CHICAGO TRANSIT AUTHORITY
Advertisement for Bids

NOTICE OF TIME EXTENSION AND ADDENDUM #1

Notice is hereby given that the bid opening date heretofore advertised as, Thursday, May 26, 2011 has been extended to Tuesday, June 7, 2011, at 11:00 A.M. in the Bid Office, 2nd Floor, 567 W. Lake, Chicago, IL 60661-1498 for the following items:

Req No: C11RI101126074, Spec. No. CTA 0039-10
Purple Line Viaduct Replacements: Greenleaf Street, Dempster Street and Grove Street and Retaining Wall Rehabilitation.

PROPOSAL GUARANTEE: $700,000.00

For additional information, please contact Edmund Rendon, Procurement Administrator at 312/681-2429.

Any contract resulting from this advertisement will be awarded to the lowest responsive and responsible bidder.

Chicago Transit Authority hereby notifies all bidders that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

PLEASE NOTE: Where bids are sent by mail, delivery service or delivered in-person to the CTA Bid Office, the bidders shall be responsible for their delivery only to the Bid Office before the advertised date and hour for the opening of the bids. The Bid Office hours are Monday through Friday from 8:00 a.m. to 4:30 p.m. Chicago time, except holidays.

The right is reserved to accept any bid or any part or parts thereof or to reject any and all bids.

All inquiries should be directed to and copies of bid documents obtained from the Bid Office – 2nd Floor, 567 W. Lake Street, Chicago, Illinois 60661-1498.

CHICAGO TRANSIT AUTHORITY

By: Geoffrey Urban
General Manager, Purchasing

May 20, 2011

Contract No. C11RI101126074:

Purple Line Viaduct Replacements: Greenleaf Street, Dempster Street, Grove Street and Retaining Wall Rehabilitation Response to Bidders' Questions

Item No.	Bid Document Item Affected	Drawing No./Spec No.	Subject	Question	Reply
1			As Built Drawings	Will CTA provide drawings of the existing bridges?	No. These documents can be made available to the succesful bidder
2				What type of waste are excavation materials considered?	Special waste. See specification 2200, section 3.05
3				The plan page in the contract documents listed under Greenleaf St. page SXGRE-003 is SXGRO-003 for Grove Street. Please provide SXGRE-003.	Addendum No. 1.
4		SGRE-516, SXGRE-003	Missing Drawings	Drawing SGRE-516 is not included in the bid documents, Drawing SDEM 516 is in its place and Drawing SXGRE-003 is not included in the bid documents, Drawing SXGRO-003 is in its place. Please provide Drawings SGRE-516 and SXGRE-003.	Addendum No. 1.
5		SGRE-516, SXGRE-003	Missing Drawings	Please provide correct plan sheets SGRE-516 (current plan sheet is SDEM-516) and SXGRE-003 (current plan sheet is SXGRO-003)	Addendum No. 1.
6		SGRE-516, SXGRE-003	Missing Drawings	Contract plan set is missing Sheet SGRE-516 “Proposed North Abutment”. Sheet SDEM-516 has incorrectly been included in its place. Please provide this drawing sheet. Contract plan set is missing Sheet SXGRE-003 “Staging Location”. Sheet SXGRO-003 has incorrectly been included in its place. Please provide this drawing sheet.	Addendum No. 1.
7	3200	WAL S-501 G-003	Galvanized Rebar	Rebars have (E) designation on S-501 while Note 3F on Sheet G-003 calls out galvanized rebar. The Spec. 3200 also calls out hot dip galvanized. Please clarify if rebar is to be epoxy coated or galvanized?	Rebar "(E)" designation has been removed. Per section 3200 all reinforcement shall be galvanized. See addendum No. 1.
8		WAL S-501		On drawing no. WAL S-501, Typical Wall Repair Details, It indicates that all the reinforcing steel used in the retaining wall repairs are Epoxy coated. Is this correct or should it be galvanized? And should the mesh be galvanized?	Per section 3200 all reinforcement shall be galvanized. See Addendum No. 1.
9		WAL S-007, WAL S-008	HP 10x420 Galvanized	Sheet WALS-008 calls out the HP 10x42 as galvanized while Sheet WALS-007 does not require the HP 10x42 to be galvanized. Please clarify.	All HP 10x42 shall be galvanized. See Addendum No. 1.
10	7101 3.04B	SGRE-507, SDEM-507, SGRO-507	Floor Deck Plate Painting	The Spec. states that the surface preparation is to be near white SSPC SP-10 clean. Note 3 on each of the drawings states the deck plate to be prime painted. Is the prime paint only on the bottom side?	All ballast deck plate surfaces shall be prime painted unless the surface is to receive the membrane waterproofing. Surfaces that are to receive membrane waterproofing shall be prepared as specified in Specification Section 7101 Part 3.
11	6101	CT-502	Cross Ties	Please clarify the timber cross tie dimensions.	7"x9"x9'. See Addendum No. 1
12		TS-500, TS-501, CT-502	Chair Tie Stagger	Cross ties on sheet TS-500 have no stagger, while cross ties on Sheet TS-501 have a stagger, and Sheet CT-502 indicates a 9'-6" tie. Please clarify tie dimensions and stagger requirements	Addendum No. 1.
13	2450 2.10A		Rail welds	Specification 2450 2.10A indicates that no more than 12 thermite welds can be made for each bridge. Since the rails are 197 feet and 202 feet long, and at least three sticks of new rail will have to be used to make these lengths, can 16 thermite welds per bridge be used?	No.
14			Rail welds	Can 16 field welds be made at each bridge in lieu of 12?	No.
15	1770 1.06A 2 a		Mylars	Do full size mylar as-builts need to be provided, or is one hard copy and a compact disk sufficient?	CTA requires mylars per Division I, Specification 1770, 1.06A, a
16	1020 3.01B 2 a		Utility Allowance	The section states the allowance is for ComEd utilities shown on the drawings. There are no ComEd utilities shown on the drawings. Please clarify the locations of ComEd utlilties to be relocated specifically the overhead power lines located east of the viaduct at Greenleaf.	ComEd utilities are specified in the plans on sheets EGRE-101 (see addendum 1), EDEM-101 and EDEM-102.
17	Attachment G		Electronic Filing	Is it possible for the "Disclosure of Ownership and Interests Affidavit" to be filed electronically similar to manner it is filed for the City of Chicago?	No.
18				There are allowances that the Contractor is to include in their bid ($250,000), will the DBE participation apply to the allowances? Similarly will the DBE participation apply to Item B Total Cost to CTA Operations Item B? Please clarify	The DBE Participation will apply to the allowances. The DBE Participation will not apply to Item B: Total Cost to CTA Operations. Each bidder's DBE Participation will be evaluated and calculated based on the Total Lump Sum Bid for Work (including Allowances) plus Bid Alternate No. 1 (if accepted by CTA at time of award).

Contract No. C11RI101126074:

Purple Line Viaduct Replacements: Greenleaf Street, Dempster Street, Grove Street and Retaining Wall Rehabilitation Response to Bidders' Questions

Item No.	Bid Document Item Affected	Drawing No./Spec No.	Subject	Question	Reply
19				Please provide soil borings for each of the three bridges.	See Specification Volume II.
20				Which Bid Bond forms are acceptable for this project?	CTA requires AIA Bond Forms
21				On drawing no. G-003, General notes, 2). Reinforced Concrete: F). All reinforcing steel shall be ASTM A615, Grade 60, Galvanized. Does this apply to reinforcing steel in the new C-I-P Abutments, Caissons, Precast Backwall and Abut seats, and the New Retaining Wall Cap in Bid Alternate No.1	See response to Item No. 7
22				Does the three coat paint system for the New Structural Steel get applied in the shop or the field?	See Specification Section 5100-3.07
23				On Drawing No. WAL S-001, Bid Alternate No. 1, it indicates that the existing retaining wall from station 578+90 to 594+04 gets stained, Is this correct? If yes, can you supply us with a specification on the staining?	No staining of the concrete is required. The callout "STAINING" refers to the existing condition of the wall.
24				On bid alternate No.1 the existing retaining wall along Chicago Avenue is getting repaired. There are no any traffic control plans for this work. Will a permanent lane closure be allowed on Chicago Avenue?	A permanent lane closure will not be allowed by the City of Evanston. Work requires daily lane closure for this work per City of Evanston and IDOT Standards
25				On Drawing No. WAL S-008, Bid Alternate No. 1, Wall 2 Elevation Sta. 612+63.67 – 614+48, it indicates that the Soldier Piles HP10X42 should be galvanized. Is this correct? If it is, should the soldier piles used on retaining wall No. 1, Drawing No. WAL S-007, be galvanized?	All HP 10x42 shall be galvanized. See revised WAL S-007 in Addendum No. 1.
26				On Drawing No. WAL S-007, Wall 1 Elevation Sta. 619+45.87 – 622+65.87, should the reinforcement steel used the precast concrete wall panels be galvanized?	Rebar "(E)" designation has been removed. Per section 3200 all reinforcement shall be galvanized. Revised sheet is provided in addendum No. 1.
27				Has there been an environmental study done on the areas that we are going to excavate. If yes, can we get a copy of them? How should all the excavated material be treated as non-special, special or hazardous waste? We will have spoil from the structure excavation, earth excavation, caisson drilling, sewer spoil, etc. do we need onsite environmental oversight, Soil disposal sampling, Site contamination operation plan, site health and safety plan, soil contamination, erosion and sedimentation control plan and a final environmental report? Also, what is the contract's classification of the ground water encountered in the caissons?	Consider all material to be Special Waste as per Specification 2200, section 3.05. No environmental oversight is required, unless proven otherwise by actual field conditions. Erosion and sedimentation control shall be performed per IDOT Standards. Groundwater encountered during excavating caissons can be considered non-potable.
28				On Drawing No.G-003, General Notes, 1). Design and Construction Standards: K. Original Drawings of the existing viaducts are available from the Chicago Transit Authority. Can we get a copy of them? Need drawing to accurately price up the demolition on the project.	No. These documents can be made available to the succesful bidder
29				Please clarify Schedule C submission requirements. Other City agencies requiring submission of Schedule C with original signatures at the time of the bid have revised this requirement to allow facsimile copies to be submitted at bid time with original signature copies required within a specified time frame post bid.	This Schedule C (and accompanying attachments) must be submitted in triplicate. Original signatures are required on all three copies.
30				Is new 115# rail to be head hardened?	No.
31				Can different rail be used for S.I.G. instead of the existing running rail?	No, use old running rail from existing bridge. SX-001, phase II, note 7. Specification 2450, 2.03A
32				The track on the bridges are not to be machine tamped?	Correct, see Specification 2450, section 3.15A
33				During the weekend outage will the 3rd rail be shut off in between areas of work?	Power will be removed in the immediate area of the bridge being worked on. Additional power sections can be removed upon request and approval by CTA.
34				Type of test required for the field welds?	See drawing TS-500, note1

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Item No.	Bid Document Item Affected	Drawing No./Spec No.	Subject	Question	Reply
35	3300 3.01 J and 7150 3.01 B		Membrane Waterproofing for Cast-in-Place Concrete	Specification 03300 3.01 J. states in-part: "The back faces of construction joints between new and existing concrete shall be waterproofed in accordance with Sections 07101 and 07150 and as shown on the plans." Specification 07150 3.01 B. states: "The back faces of construction joints between new and existing concrete or between pre-cast concrete units shall be waterproofed in accordance with Section 07101, Membrane Waterproofing." Specification 07101 1.01 A. states: "This Section specifies requirements for furnishing and applying a sprayed elastomer membrane waterproofing. The work under this Section shall include furnishing all labor, materials, tools, equipment and incidentals necessary to install membrane waterproofing as indicated on the drawings." Is it the Authority's intention to waterproof all construction joints with a sprayed elastomer	See Addendum No. 1
36	2051		Bituminous Removal	Please specify the depth required for Bituminous Surface Removal at all 3 bridge locations.	Bituminous surface removal depth is 2 inches. Specification 2051, 3.03
37	Article 2 - Insurance and Bond Requirements		Insurance Policy	Article 2 - Part I, Paragraph A, subparagraph b) states that the contractor is to provide a "certified copy of the insurance policy," and continues later to say that the certified copy must be supplied within 90 days. The contractor requests that this requirement is deleted. The certificate of insurance provides sufficient evidence of the CTA's required insurance coverages.	Your request to delete this requirement is denied.
38	Article 2 - Insurance and Bond Requirements		Insurance Policy	Article 2 - Part II, Paragraph G states that the contractor is to "supply the CTA with a Certificate of Insurance and an Insurance Policy which shall clearly evidence the continuation of coverage" in the event that any required insurance expires. The contractor requests that this requirement is deleted. The certificate of insurance provides sufficient evidence of the CTA's required insurance coverages.	Your request to delete this requirement is denied.
39	Article 2 - Insurance and Bond Requirements		Builders' Risk	Article 2 - Part III, Paragraph G states "Coverage shall also include soft costs coverage as appropriate." Please clarify what is meant by "soft costs" and what limit of insurance is "appropriate."	Insurance and bond shall cover the entire bid amount. See Article 2 - Insurance and bond requirements in Division 0. Page 114 of 178
40	Attachment G in construction document		Disclosure of ownship & interest affidavit	Page 4 of 5 Item E 1. Does principal mean anyone with more tha 7.5% ownship interest as in the City of Chicago documents? If not what is the definition of principal? Our corporation has over 5000 stock holders with small ownship percentages, we assume the CTA does not want to see the entire list.	Please refer to Paragraph A (Corporations): Item No. 3 on Page 2 of 5 where bidders are instructed to provide information "for each shareholder who owns shares or options equal to or in excess of 5% of the ownership of the corporation." This guideline shall be utilized for Item E-1 on page 4 of 5.

CONTRACT NO. C11RI101126074
PURPLE LINE VIADUCT REPLACEMENTS: GREENLEAF STREET, DEMPSTER STREET, GROVE STREET AND RETAINING WALL REHABILITATION

INDEX TO ADDENDUM No. 1

DIVISION 3: CONCRETE

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.01 DESCRIPTION

A. This Section specifies the requirements for cast-in-place concrete for embankment retaining walls, bridge abutment and wing wall modifications. The work under this Section includes furnishing all labor, materials, tools and equipment required for furnishing, erecting, and removing formwork for cast-in-place concrete; constructing expansion and contraction joints and waterstops for cast-in-place concrete structures; placing, curing protecting, and finishing cast-in-place concrete; and all other appurtenant work.

1.02 STANDARDS

A. Except as modified herein, the work shall conform to the applicable portions of the Standard Specifications, Sections 503.

1.03 SUBMITTALS

A. The contractor shall submit his proposed concrete mix designs for the review and approval of the Engineer. All mix designs shall be IDOT mix designs approved for the ready mix supplier, in accordance with the Standard Specifications.

B. The Contractor shall submit to the Engineer his proposed installation and support procedure for the formwork. The Contractor shall make modifications if required to his procedure to the satisfaction of the Engineer, but it is understood that the Engineer's approval shall not relieve the Contractor from his sole responsibility for obtaining satisfactory results. The formwork shop drawings must be sealed by an Illinois SE.

C. Product data for proprietary materials and items, including forming accessories, admixtures, patching compounds, epoxy bonding compounds, waterstops, joint systems, curing compounds, concrete sealants, geocomposite wall drains and others as requested by Engineer.

D. Proposed testing agency, test reports, delivery tickets for ready mixed concrete and compatibility certificate for sealants and curing compounds.

E. Samples of materials as requested by Engineer, including names, sources, and descriptions.

F. Materials certificates in lieu of materials laboratory test reports when permitted by Engineer. Materials certificates shall be signed by manufacturer and Contractor, certifying that each material item complies with or exceeds specified requirements.

G. Provide one reproducible complete set of field records upon completion of all work. Indicate actual location and elevations of all foundations, foundation elements, sleeves, floor openings, and other features.

1.04 RELATED WORK

Related work specified elsewhere:

A. Section 01458: Testing and Inspection Services

B. Section 02050: Removal of Existing Structures.

C. Section 03100: Concrete Formwork

D. Section 03200: Concrete Reinforcement

E. Section 03250: Epoxy Grouting of Dowels

F. Section 04810: Unit Masonry Assemblies

G. Section 07101: Membrane Waterproofing

H. Section 07150: Dampproofing

I. Section 07901: Concrete Sealants

J. Section 16050: Underdeck Lighting

PART 2 – PRODUCTS

2.01 CLASS SI CONCRETE

A. All concrete defined by this specification shall be Class SI Concrete, in accordance with the Standard Specifications, having a compressive strength of not less than 6000 pounds per square inch at the age of 28 days and 3000 pounds per square inch at the age of 3 days. All concrete shall be air-entrained in accordance with the Standard Specification.

1. In order to comply with the aforementioned strength requirements, it is anticipated that a minimum of 7.5 sacks of Type I Portland Cement will be required per cubic yard of concrete.

B. All coarse aggregate shall be gradation CA- 11 and be of Class A quality.

C. Admixtures containing chlorides shall not be used in the concrete.

D. Fly ash shall not be used.

2.02 MATERIALS

A. WATERSTOPS: Waterstops shall be extruded from high quality neoprene or TPER. The waterstops shall meet the requirements of U.S. Corps of Engineers Specification CRD-C572. Waterstop shall be a serrated type with center bulb, 6

inches wide by a minimum 3/16 inches thick capable of withstanding 100 ft. head of water at control joints and dumbbell type 6 inches wide at construction joints.

B. CURING AND SEALING COMPOUND: Curing compounds shall conform to Article 1022 of the Standard Specifications. Membrane curing compounds are permitted, on all cast-in-place concrete surfaces except those that will abut other new concrete. Curing of such abutting surfaces shall be by the wetted burlap method as described in Section 1022.02 of the Standard Specifications. Membrane curing shall be compatible with the specified Concrete Sealant, or the membrane curing compound shall be removed to promote adhesion of the sealant to the concrete.

2.03 FORMWORK MATERIAL

A. Formwork shall comply with Section 03100, Concrete Formwork.

2.04 JOINT SEALS

A. Joint seals shall comply with IDOT Bridge Special Provision BSP-3.

2.05 EPOXY BONDING COMPOUND

A. New concrete shall be bonded to sound concrete with an Epoxy-Resin-Base Bonding System for Concrete conforming to ASTM C881, Type II, Grade 2, Class A, B or C. Use of this material shall be in accordance with manufacturer's recommendation.

B. It is recommended that a Binks bottom discharge pressure vessel operating at approximately 100 psi be used to apply the bonding compound as a spray application.

C. Epoxy bonding materials shall not be diluted by solvents.

2.06 CONCRETE SEALANT WHERE SHOWN ON THE PLANS

A. Sealants shall comply with Section 07901, Concrete Sealants.

2.07 GEOCOMPOSITE WALL DRAIN

A. Wall drain shall comply with Article 1040.07 of the Standard Specifications.

PART 3 – EXECUTION

3.01 CONSTRUCTION PROCEDURE

A. The forms shall be constructed so that the completed concrete structures conform to the shape, lines and dimensions of the members as shown on the Plans. They shall be properly braced or tied together to maintain position and shape. Forms shall be made sufficiently tight to prevent leakage of mortar.

B. The formwork shall be removed when the concrete is strong enough and permission was obtained from the Engineer.

C. Vertical control joints in walls shall be filled with preformed joint filler, conforming to Article 1051 of the Standard Specifications, sealing compound applied on both faces and specified in Section 07901 and high tensile neoprene

waterstop having Shore A hardness of 60-70. The joint filler materials and sealing compound shall be placed the full vertical height of the walls.

D. Waterstops shall be secured in place in by splitting the concrete form. The center bulb shall be centered in the joint. While concrete is being placed the concrete shall be thoroughly vibrated to insure complete embedment of the ribbed flanges.

E. Waterstop splices will not be permitted in vertical joints. All splices and junctions between strips will be made with premolded unions. During the vulcanizing period the joints shall be securely held by suitable clamps.

F. Vertical construction joints in walls shall be keyed with epoxy bonding compound applied in the groove of the front face. The epoxy bonding compound shall be placed the full exposed vertical height of the walls.

G. Isolation joints between vertical face of new concrete walls, piers and slabs and existing concrete, where called out on the Plans, shall be filled with a preformed joint filler, conforming to Article 1051 of the Standard Specifications.

H. The back faces of the retaining walls and any other surfaces to be backfilled or ordered by the Engineer shall be dampproofed in accordance with Article 503.18 of the Standard Specifications.

I. Proportioning, mixing, transporting, depositing, consolidating and protecting of concrete is to be in compliance with Standard Specifications.

J. Concreting in freezing weather shall conform to the requirements of Section 01500, Part 1.18. The back faces of construction joints between new and existing concrete shall be ~~waterproofed~~ dampproofed in accordance with Section~~s 07101 and~~ 07150 and as shown on the plans.

K. All exposed concrete edges shall be broken with a 3/4" x 3/4" chamfer or should match existing.

L. Geocomposite wall drains shall be installed where call out on the Contract Drawings and in accordance with Section 591 of the Standard Specifications.

3.02 CURING

A. Concrete placed in foundations shall have cured at least 14 days before structure load is placed on the concrete.

B. Cast-in-place concrete retaining walls shall have cured at least 14 days before any backfilling is placed.

C. Curing shall be in accordance with the applicable portions of Article 1020.13 of the Standard Specification.

D. The curing compounds must be applied immediately after final finishing. Method of curing shall be compatible with Concrete Sealant Material as specified in Section 07901.

3.03 FINISH

A. All exposed surfaces shall be given a normal finish in accordance with the applicable portions of Article 503.15 (a) of the Standard Specifications.

B. The Contractor shall correct all imperfections on the concrete surfaces to the satisfaction of the Engineer as specified in Article 503.15 of the Standard Specifications.

3.04 TESTING

A. Additional Cylinders: Furnish a supply of 25 standard cylinder molds at the site at all times for making additional cylinders as may be directed by the Authority.

B. Monitoring of Concrete Placement: Continuously observe concrete placement operations on a full-time basis, record such observations on a daily basis, and submit reports of the results.

C. Compression Tests: ASTM C 31 and C 39. Sample at point of deposit. Cure the cylinders in laboratory.

1. Every 50 cu.yd. or Fraction Thereof: Make 1 set of 4 6" x 12" cylinders from a single concrete sampling for each type of concrete used each day. Test 1 cylinder at the age of 7 days. Test 2 cylinders at the age of 28 days. Keep 1 cylinder in reserve for 56 days test if 28 day test does not meet requirements.

2. Every 100 cu.yd. or Fraction Thereof: Make 1 cylinder for each type of concrete used each day. Test 1 cylinder at the age of 56 days, as a reserve.

3. Minimum 1 set of cylinders for each day's pour and each batch of concrete. In addition, make 1 cylinder from every truck load and test at the age of 7 days.

D. Air Content Test: ASTM C 173.

1. Air Entrained Concrete: First truck and every third truck thereafter.

2. Concrete Not Air Entrained: Every 100 cu.yd. at random.

E. Slump Test: ASTM C 143. First truck each day, make 2 tests for each 100 cubic yards of concrete or fraction thereof, and as often as necessary thereafter but not less than 2 tests for each days pour, and make each test from a separate batch. Provide a slump cone and rod available for use at all times.

F. Compression Test Reports: In addition to reporting as outlined in ASTM C 39, Provide reports to the Authority, certified by the independent testing agency and present the following data in tabular form and distribute immediately after recording the test results.

1. Identity of job, Contractor, supplier.

2. Identity of mix and required strength.

3. Pour location of sampled concrete.

4. Slump, air content, truck number, time and date sampled, air temperature, concrete temperature, consistency.

5. Curing history.

6. Date tested.

7. Compressive strength.

8. Type of fracture.

9. Compliance with specification (yes or no).

G. Additional Testing and Inspection: In addition to specified testing, Contractor is responsible for the expense of additional testing or inspection resulting as a consequence of the work not evidencing compliance with this Specification; including tarring, curing, and testing of concrete cores.

END OF SECTION

DIVISION 6: WOOD AND PLASTICS

SECTION 06101

HARDWOOD RAILROAD TIES

PART 1 - GENERAL

1.01 DESCRIPTION

A. This Section includes the requirements to the season, manufacture, preserve, inspect, deliver and install hardwood track ties for use in ballasted rapid transit trackwork at locations shown on the plans. The Contractor shall furnish and install only new, virgin, seasoned and preserved oak ties.

1.02 RELATED WORK

A. Section 02450, Track Construction.

1.03 REFERENCES

A. All ties shall conform to the most recent version of the American Railway Engineering and Maintenance of Way Association (AREMA) *Manual for Railway Engineering*, chapter 30, *Ties and Wood Preservation*.

B. AWPA C6 - Crossties and Switch Ties - Preservative Treatment by Pressure Processes.

C. AWPA P2 - Standard for Creosote Solutions.

D. ASTM D245 - Standard Practice for Establishing Structural Grades and Related Allowable Properties for Visually Graded Lumber.

E. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials.

1.04 SUBMITTALS

A. The Contractor shall submit documentation for review that details the structural density of the ties prior to treatment. The submittal shall also identify the quantity and type of timbers used, the qualifications of the grading inspector, the grading for the ties, the location of where the timbers were felled, the owner of the plant, and the method of seasoning and treatment.

PART 2 - PRODUCTS

2.01 DESCRIPTION

A. Timber tie sections shall be composed of red or white oak (genus Quercus) as defined by the latest version of the American Society for Testing and Materials (ASTM) standard D 1165, *Domestic Hardwoods and Softwoods.* Up to ten (10%) mixed hardwood shall be permitted.

2.02 PHYSICAL REQUIREMENTS

A. The rail bearing area of ties shall have the maximum amount of clear, straight grain. Cross tie rail bearing areas are those sections between twenty (20) inches and forty (40) inches from the center of the tie. The rail bearing area of switch ties extends the entire length of the tie.

B. Cross and chair ties shall be 7 inches deep by 9 inches wide by 9 feet in length. ~~Switch t~~Ties shall conform to AREMA seven (7) inch grade, unless otherwise requested. The timbers, prior to seasoning, shall measure seven (7) inches to eight (8) inches thick , nine (9) inches to ten (10) inches wide throughout the section defined by planes normal to the axis of the tie and located twelve (12) inches from each end.

C. Ties shall be rejected if at any time defects are located as follows:

1. Straightness for members less than twelve (12) feet long:

a. Depth Dimension: Ties will be considered straight when a straight line along the depth face from the middle of one end to the middle of the other end is no closer to the edge of the tie than one-half the tie depth dimension, plus one quarter (1/4) inch or minus one quarter (1/4) inch.

b. Width Dimension: Ties will be considered straight when a straight line along the width face from the middle of one end to the middle of the other end is no closer to the edge of the tie than one-half the tie width dimension, plus one half (1/2) inch or minus one half (1/2) inch.

2. Straightness for members more than twelve (12) feet long:

a. Depth Dimension: Ties will be considered straight when a straight line along the depth face from the middle of one end of the middle of the other end is no closer to the edge of the tie than one-half the tie depth dimension, plus one half (1/2) inch or minus one half (1/2) inch.

b. Width Dimension: Ties will be considered straight when a straight line along the width face from the middle of one end to the middle of the other end is no closer to the edge of the tie than one-half the tie width dimension, plus one (1) inch or minus one (1) inch.

3. Splits: Ties containing a split five (5) inch in length or longer will be rejected. End splits and shrinkage cracks that do not impair the fastening or strength of the material will be permitted.

4. Checks: Ties with checks over one and one half (1 1/2) inch deep or over one half (1/2) inch wide on any face or longer than two (2) feet will be rejected.

5. Shakes: Ties containing a shake more than one eighth (1/8) inch wide and/or length of more than two (2) inches and within one (1) inch of any face will be rejected.

6. Grain: Ties with excessive cross grain shall be rejected and ties with slanting grain in excess of one (1) inch in any ten (10) inches of length will be rejected.

7. Knots: Sound knots of two (2) inches in diameter or less are permitted. The sum of the diameters of all knots in any one (1) foot length shall not exceed four (4) inches. Open or loose knots are not permitted. Knots in clusters are not permitted.

PART 3 - EXECUTION

3.01 SEASONING

A. The ties are intended for use in ballasted rapid transit trackwork. The ties shall be kiln dried; although air seasoned ties are acceptable.

B. The Contractor shall employ adequate means and methods to minimize defects caused by the seasoning process.

3.02 MANUFACTURE

A. Sawing: Timber shall be well sawn and cut square at both ends. Timber is not well sawn when its surfaces are cut into with score marks more than one half (1/2) inch deep, or when its surfaces are not even.

B. Ties shall not be bored. Ties shall not be adzed.

C. All ties shall have an anti-checking device attached to each end.

D. Identification Marking:

1. Each tie shall be permanently identified and marked by branding. The brand shall be placed in the center of one (1) of the nine (9) inch wide surfaces. The identification mark shall contain information as follows:

a. Month and last two digits of the year of manufacture.
b. Identity of Contractor’s manufacturing plant.

2. The height of the letters or figures shall be a minimum of two (2) inches high. Dies for branding shall have cutting edges one eighth (1/8) inch wide which shall indent the wood a minimum of one quarter (1/4) inch. The "Clock Dating" method of boring dating holes will not be permitted.

E. Tolerances:

1. Ties shall be carefully sawn and/or machined to the nominal dimensions specified within the tolerances listed below at the specified maximum seasoned water content
   a. Length: A tolerance of one quarter (1/4) inch under the specified nominal length and up to three (3) inches over the specified nominal length.
   b. Width: A tolerance of one quarter (1/4) inch under the specified width and up to one half (1/2) inch over the specified width will be accepted.
   c. Thickness: A tolerance of one eighth (1/8) inch under the specified thickness and one eighth (1/8) inch over the specified thickness will be accepted.

3.03 PRESERVATIVE TREATMENT

A. All ties shall be treated by the Standard Rueping Process in strict conformance with Specification C6, Cross Ties and Switch Ties – Preservative Treatment by Pressure Processes of the American Wood Preservers Association, Standard (AWPA).

B. The preservative used shall conform to the current AWPA P2 Standard for Creosote Coal Tar Solutions of the American Wood Preservers Association, Standard Manual of Recommended Practice.

C. Retention and Penetration:

1. Retention: All ties shall be treated to eight (8) pounds per cubic foot net final retention with AWPA P2 Standard for Creosote Coal Tar Solution.

2. Penetration:

   a. Red Oak: Shall be a minimum of sixty five (65%) percent of annual rings.

   b. White Oak: Shall be a minimum of ninety five (95%) percent of sapwood.

3. Treatment penetration shall be determined by bored cores taken from the center of twenty (20) ties in each charge. If the average penetration of the twenty (20) borings meets the penetration requirement, the charge shall be accepted.

   a. Core holes shall be saturated with the creosote-coal tar solution prior to the insertion of plugs.

b. Core holes shall be fitted with tight, treated plugs after sampling.
c. Timber failing to meet the penetration requirement may be retreated and retested at the Contractor's option.
d. The inspector shall document that core samples have been checked and verified. The inspectors log shall be submitted to the CTA.

D. The ties shall be subjected to a final steam treatment and vacuumed after treatment to minimize dripping and bleeding of the preservative from the faces of the timber. Ties shall be clean and free of all dirt, debris and excess creosote.

3.04 INSPECTION

A. The CTA retains the right to reject material in spite of the inspector's logs or documentation. Material rejected by the CTA does not entitle the Contractor to extra Contract time or Contract cost. The Contractor shall be responsible for the cost of handling, transporting and disposal all rejected material.

B. Acceptance of ties by the CTA does not constitute final acceptance or relieve the Contractor from responsibility for the final installation.

3.05 INSTALLATION

A. The Contractor shall furnish and install the quantity and sizes of ties shown on the plans.

END OF SECTION

DIVISION 7: THERMAL AND MOISTURE PROTECTION

SECTION 07150

DAMPPROOFING

PART 1 – GENERAL

1.01 DESCRIPTION

A. This work shall consist of furnishing all materials, labor, tools and equipment for placing dampproofing on concrete structures in accordance with the details shown on the Plans, as directed by the Engineer and in accordance with Section 503.18 of the Standard Specifications for waterproofing surfaces below the ground and with the provisions of Chapter 8, Part 29, Section 3 Dampproofing of the AREMA Specifications.

1.02 RELATED WORK

Related work specified elsewhere:

A. Section 03300: Cast-In-Place Concrete

B. Section 03410: Structural Precast Concrete

~~C. Section 07101: Membrane Waterproofing~~

1.03 SUBMITTALS

A. Product data for proprietary materials and items as requested by Engineer.

B. Samples of materials as requested by Engineer, including names, sources and descriptions.

C. The Contractor shall submit certification that the ~~waterproofing,~~ dampproofing, sealer and/or repellent materials in contact are compatible.

PART 2 – PRODUCTS

2.01 GENERAL

In lieu of the above specified damppoofing procedure, the Contractor may elect to employ a cold applied dampproofing conforming to any of the following specifications:

A. ASTM D2823

B. ASTM D2822

C. ASTM D1227 (Type I)

Surface preparation and application shall be in strict conformance with the manufacturer's instructions.

PART 3 – EXECUTION

3.01 GENERAL

A. All existing cast-in-place concrete and new precast concrete surfaces which are exposed in the process of the work and will be in contact with ballast or fill when the work is completed and all new cast-in-place concrete which will be in contact with ballast or fill at the completion of the work shall be dampproofed.

~~B. The back faces of construction joints between new and existing concrete or between pre-cast concrete units shall be waterproofed in accordance with Section 07101, Membrane Waterproofing.~~

END OF SECTION

INDEX OF DRAWINGS

GENERAL

REV. NO.	DRAWING NO.	TITLE
0	G-001	COVER
1	G-002	INDEX OF DRAWINGS
0	G-003	GENERAL NOTES
0	G-004	LOCATION MAP
0	V-001	SURVEY CONTROL POINTS
0	TS-108A	CTA STANDARD CLEARANCE DIAGRAM EQUIPMENT OUTLINE
0	TS-108B	CTA STANDARD CLEARANCE END AND MIDDLE OVERHANG SUPERELEVATION EFFECT
0	TS-121	STANDARD OTM DETAILS
0	TS-500	DOUBLE TRACK BALLASTED PLAN AND SECTION
1	TS-501	DOUBLE TRACK BALLASTED DECK PLAN AND SECTION
0	TS-502	ROLLED STEEL TIE PLATE WITH 6 SQUARE HOLES FOR USE WITH CUT SPIKES
0	TS-503	STEEL INSIDE GUARD RAIL PLAN AND DETAILS
0	CT-501	"BLAIR" TYPE CONTACT RAIL INSULATOR CHAIR WITH FIBERGLASS BLOCK
1	CT-502	CONTACT RAIL INSULATOR CHAIR INSTALLATION
0	CT-503	BALLASTED TRACK CONTACT RAIL ANCHOR INSTALLATION
0	CT-504	BASE CONTACT RAIL ASSEMBLY AND DETAILS
0	CT-505	ALUMINUM CLAD CONTACT RAIL ASSEMBLY & DETAILS
0	CT-506	CONTACT RAIL TAPS CONNECTION DEPENDING ON TEMPERATURE
0	CT-507	CONTACT RAIL TAP ASSEMBLY AND DETAILS
0	CT-508	IMPEDANCE BOND AUXILIARY NEGATIVE RAIL BY-PASS & CENTER TAP DETAIL (TYP.)
0	CT-509	CABLE DETAILS
0	T-101	TEMPORARY COMMUNICATIONS PLAN

GREENLEAF STREET VIADUCT

REV. NO.	DRAWING NO.	TITLE
1	CGRE-101	EXISTING PLAN AND ELEVATION
1	CGRE-102	GENERAL PLAN AND ELEVATION
0	CGRE-501	ROADWAY DETAILS
0	CGRE-502	CROSS SECTIONS
0	CGRE-503	TRACK PROFILES
0	SGRE-501	DECK CROSS SECTION DETAILS
0	SGRE-502	STEEL FRAMING AND LATERAL BRACING DETAILS
0	SGRE-503	GIRDER ELEVATION AND DESIGN TABLE DETAILS
0	SGRE-504	GIRDER ELEVATION DETAILS
0	SGRE-505	END FLOOR BEAM DETAILS
0	SGRE-506	TYPICAL DECK DETAILS
0	SGRE-507	FLOOR PLATE DETAILS
0	SGRE-508	UPPER FLOOR PLATE DETAILS
0	SGRE-509	BALLAST STOP PLATE DETAILS
0	SGRE-510	GIRDER BEARING DETAILS
0	SGRE-511	BEARING COMPONENT DETAILS
0	SGRE-512	DRAINAGE DETAILS
0	SGRE-513	EXISTING SOUTH ABUTMENT
0	SGRE-514	PROPOSED SOUTH ABUTMENT
0	SGRE-515	EXISTING NORTH ABUTMENT
1	SGRE-516	PROPOSED NORTH ABUTMENT
0	SGRE-517	ABUTMENT DETAILS I
0	SGRE-518	ABUTMENT DETAILS II
0	SGRE-519	CAISSON DETAILS
0	SXGRE-001	SUGGESTED STAGING SEQUENCE
0	SXGRE-002	MAINTENANCE OF TRAFFIC
1	SXGRE-003	STAGING LOCATION
0	AGRE-101	ARCHITECTURAL PLAN
0	AGRE-102	LANDSCAPE PLAN
1	EGRE-101	EXISTING AND TEMPORARY CABLE PLAN
0	EGRE-102	FINAL ELECTRICAL PLAN
0	EGRE-103	LIGHTING PLAN
0	EGRE-501	LIGHTING DETAILS

DEMPSTER STREET VIADUCT

REV. NO.	DRAWING NO.	TITLE
1	CDEM-101	EXISTING PLAN AND ELEVATION
1	CDEM-102	GENERAL PLAN AND ELEVATION
0	CDEM-501	ROADWAY DETAILS
0	CDEM-502	CROSS SECTIONS
0	CDEM-503	TRACK PROFILES
0	SDEM-501	DECK CROSS SECTION DETAILS
0	SDEM-502	STEEL FRAMING AND LATERAL BRACING DETAILS
0	SDEM-503	GIRDER ELEVATION AND DESIGN TABLE DETAILS
0	SDEM-504	GIRDER ELEVATION DETAILS
0	SDEM-505	END FLOOR BEAM DETAILS
0	SDEM-506	TYPICAL DECK DETAILS
0	SDEM-507	FLOOR PLATE DETAILS
0	SDEM-508	UPPER FLOOR PLATE DETAILS
0	SDEM-509	BALLAST STOP PLATE DETAILS
0	SDEM-510	GIRDER BEARING DETAILS
0	SDEM-511	BEARING COMPONENT DETAILS
0	SDEM-512	DRAINAGE DETAILS
0	SDEM-513	EXISTING SOUTH ABUTMENT
0	SDEM-514	PROPOSED SOUTH ABUTMENT
0	SDEM-515	EXISTING NORTH ABUTMENT
0	SDEM-516	PROPOSED NORTH ABUTMENT
0	SDEM-517	ABUTMENT DETAILS I
0	SDEM-518	ABUTMENT DETAILS II
0	SDEM-519	CAISSON DETAILS
0	SDEM-520	EXISTING PLATFORM DEMOLITION AND EXTENSION PLAN
0	SDEM-521	PLATFORM EXTENSION
0	SDEM-522	PLATFORM EXTENSION DETAILS
0	SDEM-523	PLATFORM SIGNAGE PLAN
0	SXDEM-001	STAGING SEQUENCE
0	SXDEM-002	MAINTENANCE OF TRAFFIC
0	SXDEM-003	STAGING LOCATION
0	ADEM-101	ARCHITECTURAL PLAN
0	ADEM-102	LANDSCAPE PLAN
0	EDEM-101	EXISTING AND TEMPORARY CABLE PLAN
0	EDEM-102	FINAL ELECTRICAL PLAN
0	EDEM-103	LIGHTING PLAN
0	EDEM-501	LIGHTING DETAILS

GROVE STREET VIADUCT

REV. NO.	DRAWING NO.	TITLE
1	CGRO-101	EXISTING PLAN AND ELEVATION
1	CGRO-102	GENERAL PLAN AND ELEVATION
0	CGRO-501	ROADWAY DETAILS
0	CGRO-502	CROSS SECTIONS
0	CGRO-503	TRACK PROFILES
0	SGRO-501	DECK CROSS SECTION DETAILS
0	SGRO-502	STEEL FRAMING AND LATERAL BRACING DETAILS
0	SGRO-503	GIRDER ELEVATION AND DESIGN TABLE DETAILS
0	SGRO-504	GIRDER ELEVATION DETAILS
0	SGRO-505	END FLOOR BEAM DETAILS
0	SGRO-506	TYPICAL DECK DETAILS
0	SGRO-507	FLOOR PLATE DETAILS
0	SGRO-508	UPPER FLOOR PLATE DETAILS
0	SGRO-509	BALLAST STOP PLATE DETAILS
0	SGRO-510	GIRDER BEARING DETAILS
0	SGRO-511	BEARING COMPONENT DETAILS
0	SGRO-512	DRAINAGE DETAILS
0	SGRO-513	EXISTING SOUTH ABUTMENT
0	SGRO-514	PROPOSED SOUTH ABUTMENT
0	SGRO-515	EXISTING NORTH ABUTMENT
0	SGRO-516	PROPOSED NORTH ABUTMENT
0	SGRO-517	ABUTMENT DETAILS
0	SGRO-518	CAISSON DETAILS
0	SXGRO-001	STAGING SEQUENCE
0	SXGRO-002	MAINTENANCE OF TRAFFIC
0	SXGRO-003	STAGING LOCATION
0	AGRO-101	ARCHITECTURAL PLAN
0	AGRO-102	LANDSCAPE PLAN
0	EGRO-101	EXISTING AND TEMPORARY CABLE PLAN
0	EGRO-102	FINAL ELECTRICAL PLAN
0	EGRO-103	LIGHTING PLAN
0	EGRO-501	LIGHTING DETAILS

RETAINING WALL REHABILITATION

REV. NO.	DRAWING NO.	TITLE
1	WAL S-501	TYPICAL WALL REPAIR DETAILS
0	WAL S-001	WALL 1 ELEVATION STA. 578+90 – 581+99
0	WAL S-002	WALL 1 ELEVATION STA. 581+99 – 584+99
0	WAL S-003	WALL 1 ELEVATION STA. 584+99 – 587+99
0	WAL S-004	WALL 1 ELEVATION STA. 587+99 – 590+98
0	WAL S-005	WALL 1 ELEVATION STA. 590+98 – 594+04
0	WAL S-006	WALL 1 PLAN STA. 619+45.87 – 622+65.87
1	WAL S-007	WALL 1 ELEVATION STA. 619+45.87 – 622+65.87
0	WAL S-008	WALL 2 ELEVATION STA. 612+63.67 – 614+48
0	WAL S-009	WALL 2 ELEVATION STA. 614+48 – 615+82
0	WAL S-010	WALL 2 ELEVATION STA. 616+44 – 617+81
0	WAL S-011	WALL 2 ELEVATION STA. 617+81 – 619+19

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA – PURPLE LINE
REHABILITATION
VIADUCT REPLACEMENT
AND RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

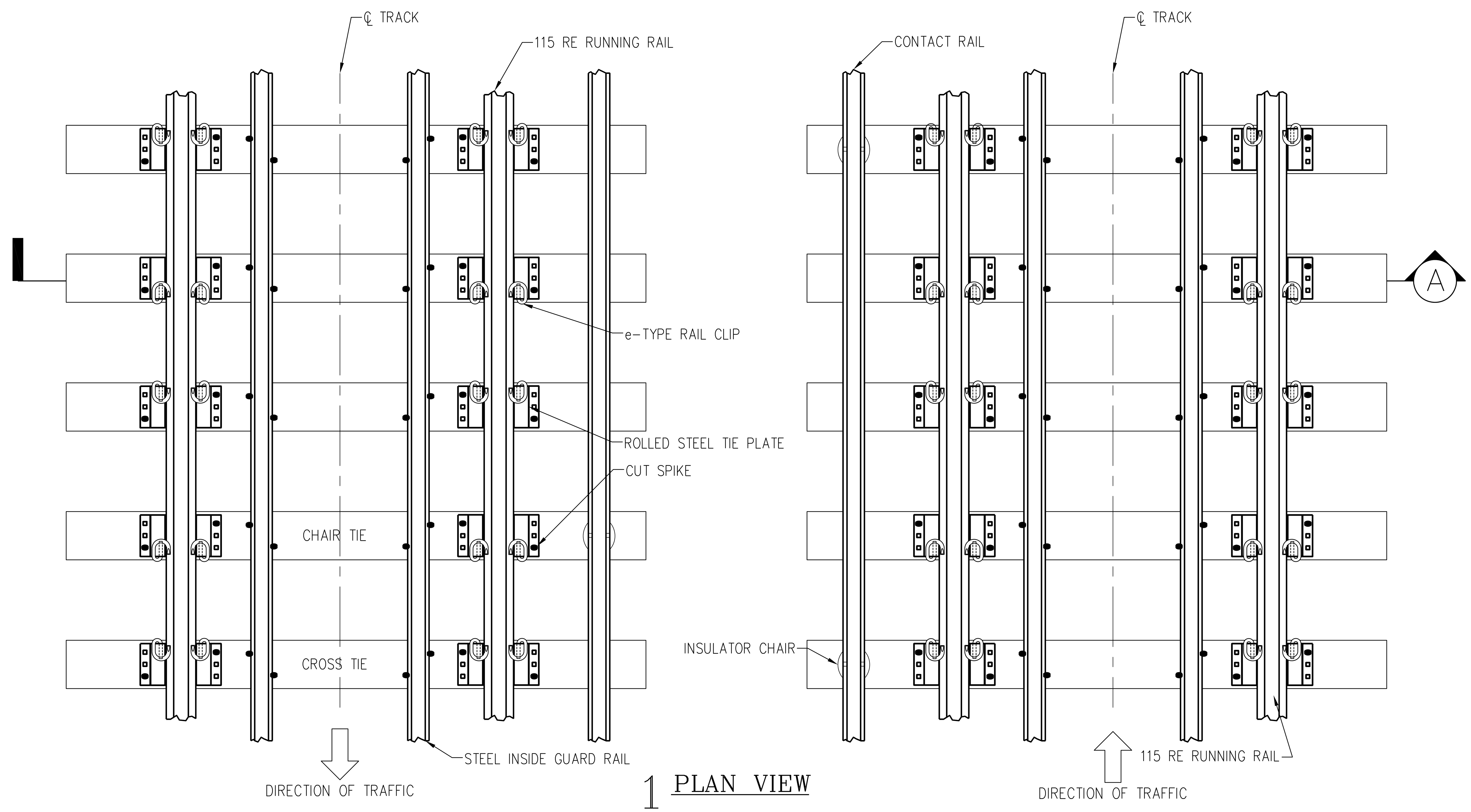
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGENG-002

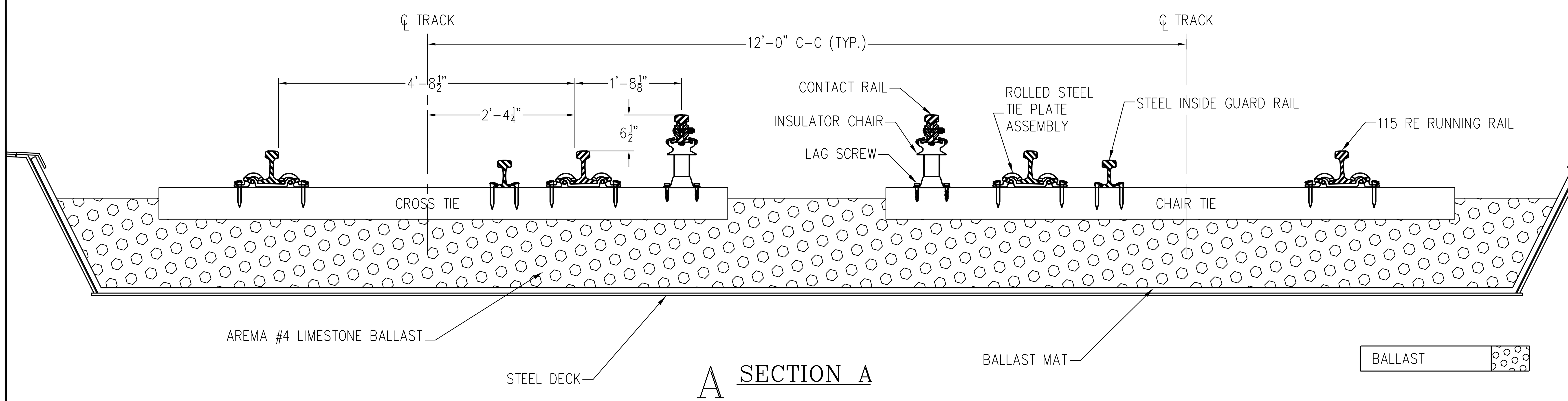
REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
INDEX OF DRAWINGS

DRAWING NO. G-002



1 PLAN VIEW



A SECTION A

BALLAST

NOTES

1. THERMITE WELDS SHALL CONFORM TO THE MOST RECENT VERSION OF AREMA MANUAL FOR RAILWAY ENGINEERING. AREMA RECOMMENDATIONS FOR WELD TESTING SHALL BE COMPLIED WITH EXPLCITLY, WHERE A MINIMUM OF VISUAL, MAG PARTICLE, AND HARDNESS TESTS SHALL BE COMPLETED FOR EACH WELD.

2. RAIL SHALL BE INSTALLED SUCH THAT THE BRAND FACES THE CENTERLINE OF EACH TRACK.

3. ALL RUNNING RAIL TO BE INSTALLED SHALL BE SET IN TRACK AT PREFERRED RAIL LAYING TEMPERATURES AS PRESCRIBED BY THE MOST RECENT VERSION OF AREMA MANUAL.

4. TIE SPACING SHALL NOT EXCEED 24 INCHES CENTER TO CENTER FOR TANGENT TRACK.

5. ADJUST THE PATTERN OF TIE SPACING TO ACCOMODATE EQUIPMENT LOCATED IN THE TRACK AND TO CLEAR ANY OTHER ACCEPTED OBSTRUCTION.

6. USE CUT SPIKE INSTALLATION PATTERN AS SHOWN.

7. TIES SHALL BE SET PERPENDICULAR TO THE CENTERLINE OF TRACKS.

8. GRIND THE ENDS OF THE NEW RAIL TO MATCH THE HEAD WEAR AND GAGE WEAR OF THE EXISTING RAIL ACCORDING TO THE SCHEDULE SHOWN PRIOR TO MAKING THE FINAL FIELD WELDS.

9. INSTALL PLATE ASSEMBLIES CONSISTING OF A ROLLED STEEL PLATE, 2 e–TYPE RAIL CLIPS, AND 2 CUT SPIKES AS SHOWN.

10. SPACE INSULATOR CHAIRS 8 FT (+0', –2') C–C, ON TANGENT TRACK.

11. MAINTAIN AN 18 INCH MINIMUM CLEARANCE BETWEEN THE INSULATOR CHAIR AND EITHER SIDE OF A CONTACT RAIL POWER TAP ASEMBLY OR CONTACT RAIL JOINT BOND.

12. BALLAST SHALL BE #4 LIMESTONE IN ACCORDANCE WITH THE MOST RECENT VERSION OF AREMA MANUAL. THE BALLAST SHALL BE CRIBBED 1" BELOW THE TOP OF TIE AND SHALL NEVER TOUCH THE RUNNING RAIL.

RAIL GRINDING

DEPTH	DISTANCE
1/16"	18"
1/8"	24"
3/16"	30"
1/4"	36"
5/16"	42"
3/8"	48"
7/16"	54"
1/2"	60"
9/16"	66"
5/8"	72"

NOTE:
DISTANCE IS DEFINED AS THE LENGTH FROM FULL RAIL PROFILE TO RAIL END.

ABBREVIATIONS

C–C CENTER–TO–CENTER
℄ CENTERLINE
TYP TYPICAL

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606–3421
TEL. (312) 251–3000

CTA – PURPLE LINE REHABILITATION
VIADUCT REPLACEMENT AND RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

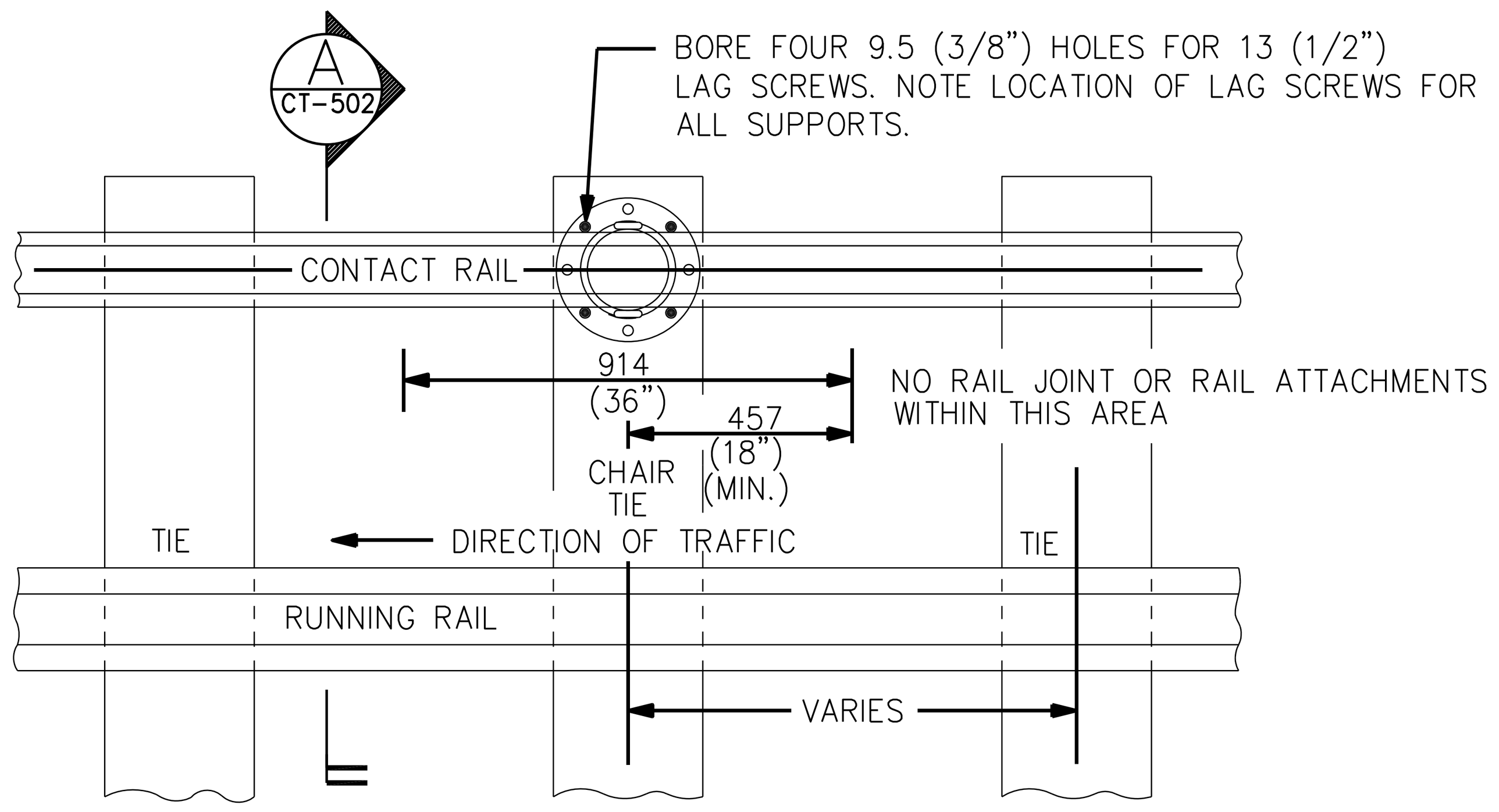
CHICAGO TRANSIT AUTHORITY

IN CHARGE	GCZ
APPROVED BY	RAS
CHECKED BY	JBS
DESIGNED BY	JJH
DRAWN BY	JJH
PROJECT NO.	050019057
FILE NAME	

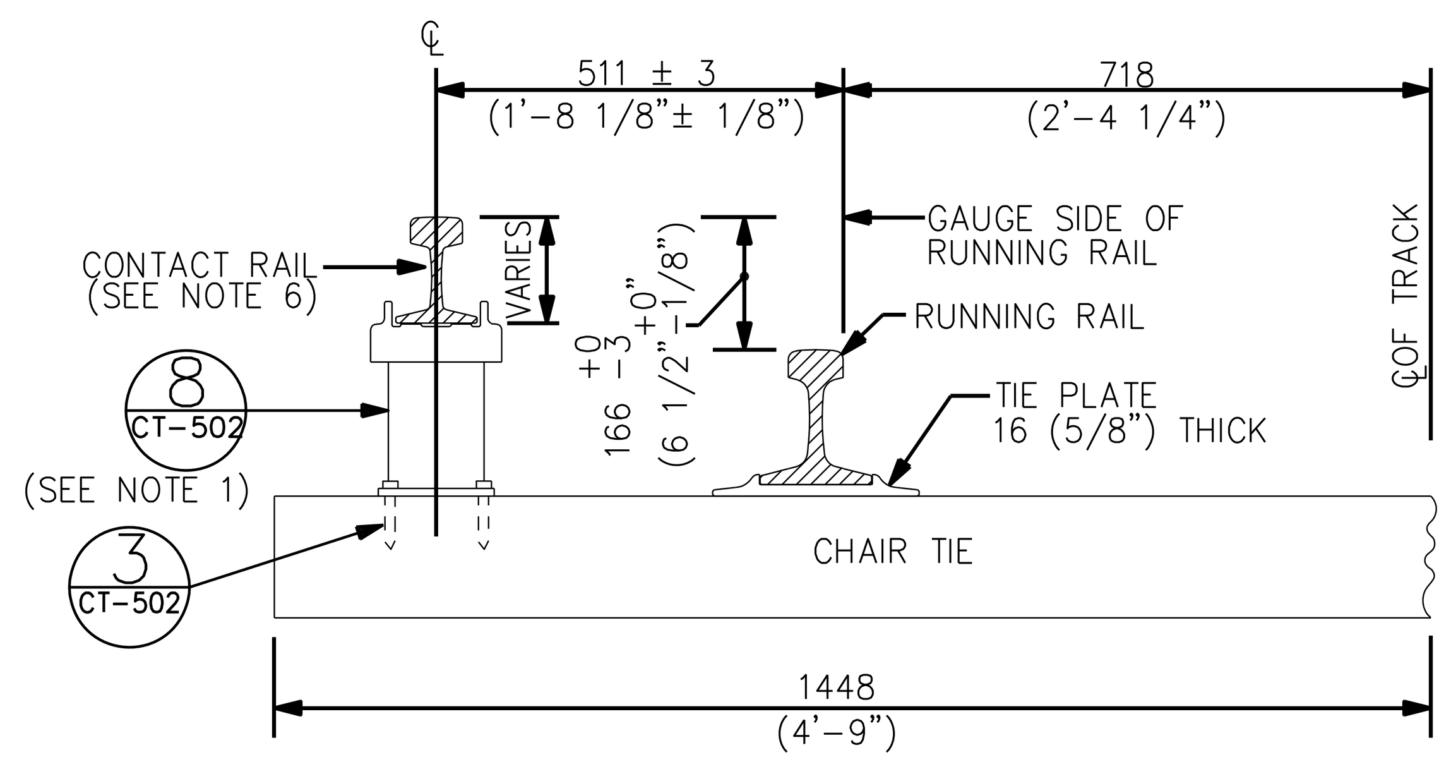
REV.	DATE	DESCRIPTION
1	05–16–11	ADDENDUM NO. 1
0	04–13–11	ISSUED FOR BID

SHEET TITLE
DOUBLE TRACK
BALLASTED DECK
PLAN AND SECTION

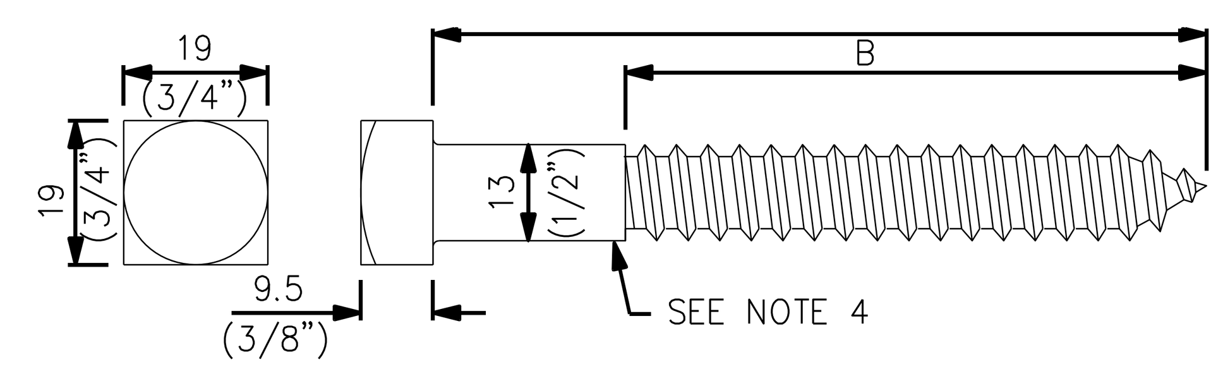
DRAWING NO. TS–501



DETAIL OF PORCELAIN INSULATOR CHAIR INSTALLATION (1 / CT-502)



SECTION (A / CT-502)



TYPE OF CHAIR	DIM. "A" (INCH.)	DIM. "B" (INCH.)
SOLID FIBERGLASS BLOCK WITHOUT BOTTOM CASTING (SEE NOTE 4)	102 (4")	76 (3")
PORCELAN OR FIBERGLASS BLOCK WITH MALLEABLE BOTTOM CASTING (SEE NOTE 5)	76 (3")	51 (2")

DETAIL OF LAG SCREW (2 / CT-502)

NOTES:

1. PORCELAIN INSULATOR CHAIRS SHALL BE USED FOR RIGHT–OF–WAY IN EXPRESSWAY MEDIANS (SALT SPRAY CONDITIONS EXIST) AND SUBWAY TRACK INSTALLATIONS.

2. BLAIR INSULATOR CHAIRS SHALL BE USED FOR BALLASTED RIGHT–OF–WAY (NON–EXPRESSWAY) AND STRUCTURE (ELEVATED) TRACK INSTALLATION.

3. FOR CONTACT RAIL INSULATOR CHAIR SPACING SEE THIS DRAWING. CHAIR SPACING SHALL BE SPACED 2438 (8'–0") APART ON TANGENT TRACK, AND 1829 (6'–0") APART ON CURVES WITH RADIUS LESS THAN 2500 FEET. CHAIR SPACING MAY BE ADJUSTED AS REQUIRED BY FIELD CONDITIONS (EXCEPT FIRST CHAIR) AT POINT OF INCLINE. ADJUSTMENTS ALLOWED ARE: ±610 (±2'–0") ONLY FOR TANGENT TRACK AND –610 (–2'–0") ONLY FOR CURVE TRACK.

4. LAG SCREW SQUARE HEAD, GIMLET POINT, EPOXY ELECTROCOATED, HEAD TO BE 9.5 (3/8") THICK, PER AREA 5–M–1:
   - CARBON – 0.18% MIN.
   - TENSILE STRENGTH – 60,000 PSI
   - YIELD POINT, PSI – 0.5 TENSILE STRENGTH
   - ELONGATION IN 51 (2") MIN. – 18%

5. LAG SCREW SQUARE HEAD, GIMLET OR SEMI–CONICAL POINT, EPOXY ELECTROCOATED, HEAD TO BE 9.5 (3/8") THICK, PER AREA 5–M–1:
   - CARBON – 0.18% MIN.
   - TENSILE STRENGTH – 60,000 PSI
   - YIELD POINT, PSI – 0.5 TENSILE STRENGTH
   - ELONGATION IN 51 (2") MIN. – 18%

6. TYPICAL BASE CONTACT RAIL SHOWN.

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606–3421
TEL. (312) 251–3000

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VIADUCT REPLACEMENT AND RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

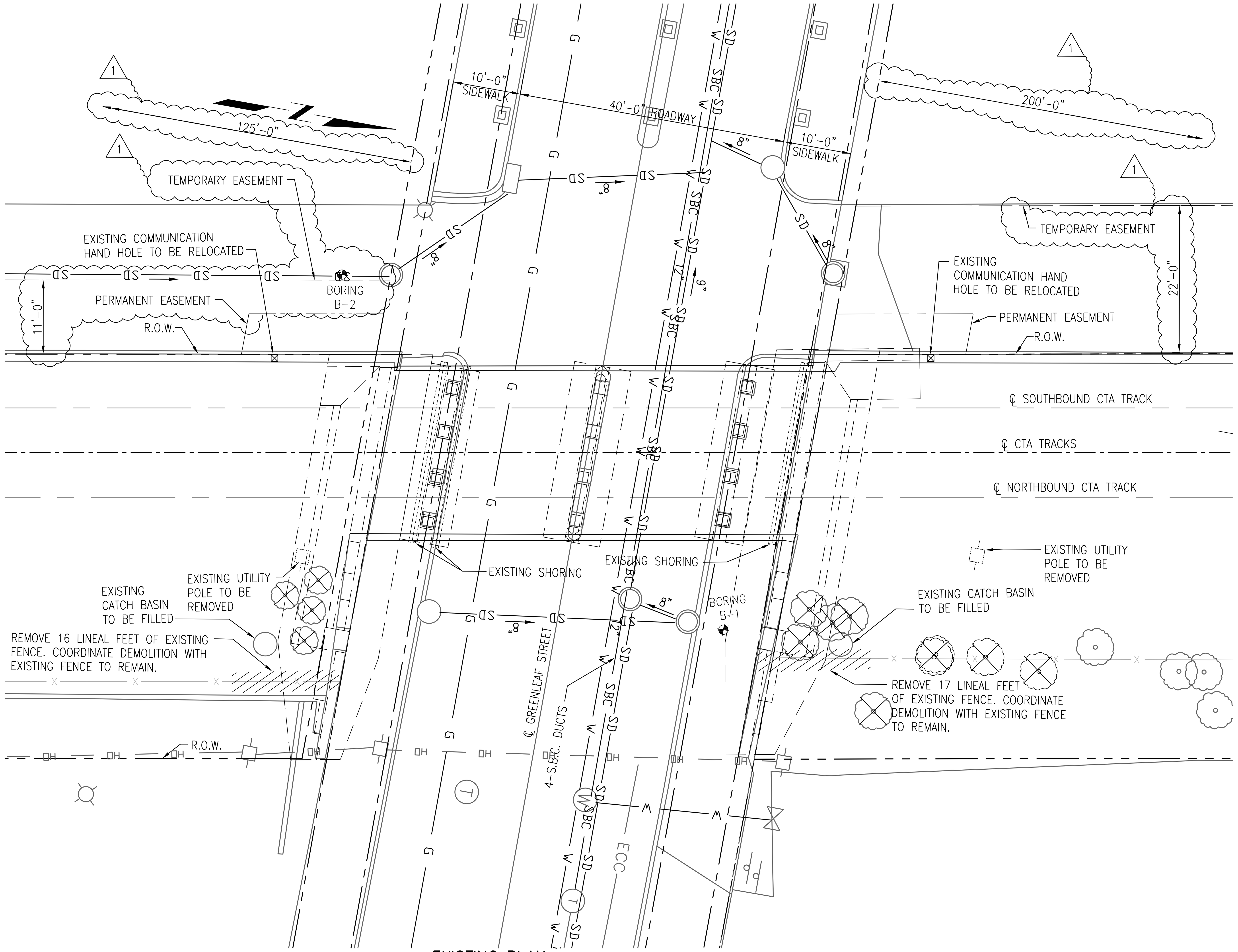
CHICAGO TRANSIT AUTHORITY

IN CHARGE	CTA
APPROVED BY	CTA
CHECKED BY	CTA
DESIGNED BY	CTA
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGENCT–502.dwg

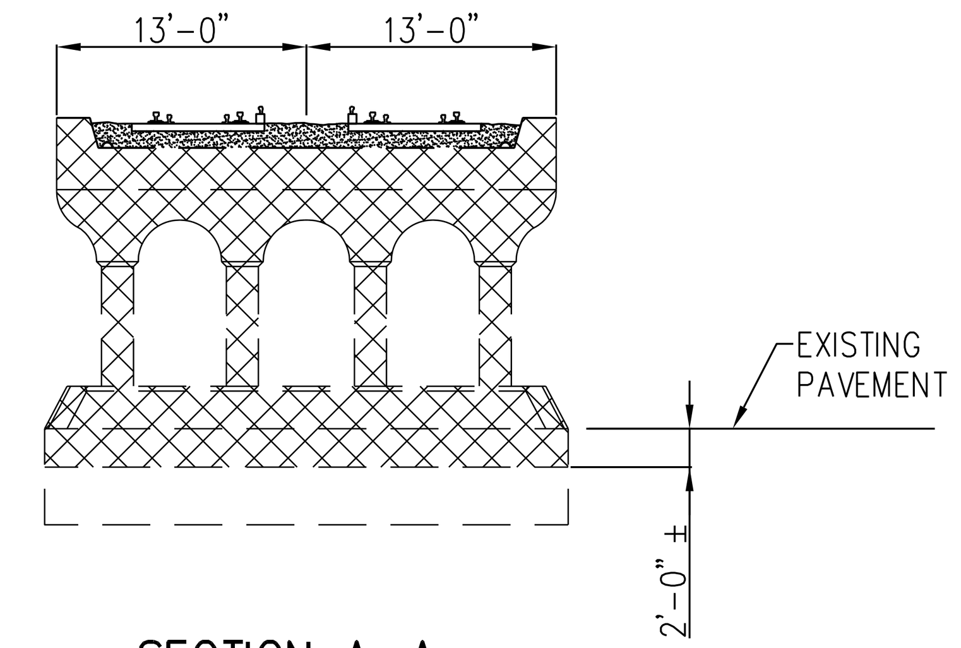
REV.	DATE	DESCRIPTION
1	05–16–11	ADDENDUM NO. 1
0	04–13–11	ISSUED FOR BID

SHEET TITLE
CONTACT RAIL INSULATOR CHAIR INSTALLATION

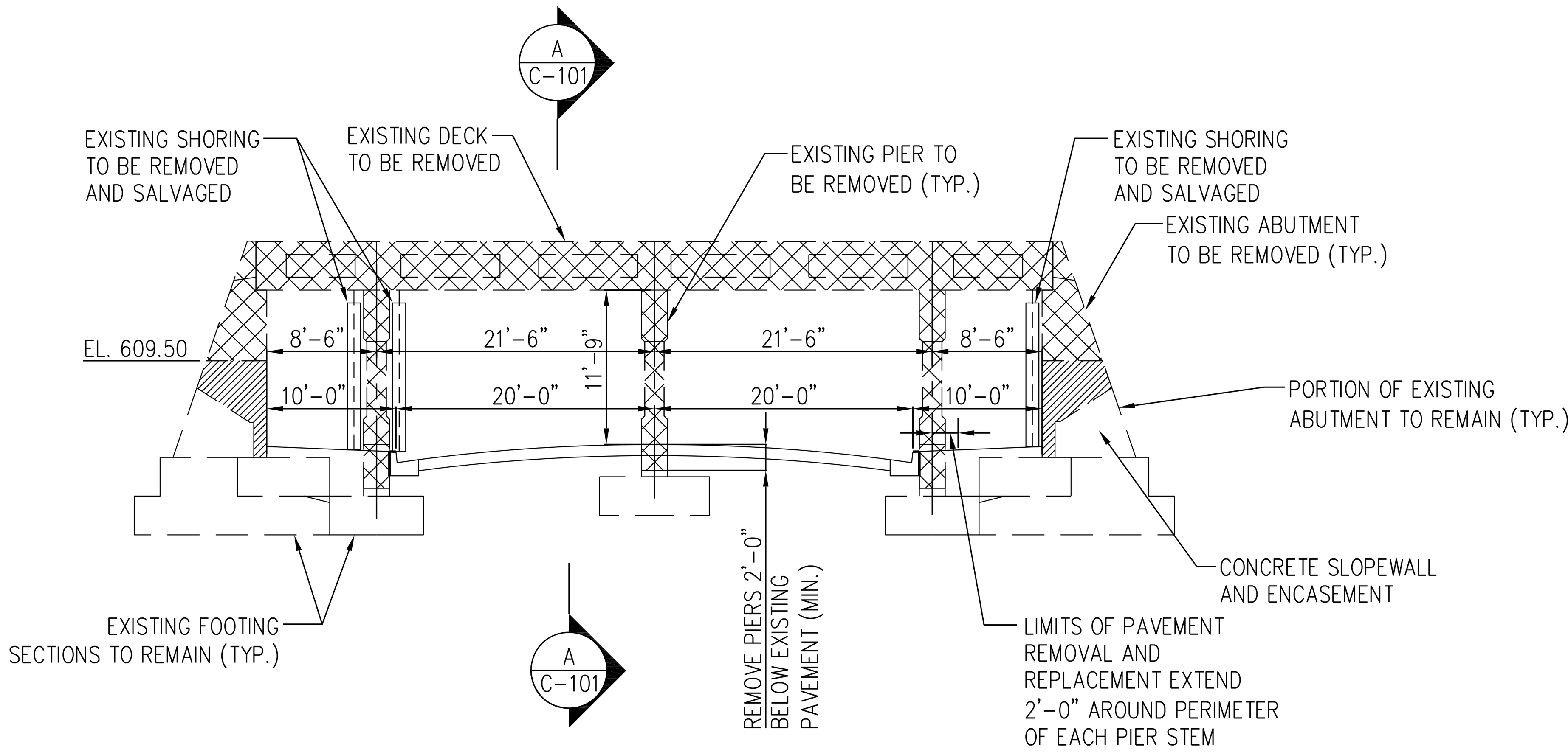
DRAWING NO. CT–502



EXISTING PLAN
SCALE: 1"=10'-0"



SECTION A-A
SCALE: 1"=10'-0"



EXISTING ELEVATION
(LOOKING WEST)
SCALE: 1"=10'-0"

NOTE:

1. CONTRACTOR SHALL DELIVER SALVAGED SHORING TO CTA WEST SHOPS.

LEGEND

EXISTING

- CATCH BASIN
- MANHOLE
- LAMP POST
- WATER VALVE VAULT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- WATER VALVE
- TIMBER POWER LINE POLE
- SOIL BORING
- TREE
- TREE TO BE REMOVED
- —SD— —SD— STORM DRAIN LINE
- —UD— —UD— SUBSURFACE DRAIN LINE
- —SS— —SS— SEWER LINE
- — E — — E — ELECTRICAL LINE
- — ECC — UNDERGROUND ELECTRICAL LINE
- — OH — EXISTING OVERHEAD COMED LINE
- — W — — W — WATER MAIN LINE
- — SBC — S.B.C. DUCT
- — — — R.O.W.
- -X—X—X- EXISTING FENCE
- CONCRETE REMOVAL BEFORE ROLL-IN OF NEW SUPERSTRUCTURE
- CONCRETE REMOVAL AFTER NEW SUPERSTRUCTURE IS IN PLACE
- LIMITS OF FENCE REMOVAL

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE REHABILITATION
GREENLEAF STREET VIADUCT
EVANSTON, ILLINOIS

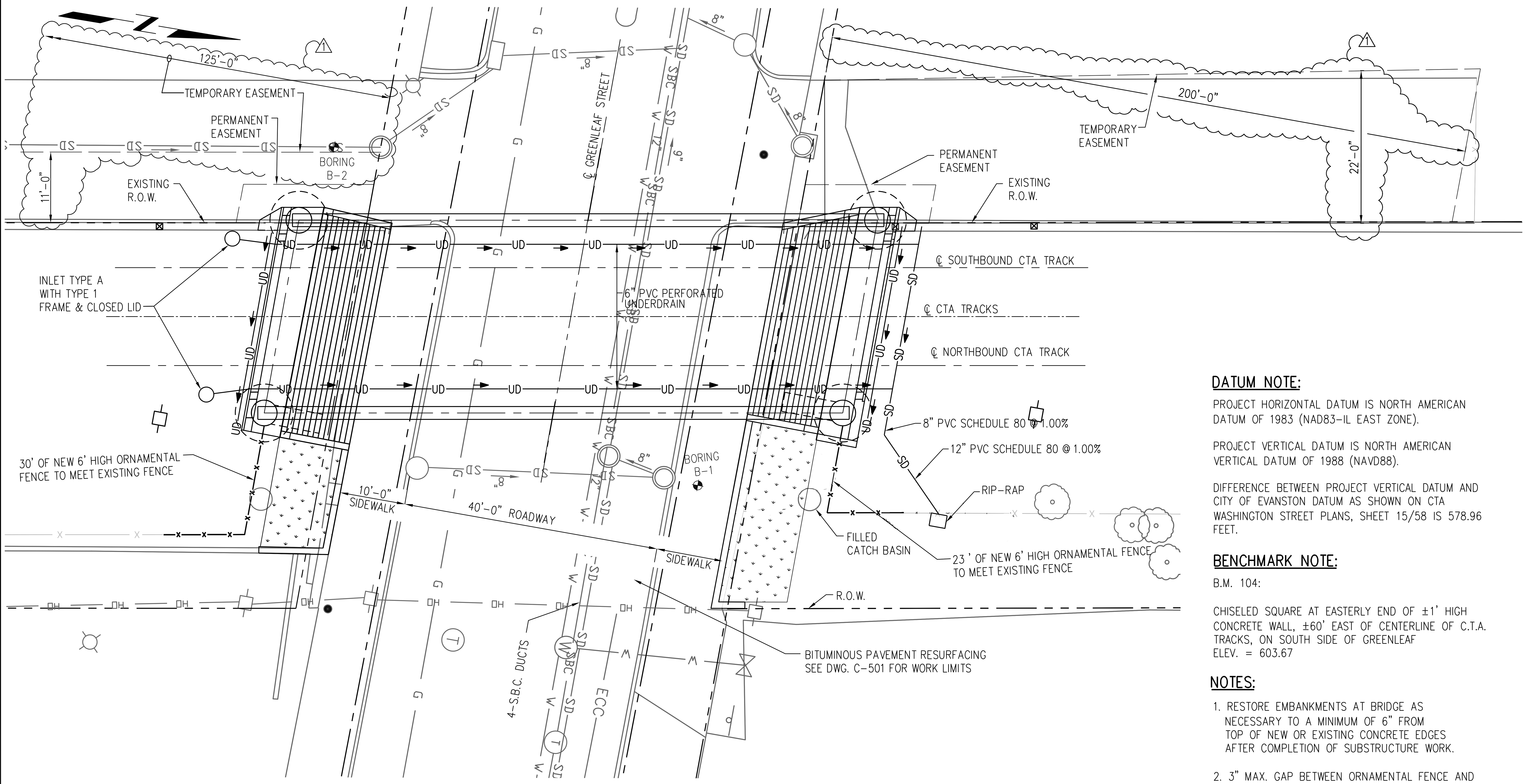
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JAP
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGREC-101

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
EXISTING PLAN AND ELEVATION

DRAWING NO. CGRE-101



PROPOSED PLAN
SCALE: 1"=10'-0"

DATUM NOTE:

PROJECT HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83-IL EAST ZONE).

PROJECT VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

DIFFERENCE BETWEEN PROJECT VERTICAL DATUM AND CITY OF EVANSTON DATUM AS SHOWN ON CTA WASHINGTON STREET PLANS, SHEET 15/58 IS 578.96 FEET.

BENCHMARK NOTE:

B.M. 104:

CHISELED SQUARE AT EASTERLY END OF ±1' HIGH CONCRETE WALL, ±60' EAST OF CENTERLINE OF C.T.A. TRACKS, ON SOUTH SIDE OF GREENLEAF
ELEV. = 603.67

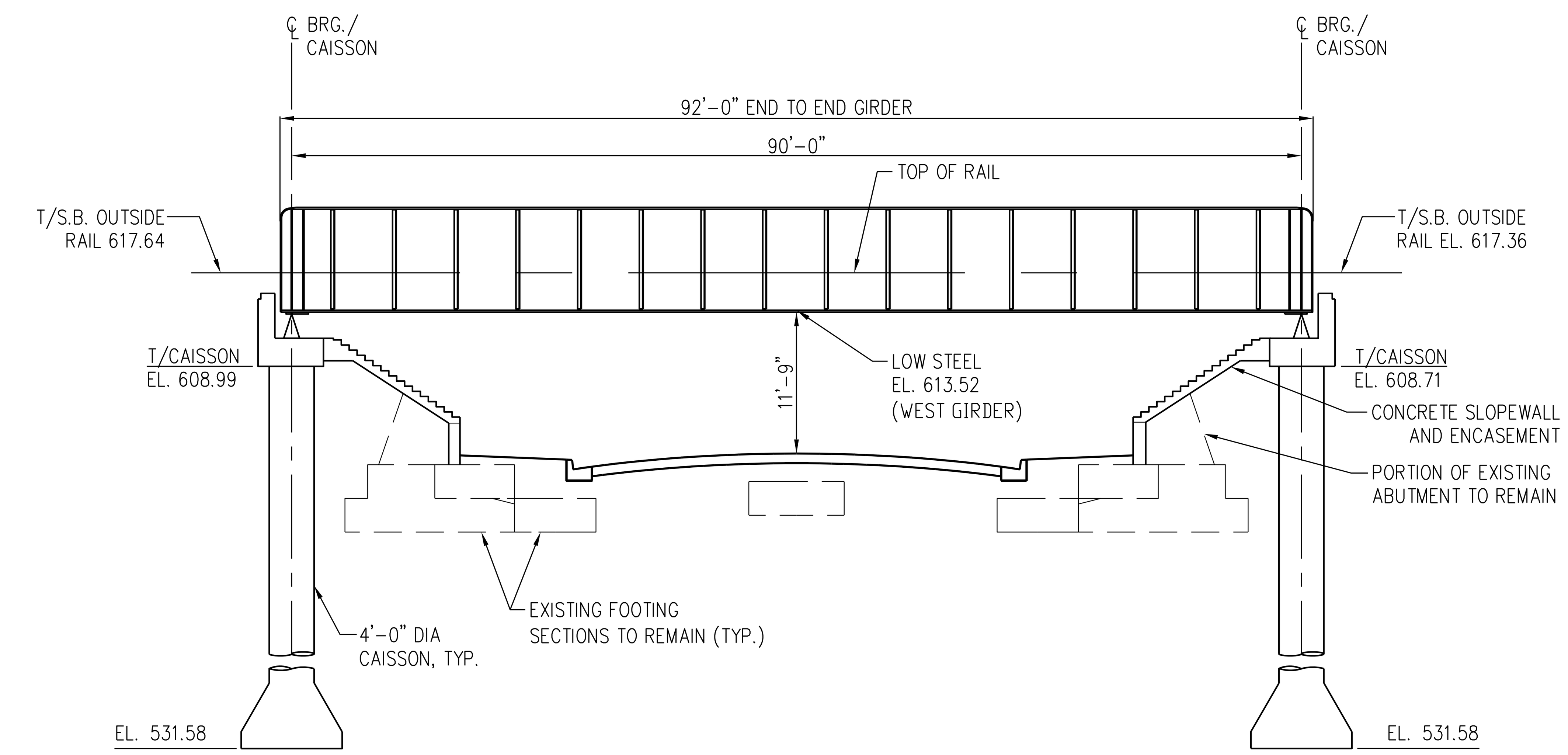
NOTES:

1. RESTORE EMBANKMENTS AT BRIDGE AS NECESSARY TO A MINIMUM OF 6" FROM TOP OF NEW OR EXISTING CONCRETE EDGES AFTER COMPLETION OF SUBSTRUCTURE WORK.
2. 3" MAX. GAP BETWEEN ORNAMENTAL FENCE AND EXISTING FENCE.
3. REFER TO SGRE-512 FOR DRAINAGE DETAILS.

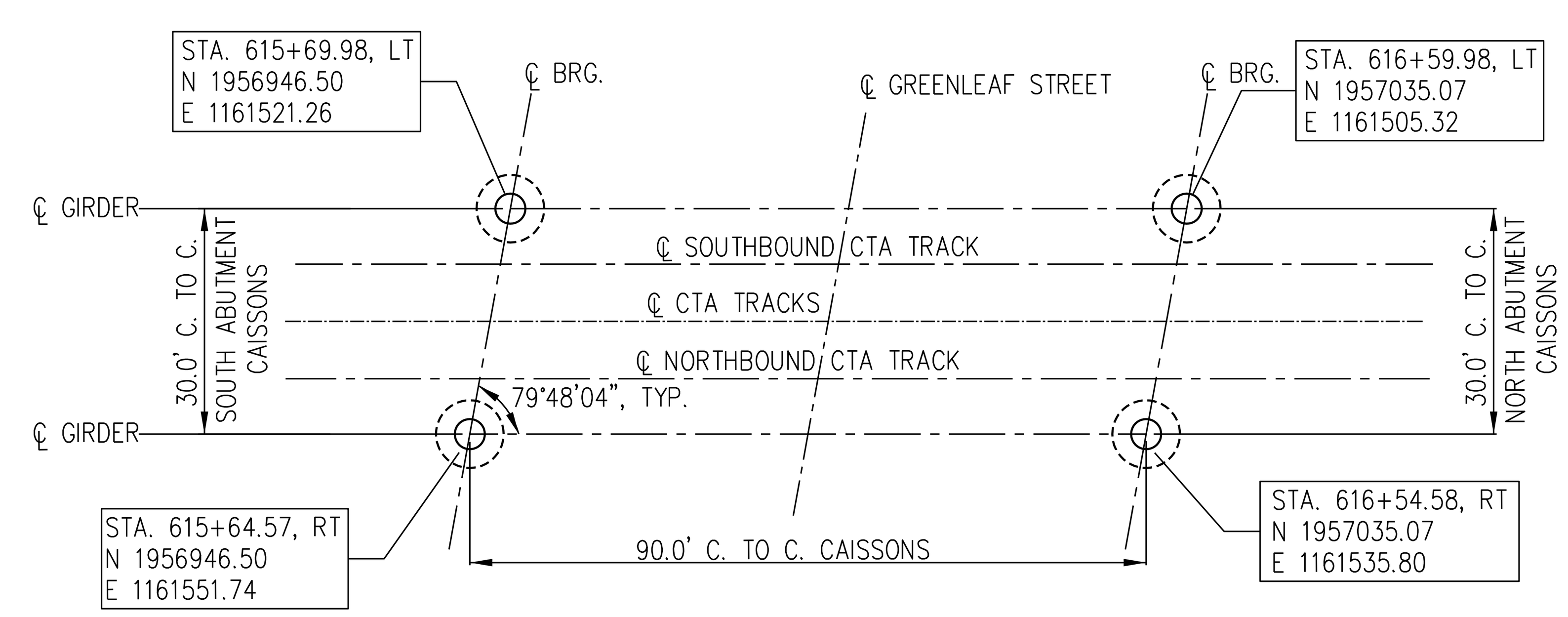
LEGEND

EXISTING / PROPOSED

- CATCH BASIN
- MANHOLE
- LAMP POST
- WATER VALVE VAULT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- WATER VALVE
- TIMBER POWER LINE POLE
- SOIL BORING
- —SD—SD— NEW STORM DRAIN LINE
- —UD—UD— NEW SUBSURFACE DRAIN LINE
- —SS—SS— SEWER LINE
- —E—E— ELECTRICAL LINE
- —ECC— UNDERGROUND ELECTRICAL LINE
- —OH— EXISTING OVERHEAD COMED LINE
- —W—W— WATER MAIN LINE
- —SBC— S.B.C. DUCT
- R.O.W.
- EXISTING FENCE
- NEW FENCE
- LANDSCAPING



PROPOSED ELEVATION
SCALE: 1"=10'-0"



CAISSON FOUNDATION PLAN
SCALE: 1"=20'-0"

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA – PURPLE LINE
REHABILITATION
VIADUCT REPLACEMENT
AND RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

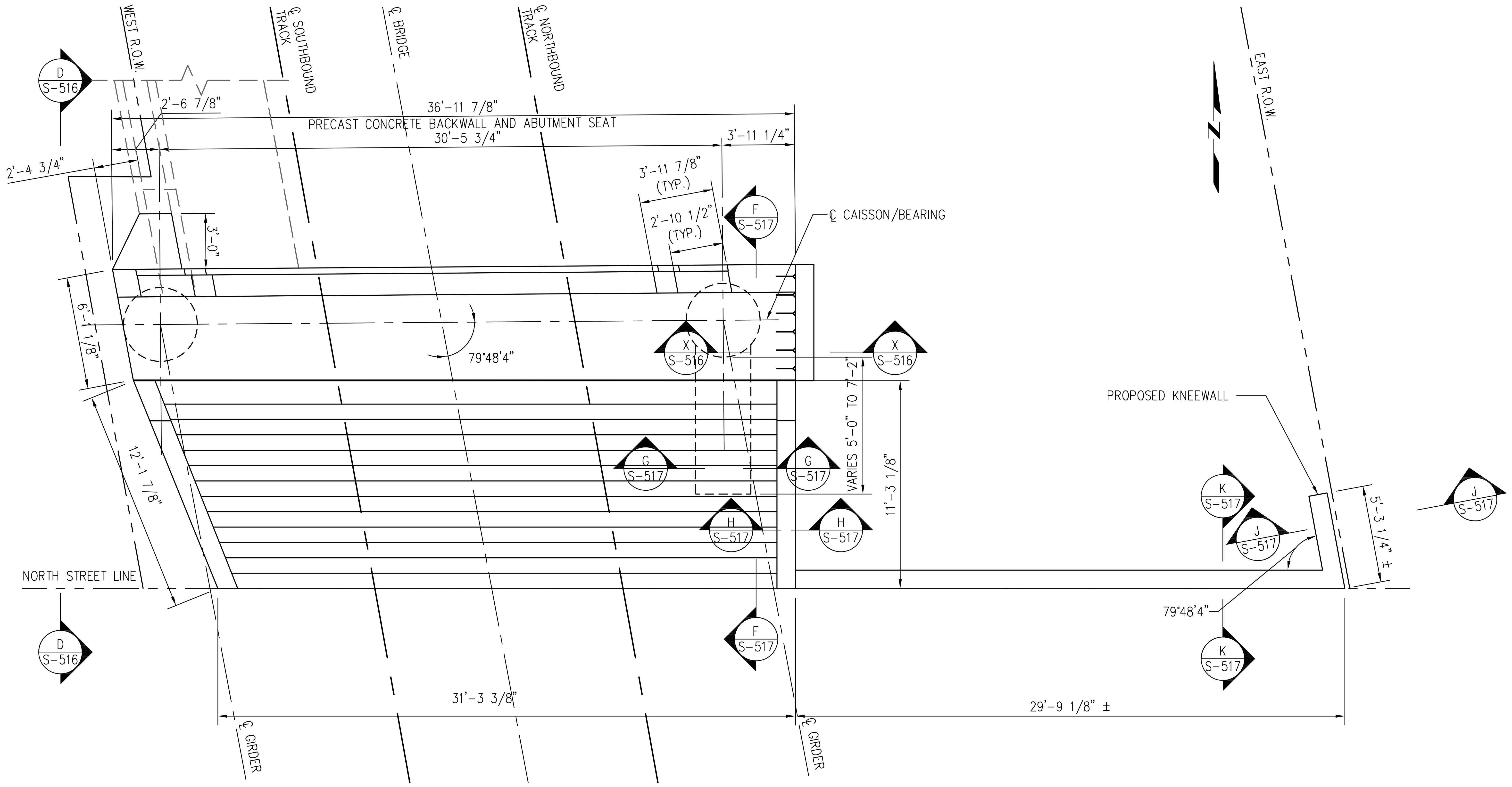
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGREC-102

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
GENERAL PLAN AND ELEVATION

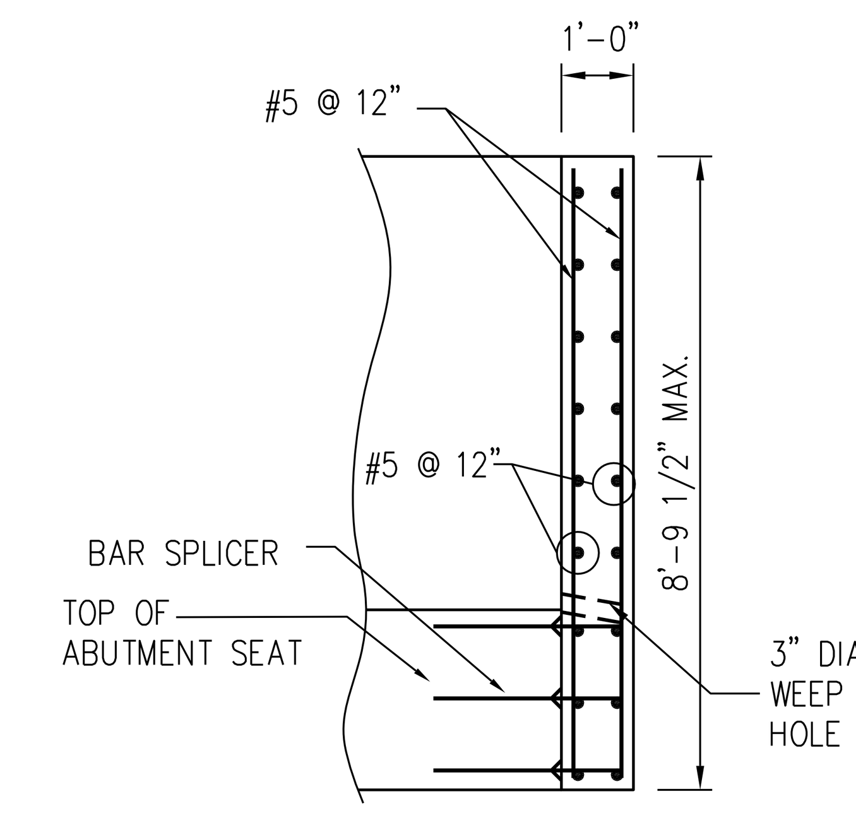
DRAWING NO. CGRE-102



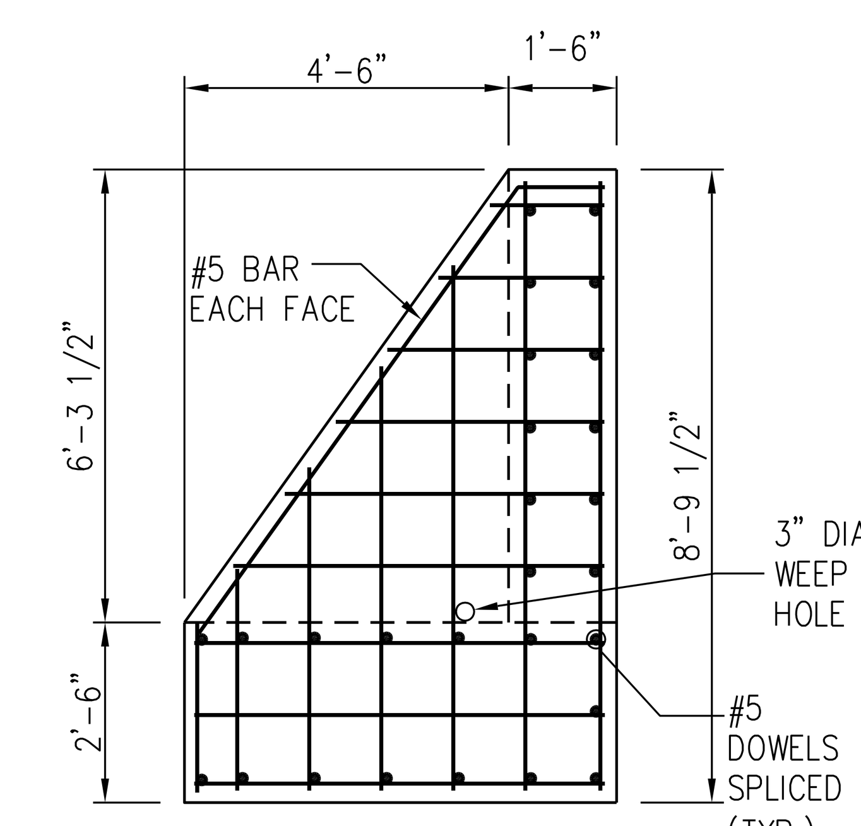
NORTH ABUTMENT PLAN
SCALE: 1/4" = 1'-0"

NOTE

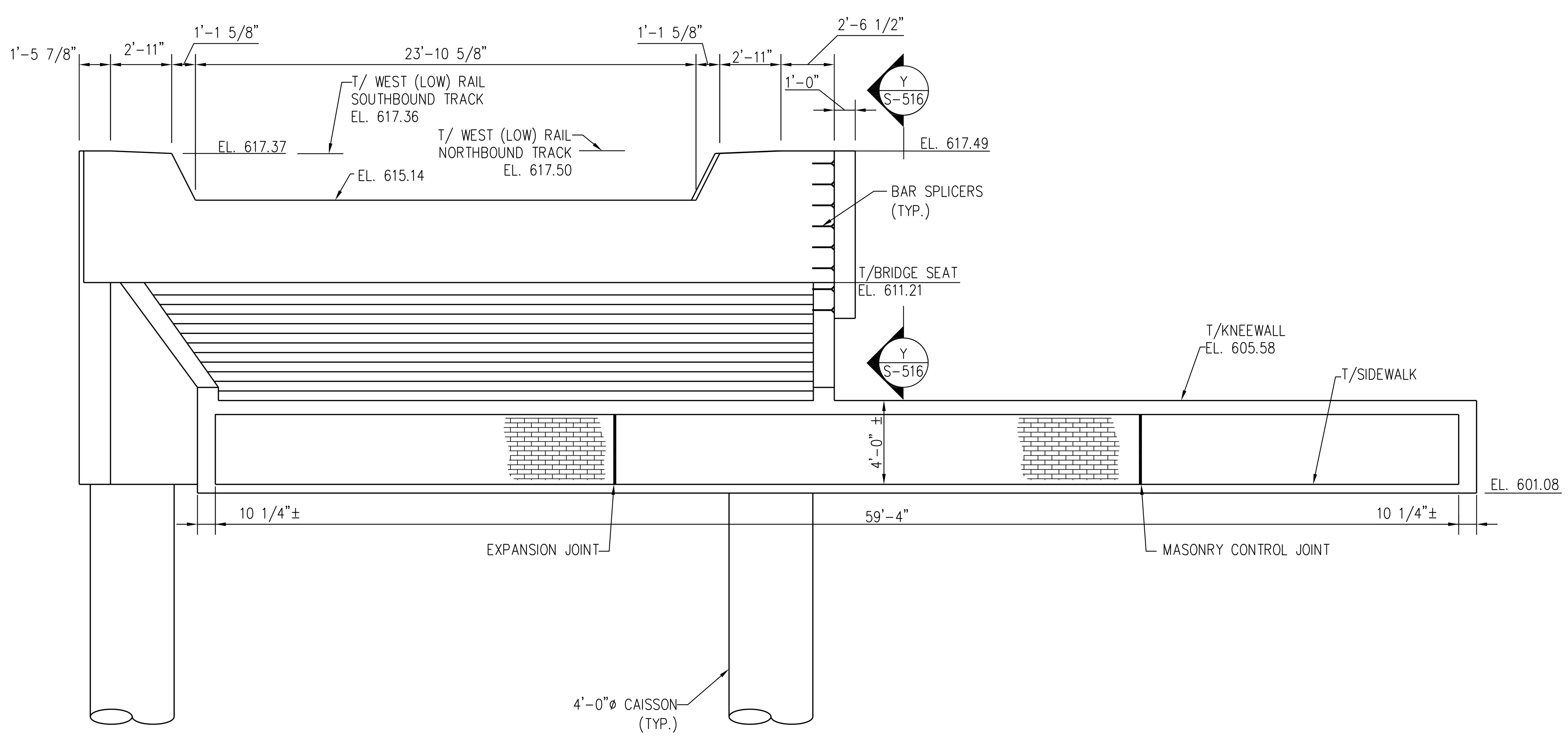
FOR ABUTMENT SECTIONS AND DETAILS, SEE SHEETS S-517, S-518



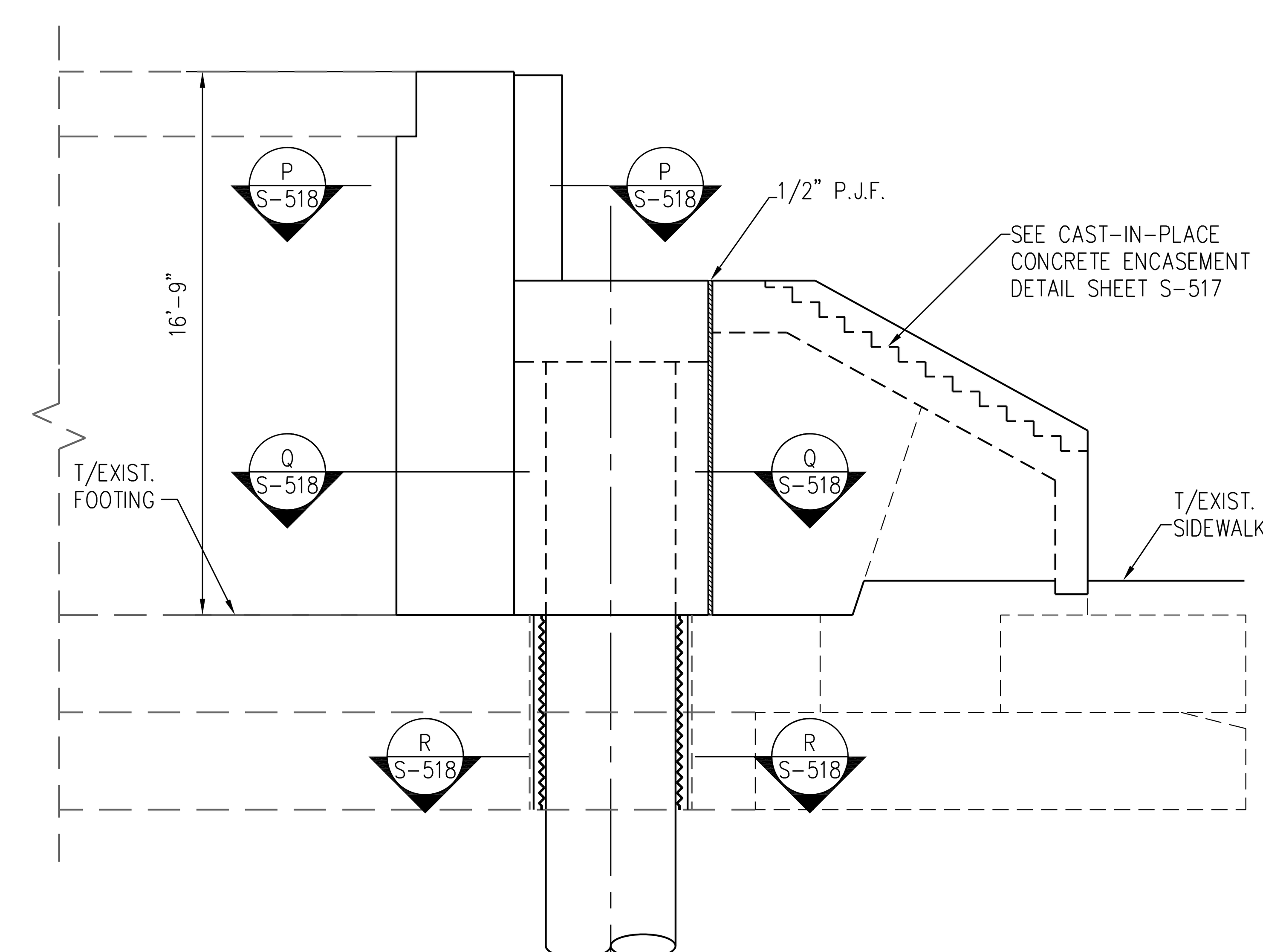
SECTION X-X
SCALE: 3/8" = 1'-0"



SECTION Y-Y
SCALE: 3/8" = 1'-0"



NORTH ABUTMENT ELEVATION
SCALE: 1/4" = 1'-0"



VIEW D-D
SCALE: 1/4" = 1'-0"

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1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE REHABILITATION
GREENLEAF STREET VIADUCT
EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGRES-516

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
PROPOSED NORTH ABUTMENT

DRAWING NO. SGRE-516

NOTES:

1. STAGING AREA A WILL BE PROVIDED CONTINGENT ON AGREEMENT BETWEEN CTA AND PROPERTY OWNER. STAGING AREA B WILL BE PROVIDED IF AREA A IS NOT SECURED BY CTA.
2. CONTRACTOR TO PROVIDE ALL TEMPORARY PAVEMENT STRIPING IN PARKING LOT ADJACENT TO STAGING AREA A.
3. CONTRACTOR TO PROVIDE TEMPORARY PARKING LOT LIGHTING AT STAGING AREA TO REPLACE REMOVED LIGHT POLES.
4. IF STAGING AREA B IS USED, A 20 FOOT WIDE APRON IS TO BE INSTALLED OFF CHICAGO AVE. SOUTH OF GREENLEAF FOR THE DURATION OF THE PROJECT PER CITY OF EVANSTON SPECS. AREA TO BE RESTORED TO ORIGINAL CONDITION UPON COMPLETION. ONE SIDEWALK ALONG GREENLEAF STREET MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR SHALL PROVIDE A DETOUR PLAN TO THE CITY OF EVANSTON FOR APPROVAL.
5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SECURING BRIDGE CONSTRUCTION SITE AND STAGING AREA.
6. CONTRACTOR IS RESPONSIBLE TO COORDINATE AND SECURE WITH LOCAL JURISDICTION STREET OR LANE CLOSURES, REQUIRED SITE IMPROVEMENTS, REQUIRED SIGNAGE AND ANY TEMPORARY OR PERMANENT DETOUR ROUTING AND SIGNING.
7. CONTRACTOR WILL FENCE AND SECURE SITE TO PREVENT PUBLIC FROM ACCESSING. CONTRACTOR TO ENSURE THAT WORK AREA IS SEGREGATED FROM GENERAL PUBLIC AND SAFE PEDESTRIAN AND TRAFFIC ROUTES ARE PROVIDED.
8. CONTRACTOR IS RESPONSIBLE FOR COMMUNICATING WITH LOCAL BUSINESSES AS TO WHEN ACCESS OR PARKING IS AFFECTED.
9. CONTRACTOR SHALL MAINTAIN 1–10' WIDE TRAVEL LANE WEST OF THE CTA TRACKS FOR TRAFFIC EXITING THE METRA ALLEY.
10. MAINTENANCE OF TRAFFIC TO COMPLY WITH MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
11. CONTRACTOR TO RESTORE STAGING AREA TO ORIGINAL CONDITIONS INCLUDING NEW STRIPING, NEW ASPHALT PAVING, NEW CONCRETE CURBS, RE-INSTALL LIGHT POLE, PROVIDE NEW LANDSCAPING. NEW LANDSCAPE PLAN TO BE SUBMITTED TO AND APPROVED BY CTA.

LEGEND

STAGING LOCATION

SUGGESTED STORAGE LOCATION

TRAFFIC DIRECTION ADJACENT TO STAGING AREA

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606–3421
TEL. (312) 251–3000

CTA – PURPLE LINE
REHABILITATION
GREENLEAF STREET VIADUCT
EVANSTON, ILLINOIS

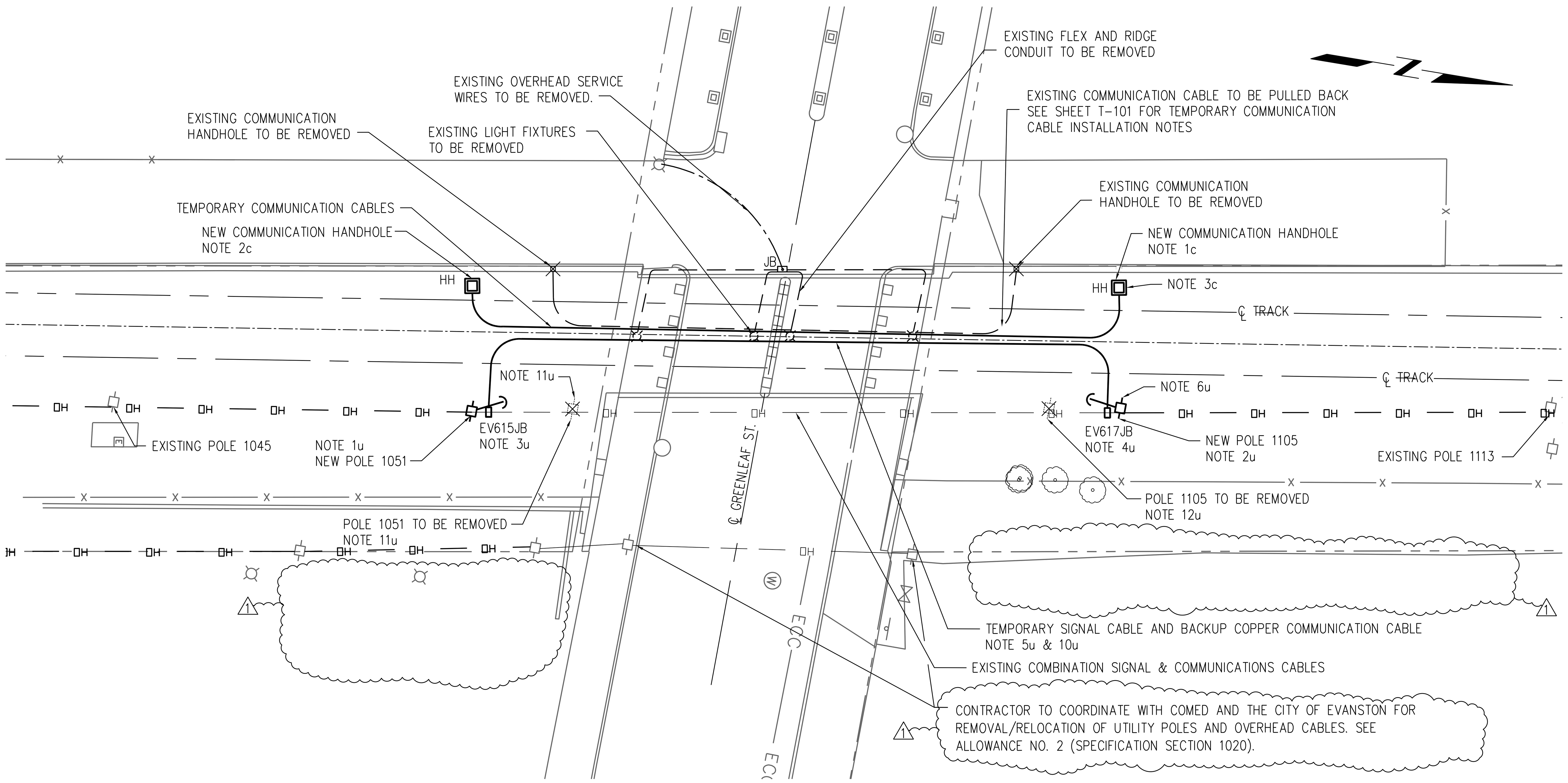
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	FJD
PROJECT NO.	050019057
FILE NAME	PLGRESX-003.dwg

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
STAGING LOCATION

DRAWING NO. SXGRE-003



EXISTING AND TEMPORARY ELECTRICAL PLAN

SCALE: 1/16" = 1'-0"

LEGEND

- EXISTING UNDERPASS LUMINAIRE TO BE REMOVED
- HH PROPOSED QUAZITE ENCLOSURE HANDHOLE, 30"x48"x42"
- JB PROPOSED JUNCTION BOX NEMA 4X ENCLOSURE SIZE 24"L x 21"W x8"D
- EXISTING UTILITY POLE TO BE REMOVED
- NEW UTILITY POLE
- OH EXISTING OVERHEAD CABLE TO REMAIN
- OH EXISTING OVERHEAD CABLE TO BE REMOVED
- EXISTING CABLE ON GROUND
- PROPOSED TEMPORARY CABLE ON GROUND
- DOWN GUY

PHASE I - PRE-ACTIVITY TASKS BEFORE START OF ABUTMENT WALL CONSTRUCTION

1u. THE CONTRACTOR SHALL INSTALL A NEW UTILITY POLE APPROXIMATELY 20 FEET TO THE SOUTH OF POLE 1051 AT THE SOUTHEAST CORNER OF THE GREENLEAF STREET VIADUCT AND PROVIDE DOWN GUY AT DEADEND MESSENGER CABLE.

2u. THE CONTRACTOR SHALL INSTALL A NEW UTILITY POLE APPROXIMATELY 15 FEET TO THE NORTH OF POLE 1105 AT THE NORTHEAST CORNER OF THE GREENLEAF STREET VIADUCT AND PROVIDE A DOWN GUY AT DEADEND MESSENGER CABLE.

3u. CTA WILL INSTALL CONTRACTOR-FURNISHED SIGNAL JUNCTION BOX EV615 ON THE NEW RELOCATED UTILITY POLE 1051 AT THE SOUTHEAST CORNER OF THE VIADUCT.

4u. CTA WILL INSTALL CONTRACTOR-FURNISHED SIGNAL JUNCTION BOX EV617 ON NEW RELOCATED UTILITY POLE 1105 AT THE NORTHEAST CORNER OF THE VIADUCT.

5u. THE CONTRACTOR SHALL RUN TEMPORARY SIGNAL CABLE ACROSS THE VIADUCT IN BETWEEN THE TRACKS WITH SUFFICIENT SLACK TO ROLL BACK CABLE DURING INSTALLATION OF BRIDGE DECK AND RECONNECT AFTER ROLL IN WEEKEND.

6u. CTA SHALL RECONNECT TEMPORARY SIGNAL CABLE IN NEW JUNCTION BOXES AT EV617.

7u. CTA SHALL RING OUT AND TEST SIGNAL CIRCUITS AFTER TERMINATION.

8u. THE CTA SHALL CUT EXISTING AERIAL SIGNAL CABLE AT EV 615+40 SOUTHEAST END AND AT EV 616+80 NORTHEAST END OF VIADUCT WITH SUFFICIENT SLACK FOR CTA TO RE-CONNECT FOR CONTINUATION OF OVERHEAD LINES ON POLES.

9u. CTA TO PERFORM THE TERMINAL RECONNECTION IN BOTH JUNCTION BOXES FOR SIGNAL CIRCUITS.

10u. CTA SHALL RING OUT AND TEST CIRCUITS AFTER TERMINATION.

11u. THE CONTRACTOR IS TO REMOVE EXISTING POLE 1051.

12u. THE CONTRACTOR SHALL REMOVE EXISTING POLE 1105.

COMMUNICATION CABLES

(SEE SHEET T-101 FOR DETAILED COMMUNICATION SCOPE OF WORK)

1c. THE CONTRACTOR SHALL INSTALL A NEW COMMUNICATION HANDHOLE ON NORTHWEST CORNER OF VIADUCT APPROX. 35 FEET NORTH OF THE EXISTING ABUTMENT WALL.

2c. THE CONTRACTOR SHALL INSTALL A NEW COMMUNICATION HANDHOLE ON SOUTHWEST CORNER OF VIADUCT APPROX. 40 FEET SOUTH OF THE EXISTING ABUTMENT WALL.

3c. HAND HOLE TO BE USED FOR LOCATION OF FO CONNECTORS.

UNDERDECK LIGHTING

1. THE UNDERDECK LIGHTING SHALL REMAIN IN SERVICE UNTIL ROLL-IN WEEKEND.
2. IMMEDIATELY PRIOR TO ROLL-IN WEEKEND THE CONTRACTOR SHALL TERMINATE AND REMOVE THE EXISTING OVERHEAD SERVICE WIRES.
3. THE CONTRACTOR SHALL REMOVE THE EXISTING LIGHT FIXTURES (4) AND THE EXISTING FLEX AND RIGID CONDUIT INCLUDING ASSOCIATED WIRING AND CONNECTORS (TYP.)

PHASE 2 - PRE-ACTIVITY TASKS/ ROLL-IN WEEKEND

1. CTA SHALL INTERCEPT CABLES TO THE NORTH THAT ARE RAN N-S ACROSS TOP OF RAILROAD TIES.
2. THE CONTRACTOR SHALL PULL BACK CABLE TO ALLOW FOR BRIDGE ROLL-IN OVER THE WEEKEND.
3. AFTER INSTALLATION OF NEW BRIDGE RECONNECT TEMPORARY CABLES IN THE SAME MANNER AS PREVIOUSLY INSTALLED.
4. ALL SIGNAL AND COMMUNICATION CABLES SHALL BE FURNISHED BY CONTRACTOR AND INSTALLED BY CTA FORCES.

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1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE REHABILITATION
GREENLEAF STREET VIADUCT
EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

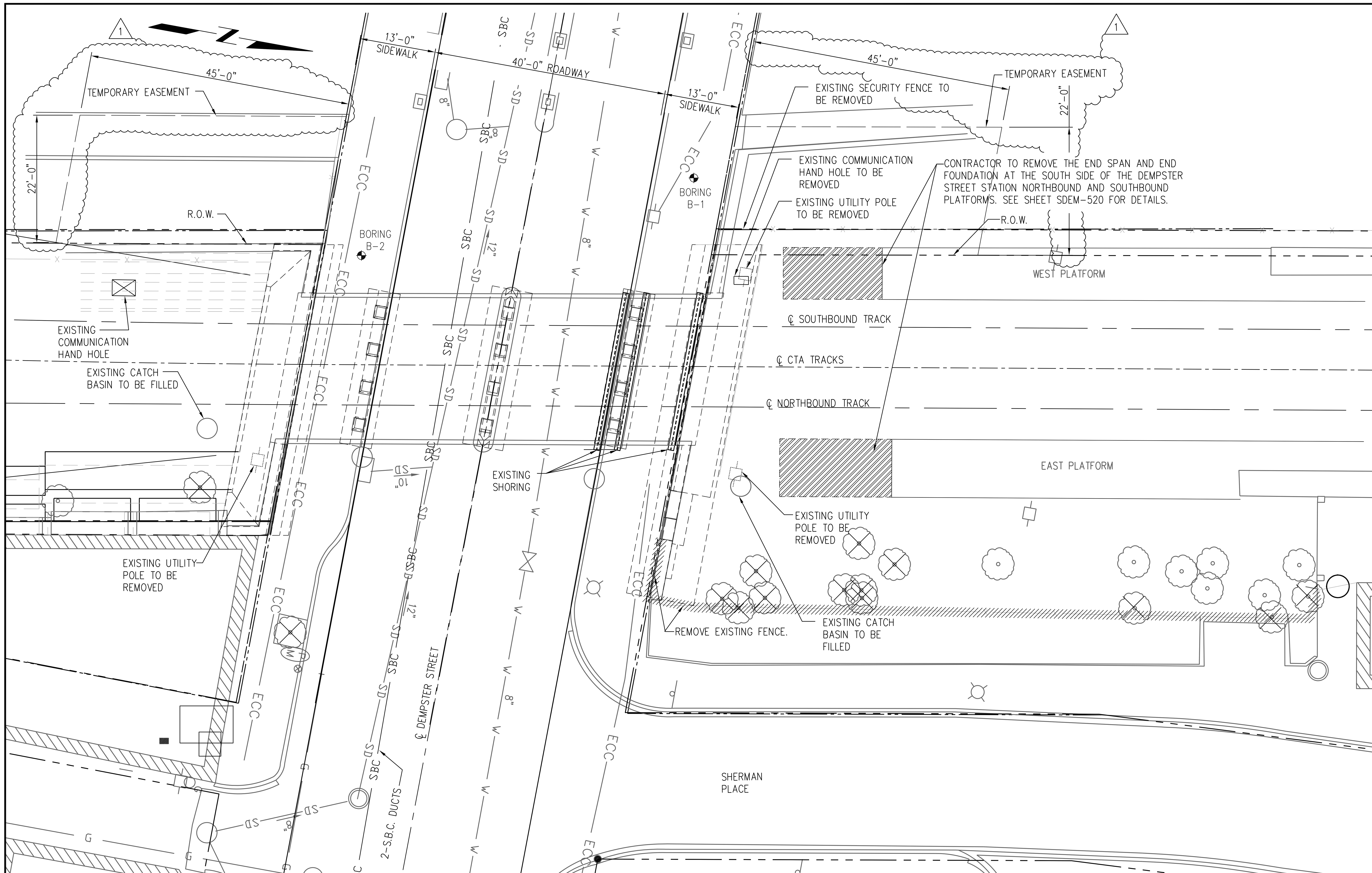
IN CHARGE	JSS
APPROVED BY	CDS
CHECKED BY	CDS
DESIGNED BY	LJH
DRAWN BY	FJD
PROJECT NO.	050019057
FILE NAME	PLGREE-101

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE

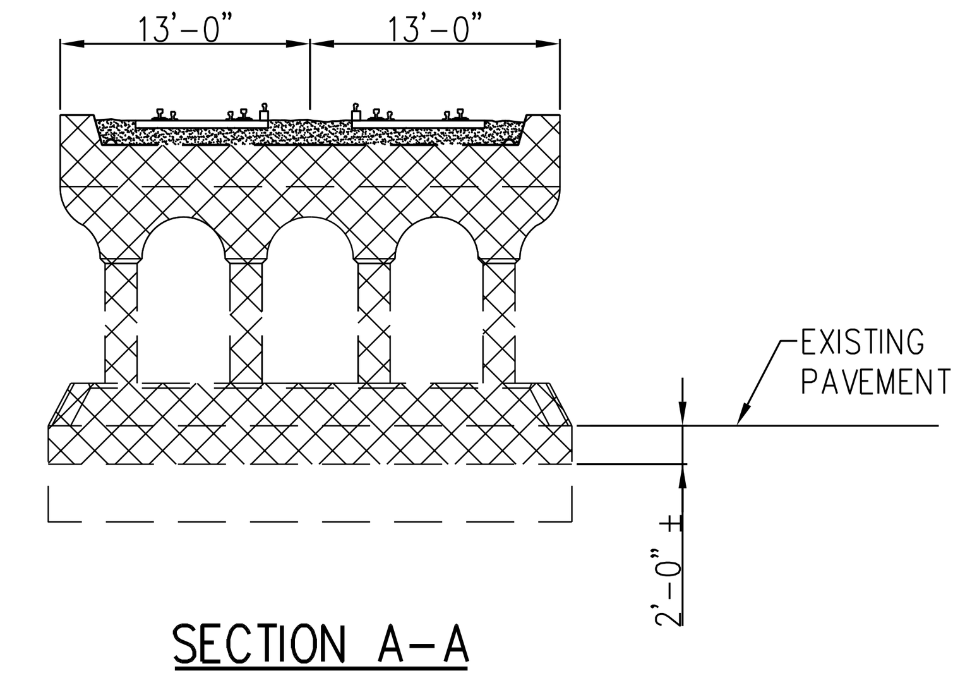
EXISTING AND TEMPORARY CABLE PLAN

DRAWING NO. EGRE-101



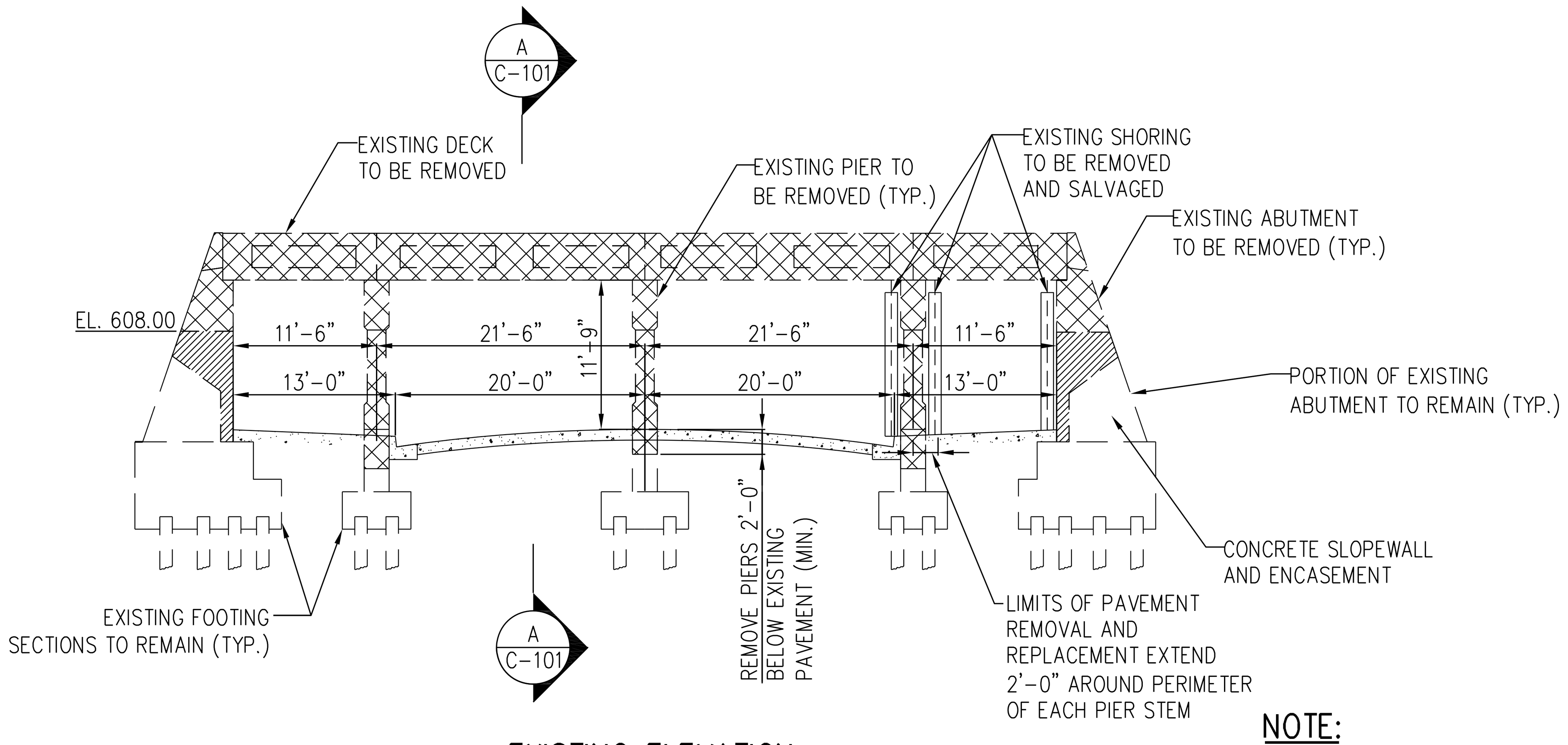
EXISTING PLAN

SCALE: 1"=10'-0"



SECTION A-A

SCALE: 1"=10'-0"



EXISTING ELEVATION

(LOOKING WEST)
SCALE: 1"=10'-0"

NOTE:

1. CONTRACTOR SHALL DELIVER SALVAGED SHORING TO CTA WEST SHOPS.

LEGEND

EXISTING

- CATCH BASIN
- MANHOLE
- LAMP POST
- WATER VALVE VAULT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- WATER VALVE
- TIMBER POWER LINE POLE
- SOIL BORING
- TREE
- TREE TO BE REMOVED
- —SD——SD— STORM DRAIN LINE
- —UD——UD— SUBSURFACE DRAIN LINE
- —SS——SS— SEWER LINE
- — E —— E — ELECTRICAL LINE
- —— ECC —— UNDERGROUND ELECTRICAL LINE
- — W —— W — WATER MAIN LINE
- —— SBC —— S.B.C. DUCT
- R.O.W.
- -X——X——X— EXISTING FENCE
- CONCRETE REMOVAL BEFORE ROLL-IN OF NEW SUPERSTRUCTURE
- CONCRETE REMOVAL AFTER NEW SUPERSTRUCTURE IS IN PLACE
- LIMITS OF FENCE REMOVAL
- PLATFORM REMOVAL
- EXISTING BUILDING

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE REHABILITATION

DEMPSTER STREET VIADUCT

EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

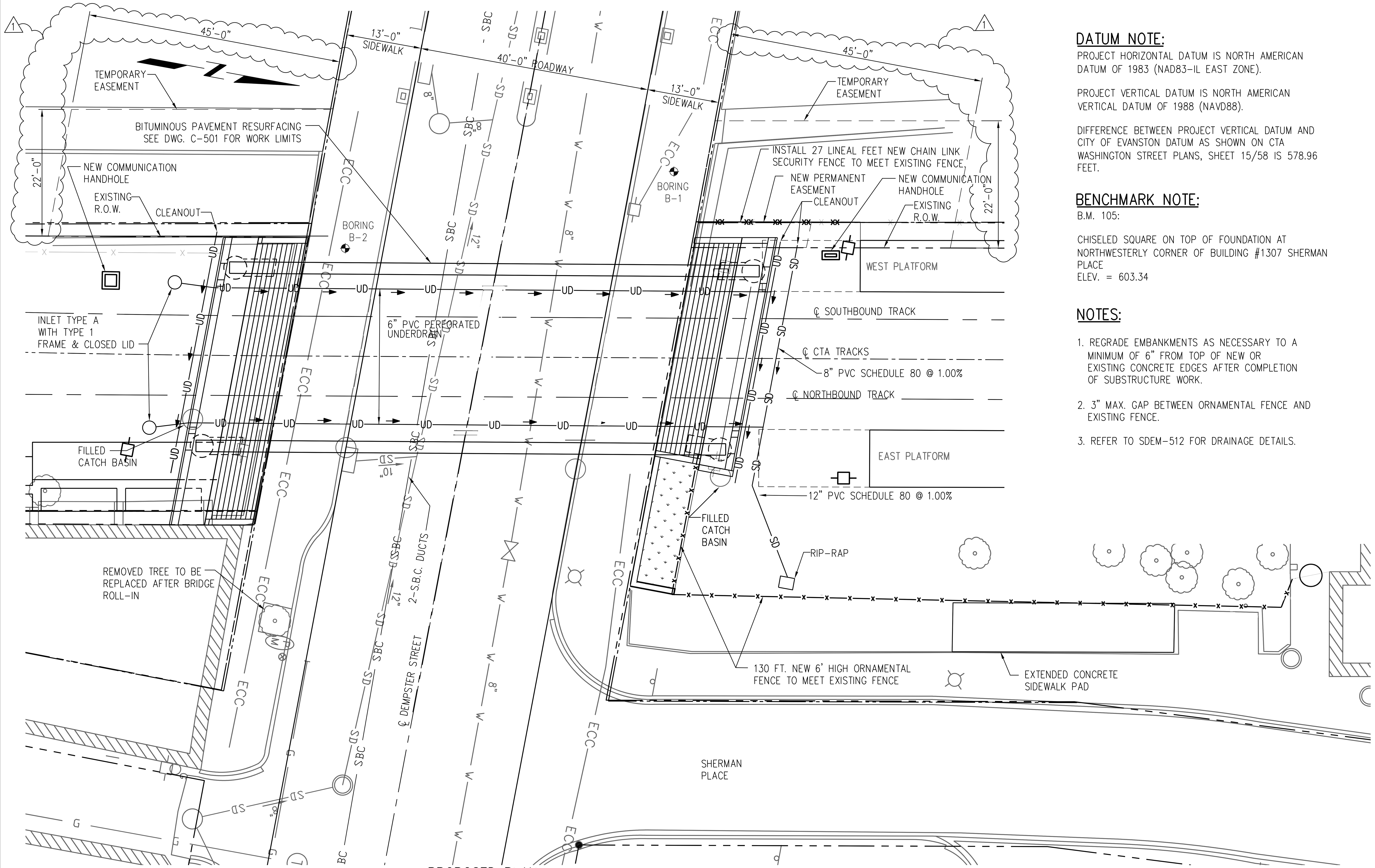
IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	JSS
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLDEMC-101

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE

EXISTING PLAN AND ELEVATION

DRAWING NO. CDEM-101



PROPOSED PLAN

SCALE: 1"=10'-0"

DATUM NOTE:

PROJECT HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83-IL EAST ZONE).

PROJECT VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

DIFFERENCE BETWEEN PROJECT VERTICAL DATUM AND CITY OF EVANSTON DATUM AS SHOWN ON CTA WASHINGTON STREET PLANS, SHEET 15/58 IS 578.96 FEET.

BENCHMARK NOTE:

B.M. 105:

CHISELED SQUARE ON TOP OF FOUNDATION AT NORTHWESTERLY CORNER OF BUILDING #1307 SHERMAN PLACE
ELEV. = 603.34

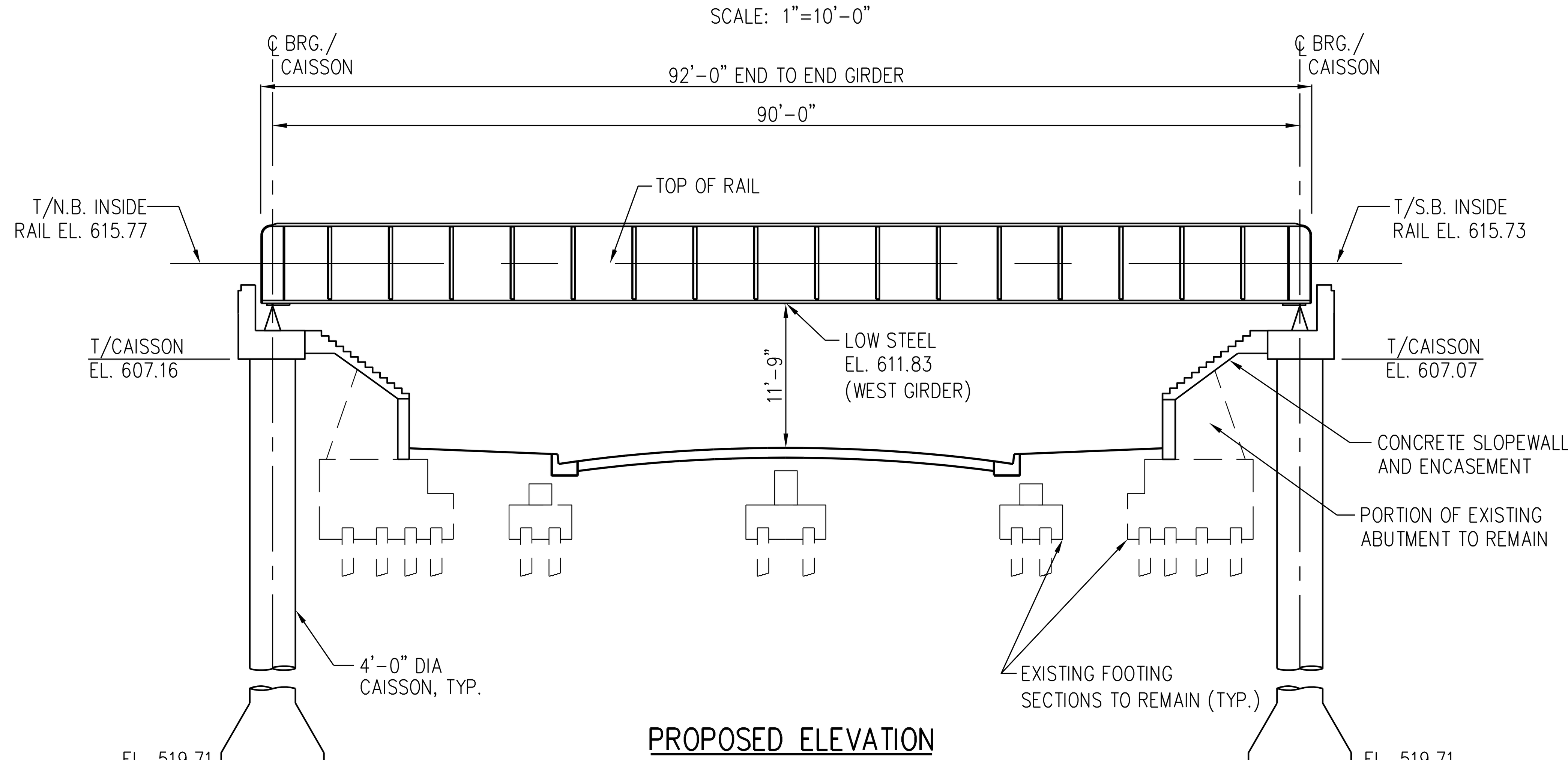
NOTES:

1. REGRADE EMBANKMENTS AS NECESSARY TO A MINIMUM OF 6" FROM TOP OF NEW OR EXISTING CONCRETE EDGES AFTER COMPLETION OF SUBSTRUCTURE WORK.
2. 3" MAX. GAP BETWEEN ORNAMENTAL FENCE AND EXISTING FENCE.
3. REFER TO SDEM-512 FOR DRAINAGE DETAILS.

LEGEND

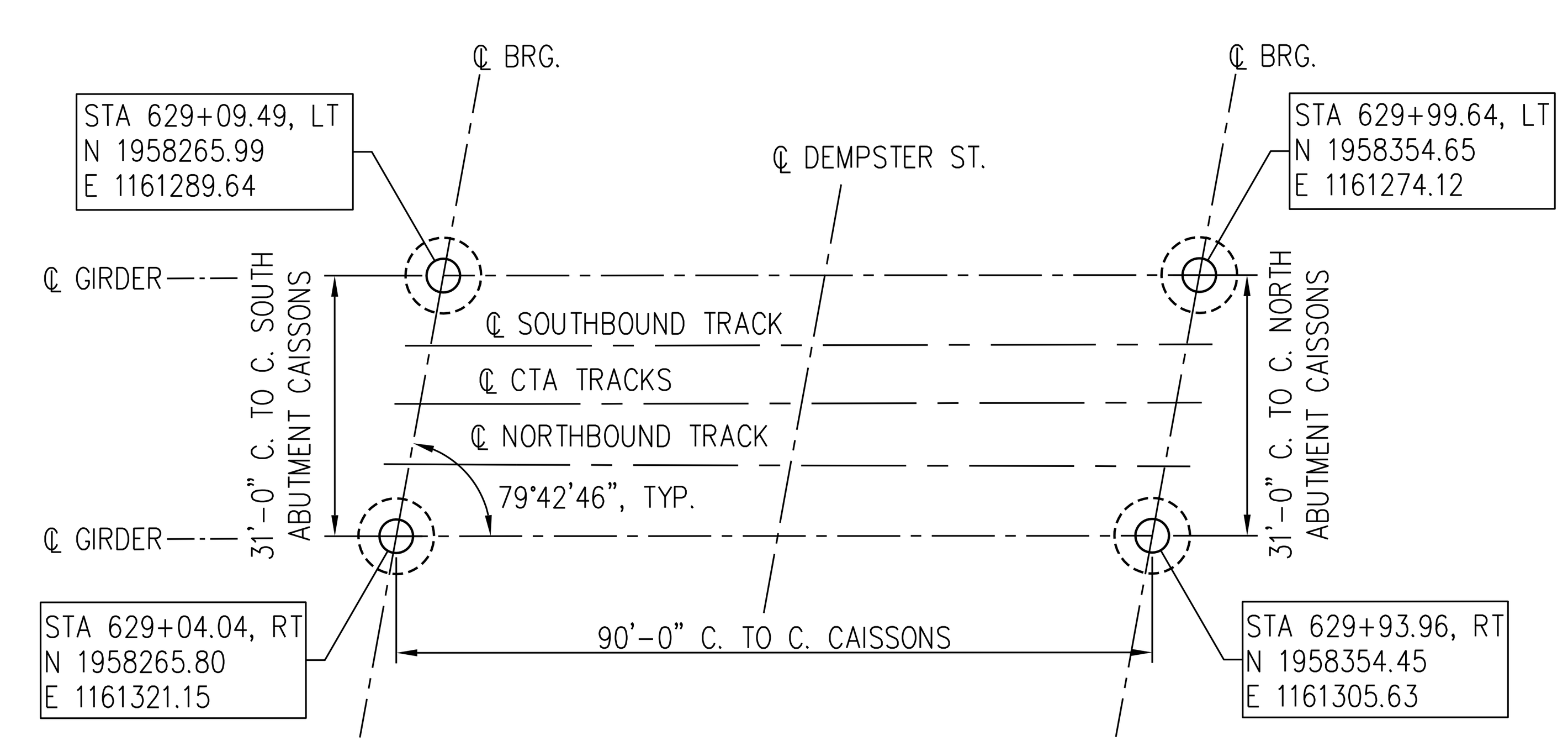
EXISTING / PROPOSED

- CATCH BASIN
- MANHOLE
- LAMP POST
- WATER VALVE VAULT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- WATER VALVE
- TIMBER POWER LINE POLE
- SOIL BORING
- —SD—→—SD— NEW STORM DRAIN LINE
- —UD—→—UD— NEW SUBSURFACE DRAIN LINE
- —SS—→—SS— SEWER LINE
- — E —— E — ELECTRICAL LINE
- —— ECC —— UNDERGROUND ELECTRICAL LINE
- — W —— W — WATER MAIN LINE
- —— SBC —— S.B.C. DUCT
- R.O.W.
- EXISTING FENCE
- NEW ORNAMENTAL FENCE
- NEW SECURITY FENCE
- LANDSCAPING
- EXISTING BUILDING



PROPOSED ELEVATION

(LOOKING WEST)
SCALE: 1"=10'-0"



CAISSON FOUNDATION PLAN

SCALE 1"=20'-0"

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1 NORTH FRANKLIN STREET
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CTA – PURPLE LINE REHABILITATION
DEMPSTER STREET VIADUCT
EVANSTON, ILLINOIS

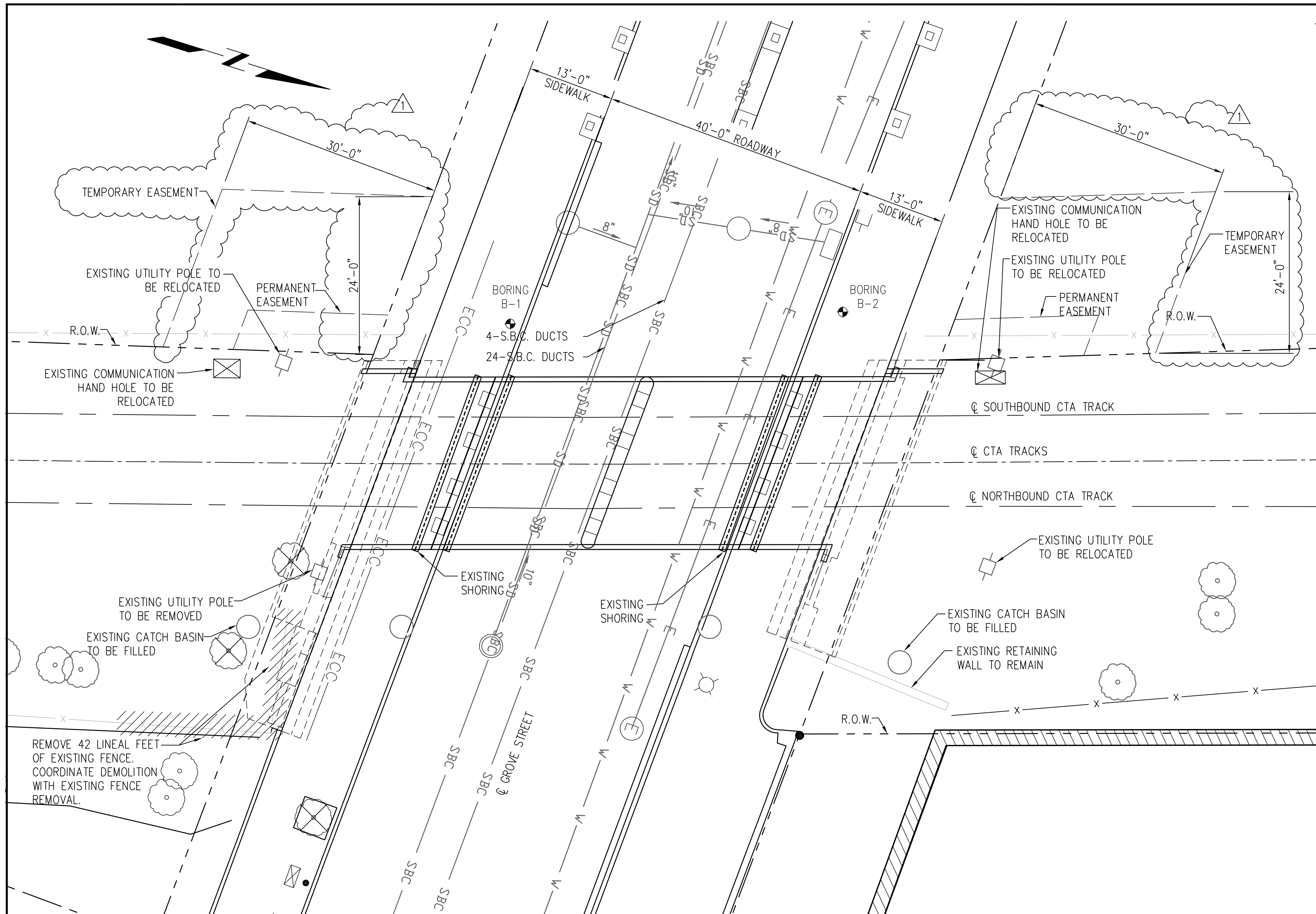
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLDEMC-102

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

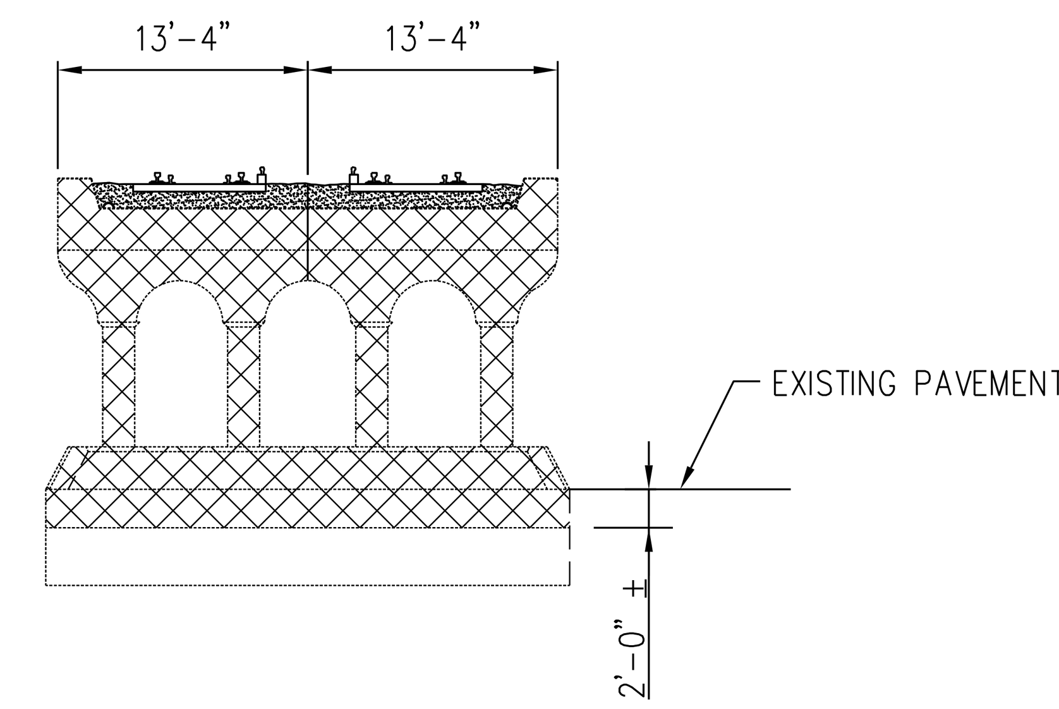
SHEET TITLE
GENERAL PLAN AND ELEVATION

DRAWING NO. CDEM-102



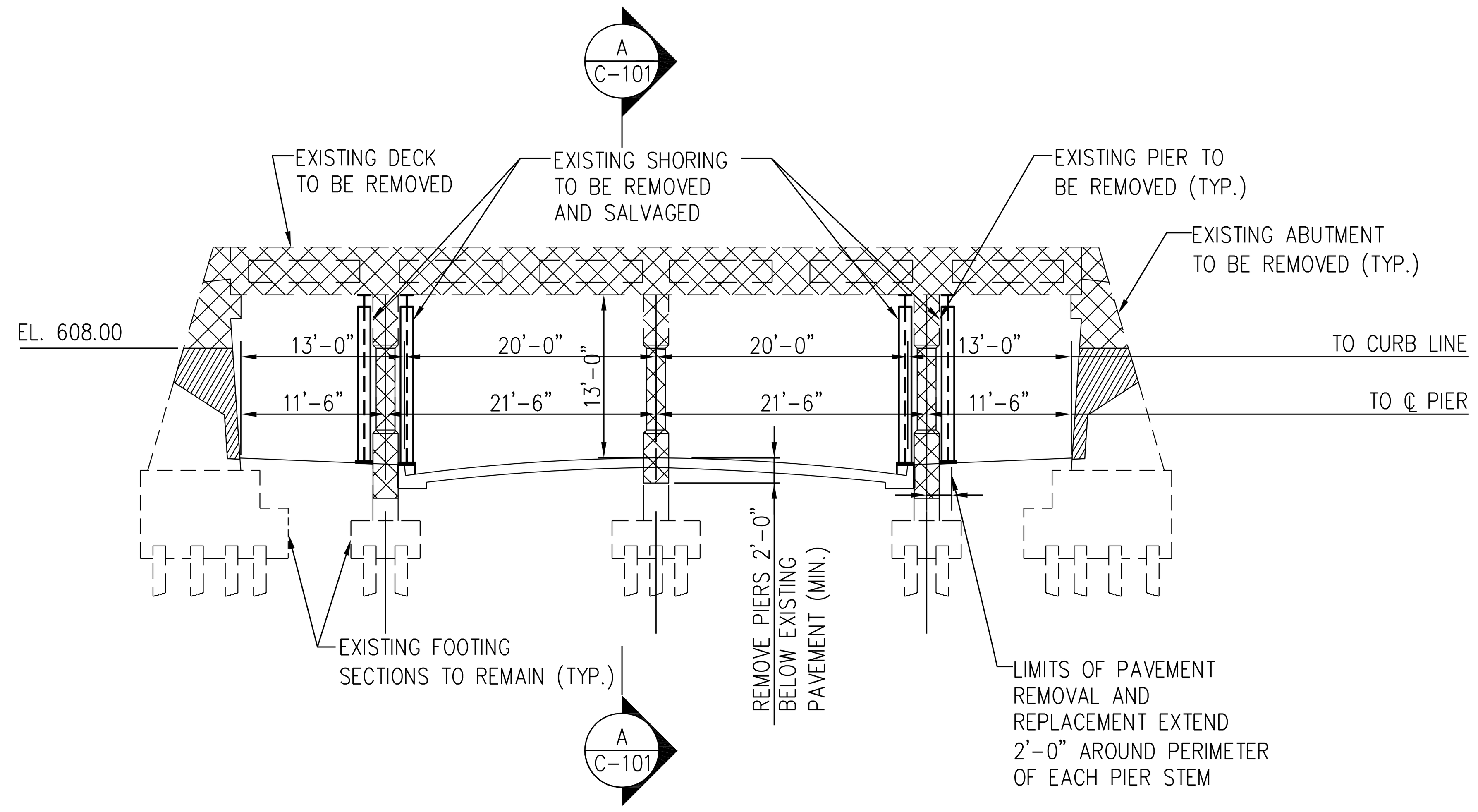
EXISTING PLAN

SCALE: 1"=10'-0"



SECTION A-A

SCALE: 1"=10'-0"



EXISTING ELEVATION

(LOOKING WEST)
SCALE: 1"=10'-0"

NOTE:

1. CONTRACTOR SHALL DELIVER SALVAGED SHORING TO CTA WEST SHOPS.

LEGEND

EXISTING

- CATCH BASIN
- MANHOLE
- LAMP POST
- WATER VALVE VAULT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- WATER VALVE
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- — W —— W — WATER MAIN LINE
- —— SBC —— S.B.C. DUCT
- —— — — —— R.O.W.
- -x——x——x— EXISTING FENCE
- CONCRETE REMOVAL BEFORE ROLL-IN OF NEW SUPERSTRUCTURE
- CONCRETE REMOVAL AFTER NEW SUPERSTRUCTURE IS IN PLACE
- LIMITS OF FENCE REMOVAL
- EXISTING BUILDING

JACOBS
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CTA - PURPLE LINE
REHABILITATION
GROVE STREET VIADUCT
EVANSTON, ILLINOIS

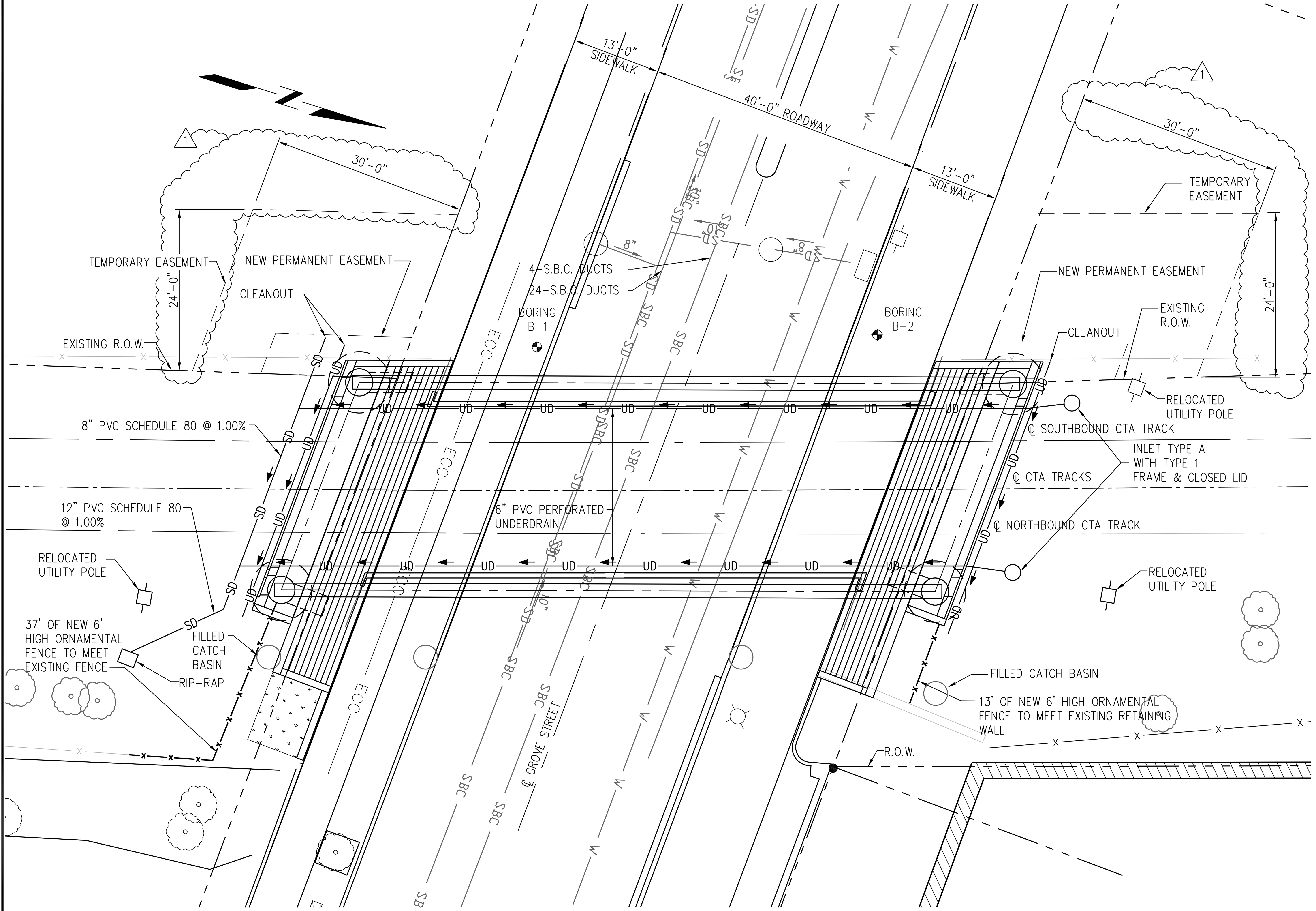
CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
CHECKED BY	JSS
DESIGNED BY	TCG
DRAWN BY	JRW
PROJECT NO.	050019057
FILE NAME	PLGROC-101

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
EXISTING PLAN AND ELEVATION

DRAWING NO. CGRO-101



PROPOSED PLAN

SCALE: 1"=10'-0"

DATUM NOTE:

PROJECT HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83-IL EAST ZONE).

PROJECT VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

DIFFERENCE BETWEEN PROJECT VERTICAL DATUM AND CITY OF EVANSTON DATUM AS SHOWN ON CTA WASHINGTON STREET PLANS, SHEET 15/58 IS 578.96 FEET.

BENCHMARK NOTE:

B.M. 106:

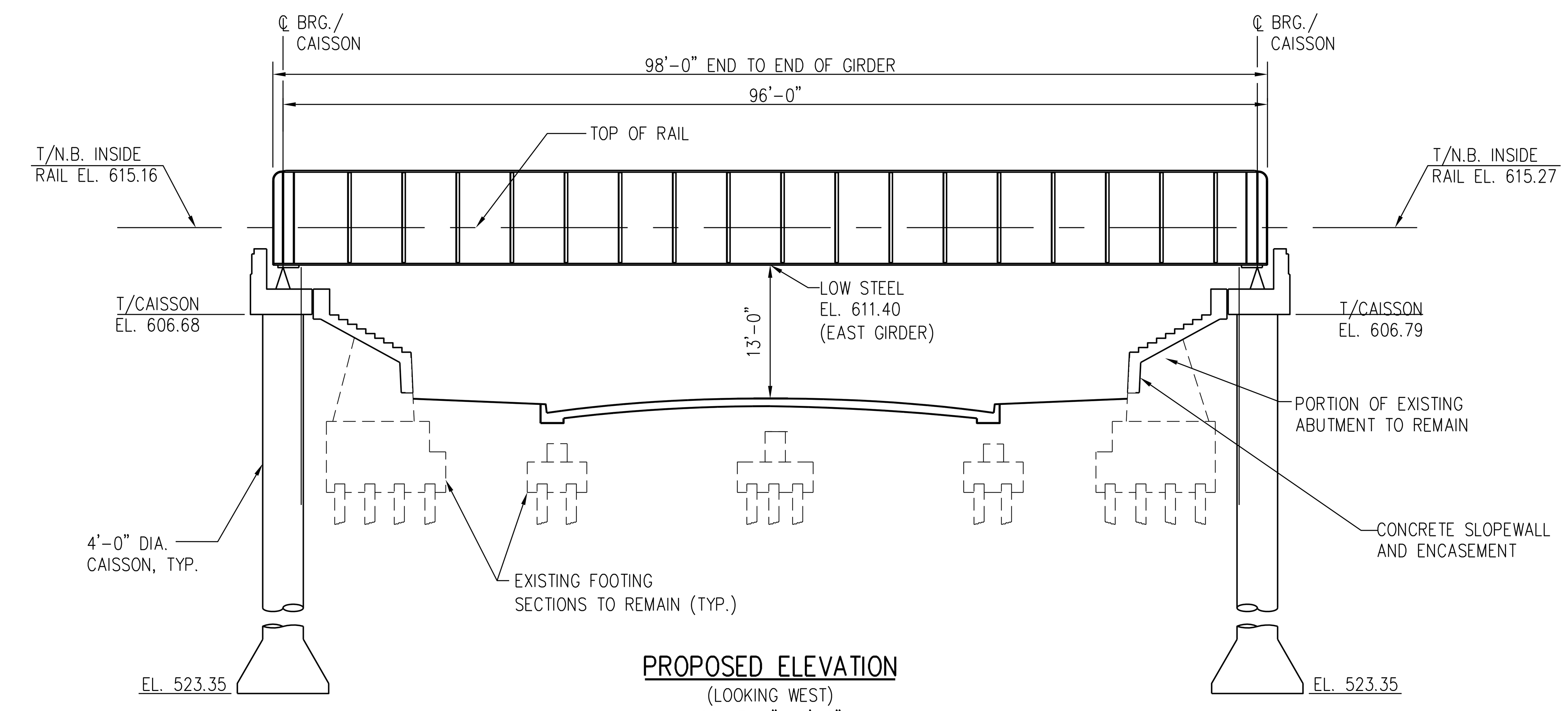
CHISELED SQUARE ON EASTERLY EDGE OF CONCRETE STOOP, CENTER OF BUILDING #1514 ELMWOOD STREET
ELEV. = 599.57

NOTES:

1. REGRADE EMBANKMENTS AS NECESSARY TO A MINIMUM OF 6" FROM TOP OF NEW OR EXISTING CONCRETE EDGES AFTER COMPLETION OF SUBSTRUCTURE WORK.
2. 3" MAX. GAP BETWEEN ORNAMENTAL FENCE AND EXISTING FENCE.
3. REFER TO SGRO-512 FOR DRAINAGE DETAILS.

LEGEND

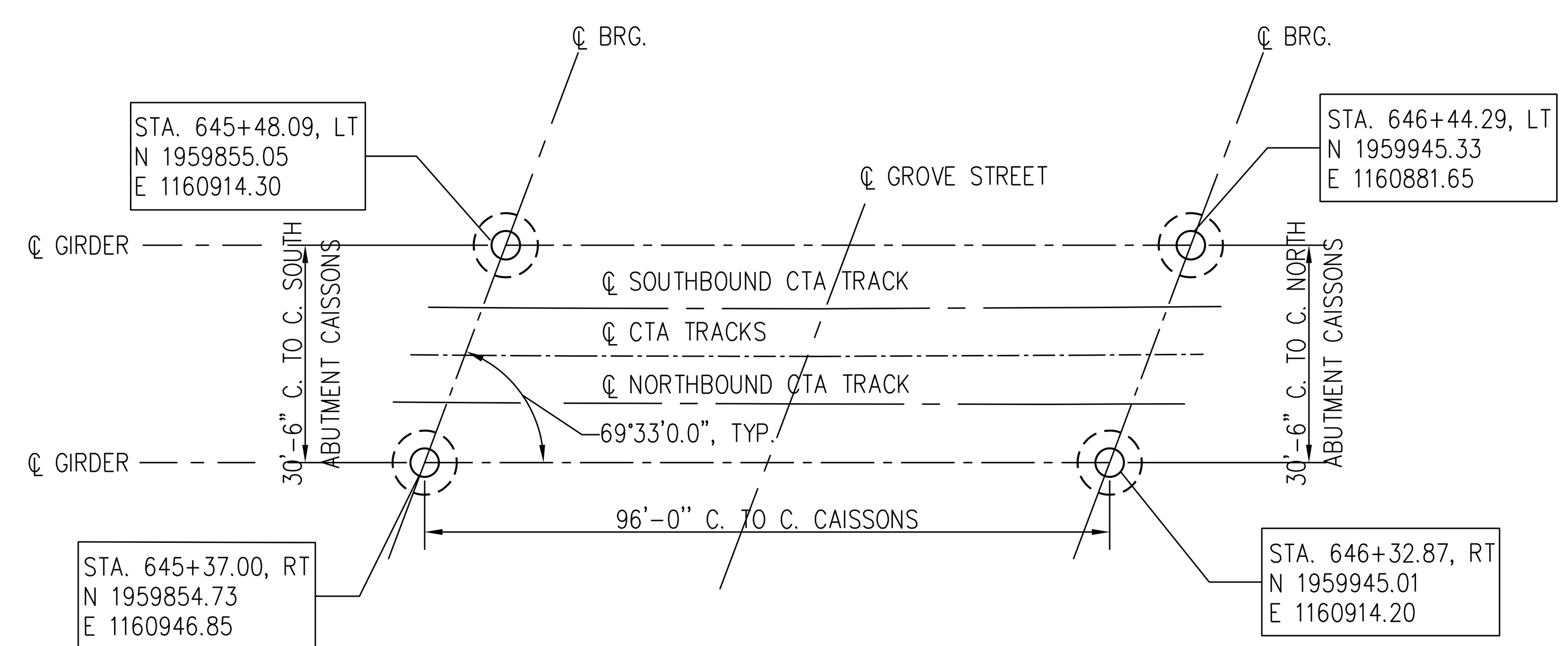
EXISTING	PROPOSED	
○	●	CATCH BASIN
◎	◉	MANHOLE
		LAMP POST
(W)		WATER VALVE VAULT
(E)		ELECTRICAL MANHOLE
(T)		TELEPHONE MANHOLE
		WATER VALVE
		TIMBER POWER LINE POLE
		SOIL BORING
—SD——SD—		NEW STORM DRAIN LINE
—UD——UD—		NEW SUBSURFACE DRAIN LINE
—SS——SS—		SEWER LINE
— E —— E —		ELECTRICAL LINE
—— ECC ——		UNDERGROUND ELECTRICAL LINE
— W —— W —		WATER MAIN LINE
—— SBC ——		S.B.C. DUCT
—— — — ——		R.O.W.
-X——X——X—		EXISTING FENCE
—x——x——x—		NEW FENCE
		LANDSCAPING
		EXISTING BUILDING



PROPOSED ELEVATION

(LOOKING WEST)

SCALE: 1"=10'-0"



CAISSON FOUNDATION PLAN

SCALE: 1"=20'-0"

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CHICAGO, ILLINOIS 60606-3421
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CTA - PURPLE LINE REHABILITATION

GROVE STREET VIADUCT

EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

IN CHARGE	JSS
APPROVED BY	JSS
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PROJECT NO.	050019057
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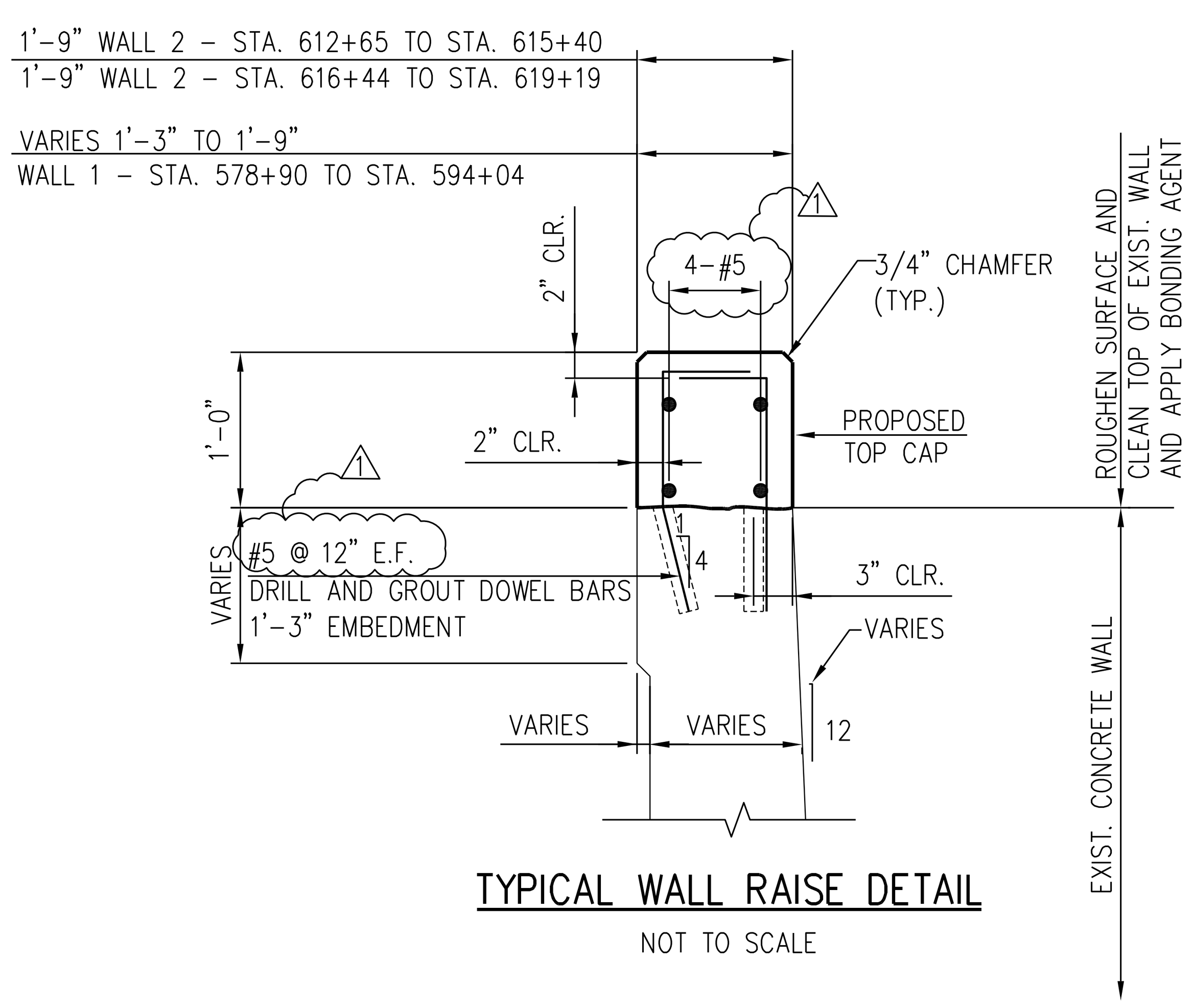
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE

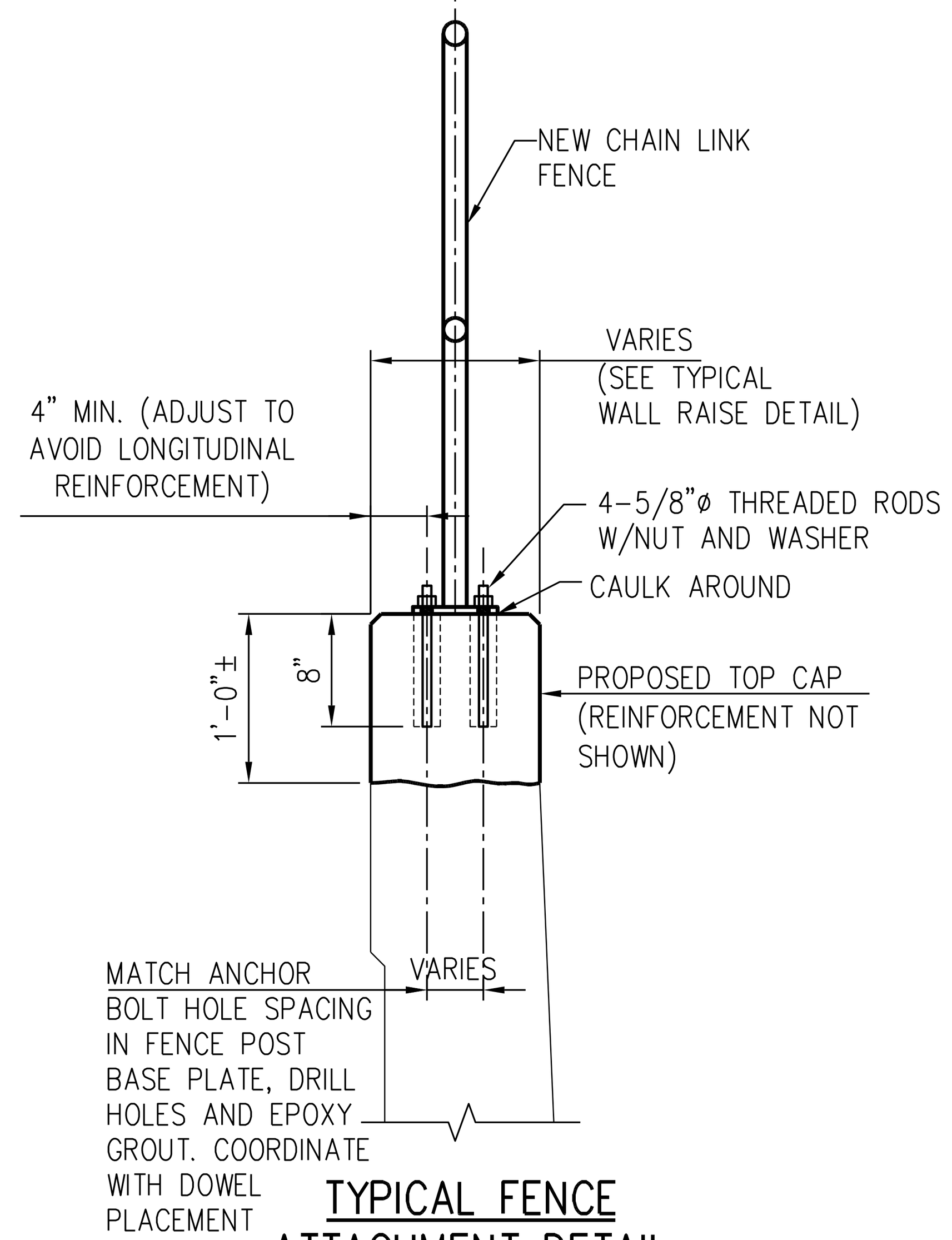
GENERAL PLAN AND ELEVATION

DRAWING NO. CGRO-102



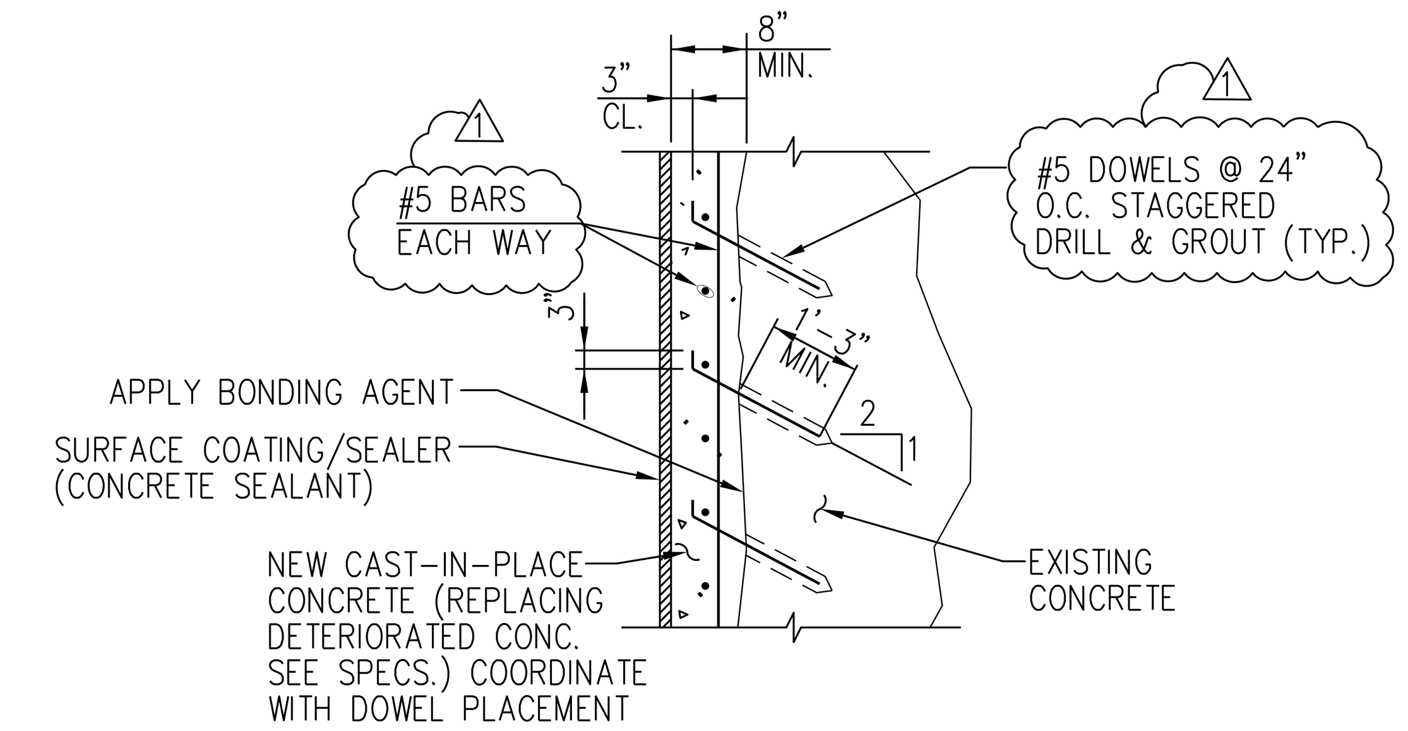
TYPICAL WALL RAISE DETAIL

NOT TO SCALE

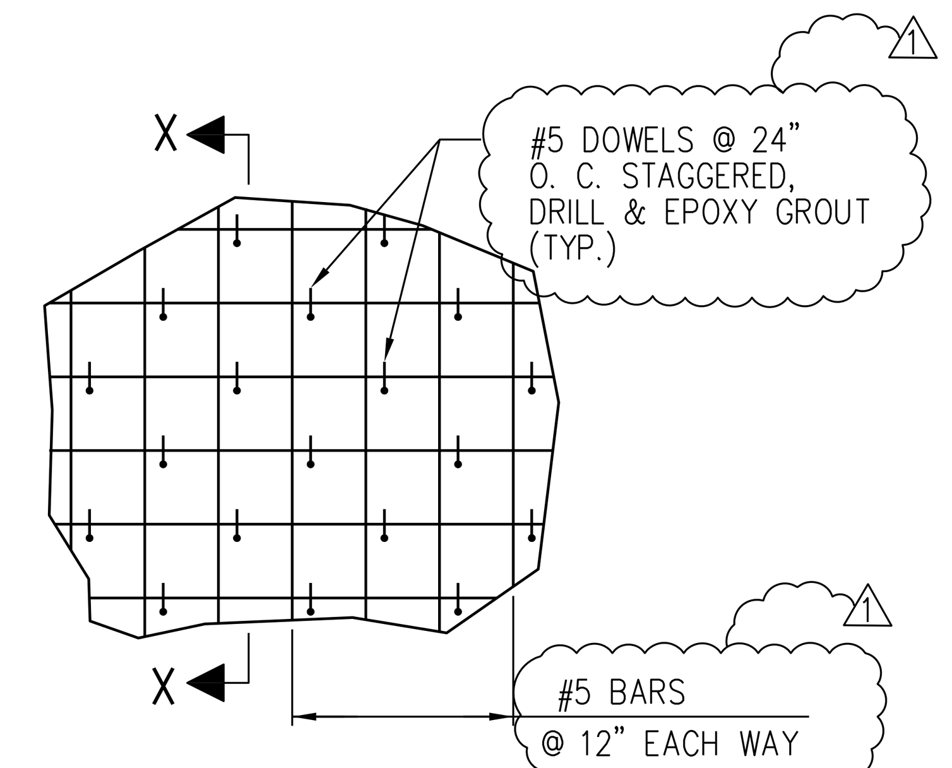


TYPICAL FENCE ATTACHMENT DETAIL

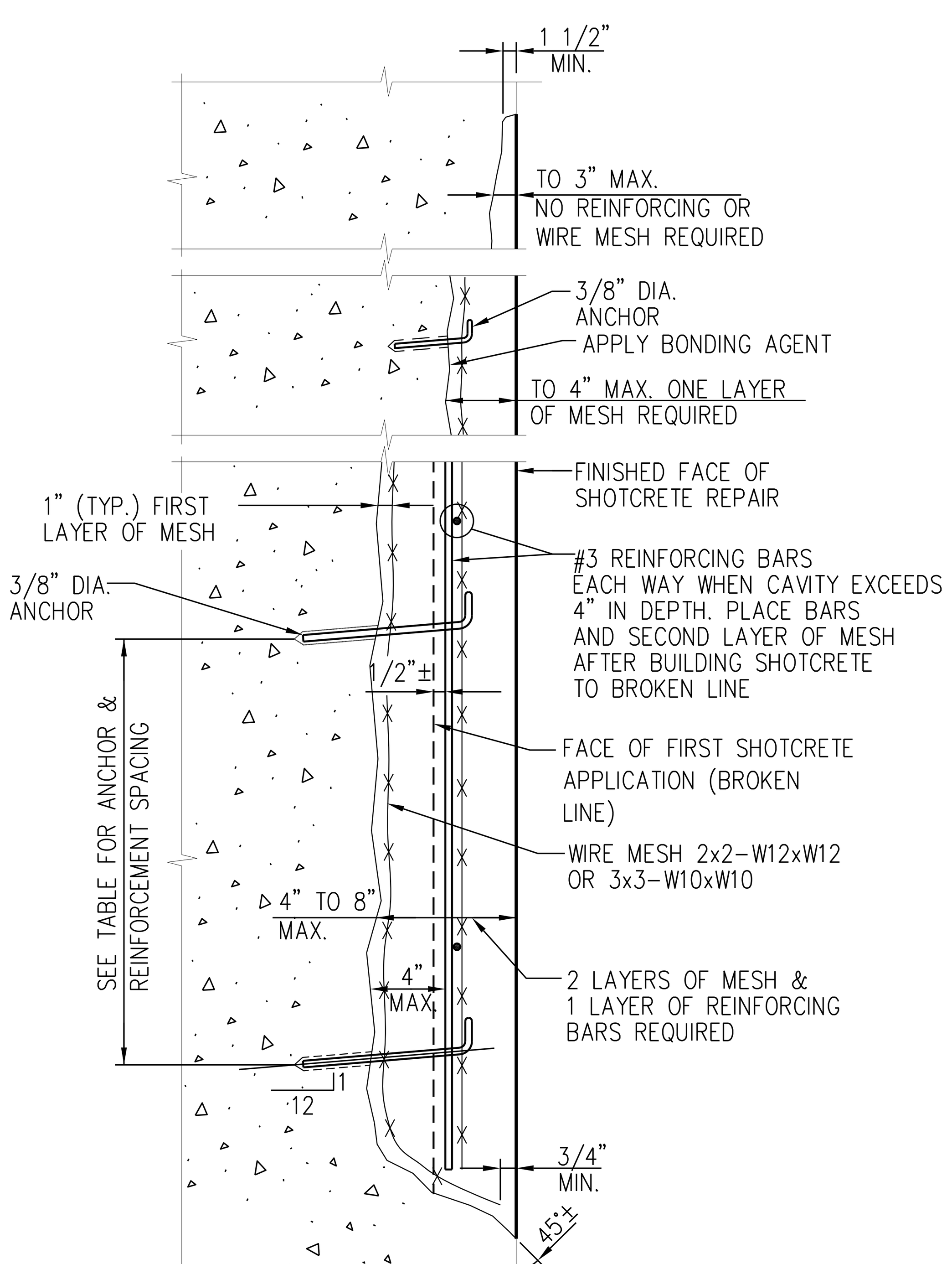
NOT TO SCALE



SECTION X-X



TYPICAL C.I.P. CONCRETE REPAIR DETAIL (8" MIN. DEPTH)



TYP. SHOTCRETE REPAIR DETAIL (8" MAX. DEPTH)

NOT TO SCALE
(SEE NOTE 5)

SHOTCRETE ANCHOR AND REINFORCEMENT SPACING					
SHOTCRETE THICKNESS	ANCHORS				
	SIZE	MIN. EMBED-MENT	SPACING SUSPENDED SURFACES (EACH WAY)	SPACING VERTICAL SURFACES (EACH WAY)	SPACING TOP SURFACES (EACH WAY)
UNDER 1 1/2"	NONE REQUIRED				
1 1/2" - 4"	3/8"	3 1/2"	8"	1'-0"	1'-6"
4" - 5"	3/8"	3 1/2"	1'-5"	1'-2"	3'-0"
5" - 6"	3/8"	3 1/2"	1'-4"	1'-4"	3'-0"
6" - 7"	3/8"	3 1/2"	1'-2"	1'-6"	3'-0"
7" - 8"	1/2"	3 1/2"	1'-0"	1'-11"	3'-0"
OVER 8"	SEE TYPICAL C.I.P. CONCRETE REPAIR DETAIL				

NOTES:

1. REFER ALSO TO AREMA MANUAL, CHAPTER 8 PART 14-REPAIR AND REHABILITATION OF CONCRETE STRUCTURES.
2. FOR ENCASEMENT THICKNESS IN EXCESS OF 4" (3" SUSPENDED) AN ADDITIONAL TWO-WAY SYSTEM OF #3 REINFORCING BARS SPACED THE SAME AS THE ANCHORS IN BOTH DIRECTIONS SHALL BE PROVIDED. THE LAST LAYER OF WIRE MESH SHALL BE SECURED BY TYING TO THE BARS.
3. AT CORNERS, DOUBLE REINFORCING MESH SHALL BE PROVIDED AND EXTEND A MINIMUM DISTANCE OF 6 INCHES BEYOND THE INTERSECTION OF THE TWO PLANES.
4. SPLICED BARS SHALL BE LAPPED AT LEAST 30 BAR DIAMETERS WITH LAPS SECURELY WIRED. FOR WIRE MESH, A LAP OF 1 1/2" MESH SHALL BE REQUIRED, SECURELY WIRED AT INTERVALS OF NOT MORE THAN 18 INCHES.
5. IF THE DEPTH OF SPALL OR DETERIORATED CONCRETE IS GREATER THAN 8" USE CAST-IN- PLACE (C.I.P.) CONCRETE REPAIR DETAIL.
6. ALL SHOTCRETE AND C.I.P. LIMITS OF REMOVAL TO BE NEAT AND SQUARE WITH 1" DEEP SAWCUT.

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE REHABILITATION
VIADUCT REPLACEMENT AND RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

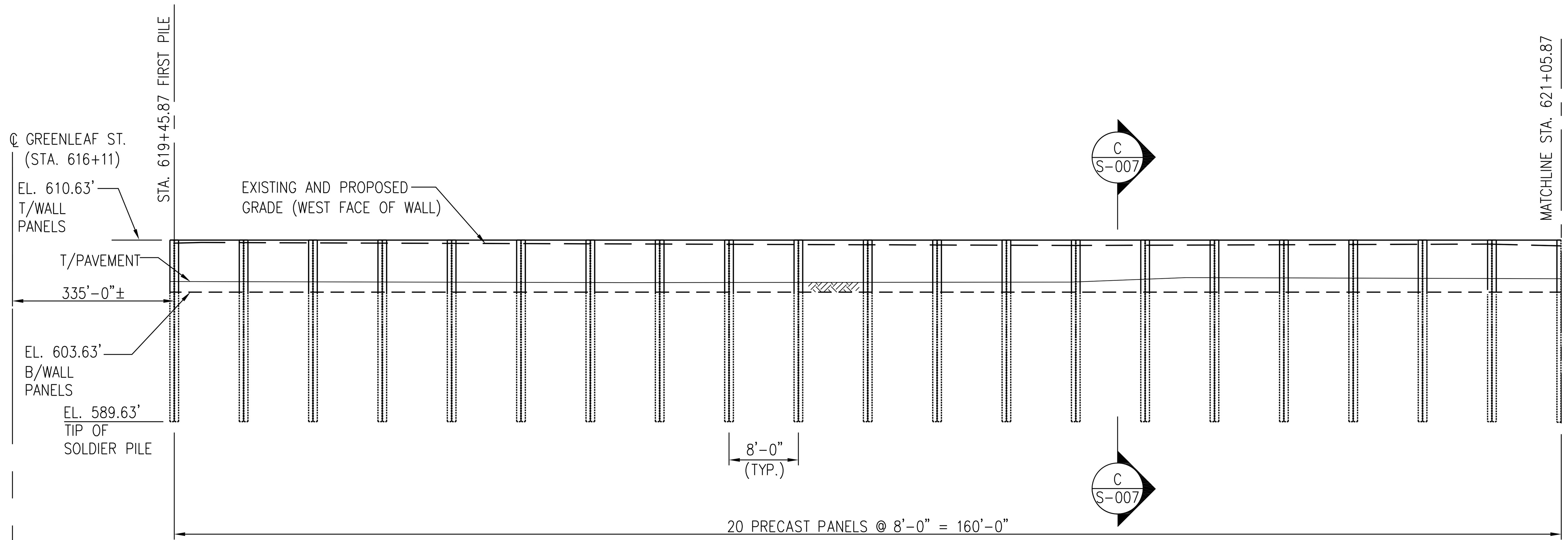
IN CHARGE	EGC
APPROVED BY	MEZ
CHECKED BY	JSS
DESIGNED BY	NJM
DRAWN BY	ABW
PROJECT NO.	050019057
FILE NAME	PLWALS-501

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

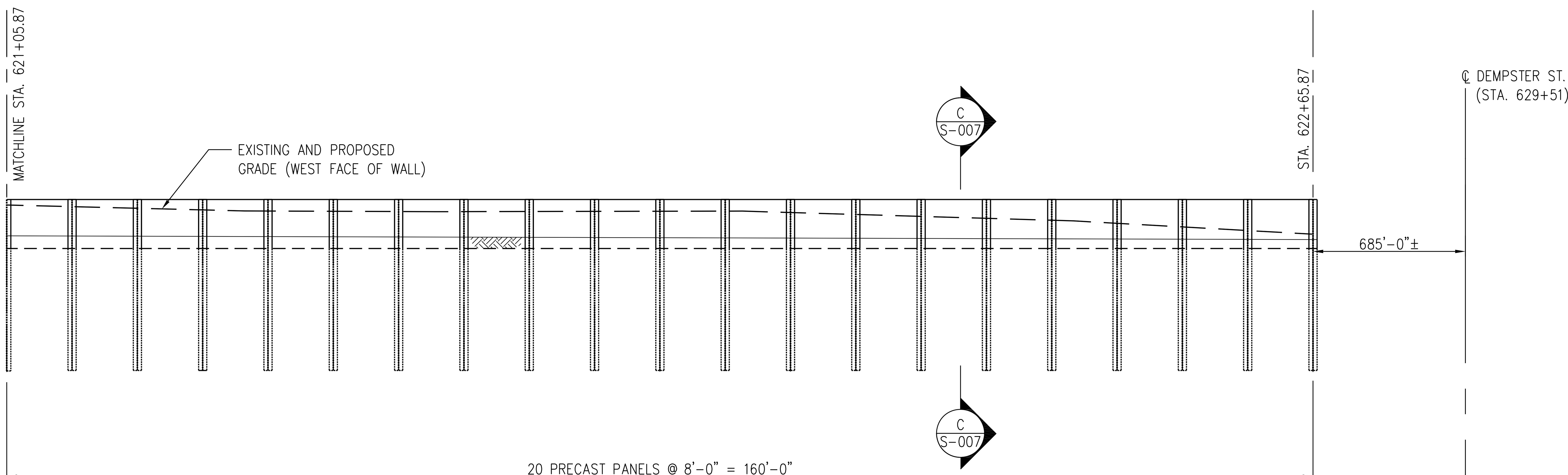
SHEET TITLE

TYPICAL WALL REPAIR DETAILS

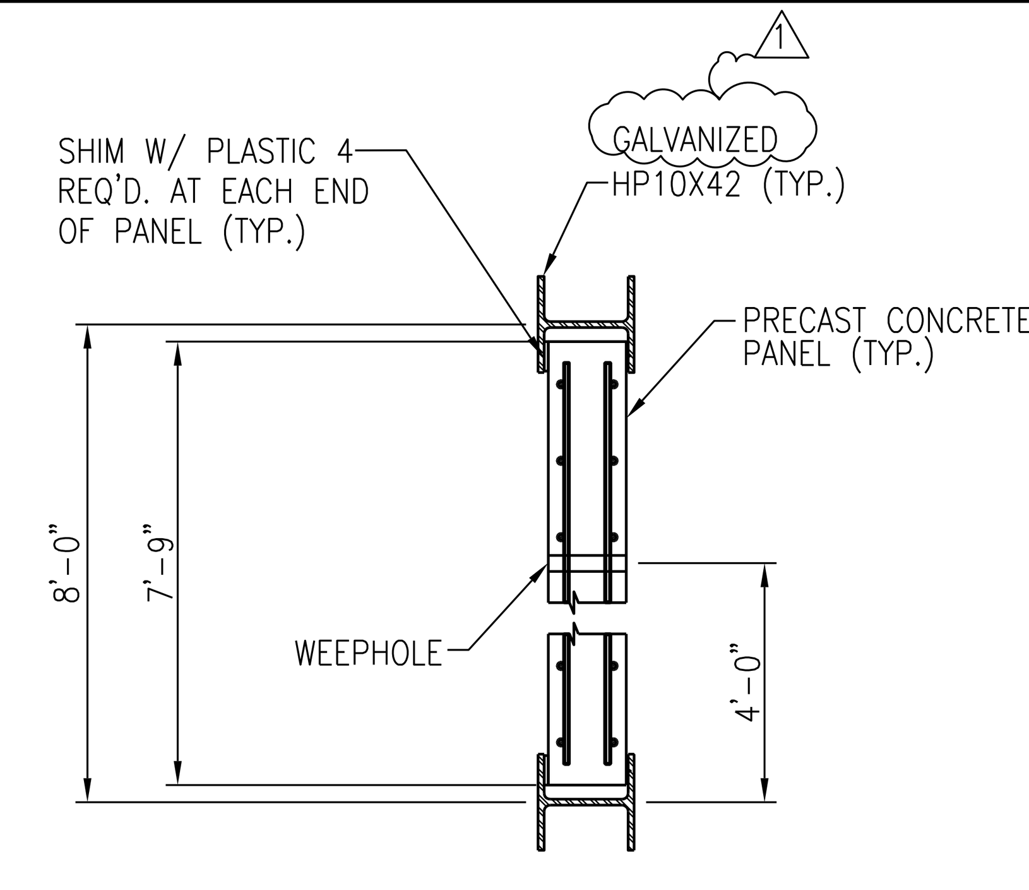
DRAWING NO. WAL S-501



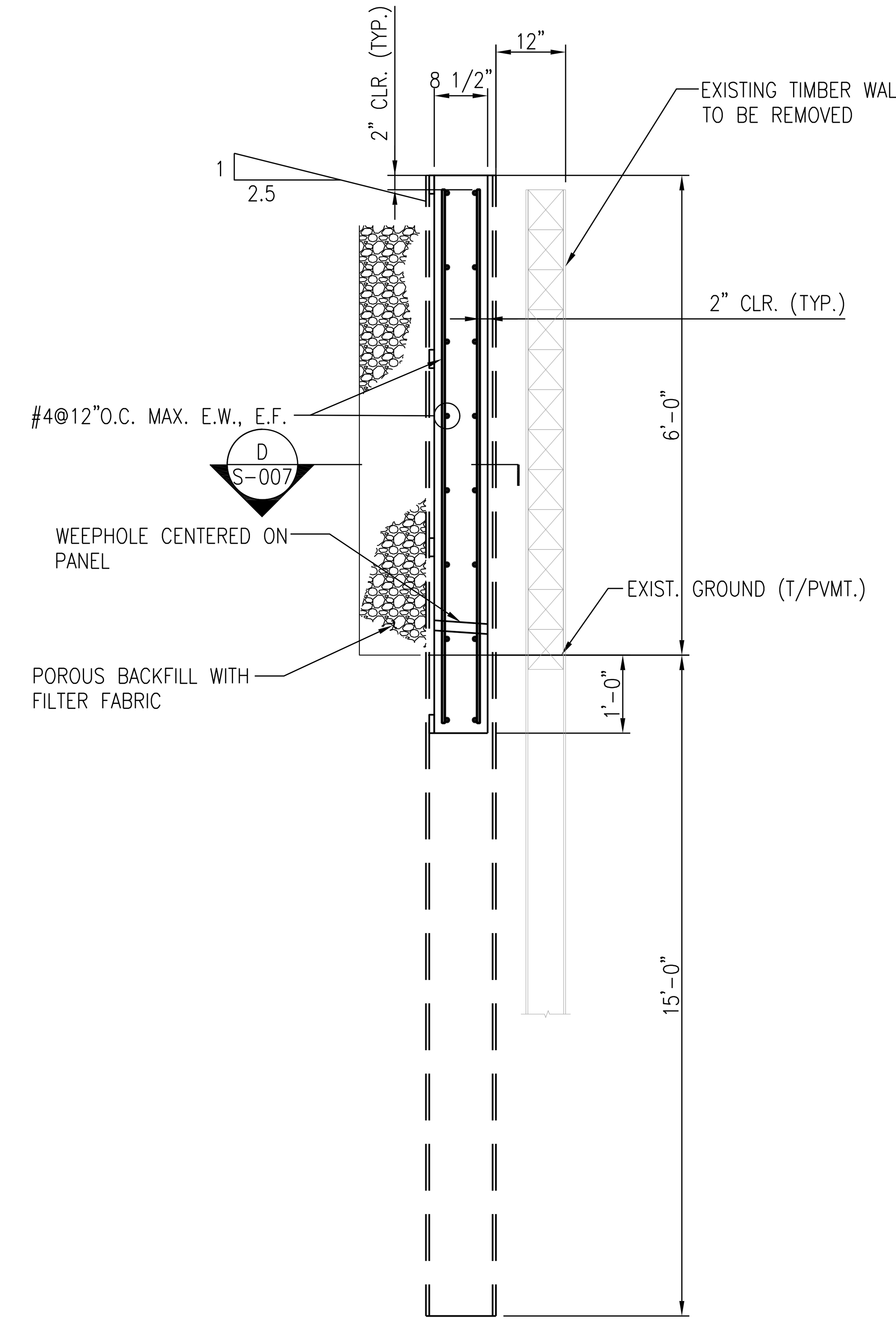
ELEVATION
SCALE: 1" = 10'



ELEVATION
SCALE: 1" = 10'



SECTION D-D
SCALE: 1/2" = 1'-0"



EXTENDED WALL DETAIL
SECTION C-C
SCALE: 1/2" = 1'-0"

NEW SIGN SCHEDULE - WALL 1 STA. 619+45.87 - 622+65.87						
MARK	QUANTITY	COLORS	SIZE WxH	MESSAGE	MATERIAL	REMARKS
P-7	4	WHITE BACKGROUND, BLACK COPY, RED PMS 200	84"x12"	Danger - Keep Off Tracks High Voltage	FIBERGLASS	DRILL PATTERN:"GA" SEE NOTE 3

NOTES:
1. FOR GENERAL NOTES, SEE DWG. NO. G-003.
2. FOR WALL PLAN AND LOCATION, SEE DWG. NO. WAL S-006.
3. SEE DWG. NO. SDEM-523 FOR DRILL PATTERN.
4. P-7 SIGNS TO BE MOUNTED ON THE EAST FACE OF THE WALL SPACED 100' APART.

ESTIMATED QUANTITIES STA. 619+45.87 - 622+65.87		
ITEM	QUANTITY	UNITS
SOLDIER PILE	41	EACH
PRECAST CONCRETE PANELS	2170	SQ. FT.
SEALING CONCRETE SURFACES (NEW WALL)	2150	SQ. FT.

LEGEND
——— PAVEMENT
— — — PROPOSED GRADE (WEST FACE OF WALL)

JACOBS
1 NORTH FRANKLIN STREET
SUITE 500
CHICAGO, ILLINOIS 60606-3421
TEL. (312) 251-3000

CTA - PURPLE LINE
REHABILITATION
VIADUCT REPLACEMENT AND
RETAINING WALL REHABILITATION
EVANSTON, ILLINOIS

CHICAGO TRANSIT AUTHORITY

IN CHARGE	EGC
APPROVED BY	MEZ
CHECKED BY	JSS
DESIGNED BY	NJM
DRAWN BY	FJD
PROJECT NO.	050019057
FILE NAME	PLWALS-007

REV.	DATE	DESCRIPTION
1	05-16-11	ADDENDUM NO. 1
0	04-13-11	ISSUED FOR BID

SHEET TITLE
WALL 1 ELEVATION
STA. 619+45.87 - 622+65.87

DRAWING NO. WAL S-007

CHICAGO TRANSIT AUTHORITY
Advertisement for Bids

Sealed bids will be received for the following by Chicago Transit Authority at the Bid Office - 2nd Floor, 567 W. Lake Street, Chicago, IL, 60661-1498, no later than 11:00 a.m. on Thursday, May 26, 2011 at which time all such bids will be opened publicly and read aloud:

Req No: C11RI101126074, Spec. No. CTA 0039-10
Purple Line Viaduct Replacements: Greenleaf Street, Dempster Street and Grove Street and Retaining Wall Rehabilitation.
PROPOSAL GUARANTEE: $700,000.00

A Pre Bid Meeting is Scheduled for 10:00 a.m. on Tuesday, May 10, 2011 in Conference Room 2A at CTA Headquarters, 567 W. Lake St., Chicago, IL 60661.

For additional information, please contact Edmund Rendon, Procurement Administrator at 312/681-2429.

Any contract resulting from this advertisement will be awarded to the lowest responsive and responsible bidder.

The contractor will be required to furnish certified copies of any and all Insurance Policies required in relation to this contract prior to CTA's execution.

Chicago Transit Authority hereby notifies all bidders that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

PLEASE NOTE: Where bids are sent by mail, delivery service or delivered in-person to the CTA Bid Office, the bidders shall be responsible for their delivery only to the Bid Office before the advertised date and hour for the opening of the bids. The Bid Office hours are Monday through Friday from 8:00 a.m. to 4:30 p.m. Chicago time, except holidays.

The right is reserved to accept any bid or any part or parts thereof or to reject any and all bids.

All inquiries should be directed to and copies of bid documents obtained from the Bid Office - 2nd Floor, 567 W. Lake Street, Chicago, Illinois 60661-1498.

CHICAGO TRANSIT AUTHORITY

By: Geoffrey Urban
General Manager, Purchasing

May 3, 2011