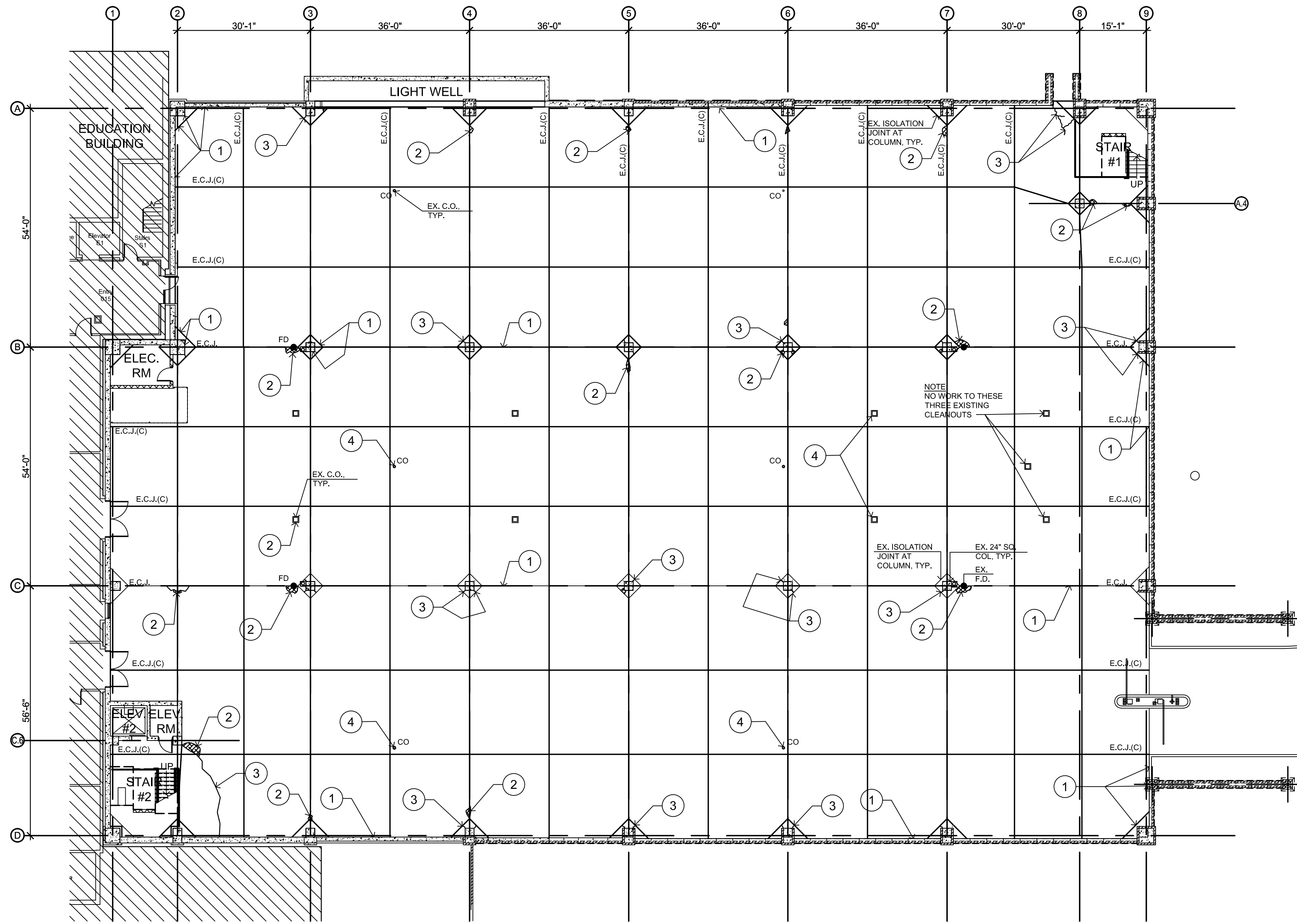
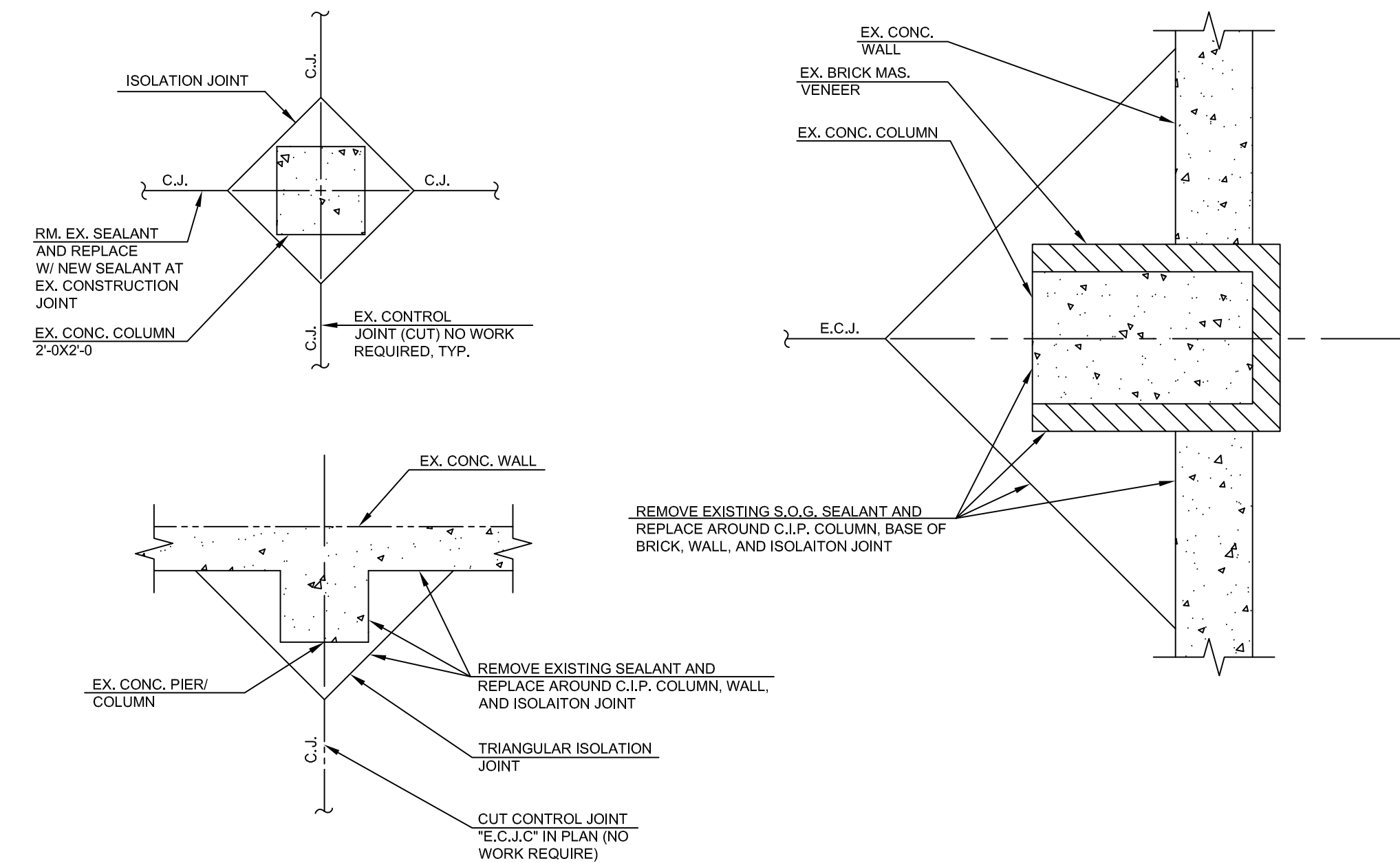


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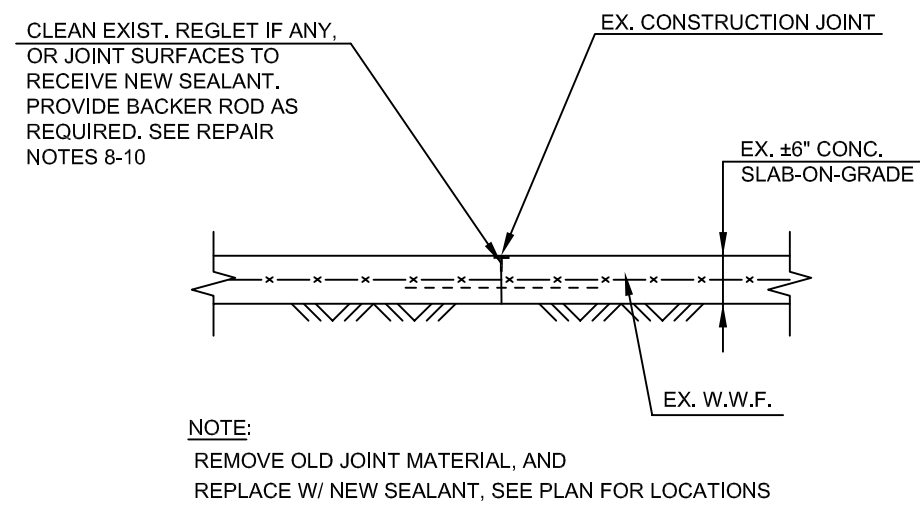
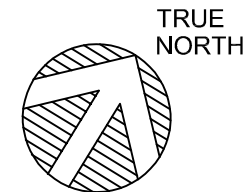
- NOTES**
- REMOVE AND REPLACE OLD SEALANT WITH NEW JOINT SEALANT AT EXISTING SLAB CONSTRUCTION JOINTS, JOINTS OCCUR AT EDGE OF SLAB/PERIMETER WALL INTERFACE, AT COLUMN BASE AND AT COLUMN ISOLATION SLAB JOINTS. SEE TYPICAL ISOLATION JOINT SEALANT DETAILS THIS SHEET. FOR BID PURPOSES THERE IS 2700 L.F. OF JOINT SEALANT REPLACEMENT ON THE LOWER LEVEL.
 - SPALL REPAIR- SEE DETAIL "FA" THIS SHEET, FOR BID PURPOSES THERE IS 30 SF OF SPALL REPAIR AREAS.
 - CONCRETE SLAB CRACK REPAIR, SEE DETAIL "YYS1.4, FOR BID PURPOSES THERE IS 40 L.F. OF SLAB CRACK.
 - REMOVE EXISTING SEALANT AND PROVIDE NEW SEALANT AROUND ALL SANITARY CLEANOUTS.

- LEGEND**
- E.C.J. - INDICATES EXISTING SLAB CONSTRUCTION/CONTROL
 - E.C.J.(C) - EXISTING CONTROL JOINT (SAWN CUT)
 - SPALLED CONCRETE SURFACE, SEE CONCRETE SPALL REPAIR DETAIL "FA" THIS SHEET.
 - INDICATES NEW CRACK REPAIR

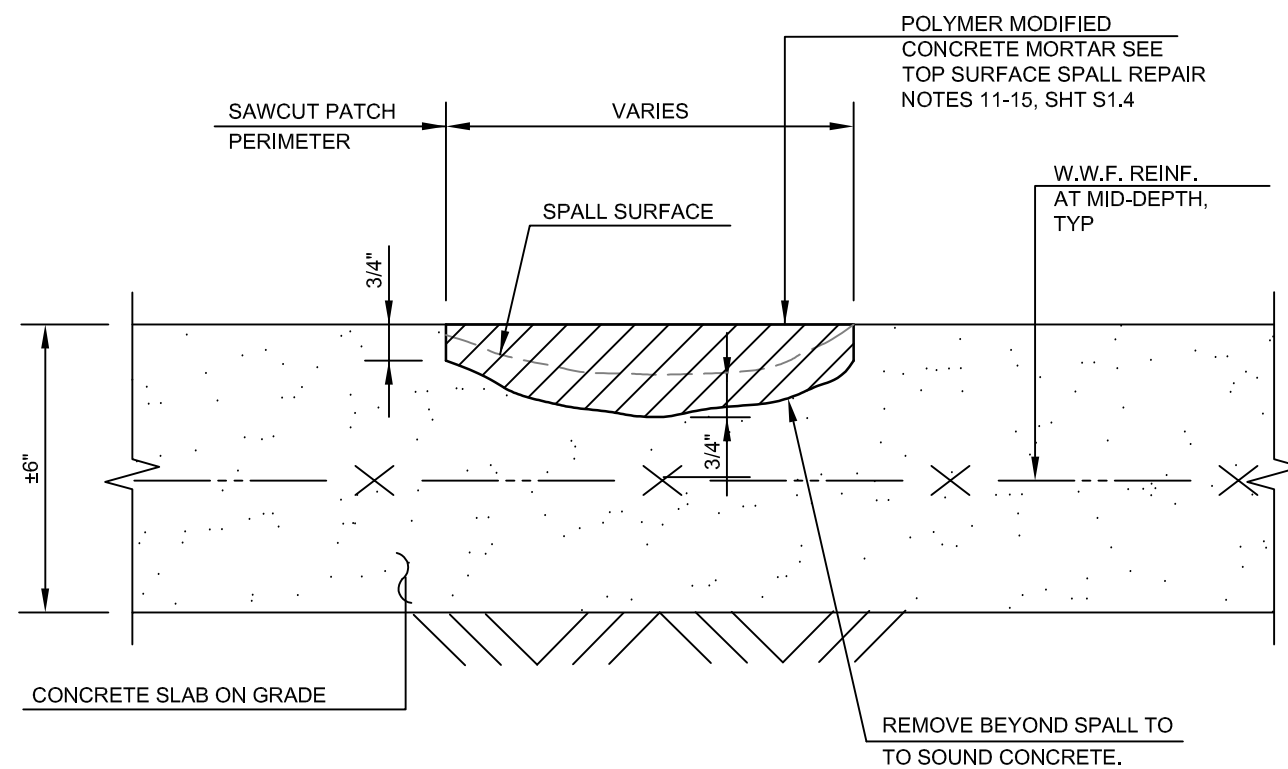


TYPICAL COLUMN ISOLATION JOINT SEALANT DETAILS
N.T.S.

1 LOWER LEVEL FLOOR PLAN
SCALE: 1/16" = 1'-0"



TYPICAL S.O.G. CONSTRUCTION JOINT SEALANT REPLACEMENT DETAIL
1/2" = 1'-0



DETAIL "FA" CONCRETE SPALL REPAIR DETAIL
SCALE: 3" = 1'-0
(TYPICAL SPALL REPAIR DETAIL AT SLAB-ON-GRADE)

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MARK A. BERKOWSKY
N.J. CERTIFICATE: C-4319
DATE



FORCINA PARKING GARAGE REPAIRS

**METZGER DR.
EWING, N.J. 08628**

ISSUED FOR:		
REV	DATE	DESCRIPTION
	07.12.22	DD PHASE REVIEW
	09.02.22	85% CD'S
	09.27.22	100% CD'S
	10.21.22	DCA REVIEW
	12.15.23	FOR BID

**DRAWING TITLE
LOWER LEVEL PLAN,
SLAB ON GRADE REPAIRS**

PROJECT NO.	DATE
22058	07.12.22
DRAWN BY	CHECKED BY
BD/TCY	RMF

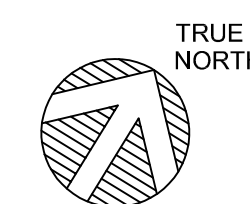
DRAWING NUMBER

LBA JOB NUMBER 72053
LEONARD BUSCH ASSOCIATES
CONSULTING ENGINEERS
626 JACKSONVILLE RD., STE 100A, WARMINSTER, PA 18974

S1.0

SHEET 10 OF 19






1 LOWER LEVEL REFLECTED CEILING PLAN (BOTTOM OF UPPER LEVEL DECK)
SCALE: 1/16" = 1'-0"

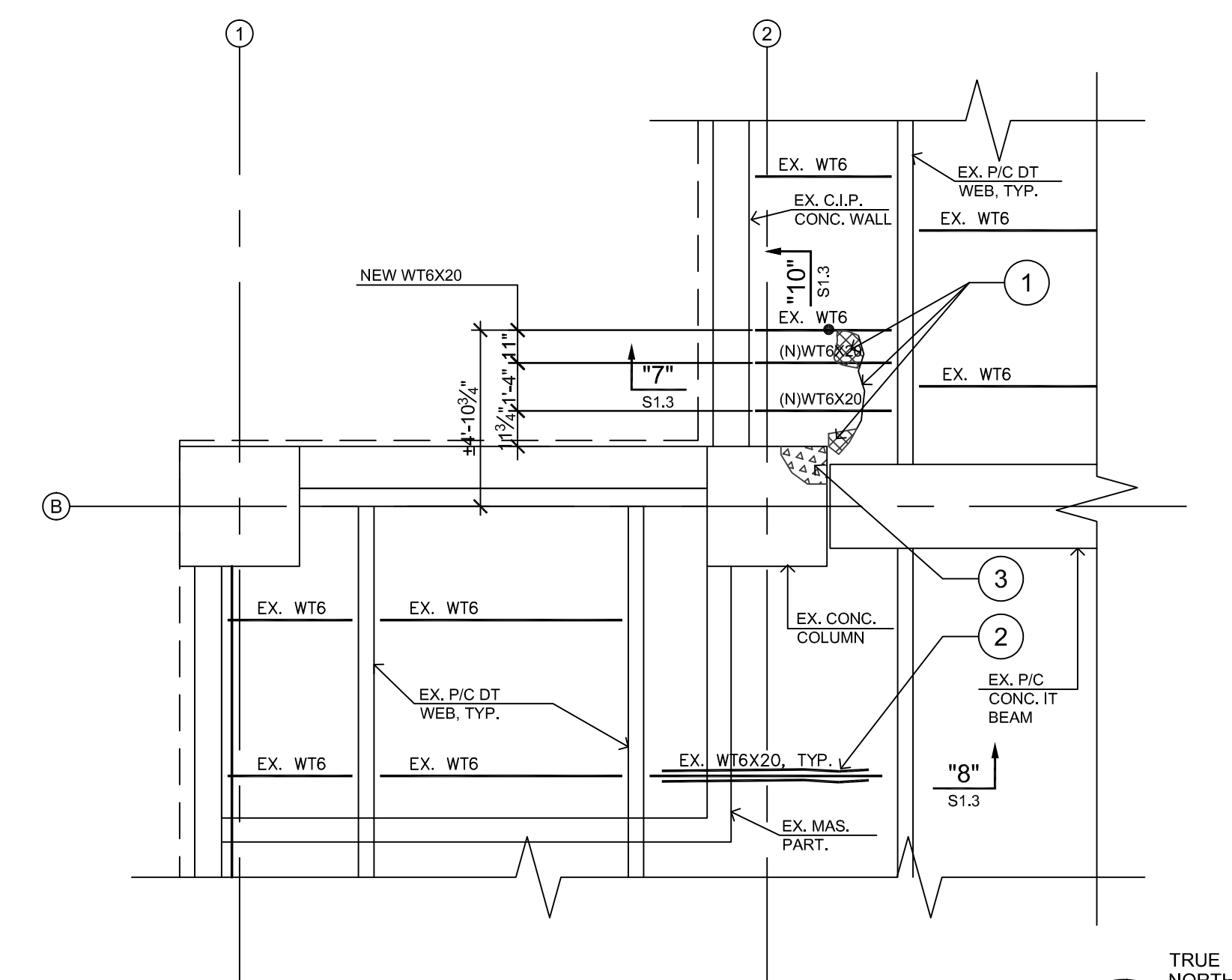


- ## NOTES

- ① REPAIR EXISTING CRACKS - SEE OVERHEAD CRACK REPAIR DETAIL "W"/S14 - REPAIR SPALLED OR DELAMINATED AREAS PER DETAIL "B"/S14. INSTALL NEW WT SEE ENLARGED PLAN 2 THIS SHEET.
- ② REPLACE EXISTING GROUT OVER WT REINFORCING. SEE SECTION 8/ S1.3.
- ③ TOP OF COLUMN CRACKED/ DELAMINATED / OR SPALLED - SEE VERTICAL SURFACE SPALL REPAIR DETAIL "E"/S14 AND REPAIR NOTES 16-20 ON DRAWING S1.3.
- ④ BOTTOM OF FLANGE SPALL DELAMINATED - SEE BOTTOM SURFACE SPALL REPAIR NOTES 16-20 ON DRAWING S1.3 AND REPAIR DETAIL "B"/S14.
- ⑤ OVERHEAD SPALL IN C.I.P. HAUNCH CHAIRS OR LARGE HONEYCOMB PRESENT. SEE SECTION 6"/S1.3.

LEGEND

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|
|  | FLEXURAL CRACK |
|  | NARROW FLEXURAL CRACK |
|  | SPALLED CONCRETE SURFACE |
|  | CRACKED CONCRETE CORNER/ LARGER VERTICAL SPALL REPAIR |
|  | HONEYCOMBED C.I.P. CONC. W/ EXP. STEEL CHAIRS |



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DATE _____



FORCINA PARKING
GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

ISSUED FOR:

REV	DATE	DESCRIPTION
	07.12.22	DD PHASE REVIEW
	09.02.22	85% CD'S
	09.27.22	100% CD'S
	10.21.22	DCA REVIEW
	12.15.23	FOR BID

DRAWING TITLE
LOWER LEVEL REFLECTED
CEILING PLAN

PROJECT NO. 22058	DATE 07.12.22
DRAWN BY BD/TCY	CHECKED BY RMF

DRAWING NUMBER

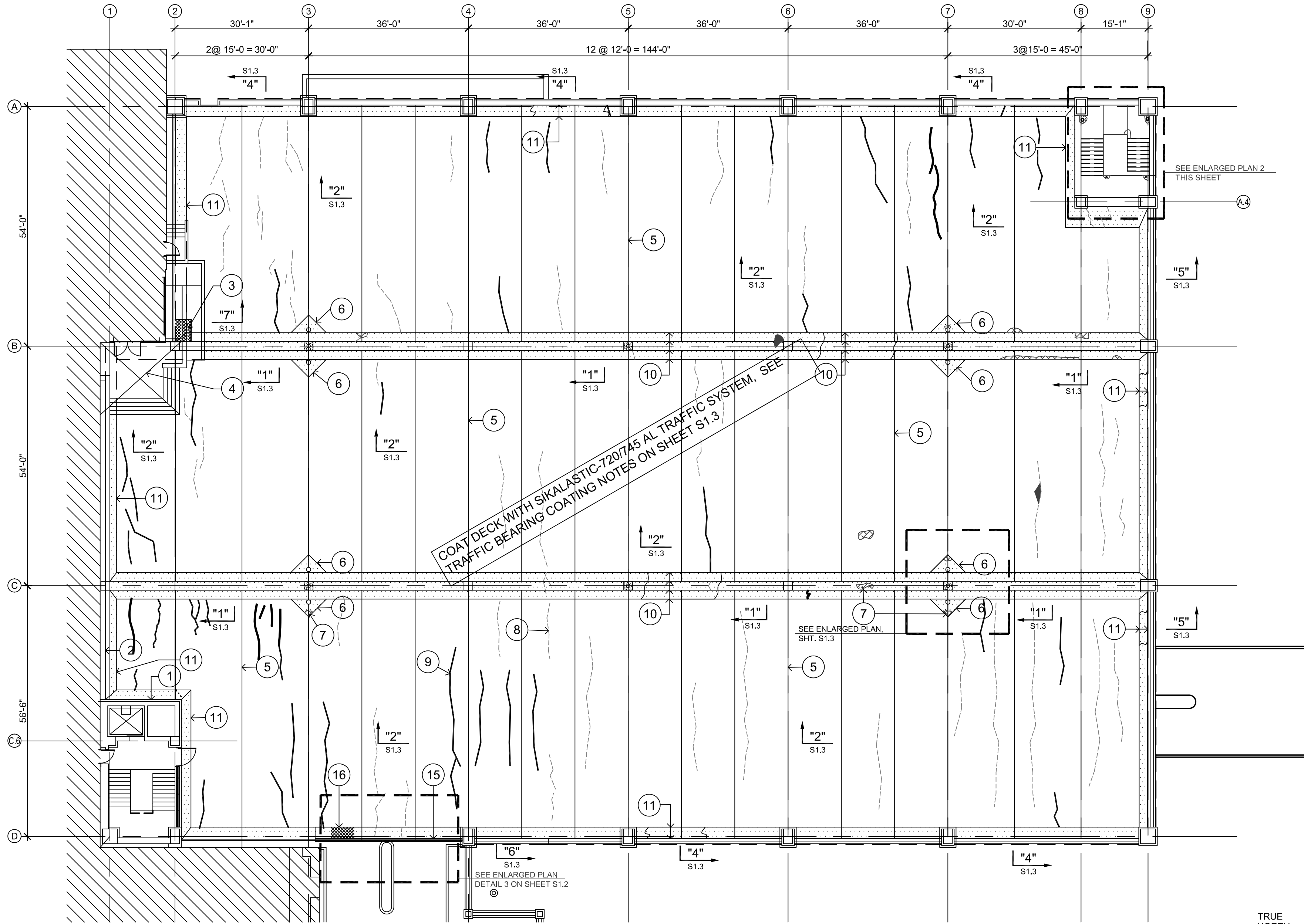
S1.1

SHEET 11 OF 19

LBA JOB NUMBER 72053

LEONARD BUSCH ASSOCIATES CONSULTING ENGINEERS 626 JACKSONVILLE RD., STE 100A, WARMINSTER, PA 18974

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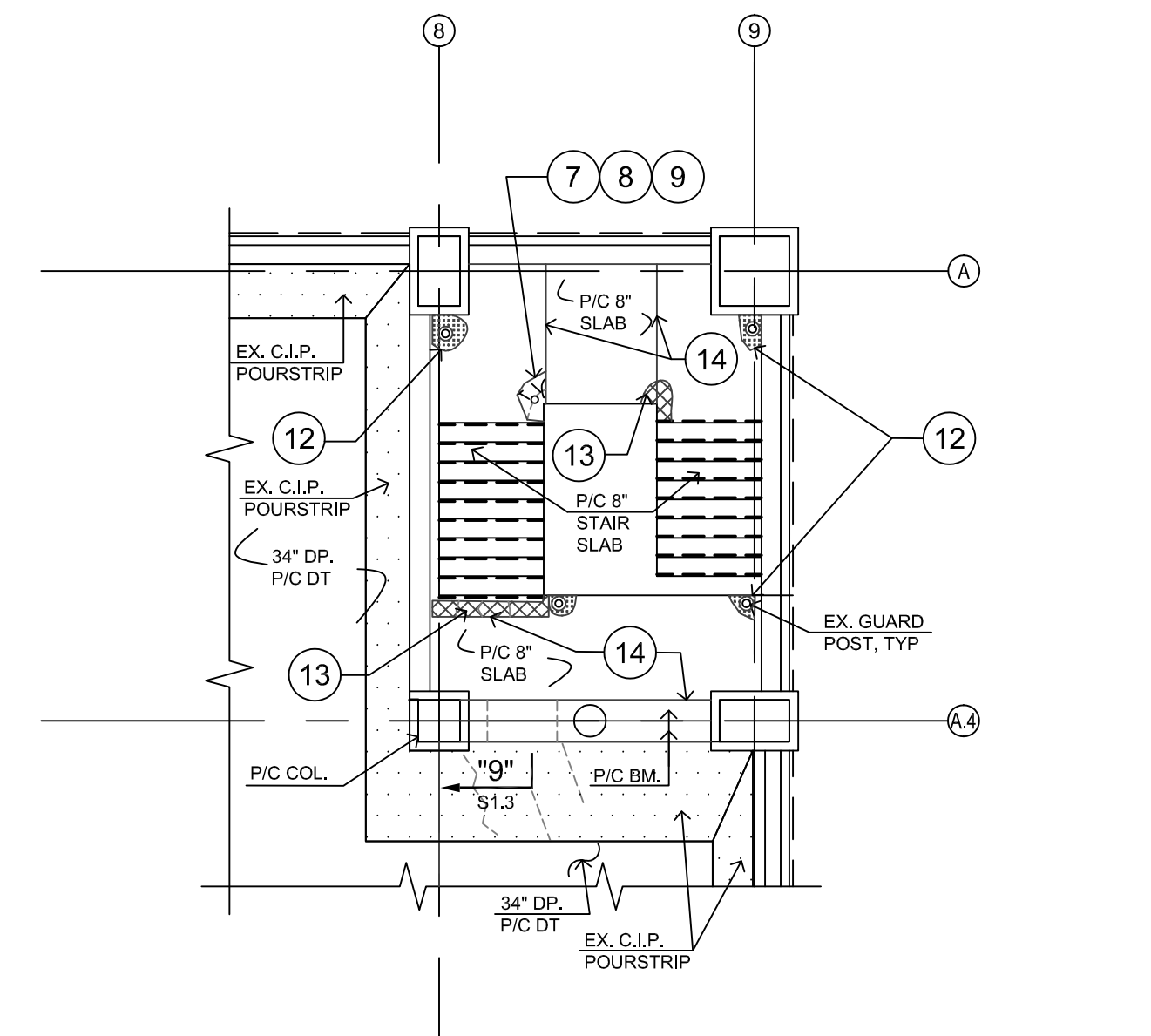


NOTES

- 1 NEW FLASHING AND WATERPROOFING SEE NOTE 6 ON DRAWING A1.2. FOR BID PURPOSES THERE IS 20 L.F. OF FLASHING & WATERPROOFING REPAIR.
- 2 NEW SEALANT AT EXIST. COLD JOINT AND BLDG. SEE NOTE 6 ON DRAWING A1.2. FOR BID PURPOSES THERE IS 150 L.F. OF SEALANT REPAIR.
- 3 SEE DWG. S1.1 FOR SLAB REPAIRS AND ADDITIONAL REINF. REQUIRED AND SECTION 7" ON DRAWING S1.3.
- 4 SEE ARCH. DWGS. FOR NEW WATERPROOFING DETAILS REQUIRED.
- 5 DT JOINT SEALANT REPLACEMENT SEE SECTION 7" S1.3 FOR ALL DT JOINTS. FOR BID PURPOSES THERE IS 2,400 L.F. OF DT JOINT SEALANT REPAIR.
- 6 REMOVE EXISTING DRAIN BODY AND INSTALL NEW DRAIN. SEE TYPICAL DETAIL "C" ON DRAWING S1.4. FOR BID PURPOSES THERE IS 150 L.F. OF JOINT REPAIR.
- 7 EXISTING DELAMINATED CONCRETE OR SPALL. SEE SPALL REPAIR DETAIL "A7" S1.4. FOR BID PURPOSES THERE IS 20 S.F. OF SPALL REPAIR.
- 8 EXIST. CRACK. SEE NEW CRACK SEALANT REPAIR DETAIL "Y" S1.4 AND REPAIR NOTE 32. FOR BID PURPOSES THERE IS 900 L.F. OF CRACK REPAIR.
- 9 EXIST. CRACK CAULKED OR OTHER. SEE DETAIL "Y" S1.4 AND REPAIR NOTE 32. FOR BID PURPOSES THERE IS 600 L.F. OF CRACK REPAIR.
- 10 EXIST. TOPPING JOINT REPAIR. SEE SECTION 11" S1.3. FOR BID PURPOSES THERE IS 1,900 L.F. OF JOINT REPAIR.
- 11 EXTERIOR TOPPING REPAIR AND SEALANT SEE SECTIONS "4" & "5" S1.3. FOR BID PURPOSES THERE IS 1,700 L.F. OF SEALANT REPAIR.
- 12 CORNER SPALL AT GUARD POST. SEE DETAIL "D7" S1.04 AND VERTICAL SPALL REPAIR NOTES 16-20 DRAWING S1.03. FOR BID PURPOSES THERE IS 10 S.F. OF SPALL REPAIR.
- 13 DELAMINATED PATCHED SLAB. REPAIR TOP SURFACE SPALL DETAIL A' S1.4 SEE NOTES 11-15. FOR BID PURPOSES THERE IS 10 S.F. OF SPALL REPAIR.
- 14 PROVIDE NEW SEALANT AT STAIR SLAB JOINTS. SEE SECTION 9" S1.3 AND DETAIL "X15" S1.4. FOR BID PURPOSES THERE IS 25 L.F. OF SEALANT REPAIR.
- 15 PROVIDE NEW EXPANSION JOINT. SEE SECTION 11R/S1.5 & DETAIL U/S1.5.
- 16 DT DECK REPAIRS. SEE PARTIAL PLAN 3/S1.2.

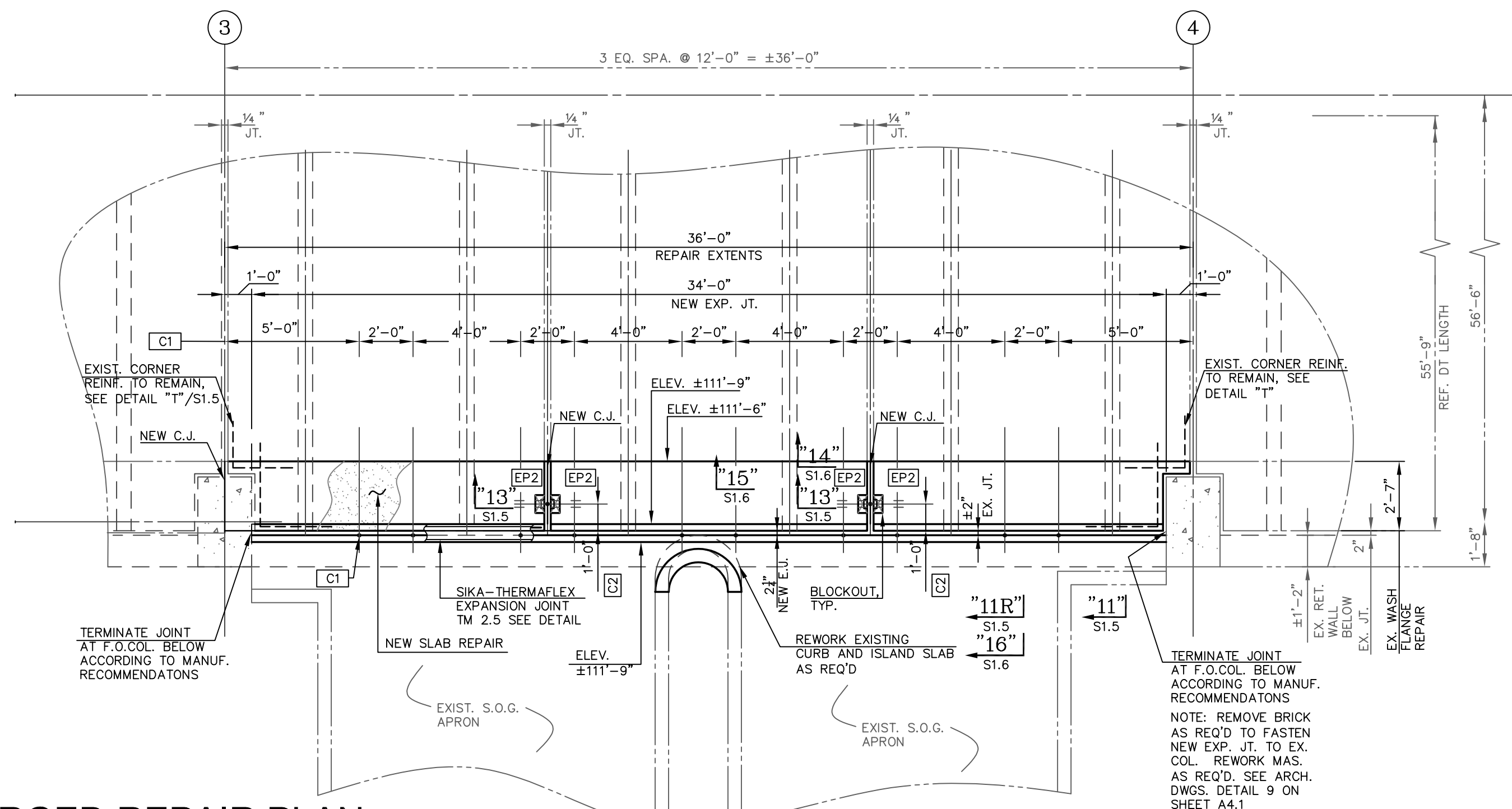
LEGEND

- EXISTING CRACK REPAIR SEE NOTE 9, TYP.
- EXISTING FLEXURAL CRACK OPEN SEE NOTE 8, TYP.
- EXIST. C.I.P. TOPPING POURSTRIP
- SPALLED CONCRETE SURFACE
- CRACKED CONCRETE EDGE OR CORNER/ LARGER SECTION REPAIR



3 ENLARGED REPAIR PLAN

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



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N.J. CERTIFICATE: C-4319

DATE



FORCINA PARKING GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

ISSUED FOR:

REV	DATE	DESCRIPTION
07.12.22		DD PHASE REVIEW
09.02.22		85% CD'S
09.27.22		100% CD'S
10.21.22		DCA REVIEW
12.15.23		FOR BID

DRAWING TITLE
UPPER LEVEL PLAN

PROJECT NO.
22058

DATE
07.12.22

DRAWN BY
BD/TCY

CHECKED BY
RMF

DRAWING NUMBER

S1.2

SHEET 12 OF 19

LBA JOB NUMBER 72053
LEONARD BUSCH ASSOCIATES
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1. The purpose of this work is to remove delaminated and unsound concrete principally from the exposed surface of the parking deck in the area that will receive a prophylactic barrier coating to inhibit water penetration. Repairs to other portions of the top surface of the concrete may be indicated and repairs to recently exposed portions of the underside of the concrete slab are addressed here.
2. The garage will remain closed to traffic during construction operations. Delivery and storage of materials shall be coordinated with the Owner. Location of activity for each workday shall be coordinated with the Owner.
3. All access to an active construction area shall be controlled with temporary barriers and signs erected and maintained by the contractor. Location of barriers and signs shall be coordinated with the Owner. It shall be a primary focus of the Contractor to protect the public and vehicles within and adjacent to the garage from hazards associated with repair operations.
4. Contractor shall locate spalls and delaminated areas by both reference to these drawings and visual inspection of the area of the planned topping.
5. During all preparation work avoid cutting or damaging existing concrete reinforcing steel.
6. Application of cementitious materials shall take place when air temperature is a minimum 45 degrees Fahrenheit and rising and is forecast to remain above 45 degrees F for the following 24 hours. Note that substrate shall have attained a minimum temperature of 40 degrees F before beginning application.
7. All material applications shall be prepared, applied and cured in accordance with the manufacturer's recommendations.

Lower Level Joint Sealant Repair Notes:

8. Remove lower level slab on grade joint material at control joint, column-slab joints, slab to exterior wall joints by mechanical means.
9. Clean joint as required between adjacent horizontal surfaces or horizontal and vertical wall surfaces in accordance with manufacturer recommendations.
10. Install backer rod and apply Sikaflex-1c SL to fill the joint to provide at least 0.5" depth in accordance with manufacturer's recommendations. Tool joint as required.

Top Surface Spall Repair Notes:

11. Remove all loose and deteriorated concrete by mechanical means to provide a rough surface (+/- 1/8" profile) and at least 1/4" deep. Edges shall be vertical and preferably saw-cut.
12. Extend removal to at least 3/4" below reinforcement encountered. Thoroughly clean exposed reinforcement with wire brush or mechanical means and rinse reinforcement and spill area with high pressure wash. Prime reinforcement with two coats of Sikka Armatec 110 EpoCem.
13. Mix and brush Sikaflex 1c acrylic latex bonding agent groud into exposed surface of spall. Immediately afterwards apply Sikaflex 1000 cement mortar for surfaces 1" deep and less or Sikaflex 1000 concrete for spalls greater than 1" deep.
14. Finish surface to match texture of adjacent areas.
15. Cure freshly placed material with wet burlap or spray mist for the first 48 hours after application.

8. Remove lower level slab on grade joint material at control joint, column-slab joints, slab to exterior wall joints by mechanical means.
9. Clean joint as required between adjacent horizontal surfaces or horizontal and vertical wall surfaces in accordance with manufacturer recommendations.
10. Install backer rod and apply Sikaflex-1c SL to fill the joint to provide at least 0.5" depth in accordance with manufacturer's recommendations. Tool joint as required.

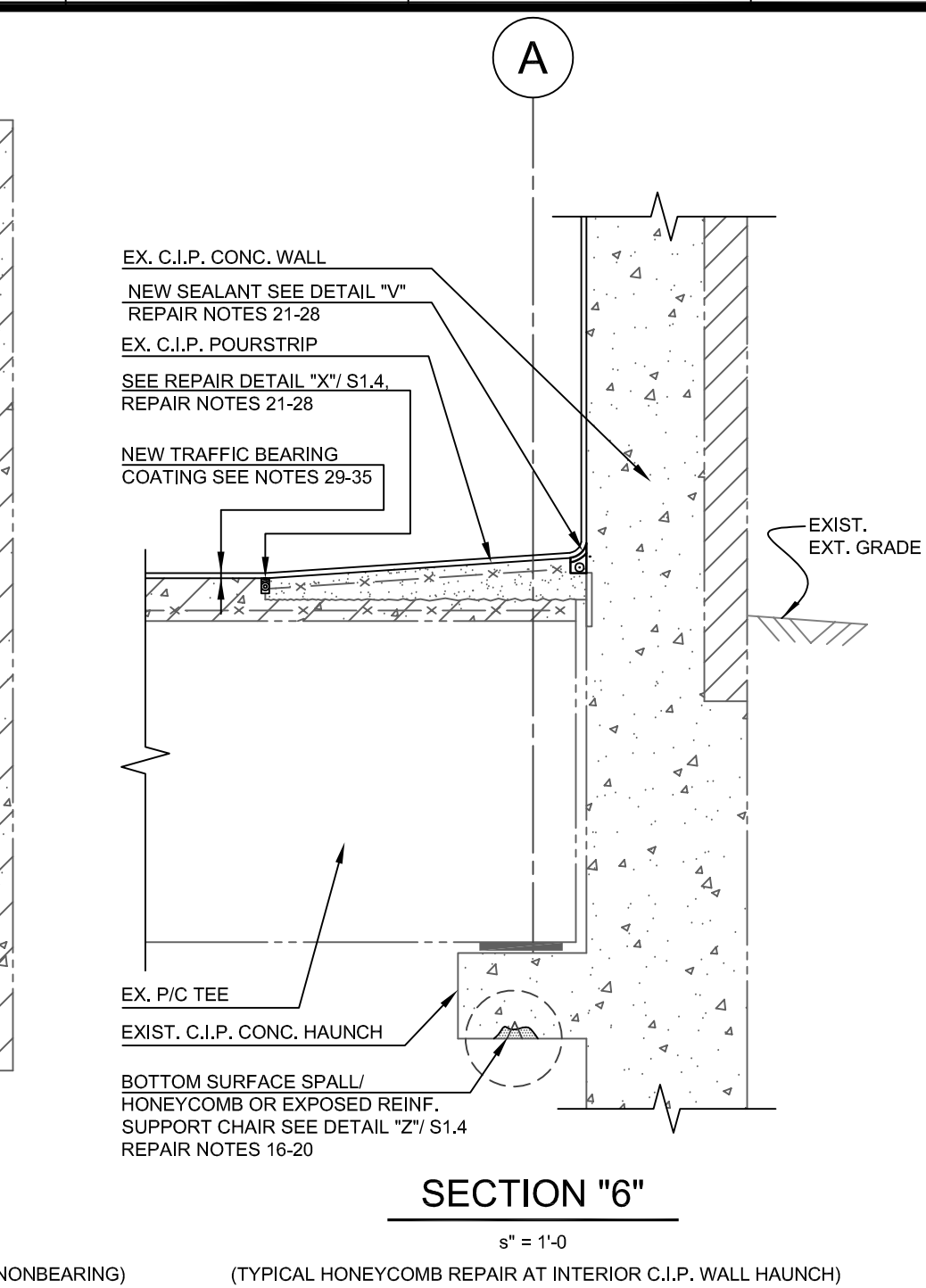
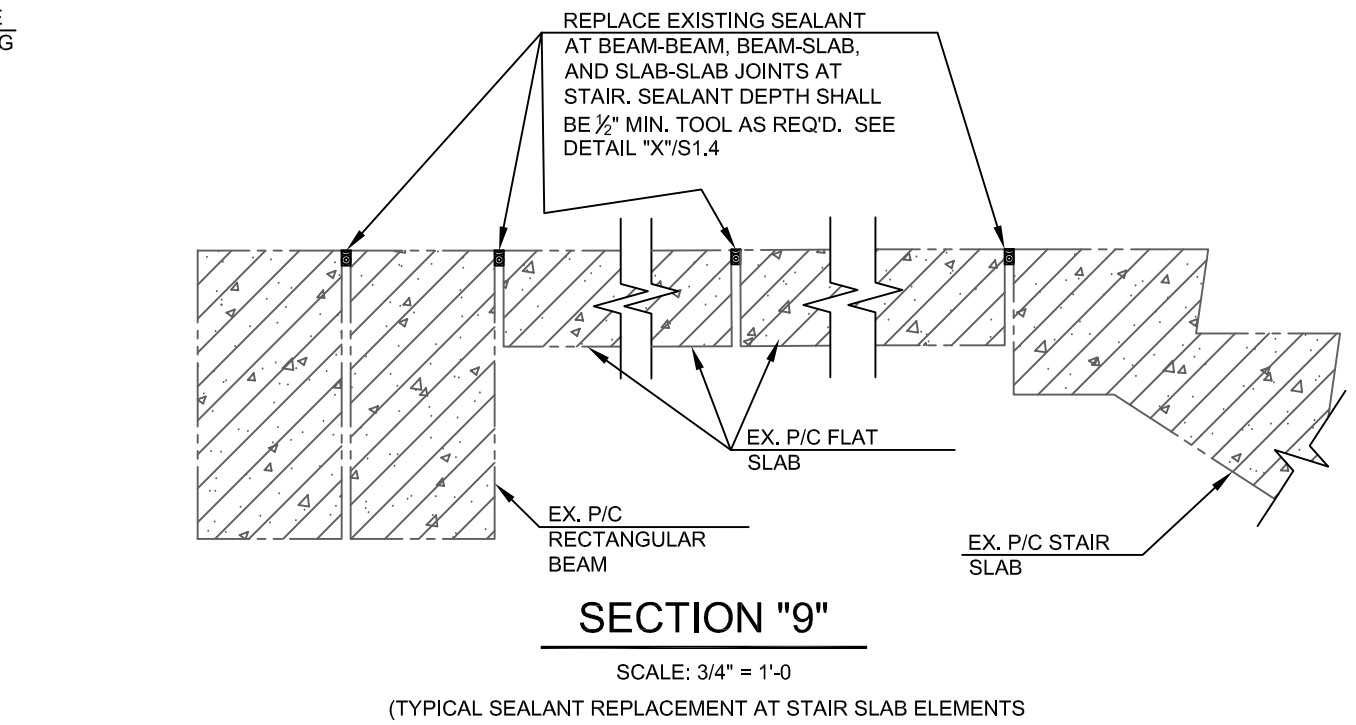
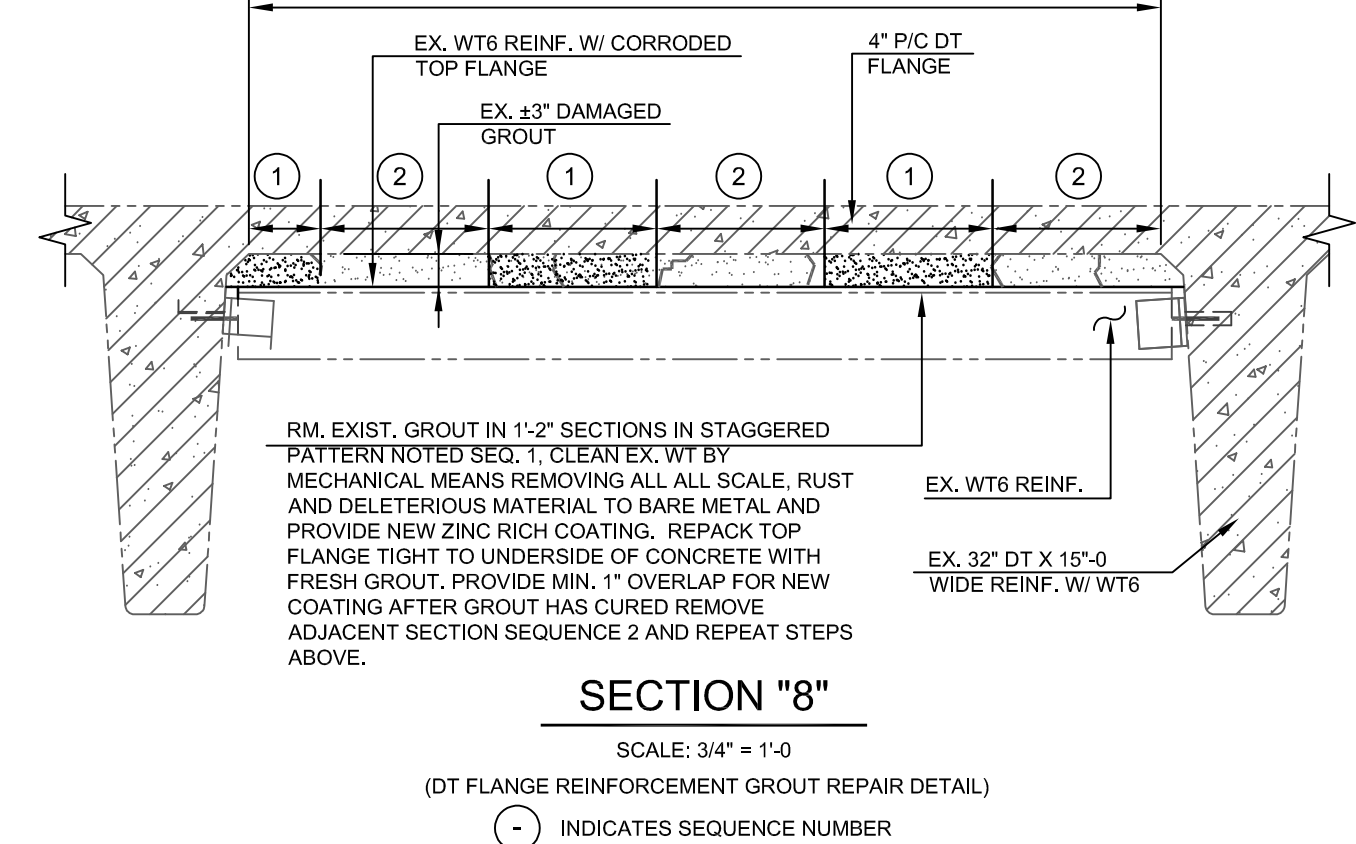
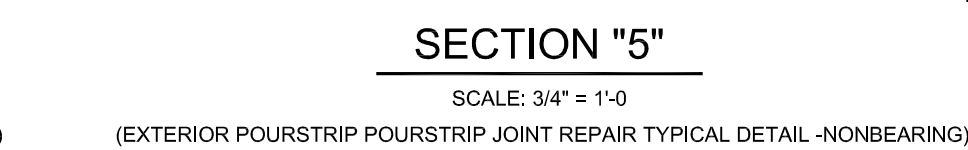
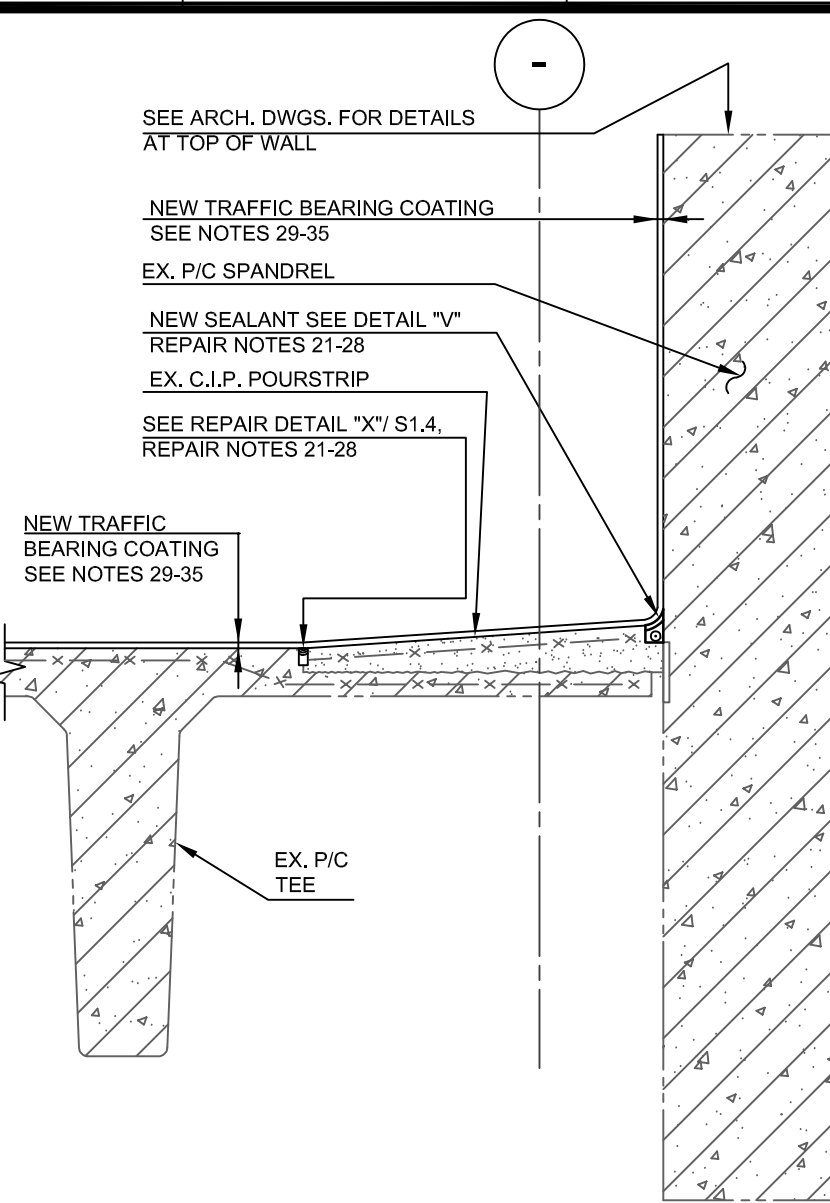
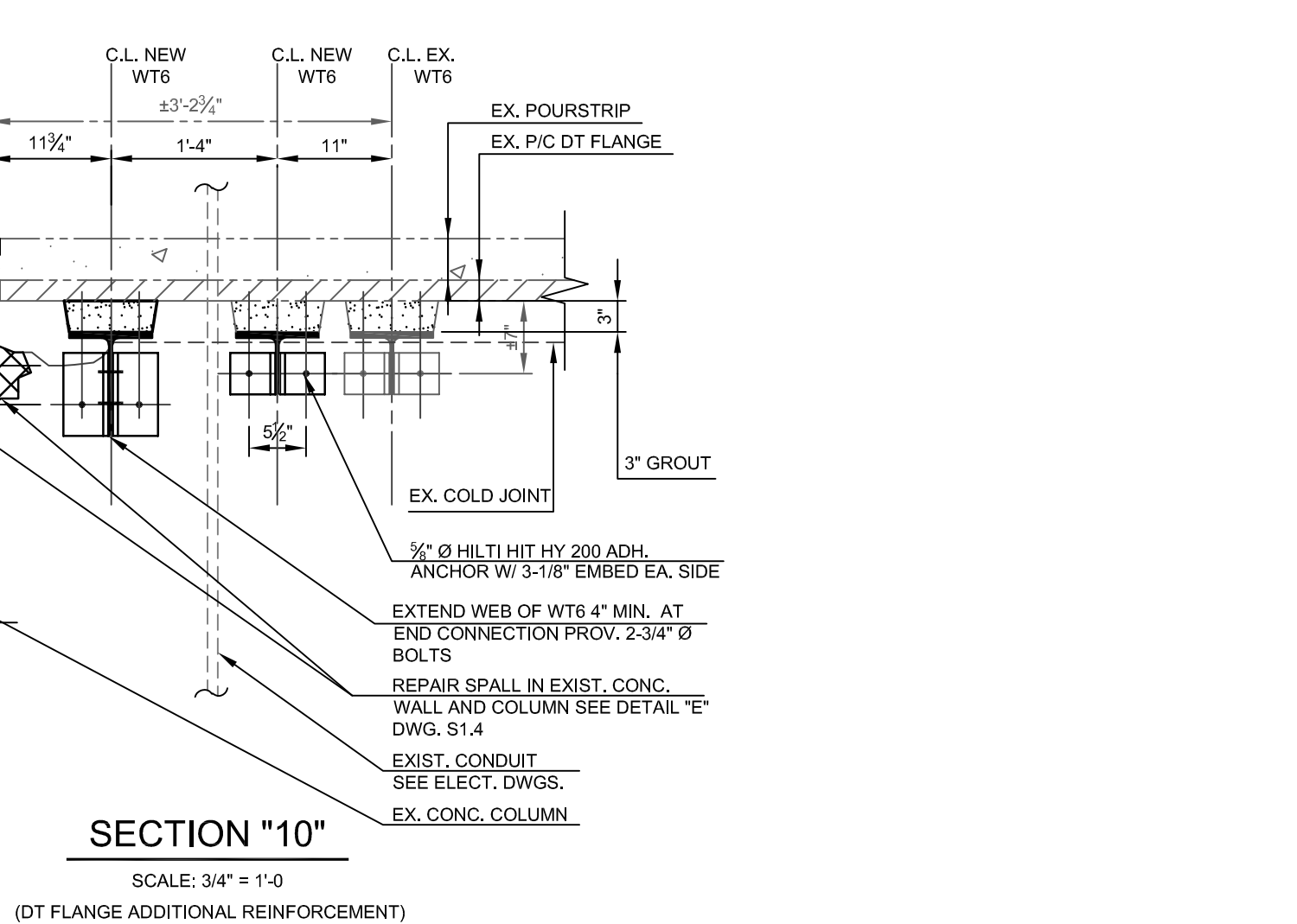
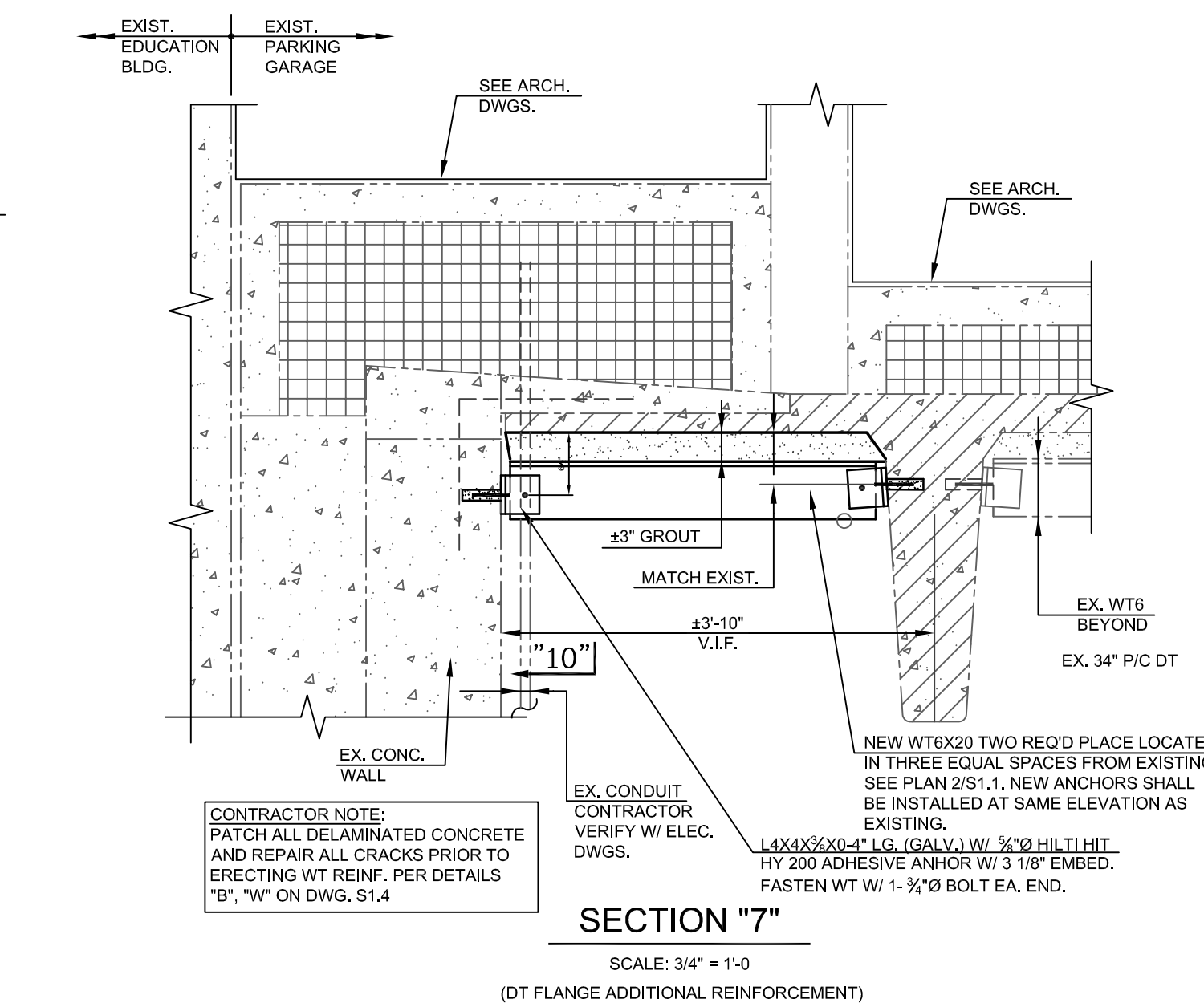
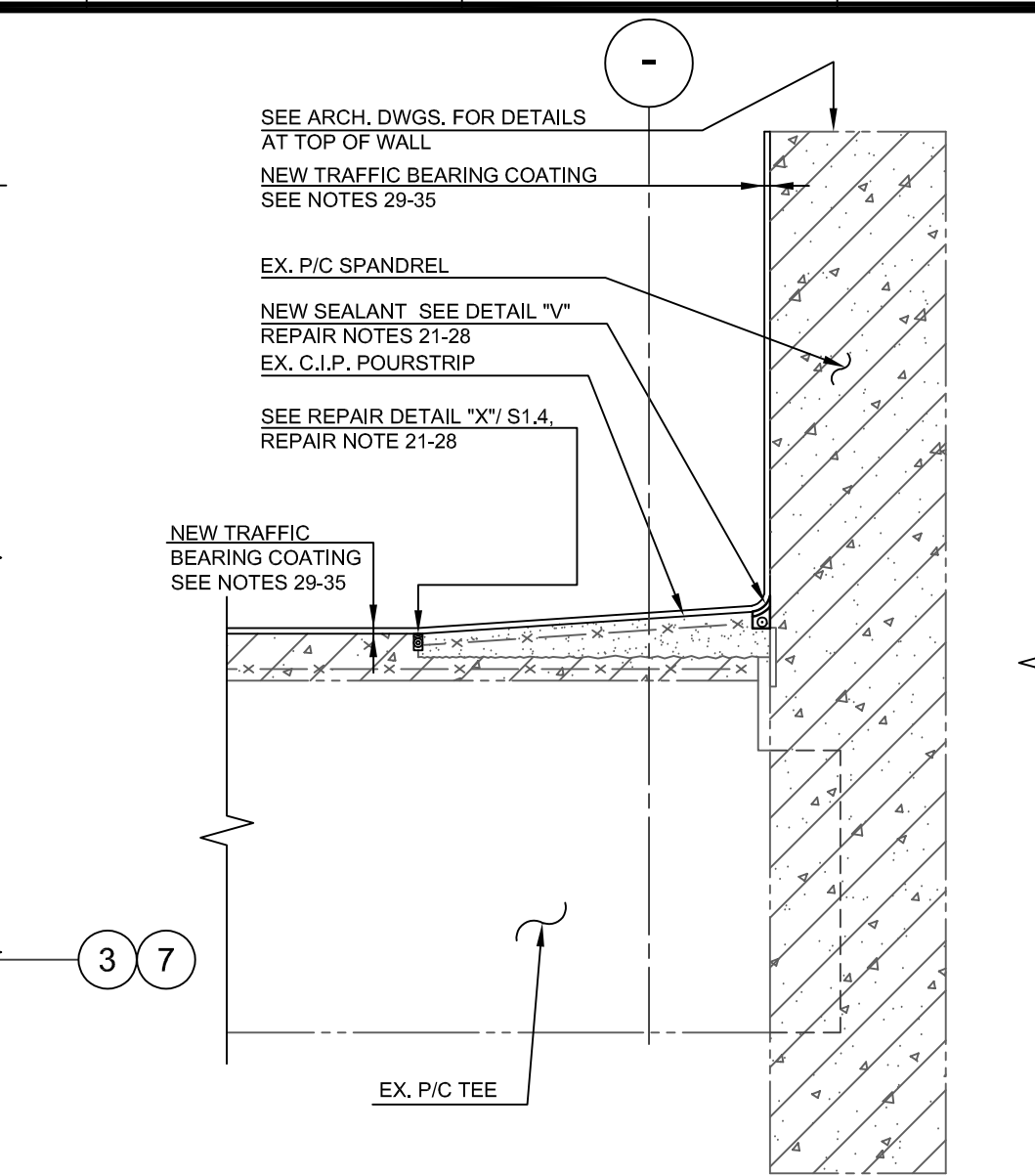
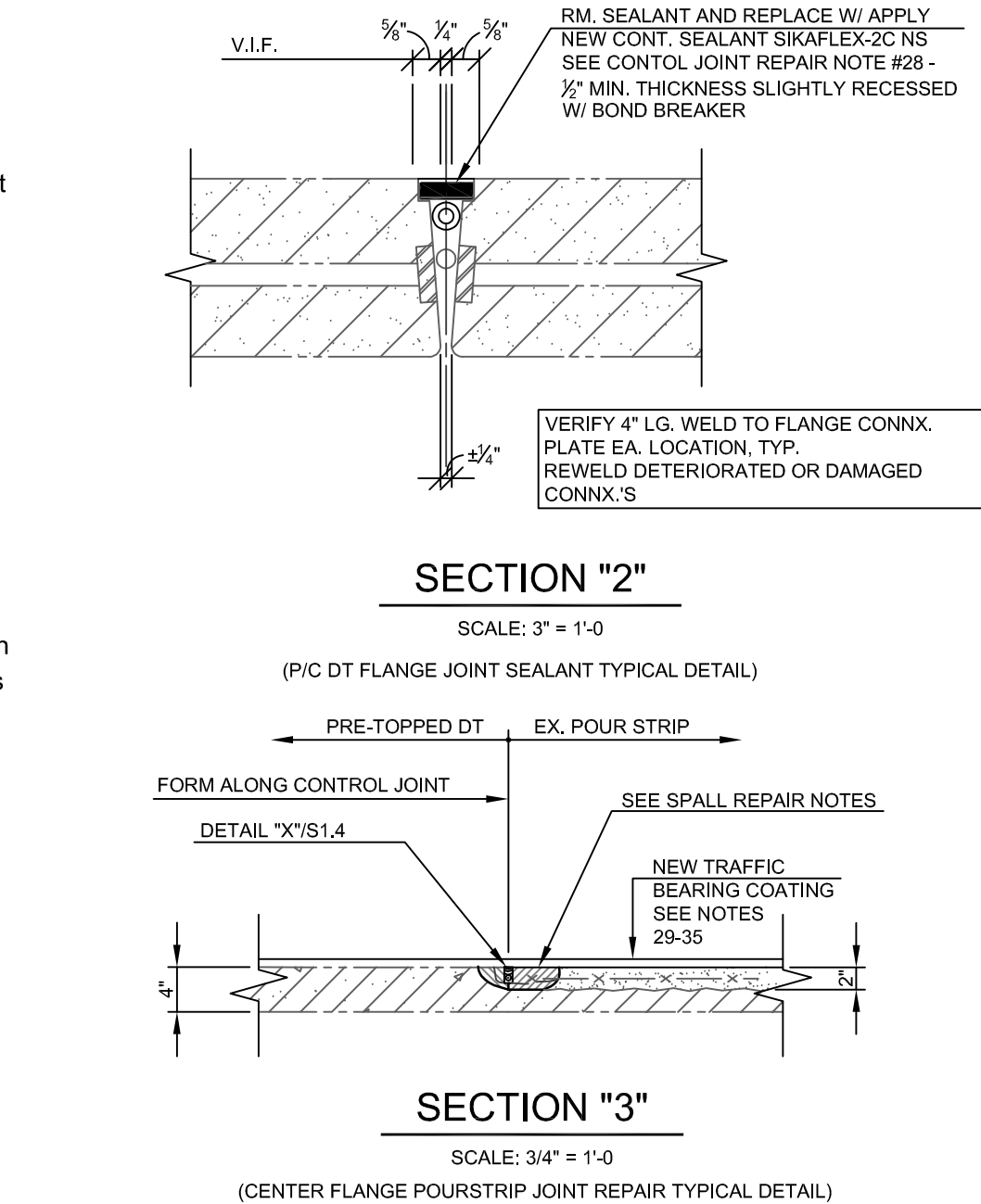
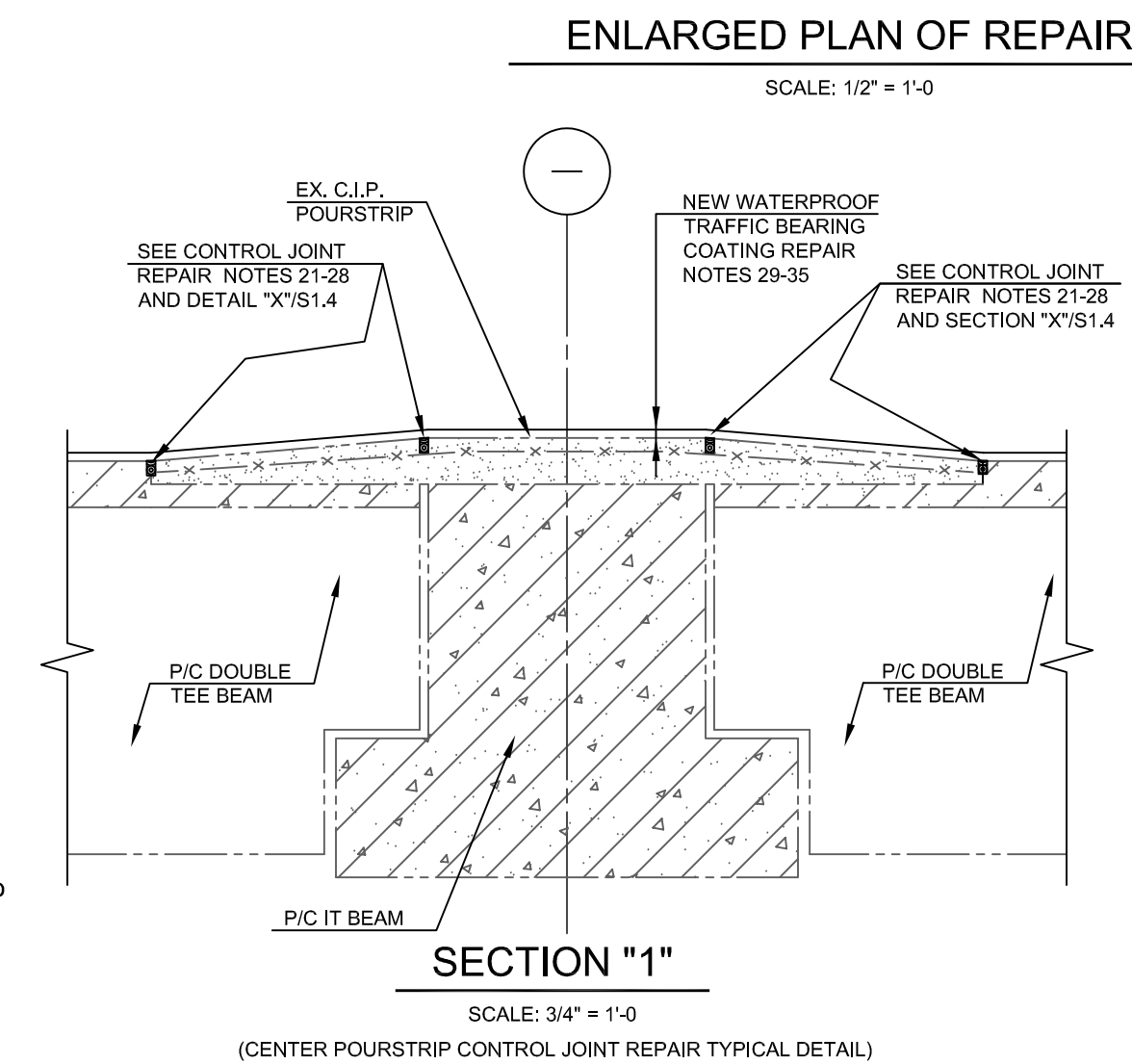
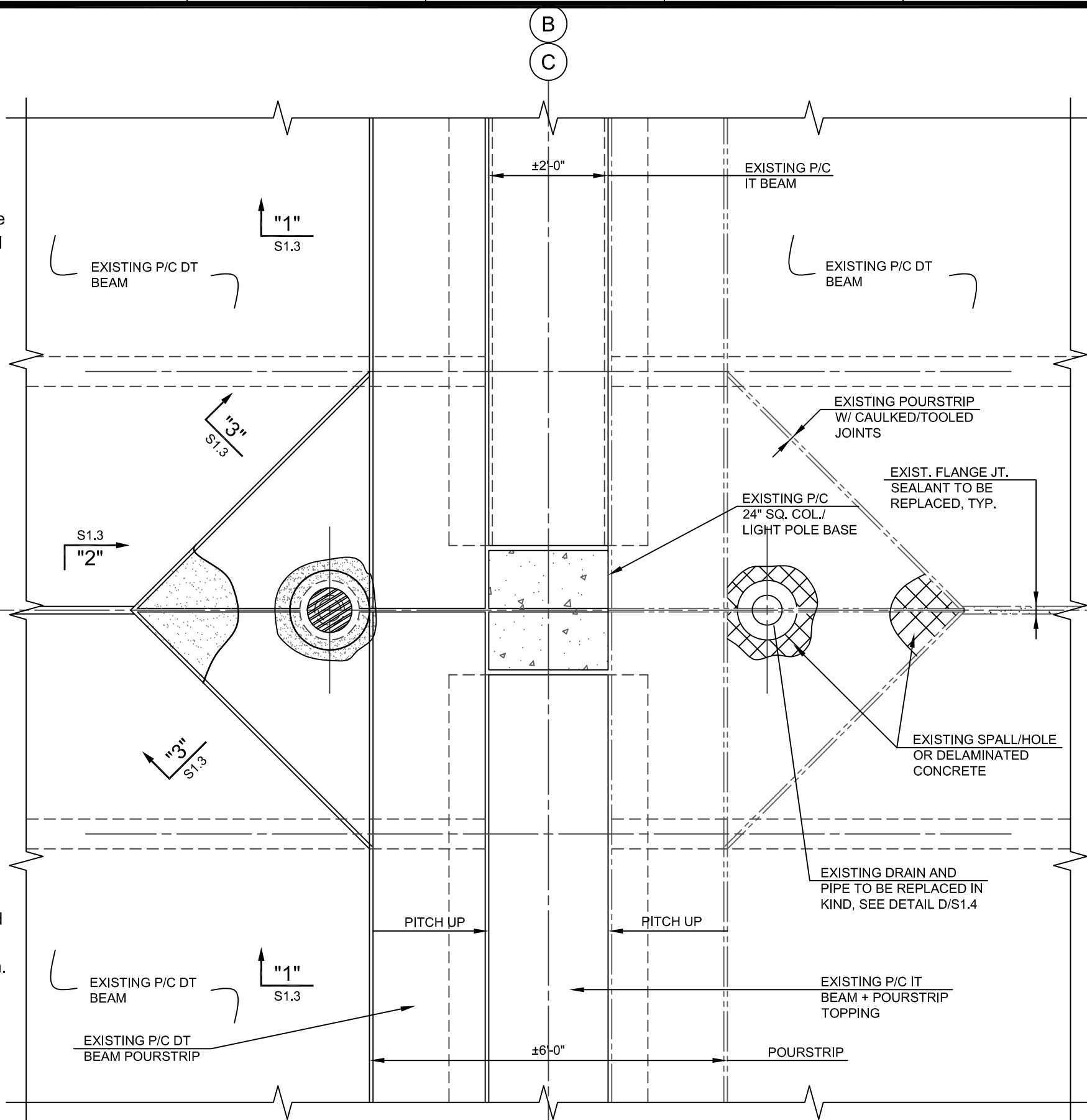
Top Surface Spall Repair Notes:

11. Remove all loose and deteriorated concrete by mechanical means to provide a rough surface (+/- 1/8" profile) and at least 3/4" depth. Edges shall be vertical and preferably saw-cut.
12. Extend removal to at least 3/4" below reinforcement encountered. Thoroughly clean exposed reinforcement with wire brush or mechanical means and rinse reinforcement and spall area with high pressure wash. Prime reinforcement with two coats of Sika Armatec 110 EpoCem.
13. Mix and brush SikaLatex R acrylic latex bonding agent grout into exposed surface of spall. Immediately afterwards apply SikaQuick 1000 cement mortar for surfaces 1" deep and less or SikaQuick 1000 concrete for spalls greater than 1" deep.
14. Finish surface to match texture of adjacent areas.
15. Cure freshly placed material with wet burlap or spray mist for the first 48 hours after application.

16. Remove all loose and deteriorated concrete by mechanical means to provide a rough surface (+/- 1/16" profile) and at least 1/2" deep. Edges shall be vertical at bottom spalls and horizontal and vertical at vertical spalls, preferably saw-cut. Extend removal to at least 3/4" below reinforcement encountered.
17. Thoroughly clean exposed reinforcement with wire brush or other mechanical means and rinse reinforcement and spill area with high pressure wash. Prime reinforcement with two coats of Sika Armatec 110 EpoCem.
18. Mix and brush Armatec 110 EpoCem bonding agent grout into exposed surface of spill. Immediately afterwards apply SikaTop 123 Plus repair mortar. For surfaces over 1 1/2" deep apply mortar in lifts.
19. Finish surface to match texture of adjacent areas.
20. Cure spill with wet burlap or spray mist for the first 48 hours after application.

21. Remove all loose and deteriorated concrete by mechanical means to at least 1/4" deep. Edges shall be vertical and preferably saw-cut.
22. Extend removal to at least 3/4" below reinforcement encountered without cutting reinforcement. Thoroughly clean exposed reinforcement with wire brush or mechanical means and rinse reinforcement and spill area with high pressure wash. Prime reinforcement with two coats of Sika Armatex 110 EpoCem.
23. Prime concrete surfaces with brush application of Sika Armatex 110 EpoCem immediately prior to application of repair mortar/concrete.
24. Apply SikaQuick 1000 cement mortar for surfaces 1" deep and less or SikaQuick 1000 concrete for areas greater than 1" deep.
25. Maintain the original control joint by forming vertical surface along joint and providing gap to be filled with sealant.
26. Finish surface to match texture of adjacent areas.
27. Cure fresh mortar/concrete with wet burlap or spray mist for the first 48 hours after application.
28. Provide backer bar and fill joint with Sikaflex -2c NS TG traffic grade polyurethane elastomeric sealant. Tool as required.

29. For extent of waterproofing coating, see drawing A1.2. Upper deck surface, interior face of upper deck walls shall receive waterproofing. Waterproofing area shall be prepared and coated with a five coat application of Sikalastic-720/745 AL Traffic System or equivalent. A Owner's discretion, extent of coating may be increased.
30. Begin application of the elastomeric polyurethane system after all other top surface repairs are complete and cured. Contractor shall conform with the manufacturer that other treatments, repairs and sealants used on the project will not deleteriously affect the application or longevity of the system and apply in accordance with manufacturer's recommendations.
31. Prepare surface to receive traffic bearing coating by treating any discolored areas required to decontaminate them of surface contaminants including but not limited to dirt, oil, grease, chemicals or curing compounds. After treating stains, prepare all surfaces to receive the traffic bearing coating by shotblasting in accordance with industry standard surface texture ICRI CSP 3-4 for deck surfaces and CSP 1-3 for wall surfaces.
32. See drawing S1.2 notes 7, 8, & 9 for crack and spall repairs. Prepare all visible hairline cracks 1/16" wide or less as recommended by Sika. Wider cracks shall be sealed with Sikadur 35, Hi-Mod LV in a gravity feed application. "Detail" area around all cracks and joints according to manufacturer recommendations.
33. Prior to each coating application, the contractor shall review forecasted weather, temperature, substrate moisture content, and all other factors are within manufacturer's guidelines for the application.
34. Select appropriate Primer Coat material based on field conditions and manufacturer recommendations. Apply Primer Coat, 720 Detail Coat, 720 Base Coat, 745 AL Wear Coat, and 745 AL Top Coat to achieve a total system thickness of at least 55 dry mils following the manufacturer's System Guide for Heavy Vehicular Traffic - Seed and Lock.
35. Contractor shall coordinate with the Owner and take appropriate measures to assure that vapors and overspray do not affect the public, applicators, nearby vehicles or adjacent buildings.



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RK A. BERKOWSKY

. CERTIFICATE · C-6319

DATE _____



FORCINA PARKING GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

ISSUED FOR:		
REV	DATE	DESCRIPTION
	07.12.22	DD PHASE REVIEW
	09.02.22	85% CD'S
	09.27.22	100% CD'S
	10.21.22	DCA REVIEW
	03.10.23	RESPONSE TO DCA COMMENTS
	12/15/23	FOR BID

DRAWING TITLE
SECTIONS AND REPAIR NOTES

PROJECT NO. 22058	DATE 07.12.22
DRAWN BY BD/TCY	CHECKED BY RMF

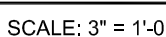
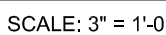
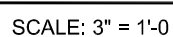
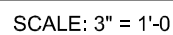
DRAWING NUMBER

S1.3

SHEET 13 OF 19

LBA JOB NUMBER 72053

LEONARD BUSCH ASSOCIATES CONSULTING ENGINEERS 626 JACKSONVILLE RD., STE 100A, WARMINSTER, PA 18974



12. These drawings are based on the best available information available at the time of their creation and all work shall be executed in conformity with these drawings. Before proceeding with construction, General Contractor shall check and verify all dimensions, elevations and any existing conditions. Discrepancies, if any, are to be reported to the Design Professional for adjustment.

General Requirements

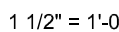
1. It shall be the responsibility of the Owner's representative to retain the services of special inspectors as noted below. Where not specifically noted below, frequency of periodic inspections shall be a negotiated item between the Owner and the special inspector. Inspections shall be sufficient in number for inspector to certify compliance with the contract documents.
2. Inspections that find items in conflict with project requirements are to be brought to the immediate attention of the appropriate parties for resolution: Subcontractor's Foreman, General Contractor's Superintendent, Owner's Representative and/or the Design Professional of Record.
3. All contractors shall be prepared to submit letters of certification stating that the construction and fabrication under their control was performed to satisfy the special inspection requirements of the IBC 2018 NEW JERSEY EDITION, to comply with the contract documents and to meet or exceed industry standards.

Steel Construction

1. In general it is the intention of this document to require the Steel Fabricator and Erector to comply with the quality assurance inspection requirements of the "Specification for Structural Steel Buildings," AISC 360, latest edition.
2. Steel fabricator shall be registered and approved to perform such work without special inspections by an approved agency such as the American Institute of Steel Construction or the Steel Joist Institute.
3. All shop and field welding are required to be performed by welders qualified for such work in accordance with AWS D1.1. Verification of welder's qualifications shall be submitted prior to fabrication or field work.
4. Fabricator shall have on record and available for inspection, records identifying all materials used in the fabrication process including material certifications for structural steel, bolts, washers, nuts, weld filler and Nelson studs.
5. All high strength bolting shall be inspected in accordance with the AISC "Code of Standard Practice for Steel Buildings and Bridges", latest edition. Bearing type connections shall be inspected on a periodic basis.
6. Steel construction shall be inspected by an approved quality control agency after erection for compliance with the contract documents and report provided to the Owner in a timely fashion.

Concrete Construction

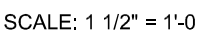
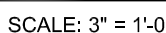
1. All mix designs shall be submitted to the engineer of record for review and acceptance.
2. Inspection of reinforcing steel placement and cast in place anchors shall be conducted by the designated quality control agency prior to any concrete pour. Included shall be the inspection of formwork for general compliance with the contract drawings including the proper positioning of reinforcement and embedded items.
3. During placement of fresh concrete continuous inspection shall be provided. Quality control agency shall verify proper mix design is delivered and shall sample concrete for strength tests and check slump temperature and air content.
4. Inspection items to follow schedule below and Table 1705.3
Inspection anchors post installed in hardened concrete shall be continuously inspected in compliance with ACI 318: 17.8.2.4.
5. The special inspector shall verify grout mix design and perform periodic inspection of grout placement. All mix designs shall be submitted to the engineer of record for review and acceptance.



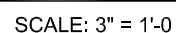
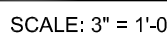
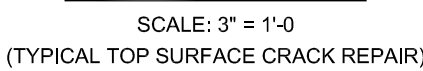
NOTE "1": CORE HOLE IN PRECAST PLANK (AS REQ'D) 1" LARGER THAN O.D. OF PIPE

NOTE "2" : CORE TOPPING AS REQ'D. FOR DRAIN INSTALLATION

NOTE "3": REMOVE LOOSE DELAMINATED TOPPING AS REQUIRED IN DRAIN TOPPING AREA AND REPAIR SEE SPALL REPAIR NOTES.



CONTRACTOR NOTE: VERIFY EXISTING CONDITIONS AND SECURE OR REINSTALL THE EXISTING GUARD TO MEET THE BUILDING CODE REQUIREMENTS AND RESIST A MIN. 200# FORCE APPLIED AT THE TOP OF THE GUARD IN ANY DIRECTION.



LRA JOB NUMBER 72053

LEONARD BUSCH ASSOCIATES
CONSULTING ENGINEERS

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MARK A. BERKOWSKY

NJ. CERTIFICATE - C-6319



FORCINA PARKING
GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

ISSUED FOR:

REV	DATE	DESCRIPTION
	07.12.22	DD PHASE REVIEW
	09.02.22	85% CD'S
	09.27.22	100% CD'S
	10.21.22	DCA REVIEW
	03.10.23	RESPONSE TO DCA COMMENTS
	12/15/23	FOR BID

DRAWING TITLE
DETAILS AND GENERAL NOTES

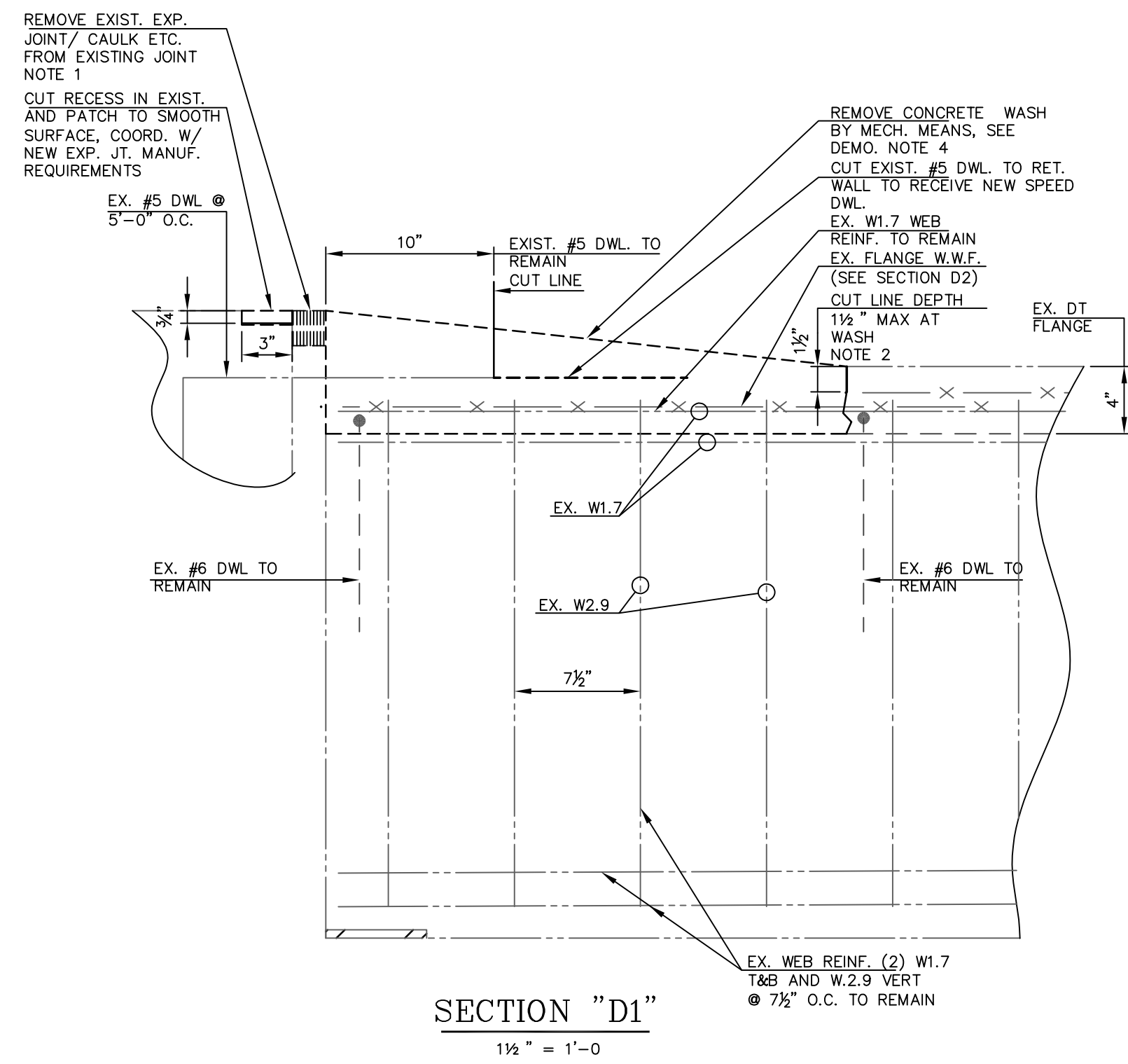
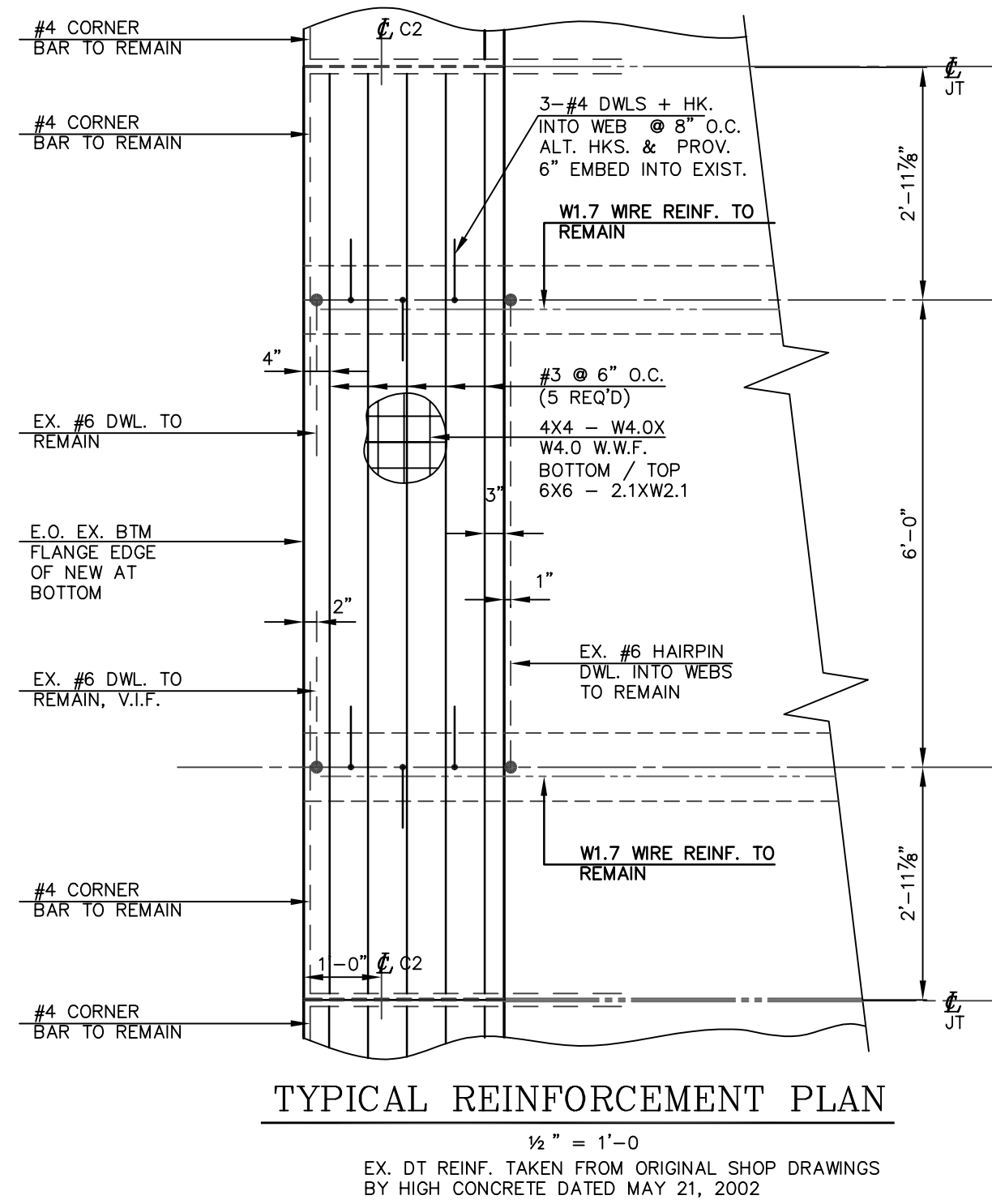
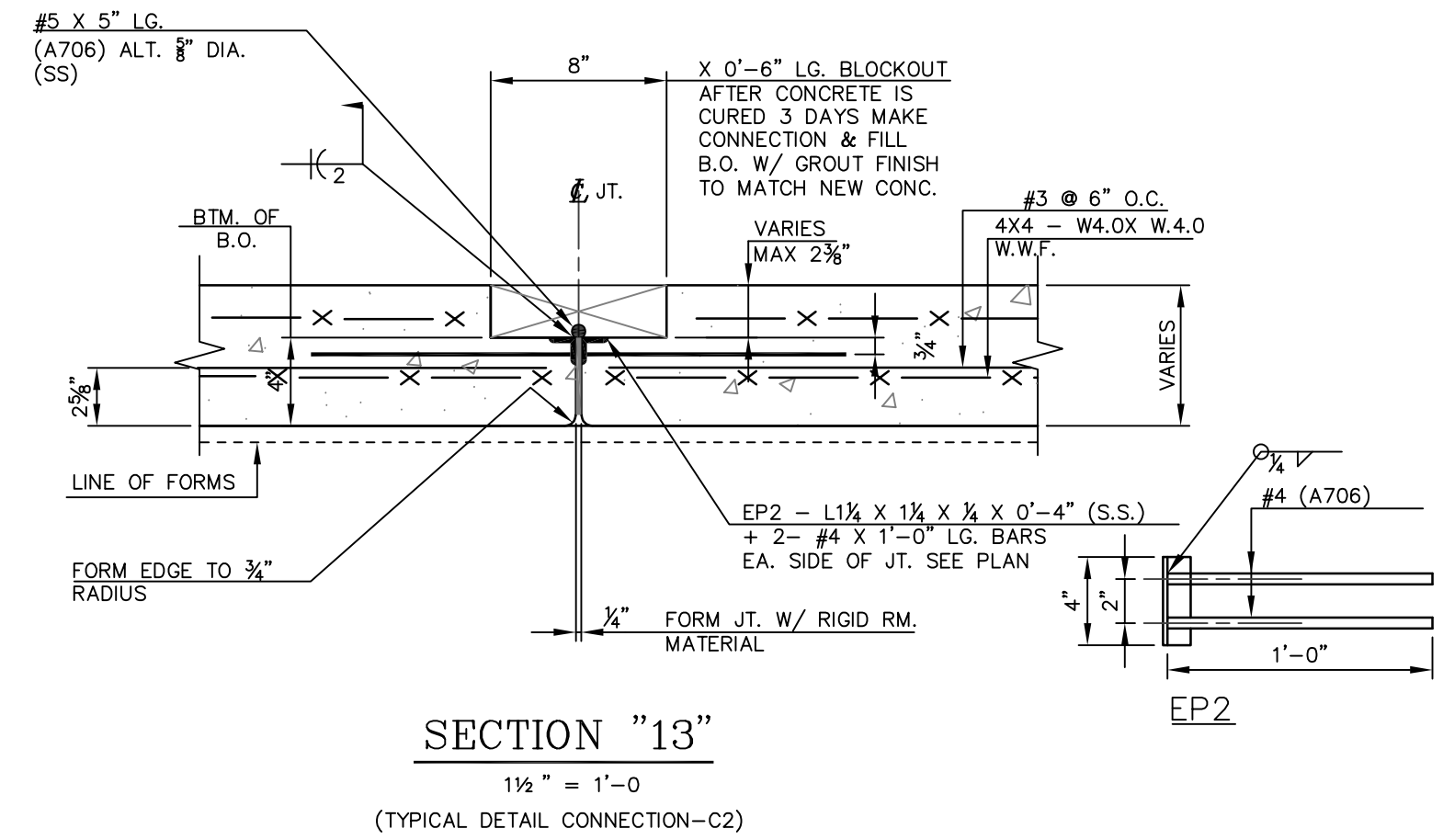
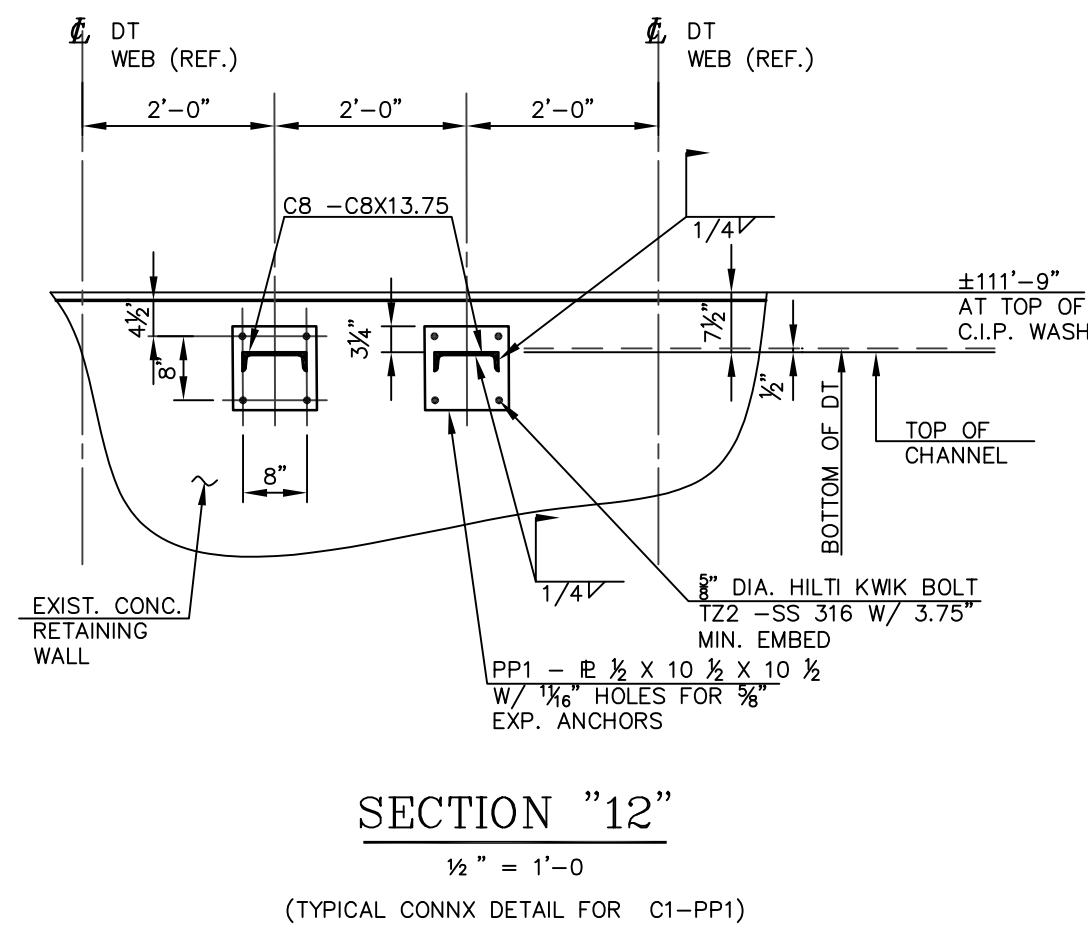
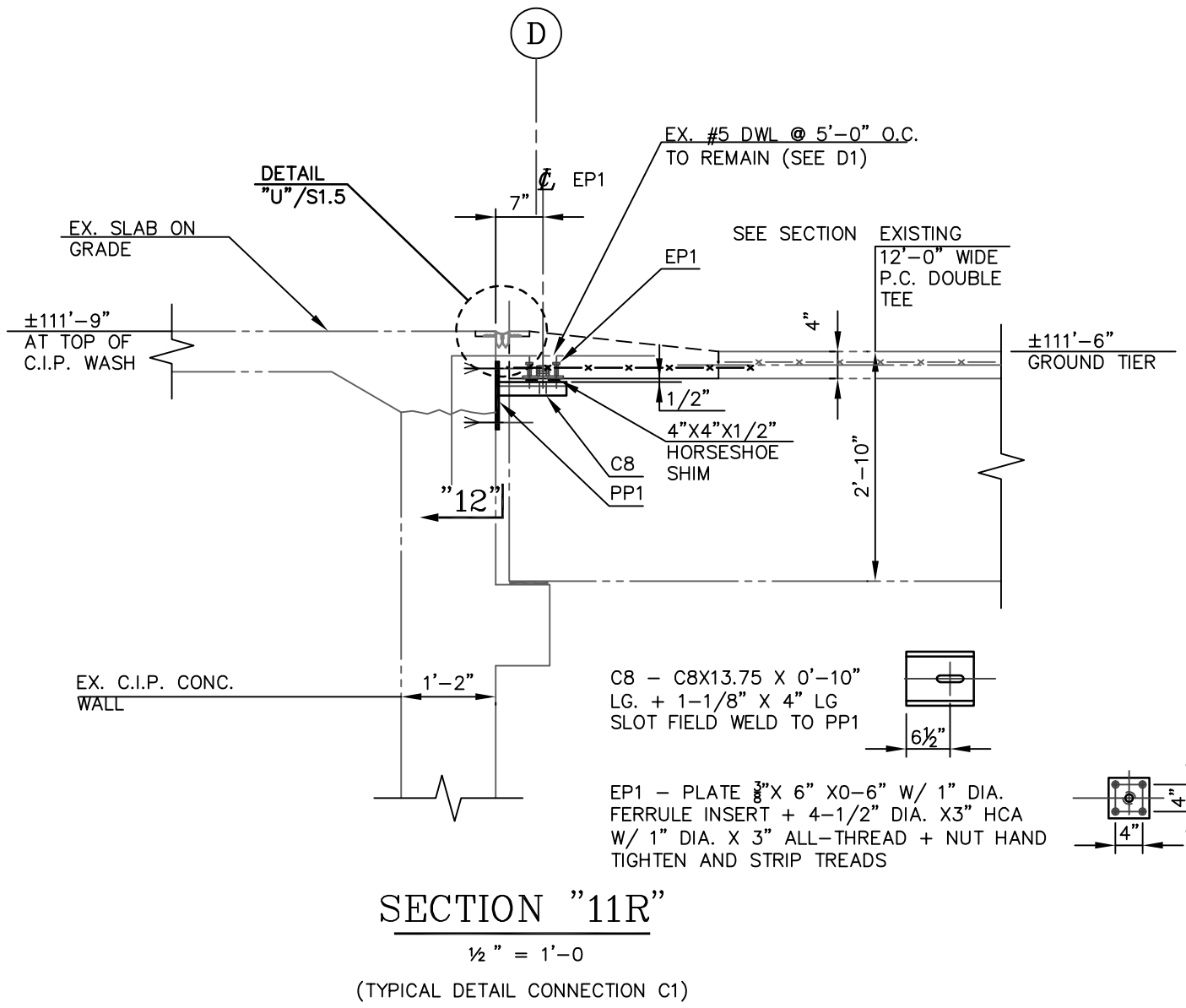
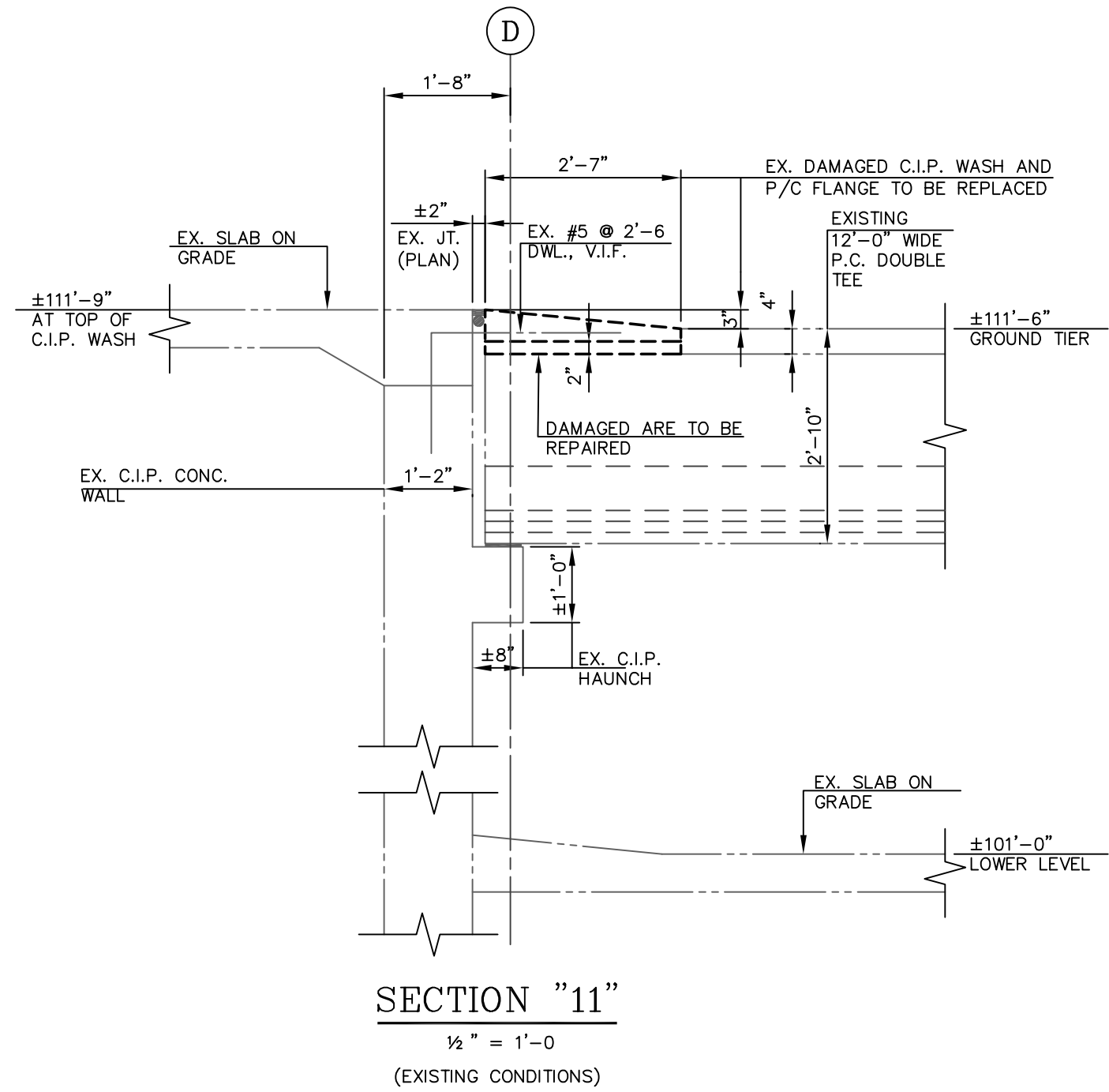
PROJECT NO. 22058	DATE 07.12.22
DRAWN BY BD/TCY	CHECKED BY RMF

DRAWING NUMBER

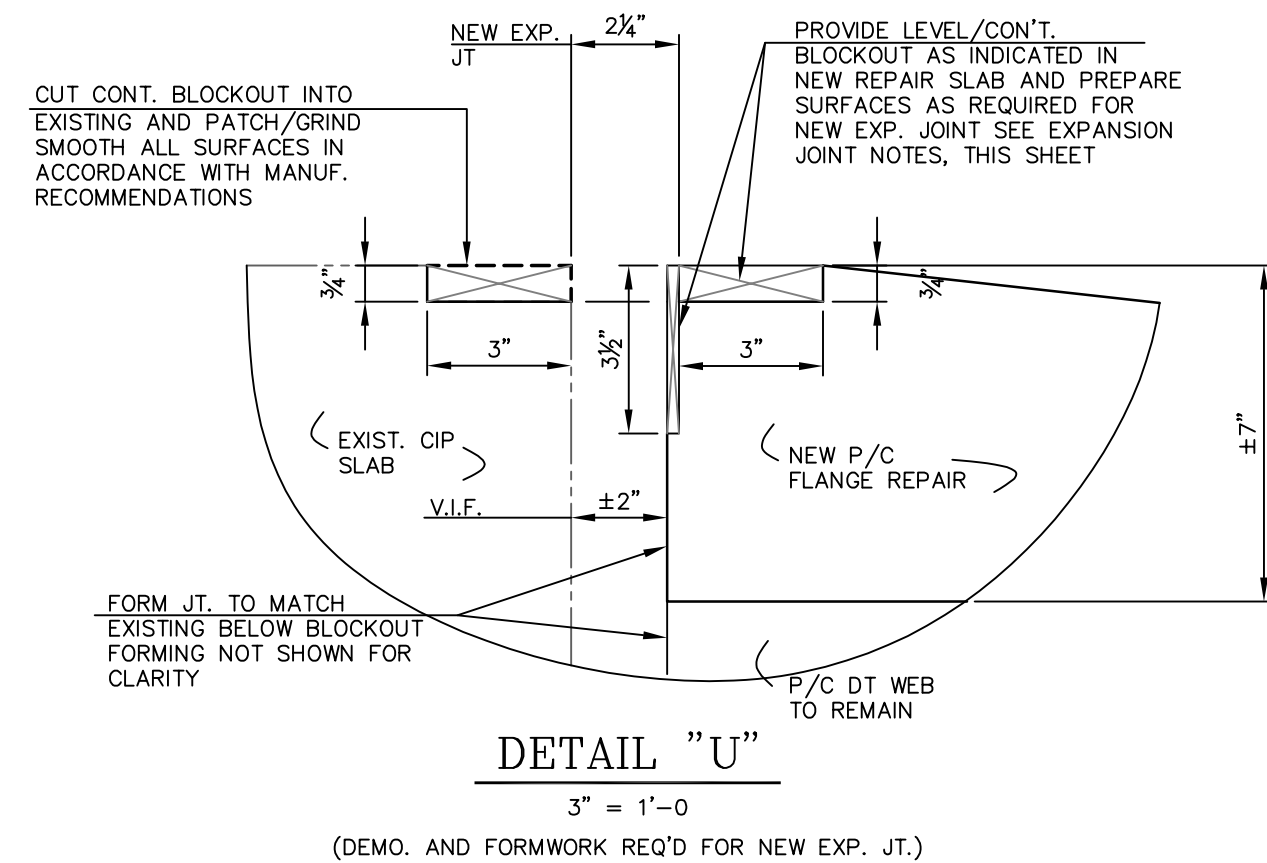
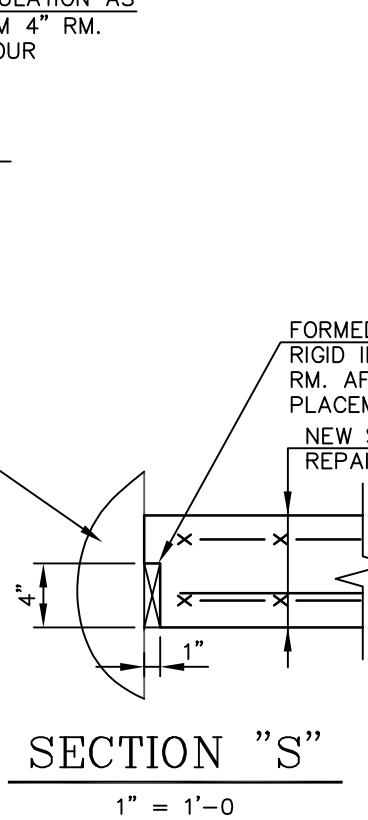
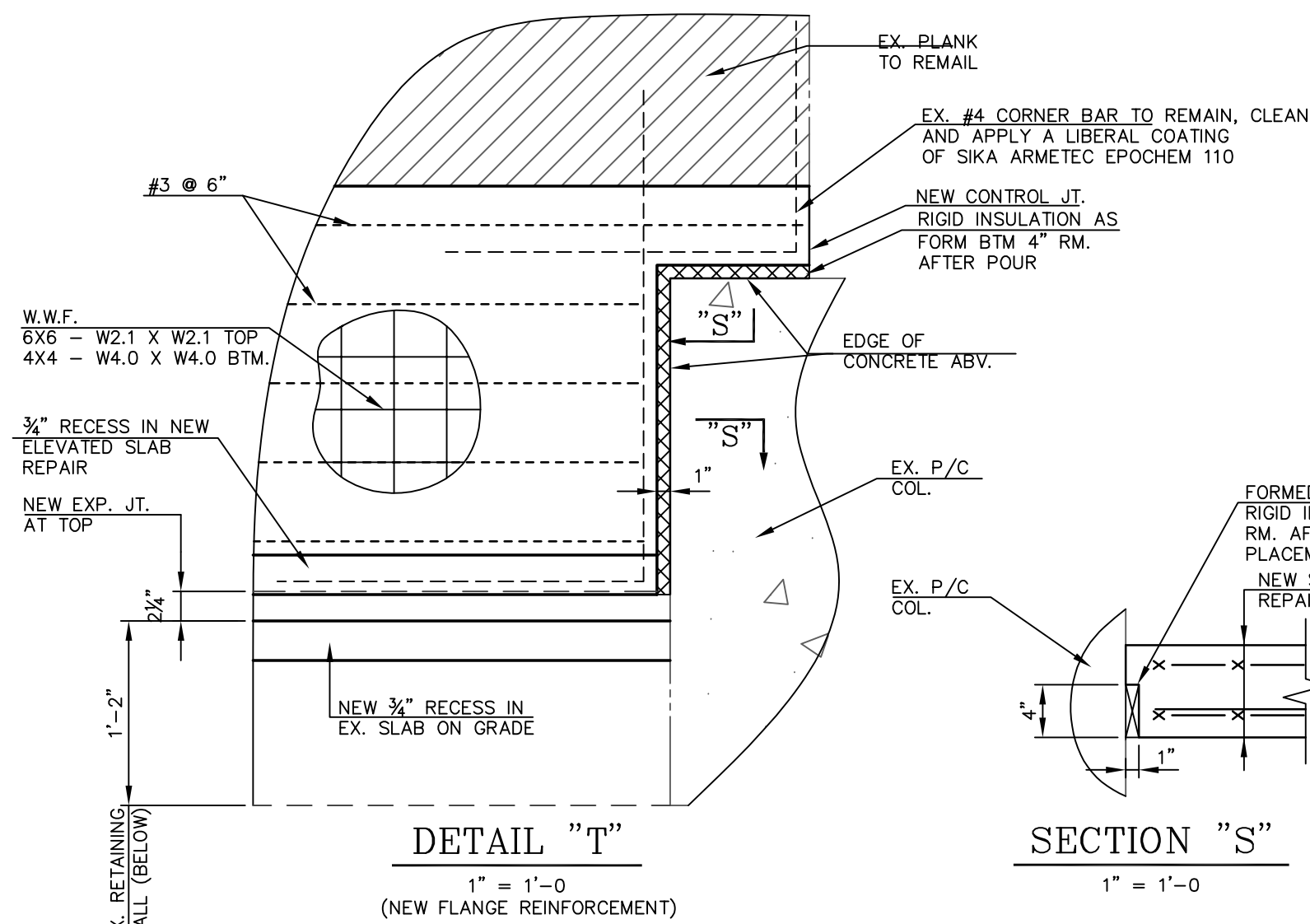
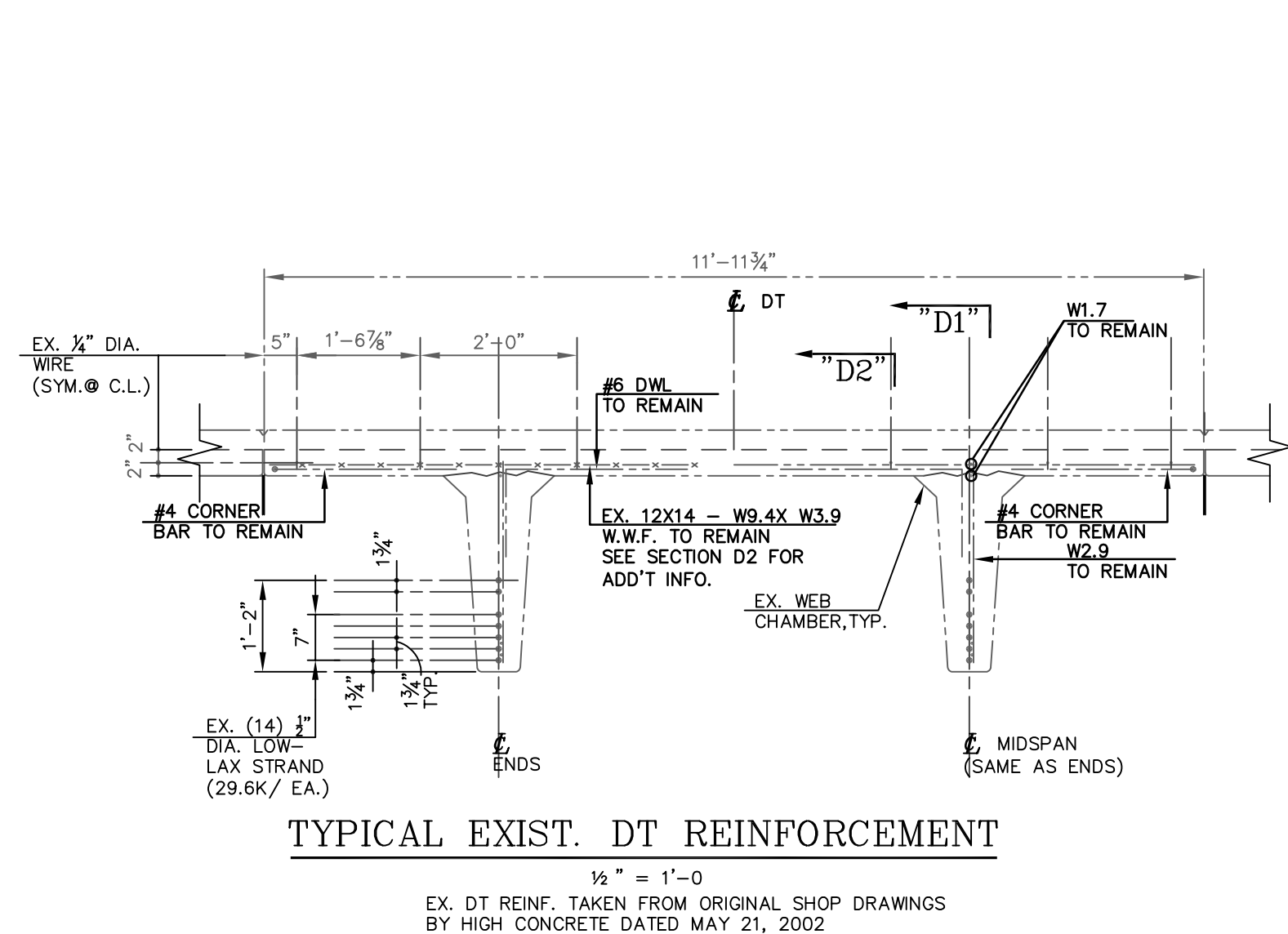
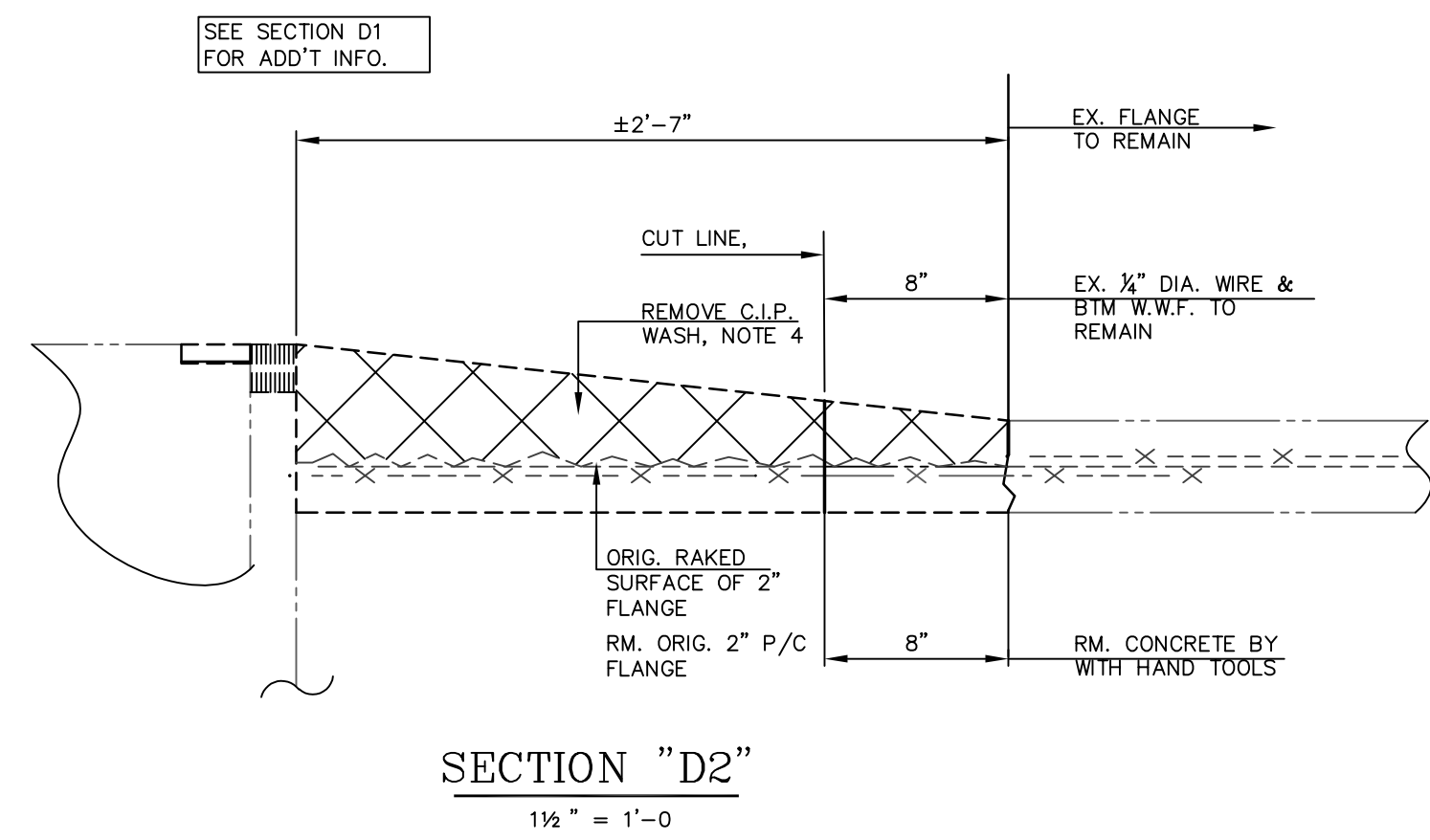
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SHEET 14 OF 19

C:\Users\lyasson\OneDrive - Berkowsky and Associates, Inc\General - BAI_Design\The College of New Jersey\22058 Forcina Parking Garage Repairs\04_CD\0101_CAD-REVIT00_CadRevit_Current_Scope Reduct\02_Struct\14 - 15_LBA_22058_S1.5-S1.6.dwg 12/13/23 - 4:34pm



- SUGGESTED DEMOLITION SEQUENCE:
1. REMOVE EXISTING EXPANSION JOINT AND RAKE OUT EXIST. HORIZONTAL JOINT BETWEEN C.I.P. WASH.
 2. CUT CONT. JOINT ACROSS THREE DOUBLE TEES TO A MAX. DEPTH OF 1-1/2".
 3. CUT PERPENDICULAR SECTION OF WASH TO MAX. DEPTH OF 1-1/2" BELOW TOP OF DT.
 4. REMOVE WASH CONCRETE DOWN TO TOP OF ORIGINAL P/C PLANK.
 5. LOCATE ALL REINFORCING AFTER EXPOSING ORIG. P/C. WITH REBAR LOCATOR. SEE REINFORCING PLAN FOR CORNER BARS AND DOWELS TO REMAIN.
 6. CUT BOTTOM 2" OF P/C (SEE SECTION D2) BETWEEN WEBS USING CAUTION NOT TO OVERUN INTO WEB TOP CHAMFER.
 7. CUT PERPENDICULAR AND PARALLEL SECTIONS USING CAUTION NOT TO CUT CORNER BARS, WEB DOWELS OR #5 DOWEL TO EXISTING WALL.
 8. REMOVE CONCRETE OVER STEMS BY MECHANICAL MEANS.
 9. CLEAN ALL EXISTING REINFORCING WITH WIRE BRUSH OR OTHER MECHANICAL MEANS TO REMOVE CONCRETE, RUST AND OTHER DELETERIOUS MATERIAL.
 10. WASH TO SURFACE OF WEBS OF ALL LATENT MATERIAL AND PREPARE FOR BONDING AGENT APPLICATION.



LBA JOB NUMBER 72053
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609-455-2400

MARK A. BERKOWSKY
N.J. CERTIFICATE: C-6319
DATE:



FORCINA PARKING
GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

ISSUED FOR:

REV	DATE	DESCRIPTION
12/15/23		FOR BID

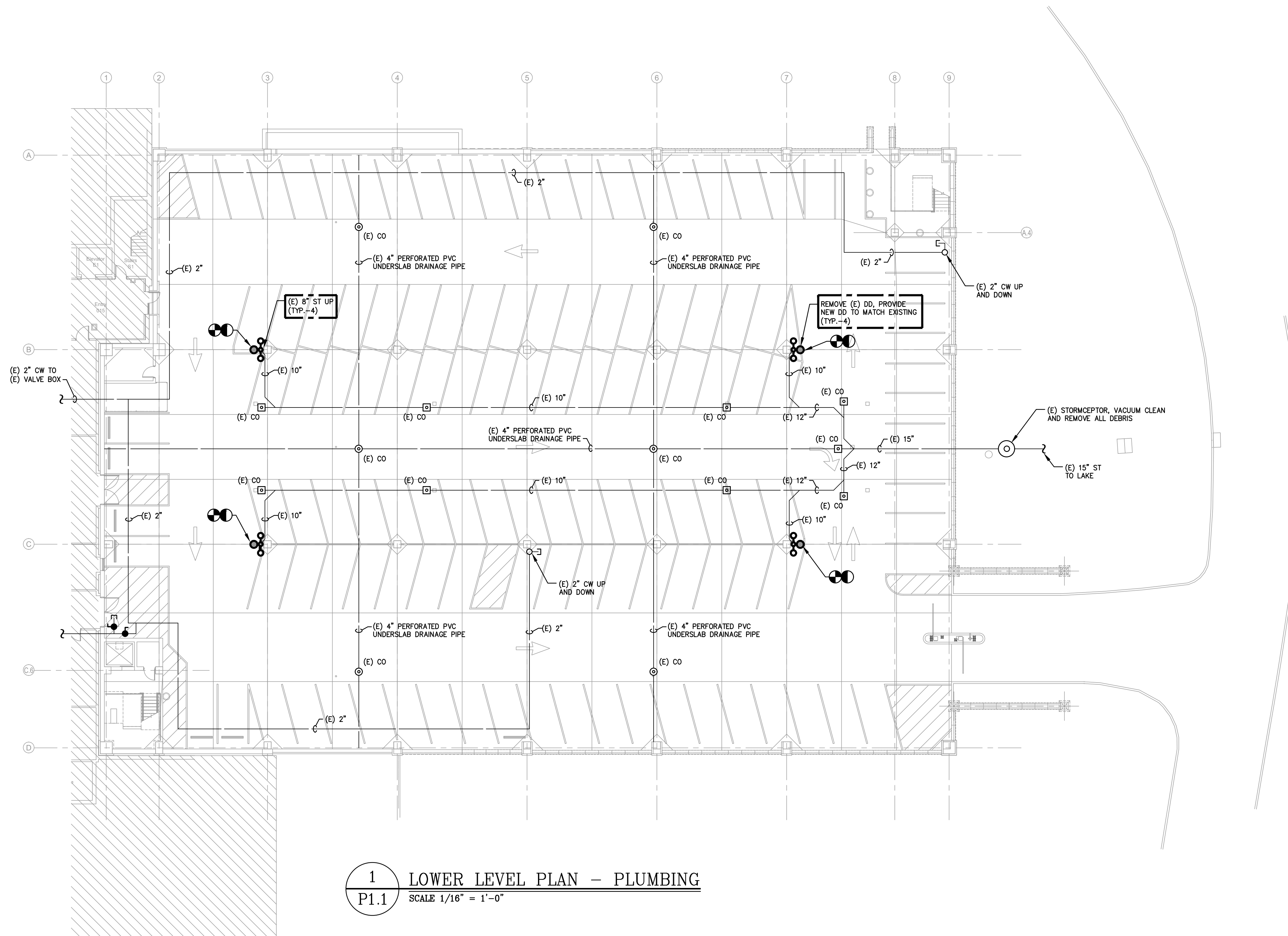
DRAWING TITLE
SECTIONS AND DETAILS

PROJECT NO.	DATE
22058	12.15.23
DRAWN BY	CHECKED BY
BD/TCY	RMF

DRAWING NUMBER

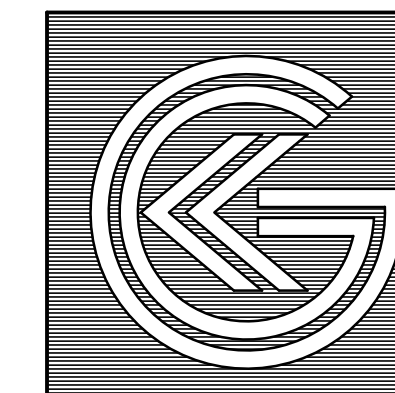
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SHEET 15 OF 19



1 LOWER LEVEL PLAN - PLUMBING
P1.1 SCALE 1/16" = 1'-0"

Z:\3049 - TCUJ Forcina Garage\3049 P1.dwg 12/13/23 - 12:22pm



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MARK A. BERKOWSKY
N.J. CERTIFICATE: C-6319 DATE



**FORCINA PARKING
GARAGE REPAIRS**

**METZGER DR.
EWING, N.J. 08628**

ISSUED FOR:

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	07.12.22	DD PHASE REVIEW
	09.02.22	85% CD'S
	09.27.22	100% CD'S
	10.21.22	DCA REVIEW
	12.15.23	FOR BID

DRAWING TITLE
LOWER LEVEL PLAN -
PLUMBING

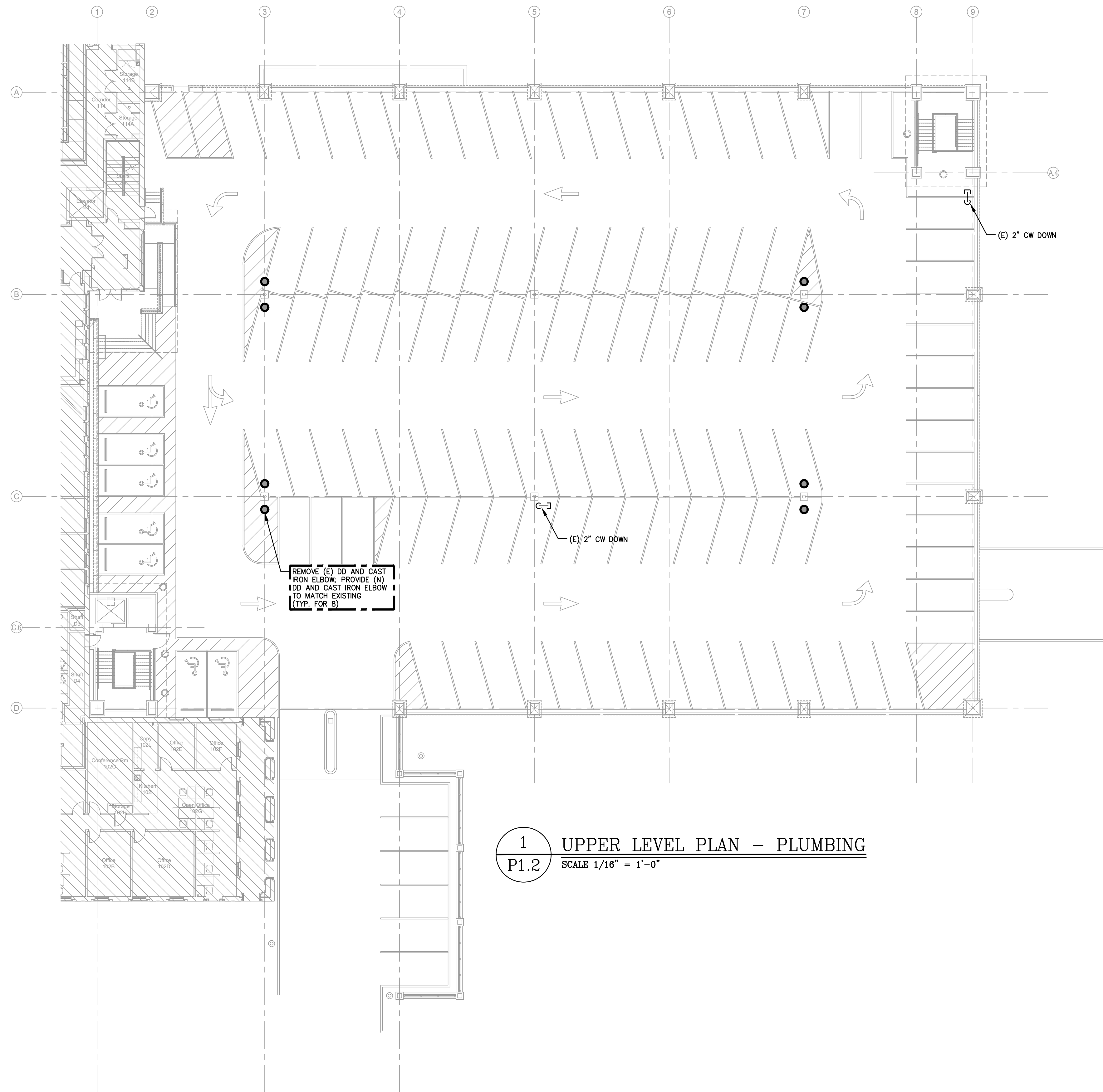
PROJECT NO.	DATE
22058	07.12.22
DRAWN BY	CHECKED BY
DM	ACL

DRAWING NUMBER

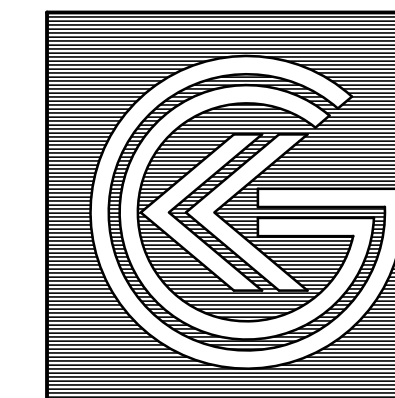
P1.1

SHEET	17	OF	19
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1 UPPER LEVEL PLAN - PLUMBING
P1.2 SCALE 1/16" = 1'-0"



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N.J. CERTIFICATE: C-6319

DATE



**FORCINA PARKING
GARAGE REPAIRS**

**METZGER DR.
EWING, N.J. 08628**

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	12.15.23	FOR BID

DRAWING TITLE
UPPER LEVEL PLAN -
PLUMBING

PROJECT NO.	DATE
22058	07.12.22
DRAWN BY	CHECKED BY
DM	ACL

DRAWING NUMBER

P1.2

SHEET	18	OF	19
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PLUMBING SPECIFICATIONS:

1. SCOPE OF WORK

- A. STORM DRAINAGE PIPING.
B. PARKING DECK DRAINS.
C. REMOVALS.
D. SUBMITTALS.
E. PERMITS.
F. WARRANTY.

2. STANDARDS AND CODES

- A. NEW JERSEY UNIFORM CONSTRUCTION CODE
B. INTERNATIONAL BUILDING CODE 2020, NEW JERSEY EDITION
C. NATIONAL STANDARD PLUMBING CODE 2020
D. LOCAL MUNICIPAL UTILITY AUTHORITY
E. LOCAL WATER COMPANY RULES AND REGULATIONS
F. OTHER STATE AND LOCAL AUTHORITIES HAVING JURISDICTION

3. MATERIALS:

A. PIPE AND FITTINGS

1. PIPE

SERVICE	MATERIAL	SCHEDULE	DESIGNATION
SOIL, WASTE & VENT ABOVE GROUND	NO-HUB CAST IRON	STANDARD WEIGHT	CISPI-30-7B

SOIL, WASTE & VENT BELOW GROUND	CAST IRON HUB & SPIGOT	STANDARD WEIGHT	ASTM A-74
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2. FITTINGS

SERVICE	SIZE	MATERIAL	WEIGHT	TYPE
SOIL, WASTE & VENT ABOVE GROUND	ALL	CAST IRON	STANDARD WEIGHT	NO-HUB ASTM A-48 MG COUPLING ASSEMBLY OR STAINLESS STEEL EQUAL TO CLAMP-ALL

SOIL, WASTE & VENT BELOW GROUND	ALL	CAST IRON	STANDARD WEIGHT	ASTM C-565 65T COMPRESSION GASKET
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3. DISSIMILAR METALS: PIPE, FITTINGS, HANGERS, ETC. DISSIMILAR METALS SHALL BE INSULATED AGAINST DIRECT CONTACT WITH EACH OTHER, BY USING A HIGH QUALIT OR GRADE OF DIELECTRIC MATERIAL.

4. SUBMITTALS:

A. SHOP DRAWINGS SHALL BE REQUIRED FOR:

1. ALL EQUIPMENT, MATERIALS, MEANS & METHODS INTENDED FOR USE UNDER THIS CONTRACT.

B. PRIOR TO DELIVERY TO JOB SITE, BUT SUFFICIENTLY IN ADVANCE OF REQUIREMENTS NECESSARY TO ALLOW ARCHITECT AMPLE TIME FOR REVIEW, SUBMIT SHOP DRAWINGS OF ALL EQUIPMENT, FIXTURES, MATERIALS, PIPING, SLEEVES, WIRING DIAGRAMS, ETC. AND FURTHER OBTAIN WRITTEN COMMENTS OF "APPROVED" OR "APPROVED AS NOTED" FOR SAME FROM ARCHITECT BEFORE INSTALLING ANY OF THESE ITEMS.

C. SHOP DRAWINGS SHALL CONSIST OF MANUFACTURER'S CERTIFIED SCALE DRAWINGS, CUTS, OR CATALOGS, INCLUDING DESCRIPTIVE LITERATURE AND COMPLETE CERTIFIED CHARACTERISTICS OF EQUIPMENT, FIXTURES, ETC. SHOWING DIMENSIONS, CAPACITY, CODE REQUIREMENTS, MOTOR AND DRIVE TESTING, AS INDICATED IN THE CONTRACT DOCUMENTS.

D. FAILURE TO SUBMIT SHOP DRAWINGS IN AMPLE TIME FOR CHECKING SHALL NOT ENTITLE AN EXTENSION OF CONTRACT TIME, AND NO CLAIM FOR EXTENSION BY REASON OF SUCH DEFAULT SHALL BE ALLOWED.

E. PRIOR TO SUBMISSION OF SHOP DRAWINGS CONTRACTOR SHALL THOROUGHLY CHECK EACH SHOP DRAWING, REJECT THOSE NOT CONFORMING TO THE SPECIFICATIONS, AND INDICATE BY SIGNED, WRITTEN DECLARATION THAT THE SHOP DRAWINGS SUBMITTED MEET CONTRACT REQUIREMENTS.

F. THE COMMENT "APPROVED" OR "APPROVED AS NOTED" RENDERED ON SHOP DRAWINGS SHALL NOT BE CONSIDERED AS A GUARANTEE OF MEASUREMENTS OR BUILDING CONDITIONS. WHERE DRAWINGS ARE REVIEWED, SAID REVIEW DOES NOT IN ANY WAY RELIEVE THE RESPONSIBILITY, OR NECESSITY, OF FURNISHING MATERIAL OR PERFORMING WORK AS REQUIRED BY THE CONTRACT DRAWINGS AND SPECIFICATIONS.

G. "APPROVED AS NOTED" MEANS, UNLESS OTHERWISE NOTED ON THE DRAWINGS, TO APPROVE FOR CONSTRUCTION, FABRICATION, AND/OR MANUFACTURE SUBJECT TO THE PROVISION THAT THE WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH ALL ANNOTATIONS AND/OR CORRECTIONS INDICATED ON THE SHOP DRAWINGS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

1. WHERE THE COMMENT "APPROVED AS NOTED" INCLUDES DIRECTION TO THE CONTRACTOR TO RESUBMIT CORRECTED SHOP DRAWING FOR RECORD, FAILURE TO COMPLY WITH THE INSTRUCTION TO RESUBMIT RECORD COPY SHALL RENDER THE APPROVAL NULL AND VOID.

5. PERMITS AND INSPECTIONS:

- A. TCNJ SHALL ACQUIRE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE EXECUTION OF THIS CONTRACT.
B. CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH TCNJ.

6. WARRANTY:

A. CONTRACTOR SHALL:

1. UNCONDITIONALLY WARRANTY HIS WORK TO BE FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
a. ANY DEFECTS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE OWNER AT NO ADDITIONAL COST.
2. ALL EQUIPMENT SHALL CARRY THE ORIGINAL MANUFACTURER'S WARRANTY AS SPECIFIED IN THE MANUFACTURER'S WARRANTY DOCUMENTATION PROVIDED WITH THE EQUIPMENT. WARRANTY PERIOD SHALL BE CALCULATED FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
a. ANY DEFECTS SHALL BE REPAIRED OR REPLACED AT THE DISCRETION OF THE MANUFACTURER.

7. EXECUTION:

A. CONCEALED PIPING

1. ALL PIPING INSTALLED IN FINISHED AREAS SHALL BE COMPLETELY CONCEALED WITHIN HUNG CEILINGS, FURRING, SOFFITS, PIPE SPACES, ETC.
2. ALL PIPING, ETC. SHALL BE COMPLETELY TESTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION BEFORE ANY CONCEALMENT BEGINS.

8. ALTERATION WORK

- A. ALL EQUIPMENT, PIPING, PLUMBING FIXTURES, ETC. TO BE REMOVED SHALL BE DISPOSED OF, TURNED OVER TO OWNER OR SALVAGED AS DIRECTED. THEY SHALL NOT BE REMOVED FROM THE PREMISES WITHOUT APPROVAL.
B. ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED SO THAT, UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE CONCEALED IN FINISHED AREAS.
C. NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION OF JOB.
D. EXISTING EXPOSED PIPING NOT REUSED AND NOT SPECIFICALLY NOTED OR SHOWN ON DRAWING TO BE ABANDONED SHALL BE COMPLETELY REMOVED.
E. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER UNTIL COMPLETION OF ALL NEW WORK.
F. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING SHALL BE VERIFIED ON THE JOB.
G. NO REMOVED EXISTING PIPING, ETC. SHALL BE REUSED.
H. DO NOT INTERRUPT ANY OF THE SERVICES OF THE EXISTING BUILDING, NOR INTERFERE WITH THE SERVICES IN ANY WAY WITHOUT EXPRESS PERMISSION OF THE OWNER. SUCH INTERRUPTIONS AND INTERFERENCES SHALL BE MADE AS BRIEF AS POSSIBLE AND ONLY AT THE DESIGNATED TIMES.
I. UNDER NO CIRCUMSTANCES SHALL WORKMEN BE PERMITTED TO USE ANY PART OF THE BUILDING AS A SHOP, EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES.
J. REROUTE OR REMOVE ALL EXISTING PIPING EXPOSED TO VIEW WHERE NECESSARY TO AVOID NEW EQUIPMENT, STRUCTURAL OR MASONRY WORK AS REQUIRED BY THE PROPOSED ALTERATIONS.

9. TESTING

- A. FURNISH ALL TESTING INSTRUMENTS, GAUGES, PUMPS, AND ALL OTHER EQUIPMENT NECESSARY TO PERFORM TESTS.
B. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE REPRESENTATIVES OF THE ARCHITECT, THE OWNER AND THE PLUMBING INSPECTOR. GIVE NOT LESS THAN 5 DAYS NOTICE.
C. TEST
1. DRAINAGE AND VENT PIPING: TEST WITH WATER AT 10 FT. HD.
2. DOMESTIC WATER: TEST WITH WATER AT 125 PSI.

10. PIPE INSTALLATION

- A. RUN PIPING GENERALLY PARALLEL TO THE AXIS OF THE BUILDING, ARRANGED TO CONFORM TO THE BUILDING REQUIREMENTS AND TO SUIT THE NECESSITIES OF CLEARANCE OF DUCTS, FLUES, CONDUITS AND WORK OF OTHER TRADES AND CLOSE TO CEILING OR OTHER CONSTRUCTION AS PRACTICAL, FREE OF TRAPS OR BENDS.
B. PROVIDE ADDITIONAL OFFSETS, FITTINGS, VALVES, DRAINS, ETC. WHERE REQUIRED BY CONSTRUCTION AND WORK OF OTHER TRADES.
C. RUN IN CHASES, RECESSES, SHAFTS, HUNG CEILINGS AND BEAM CUTS WHERE APPLICABLE. DO NOT COVER BEFORE EXAMINATION AND TESTING. NO PIPING IN FLOOR FILL UNLESS NOTED OR APPROVED.
D. RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS AND OTHER PIPING, NEATLY SPACED AND WITH PLUMB RISERS. MAINTAIN MAXIMUM HEADROOM.
E. PROVIDE REDUCING FITTINGS FOR CHANGES IN PIPE SIZE. NO BUSHINGS ARE PERMITTED.

PLUMBING SYMBOL LIST

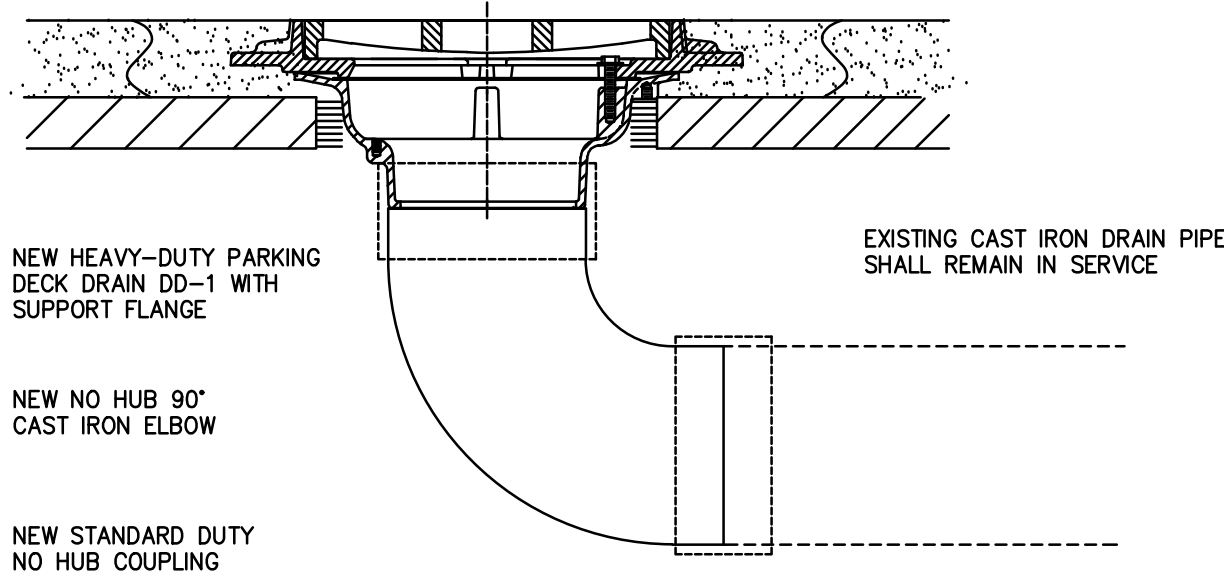
ABBREVIATION	SYMBOL	DESCRIPTION	ABBREVIATION	SYMBOL	DESCRIPTION
CW		COLD WATER PIPING			NEW CONNECTION TO EXISTING
(E) ST		EXISTING STORM PIPING			NEW CONNECTION TO EXISTING
			CO		CLEANOUT

PLUMBING DRAIN SCHEDULE

MARK	DESCRIPTION	MANUFACTURER MODEL	LOCATION	REMARKS
DD-1	PARKING DECK DRAIN	ZURN Z536	LOWER LEVEL UPPER LEVEL	CAST IRON BODY, NO-HUB OUTLET POLISHED NICKEL BRONZE TOP, HEEL-PROOF GRATE VANDAL-PROOF SECURED TOP, SEDIMENT BUCKET

LEGEND

- POINT OF REMOVAL
 NEW CONNECTION TO EXISTING
CO CLEANOUT
CW COLD WATER
DD DECK DRAIN
(E) EXISTING
(N) NEW
ST STORM DRAIN



1 PARKING DECK DRAIN DETAIL
P2.1 NOT TO SCALE

SEAL

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MARK A. BERKOWSKY
N.J. CERTIFICATE: C-8319

DATE



FORCINA PARKING
GARAGE REPAIRS

METZGER DR.
EWING, N.J. 08628

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	10.21.22	DCA REVIEW
	12.15.23	FOR BID

DRAWING TITLE

SCHEDULES AND
SPECIFICATIONS - PLUMBING

PROJECT NO.

DATE

22058

07.12.22

DRAWN BY

CHECKED BY

DM

ACL

DRAWING NUMBER

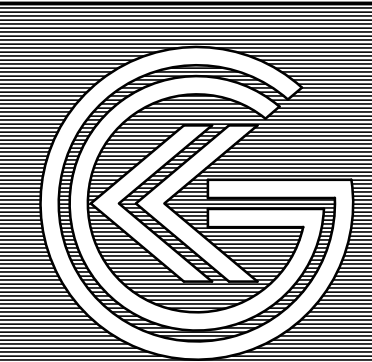
P2.1

SHEET

19

OF

19



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