimize the need for preventive maintenance?

What biases have you experienced in evaluation of options in the past? Can you think of instances of the “authority bias” or instances where design tends to react to recent events?

The main point in this exercise is to recognize that we all bring biases. We can’t help it. With some understanding, we can try to decrease the influence of biases on the study outcome. We will need to try to understand the input from others – the ideas and the reasons behind the ideas. Note that there are more types of bias, but only the top influencers were included above. (If your firm or organization has recently held “bias” training, you may have even thought this mention of bias was going to take a totally different avenue!)

Transit Project Photos

Browse through to get a creativity boost for the value engineering workshop!

Photos may help with ideas related to design, risk, constructability, future maintenance, or other! Look carefully at photos. Look at platform widths. Look at canopies. Look at use of space over the tracks.

This might only take 5-8 minutes.

Bus Layover Canopy in Switzerland



MBTA Station



MBTA Station



Sound Transit Sounder Station



Sound Transit Sounder Station



Station in Belfast, Northern Ireland



Impressive canopies in Vancouver, Canada



Nashville Music City Star Station



High Speed Rail Station in Spain



Denver RTD A-Line Station



Denver RTD A-Line Station



Denver RTD A-Line Station



Brightline (Florida)



Brightline (Florida)



Landscaped Plaza of Orly Station, Amsterdam



Structural Columns inside Delft Train Station, Netherlands



Open Air Transit Station to Elevated Guideway (Netherlands)



Utility Relocation (Water Main)



Construction usually means a “muddy mess” for pedestrians

Things to Think About for the Glen Ellyn Station

- How do platform widths compare to examples? (Is there a safety component to the width?)
- Is long-term aesthetics important or is lowest possible construction cost the most important?
- How do landscaping elements contribute to both aesthetics and sustainability?
- Are landscaping and artistic elements expensive compared to the value?
- How disruptive will utility relocations be to station access and nearby businesses?
- Could the space over the UP/Metra tracks be utilized?
- How important is providing protection from rain and sleet?
- With modern apps, how important to passengers is the ability to wait inside of the station building? (How many days a year is this shelter important?)
- Have any traditional elements within a station become a “thing of the past” because of technology?
- Do the businesses near the station provide services used by Metra patrons?
- What would you say is the current “state of the practice” for curbside management? (What are other properties doing to address Lyft and Uber pickups and drop-offs?)
- Were there any images that looked great but you don’t believe the budget would ever allow for implementation in the Village?
- Consider the observation: “The Village’s mission related to this project is bigger than the station.”

*The following slides are for those
interested in the technical and
constructability aspects of the
pedestrian tunnel*

Taylor Avenue Pedestrian Tunnel in Glen Ellyn

(Design and photos by Benesch; Tunnel was jack-and-bore)



Preparation of the
“push pit”

Taylor Avenue Pedestrian Tunnel in Glen Ellyn

(Design and photos by Benesch; Tunnel was jack-and-bore)



Notice the construction room needed.

Taylor Avenue Pedestrian Tunnel in Glen Ellyn

(Design and photos by Benesch; Tunnel was jack-and-bore)



Precast Concrete Pedestrian Tunnel



Mined Tunnel (showing in-progress interior finishing)



If you really want to research more, look up Pipe Arch Canopy with Sequential Excavation Method (SEM).

VALUE ENGINEERING JOB PLAN

Glen Ellyn Metra Station Village of Glen Ellyn, Illinois

June 2, 2023 Rev01

Revised to include proposed VE Team



Value Engineering Overview

Value Engineering is not simply a cost-cutting exercise. Value Engineering is a function-based, multi-disciplinary approach to find the best value for a project without sacrificing the project's basic function and requirements. For transit projects, capital costs are intertwined with multiple project goals, and, because of this, care must be taken when removing or reducing capital cost elements.

Value Engineering (VE) is often viewed as “cost cutting,” a means to reduce capital cost when a project has run over budget. Projects run over expected cost for a variety of reasons ranging from the addition of project elements by a multitude of stakeholders to fluctuation of market prices, including for key materials and labor. For the last two years, inflation in the construction industry has been common across the country for all types of projects.

For transit projects and, in this case, specifically a transit station, capital costs are intertwined with, at minimum:

- Customer service and convenience,
- Rail operations,
- Ease of maintenance and cost of future operations (e.g., energy use),
- Ability to support surrounding development,
- Ability to support future growth, and
- Safety and security.

Beyond functions, transit stations have requirements including those related to the railroad and those related to accessibility.

Simple cost cutting on this project without an understanding of how the **system** functions – how all the parts function together to address project goals and requirements – can result in undesirable consequences. As an example, capital cost could be reduced by using an open-air shelter instead of an enclosed building. While this would reduce up-front construction cost, this would certainly be viewed as impacting customer comfort. A true VE study would examine how such a capital cost reduction would potentially have a negative affect on the attraction of customers, perceived customer service, and likely the impact on supporting station-area development.

The definition of “value” should be kept in mind when conducting VE workshops to help maintain a balanced outcome.

$$Value = \frac{Function}{Cost}$$

In other words, while a lower cost for the same function improves value, if a lower cost results in a decreased function, then the value may not be improved. (Note that the formula represents the value concept. Converting some functionality, such as aesthetics, sustainability, or resilience, into dollars for a mathematical comparison is not the intent.)

Function can include maintainability, operability, attraction of customers (transit riders), customer convenience, customer comfort, safety, security, aesthetics (including station architecture, landscaping, and art), reliability, transfer time (affecting total travel time), ability to respond to incidents, sustainability, resiliency, and so forth. Cost includes capital cost and operating & maintenance costs. Cost should, basically, keep life-cycle costs in view (as part of asset management); however, precise calculation of life-cycle costs is typically not possible during a time-constrained VE workshop. Cost cutting solely to reduce up-front construction cost typically has consequences down the line.

Value Engineering Process

VE studies follow phases as outlined by the Society of American Value Engineers (SAVE, now SAVE International). This process is the identical process recommended by federal agencies including FTA, FHWA, and USACE.

1.1 Pre-Workshop Phases

Two phases of the VE process occur prior to the workshop. (Of course, creation of the Job Plan also occurs prior to the workshop.)

- Project identification
- Team formation

The pre-workshop phase also includes the logistics for the workshop itself. (During and following the Covid-19 pandemic, VE workshops carried out virtually have been found to be just as effective as in-person workshops, with the added benefit of reduction in VE study cost, the ability to tap into national resources if needed, and greater flexibility in scheduling.)

Pre-study project identification includes a definition of the study scope and objectives. Typically, the client may provide points of emphasis or may provide aspects of the project which are constrained. As an example, if the pedestrian tunnel under the Metra tracks is tied to a portion of the grant funding, then installation of a tunnel is a project constraint.

The VE study scope may include, but is not limited to:

- Tunnel
- ADA access to station, platforms, parking, and multi-modal transfer area
- Station
- Bicycle parking
- Constructability
- Impact to rail operations during construction
- Risk (related to perceived Contractor risk impacting bid prices)
- Stormwater management
- Sustainability goals
- Potential Resiliency improvements

Elements that may constrain VE recommendations include, but are not limited to:

- ADA laws
- ICC grade protection
- Historic designations (from SHPO)
- Grant requirements

Several principles of **team formation** feed directly into successful VE studies. First, studies tend to be more successful if the team has a mix of some persons with agency and area familiarity plus persons with “fresh eyes” on the project. Persons with a mix of geographic experience help “cross pollinate” ideas based on experience from other similar agencies or projects. VE workshops flow better when the participants are “big picture” thinkers, able to examine the entire system from the vantage point of different disciplines. For VE Studies, recent research indicates participants identify themselves as “lead adaptors,” comfortable with examining ideas which are outside of the status quo.

Finally, the range of team members should cover the disciplines needed for the subject of the study. For this workshop, the disciplines include, but may not be limited to:

- Station architecture
- Multi-modal (bus, bicycle, walking, vehicular)
- Construction and constructability
- Rail operations (related to Metra operations during construction)
- Stormwater and sustainability
- ADA requirements
- VE facilitator
- Cost estimator (non-workshop support, background support during evaluation and development)
- Administrative (support, non-technical participant)

Other participants may be added based on review of the job plan. While VE team members are typically experienced, VE teams sometimes include one “junior” member who may benefit from the VE workshop experience.

This VE workshop will be held using a virtual platform (Microsoft Teams). This means that participants must have computer capabilities to view the shared screen. Connecting by phone and viewing printed exhibits will not be acceptable. Based on the size of this project, the VE team size is expected to be six to eight, not including the cost estimate and administrative support.

Project information will basically consist of the existing materials at the time of the VE study. These materials will also include planning documents. Understanding constraints related to the funding grants will be important. The materials will be sent to participants one week ahead of the workshop. Participants are expected to review the information prior to the start of the workshop, if possible. Supplemental material related to the VE process will also be distributed during the week prior to the workshop. Note that participants should not develop a list of VE ideas prior to the workshop.

Prior to the workshop, a general report template and a template for recommendations will be developed.

1.2 Workshop Phases

Up to six VE phases can occur within the workshop, although the phase in the last bullet point often follows the workshop, especially when the workshop is held virtually.

- Information phase
- Functional analysis phase
- Creativity phase
- Evaluation phase
- Development phase
- Reporting/Presentation

Information phase: This is the review of plans and any other available materials pertinent to the VE study. Beyond simply review by VE team members, usually a designer who is thoroughly familiar with the plans makes a presentation. The information phase can also include direction from the client, especially in regard to perceptions of constraints that may not be found in the planning documents.

Functional Analysis phase: Review of high-cost components, high worth items, cost-worth mismatches, and the basic functions for the study subject. Function analysis helps separate “must have” from “nice to have.” Functional analysis primes the participants for the creativity phase. Functional analysis also sometimes allows visioning of “simple and elegant solutions” rather than attaching Band-Aids to address individual concerns. Certain project elements could address multiple functions, improving function and decreasing cost. Conversely, other project elements may be identified with relatively high cost and questionable value. The latter may be good candidates to evaluate during the workshop.

Creativity phase: Also called brainstorming, this is the generation of many potential ideas for improving project value (which often involves reducing up-front construction cost).

Evaluation phase: Review of ideas to narrow to a list of the best recommendations for value improvement. Evaluation can take many forms including pairs analysis (which looks at ideas with similar function two at a time), matrix analysis, benefit-cost calculations, or other forms. The evaluation types should be left to the team since a variety of methods may be appropriate. A variety of evaluation types helps address bias (of various forms) which can creep into the VE study. Evaluation is typically iterative with the Development phase.

Development phase: Development of enough detail to further evaluate and provide reasonable assurance the recommendations can be implemented. It is not uncommon to find out, upon development of further details, that a seemingly good idea turns out to be impractical for implementation. (Note that some VE studies end up confirming the original design. The outcome of VE studies is not known at the onset of the study.)

Reporting and Presentation: As mentioned above, it is possible to prepare a draft report and provide a presentation during the workshop. However, this is usually done when the workshop is

conducted in person, full time, across five days. The culmination of the workshop is a presentation of VE recommendations. For virtual workshops, the draft report and presentation usually occur during the weeks following the workshop.

1.3 Post-Workshop Phases

Following the workshop, the draft report would be revised, VE recommendations would be reviewed for approval, and a final VE report developed. Note that the report remains draft until the client confirms the recommendations. The recommendations then would be passed to the design team for incorporation.

Potential Team Members

This section has been included *only for discussion*. The VE Team needs to include persons who have appropriate experience to cover the disciplines used on this project. Team members should be experienced, be “big picture” thinkers, be able to view the project from multiple vantage points and have availability to fully participate without distraction.

As stated above, the disciplines tied to this project include, but are not necessarily limited to:

- Station architecture
- Multi-modal access (bus, bicycle, walking, vehicular)
- Construction and constructability
- Rail operations (related to Metra operations during construction)
- Stormwater and sustainability
- ADA requirements

Because of the existing station area development, experience in urban planning may be useful.

In addition to covering the disciplines, the team will have a facilitator:

- Tom Williams, PE, VMA (Value Methodology Associate certification number 201202038) – Tom has facilitated over a dozen VE studies in four states. Six studies have included rail transit with several of these including stations and station areas.

The team will also have a cost estimator and administrative support in the background to the workshop.

For this size study, a team (in the workshop) of six to eight (including the facilitator) would be appropriate and manageable. (*Note that the team has expanded beyond this originally estimated number of workshop team members.*)

Value Engineering Team

Name	Agency/Firm	Subject Matter
Tom Williams, PE, VMA	CDM Smith	Facilitator
Sarah Sutherlin	CDM Smith	Architecture
Robert Cheval	CDM Smith	Architecture, Building Systems
Anthony (Tony) Cerda	CDM Smith	Roadway
Jared Wendorf	CDM Smith	Civil
Khwaja Mahmood	CDM Smith	Tunnel, Geotechnical (Limited Availability)
Hong Yang	CDM Smith	Tunnel, Geotechnical
Anas Alkhatib	CDM Smith	Constructability
Martin (Marty) Scott	Village of Glen Ellyn	
Robert Schmidt	Village of Glen Ellyn	
Dave Buckley	Village of Glen Ellyn	
Mark Franz	Village of Glen Ellyn	
Derek Peebles (Optional)	Village of Glen Ellyn	Landscape Architecture
Richard Daubert	Village of Glen Ellyn	(Observation)
Steve Szymanski	Village of Glen Ellyn	Capital Improvements Commission Chair
Tim Loftus	Village of Glen Ellyn	Plan Commission Chair
Ramesh Nair	Vistara	Cost Estimating

Schedule

The following schedule is based on various assumptions regarding project enrollment, client approval, and team availability. Teams invitations have been sent to participants for the following dates and times.

- June 12 – 1:30-4:00PM – Kick-off, Information Phase, start Function Phase
- June 13 – 11:00AM-4:00PM (with break 12:30-1:30PM) – Complete Function Phase / Creativity Phase / Begin Evaluation Phase
- June 14 – 9:00-11:30AM – Continue Evaluation Phase / Begin Development Phase
- June 15 – 9:00-11:30AM – Continue Development Phase / Iterate (as necessary) with Continued Evaluation
- June 16 – 9:00-11:30AM – Complete Development Phase / Consolidate Recommendations

Breaks will be provided as needed by the team and as we reach natural breaking points. Especially on the first two days, team members should be available, preferably with minimal

interruption. Otherwise, if team members need to step away for calls or short meetings, this can be accommodated.

Note that the team should have availability the prior week (for 15 minutes up to an hour each day) to review materials.

Most team members will not need availability in the weeks following the workshop (except as they may want to have an update on the progress and the accepted recommendations).

VE Materials

Informational materials will be provided in the week prior to the workshop for participants to become familiar with the study topic and general project background. Materials will include any plan sheets, reports, or additional material that helps in understanding the project and constraints. This project does have constraints, some related to the grant funding and some related to agency requirements. As an example, Metra has a formula for square foot requirements based on passenger volumes. As another example, the Village has a lease with a vendor for space at the station. This will constrain options related to that space.

Laws and codes also constrain via requirements. An example is ADA requirements.

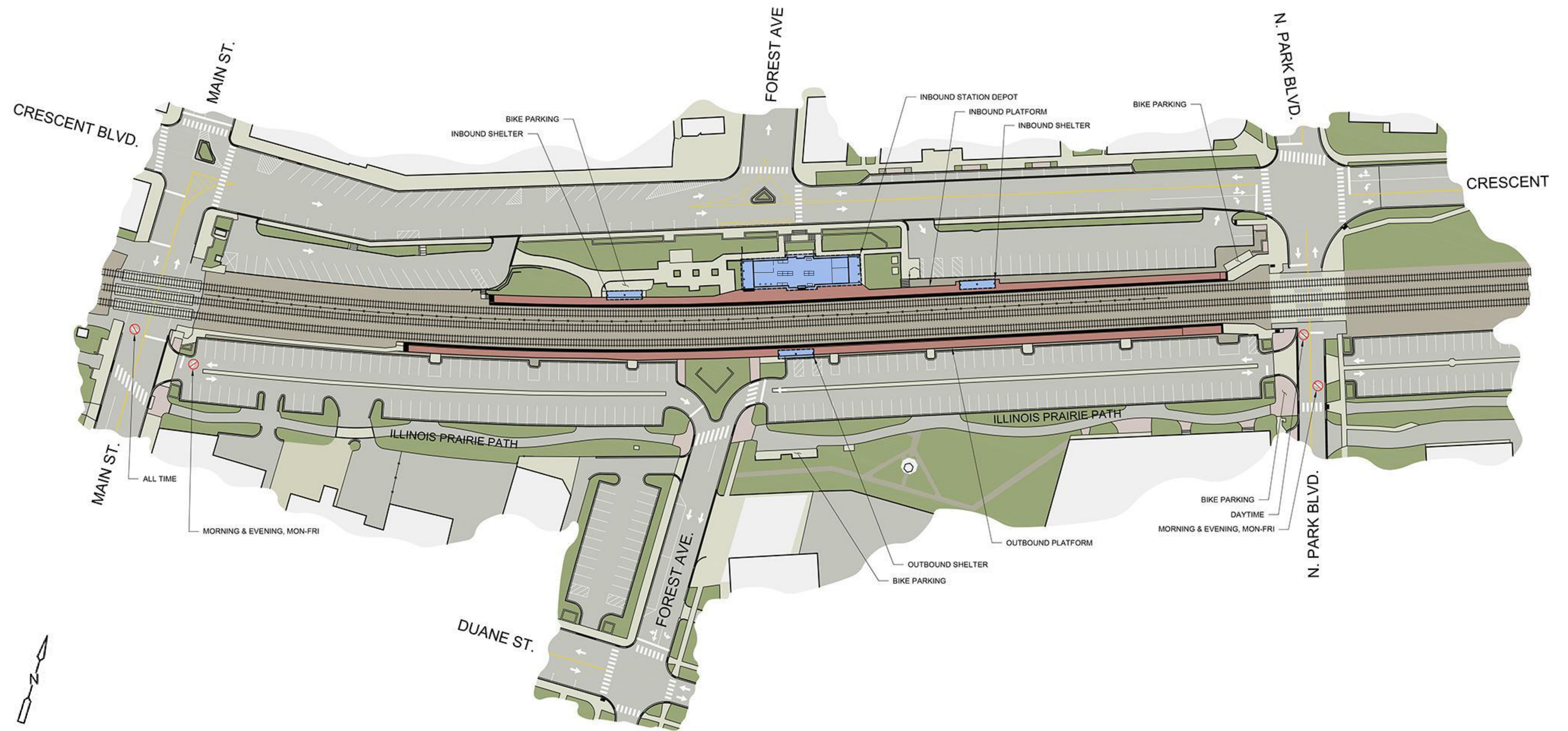
In addition to project-specific materials, one technique that has been used successfully to move participants toward a “VE mindset” is to send out short, thought-provoking materials each day during the week prior to the study. These materials would be more about the VE process (such as functional analysis) and group dynamics.

As examples, materials may be sent out asking:

- What is the purpose of a commuter rail station? List all you can think of. Of all you list, is there one on the list that is a “must,” without which the project would not even be a station?
- Are there certain “givens” about Metra’s operation that will impact construction?
- What biases could participants bring to a VE workshop? Which biases could impact the generation of ideas or the evaluation of ideas? To get thoughts in this area started, here are two common biases that occur in group situations:
 - Conceding to the most (organizationally) senior person at the table. You may have seen this in the past. If an influential department head expresses a preference for Option A, all others in the meeting go along with Option A.
 - The Status-Quo bias: Many people prefer to do what was done before or do what has been done recently. There is comfort in going with options that are familiar.
- What can be learned from other similar transit stations? Usually, this question is accompanied with photos of other projects. Seeing photos can get creative thoughts flowing.

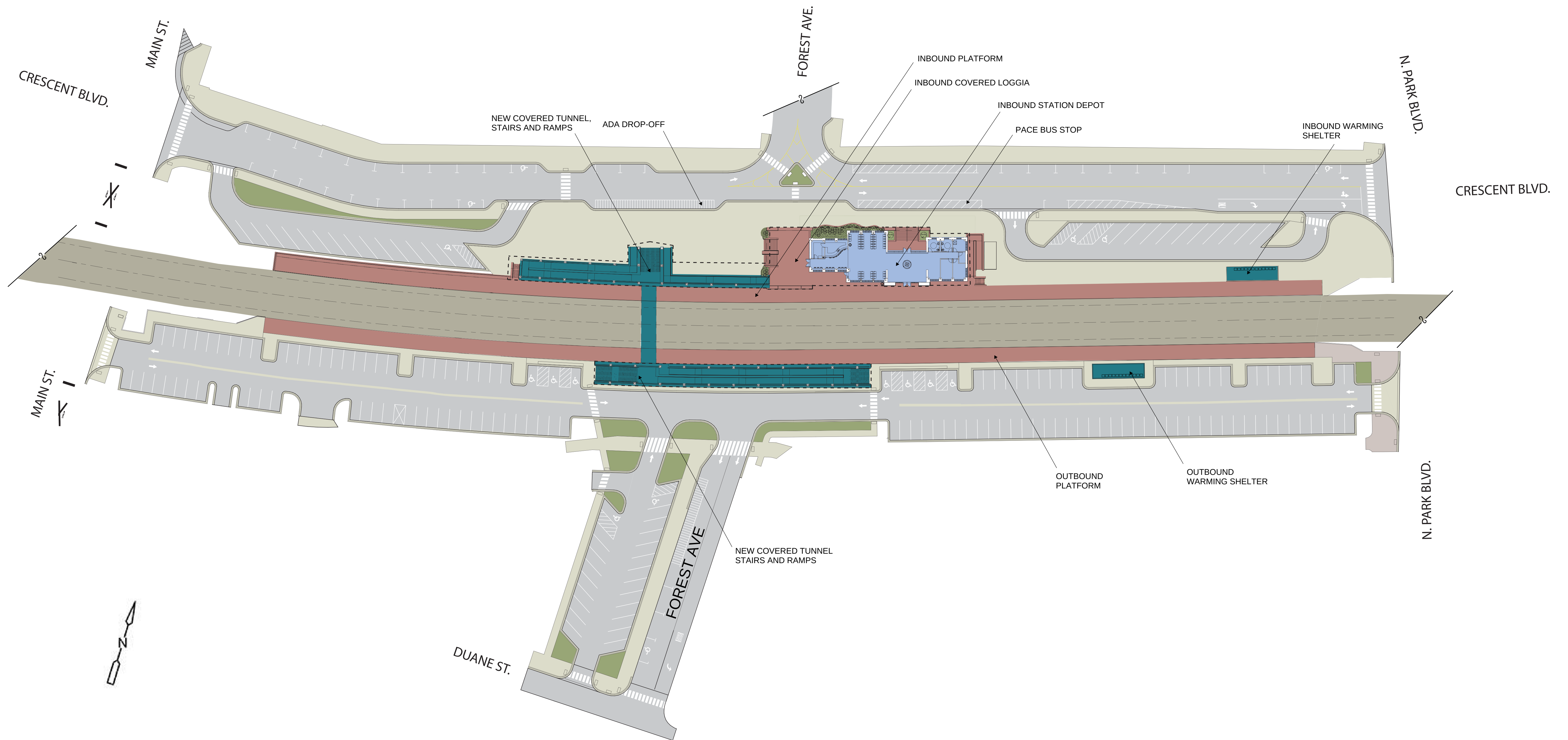
One instruction to participants: Try to resist preparing lists of VE ideas before the workshop!
(There are several reasons for this, related to both the value analysis process and avoiding the potential for defensiveness related to ideas.)

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EXISTING SITE PLAN





CONCEPTUAL SITE PLAN



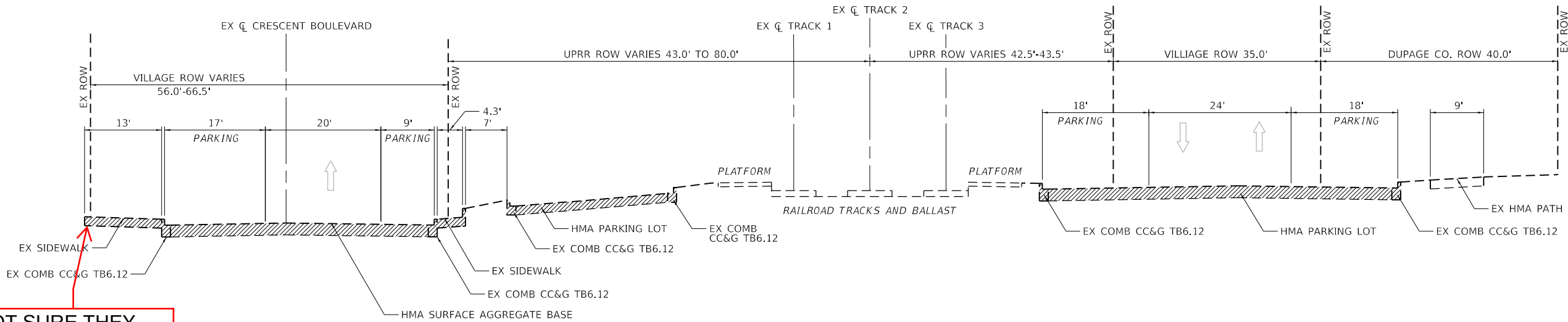
NOT SURE THEY
WILL FLAG IT AT
THIS POINT...THEY
SHOULD BUT WE
DO HAVE
EASEMENTS FOR
THE AREA OF
SIDEWALK
BETWEEN THE
ROW AND
BUILDINGS. I WILL
TRANSMIT THEM TO
STEVE H. AND BOB
C.

NOT CRITICAL BUT
WERE SECTIONS
NOT DRAWN WITH
ASSEMBLIES?
THEY ARE NOT TO
SCALE.

NTS

LEGEND

- ↑ TRAFFIC FLOW ARROW
- REMOVAL ITEMS

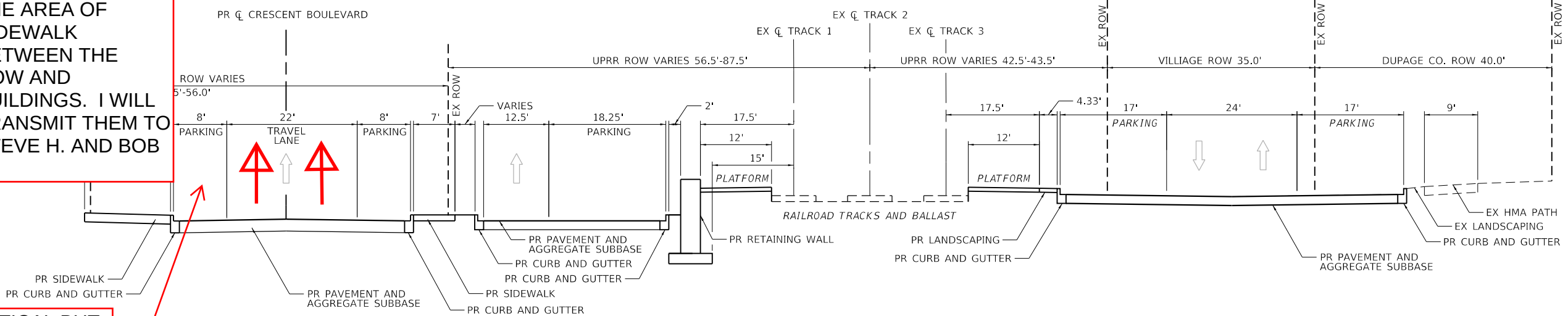


CRESCENT BLVD

EXISTING TYPICAL SECTION

CRESCENT BOULEVARD & SOUTH PARKING LOT
MAIN STREET TO FOREST AVENUE
STA 200+05.25 TO STA 206+17.00

SOUTH PARKING LOT



CRESCENT BLVD

PROPOSED TYPICAL SECTION

CRESCENT BOULEVARD & SOUTH PARKING LOT
MAIN STREET TO FOREST AVENUE
STA 200+05.25 TO STA 206+17.00

SOUTH PARKING LOT



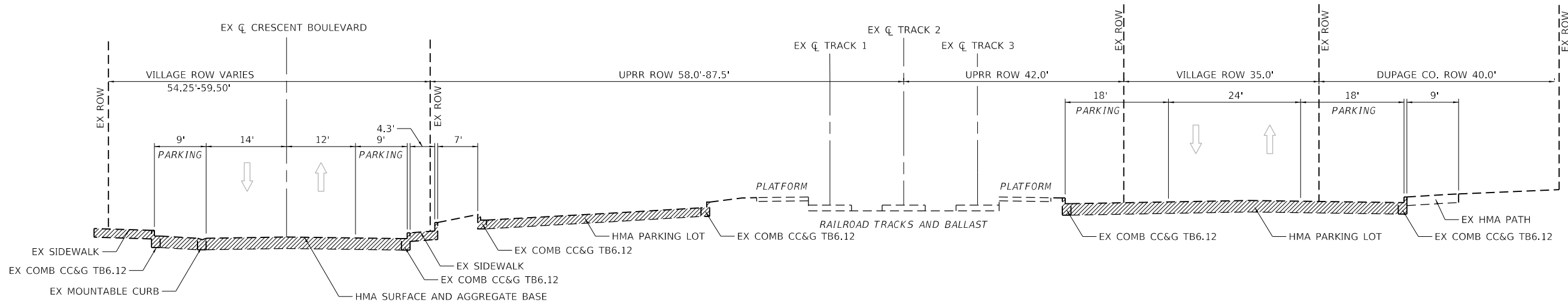
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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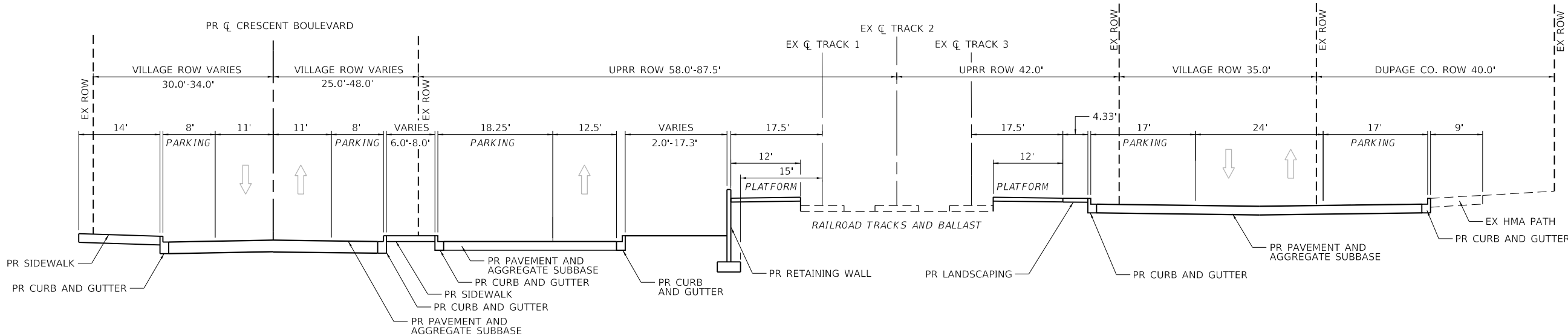


CRESCENT BLVD

EXISTING TYPICAL SECTION

SOUTH PARKING LOT

CRESCENT BOULEVARD & SOUTH PARKING LOT
FOREST AVENUE TO PARK BOULEVARD
STA 206+17.00 TO STA 210+99.10



CRESCENT BLVD

PROPOSED TYPICAL SECTION

SOUTH PARKING LOT

CRESCENT BOULEVARD & SOUTH PARKING LOT
FOREST AVENUE TO PARK BOULEVARD
STA 206+17.00 TO STA 210+99.10

LEGEND

- TRAFFIC FLOW ARROW
- REMOVAL ITEMS

NTS

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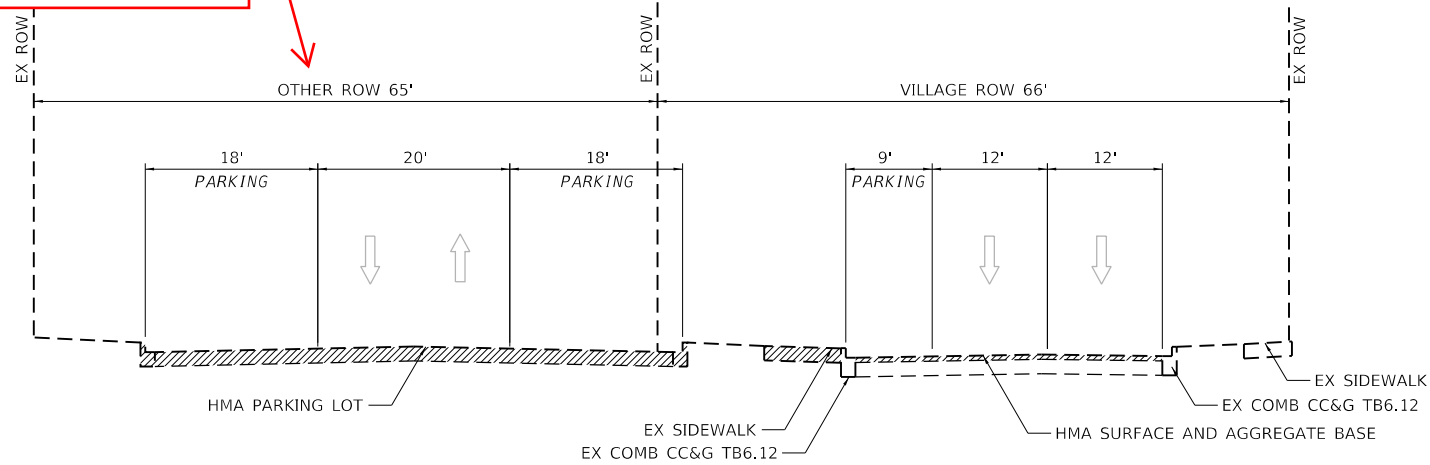
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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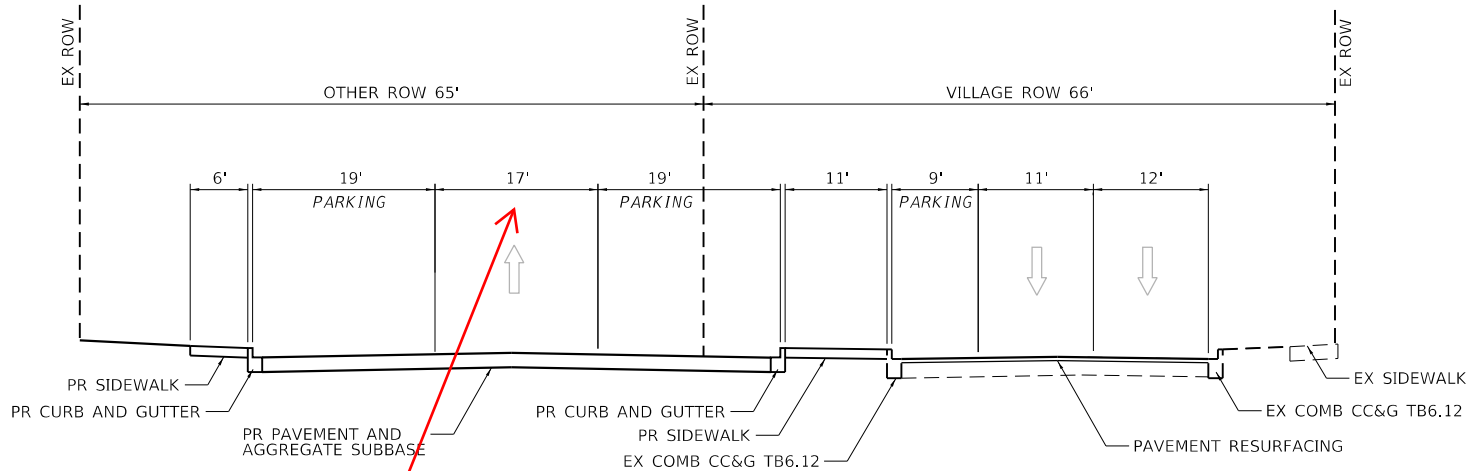
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SHOULD THIS BE LISTED AS VILLAGE PROPERTY?



EXISTING TYPICAL SECTION

FOREST AVENUE
DUANE STREET TO SOUTH PARKING LOT



PROPOSED TYPICAL SECTION

FOREST AVENUE
DUANE STREET TO SOUTH PARKING LOT

DIMENSIONS DON'T
MATCH PLAN VIEW

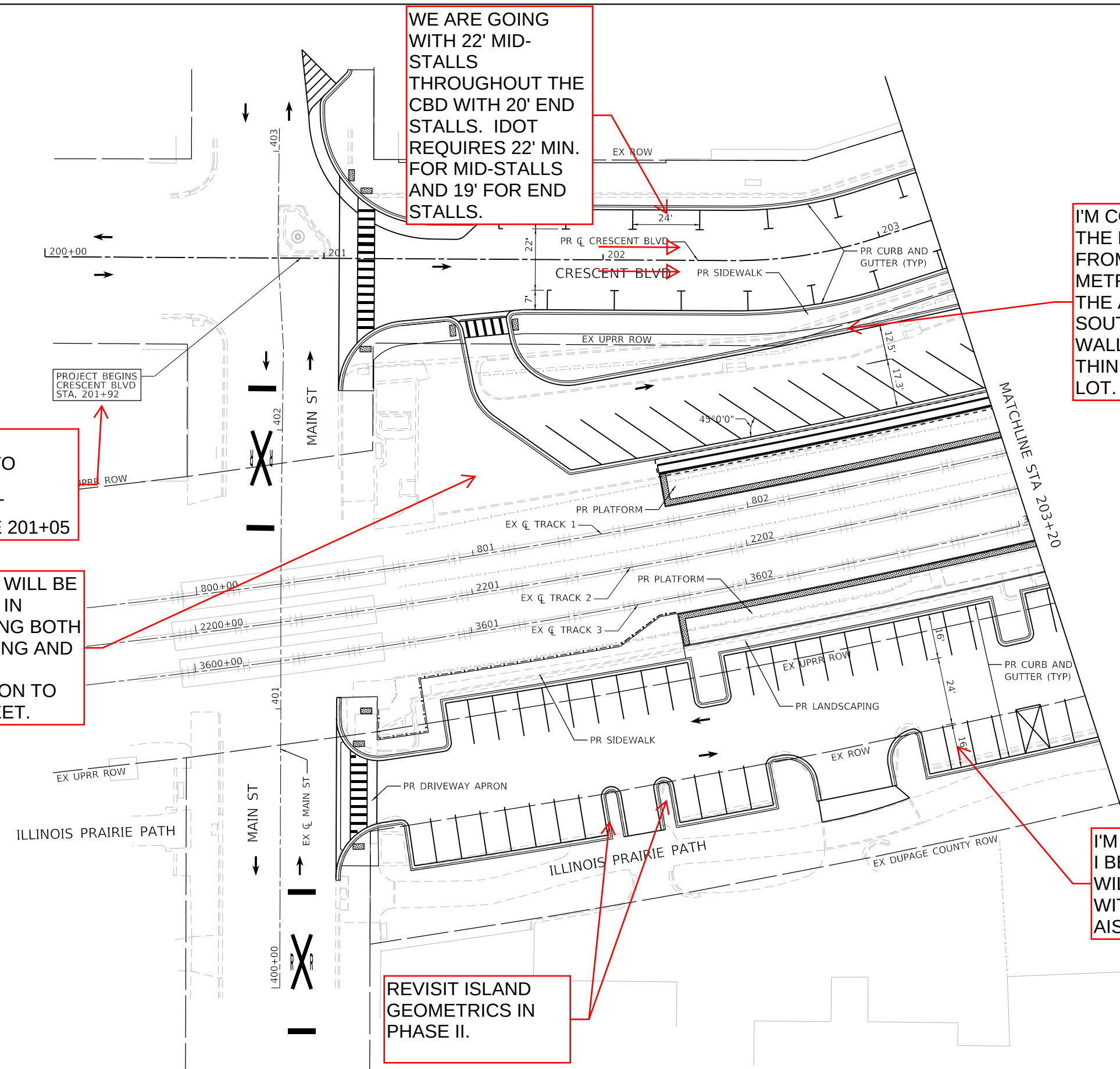
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LEGEND

- ↑ TRAFFIC FLOW ARROW
- REMOVAL ITEMS

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		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				



WE ARE GOING WITH 22' MID-STALLS THROUGHOUT THE CBD WITH 20' END STALLS. IDOT REQUIRES 22' MIN. FOR MID-STALLS AND 19' FOR END STALLS.

I'M CONCERNED ABOUT THE GEOMETRICS HERE WITH THE POTENTIAL CONFLICT FOR BACKING VEHICLES FROM THE SURFACE LOT. JUST LOOKING AT ITE AND METRA STANDARDS, WE CAN REDUCE THE DEPTH OF THE ANGLE SPACES TO 16.5' AND PUSH THE CURB SOUTH. WE COULD ALSO CONSIDER A GUARDRAIL, WALL, OR CRASH RATED FENCE BUT WE NEED TO THINK ABOUT HOW PEOPLE WILL SAFELY WALK IN THE LOT. FUN DETAILS TO DIVE INTO DURING PHASE II!

LEADER IS POINTING TO 200+91 BUT APPEARS IT SHOULD BE 201+05

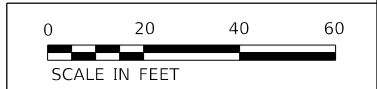
THIS AREA WILL BE REVISITED IN PHASE II ENG BOTH FOR PARKING AND SIDEWALK CONNECTION TO MAIN STREET.

I'M ALL FOR 16' BUT I BELIEVE METRA WILL REQUIRE 17' WITH A 22' DRIVE AISLE.

REVISIT ISLAND GEOMETRICS IN PHASE II.

LEGEND

TRAFFIC FLOW ARROW →



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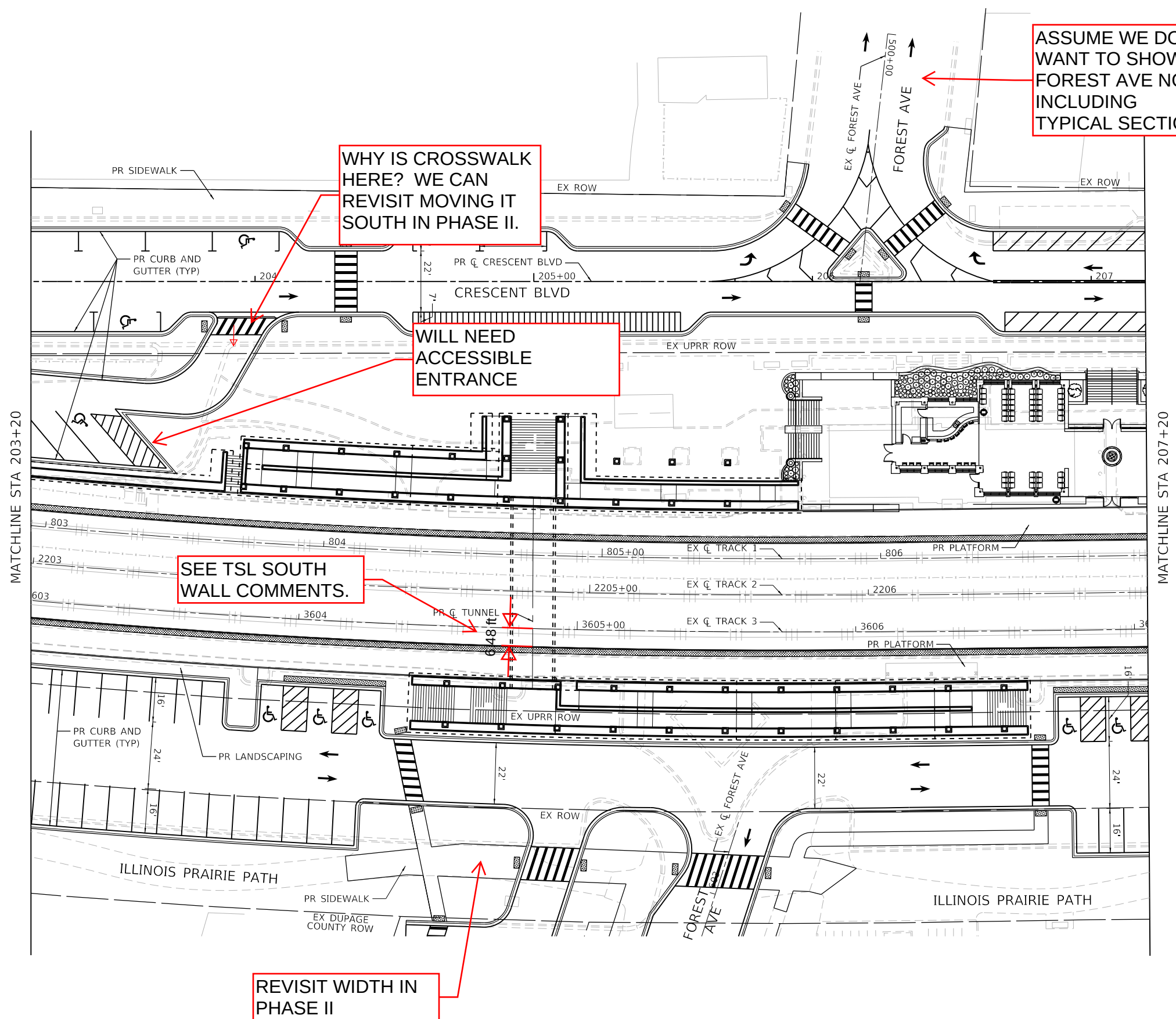
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DUPAGE	XX	
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		ILLINOIS	FED. AID PROJECT	



LEGEND

TRAFFIC FLOW ARROW →



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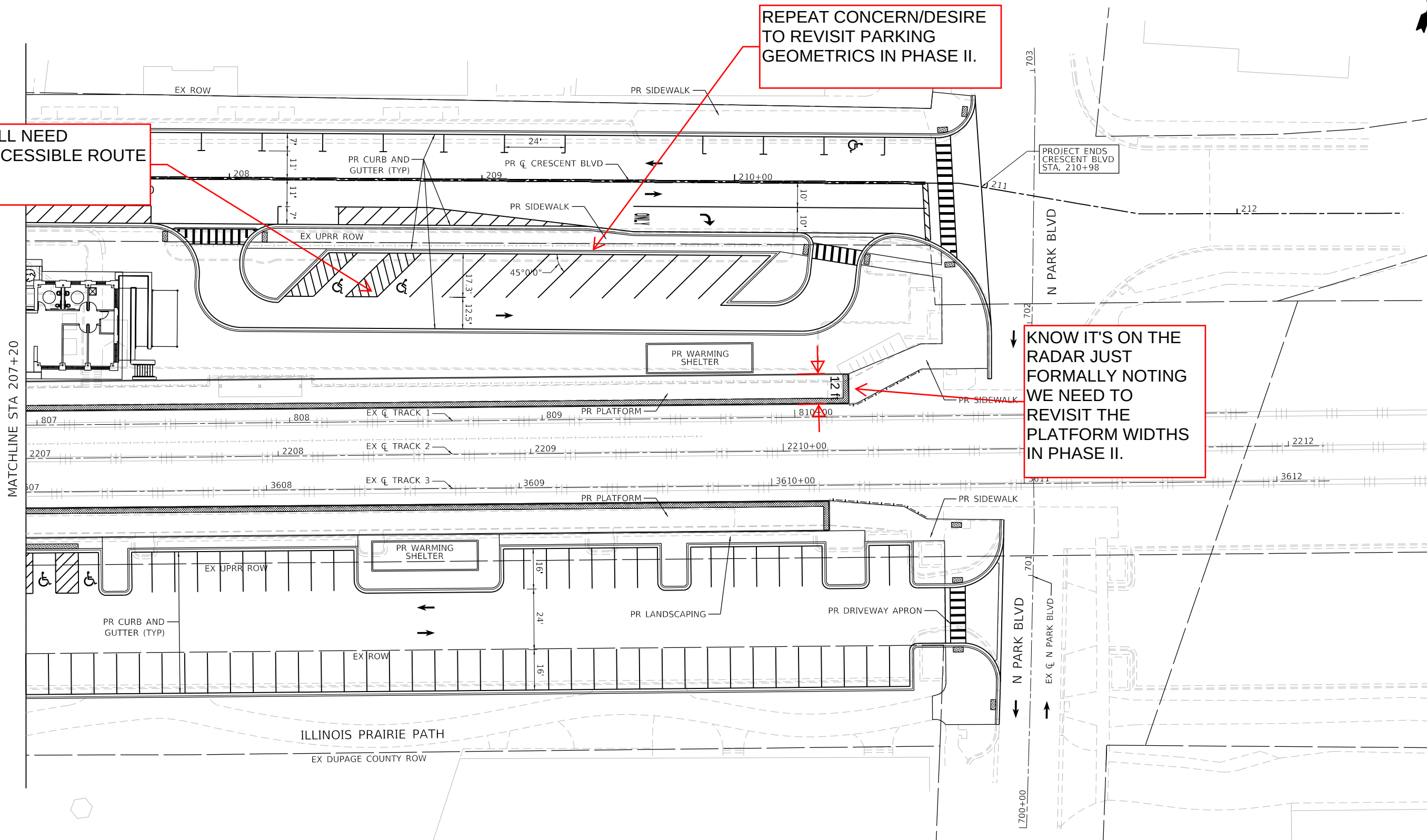
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	PLOT DATE = 3/14/2023		DATE -	REVISED -								ILLINOIS	FED. AID PROJECT	



WILL NEED
ACCESSIBLE ROUTE
TO

REPEAT CONCERN/DESIRE
TO REVISIT PARKING
GEOMETRICS IN PHASE II.

KNOW IT'S ON THE
RADAR JUST
FORMALLY NOTING
WE NEED TO
REVISIT THE
PLATFORM WIDTHS
IN PHASE II.



LEGEND

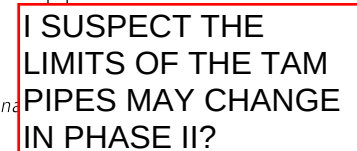
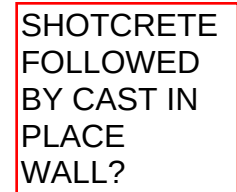
TRAFFIC FLOW ARROW →



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CDM Smith listen. think. deliver.	USER NAME = JUEJ	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN				F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -										DUPAGE	XX	
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	PLOT DATE = 3/14/2023	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.					
												ILLINOIS	FED. AID	PROJECT	

Existing Structure: None.



MAY WANT TO CLARIFY THIS REFERENCE TO THE STEEL YIELD STRENGTHS

LOADING
Cooper E-80 Railroad Live Load

DESIGN STR
FIELD UNITS

SEISMIC DATA

I'M COMING UP WITH DIFFERENT ELEVATIONS BASED ON TOPO (SOUTH RAIL FOR TRACK 3 IS ~744.50; HENCE PLATFORM GRADE SHOULD BE ~744.15. NOTE 3 ADDRESSES BUT UP MAY CRITIQUE GIVEN ELEVATIONS ARE IDENTICAL.

	Location A		Location B	
Track No.	Station	Elevation	Station	Elevation
1	804+00	744.09	805+00	744.09
2	2204+00	744.09	2205+00	744.09
3	3604+00	744.09	3605+00	744.09


$$1'' = 15'$$

PLAN

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL PLAN AND ELEVATION
PEDESTRIAN TUNNEL
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 3604+41.45

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**CDM
Smith**
listen. think. deliver.

USER NAME = _____	DESIGNED - _____	REVISED - _____
	CHECKED - _____	REVISED - _____
PLOT SCALE = _____	DRAWN - _____	REVISED - _____
PLOT DATE = _____	CHECKED - _____	REVISED - _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
		CONTRACT NO. ____		
		ILLINOIS FED. AID PROJECT		

Benchmark: Located at the southeast corner of the intersection of Main Street and Crescent Boulevard, 74.0 feet south of the centerline of Crescent Boulevard and 42.5 feet east of the centerline of Main Street. Monument is a 3.5 inch brass disk set on top of a 3 foot high retaining wall surrounding an electrical control box. Monument is 1.0 foot above grade. Datum: NAVD88, Elev. 745.28.

Existing Structure: None.

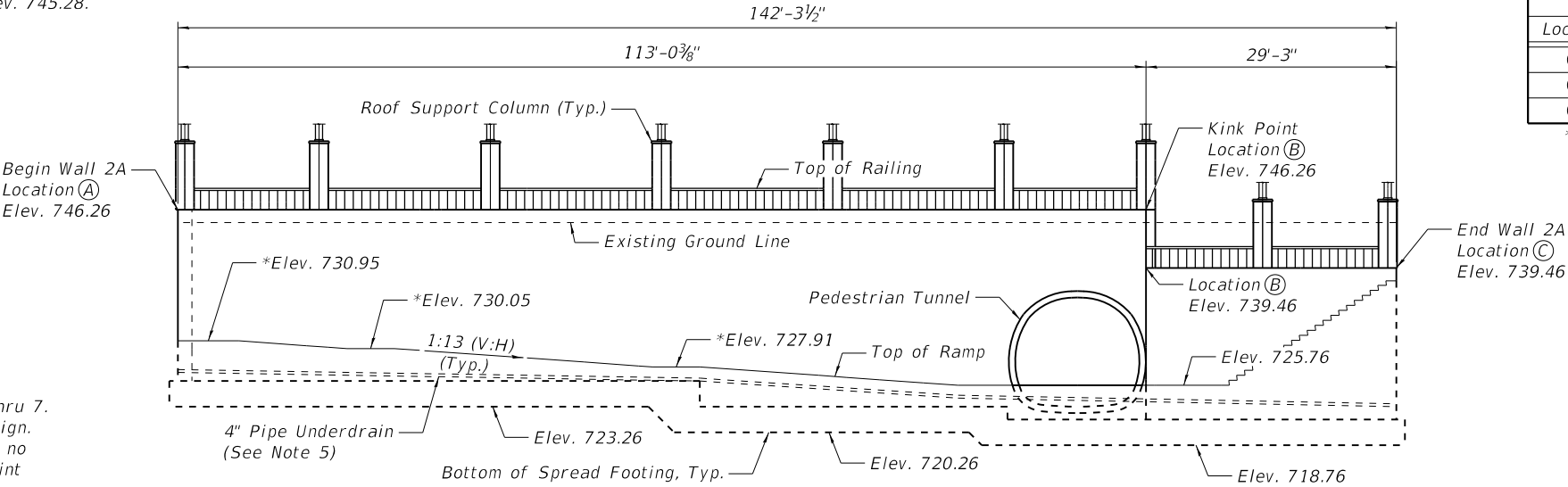
LOCATION TABLE

Location	℄ UPRR Track		℄ Crescent Blvd.	
	Station	Offset**	Station	Offset**
(A)	803+68.92	20.83' Lt.	203+94.92	72.47' Rt.
(B)	804+82.74	20.83' Lt.	205+07.83	77.64' Rt.
(C)	804+82.09	50.08' Lt.	205+07.97	48.39' Rt.

**Offsets measured from ℄ to front face of Wall 2A

NOTES

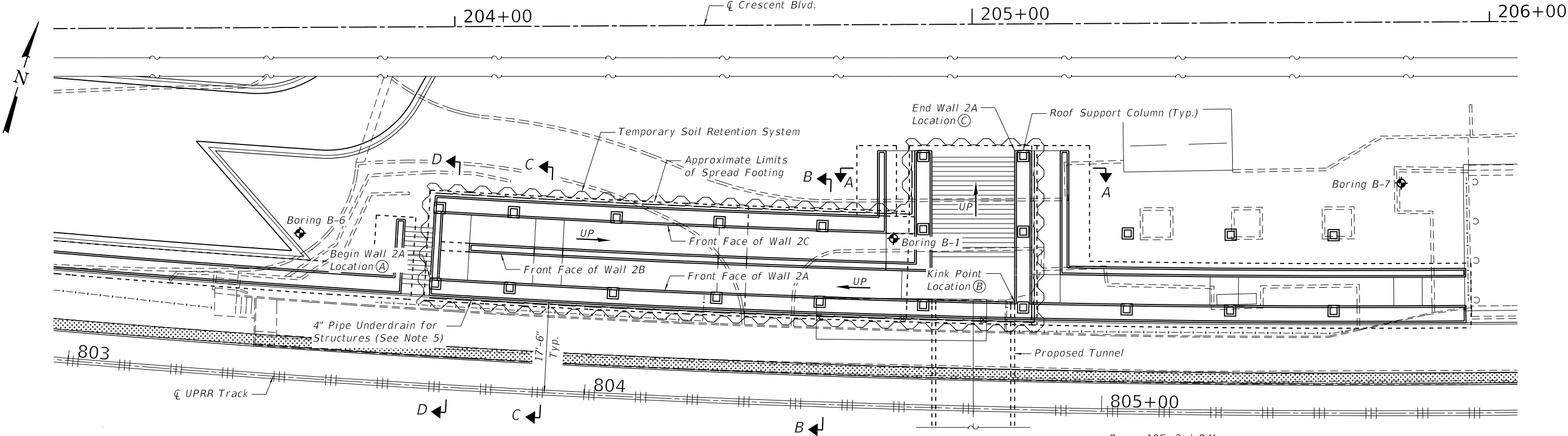
- For Section A-A, B-B, C-C and D-D, see sheet 4 thru 7.
- Utility conflicts to be coordinated during final design.
- Construction and expansion joints shall be spaced no more than 30'-0" and 90'-0" apart, respectively. Joint locations to be determined during final design.
- Profile grade for ℄ Crescent Blvd. will be provided during final design.
- Drainage details to be coordinated during final design.



WALL 2A ELEVATION

(Looking at projected view of front face of wall, unfolded)

*Top of ramp/stair elevation for landing areas.



PLAN

DESIGN SPECIFICATIONS

- 2020 AASHTO LRFD Bridge Design Specifications, 9th Edition
- 2022 Manual for Railway Engineering (AREMA)
- 2021 UPRR and BNSF Guidelines for Temporary Shoring
- 2010 Metra Temporary Shoring Guidelines

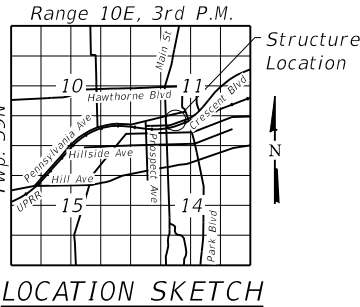
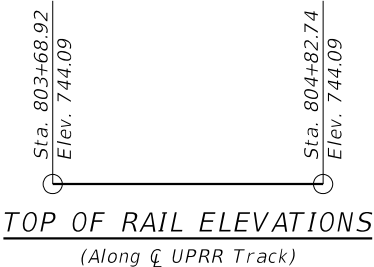
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING

Cooper E-80 Railroad Live Load



GENERAL PLAN AND ELEVATION

NORTH RETAINING WALLS

GLEN ELLYN METRA STATION

SECTION 18-00082-00-MS

DUPAGE COUNTY

STATION 803+68.92 TO 804+82.74

LEGEND

- Exist Railroad Tracks
- Pipe Underdrain
- Temp. Soil Retention System
- Soil Boring Log



USER NAME =	DESIGNED -	REVISD -
PLOT SCALE =	CHECKED -	REVISD -
PLOT DATE =	DRAWN -	REVISD -
	CHECKED -	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION I
NORTH TUNNEL WALLS

SHEET 1 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				

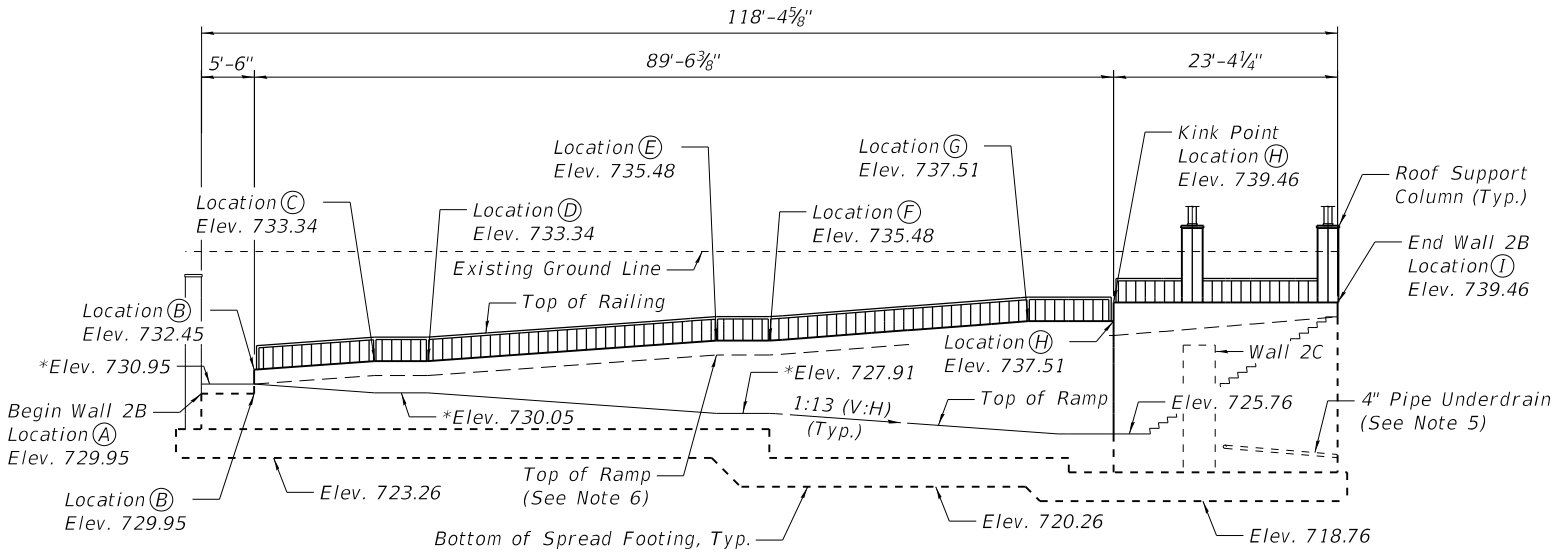
LOCATION TABLE

Location	CL UPRR Track		CL Crescent Blvd.	
	Station	Offset**	Station	Offset**
(A)	803+70.62	26.33' Lt.	203+96.94	67.09' Rt.
(B)	803+76.17	26.33' Lt.	204+02.43	67.43' Rt.
(C)	803+88.84	26.33' Lt.	204+14.97	68.19' Rt.
(D)	803+94.40	26.33' Lt.	204+20.47	68.51' Rt.
(E)	804+24.76	26.33' Lt.	204+50.52	70.05' Rt.
(F)	804+30.33	26.33' Lt.	204+56.03	70.30' Rt.
(G)	804+57.53	26.33' Lt.	204+82.98	71.37' Rt.
(H)	804+66.50	26.33' Lt.	204+91.86	71.67' Rt.
(I)	804+65.87	49.68' Lt.	204+91.97	48.31' Rt.

**Offsets measured from CL to front face of Wall 2B

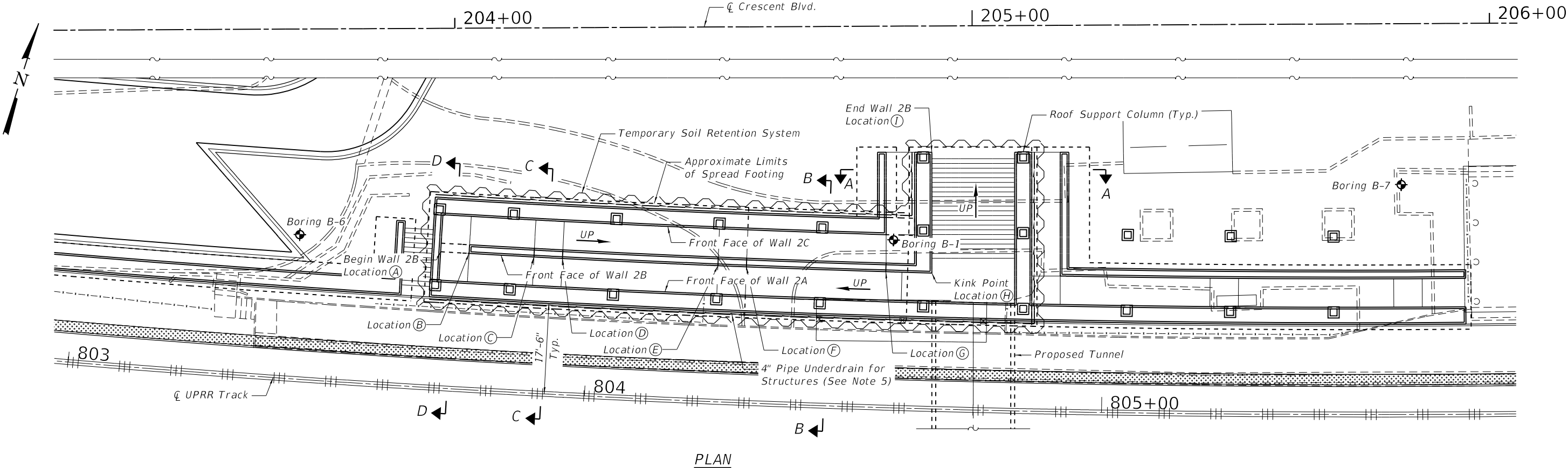
NOTES

1. For Section A-A, B-B, C-C and D-D, see sheet 4 thru 7.
2. Utility conflicts to be coordinated during final design.
3. Construction and expansion joints shall be spaced no more than 30'-0" and 90'-0" apart, respectively. Joint locations to be determined during final design.
4. Profile grade for CL Crescent Blvd. will be provided during final design.
5. Drainage details to be coordinated during final design.
6. For top of ramp elevations along back face of wall, see elevation view for Wall 2A on sheet 1 of 7.



WALL 2B ELEVATION
(Looking at front face of wall, unfolded)

*Top of ramp/stair elevation for landing areas.



PLAN

LEGEND

- Exist Railroad Tracks
- Pipe Underdrain
- Temp. Soil Retention System
- Soil Boring Log

GENERAL PLAN AND ELEVATION
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION II
NORTH TUNNEL WALLS

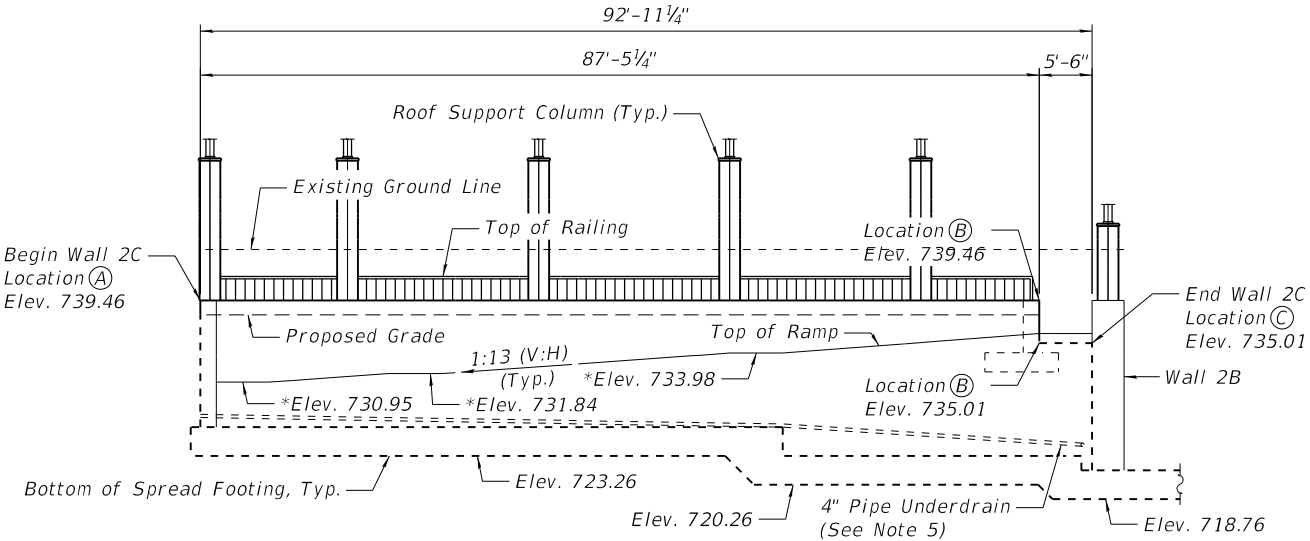
SHEET 2 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				

LOCATION TABLE

Location	℄ UPRR Track		℄ Crescent Blvd.	
	Station	Offset**	Station	Offset**
(A)	803+68.92	33.50' Lt.	203+95.74	59.83' Rt.
(B)	804+57.34	33.50' Lt.	204+83.06	64.20' Rt.
(C)	804+62.90	33.50' Lt.	204+88.56	64.39' Rt.

**Offsets measured from ℄ to front face of Wall 2C

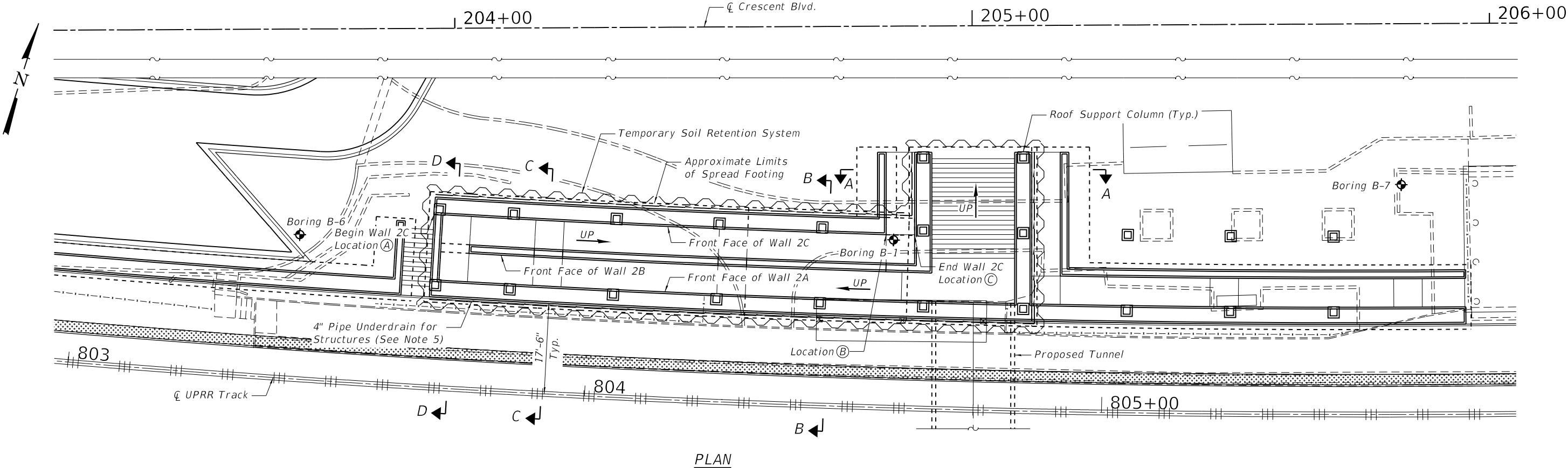


WALL 2C ELEVATION
(Looking at front face of wall, unfolded)

*Top of ramp/stair elevation for landing areas.

NOTES

1. For Section A-A, B-B, C-C and D-D, see sheet 4 thru 7.
2. Utility conflicts to be coordinated during final design.
3. Construction and expansion joints shall be spaced no more than 30'-0" and 90'-0" apart, respectively. Joint locations to be determined during final design.
4. Profile grade for ℄ Crescent Blvd. will be provided during final design.
5. Drainage details to be coordinated during final design.



PLAN

LEGEND

- Exist Railroad Tracks
- Pipe Underdrain
- Temp. Soil Retention System
- Soil Boring Log

GENERAL PLAN AND ELEVATION
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74

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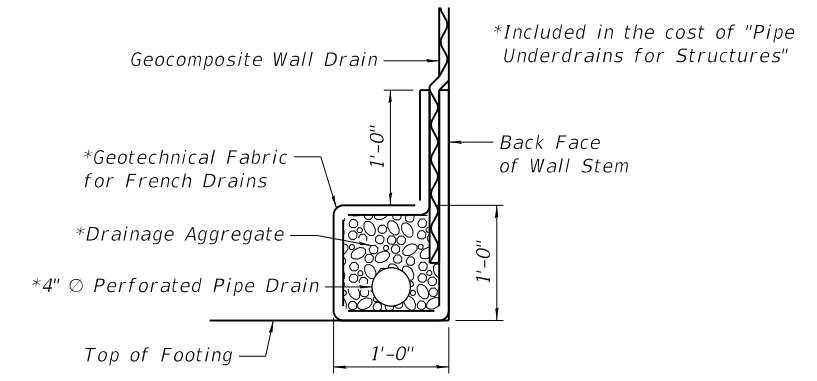
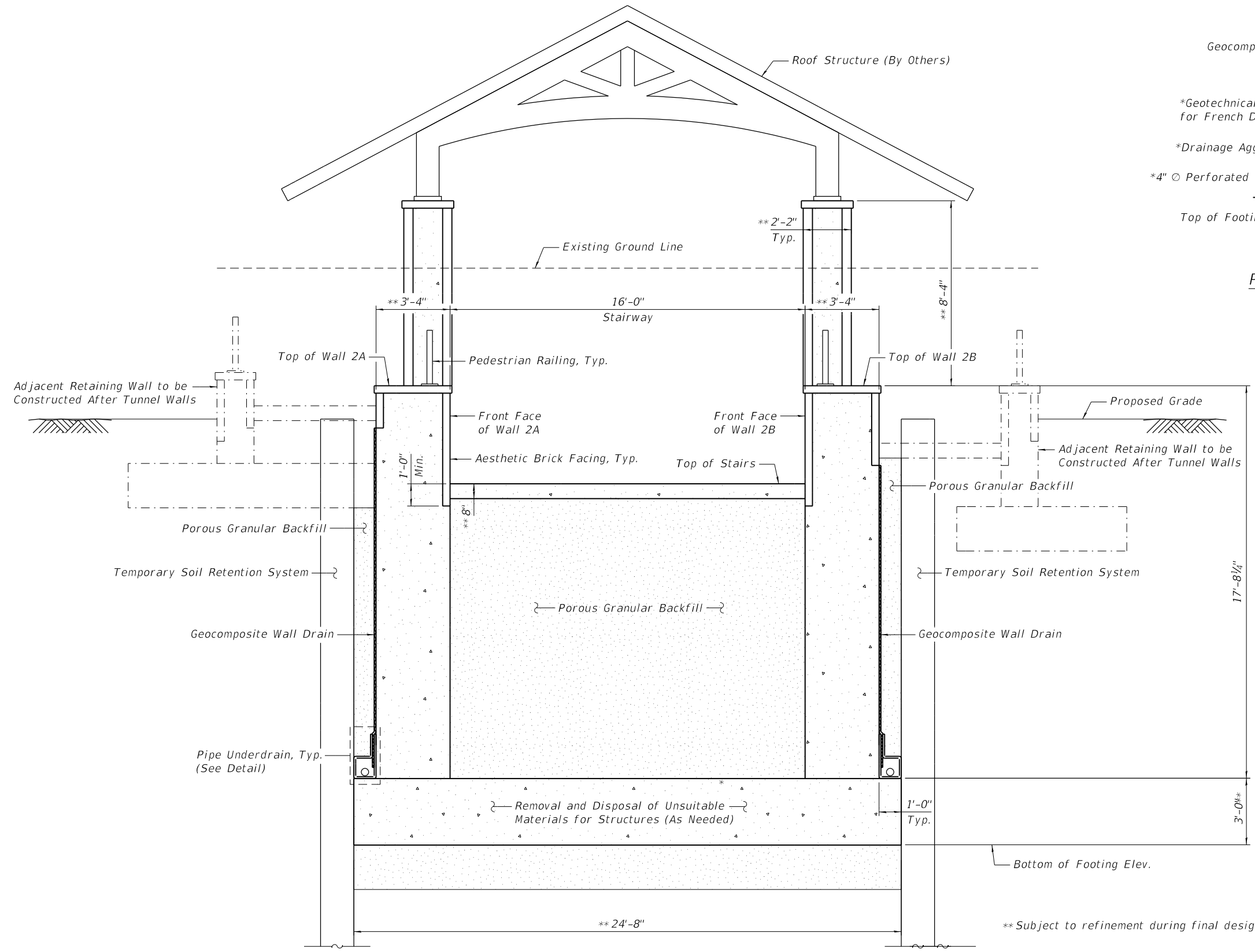
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION III
NORTH TUNNEL WALLS

SHEET 3 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				
ILLINOIS FED. AID PROJECT				



PIPE UNDERDRAIN DETAIL

SECTION A-A

GENERAL DETAILS
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74

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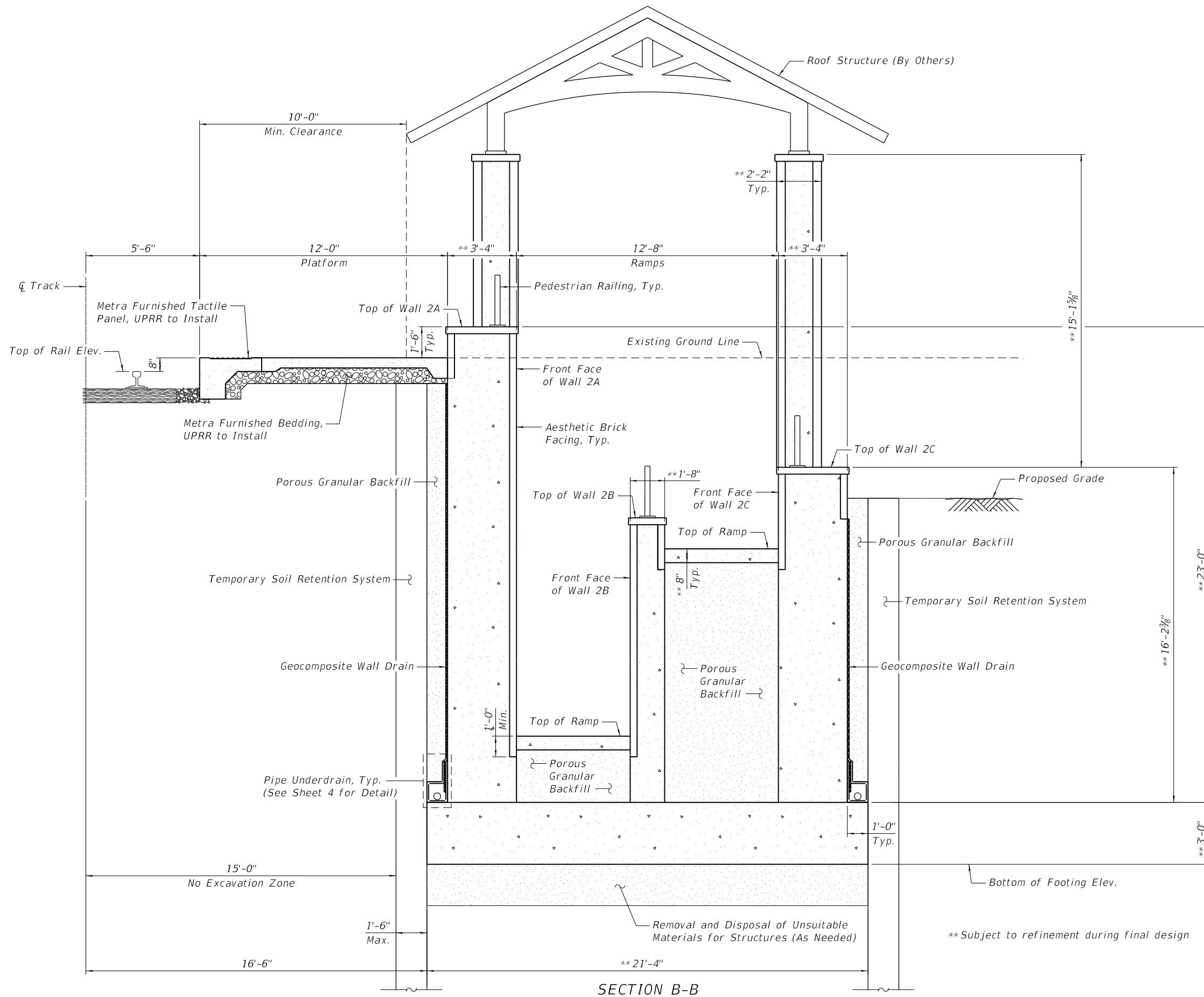
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS I
NORTH TUNNEL WALLS

SHEET 4 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT				

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GENERAL DETAILS
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74



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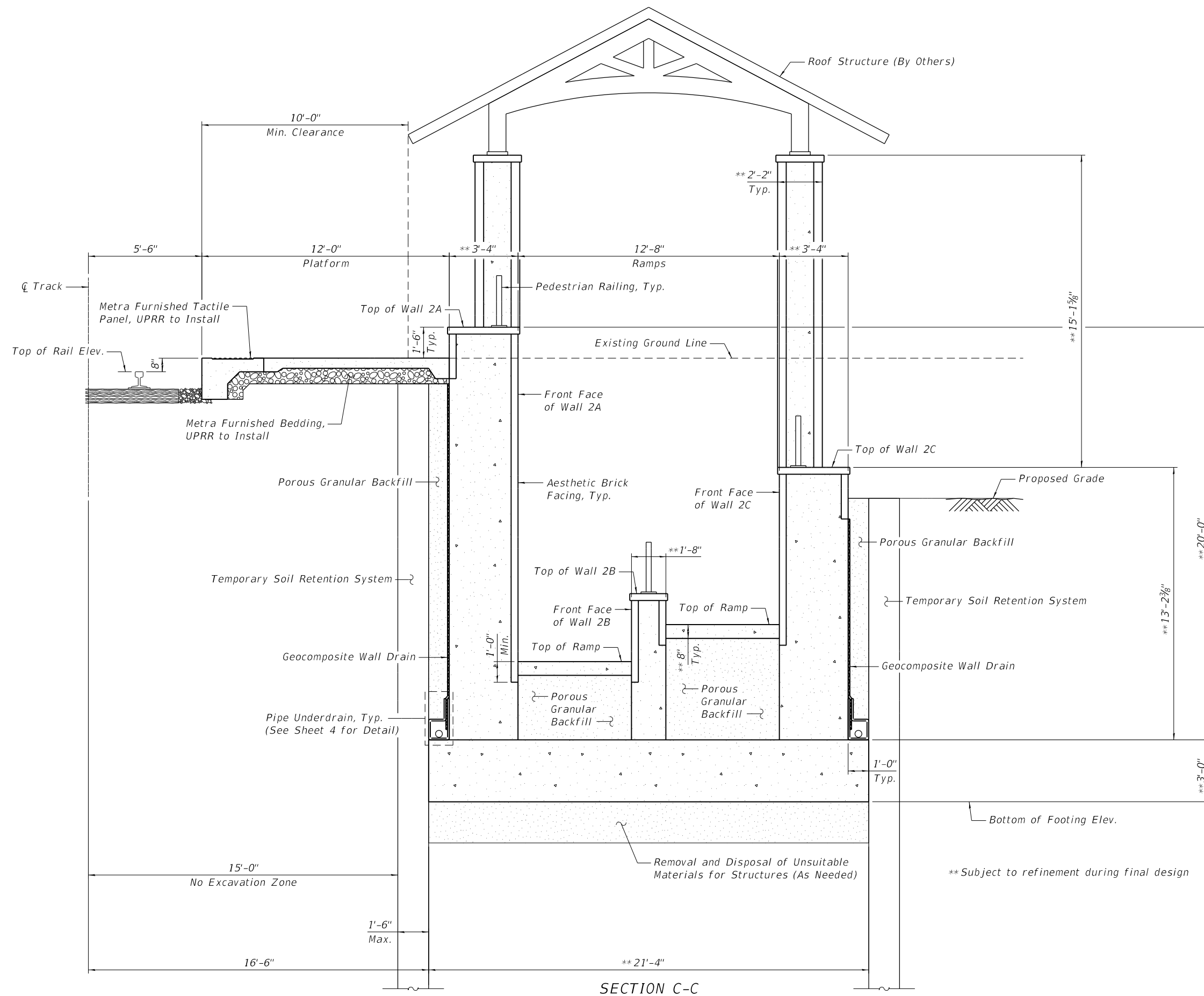
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS II
NORTH TUNNEL WALLS

SHEET 5 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				

ILLINOIS FED. AID PROJECT



GENERAL DETAILS
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74

**CDM
Smith**
listen. think. deliver.

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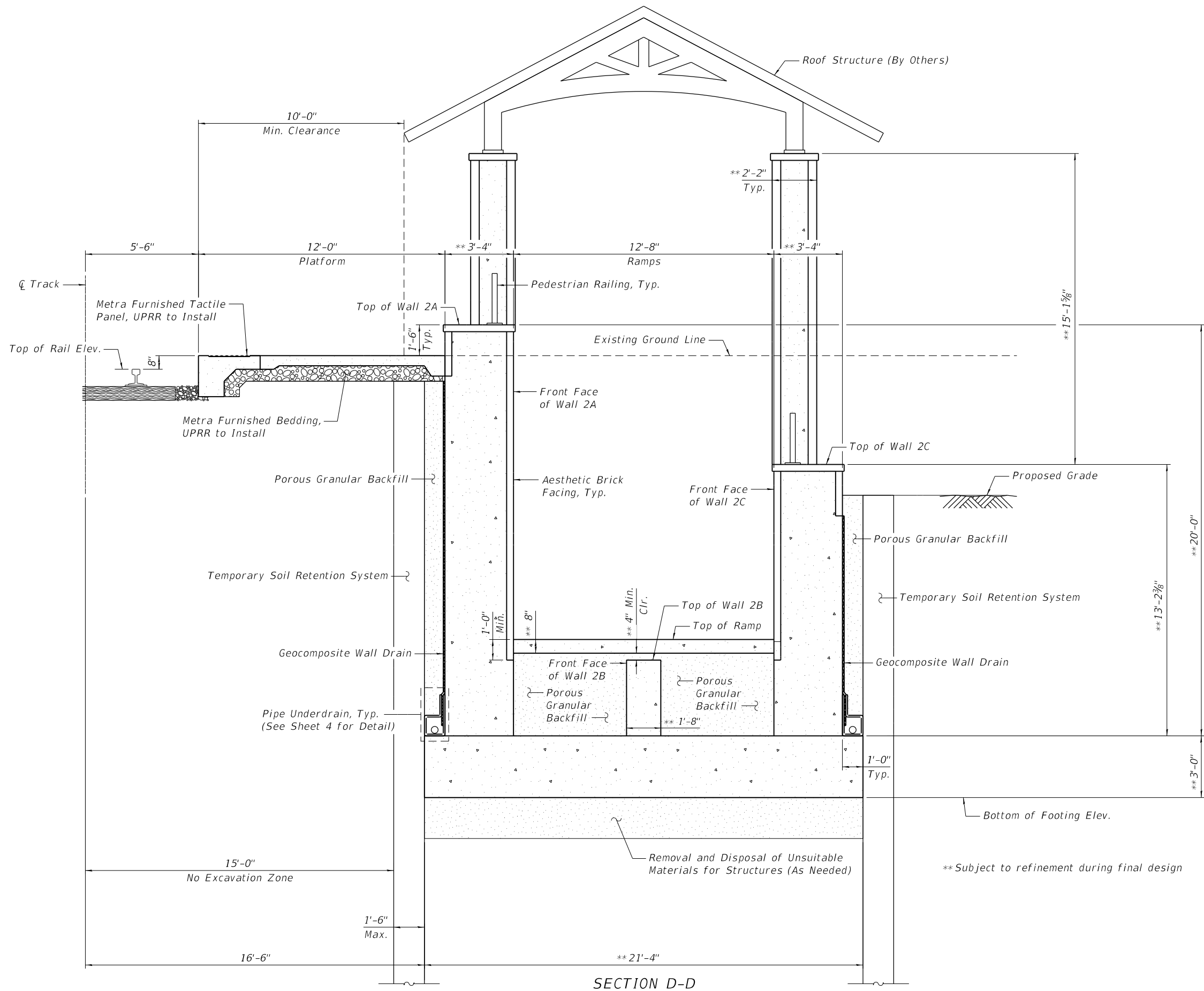
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL DETAILS III NORTH TUNNEL WALLS

SHEET 6 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS		FED. AID PROJECT		

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GENERAL DETAILS
NORTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 803+68.92 TO 804+82.74



USER NAME =	DESIGNED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS IV
NORTH TUNNEL WALLS

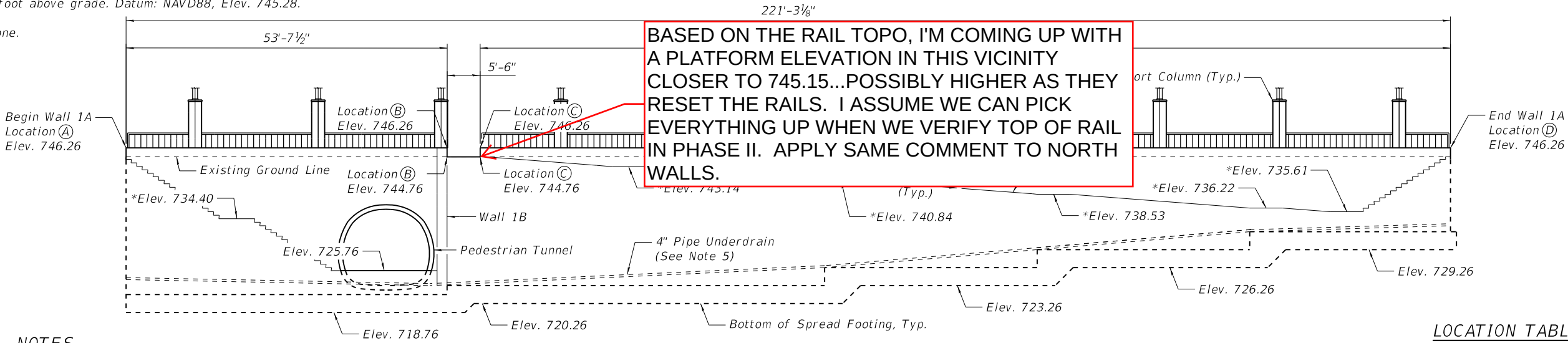
SHEET 7 OF 7 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				

ILLINOIS FED. AID PROJECT

Benchmark: Located at the southeast corner of the intersection of Main Street and Crescent Boulevard, 74.0 feet south of the centerline of Crescent Boulevard and 42.5 feet east of the centerline of Main Street. Monument is a 3.5 inch brass disk set on top of a 3 foot high retaining wall surrounding an electrical control box. Monument is 1.0 foot above grade. Datum: NAVD88, Elev. 745.28.

Existing Structure: None.



NOTES

1. For Section A-A, B-B and C-C, see sheet 4 thru 6.
2. Utility conflicts to be coordinated during final design.
3. Construction and expansion joints shall be spaced no more than 30'-0" and 90'-0" apart, respectively. Joint locations to be determined during final design.
4. Alignment and profile grade for Q Parking Lot will be provided during final design.
5. Drainage details to be coordinated during final design.

SEE SECTION A
DRAWING
COMMENT ON
DIMENSION.

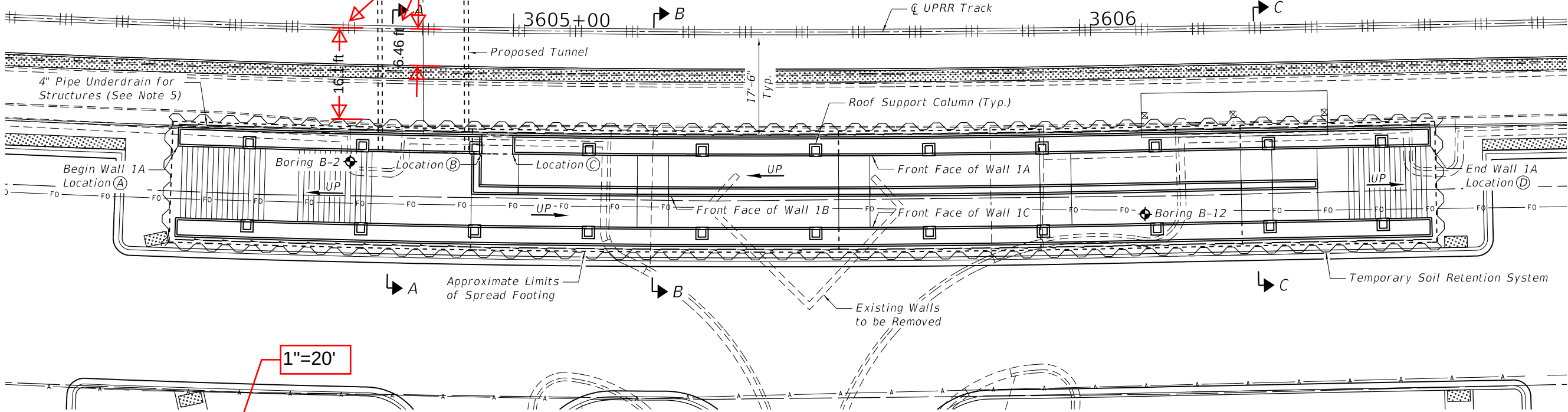
WALL 1A ELEVATION
(Looking at front face of wall, unfolded)

*Top of ramp/stair elevation for landing areas.

LOCATION TABLE

Location	Q UPRR Track	
	Station	Offset**
(A)	3604+41.45	20.83' Rt.
(B)	3604+94.69	20.83' Rt.
(C)	3605+00.16	20.83' Rt.
(D)	3606+61.55	20.83' Rt.

**Offsets measured from Q Track to front face of Wall 1A



LEGEND

- A — Exist. Aerial
- FO — Exist. Fiber Optic
- — Exist. ROW
- — Exist. Railroad Tracks
- — Pipe Underdrain
- — Temp. Soil Retention System
- — Soil Boring Log

DESIGN SPECIFICATIONS

- 2020 AASHTO LRFD Bridge Design Specifications, 9th Edition
- 2022 Manual for Railway Engineering (AREMA)
- 2021 UPRR and BNSF Guidelines for Temporary Shoring
- 2010 Metra Temporary Shoring Guidelines

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

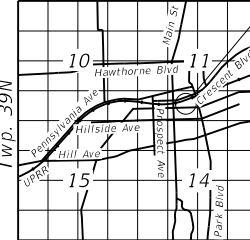
LOADING

Cooper E-80 Railroad Live Load

TOP OF RAIL ELEVATIONS

(Along Q UPRR Track)

Range 10E, 3rd P.M.



Structure Location

GENERAL PLAN AND ELEVATION

SOUTH RETAINING WALLS

GLEN ELLYN METRA STATION

SECTION 18-00082-00-MS

DUPAGE COUNTY

STATION 3604+41.45 TO 3606+61.55

CDM
Smith
listen. think. deliver.

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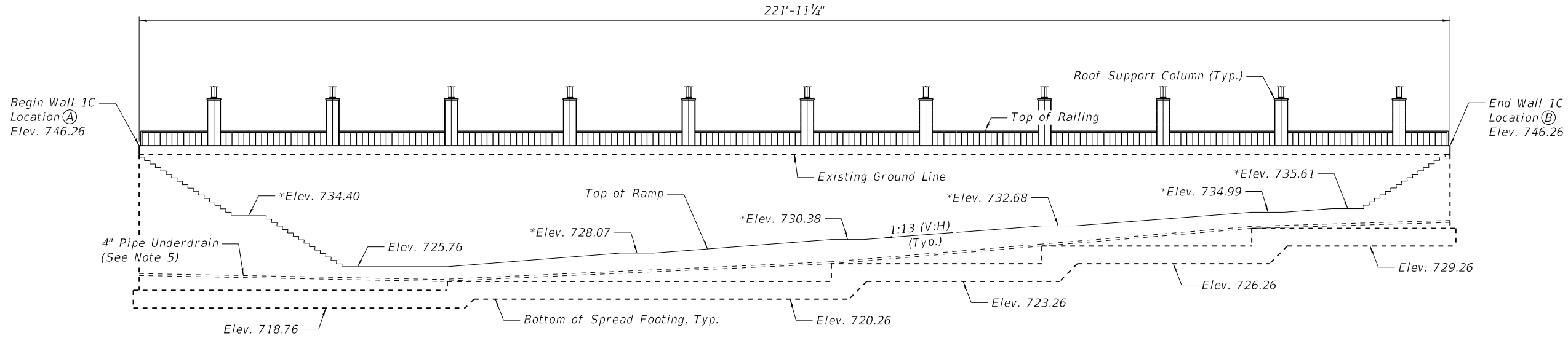
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION I
SOUTH TUNNEL WALLS

SHEET 1 OF 6 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT				

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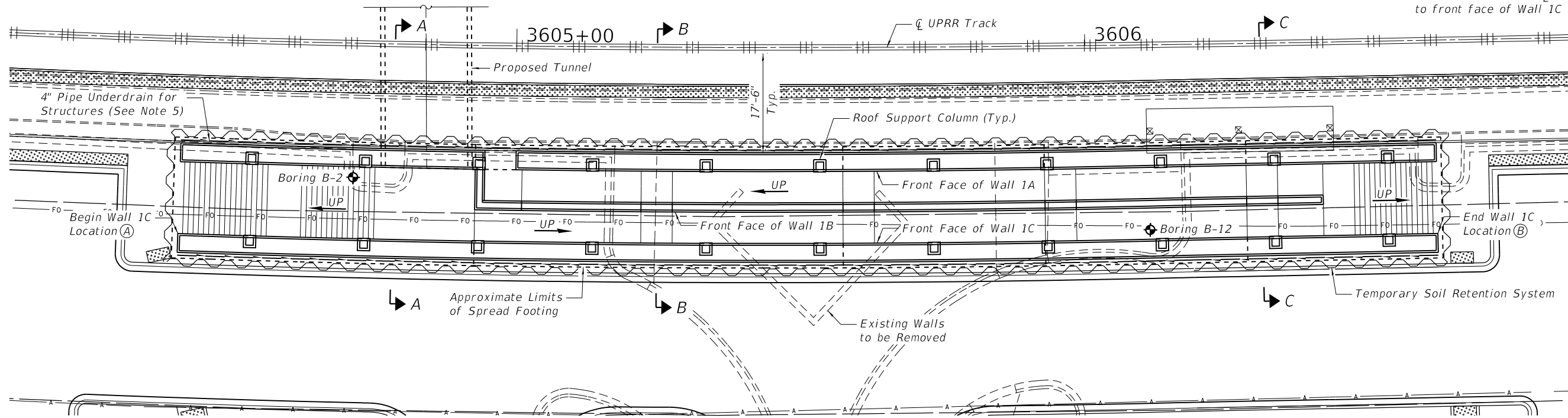
WALL 1C ELEVATION
(Looking at projected view of front face of wall, unfolded)

*Top of ramp/stair elevation for landing areas.

LOCATION TABLE

Location	CL UPRR Track	
	Station	Offset**
(A)	3604+41.45	33.50' Rt.
(B)	3606+61.55	33.50' Rt.

**Offsets measured from CL Track to front face of Wall 1C



PLAN

LEGEND

- A — Exist. Aerial
- FO — Exist. Fiber Optic
- — Exist. ROW
- ||| Exist. Railroad Tracks
- Pipe Underdrain
- Temp. Soil Retention System
- Soil Boring Log

NOTES

1. For Section A-A, B-B and C-C, see sheet 4 thru 6.
2. Utility conflicts to be coordinated during final design.
3. Construction and expansion joints shall be spaced no more than 30'-0" and 90'-0" apart, respectively. Joint locations to be determined during final design.
4. Alignment and profile grade for CL Parking Lot will be provided during final design.
5. Drainage details to be coordinated during final design.

GENERAL PLAN AND ELEVATION

SOUTH RETAINING WALLS

GLEN ELLYN METRA STATION

SECTION 18-00082-00-MS

DUPAGE COUNTY

STATION 3604+41.45 TO 3606+61.55



USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DRAWN -	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION III
SOUTH TUNNEL WALLS**

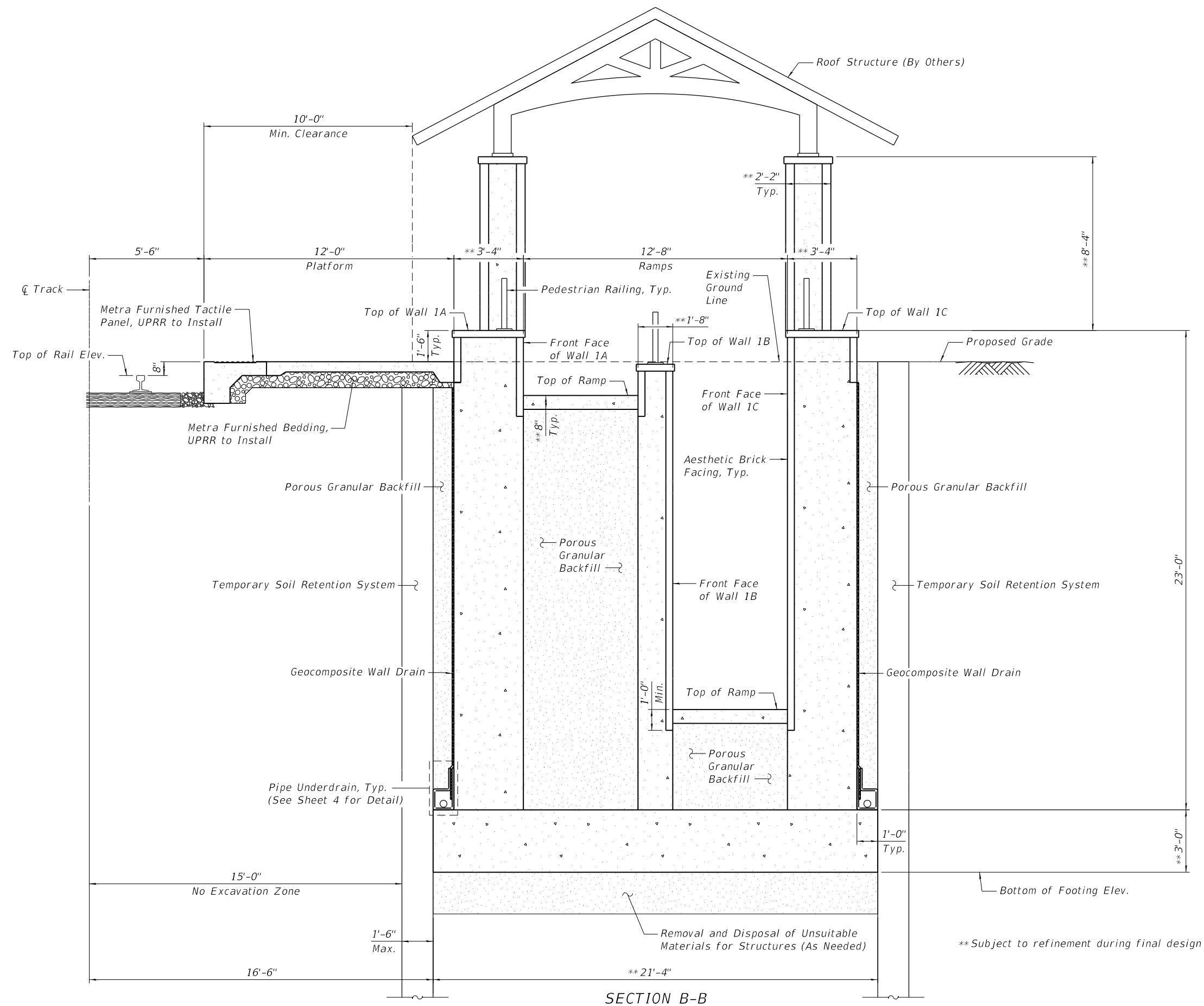
SHEET 3 OF 6 SHEETS

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-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				
ILLINOIS FED. AID PROJECT				

↓



STATION 3604+41.45 TO 3606+61.55



GENERAL DETAILS
SOUTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 3604+41.45 TO 3606+61.55

USER NAME = _____	DESIGNED - _____	REVISED - _____
	CHECKED - _____	REVISED - _____
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

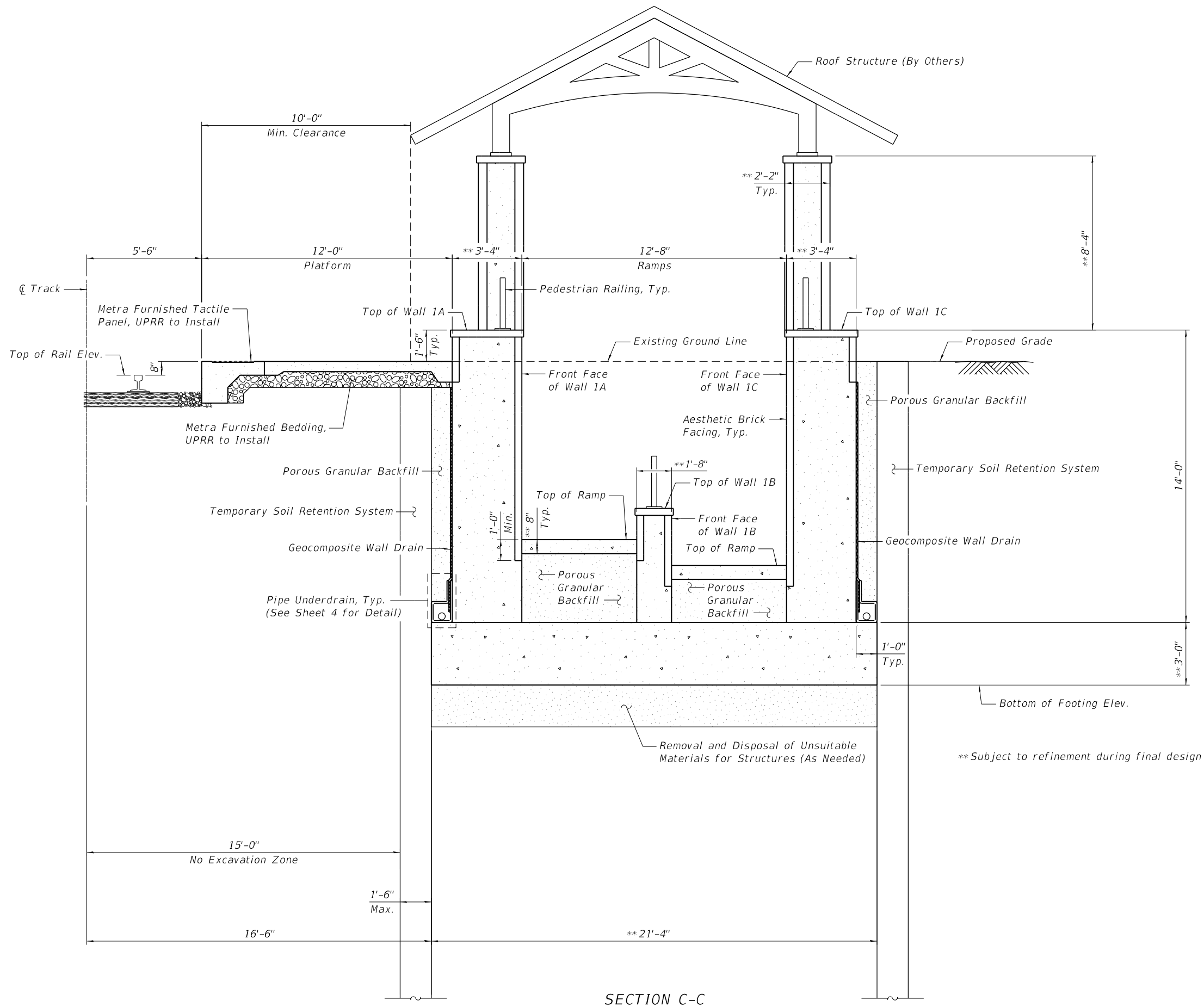
GENERAL DETAILS II

SOUTH TUNNEL WALLS

SHEET 5 OF 6 SHEETS

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
		CONTRACT NO. ____		
ILLINOIS		FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\cdmsmith-a202-pw.bentley.com:pw_pl\Documents\258021\219307\04 Design Services NM_PDR\04 Structural\10 CADD\06 Sheet.dgn
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SECTION C-C

GENERAL DETAILS
SOUTH RETAINING WALLS
GLEN ELLYN METRA STATION
SECTION 18-00082-00-MS
DUPAGE COUNTY
STATION 3604+41.45 TO 3606+61.55



USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS III
SOUTH TUNNEL WALLS

SHEET 6 OF 6 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-00082-00-MS	DUPAGE	-	-
CONTRACT NO. _____				
ILLINOIS FED. AID PROJECT				



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

Meeting 6/13/2023 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Discussion Item
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2023-
626)**

DOC ID: 2023-626

Lead Service Line Replacement Act Primer

Statement of the Issue:

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

Analysis:

Budget Impact:

Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. CIC Memo for Primer on Lead Service Line Replacement Act 6-9-2023
2. IL Compiled Statute 415 ILCS 5/17.12



MEMORANDUM

TO: Capital Improvements Commission

FROM: Rich Daubert, Professional Engineer

DATE: June 9, 2023

RE: Lead Service Line Replacement Act Primer

Introduction

The State of Illinois has developed a compiled statute which relevant to this discussion requires the Village to develop a complete inventory of water services by material type. Ultimately, the State is looking for public water supplies to develop and execute a plan to eliminate all lead service lines within its distribution system including the property owner portion of the applicable lead water service lines. In addition to lead services, any galvanized steel services that are or were downstream of lead material also need to be replaced. For all intents, this means that steel services are all likely subject to replacement. The complied statute is attached for reference.

Subject

The Village has submitted its draft inventory to the State. The final inventory is due April 15, 2024. At the time of this memo, the Village has 8,306 water services in its inventory with a summary of services by material type as follows:

Description	Number
Total Number of Services	8,306
Breakdown	
Copper on Both Sides	4,986
Unknown Material	2,885
Galvanized	186
Lead	173
Iron	73
Plastic	2
Copper Lead Solder	1

Between now and April of 2024, Public Works Utilities staff will continue to acquire as much information as they can as to update the inventory as accurately as possible. The final inventory is due to the State no later than April 15, 2024 and will ultimately set the rate and deadline under which lead and galvanized water services need to be replaced. Staff believes that the inventory will

potentially shake out such that the Village will have to replace 7% of lead/galvanized services annually starting in 2027 with the elimination of lead services to be completed by no later than April 15, 2042.

Utilities and Engineering Staff are coordinating on the development of a plan to eliminate/replace all lead water services in the Village. A draft of the plan is due to the State no later than April 15, 2024. The State allows for the plan to be refined until April 15, 2027.

Staff notes that is has already been ahead of the curve on lead. Staff has been proactively notifying residents about the impacts of lead particularly during construction since 2012 in another community. In addition to notification, extensive testing has been performed when lead services lines are disrupted. These practices were brought to Glen Ellyn and immediately supported by the Village's staff and management teams. We are also stringently following the State's requirements to no longer complete any partial service line replacements as part of projects involving water main replacement. In summary, if we know of and/or come across a lead service line during the conduct of a water main replacement project, we replace the lead services in entirety to the first shut off valve inside of the building.

As we embark upon the development of the lead service line replacement plan, one of the more fundamental matters we are considering is not just complying with the requirement to replace lead services but to also consider replacing water mains where we have a high density of lead services connected to older water main along with overlapping street work. This has several fold benefits including overdue replacement of antiquated water infrastructure, not having to rework water services in the future for future water main replacement, as well as eliminating water main which still feature lead caulked joints, and capitalizing on the street work to absorb pavement rehabilitation costs that would come with standalone water main replacement.

As we work through the development of the plan, we are looking at areas where we have high densities of lead/steel water services along with older water main and planned street work. Unfortunately, we do not have a complete grasp on all the lead/steel services yet and that will continue to be refined as we work through this newer mandate. However, we do have select areas identified which do overlap with forthcoming street work and are planning accordingly. For example, next year's street rehabilitation project includes work on Forest Avenue and Crest Road which has 49 lead or steel services on water main dated to 1923/1925. Staff did include within the 2024 Capital Improvement Plan a placeholder of 3,000 feet of water main replacement which will cover this area. While water main and water service line replacement costs more than just eliminating all lead services in the Village, this is a prudent approach to take when we have modest levels of street work which is the case for these blocks. Staff is accordingly working with AECOM to incorporate water main replacement design work into the street rehabilitation project.

Also, of consideration is that we cannot simply replace all old water main and eliminate all lead water services in an immediate fashion without bearing a tremendous financial impact. We also have limited information on confirmed lead/steel water services. Hence, we need to approach the replacement/elimination of lead services in a strategic and fiscally viable manner while working with what information we do know at the time. This information will be laid out more objectively in future discussions as staff develops the pertinent plan.



Exhibit Depicting Water Service Inventory by Material Type – Forest and Crest of emphasis

Action Requested

Engineering staff is providing this as a primer for a future discussion with the Capital Improvements Commission on the lead service line replacement plan development. The discussion will include staff from the Public Works Utilities Team who will add their expertise to the discussion. It also intends to ensure the CIC is up to speed on the planned addition of water main replacement on Forest Avenue and Crest Road. This information will be discussed with the CIC at its June 13, 2023 Meeting.

Attachments

Compiled Statute 415 ILCS 5/17.12



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Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

(415 ILCS 5/17.12)

Sec. 17.12. Lead service line replacement and notification.

(a) The purpose of this Act is to: (1) require the owners and operators of community water supplies to develop, implement, and maintain a comprehensive water service line material inventory and a comprehensive lead service line replacement plan, provide notice to occupants of potentially affected buildings before any construction or repair work on water mains or lead service lines, and request access to potentially affected buildings before replacing lead service lines; and (2) prohibit partial lead service line replacements, except as authorized within this Section.

(b) The General Assembly finds and declares that:

(1) There is no safe level of exposure to heavy metal lead, as found by the United States Environmental Protection Agency and the Centers for Disease Control and Prevention.

(2) Lead service lines can convey this harmful substance to the drinking water supply.

(3) According to the Illinois Environmental Protection Agency's 2018 Service Line Material Inventory, the State of Illinois is estimated to have over 680,000 lead-based service lines still in operation.

(4) The true number of lead service lines is not fully known because Illinois lacks an adequate inventory of lead service lines.

(5) For the general health, safety and welfare of its residents, all lead service lines in Illinois should be disconnected from the drinking water supply, and the State's drinking water supply.

(c) In this Section:

"Advisory Board" means the Lead Service Line Replacement Advisory Board created under subsection (x).

"Community water supply" has the meaning ascribed to it in Section 3.145 of this Act.

"Department" means the Department of Public Health.

"Emergency repair" means any unscheduled water main, water service, or water valve repair or replacement that results from failure or accident.

"Fund" means the Lead Service Line Replacement Fund created

under subsection (bb).

"Lead service line" means a service line made of lead or service line connected to a lead pigtail, lead gooseneck, or other lead fitting.

"Material inventory" means a water service line material inventory developed by a community water supply under this Act.

"Noncommunity water supply" has the meaning ascribed to it in Section 3.145 of the Environmental Protection Act.

"NSF/ANSI Standard" means a water treatment standard developed by NSF International.

"Partial lead service line replacement" means replacement of only a portion of a lead service line.

"Potentially affected building" means any building that is provided water service through a service line that is either a lead service line or a suspected lead service line.

"Public water supply" has the meaning ascribed to it in Section 3.365 of this Act.

"Service line" means the piping, tubing, and necessary appurtenances acting as a conduit from the water main or source of potable water supply to the building plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter.

"Suspected lead service line" means a service line that a community water supply finds more likely than not to be made of lead after completing the requirements under paragraphs (2) through (5) of subsection (h).

"Small system" means a community water supply that regularly serves water to 3,300 or fewer persons.

(d) An owner or operator of a community water supply shall:

(1) develop an initial material inventory by April 15, 2022 and electronically submit by April 15, 2023 an updated material inventory electronically to the Agency; and

(2) deliver a complete material inventory to the Agency no later than April 15, 2024, or such time as required by federal law, whichever is sooner. The complete inventory shall report the composition of all service lines in the community water supply's distribution system.

(e) The Agency shall review and approve the final material inventory submitted to it under subsection (d).

(f) If a community water supply does not submit a complete inventory to the Agency by April 15, 2024 under paragraph (2) of subsection (d), the community water supply may apply for an extension to the Agency no less than 3 months prior to the due date. The Agency shall develop criteria for granting material inventory extensions. When considering requests for extension, the Agency shall, at a minimum, consider:

(1) the number of service connections in a water supply; and

(2) the number of service lines of an unknown material composition.

(g) A material inventory prepared for a community water supply under subsection (d) shall identify:

(1) the total number of service lines connected to the community water supply's distribution system;

(2) the materials of construction of each service line connected to the community water supply's distribution system;

(3) the number of suspected lead service lines that were newly identified in the material inventory for the community water supply after the community water supply last submitted a service line inventory to the Agency; and

(4) the number of suspected or known lead service

lines that were replaced after the community water supply last submitted a service line inventory to the Agency, and the material of the service line that replaced each lead service line.

When identifying the materials of construction under paragraph (2) of this subsection, the owner or operator of the community water supply shall to the best of the owner's or operator's ability identify the type of construction material used on the customer's side of the curb box, meter, or other line of demarcation and the community water supply's side of the curb box, meter, or other line of demarcation.

(h) In completing a material inventory under subsection (d), the owner or operator of a community water supply shall:

(1) prioritize inspections of high-risk areas identified by the community water supply and inspections of high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, and confirm service line materials in those areas and at those facilities;

(2) review historical documentation, such as construction logs or cards, as-built drawings, purchase orders, and subdivision plans, to determine service line material construction;

(3) when conducting distribution system maintenance, visually inspect service lines and document materials of construction;

(4) identify any time period when the service lines being connected to its distribution system were primarily lead service lines, if such a time period is known or suspected; and

(5) discuss service line repair and installation with its employees, contractors, plumbers, other workers who worked on service lines connected to its distribution system, or all of the above.

(i) The owner or operator of each community water supply shall maintain records of persons who refuse to grant access to the interior of a building for purposes of identifying the materials of construction of a service line. If a community water supply has been denied access on the property or to the interior of a building for that reason, then the community water supply shall attempt to identify the service line as a suspected lead service line, unless documentation is provided showing otherwise.

(j) If a community water supply identifies a lead service line connected to a building, the owner or operator of the community water supply shall attempt to notify the owner of the building and all occupants of the building of the existence of the lead service line within 15 days after identifying the lead service line, or as soon as is reasonably possible thereafter. Individual written notice shall be given according to the provisions of subsection (jj).

(k) An owner or operator of a community water supply has no duty to include in the material inventory required under subsection (d) information about service lines that are physically disconnected from a water main in its distribution system.

(l) The owner or operator of each community water supply shall post on its website a copy of the most recently submitted material inventory or alternatively may request that the Agency post a copy of that material inventory on the Agency's website.

(m) Nothing in this Section shall be construed to require service lines to be unearthed for the sole purpose of inventorying.

(n) When an owner or operator of a community water supply

awards a contract under this Section, the owner or operator shall make a good faith effort to use contractors and vendors owned by minority persons, women, and persons with a disability, as those terms are defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act, for not less than 20% of the total contracts, provided that:

(1) contracts representing at least 11% of the total projects shall be awarded to minority-owned businesses, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act;

(2) contracts representing at least 7% of the total projects shall be awarded to women-owned businesses, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act; and

(3) contracts representing at least 2% of the total projects shall be awarded to businesses owned by persons with a disability.

Owners or operators of a community water supply are encouraged to divide projects, whenever economically feasible, into contracts of smaller size that ensure small business contractors or vendors shall have the ability to qualify in the applicable bidding process, when determining the ability to deliver on a given contract based on scope and size, as a responsible and responsive bidder.

When a contractor or vendor submits a bid or letter of intent in response to a request for proposal or other bid submission, the contractor or vendor shall include with its responsive documents a utilization plan that shall address how compliance with applicable good faith requirements set forth in this subsection shall be addressed.

Under this subsection, "good faith effort" means a community water supply has taken all necessary steps to comply with the goals of this subsection by complying with the following:

(1) Soliciting through reasonable and available means the interest of a business, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act, that have the capability to perform the work of the contract. The community water supply must solicit this interest within sufficient time to allow certified businesses to respond.

(2) Providing interested certified businesses with adequate information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the solicitation.

(3) Meeting in good faith with interested certified businesses that have submitted bids.

(4) Effectively using the services of the State, minority or women community organizations, minority or women contractor groups, local, State, and federal minority or women business assistance offices, and other organizations to provide assistance in the recruitment and placement of certified businesses.

(5) Making efforts to use appropriate forums for purposes of advertising subcontracting opportunities suitable for certified businesses.

The diversity goals defined in this subsection can be met through direct award to diverse contractors and through the use of diverse subcontractors and diverse vendors to contracts.

(o) An owner or operator of a community water supply shall collect data necessary to ensure compliance with subsection (n) no less than semi-annually and shall include progress toward compliance of subsection (n) in the owner or operator's report

required under subsection (t-5). The report must include data on vendor and employee diversity, including data on the owner's or operator's implementation of subsection (n).

(p) Every owner or operator of a community water supply that has known or suspected lead service lines shall:

(1) create a plan to:

(A) replace each lead service line connected to its distribution system; and

(B) replace each galvanized service line connected to its distribution system, if the galvanized service line is or was connected downstream to lead piping; and

(2) electronically submit, by April 15, 2024 its initial lead service line replacement plan to the Agency;

(3) electronically submit by April 15 of each year after 2024 until April 15, 2027 an updated lead service line replacement plan to the Agency for review; the updated replacement plan shall account for changes in the number of lead service lines or unknown service lines in the material inventory described in subsection (d);

(4) electronically submit by April 15, 2027 a complete and final replacement plan to the Agency for approval; the complete and final replacement plan shall account for all known and suspected lead service lines documented in the final material inventory described under paragraph (3) of subsection (d); and

(5) post on its website a copy of the plan most recently submitted to the Agency or may request that the Agency post a copy of that plan on the Agency's website.

(q) Each plan required under paragraph (1) of subsection (p) shall include the following:

(1) the name and identification number of the community water supply;

(2) the total number of service lines connected to the distribution system of the community water supply;

(3) the total number of suspected lead service lines connected to the distribution system of the community water supply;

(4) the total number of known lead service lines connected to the distribution system of the community water supply;

(5) the total number of lead service lines connected to the distribution system of the community water supply that have been replaced each year beginning in 2020;

(6) a proposed lead service line replacement schedule that includes one-year, 5-year, 10-year, 15-year, 20-year, 25-year, and 30-year goals;

(7) an analysis of costs and financing options for replacing the lead service lines connected to the community water supply's distribution system, which shall include, but shall not be limited to:

(A) a detailed accounting of costs associated with replacing lead service lines and galvanized lines that are or were connected downstream to lead piping;

(B) measures to address affordability and prevent service shut-offs for customers or ratepayers; and

(C) consideration of different scenarios for structuring payments between the utility and its customers over time; and

(8) a plan for prioritizing high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, as well as high-risk areas identified by the community water supply;

Initial
Plan Due

4/15/2024

Annual updates

Final Plan →
4/15/2027

Plan Notice
&
Public Comment

(9) a map of the areas where lead service lines are expected to be found and the sequence with which those areas will be inventoried and lead service lines replaced;

(10) measures for how the community water supply will inform the public of the plan and provide opportunity for public comment; and

(11) measures to encourage diversity in hiring in the workforce required to implement the plan as identified under subsection (n).

(r) The Agency shall review final plans submitted to it under subsection (p). The Agency shall approve a final plan if the final plan includes all of the elements set forth under subsection (q) and the Agency determines that:

(1) the proposed lead service line replacement schedule set forth in the plan aligns with the timeline requirements set forth under subsection (v);

(2) the plan prioritizes the replacement of lead service lines that provide water service to high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, and high-risk areas identified by the community water supply;

(3) the plan includes analysis of cost and financing options; and

(4) the plan provides documentation of public review.

(s) An owner or operator of a community water supply has no duty to include in the plans required under subsection (p) information about service lines that are physically disconnected from a water main in its distribution system.

(t) If a community water supply does not deliver a complete plan to the Agency by April 15, 2027, the community water supply may apply to the Agency for an extension no less than 3 months prior to the due date. The Agency shall develop criteria for granting plan extensions. When considering requests for extension, the Agency shall, at a minimum, consider:

(1) the number of service connections in a water supply; and

(2) the number of service lines of an unknown material composition.

(t-5) After the Agency has approved the final replacement plan described in subsection (p), the owner or operator of a community water supply shall submit a report detailing progress toward plan goals to the Agency for its review. The report shall be submitted annually for the first 10 years, and every 3 years thereafter until all lead service lines have been replaced. Reports under this subsection shall be published in the same manner described in subsection (l). The report shall include at least the following information as it pertains to the preceding reporting period:

(1) The number of lead service lines replaced and the average cost of lead service line replacement.

(2) Progress toward meeting hiring requirements as described in subsection (n) and subsection (o).

(3) The percent of customers electing a waiver offered, as described in subsections (ii) and (jj), among those customers receiving a request or notification to perform a lead service line replacement.

(4) The method or methods used by the community water supply to finance lead service line replacement.

(u) Notwithstanding any other provision of law, in order to provide for costs associated with lead service line remediation and replacement, the corporate authorities of a municipality may, by ordinance or resolution by the corporate authorities, exercise authority provided in Section 27-5 et seq. of the

Property Tax Code and Sections 8-3-1, 8-11-1, 8-11-5, 8-11-6, 9-1-1 et seq., 9-3-1 et seq., 9-4-1 et seq., 11-131-1, and 11-150-1 of the Illinois Municipal Code. Taxes levied for this purpose shall be in addition to taxes for general purposes authorized under Section 8-3-1 of the Illinois Municipal Code and shall be included in the taxing district's aggregate extension for the purposes of Division 5 of Article 18 of the Property Tax Code.

(v) Every owner or operator of a community water supply shall replace all known lead service lines, subject to the requirements of subsection (ff), according to the following replacement rates and timelines to be calculated from the date of submission of the final replacement plan to the Agency:

(1) A community water supply reporting 1,200 or fewer lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 7% of the amount described in the final inventory, with a timeline of up to 15 years for completion.

(2) A community water supply reporting more than 1,200 but fewer than 5,000 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 6% of the amount described in the final inventory, with a timeline of up to 17 years for completion.

(3) A community water supply reporting more than 4,999 but fewer than 10,000 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 5% of the amount described in the final inventory, with a timeline of up to 20 years for completion.

(4) A community water supply reporting more than 9,999 but fewer than 99,999 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 3% of the amount described in the final inventory, with a timeline of up to 34 years for completion.

(5) A community water supply reporting more than 99,999 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 2% of the amount described in the final inventory, with a timeline of up to 50 years for completion.

(w) A community water supply may apply to the Agency for an extension to the replacement timelines described in paragraphs (1) through (5) of subsection (v). The Agency shall develop criteria for granting replacement timeline extensions. When considering requests for timeline extensions, the Agency shall, at a minimum, consider:

(1) the number of service connections in a water supply; and

(2) unusual circumstances creating hardship for a community.

The Agency may grant one extension of additional time equal to not more than 20% of the original replacement timeline, except in situations of extreme hardship in which the Agency may consider a second additional extension equal to not more than 10% of the original replacement timeline.

Replacement rates and timelines shall be calculated from the date of submission of the final plan to the Agency.

(x) The Lead Service Line Replacement Advisory Board is created within the Agency. The Advisory Board shall convene within 120 days after the effective date of this amendatory Act of the 102nd General Assembly.

The Advisory Board shall consist of at least 28 voting

7% of
300 = 21

members, as follows:

- (1) the Director of the Agency, or his or her designee, who shall serve as chairperson;
- (2) the Director of Revenue, or his or her designee;
- (3) the Director of Public Health, or his or her designee;
- (4) fifteen members appointed by the Agency as follows:

- (A) one member representing a statewide organization of municipalities as authorized by Section 1-8-1 of the Illinois Municipal Code;

- (B) two members who are mayors representing municipalities located in any county south of the southernmost county represented by one of the 10 largest municipalities in Illinois by population, or their respective designees;

- (C) two members who are representatives from public health advocacy groups;

- (D) two members who are representatives from publicly-owned water utilities;

- (E) one member who is a representative from a public utility as defined under Section 3-105 of the Public Utilities Act that provides water service in the State of Illinois;

- (F) one member who is a research professional employed at an Illinois academic institution and specializing in water infrastructure research;

- (G) two members who are representatives from nonprofit civic organizations;

- (H) one member who is a representative from a statewide organization representing environmental organizations;

- (I) two members who are representatives from organized labor; and

- (J) one member representing an environmental justice organization; and

- (5) ten members who are the mayors of the 10 largest municipalities in Illinois by population, or their respective designees.

No less than 10 of the 28 voting members shall be persons of color, and no less than 3 shall represent communities defined or self-identified as environmental justice communities.

Advisory Board members shall serve without compensation, but may be reimbursed for necessary expenses incurred in the performance of their duties from funds appropriated for that purpose. The Agency shall provide administrative support to the Advisory Board.

The Advisory Board shall meet no less than once every 6 months.

(y) The Advisory Board shall have, at a minimum, the following duties:

- (1) advising the Agency on best practices in lead service line replacement;

- (2) reviewing the progress of community water supplies toward lead service line replacement goals;

- (3) advising the Agency on other matters related to the administration of the provisions of this Section;

- (4) advising the Agency on the integration of existing lead service line replacement plans with any statewide plan; and

- (5) providing technical support and practical expertise in general.

- (z) Within 18 months after the effective date of this

amendatory Act of the 102nd General Assembly, the Advisory Board shall deliver a report of its recommendations to the Governor and the General Assembly concerning opportunities for dedicated, long-term revenue options for funding lead service line replacement. In submitting recommendations, the Advisory Board shall consider, at a minimum, the following:

- (1) the sufficiency of various revenue sources to adequately fund replacement of all lead service lines in Illinois;

- (2) the financial burden, if any, on households falling below 150% of the federal poverty limit;

- (3) revenue options that guarantee low-income households are protected from rate increases;

- (4) an assessment of the ability of community water supplies to assess and collect revenue;

- (5) variations in financial resources among individual households within a service area; and

- (6) the protection of low-income households from rate increases.

(aa) Within 10 years after the effective date of this amendatory Act of the 102nd General Assembly, the Advisory Board shall prepare and deliver a report to the Governor and General Assembly concerning the status of all lead service line replacement within the State.

(bb) The Lead Service Line Replacement Fund is created as a special fund in the State treasury to be used by the Agency for the purposes provided under this Section. The Fund shall be used exclusively to finance and administer programs and activities specified under this Section and listed under this subsection.

The objective of the Fund is to finance activities associated with identifying and replacing lead service lines, build Agency capacity to oversee the provisions of this Section, and provide related assistance for the activities listed under this subsection.

The Agency shall be responsible for the administration of the Fund and shall allocate moneys on the basis of priorities established by the Agency through administrative rule. On July 1, 2022 and on July 1 of each year thereafter, the Agency shall determine the available amount of resources in the Fund that can be allocated to the activities identified under this Section and shall allocate the moneys accordingly.

Notwithstanding any other law to the contrary, the Lead Service Line Replacement Fund is not subject to sweeps, administrative charge-backs, or any other fiscal maneuver that would in any way transfer any amounts from the Lead Service Line Replacement Fund into any other fund of the State.

(cc) Within one year after the effective date of this amendatory Act of the 102 General Assembly, the Agency shall design rules for a program for the purpose of administering lead service line replacement funds. The rules must, at minimum, contain:

- (1) the process by which community water supplies may apply for funding; and

- (2) the criteria for determining unit of local government eligibility and prioritization for funding, including the prevalence of low-income households, as measured by median household income, the prevalence of lead service lines, and the prevalence of water samples that demonstrate elevated levels of lead.

(dd) Funding under subsection (cc) shall be available for costs directly attributable to the planning, design, or construction directly related to the replacement of lead service lines and restoration of property.

Funding shall not be used for the general operating expenses

of a municipality or community water supply.

(ee) An owner or operator of any community water supply receiving grant funding under subsection (cc) shall bear the entire expense of full lead service line replacement for all lead service lines in the scope of the grant.

(ff) When replacing a lead service line, the owner or operator of the community water supply shall replace the service line in its entirety, including, but not limited to, any portion of the service line (i) running on private property and (ii) within the building's plumbing at the first shut-off valve. Partial lead service line replacements are expressly prohibited. Exceptions shall be made under the following circumstances:

Defn?

(1) In the event of an emergency repair that affects a lead service line or a suspected lead service line, a community water supply must contact the building owner to begin the process of replacing the entire service line. If the building owner is not able to be contacted or the building owner or occupant refuses to grant access and permission to replace the entire service line at the time of the emergency repair, then the community water supply may perform a partial lead service line replacement. Where an emergency repair on a service line constructed of lead or galvanized steel pipe results in a partial service line replacement, the water supply responsible for commencing the repair shall perform the following:

(A) Notify the building's owner or operator and the resident or residents served by the lead service line in writing that a repair has been completed. The notification shall include, at a minimum:

(i) a warning that the work may result in sediment, possibly containing lead, in the buildings water supply system;

(ii) information concerning practices for preventing the consumption of any lead in drinking water, including a recommendation to flush water distribution pipe during and after the completion of the repair or replacement work and to clean faucet aerator screens; and

(iii) information regarding the dangers of lead to young children and pregnant women.

(B) Provide filters for at least one fixture supplying potable water for consumption. The filter must be certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate. The filter must be provided until such time that the remaining portions of the service line have been replaced with a material approved by the Department or a waiver has been issued under subsection (ii).

(C) Replace the remaining portion of the lead service line within 30 days of the repair, or 120 days in the event of weather or other circumstances beyond reasonable control that prohibits construction. If a complete lead service line replacement cannot be made within the required period, the community water supply responsible for commencing the repair shall notify the Department in writing, at a minimum, of the following within 24 hours of the repair:

(i) an explanation of why it is not feasible to replace the remaining portion of the lead service line within the allotted time; and

(ii) a timeline for when the remaining portion of the lead service line will be replaced.

(D) If complete repair of a lead service line

cannot be completed due to denial by the property owner, the community water supply commencing the repair shall request the affected property owner to sign a waiver developed by the Department. If a property owner of a nonresidential building or residence operating as rental properties denies a complete lead service line replacement, the property owner shall be responsible for installing and maintaining point-of-use filters certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate at all fixtures intended to supply water for the purposes of drinking, food preparation, or making baby formula. The filters shall continue to be supplied by the property owner until such time that the property owner has affected the remaining portions of the lead service line to be replaced.

(E) Document any remaining lead service line, including a portion on the private side of the property, in the community water supply's distribution system materials inventory required under subsection (d).

For the purposes of this paragraph (1), written notice shall be provided in the method and according to the provisions of subsection (jj).

(2) Lead service lines that are physically disconnected from the distribution system are exempt from this subsection.

(gg) Except as provided in subsection (hh), on and after January 1, 2022, when the owner or operator of a community water supply replaces a water main, the community water supply shall identify all lead service lines connected to the water main and shall replace the lead service lines by:

(1) identifying the material or materials of each lead service line connected to the water main, including, but not limited to, any portion of the service line (i) running on private property and (ii) within the building plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter;

(2) in conjunction with replacement of the water main, replacing any and all portions of each lead service line connected to the water main that are composed of lead; and

(3) if a property owner or customer refuses to grant access to the property, following prescribed notice provisions as outlined in subsection (ff).

If an owner of a potentially affected building intends to replace a portion of a lead service line or a galvanized service line and the galvanized service line is or was connected downstream to lead piping, then the owner of the potentially affected building shall provide the owner or operator of the community water supply with notice at least 45 days before commencing the work. In the case of an emergency repair, the owner of the potentially affected building must provide filters for each kitchen area that are certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate. If the owner of the potentially affected building notifies the owner or operator of the community water supply that replacement of a portion of the lead service line after the emergency repair is completed, then the owner or operator of the community water supply shall replace the remainder of the lead service line within 30 days after completion of the emergency repair. A community water supply may take up to 120 days if necessary due to weather conditions. If a replacement takes longer than 30 days, filters provided by the owner of the potentially affected building must

Emergency
only

be replaced in accordance with the manufacturer's recommendations. Partial lead service line replacements by the owners of potentially affected buildings are otherwise prohibited.

(hh) For municipalities with a population in excess of 1,000,000 inhabitants, the requirements of subsection (gg) shall commence on January 1, 2023.

(ii) At least 45 days before conducting planned lead service line replacement, the owner or operator of a community water supply shall, by mail, attempt to contact the owner of the potentially affected building serviced by the lead service line to request access to the building and permission to replace the lead service line in accordance with the lead service line replacement plan. If the owner of the potentially affected building does not respond to the request within 15 days after the request is sent, the owner or operator of the community water supply shall attempt to post the request on the entrance of the potentially affected building.

If the owner or operator of a community water supply is unable to obtain approval to access and replace a lead service line, the owner or operator of the community water supply shall request that the owner of the potentially affected building sign a waiver. The waiver shall be developed by the Department and should be made available in the owner's language. If the owner of the potentially affected building refuses to sign the waiver or fails to respond to the community water supply after the community water supply has complied with this subsection, then the community water supply shall notify the Department in writing within 15 working days.

(jj) When replacing a lead service line or repairing or replacing water mains with lead service lines or partial lead service lines attached to them, the owner or operator of a community water supply shall provide the owner of each potentially affected building that is serviced by the affected lead service lines or partial lead service lines, as well as the occupants of those buildings, with an individual written notice. The notice shall be delivered by mail or posted at the primary entranceway of the building. The notice may, in addition, be electronically mailed. Written notice shall include, at a minimum, the following:

- (1) a warning that the work may result in sediment, possibly containing lead from the service line, in the building's water;

- (2) information concerning the best practices for preventing exposure to or risk of consumption of lead in drinking water, including a recommendation to flush water lines during and after the completion of the repair or replacement work and to clean faucet aerator screens; and

- (3) information regarding the dangers of lead exposure to young children and pregnant women.

When the individual written notice described in the first paragraph of this subsection is required as a result of planned work other than the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice not less than 14 days before work begins. When the individual written notice described in the first paragraph of this subsection is required as a result of emergency repairs other than the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice at the time the work is initiated. When the individual written notice described in the first paragraph of this subsection is required as a result of the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice at the time the work is

initiated.

The notifications required under this subsection must contain the following statement in the Spanish, Polish, Chinese, Tagalog, Arabic, Korean, German, Urdu, and Gujarati: "This notice contains important information about your water service and may affect your rights. We encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice."

An owner or operator of a community water supply that is required under this subsection to provide an individual written notice to the owner and occupant of a potentially affected building that is a multi-dwelling building may satisfy that requirement and the requirements of this subsection regarding notification to non-English speaking customers by posting the required notice on the primary entranceway of the building and at the location where the occupant's mail is delivered as reasonably as possible.

When this subsection would require the owner or operator of a community water supply to provide an individual written notice to the entire community served by the community water supply or would require the owner or operator of a community water supply to provide individual written notices as a result of emergency repairs or when the community water supply that is required to comply with this subsection is a small system, the owner or operator of the community water supply may provide the required notice through local media outlets, social media, or other similar means in lieu of providing the individual written notices otherwise required under this subsection.

No notifications are required under this subsection for work performed on water mains that are used to transmit treated water between community water supplies and properties that have no service connections.

(kk) No community water supply that sells water to any wholesale or retail consecutive community water supply may pass on any costs associated with compliance with this Section to consecutive systems.

(ll) To the extent allowed by law, when a community water supply replaces or installs a lead service line in a public right-of-way or enters into an agreement with a private contractor for replacement or installation of a lead service line, the community water supply shall be held harmless for all damage to property when replacing or installing the lead service line. If dangers are encountered that prevent the replacement of the lead service line, the community water supply shall notify the Department within 15 working days of why the replacement of the lead service line could not be accomplished.

(mm) The Agency may propose to the Board, and the Board may adopt, any rules necessary to implement and administer this Section. The Department may adopt rules necessary to address lead service lines attached to noncommunity water supplies.

(nn) Notwithstanding any other provision in this Section, no requirement in this Section shall be construed as being less stringent than existing applicable federal requirements.

(oo) All lead service line replacements financed in whole or in part with funds obtained under this Section shall be considered public works for purposes of the Prevailing Wage Act. (Source: P.A. 102-613, eff. 1-1-22.)





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

Meeting 6/13/2023 7:00 PM
Department: Public Works
Department Head: Dave Buckley
Category: Report
Prepared By: Rich Daubert

**AGENDA ITEM (ID # 2023-
627)**

DOC ID: 2023-627

Engineering Project Activity Report Dated June 9, 2023

Statement of the Issue:

The Public Works Engineering Division Project Activity Report Dated June 9, 2023 is attached hereto for review by the Capital Improvements Commission

Analysis:

Budget Impact:

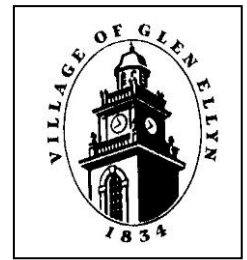
Contribution to Strategic Plan (if applicable)

Action Requested:

Attachments:

1. Engineering Project Report 6-9-23

June 9, 2023



ENGINEERING DIVISION PROJECT ACTIVITY REPORT

CONSTRUCTION PROJECTS IN PROGRESS

CBD STREETScape AND UTILITY IMPROVEMENTS – Phase 1 – Contractor: A Lamp Concrete Contractors

(Project No. 15006; Value of Construction Contract = \$5,704,293)

The final roadway reconstruction work on Hillside Avenue east and west of Main Street, is nearly complete. The work was divided into two stages to maintain northbound Main street traffic during the conduct of the work. Recently completed Stage 1 involved Hillside east of Main, including the east half of the Hillside/Main intersection. Currently underway Stage 2 involves Hillside west of Main and the west half of the intersection.

Completion of the Stage 2 work, including the brick paver crosswalks, is targeted for June 14th, such that the intersection and roadways can be open for the June 16th Country Road music event to occur along Main Street. There will be various minor items including restoration and punch list items, but the Phase 1 streetscape construction should then be substantially complete.

Over the past few weeks the ground cover plantings and irrigation system were also completed. The plantings needed to wait until there was no longer a risk of an overnight freeze. Unfortunately, this year we jumped right into a drought with some early 90-degree days which has been a challenge for new plantings and parkway sod. That said, the plantings remain the responsibility of the contractor at this point, and there is a one-year warranty, anything that does not survive the current period will be replaced at the cost of the contractor. Note that the plantings along Main Street adjacent to the Apex 400 building are still to be added by the Developer in accordance with their approved permit plans. Public Works staff has advised the Developer and other pertinent staff of this matter.



Reconstruction of Hillside Avenue east of Main Street, April 2023

CBD STREETSCAPE AND UTILITY IMPROVEMENTS – Phase 2-3 – Contractor: A Lamp Concrete Contractors

(Project No. 15006; Value of Construction Contract = \$16,298,499)

Construction on Phase 2-3 of the downtown streetscape project has continued largely without any lost days due to the dry weather. The most significant challenge has remained coordinating with the multiple Nicor crews, requiring very dynamic scheduling of construction activities.

There has been significant progress over the past month including the substantial completion of the underground sewer and water utility work along Pennsylvania Ave between Main Street and Prospect Avenue. This including new watermain, new storm sewer, sanitary sewer repairs, and all of the lateral service connections to the buildings.

Meanwhile, Nicor's contractor NPL completed their new gas main and all of the building service connections along Main Street between Crescent and Anthony. NPL also completed the installation of new gas main along Pennsylvania Avenue from Main to Western and along Prospect Avenue from Pennsylvania to Crescent. They are currently working on the new gas main along Crescent Boulevard from Prospect to Main which will allow for livening of the full loop through the Phase 2 streetscaping project area, and the decommissioning of the old Main Street gas mains, which will finally fully open up Main Street to the Village's Contractor for the advancement of utility work.

Looking ahead through this month, the Village's contractor will be moving on to the Main Street underground utility work, starting with watermain and sanitary sewer. NPL will be focusing on the service connections along the length of Pennsylvania and Crescent. Once NPL is completed with services along Pennsylvania from Main Street to Prospect, the Village's contractor will begin the roadway excavation and curb work along the west side of Main Street (from Pennsylvania to Anthony) and north side of Pennsylvania (from Main to Western).

2023 UTILITY AND ROADWAY IMPROVEMENTS PROJECT – Contractor: R.W. Dunteman

(Project No. 23002; Value of Construction Contract = \$4,377,900)

This project involves the rehabilitation of approximately 6.85 centerline miles of streets throughout the Village of Glen Ellyn generally located in Arboretum Estates East, Amber Ridge, Brentwood Place, Deerglen Estates, Glen Ellyn addition to Prospect Park, Glen Park Subdivision, Saddlewood, Stacy Woods and other Various Streets. The project was awarded to the R.W. Dunteman Company of Addison, IL at the May 22nd Village Board Meeting. V3 Companies was also retained to perform Construction Engineering Services for the Project. The Contract has been prepared with execution underway by the Contractor. The project preconstruction meeting will be held on June 9th which will include discussions on the project approach and schedule. A project notification letter has been developed and will be distributed to approximately 750 properties throughout the project corridor. While the scope of the project is primarily basic resurfacing, staff will hold a project informational meeting for the public to gain information on the project.

2022 STREET IMPROVEMENTS PROJECT – Contractor: R.W. Dunteman

(Project No. 22002; Value of Construction Contract = \$2,880,474)

This project involved the rehabilitation of approximately 3.4 centerline miles of various streets throughout the Village of Glen Ellyn including Baker Hill Drive, Carleton Avenue, Colcord Place, Crescent Drive, DuPage Boulevard, Phillips Avenue, and the Raintree Subdivision. All work was substantially completed December 16 except for select punch list items which needed to be completed under more favorable weather. Given more favorable weather is now upon us, the contractor has started said punch list work. Village staff has been corresponding with the contractor in writing and several meetings regarding liquidated damages and acceptable resolution to issues with bumps at the land bridge joints on Nicoll Way. Staff recently declined a proposed solution involving adding material at each joint due to sustainability concerns and is meeting with the contractor on June 9th to determine the best approach for re-paving the limits of the bridge with an emphasis on rideability of the pavement.

TAFT AVENUE LIGHTING INSTALLATION PROJECT – Contractor: Utility Dynamics Corporation

(Value of Construction Contract = \$135,056)

This project will provide lighting improvements on Taft Avenue between Park Boulevard and Nicoll Way. The project scope includes the installation of approximately 1,740 linear feet of directionally drilled conduit, eight light poles and luminaires, two handholes, a new street controller, the installation of a new electric service, tree protection, soil and erosion control, parkway restoration, and final wiring and testing. Utility Dynamics began parkway restoration on Taft Avenue. ComEd installed the meter on April 26th and completed the electrical service connection between the controller and the transformer on May 4th. The light poles and luminaires, which were ordered by the Village several months ago, have been delayed and are expected to arrive on June 15th. They will be installed shortly after their arrival. Completion of the project is now targeted for June 30th.

CONSTRUCTION PROJECTS IN CLOSEOUT

UTILITY AND ROADWAY IMPROVEMENTS PROJECT 20001 – PHASE II – Contractor: R.W. Dunteman

(Project No. 20001; Value of Construction Contract = \$4,508,341)

This phase of the project involved the rehabilitation of roadways in the central-west portion of the Village including: Windsor Avenue (Sawyer to Hillside), Sawyer Avenue (Lorraine to west Village Limit), Chesterfield Avenue (Lorraine to west Village Limit), Dawn Avenue (Hillside to Duane), Kenilworth Avenue (Hillside to Duane), Duane Street (Kenilworth to Lorraine) and one street located in the east area of the Village, Carleton Avenue (DuPage to south end). The scope of the work included sanitary sewer main line repairs and service line replacement, water main and service line replacement, storm sewer/drainage improvements, and varying levels of roadway rehabilitation.

The Contractor has completed all work including the resurfacing of Duane Street/Lawrence Avenue between Hillside and Lorraine. The project punch list is also complete. The Engineer is otherwise working with the Contractor to agree on final quantities for the project.

GLEN ELLYN/IL AMERICAN WATER INTERCONNECT– Contractor: Archon Construction
(Value of Construction Contract = \$219,068)

This project involved the construction of an emergency use interconnection between the Village and Illinois American Water Company (ILAWC) distribution systems, near Glenbard South High School. The interconnection will improve reliability and reduce the water outage areas for the respective utilities in the event of water main breaks. The water main installation work including the punch list is now complete. Materials finally came in for the SCADA/Telemetry equipment with the fabrication and installation work imminent.

PARK BOULEVARD WATER MAIN REPLACEMENT – Contractor: J. Congdon Sewer Service
(Project No. 22003; Value of Construction Contract = \$2,136,367)

This project involved the replacement of approximately 3,600 feet of water main along Park Boulevard (between Marston Avenue and Taft Avenue). This locally funded project included water main and water service line replacement and restoration of pavement, curbs, sidewalk and parkways disturbed by the work.

All work including the project punch list is complete with the project now in the closeout stage. The Village and Contractor are in agreement on all pay item quantities associated with the roadway patching and resurfacing work. The project is set to be closed out approximately \$141,000 under the contract award amount listed above. A final balancing change order is being drafted in order for final payment to be made in mid-June.

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 = \$3,052,793)

The revised final pay estimate has been transmitted to the State for processing.

ENGINEERING PROJECTS

MULTIYEAR UTILITY AND ROADWAY IMPROVEMENTS – Engineer: AECOM

This project involves the design of utility and roadway improvements programmed for 2023 and 2024 as well as future federal aid eligible roadway projects. Design, competitive bidding, and award of the 2023 Utility and Roadway Improvements project is complete. A separate construction update is provided under construction projects in progress.

Survey is complete for the 2024 locally funded and future federal aid eligible roadway projects. Preliminary plans are under preparation with staff next meeting with AECOM on June 12th to discuss a number of design decisions. Other items in progress include developing a list of streets to be included in a locally let but MFT/Rebuild Illinois funded section, streamlined environmental

survey request submittals for the federal aid eligible roadways, and review of advancing water main and lead service line replacement work. With respect to the latter, engineering staff is working with the Village's Utilities Superintendent to develop a plan to eliminate all lead service lines in the Village. Per the lead service line replacement act requirement, the draft plan is due to the State by April 15, 2024 and will be in final form no later than April 15, 2027. The annual replacement rate and deadline to eliminate all lead service in the Village will be dependent on the Village's final service line material inventory (# of lead and unknown services) which is due to the State by April 15, 2024. Based on what we currently know, which is a work in progress, we anticipate we will most likely have to replace 7% of our lead service lines annually starting in 2027 and have 15 years to eliminate all lead services thereafter with a lead service line replacement deadline of April 15, 2042. This matter will be reviewed in more detail with the Capital Improvements Commission and Village Board. Of particular interest to staff is logically approaching the elimination of lead services in consort with replacing antiquated water mains and rehabilitating streets.

CRESECENT BOULEVARD RESURFACING PROJECT – Engineer: *Primera Engineers*

This project involves the rehabilitation of Crescent Boulevard between Lake Road and approximately the east Village Limit (approximately 1.2 centerline miles). Rehabilitation will be in the form of a mill and overlay (resurfacing) of the roadway as well as sidewalk removal and replacement including bringing the sidewalk ramps up to ADA standards. Also included with the project is the construction of new sidewalk on the south side of Crescent Boulevard from Lee to Riford and on the north side of Crescent Boulevard from Crescent Drive to 950 Crescent which is approximately 385' east of Cumnor Avenue.

IDOT District 1 recommended design approval for the project on Monday, April 24th. The Engineer has revised the project plans and special provisions to address State and Village comments before a subsequent submittal on May 24, 2023. Staff is working to keep the project on track for the August or September State Lettings.

HILL AVENUE UTILITY IMPROVEMENTS – Engineer: *Walter E. Deuchler Associates*
(Project No. 00511)

This project involves the construction of sanitary sewer and water distribution system improvements on Hill Avenue between Golf Avenue and the East Branch of the DuPage River. The improvements will ultimately result in the Village's water main being continuous and looped along both Hill Avenue and Crescent Boulevard. Also, this will allow the Village to serve the fronting properties on Hill Avenue with potable water service.

As noted previously, staff submitted IEPA permit applications for the water main and sanitary sewer improvements (2 separate permits). Minor comments were received and are being addressed at the time of this report. Resubmittal has been made to DuPage County on the Stormwater Certification/Permit for the project. Staff prepared the draft water main easement agreement for the Elliot Construction property on the south side of Hill Avenue and transmitted it to the owner on May 2nd for their review. The Owner has agreed to the easement terms and executed the document accordingly. Staff will review the final bidding and contract documents over the next week including the final drawings. This should wrap up the project development to allow for competitive bidding to then be advanced.

TRAIN STATION / PEDESTRIAN TUNNEL – Engineer: CDM Smith/KMI Architects

(Project No. 16016)

Phase II Engineering is officially underway with the kickoff meeting held on May 11th. The primary foci at this point are advancing the topographic survey work, historic building information survey, and perhaps most importantly the Value Engineering Exercise. Value Engineering will advance in earnest the week of June 12th. Staff will complete the initial heavy lifting exercises but are engaging representative from the Capital Improvements, Plan Commission, and Village Board in the process. The VE report will be presented to the Capital Improvements Commission and Village Board in the coming months.

CONSTRUCTION MAINTENANCE PROGRAMS

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	2023 Estimated Glen Ellyn Cost	Status
2023 Sidewalk and Concrete Street Repairs	\$301,901	This annual program includes repairs to deteriorated or damaged sidewalk and concrete roadway infrastructure and the installation of new sidewalk throughout the Village. Schroeder and Schroeder completed Phase 1 of the Village's sidewalk removal and replacement program in early May. Approximately 10,000 square feet of sidewalk were replaced in the first phase. Phase 2 of the Sidewalk Program will involve concrete street patching and additional sidewalk removal and replacement. New sidewalk will be installed on Park Row between Crescent Blvd. and Willis St. in August after GBW is done with their tennis court and field improvements and before GBW students return to school in mid-August. Budget breakdown: \$150,000 Sidewalk Replacement, \$62,500 New Sidewalk Installation, \$49,401.20 Concrete Patching, and \$40,000 Concrete Restoration Contract (Water/Sewer).
2023 Asphalt Roadway Patching	\$200,000	The 2023 Asphalt Roadway Patching Program is currently out to bid and has a June 15 th bid opening date. Staff will provide an award recommendation for the contract at the June 26 th Village Board Meeting. The project scope includes roadway patching throughout the Village. Patch locations are determined by staff utilizing both the Village's Pavement Management System Data and Field Inspections.
2023 Pavement Markings	\$93,000	The annual contract line striping contract was awarded to Superior Road Striping (SRS), the low bidder of both the DuPage County and Suburban Purchasing Cooperative contracts, on April 24 th . The Village is utilizing DuPage County's contract unit prices, which provides the lowest total cost for the striping program (Not to Exceed \$85,176.). SRS began refreshing pavement markings on May 15 th and completed the work within a week. Target areas for new pavement markings were school zone intersections, several Roosevelt Road intersections, Lambert Rd. (double yellow long lines, intersections, and the bike lanes), and double yellow long lines on Main, Ellyn,

Project	2023 Estimated Glen Ellyn Cost	Status
		Parkside, Crescent, Duane, Kenilworth, Sunset, Riford and the Baker Hill subdivision. The Board awarded a contract to Countryman, Inc., for \$4,824 to install an alternative material, MMA (methyl methacrylate), at three test locations on concrete streets that have historically had issues with marking longevity: the Crescent Boulevard parking stalls by GBW, the Hill and Main St. crosswalks and stop bars, and two applications of “SCHOOL” on Hill near Bryant Ave. Installation date TBD. In April and May, the Streets Division refreshed pavement markings along Crescent, between Main and Forest, and will continue to refresh crosswalk and stop bar pavement markings with paint in various locations this summer. Riford Rd: Pavement Markings - Before and After 

Project	2023 Estimated Glen Ellyn Cost	Status
		Lambert and Tallgrass Rd. – Refreshed Pavement Markings  Pershing and Rt. 53: Completely faded pavement markings being refreshed. 

Project	2023 Estimated Glen Ellyn Cost	Status
		Crescent Blvd: Double Yellow line being refreshed east of Ellyn Ave using the truck's laser guided system. The crosswalk was refreshed later with the Contractor's hand cart. 
2023 Crack Sealing	\$40,000	The 2023 Crack Sealing Program is currently out to bid and has a June 15 th bid opening date. Staff will provide an award recommendation for the contract at the June 26 th Village Board Meeting. This year's program targets candidate locations using Pavement Condition Index (PCI) Study data and visual inspections.
2023 Asphalt Surface Rejuvenation	\$101,348	The Board awarded a contract to CAM (Corrective Asphalt Materials) on April 24 th . Candidate locations for rejuvenation include streets that have been resurfaced in the previous one to three years and those that will be paved in Phase 2 of the CBD Streetscape project. The unit price for Reclamite® is \$0.99/SQ YD and represents a 5.3% increase from the 2021/2022 price. CAM will be applying Reclamite® to Village streets in late July or early August.
2023 Sanitary Sewer Lining and Repairs	\$500,000	This year's program will provide for sanitary sewer lining and repairs throughout the Village including withing the Street Improvements Project Areas. Proposed locations are currently being identified by staff.

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