

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



WASHINGTON D.C. AREA METRO TRACK DECK SLAB AND CEILING PANEL REHABILITATION AT RHODE ISLAND AVENUE STATION COVER SHEET

CONTRACT □FQ□ 18086 - FEBRUARY 9, 2018
VOLUME 2 IFB Drawings

OFFICE OF DESIGN AND CONSTRUCTION INFRASTRUCTURE RENEWAL PROGRAM GROUP (IRPG)

CONSULTANT DESIGN TEAM

DESIGN LEAD

GANNETT FLEMING / PARSONS
800 I STREET N.W. SUITE 600
WASHINGTON, D.C. 20001
202-969-3177

CIVIL /TRACK

GANNETT FLEMING / PARSONS
800 I STREET N.W. SUITE 600
WASHINGTON, D.C. 20001
202-969-3177

STRUCTURAL

GANNETT FLEMING / PARSONS
800 I STREET N.W. SUITE 600
WASHINGTON, D.C. 20001
202-969-3177

EQUIPMENT

PLUMBING

ELECTRICAL

GANNETT FLEMING / PARSONS
800 I STREET N.W. SUITE 600
WASHINGTON, D.C. 20001
202-969-3177

LEED

HAZARDOUS MATERIALS

LANDSCAPE

ARCHITECTURAL




FIRE PROTECTION

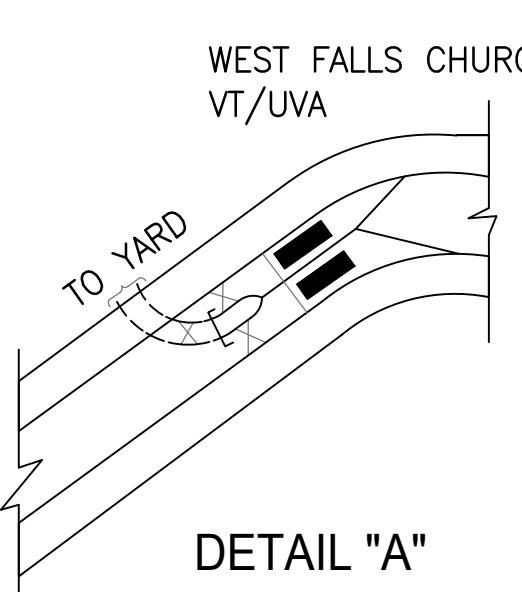
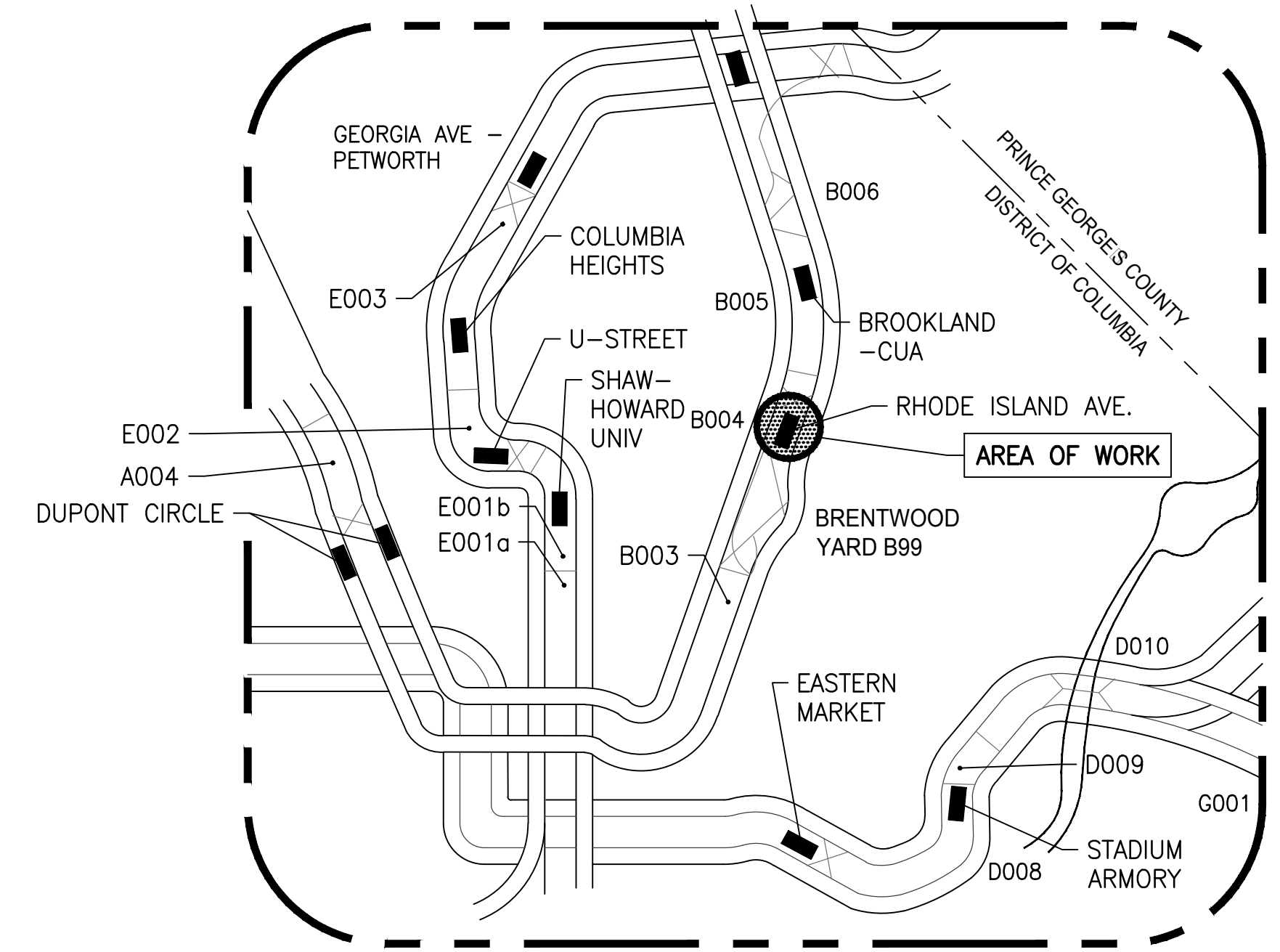
MECHANICAL

TELECOMMUNICATIONS

GEOTECHNICAL

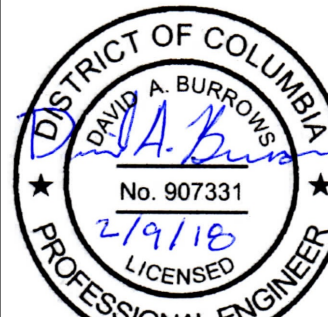
LEGEND

-  RAPID TRANSIT LINE
-  RAPID TRANSIT STATIONS CENTER PLATFORM
-  RAPID TRANSIT STATIONS SIDE/SPLIT PLATFORM



GFP A Gannett Fleming/Parsons JOINT VENTURE

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA.


 LICENSE No. 907331
 EXPIRATION DATE: 08/31/18
 - DC REGISTER SECTION 1516



DESIGNED	S. FERGUSON	02/09/2018
		DATE
DRAWN	L. NGUYEN	02/09/2018
		DATE
CHECKED	I. AHMAD	02/09/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	0 FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED:  02/09/2018
JOHN PURDY, ENGINEERING MANAGER

APPROVED:  02/09/2018
DAVID BURROWS, ENGINEER OF RECORD

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	AS NOTED	B04-G-001	01 of 28

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B04-G-002	02 OF 28	GENERAL NOTES AND DRAWING INDEX
B04-G-003	03 OF 28	STREET LEVEL SITE PLAN
B04-G-004	04 OF 28	EQUIPMENT STAGING AND MATERIAL STORAGE AREA

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B04-S-903	08 OF 28	TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 2 OF 7
B04-S-904	09 OF 28	TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 3 OF 7
B04-S-905	10 OF 28	TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 4 OF 7
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B04-S-911	16 OF 28	TYPICAL TRACK GIRDER REPAIR DETAILS
B04-S-912	17 OF 28	MISCELLANEOUS TRACK GIRDER REPAIR DETAILS
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ELECTRICAL DRAWINGS:

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B04-E-002	23 OF 28	ELECTRICAL ABBREVIATIONS & LEGEND
B04-E-101	24 OF 28	STATION TRACK LIGHTING PLAN 1 OF 5
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B04-E-103	26 OF 28	STATION TRACK LIGHTING PLAN 3 OF 5
B04-E-104	27 OF 28	STATION TRACK LIGHTING PLAN 4 OF 5
B04-E-105	28 OF 28	STATION TRACK LIGHTING PLAN 5 OF 5

SURVEY CONTROL DRAWINGS:

B04-C-011	SURVEY CONTROL
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REFERENCE DRAWINGS:

B4-S-264	M39-202	PLAN AND ELEVATION - PIERS B1605-IB:OB; B1614-IB:OB; B1623-IB:OB
B4-S-292	M39-203	CAP REINFORCING DETAILS - PIERS B1605-IB:OB; B1614-IB:OB; B1623-IB:OB
B4-S-265	M39-204	PLAN AND ELEVATION - PIER B1632-IB:OB
B4-S-295	M39-205	CAP REINFORCING DETAILS - PIER B1632-IB:OB
B4-S-266	M39-206	PLAN - PIER B1640-IB: 1643-OB
B4-S-290	M39-207	ELEVATION & DETAILS - PIER B1640-IB: 1643 OB
B4-S-291	M39-208	CAP REINFORCING DETAILS - PIER B1640-IB: 1643 OB
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B4-S-158	M39-275	PLATFORM GIRDERS PLAN AND ELEVATION PG3L, PG34, PG4L, PG4R, PG5L AND PG5R
B4-S-159	M39-276	PLATFORM GIRDERS PLAN AND ELEVATION PG6L AND PG6R
B4-S-160	M39-277	PLATFORM GIRDERS PLAN AND ELEVATION PG7L AND PG7R
B4-S-149	M39-278	PLATFORM GIRDERS DIAPHRAGM DETAILS
B4-S-279	M39-279	PLATFORM GIRDER BEARING ASSEMBLIES
B4-S-303	M39-357	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE KEY PLAN AND ELEVATION
B4-S-305	M39-361	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE FRAMING PLAN & STEEL DETAILS
B4-S-306	M39-362	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE STEEL DETAILS
B4-S-308	M39-363	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE DECK PLAN & DETAILS
B4-A-19	M39-364	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE PLAN, ELEVATION AND SECTION
B4-A-20	M39-365	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE DETAILS
B4-E-21	M39-366	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE LIGHTING PLAN
B4-E-22	M39-367	PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE LIGHTING FIXTURE DETAILS
B4-E-23	M39-335A	RHODE ISLAND AVENUE STATION SITE LIGHTING ELECTRICAL PLAN

DRAWING NO.	SHEET NO.	TITLE
B4-E-1	M39-336	RHODE ISLAND AVENUE STATION ELECTRICAL PLANS
B4-E-2	M39-337	RHODE ISLAND AVENUE STATION ELECTRICAL PLANS
B4-E-3	M39-338	RHODE ISLAND AVENUE STATION ELECTRICAL PLANS
B4-E-4	M39-339	RHODE ISLAND AVENUE STATION ELECTRICAL PLANS
B4-E-26	M39-241A	RHODE ISLAND AVENUE STATION ELECTRICAL PLAN
B4-E-15	M39-342	RHODE ISLAND AVENUE STATION A.C. POWER SERVICE
B4-E-16	M39-343	RHODE ISLAND AVENUE STATION ELECTRICAL DIAGRAMS
B4-E-17	M39-344	RHODE ISLAND AVENUE STATION ELECTRICAL DIAGRAMS
B4-E-5	M39-345	RHODE ISLAND AVENUE STATION ELECTRICAL SCHEDULES
B4-E-24	M39-345A	RHODE ISLAND AVENUE STATION ELECTRICAL SCHEDULES
B4-E-10	M39-346	RHODE ISLAND AVENUE STATION ELECTRICAL SCHEDULES

REFERENCE DRAWINGS (1994 REHAB):

B4S-S-7	M898-15	PRECAST PANEL LIFTING & OTHER DETAILS
B4S-S-6	M898-16	CONCRETE REPAIR DETAILS
B4S-S-11	M898-20	T.G. BEARING REPAIR: PLANS, NOTES & PROCEDURE
B4S-S-12	M898-21	EXISTING PIERS 1 THRU 6 & 8:IB & OB
B4S-S-13	M898-22	EXISTING PIER 7
B4S-S-14	M898-23	TRACK GIRDER BEARING JACKING & NOTES
B4S-S-15	M898-24	TRACK GIRDER NEW BEARING DETAILS
B4S-S-15A	M898-24A	CONCRETE PAD REPAIRS AND EMERGENCY SHIMMING
B4S-E-1	M898-25	SYMBOLS, ABBREVIATIONS, NOTES AND TYPICAL DETAILS
B4S-E-2	M898-26	ELECTRICAL PLAN AND DETAILS-SHEET 1
B4S-E-4	M898-28	ELECTRICAL DETAILS SHEET 2
B4S-E-5	M898-29	ELECTRICAL MEZZANINE GROUNDING PLAN AND DETAILS

TRACK REFERENCE DRAWINGS - FOR INFORMATION ONLY (NIC):

B04-TA-101	1 OF 11	TRACK B1 AND B2 - HORIZONTAL ALIGNMENT GEOMETRY
B04-PP-101	2 OF 11	TRACK PLAN - STA 147+00 TO STA 158+00
B04-PP-102	3 OF 11	TRACK PLAN - STA 158+00 TO STA 169+50
B04-PP-103	4 OF 11	TRACK PLAN - STA 169+50 TO STA 175+00
B04-PP-201	5 OF 11	TRACK PROFILES - STA 147+00 TO STA 158+00
B04-PP-202	6 OF 11	TRACK PROFILES - STA 158+00 TO STA 169+50
B04-PP-203	7 OF 11	TRACK PROFILES - STA 169+50 TO STA 175+00
B04-TW-501	8 OF 11	INBOUND TRACK - TABLE OF ELEVATIONS
B04-TW-502	9 OF 11	OUTBOUND TRACK - TABLE OF ELEVATIONS
B04-TW-503	10 OF 11	TRACK CHART - GLENMONT ROUTE - STA 122+00 TO STA 152+00
B04-TW-504	11 OF 11	TRACK CHART - GLENMONT ROUTE - STA 152+00 TO STA 182+00

GENERAL NOTES:

- GENERAL NOTES ARE TO BE READ IN CONJUNCTION WITH THE TECHNICAL PROVISIONS, SPECIAL PROVISIONS AND THESE DRAWINGS.
- VERIFY AND PROPERLY DOCUMENT ALL FIELD CONDITIONS.
- ALL PLAN DIMENSIONS SHALL BE MEASURED IN TRUE HORIZONTAL PLANE AND ALL VERTICAL DIMENSIONS SHALL BE MEASURED IN TRUE VERTICAL PLANE EXCEPT AS OTHERWISE NOTED.
- ANY DEVIATION FROM, OR IN-FIELD ALTERATION TO THESE DRAWINGS, AND SPECIFICATIONS IS STRICTLY PROHIBITED WITHOUT PRIOR APPROVAL OF A.R.. ANY SUCH ALTERATIONS SHALL BE CORRECTED AT ONCE, WITH NO EXPENSE TO THE OWNER.
- AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING THE ADEQUACY OF THE CONTRACTOR'S MEANS OR METHODS OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES REGARDLESS OF DISCREPANCIES IN THE CONTRACT DOCUMENTS. NO ADDITIONAL COSTS WILL BE PAID BY THE OWNER TO RECTIFY WORK TO BE RELOCATED DUE TO LACK OF JOBSITE COORDINATION.
- DEMOLITION, CUTTING, AND PATCHING OF ANY MATERIALS OR FIXTURES REQUIRED TO CONSTRUCT THE PROJECT IS HEREIN MADE A PART OF THESE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS.
- ALL WORK INDICATED OR SHOWN GRAPHICALLY AS "EXISTING TO REMAIN" WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND WORK AROUND WITHOUT DISTURBING. IF DAMAGED, THE CONTRACTOR WILL REPLACE OR REPAIR AT AUTHORITY'S DIRECTION.
- CONCRETE OR CEMENTITIOUS MATERIAL CONSTRUCTION DEBRIS ARE NOT PERMITTED ON THE TRACK BED. PROTECT AND WRAP EXISTING TRACK DRAIN GRATES IN THE AREA OF OPERATION USING FILTER FABRIC POSITIONED ABOVE AND ANCHORED TO THE GRATES SUCH THAT SOLID MATERIALS CAN BE CAPTURED AND RETAINED AND NOT FLOW INTO THE TRACK DRAIN PIPE BELOW.
- WMATA SHALL DE-ENERGIZE ELECTRICAL CIRCUITS TO EXISTING CEILING PANEL LIGHT FIXTURES. CONTRACTOR SHALL REMOVE AND DISPOSE OF LIGHT FIXTURES, JUNCTION BOXES AND CONDUITS IN A SAFE MANNER.
- ALL WASTE WATER SHALL BE CONTAINED AND DISPOSED IN A LAWFUL MANNER. CONTRACTOR IS PROHIBITED FROM DISCHARGING WASTE WATER INTO WMATA TRACK DRAINS AND MUNICIPAL DRAINAGE SYSTEMS.
- CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC PLANS FOR CONSTRUCTION WORK OVER RHODE ISLAND AVENUE TO A.R. FOR APPROVAL.
- CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR ROADWAY CLOSURE FROM DISTRICT TRAFFIC CONTROL AND SUBMIT A COPY OF ALL APPROVED PERMITS TO A.R. PRIOR TO START OF WORK.
- PROTECT RAILS, RAIL FASTENERS AND ALL OTHER SYSTEM ACCESSORIES/EQUIPMENT AT ALL TIMES DURING CONSTRUCTION
- WMATA WILL PERFORM ASSOCIATED TRACK WORK AS SHOWN IN REFERENCE TRACK DRAWINGS WITHIN THE SHUTDOWN PERIOD. CONTRACTOR SHALL COORDINATE WITH WMATA TRACK WORK.

GFP A Gannett Fleming/Parsons
JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID A. BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS		APPROVED	DATE	APPROVED	DATE	TRACK DECK SLAB AND CEILING PANEL REHABILITATION				
		NUMBER	TITLE	DATE	NUM					DESCRIPTION	M NO.	CONTRACT NO.	SCALE	DRAWING NO.
	02/09/2018			02/09/2018	0					M 1302	F 18086	NONE	B04-G-002	02 OF 28
DRAWN	02/09/2018													
CHECKED	02/09/2018													

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

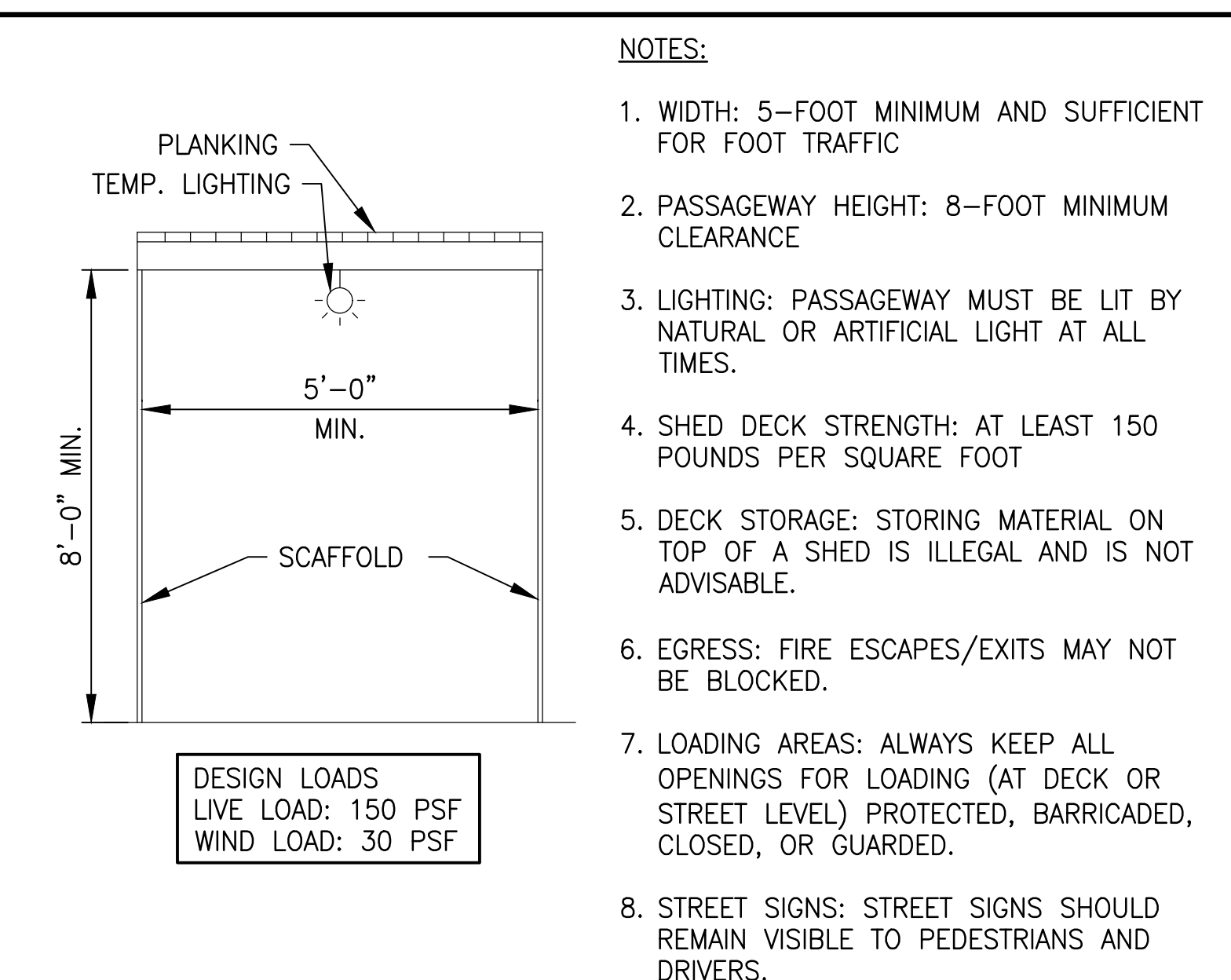
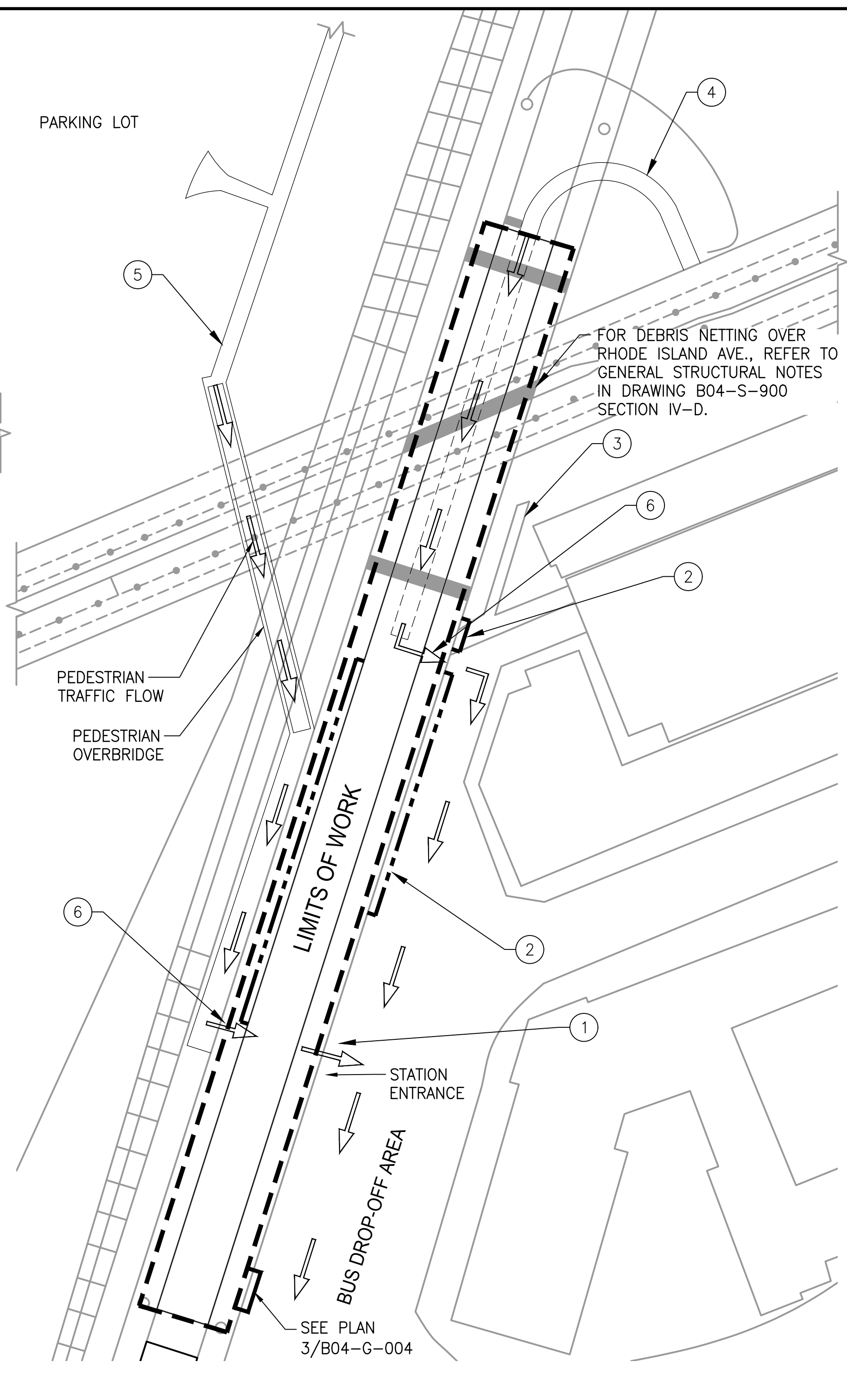
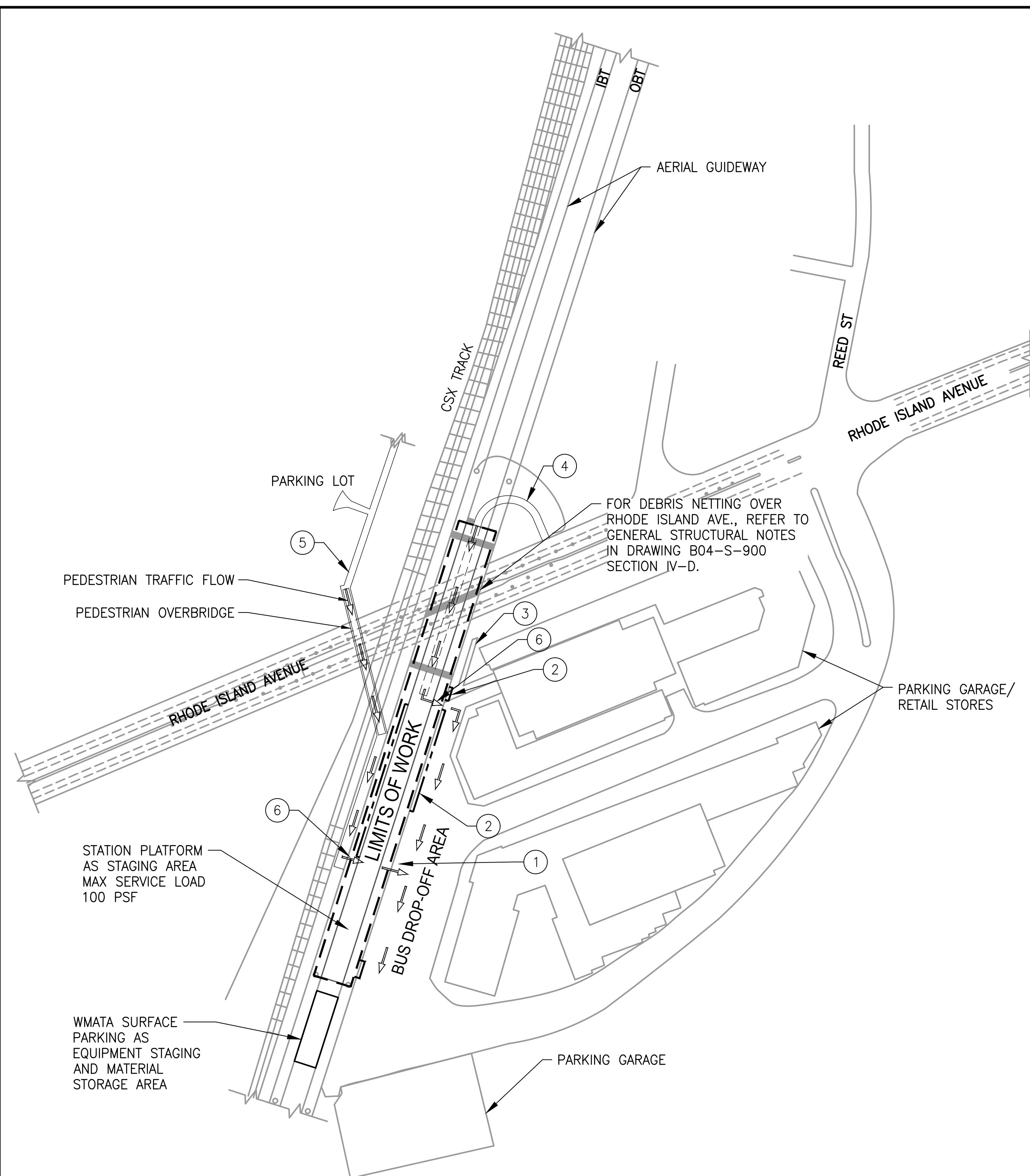
APPROVED
JOHN PURDY
ENGINEERING MANAGER

02/09/2018
DATE

APPROVED
DAVID BURROWS
ENGINEER OF RECORD

02/09/2018
DATE

GENERAL NOTES AND DRAWING INDEX



- NOTES:**
1. WIDTH: 5-FOOT MINIMUM AND SUFFICIENT FOR FOOT TRAFFIC
 2. PASSAGEWAY HEIGHT: 8-FOOT MINIMUM CLEARANCE
 3. LIGHTING: PASSAGEWAY MUST BE LIT BY NATURAL OR ARTIFICIAL LIGHT AT ALL TIMES.
 4. SHED DECK STRENGTH: AT LEAST 150 POUNDS PER SQUARE FOOT
 5. DECK STORAGE: STORING MATERIAL ON TOP OF A SHED IS ILLEGAL AND IS NOT ADVISABLE.
 6. EGRESS: FIRE ESCAPES/EXITS MAY NOT BE BLOCKED.
 7. LOADING AREAS: ALWAYS KEEP ALL OPENINGS FOR LOADING (AT DECK OR STREET LEVEL) PROTECTED, BARRICADED, CLOSED, OR GUARDED.
 8. STREET SIGNS: STREET SIGNS SHOULD REMAIN VISIBLE TO PEDESTRIANS AND DRIVERS.

3 PEDESTRIAN PROTECTION
B04-G-003 NOT TO SCALE

- DRAWING NOTES:**
1. REFER TO DRAWINGS B04-G-001, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.
 2. CONTRACTOR TO PROVIDE TRAFFIC MAINTENANCE PLAN ALONG RHODE ISLAND AVENUE FOR THE PERIOD OF ACTIVE CONSTRUCTION WORK OVER RHODE ISLAND AVENUE.
- STAGING NOTES:**
1. THE CONTRACTOR SHALL SUBMIT THE CONSTRUCTION SEQUENCE TO THE AUTHORITY'S REPRESENTATIVE (A.R.) FOR REVIEW PRIOR TO COMMENCING ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
 2. TEMPORARY BARRICADES FOR THE PROTECTION OF PASSENGERS SHALL BE PROVIDED AT ALL TIMES WHEN THE STATION ENTRANCE, BUS LOOP AND BUS SHELTER ARE OPEN TO PUBLIC.
 3. PROVIDE SAFETY NETTING AND PLASTIC SHEATHING AS SHOWN IN B04-G-004. SAFETY NET SHALL BE SECURED TO TRACK GIRDER ON TOP AND SIDEWALK SLAB AND STATION MEZZANINE AT BOTTOM.
 4. CONTRACTOR SHALL REMOVE ALL PEDESTRIAN PROTECTION AND SAFETY NETTING AND PLASTIC SHEATHING UPON COMPLETION OF WORK.

- LEGEND:**
- ① STATION ENTRANCE
 - ② INSTALL SAFETY NETTING AND PLASTIC SHEATHING PRIOR TO STARTING CONSTRUCTION WORK. REMOVE ALL SAFETY NETTING AND PLASTIC SHEATHING UPON COMPLETION OF WORK.
 - ③ STAIR TO STATION: MAINTAIN PEDESTRIAN ACCESS DURING PERIODS OF ACTIVE WORK OVER RHODE ISLAND AVENUE.
 - ④ PEDESTRIAN BRIDGE BELOW PLATFORM: MAINTAIN ACCESS DURING PERIODS OF ACTIVE WORK AT BRIDGE.
 - ⑤ PEDESTRIAN OVERPASS TO STATION AND BUS SHELTER: MAINTAIN ACCESS BY PROVIDING PEDESTRIAN PROTECTION DURING CONSTRUCTION WORK.
 - ⑥ PEDESTRIAN PROTECTION, SEE 3/B04-G-003.

1 OVERALL SITE PLAN
B04-G-003 SCALE: 1" = 100'-0"

2 STATION BLOW-UP PLAN
B04-G-003 SCALE: 1" = 50'-0"

GFP A Gannett Fleming/Parsons JOINT VENTURE

TRUE NORTH

DISTRICT OF COLUMBIA
DAVID A. BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

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CHECKED		DATE		02/09/2018	
NUMBER	TITLE	DATE	NUM	DESCRIPTION	
		02/09/2018	0	FINAL CONTRACT DRAWINGS	

APPROVED		02/09/2018	APPROVED		02/09/2018
JOHN PURDY		DATE	DAVID BURROWS		DATE
ENGINEERING MANAGER			ENGINEER OF RECORD		

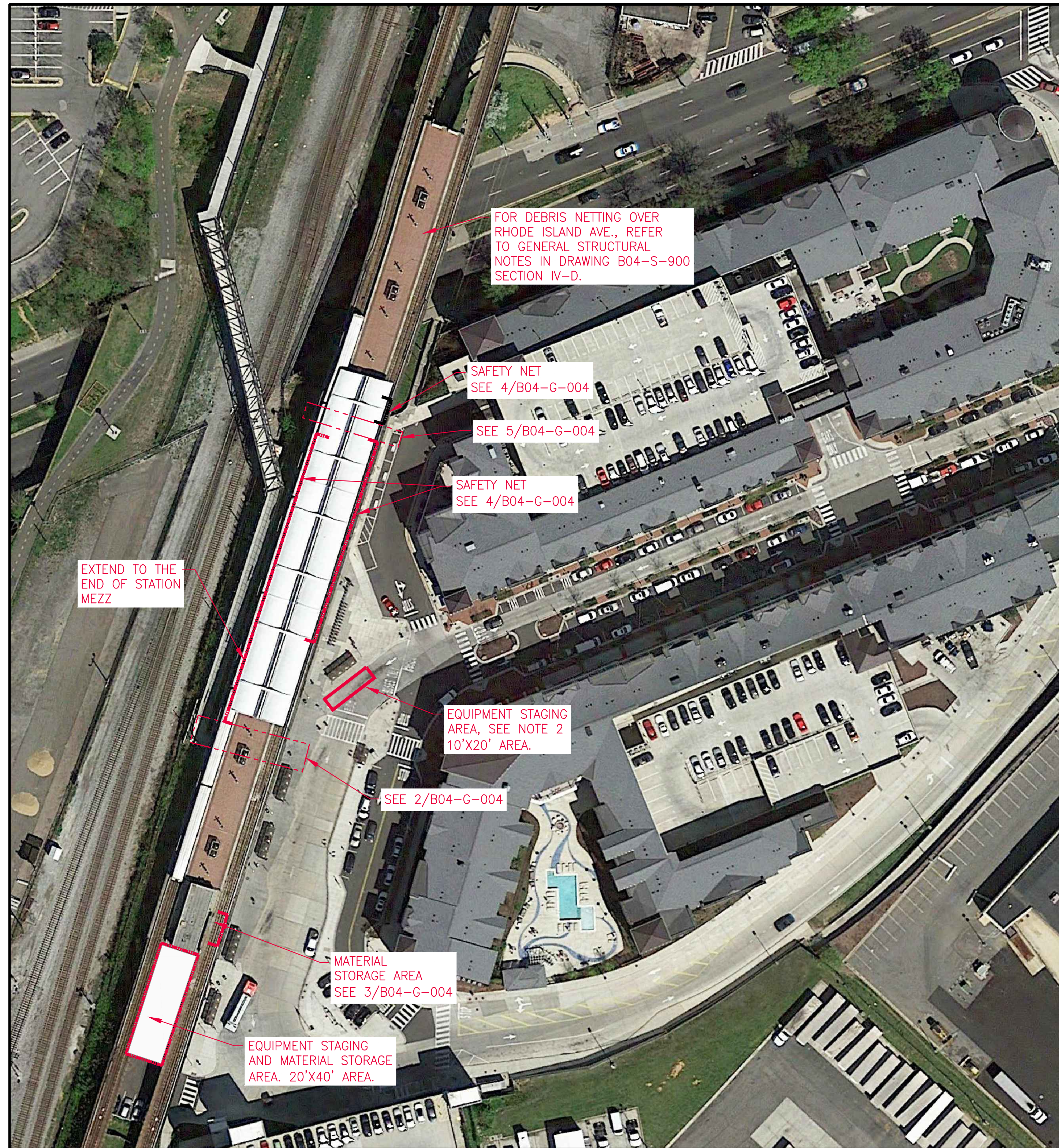
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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

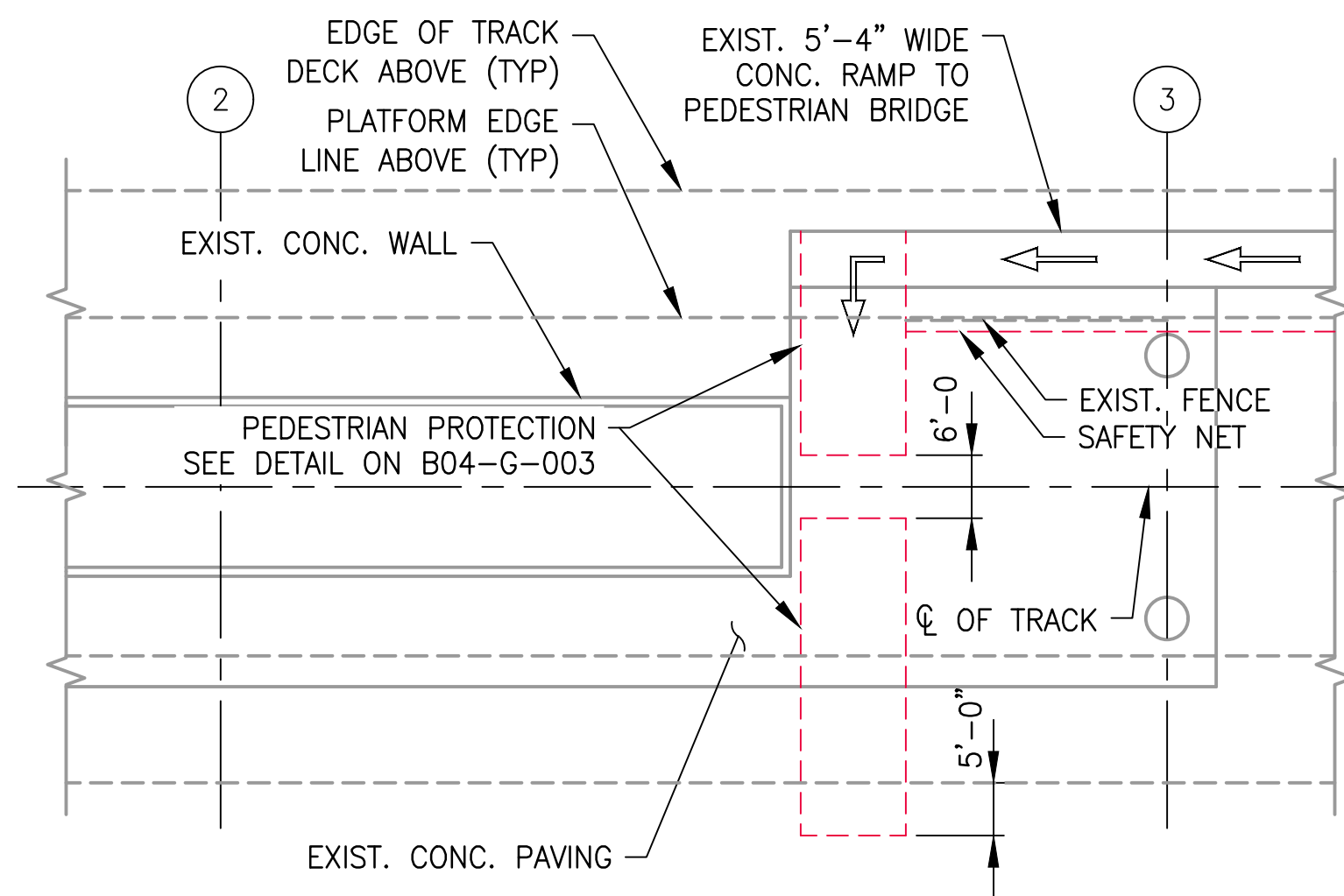
OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

TRACK DECK SLAB AND CEILING PANEL REHABILITATION

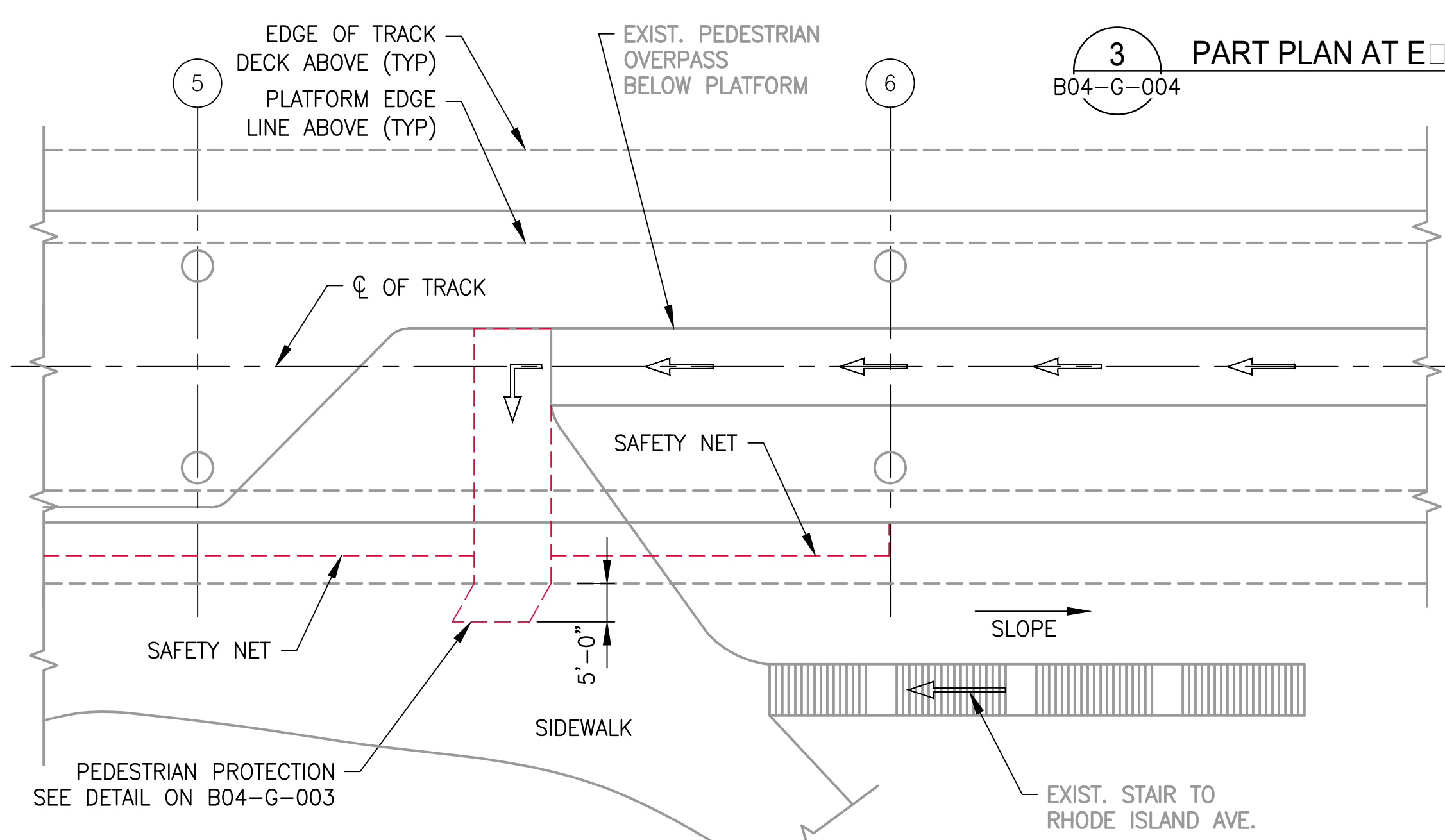
STREET LEVEL SITE PLAN



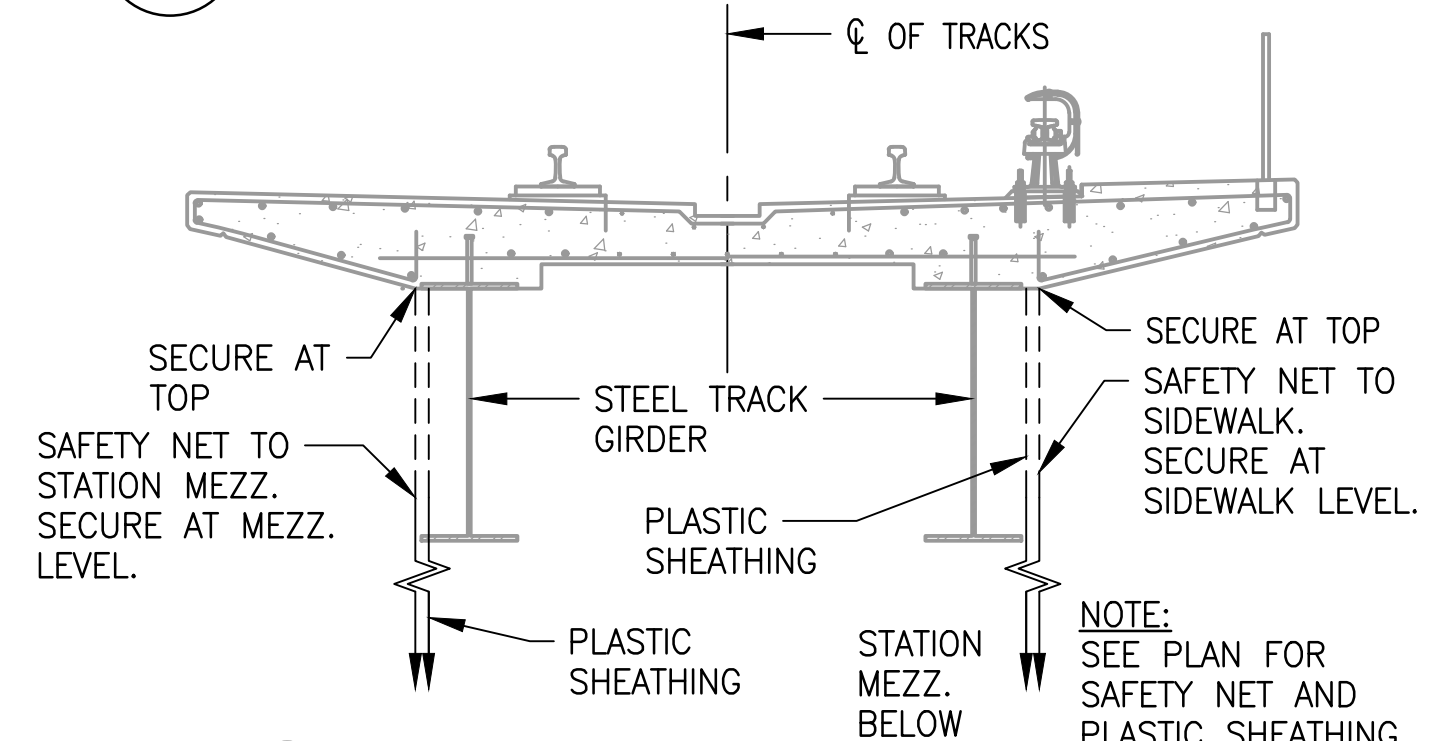
1 OVERALL PLAN - STAGING AREAS
 B04-G-004 SCALE: 1" = 50'-0"



2 PART PLAN AT ENTRANCE
 B04-G-004 SCALE: 1/16" = 1'-0"

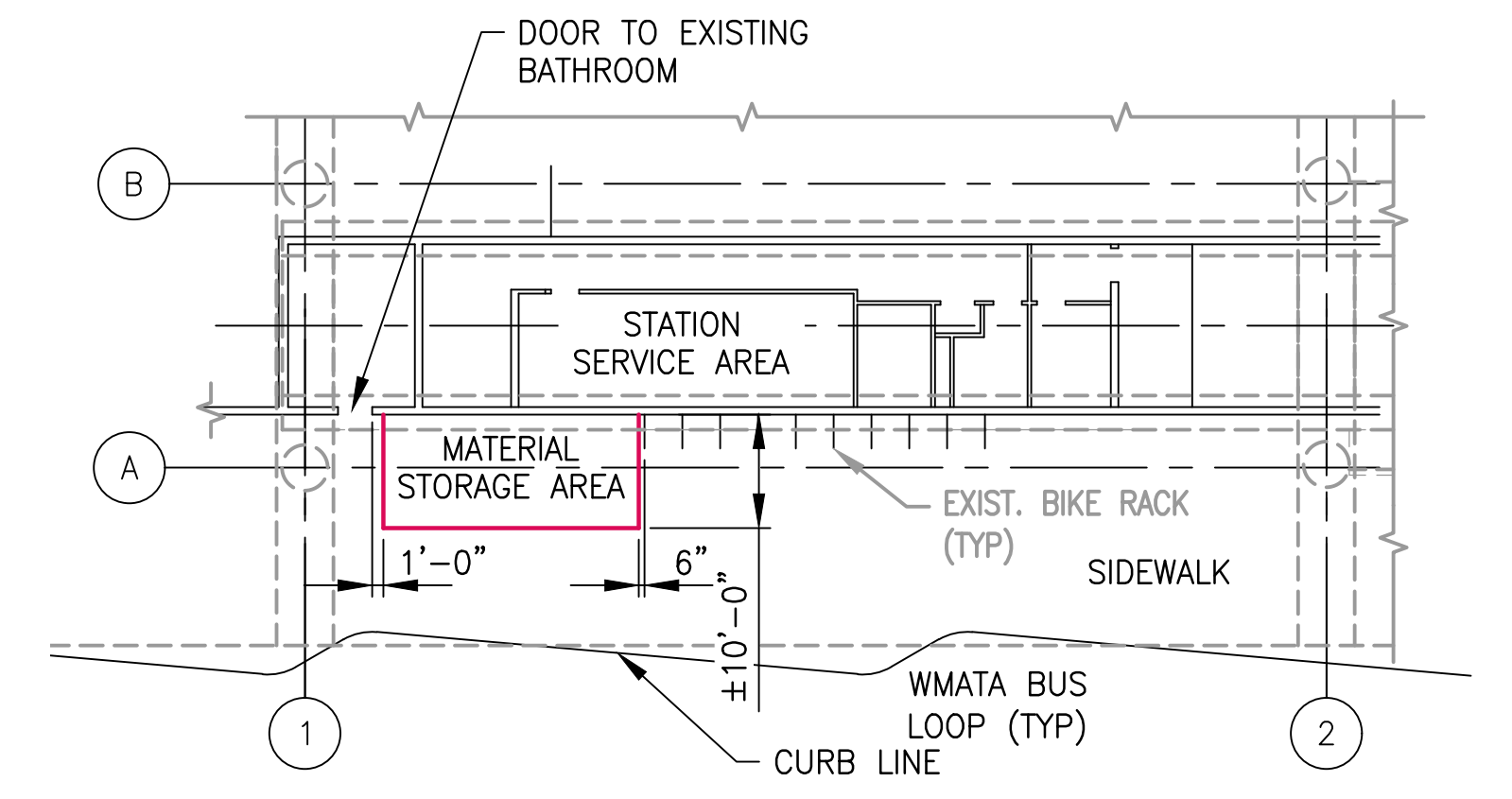


5 PART PLAN AT OVERPASS
 B04-G-004 SCALE: 1/16" = 1'-0"

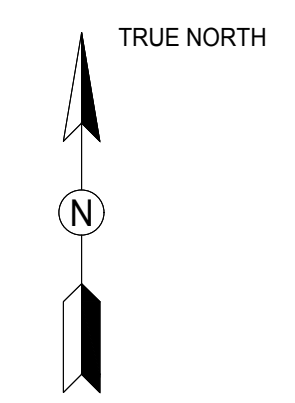


4 SECTION THRU TRACK
 B04-G-004 SCALE: 3/8" = 1'-0"

- DRAWING NOTES:**
- REFER TO DRAWINGS B04-G-001, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION. REFER TO DRAWING B04-G-003 FOR ADDITIONAL PLANS AND NOTES.
 - AT WMATA A.R.'S DISCRETION, THIS AREA MAY BE USED AS EQUIPMENT STAGING WITH WMATA A.R. APPROVAL.



3 PART PLAN AT EQUIPMENT STORAGE AREA
 B04-G-004 SCALE: 1/16" = 1'-0"



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DATE						

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
 IRPG - FIXED FACILITIES

APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
 APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION		B04 - RHODE ISLAND AVENUE STATION	
EQUIPMENT STAGING AND MATERIAL STORAGE AREA			
M NO.	CONTRACT NO.	SCALE	DRAWING NO.
M 1302	F 18086	AS NOTED	B04-G-004
SHEET NO.		04 of 28	

GENERAL STRUCTURAL NOTES

I-GENERAL

1. VERIFY AND PROPERLY DOCUMENT ALL FIELD CONDITION.
2. ALL WORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ACI, AISC AND WMATA DESIGN CRITERIA, VERSION 9 REQUIREMENTS.
3. ALL DIMENSIONS SHOWN ARE BASED ON AS-BUILT DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL LOCATIONS, DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES, UTILITIES, ETC. ANY DISCREPANCIES ARISING BETWEEN EXISTING CONDITIONS AND DETAILS AS SHOWN ON CONTRACT PLANS SHALL BE REPORTED TO THE AUTHORITY REPRESENTATIVE (A.R.) FOR RESOLUTION.
4. EMBEDDED ITEMS REQUIRED FOR WORK OF THE VARIOUS TRADES ARE NOT SHOWN IN THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL REFER TO DRAWINGS OF VARIOUS TRADES FOR ALL INSERT, ANCHOR BOLTS, CONDUITS, PIPES AND ANY OTHER NON-STRUCTURAL ITEMS. WORK SHALL BE COORDINATED WITH THE VARIOUS TRADES TO AVOID CONFLICT OR INTERFERENCE WITH REINFORCING STEEL OR STRUCTURAL STEEL MEMBERS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE A.R. PRIOR TO PERFORMING WORK.
5. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONAL INFORMATION. ALL PLAN DIMENSIONS SHALL BE MEASURED IN TRUE HORIZONTAL PLANE AND ALL VERTICAL DIMENSIONS SHALL BE MEASURED IN TRUE VERTICAL PLANE EXCEPT AS OTHERWISE NOTED.
6. DRAWINGS HAVE BEEN PREPARED BASED ON AVAILABLE KNOWLEDGE OF EXISTING CONDITIONS. IF DURING DEMOLITION AND RECONSTRUCTION, ACTUAL CONDITIONS ARE DISCOVERED TO DIFFER FROM THOSE INDICATED ON DRAWINGS, A.R. SHALL BE NOTIFIED.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES REGARDLESS OF DISCREPANCIES IN THE CONTRACT DOCUMENTS. NO ADDITIONAL COSTS WILL BE PAID BY THE OWNER TO RECTIFY WORK TO BE RELOCATED DUE TO LACK OF JOBSITE COORDINATION.
8. ANY DEVIATION FROM, OR IN FIELD ALTERATION TO THESE DRAWINGS AND SPECIFICATIONS IS STRICTLY PROHIBITED WITHOUT PRIOR APPROVAL OF A.R. ANY SUCH ALTERATIONS SHALL BE CORRECTED AT ONCE WITH NO EXPENSE TO THE OWNER.
9. CONTRACTOR SHALL COORDINATE AND VERIFY THE LOCATIONS AND SIZES OF ALL REQUIRED OPENINGS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS AND/OR OF ALL ELECTRICAL AND MECHANICAL UTILITIES TO BE DETACHED FROM AND ATTACHED TO THE STRUCTURE.
10. DO NOT CUT OR ALTER ANY EXISTING STRUCTURAL MEMBERS WITHOUT WRITTEN AUTHORIZATION OF THE A.R. UNLESS OTHERWISE SHOWN IN DRAWINGS.
11. SHORING, BRACING AND PROTECTION OF EXISTING AND ADJACENT STRUCTURES DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PROTECT AND MAINTAIN THE INTEGRITY OF ADJACENT STREETS, BUILDINGS AND STRUCTURES. SHORING SHALL NOT BE SUPPORTED ON TRACK LEVEL FRP CEILING PANELS. CONTRACTOR SHALL NOT ANCHOR SHORING TO EXISTING POST-TENSIONED PLATFORM SUPPORT GIRDERS. SUBMIT SIGNED AND SEALED SHORING DESIGN AND LAYOUT TO A.R. FOR REVIEW PRIOR TO STARTING WORK.
12. CONTRACTOR SHALL SUBMIT A DEBRIS CONTAINMENT SYSTEM TO A.R. FOR APPROVAL PRIOR TO CONSTRUCTION.
13. CONTRACTOR SHALL SUBMIT CONSTRUCTION SEQUENCE, LIFTING PLAN AND PROCEDURE FOR CEILING PANEL REMOVAL AND REPLACEMENT TO A.R. FOR APPROVAL. CONTRACTOR ALSO TO COORDINATE CONSTRUCTION SEQUENCE WITH WMATA TRACK WORK WITHIN THE SHUTDOWN PERIOD. LIFTING PLANS ASSOCIATED WITH CEILING PANEL REMOVAL AND REPLACEMENT SHALL BE DESIGNED AND SEALED BY A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE DISTRICT OF COLUMBIA.
14. ALL DEBRIS FROM TOP OF EXISTING PRECAST PRESTRESSED CEILING PANELS SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
15. WHEN ANCHORING, SHOOTING, DRILLING, CHIPPING, OR CORING INTO CONCRETE, THE AREA SHALL BE X-RAYED, FERRO SCANNED, OR SCANNED USING GROUND PENETRATION RADAR (GPR) PRIOR TO START OF WORK. DO NOT CUT OR NICK EXISTING REINFORCING.
16. NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL STRUCTURAL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
17. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING SAFETY OF PERSONS AND PROPERTY. THE A.R. PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTOR'S MEANS OR METHODS OR CONSTRUCTION.
18. ALL WORK INDICATED OR SHOWN GRAPHICALLY AS "EXISTING TO REMAIN" WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND WORK AROUND WITHOUT DISTURBING. IF DAMAGED, THE CONTRACTOR WILL REPLACE OR REPAIR AT THE AUTHORITY'S DIRECTION AND AT NO ADDITIONAL COST TO THE OWNER.

II-DESIGN CRITERIA:

A. DESIGN CODES AND SPECIFICATIONS:

1. WMATA MANUAL OF DESIGN CRITERIA RELEASE 9 REV. 3, 2016.

2. ACI 318-11, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY.
 3. STRUCTURAL STEEL: AISC STEEL CONSTRUCTION MANUAL 13TH EDITION.
- B. DESIGN LOADS:**
1. DEAD LOADS, SHALL BE ACTUAL CALCULATED WEIGHT OF MATERIAL AND PERMANENTLY AFFIXED ITEMS.
 2. LIVE LOADS FOR PLATFORM: UNIFORM 150 PSF.

III - MATERIALS:

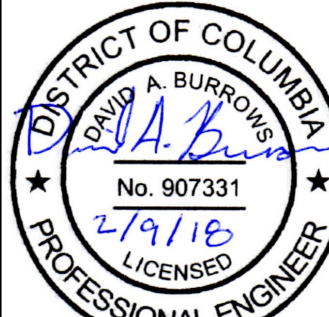
- A. CONCRETE:**
1. NEW CONCRETE TRACK DECK SLAB $f'_c = 7000$ PSI. SEE SPEC. 03300 FOR MORE INFORMATION. FOR REPAIR MORTAR, SEE SPECIFICATION 03720.
- B. REINFORCING STEEL:**
1. ASTM A615, GRADE 60, $f_y = 60$ KSI, EPOXY COATED.
 2. REINFORCEMENT DETAILS SHALL CONFORM TO THE REQUIREMENTS OF ACI DETAILING MANUAL 2004.
 3. ALL DIMENSIONS TO REINFORCING ARE TO THE CENTERLINE OF BAR UNLESS OTHERWISE NOTED.
 4. CONCRETE PROTECTION FOR MAIN REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
 TOP BARS: 1" CLEAR TO MATCH W/ EXISTING REBAR U.O.N.
 SIDE BARS: 2" CLEAR COVER
 BOTTOM BARS: 1 1/2" CLEAR COVER
- C. STRUCTURAL STEEL:**
1. STRUCTURAL STEEL SHAPES AND PLATES: ASTM A36 HOT-DIP GALVANIZED.
 2. HOT-DIP GALVANIZING SHALL CONFORM TO ASTM A123. REPAIR SCRATCHED OR ABRADED GALVANIZED SURFACES WITH APPROVED ZINC-RICH PAINT.
 3. BOLTS: ALL STAINLESS STEEL BOLTS SHALL BE 5/8" DIAMETER ASTM F593, $f_y=65$ KSI MIN., GROUP 1.
 4. NUTS: STAINLESS STEEL NUTS AND WASHERS, ASTM F594, GROUP 1
- D. WELDING:**
1. ALL WELDS FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AWS D1.1 (LATEST EDITION) AND SHALL BE PERFORMED BY AN AWS D1.1 CERTIFIED WELDER.
 2. ELECTRODES SHALL BE AWS CLASS E70XX (ELECTRODES SHALL BE SUITABLE TO GRADE OF BASE METAL). MINIMUM SIZE OF FILLET WELD SHALL BE 3/16" U.O.N.

IV - CONSTRUCTION:

1. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" X 3/4", UNLESS OTHERWISE NOTED.
 2. THE CONTRACTOR SHALL SUBMIT THE CONSTRUCTION AND REPAIR SEQUENCES TO THE A.R. FOR REVIEW PRIOR TO COMMENCING ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
 3. ALL NON-KEYED CONSTRUCTION JOINTS SHALL BE ROUGHENED IN ACCORDANCE WITH ACI 318-11, AND BONDED WITH AN APPROVED BONDING AGENT.
 4. ALL UTILITIES SUCH AS PIPING, CABLES, CONDUITS SHALL BE TEMPORARILY RELOCATED OR PROTECTED PRIOR TO STARTING DEMOLITION AND REPAIR WORK.
 5. THE CONTRACTOR SHALL REMOVE THE DEBRIS RESULTING FROM DEMOLITION WORK TO A LOCATION OUTSIDE THE AUTHORITY'S RIGHT-OF-WAY PRIOR TO RESUMING FULL RAIL OPERATION OR TO PRE-APPROVED STAGING AREAS. ALL REMOVED MATERIALS AND DEBRIS TO BE DISPOSED OF PROPERLY AT NO ADDITIONAL COST TO THE AUTHORITY.
- A. CONCRETE REMOVALS AND REPAIRS:**
1. GENERIC DETAILS FOR REHABILITATION OF DEFECTIVE CONCRETE SHOWN IN DRAWINGS ARE BASED ON VISUAL INSPECTION SURVEY. CONTRACTOR SHALL VERIFY LOCATIONS AND SIZES WHERE REPAIRS ARE TO BE MADE AND REPORT TO A.R. IN WRITING OF ANY CONDITIONS WHICH DIFFERS FROM THOSE SHOWN ON DRAWINGS.
 2. CONTRACTOR SHALL INSPECT CONCRETE BY SOUNDING AND MARK OFF PERIMETER OF CONCRETE TO BE REMOVED. PROVIDE MINIMUM OF ONE INCH CLEARANCE OUTSIDE EDGE OF ANY SPALL/DELAMINATION. ALL AREAS MARKED FOR REPAIRS SHALL BE APPROVED BY A.R. PRIOR TO REMOVAL.
 3. REMOVAL OF CONCRETE SPALLS SHALL BE ACCOMPLISHED IN STAGES AS NOT TO EXCEED THE EXTENTS SHOWN IN DRAWING. IF PROPOSED REMOVAL IS TO EXCEED THE EXTENTS SHOWN IN DRAWINGS, DESIGN CALCULATIONS BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE


- DISTRICT OF COLUMBIA SHALL BE SUBMITTED TO A.R. FOR APPROVAL.
4. CONTRACTOR SHALL REPORT TO A.R. IF THERE IS MORE THAN 15% OF CROSS SECTIONAL AREA LOSS IN CORRODED REINFORCEMENT. WITH A.R. APPROVAL, CONTRACTOR SHALL USE CADWELD MECHANICAL COUPLER TO CONNECT NEW REINFORCEMENT TO CORRODED REINFORCEMENT.
 5. CONTRACTOR SHALL APPLY AN APPROVED BONDING AGENT (SIKADUR 32, HI-MOD LPL OR APPROVED EQUAL) ON ALL EXPOSED CONCRETE TO BE REPAIRED AND EXPOSED REBAR.
 6. PATCH WORK SHALL NOT BE PERFORMED UNTIL THE A.R. HAS APPROVED THE CONCRETE SURFACE PREPARATIONS.
- B. COATING ON TRACK DECK SLAB**
1. CONCRETE SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH APPROVED COATING MANUFACTURER'S RECOMMENDATIONS AT TIME OF APPLICATION. APPLY TWO COATS OF APPROVED COATING IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PER SPECIFICATION 09900.
- D. CEILING PANEL SLAB REMOVAL, REPLACEMENT:**
1. ALL EXISTING PRECAST/PRESTRESSED CEILING PANELS AS SHOWN IN PLAN SHALL BE REMOVED AND DISCARDED. EXISTING CEILING PANELS SHALL BE REMOVED IN A SAFE MANNER. CONTRACTOR SHALL SUBMIT MEANS AND METHODS OF EXISTING CEILING PANELS REMOVAL TO A.R. FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH CONSTRUCTION WORK.
 2. PRIOR TO REMOVAL OF PRECAST/PRESTRESSED CEILING PANELS OVER RHODE ISLAND AVE., CONTRACTOR SHALL INSTALL NETTING UNDERSIDE THE EXISTING CEILING PANELS TO PREVENT FROM DEBRIS FALLING ONTO RHODE ISLAND AVE. ATTACH DEBRIS NETTING TO PLATFORM GIRDER AND UNDERSIDE OF TRACK DECK SLAB. SUBMIT DEBRIS NETTING PLAN LIMIT, ATTACHMENT INFO. AND TYPE OF NETTING TO BE USED TO WMATA FOR REVIEW AND APPROVAL. A.R. AND CONTRACTOR SHALL JOINTLY INSPECT THE INSTALLATION LIMIT OF THE NETTING. UPON A.R.'S APPROVAL, CONTRACTOR SHALL PROCEED WITH REMOVAL AND REPLACEMENT OF PRECAST/PRESTRESSED CEILING PANELS OVER THE RHODE ISLAND AVE.
 3. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, DIMENSIONS AND SIZES OF THE WEDGE INSERT IN STATION PLATFORM GIRDER PRIOR TO FABRICATION OF THE SUPPORT ANGLES AND ORDERING OF HARDWARE FOR THE PROPOSED CEILING PANEL AND PANEL CONNECTION. PRIOR TO STARTING WORK, CONTRACTOR TO SURVEY LOCATIONS OF EXISTING WEDGE INSERTS IN STATION PLATFORM GIRDERS. FABRICATE SLOTTED HOLES IN SUPPORT ANGLES, BASED ON EXISTING FIELD CONDITION.
 4. CONTRACTOR SHALL EXERCISE CAUTION NOT TO DAMAGE EXISTING WEDGE INSERT EMBEDDED INSIDE THE PLATFORM GIRDER WHEN UNBOLTING AND REMOVING EXISTING CEILING PANELS.
 5. THE NEOPRENE SUPPORT MATERIAL MAY BE REPLACED BY FABREEKA PAD SUPPORT WITH PRIOR APPROVAL OF A.R. SUCH THAT THE DESIGN SLOPE OF PANEL WILL BE MAINTAINED .
 6. AFTER INSTALLATION OF NEW CEILING PANEL IS COMPLETED, APPLY PROTECTIVE COATING TO ALL EXPOSED ACCESSIBLE CONCRETE SURFACES AND PROVIDE SEALANT IN JOINT AROUND EACH NEW PANEL.
 7. CONTRACTOR SHALL APPLY APPROVED COLD FORM ZINC-RICH PAINT TO ALL METAL SURFACES AT CEILING PANEL CONNECTIONS.
 8. CONTRACTOR SHALL PROVIDE REPAIR DETAILS TO A.R. FOR APPROVAL FOR ANY DAMAGE CAUSED BY CONTRACTOR DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR THE DAMAGE AT NO ADDITIONAL COST TO THE AUTHORITY.
 9. CONTRACTOR SHALL PROVIDE PROPER GROUNDING FOR THE PROPOSED CEILING PANELS AND SHALL ENSURE THAT ALL THE PROPOSED CEILING PANELS ARE GROUNDED AT ALL TIMES.



GFP A Gannett Fleming/Parsons
JOINT VENTURE



"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."
 LICENSE No. 907331
 EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED		REFERENCE DRAWINGS		REVISIONS			 WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES		TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION GENERAL STRUCTURAL NOTES AND ABBREVIATIONS 1 OF 2										
		NUMBER	TITLE	DATE	NUM	DESCRIPTION													
DESIGNED	S. FERGUSON	02/09/2018																	
		DATE				FINAL CONTRACT DRAWINGS													
DRAWN	L. NGUYEN	02/09/2018																	
		DATE																	
CHECKED	I. AHMAD	02/09/2018																	
		DATE																	

APPROVED		APPROVED		
JOHN PURDY	02/09/2018	DAVID BURROWS	02/09/2018	
ENGINEERING MANAGER	DATE	ENGINEER OF RECORD	DATE	

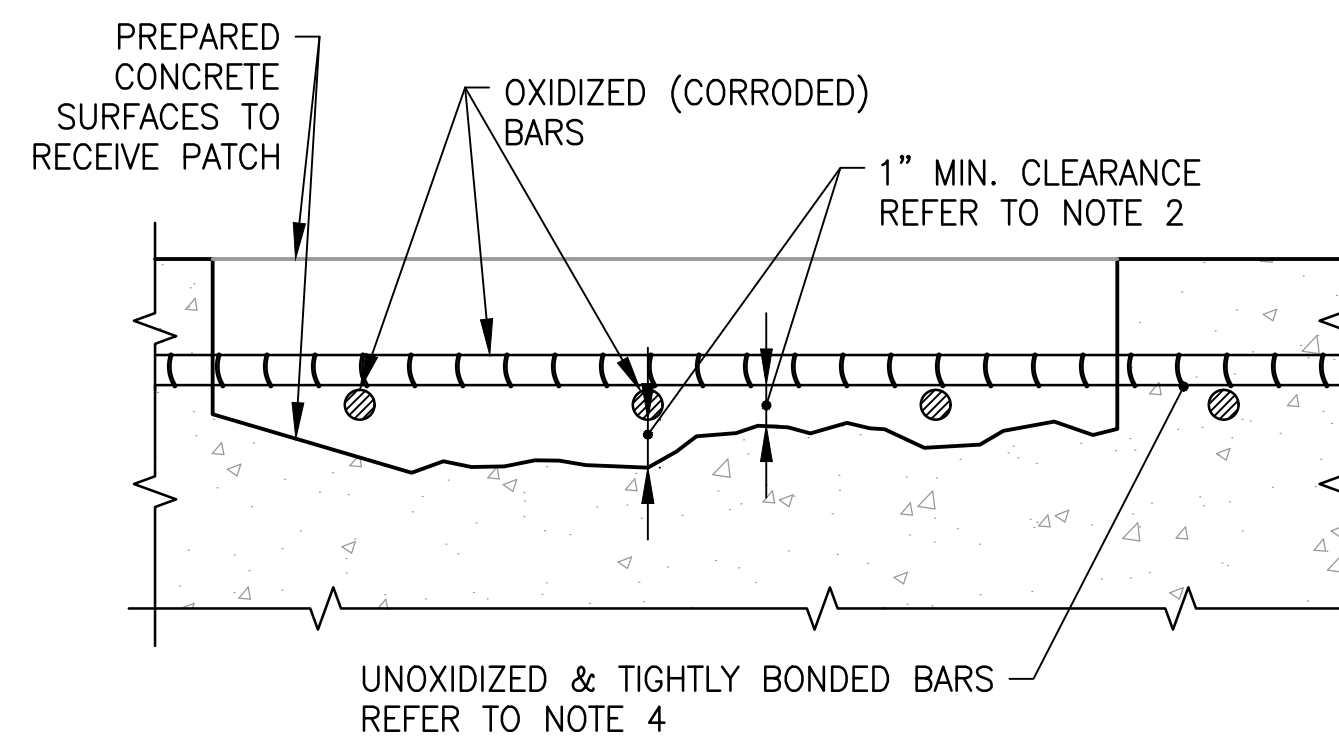
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	NONE	B04-S-900	05 of 28

REPAIR QUANTITY ESTIMATE SUMMARY TABLE					
ITEM NO.		DESCRIPTION	QUANTITY	INVENTORY	UNIT
1	TYPE A REPAIR	CONCRETE DECK EDGE, FULL DEPTH REPAIR	210	-	LF
		SACRIFICIAL ANODE	420	-	EA
2	TYPE B REPAIR	CONCRETE DECK BOTTOM SURFACE, PARTIAL DEPTH REPAIR (OVERHEAD)	150	-	SF
3	TYPE C REPAIR	FULL DEPTH CONCRETE SLAB REPAIR AT EXP. JT. - SIMILAR TO TYPE A	50	-	LF
4	TYPE D REPAIR	CONCRETE DECK TOP SURFACE, PARTIAL DEPTH REPAIR	20	-	SF
5	TYPE E REPAIR	4'-0" X 8'-0" FRP CEILING PANEL	130	121	EA
		L 6X4X5/16 X 8'-0" STEEL SUPPORT ANGLE	130	212	EA
		STEEL ANGLE BRACKETS	260	200	EA
		FRP PANEL END CAPS (20'-0" LENGTH)	55	104	EA
		1/2" NEOPRENE PAD (4'-0" LENGTH)	260	40	EA
		2" NEOPRENE PAD (6'-0" LENGTH)	175	75	EA
		STAINLESS STEEL BOLTS (1/2"Ø X 4 1/2")	400	495	EA
		STAINLESS STEEL WASHERS	1300	994	EA
		STAINLESS STEEL LOCKNUTS W/ NYLON INSERTS	400	500	EA
		STAINLESS STEEL ANCHOR BOLTS (1/2"Ø X 4 1/2") W/ NUTS & WASHERS	260	500	EA
		WEDGE BOLTS	520	0	EA
		CAULK AND SEAL JOINT	1260	-	LF
6	TYPE F REPAIR	PIER CAP REPAIR AT BEAM BEARINGS	15	-	CF
		LIFTING OF TRACK GIRDER	2 LOCATIONS	-	EACH
7	TYPE G REPAIR	TRACK DECK JOINT SEAL REPAIR AND REPLACEMENT	600	-	LF
8	TYPE H REPAIR	OVERHEAD/EDGE SPALL REPAIRS PEDESTRIAN OVERPASS REPAIR	60	-	SF
9		PROTECTIVE COATING ALONG TRACK GIRDER	12,000	-	SF

* QUANTITIES OF REPAIRS REPRESENT ESTIMATES MADE AT TIME OF NON-DESTRUCTIVE INSPECTION BASED ON LIMITED VISUAL SURVEY WITHIN THE LIMITS OF WORK. FOR ELECTRICAL ITEMS, SEE ELECTRICAL CONTRACT DOCUMENT.

** THIS COLUMN REPRESENTS THE INVENTORY OF ITEMS RELATED TO THE CEILING PANEL REPLACEMENT THAT WMATA WILL PROVIDE. THIS VALUE CAN BE DEDUCTED FROM THE TOTAL QUANTITY REQUIRED TO DETERMINE ADDITIONAL SUPPLIES REQUIRED, IF ANY.

TYPICAL GUIDELINE FOR EXPOSING AND UNDERCUTTING REINFORCING STEEL



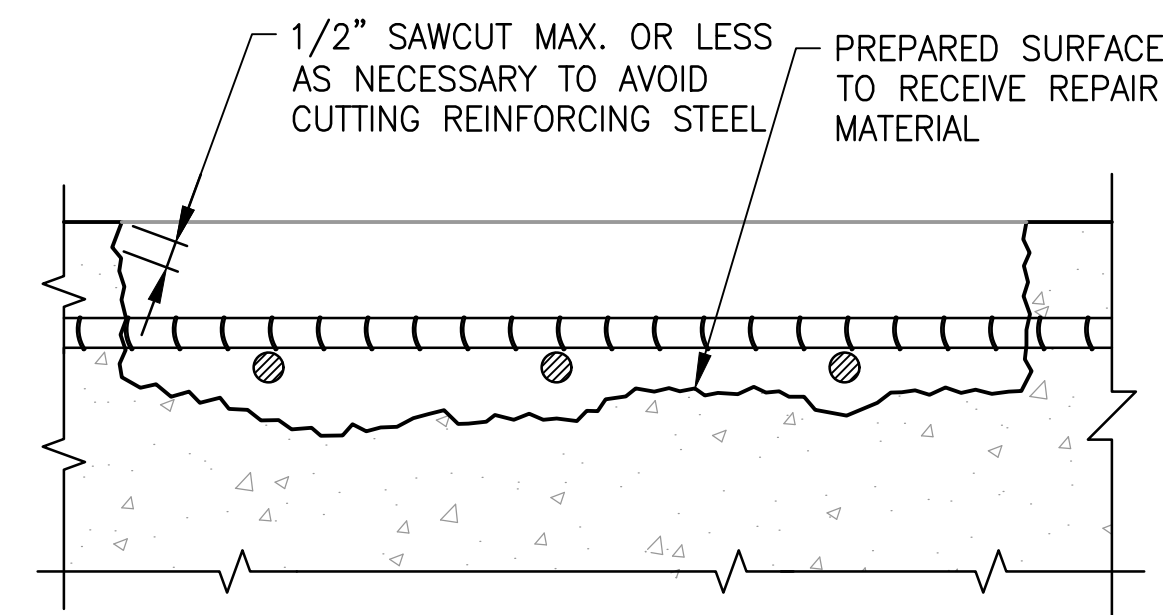
SECTION THROUGH CONCRETE MEMBER

CAUTION: BEFORE STARTING REMOVALS, REVIEW EFFECT OF REMOVALS ON STRUCTURAL INTEGRITY. PROVIDE SHORING OF MEMBERS AS NECESSARY.

NOTES:

- REMOVE LOOSE OR DELAMINATED CONCRETE ABOVE OXIDIZED REINFORCING STEEL. ONCE INITIAL REMOVALS ARE MADE, PROCEED WITH THE UNDERCUTTING OF ALL EXPOSED OXIDIZED (CORRODED) BARS. UNDERCUTTING WILL PROVIDE CLEARANCE FOR UNDER BAR CLEANING, FULL BAR CIRCUMFERENCE BONDING TO SURROUNDING CONCRETE, AND WILL SECURE THE PATCH STRUCTURALLY.
- PROVIDE MINIMUM 1" CLEARANCE BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE OR 1/4" LARGER THAN LARGEST AGGREGATE IN REPAIR MORTAR, WHICH EVER IS GREATER.
- CONCRETE REMOVALS SHALL EXTEND ALONG THE BARS TO LOCATIONS ALONG THE BAR FREE OF BOND INHIBITING CORROSION, AND WHERE THE BAR IS WELL BONDED TO SURROUNDING CONCRETE.
- IF UNOXIDIZED REINFORCING STEEL IS EXPOSED DURING THE UNDERCUTTING PROCESS, CARE SHALL BE TAKEN NOT TO DAMAGE THE BAR'S BOND TO SURROUNDING CONCRETE. IF BOND BETWEEN BAR AND CONCRETE IS BROKEN, AS DETERMINED BY THE A.R., UNDERCUTTING OF THE BAR SHALL BE REQUIRED.
- ANY REINFORCEMENT WHICH IS LOOSE SHALL BE SECURED IN PLACE BY TYING TO OTHER SECURED BARS OR BY OTHER APPROVED METHODS.
- TAKE EXTRA PRECAUTION NOT TO DAMAGE REINFORCEMENT WHEN REMOVING CONCRETE.
- APPLICABLE TO HORIZONTAL, VERTICAL AND OVERHEAD LOCATIONS UNLESS OTHERWISE NOTED IN DRAWINGS.

TYPICAL GUIDELINE FOR EDGE AND SURFACE CONDITIONING

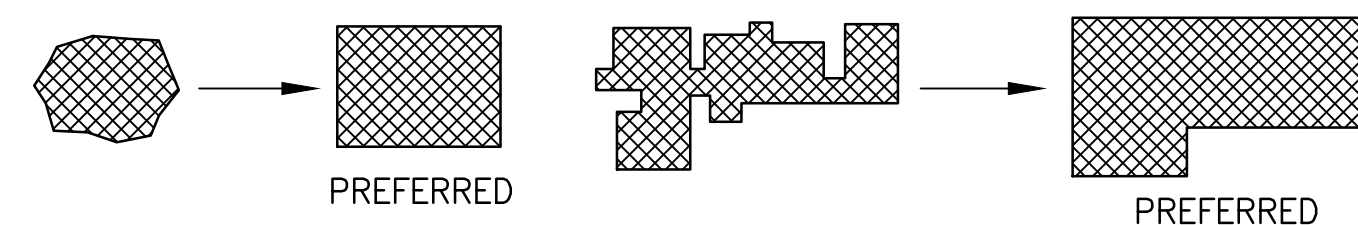


SECTION THROUGH CONCRETE MEMBER

CAUTION: BEFORE STARTING REMOVALS, REVIEW EFFECT OF REMOVALS ON STRUCTURAL INTEGRITY. PROVIDE SHORING OF MEMBERS AS NECESSARY.

NOTES:

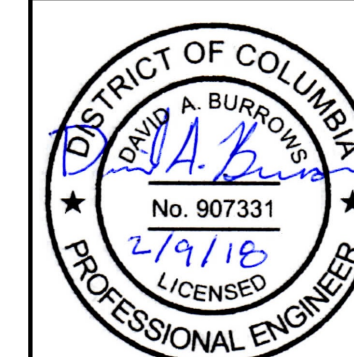
- REMOVE DELAMINATED CONCRETE, UNDERCUT REINFORCING STEEL (REFER TO REINFORCING STEEL UNDERCUTTING GUIDELINE), REMOVE ADDITIONAL CONCRETE AS REQUIRED TO PROVIDE MINIMUM REQUIRED THICKNESS OF REPAIR MATERIAL.
- TAKE EXTRA PRECAUTION NOT TO DAMAGE REINFORCEMENT WHEN REMOVING CONCRETE.
- AT EDGE LOCATIONS PROVIDE ANGLE CUTS. AVOID FEATHER EDGES. FOR SHOTCRETE REPAIRS REFER TO ACI 506 EDGE PREPARATION GUIDELINES. PATCH CONFIGURATION SHOULD BE KEPT AS SIMPLE AS POSSIBLE. FOR EXAMPLE:



- AFTER REMOVALS AND EDGE CONDITIONING ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, LOOSELY BONDED AGGREGATES) BY ABRASIVE BLASTING OR HIGH PRESSURE WATERBLASTING WITH OR WITHOUT ABRASIVE. CHECK THE SURFACE AFTER CLEANING TO ENSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE, OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
- APPLICABLE TO HORIZONTAL, VERTICAL AND OVERHEAD LOCATIONS UNLESS OTHERWISE NOTED IN DRAWINGS.

ABBREVIATIONS:

A.R.	AUTHORITY'S REPRESENTATIVE
ARCH.	ARCHITECTURAL
BOTT.	BOTTOM
CL.	CENTERLINE
C/C	CENTER TO CENTER
CF	CUBIC FEET
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
DET.	DETAIL
DWG.	DRAWING
EXIST.	EXISTING
EXP.	EXPANSION
FIN.	FINISH
FLR.	FLOOR
GFRP	GLASS FIBER REINFORCED PLASTIC
GALV.	GALVANIZED
JT.	JOINT
LF	LINEAR FEET
MAX.	MAXIMUM
MEZZ.	MEZZANINE
MIN.	MINIMUM
OPP.	OPPOSITE
PROP.	PROPOSED
PT	POST-TENSIONED
REINF.	REINFORCING
SIM.	SIMILAR
SF	SQUARE FEET
STA.	STATION
STRUC.	STRUCTURAL
T/R	TOP OF RAIL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
REQ'D	REQUIRED
TRK	TRACK



"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

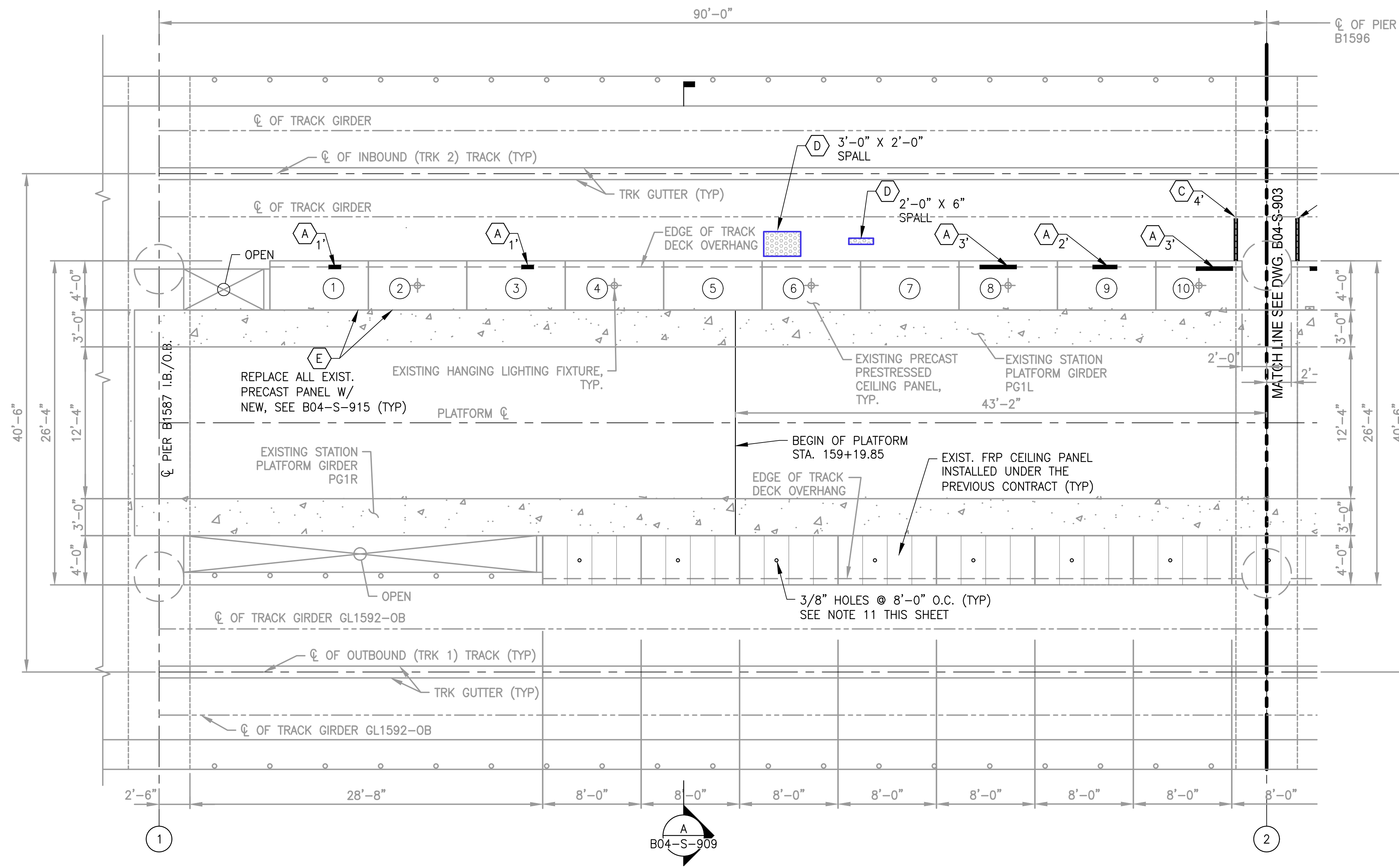
APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION

B04 - RHODE ISLAND AVENUE STATION
GENERAL STRUCTURAL NOTES AND ABBREVIATIONS 2 OF 2

M NO. M 1302	CONTRACT NO. F 18086	SCALE NONE	DRAWING NO. B04-S-901	SHEET NO. 06 of 28
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DESIGNED	S. FERGUSON	02/09/2018	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	TITLE	DATE	NUM	DESCRIPTION
DRAWN	L. NGUYEN	02/09/2018			02/09/2018	0	FINAL CONTRACT DRAWINGS
CHECKED	I. AHMAD	02/09/2018					



DRAWING NOTES:

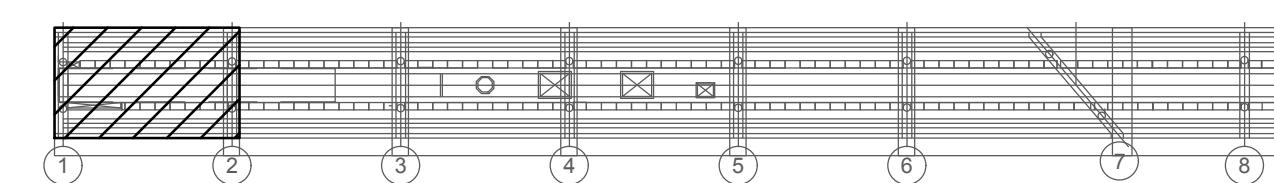
- REFER TO DRAWINGS B04-G-002, B04-S-900 AND B04-S-901 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.
- REMOVE ALL TEMPORARY SAFETY NETTING UNDER THE TRACK DECK SLAB PRIOR TO STARTING WORK.
- ALL EXISTING PRECAST/PRESTRESSED CEILING PANELS AS SHOWN IN PLAN SHALL BE REMOVED AND DISCARDED. REPLACE WITH NEW FIBER REINFORCED PLASTIC (FRP) CEILING PANELS AS SHOWN IN DRAWING B04-S-915. REPLACE ALL EXISTING ANCHOR BOLTS WITH NEW STAINLESS STEEL BOLTS.
- ALL NEW CONCRETE AND PATCH REPAIR MORTAR SHALL BE CURED FOR AT LEAST 3 DAYS AND UNTIL A MINIMUM 0.75 F'C DESIGN STRENGTH OF CONCRETE IS REACHED. TRACKS SHALL NOT BE IN OPERATION OR USED BY PRIME MOVERS FOR AT LEAST 3 DAYS FROM THE DAY OF CONCRETE PLACEMENT AND UNTIL 0.75 F'C CONCRETE STRENGTH IS REACHED.
- THE A.R. AND THE CONTRACTOR SHALL JOINTLY INSPECT EACH ITEM TO BE REPAIRED. THE LOCATION AND EXTENT OF EACH TYPE OF REPAIR SHALL BE DETERMINED BY THE A.R. PRIOR TO PROCEEDING WITH REPAIR WORK.
- ALL EXISTING DIMENSIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- SEE SPECIFICATION SECTION 03720 FOR REPAIR OF EXISTING CONCRETE.
- EMBEDDED CONDUITS MAY BE PRESENT IN TRACK DECK SLAB. PRIOR TO TRACK DECK SLAB DEMOLITION, CONTRACTOR TO LOCATE EXISTING REBAR AND EMBEDDED CONDUITS BY GROUND PENETRATING RADAR (GPR) OR ANY OTHER MEANS. AT ANY INSTANCE, NO EMBEDDED ITEMS SHALL BE DAMAGED.
- THE CONTRACTOR SHALL SUBMIT REPAIR SEQUENCE, PROCEDURES AND MATERIALS TO THE A.R. FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH REPAIR WORK.
- CONTRACTOR SHALL PROTECT FARE GATE CONSOLES AND FARE VENDING MACHINES LOCATED WITHIN THE STATION MEZZANINE DURING CONSTRUCTION.
- CONTRACTOR SHALL DRILL 3/8" HOLES @ 8'-0" O.C. TO EXIST. FRP CEILING PANELS TO INSTALL NEW CEILING LIGHTS. CONTRACTOR SHALL LOCATE THE VERTICAL WEBS OF THE FRP CEILING PANELS. HOLES SHALL BE CENTERED IN BETWEEN VERTICAL WEBS. DO NOT DRILL DRILL THROUGH VERTICAL WEBS. SEE DRAWING B04-S-910 FOR ADDITIONAL INFORMATION. FOR LIGHT FIXTURE LOCATIONS IN NEW FRP PANELS, REFER TO ELECTRICAL PLAN SHEETS B04-E-104 TO B04-E-107.
- WMATA WILL PERFORM ASSOCIATED TRACK WORK AS SHOWN IN REFERENCE TRACK DRAWINGS WITHIN THE SHUTDOWN PERIOD. CONTRACTOR SHALL COORDINATE WITH WMATA TRACK WORK AND INCORPORATE TRACK WORK INTO CONSTRUCTION SEQUENCE AND SCHEDULE. SUBMIT CONSTRUCTION SEQUENCE AND SCHEDULE TO A.R. FOR APPROVAL PRIOR TO STARTING CONSTRUCTION WORK.

LEGEND:

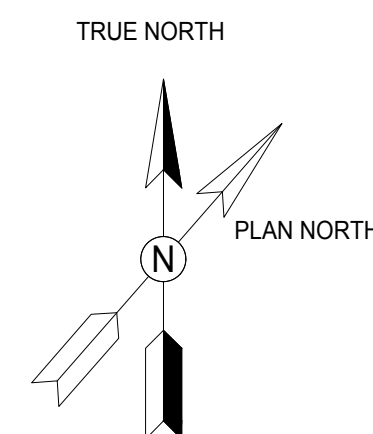
- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT. , SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN
B04-S-902

SCALE: 3/16" = 1'-0"



KEY PLAN



GFP A Gannett Fleming/Parsons JOINT VENTURE

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA.

DAVID A. BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

LICENSE No. 907331
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

	DESIGNED		DATE	
	S. FERGUSON	02/09/2018		
DRAWN	L. NGUYEN		DATE	
	02/09/2018			
CHECKED	I. AHMAD		DATE	
	02/09/2018			

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

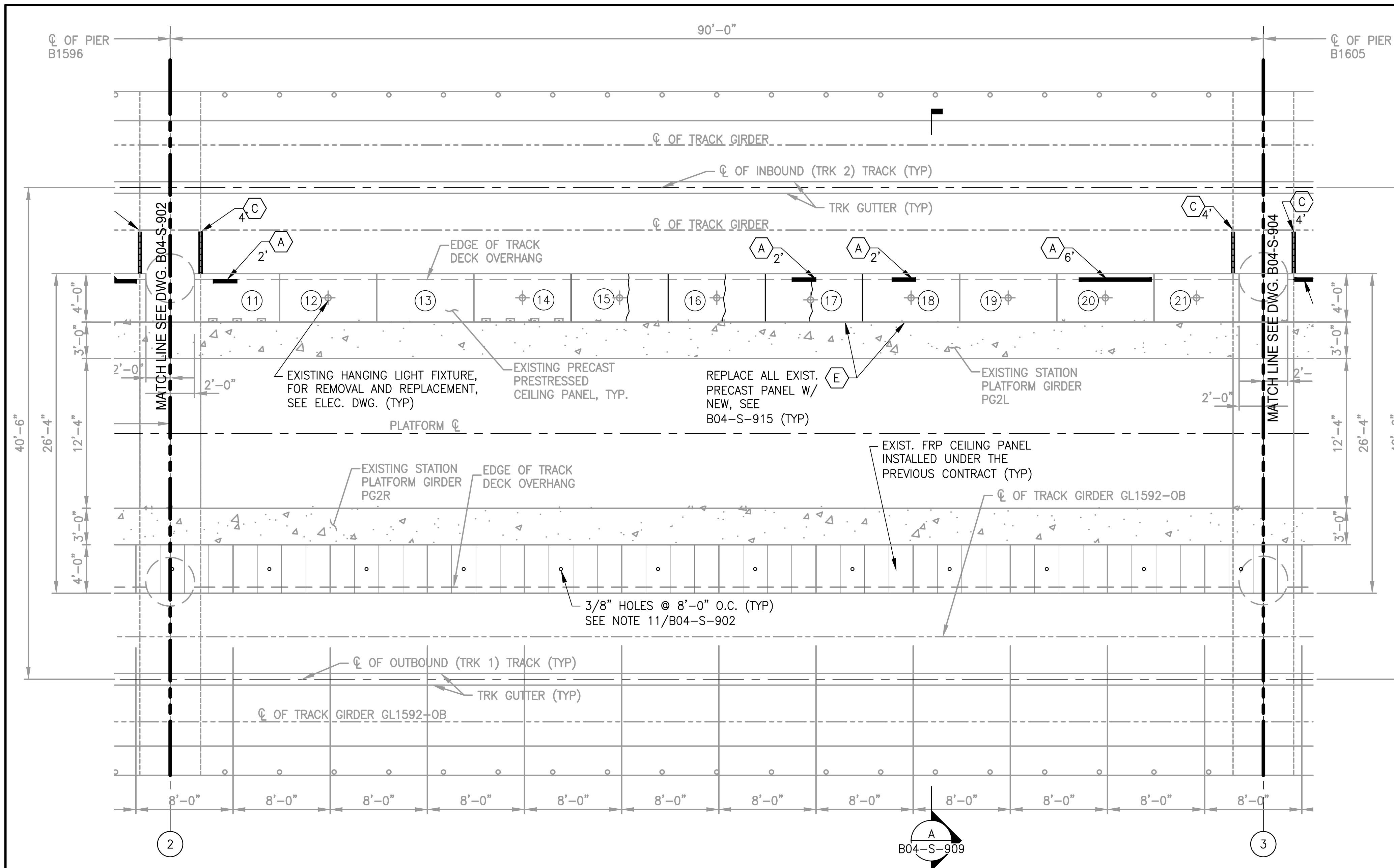
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION				
B04 - RHODE ISLAND AVENUE STATION				
TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 1 OF 7				
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	3/16" = 1'-0"	B04-S-902	07 OF 28



DRAWING NOTES:

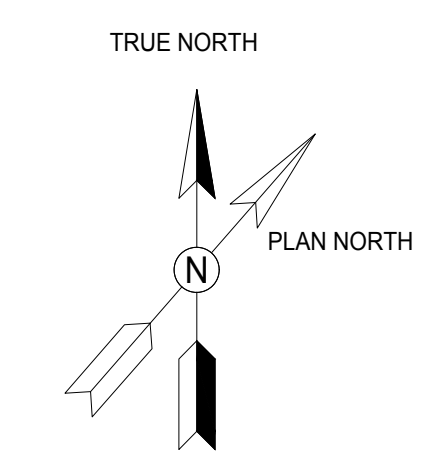
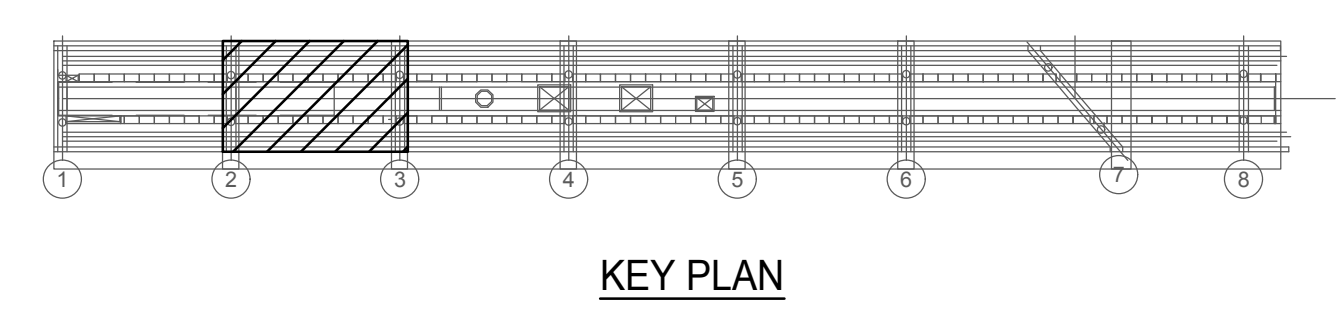
1. REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

LEGEND:

- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT., SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN
B04-S-903

SCALE: 3/16" = 1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

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DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

LICENSE No. 907331
EXPIRATION DATE: 08/31/18

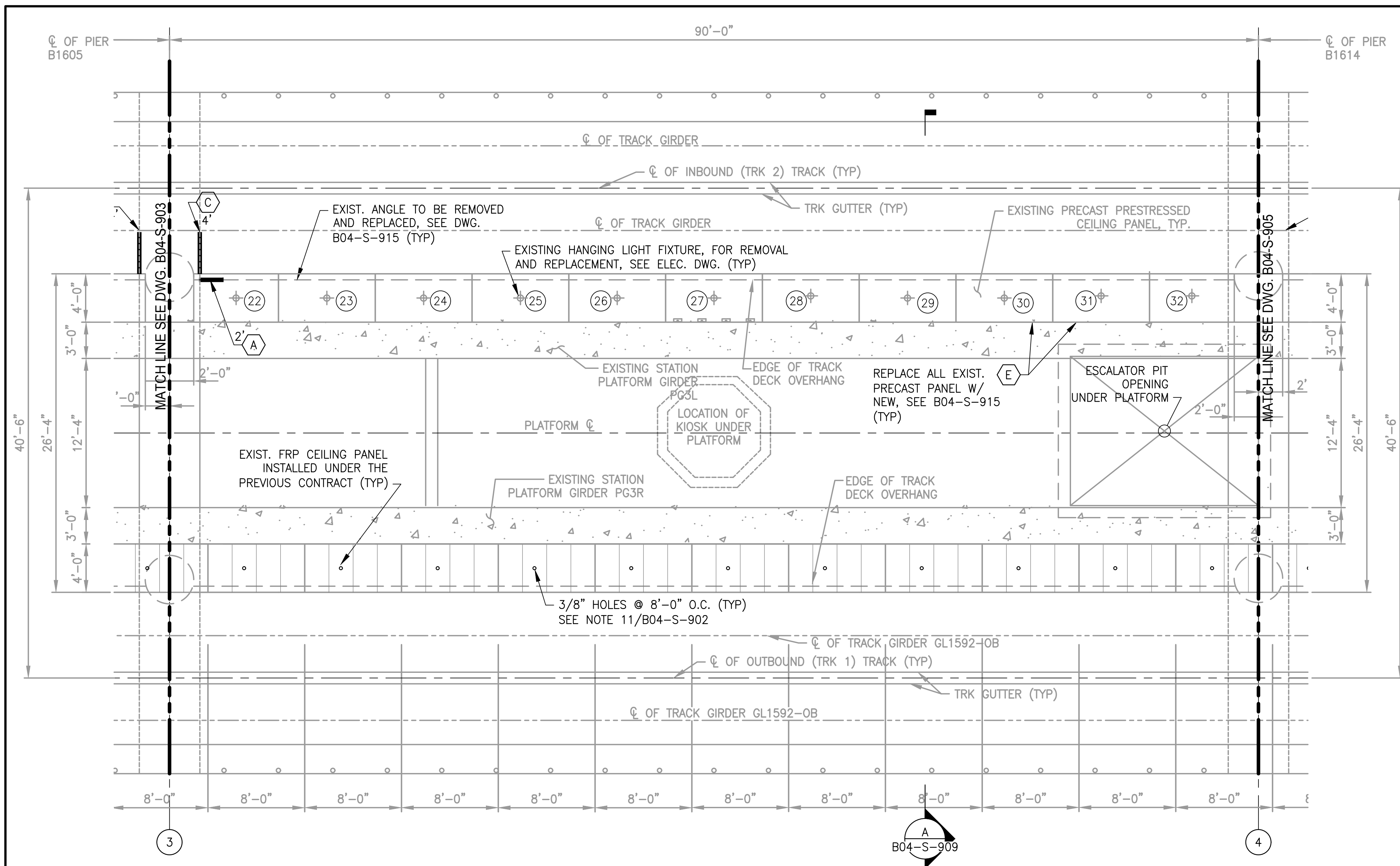
- DC REGISTER SECTION 1516

DESIGNED		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
DESIGNED	S. FERGUSON	02/09/2018	DATE	02/09/2018	NUM	0	DESCRIPTION	FINAL CONTRACT DRAWINGS											
DRAWN	L. NGUYEN	02/09/2018	DATE																
CHECKED	I. AHMAD	02/09/2018	DATE																

REFERENCE DRAWINGS		REVISIONS		
NUMBER	TITLE	DATE	NUM	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES		TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 2 OF 7	
APPROVED	02/09/2018	APPROVED	02/09/2018
JOHN PURDY ENGINEERING MANAGER	DATE	DAVID BURROWS ENGINEER OF RECORD	DATE

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	3/16" = 1'-0"	B04-S-903	08 of 28



DRAWING NOTES:

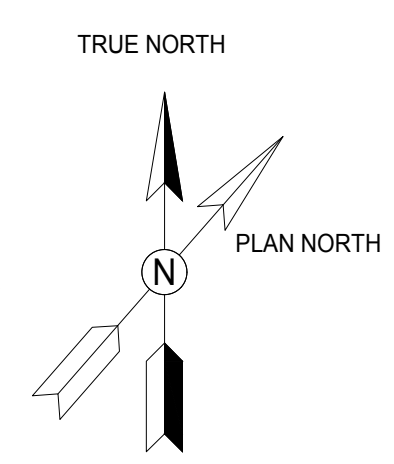
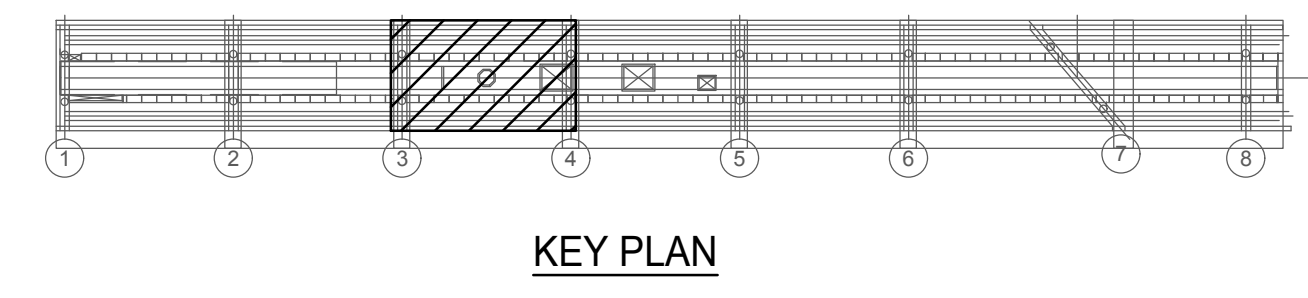
- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

LEGEND:

- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT., SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN
B04-S-904

SCALE: 3/16" = 1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED	S. FERGUSON	02/09/2018
		DATE
DRAWN	L. NGUYEN	02/09/2018
		DATE
CHECKED	I. AHMAD	02/09/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	0 FINAL CONTRACT DRAWINGS

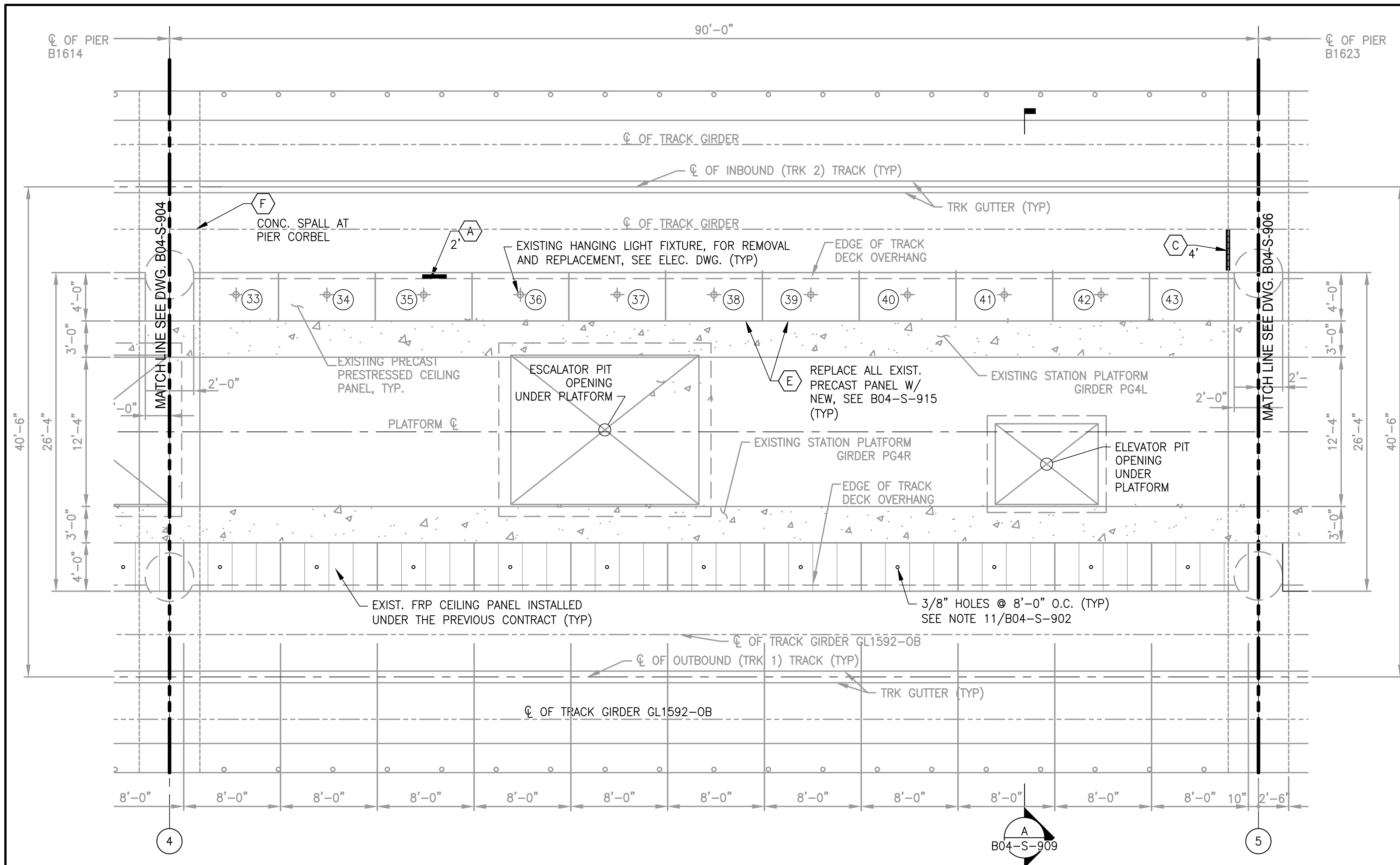
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: *[Signature]* 02/09/2018
DAVID BURROWS
ENGINEER OF RECORD

APPROVED: *[Signature]* 02/09/2018
DAVID BURROWS
ENGINEER OF RECORD

TRACK DECK SLAB AND CEILING PANEL REHABILITATION			
B04 - RHODE ISLAND AVENUE STATION			
TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 3 OF 7			
M NO.	CONTRACT NO.	SCALE	DRAWING NO.
M 1302	F 18086	3/16" = 1'-0"	B04-S-904
			SHEET NO.
			09 OF 28



DRAWING NOTES:

- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

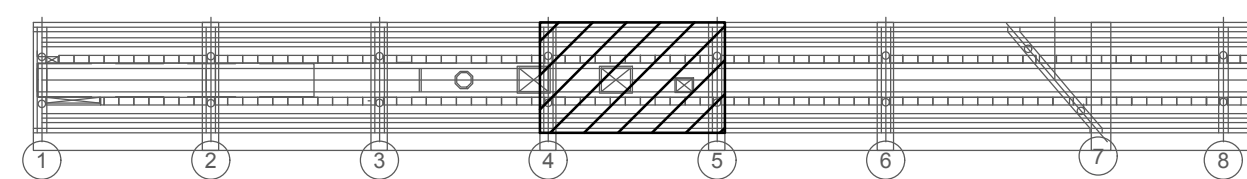
LEGEND:

- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT., SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

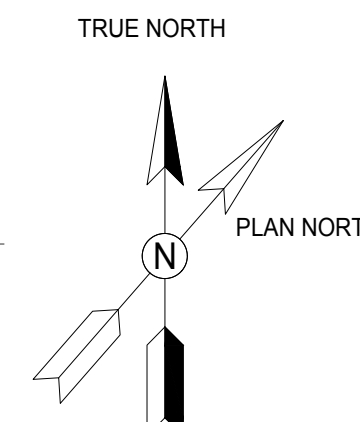
1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN

B04-S-905

SCALE: 3/16" = 1'-0"



KEY PLAN



GFP A Gannett Fleming/Parsons JOINT VENTURE

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LICENSE No. 907331
EXPIRATION DATE: 08/31/18

DC REGISTER SECTION 1516

	DESIGNED		DATE	
	S. FERGUSON	02/09/2018		
	DRAWN		DATE	
	L. NGUYEN	02/09/2018		
	CHECKED		DATE	
	I. AHMAD	02/09/2018		

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

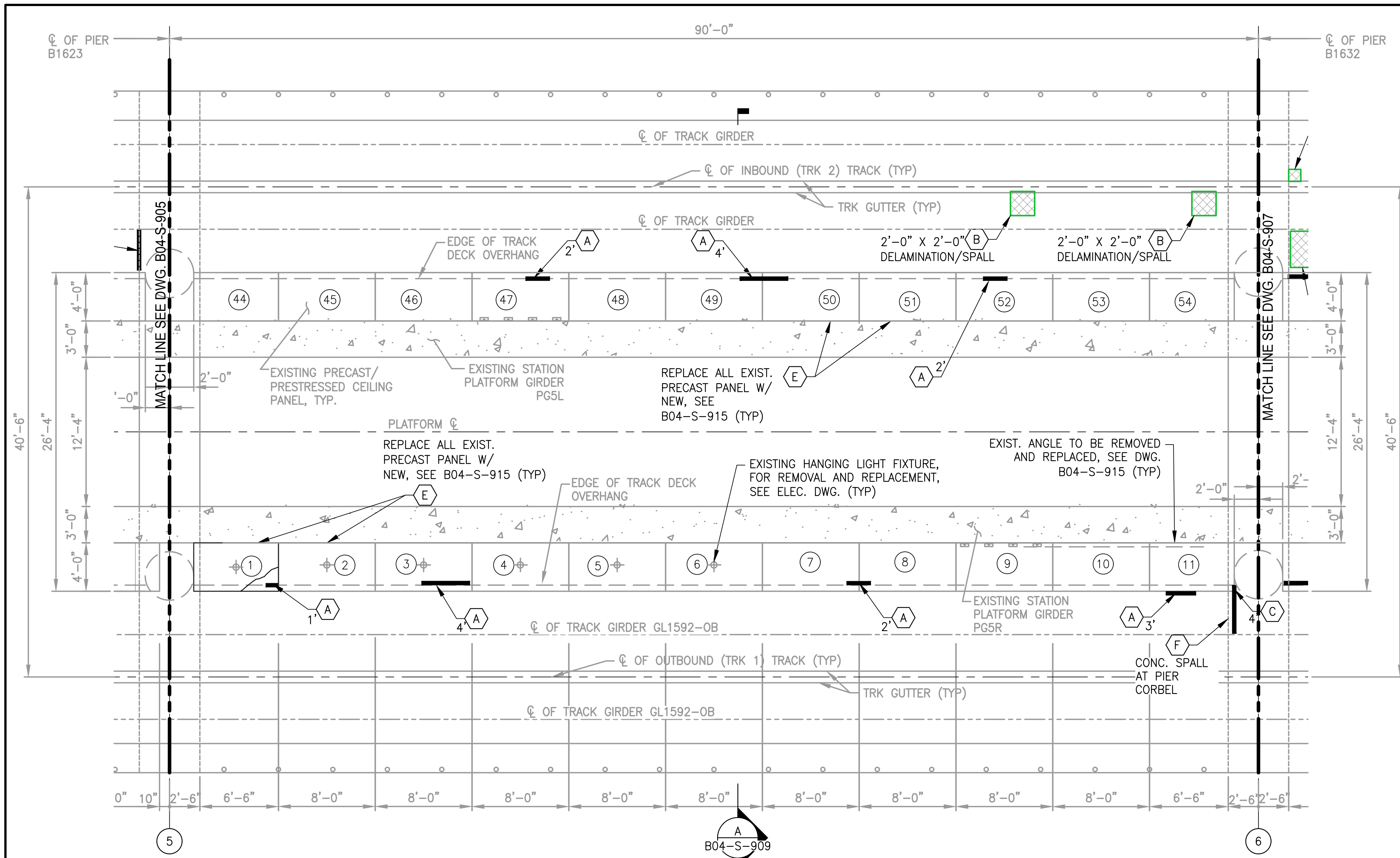
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION				
B04 - RHODE ISLAND AVENUE STATION				
TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 4 OF 7				
M NO. M 1302	CONTRACT NO. F 18086	SCALE 3/16" = 1'-0"	DRAWING NO. B04-S-905	SHEET NO. 10 OF 28



DRAWING NOTES:

- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

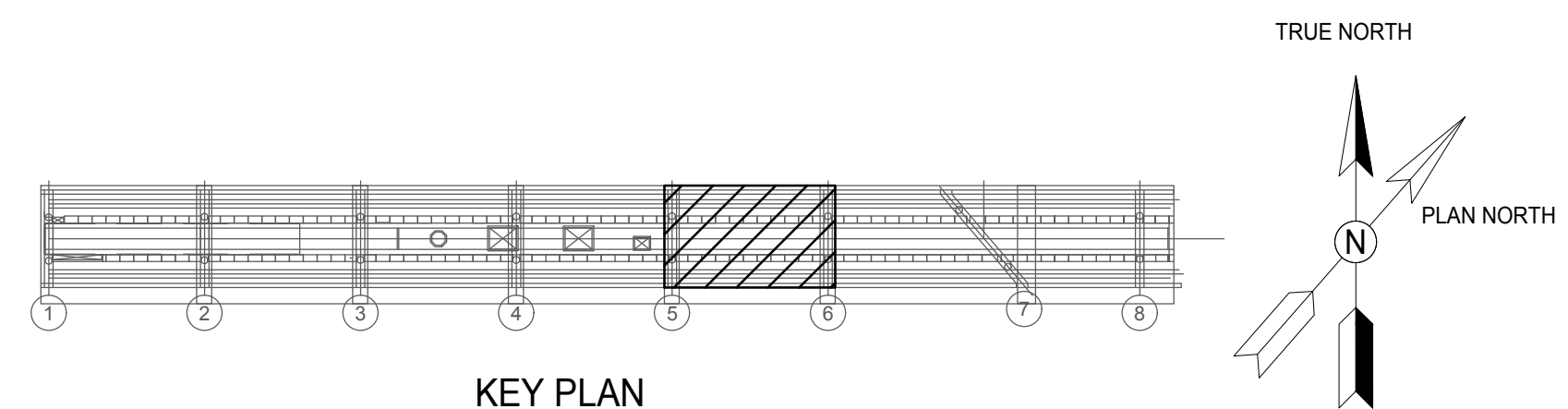
LEGEND:

- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT., SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN

B04-S-906

SCALE: 3/16" = 1'-0"



KEY PLAN

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 DAVID BURROWS
 No. 907331
 2/9/18
 LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
 EXPIRATION DATE: 08/31/18
 - DC REGISTER SECTION 1516

	DESIGNED		DATE	
	S. FERGUSON	02/09/2018		
	DRAWN		DATE	
	L. NGUYEN	02/09/2018		
	CHECKED		DATE	
	I. AHMAD	02/09/2018		

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

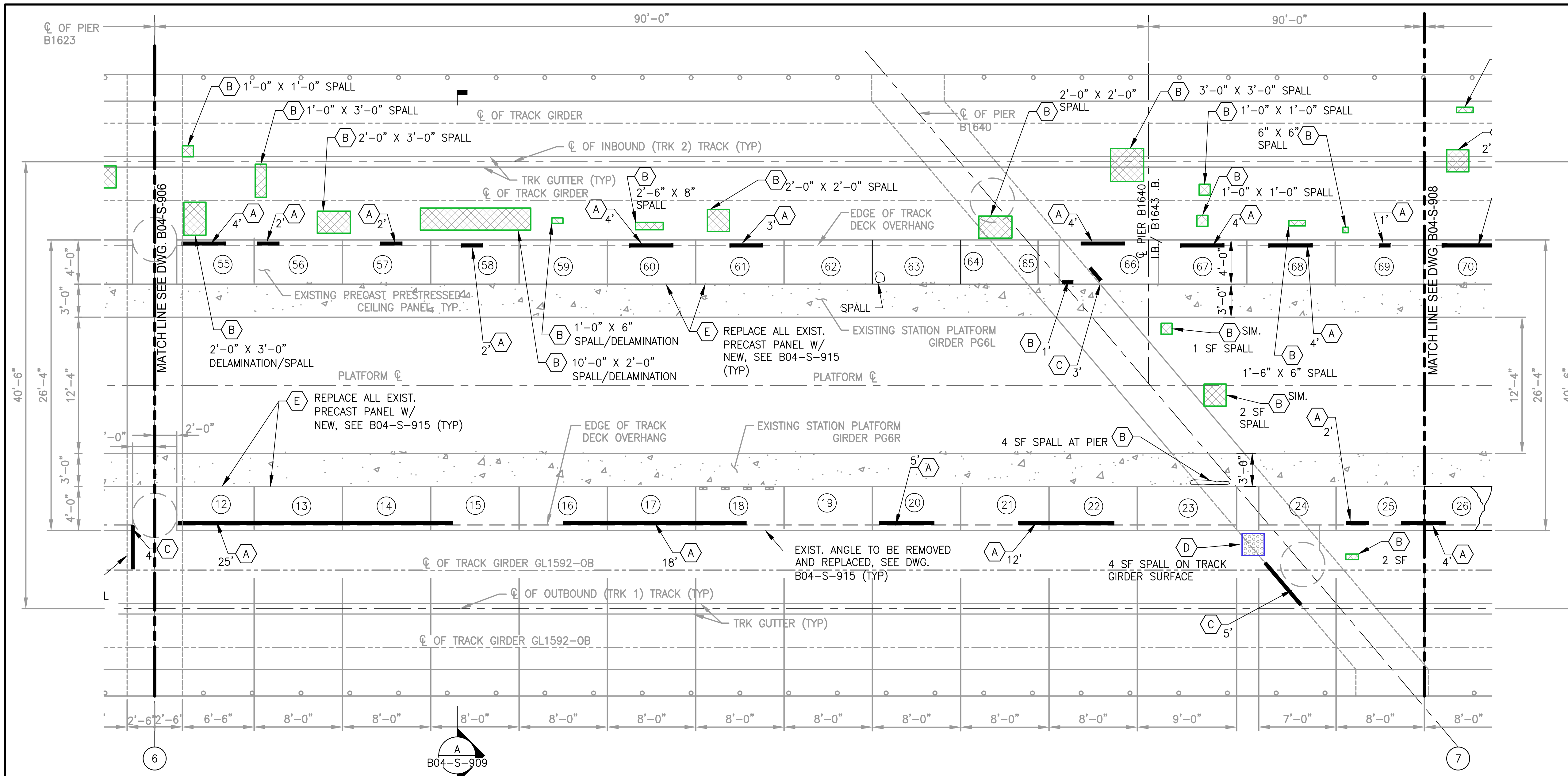
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
 IRPG - FIXED FACILITIES

APPROVED: [Signature] 02/09/2018
 DAVID BURROWS
 ENGINEER OF RECORD

APPROVED: [Signature] 02/09/2018
 DAVID BURROWS
 ENGINEER OF RECORD

TRACK DECK SLAB AND CEILING PANEL REHABILITATION				
B04 - RHODE ISLAND AVENUE STATION				
TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 5 OF 7				
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	3/16" = 1'-0"	B04-S-906	11 of 28

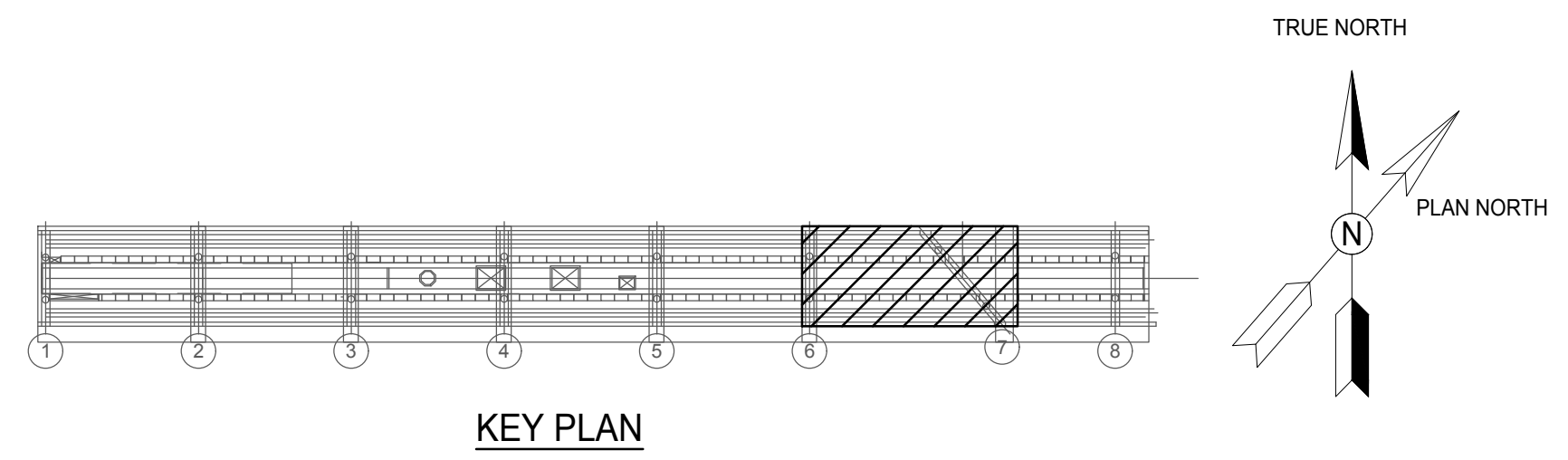


DRAWING NOTES:
 1. REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN
 B04-S-907

SCALE: 3/16" = 1'-0"

- LEGEND:**
- (X) DENOTES CEILING PANEL NUMBER
 - (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
 - (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
 - (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT. , SEE SECTION A ON B04-S-911
 - (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
 - (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
 - (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 DAVID BURROWS
 No. 907331
 2/9/18
 LICENSED PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA.

LICENSE No. 907331
 EXPIRATION DATE: 08/31/18

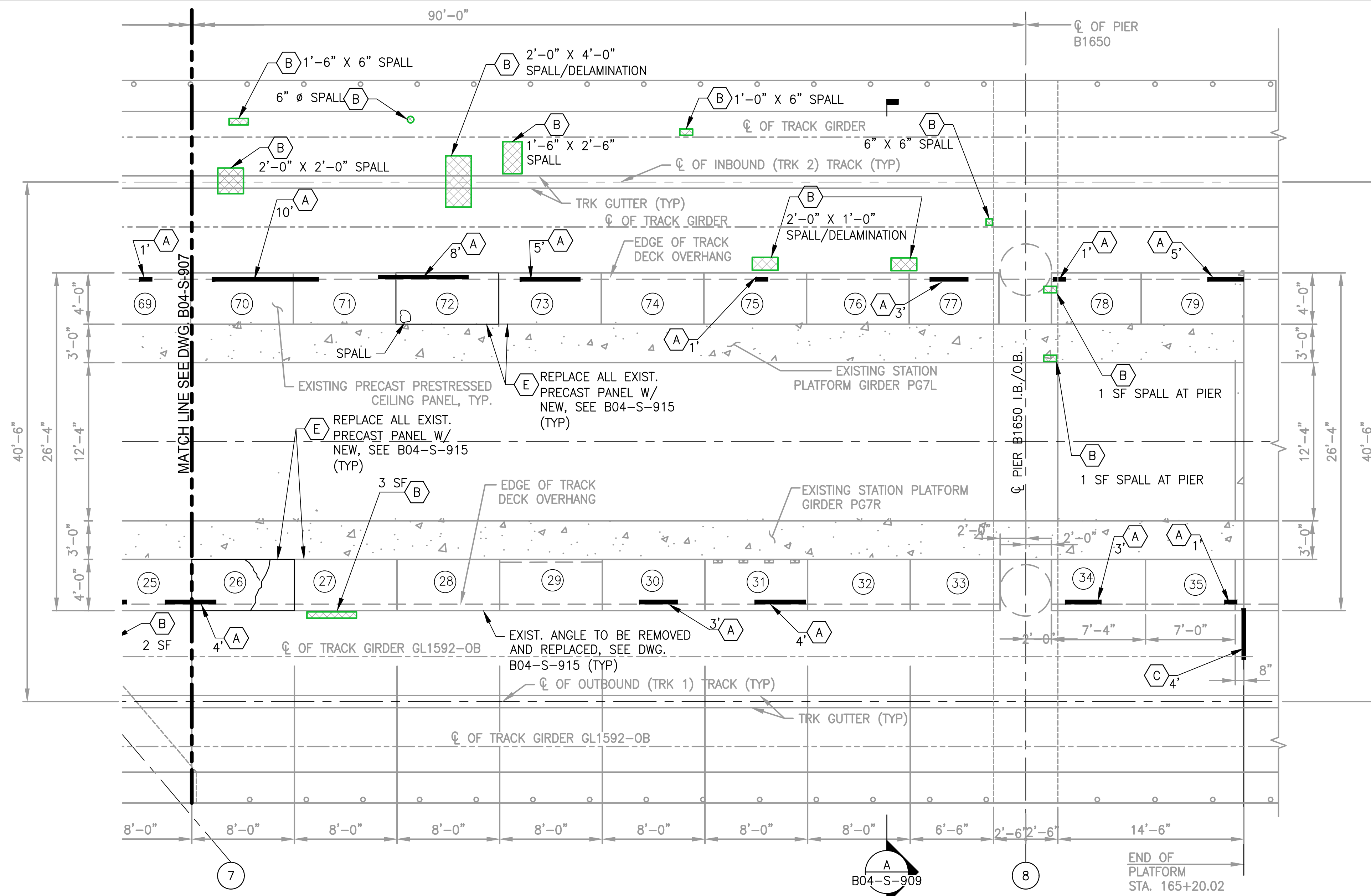
- DC REGISTER SECTION 1516

DESIGNED		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
S. FERGUSON	02/09/2018	L. NGUYEN	02/09/2018	I. AHMAD	02/09/2018										

NUMBER	TITLE	DATE	NUM	DESCRIPTION
		02/09/2018	0	FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES		TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 6 OF 7	
APPROVED OHN PURDY ENGINEERING MANAGER	02/09/2018 DATE	APPROVED DAVID BURROWS ENGINEER OF RECORD	02/09/2018 DATE

M NO. M 1302	CONTRACT NO. F 18086	SCALE 3/16" = 1'-0"	DRAWING NO. B04-S-907	SHEET NO. 12 OF 28
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DRAWING NOTES:

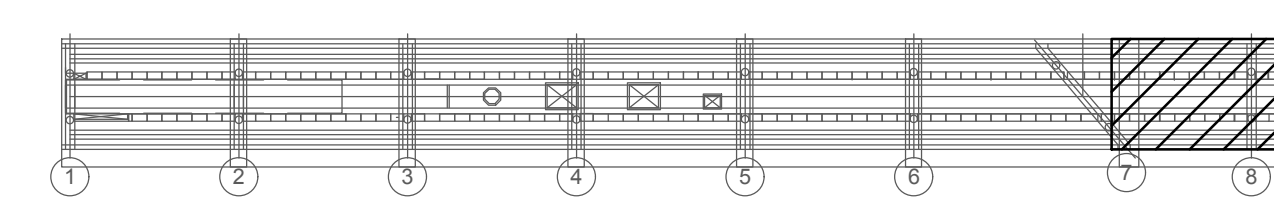
- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

LEGEND:

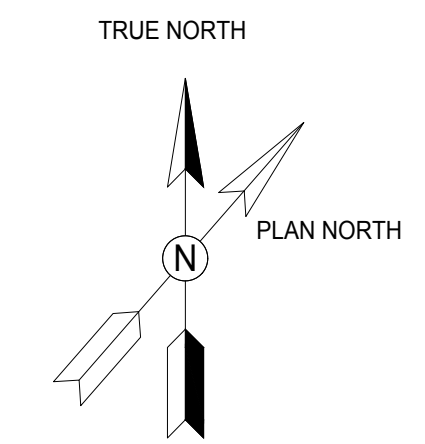
- (X) DENOTES CEILING PANEL NUMBER
- (A) TYPE A, CONCRETE DECK EDGE FULL DEPTH REPAIR, SEE SECTION A ON B04-S-911
- (B) TYPE B CONCRETE OVERHEAD SPALL REPAIR, SEE SECTION B ON B04-S-911
- (C) SIM. TO TYPE A OVERHEAD FLANGE END REPAIR AT EXP. JT., SEE SECTION A ON B04-S-911
- (D) TYPE D CONCRETE TOP SURFACE SPALL REPAIR, SEE SECTION C ON B04-S-911
- (E) TYPE E, CEILING PANEL REPLACEMENT, SEE PLAN ON B04-S-915
- (F) PIER CAP REPAIR AT BEAM BEARING, SEE B04-S-914

1 TRACK DECK SLAB AND PRECAST CEILING PART PLAN
B04-S-908

SCALE: 3/16" = 1'-0"



KEY PLAN



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 SWAIN A. BURROWS
 No. 907331
 2/9/18
 LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

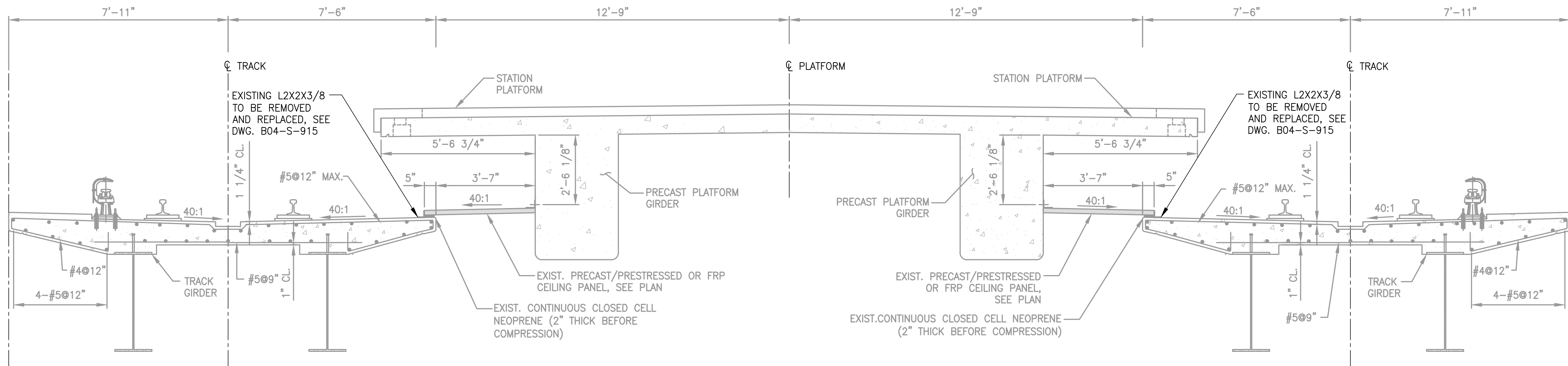
LICENSE No. 907331
 EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED S. FERGUSON 02/09/2018 DATE DRAWN L. NGUYEN 02/09/2018 DATE CHECKED I. AHMAD 02/09/2018 DATE		<table border="1"> <thead> <tr> <th colspan="2">REFERENCE DRAWINGS</th> <th colspan="2">REVISIONS</th> </tr> <tr> <th>NUMBER</th> <th>TITLE</th> <th>DATE</th> <th>NUM</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>02/09/2018</td> <td>0</td> <td>FINAL CONTRACT DRAWINGS</td> </tr> </tbody> </table>		REFERENCE DRAWINGS		REVISIONS		NUMBER	TITLE	DATE	NUM	DESCRIPTION			02/09/2018	0	FINAL CONTRACT DRAWINGS	<p>M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY</p> <p>OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES</p> <p>APPROVED: OHN PURDY, ENGINEERING MANAGER, 02/09/2018 APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018</p>		<p>TRACK DECK SLAB AND CEILING PANEL REHABILITATION</p> <p>B04 - RHODE ISLAND AVENUE STATION TRACK GIRDER REPAIR OVERALL STRUCTURAL PLAN 7 OF 7</p>			
REFERENCE DRAWINGS		REVISIONS																					
NUMBER	TITLE	DATE	NUM	DESCRIPTION																			
		02/09/2018	0	FINAL CONTRACT DRAWINGS																			
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.																			
M 1302	F 18086	3/16" = 1'-0"	B04-S-908	13 OF 28																			

DRAWING NOTES:

1. REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.
2. ALL DIMENSIONS ARE REFERENCED FROM FROM WMATA RECORD DRAWINGS AND SHALL BE FIELD VERIFIED PRIOR TO ANY FABRICATION OR CONSTRUCTION.
3. BACKGROUNDS ARE TAKEN FROM WMATA RECORD DRAWINGS DATED 05/1971.



A OVERALL SECTION THRU PLATFORM

B04-S-909

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

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 DAVID A. BURROWS
 No. 907331
 2/9/18
 LICENSED PROFESSIONAL ENGINEER

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LICENSE No. 907331
 EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
 IRPG - FIXED FACILITIES

APPROVED: *[Signature]* 02/09/2018
 OHN PURDY
 ENGINEERING MANAGER

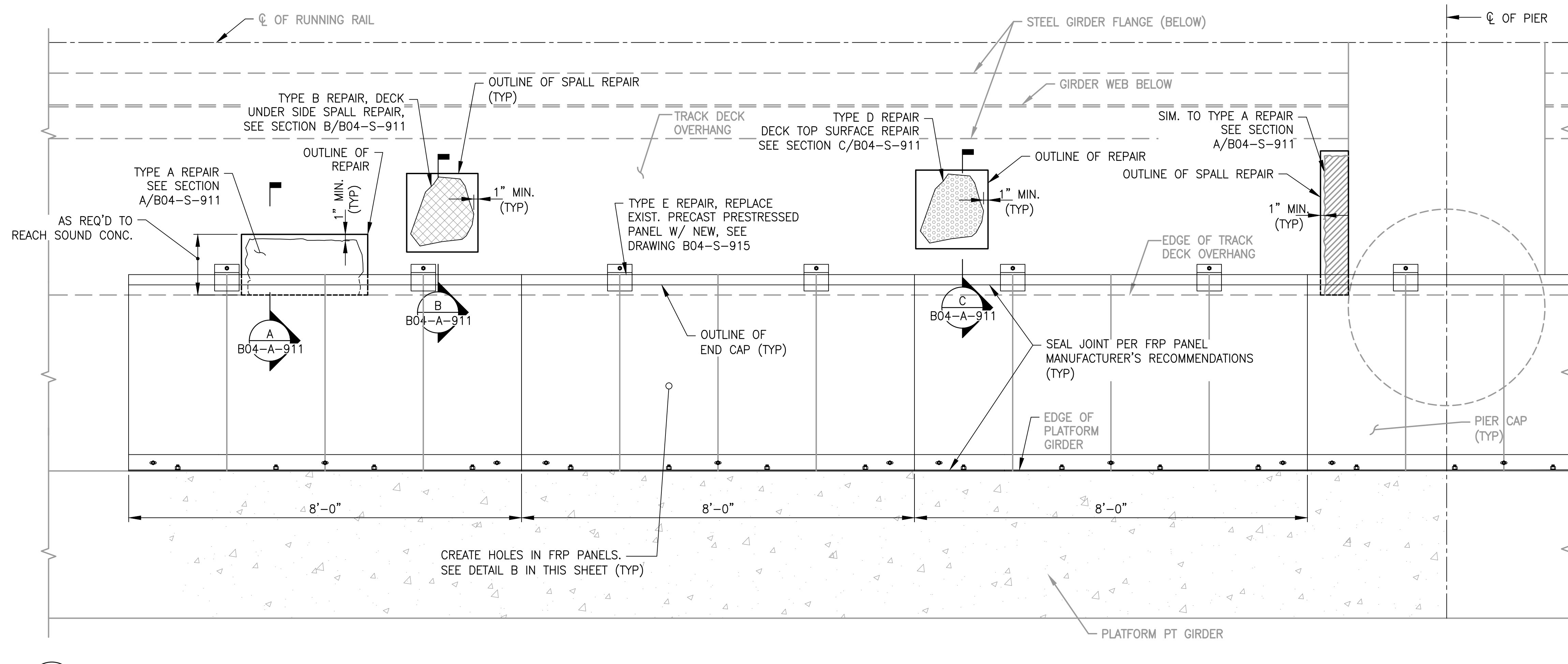
APPROVED: *[Signature]* 02/09/2018
 DAVID BURROWS
 ENGINEER OF RECORD

TRACK DECK SLAB AND CEILING PANEL REHABILITATION

B04 - RHODE ISLAND AVENUE STATION
 OVERALL SECTION THRU STATION PLATFORM

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	AS NOTED	B04-S-909	14 of 28

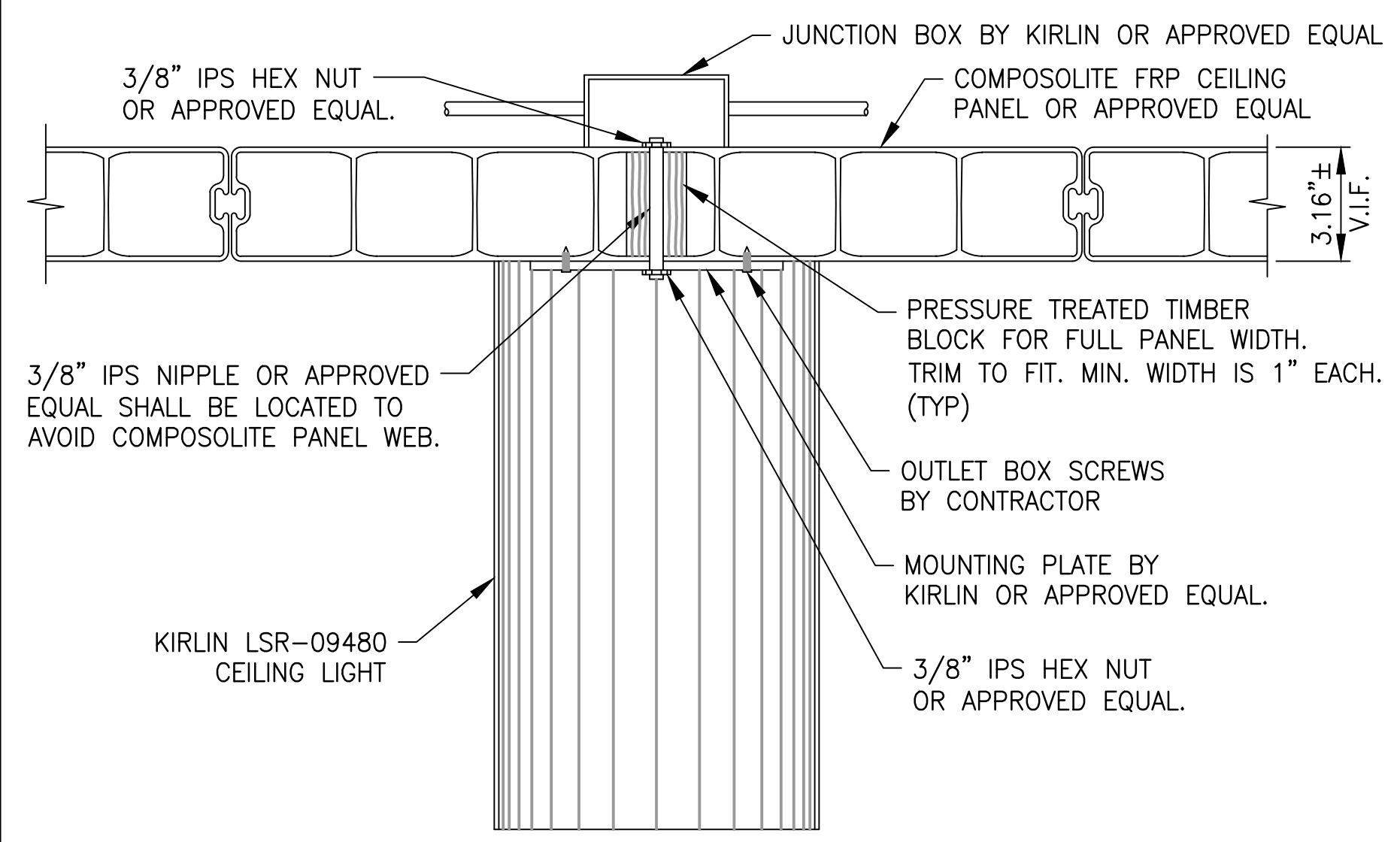
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	NUMBER	TITLE	DATE	NUM			DESCRIPTION			
DESIGNED	S. FERGUSON	02/09/2018	DATE	02/09/2018	0	FINAL CONTRACT DRAWINGS				
DRAWN	L. NGUYEN	02/09/2018	DATE							
CHECKED	I. AHMAD	02/09/2018	DATE							



- DRAWING NOTES:**
- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.
 - FOR NEW FRP CEILING PANEL DETAILS, SEE B04-S-915.

1 TYPICAL NEW CEILING PANEL PART PLAN
B04-S-910

SCALE: 3/4" = 1'-0"



*NOTE:
REFER TO KIRLIN SURFACE LUMINAIRE INSTALLATION INSTRUCTIONS. MOUNTING MATERIALS NOT PROVIDED BY KIRLIN SHALL BE PROVIDED BY THE CONTRACTOR. SAME DETAIL APPLIES TO EXISTING FRP PANELS INSTALLED UNDER THE PREVIOUS CONTRACT.

B TYPICAL CEILING LIGHT INSTALLATION DETAIL IN NEW FRP PANEL
B04-S-910 NOT TO SCALE

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED	S. FERGUSON	02/09/2018
		DATE
DRAWN	L. NGUYEN	02/09/2018
		DATE
CHECKED	I. AHMAD	02/09/2018
		DATE

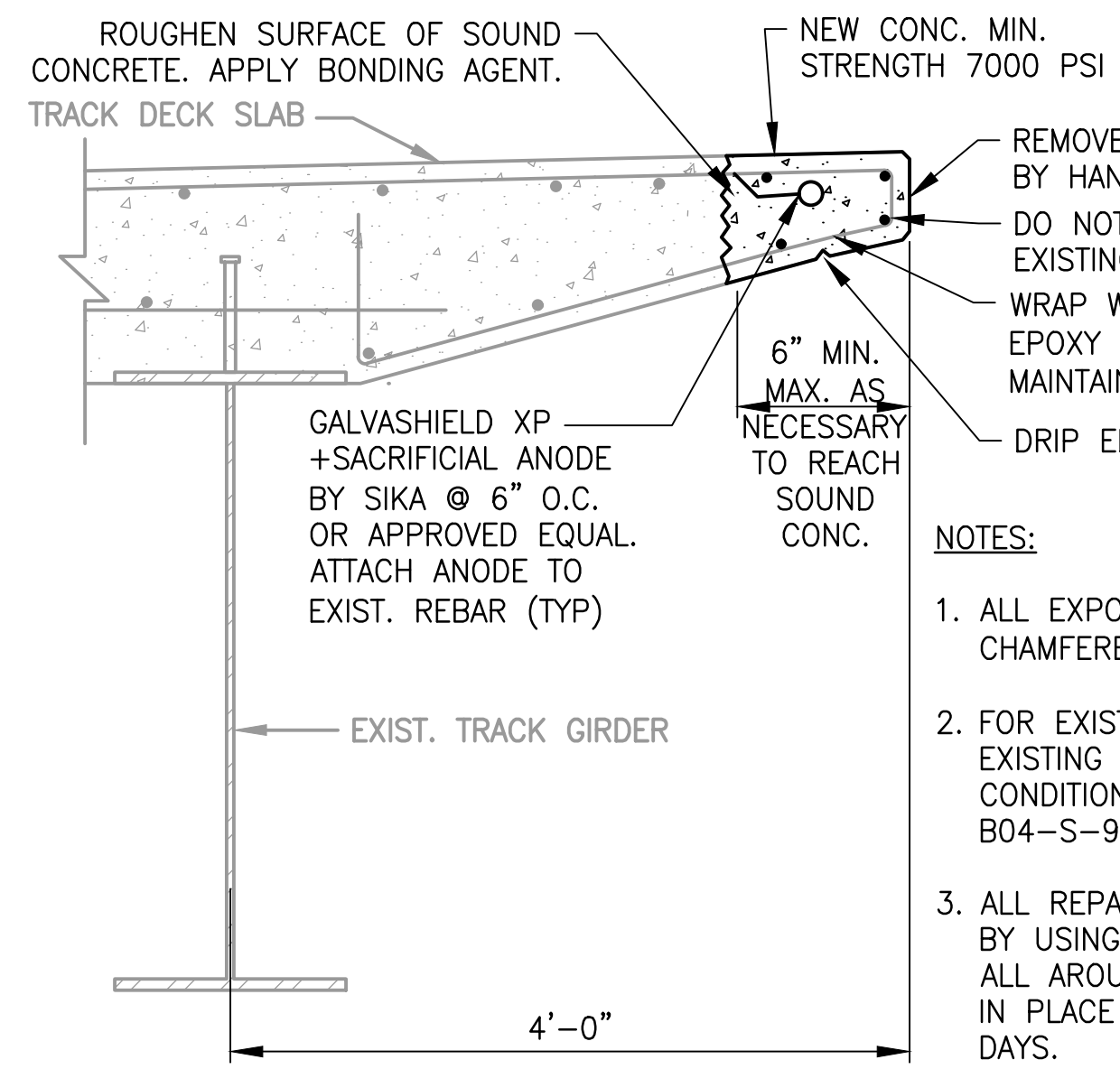
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NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	0 FINAL CONTRACT DRAWINGS

M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

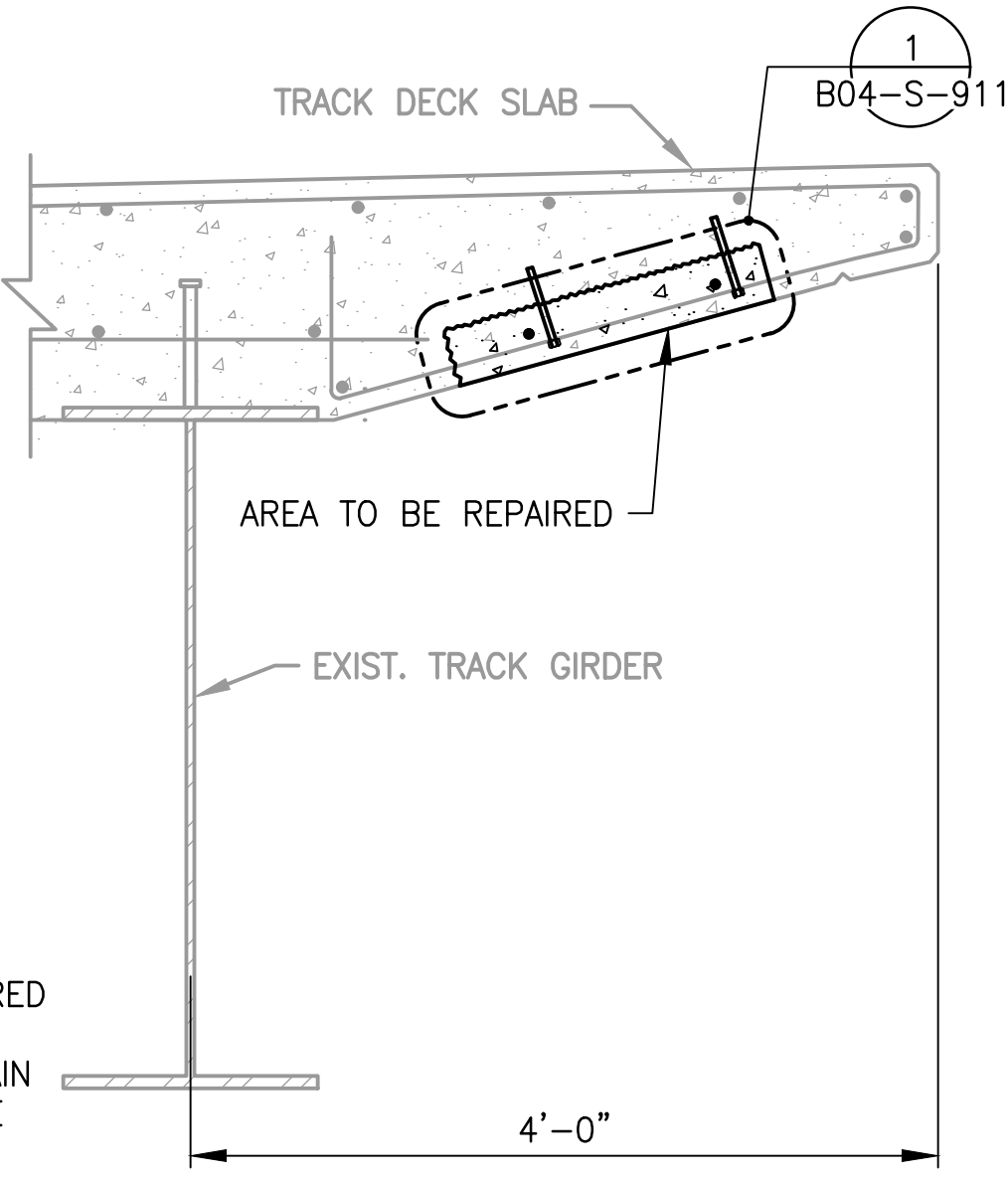
APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION		B04 - RHODE ISLAND AVENUE STATION NEW FRP CEILING PANEL PARTIAL PLAN	
M NO. F1302	CONTRACT NO. F18086	SCALE AS NOTED	DRAWING NO. B04-S-910
		SHEET NO. 15 OF 28	

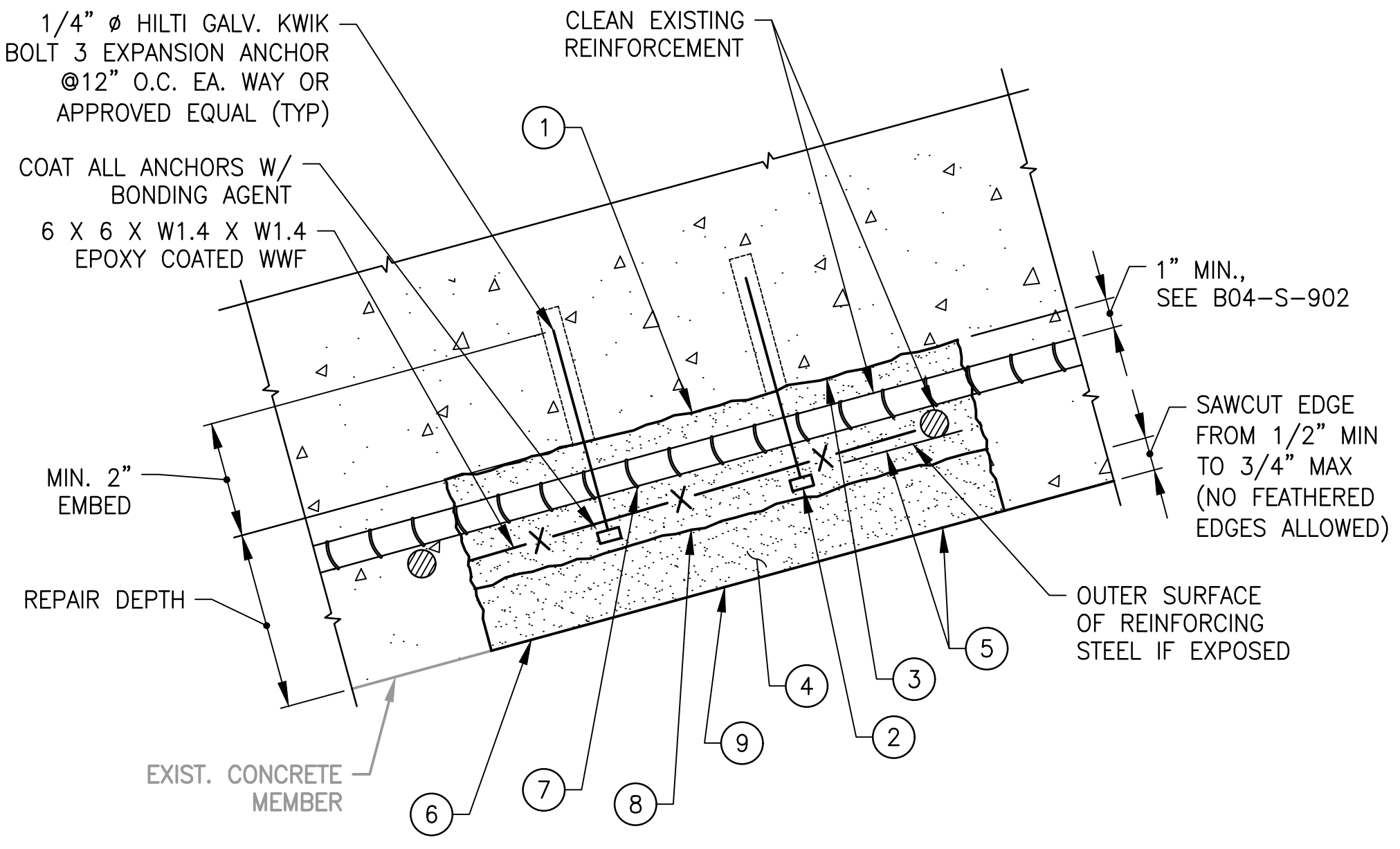


- NOTES:**
1. ALL EXPOSED EDGE SHALL BE CHAMFERED 3/4" X 3/4"
 2. FOR EXISTING REBAR CLEANING, AND EXISTING CONCRETE EDGE CONDITIONING, REFER TO DRAWING B04-S-901.
 3. ALL REPAIRED AREAS SHALL BE CURED BY USING PLASTIC SHEETING TAPED ALL AROUND. SHEETING SHALL REMAIN IN PLACE FOR A MINIMUM OF THREE DAYS.

A TYPE A DECK EDGE REPAIR
B04-S-911 SCALE: 1" = 1'-0"

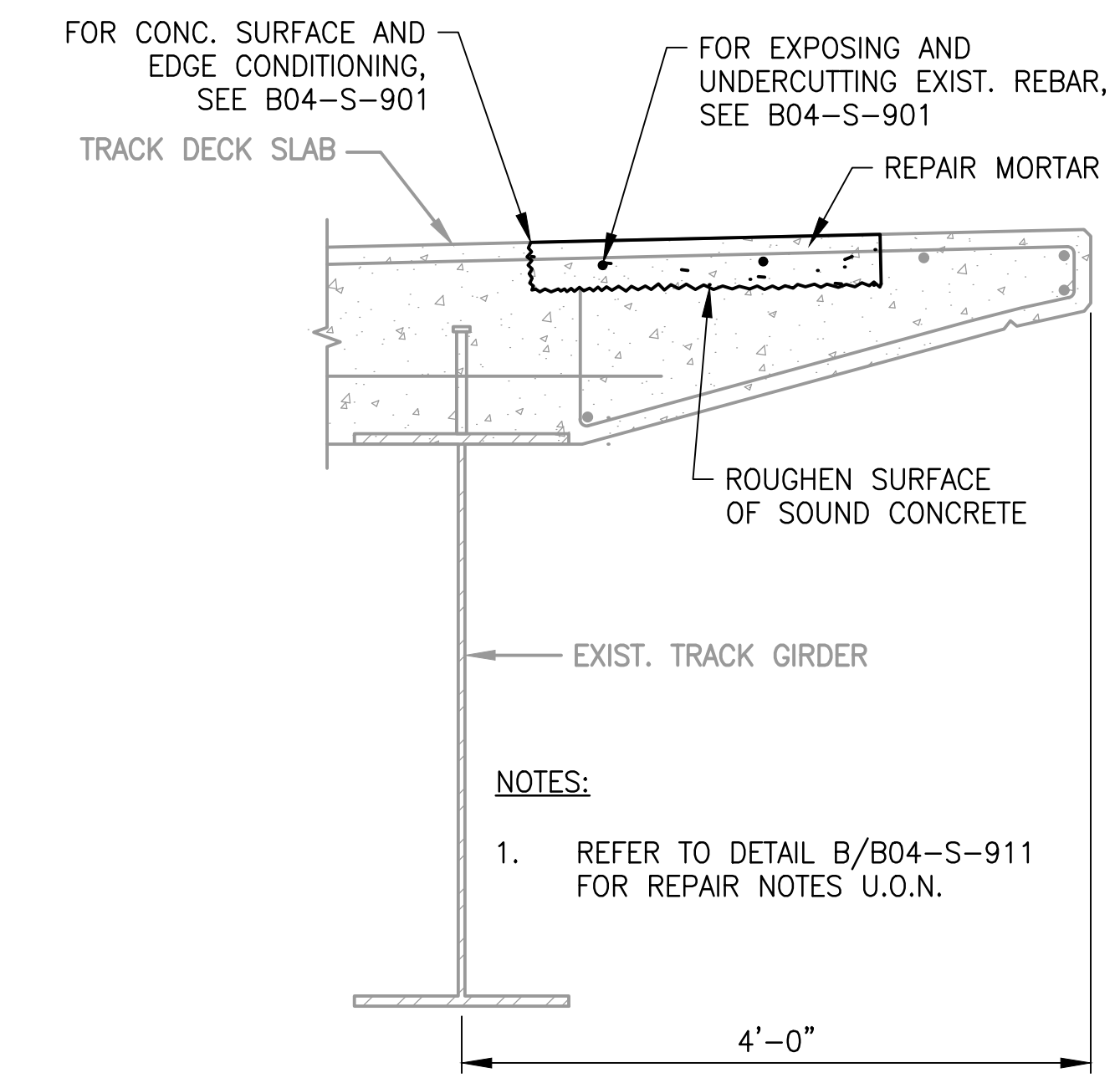


B TYPE B OVERHEAD SPALL REPAIR
B04-S-911 SCALE: 1" = 1'-0"



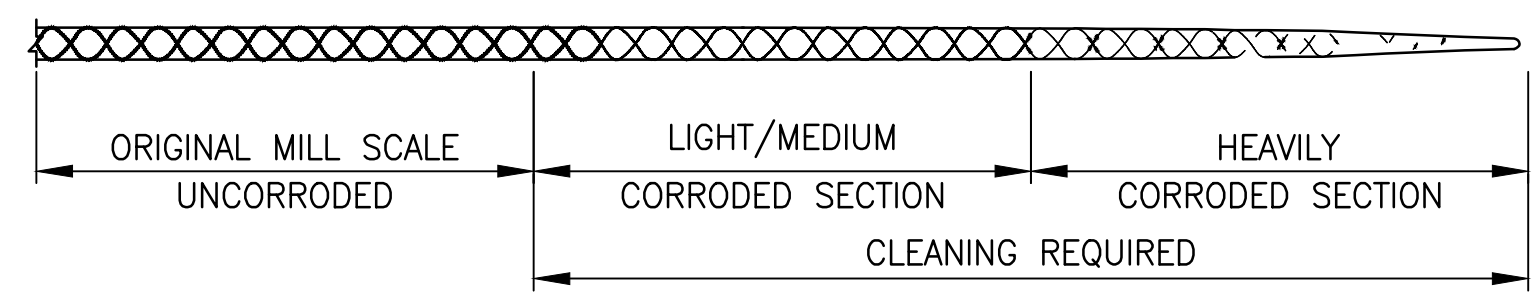
1 BLOW-UP DETAIL
B04-S-911 NOT TO SCALE

- NOTES:**
1. SQUARE UP AND ROUGHEN SURFACE. REFER TO DRAWING B04-S-901.
 2. INSTALL EXPANSION ANCHOR.
 3. APPLY BONDING AGENT.
 4. REPAIR MORTAR SHALL BE A TWO COMPONENT POLYMER-MODIFIED EMENTIOUS TROWEL-GRADE MORTAR. EXTEND MORTAR WHEN REPAIR THICKNESS OF LIFT IS GREATER THAN 3/4" PER MANUFACTURER REQUIREMENTS.
 5. CONCRETE COVER OF REINFORCEMENT SHALL NOT BE LESS THAN 1 INCH.
 6. USE POTABLE WATER FOR CURING REPAIR WORK.
 7. CLEAN ALL CORROSION OFF REINFORCING, SPLICE IN NEW REBAR AS MAY BE REQUIRED. APPLY BONDING AGENT WITH AN ANTI-CORROSION INHIBITING PROTECTION SYSTEM. REFER TO DRAWING B04-S-901.
 8. WHEN REPAIR MORTAR IS PLACED IN MULTIPLE LIFTS, CONTRACTOR SHALL SCORE SURFACE OF MORTAR FOR ADDITIONAL LIFTS AND APPLY A BONDING AGENT BEFORE APPLYING NEW LIFT, UNLESS OTHERWISE REQUIRED BY MANUFACTURER'S REPAIR MATERIALS.
 9. ALL REPAIRED AREAS SHALL BE CURED BY USING PLASTIC SHEETING TAPED ALL AROUND. SHEETING SHALL REMAIN IN PLACE FOR A MINIMUM OF THREE DAYS.
- * IF THE DEPTH OF OVERHEAD AND TOP SURFACE SPALL REPAIR ≤ 1 1/4" WITH NO REBAR EXPOSED, FOLLOW SIMILAR PROCEDURE STATED ABOVE ONLY OMIT STEP 7.

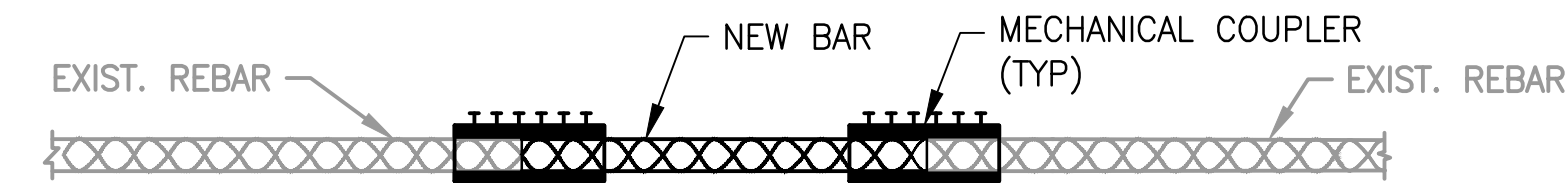


- NOTES:**
1. REFER TO DETAIL B/B04-S-911 FOR REPAIR NOTES U.O.N.

C TYPE D TOP SURFACE SPALL REPAIR
B04-S-911 SCALE: 1" = 1'-0"



CLEANING OF REINFORCING STEEL DETAIL



REBAR CONNECTION

- NOTES:**
1. EXCESSIVE LOSS OF SECTION IS DEFINED AS: AFTER CLEANING, REBAR HAS LOST 15% OR MORE OF ANY DIAMETER AT A CROSS SECTION, EG. FOR #5 REBAR SHOWN IN DRAWINGS, AFTER CLEANING, A DIAMETER MEASURED BY MICROMETER CALIPER EQUAL TO OR LESS THAN 0.53 INCH.
 2. USE NEW BAR EQUAL TO BAR TO BE REPAIRED.

2 TYPICAL REPAIR OF REBAR
B04-S-911 NOT TO SCALE

- DRAWING NOTES:**
1. REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
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LICENSE No. 907331
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- DC REGISTER SECTION 1516

DESIGNED		DATE		REVISIONS		DATE		DESCRIPTION		APPROVED		DATE		M NO.		CONTRACT NO.		SCALE		DRAWING NO.		SHEET NO.	
S. FERGUSON	02/09/2018	02/09/2018	0	FINAL CONTRACT DRAWINGS	OHN PURDY	02/09/2018	DAVID BURROWS	02/09/2018	M 1302	F 18086	AS NOTED	B04-S-911	16	28									

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

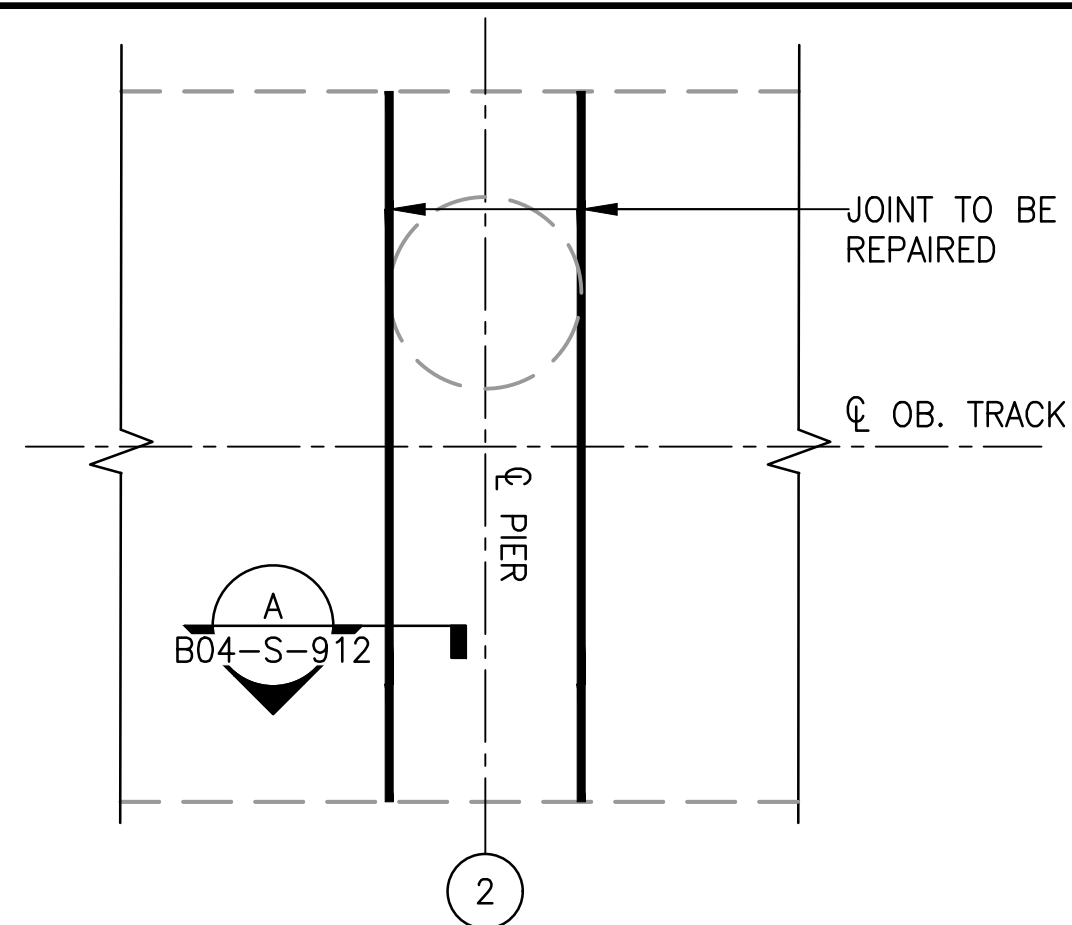
OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: OHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

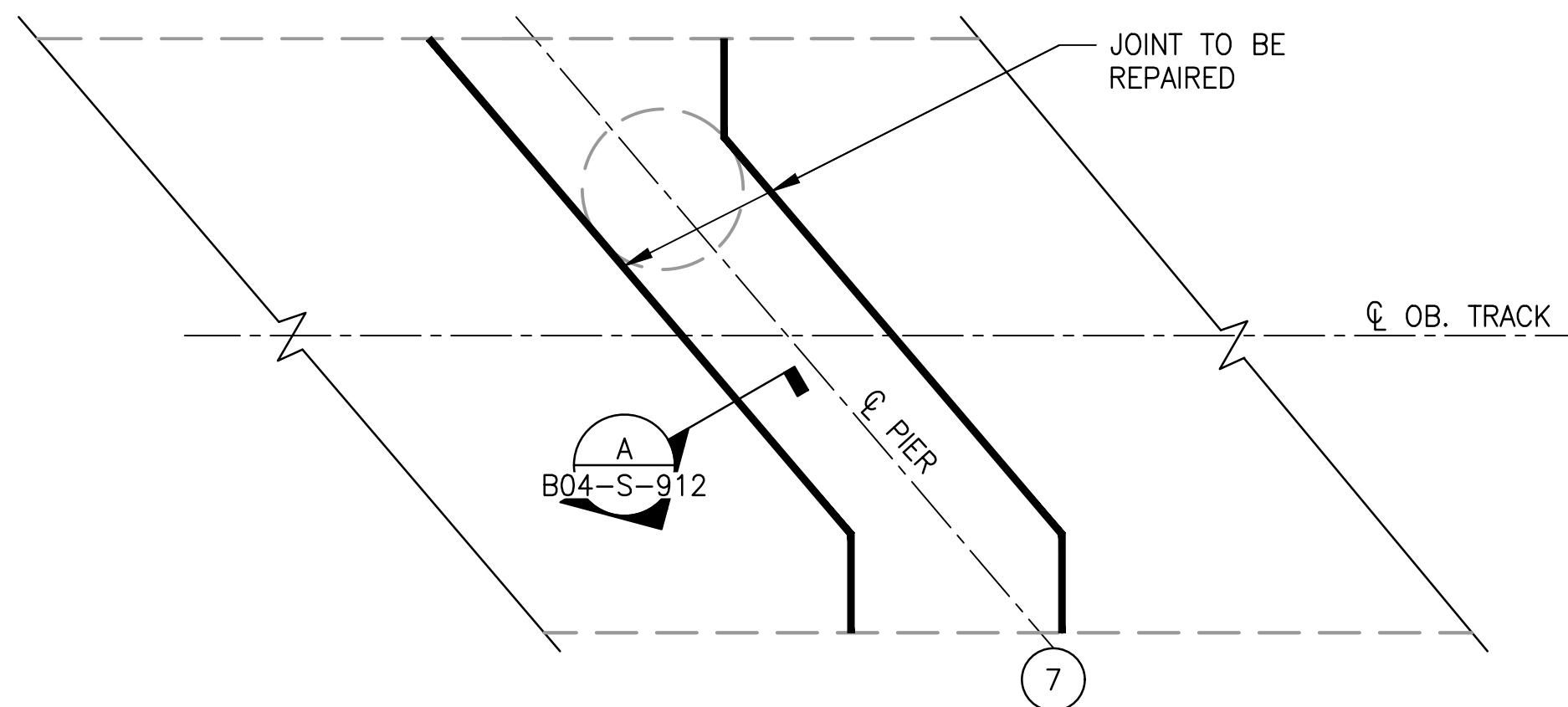
TRACK DECK SLAB AND CEILING PANEL REHABILITATION

B04 - RHODE ISLAND AVENUE STATION
TYPICAL TRACK GIRDER REPAIR DETAILS

M NO. 1302, CONTRACT NO. F 18086, SCALE AS NOTED, DRAWING NO. B04-S-911, SHEET NO. 16 OF 28



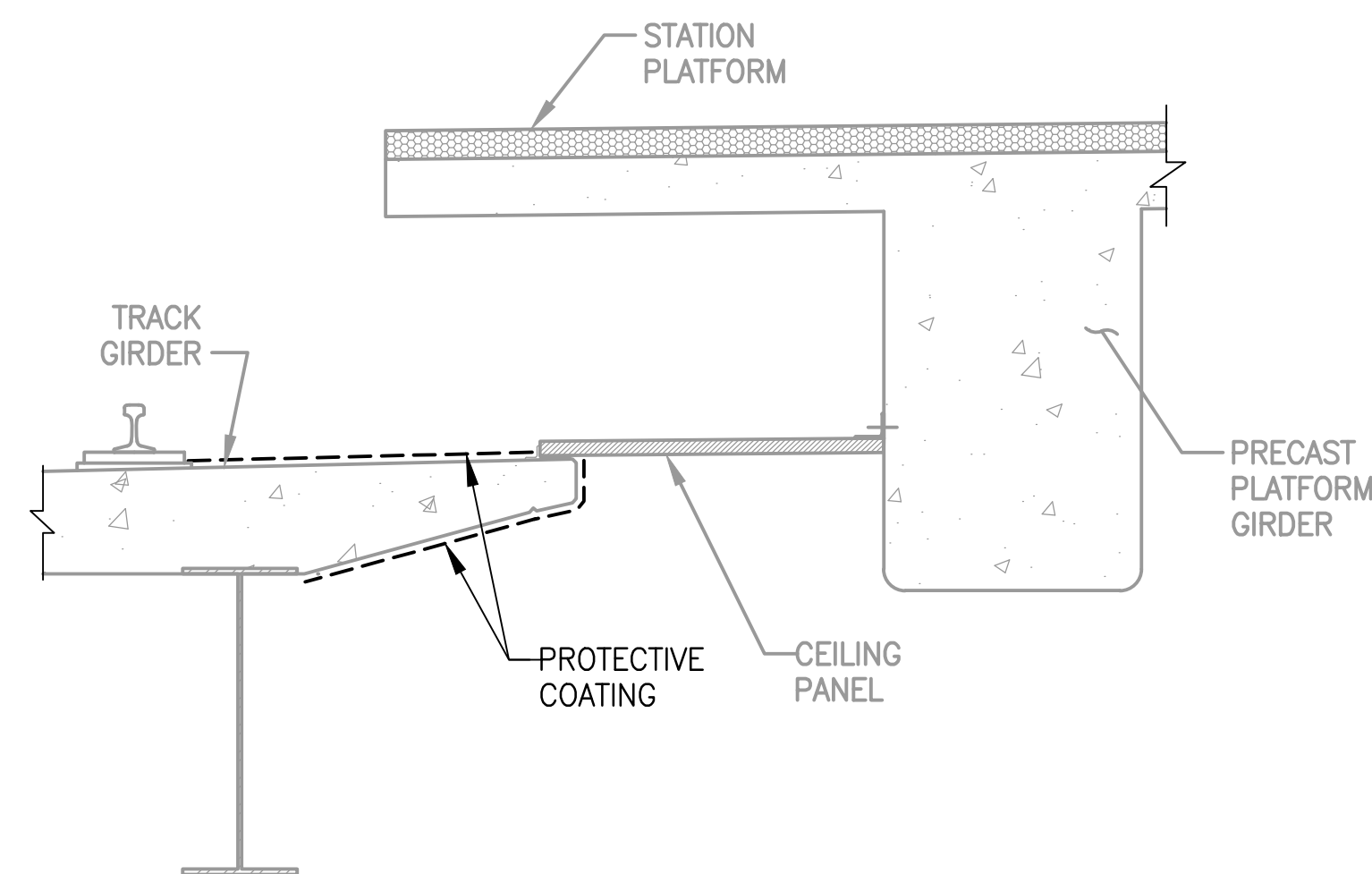
1 TYPICAL TYPE G - TRACK GIRDER JOINT PARTIAL PLAN
B04-S-912 SCALE: 1/4" = 1'-0"



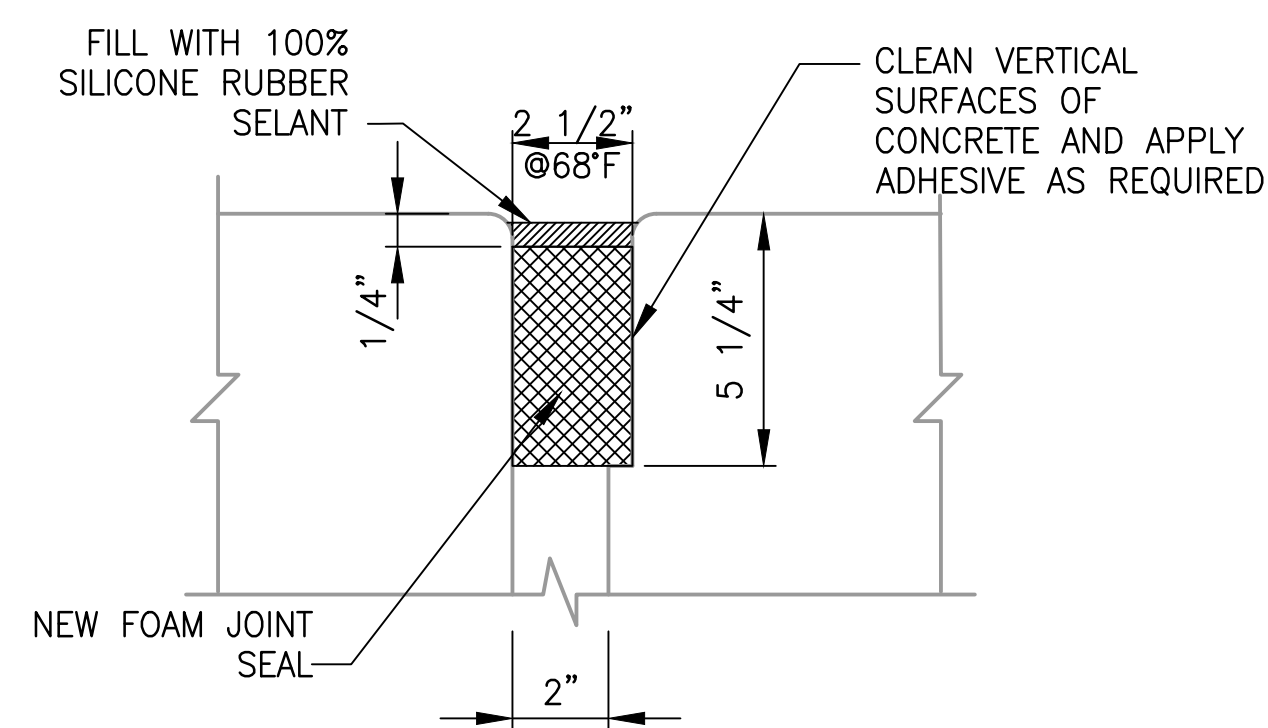
2 TYPICAL TYPE G - TRACK GIRDER JOINT PARTIAL PLAN
B04-S-912 SCALE: 1/4" = 1'-0"

JOINT SEAL INSTALLATION NOTES:

- DIMENSIONS OF DECK SLAB JOINT SEAL SHALL BE FIELD MEASURED PRIOR TO ANY FABRICATION OR CONSTRUCTION.
- THE WORK TO BE COMPLETED INCLUDES THE COMPLETE REMOVAL OF EXISTING JOINT SEALS AS SHOWN AND INSTALLATION OF NEW FOAM JOINT SEALS.
- REPLACEMENT OF THE JOINTS SHALL BE DONE AT THE DIRECTION OF THE A.R.
- ALL ELECTRICAL CIRCUITS ON THE STRUCTURE SHALL BE DE-ENERGIZED DURING REPLACEMENT OF THE JOINT SEALS.
- THE EXISTING JOINT MATERIALS SHALL BE COMPLETELY REMOVED FOR THE ENTIRE LENGTH OF THE JOINT. ALL JOINT ADHESIVE AND DEBRIS SHALL BE CLEANED FROM THE VERTICAL CONCRETE JOINT FACE. MEANS AND METHODS OF CLEANING THE JOINT SHALL BE SUBMITTED TO A.R. FOR APPROVAL PRIOR TO ANY WORK TAKING PLACE. DAMAGES TO ANY EXISTING STRUCTURAL ELEMENTS OR TRACK EQUIPMENT ADJACENT TO THE JOINT ARE TO BE REPAIRED IMMEDIATELY AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL MAKE ALL NECESSARY CONCRETE REPAIRS AND PREPARATION WORK REQUIRED PER JOINT MANUFACTURE'S RECOMMENDATION PRIOR TO DECK JOINT INSTALLATION.
- AN APPROPRIATE ADHESIVE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- INSTALL FOAM JOINT SEAL IN ACCORDANCE WITH THE DETAILS AND MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE JOINTS THAT ALLOW FOR ADEQUATE MOVEMENT BASED ON THE EXISTING STRUCTURE DRAWINGS AND THE MANUFACTURER'S RECOMMENDATIONS.
- DECK APPURTENANCES NOT SHOWN FOR CLARITY. CONTRACTOR SHALL VERIFY IN FIELD AND REPORT TO A.R. IF ANY CONDITION IS DIFFER THAN AS SHOWN ON DRAWING.
- AS-BUILT DRAWING B4-S-284 DECK SLAB JOINT SEAL DETAILS IS ATTACHED.



3 LOCATION OF PROTECTIVE COATING APPLICATION
B04-S-912 SCALE: 1/2" = 1'-0"



A REPLACEMENT JOINT SEAL DETAIL
B04-S-912 SCALE: 3" = 1'-0"

DRAWING NOTES:

- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
PROFESSIONAL ENGINEER

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LICENSE No. 907331
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED
JOHN PURDY
ENGINEERING MANAGER

02/09/2018
DATE

APPROVED
DAVID BURROWS
ENGINEER OF RECORD

02/09/2018
DATE

TRACK DECK SLAB AND CEILING PANEL REHABILITATION

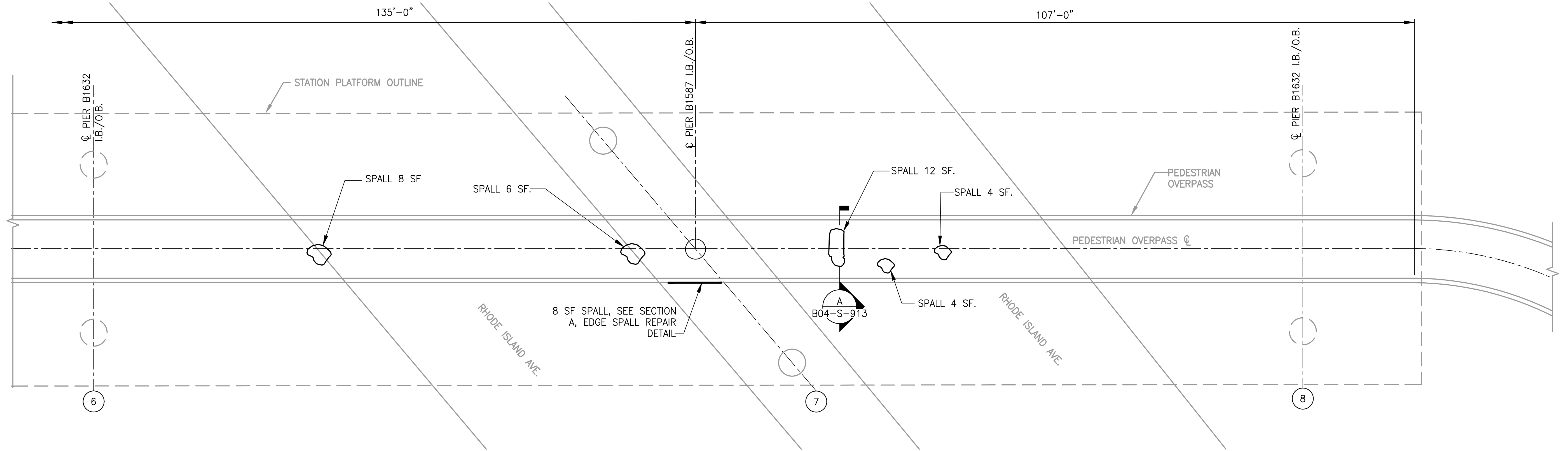
B04 - RHODE ISLAND AVENUE STATION
MISCELLANEOUS TRACK GIRDER REPAIR DETAILS

DESIGNED	S. FERGUSON	02/09/2018
		DATE
DRAWN	L. NGUYEN	02/09/2018
		DATE
CHECKED	I. AHMAD	02/09/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	NUM
		02/09/2018	0

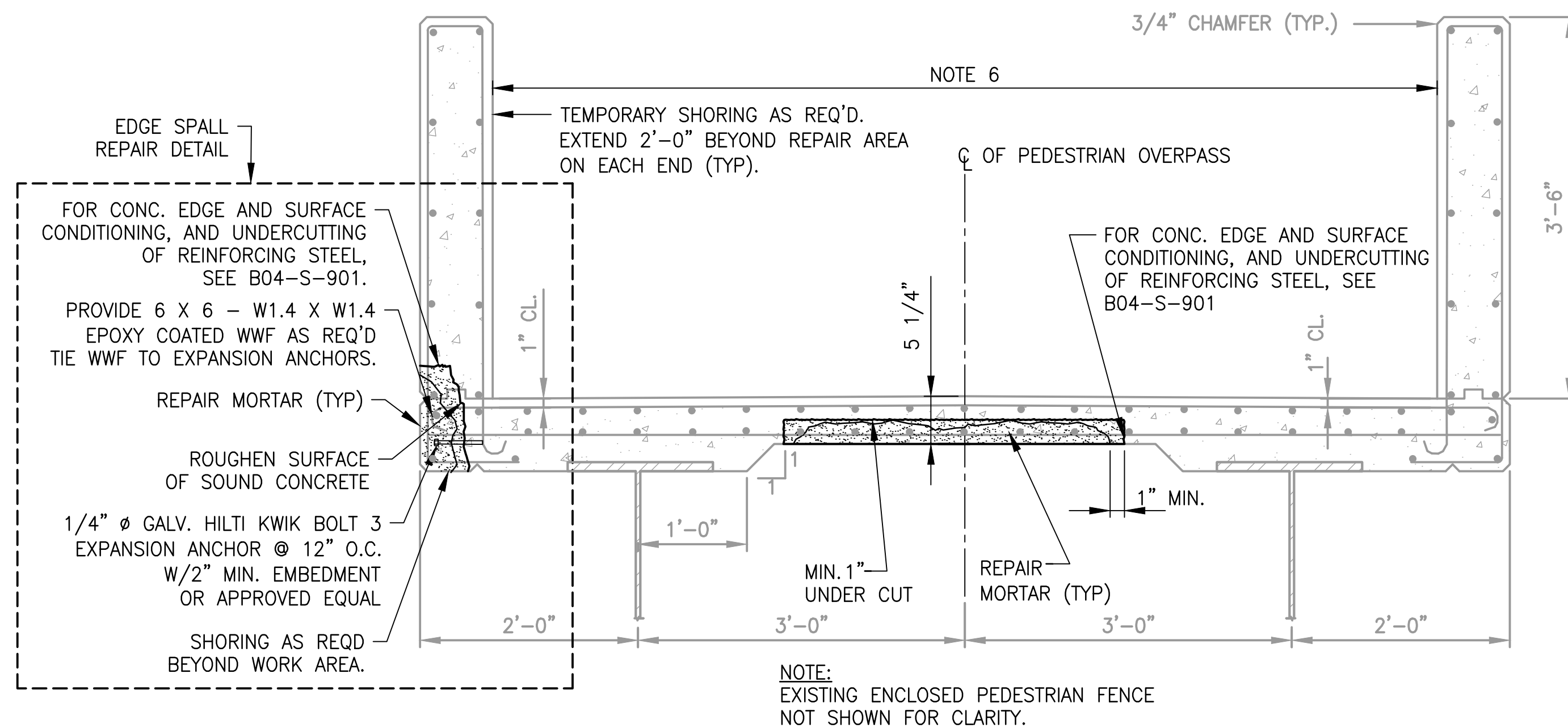


M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	AS NOTED	B04-S-912	17 of 28



1 TYPE H - PEDESTRIAN OVERPASS PARTIAL PLAN
B04-S-913

SCALE: 1/8" = 1'-0"

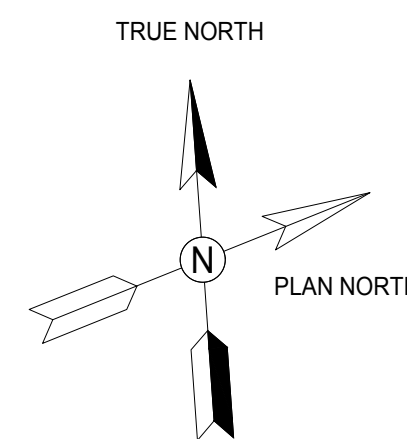
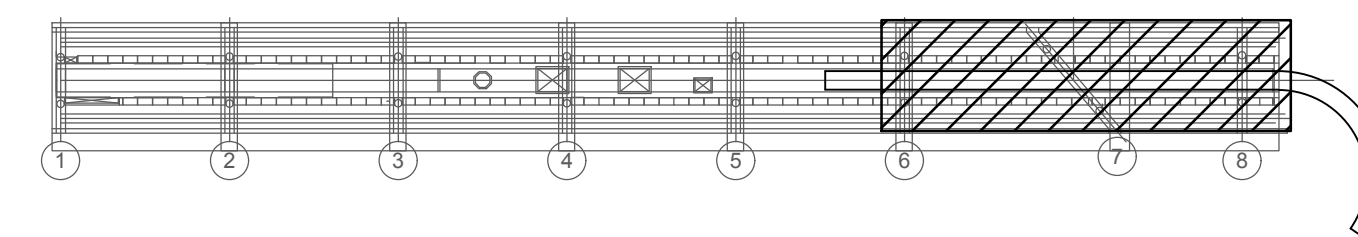


A TYPE H - PEDESTRIAN OVERPASS SECTIONS TYPICAL REPAIRS
B04-S-913

SCALE: 1" = 1'-0"

NOTES:

- REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES.
- DIMENSIONS OF DECK SLAB JOINT SHALL BE FIELD MEASURED PRIOR ANY FABRICATION OR CONSTRUCTION.
- PEDESTRIAN OVERPASS SHALL BE CLOSED DURING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY DETOUR SIGNS FOR PEDESTRIAN DURING CONSTRUCTION.
- ALL SPALLS SHOWN IN PARTIAL PLAN ARE AT UNDERSIDE OF BRIDGE DECK SLAB.
- NO PEDESTRIAN TRAFFIC ALLOWED ON THE DECK UNTIL THE REPAIR MATERIAL IS FULLY CURED.
- APPLY TWO COATS OF PROTECTIVE COATING AT THE REPAIRED AREA AFTER CURING, COST OF PEDESTRIAN OVERPASS COATING SHALL BE INCLUDED IN THE CONCRETE REPAIR COST.



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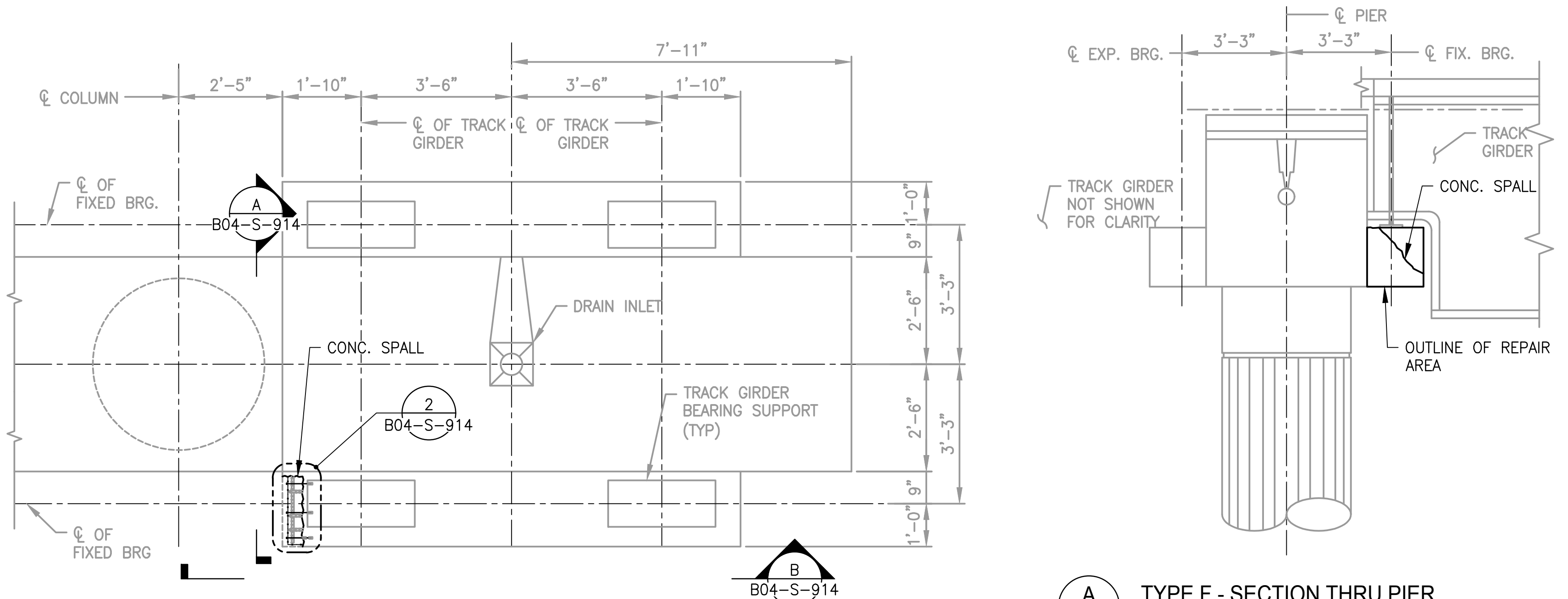
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			NUMBER	TITLE	DATE	NUM	DESCRIPTION
DRAWN	L. NGUYEN	02/09/2018			02/09/2018	0	FINAL CONTRACT DRAWINGS
CHECKED	I. AHMAD	02/09/2018					

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

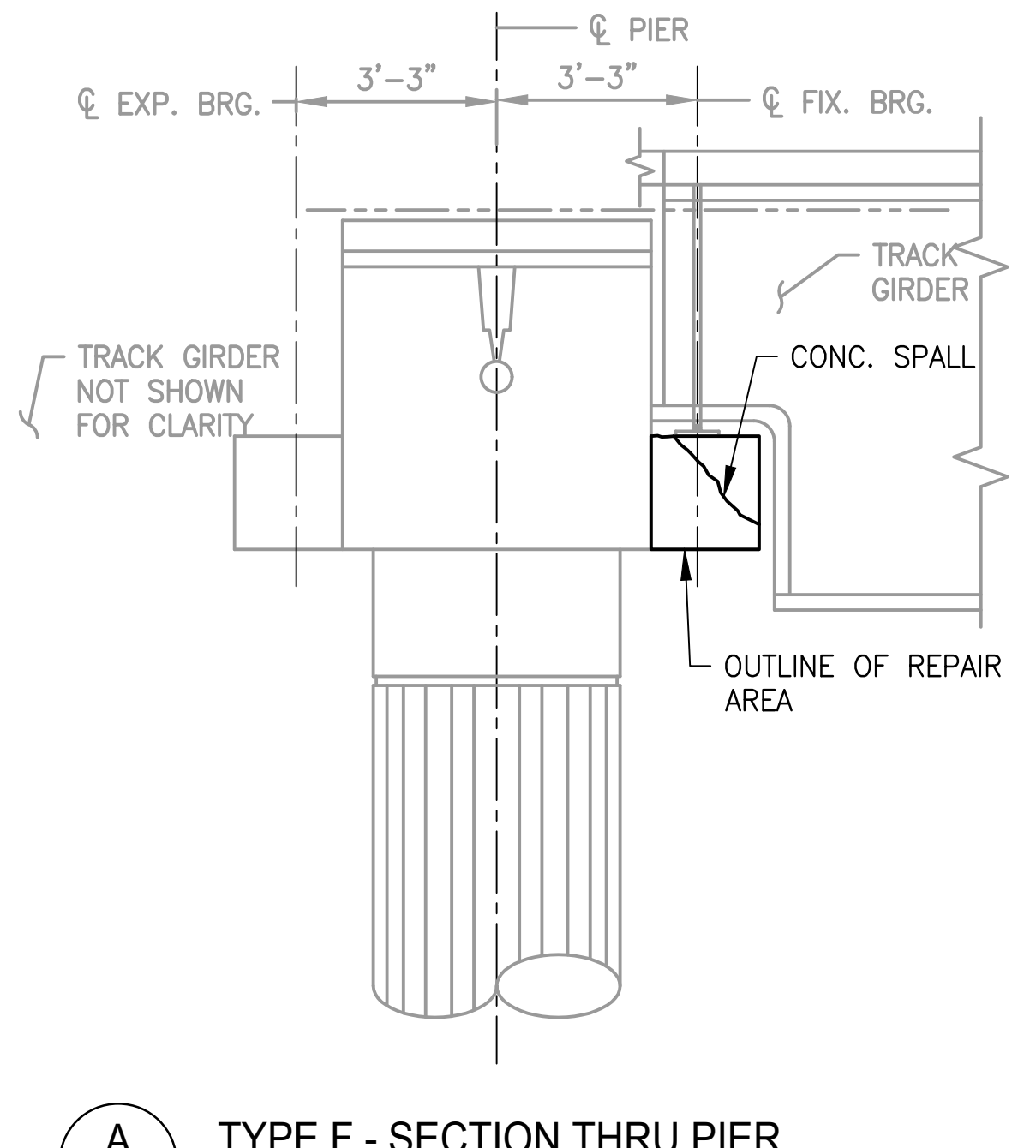
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APPROVED: OHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

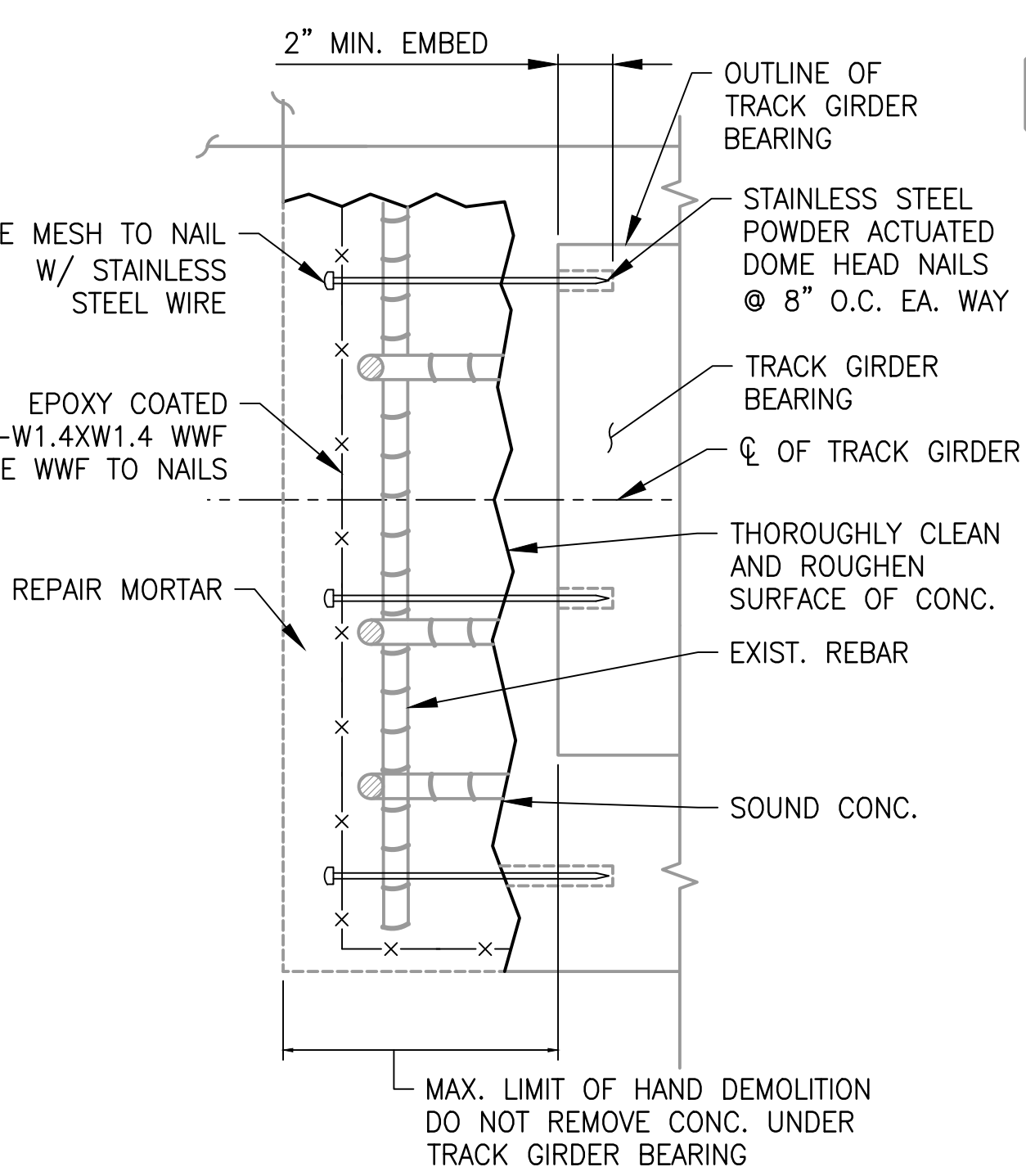
TRACK DECK SLAB AND CEILING PANEL REHABILITATION				
B04 - RHODE ISLAND AVENUE STATION PEDESTRIAN OVERPASS REPAIR DETAILS				
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	AS NOTED	B04-S-913	18 of 28



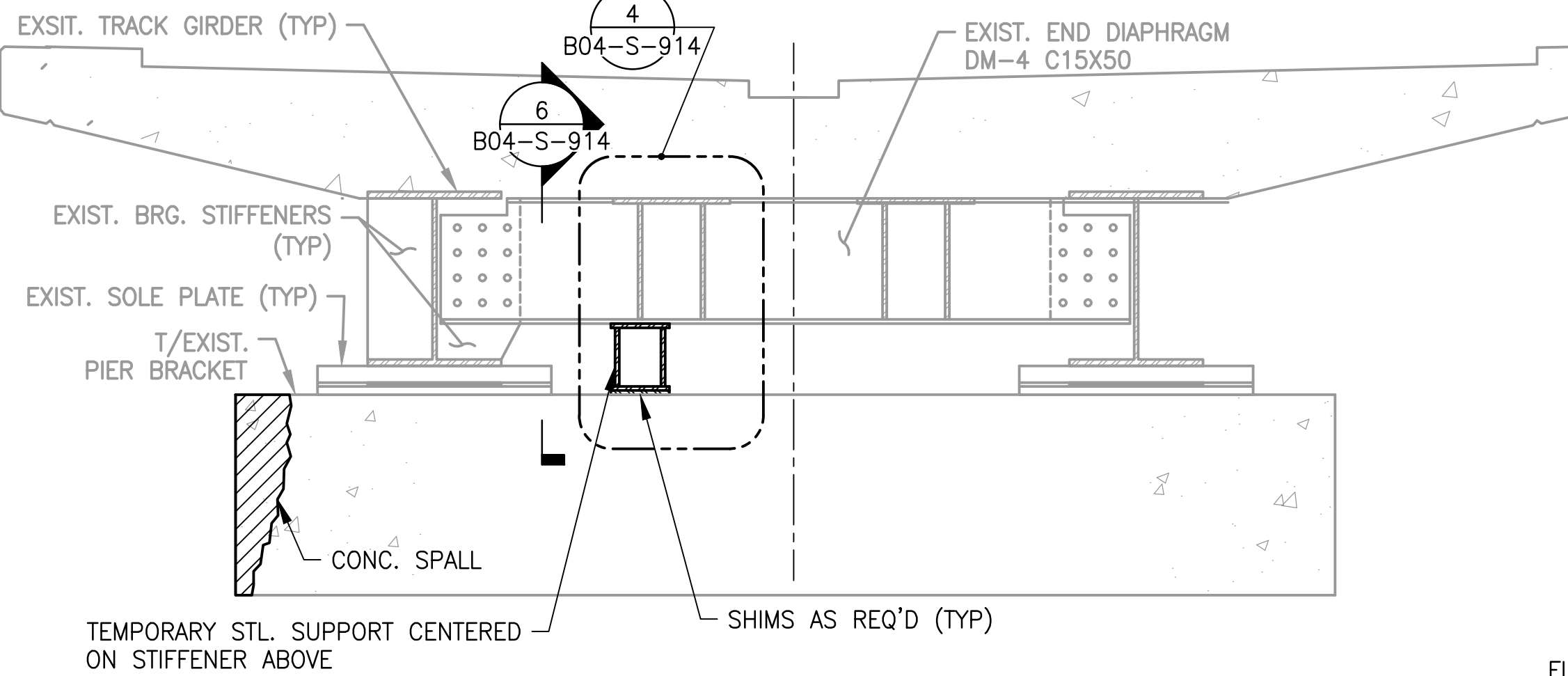
1 TYPE F - PIER CAP PART PLAN
B04-S-914



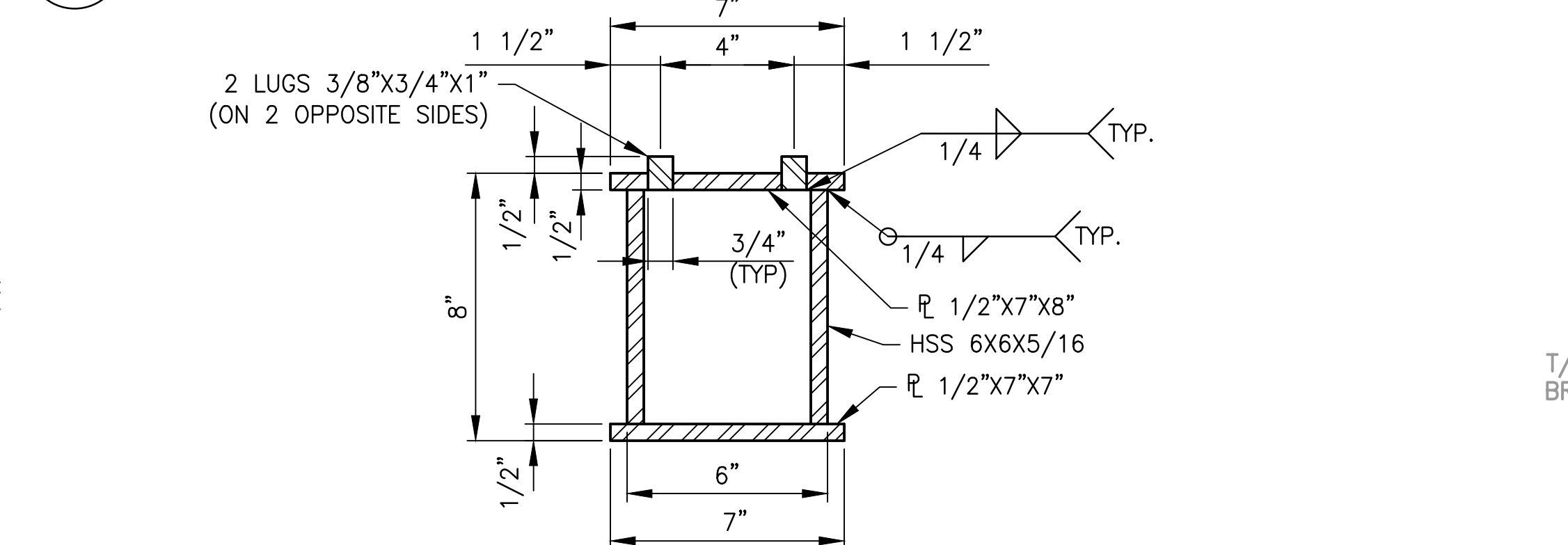
A TYPE F - SECTION THRU PIER
B04-S-914



2 TYPE F - BLOW UP DETAIL
B04-S-914



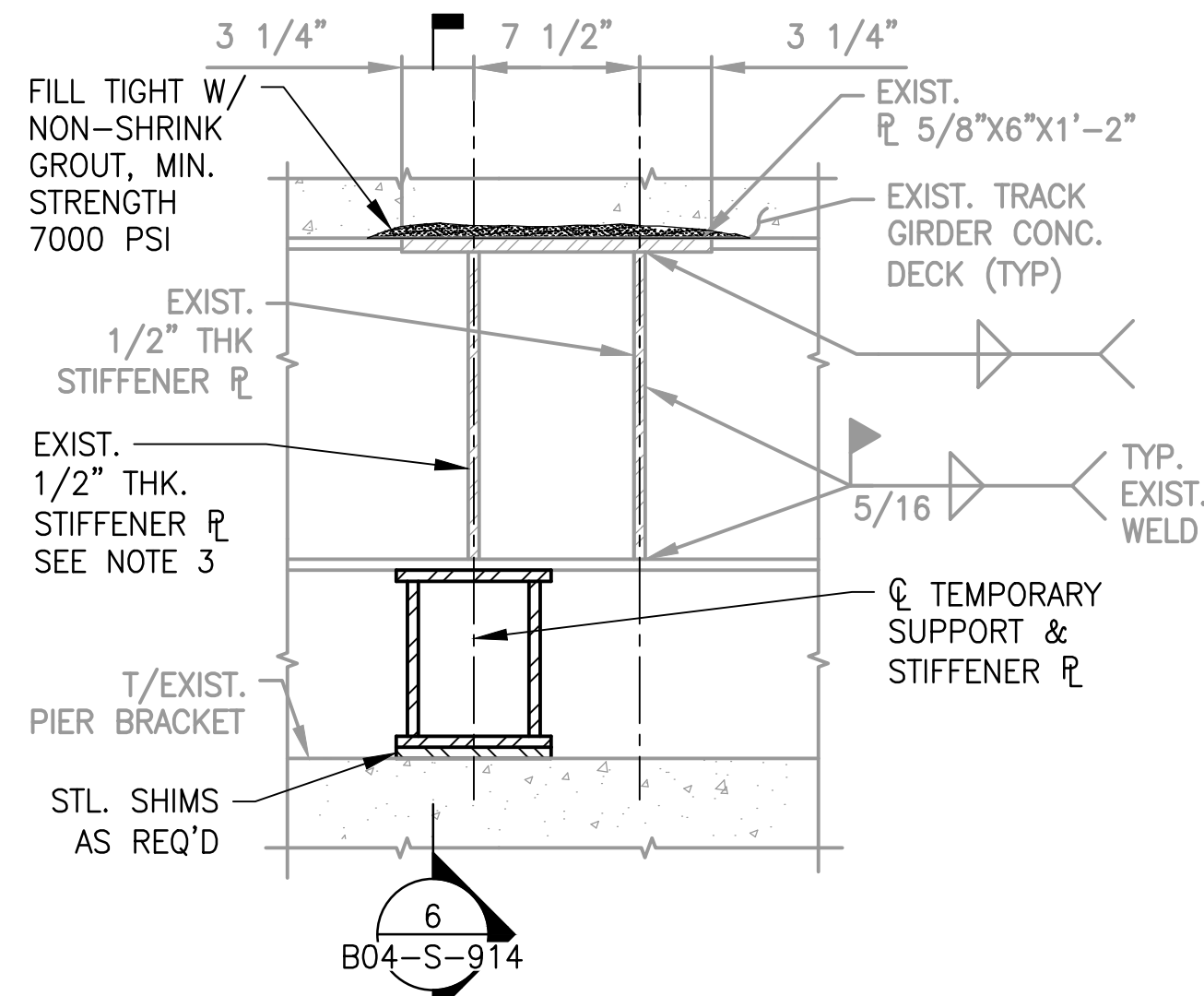
B TYPE F - SECTION
B04-S-914



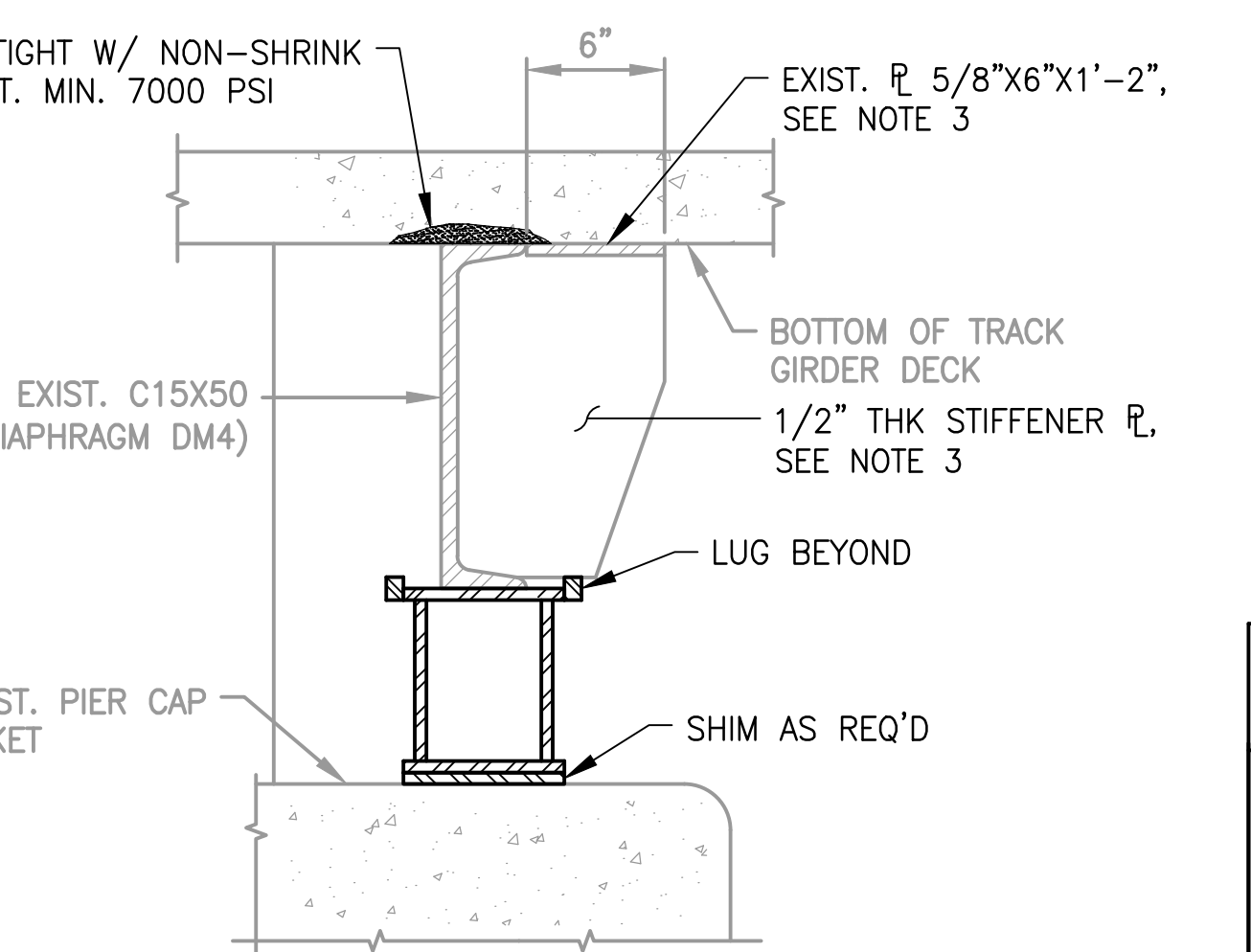
5 TEMPORARY SUPPORT DETAIL
B04-S-914



3 TYPICAL PIER CAP SPALL AT BEAM BEARING
B04-S-914



4 DETAIL
B04-S-914



6 SECTION
B04-S-914

- SUGGESTED REPAIR PROCEDURE
1. INSTALL TEMPORARY SUPPORT AS SHOWN IN DET. B/B04-S-914 TOWARDS THE SIDE WHERE SPALL REPAIR TO BE PERFORMED. LAYOUT AREA TO BE REPAIRED.
 2. SAWCUT 1/2" DEEP AROUND SPALL/DELAMINATED AREA.
 3. CHIP OUT AND REMOVE DELAMINATED CONCRETE TO THE LINE OF SAWCUT. AT ALL INSTANCES, DO NOT REMOVE ANY CONCRETE AT TRACK GIRDER SUPPORT BEARING.
 4. SANDBLAST CLEAN EXISTING CONCRETE AND REBAR TO REMOVE RUST, OXIDES AND SCALE.
 5. AT THE TIME OF PATCHING MATERIAL, SATURATE EXISTING CONCRETE SUBSTRATE WITH BONDING AGENT. PATCHING MORTAR SHALL BE APPLIED IMMEDIATELY FOLLOWING THE BONDING AGENT.
 6. REPAIRED AREAS SHALL BE CURED USING PLASTIC SHEETING TAPED ALL AROUND. SHEETING SHALL REMAIN IN PLACE FOR A MINIMUM OF THREE DAYS.
 7. REMOVE TEMPORARY SUPPORT UPON COMPLETION OF THE REPAIR WORK.
 8. THE CONTRACTOR SHALL SUBMIT REPAIR SEQUENCE, PROCEDURES AND MATERIALS TO THE A.R. FOR REVIEW AND APPROVAL PRIOR TO STARTING THE REPAIR WORK.

- DRAWING NOTES:
1. REFER TO DRAWINGS B04-G-002, B04-S-900, B04-S-901 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION. FOR REPAIR LOCATIONS, SEE PLAN.
 2. MATERIALS:
ALL PLATES: ASTM A36
HSS SECTION: A500 GR. B, Fy=46 KSI
 3. CONTRACTOR SHALL FIELD VERIFY THE PRESENCE OF EXISTING STIFFENER ASSEMBLY TO RECEIVE THE TEMPORARY SUPPORT UNDERNEATH AS SHOWN. IF NOT FOUND, INSTALL NEW STIFFENER ASSEMBLY TO PERFORM THE REPAIR WORK AT BEAM BEARINGS.

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
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DESIGNED	S. FERGUSON	02/09/2018
DATE		
DRAWN	L. NGUYEN	02/09/2018
DATE		
CHECKED	I. AHMAD	02/09/2018
DATE		

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

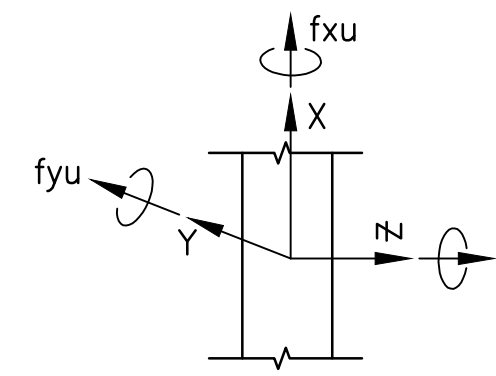
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018
APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018

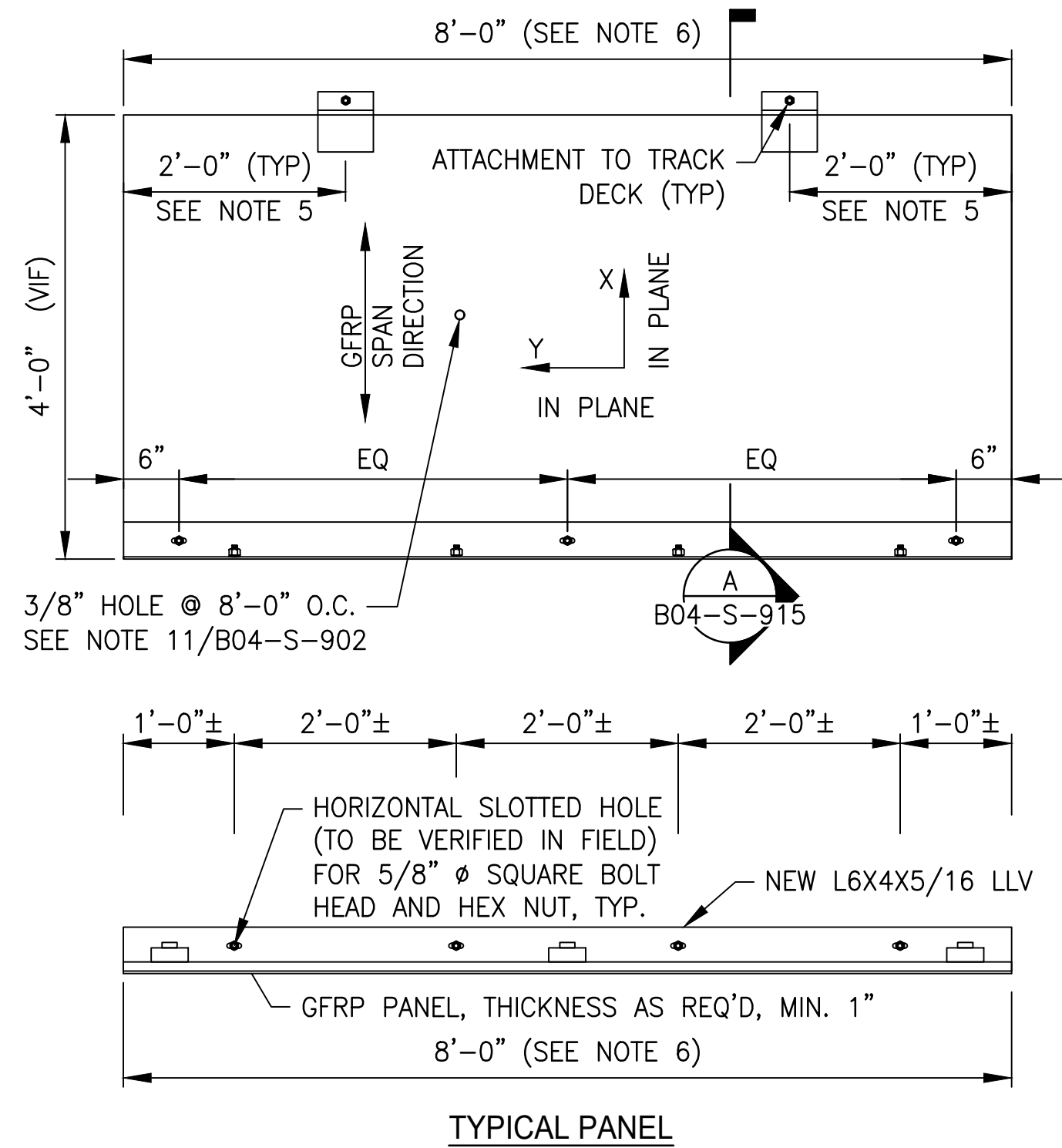
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	AS NOTED	B04-S-914	19 OF 28



NOTES:

FIRE RETARDANT PULTRUDED FIBER REINFORCED PLASTIC (FRP) CELLULAR STRUCTURAL PANELS BY STRONGWELL® OR APPROVED EQUAL TENSILE STRENGTH
 $f_{ux} = 31$ KSI

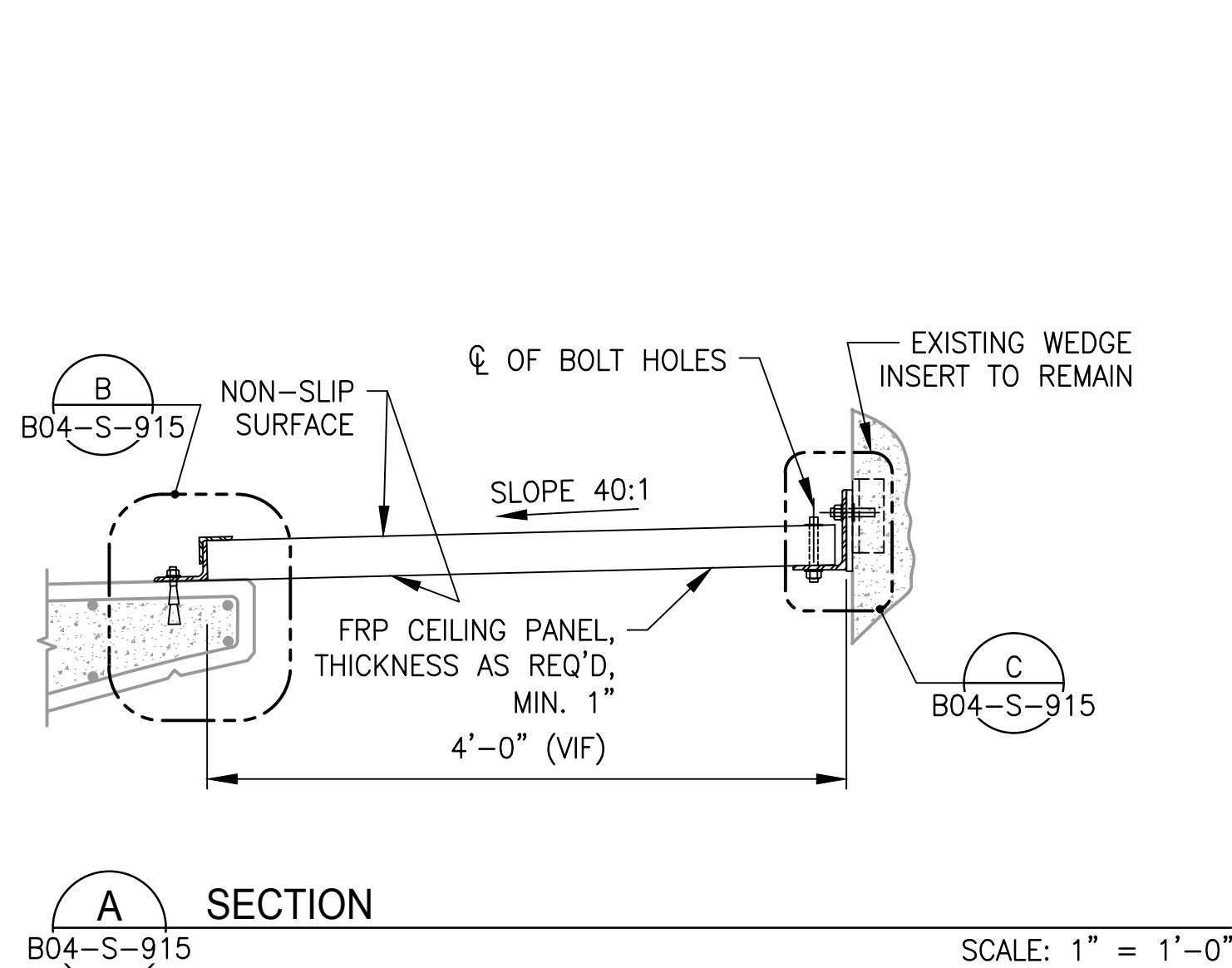
FLEXURAL STRENGTH
 ULTIMATE $f_{yu} = 24.5$ KSI
 ULTIMATE $f_{xu} = 8.2$ KSI
 MAX UNIFORM SERVICE LIVE LOAD = 100 PSF
 MAX SERVICE CONCENTRATED LOAD = 400 LB
 COLOR - SLATE GRAY
 MAX SERVICE DEFLECTION UNDER LIVE LOAD = $L/180$ WHERE L IS THE SPAN LENGTH



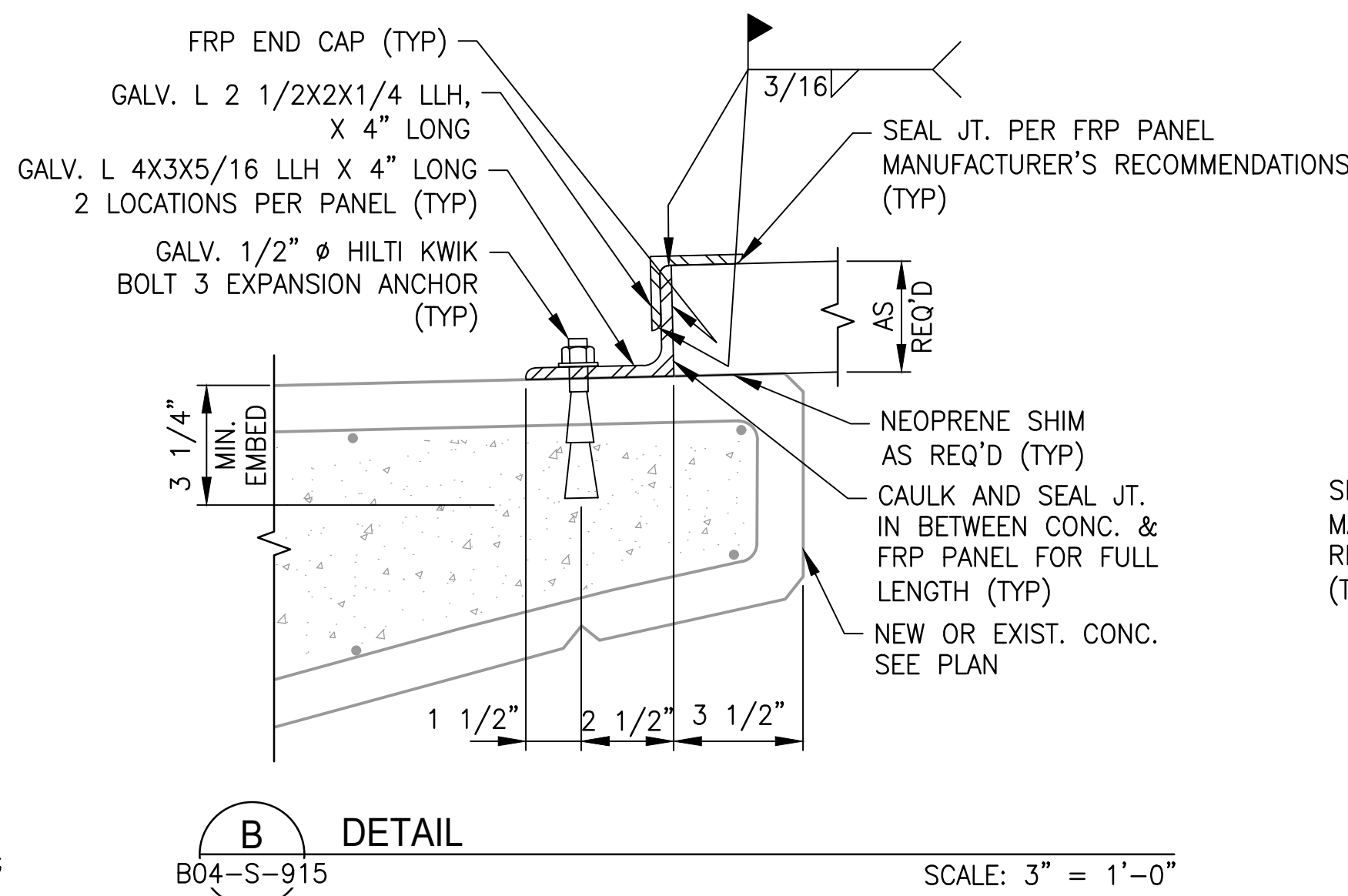
- DRAWING NOTES:**
- REFER TO DRAWINGS B04-G-002, B04-S-900 AND B04-S-902 FOR GENERAL NOTES AND ADDITIONAL INFORMATION.
 - DIMENSIONS OF CEILING PANEL SHALL BE FIELD MEASURED PRIOR TO ANY FABRICATION OR CONSTRUCTION.
 - LLV DENOTES LONG LEG VERTICAL. LLH DENOTES LONG LEG HORIZONTAL.
 - ALL MATERIAL SHALL BE HOT DIP GALVANIZED, UNLESS OTHERWISE NOTED.
 - PRIOR TO CEILING PANEL FABRICATION, CONTRACTOR SHALL LOCATE ALL EMBEDDED ITEMS IN TRACK DECK SLAB BY GPR OR ANY OTHER EFFECTIVE AND NON-DESTRUCTIVE MEANS. ADJUST ATTACHMENT LOCATIONS AS REQUIRED TO AVOID REBAR CONFLICT. DO NOT DRILL THROUGH OR DAMAGE EXISTING REBARS.
 - CONTRACTOR TO TRIM FRP PANELS AND ADD END CAPS WHERE REQUIRED TO COMPLETE THE INSTALLATION WITHIN THE LIMIT SHOWN IN PLANS. CONTRACTOR TO SEEK APPROVAL FROM A.R. PRIOR TO PROCEEDING WITH ANY ADJUSTMENT OR TRIMMING OF FRP PANELS. MAINTAIN A MINIMUM TWO SUPPORT POINTS ALONG PLATFORM GIRDER FOR TRIMMED FRP PANELS. SEE FRP PANEL MANUFACTURER'S RECOMMENDATION FOR ADDITIONAL INFORMATION.

1 TYPE E - TYPICAL NEW FRP CEILING PANEL
 B04-S-915

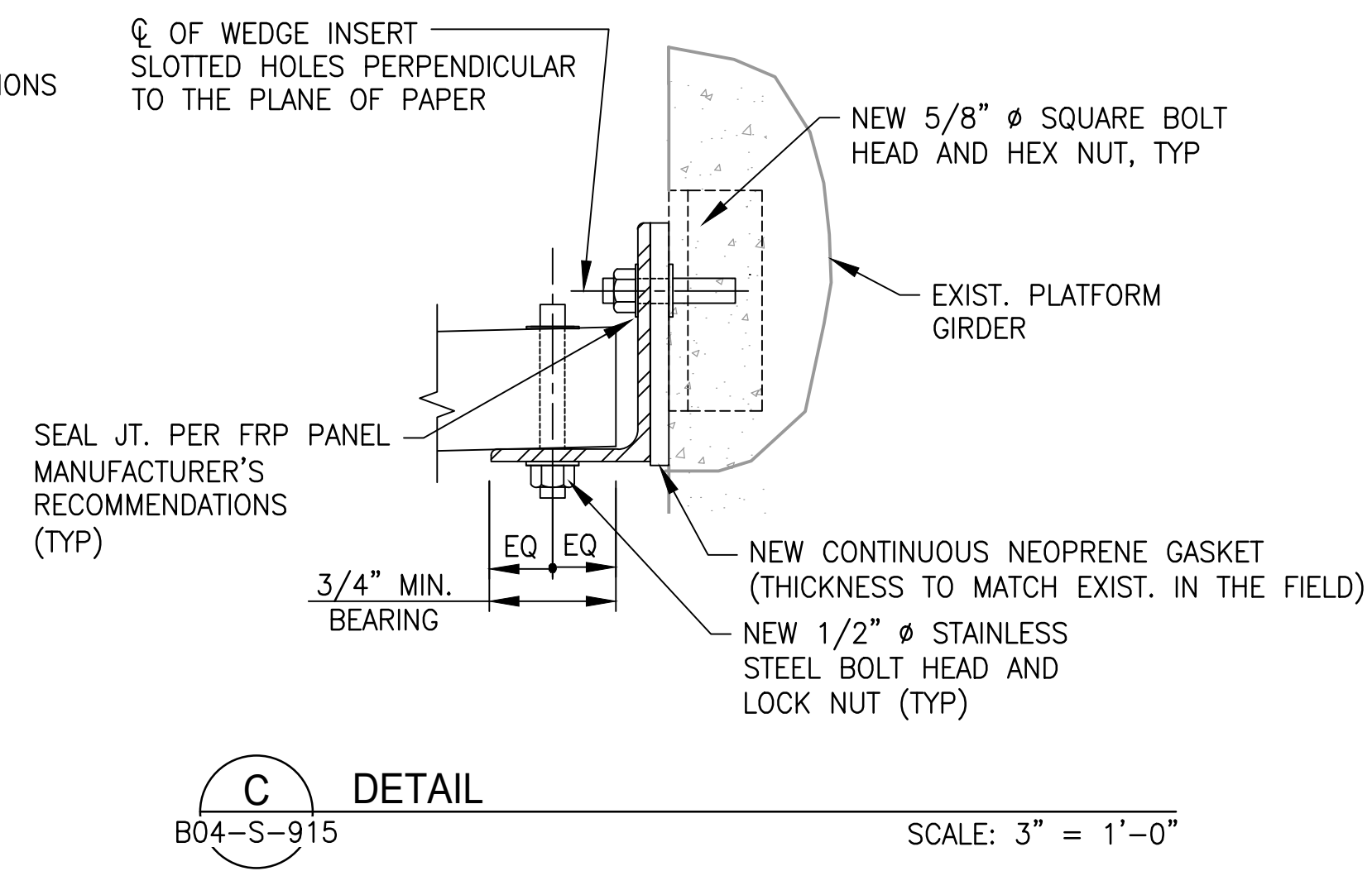
SCALE: 3/4" = 1'-0"



A SECTION
 B04-S-915 SCALE: 1" = 1'-0"



B DETAIL
 B04-S-915 SCALE: 3" = 1'-0"



C DETAIL
 B04-S-915 SCALE: 3" = 1'-0"

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 DAVID A. BURROWS
 No. 907331
 2/9/18
 LICENSED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."
 LICENSE No. 907331
 EXPIRATION DATE: 08/31/18
 - DC REGISTER SECTION 1516

DESIGNED	S. FERGUSON	02/09/2018	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	TITLE	DATE	NUM	DESCRIPTION
DRAWN	L. NGUYEN	02/09/2018			02/09/2018	0	FINAL CONTRACT DRAWINGS
CHECKED	I. AHMAD	02/09/2018					

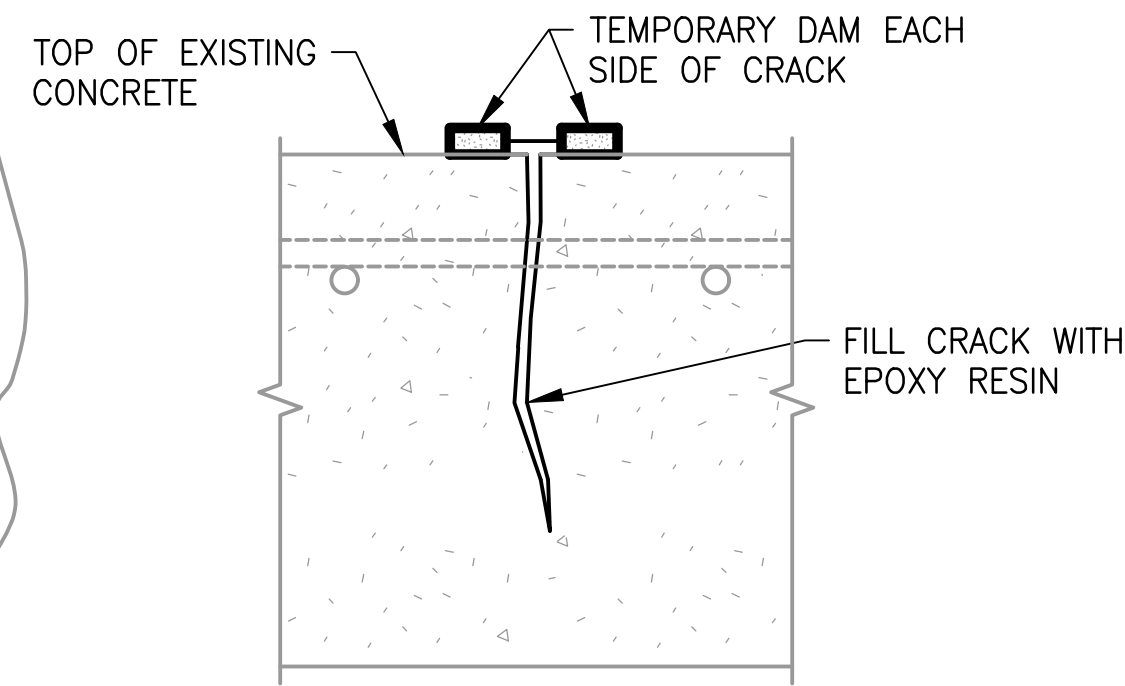
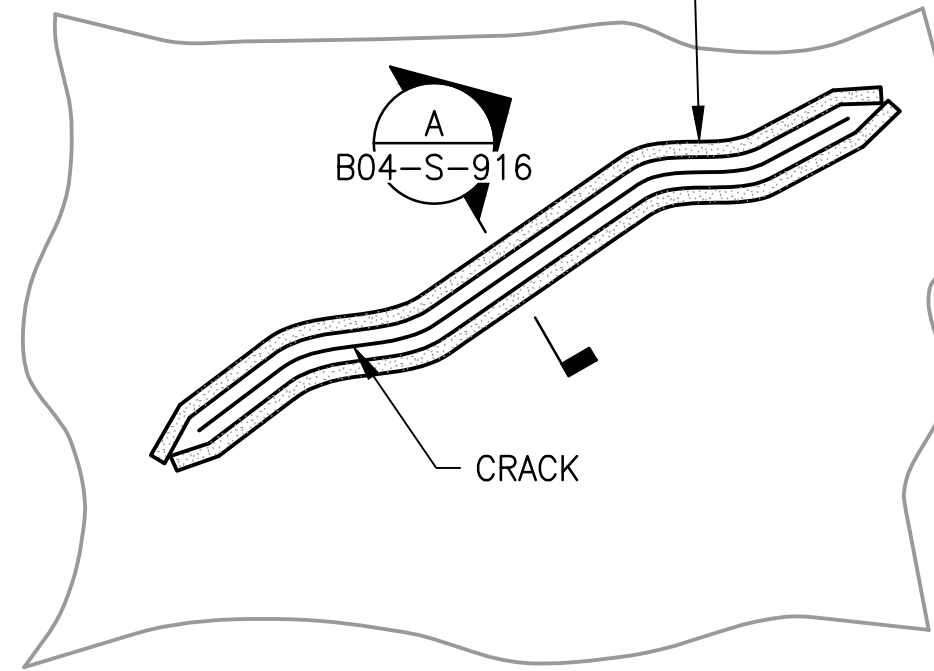
M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
 IRPG - FIXED FACILITIES

APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
 APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION		B04 - RHODE ISLAND AVENUE STATION		FRP CEILING PANEL - PLANS AND DETAILS	
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.	
M 1302	F 18086	AS NOTED	B04-S-915	20 of 28	

PROVIDE TEMPORARY DAM EACH SIDE OF CRACK TO CONTROL FLOW OF GRAVITY FED EPOXY RESIN INTO CRACK



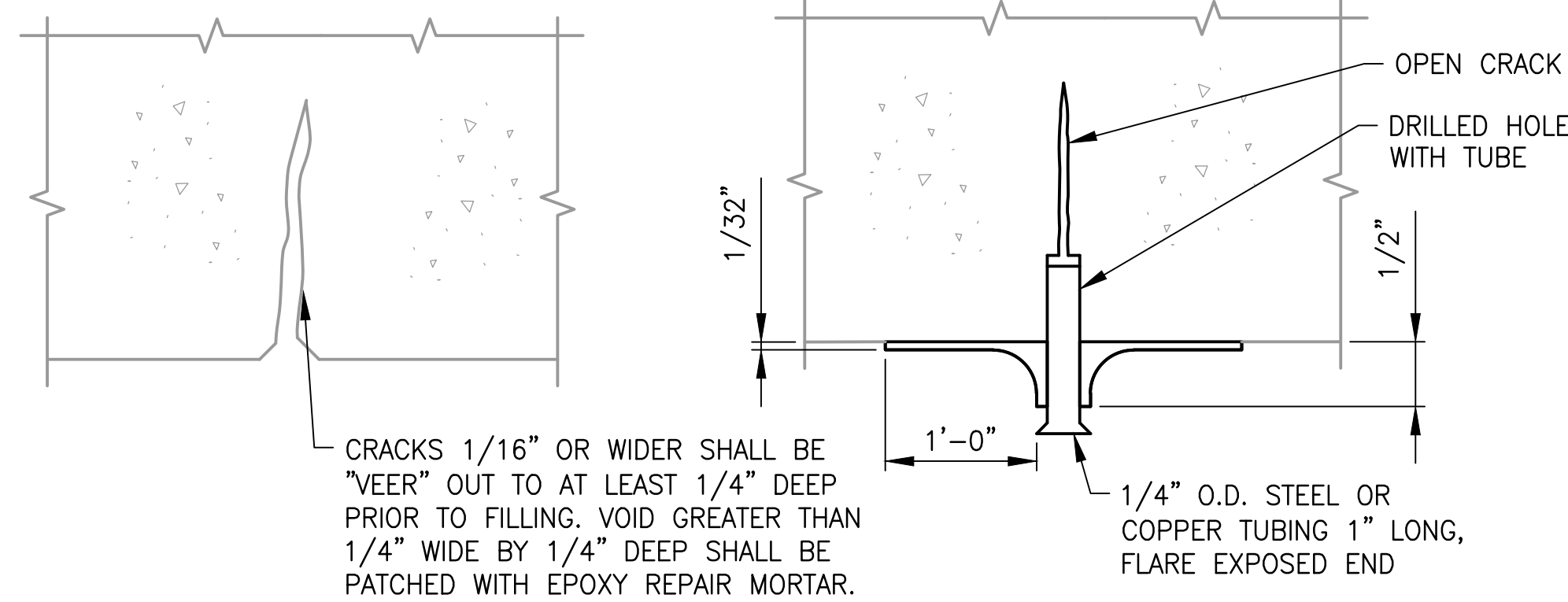
A SECTION
B04-S-916 SCALE: NOT TO SCALE

NOTES:

1. SEAL UNDERSIDE OF SLAB PER DETAIL 2, THIS SHEET, PRIOR TO FILLING IF CRACKS REFLECT THROUGH STRUCTURAL SLAB.

1 TYPICAL GRAVITY FED CRACK REPAIR

B04-S-916 SCALE: NOT TO SCALE

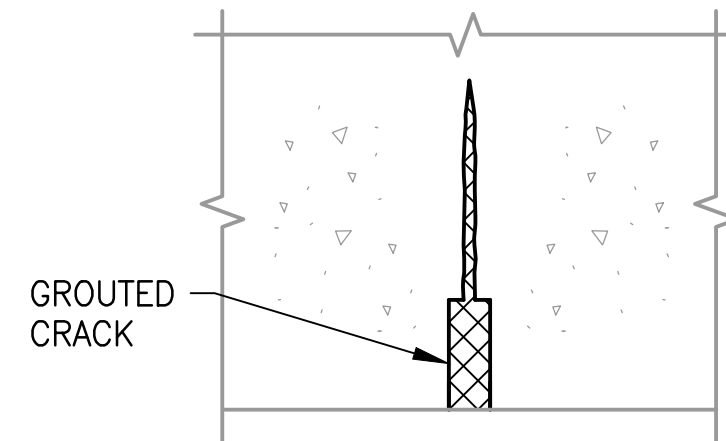


CRACK STEP A

CLEAN OUT CRACK WITH HAND TOOLS. HIGH PRESSURE AIR BLAST AND VACUUM CLEAN SURFACE.

STEP B

DRILL HOLES FOR PORTS TO A WIDTH AND DEPTH SUFFICIENT TO ASSURE A SNUG FIT OF THE PORT. VACUUM OUT DEBRIS. INSERT PORT AND SEAL SURFACE OF CRACK WITH EPOXY SURFACE SEALANT. SEAL SHALL EXTEND ABOVE CONCRETE SURFACE A MINIMUM OF 1/32" AND EXTEND A MINIMUM OF 1" TO EITHER SIDE OF CRACK. ALLOW A MINIMUM OF 6 HOURS CURING TIME BEFORE INITIATING INJECTION PROCESS.



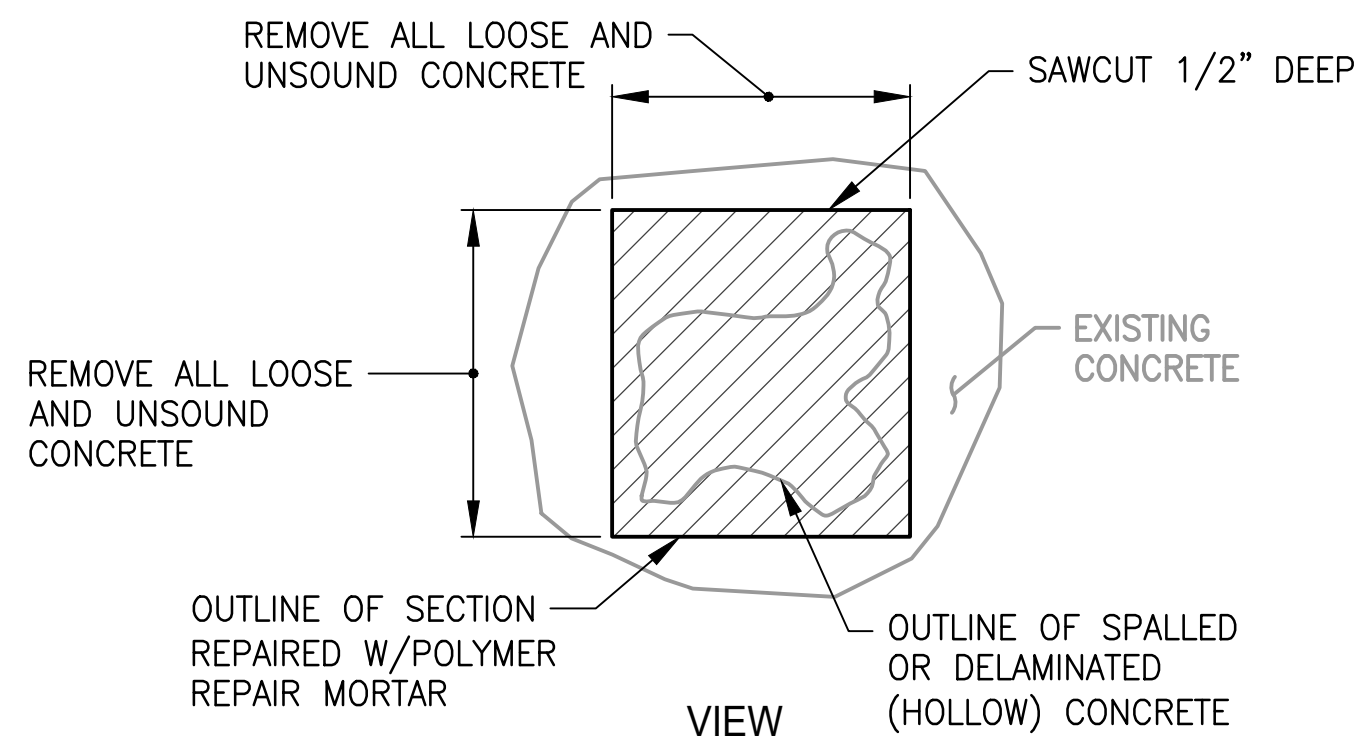
STEP C

INJECT LOW VISCOSITY INJECTION EPOXY GROUT AS DETAILED IN CONCRETE SPECIFICATION SECTION. ALLOW MINIMUM OF 6 HOURS CURING TIME. REMOVE EPOXY SURFACE SEALANT AND SEALER TO THE SATISFACTION OF THE A.R.

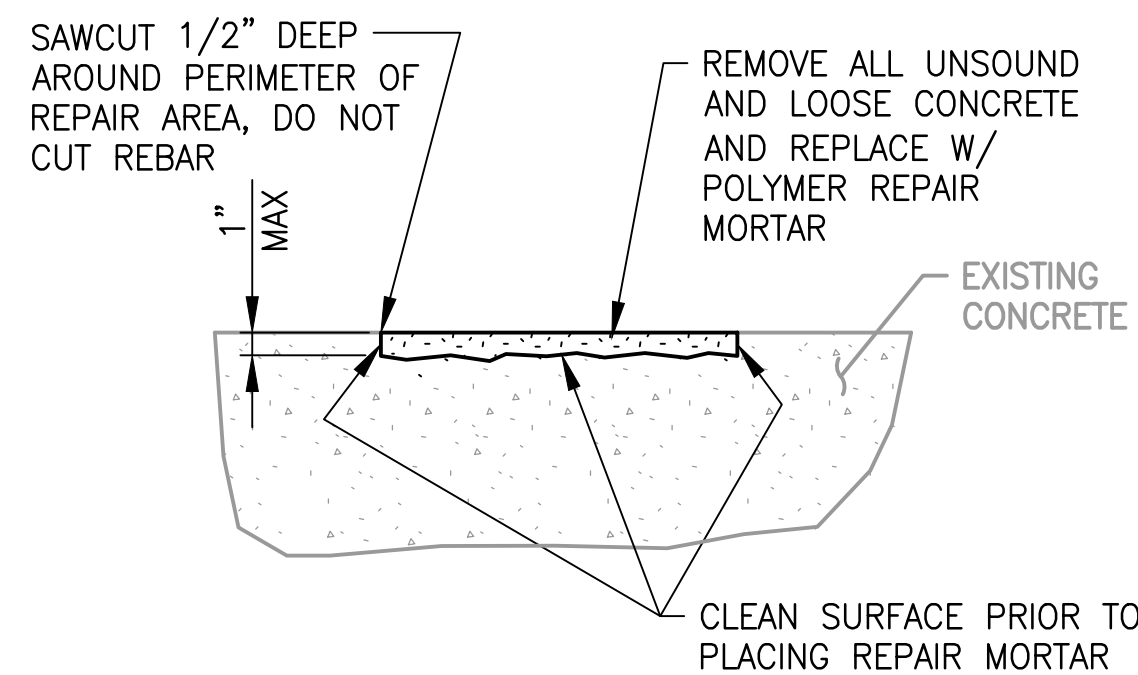
1. PUMP EPOXY INTO FIRST PORT UNTIL EPOXY IS EVIDENT AT THE ADJACENT PORT.
2. ADVANCE HAND PUMP TO THE NEXT LOCATION AND INJECT EPOXY.
3. CONTINUE PROCESS UNTIL CRACK HAS BEEN COMPLETELY FILLED.
4. CUT OFF GROUT TUBE FLUSH WITH CONCRETE FACE.
5. PATCH OVER GROUT TUBE.
6. GRIND EPOXY SURFACE SEALANT SMOOTH TO SURFACE OF SLAB.
7. ROUT AND SEAL CRACK.

2 TYPICAL CRACK REPAIR BY EPOXY INJECTION

B04-S-916 SCALE: NOT TO SCALE



VIEW



SECTION

TYPICAL SHALLOW CONCRETE REPAIR NOTES:

1. THIS REPAIR TO BE USED FOR LOCATIONS WHERE FINAL REPAIR DEPTH IS A MAXIMUM OF 1" DEEP. AT LOCATIONS WHERE FINAL REPAIR DEPTH IS GREATER THAN 1" DEEP, REPAIR USING TYPE D REPAIR PROCEDURE.
2. FINAL REPAIR DEPTH SHALL BE DETERMINED AFTER REMOVAL OF ALL UNSOUND AND LOOSE CONCRETE.
3. REPAIR SHALL BE MADE AFTER GRANITE EDGE PIECE AND ARCHITECTURAL TOPPING MATERIALS HAVE BEEN REMOVED SO FULL REPAIR AREA CAN BE ASSESSED.

3 TYPICAL SHALLOW CONCRETE SPALL REPAIR

B04-S-916 SCALE: NOT TO SCALE

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
DAVID BURROWS
No. 907331
2/9/18
PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 907331
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: DAVID BURROWS, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION

B04 - RHODE ISLAND AVENUE STATION
TYPICAL REPAIR DETAILS

M NO. M 1302	CONTRACT NO. F 18086	SCALE AS NOTED	DRAWING NO. B04-S-916	SHEET NO. 21 of 28
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DESIGNED	S. FERGUSON	02/09/2018	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	TITLE	DATE	NUM	DESCRIPTION
DRAWN	L. NGUYEN	02/09/2018			02/09/2018	0	FINAL CONTRACT DRAWINGS
CHECKED	I. AHMAD	02/09/2018					

GENERAL NOTES

- CONTRACTOR SHALL CONTACT WMATA AUTHORITY REPRESENTATIVE (AR) TO DEFINE ACCEPTABLE WORKING HOURS, SPACE FOR STORAGE OF MATERIALS, PARKING, ETC.
- ALL MATERIALS PROVIDED SHALL BE UL LISTED, NEW AND CONFORM TO CONTRACT SPECIFICATIONS, DRAWINGS AND THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- ALL WORK SHALL COMPLY WITH REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND LOCAL CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORK.
- THE CONTRACTOR SHALL CAREFULLY EXAMINE ALL CONTRACT DRAWINGS/SPECIFICATIONS AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIALS AND EQUIPMENT AT EACH LOCATION AS INDICATED. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT INDICATE ALL PULL BOXES, OFFSETS, FITTINGS AND ACCESSORIES AS MAY BE REQUIRED. FURNISHING SUCH MATERIALS AS REQUIRED TO MEET FIELD CONDITIONS AND NEC REQUIREMENTS SHALL BE AT NO ADDITIONAL COST TO THE AUTHORITY.
- THE CONTRACTOR SHALL EXAMINE THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE DONE OR OTHER CIRCUMSTANCES WHICH WILL AFFECT THE CONTEMPLATED WORK PRIOR TO SUBMITTING A BID. ANY REQUESTED VARIANCE TO THESE CONTRACT DOCUMENTS SHOULD BE SUBMITTED AS PART OF THE BID. ANY VARIANCE REQUIRED FOR FIELD CONDITIONS IDENTIFIED AFTER THE BID PERIOD WILL BE RESPONSIBILITY OF CONTRACTOR.
- INDICATED DIMENSIONS OF EQUIPMENT ARE APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE FINAL VERIFICATION OF ALL MEASUREMENTS SO THAT THE NEW EQUIPMENT CAN BE MANUFACTURED TO RETROFIT EXISTING CONDITIONS.
- THE CONTRACTOR SHALL ONLY WORK ON DE-ENERGIZED EQUIPMENT. ALL OUTAGES SHALL BE COORDINATED THROUGH WITH THE AUTHORITY REPRESENTATIVE (AR).
- CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO SECURE AND PROTECT THE OPERATIONAL EQUIPMENT IN THE STATION OR FACILITY DURING CONTRACTOR'S WORK, TO PREVENT DAMAGE OR SHUT DOWN OF EQUIPMENT.
- CONTRACTOR SHALL PROTECT EXISTING ELECTRICAL EQUIPMENT TO REMAIN FREE FROM DUST AND WATER DURING CONTRACTOR'S WORK.
- ALL NEW EQUIPMENT TO BE INSTALLED SHALL BE STORED PROPERLY. EQUIPMENT DAMAGED DURING SHIPPING, HANDLING, STORAGE, WATER OR OTHER CAUSES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL TEMPORARILY STORE THE EXISTING REMOVED EQUIPMENT UNTIL ITS DISPOSAL. A STAGING AREA INSIDE THE FACILITY SHALL BE ESTABLISHED TO AVOID OBSTRUCTION TO EXISTING ELECTRICAL EQUIPMENT WITH LOCATION APPROVED BY THE AR. COORDINATE WITH AN THE AR TO DETERMINE WHETHER REMOVED EQUIPMENT SHOULD BE RETURNED TO WMATA OR DISPOSED OF BY CONTRACTOR.
- INTERRUPTION OF SERVICE TO EQUIPMENT SHALL BE KEPT TO A MINIMUM, AND SHALL BE COORDINATED WITH THE AR AT LEAST TWO WEEKS PRIOR TO THE REQUIRED OUTAGE.
- CONTRACTOR SHALL OBTAIN & BECOME FAMILIAR WITH WMATA'S SAFETY AND OPERATING PROCEDURES & RULES. SAFETY TRAINING & CERTIFICATION FOR ALL CONTRACTOR EMPLOYEES ON THE WORK SITE IS MANDATORY.
- A CLEAR AND UNOBSTRUCTED PATHWAY FROM TRACK TO STREET SHALL BE MAINTAINED AT ALL TIMES FOR PERSONNEL ACCESS. THIS INCLUDES PROHIBITING SUCH ACTIVITIES AS BLOCKING DOORWAYS, PATHWAYS OR STAIRS WITH EQUIPMENT AND MATERIALS, DISMANTLING STAIRS AND OBSTRUCTING STREET HATCHWAYS.
- CONTRACTOR MUST INCLUDE UNIT PRICE FOR LABOR DURING WMATA NON-REVENUE HOURS.
- ALL NEW POWER WIRES SHALL HAVE TYPE RHW-2 INSULATION, LOW SMOKE, ZERO HALOGEN. MINIMUM WIRE SIZE SHALL BE #12 AWG FOR POWER WIRING AND #14 AWG FOR CONTROL WIRING. COLOR CODING OF POWER CONDUCTORS SHALL BE AS FOLLOWS:

PHASE	208/120V	480/277V
A	BLACK	BROWN
B	RED	ORANGE
C	BLUE	YELLOW
GROUNDING CONDUCTOR (NEUTRAL)	WHITE	GRAY

- GROUNDING CONDUCTOR GREEN GREEN
 PROVIDE FACTORY COLOR CODED WIRE FOR # 6 AWG AND SMALLER WIRE. WIRE # 4 AWG AND LARGER MAY BE COLOR CODED BY COLOR TAPING OF THE ENTIRE LENGTH OF THE EXPOSED ENDS. SUBSTITUTIONS FOR COLOR-CODED WIRE: WITH APPROVAL OF OWNER'S REPRESENTATIVE, AND WHERE COLOR CODING CANNOT BE READILY PROVIDED, PROVIDE COLORED TAPE APPLIED SPIRALLY AND HALF-LAPPED OVER EXPOSED PORTIONS OF CONDUCTORS WITHIN MANHOLES, BOXES, AND AT TERMINATION POINTS.
- ALL NEW CONDUITS SHALL BE TYPE GRS WHERE EXPOSED AND TYPE FRE WHERE EMBEDDED IN CONCRETE. MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH. ALL MATERIALS AND INSTALLATION SHALL COMPLY WITH NFPA-130 REQUIREMENTS.
 - SEE REFERENCE DRAWINGS FOR LOCATION OF ELECTRICAL ROOMS, POWER SOURCES, PANELS, AND OTHER INFORMATION NOT SHOWN HERE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION CONTAINED IN THE AS-BUILT REFERENCE DRAWINGS.
 - RESTORE ANY PLATFORM EMBEDDED STRAY CURRENT PROTECTION CONDUCTORS THAT MAY BE BROKEN DURING STRUCTURAL WORK. COMPLY WITH SPECIFICATION SECTIONS 13110 AND 13115.
 - FIELD SPLICES ARE PERMITTED ONLY FOR TEMPORARILY RELOCATED WIRING. FOR NEW PERMANENT WIRING, COMM WIRING SHALL BE INSTALLED CONTINUOUS-TO-END WITHOUT SPLICES. POWER BRANCH CIRCUIT WIRING SPLICES ARE PERMITTED IN APPROVED JUNCTION BOXES AND ONLY WHERE REQUIRED TO TAP CONDUCTORS FOR THE PURPOSE OF SUPPLYING POWER LOADS AND LIGHTING FIXTURES. SPLICING OF POWER MAIN FEEDERS IS PROHIBITED.
 - WHERE SUFFICIENT SLACK EXISTS IN WIRING TO BE TEMPORARILY RELOCATED, THE CONTRACTOR MAY USE AVAILABLE SLACK TO RELOCATE WIRING WITHOUT SPLICING, AND SHALL RESTORE WIRING TO ITS ORIGINAL LOCATION UPON STRUCTURAL WORK COMPLETION. THIS OPTION MAY BE ELECTED IN LIEU OF PROVIDING NEW REPLACEMENT WIRING AND CONDUIT PROVIDED THAT:
 - NO FIELD SPLICING WAS DONE
 - THE RELOCATED CONDUCTORS ARE FREE OF DAMAGE.
 - EXISTING CONDUIT IS IN GOOD PHYSICAL CONDITION AND NO PART OF THE CONDUIT IS SEVERELY CORRODED.

PROVIDE AN ALTERNATE BID PRICE FOR THIS WORK. ALL EXISTING WIRING THUS RESTORED SHALL BE TESTED FOR CONTINUITY AND INSULATION RESISTANCE.

- ALL EQUIPMENT SHALL BE PROVIDED IN OUTDOOR ENCLOSURE, NEMA 4.

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LICENSE No. 908830
 EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED _____ 02/09/2018 DATE DRAWN _____ 02/09/2018 DATE CHECKED <u>P. LOREN O.</u> 02/09/2018 DATE	REFERENCE DRAWINGS NUMBER TITLE DATE NUM DESCRIPTION		REVISIONS DATE NUM DESCRIPTION		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES	TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION ELECTRICAL GENERAL NOTES				
	FINAL CONTRACT DRAWINGS		02/09/2018 0			APPROVED <u>[Signature]</u> 02/09/2018 DATE JOHN PURDY ENGINEERING MANAGER	APPROVED <u>[Signature]</u> 02/09/2018 DATE BRIAN SEIP ENGINEER OF RECORD	M NO. M 1302	CONTRACT NO. F 18086	SCALE NONE

ABBREVIATIONS

#	NUMBER	EXIST	EXISTING	N	NORTH
&	AND	EXP	EXPOSED	N/A	NOT APPLICABLE
@	AT			NFSS	NON-FUSED SAFETYSWITCH
A/C	AIR CONDITIONING	F.F.	FINISH FLOOR	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	FA	FIRE ALARM	NO	NUMBER
AHU	AIR HANDLING UNIT	FAAP	FIRE ALARM ANNUNCIATOR PANEL	NTS	NOT TO SCALE
AR	AUTHORITY REPRESENTATIVE	FC	FOOT-CANDLE	OC	ON CENTER
ARCH	ARCHITECT(URAL)	FIN	FINISH(ED)	OD	OUTSIDE DIAMETER / DIMENSION
AUTO	AUTOMATIC	FIN GR	FINISH GRADE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
AUX	AUXILIARY	FLEX	FLEXIBLE	PWR	POWER
AV	AUDIO VISUAL	FLR	FLOOR(S)	RAD	RADIUS
AVG	AVERAGE	FLUOR	FLUORESCENT	RECPT	RECEPTACLE
BAS	BUILDING AUTOMATION SYSTEM	FRE	FIBER GLASS REINFORCED EPOXY CONDUIT	REF	REFERENCE
BFP	BACKFLOW PREVENTER	FT	FEET (FOOT)	REQD	REQUIRED
BLDG	BUILDING	GAL	GALLON(S)	REV	REVISED / REVISION
BSMT	BASEMENT	GALV	GALVANIZED	RM	ROOM
		GFI	GROUND FAULT INTERRUPTING	RND	ROUND(ED)
CB	CIRCUIT BREAKER	GND	GROUND	ROW	RIGHT OF WAY
CCTV	CLOSED CURCUIT TELEVISION	GPH	GALLONS PER HOUR	SCHED	SCHEDULE(D)
CIRC	CIRCULATION	GPM	GALLONS PER MINUTE	SECT	SECTION
CL	CENTER LINE	GRS, GRSC	GALVANIZED RIGID STEEL CONDUIT	SHT	SHEET
CLG	CEILING	HR	HOURL(S)	SIM	SIMILAR
CLG HT	CEILING HEIGHT	HT	HEIGHT	SQ	SQUARE
CMU	CONCRETE MASONRY UNIT(S)	KVA	KILO VOLT - AMPERES	SQ FT	SQUARE FOOT / FEET
COMM	COMMUNICATION	LTG	LIGHTING	STD	STANDARD
CONN	CONNECT(ION)	LV	LOW VOLTAGE (208V OR 480V)	SYMM	SYMMETRICAL
CONT	CONTINUOUS / CONTINUE	M.H.	MOUNTING HEIGHT	TCR	TRAIN CONTROL ROOM
CORR	CORRIDOR	MACH	MACHINE	TEMP	TEMPERATURE
CTR	CENTER(ED)	MAINT	MAINTAIN / MAINTENANCE	TYP	TYPICAL
CU	CUBIC	MATL	MATERIAL	UNO	UNLESS NOTED OTHERWISE
		MAX	MAXIMUM	VA	VOLT - AMPERES
DB	DECIBEL	MECH	MECHANICAL	VERT	VERTICAL
DEG	DEGREES	MFR	MANUFACTURER	WP	WEATHERPROOF
DIA	DIAMETER	MIN	MINIMUM	WT	WEIGHT
DIAG	DIAGONAL	MISC	MISCELLANEOUS		
DIFF	DIFFUSER(S)	MLO	MAIN LUGS ONLY		
DIM	DIMENSION(S)	MTD	MOUNTED		
DN	DOWN				
DS	DISCONNECT SWITCH				
DWG	DRAWING				
EA	EACH				
ELEC	ELECTRIC(AL)				
ELEC CL	ELECTRICAL CLOSET				
ELEV	ELEVATOR				
EMER	EMERGENCY				
EMR	ELEVATOR MACHINE ROOM				
ENCL	ENCLOSURE / ENCLOSE(D)				
ENTR	ENTRANCE				
EQUIP	EQUIPMENT				
ESC	ESCALATOR				
ESCSP	ESCALATOR SUMP PUMP				
ESP	ELEVATOR SUMP PUMP				

LEGEND

	DUPLEX ELECTRICAL RECEPTACLE, 120V, 20A M.H. 18" AFF		EMERGENCY TRIP STATION
	DUPLEX ELECTRICAL RECEPTACLE WITH GFI PROTECTION, WEATHER PROOF M.H. 18" AFF		CONDUIT OR CABLE TURNING AWAY OR DOWN
	JUNCTION BOX - CEILING MOUNTED TYPE AS INDICATED OR AS REQUIRED BY CODE		CONDUIT OR CABLE TURNING UPWARD OR TOWARDS VIEWER
	JUNCTION BOX - WALL MOUNTED		CONDUIT OR CABLE EXPOSED
	PULL BOX - SIZE AS REQUIRED, NEMA 4X OUTDOORS, NEMA 12 INDOORS		CONDUIT EMBEDDED IN CONCRETE
			CONDUIT RUN CONCEALED IN PUBLIC SPACES OR EXPOSED IN AUXILLIARY SPACES 1 PHASE , 1 NEUTRAL , 1 GROUND CONDUCTORS
			SAME AS ABOVE 2 PHASE , 1 NEUTRAL , 1 GROUND CONDUCTORS
			SAME AS ABOVE 3 PHASE , 1 NEUTRAL , 1 GROUND CONDUCTORS
			HOMERUN TO PANEL. EQUIPMENT GROUND WIRE SHALL BE PROVIDED FOR ALL CIRCUITS. MINIMUM 3/4" C AND #12 WIRING.
			GROUND BUS BAR MOUNTED ON WALL
			CONDUIT DESIGNATION, LETTER INDICATES THUS: P - POWER C - COMMUNICATION G - GROUND TC - TRAIN CONTROL
			PANELBOARD, DISTRIBUTION AND LIGHTING, 480/277V.
			PANELBOARD, LIGHTING AND APPLIANCE, 208/120V.
			GROUND ROD
			CONNECTION TO SIGNAGE, PROVIDE JUNCTION BOX AS REQUIRED. SEE SIGNAGE DRAWINGS FOR MOUNTING AND CONNECTION DETAILS.

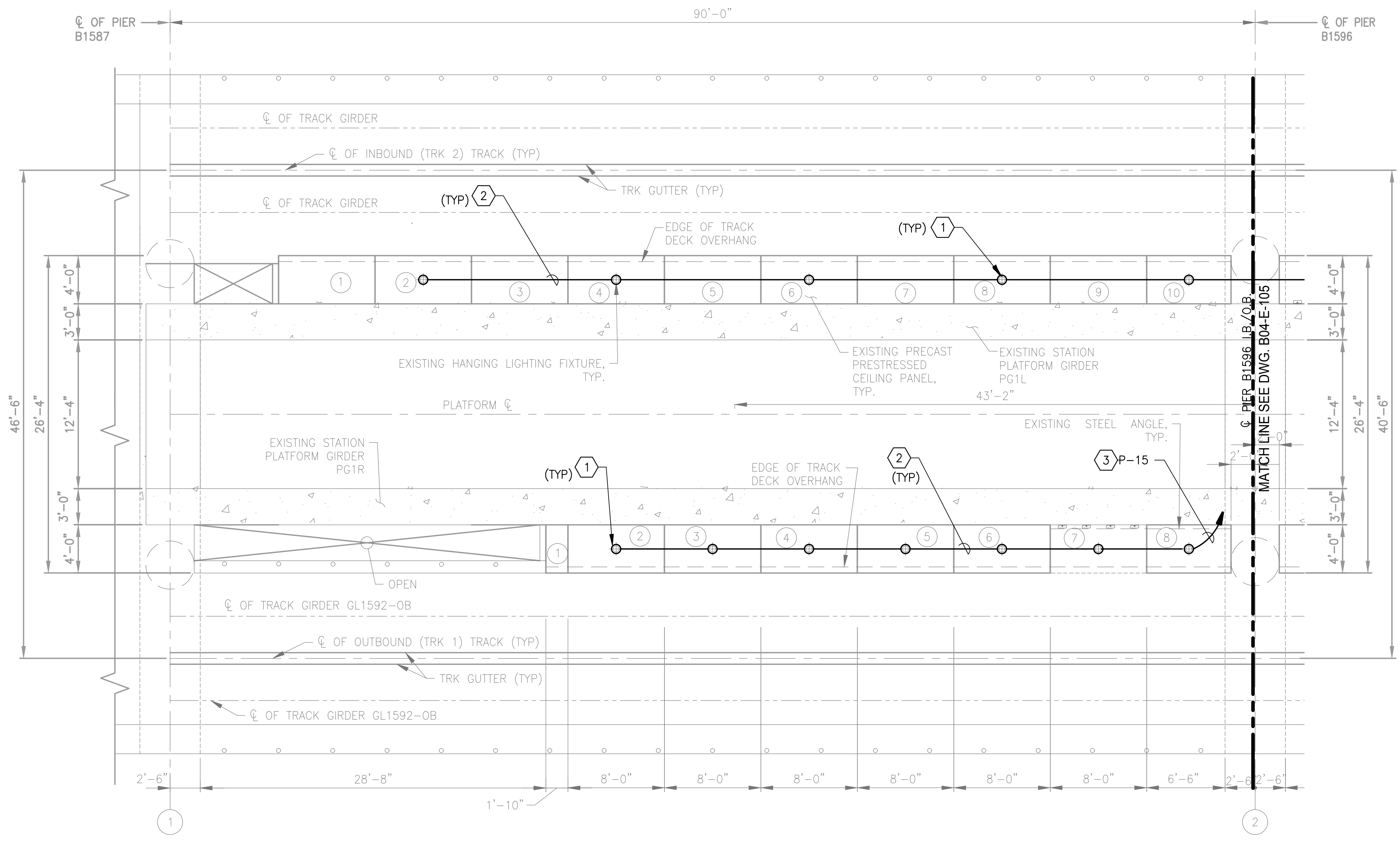
GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
 B. SEIP
 No. 908830
 REGISTERED PROFESSIONAL ENGINEER (EIT)

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 LICENSE No. 908830
 EXPIRATION DATE: 08/31/18
 - DC REGISTER SECTION 1516

DESIGNED	02/09/2018	DATE	02/09/2018	NUM	0	DESCRIPTION	FINAL CONTRACT DRAWINGS
DRAWN	02/09/2018	DATE					
CHECKED	P. LOREN O.	02/09/2018	DATE				

 WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018 DATE APPROVED: BRIAN SEIP, ENGINEER OF RECORD, 02/09/2018 DATE	TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION ELECTRICAL ABBREVIATIONS & LEGEND			
M NO. M 1302	CONTRACT NO. F 18086	SCALE NONE	DRAWING NO. B04-E-002	SHEET NO. 23 of 28



SHEET GENERAL NOTES:

1. LIGHT FIXTURE SHALL BE 74WATT KIRLIN COMPANY REGRESSED LENS CYLINDER LED CATALOG NUMBER "LSR-09481- 41K-37-80".
2. CONTRACTOR SHALL CADWELL ALL STRUCTURAL METAL PLATE AND REBAR TO THE EXISTING #4/0 GROUNDING CONDUCTORS.
3. CONDUIT AND CONDUCTORS SHALL BE (2)#12, (1)#12 GRD IN 3/4" RGS CONDUIT.
4. CIRCUIT HOMERUNS ARE LABELED WITH THE INDICATED CIRCUIT FROM THE "ORIGINAL CONSTRUCTION AS-BUILT" DRAWINGS OF 1976. CONTRACTOR SHALL FIELD VERIFY CIRCUITS.

SHEET KEYNOTES:

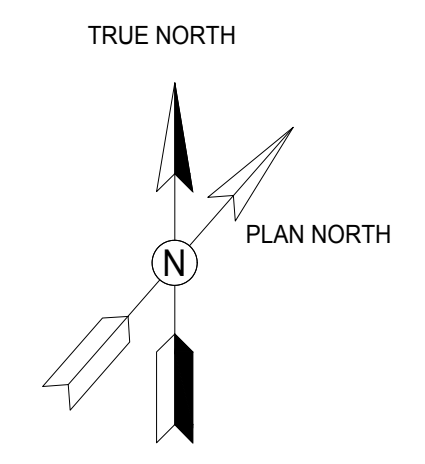
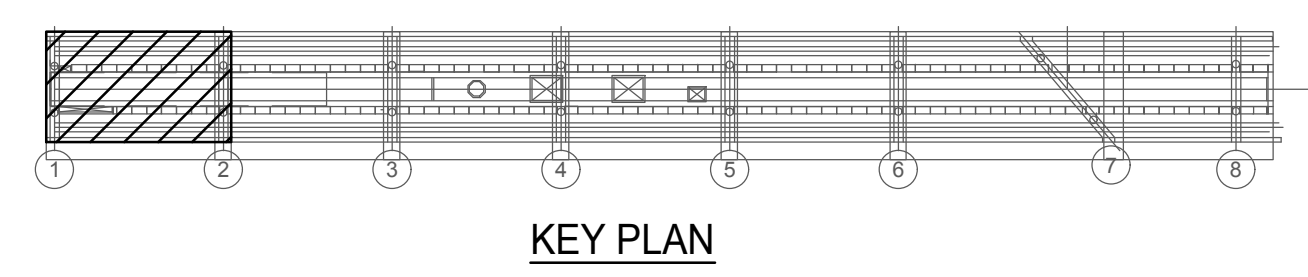
1. REPLACE ALL LIGHTING FIXTURES AS INDICATED. PROVIDE JUNCTION BOX AT FIXTURE LOCATION FOR MOUNTING OF FIXTURE. MOUNT FIXTURES TO THE UNDERSIDE OF FRP CEILING PANELS.
2. MOUNT CONDUIT AND JUNCTION BOX ON TOP SIDE OF THE CEILING PANELS.
3. ROUTE NEW CONDUIT AND CONDUCTORS THROUGH NEW CONCRETE SLAB TO ABOVE TRACK DECK OVERHANG. FINAL CONNECTION TO POWER SUPPLY SHALL BE COMPLETED BY CONTRACTOR.

LEGEND:

- AWG AMERICAN WIRE GAGE
- C CONDUIT
- LIGHTING FIXTURE
- CONDUIT

1 TRACK LIGHTING PARTIAL PLAN
B04-E-101

SCALE: 3/16"=1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
BRIAN A. SEIP
No. 908830
REGISTERED PROFESSIONAL ENGINEER (EIT)

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LICENSE No. 908830
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED	B. SEIP	02/09/2018
		DATE
DRAWN	S. BICKHART	02/09/2018
		DATE
CHECKED	M. GIURGIU	02/09/2018
		DATE

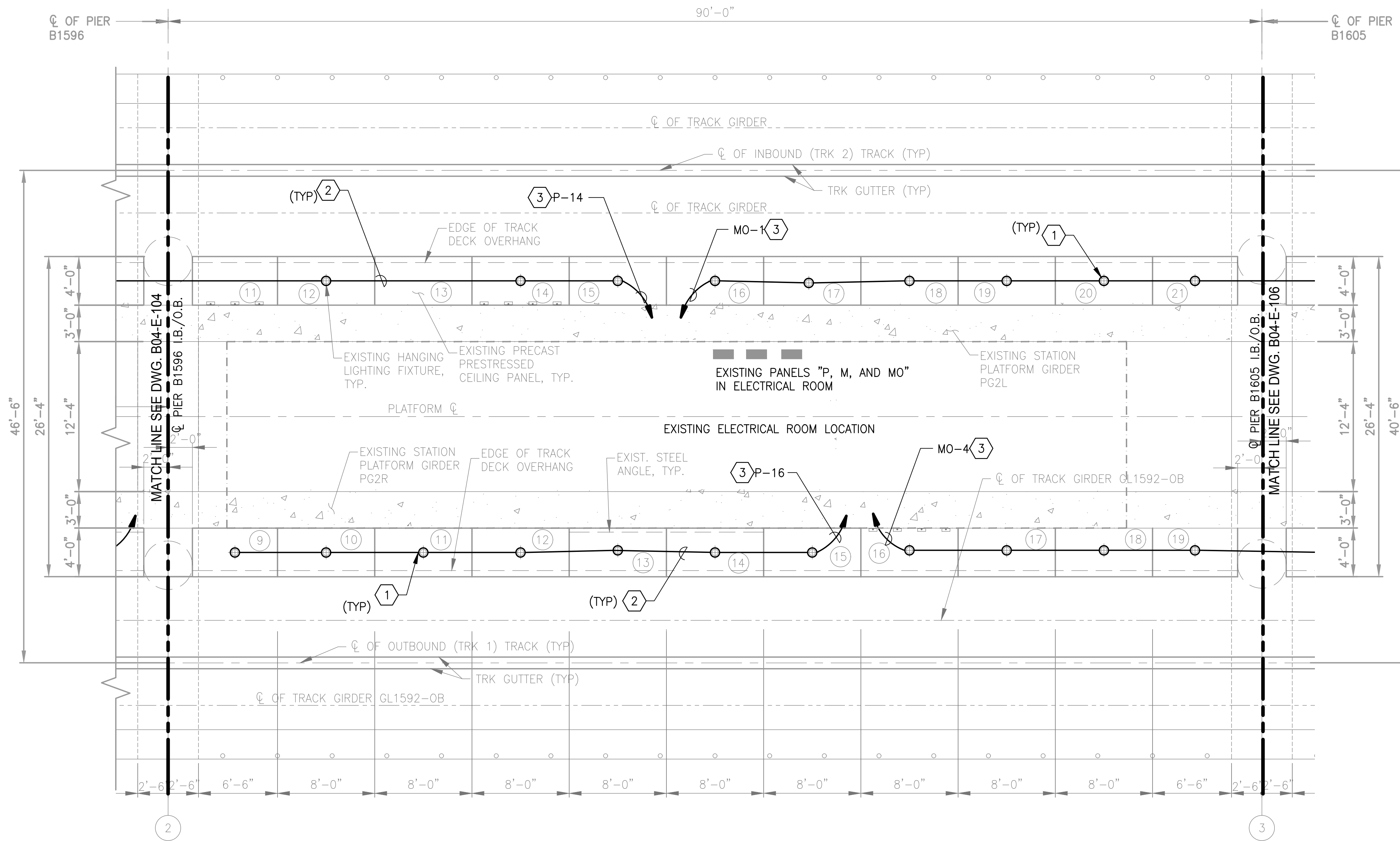
REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	NUM
		02/09/2018	0

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: OHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: BRIAN SEIP, ENGINEER OF RECORD, 02/09/2018

TRACK DECK SLAB AND CEILING PANEL REHABILITATION		B04 - RHODE ISLAND AVENUE STATION		STATION TRACK LIGHTING PLAN 1 OF 5	
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.	
M 1302	F 18086	3/16" □ 1-0"	B04-E-101	24 □ 28	



SHEET GENERAL NOTES:

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SHEET KEYNOTES:

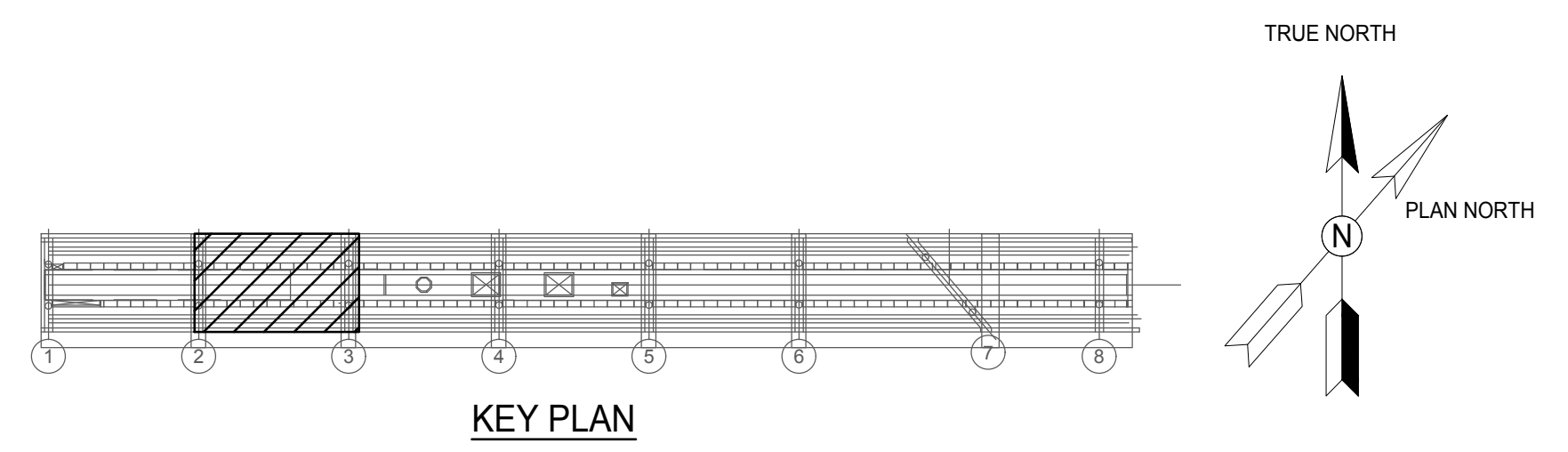
1. REPLACE ALL LIGHTING FIXTURES AS INDICATED. PROVIDE JUNCTION BOX AT FIXTURE LOCATION FOR MOUNTING OF FIXTURE. MOUNT FIXTURES TO THE UNDERSIDE OF FRP CEILING PANELS.
2. MOUNT CONDUIT AND JUNCTION BOX ON TOP SIDE OF THE CEILING PANELS.
3. ROUTE NEW CONDUIT AND CONDUCTORS THROUGH NEW CONCRETE SLAB TO ABOVE TRACK DECK OVERHANG. FINAL CONNECTION TO POWER SUPPLY SHALL BE COMPLETED BY CONTRACTOR.

LEGEND:

AWG	AMERICAN WIRE GAGE
C	CONDUIT
○	LIGHTING FIXTURE
—	CONDUIT

1 TRACK LIGHTING PARTIAL PLAN
B04-E-102

SCALE: 3/16"=1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA.

LICENSE No. 908830
EXPIRATION DATE: 08/31/18

DC REGISTER SECTION 1516

DESIGNED	B. SEIP	02/09/2018
		DATE
DRAWN	S. BICKHART	02/09/2018
		DATE
CHECKED	M. GIURGIU	02/09/2018
		DATE

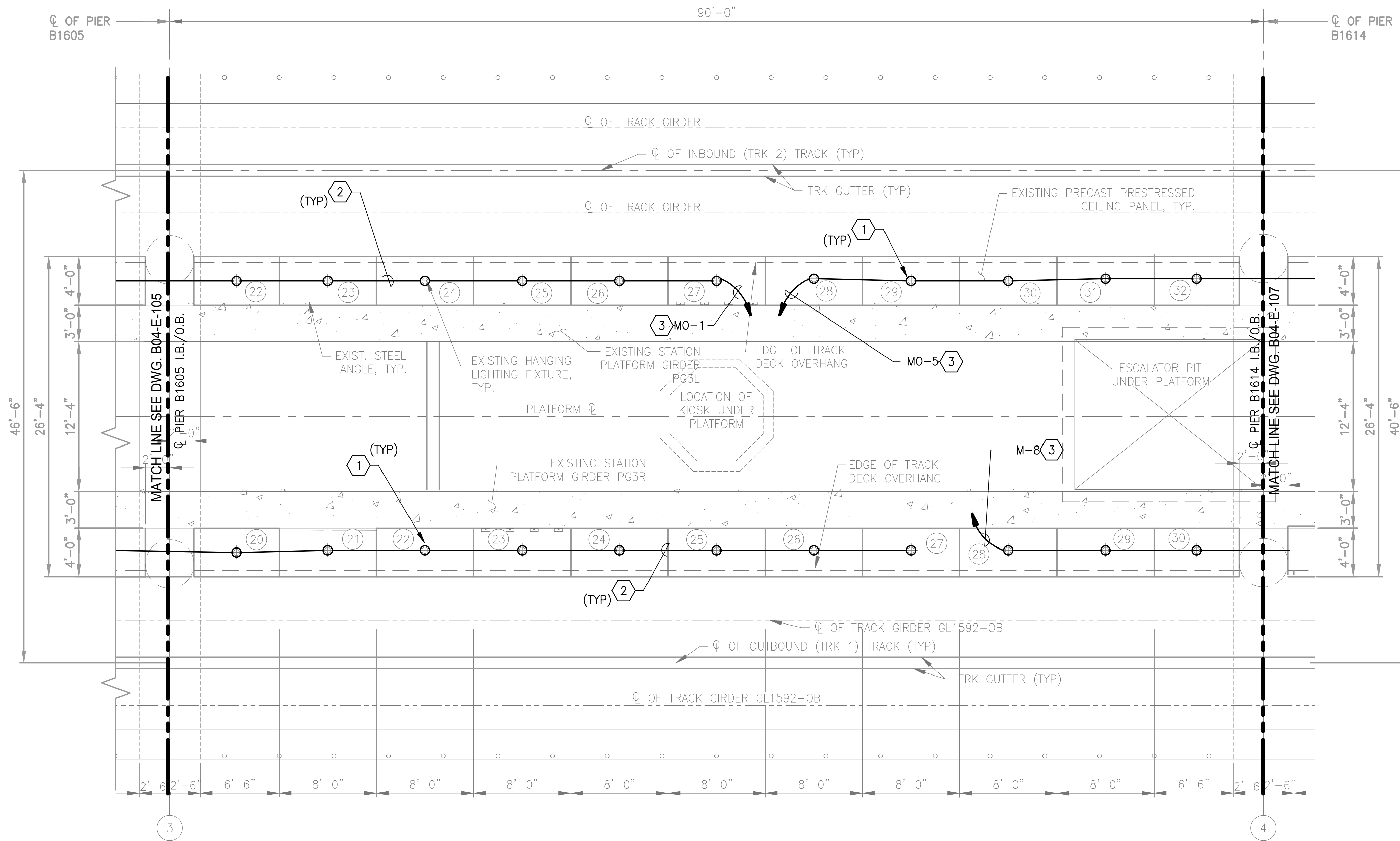
REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: JOHN PURDY, ENGINEERING MANAGER, 02/09/2018
APPROVED: BRIAN SEIP, ENGINEER OF RECORD, 02/09/2018

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	3/16" □ 1-0"	B04-E-102	25 □ 28



SHEET GENERAL NOTES:

1. LIGHT FIXTURE SHALL BE 74WATT KIRLIN COMPANY REGRESSED LENS CYLINDER LED CATALOG NUMBER "LSR-09481- 41K-37-80".
2. CONTRACTOR SHALL CADWELL ALL STRUCTURAL METAL PLATE AND REBAR TO THE EXISTING #4/0 GROUNDING CONDUCTORS.
3. CONDUIT AND CONDUCTORS SHALL BE (2)#12, (1)#12 GRD IN 3/4" RGS CONDUIT.
4. CIRCUIT HOMERUNS ARE LABELED WITH THE INDICATED CIRCUIT FROM THE "ORIGINAL CONSTRUCTION AS-BUILT" DRAWINGS OF 1976. CONTRACTOR SHALL FIELD VERIFY CIRCUITS.

SHEET KEYNOTES:

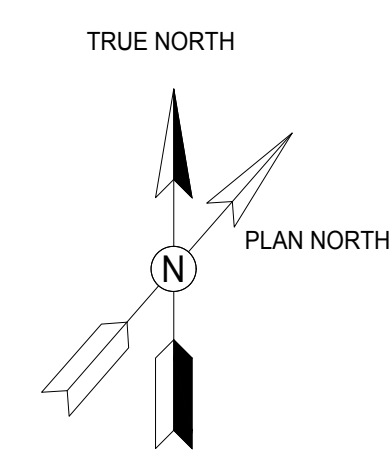
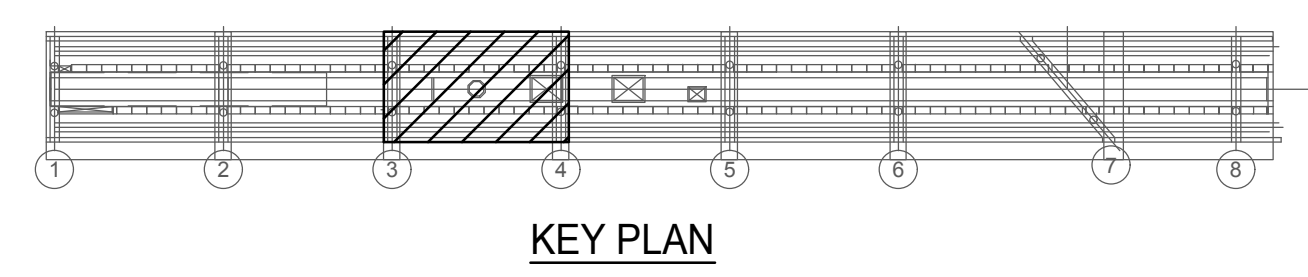
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2. MOUNT CONDUIT AND JUNCTION BOX ON TOP SIDE OF THE CEILING PANELS.
3. ROUTE NEW CONDUIT AND CONDUCTORS THROUGH NEW CONCRETE SLAB TO ABOVE TRACK DECK OVERHANG. FINAL CONNECTION TO POWER SUPPLY SHALL BE COMPLETED BY CONTRACTOR.

LEGEND:

AWG	AMERICAN WIRE GAGE
C	CONDUIT
○	LIGHTING FIXTURE
—	CONDUIT

1 TRACK DECK SLAB AND PRECAST CEILING PARTIAL PLAN
B04-E-103

SCALE: 3/16"=1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

BRIAN A. SEIP
No. 908830
REGISTERED PROFESSIONAL ENGINEER (PE)
DISTRICT OF COLUMBIA

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."
LICENSE No. 908830
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED	B. SEIP	02/09/2018
		DATE
DRAWN	S. BICKHART	02/09/2018
		DATE
CHECKED	M. GIURGIU	02/09/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		02/09/2018	FINAL CONTRACT DRAWINGS

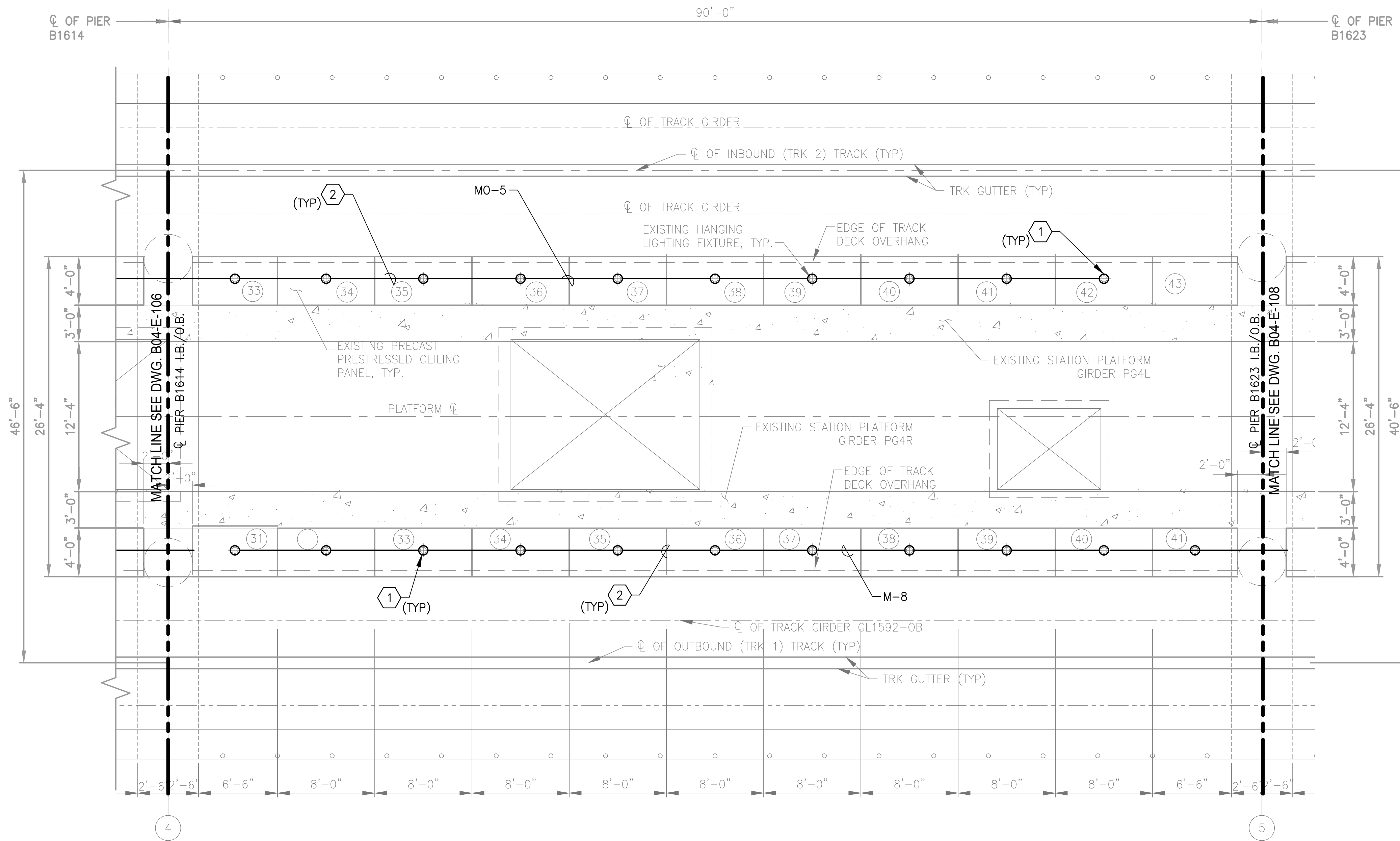
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: *[Signature]* 02/09/2018
JOHN PURDY
ENGINEERING MANAGER

APPROVED: *[Signature]* 02/09/2018
BRIAN SEIP
ENGINEER OF RECORD

TRACK DECK SLAB AND CEILING PANEL REHABILITATION		B04 - RHODE ISLAND AVENUE STATION		STATION TRACK LIGHTING PLAN 3 OF 5	
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.	
M 1302	F 18086	3/16" □ 1'-0"	B04-E-103	26 □ 28	



SHEET GENERAL NOTES:

1. LIGHT FIXTURE SHALL BE 74WATT KIRLIN COMPANY REGRESSED LENS CYLINDER LED CATALOG NUMBER "LSR-09481- 41K-37-80".
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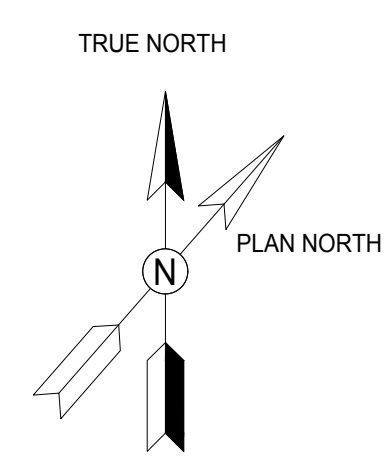
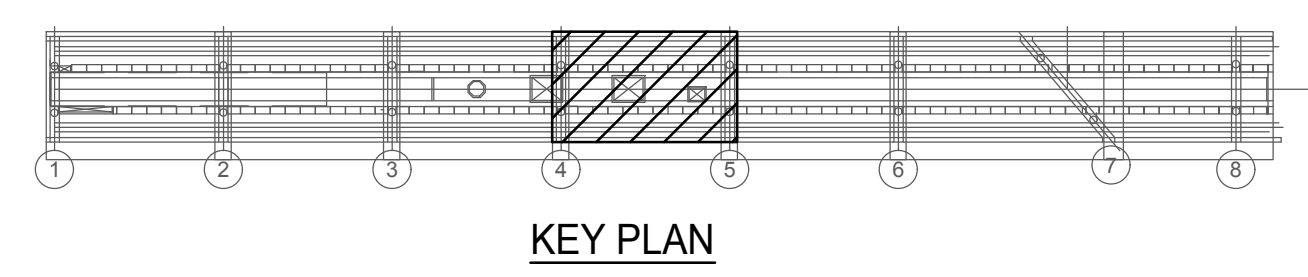
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3. ROUTE NEW CONDUIT AND CONDUCTORS THROUGH NEW CONCRETE SLAB TO ABOVE TRACK DECK OVERHANG. FINAL CONNECTION TO POWER SUPPLY SHALL BE COMPLETED BY CONTRACTOR.

LEGEND:

- AWG AMERICAN WIRE GAGE
- C CONDUIT
- LIGHTING FIXTURE
- CONDUIT

1 TRACK LIGHTING PARTIAL PLAN
B04-E-104

SCALE: 3/16"=1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
BRIAN A. SEIP
No. 908830
REGISTERED PROFESSIONAL ENGINEER (PE)
2018

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."
LICENSE No. 908830
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED	B. SEIP	02/09/2018
		DATE
DRAWN	S. BICKHART	02/09/2018
		DATE
CHECKED	M. GIURGIU	02/09/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	NUM
		02/09/2018	0

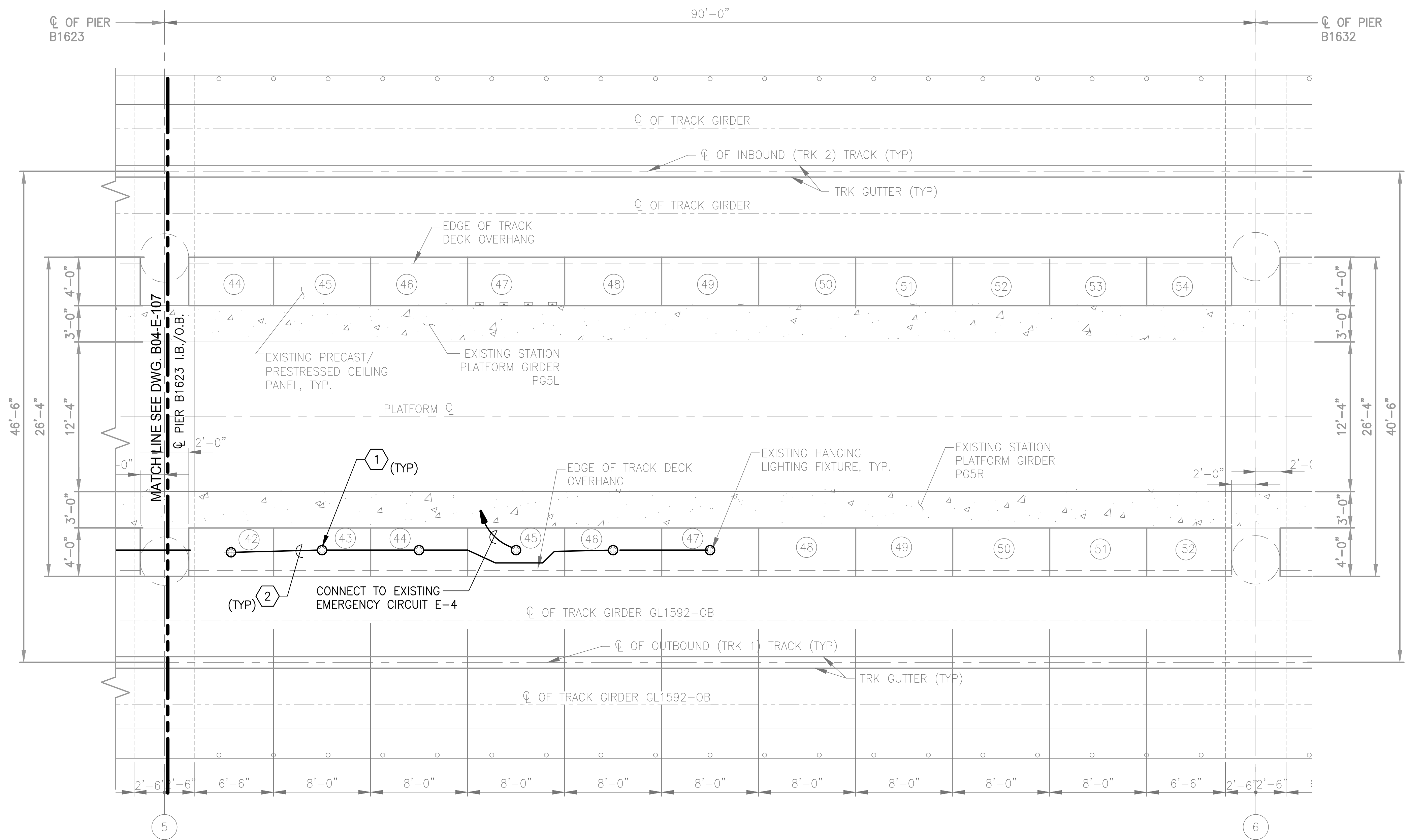
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
metro

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

APPROVED: *[Signature]* 02/09/2018
JOHN PURDY
ENGINEERING MANAGER

APPROVED: *[Signature]* 02/09/2018
BRIAN SEIP
ENGINEER OF RECORD

TRACK DECK SLAB AND CEILING PANEL REHABILITATION			
B04 - RHODE ISLAND AVENUE STATION			
STATION TRACK LIGHTING PLAN 4 OF 5			
M NO.	CONTRACT NO.	SCALE	DRAWING NO.
M 1302	F 18086	3/16" □ 1-0"	B04-E-104
SHEET NO.			27 □ 28



SHEET GENERAL NOTES:

1. LIGHT FIXTURE SHALL BE 74WATT KIRLIN COMPANY REGRESSED LENS CYLINDER LED CATALOG NUMBER "LSR-09481- 41K-37-80".
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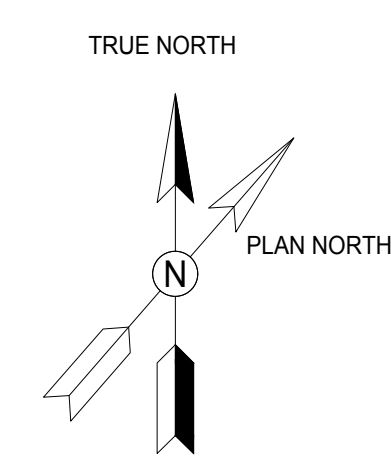
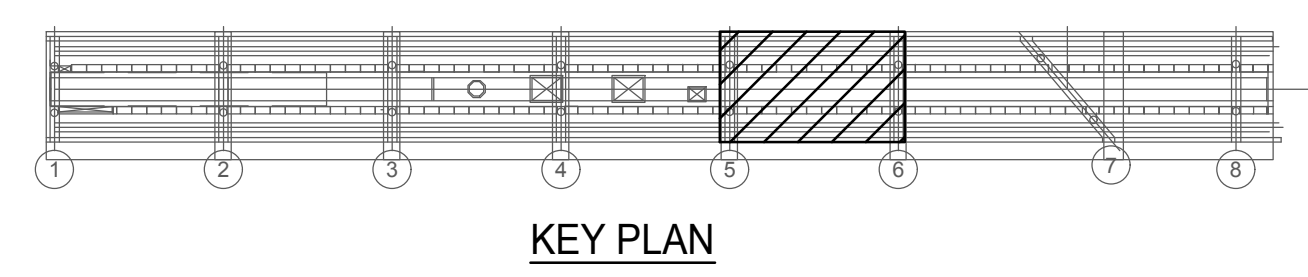
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LEGEND:

AWG	AMERICAN WIRE GAGE
C	CONDUIT
○	LIGHTING FIXTURE
—	CONDUIT

1 TRACK LIGHTING PARTIAL PLAN
B04-E-105

SCALE: 3/16"=1'-0"



GFP A Gannett Fleming/Parsons JOINT VENTURE

BRIAN A. SEIP
No. 908830
REGISTERED PROFESSIONAL ENGINEER (PE)
DISTRICT OF COLUMBIA

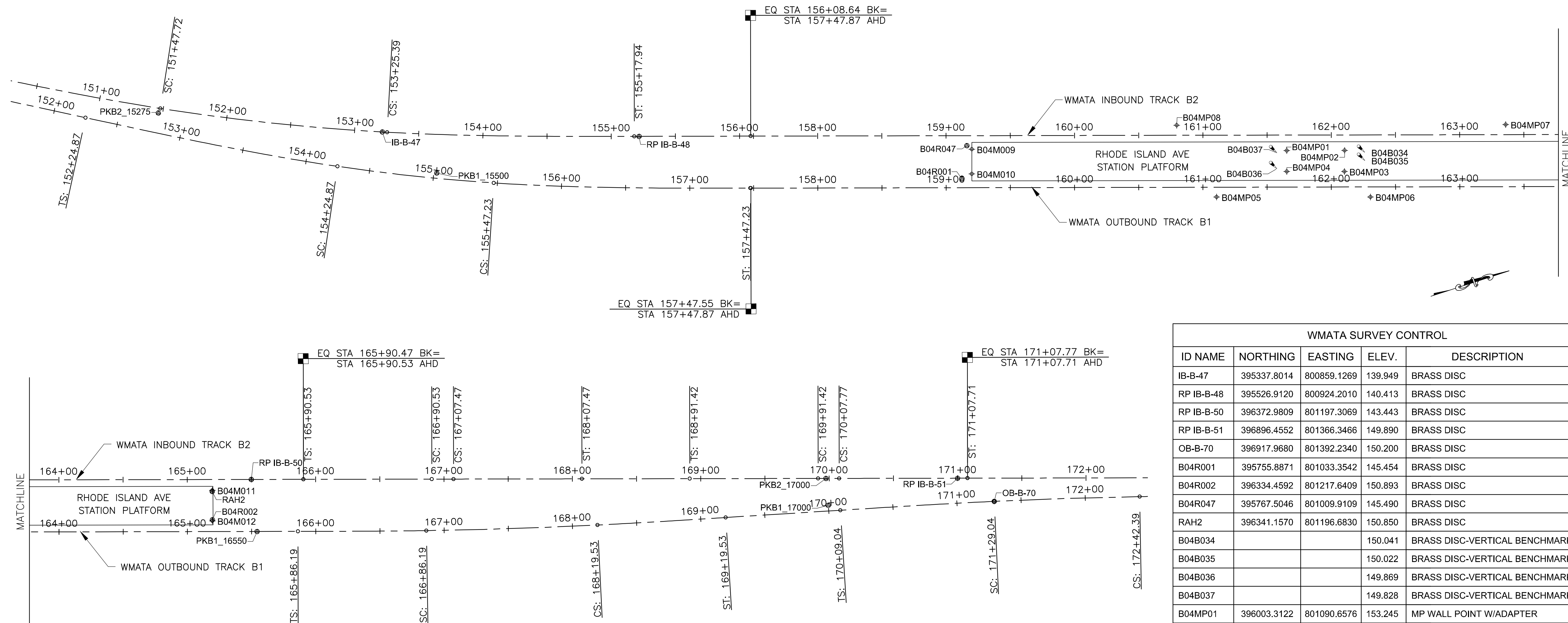
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LICENSE No. 908830
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED <u>B. SEIP</u> 02/09/2018 DATE DRAWN <u>S. BICKHART</u> 02/09/2018 DATE CHECKED <u>M. GIURGIU</u> 02/09/2018 DATE	REFERENCE DRAWINGS NUMBER TITLE DATE NUM DESCRIPTION		REVISIONS DATE NUM DESCRIPTION		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY OFFICE OF DESIGN AND CONSTRUCTION IRPG - FIXED FACILITIES APPROVED <u>[Signature]</u> 02/09/2018 JOHN PURDY ENGINEERING MANAGER DATE APPROVED <u>[Signature]</u> 02/09/2018 BRIAN SEIP ENGINEER OF RECORD DATE	TRACK DECK SLAB AND CEILING PANEL REHABILITATION B04 - RHODE ISLAND AVENUE STATION STATION TRACK LIGHTING PLAN 5 OF 5			
	M NO. M 1302 CONTRACT NO. F 18086 SCALE 3/16" = 1'-0" DRAWING NO. B04-E-105 SHEET NO. 28 OF 28								

Dec 22, 2017 - 8:13am
T:\SURVEY\data\B04_8908_RI_Ave_Platform_Rehab\Computing\CAD\11-2017_Control_Drawing\B04-C-011.dwg

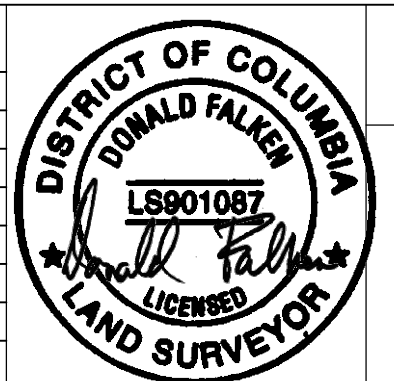


WMATA SURVEY CONTROL				
ID NAME	NORTHING	EASTING	ELEV.	DESCRIPTION
IB-B-47	395337.8014	800859.1269	139.949	BRASS DISC
RP IB-B-48	395526.9120	800924.2010	140.413	BRASS DISC
RP IB-B-50	396372.9809	801197.3069	143.443	BRASS DISC
RP IB-B-51	396896.4552	801366.3466	149.890	BRASS DISC
OB-B-70	396917.9680	801392.2340	150.200	BRASS DISC
B04R001	395755.8871	801033.3542	145.454	BRASS DISC
B04R002	396334.4592	801217.6409	150.893	BRASS DISC
B04R047	395767.5046	801009.9109	145.490	BRASS DISC
RAH2	396341.1570	801196.6830	150.850	BRASS DISC
B04B034			150.041	BRASS DISC-VERTICAL BENCHMARK
B04B035			150.022	BRASS DISC-VERTICAL BENCHMARK
B04B036			149.869	BRASS DISC-VERTICAL BENCHMARK
B04B037			149.828	BRASS DISC-VERTICAL BENCHMARK
B04MP01	396003.3122	801090.6576	153.245	MP WALL POINT W/ADAPTER
B04MP02	396046.1042	801104.4192	151.540	MP WALL POINT W/ADAPTER
B04MP03	396040.9902	801119.9784	152.131	MP WALL POINT W/ADAPTER
B04MP04	395998.2338	801106.1010	153.299	MP WALL POINT W/ADAPTER
B04MP05	395940.1177	801108.1038	146.404	MP WALL POINT W/ADAPTER
B04MP06	396054.1089	801145.0357	146.974	MP WALL POINT W/ADAPTER
B04MP07	396171.7388	801124.0149	147.193	MP WALL POINT W/ADAPTER
B04MP08	395927.8591	801045.4181	146.299	MP WALL POINT W/ADAPTER
B04M009	395770.2827	801013.8373	151.922	MP WALL POINT W/ADAPTER
B04M010	395764.4288	801032.0279	152.193	MP WALL POINT W/ADAPTER
B04M011	396341.4679	801195.8949	151.179	MP WALL POINT W/ADAPTER
B04M012	396334.2110	801218.5504	151.181	MP WALL POINT W/ADAPTER
PKB1_15500	395368.2937	800902.6686	139.871	PK NAIL
PKB1_16550	396364.7506	801237.1306	143.435	PK NAIL
PKB1_17000	396794.2161	801355.2698	149.721	PK NAIL
PKB2_15275	395176.4481	800791.1957	139.366	PK NAIL
PKB2_17000	396799.0053	801334.7984	149.407	PK NAIL

NOTES:

- WMATA SURVEY CONTROL COORDINATES SHOWN IN TABLE ON THIS SHEET ARE IN WMATA PROJECT DATUM AND NGVD 1929 VERTICAL DATUM.
- WMATA SURVEY CONTROL SHOWN REPRESENTS A CURRENT READJUSTMENT OF PREVIOUSLY PUBLISHED SURVEY CONTROL, DATED 12/2017. SURVEY CONTROL ADJUSTMENT FILES CAN BE PROVIDED PER REQUEST.
- SURVEY CONTROL BENCHMARKS ARE DESIGNATED AS "B04B####" AND ARE TO BE USED ONLY FOR VERTICAL CONTROL.
- SURVEY CONTROL POINTS CONSIST OF 5 TYPES OF MONUMENTS: STANDARD WMATA 2 1/2" BRASS OR ALUMINUM DISCS, 2" ALUMINUM DISCS WITH A CENTER PUNCH, BRASS "MESS PUNKT" WALL POINTS DESIGNATED AS "B04MP####" AND/OR "B04M####", WHITE PLASTIC "MESS PUNKT" WALL POINTS DESIGNATED AS "B04MP####" AND/OR "B04M####", AND PK NAILS SET IN TRACKWAY CONCRETE DESIGNATED AS "PKB#-#####". WMATA SURVEY CONTROL ID NAMES ARE GENERALLY STAMPED ON THE BRASS OR ALUMINUM DISC OR ON A BRASS TAG INSTALLED ADJACENT TO THE POINT. PK NAILS WILL NOT HAVE A ID NAME STAMPED TAG. PHOTOGRAPHS OF WMATA CONTROL POINTS ARE AVAILABLE UPON REQUEST.
- MESS PUNKT (MP) WALL POINT COORDINATES ARE TO THE CENTER OF A SECO MINI PRISM (6600-04) WHICH IS 25MM IN DIAMETER WITH A -17.5MM OFFSET. THIS PRISM REQUIRES THE USE OF A GOECHE SCHWELM LEICA ADAPTER 11R5-W. CONTACT THE WMATA GEOMATICS OFFICE AT 703-667-7930 FOR ADDITIONAL INFORMATION.
- ALL DATA SHOWN ON THIS SHEET IS SUPPLIED BY WMATA FOR USE ON THIS PROJECT.

DESIGNED	A. BENNETT	12/11/17	REFERENCE DRAWINGS		REVISIONS	
			NUMBER	DESCRIPTION	DATE	BY
DRAWN	A. BENNETT	12/11/17				
CHECKED	S. FALK	12/11/17				
APPROVED	D. FALKEN	12/19/17				



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

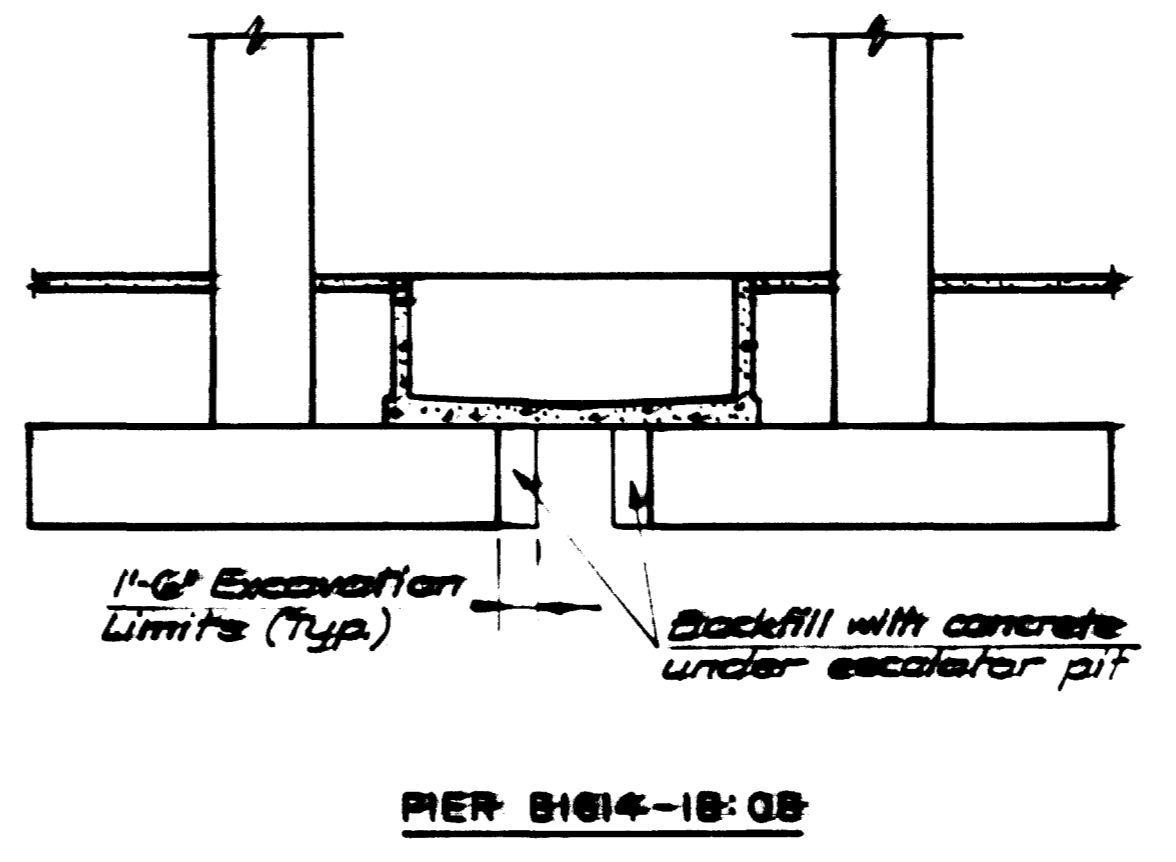
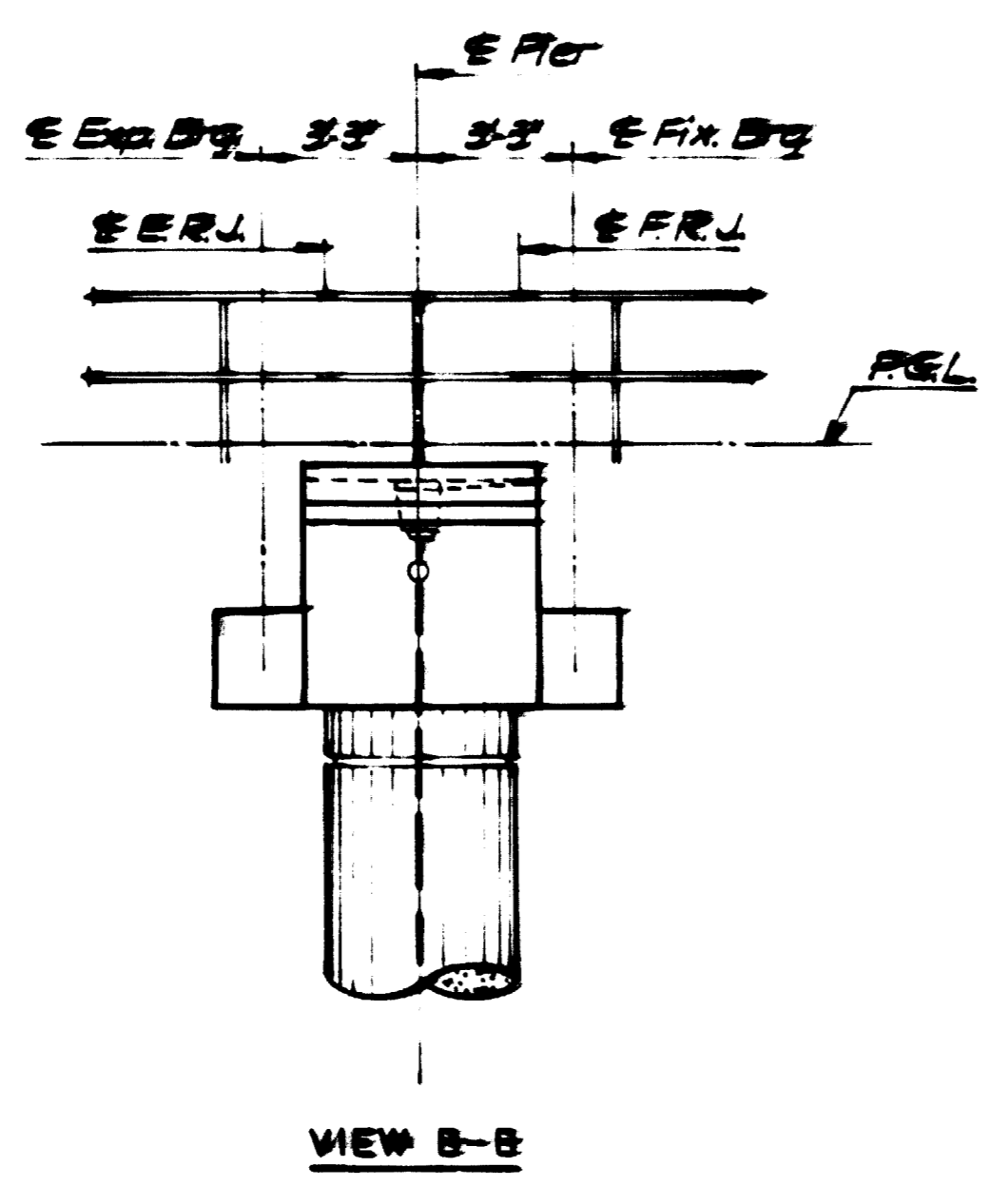
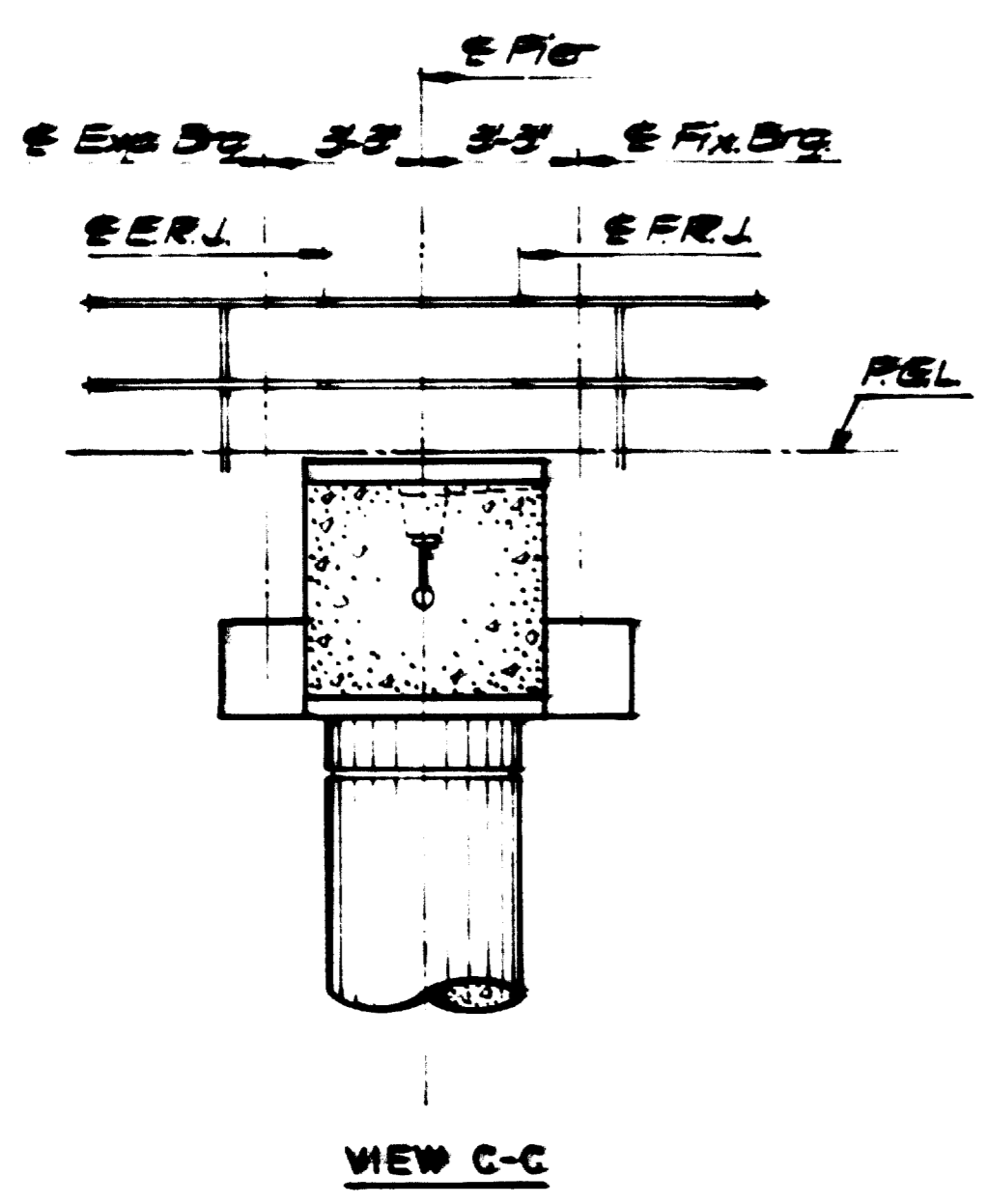
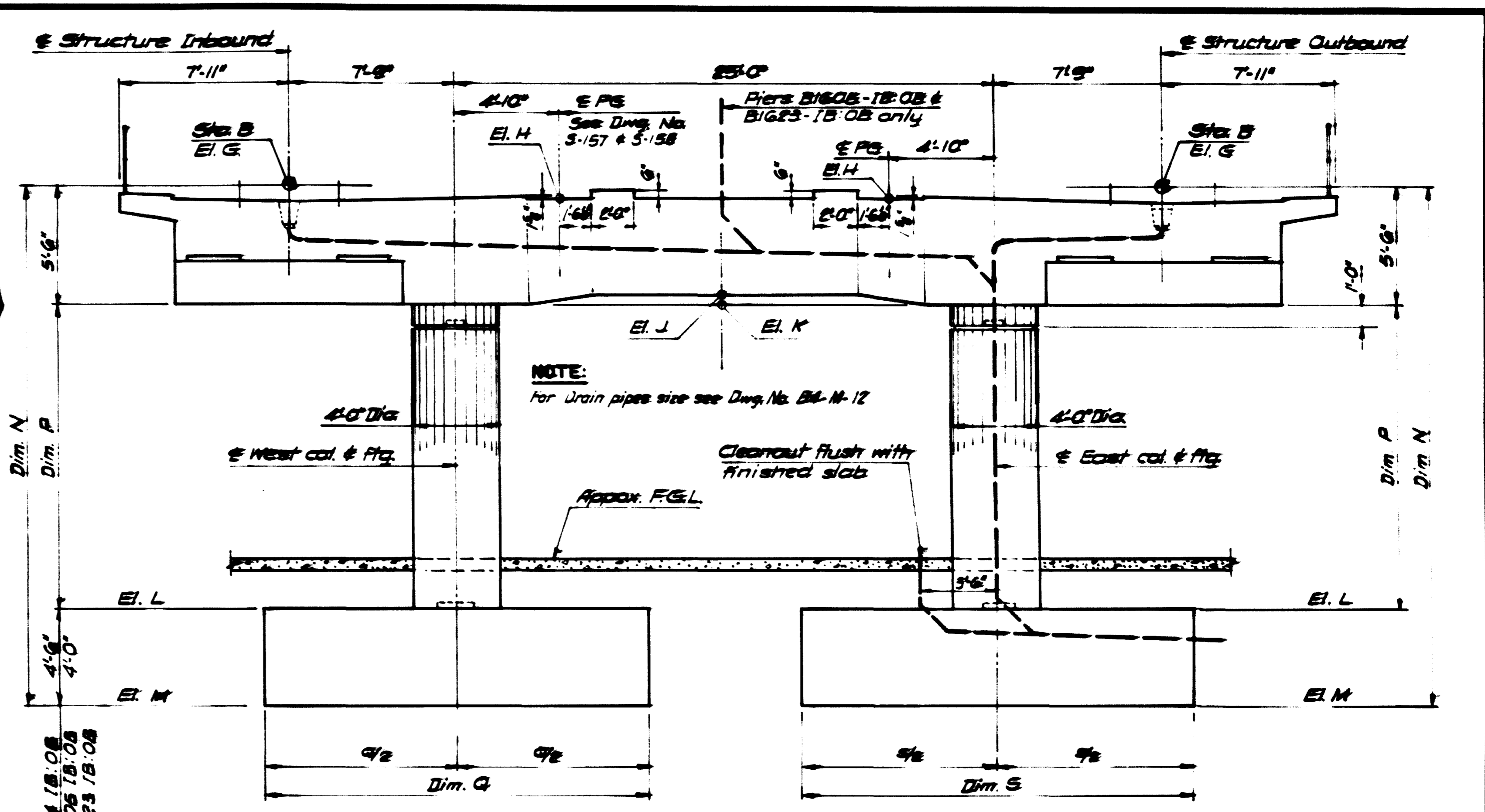
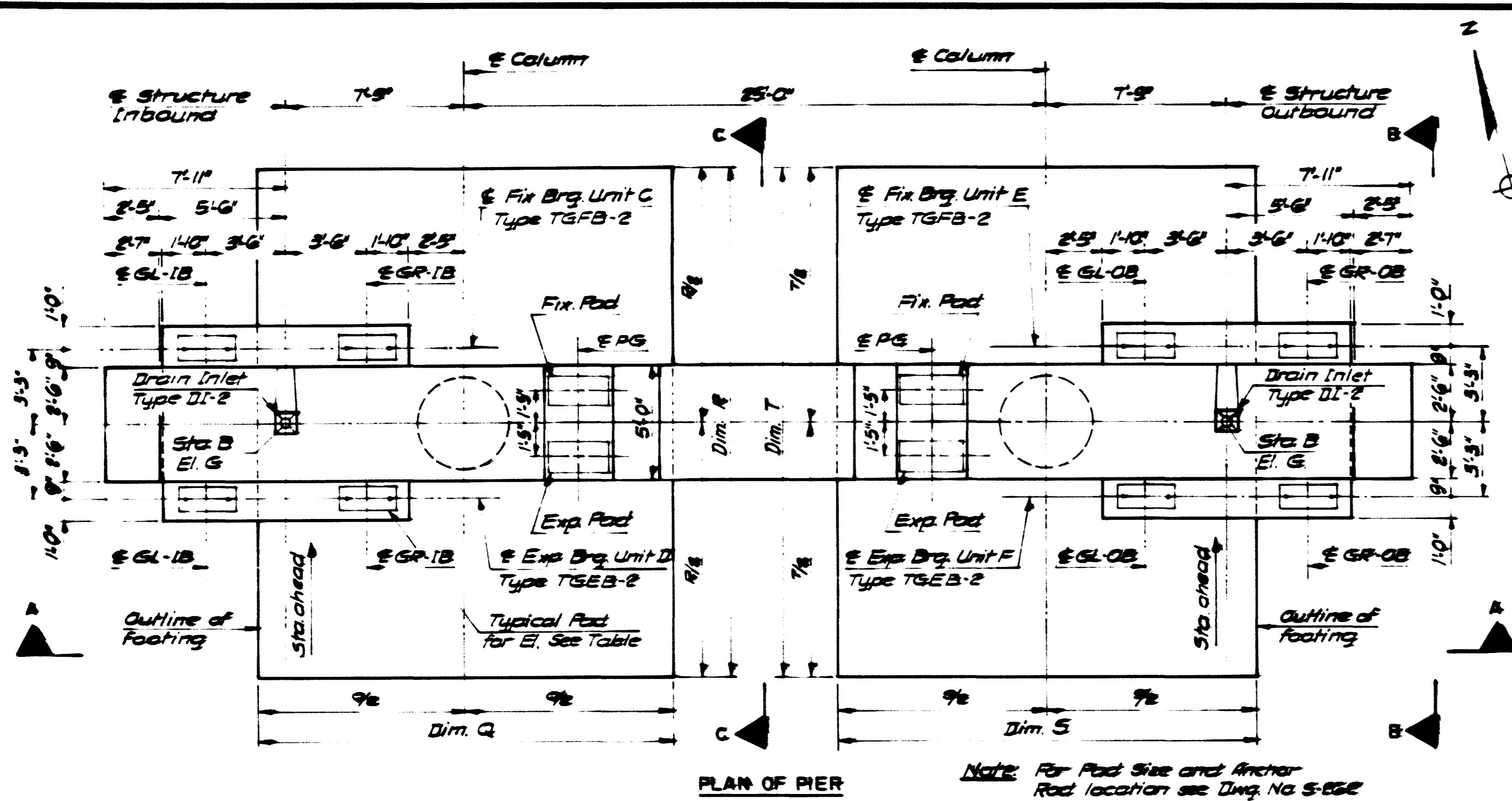
SUBMITTED *Donald Falken* 12-19-2017 DATE APPROVED _____ DATE

PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION

B04 - RHODE ISLAND AVENUE
SURVEY CONTROL

SCALE 0 40
Scale in feet

DRAWING NO. B04-C-011 SHEET NO. _____



PAD ELEVATIONS				
PIER	UNIT C	UNIT D	UNIT E	UNIT F
B1605-18:08	138.99	138.95	138.99	138.95
B1614-18:08	139.30	139.26	139.30	139.26
B1623-18:08	139.62	139.58	139.62	139.58

PIER	STA. B	BRG. UNIT C	BRG. UNIT D	BRG. UNIT E	BRG. UNIT F	EL. G	EL. H	EL. J	EL. K	EL. L	EL. M	DIM. N	DIM. P	DIM. Q	DIM. R	DIM. S	DIM. T	EXP. PAD	EXP. PAD
B1605-18:08	160+33.02	B1610-18	B1601-18	B1610-08	B1601-08	142.66	141.99	137.66	137.16	122.00	116.00	24'-7 1/2"	15'-1 7/8"	19'-6"	19'-0"	19'-6"	19'-6"	Type P3EB-1	Type P3AP-3
B1614-18:08	161+42.02	B1619-18	B1610-18	B1619-08	B1610-08	142.97	142.30	137.97	137.47	119.34	114.84	22'-1 1/2"	18'-1 1/2"	18'-0"	22'-0"	18'-0"	22'-0"	Type P3EB-3	Type P3AP-3
B1623-18:08	162+33.02	B1608-18	B1619-18	B1628-08	B1619-08	143.29	142.62	138.29	137.79	122.50	118.50	24'-3 1/2"	15'-3 1/2"	19'-0"	19'-0"	19'-0"	19'-0"	Type P3EB-3	Type P3AP-3

AS-BUILT

AS-BUILT ABOVE
Grid Coordinates and Horizontal Control Values are based on 1977 Field Geomatics Positions and Control Values.

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS	
		NUMBER	DESCRIPTION	DATE	BY
J.M.C.	3-71	94-M-12	Plan & Elevation		
G.M.G.	6-71	94-S-262	Plan & Elevation Pier B1587-18:08		
H.N.M.	6-71				
R.B.	7-71				

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENOFF CONSULTING ENGINEERS | HNTB

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

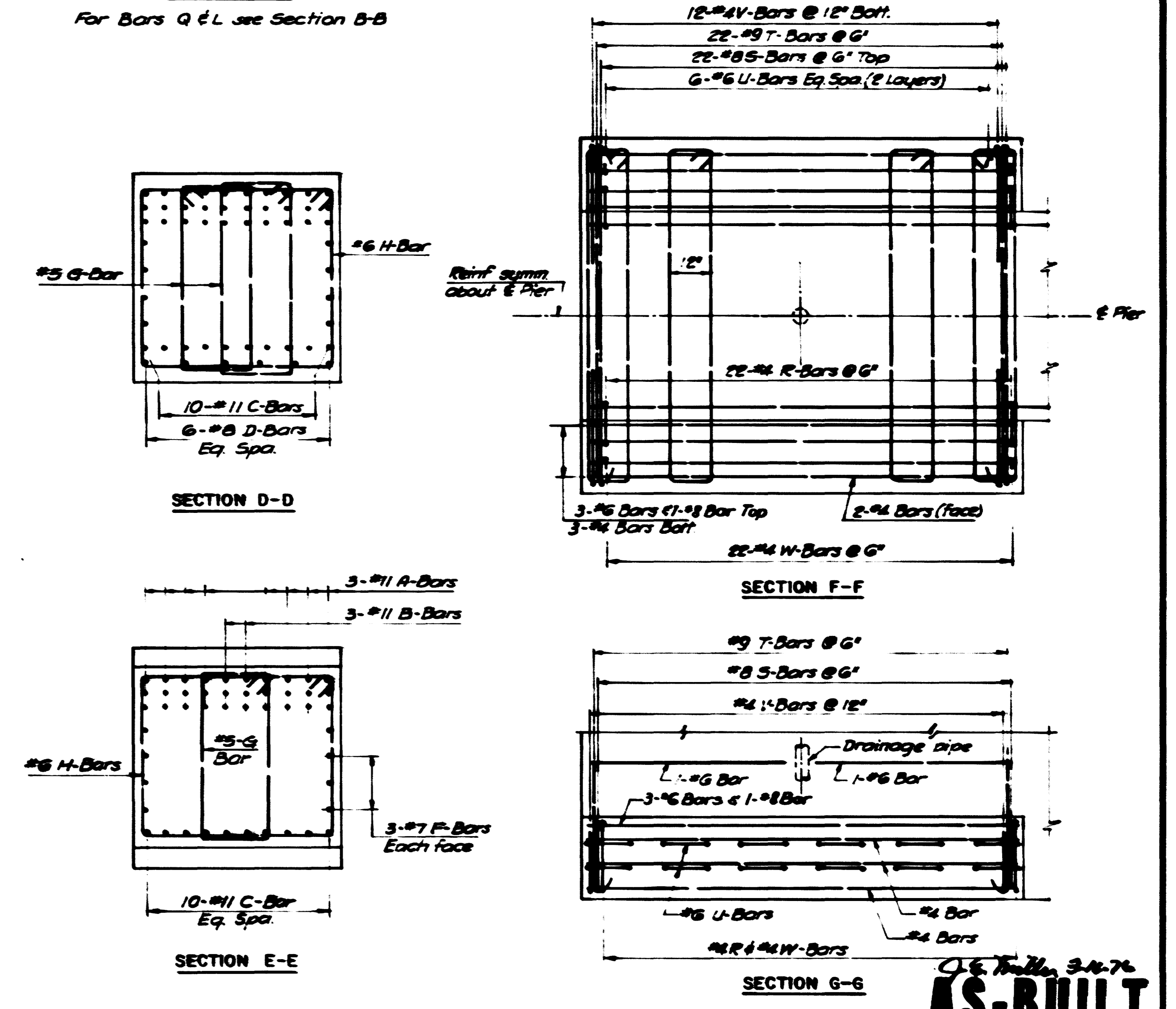
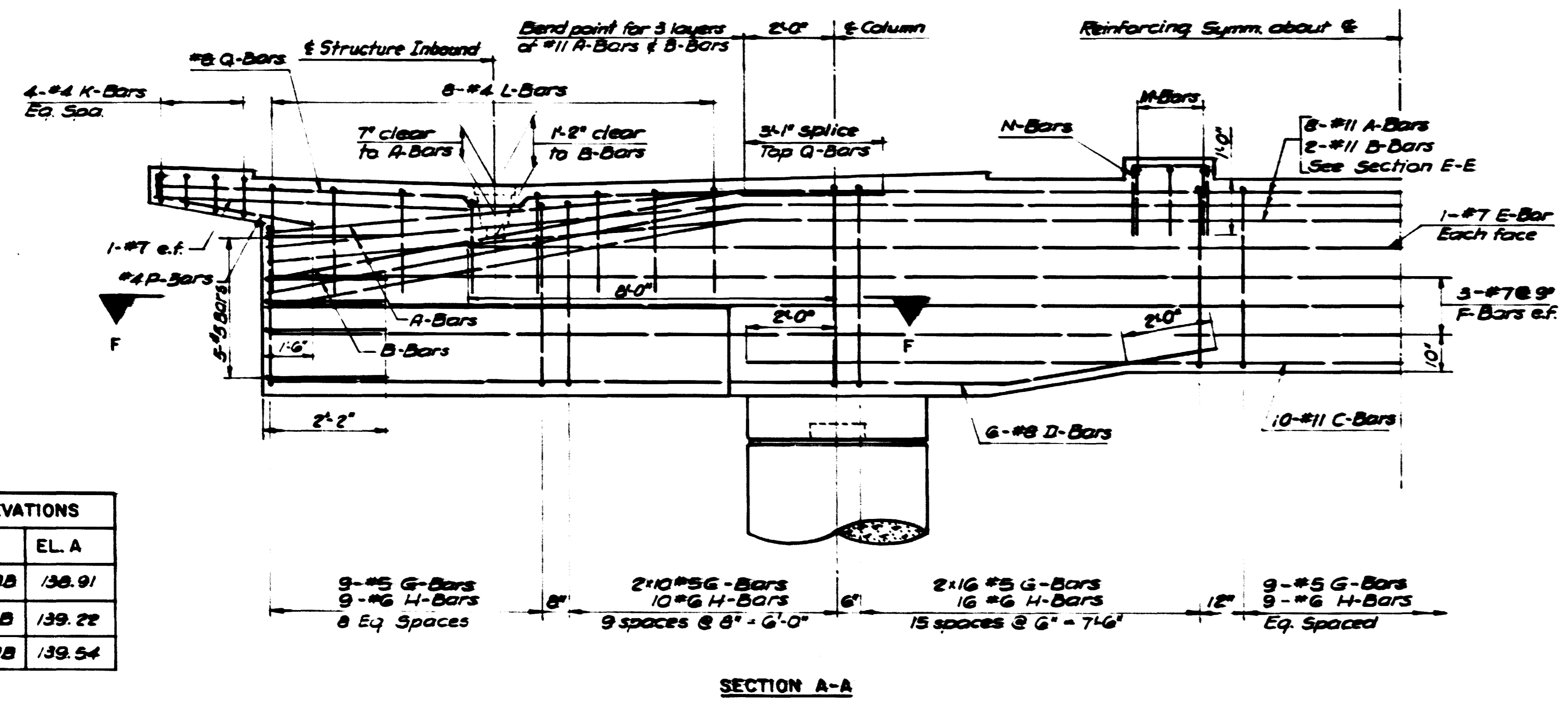
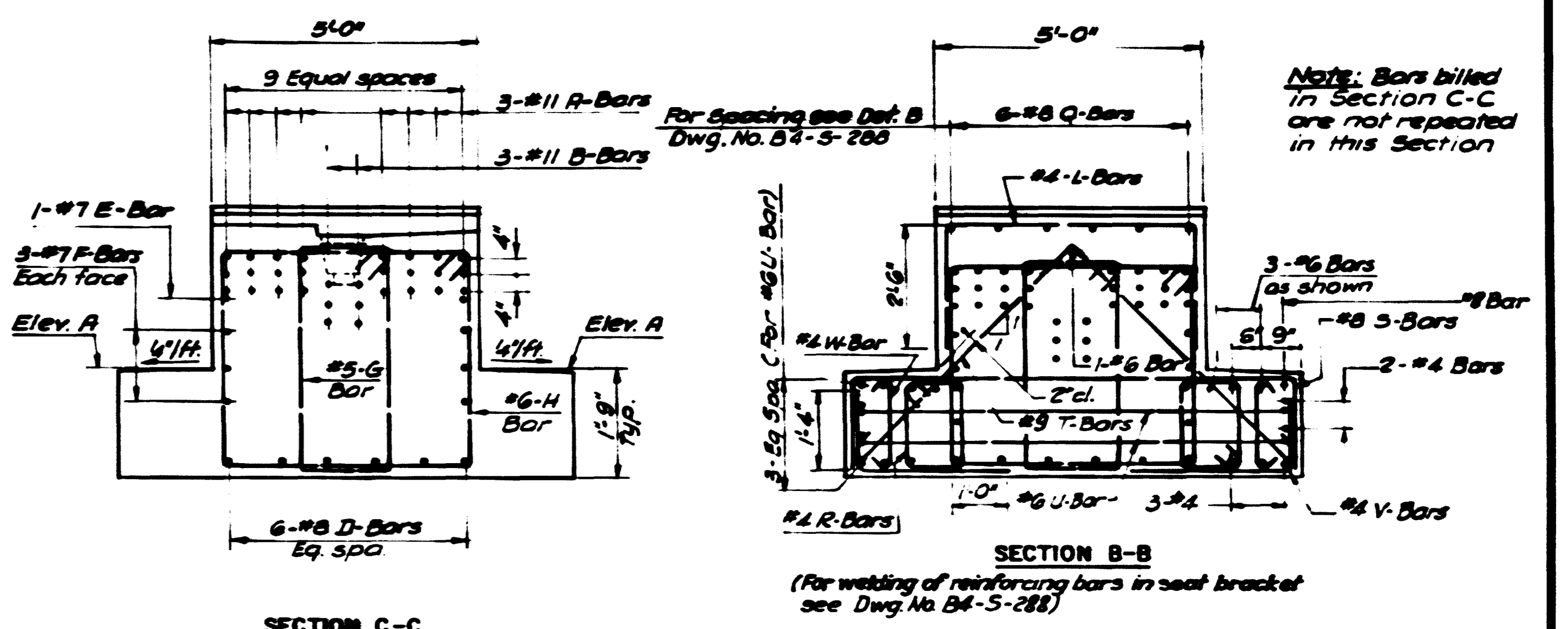
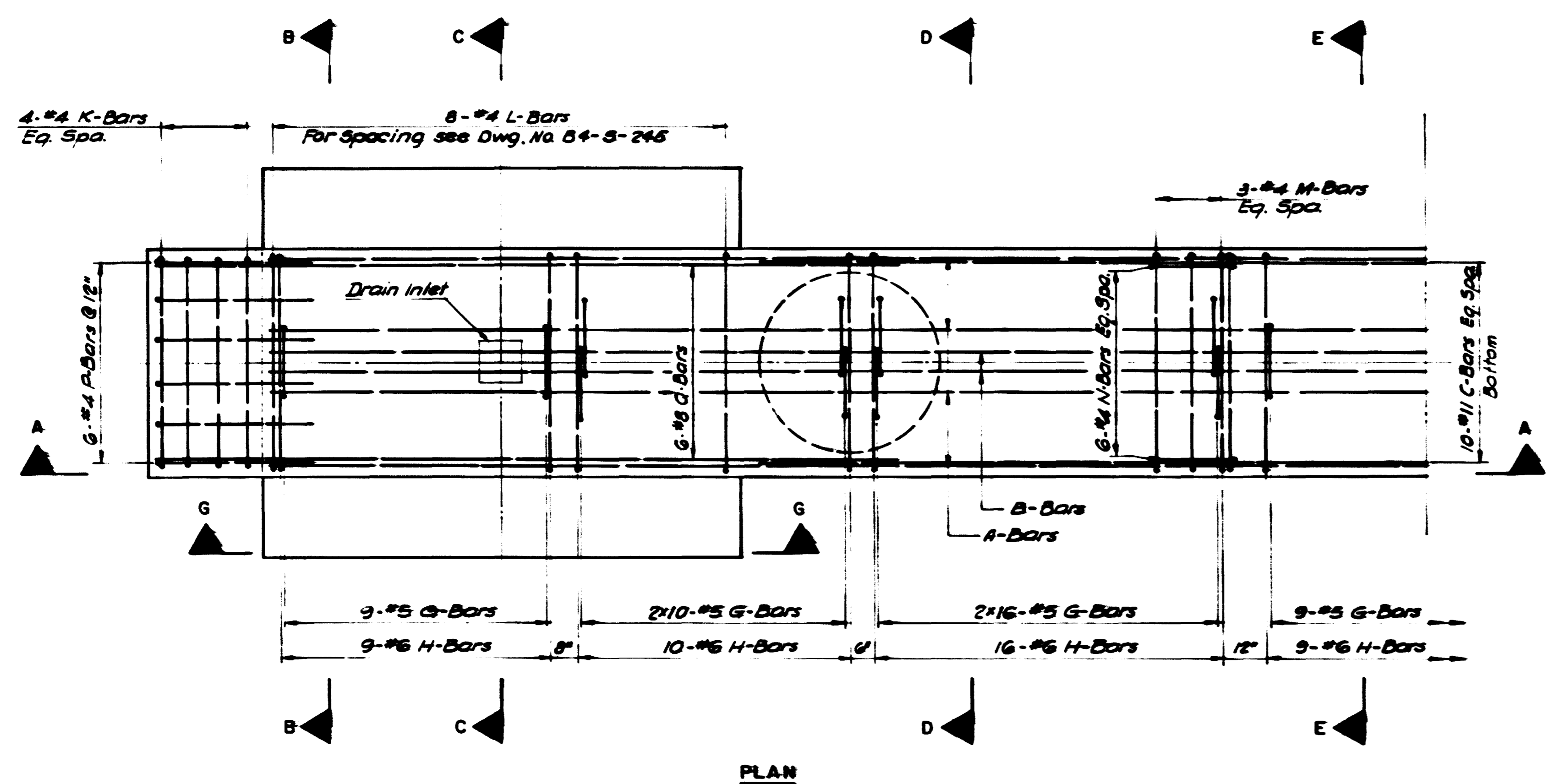
HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

B & O ROUTE AERIAL STRUCTURE
PLAN AND ELEVATION
PIERS B1605-18:08; B1614-18:08; B1623-18:08

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

DRAWING NO. B4-S-264

M39-202



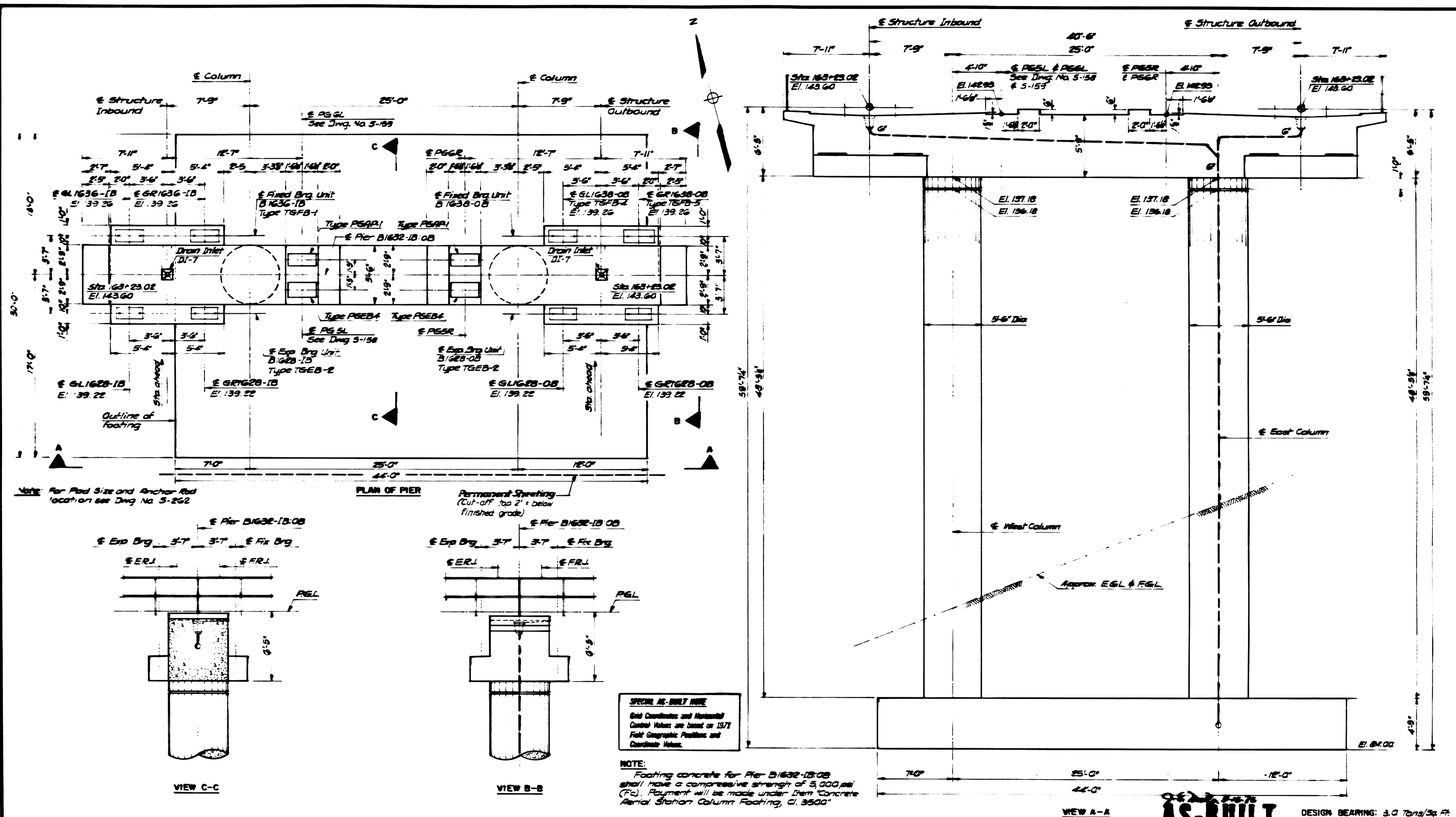
Note: Bars billed in Section C-C are not repeated in this Section

PAD ELEVATIONS	
PIER	EL. A
B16051B:0B	139.91
B16141B:0B	139.22
B16231B:0B	139.54

NOTE: Reinforcing to be 2" clear from Face of Concrete.

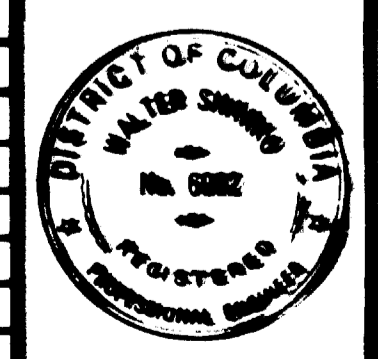
AS-BUILT

DESIGNED: W.P. 5-71		DATE: 5-71		REFERENCE DRAWINGS		REVISIONS				WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT		B & O ROUTE AERIAL STRUCTURE CAP REINFORCING DETAILS PIERS B1605-1B:0B, B1614-1B:0B, & B1623-1B:0B SCALE: 1/2" = 1'-0" DRAWING NO: B4-S-292 M39-203							
DRAWN: G.M.O. 6-71		DATE: 6-71		NUMBER: B4-S-292		DESCRIPTION: Typical Deck Slab Reinforcing Details								DATE: 6-17-72		BY: H.F.B.		DESCRIPTION: Per PCO-4	
CHECKED: H.K.M. 6-71		DATE: 6-71		NUMBER: B4-S-288		DESCRIPTION: Cap Reinforcing Details								DATE: 7-71		BY: [Signature]		DESCRIPTION: [Signature]	
APPROVED: [Signature] 7-71		DATE: 7-71		DATE: 7-71		DATE: 7-71													



DESIGNED	J-R	4-71
DRAWN	G-MO	5-71
CHECKED	L-D	5-71
APPROVED	K-B	7-71

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	DESCRIPTION
34-S-262	Plan & Elevation Pier B1587-18:08	9-3-71	H.F.B. Amendment No. 1
34-V-12	41 Ave Sta Drainage Plan and Elev.		
34-G-3	Traffic and Construction Staging		
34-G-5	Traffic and Construction Staging		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LELUW, CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

APPROVED: *J. L. Greenwood*

AS-BUILT

**B & O ROUTE
AERIAL STRUCTURE**

PLAN AND ELEVATION
PIER B1632-18:08

DESIGN BEARING: 3.0 Tons/Sq Ft

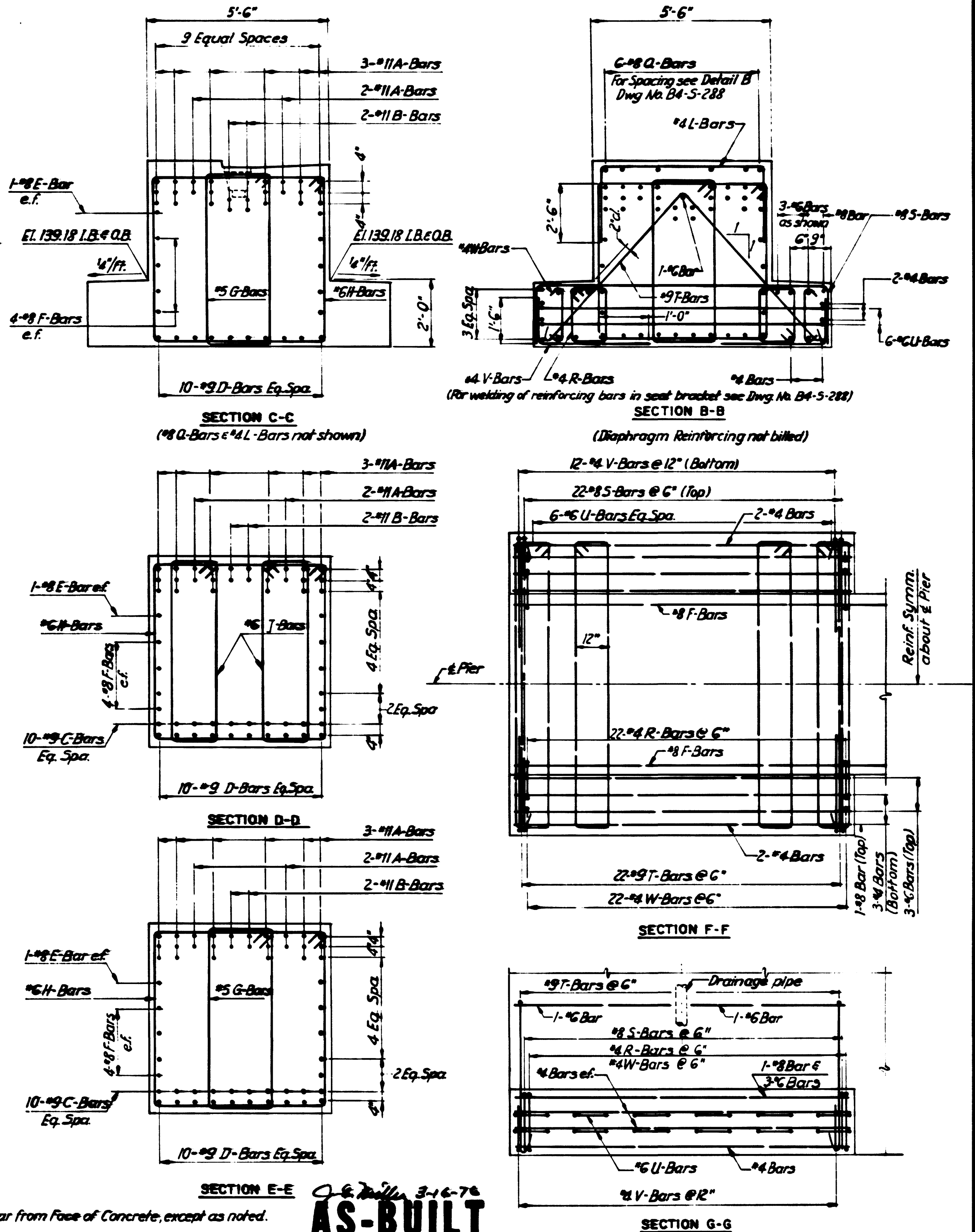
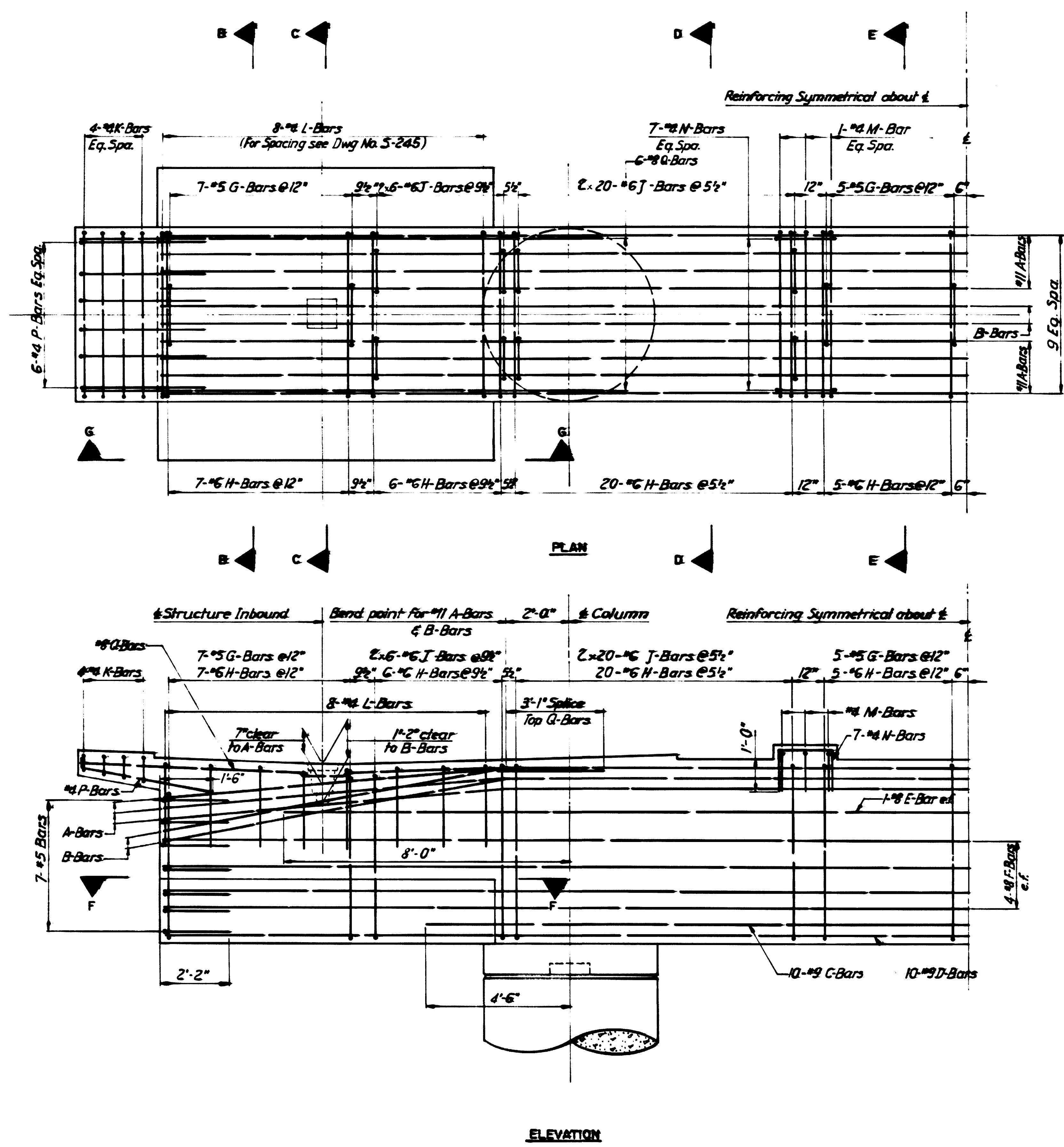
SCALE: 1" = 1'-0"

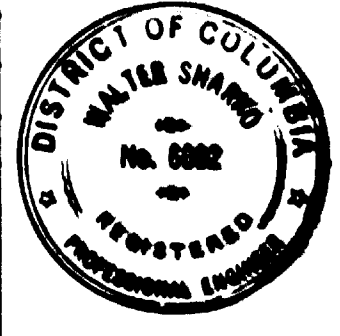
DRAWING NO: B4-S-265

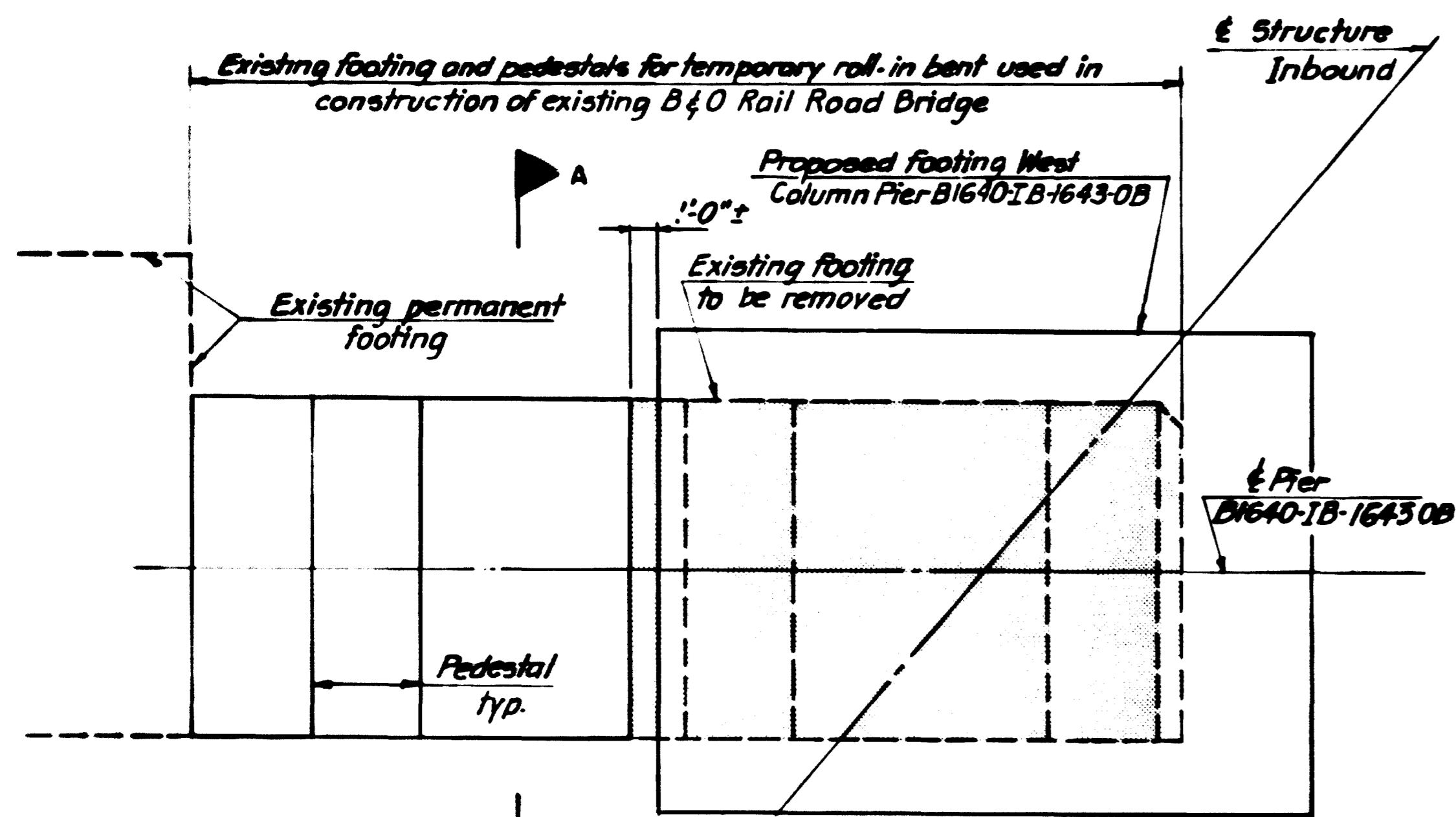
W39-204

SPECIAL AS-BUILT NOTE
Grid Coordinates and Horizontal Control Values are based on 1977 Field Geographic Positions and Coordinate Values.

NOTE:
Footings concrete for Pier B1632-18:08 shall have a compressive strength of 5,000 psi (Pc). Payment will be made under item Concrete Aerial Station Column Footing, Cl. 3500"

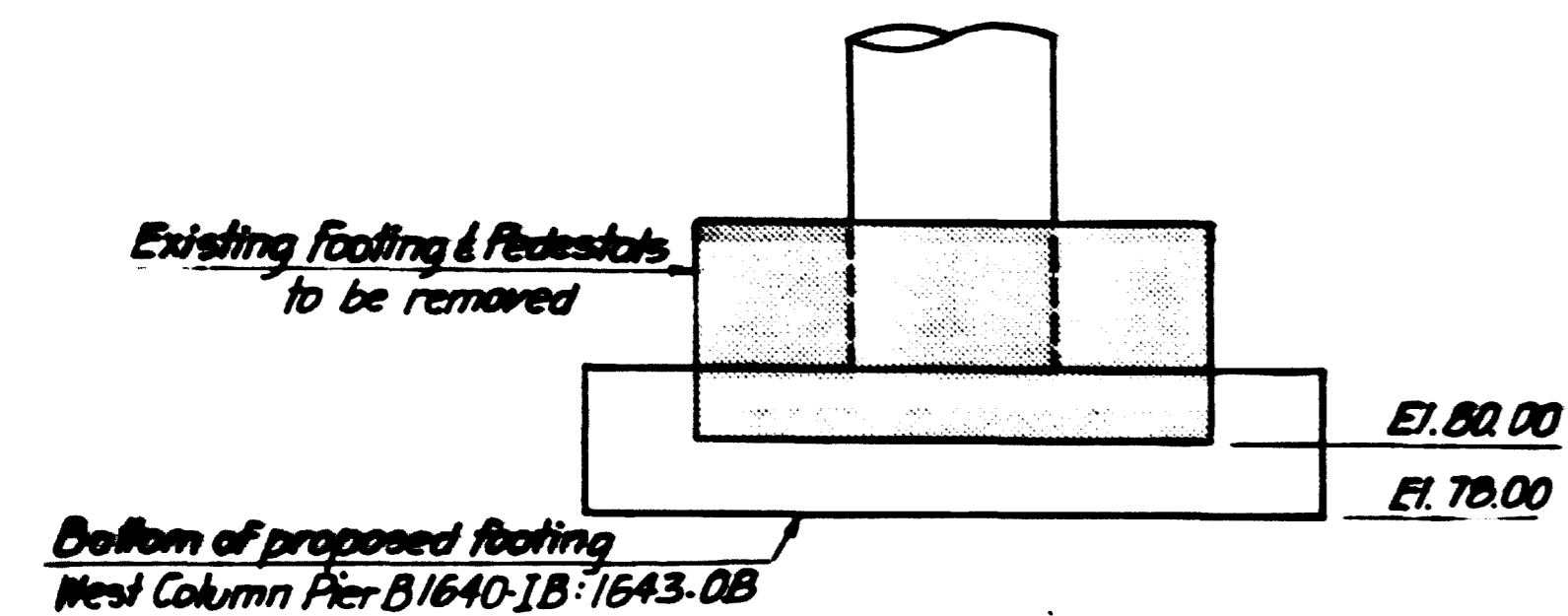


DESIGNED <u>L.M.C. & F.L.I.</u> 5-71	DATE	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT	B & O ROUTE AERIAL STRUCTURE CAP REINFORCING DETAILS PIER B#32-1B:0B SCALE 1/2" = 1'-0" DRAWING NO. B4-S-295 M39-205
DRAWN <u>H.F.B.</u> 6-71	DATE	64-S-289	Cap Reinforcing Details	4-17-72	H.F.B.	Per PCO-4			
CHECKED <u>H.R.M.</u> 6-71	DATE								
APPROVED <u>H.F.B.</u> 7-11	DATE								



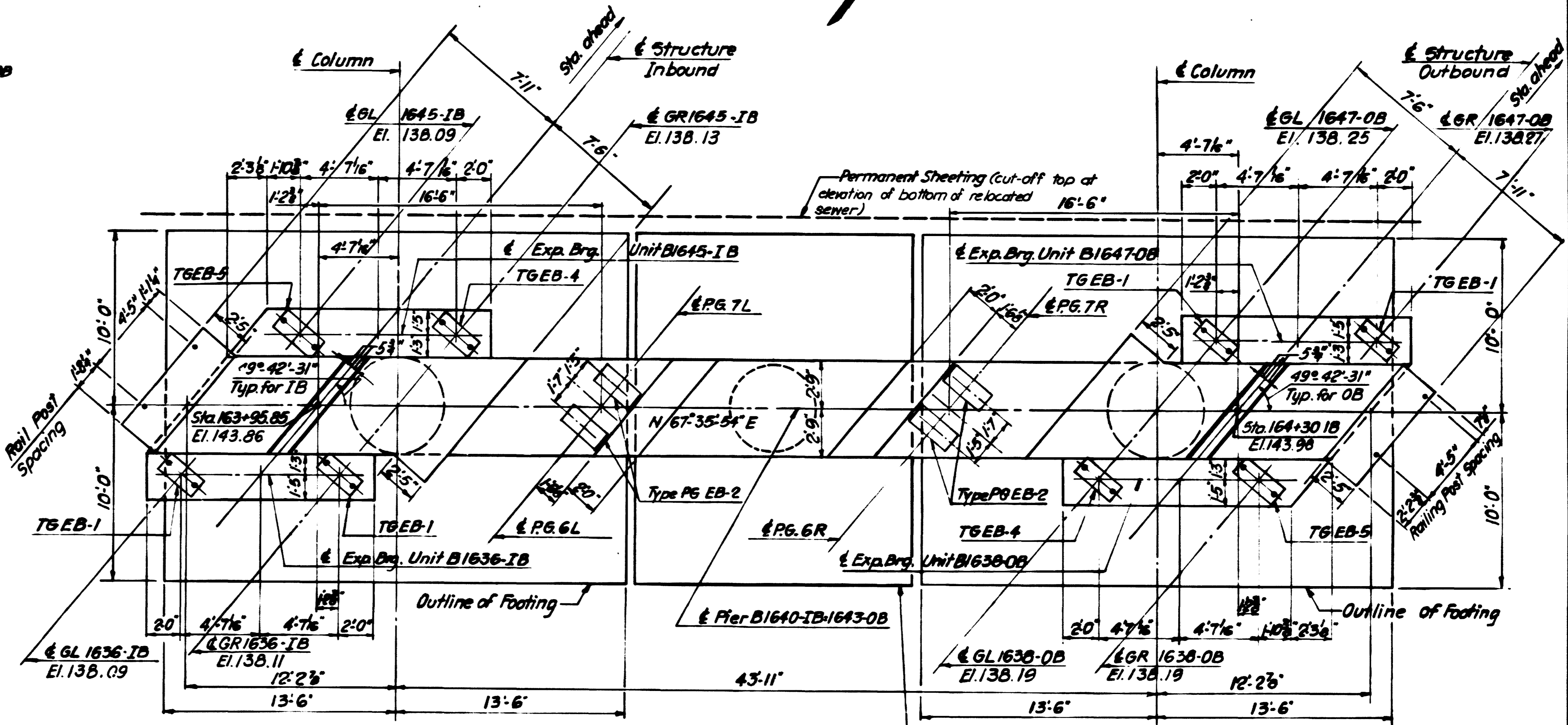
Note: Limits & extent of work to be determined in field.

FOOTING PLAN

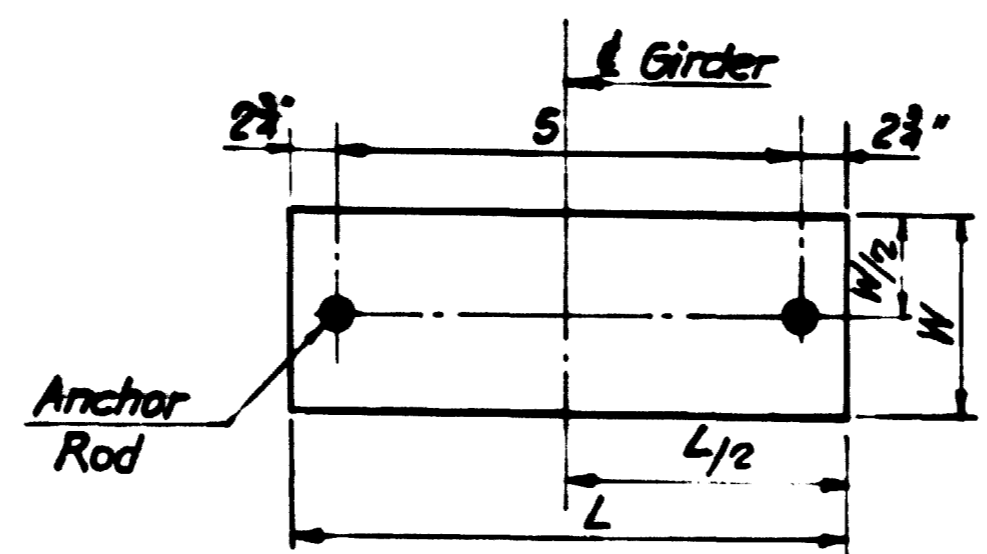


SECTION A-A

LIMITS OF REMOVAL OF EXISTING CONSTRUCTION BENT FOOTING
3/8" x 1'-0"



PLAN OF PIER
1/4" = 1'-0"

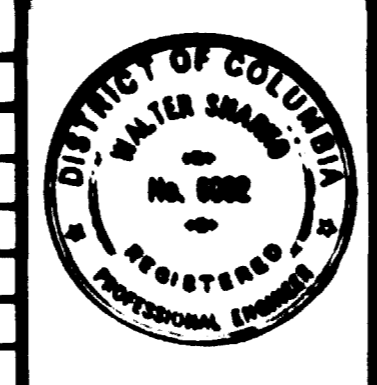


PAD DETAIL
No Scale

TYPE OF BEARING	PAD DIM.		ANCH. ROD	
	L	W	DIA.	S
TGEB-1	28'	13"	2"	27 1/2'
TGEB-4	32'	13"	2"	26 1/2'
TGEB-5	34'	14"	2 1/2"	28 1/2'

J. L. Miller 3-16-76
AS-BUILT

DESIGNED	W.P.	DATE	REFERENCE DRAWINGS		REVISIONS		
			NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN	R.M.L.	5-71	B4-G-5	Traffic and Construction Staging	9-8-71	H.F.B.	Amendment No. 1.
CHECKED	L.D.	6-71	B4-G-6	Traffic and Construction Staging			
APPROVED	R.B. K...	7-11	B4-S309	Pier and Abutment Details			



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

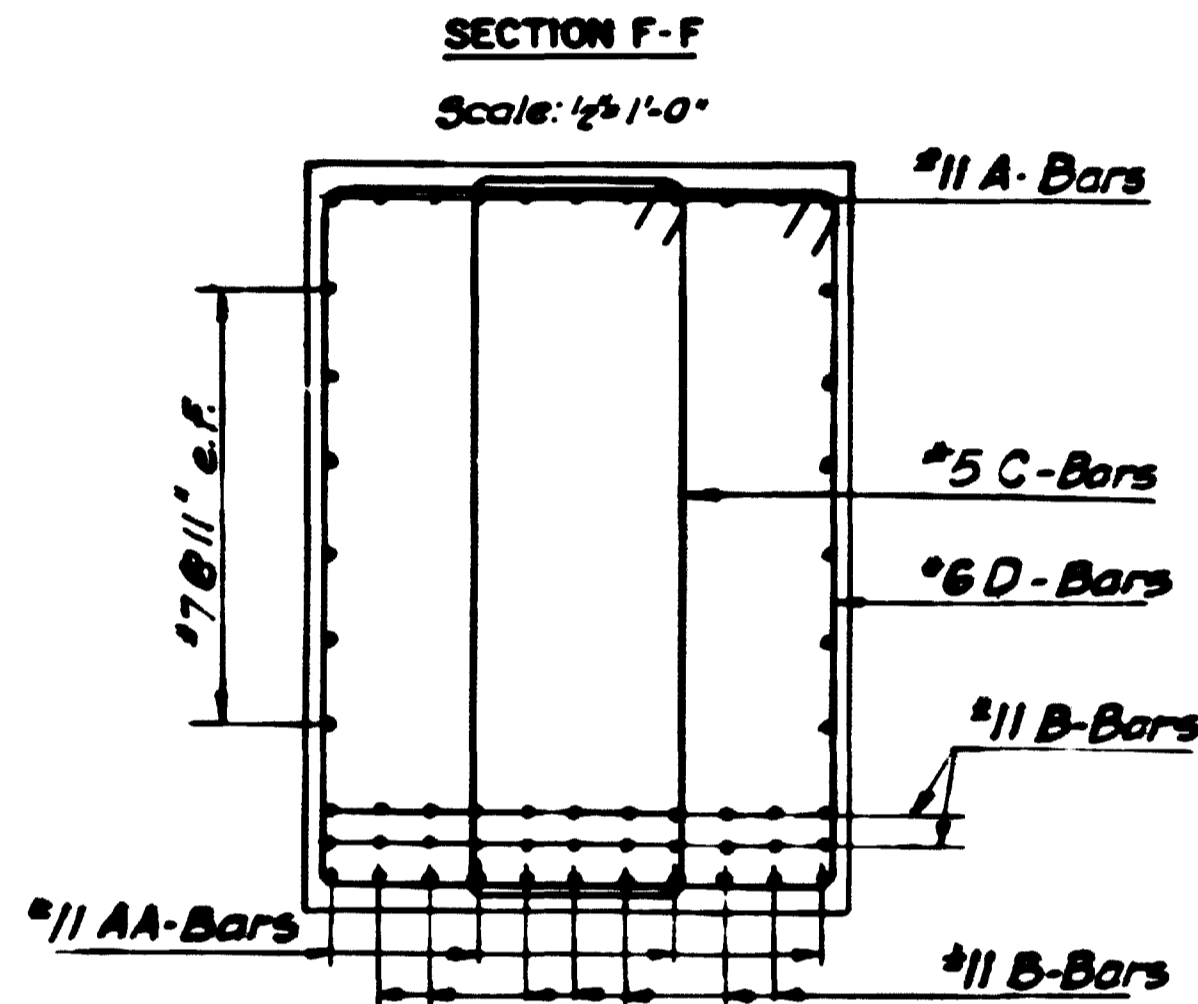
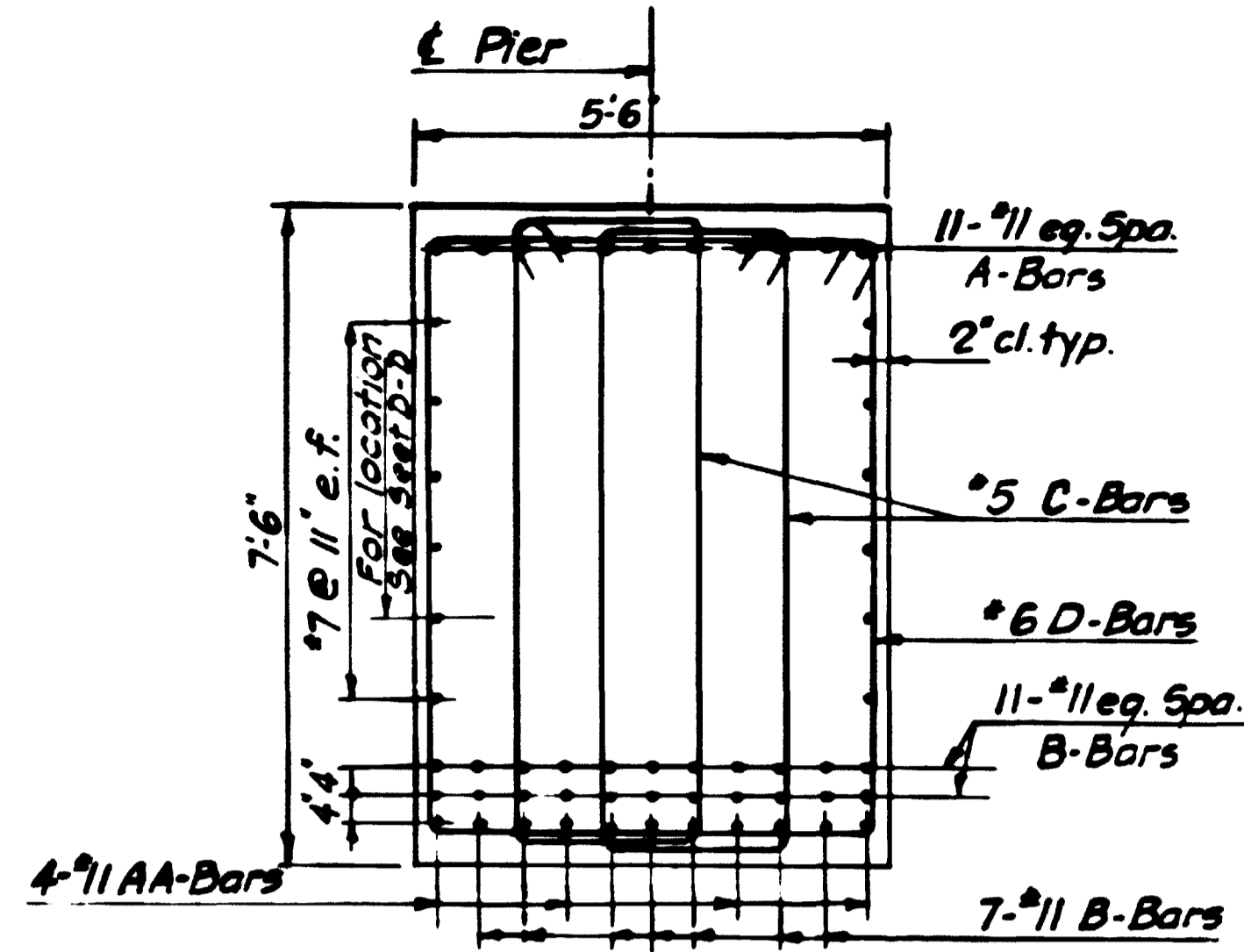
SUBMITTED: *W. Marks* APPROVED: *J. L. Miller*

B & O ROUTE AERIAL STRUCTURE
PLAN-PIER B1640-IB:1643-OB

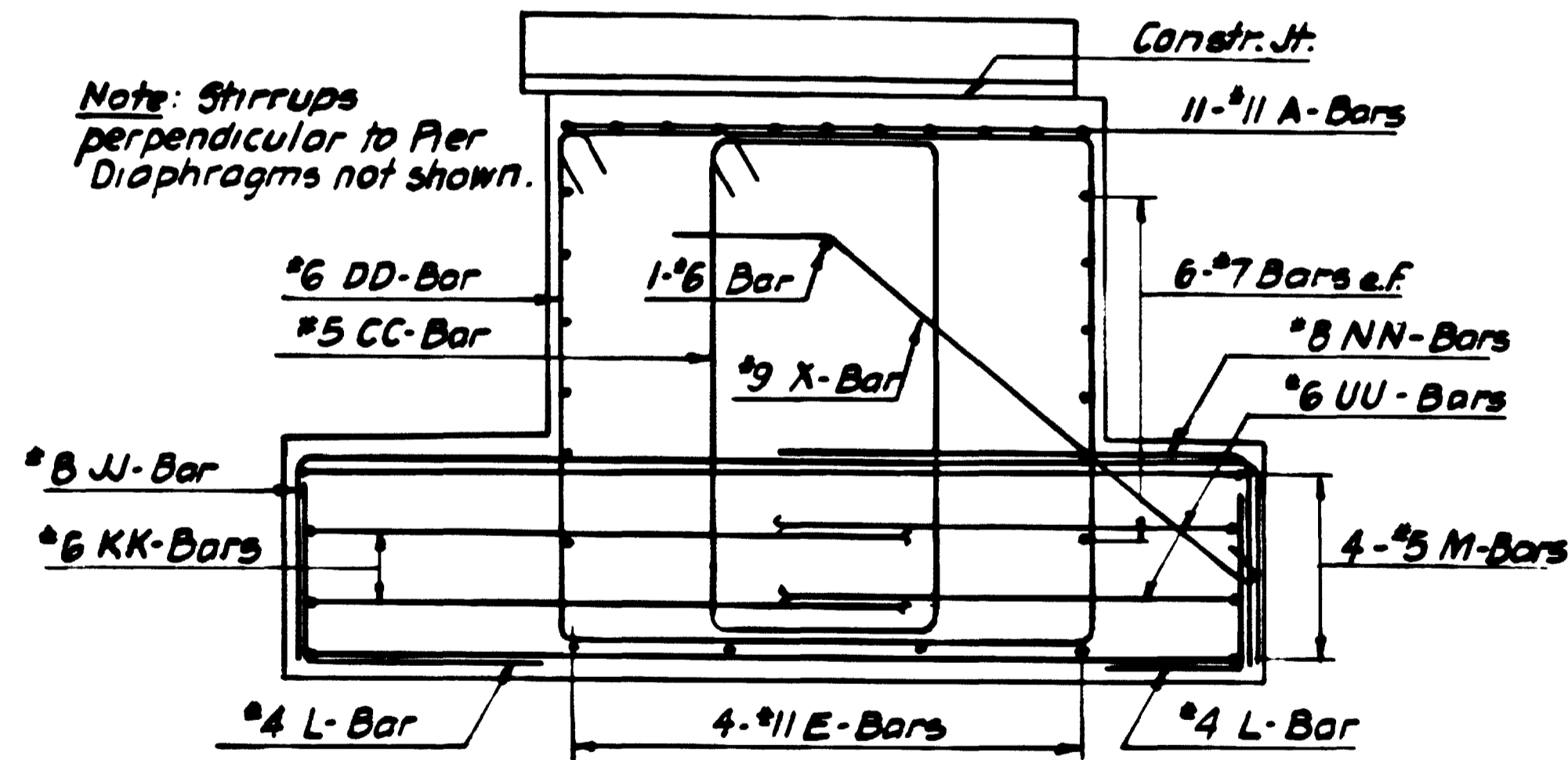
SCALE: AS SHOWN

DRAWING NO: B4-S-266

M39-206



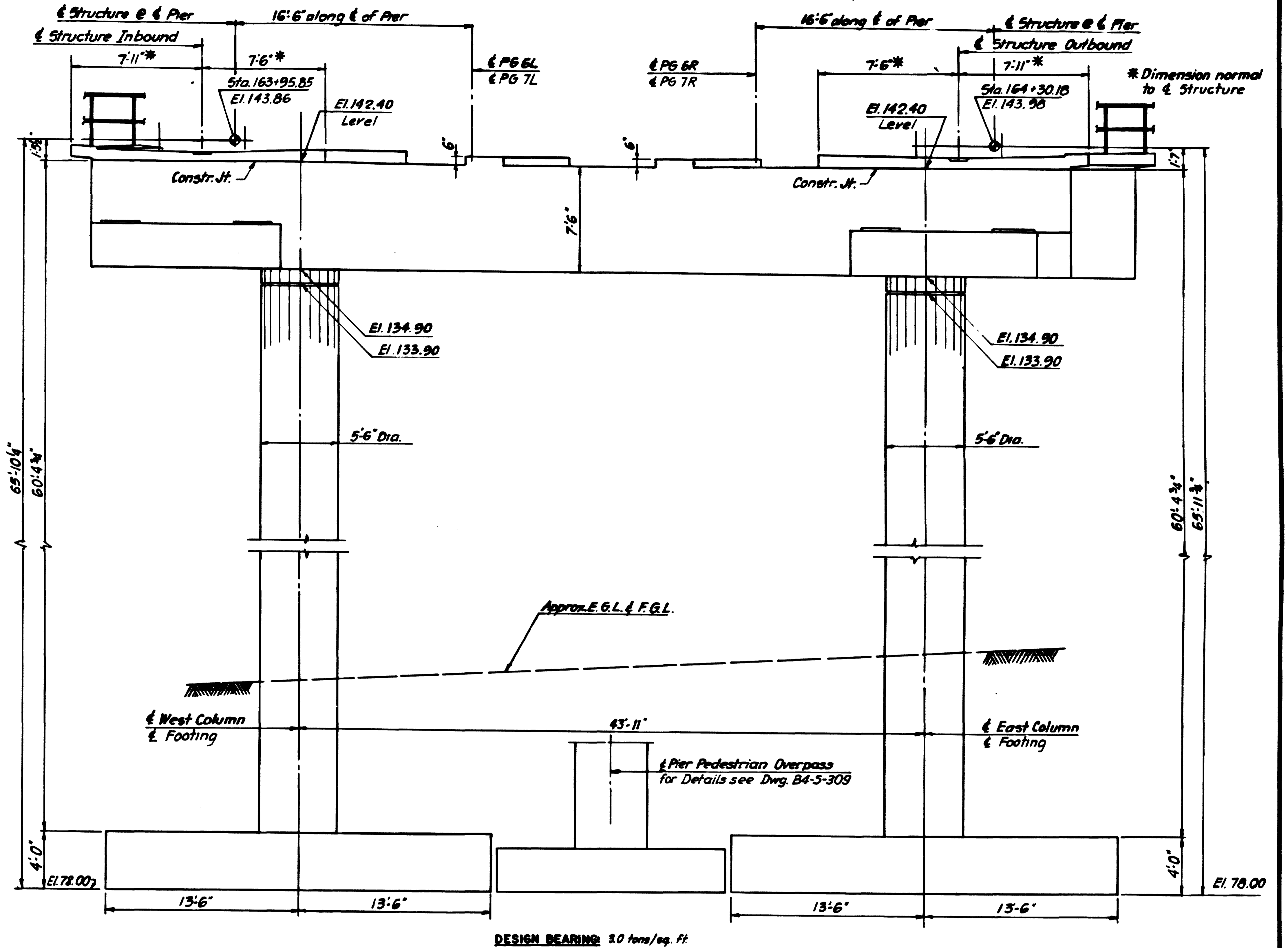
SECTION G-G
Scale: 1/2" = 1'-0"



SECTION H-H
Scale: 1/2" = 1'-0"

(For welding of reinforcing bars in seat bracket see Dwg. No. B4-S-288)

NOTE: For Location of Sections F-F, G-G, H-H see Dwg. No. B4-S-291



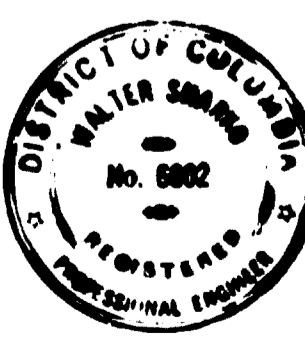
DESIGN BEARING: 3.0 tons/sq. ft.

ELEVATION-LOOKING NORTH
Scale: 1/4" = 1'-0"

AS-BUILT NOTE
Grid Coordinates and Horizontal Control Values are based on 1971 Field Geographic Positioning and Coordinate Values.

J.G. Miller 3-16-76
AS-BUILT

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS	
		NUMBER	DESCRIPTION	DATE	DESCRIPTION
W.P.	5-71	B4-S-291	Cap Reinforcing Details Pier B1640-1B:1643-08	9-8-71	HFB Amendment No. 1
R.M.L.	5-71	B4-S-309	Pier and Abutments Details	4-17-72	HFB Per PCO-4
L.D.	6-71	B4-S-288	Cap Reinforcing Details		
K.B. Miller	7-71				



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS | **HNTB**

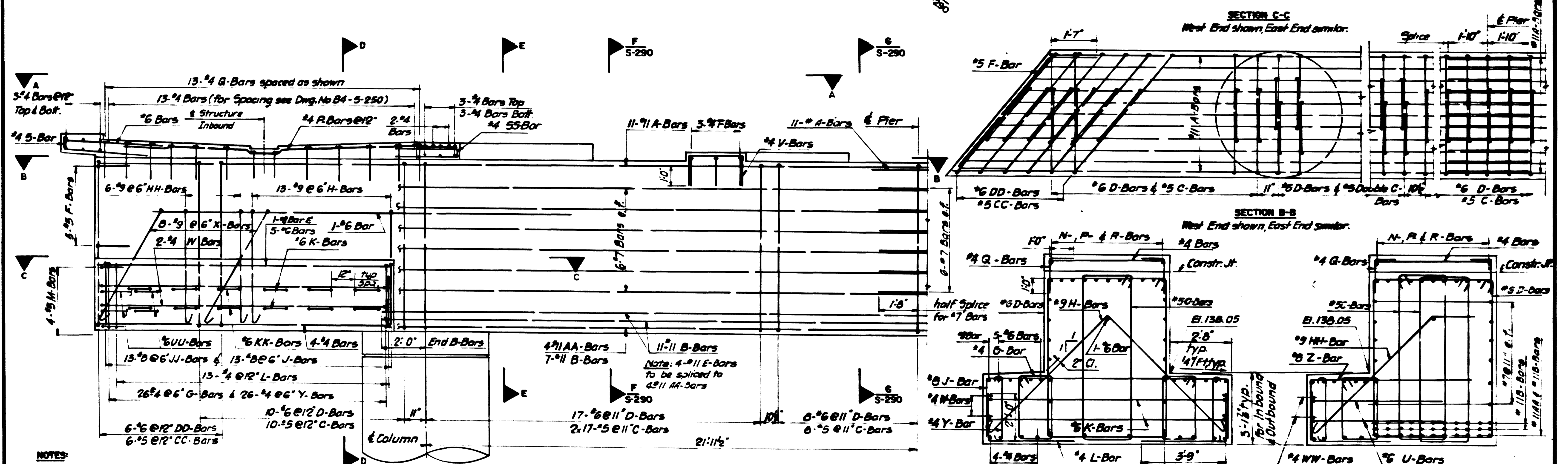
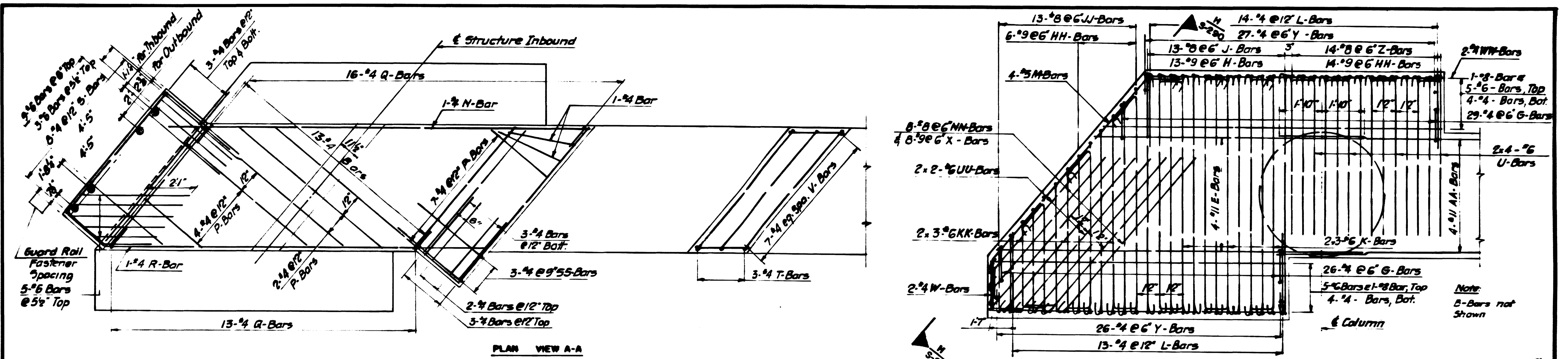
DE LEUW CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *J. H. Curwood* APPROVED: *J. H. Curwood*

**B & O ROUTE
AERIAL STRUCTURE
ELEVATION & DETAILS
PIER B1640-1B:1643-08**

SCALE: AS SHOWN DRAWING NO: B4-S-290 M39-207

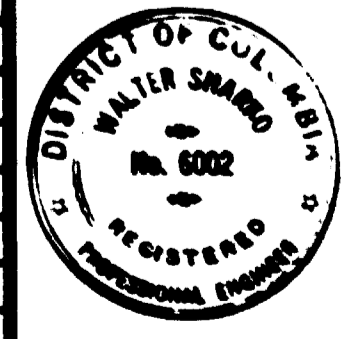


NOTES:
 The portion of concrete deck slab on top of pier cap shall be placed after the concrete deck slab on flanking Super structure units is placed.
 Re. reinforcing to be 2" clear from Face of Concrete.

ELEVATION - WEST END OF PIER
 East End similar.

AS-BUILT

DESIGNED			REFERENCE DRAWINGS			REVISIONS		
DESIGNED	M.P.	5-71	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION	
DATE			34-5-290	Elevation & Details Pier B 1640-1B 1643-0B	4-17-72	H.F.B.	Per P.C.O.-4	
DRAWN	R.M.L.	5-71	DATE	64-5-288	Cap Reinforcing Details			
CHECKED	L.D.	6-71						
APPROVED	R.B. Williams	7-71						



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY
 GENERAL ENGINEERING CONSULTANT

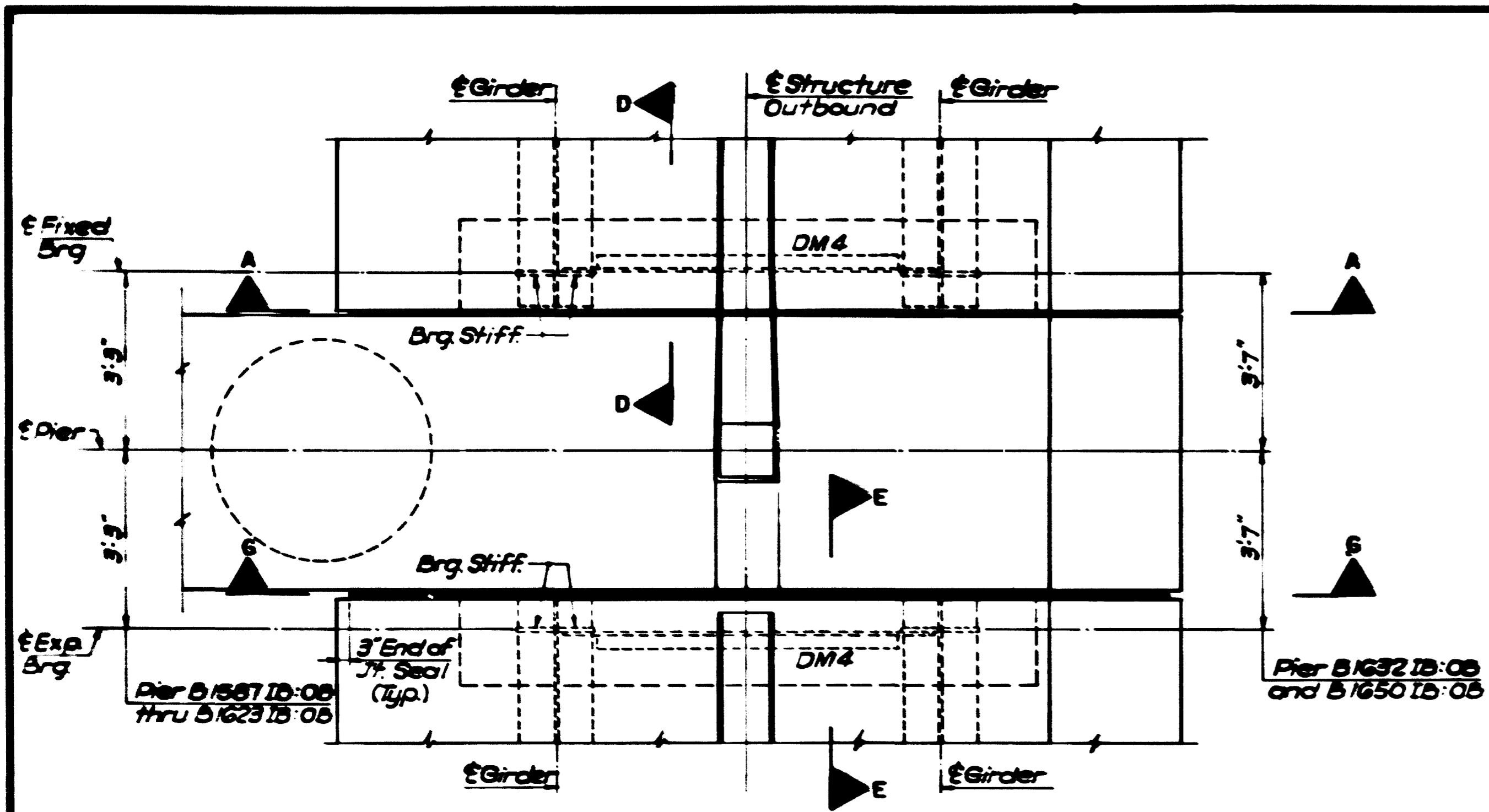
HARRY WESE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED *W. Williams* APPROVED *J. L. ...*

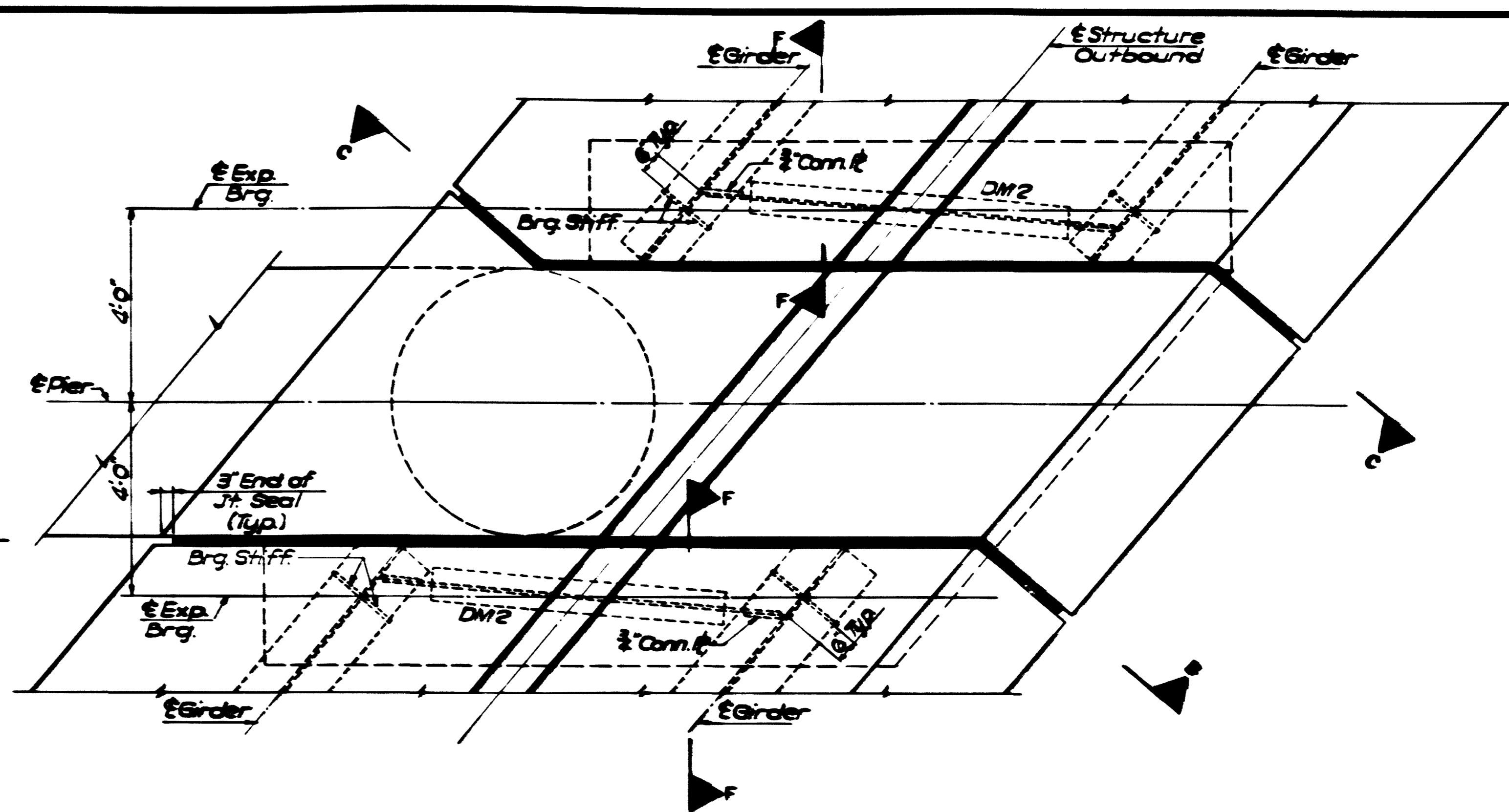
B & O ROUTE
AERIAL STRUCTURE
 CAP REINFORCING DETAILS
 PIER B1640-1B: 1643-0B

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

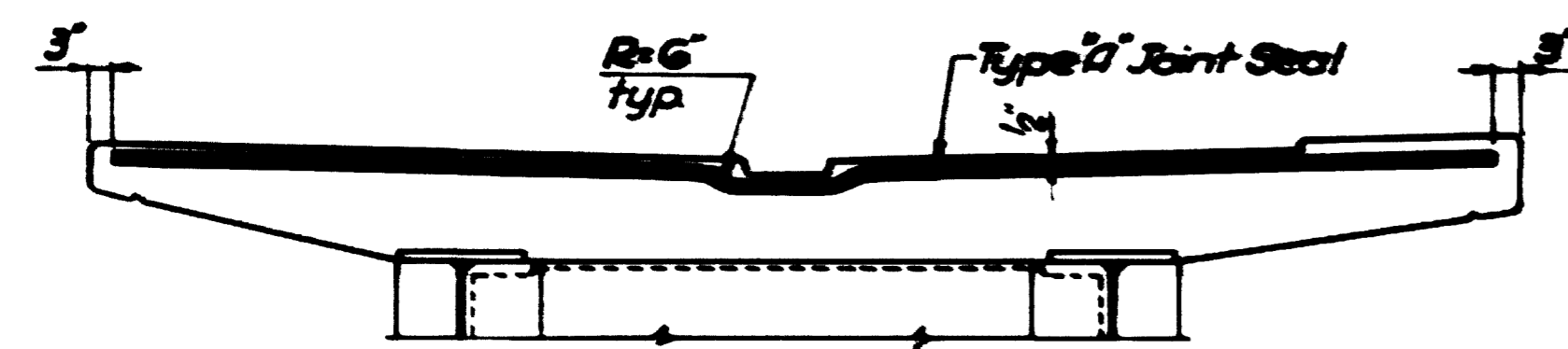
DRAWING NO: **B4-S-291** M39-208



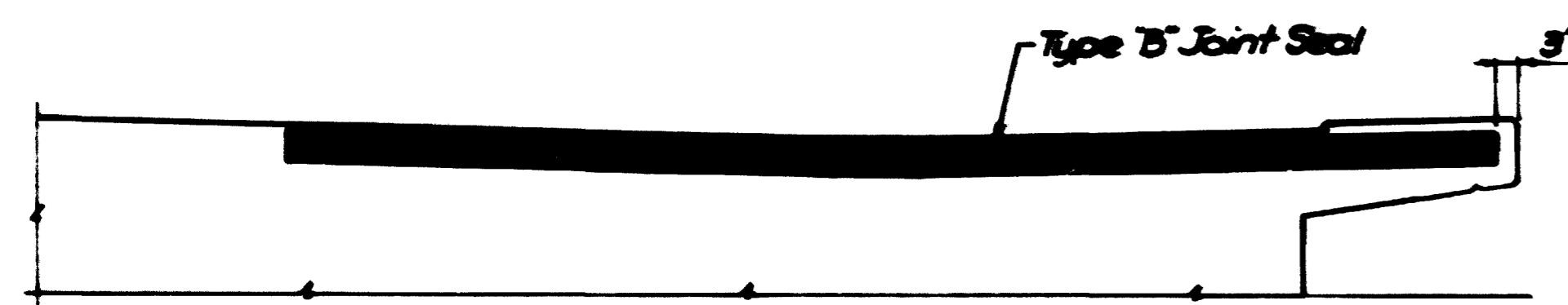
PARTIAL PLAN - PIER B1596-1B:0B SHOWN
PIER B1587-1B:0B, B1605-1B:0B THRU B1632-1B:0B & B1650-1B:0B SIMILAR
 1/2" = 1'-0"



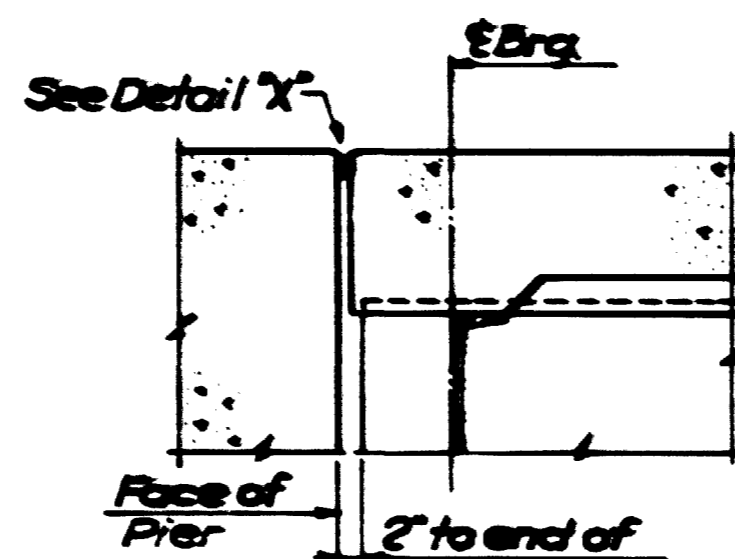
PARTIAL PLAN - PIER B1640-1B:16430B
 1/2" = 1'-0"



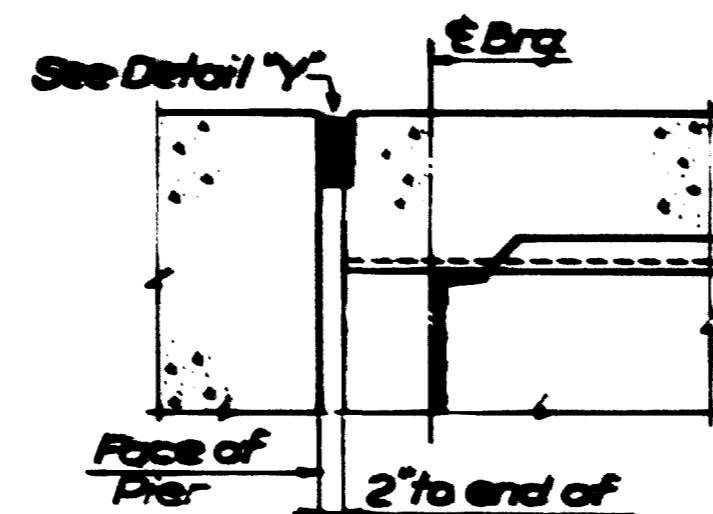
SECTION A-A
SECTION G-G SIMILAR
 1/2" = 1'-0"



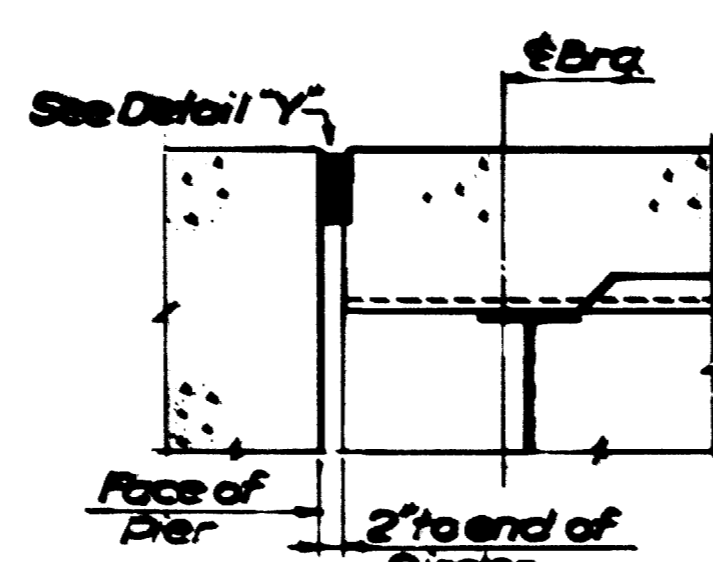
SECTION B-B
SECTION C-C OPPOSITE HAND
 1/2" = 1'-0"



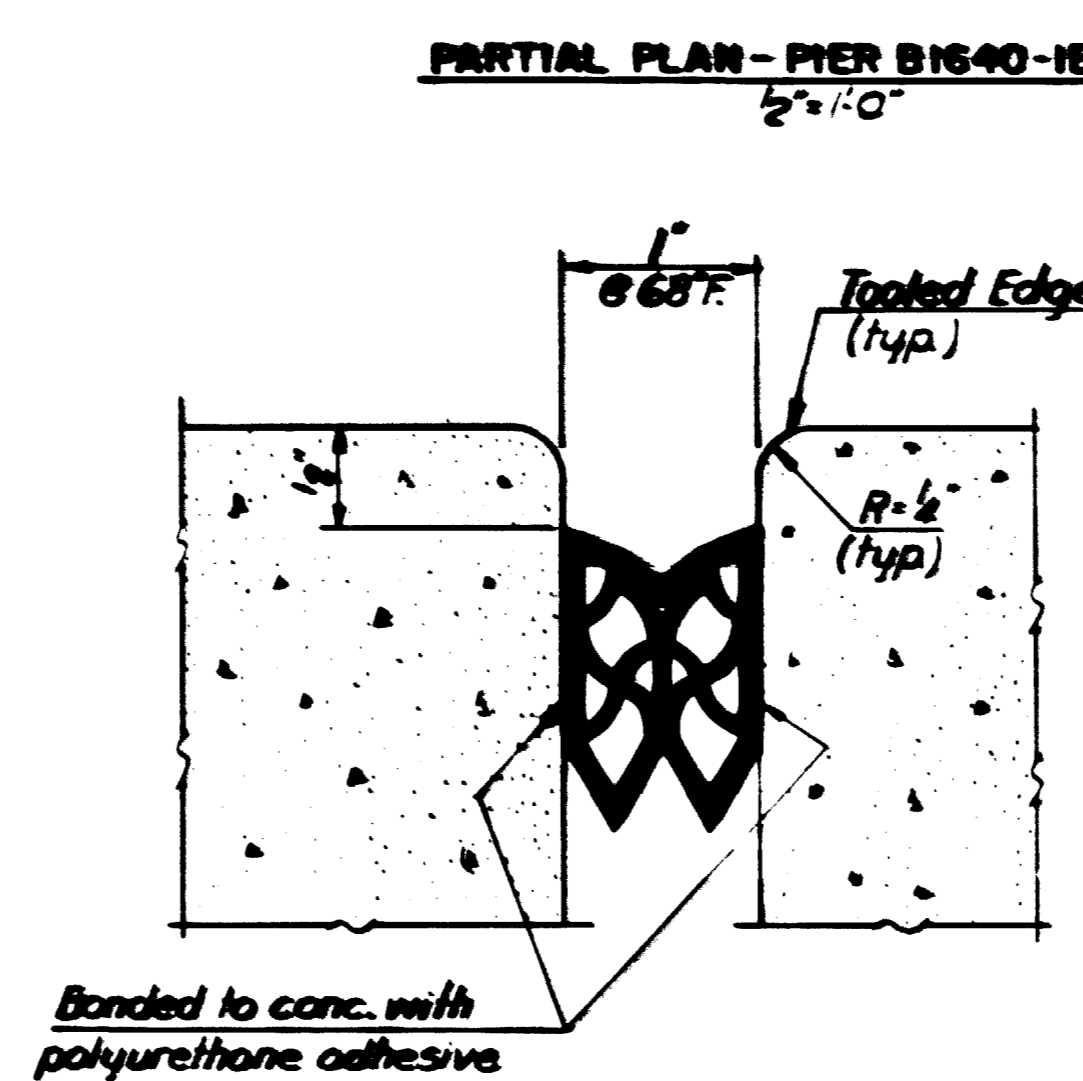
SECTION D-D
 1/4" = 1'-0"



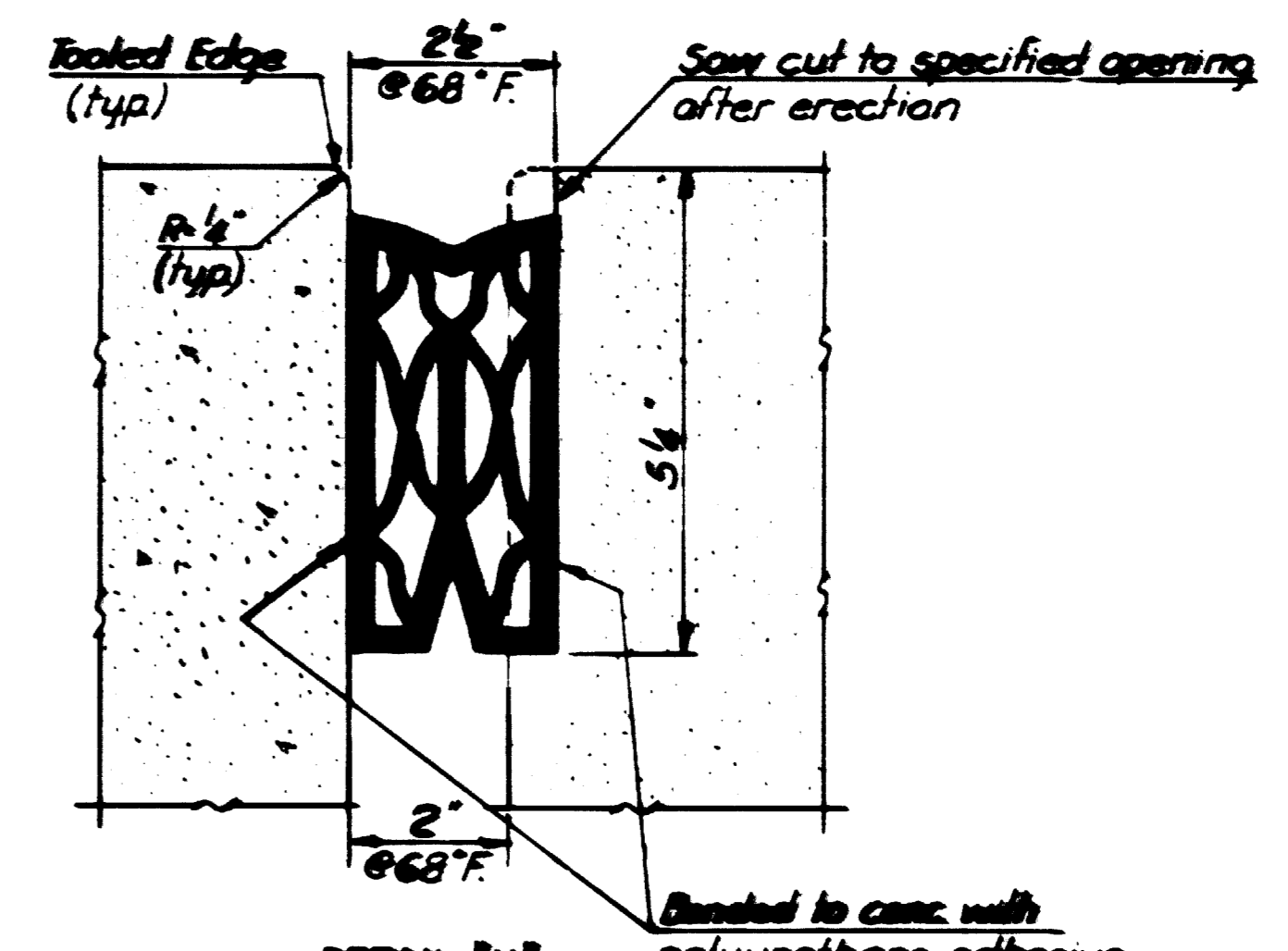
SECTION E-E
 1/4" = 1'-0"



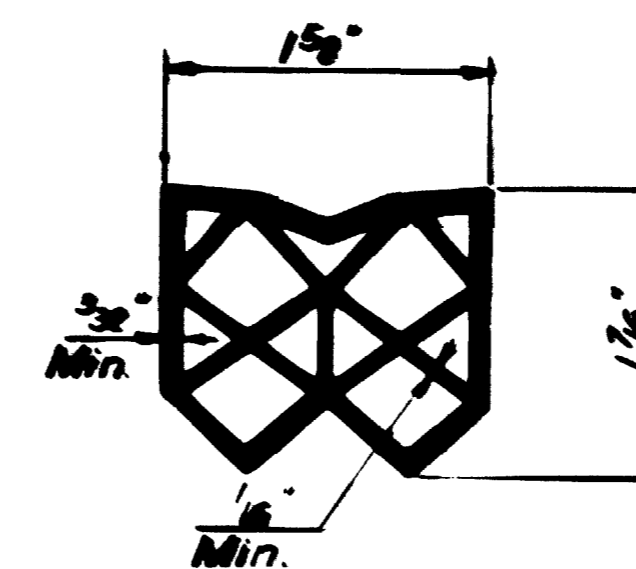
SECTION F-F
 1/4" = 1'-0"



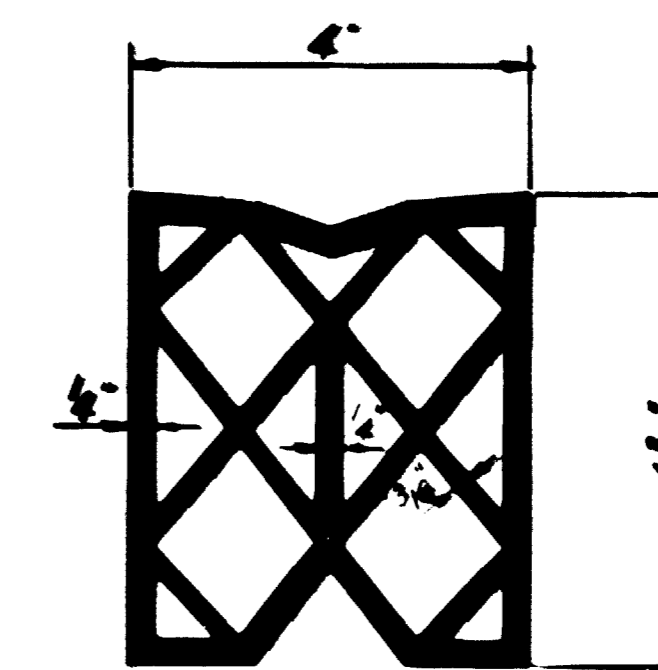
DETAIL "X"
 Full Size



DETAIL "Y"
 Half Size



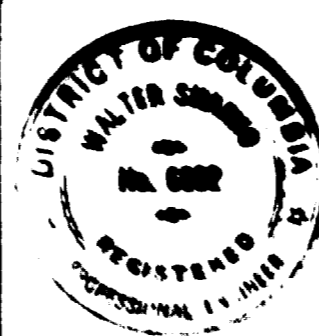
TYPE "A" JOINT SEAL
 Full Size



TYPE "B" JOINT SEAL
 Half Size

J.G. Miller 3-16-76
AS-BUILT

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS		
		NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
TLT	4-71					
DRAWN	T.J.G.					
CHECKED	L.O.					
APPROVED	2-11					



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHAR & COMPANY
 GENERAL ENGINEERING CONSULTANT

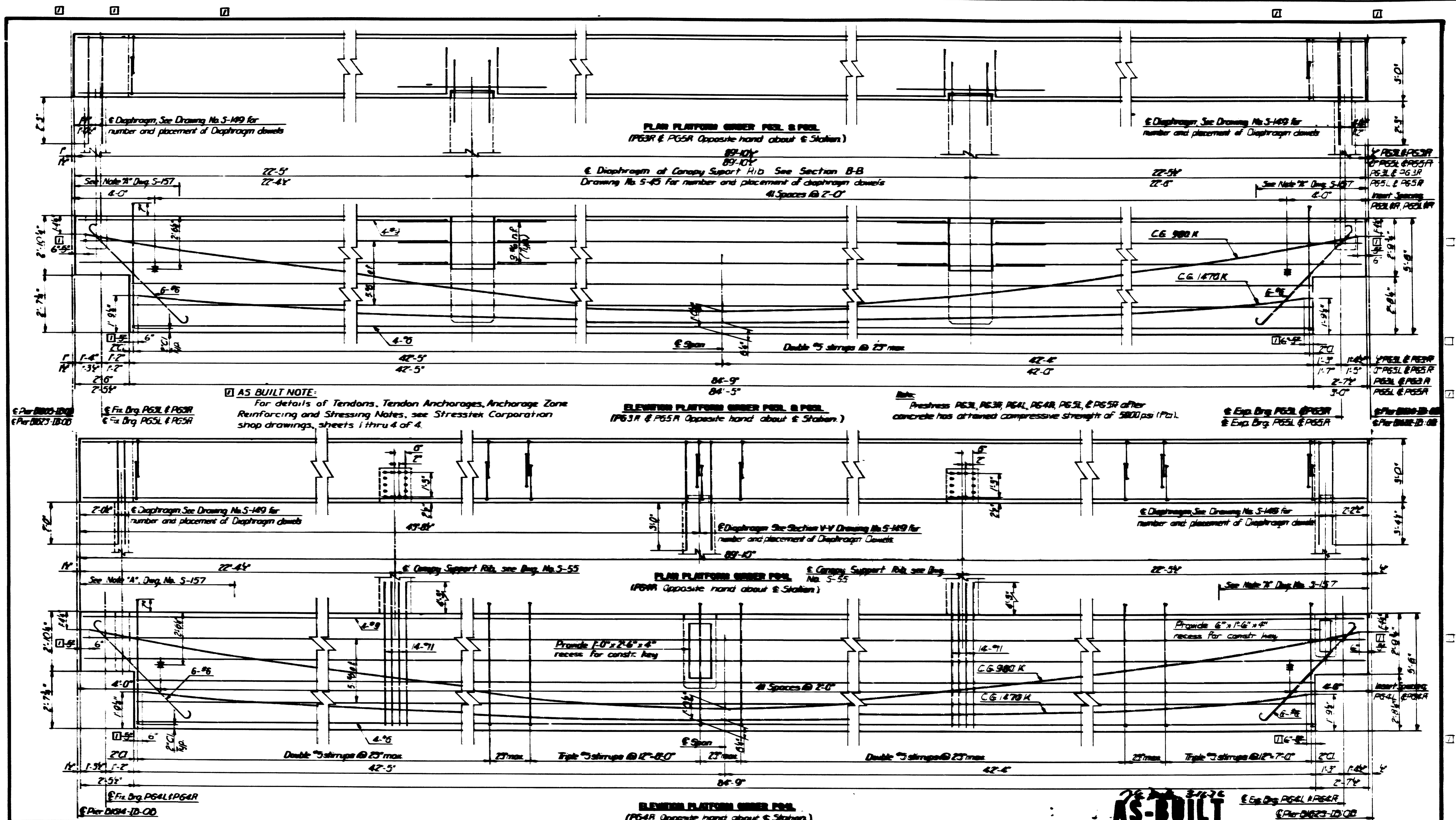
HARRY WEESE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *H. Charles* APPROVED: *J.G. Miller*

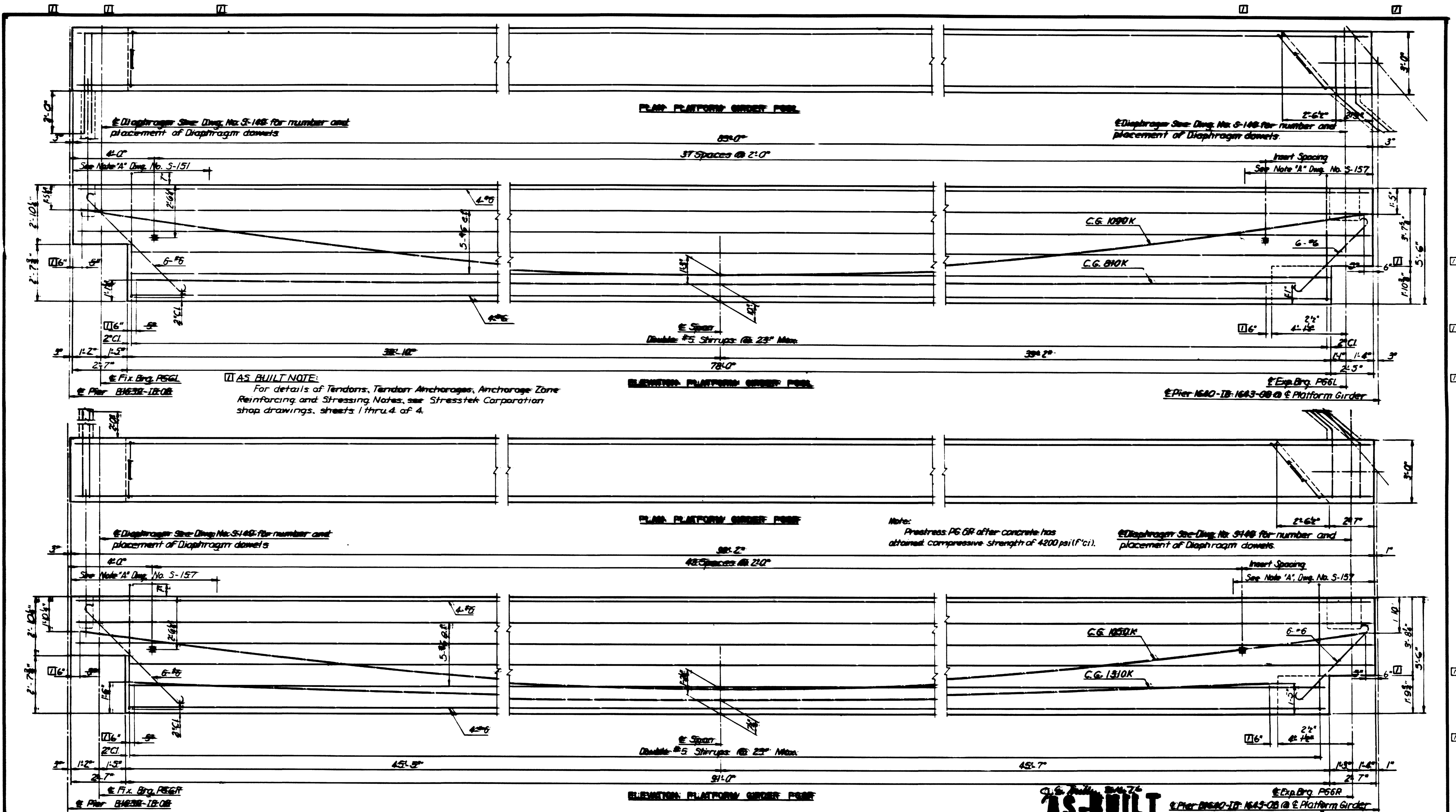
B & O ROUTE
AERIAL STRUCTURE
 DECK SLAB JOINT SEAL DETAILS

SCALE: AS NOTED

DRAWING NO: B4-S-284 M39-263



DESIGNED C.H.C. DATE 3-69	REFERENCE DRAWINGS	REVISIONS		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		AS-BUILT DE LEUW, CATHY & COMPANY GENERAL ENGINEERING CONSULTANT HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT	B & O ROUTE RHODE ISLAND AVE. STATION PLATFORM GIRDERS PLAN AND ELEVATION P63L, P63R, P64L, P64R, P65L AND P65R		
DRAWN JGV DATE 11-69	NUMBER DESCRIPTION	DATE BY DESCRIPTION		HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB				SCALE 1" = 1'-0"	DRAWING NO. B4-S-158
CHECKED S DATE 5-70	445-49 Platform Girder Diaphragm Details	4-3-75 TEM (1) As Built		SUBMITTED A. Shadick				APPROVED <i>[Signature]</i>	N39-275
APPROVED C.H. Cleverley DATE 5-70	445-45 Sealing Assemblies			APPROVED <i>[Signature]</i>					
	445-45 Platform Plan			APPROVED <i>[Signature]</i>					



AS BUILT NOTE:
 For details of Tendons, Tendon Anchorages, Anchorage Zone Reinforcing and Stressing Notes, see Stresstek Corporation shop drawings, sheets 1 thru 4 of 4.

Note: Prestress PG GR after concrete has attained compressive strength of 4200 psi (f'ci).

DESIGNED	C.H.C.	2-62
DRAWN	E.V.R.	11-62
CHECKED	J.S.	5-70
APPROVED	C.H. Claborn	5-10

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
84-S-149	Platform Girder Diaphragm Details	4-3-75	T.E.M.
84-S-279	Bearing Assemblies		
84-S-46	Platform Plan		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENOFF
 CONSULTING ENGINEERS

DE LEIJW CATHER & COMPANY
 GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT

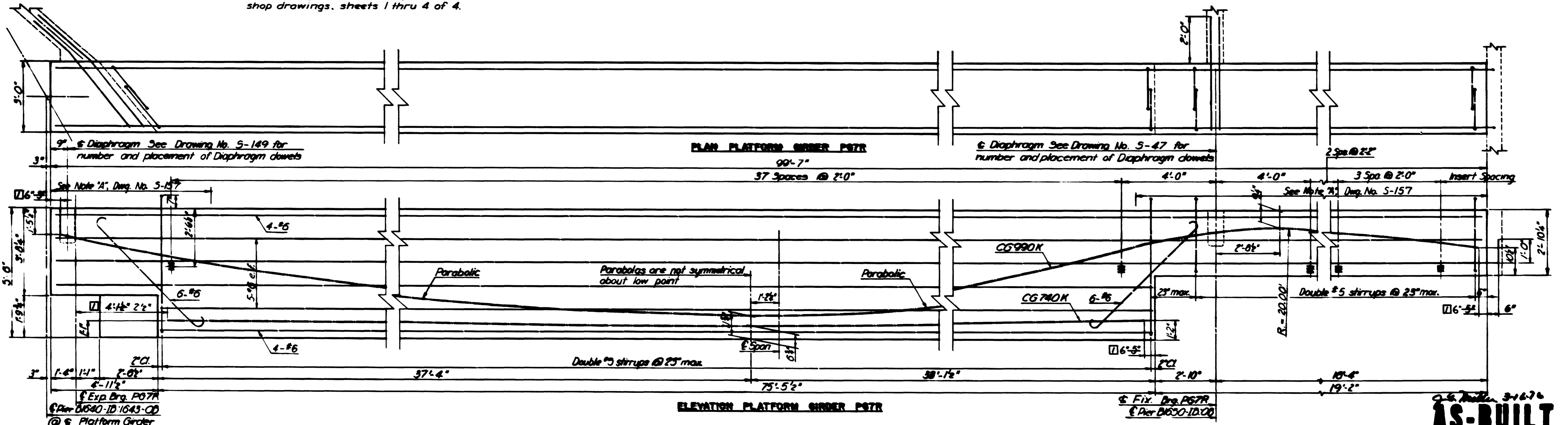
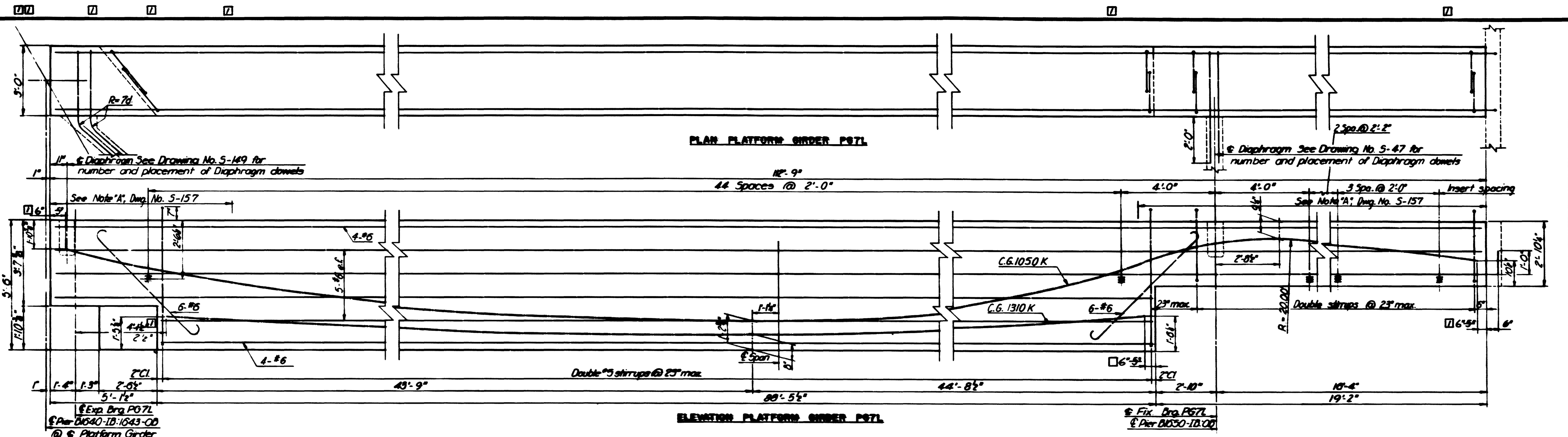
SUBMITTED: *[Signature]* APPROVED: *[Signature]*


**B&O ROUTE
 RHODE ISLAND AVE STATION
 PLATFORM GIRDERS PLAN AND ELEVATION
 PGBL AND PGBR**

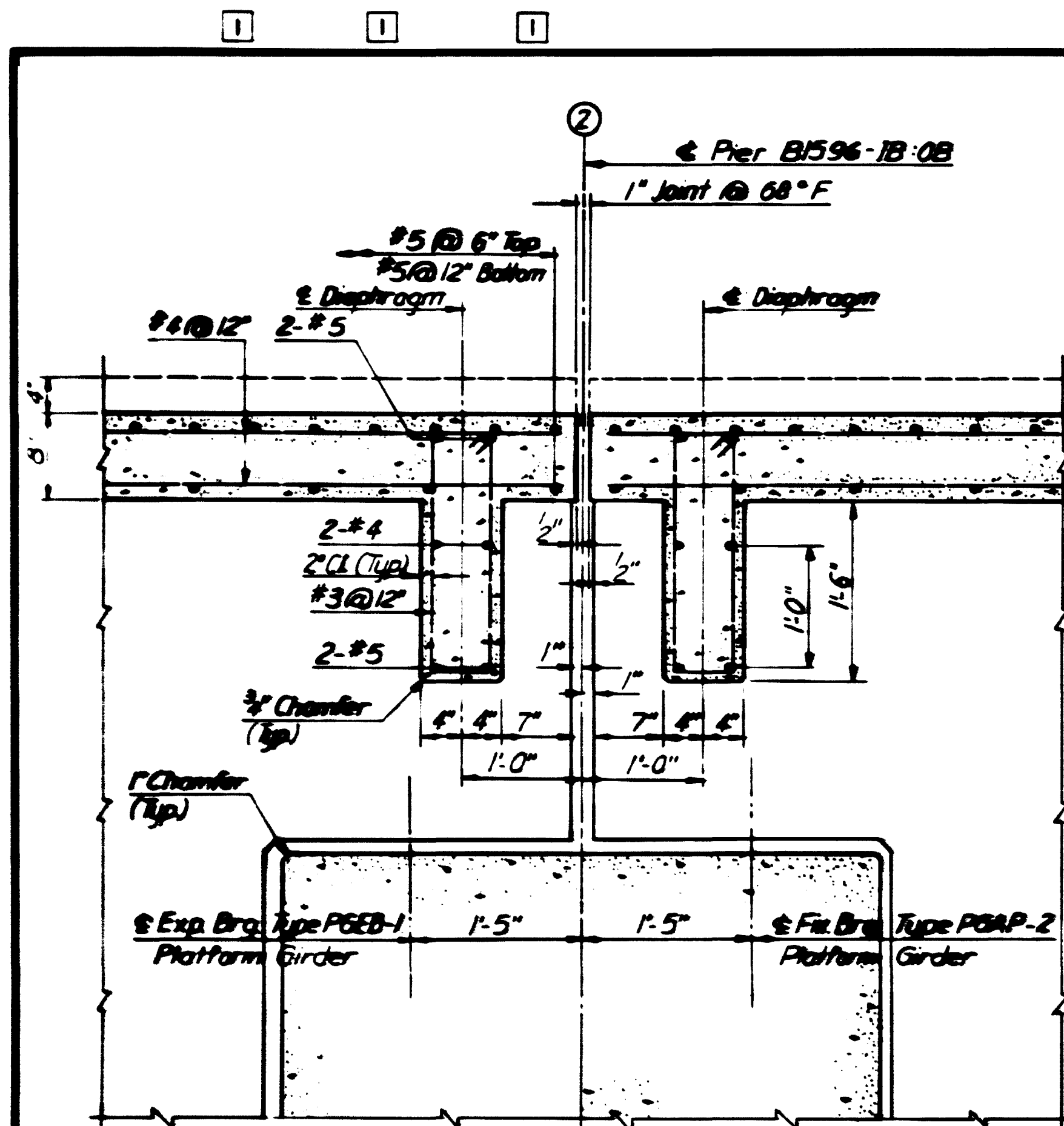
SCALE: 1" = 1'-0"

DRAWING NO. **B4-S-159**

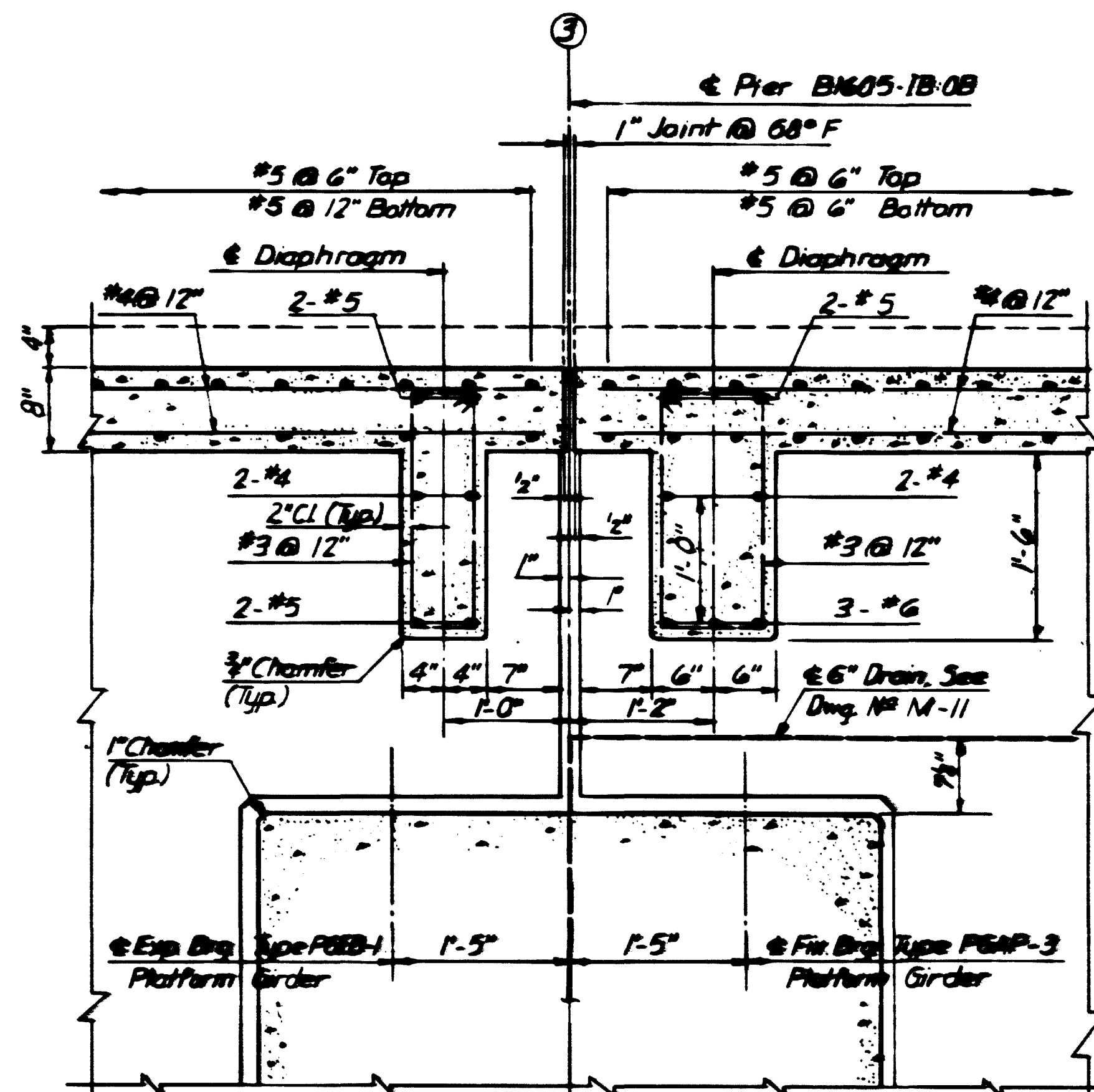
M39-276



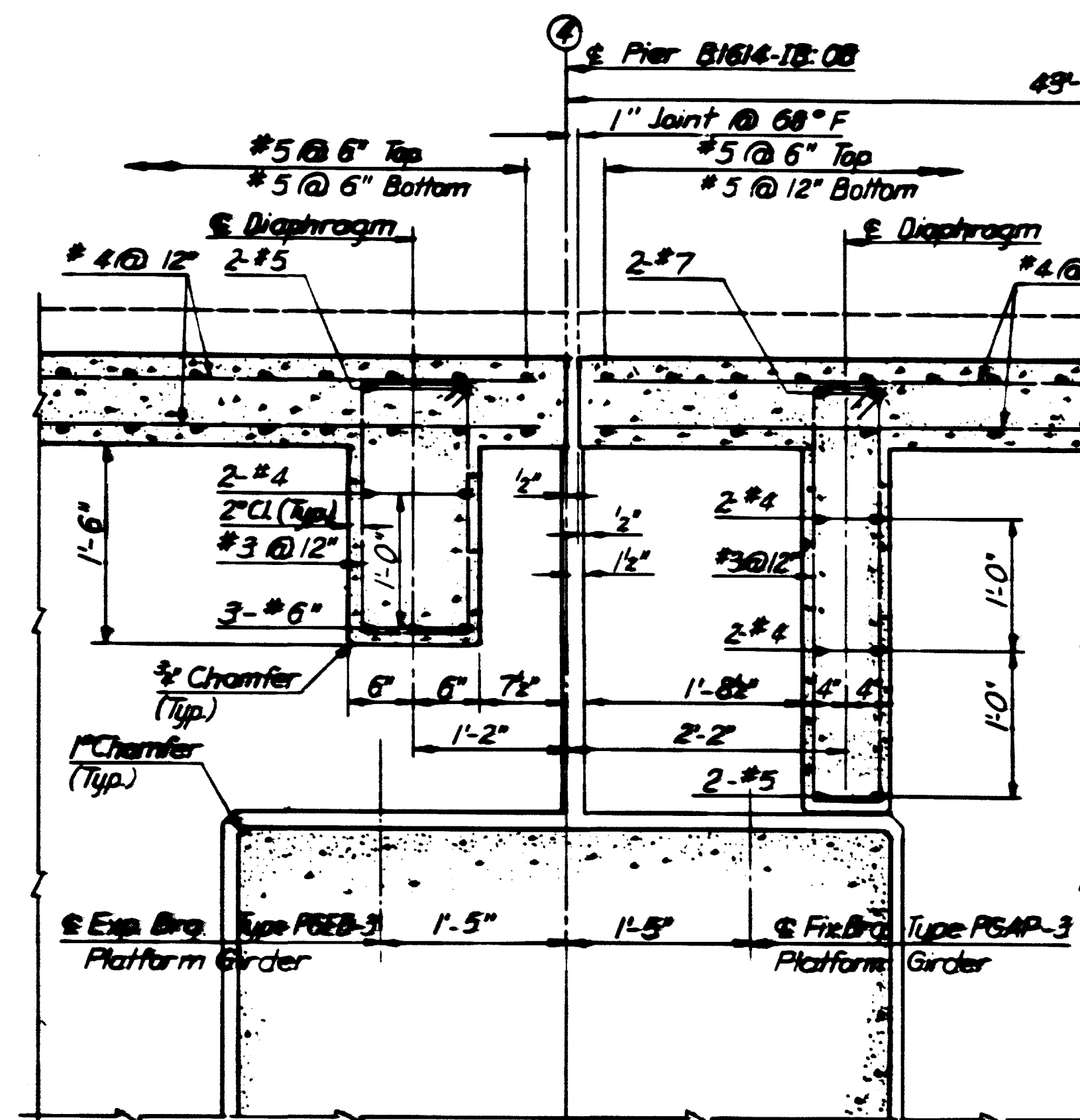
DESIGNED C.H.C. 9-69	REFERENCE DRAWINGS NUMBER DESCRIPTION DATE BY DESCRIPTION	REVISIONS DATE BY DESCRIPTION		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB		B&O ROUTE RHODE ISLAND AVE. STATION PLATFORM GIRDERS PLAN AND ELEVATION PG7L AND PG7R	
DRAWN J.G.V. 12-09	84-5-149 Platform Girder Diaphragm Details 84-5-279 Bearing Assemblies 84-5-47 Platform Plan	4-3-79 E.M. [1] As Built		SUBMITTED <i>R. Marko</i>	APPROVED <i>J. G. [Signature]</i>	SCALE 1" = 1'-0"	DRAWING NO. B4-S-160



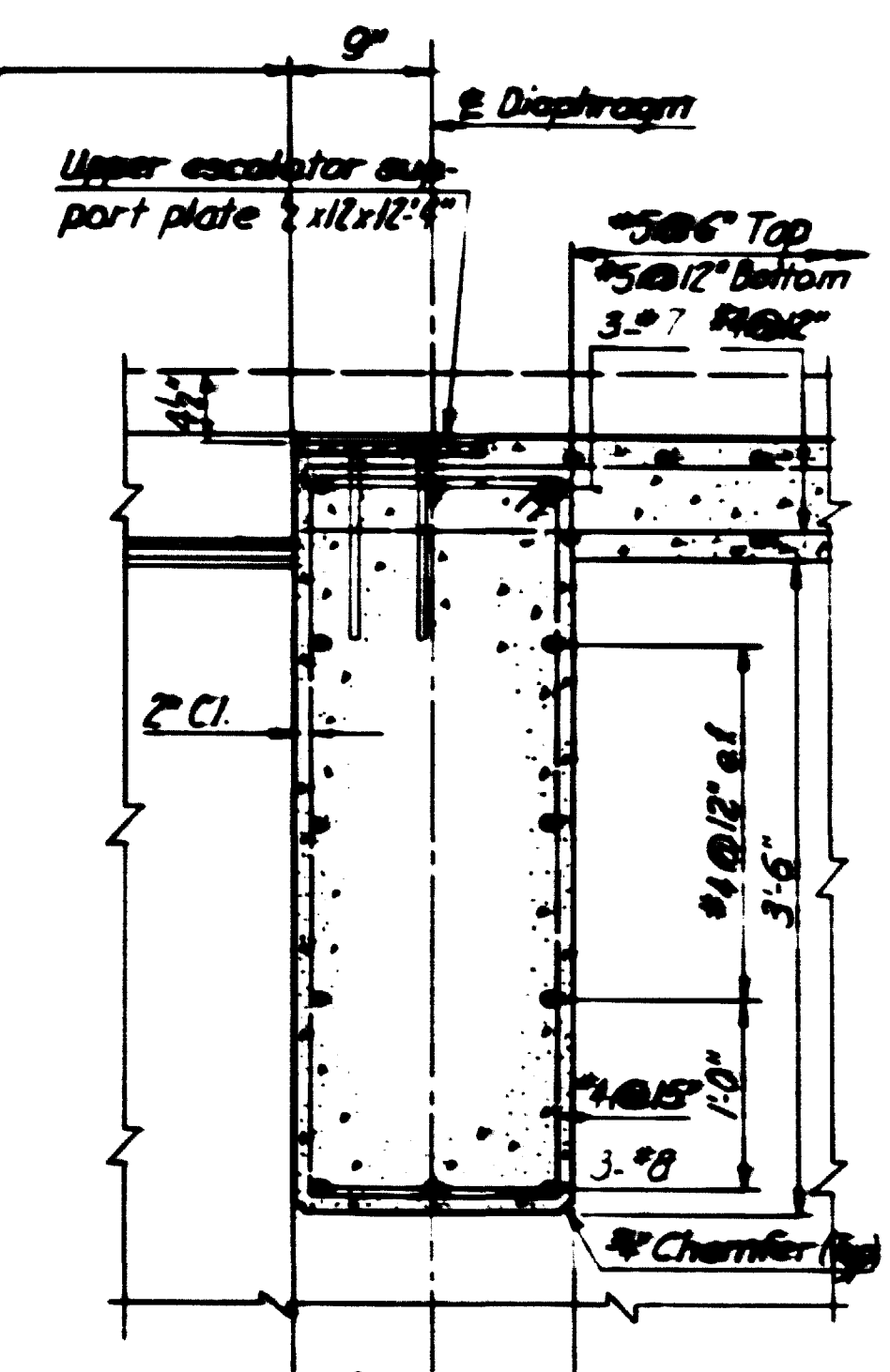
END DIAPHRAGM DETAIL AT PIER B1596-1B-08



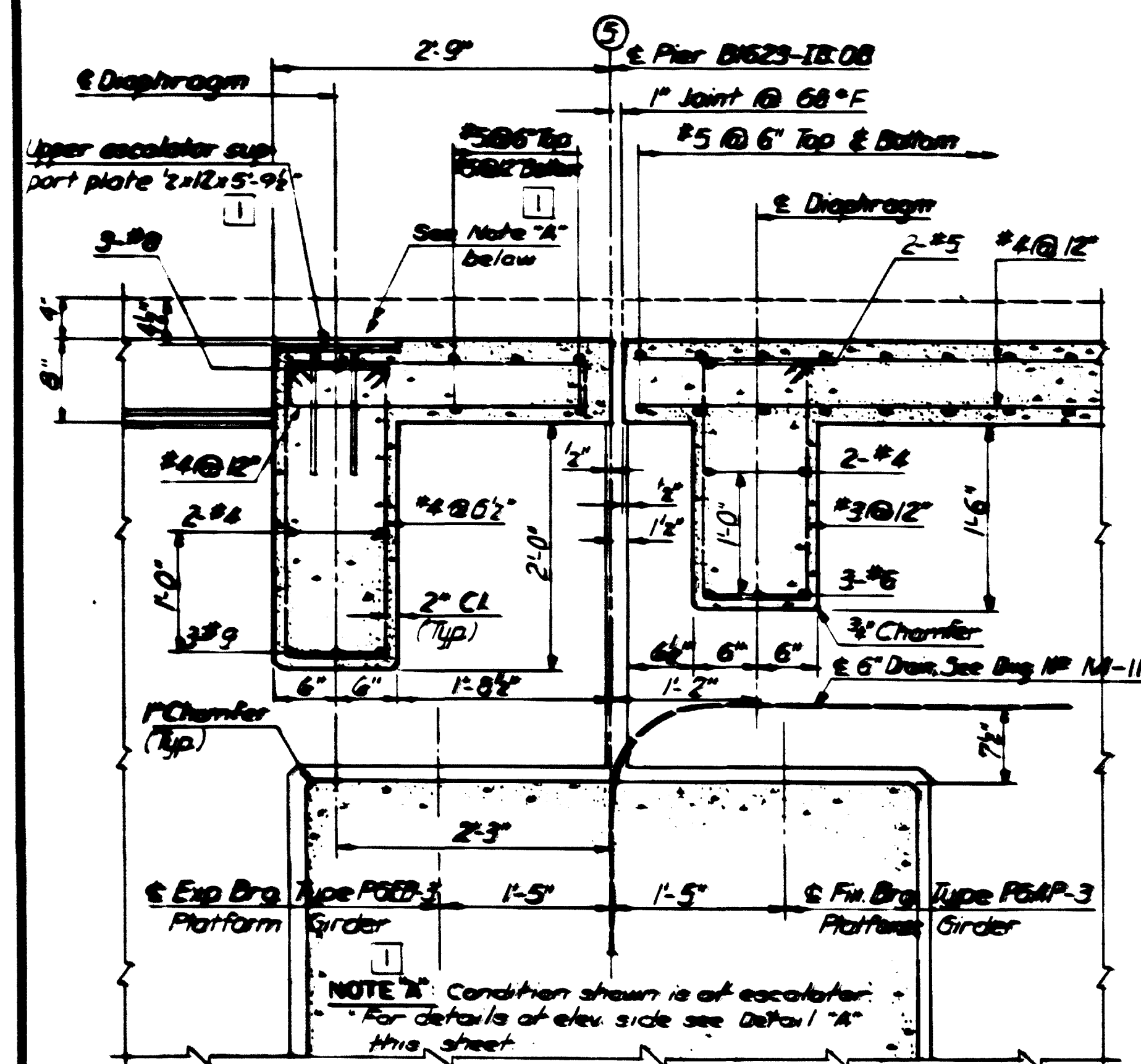
END DIAPHRAGM DETAIL AT PIER B1605-1B-08



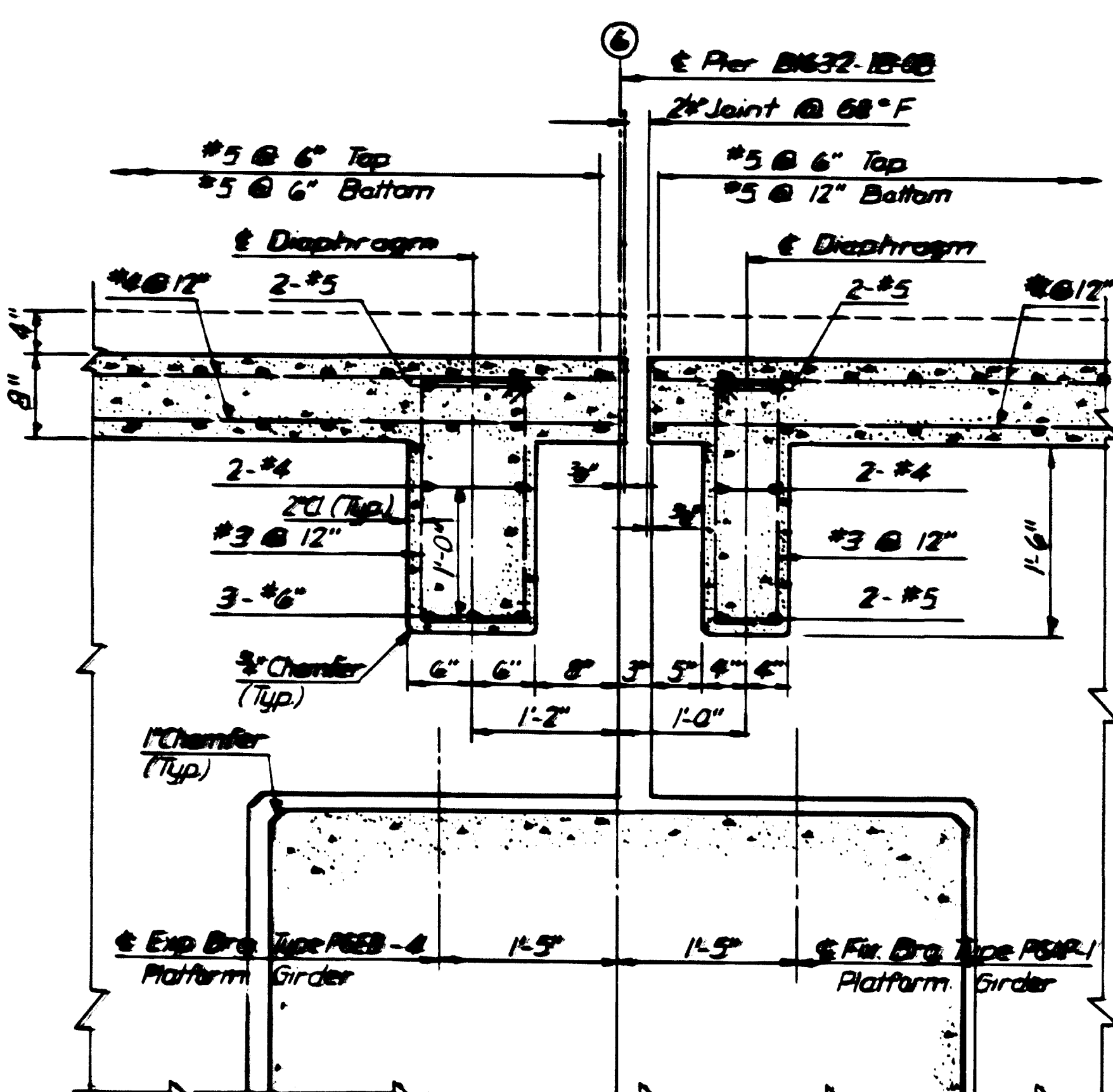
END DIAPHRAGM DETAIL AT PIER B1614-1B-08



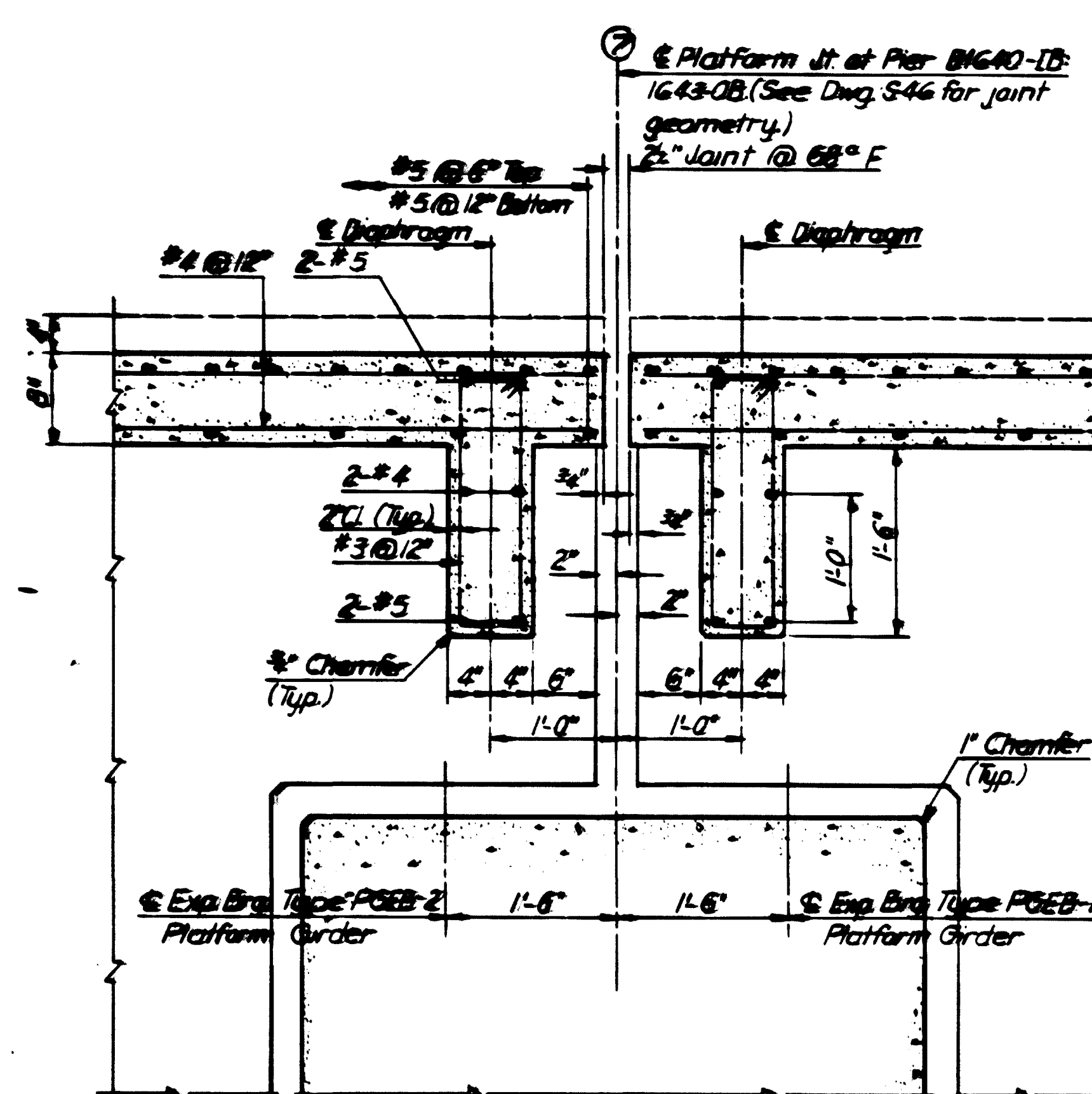
SECTION V-V



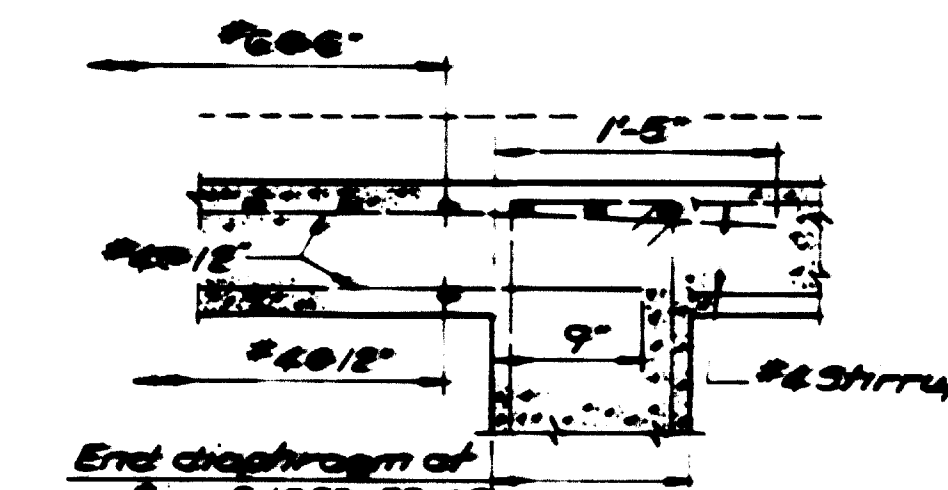
END DIAPHRAGM DETAIL AT PIER B1623-1B-08



END DIAPHRAGM DETAIL AT PIER B1632-1B-08



END DIAPHRAGM DETAIL AT PIER B1640-1B-08



DETAIL "A"

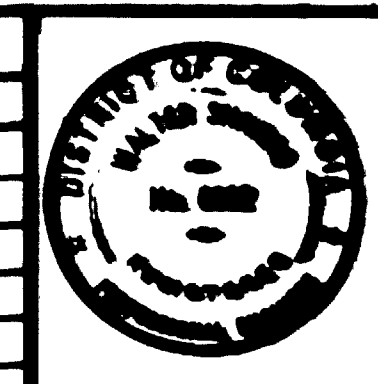
Notes:
For platform expansion joints see Details 3 and 4, Dwg. No. A-15

AS-BUILT

DESIGNED	JKB	9-69
DRAWN	EKR	9-69
CHECKED	JRJ	4-70
APPROVED	C.H. Chapman	5-70

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
1	Revised Diaphragm 200-3	1-72	J.R.J.	

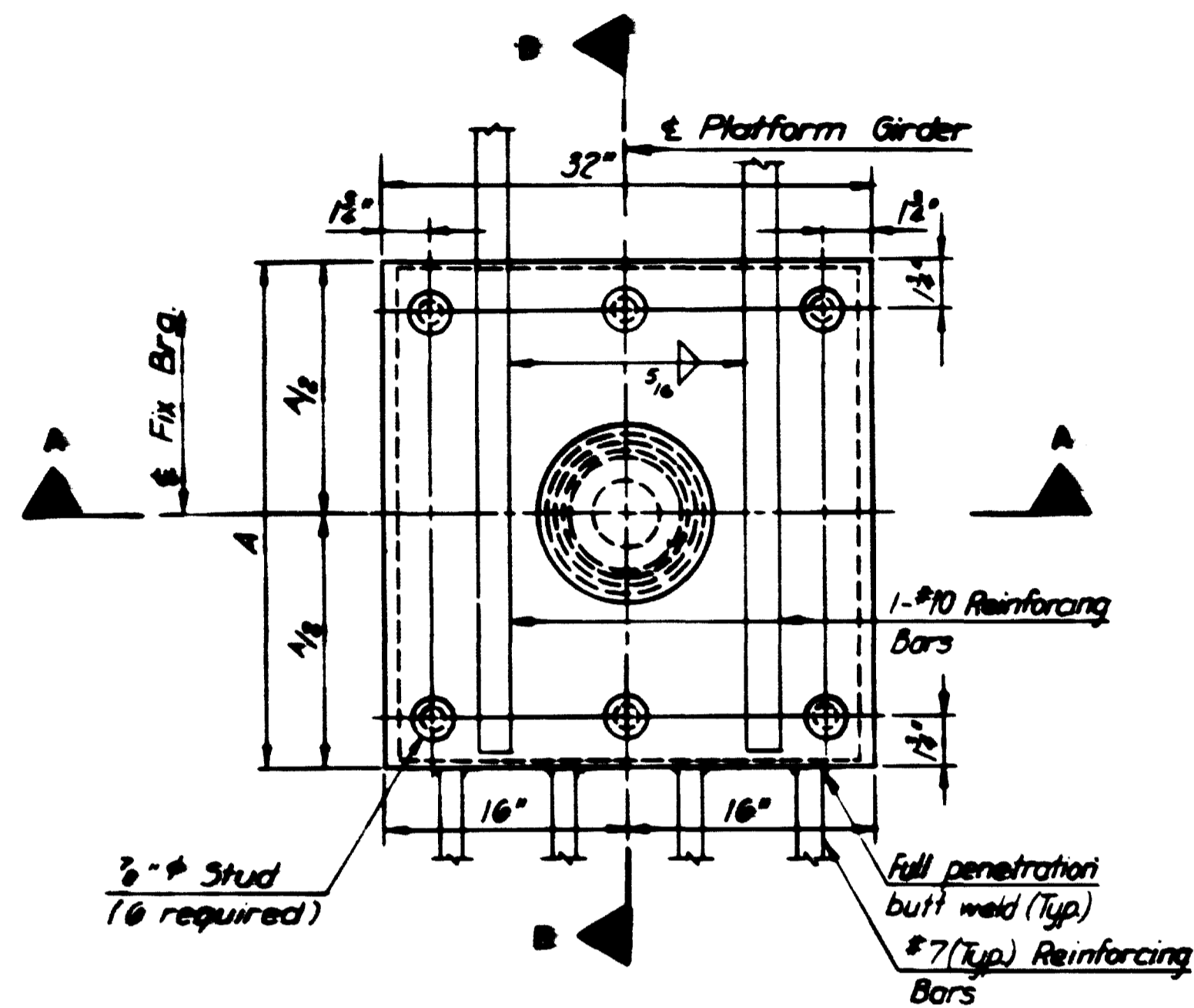
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
1	Revised Diaphragm 200-3	1-72	J.R.J.	



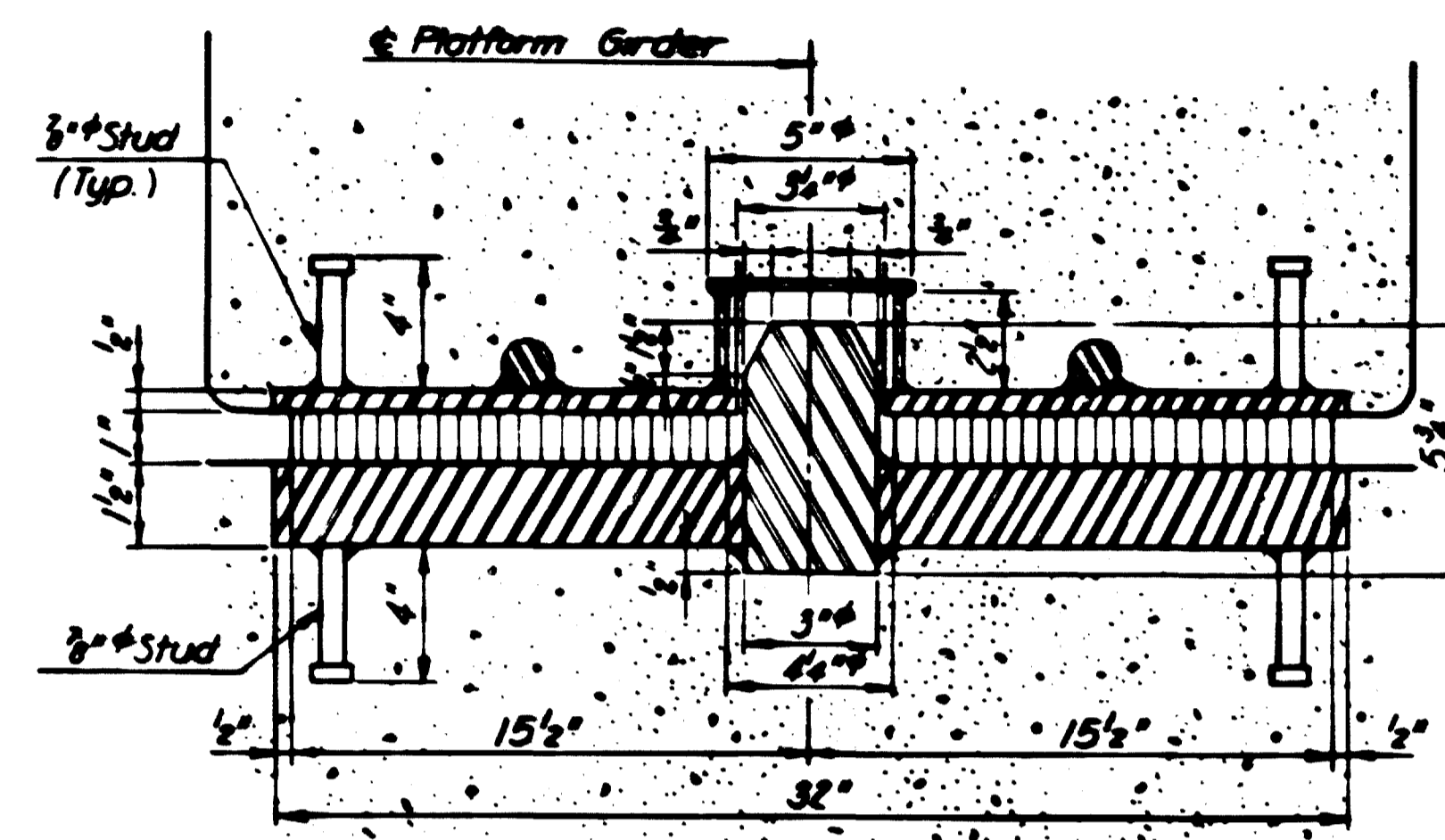
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS | HNTB
 SUBMITTED: *W. Shanks*

DE LEUW, CATHAR & COMPANY GENERAL ENGINEERING CONSULTANT
 HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT
 APPROVED: *J. G. [Signature]*

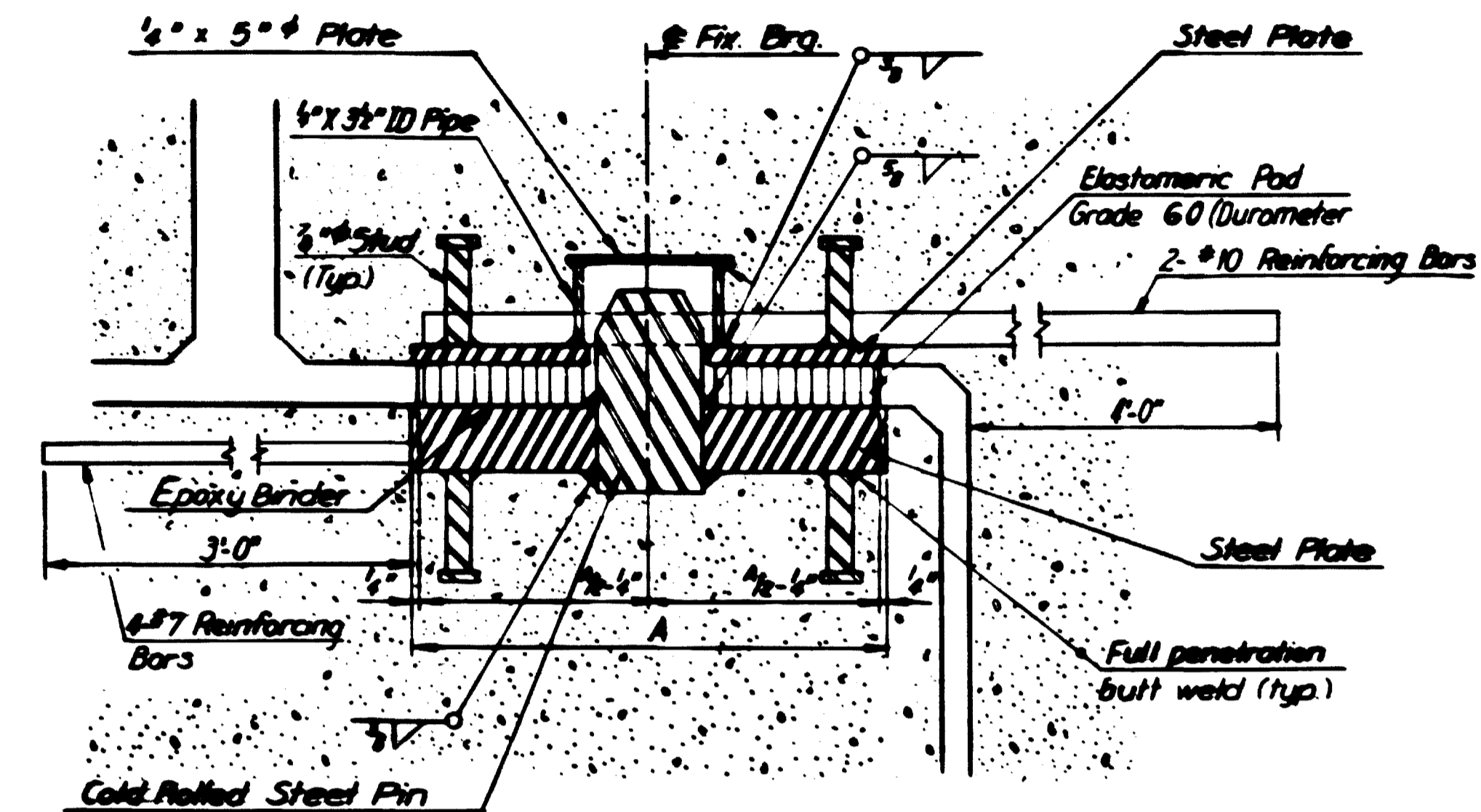
B & O ROUTE
 RHODE ISLAND AVE. STATION
 PLATFORM GIRDER DIAPHRAGM DETAILS
 SCALE: 1" = 1'-0"
 DRAWING NO. B4-S-149
 N39-278



PLAN



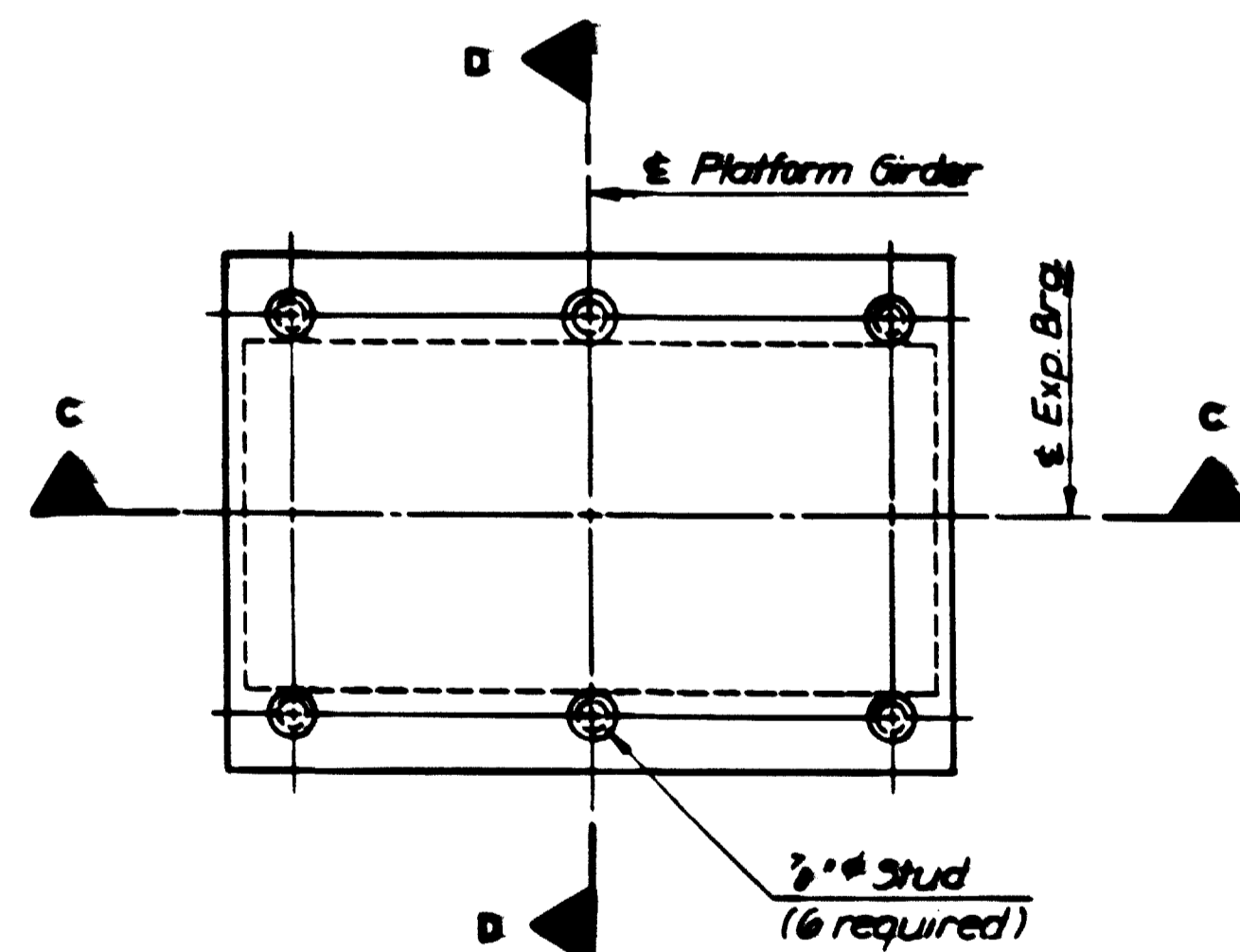
SECTION A-A



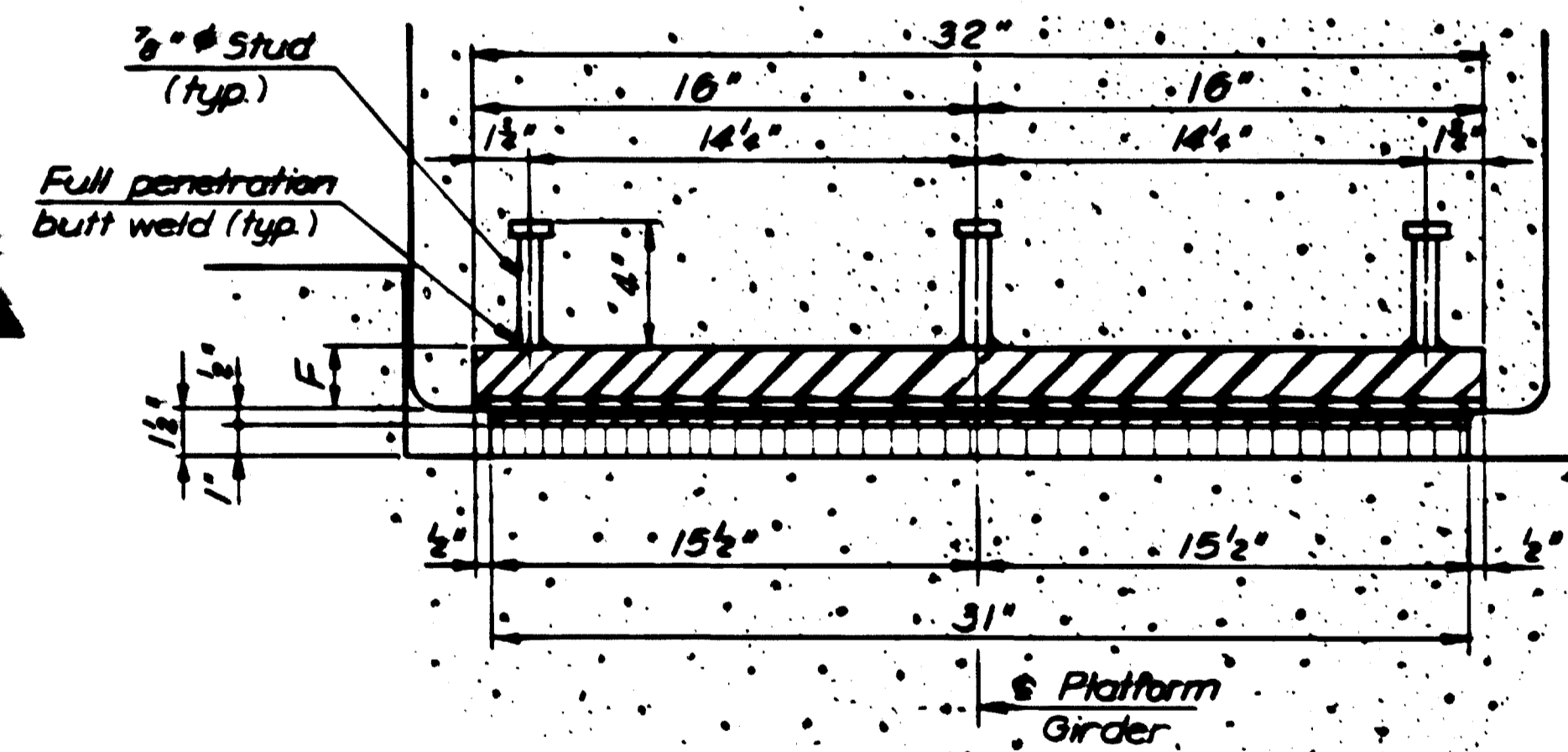
SECTION B-B

ANCHOR PIN SCHEDULE	
TYPE	A
PBAR1	14 1/2"
PBAR2	15 1/2"
PBAR3	18 1/2"

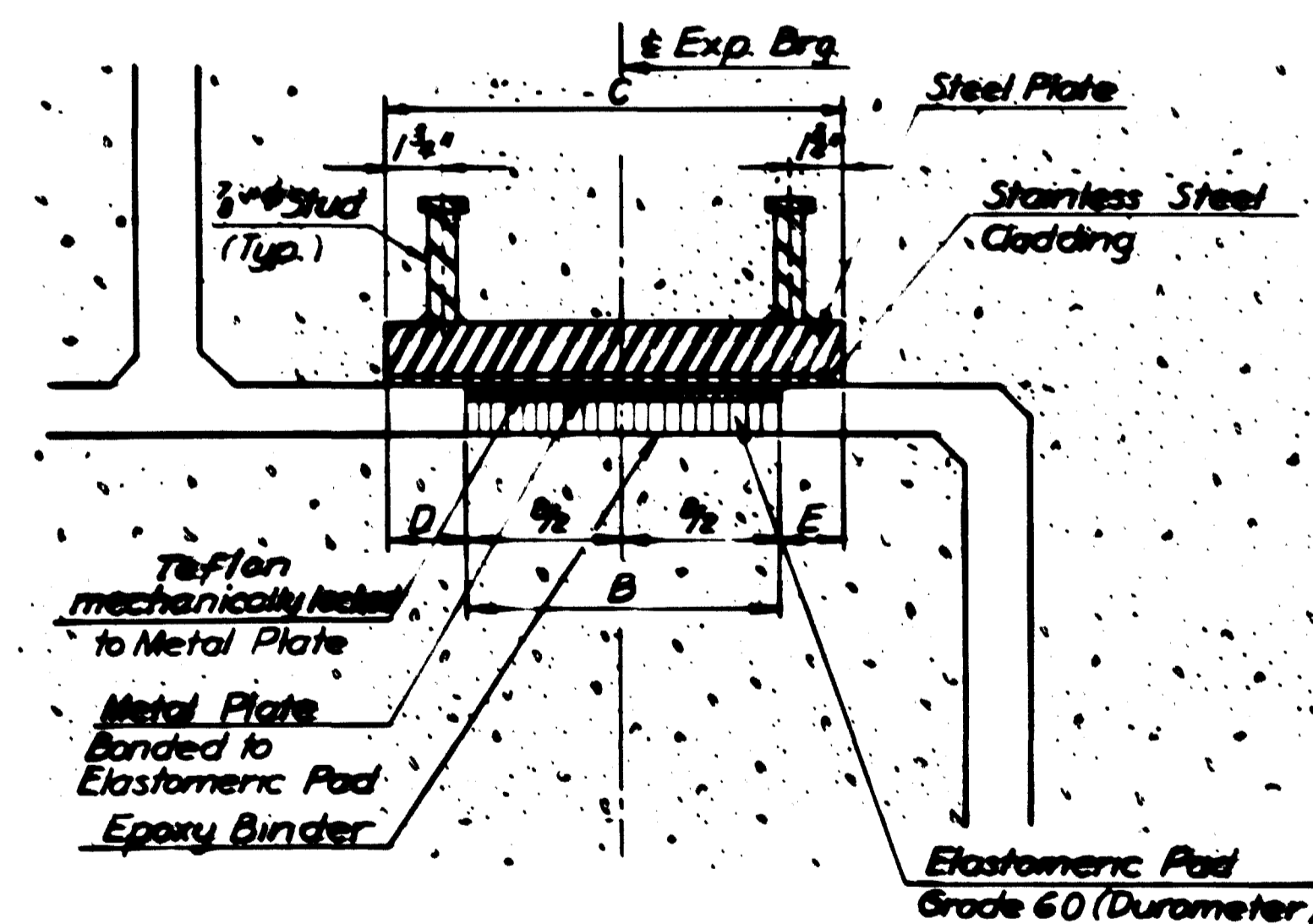
ELASTOMERIC BEARING PAD AND ANCHOR PIN ASSEMBLIES



PLAN



SECTION C-C



SECTION D-D

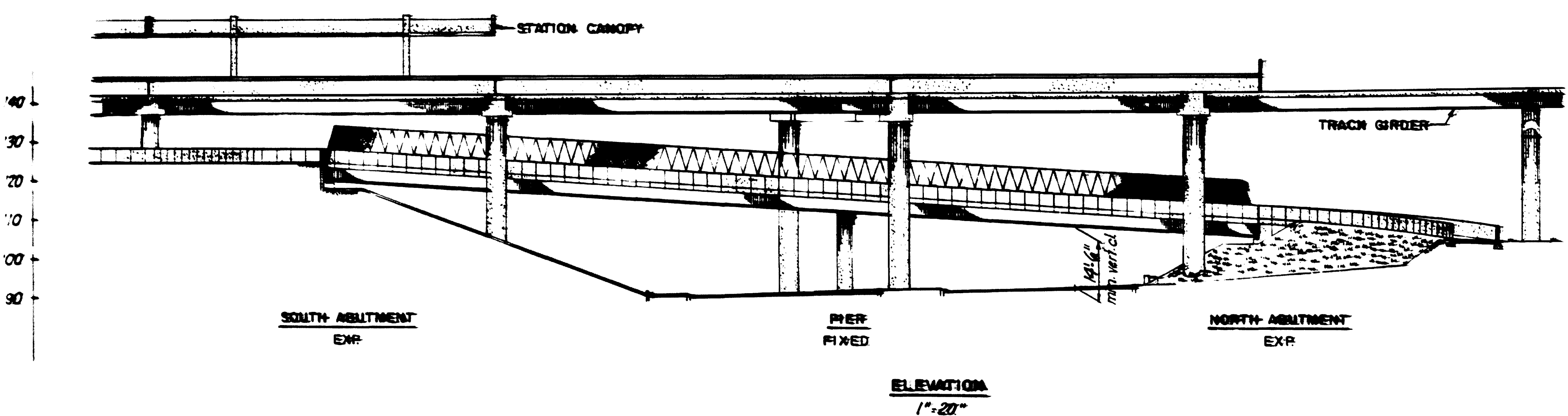
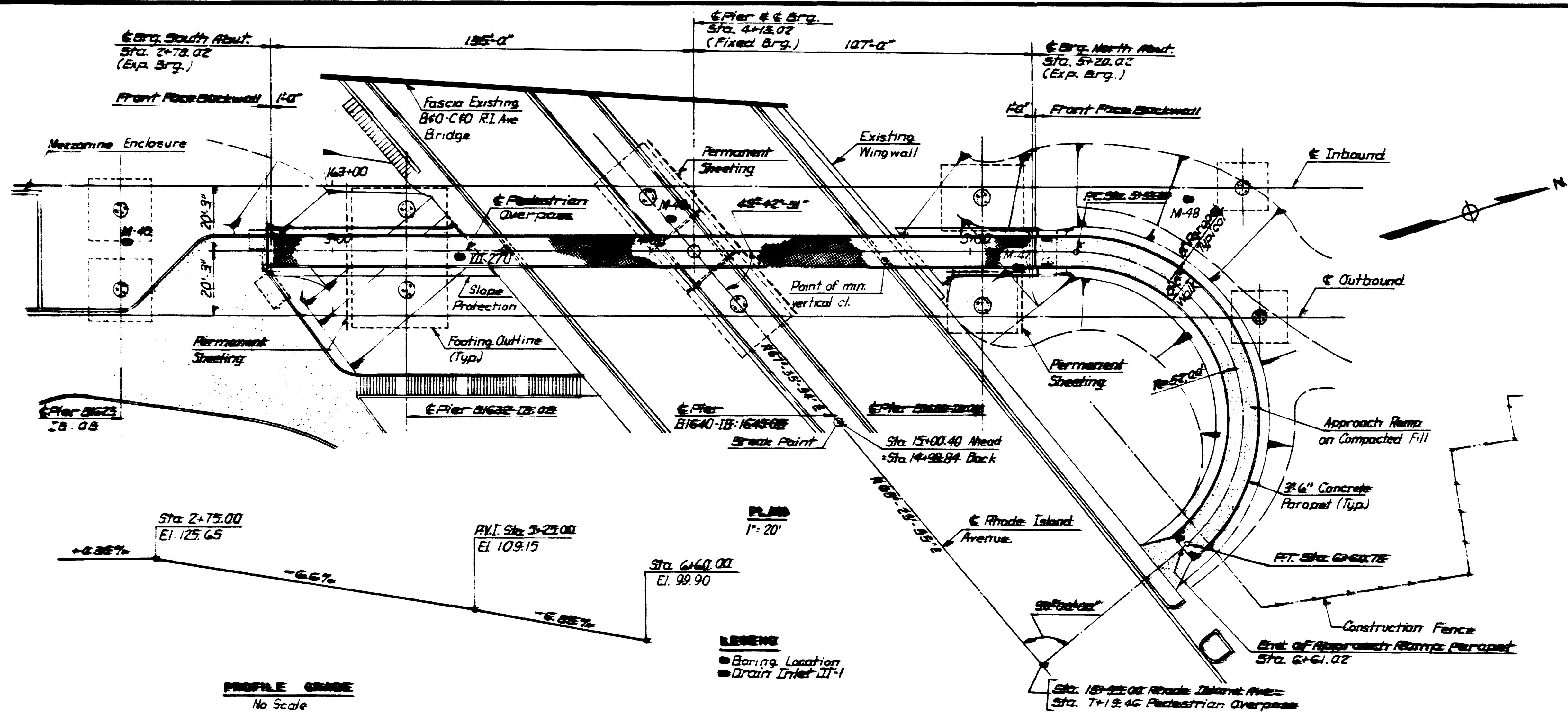
EXPANSION BEARING SCHEDULE						
TYPE	B	C	D	E	F	
PBE-1	16"	20 1/2"	2 1/2"	1 1/2"	1 1/4"	
PBE-2	14"	20 1/2"	3 1/4"	3"	2"	
PBE-3	18"	22 1/4"	2 1/2"	1 1/4"	1 1/4"	
PBE-4	18"	24 1/4"	3 1/4"	3"	2 1/4"	

NOTE:
For material, class of machine finishing and fabrication requirements of all bearings, see Section 3.28 "Bearing Assemblies" of the Contract Specifications.

EXPANSION BEARING ASSEMBLIES

AS-BUILT

DESIGNED <u>C.H.C./T.L.</u> 5-71 DRAWN <u>H.I.&N.O.P.</u> 5-71 CHECKED <u>T.E.M.</u> 5-71 APPROVED <u>[Signature]</u> 7-71	REFERENCE DRAWINGS NUMBER DESCRIPTION DATE BY DESCRIPTION	REVISIONS NUMBER DESCRIPTION DATE BY DESCRIPTION	WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT	B & O ROUTE RHODE ISLAND AVE. STATION PLATFORM GIRDER BEARING ASSEMBLIES SCALE NO SCALE DRAWING NO. B4-S-279 M39-279
---	--	---	--	---



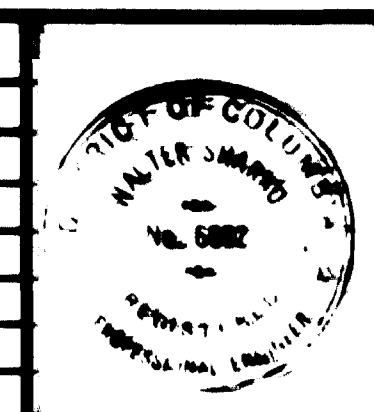
SPECIAL AS-BUILT NOTE
 All Coordinates and Horizontal Control Values are based on 1987 Field Geographic Position and Coordinate Values.

2.16.76
AS-BUILT

DESIGNED *TL/INC* 7-77
 DRAWN *TEM/NDP* 8-77
 CHECKED *H.M.M.* 9-77
 APPROVED *[Signature]* 9-77

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
34-A-18	Plan, Elevation and Section			
34-E-21	Lighting Plan			
34-P-23	Paving and Restoration Plan			
34-P-6	Geometric Layout Plan			
34-P-15	Ramp Section and Slope Protection Details			
34-S-173	Foundation Layout Plan			

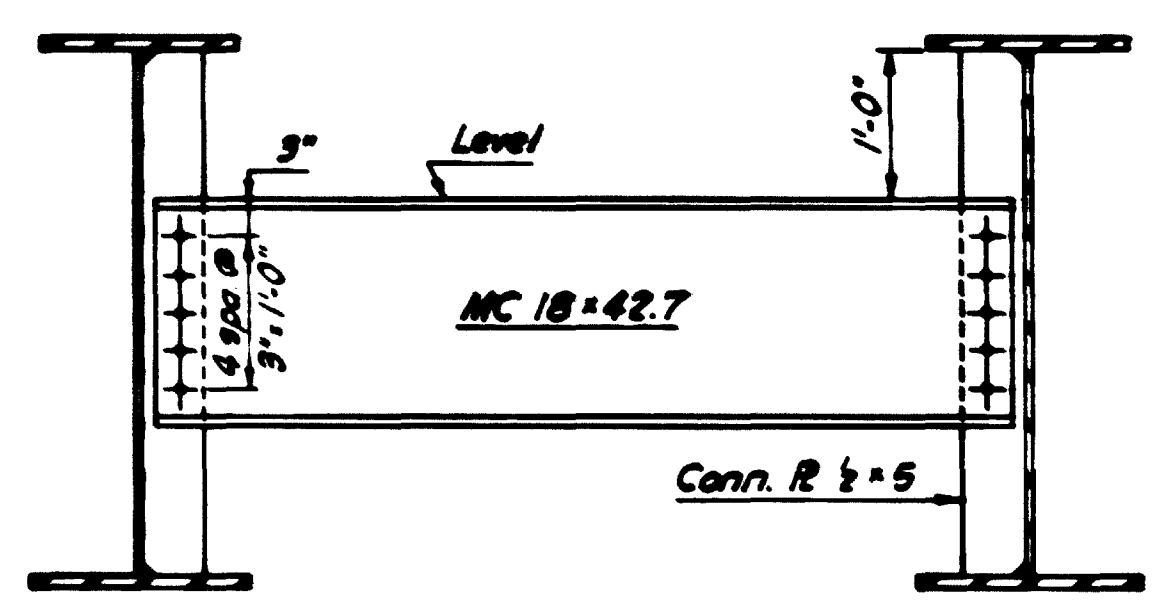
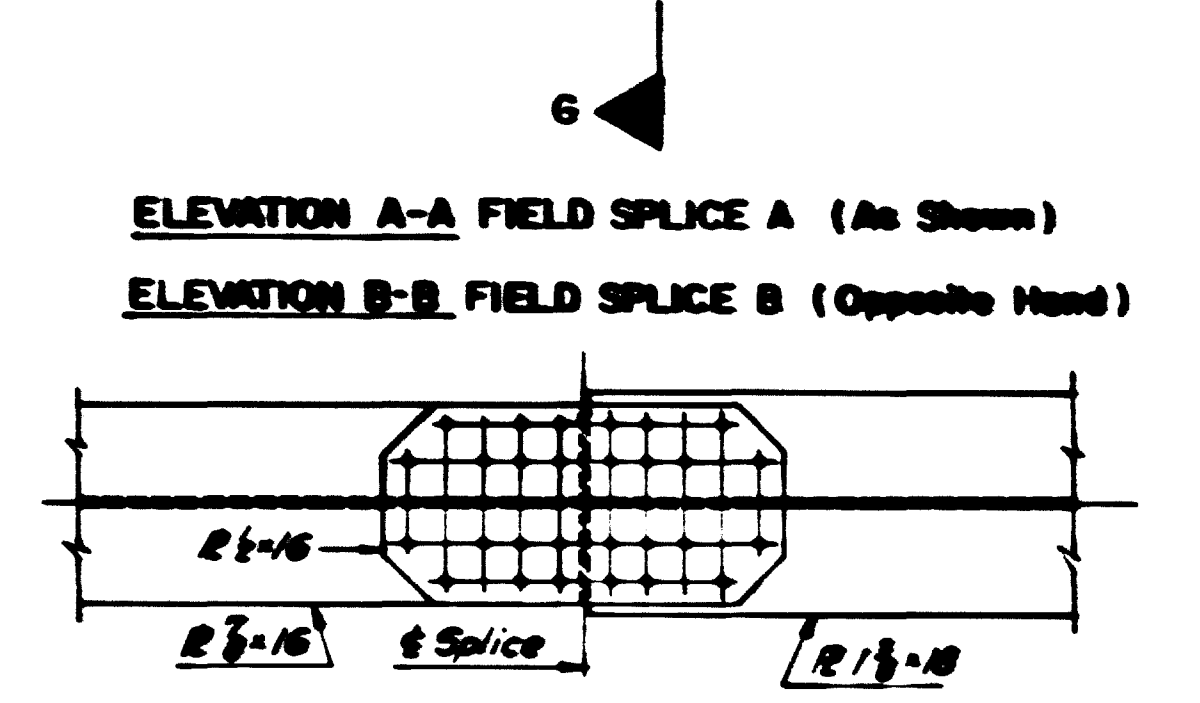
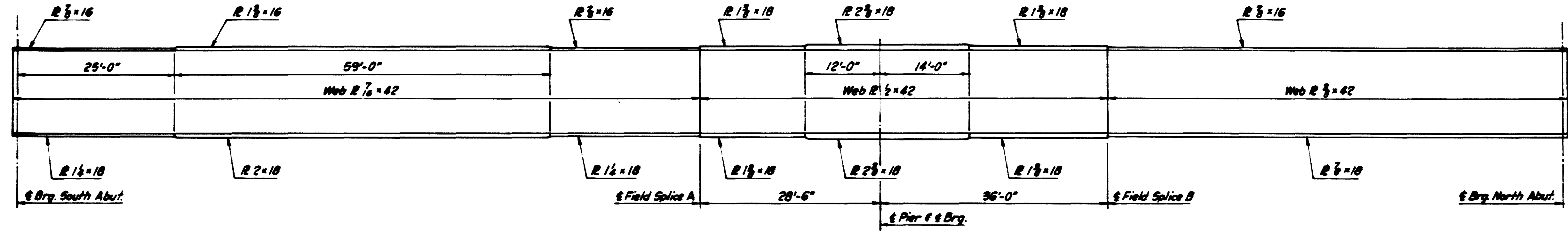
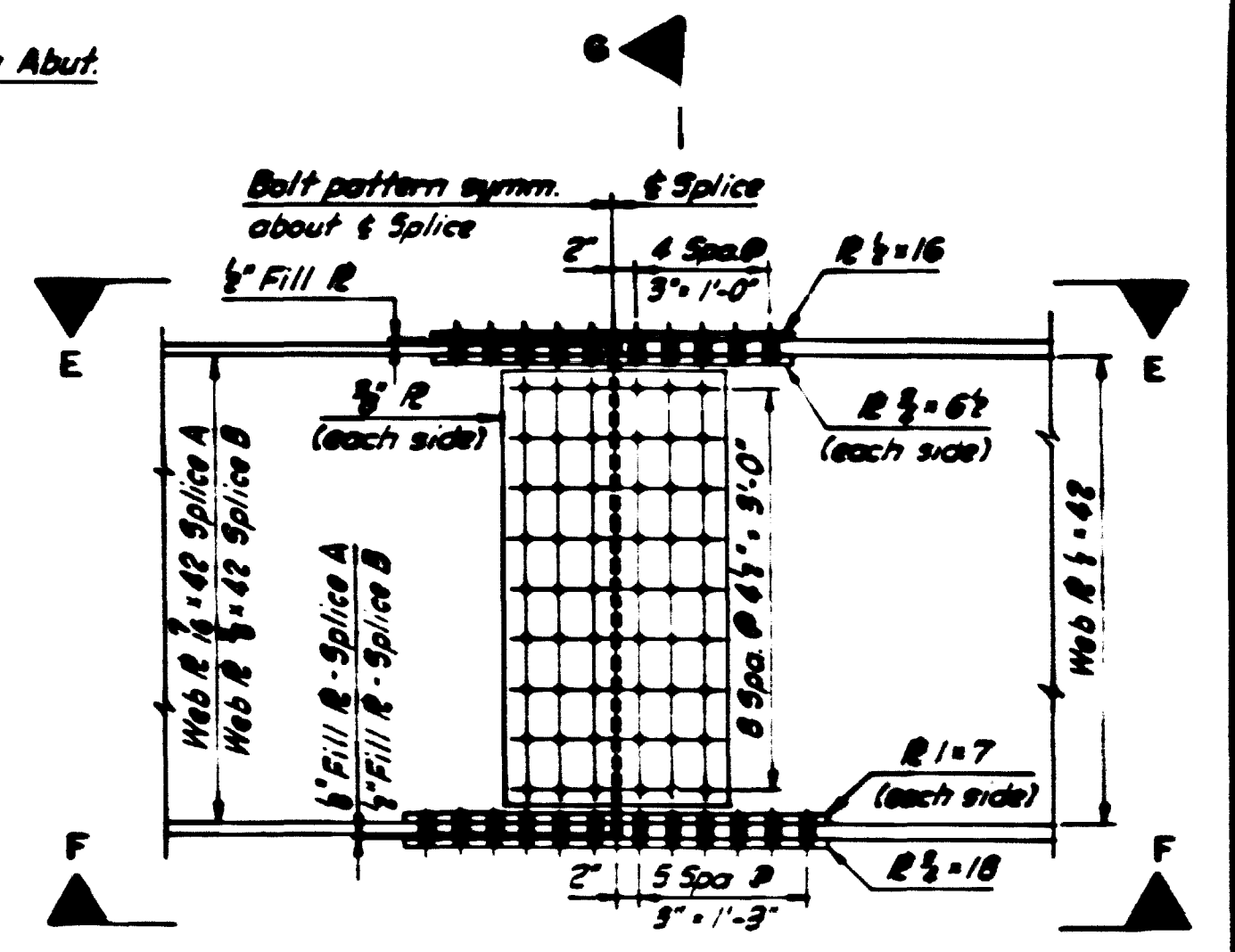
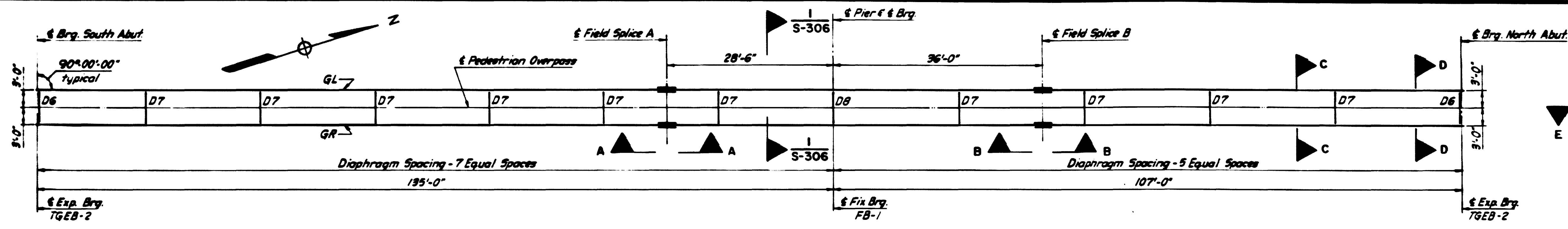
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION



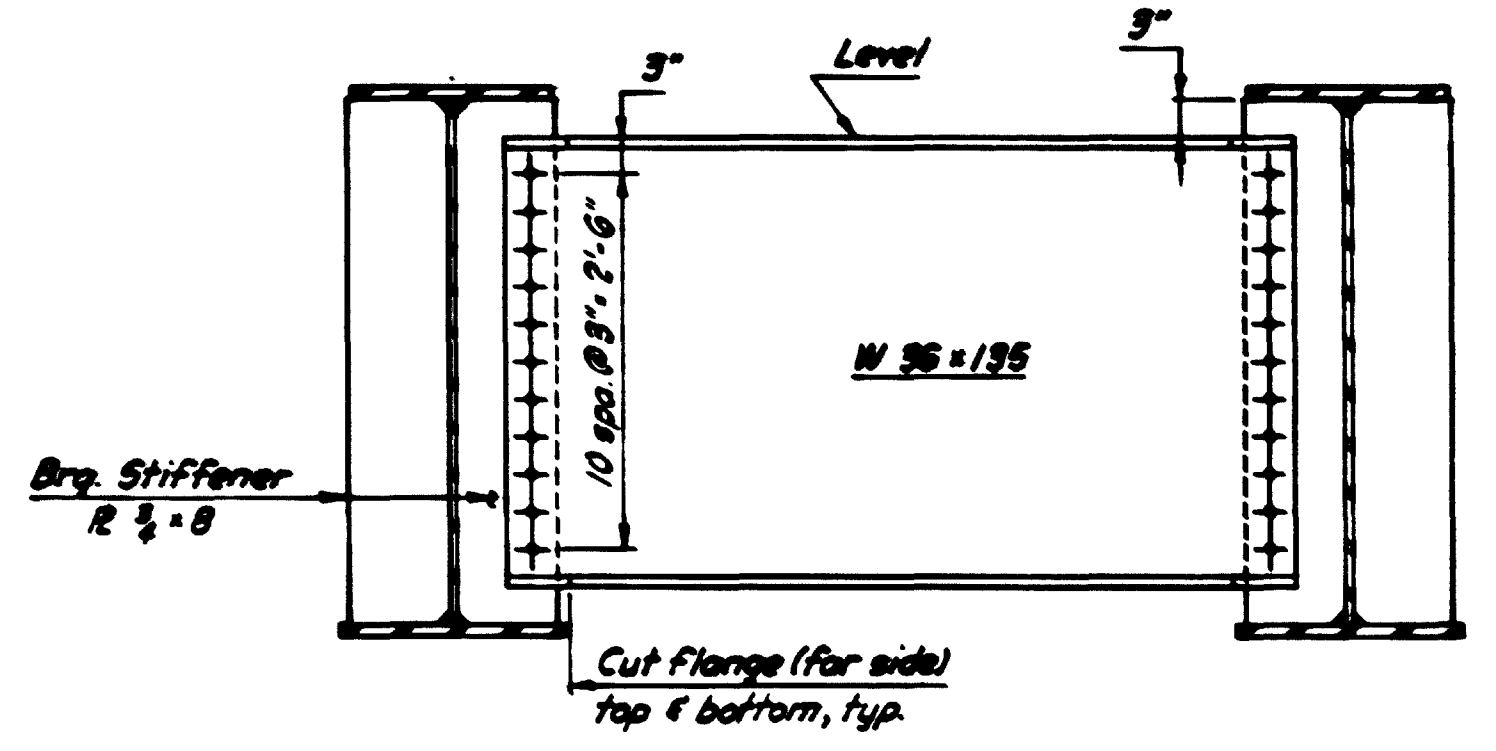
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 HOWARD NEEDLES TAMMEN & BERGEN OFF
 CONSULTING ENGINEERS | **HNTB**
 SUBMITTED *[Signature]*

DE LEIWE CATHER & COMPANY
 GENERAL ENGINEERING CONSULTANT
 HARRY WESSE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT
 APPROVED *[Signature]*

**B&O ROUTE
 PEDESTRIAN OVERPASS
 AT RHODE ISLAND AVENUE
 KEY PLAN AND ELEVATION**
 SCALE 1"=20' 10 0 10 20
 DRAWING NO. **B4-S-305** **1059-367**



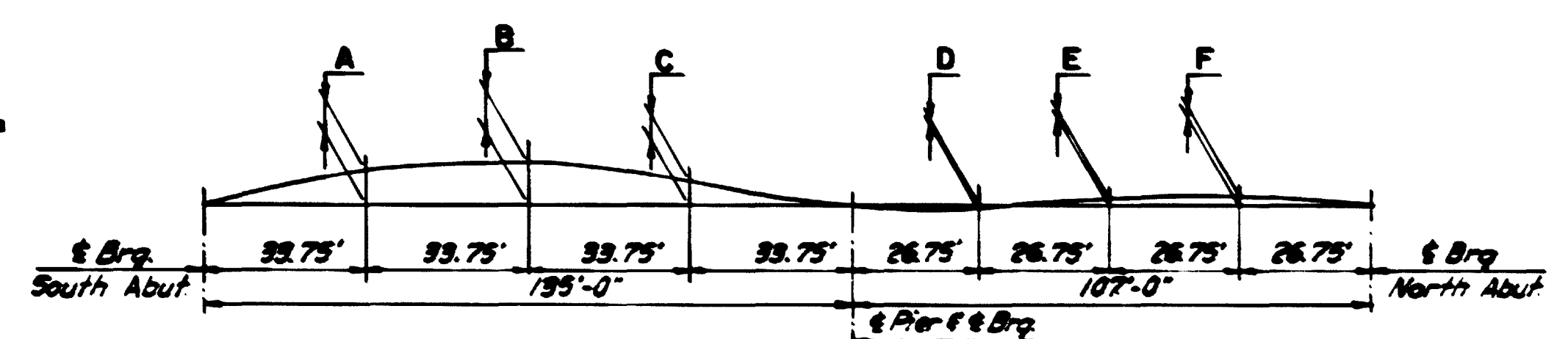
INTERMEDIATE DIAPHRAGM D7
SECTION C-C



END DIAPHRAGM D6
SECTION D-D

NOTES:

- Connections for Field Splices A & B, Diaphragms D6 & D7 shall be made with $\frac{5}{8}$ " High Strength Bolts.
- For details of Int. Diaph. D6 Conn. R & Bearing Stiff. @ Abut. see Dwg. No. B4-S-306.
- For additional steel details see Dwg. No. B4-S-306.
- Ends of girders, bearing stiffeners, diaph. D6 & D7 to be vertical. Int. diaph. D7 to be normal to grade.
- All structural steel surfaces not in contact but inaccessible after erection shall be painted with Cool Tar Epoxy, see Specifications Section 3.27 "Painting Structural Steel."
- For Bearing Assembly T6EB-2 see Dwg. No. B4-S-273. For Bearing Assembly FB-1 see Dwg. No. B4-S-306, Section I-1.



	A	B	C	D	E	F
S	1.06	1.29	0.69	-0.05	0.15	2.21
C	1.44	1.74	2.93	-2.09	0.26	2.37
B	0.89	1.01	0.53	0.02	0.24	2.27
TOTAL	3.39	4.04	2.15	-2.12	0.65	6.85

S - denotes camber due to weight of structural steel.
 C - denotes camber due to weight of concrete slab.
 B - denotes camber due to weight of superimposed dead load.

26.76.2016
AS-BUILT

DESIGNED	J.M.C.	7-71
DATE		
DRAWN	J.P.L.	8-71
DATE		
CHECKED	M.K.M.	8-71
DATE		
APPROVED	[Signature]	8-71
DATE		

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
B4-S-306	Steel Details
B4-S-273	Track Girder Bearing Assemblies

REVISIONS		
DATE	BY	DESCRIPTION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED [Signature]

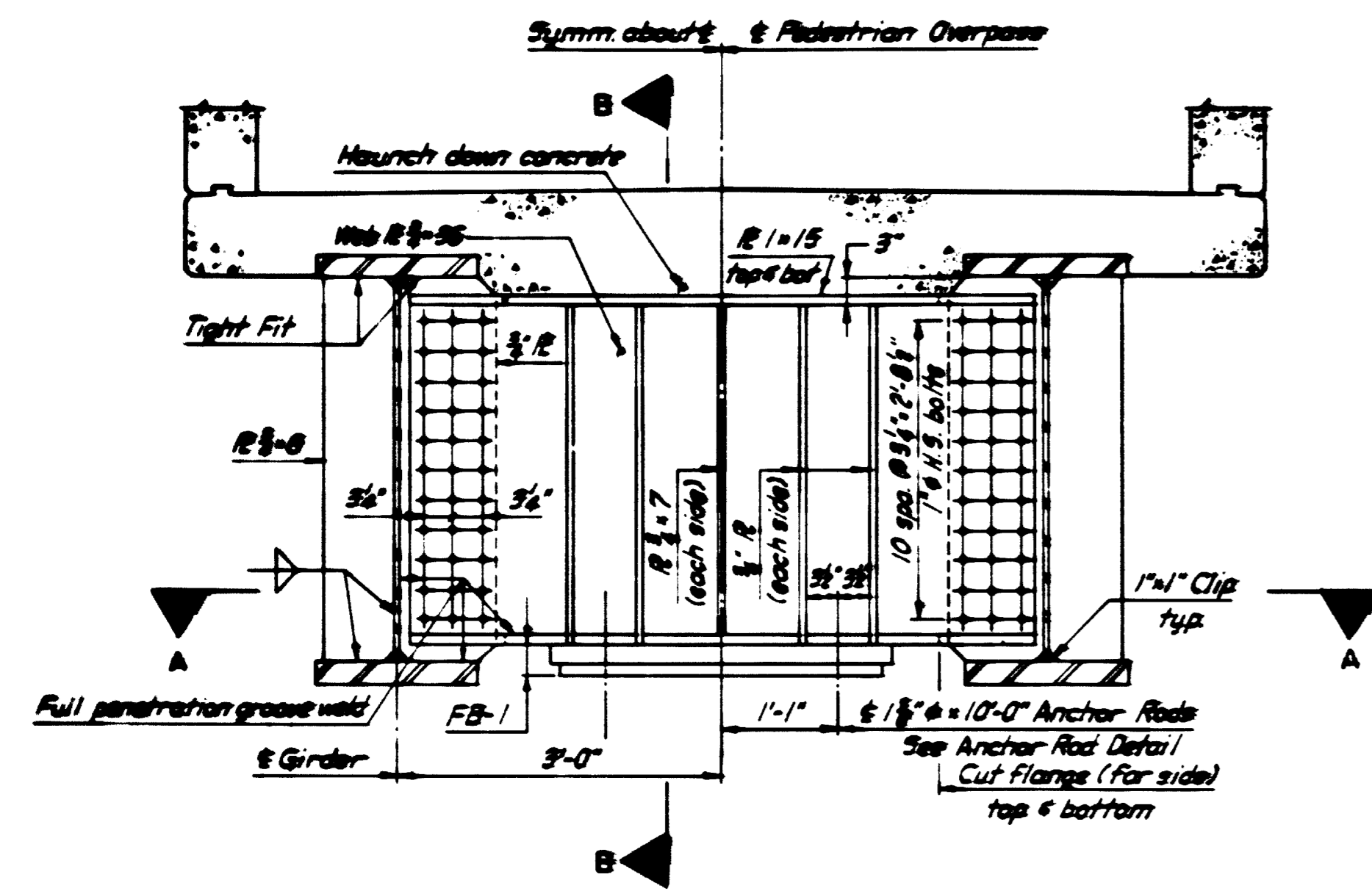
APPROVED [Signature]

B&O ROUTE PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE FRAMING PLAN & STEEL DETAILS

SCALE: 1/2" = 1'-0" AND AS NOTED

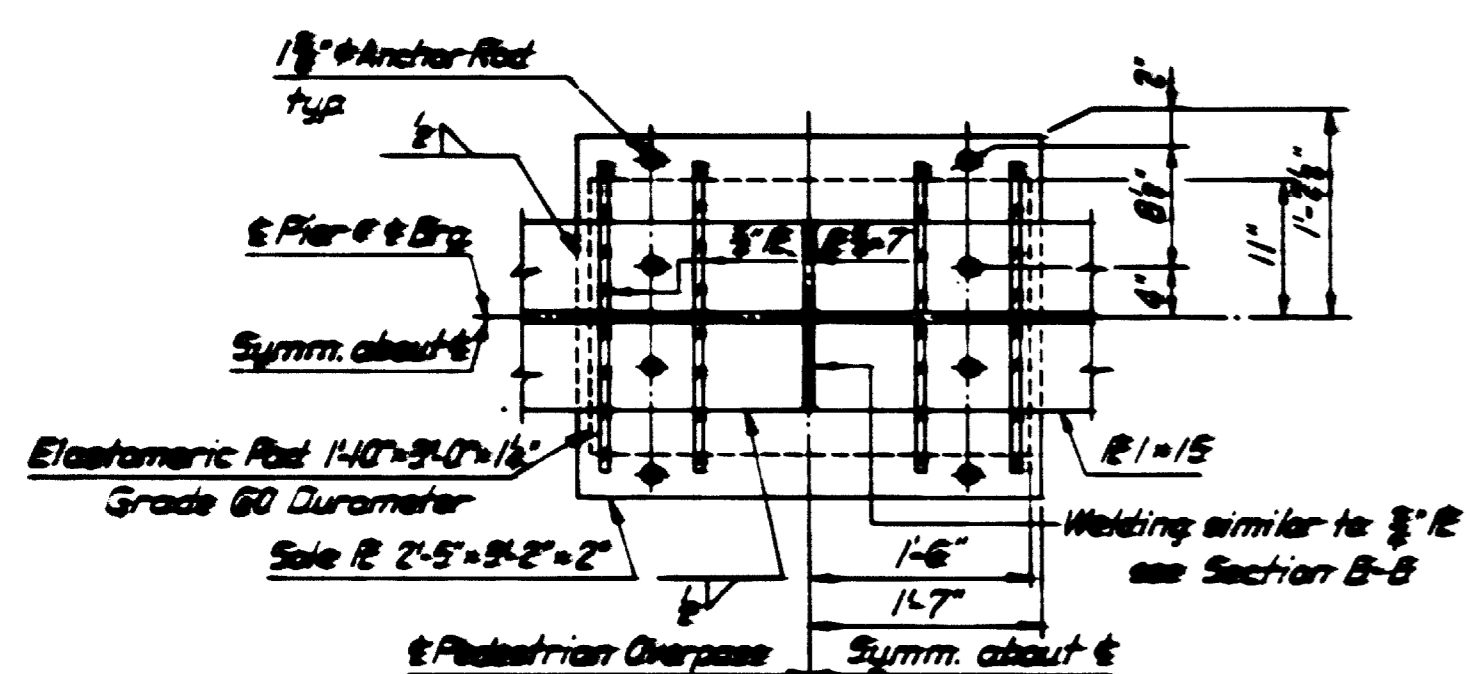
DRAWING NO. B4-S-305

M 39-361

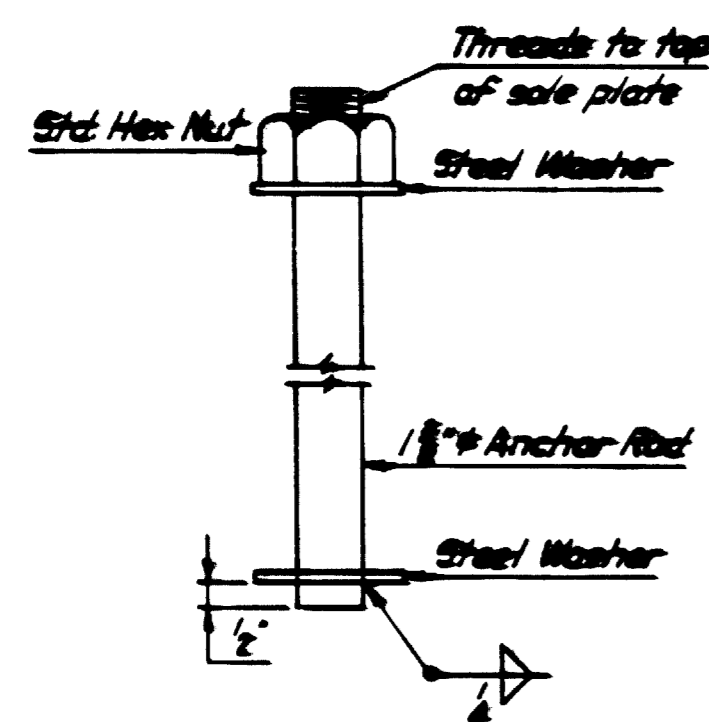


BEARING DIAPHRAGM DB & BEARING ASSEMBLY FB-1

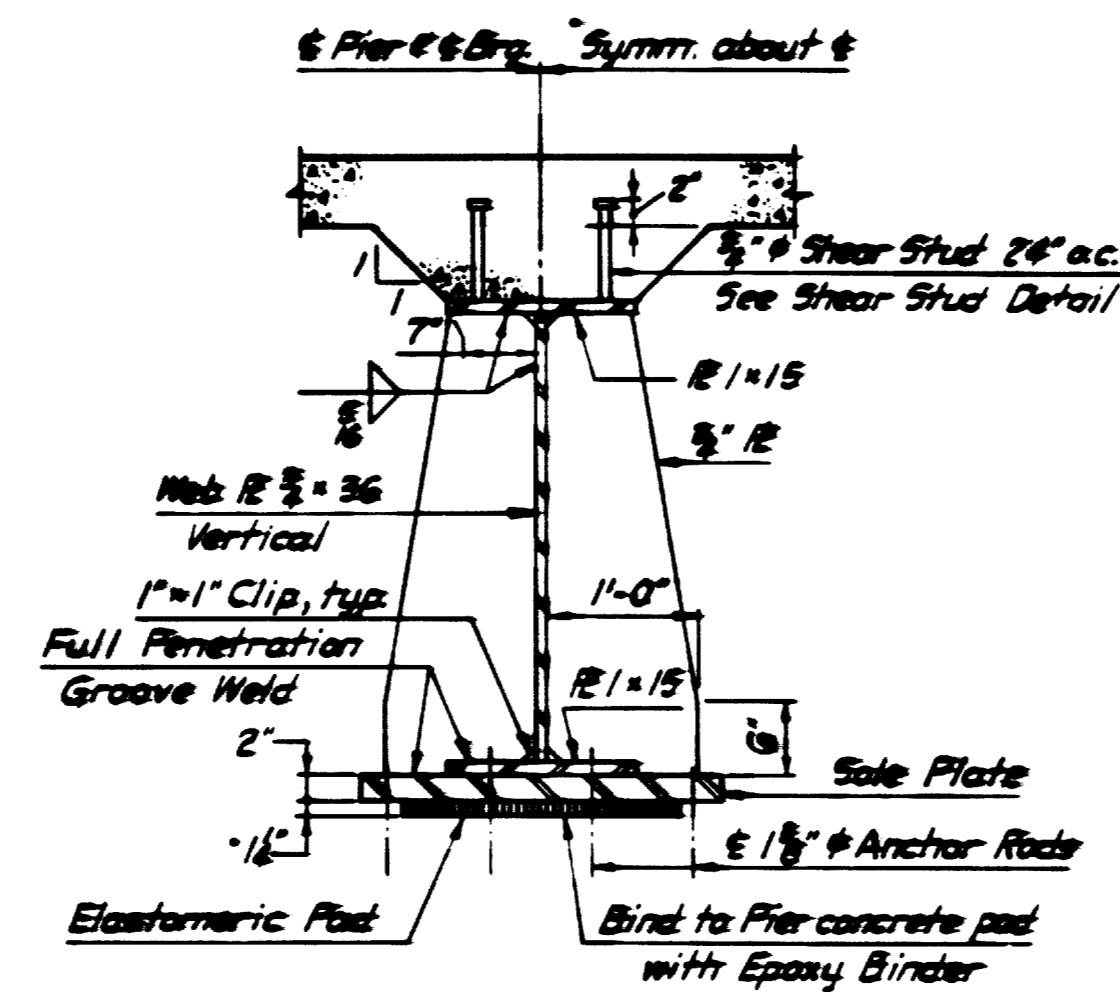
SECTION 1-1



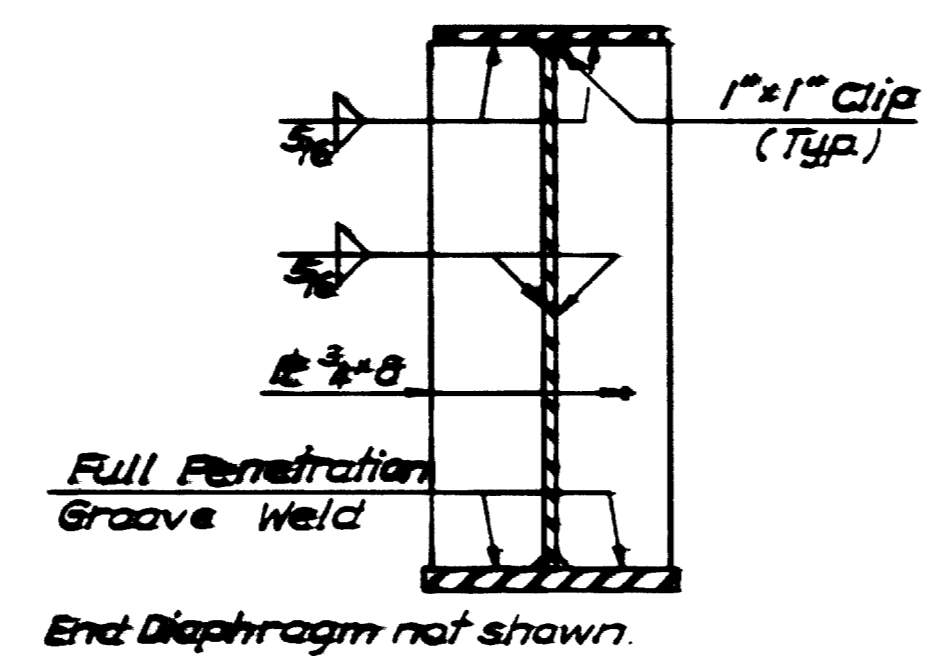
SECTION A-A



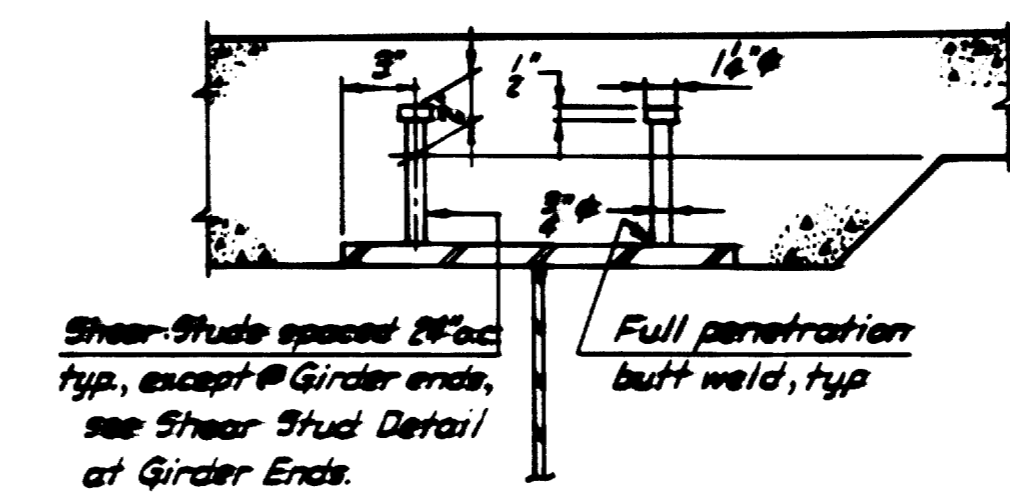
ANCHOR ROD DETAIL
No Scale



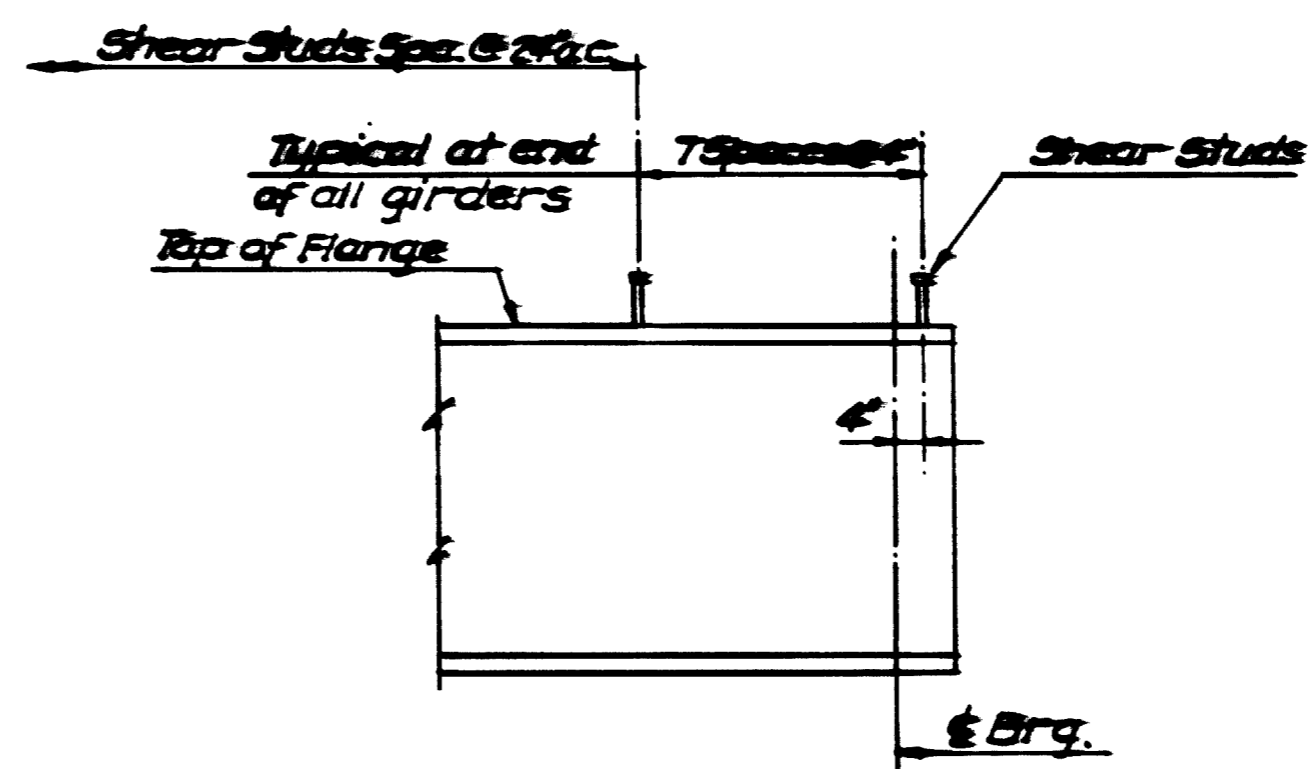
SECTION B-B



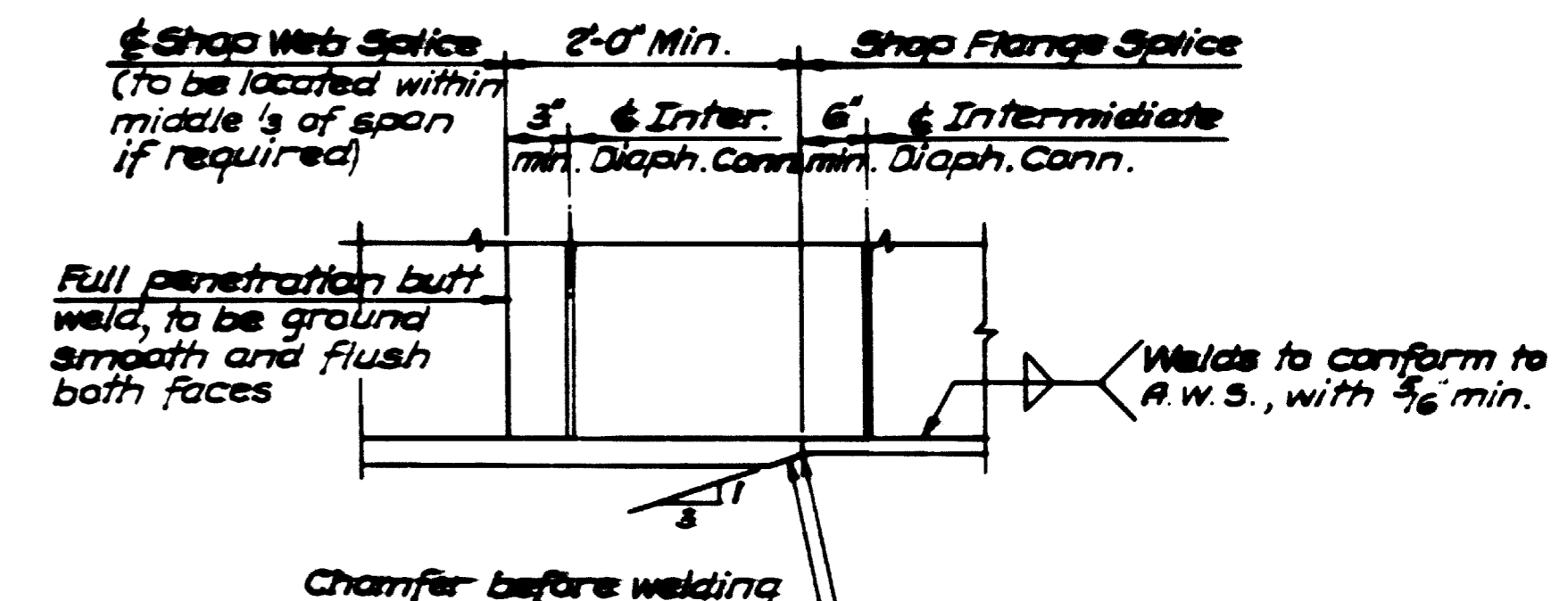
ABUTMENT BEARING STIFFENER DETAIL
No Scale



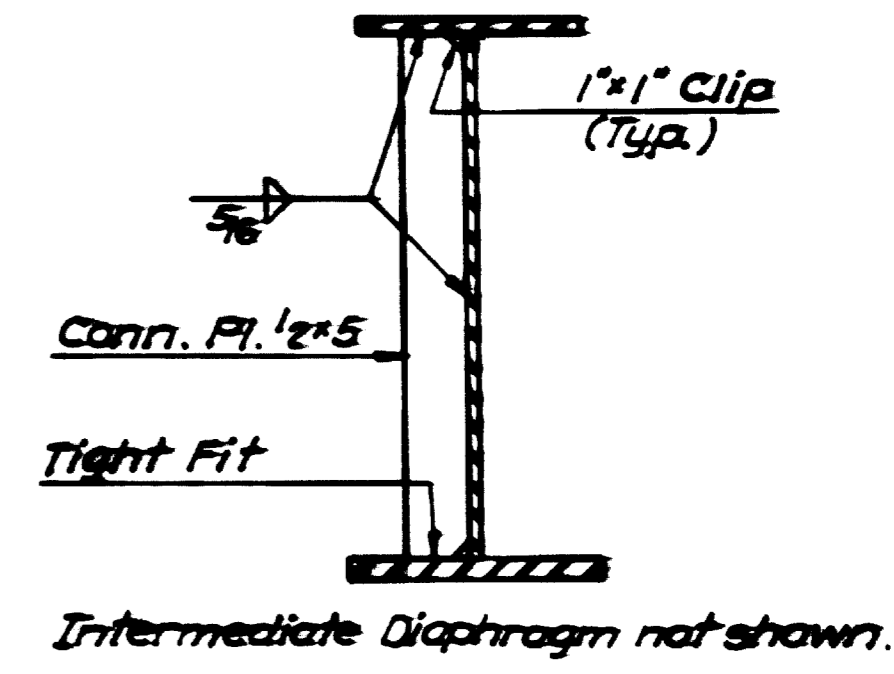
SHEAR STUD DETAIL
1/2\"/>



SHEAR STUD DETAIL AT GIRDER ENDS
No Scale



SHOP WELD SPLICE DETAIL
No Scale



INTERMEDIATE DIAPHRAGM CONNECTION PLATE DETAIL
No Scale

NOTES FOR BEARING ASSEMBLY FB-1:

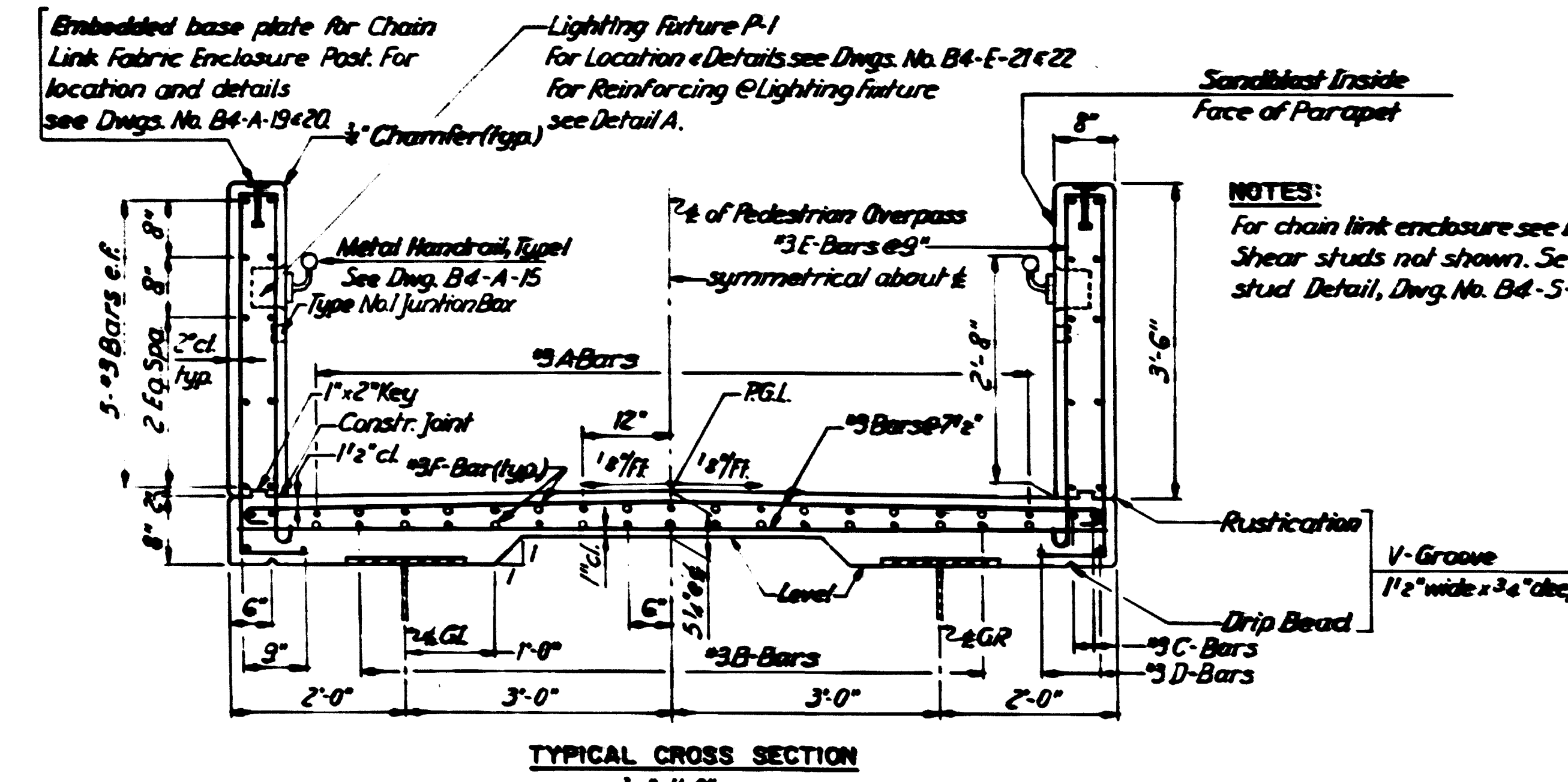
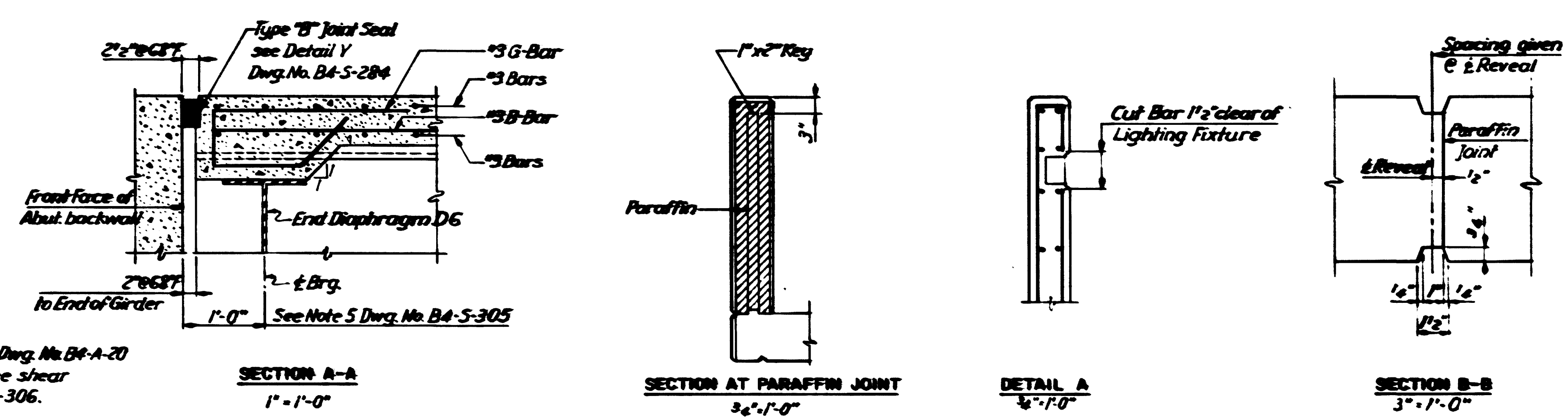
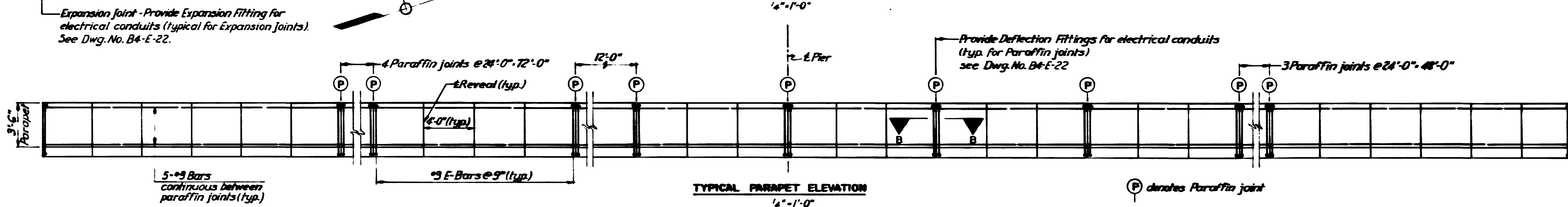
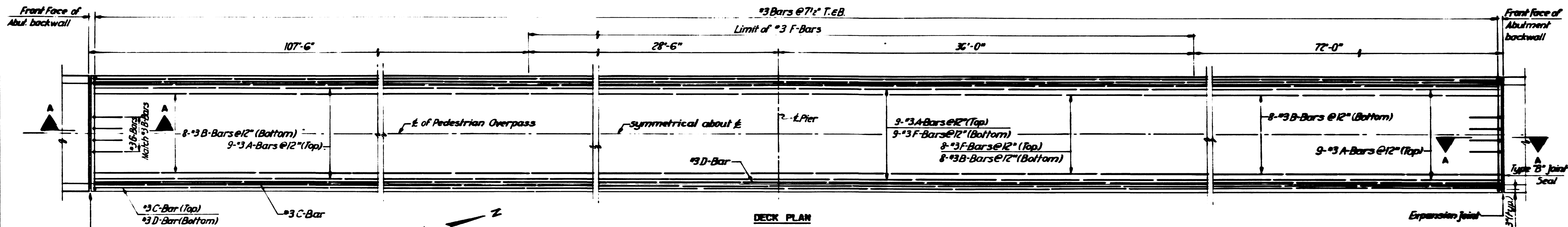
- Holes for 1/2\"/>
 - Bottom R 1/2 = 3/8 (DB) - 1/2\"/>
- For materials, class of machine finishing and fabrication requirements, see Specifications, Section 3.28, Bearing Assemblies.
- Anchor Rod nuts are to be installed after steel erection. After all dead load is in place, the nuts are to be drawn up finger tight, then backed off 1/2 turn and threads burred off at face of rod with a pointed tool.

NOTES:

- Connections for Diaphragm DB shall be made with 1\"/>
- All welds shall conform to A.W.S. Specifications, with 5/16\"/>
- For additional notes see Dwg. No. B4-S-305.

J.S. Dutton 5/16/76
AS-BUILT

DESIGNED <i>J.H.C., L.D.</i> DATE 7-77	REFERENCE DRAWINGS NUMBER 84-S-306 DESCRIPTION Framing Plan and Steel Details	REVISIONS DATE BY DESCRIPTION		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB		DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT		B&O ROUTE PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE STEEL DETAILS	
DRAWN <i>J.P.L., N.G.P.</i> DATE 8-77	CHECKED <i>M.N.M.</i> DATE 8-77	APPROVED <i>[Signature]</i> DATE 8-77		SUBMITTED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	SCALE 1/4" = 1'-0" AND AS NOTED	DRAWING NO. B4-S-306	M38-362	



NOTES:
 For chain link enclosure see Dwg. No. B4-A-20
 Shear studs not shown. See shear stud Detail, Dwg. No. B4-S-306.

DECK POURING SEQUENCE:
 Pour concrete simultaneously from the North and South Abutment to meet at the Pier.
 See Specifications Section 3.10.

AS-BUILT

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS	
		NUMBER	DESCRIPTION	DATE	BY
I.H.C.	7-71	B4-S-303	Framing Plan and Steel Details		
H.F.B.	8-71	B4-S-284	Deck Slab Joint Details		
H.K.M.	9-71	B4-E-21	Lighting Plan		
		B4-E-32	Lighting Fixture Details		
		B4-A-15	Details - Handrail		
		B4-A-20	Details		

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

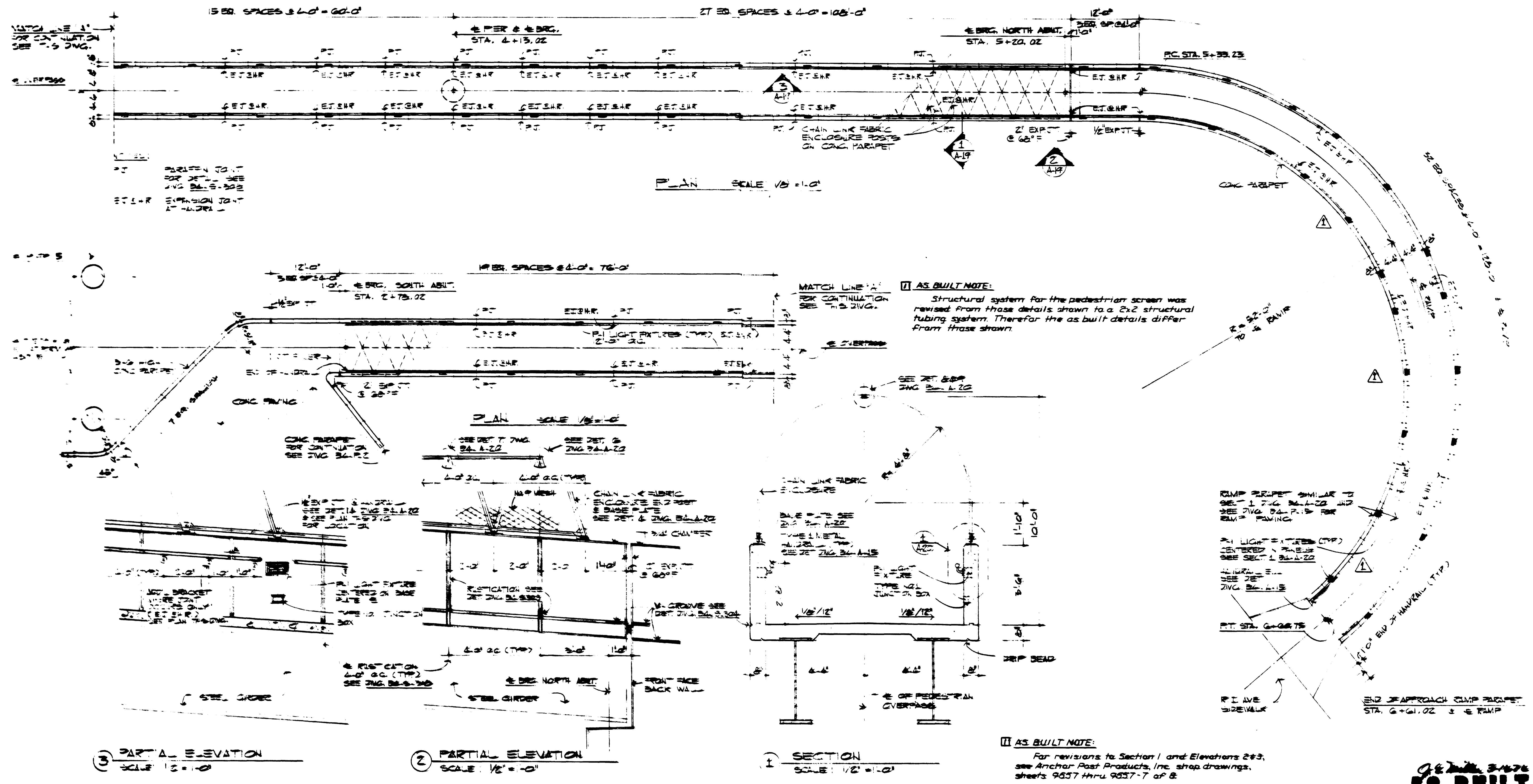
SUBMITTED *H. Shanks*

DE LEUW CATHER & COMPANY
 GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT

APPROVED *J. C. Woodward*

B&O ROUTE PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE DECK PLAN & DETAILS	
SCALE AS SHOWN	DRAWING NO. B4-S-308
M 39-363	



DESIGNED	DATE
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
24-A-10	DETAILS
24-A-11	NORTH ABUTMENT
24-A-12	RAMP PLAN & DETAILS
24-A-13	RAMP SECTION
24-A-14	LIGHTING PLAN
24-A-15	LIGHTING FIXTURE PLAN

REVISIONS	
DATE	DESCRIPTION
3-12-73	RTC A0-BUILT
4-4-73	TEM As Built

DESIGNED IN ACCORDANCE WITH THE D.C. BUILDING CODE
 THE PERMANENT PARTNERSHIP - ARCHITECTS
 SUBMITTED *Franklin Cohen*

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB

DE LEUW, CATHEN & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

B&O ROUTE PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE PLAN, ELEVATION AND SECTION

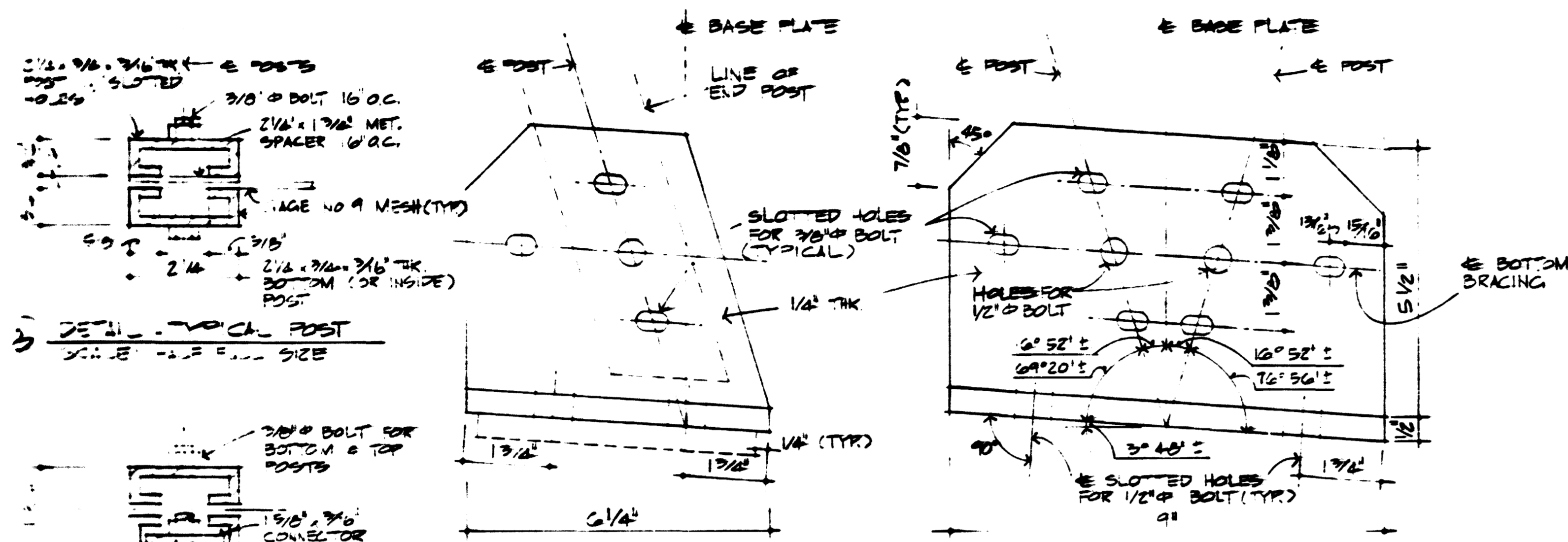
SCALE: 1/8"=1'-0"

FOR THE RECORD: B4-A-1'S

NO. 38-384

AS BUILT NOTE

Structural system for the pedestrian screen was revised from those details shown to a 2x2 structural tubing system. Therefore the as built details differ from those shown.



4 END BASE PLATE DETAIL
SCALE: HALF FULL SIZE

3 BASE PLATE DETAIL
SCALE: HALF FULL SIZE

2 DETAIL - TYPICAL POST
SCALE: HALF FULL SIZE

1 DETAIL - POSTS CONNECTOR
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

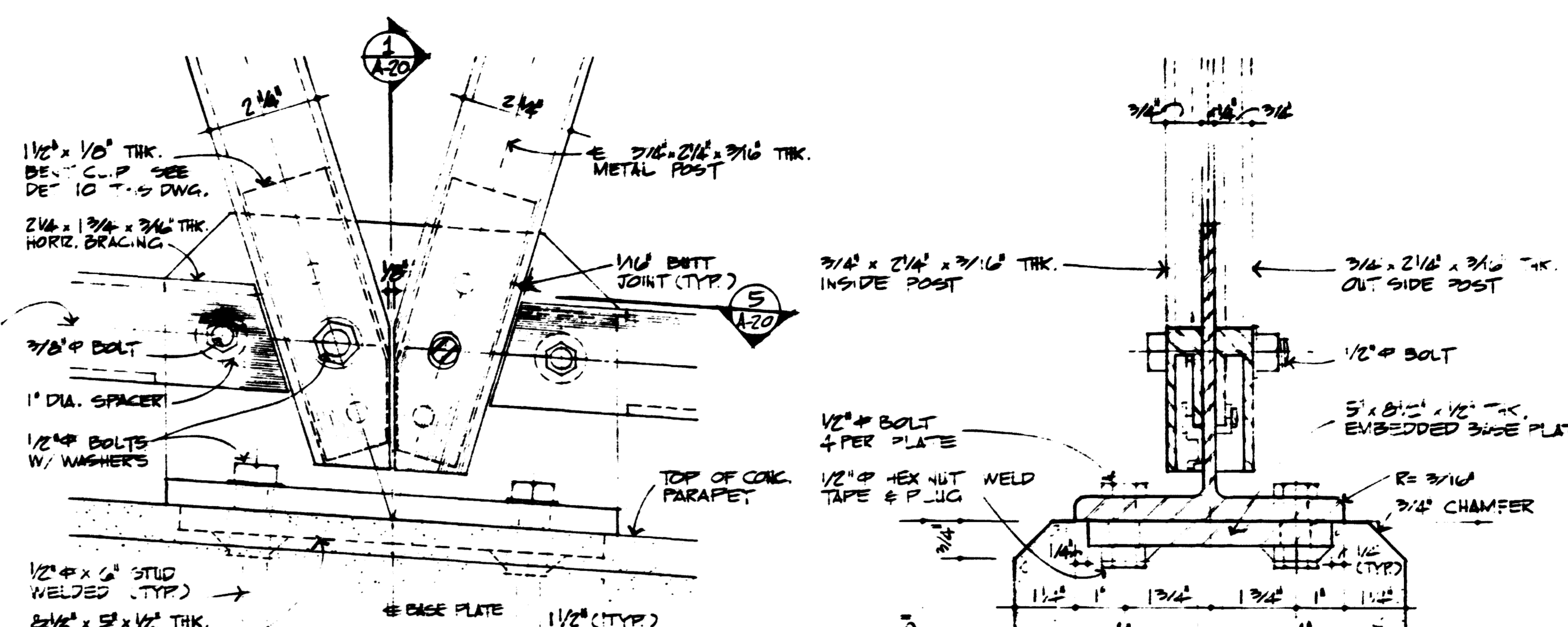
1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

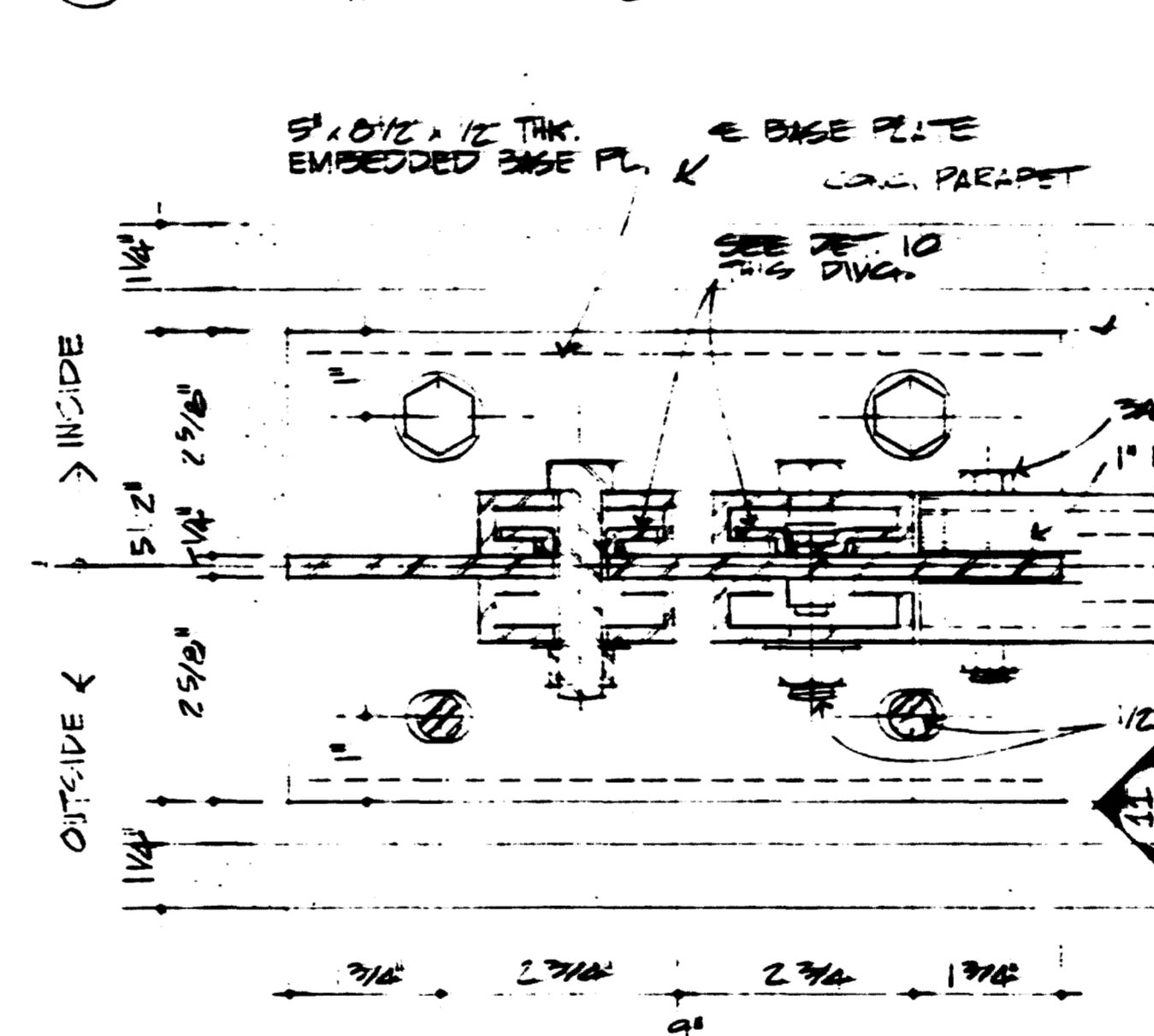
1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE

1 DETAIL - 1/2" DIA. POST
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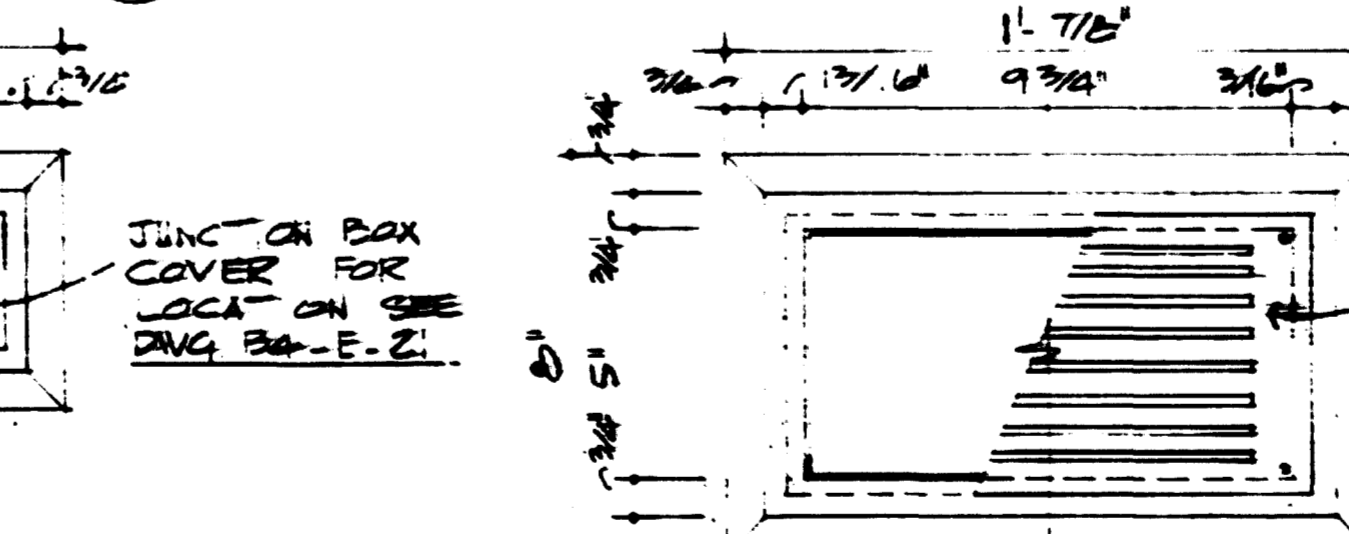
1 DETAIL - 1/2" DIA. POST
SCALE: HALF FULL SIZE



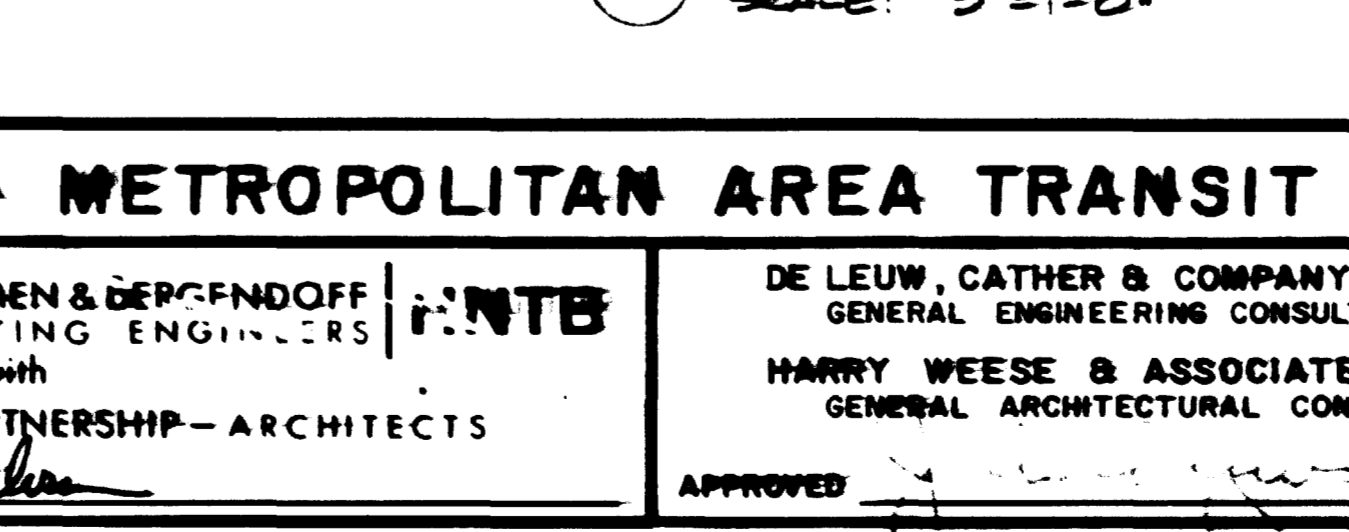
2 BASE PLATE ELEVATION THRU. OUTSIDE
SCALE: HALF FULL SIZE



5 BASE PLATE PLAN DETAIL
SCALE: HALF FULL SIZE



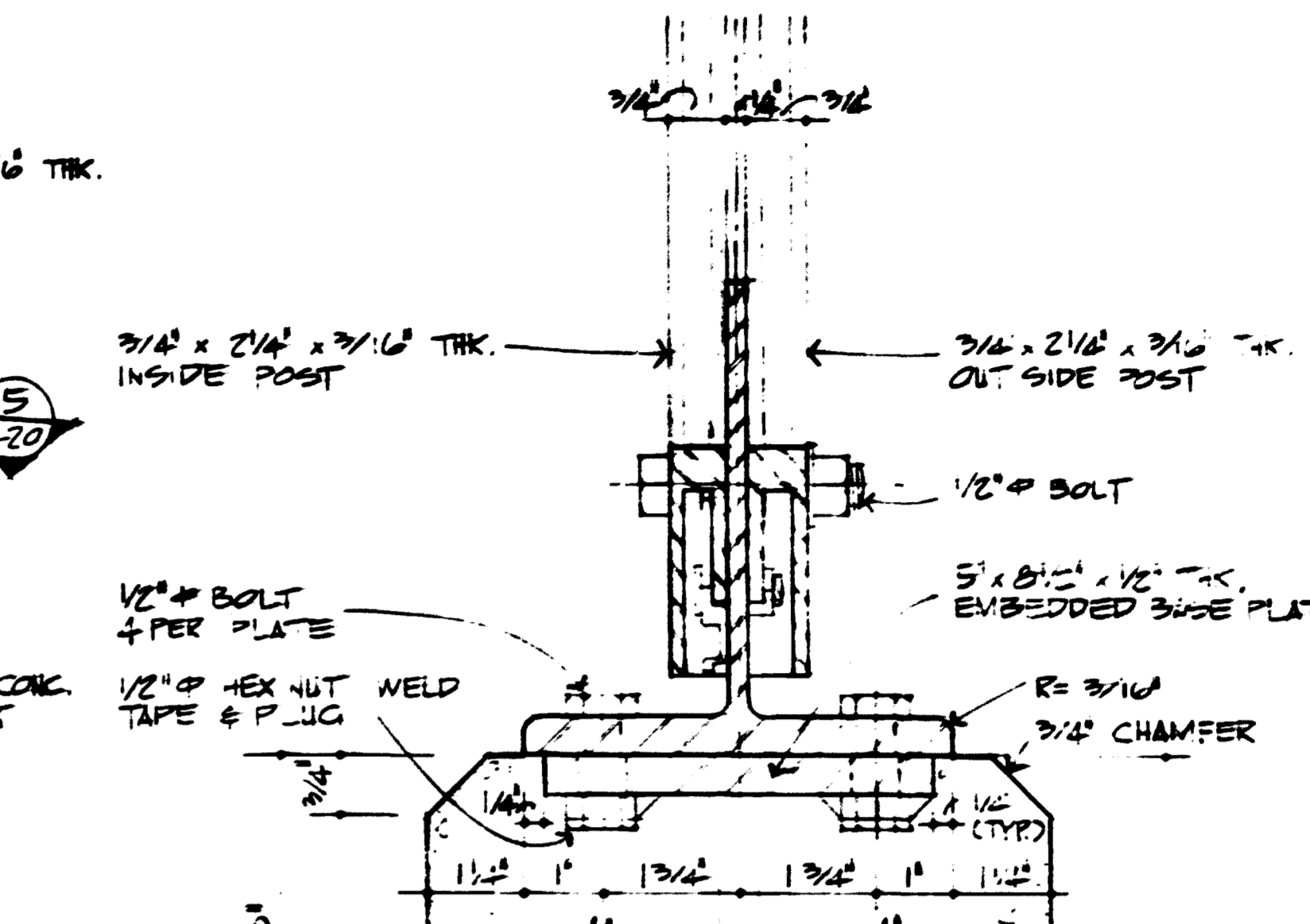
12 P-1 LIGHT FIXTURE ELEVATION
SCALE: 3"=1'-0"



13 JUNCTION BOX ELEVATION
SCALE: 3"=1'-0"



14 EXPANSION JOINT DETAIL @ HANDRAIL
NO SCALE



1 SECTION
SCALE: HALF FULL SIZE

NOTE:
HEX HEAD NUTS & BOLTS W/ LOCK WASHERS REQ'D FOR ALL ENCLOSURE CONNECTIONS

AS BUILT NOTE:
For revisions to Section 1, Elevation 2 and Details 3 thru 11, see Anchor Post Products, Inc. shop drawings, sheets 9557 thru 9557-7 of 8.

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS		DESIGNED IN ACCORDANCE WITH THE RC BUILDING CODE
		NUMBER	DESCRIPTION	DATE	BY	
DRAWN	3-71	B4-A-19	PLAN, ELEVATION & SECTION	4-4-75	TE M	As Built
CHECKED	8-71	B4-E-21	LIGHTING PLAN			
APPROVED	8-71	B4-E-22	LIGHTING FIXTURE DETAIL			

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERENSON
CONSULTING ENGINEERS

in association with
THE PERKINS & WILL PARTNERSHIP - ARCHITECTS

SUBMITTED *Franklin D. Baker*

DE LEUW, CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

APPROVED *Harry Weese*

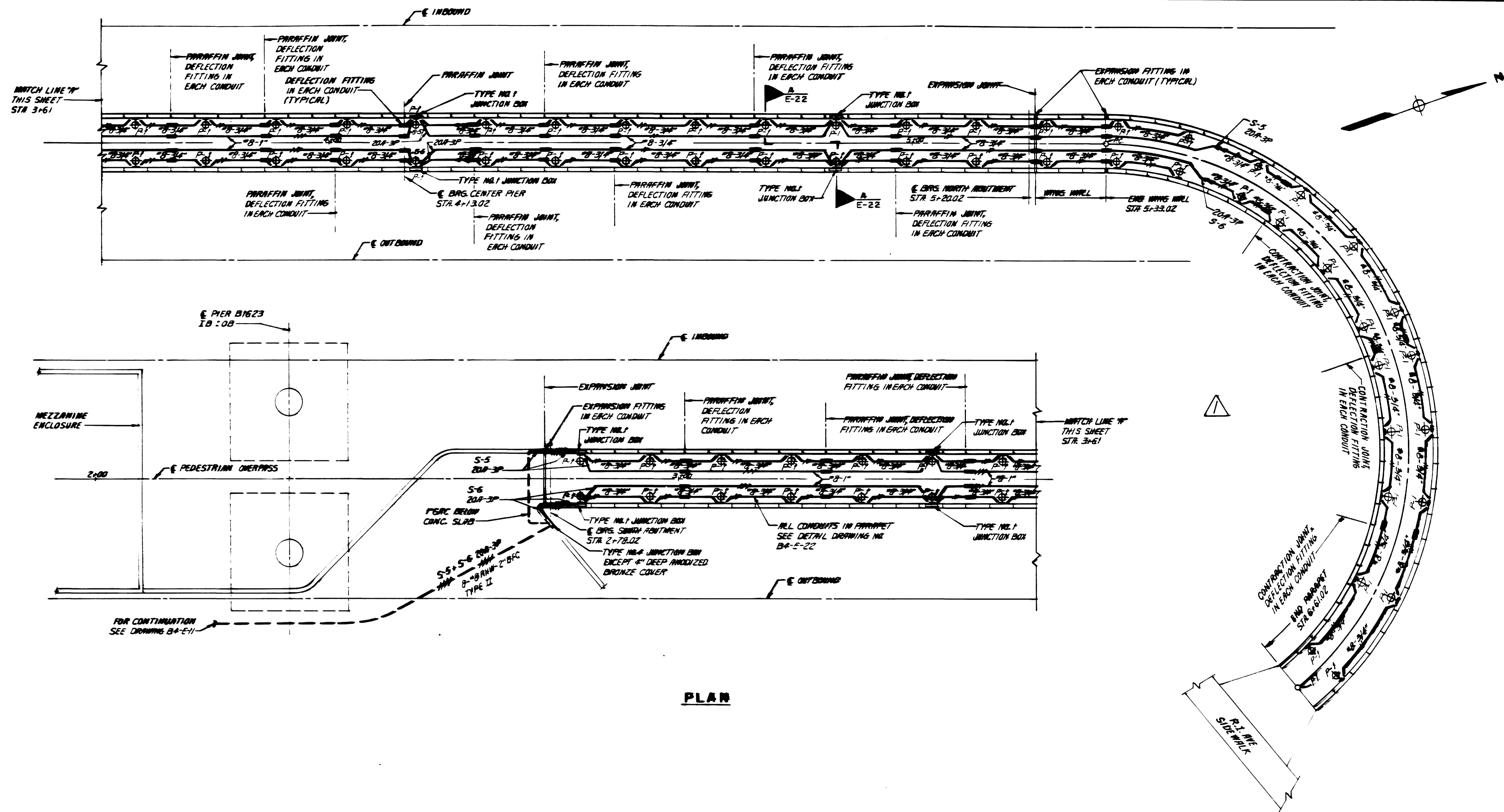
**B&O ROUTE
PEDESTRIAN OVERPASS
AT RHODE ISLAND AVENUE
DETAILS**

SCALE: AS SHOWN

DRAWING NO. **B4-A-20**

NO. **M39-365**

AS-BUILT



PLAN

C.S. Date 3/16/78
AS-BUILT

DESIGNED *C.J. MITCH* 9-71
 DRAWN *J. FRIEDL* 9-71
 CHECKED *C.J. MITCH* 9-71
 APPROVED *[Signature]* 9-71

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4-S-303	PEDESTRIAN OVERPASS - KEY PLAN	8-15-78	RTC	AS-BUILT
B4-A-19	PEDESTRIAN OVERPASS - PLAN			
B4-A-20	PEDESTRIAN OVERPASS - DETAILS			
B4-E-22	LIGHTING FIXTURE DETAILS			
B4-E-11	STATION PARKING LOT			



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

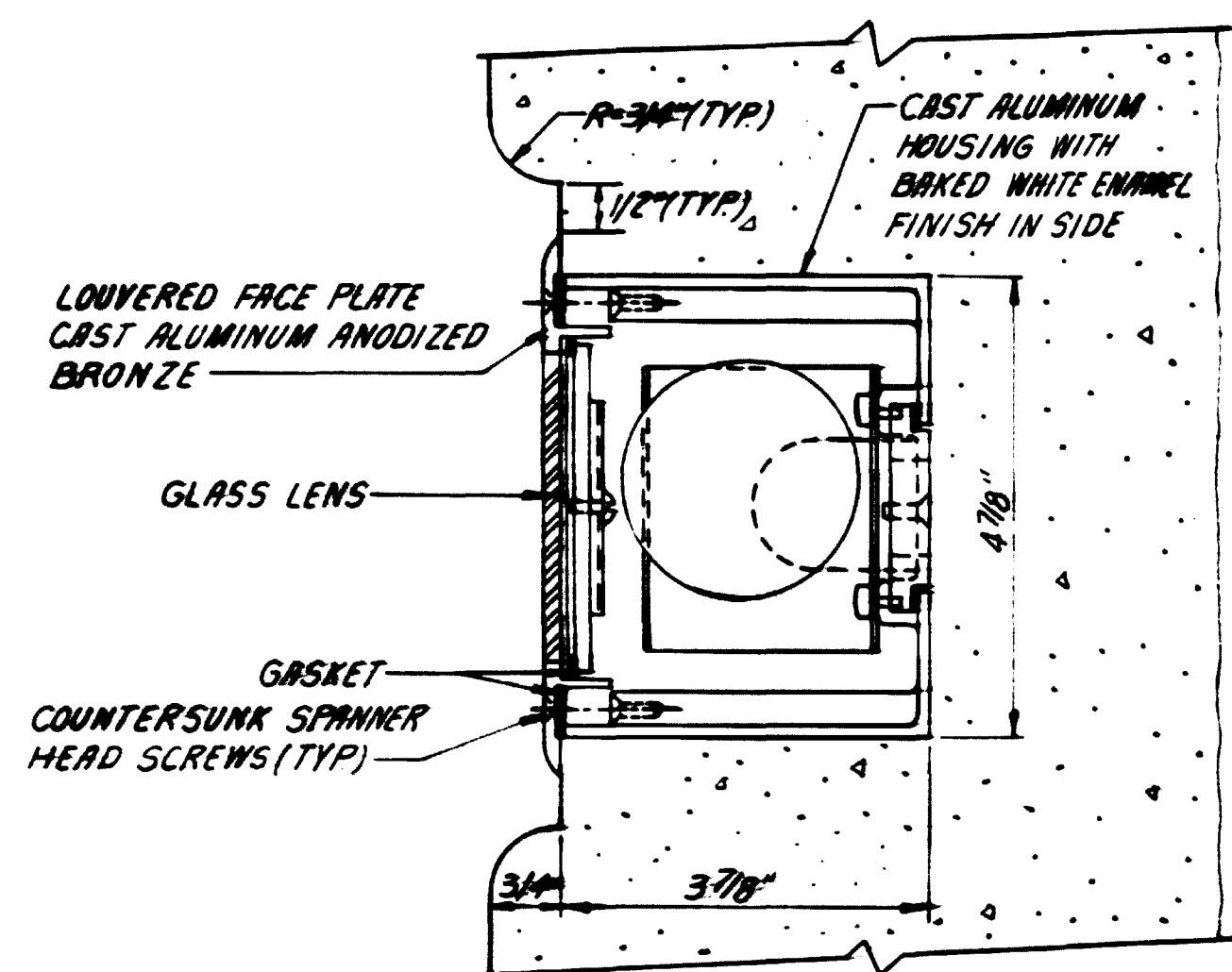
HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED *[Signature]* APPROVED *[Signature]*

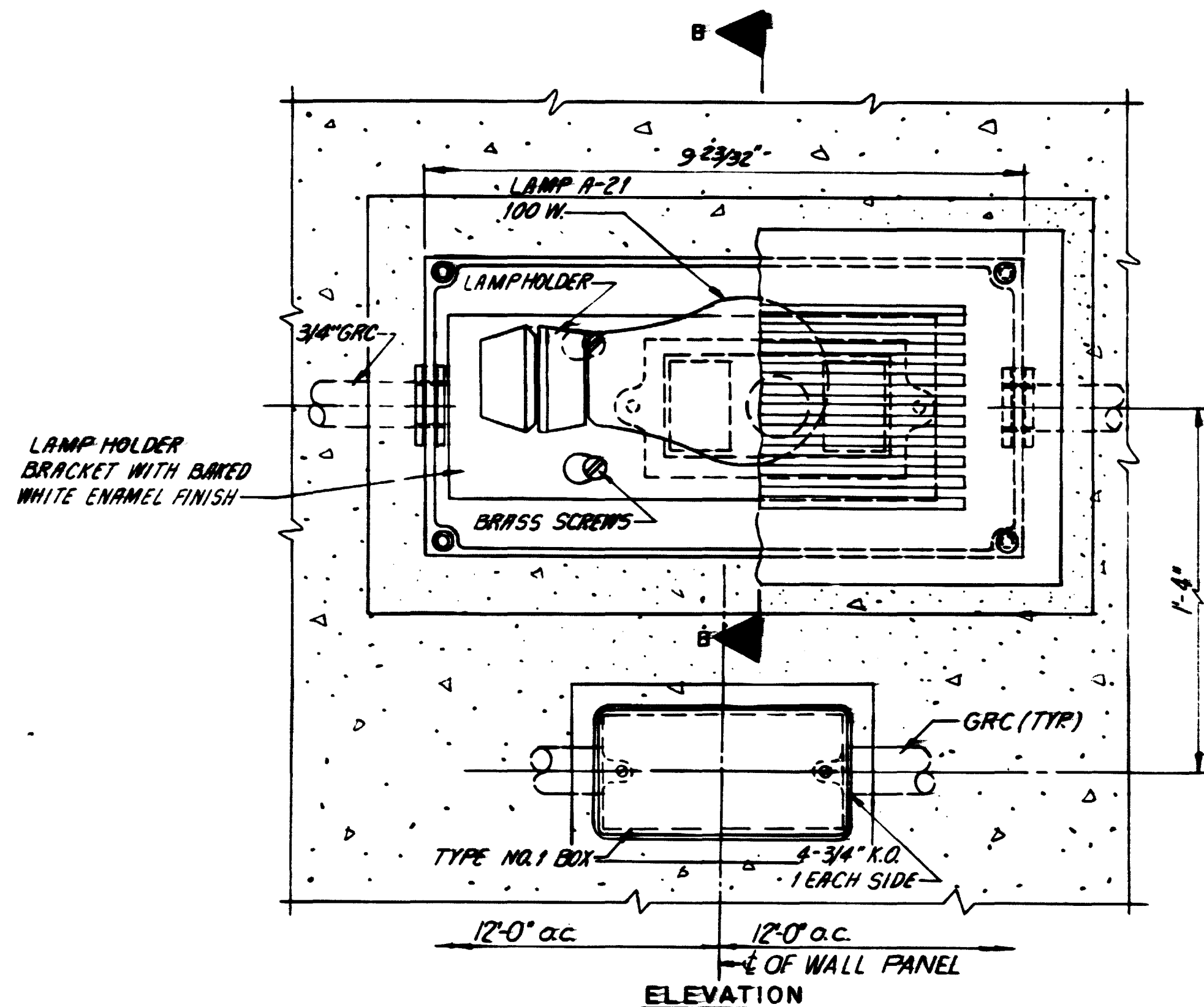
B&O ROUTE PEDESTRIAN OVERPASS AT RHODE ISLAND AVENUE LIGHTING PLAN

SCALE 1" = 1'-0" 10 2 4 6 8 0

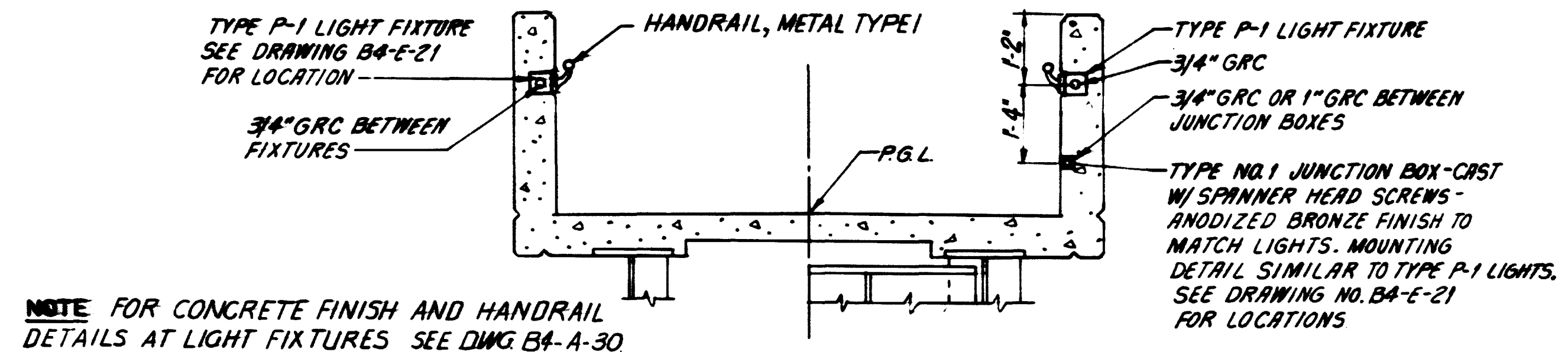
DRAWING NO. **B4-E-21** MSS-366



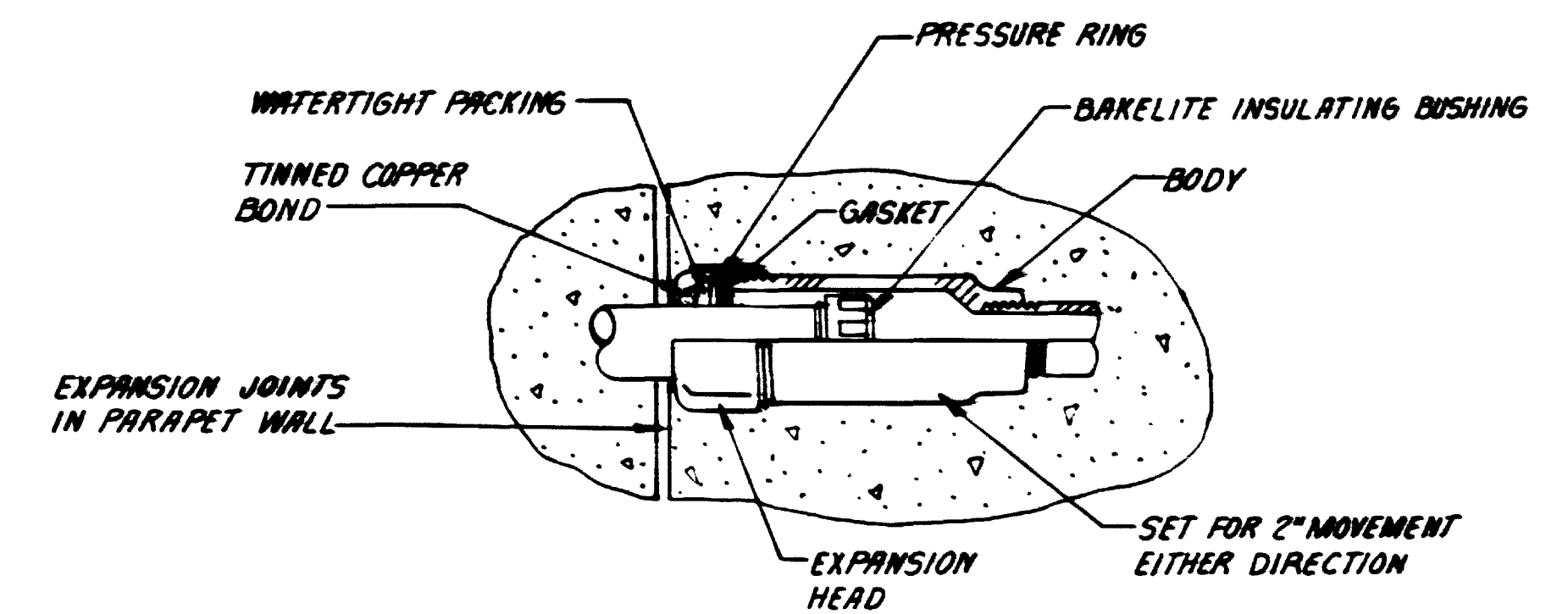
SECTION B-B



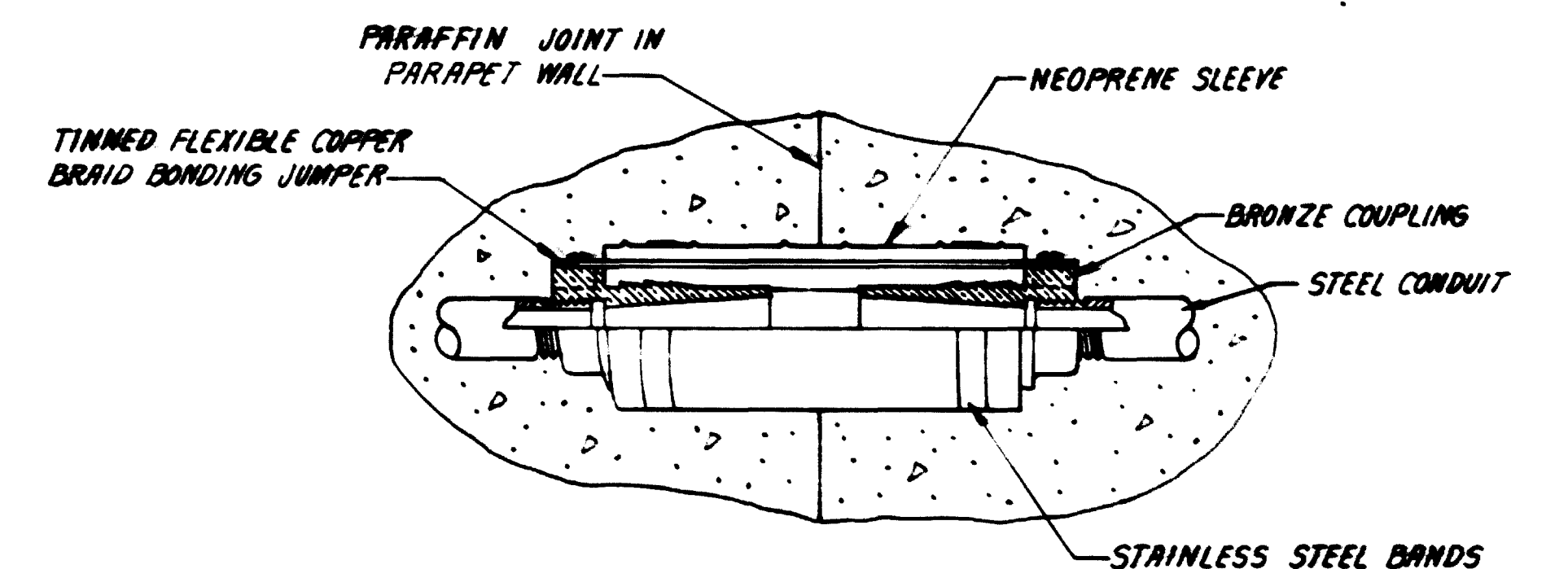
TYPE P-1 LIGHT FIXTURE
NO SCALE



TYPICAL SECTION A-A
SEE DRAWING B4-E-21
NO SCALE



EXPANSION FITTING
NO SCALE

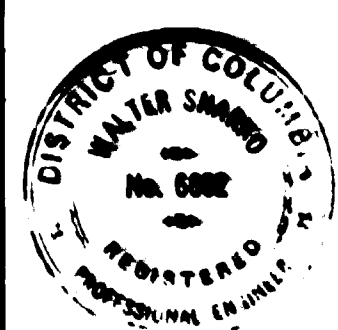


DEFLECTION FITTING
NO SCALE

J. E. Miller 3-16-76
AS-BUILT

DESIGNED *C. J. MITCH* 9-71
DATE
DRAWN *J. PAZALOS* 9-71
DATE
CHECKED *C. J. MITCH* 9-71
DATE
APPROVED *C. J. MITCH* 9-71
DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-E-21	PEDESTRIAN OVERPASS LIGHTING PLAN		
B4-A-20	PEDESTRIAN OVERPASS DETAILS		
B4-S-308	DECK PLAN AND DETAILS		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS | **HNTB**

DE LEUW CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

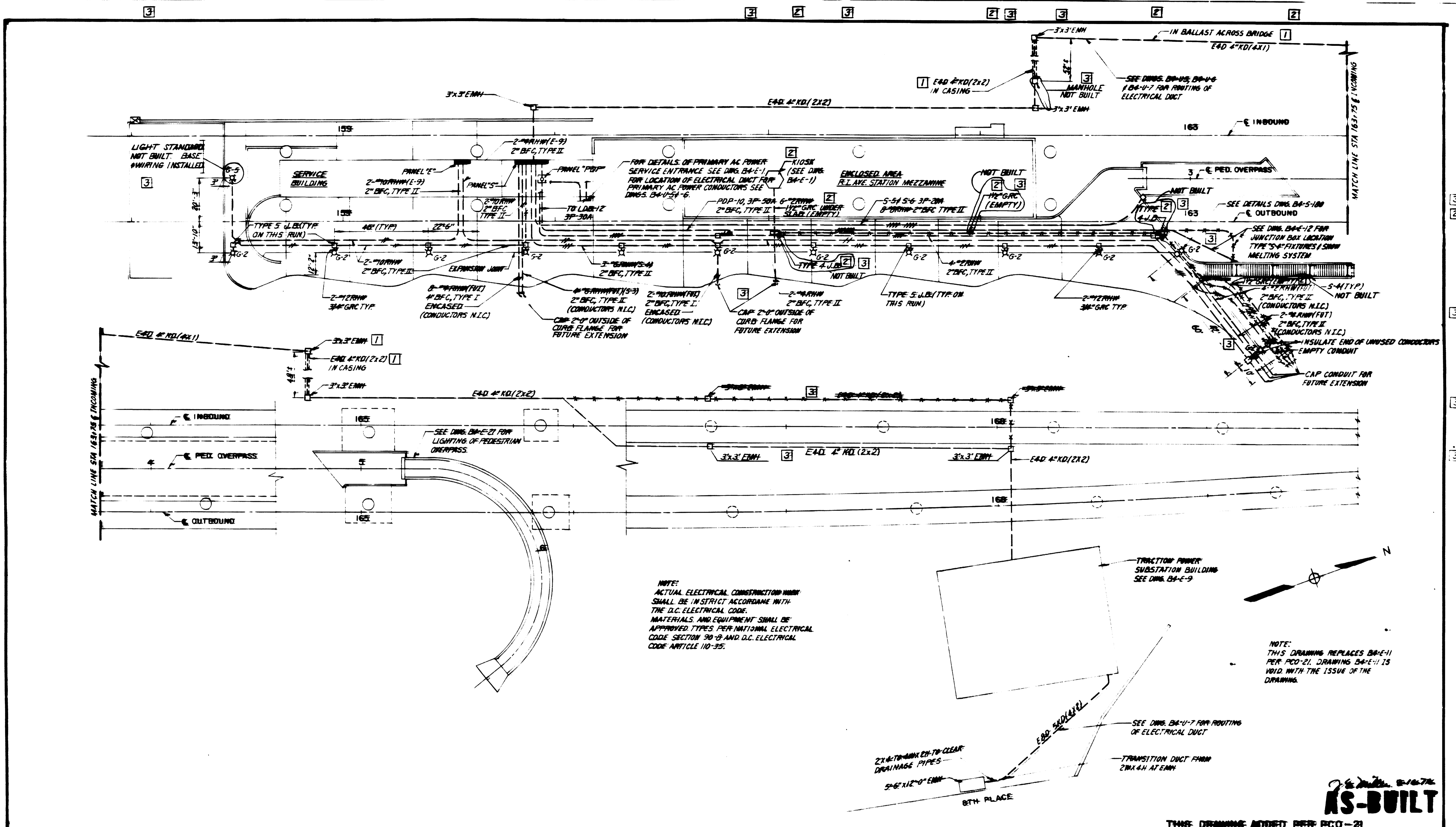
SUBMITTED *W. J. Santos* APPROVED *J. E. Miller*

**B&O ROUTE
PEDESTRIAN OVERPASS
AT RHODE ISLAND AVENUE
LIGHTING FIXTURE DETAILS**

SCALE AS NOTED

DRAWING NO. **B4-E-22**

M39-367



NOTE:
 ACTUAL ELECTRICAL CONSTRUCTION WORK SHALL BE IN STRICT ACCORDANCE WITH THE D.C. ELECTRICAL CODE.
 MATERIALS AND EQUIPMENT SHALL BE APPROVED TYPES PER NATIONAL ELECTRICAL CODE SECTION 90-9 AND D.C. ELECTRICAL CODE ARTICLE 110-35.

NOTE:
 THIS DRAWING REPLACES BA-E-11 PER PCO-21. DRAWING BA-E-11 IS VOID WITH THE ISSUE OF THE DRAWING.

AS-BUILT

THIS DRAWING ADDED PER PCO-21

DESIGNED C.J. MITCH 10-72
 DATE
 DRAWN U.S. PROVALOS 11-72
 DATE
 CHECKED C.J. MITCH 12-72
 DATE
 APPROVED C.J. MITCH 12-72
 DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-M-16	PLUMBING PLAN	3-2-73	C.J.M.
B4-P-5	PAVING AND RESTORATION PLAN	7-10-73	C.J.M.
ST-U-10	PERCO DETAILS	11-8-74	T.E.M.
ST-U-9	PERCO DETAILS		
ST-U-24	TELEPHONE DETAILS		
ST-M-11	LIGHTING FIXTURE DETAILS		



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 CONSULTING ENGINEERS

DE LEUW CATHER & COMPANY
 GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
 GENERAL ARCHITECTURAL CONSULTANT

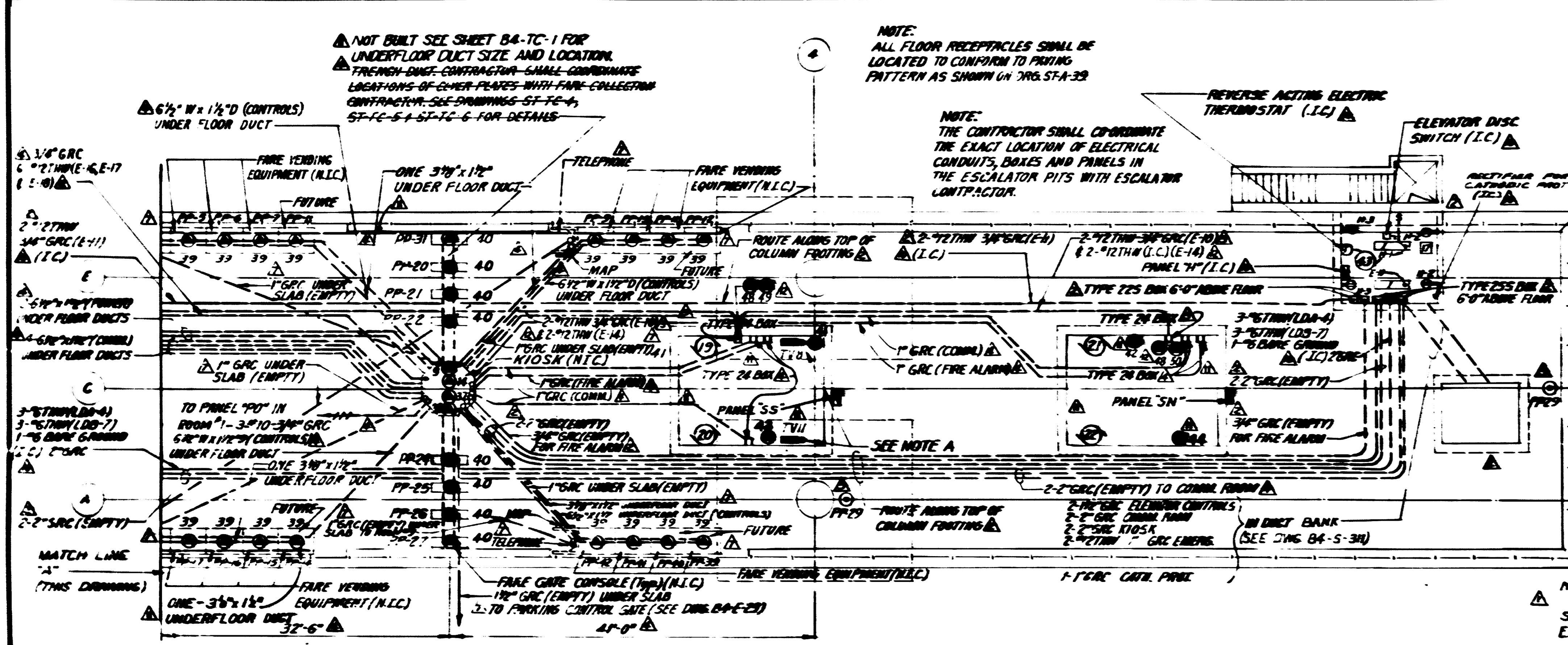
DATE: 12-72

**B & O ROUTE
 RHODE ISLAND AVENUE STATION
 SITE LIGHTING
 ELECTRICAL PLAN**

SCALE: 1" = 20'

DRAWING NO: B4-E-23

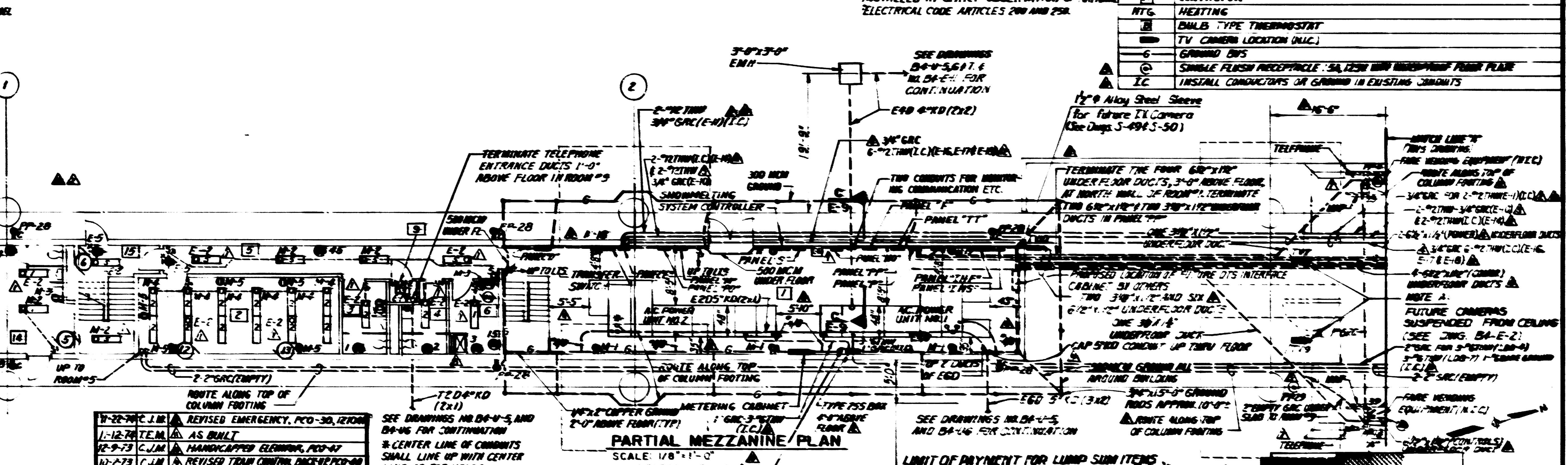
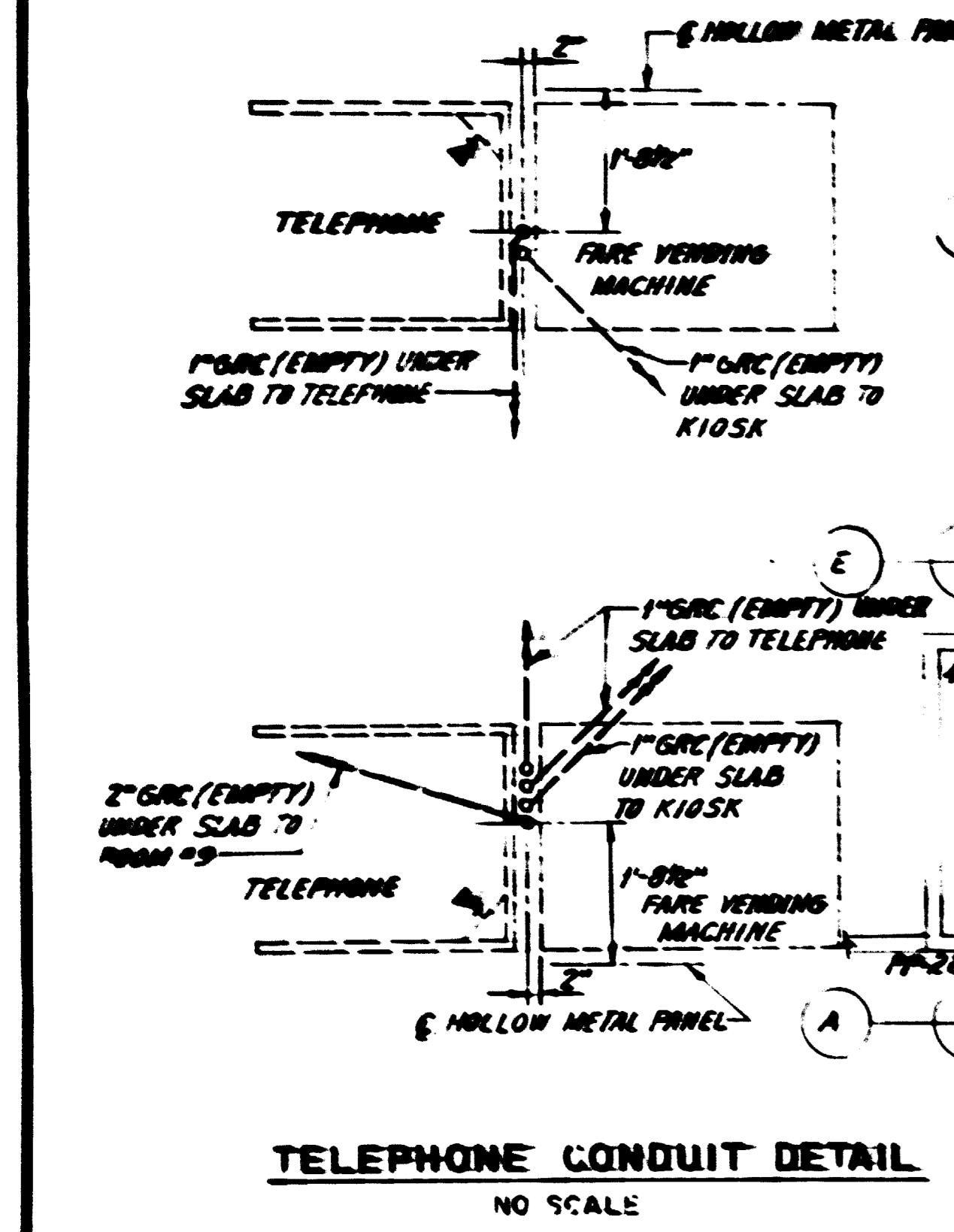
PROJECT NO: M39-335A



ROOM NO.	DESCRIPTION
1	AC SERVICE ROOM
2	TRAINMEN'S ROOM
3	MEN'S WASH ROOM
4	WOMEN'S WASH ROOM
5	CORRIDOR
6	CLEANERS ROOM
7	DISPATCHER'S ROOM
8	FIRE EQUIPMENT ROOM
9	BELL SYSTEMS ROOM
10	MAINTENANCE ROOM
11	TRAIN CONTROL ROOM
12	BATTERY ROOM
13	COMMUNICATIONS ROOM
14	OHS DRIVELS ROOM
15	STAIRWAY
16	PASSAGE
17	ELEVATOR MACHINE ROOM

ELECTRICAL SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
	FLUORESCENT LAMP FIXTURE
	INCANDESCENT FIXTURE
	INCANDESCENT BRACKET FIXTURE
	INCANDESCENT RECESSED CEILING FIXTURE
	INCANDESCENT RECESSED WALL FIXTURE
	PARKING LOT LIGHTING AND POLE
S1	TOGGLE SWITCH, 1 POLE
S2	TOGGLE SWITCH, 2 POLE
S3	TOGGLE SWITCH, 3 POLE
SP	TOGGLE SWITCH, 1 POLE WITH PILOT LAMP
	DUPLX FLUSH RECEPTACLE 15A, 125V WITH INTERLOCK SPRING COVER
	DUPLX FLUSH RECEPTACLE 15A, 125V
	EMERGENCY BLUE LIGHT, INCANDESCENT
	EMERGENCY EXIT LIGHT, INCANDESCENT (I.C.)
	SURFACE CONDUIT OR CABLE
	BURIED OR CONCEALED CONDUIT
	CONDUIT OR CABLE TURNING AWAY OR DOWN
	CONDUIT OR CABLE TURNING UPWARD
	JUNCTION OR PULL BOX
	MOTOR OUTLET
	SPECIAL OUTLET
	GALVANIZED RIGID CONDUIT
	BITUMINOUS FIBER CONDUIT (TYPE I OR II AS NOTED)
	POLYVINYL CHLORIDE CONDUIT
	CIRCUIT
	JUNCTION BOX
	ELECTRICAL MANHOLE
	EMERGENCY TRIP SWITCH
	PHOTO ELECTRIC CONTROL
	PUBLIC TELEPHONE
	ALLOY CONDUIT
	INDICATES NUMBER AND SIZE OF WIRES, SIZE CONDUIT, HOME RUN TO PANEL AND BREAKER DESIGNATION
	ASBESTOS CEMENT CONDUIT (TYPE)
	CONNECTION LOCATION FOR SUBMELTING SECTIONS
	CONTRACTOR
	HEATING
	BAULS TYPE THERMOSTAT
	TV CAMERA LOCATION (I.C.)
	GROUND BUS
	SINGLE FLUSH RECEPTACLE 15A, 125V WITH INTERLOCK SPRING COVER
	INSTALL CONDUITS OR GROUND IN EXISTING CONDUITS

PARTIAL MEZZANINE PLAN
SCALE: 1/8"=1'-0"

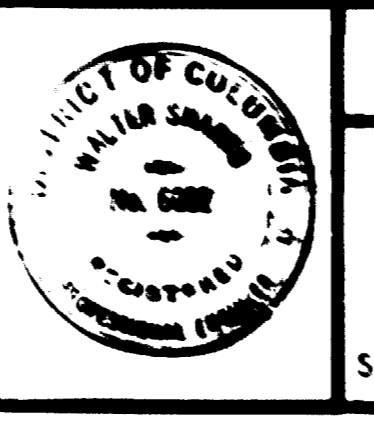


NO.	DATE	BY	REVISIONS
11-22-73	C.J.M.	AS BUILT	REVISED EMERGENCY LIGHTING AND ADDED GENERAL NOTES, PCO-9
12-9-73	C.J.M.	AS BUILT	REVISIONS FOR PCO-9
10-2-73	C.J.M.	AS BUILT	REVISIONS FOR PCO-9
7-26-73	C.J.M.	AS BUILT	REVISIONS FOR PCO-9
7-10-73	C.J.M.	AS BUILT	REVISIONS FOR PCO-9
5-22-73	C.J.M.	AS BUILT	REVISIONS FOR PCO-9

DESIGNED	J.E. FELDMER	1/70
DRAWN	J.S. ANZALOS	1/70
CHECKED	C.J. MITCH	4/71
APPROVED	[Signature]	4/71

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4-A-1	MEZZANINE PLAN	9-9-72	C.J.M.	REVISED EMERGENCY LIGHTING AND ADDED GENERAL NOTES, PCO-9
B4-A-2	PLUMBING PLANS			
B4-A-3	HEATING PLAN	11-2-72	C.J.M.	REVISIONS FOR PCO-9
B4-A-4	ELECTRICAL DIAGRAMS	11-3-72	C.J.M.	REVISIONS FOR PCO-9
B4-A-5	COMPOSITE UTILITY PLAN	11-3-72	C.J.M.	REVISIONS FOR PCO-9
B4-A-6	COMPOSITE UTILITY PLAN	2-26-73	C.J.M.	REVISIONS FOR PCO-9

DATE	BY	DESCRIPTION
9-9-72	C.J.M.	REVISED EMERGENCY LIGHTING AND ADDED GENERAL NOTES, PCO-9
11-2-72	C.J.M.	REVISIONS FOR PCO-9
11-3-72	C.J.M.	REVISIONS FOR PCO-9
11-3-72	C.J.M.	REVISIONS FOR PCO-9
2-26-73	C.J.M.	REVISIONS FOR PCO-9



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF | **HNTB** | CONSULTING ENGINEERS

DE LEUW CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

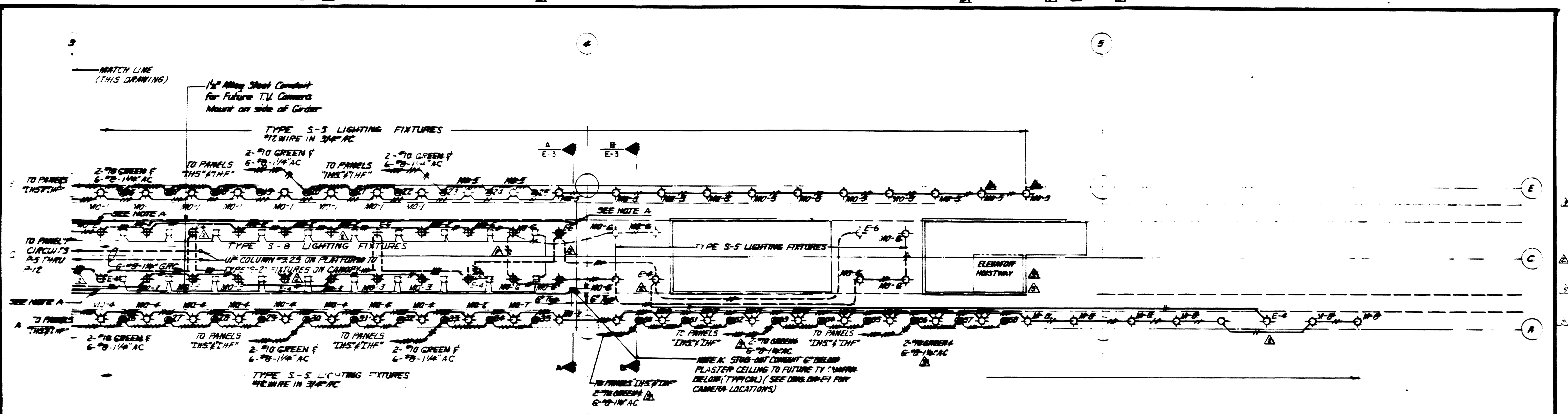
SUBMITTED: [Signature] APPROVED: [Signature]

B&O ROUTE
RHODE ISLAND AVENUE STATION
ELECTRICAL PLANS

SCALE: 1/8"=1'-0"

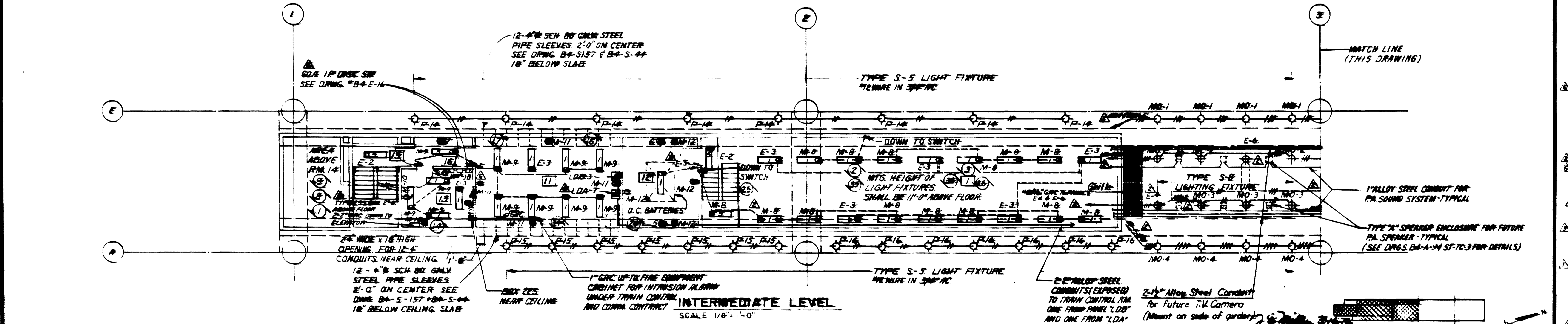
DRAWING NO: **34-E-1**

NO. 39-396



INTERMEDIATE LEVEL
SCALE 1/8"=1'-0"

NOTE:
SEE DRAWING B4-E-1 FOR
ROOM SCHEDULE



INTERMEDIATE LEVEL
SCALE 1/8"=1'-0"

AS-BUILT KEY PLAN

DESIGNED		DATE		REVISIONS	
J.E. FELDMER	1/70	94-2-2	9-8-77	TEM	Amendment No. 1
J.S. ANDALOS	1/70	94-11-3	9-19-77	C.J.M.	Revised speaker enclosure, PCO-9
J.C. WITCH	6/71	94-11-7	9-19-77	C.J.M.	Revised emergency lighting, PCO-9
	6/77	94-11-9	11-2-77	C.J.M.	Handicapped Elevator, PCO-3
	6/77	94-11-13	10-3-77	C.J.M.	Revised Train Control, PCO-10
	6/77	94-11-17	12-19-77	C.J.M.	Elevator Hubway, PCO-47

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERENSON
CONSULTING ENGINEERS

DE LEUW CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *[Signature]*

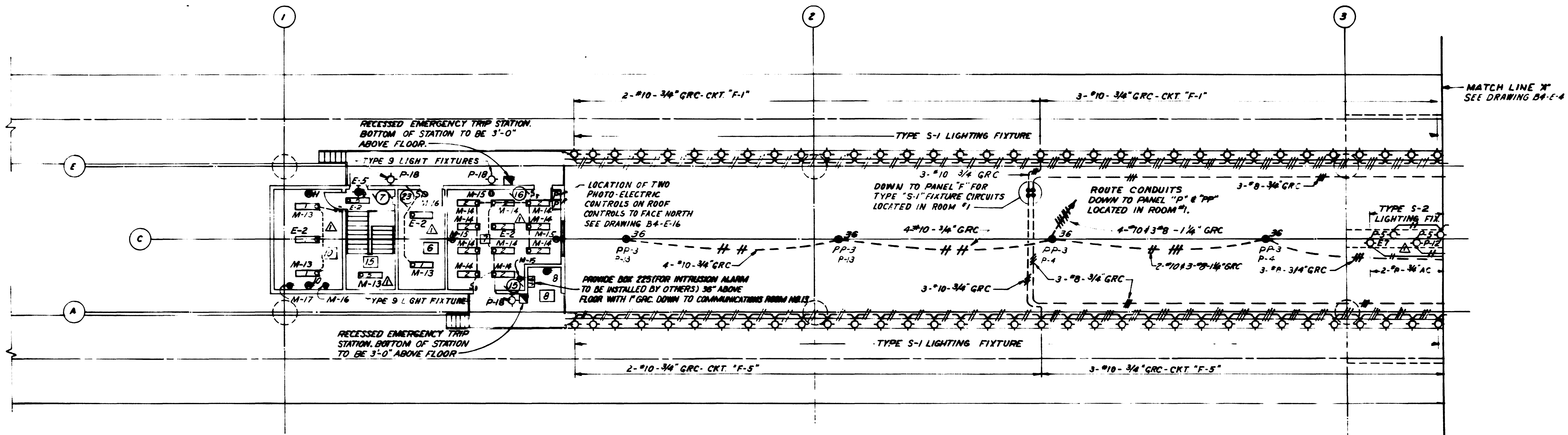
APPROVED: *[Signature]*

B&O ROUTE
RHODE ISLAND AVENUE STATION
ELECTRICAL PLANS

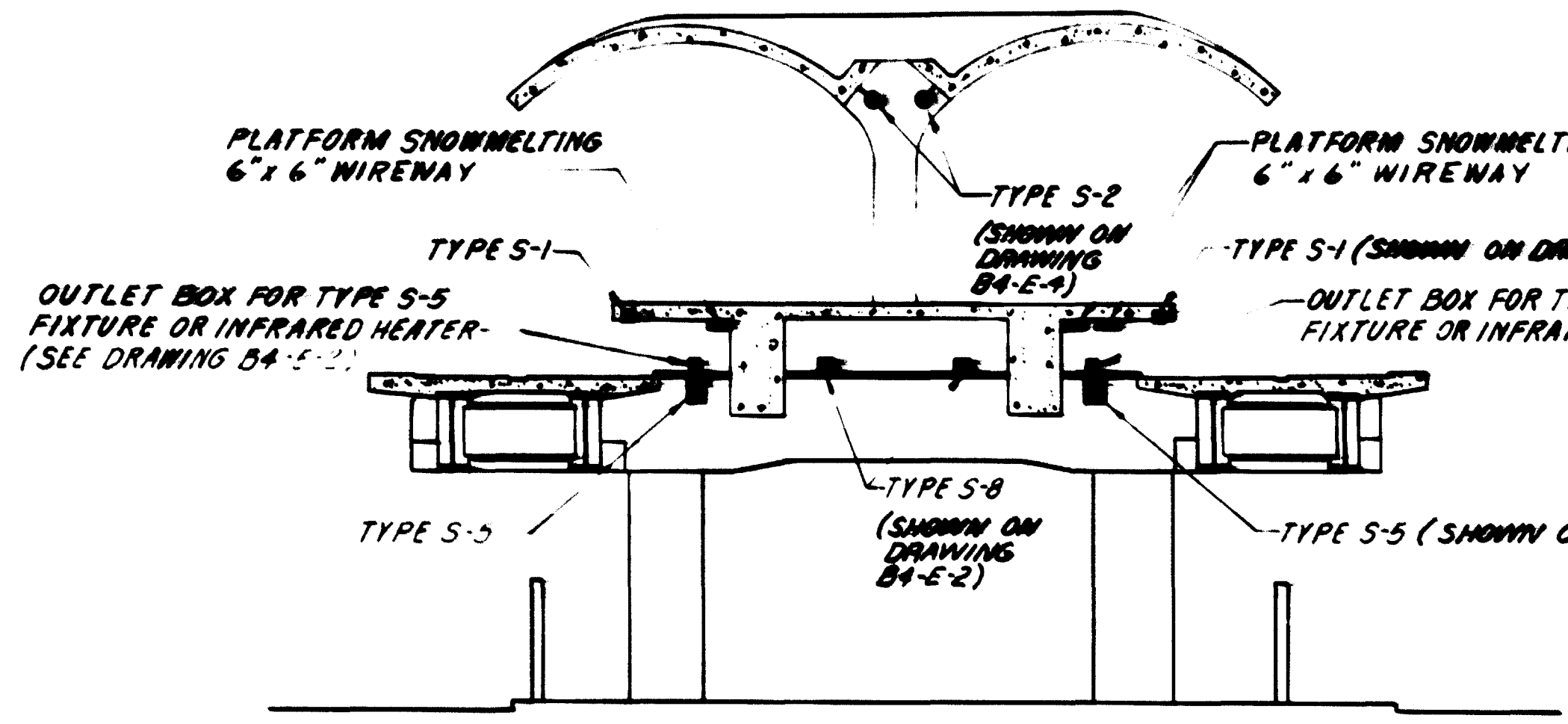
SCALE: 1"=1'-0"

DRAWING NO. **B4-E-2**

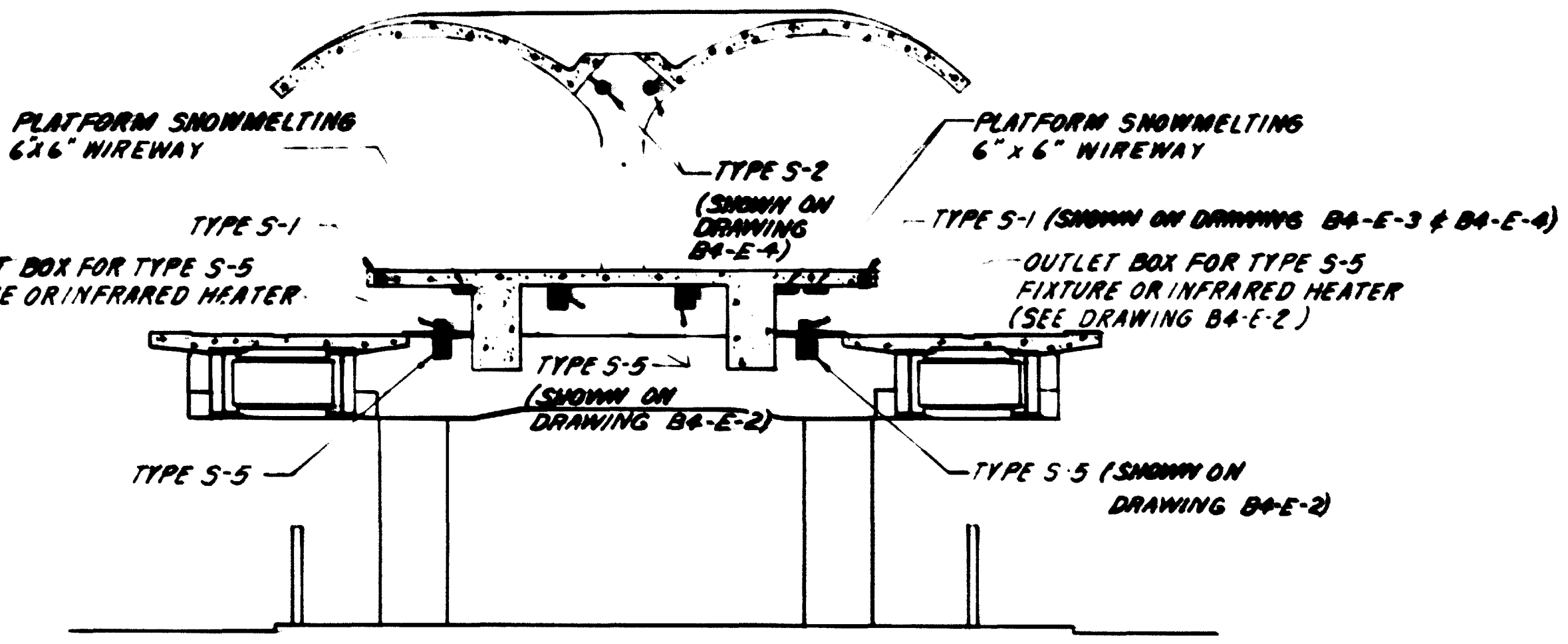
MSB-307



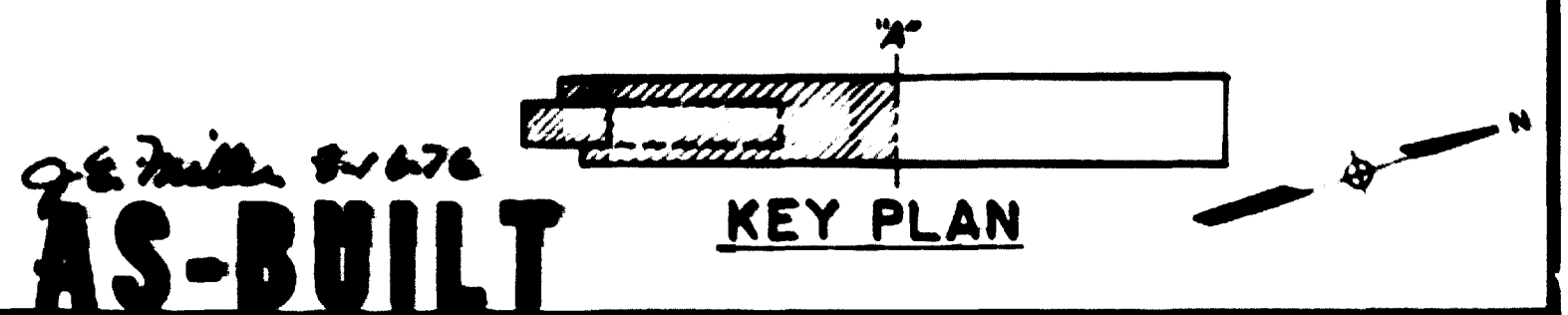
PARTIAL PLATFORM PLAN
SCALE 1/8"=1'-0"



SECTION "A-A"
NO SCALE
B4-E-4
B4-E-2

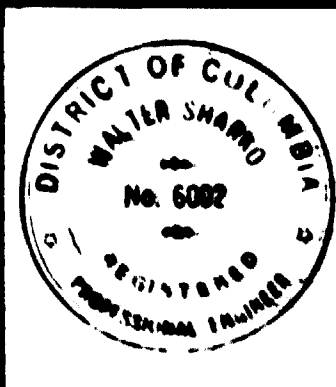


SECTION "B-B"
NO SCALE
B4-E-4
B4-E-2



DESIGNED **JE FELDMER** 1/70
DATE
DRAWN **S. PRAZLOS** 1/70
DATE
CHECKED **C. J. MITCH** 5/70
DATE
APPROVED **[Signature]** 5/70
DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-M-14	INFRARED HEATER DETAILS	9-19-70	C.J.M.
B4-A-1	MEZZANINE PLANS		
B4-A-9	REFLECTED PLATFORM CEILING PLAN		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF **HNTB** CONSULTING ENGINEERS

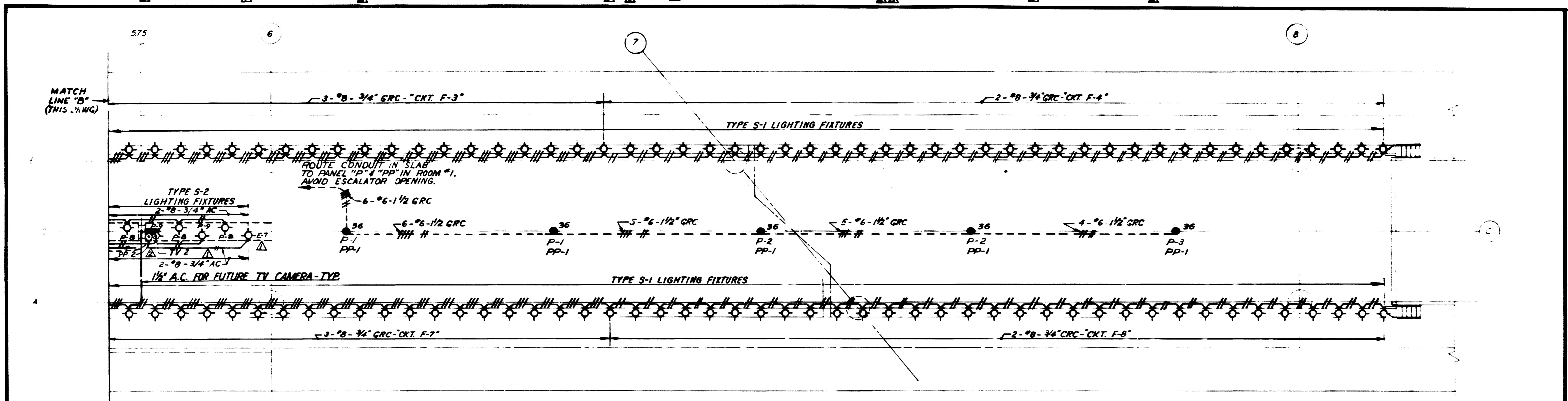
DE LEUW, CATHAR & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED **[Signature]** APPROVED **[Signature]**

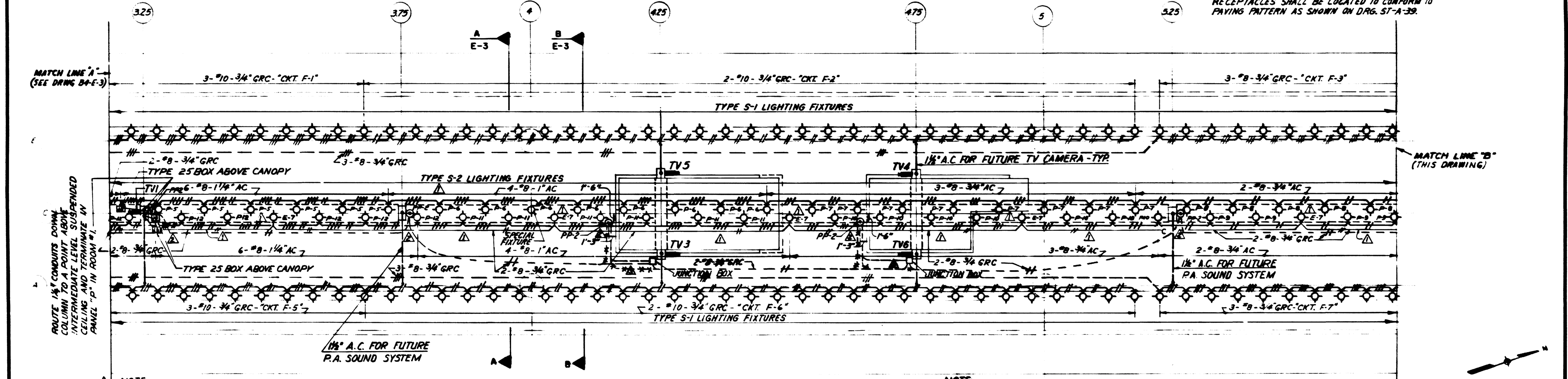
B&O ROUTE
RHODE ISLAND AVENUE STATION
ELECTRICAL PLANS

SCALE 1"=1'-0" DRAWING NO. **B4-E-3** M39-338



PARTIAL PLATFORM PLAN
SCALE 1/8"=1'-0"

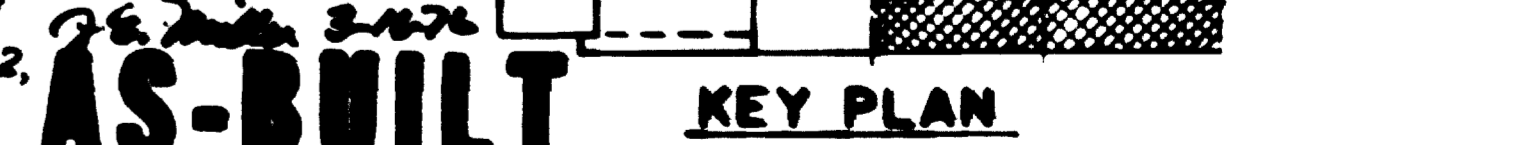
NOTE:
▲ FLOOR RECEPTACLES AT COLUMNS 3.25, 3.75, 5.25 & 5.75 SHALL BE LOCATED APPROXIMATELY ON PLATFORM CENTERLINE 6" FROM FACE OF COLUMN. ALL FLOOR RECEPTACLES SHALL BE LOCATED TO CONFORM TO PAVING PATTERN AS SHOWN ON DRG. ST-A-39.



PARTIAL PLATFORM PLAN
SCALE 1/8"=1'-0"

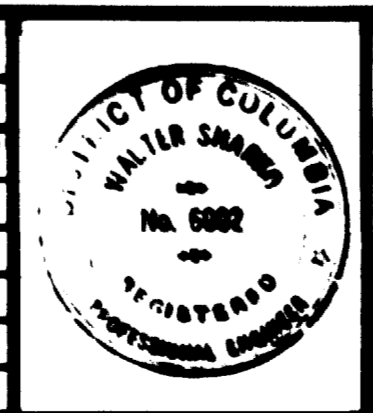
NOTE:
FOR DETAIL LOCATIONS OF CONDUITS FOR FUTURE TV CAMERAS AND P.A. SOUND SYSTEM EMBEDDED IN CONCRETE SLAB AND COLUMNS SEE DWGS. B4-S-52, B4-S-54, & B4-S-55

NOTE:
ROUTE 3/4" CONDUIT DOWN COLUMN AT 3.25 TO A POINT ABOVE INTERMEDIATE LEVEL SUSPENDED CEILING AND TERMINATE IN PANEL "E" IN ROOM #1.



DESIGNED	J.E. FELDNER	1/70
DRAWN	J.S. PAZALOS	1/70
CHECKED	G.J. MITCH	5/70
APPROVED	[Signature]	5/70

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-A-3	PARTIAL PLATFORM PLANS	9-19-72	C.J.M.
B4-A-10	REFLECTED CANOPY CEILING PLAN	1-26-73	C.J.M.
B4-E-13	ELECTRICAL PLANS	11-11-74	TEM
S7-A-39	OUTLETS, PLUGS AND MANHOLE		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW, CATHER & COMPANY
GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES
GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *W. Shanks*

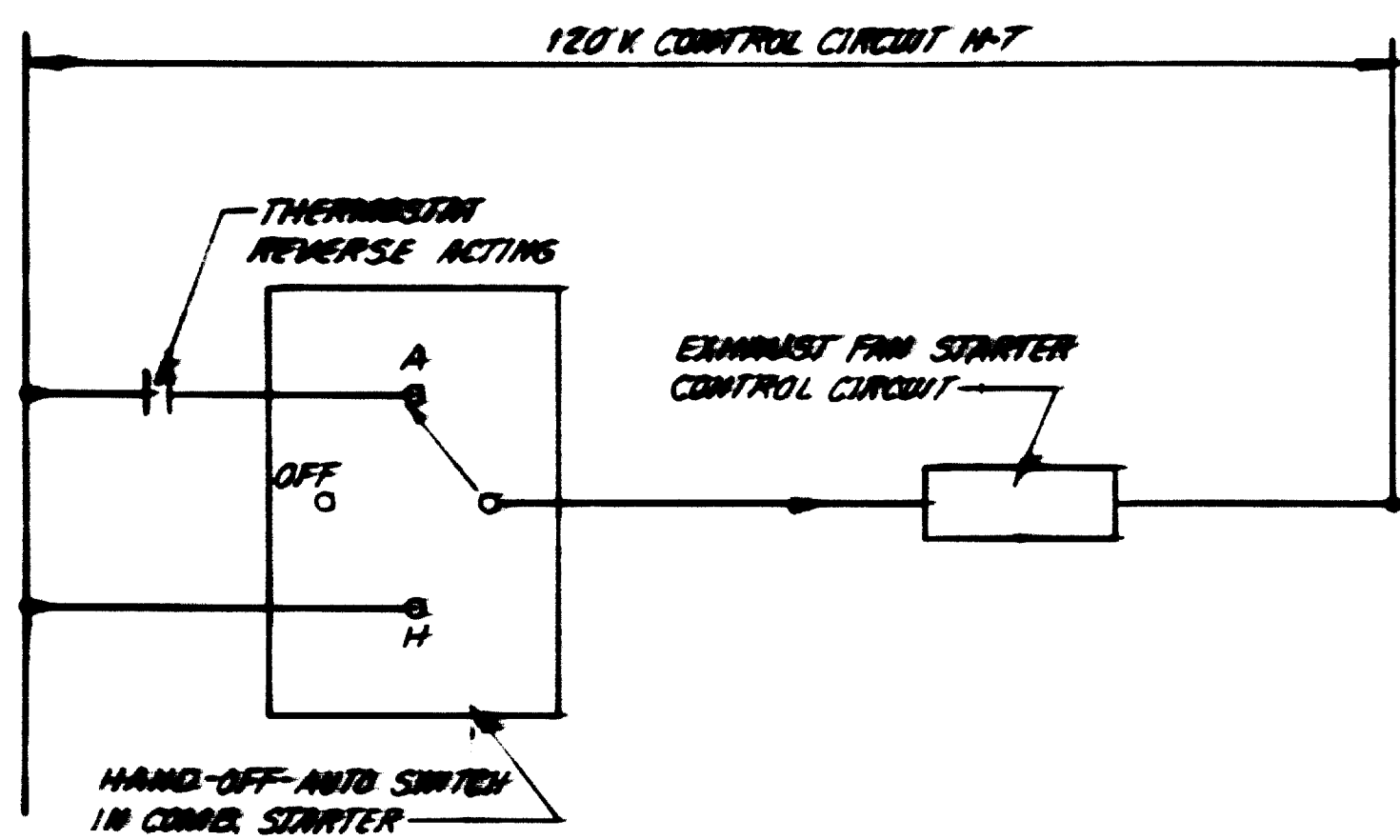
APPROVED: *[Signature]*

B&O ROUTE
RHODE ISLAND AVENUE STATION
ELECTRICAL PLANS

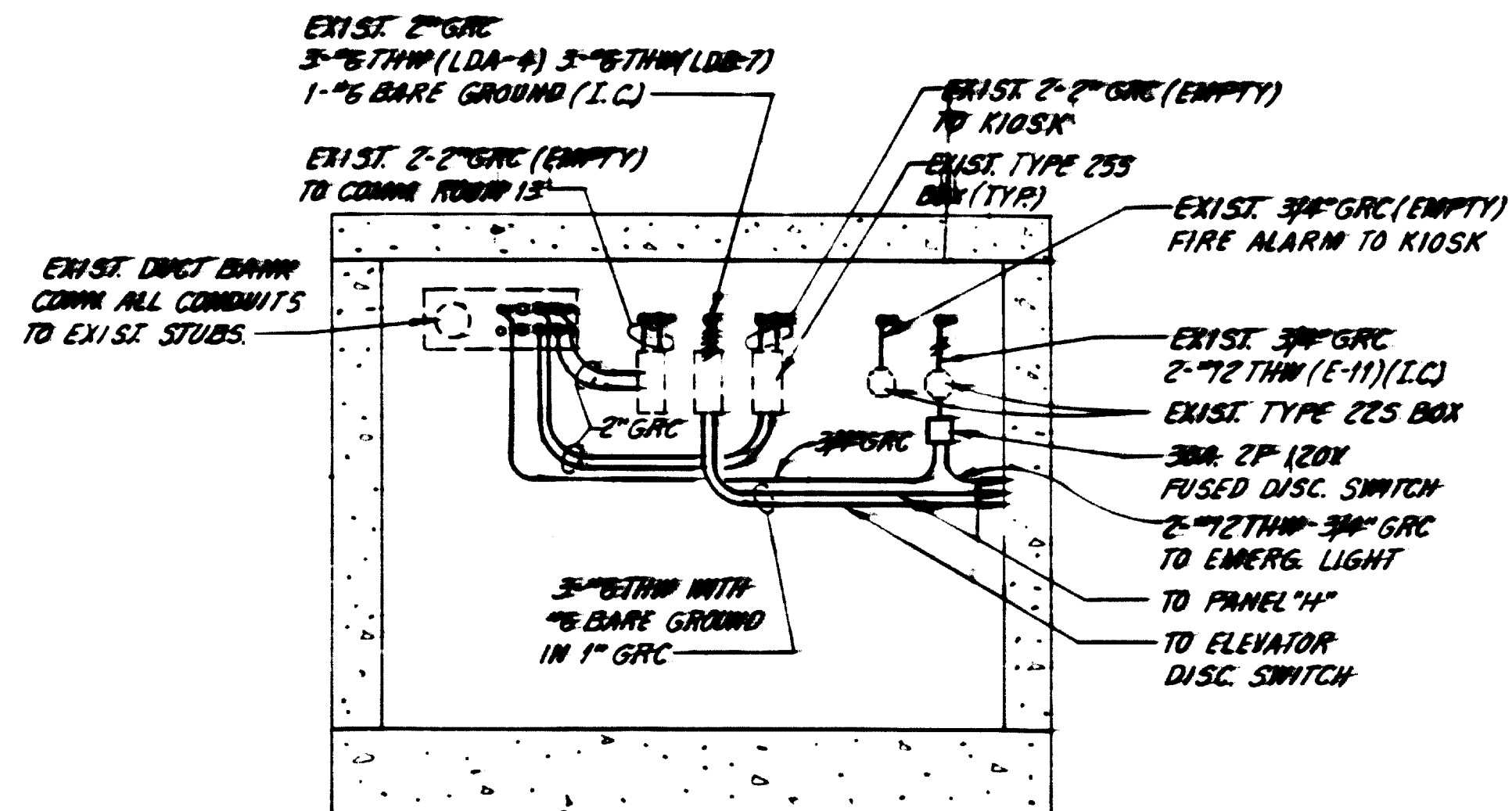
SCALE: 1"=10'-0"

DRAWING NO: **B4-E-4**

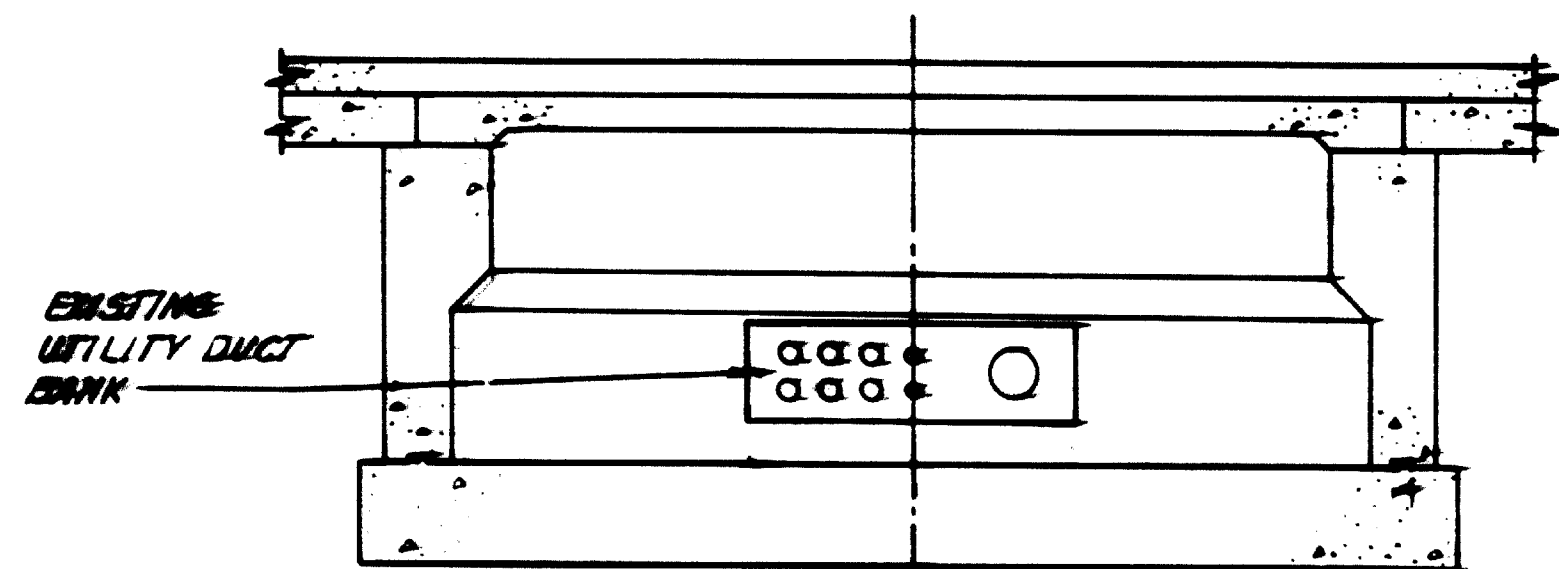
PROJECT NO: **M39-339**



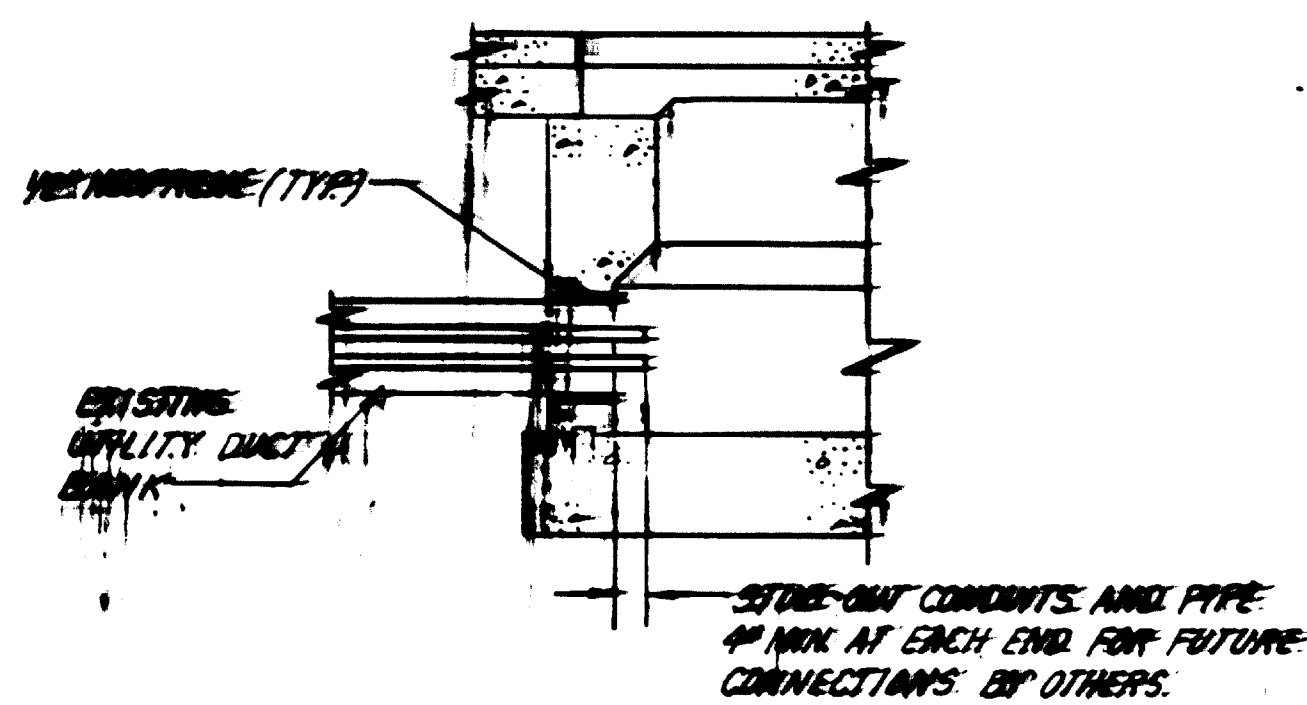
ELEVATOR MACHINE ROOM EXHAUST FAN TEMPERATURE CONTROL DIAGRAM
NO SCALE



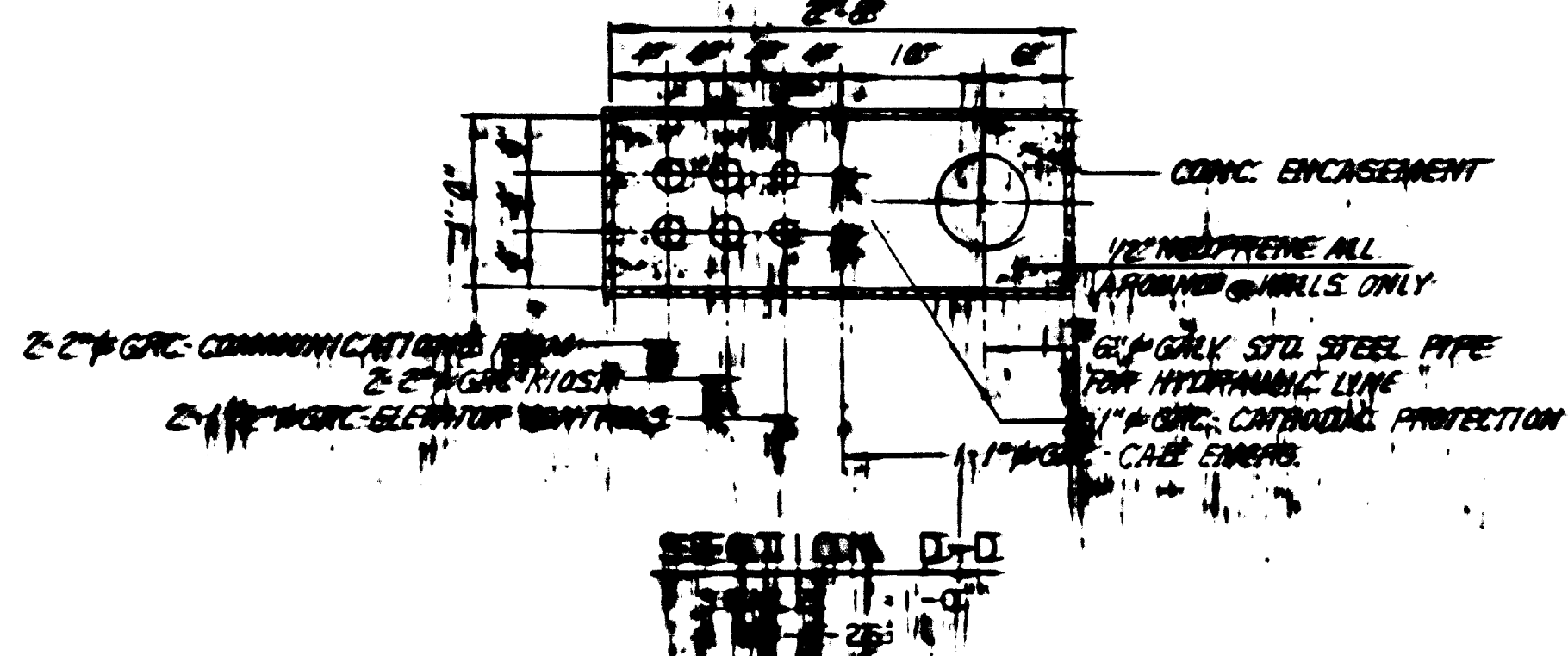
SECTION A-A
SCALE: 3/8\"/>



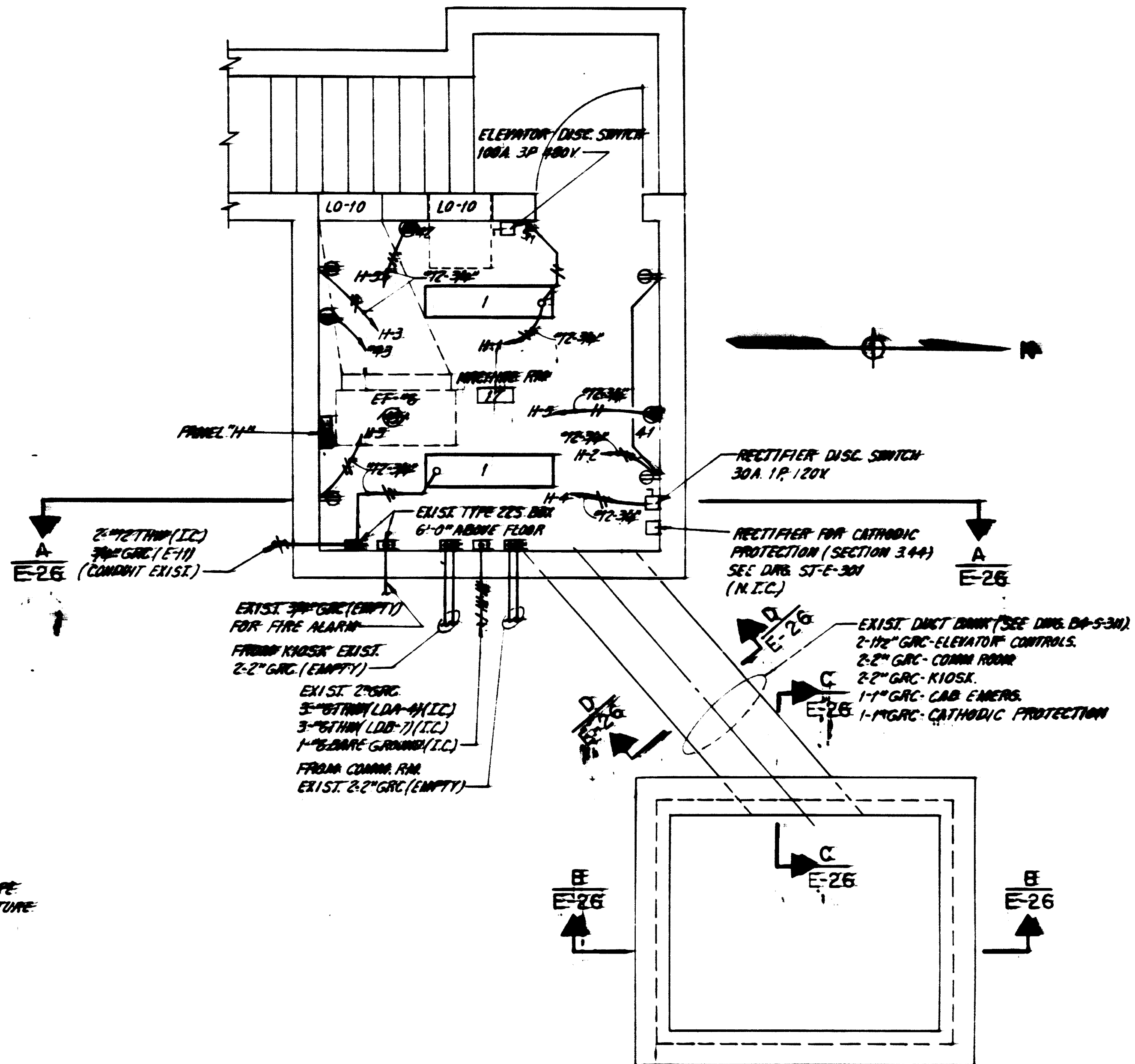
SECTION E-E
SCALE: 1/2\"/>



SECTION G-G
SCALE: 1/2\"/>



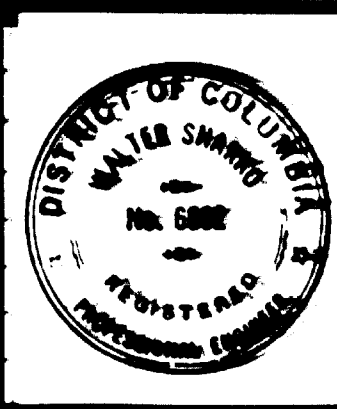
SECTION D-D
SCALE: 1/2\"/>



MACHINE ROOM ELECTRICAL FLOOR PLAN DETAIL
SCALE: 3/8\"/>

DESIGNED	G.L.M.	12-73
DRAWN	G.P.	12-73
CHECKED	G.L.M.	12-73
APPROVED	[Signature]	1-74

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
04-5-340	PLAN ELEVATOR PIT		
04-5-311	PLAN MACHINE ROOM		
04-5-312	PARTIAL MACHINE ROOM		
04-5-307	CATHODIC PROTECTION DETAILS		
04-5-1	ELECTRICAL PLANS		
04-5-16	ELECTRICAL DIAGRAMS		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS

DE LEUW CATHAR & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: [Signature]

APPROVED: [Signature]

B&O ROUTE RHODE ISLAND AVENUE STATION ELECTRICAL PLAN

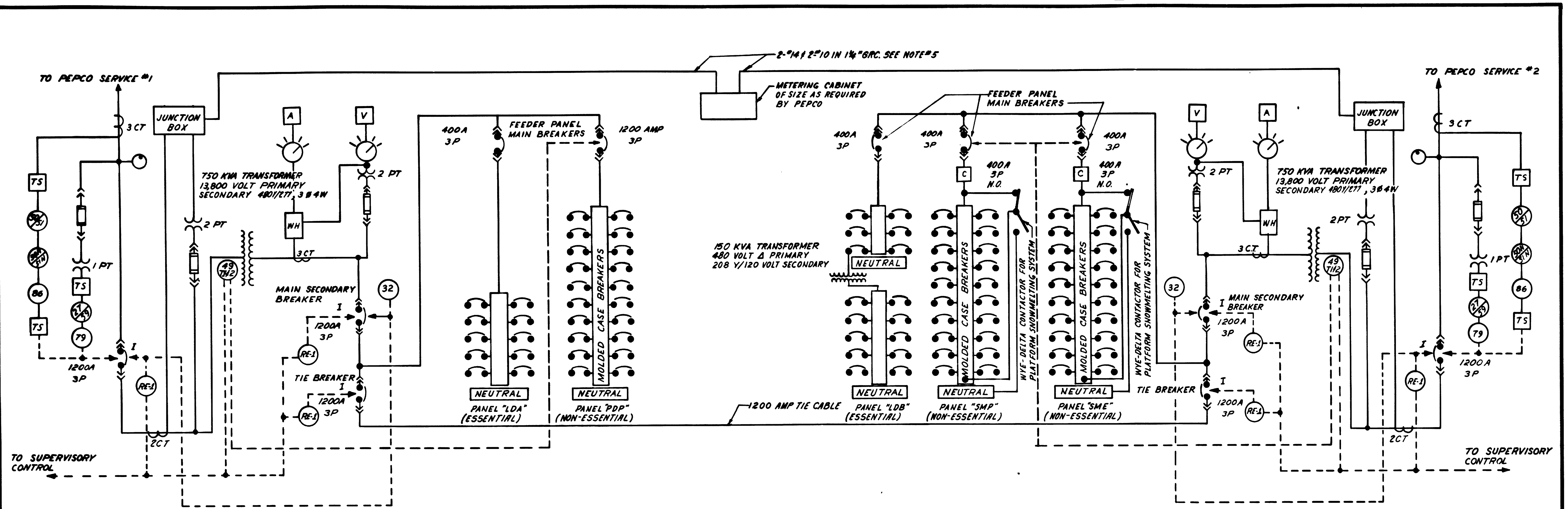
SCALE: AS SHOWN

DRAWING NO: B4-E-26

MSP-341A

AS-BUILT

THIS DRAWING ADDED PER PCJ-47



ONE DIRECT PEPCO SERVICE AT EACH SWITCHBOARD


LEGEND

DEVICE	DESCRIPTION	DEVICE	DESCRIPTION	DEVICE	DESCRIPTION
50/51	INSTANTANEOUS / TIME OVERCURRENT PHASE RELAY	WH	A.C. WATT HOUR METER	⊙	NEON GLOW TUBE HIGH VOLT INDICATOR
50N/51N	INSTANTANEOUS / TIME OVERCURRENT GROUND RELAY	RE-1	SUPVRY CONTROL INTERPOSING RELAY	⌚	MOLDED CASE CIRCUIT BREAKER (BOLT IN)
79	A.C. RECLOSING RELAY	TS	TEST SWITCH	49	TRANSFORMER OVERTEMPERATURE DEVICE, 2 STAGE
86	LOCKOUT RELAY	32	INSTANTANEOUS REVERSE CURRENT RELAY	C	CONTACTOR
CT	CURRENT TRANSFORMER	↕	DRAWOUT CIRCUIT BREAKER	⌚	DRY TYPE TRANSFORMER - SIZE AS INDICATED
PT	POTENTIAL TRANSFORMER	↕	DRAWOUT FUSE	27/59	UNDERVOLTAGE / OVERVOLTAGE RELAY
C	CONTROL (OPEN & CLOSE) - SUPVRY. SYSTEM	↕			
I	INDICATION ONLY - SUPVRY. SYSTEM	↕			
V	A.C. VOLTMETER	⊙	PHASE SELECTOR SWITCH		
A	A.C. AMMETER	⊙			

NOTES:

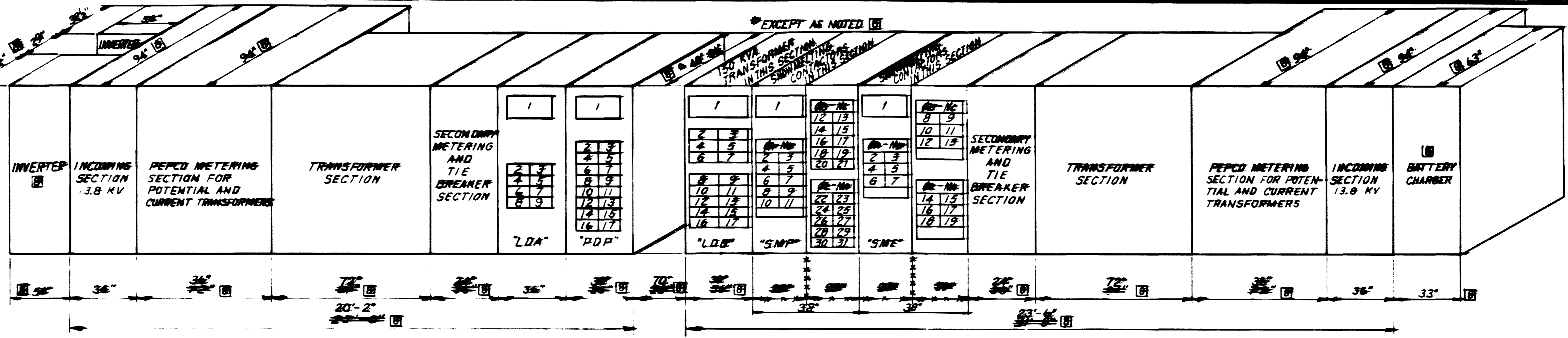
- NORMAL POSITION OF PRIMARY BREAKER IS CLOSED, WITH POSITION INDICATED TO CENTRAL CONTROL.
 - NORMAL POSITION OF SECONDARY MAIN BREAKER IS CLOSED; NORMAL POSITION OF TIE BREAKER IS OPEN.
 - PRIMARY BREAKER:
 - TRIPS ON PHASE OR GROUND OVERCURRENT AND REQUIRES MANUAL RESET.
 - TRIPS ON UNDERVOLTAGE AND OVERVOLTAGE. RECLOSING AFTER 5 SECONDS UPON RETURN OF VOLTAGE. FAILURE TO RECLOSE 2 TIMES RESULTS IN LOCKOUT.
 - TRIP FOR ANY REASON, AUTOMATICALLY TRIPS THE SECONDARY MAIN BREAKER AND LOCKS IT OUT UNTIL PRIMARY BREAKER IS CLOSED.
 - OPERATION OF 49 T1#2: FIRST STAGE PROVIDES INDICATION TO SUPERVISORY CONTROL. SECOND STAGE TRIPS THE 480 VOLT MAIN BREAKER, FEEDER PANELS.
 - DEMAND METER TIE CONDUIT IS FOR PEPCO USE ONLY.
 - ACTUAL CONSTRUCTION SHALL STRICTLY COMPLY WITH NATIONAL ELECTRICAL CODE ARTICLES 200, 230, 250, 700 AND 710
- AS-BUILT NOTE:**
 FOR AS-BUILT DTS TERMINAL BOXES SEE NEW DWGS: B4-E-15A (M39-342A) B4-E-15B (M39-342B)

J.G. Miller 8-16-76
AS-BUILT

DESIGNED J.E. FELDMER 1/70	REFERENCE DRAWINGS	REVISIONS	WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		B 80 ROUTE RHODE ISLAND AVENUE STATION A.C. POWER SERVICE
DRAWN L.N. KERBER 1/70	NUMBER DESCRIPTION DATE BY	DATE DESCRIPTION	HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB		
CHECKED C.J. MITCH 4/71	B4-E-16 ELECTRICAL DIAGRAMS 9-19-72 C.J.M.	ADDED NOTE #6 - PCO-9	DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT		SCALE NO SCALE
APPROVED C.J. MITCH 4/71	B4-E-1 ELECTRICAL PLAN 11-21-80 THUY	NOTE ADDED PER FIELD COMP. AS-BUILT	HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT		DRAWING NO. B4-E-15
	B4-E-5 ELECTRICAL SCHEDULES		SUBMITTED <i>W. Shanks</i> APPROVED <i>J.G. Miller</i>		M39-342
	B4-E-24 ELECTRICAL SCHEDULES				

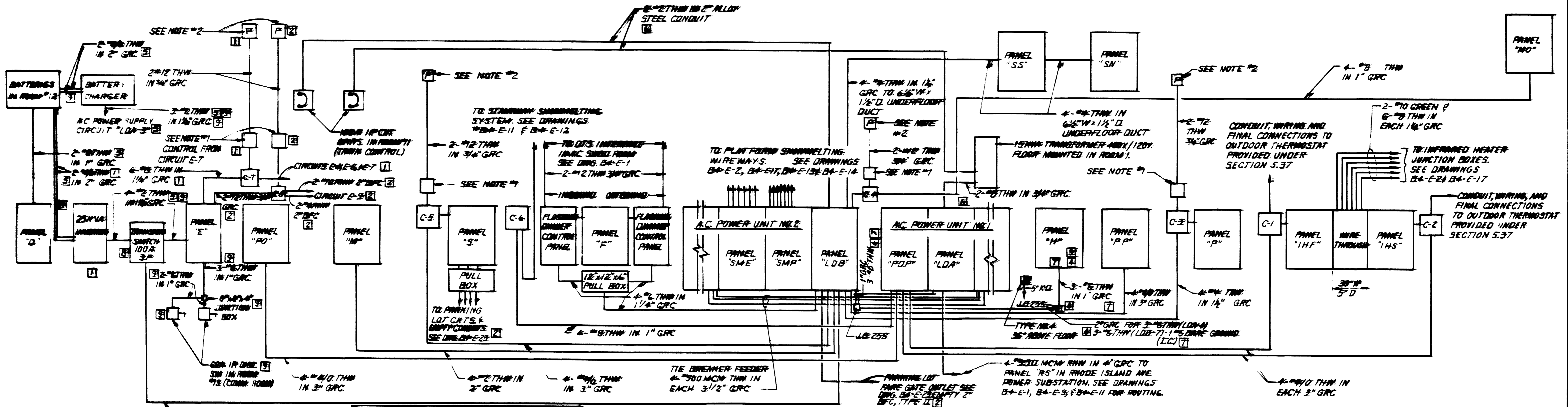
NOTES:

- Provide emergency contact adapter control which shall be suitable to operate remote mechanically-held contactor of maximum size. Control shall include terminal block with two terminals for line, two for connection to "ON" and "OFF" terminals of controlling single pole, double throw photo-electric controls, and three for contactor. Control shall function to provide switch closure not in excess of two seconds to both "ON" and "OFF" contactor terminals whenever photo-electric control turns to respective "ON" and "OFF" positions. Contactor coil circuits shall be suitable for 120 amperes inrush current at 120 volts. Also provide bypass switch for manual "ON" and "OFF" operation. Enclosure shall be NEMA I surface type, with provision for padlocking.
- Mount photo-electric controls on 2" rigid conduit, 12" above floor at locations shown on plans. The photo-electric control to have an adjustable light level selector to turn "ON" in a range from two to fifty footcandles without the use of any coils, etc. The control shall contain no relays, rectifiers, tubes, capacitors or other trouble-causing components. It shall be fully temperature compensated so that it is unaffected by temperature range change. The control shall be hermetically sealed cell protected against moisture. The housing to be cast aluminum housing with a flame-proof.



ALTERNATING CURRENT POWER UNIT No. 1

ALTERNATING CURRENT POWER UNIT No. 2



ELECTRICAL DISTRIBUTION DIAGRAM
NOT TO SCALE

DESIGNED	DATE	BY	DESCRIPTION
J.E. FELDER	1/28/72	J.E.F.	ELECTRICAL PLAN
J.E. FELDER	1/22/72	J.E.F.	ELECTRICAL SCHEDULES
J.E. FELDER	1/21/72	J.E.F.	A.C. POWER SERVICE
J.E. FELDER	1/21/72	J.E.F.	STATION PARKING LOT
J.E. FELDER	1/21/72	J.E.F.	PEDESTRIAN OVERPASS LIGHTING PLAN
J.E. FELDER	1/21/72	J.E.F.	ELECTRICAL SCHEDULES

NO.	DATE	BY	DESCRIPTION
1	9-9-71	C.J.M.	AMENDMENT NO. 1
2	10-3-72	C.J.M.	ADDED CONTROLS FOR EMERGENCY LIGHTING, PCO-9
3	12-11-72	C.J.M.	REVISED PARKING LOT, PCO-21
4	11-3-72	C.J.M.	REVISED TRIP STATION, PCO-24
5	2-22-73	C.J.M.	HANDICAPPED ELEVATOR, PCO-3

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERENSON CONSULTING ENGINEERS. **HNTB**

DE LEUW, CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

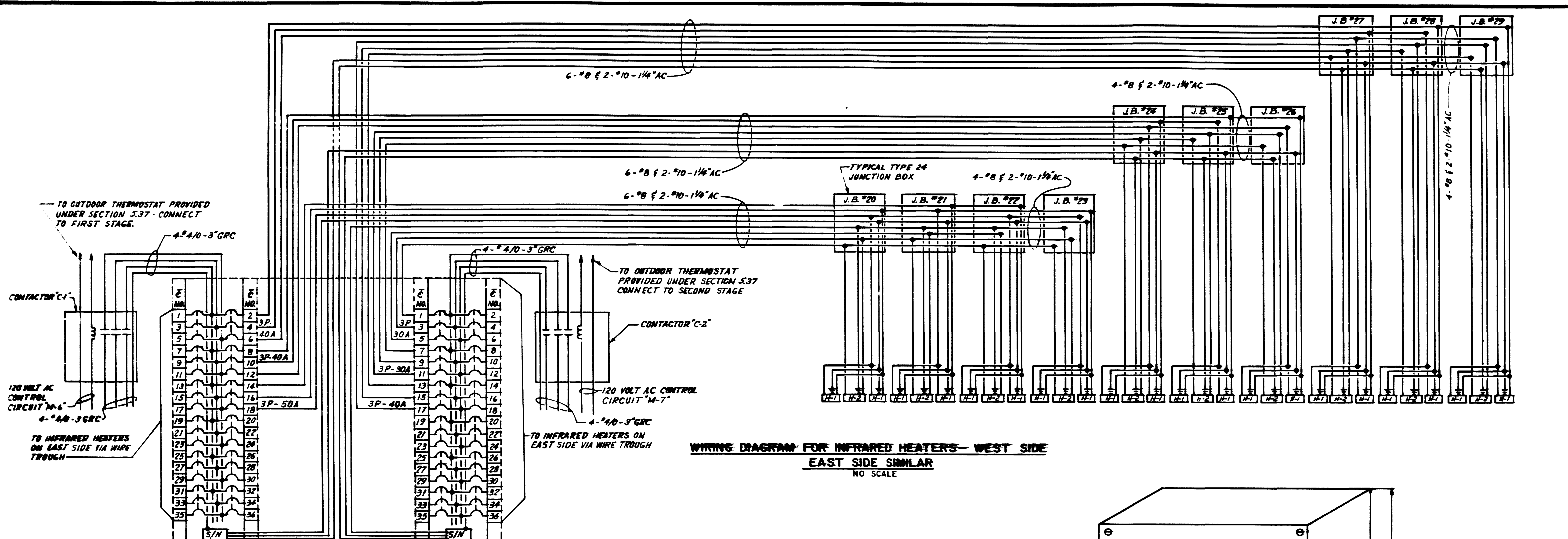
HARRY WESSE & ASSOCIATES, GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *[Signature]* APPROVED: *[Signature]*

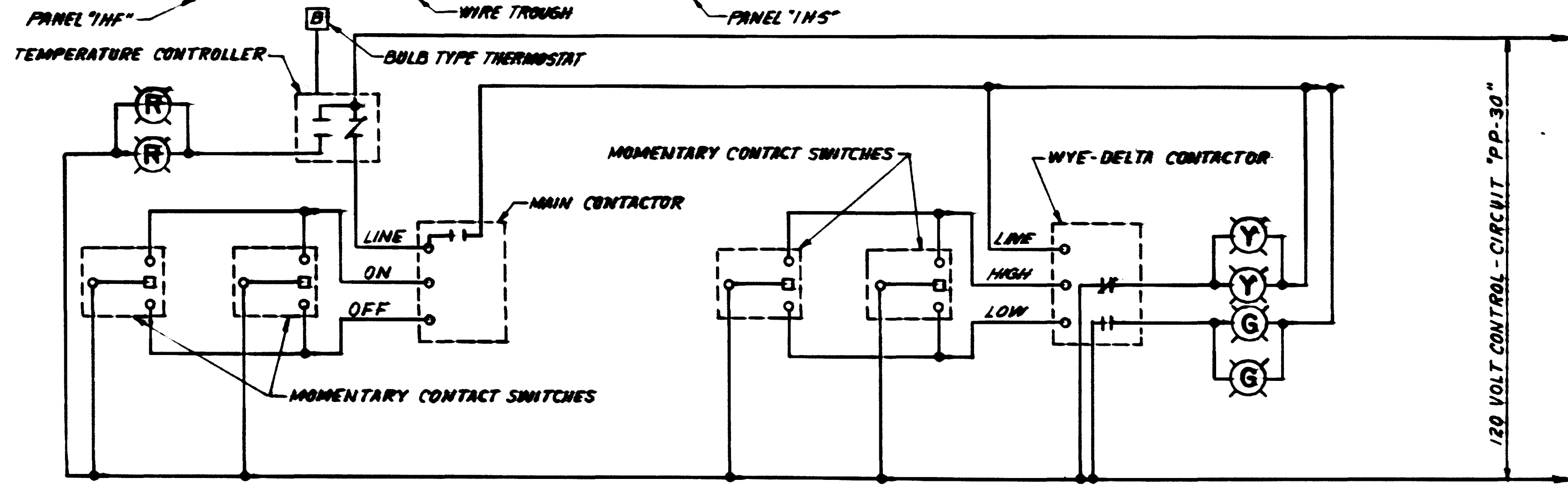
800 ROUTE RHODE ISLAND AVENUE STATION ELECTRICAL DIAGRAMS

SCALE: NO SCALE DRAWING NO. BA-E-16

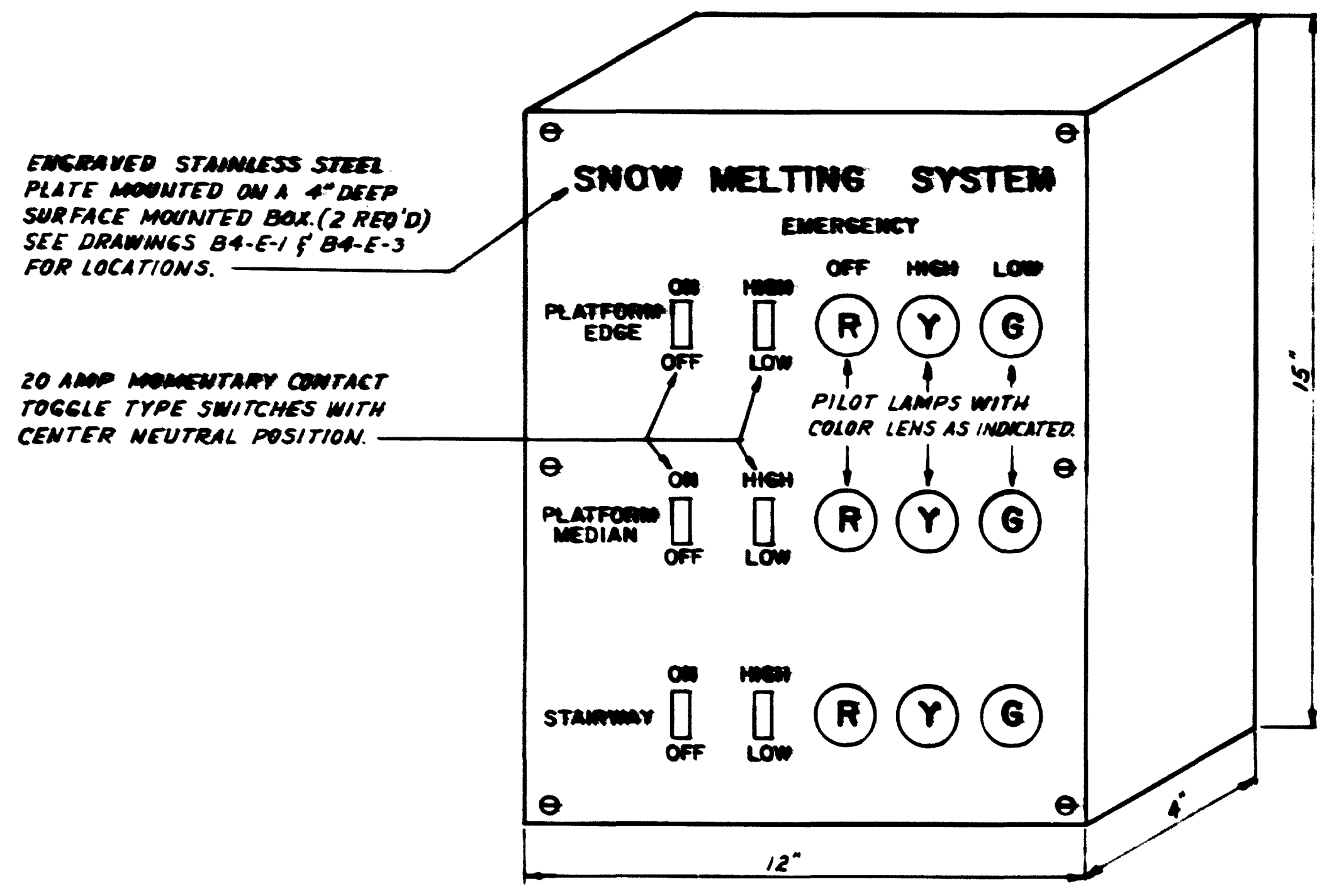
AS-BUILT



WIRING DIAGRAM FOR INFRARED HEATERS - WEST SIDE
EAST SIDE SIMILAR
 NO SCALE



TYPICAL CONTROL WIRING DIAGRAM FOR SNOWMELTING SYSTEM
 NO SCALE
 NOTE: THREE SYSTEMS REQUIRED



SNOWMELTING CONTROL PANEL
 NO SCALE

DESIGNED	J.E. FELDMER	1/70
DRAWN	L.R. KERNER	1/70
CHECKED	C. SMITH	5/70
APPROVED	[Signature]	5/70

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-E-2	ELECTRICAL PLANS	11-2-72	C.J.M.
B4-E-13	ELECTRICAL PLANS - SNOW MELTING		
B4-E-14	ELECTRICAL PLANS - SNOW MELTING		



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: [Signature]

APPROVED: [Signature]

B & O ROUTE RHODE ISLAND AVENUE STATION

ELECTRICAL DIAGRAMS

SCALE: AS NOTED

DRAWING NO: B4-E-17

M39-344

AS-BUILT

PANEL NO.	BREAKERS					WIRING		MOUNTING	LOCATION	REMARKS
	TOTAL	POLES	AMPS	ACTIVE	SPARE	SIZE	TYPE			
'D'	4	2	20	2	2	100	125 V 102N D.C.	SURFACE	RM #1	PANEL ENCLOSURE PAINTED "RED" THE 2P-60 AMP 250V D.C. BREAKER IS THE MAIN BREAKER FOR DIRECT CURRENT OPERATION.
'E'	1	2	60	1	0	100	200/277V 304W	SURFACE	RM #1	
'F'	20	1	20	16	4	100	200/277V 304W	SURFACE	RM #1	
'G'	2	1	60	1	0	100	200/277V 304W	SURFACE	RM #1	
'H'	7	1	SPACES	0	0	100	200/277V 304W	SURFACE	RM #1	
'I'	32	1	20	25	7	100	200/277V 304W	SURFACE	RM #1	
'J'	18	1	SPACES	0	0	100	200/277V 304W	SURFACE	RM #1	
'K'	28	1	20	18	6	100	200/277V 304W	SURFACE	RM #1	
'L'	6	1	SPACES	0	0	100	200/277V 304W	SURFACE	RM #1	
'M'	12	1	20	8	4	100	SPLIT BUS 200/277V 304W	SURFACE	RM #1	PANEL TO HAVE A SPLIT BUS. TOP SECTION TO HAVE 6-1P-20 AMP BREAKERS TO SERVE CIRCUITS F-1 THRU F-8, AND BOTTOM SECTION TO HAVE 6 1P-20 AMP BREAKERS TO SERVE CIRCUITS F-5 THRU F-8.
'N'	12	1	SPACES	0	0	100	200/277V 304W	SURFACE	RM #1	
'O'	7	3	40	7	0	400	480V/277V 304W	SURFACE	RM #1	
'P'	2	3	50	2	0	400	480V/277V 304W	SURFACE	RM #1	
'Q'	6	1	20	0	6	400	480V/277V 304W	SURFACE	RM #1	
'R'	9	1	SPACES	0	0	400	480V/277V 304W	SURFACE	RM #1	
'S'	7	3	30	7	0	400	480V/277V 304W	SURFACE	RM #1	
'T'	2	3	40	2	0	400	480V/277V 304W	SURFACE	RM #1	
'U'	6	1	20	0	6	400	480V/277V 304W	SURFACE	RM #1	
'V'	3	1	SPACES	0	0	400	480V/277V 304W	SURFACE	RM #1	
'W'	12	1	20	8	4	100	480V/277V 304W	SURFACE	RM #1	
'X'	18	1	20	15	3	100	480V/277V 304W	SURFACE	RM #1	
'Y'	5	1	30	5	0	225	480V/277V 304W	SURFACE	RM #1	
'Z'	4	1	50	4	0	225	480V/277V 304W	SURFACE	RM #1	
'AA'	5	3	15	4	1	225	480V/277V 304W	SURFACE	RM #1	
'AB'	39	1	20	32	7	225	480V/277V 304W	SURFACE	RM #1	
'AC'	1	2	30	1	0	100	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AD'	16	1	20	12	4	100	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AE'	2	1	SPACES	0	0	100	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AF'	9	1	20	2	7	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AG'	1	3	15	1	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AH'	3	3	30	3	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AI'	2	3	40	2	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AJ'	6	1	SPACES	0	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AK'	4	3	20	3	1	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AL'	3	3	30	3	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AM'	11	1	SPACES	0	0	225	480V/277V 304W	SURFACE	POWER SUBSTATION BUILDING	
'AN'	8	1	20	0	8	100	480V/277V 304W	SURFACE	ESCALATOR PIT-SOUTH SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AO'	1	3	100	1	0	100	480V/277V 304W	SURFACE	ESCALATOR PIT-SOUTH SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AP'	8	1	SPACES	8	0	100	480V/277V 304W	SURFACE	ESCALATOR PIT-NORTH SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AQ'	8	1	20	0	8	100	480V/277V 304W	SURFACE	ESCALATOR PIT-NORTH SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AR'	1	3	100	1	0	100	480V/277V 304W	SURFACE	ELEVATOR MACHINE ROOM SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AS'	6	1	20	5	1	100	480V/277V 1 1/2 IN	SURFACE	ELEVATOR MACHINE ROOM SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	
'AT'	1	2	20	1	0	100	480V/277V 1 1/2 IN	SURFACE	ELEVATOR MACHINE ROOM SUB-FEED LINES FOR PANEL "SN" 100 AMP, 3 POLE 1S MAIN BREAKER	

CONTACTOR SCHEDULE								
NO.	SERVING	CONTACTOR OPERATION	SIZE		CABINET	CONTROL DEVICE	LOCATION	REMARKS
			POLE	AMP				
1	PANEL "N"	SINGLE THROW INTERLOCK - HELD	3	300	SURFACE	THERMOSTAT	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
2	PANEL "NS"	SINGLE THROW INTERLOCK - HELD	3	300	SURFACE	THERMOSTAT	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
3	PANEL "P"	SINGLE THROW INTERLOCK - HELD	3	100	SURFACE	PHOTOCELL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
4	PANEL "M"	SINGLE THROW INTERLOCK - HELD	3	60	SURFACE	PHOTOCELL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
5	PANEL "S"	SINGLE THROW INTERLOCK - HELD	3	200	SURFACE	PHOTOCELL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
6	STAIRWAY SMELTING SYSTEM	SINGLE THROW INTERLOCK - HELD	3	60	SURFACE	SMELTING CONTROL PANEL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
7	EMERGENCY LIGHTING	SINGLE THROW INTERLOCK - HELD	3	30	SURFACE	PHOTOCELL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION
8	PARK EMERGENCY LIGHTING	SINGLE THROW INTERLOCK - HELD	2	20	SURFACE	PHOTOCELL	RM #1	PHONE CONTROL RELAY FOR THIS WIRE OPERATION

10-3-73 C.J.M.	REVISION TRAMP CONTROL BACKUP, PCO-34
7-10-73 C.J.M.	FARE VENDING REVISIONS, PCO-33
5-27-73 C.J.M.	UPS SYSTEM, PCO-34
12-11-72 C.J.M.	REVISION PARKING LOT, PCO-31
11-3-72 C.J.M.	REVISION TRAMP CONTROL, PCO-34
11-22-74 C.J.M.	REVISION EMERGENCY, PCO-30 (LSPH)
11-74 D.D.R.	A.F.C. AT PARKING LOT GATE
12-19-73 C.J.M.	HANDICAPPED ELEVATOR, PCO-37

DATE	NAME	DESCRIPTION
1/70	J.E. FELDMER	DESIGNED
4/70	J.S. MAZALOS	DRAWN
8/71	C.J. MITCH	CHECKED
9/71	[Signature]	APPROVED

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
64-4-15	ELECTRICAL PLANS	9-9-77	C.J.M.
64-4-15	AC POWER SERVICE	4-18-78	C.J.M.
64-4-16	ELECTRICAL DIAGRAMS		
64-4-19	ELECTRICAL PLAN		
64-4-24	ELECTRICAL SCHEDULES (1)	11-2-78	C.J.M.
		11-3-78	C.J.M.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHAR & COMPANY GENERAL ENGINEERING CONSULTANTS

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANTS

APPROVED: [Signature]

B&O ROUTE

RHODE ISLAND AVENUE STATION

ELECTRICAL SCHEDULES

SCALE: NONE DRAWING NO. B4-E-5 NSB-345

A.C. POWER UNIT NO. 2 - PANEL "LDO"				
NO.	UNIT SERVED	POLES	AMP	REMARKS
1	FEEDER PANEL MAIN BREAKER	3	400	
2	PANEL "NO"	3	50	
3	SPACE	3	400	
4	SPACE	3	180	
5	PARKING LOT CONTROL GATES	3	50	
6	150 KVA TRANSFORMER	3	225	
7	PANEL "N"	2	50	200/277V
8	PANEL "E"	3	100	
9	PANEL "F"	3	50	
10	PANEL "S"	3	100	
11	PANEL "M"	3	100	
12	SPACE	3	30	
13	PANELS "SS" & "SN"	3	180	
14	PANEL "PP"	3	225	
15	SPACE	3	225	
16	PANELS "P"	3	100	
17	TRAIN CONTROL ROOM	1	100	Movable Section

NOTE: THIS PANEL TO OPERATE ON 480V/277 VOLT, THREE PHASE, FOUR WIRE WITH 1200 AMP MAIN BUS.

A.C. POWER UNIT NO. 1 - PANEL "PDP"				
NO.	UNIT SERVED	POLES	AMP	REMARKS
1	FEEDER PANEL MAIN BREAKER	3	1200	
2	MOTOR #2	3	30	
3	MOTOR #3	3	30	
4	SPACE	3	50	
5	SPACE	3	30	
6	MOTOR #21 (ESCALATOR)	3	50	
7	MOTOR #22 (ESCALATOR)	3	50	
8	MOTOR #25	3	30	
9	MOTOR #26	3	30	
10	CONTACTOR #6	3	50	
11	MOTOR #1	3	70	
12	PANEL "PO"	3	225	
13	PANEL "NF"	3	350	
14	PANEL "NS"	3	300	
15	SPACE	3	225	
16	SPACE	3	225	
17	SPACE	3	225	

NOTE: THIS PANEL TO OPERATE ON 480V/277 VOLT, THREE PHASE, FOUR WIRE WITH 1200 AMP MAIN BUS.

A.C. POWER UNIT NO. 2 - PANEL "SMP"				
NO.	UNIT SERVED	POLES	AMP	REMARKS
1	FEEDER PANEL MAIN BREAKER	3	400	
2	SMELTING COIL 5-3	2	40	A-C
3	SMELTING COIL 5-4	2	40	A-C
4	SMELTING COIL 5-5	2	40	A-C
5	SMELTING COIL 5-10	2	40	A-C
6	SMELTING COIL 5-15	2	20	A-C
7	SMELTING COIL 5-16	2	40	A-C
8	SMELTING COIL 5-17	2	40	A-C
9	SMELTING COIL 5-22	2	40	A-C
10	SMELTING COIL 5-25	2	40	A-C
11	SPACE	2	40	A-C
12	SMELTING COIL 5-2	2	40	A-C
13	SMELTING COIL 5-5	2	40	A-C
14	SMELTING COIL 5-9	2	40	A-C
15	SMELTING COIL 5-11	2	40	A-C
16	SMELTING COIL 5-14	2	20	A-C
17	SMELTING COIL 5-17	2	40	A-C
18	SMELTING COIL 5-20	2	40	A-C
19	SMELTING COIL 5-23	2	40	A-C
20	SMELTING COIL 5-27	2	40	A-C
21	SPACE	2	40	A-C
22	SMELTING COIL 5-1	2	20	A-C
23	SMELTING COIL 5-6	2	40	A-C
24	SMELTING COIL 5-7	2	40	A-C
25	SMELTING COIL 5-12	2	40	A-C
26	SMELTING COIL 5-15	2	40	A-C
27	SMELTING COIL 5-18	2	40	A-C
28	SMELTING COIL 5-21	2	40	A-C
29	SMELTING COIL 5-24	2	40	A-C
30	SMELTING COIL 5-26	2	40	A-C
31	SPACE	2	40	A-C

NOTE: THIS PANEL TO OPERATE ON 480V/277 VOLT, THREE PHASE, FOUR WIRE WITH 400 AMP MAIN BUS.

A.C. POWER UNIT NO. 1 - PANEL "LDA"				
NO.	UNIT SERVED	POLES	AMP	REMARKS
1	FEEDER PANEL MAIN BREAKER	3	400	
2	SPACE	3	40	
3	BATTERY CHARGER	3	100	
4	MOTOR #12 (ELEVATOR)	3	100	
5	MOTOR #19 (ESCALATOR)	3	50	
6	MOTOR #20 (ESCALATOR)	3	50	
7	TRAIN CONTROL ROOM TRANSFORMER	3	50	USE ONLY 2 POLES FROM BUS
8	PANEL "RS"	3	225	
9	SPACE	3	225	

NOTE: THIS PANEL TO OPERATE ON 480V/277 VOLT, THREE PHASE, FOUR WIRE WITH 400 AMP MAIN BUS.

A.C. POWER UNIT NO. 2 - PANEL "SME"				
NO.	UNIT SERVED	POLES	AMP	REMARKS
1	FEEDER PANEL MAIN BREAKER	3	400	
2	SMELTING COIL 5-38 & 5-39	2	50	A-C
3	SMELTING COIL 5-36 & 5-39	2	50	A-C
4	SMELTING COIL 5-36 & 5-47	2	50	A-C
5	SMELTING COIL 5-32 & 5-33	2	50	A-C
6	SMELTING COIL 5-35	2	40	A-C
7	SPACE	2	30	A-C
8	SMELTING COIL 5-38 & 5-29	2	50	A-C
9	SMELTING COIL 5-36 & 5-37	2	50	A-C
10	SMELTING COIL 5-42 & 5-43	2	50	A-C
11	SMELTING COIL 5-34 & 5-51	2	50	A-C
12	SMELTING COIL 5-54	2	30	A-C
13	SPACE	2	50	A-C
14	SMELTING COIL 5-38 & 5-39	2	50	A-C
15	SMELTING COIL 5-36 & 5-35	2	50	A-C
16	SMELTING COIL 5-40 & 5-41	2	50	A-C
17	SMELTING COIL 5-44 & 5-45	2	50	A-C
18	SMELTING COIL 5-46 & 5-49	2	50	A-C
19	SPACE	2	50	A-C

NOTE: THIS PANEL TO OPERATE ON 480V/277 VOLT, THREE PHASE, FOUR WIRE WITH 400 AMP MAIN BUS.

AS-BUILT

PANEL NO. SMP-A LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 20

DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nb			
S-3 24.3A	40A	2			3	40A	S-4 25.4A
S-8 25.4A	40A	4			5	40A	S-10 25.4A
S-13 15.1A	20A	6			7	40A	S-16 27.6A
S-19 24.7A	40A	8			9	40A	S-22 25.4A
S-25 24.3A	40A	10			11	40A	SPARE

PANEL NO. SMP-B LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 20

DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nc			
S-2 25.4A	40A	12			13	40A	S-5 25.8A
S-9 24.3A	40A	14			15	40A	S-11 24.7A
S-14 14.7A	20A	16			17	40A	S-17 23.1A
S-20 25.4A	40A	18			19	40A	S-23 24.3A
S-27 24.4A	40A	20			21	40A	SPARE

PANEL NO. SMP-C LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 20

DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nb			
S-1 14.9A	20A	22			23	40A	S-6 25.8A
S-7 24.3A	40A	24			25	40A	S-12 25.4A
S-15 27.1A	40A	26			27	40A	S-18 25.4A
S-21 24.7A	40A	28			29	40A	S-24 25.4A
S-26 24.3A	40A	30			31	40A	SPARE

PANEL NO. SME-A LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 12

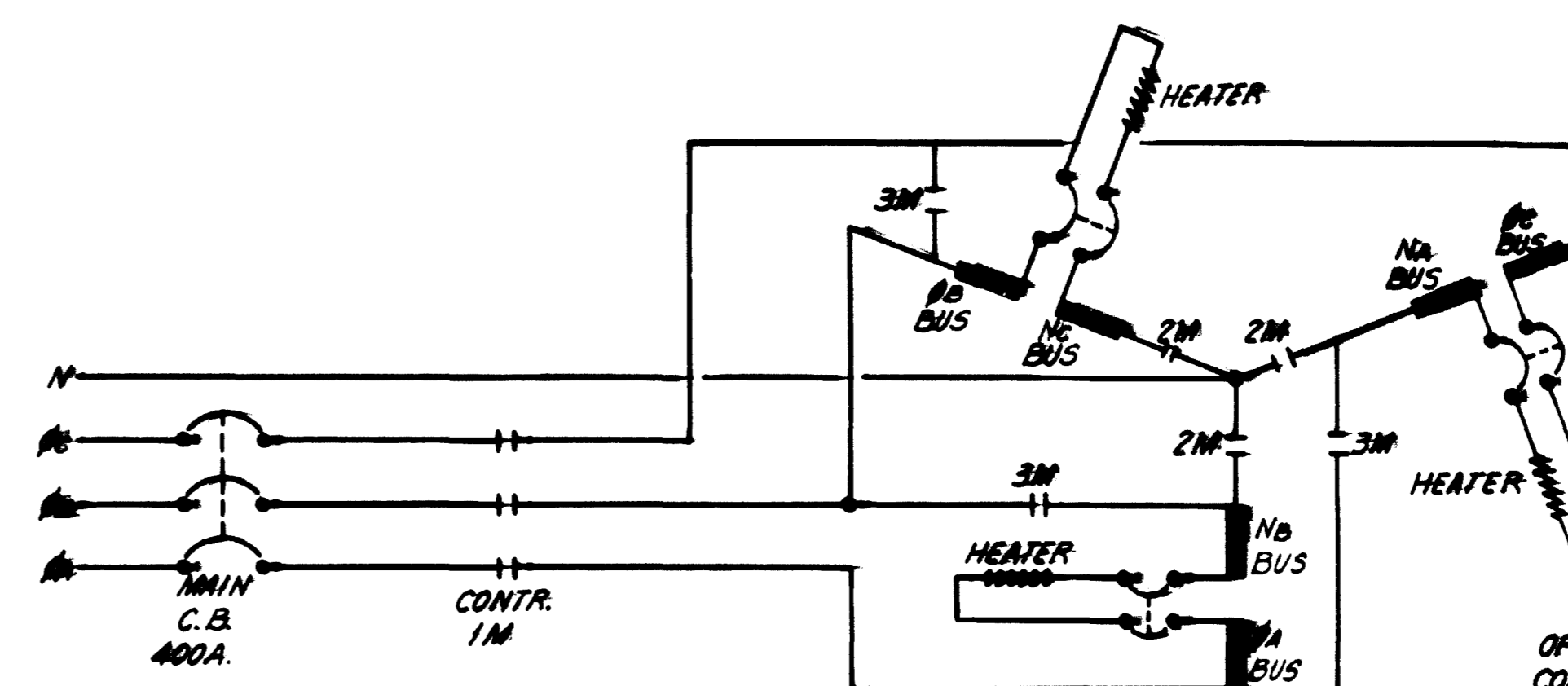
DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nb			
S-32 20A	50A	2			3	50A	S-38 20A
S-46 19.9A	50A	4			5	50A	S-52 20A
S-55 26.9A	40A	6			7	50A	SPARE

PANEL NO. SME-B LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 12

DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nc			
S-28 19.9A	50A	8			9	50A	S-36 20A
S-42 20.7A	50A	10			11	50A	S-50 20A
S-54 20A	30A	12			13	50A	SPARE

PANEL NO. SME-C LOCATION: A-C POWER UNIT #2
 PANEL TYPE: DISTR. 480V. 1Ø 2W MAIN-LUGS ONLY 400 AMPS
 NO. OF CIRCUITS - 12

DESCRIPTION	BKR. AMPS	CKT. NO.	BUS		CKT. NO.	BKR. AMPS	DESCRIPTION
			Na	Nb			
S-30 18.6A	50A	14			15	50A	S-34 20A
S-40 16.6A	50A	16			17	50A	S-44 18.6A
S-48 20A	50A	18			19	50A	SPARE



OPERATION:
 CONTACTOR 2M & 3M MECHANICALLY INTERLOCKED
 DELTA CONTROL - 1M & 3M CLOSED
 WYE CONTROL - 1M & 2M CLOSED

ELECTRICAL SCHEMATIC
 SNOWMELTING WYE-DELTA CONTROL
 NO SCALE

AS-BUILT
 3-16-76

THIS DRAWING ADDED PER PCO-9

DESIGNED G.W. MITCH 12/72
 DRAWN J. PRINLOS 12/72
 CHECKED G.W. MITCH 12/72
 APPROVED [Signature] 12/72

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4-E-13	ELECTRICAL PLANS-SNOW MELTING			
B4-E-14	ELECTRICAL PLANS-SNOW MELTING			
B4-E-16	ELECTRICAL DIAGRAMS			
B4-E-5	ELECTRICAL SCHEDULES			
B4-E-15	A.C. POWER SERVICE			



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS HNTB

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT

HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED [Signature] APPROVED [Signature]

B & O ROUTE
 RHODE ISLAND AVENUE STATION
 ELECTRICAL SCHEDULES

SCALE NO SCALE DRAWING NO. B4-E-24 M39-346A

SPECIAL OUTLET SCHEDULE

NO.	DESCRIPTION	KVA	PHASE	VOLTS	HZ	NO.	AMP	WIRING			REMARKS
								NO.	SIZE	COND.	
1	ELECTRIC CONVECTOR *EC-1	2.0	1	277	PO-1	1	20	2	12	3/4	RM 3
2	"*EC-2	2.0	1		PO-2	1	20	2	12	3/4	RM 4
3	"*EC-3	2.0	1		PO-3	1	20	2	12	3/4	RM 5
4	"*EC-4	2.0	1		PO-4	1	20	2	12	3/4	RM 14
5	"*EC-5	2.0	1		PO-5	1	20	2	12	3/4	RM 12
6	"*EC-6	2.0	1		PO-6	1	20	2	12	3/4	RM 12
7	"*EC-7	1.0	1		PO-7	1	20	2	12	3/4	RM 16
8	"*EC-8	2.0	1		PO-8	1	20	2	12	3/4	RM 8
9	FAEGATE BULLSEYE	0.6	1	120	E-17	1	20	2	12	3/4	KIOSK
10	ELECTRIC CONVECTOR *EC-10			277	PO-9	1	20	2	12	3/4	RM 10
11	"*EC-11	2.0	1		PO-10	1	20	2	12	3/4	RM 10
12	"*EC-12	2.0	1		RS-7	1	20	2	12	3/4	TRAC POWER SUBSTATION
13	"*EC-13	2.0	1		RS-8	1	20	2	12	3/4	TRAC POWER SUBSTATION
14	KIOSK DATA ACQUISITION DISPLAY	1.5	1	120	E-16	1	20	2	12	3/4	KIOSK
15	HOT WATER HEATER	3.0	1	277	PO-11	1	50	2	8	3/4	MEZZANINE LEVEL
16	INFRARED HEATING FIXTURES J.B.*20	11.4	3	480							SEE DWG. B4-E-2 & B4-E-17
17	J.B.*21										SEE SHEET B4-E-17 FOR WIRING, CONTROL PANEL, ETC.
18	J.B.*22										
19	J.B.*23										
20	J.B.*24										
21	J.B.*25										
22	J.B.*26										
23	J.B.*27										
24	J.B.*28										
25	J.B.*29										
26	J.B.*30										
27	J.B.*31										
28	J.B.*32										
29	J.B.*33										
30	J.B.*34										
31	J.B.*35										
32	J.B.*36										
33	J.B.*37										
34	J.B.*38										
35	J.B.*39										
36	TYPICAL PYLON (N.I.C.)			120	SEE PLAN						PLATFORM
37	KIOSK CLOCK & LIGHTS	0.4	1	120	E-18	1	20	2	12	3/4	MEZZANINE
38	KIOSK AIR COND. & HEATING	3.7	1	208	PP-37	2	30	3	10	3/4	
39	TYPICAL FARE VENDING MACHINE	1.2	1	120	SEE PLAN	1	20				ROUTE CIRCUIT TO PANEL VIA UNDERFLOOR DUCT SYSTEM
40	TYPICAL FARE GATE SEE NOTE #3	1.2	1	120	SEE PLAN	1	20				ROUTE CIRCUIT TO PANEL VIA UNDERFLOOR DUCT SYSTEM
41	ELECTRIC CONVECTOR *EC-14 SEE NOTE #5	1.1	1	208	H-5	2	20	2	12	3/4	RM 17
42	"*EC-15 SEE NOTE #5	1.1	1	208	H-5	2	20	2	12	3/4	RM 17
43	"*EC-16	2.0	1		PO-15	1	20	2	10	3/4	
44	"*EC-17	2.0	1		PO-16	1	20	2	10	3/4	
45	"*EC-18	2.0	1	277	PO-17	1	20	2	12	3/4	RM 5
46	DIRECTION PYLON (N.I.C.)			120	5-4	IN-LINE	2	12	3/4		PARKING LOT
47	"METRO" PYLON (N.I.C.)			120	5-4	IN-LINE	2	6	2	6	PARKING LOT
48	ESCALATOR CONTROLS	0.9	1	120	E-14	1	20	2	12	3/4	ESCAL. PIT
49	ESCALATOR EMERGENCY LIGHTS	0.5	1	120	E-10	1	20	2	12	3/4	ESCAL. PIT
50	ESCALATOR EMERGENCY LIGHTS	0.5	1	120	E-10	1	20	2	12	3/4	ESCAL. PIT
51	INFRARED HEATING FIXTURES J.B.*40	11.4	3	480							SEE DWG. B4-E-2 & B4-E-17
52	"*41										SEE SHEET B4-E-17 FOR WIRING, CONTROL PANEL, ETC.
53	"*42										
54	"*43										
55	"*44										
56	"*45										
57	"*46										
58	"*47										
59	"*48										

NOTES:
1) ALL OF THE ABOVE SPECIAL OUTLETS SHALL TERMINATE AT THE EQUIPMENT WITH THE PROPER DIRECT CONNECTS TO THAT EQUIPMENT.
2) CONNECTIONS FOR FUTURE EQUIPMENT SHALL TERMINATE IN JUNCTION BOXES WITH WIRING PROPERLY TERMINATED FOR FUTURE CONNECTION AND CONTINUATION.
3) TRENCH COVER SHALL BE PROVIDED WITH OPENINGS. CONDUCTORS SHALL BE TERMINATED AT RESPECTIVE OPENING FOR FUTURE CONNECTION TO EQUIPMENT. (SEE DWGS. ST-TC-4,5 & 6 FOR DETAILS OF TRENCH AND COVERS).
4) ELECTRICAL CONDUCTORS FOR FARE VENDING MACHINES (NO.39) AND FARE GATES (NO.40) WILL BE PROVIDED BY THE ATC STAGE CONTRACTOR.
5) CONVECTORS EC-14 & EC-15 (EXISTING) ARE RATED AT 2.0 KW AT 277 VOLTS BUT SHALL BE OPERATED AT 208 VOLTS.

NO.	DATE	BY	REVISION
11-22-74	C.J.M.	1	REVISED EMERGENCY, PCO-30, 12/041
11-11-74	D.D.R.	7	A.F.C. AT PARKING LOT GATE

MOTOR AND STARTER SCHEDULE

MTR NO	LOCATION	DESCRIPTION	KW	HP	#	VOLTS	CIRCUIT NO	BKR OR FUSE	STARTER TYPE	STARTER NOMENCLATURE		TOTAL ELECT CONN			REMARKS			
										LOCATION	FURN BY	INTER-LOCKED MOTOR	ACT. UATING MOTOR	NO.		WIRING	ELECT THER.	
1	ABOVE RM 14	HTG. VENT UNIT *HV-1	28.0	1/2	3	480	PDP-11	3	70	RM.1	MFR. H.F.G. CONTR.	24	24	3	4	1/4	YES	
2	RM.1	"*HV-2	10	3	3	PDP-2	3	30						3	10	3/4		
3	RM.1	"*HV-3	10	3	3	PDP-3	3	30						3	10	3/4		
4	STATION	"*HV-4	10	3	3	RS-1	3	30						3	10	3/4		
5	RM.14	ELEC. CAB. UNIT HTR *ECUH-1	6.0	—	3	PO-27	3	15		IN UNIT	MFR.			3	12	3/4		
6	STATION	ELEC. CAB. UNIT HTR *ECUH-2	5.0	—	3	PO-28	3	15						3	12	3/4		
7	STATION	ELEC. CAB. UNIT HTR *ECUH-3	5.0	—	3	PO-29	3	15						3	12	3/4		
8	ABOVE RM 14	EXHAUST FAN *EF-1	—	1/4	1	M-20	1	20	NOTE 1	RM.1	MFR. CONTR.	1	1	2	12	3/4	NO	
9	ABOVE RM 14	"*EF-2	—	1/4	1	M-21	1	20	NOTE 1	RM.1				2	12	3/4		
10	STATION	"*EF-3	—	1/25	1	RR-1	1	20	NOTE 2	NR.UNIT				2	12	3/4		
11	STATION	"*EF-4	—	1/25	1	RR-1	1	20		NR.UNIT				2	12	3/4		
12	RM.2	AIR COND. & HTG. UNIT	4.48	1 1/2	1	277	PO-18	1	30		IN UNIT	MFR.			2	10	3/4	YES
13	RM.2		4.48	1 1/2	1		PO-19	1	30					2	10	3/4		
14	RM.13		4.48	1 1/2	1		PO-20	1	30					2	10	3/4		
15	RM.7		3.32	3/4	1		PO-21	1	30					2	10	3/4		
16	RM.7		7.20	2	1		PO-22	1	50					2	6	1		
17	RM.11		4.80	2 1/2	1		PO-23	1	50					2	6	1		
18	RM.11		4.80	2 1/2	1		PO-24	1	50					2	6	1		
19	PLANS	ESCALATOR	—	20	3	480	LDA-5	3	50	NOTE 5	IN PIT			3	6	1	W/5 BARE GROUND	
20			—	20	3		LDA-6	3	50					3	6	1		
21			—	20	3		PDP-6	3	50					3	6	1		
22	PLANS	ESCALATOR (FUTURE)	—	20	3		PDP-7	3	50					3	6	1		
23	RM.8 PLATFORM	ELEC. CAB. UNIT HTR *ECUH-4	8.0	—	3		PO-25	3	15		IN UNIT	MFR.		3	12	3/4	YES	
24	RM.12	EXHAUST FAN *EF-5	—	1/8	1	120	M-22	1	20	NOTE 1	RM.1	MFR. CONTR.	3	24	3	4	1/4	NO - TRANSFORMER
25	RM.1	ELEC. UNIT HTR *EUH-1	12.5	1/6	3	480	PDP-8	3	30					3	8	3/4	YES	
26	RM.1	"*EUH-2	12.5	1/6	3		PDP-9	3	30					3	8	3/4		
27	STATION	"*EUH-3	20.0	1/6	3		RS-2	3	40		STATION			3	8	3/4		
28	STATION	"*EUH-4	20.0	1/6	3		RS-3	3	40					3	8	3/4		
29	STATION	"*EUH-5	12.5	1/6	3		RS-4	3	30					3	10	3/4		
30	STATION	"*EUH-6	12.5	1/6	3		RS-5	3	30					3	10	3/4		
31	STATION	ROLL FILTER *RF-1	—	1/6	1	120	RR-2	1	20	NOTE 1	IN UNIT			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
32	ELEV RM	HANDICAPPED ELEVATOR	35	3	480	LDA-4	3	100	NOTE 6	ELEV RM	ELECT. CONTR. MFR.			3	6	—		
33	STATION	ROLL UP DOOR	3.4	3	480	RS-9	3	15	NOTE 4	NR.UNIT	MFR.			3	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
34	RM.11	AIRCOND. & HTG. UNIT	4.48	1 1/2	1	277	PO-26	1	30		IN UNIT	MFR.			2	10	3/4	YES
35	RM.1	ROLL FILTER *RF-2	—	1/6	1	120	M-23	1	20	NOTE 1	IN UNIT	MFR.			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS
36	RM.1	ROLL FILTER *RF-3	—	1/6	1	120	M-23	—	NOTE 1	IN UNIT	MFR.			2	12	3/4	NO	
37	STATION	AIR COMPRESSOR	—	2-1/4	1	120	RR-11	1	20	NOTE 2	NR.UNIT			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
38	STATION	AIR DRYER	—	1/2	1	120	RR-12	1	20	NOTE 2	NR.UNIT			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
39	RM.6	AIR COMPRESSOR	—	2-1/4	1	120	M-25	1	20	NOTE 2	NR.UNIT			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
40	RM.6	AIR DRYER	—	1/2	1	120	M-26	1	20	NOTE 2	NR.UNIT			2	12	3/4	SEE SHEET B4-E-17 FOR CONTROLS	
43	ELEV RM	EXHAUST FAN EF-6	1	208	H-6	2	20			ELEV RM	ELECT. CONTR. MFR.			2	12	3/4	YES	

NOTES:
1) CIRCUIT BREAKER COMBINATION STARTER NON REVERSING "F" FRAME, THREE OVERLOADS, WITH HAND-OFF-AUTO WITH PILOT LIGHT.
2) MANUAL STARTER WITH ON-OFF KEY SWITCH.
3) ELECTRIC HEATING COILS TO BE PROVIDED WITH CONTACTORS AND FUSE BLOCKS AS REQUIRED BY COIL MANUFACTURE.
4) CIRCUIT BREAKER COMBINATION STARTER NON REVERSING, THREE OVERLOADS, "J" FRAME WITH ON-OFF KEY SWITCH.
5) CIRCUIT BREAKER DISCONNECT IN SPECIAL PURPOSE NEMA 12 ENCLOSURE WITH OPERATING HANDLE. MOTORS AND STARTERS FOR ESCALATORS ARE TO BE FURNISHED AND INSTALLED BY OTHERS UNDER ESCALATOR CONTRACT.
6) DISCONNECT SWITCH (FUSED) SHALL BE PROVIDED UNDER THIS CONTRACT. ALL WIRINGS SHALL TERMINATE IN SWITCH. FUTURE EXTENSION TO ELEVATOR MOTOR SHALL BE BY ELEVATOR CONTRACTOR.



DESIGNED	J.E. FELDNER	DATE	1/70
DRAWN	J.S. PAZALOS	DATE <td>1/70</td>	1/70
CHECKED	C.J. MITCH	DATE	4/77
APPROVED	J. G. ...	DATE	4/77

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4-M-5	HEATING SCHEDULES	11-2-72	C.J.M.	HANDICAPPED ELEVATOR, PCO-3
		11-3-72	C.J.M.	ESCALATOR EMERGENCY, PCO-7
		12/1/72	C.J.M.	REVISED PARKING LOT, PCO-21
		2-28-73	C.J.M.	KIOSK DUCT REVISION, PCO-8
		7-10-73	C.J.M.	FARE VENDING REVISIONS, PCO-39
		12-19-73	C.J.M.	HANDICAPPED ELEVATOR, PCO-47

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

HOWARD NEEDLES TAMMEN & BERGENDOFF CONSULTING ENGINEERS **HNTB**

DE LEUW CATHER & COMPANY GENERAL ENGINEERING CONSULTANT
HARRY WEESE & ASSOCIATES GENERAL ARCHITECTURAL CONSULTANT

SUBMITTED: *J. Pazalos*

APPROVED: *J. G. ...*

B80 ROUTE

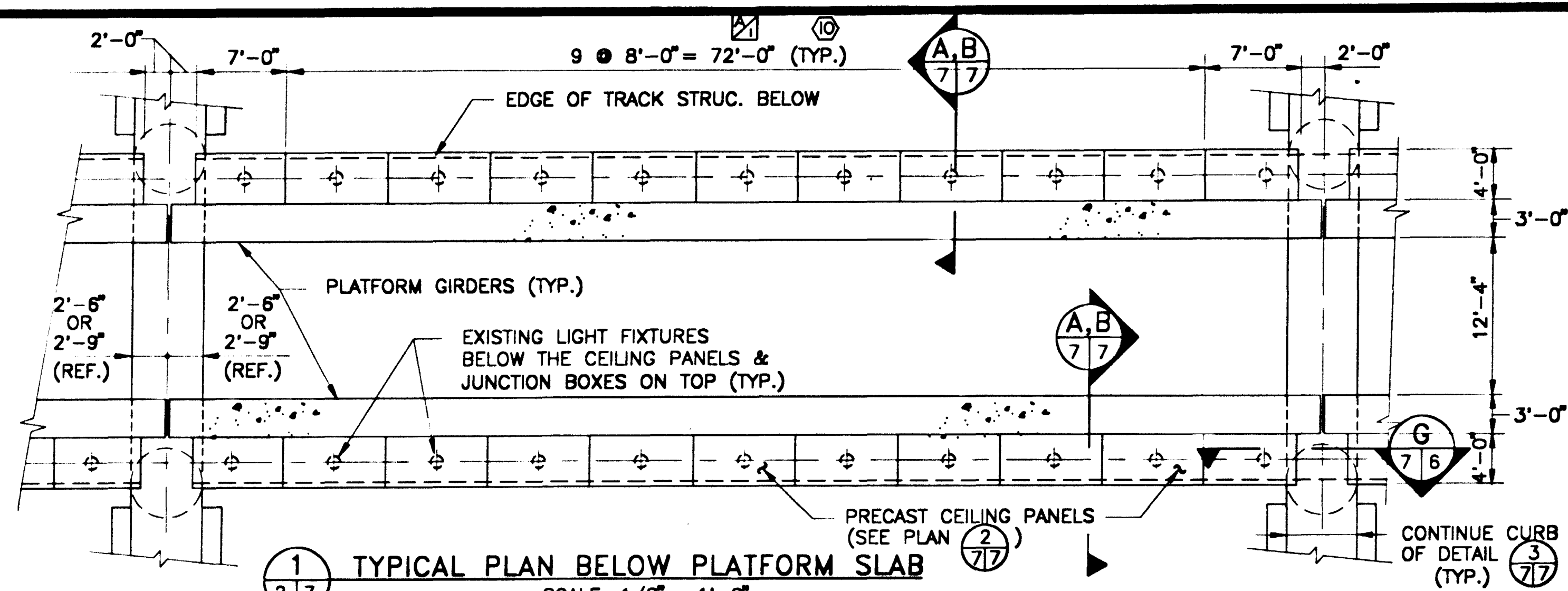
RHODE ISLAND AVENUE STATION

ELECTRICAL SCHEDULES

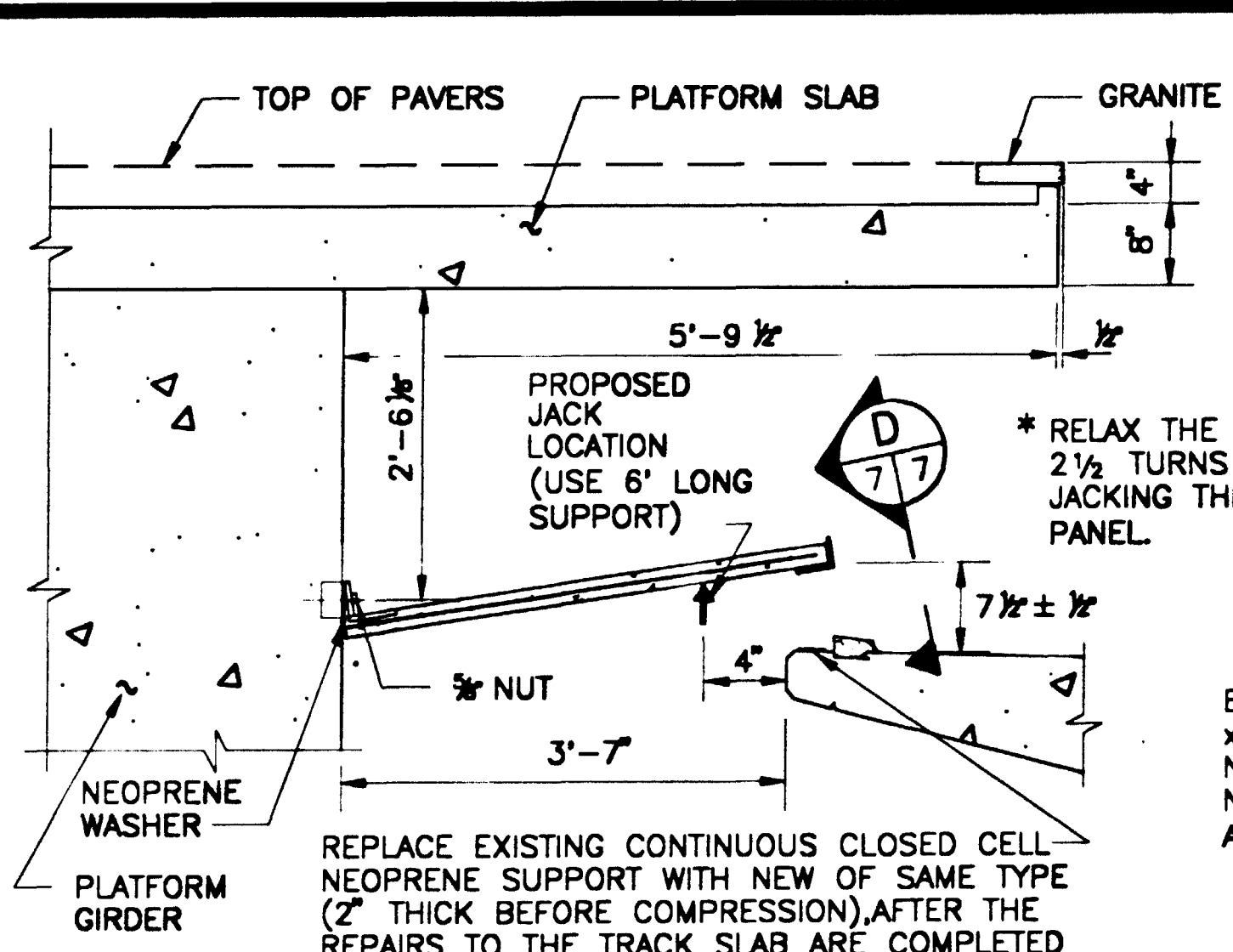
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DRAWING NO: **B4-E-10**

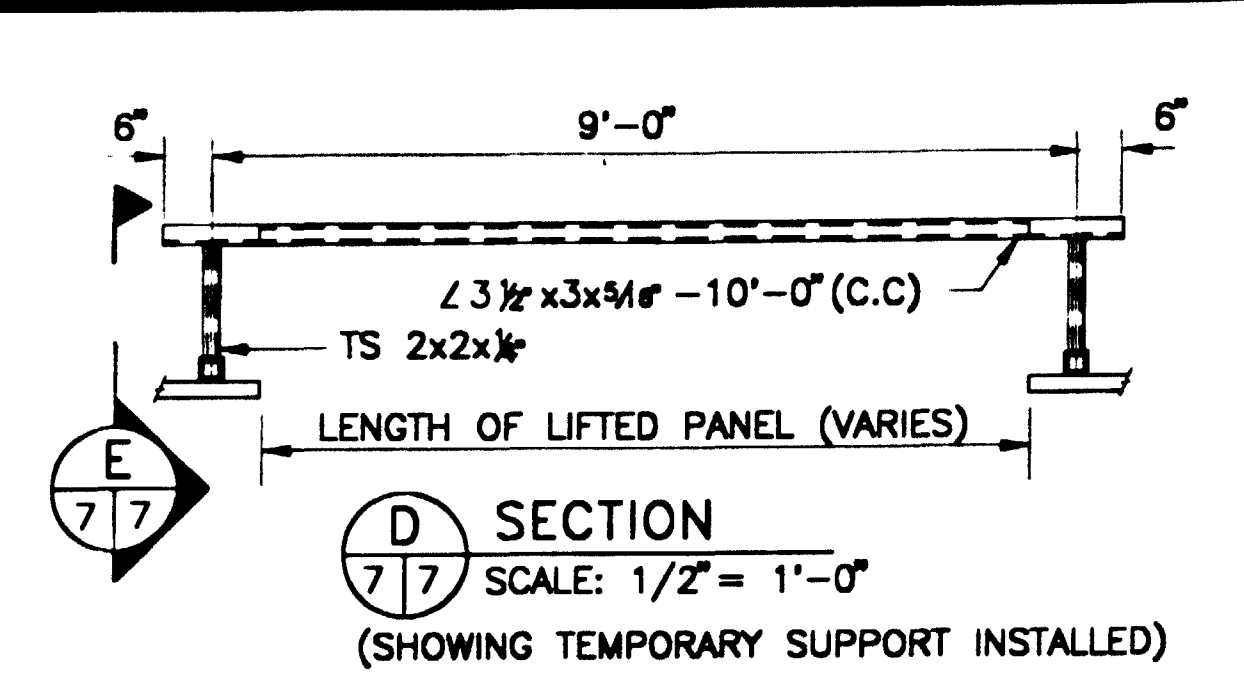
M39-346



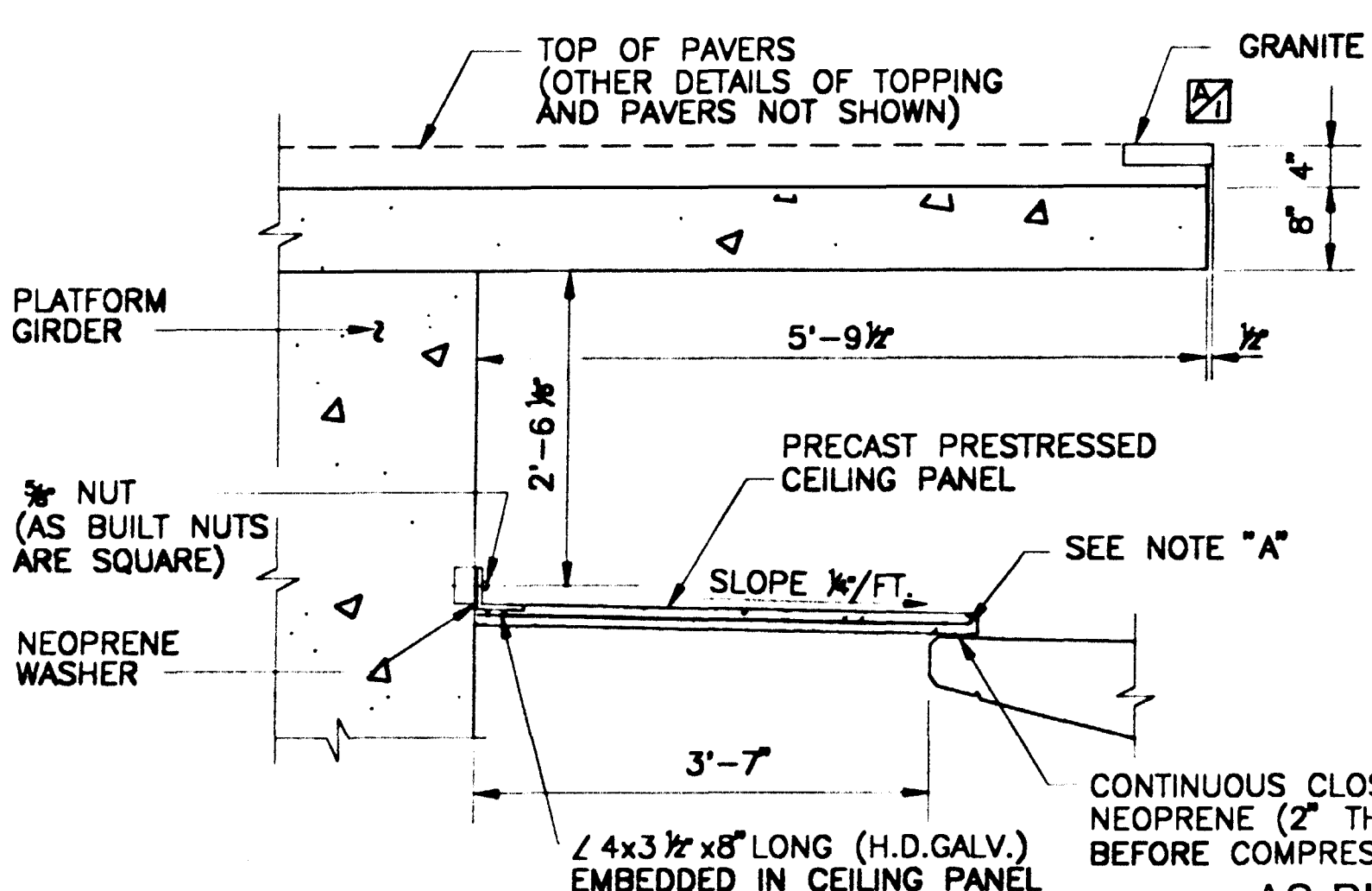
1 TYPICAL PLAN BELOW PLATFORM SLAB
 SCALE: 1/8" = 1'-0"
 (ACTUAL AS BUILT PANELS MAY VARY ACCORDING TO ARRANGEMENT OF OPENINGS, CEILING LIGHTS ETC. PANELS SUPPORT HEATERS IN SOME LOCATIONS. FOR AS BUILT CONDITIONS SEE DWGS. B4-E-2,3 & 4)



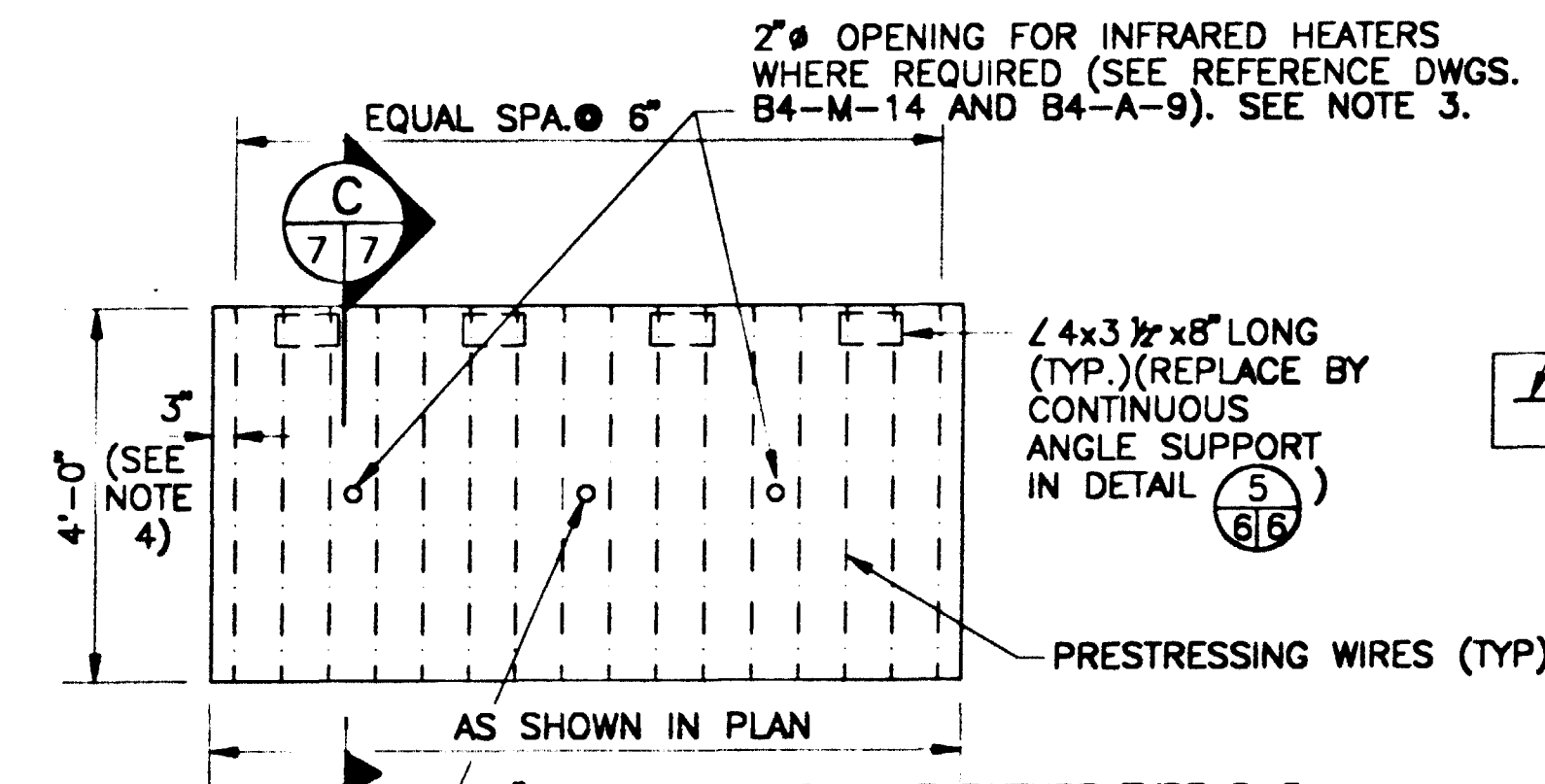
A TYPICAL SECTION
 SCALE: 3/4" = 1'-0"
 (CEILING PANEL RAISED FOR REPAIRS)



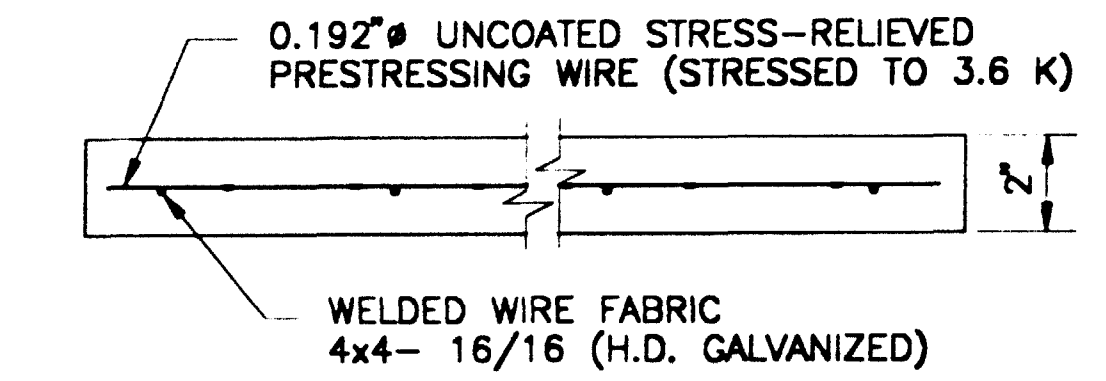
D SECTION
 SCALE: 1/2" = 1'-0"
 (SHOWING TEMPORARY SUPPORT INSTALLED)



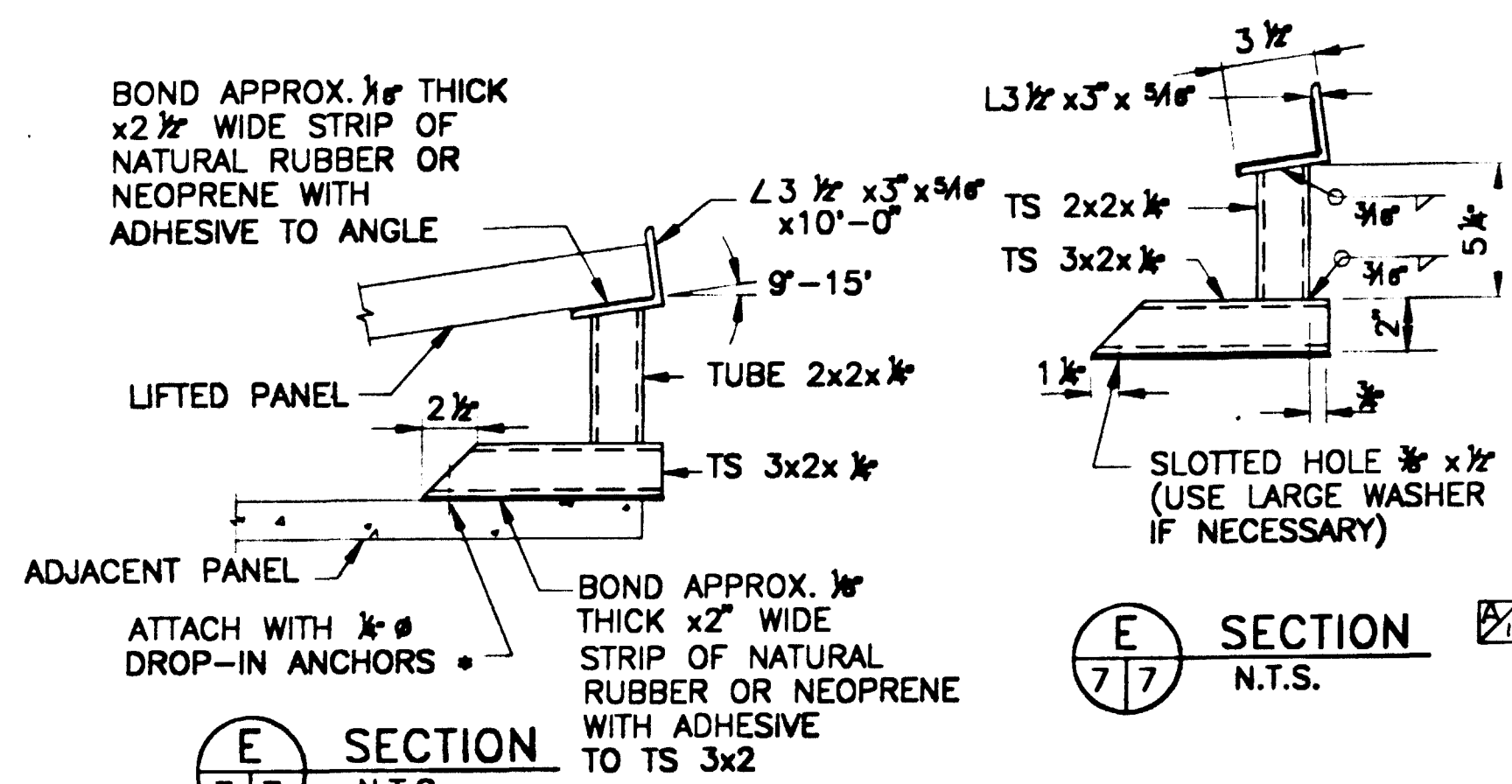
B TYPICAL SECTION
 SCALE: 3/4" = 1'-0"
 (EXISTING CEILING PANELS)



2 PLAN
 SCALE: 1/2" = 1'-0"
 EXISTING PRECAST PRESTRESSED CEILING PANEL



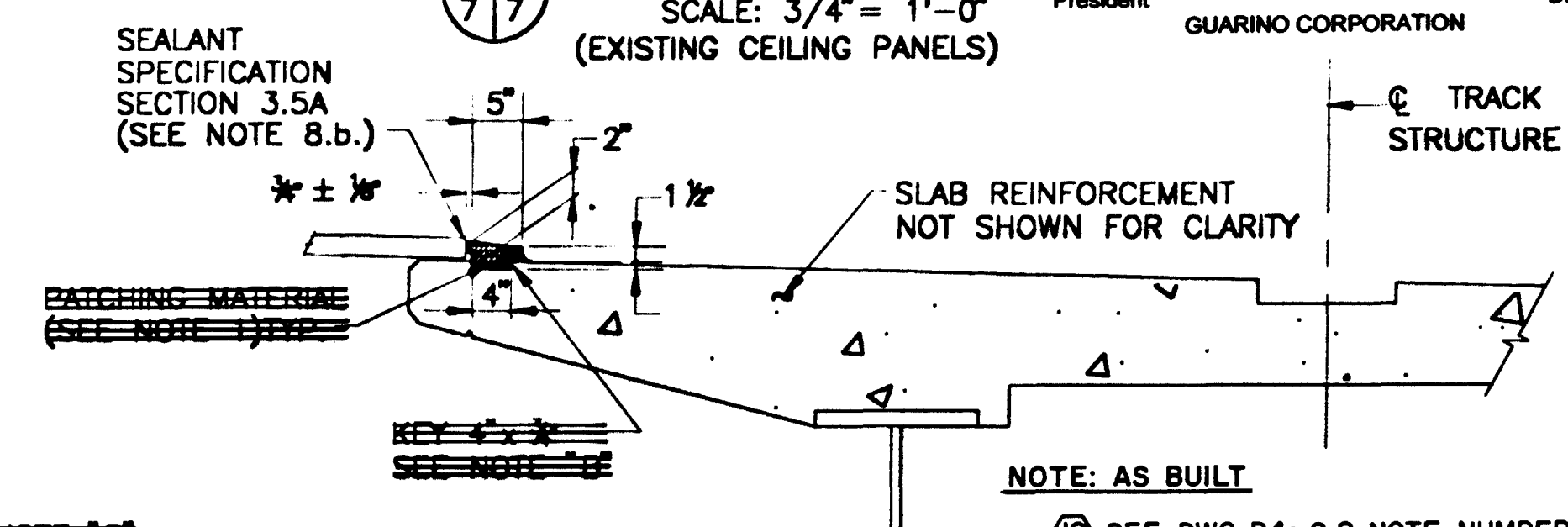
C SECTION
 SCALE: 3" = 1'-0"



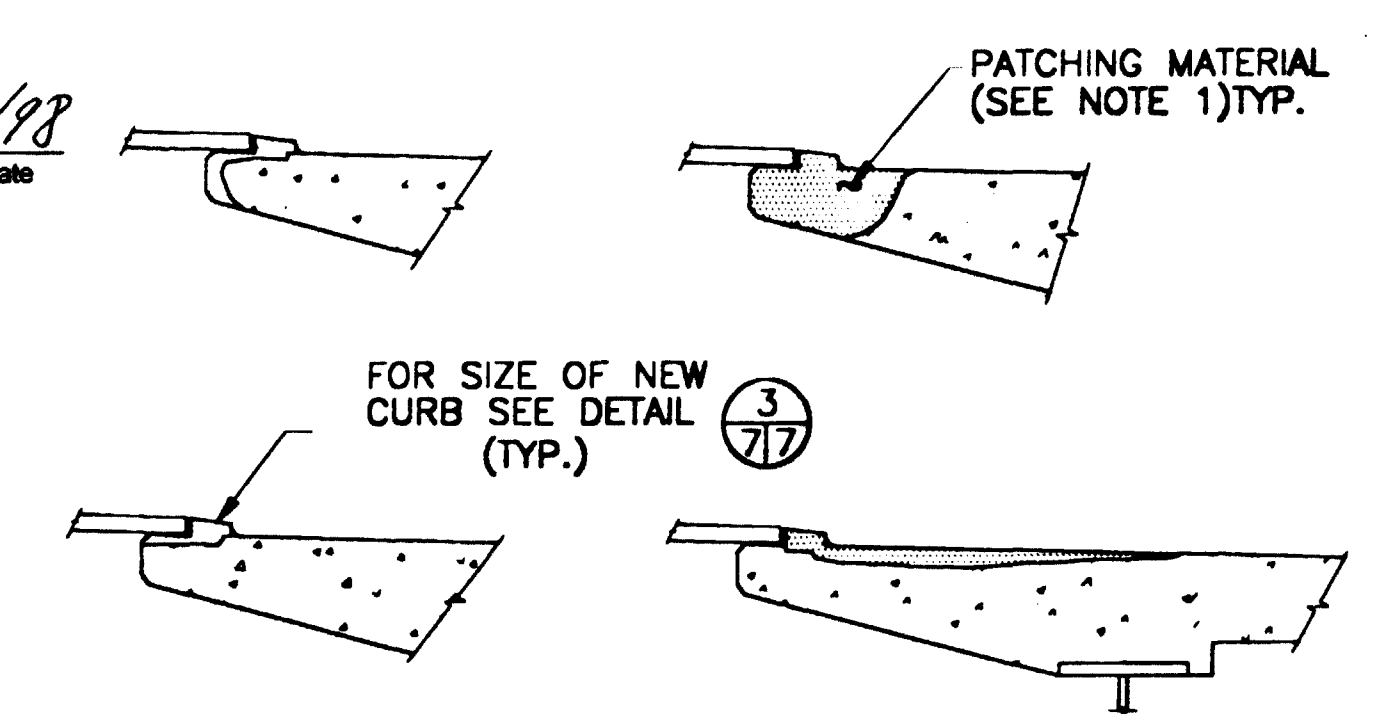
E SECTION
 N.T.S.

NOTE "A" (FOR NEW PANELS ONLY)
 BURN OFF ENDS OF PRESTRESSING WIRE 1/2" BELOW CONCRETE SURFACE AND SEAL WITH EPOXY MORTAR.

I certify that this drawing accurately depicts the work as constructed
AC Guarino 4/8/98
 President GUARINO CORPORATION Date



3 DETAIL
 SCALE: 3/4" = 1'-0"



4 DETAIL
 N.T.S.

NOTE "B"
 WHEN THE TOP OF THE TRACK SLAB IS IN CONTACT PROVIDE SHEAR KEY AS SHOWN WHEN THE TOP OF THE TRACK NEEDS REPAIRS THE KEY SHOULD BE COMBINED WITH REPAIRS, AND CURB SHOULD BE POURED INTEGRALLY. SEE DETAIL 4.

NOTE: AS BUILT
 SEE DWG. B4s-S-8 NOTE NUMBER 10 FOR INFORMATION.

NEW CURB AND TOP OF TRACK SLAB REPAIRS-VARIATIONS. THESE DETAILS PROVIDE THE INTENT OF REPAIRS. FOR ACCEPTABLE EXTENT OF PATCHING, SEE DWG. B4s-S-4.

PROCEDURE FOR RAISING & REINSTALLING THE CEILING PANEL

- CHECK THE AS BUILT SQUARE NUTS ATTACHING THE PRECAST PANELS TO THE PLATFORM GIRDER AND MAKE SURE THAT THE THREADS OF AT LEAST TWO BOLTS PER PANEL ARE FLUSH WITH THE NUT OR PROJECTING OUT OF NUT. IF NOT REPAIR THE PANEL SUPPORT ANGLES AS SHOWN IN PLAN 1.
- TURN THE NUTS AT PLATFORM GIRDER BETWEEN 2 TO 2 1/2 TURNS COUNTERCLOCKWISE FROM HAND-TIGHT POSITION.
- LIFT THE SLAB PANEL AT FREE END. PROPOSED LOCATION OF JACKS FOR LIFTING SHOWN IN TYPICAL SECTION A.
- SLIDE THE TEMPORARY SUPPORT AS SHOWN AND ATTACH IT TO ADJACENT PANELS OR PIER CAP. WHEN ATTACHING TO PIER CAP ADDITIONAL FILLER PLATES OR SHIMS MAY BE NECESSARY.
- COMPLETE TRACK SLAB REPAIRS AND PROVIDE CURB. APPLY SEALER OVER ALL EXPOSED SURFACES OF TRACK GIRDER DECK AND OVER ALL PANEL SURFACES. PROVIDE NEOPRENE SUPPORT.
- AFTER TRACK SLAB REPAIRS ARE DONE LIFT THE PANELS AND REMOVE THE PANEL SUPPORT. LOWER THE PANEL IN PLACE.
- IN FIRST STAGE LIFT, REPAIR AND LOWER ALL ALTERNATE PANELS. IN SECOND STAGE LIFT, REPAIR AND LOWER ALL REMAINING PANELS.
- RAISE THE PANELS UP ALL THE WAY TO THE TOP OF THE SLOT OF THE EXISTING WEDGE INSERT IN THE PLATFORM GIRDER, AND TIGHTEN THE NUTS. RAISE ALTERNATE PANELS IN THE SAME FASHION. THE DIFFERENCE IN THE LEVELS OF ANY TWO ADJACENT PANELS SHOULD NOT BE MORE THAN 1/4". OTHERWISE ADJUST HEIGHTS OF PANELS AT SUPPORT TO BRING THIS DIFFERENCE WITHIN LIMITS.
- PROVIDE SEALANT IN JOINTS, PER NOTE 8b.

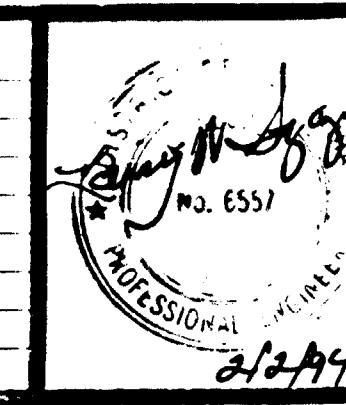
NOTES:

- PATCHING MATERIAL SHALL BE CONCRETE PATCHING MATERIAL PER SPECIFICATION SECTION 3, 3A. AND AS SHOWN ON DWG B4s-S-1.
- GRIND ALL EXPOSED SHARP STEEL EDGES SMOOTH.
- FOR ELECTRICAL WORK SEE DWG. B4s-E-2.
- ASCERTAIN THAT THE AS-BUILT PRESTRESSING TENDONS ARE IN DESIGN LOCATIONS AND NO TENDONS GET CUT WHILE INSTALLING THE 1/4" DROP IN ANCHORS.
- SEALANT SHALL BE AS SPECIFIED IN THE TABLE ON DWG. B4s-S-1.
- THE NEOPRENE SUPPORT MATERIAL MAY BE REPLACED BY SOLID OR FORM TYPE NEOPRENE SUPPORT SUCH THAT THE DESIGN SLOPE OF PANEL WILL BE MAINTAINED WITH PRIOR APPROVAL OF THE ENGINEER.
- PROVIDE REPLACEMENT PRESTRESSED CEILING PANELS, WHERE PANELS ARE BROKEN OR ANY CRACK WIDER THAN 15 MILS CROSSES ANY TWO PRESTRESSING WIRES PER PLAN 2 AND DETAIL 3.
- REPAIRING PANELS:
 - WHEN THE CRACKS ON THE UNDERSIDE OF THE PANELS ARE IN THE MIDDLE ZONE AS SHOWN IN PLAN 4 AND ARE WIDER THAN 15 MILS, PROVIDE SUPPORT AT THE EDGE OF PANEL NEAR THE PLATFORM GIRDERS.
 - AFTER THE REPAIRS ARE COMPLETED PER @, OR IF NO REPAIR PER @ IS REQUIRED, PROVIDE SURFACE SEAL BY COATING ALL EXPOSED ACCESSIBLE SURFACES BY SPECIFIED SEALER, PER DWG B4s-S-1, AND BY APPLYING SEALANT ALL AROUND EACH PANEL.
- COORDINATE WORK WITH REHABILITATION OF TRACK GIRDER DECK. SEE SUGGESTED SEQUENCE OF CONSTRUCTION, DWGS B4s-G-6,7 & 8, AND SPECIFICATION SECTION 2.23.

DESIGNED	4/93
DATE	
DRAWN	1/94
DATE	
CHECKED	1/94
DATE	
APPROVED	1/11
DATE	

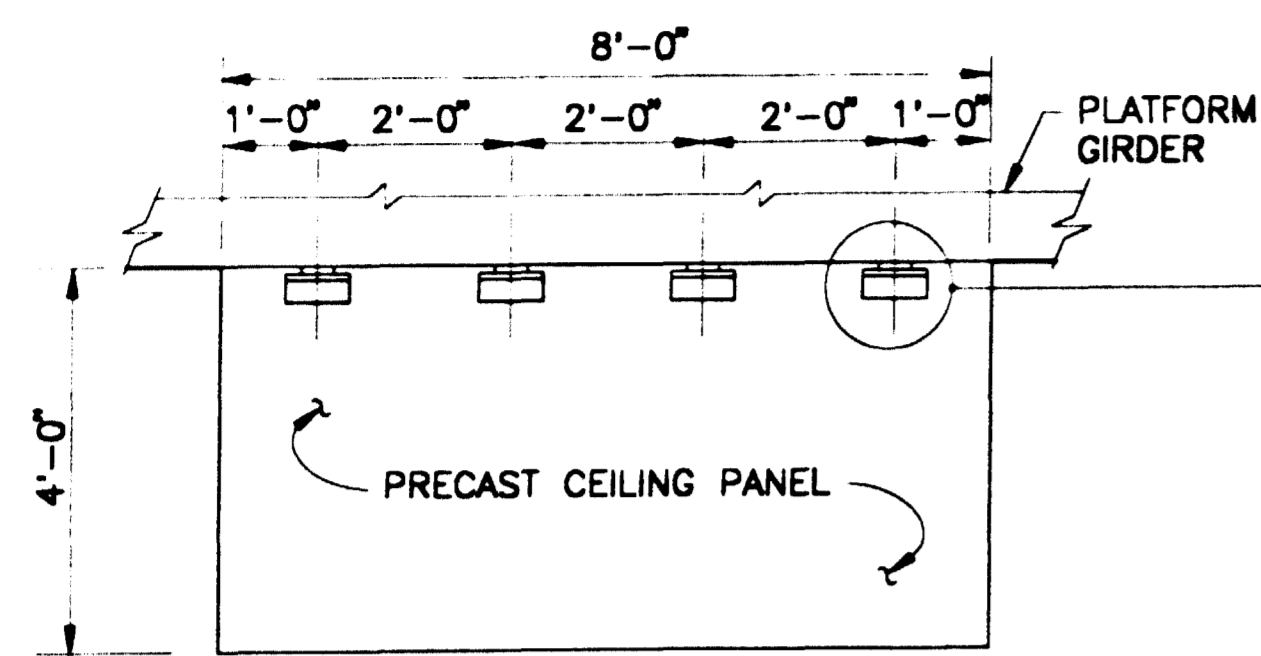
NUMBER	DESCRIPTION
B4s-S-5	REPAIR NOTES
B4-E-2	ELECTRICAL PLANS
B4-E-3,4	ELECTRICAL PLANS
B4-A-9	REFLECTED PLATFORM CEILING PLAN AND DETAILS
B4s-E-2	ELECTRICAL DETAILS - SHEET 1.
B4s-S-6	CONCRETE REPAIR DETAILS
B4-M-14	INFRARED HEATER DETAILS

DATE	BY	DESCRIPTION
12-6-97	C.P.G.	REMOVED SLAB LIP AS BUILT INFORMATION

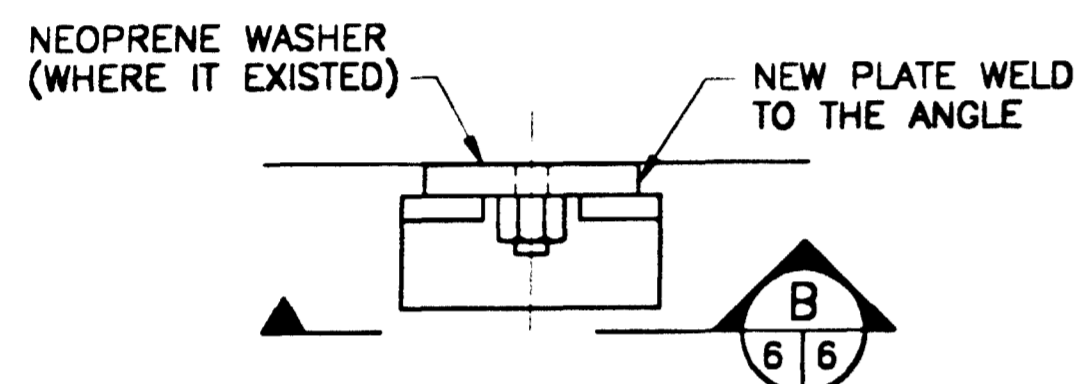


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 PARSONS DE LEUW, INC.
 SECTION DESIGNER
 SUBMITTED BY

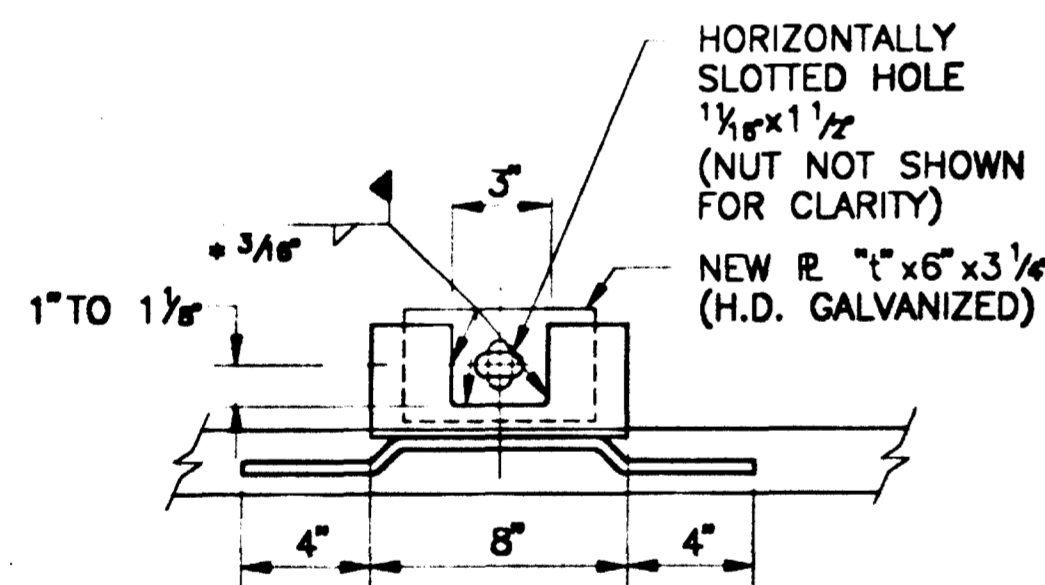
RHODE ISLAND AVENUE STATION
 STRUCTURAL REHABILITATION
 PRECAST PANEL LIFTING & OTHER DETAILS
 SCALE AS NOTED
 DRAWING NO. B4s-S-7
 M898-15
 CONTRACT NO. 71172H



1 PLAN- PRECAST CEILING PANEL WITH SUPPORT ANGLES REQUIRING REPAIRS
N.T.S.



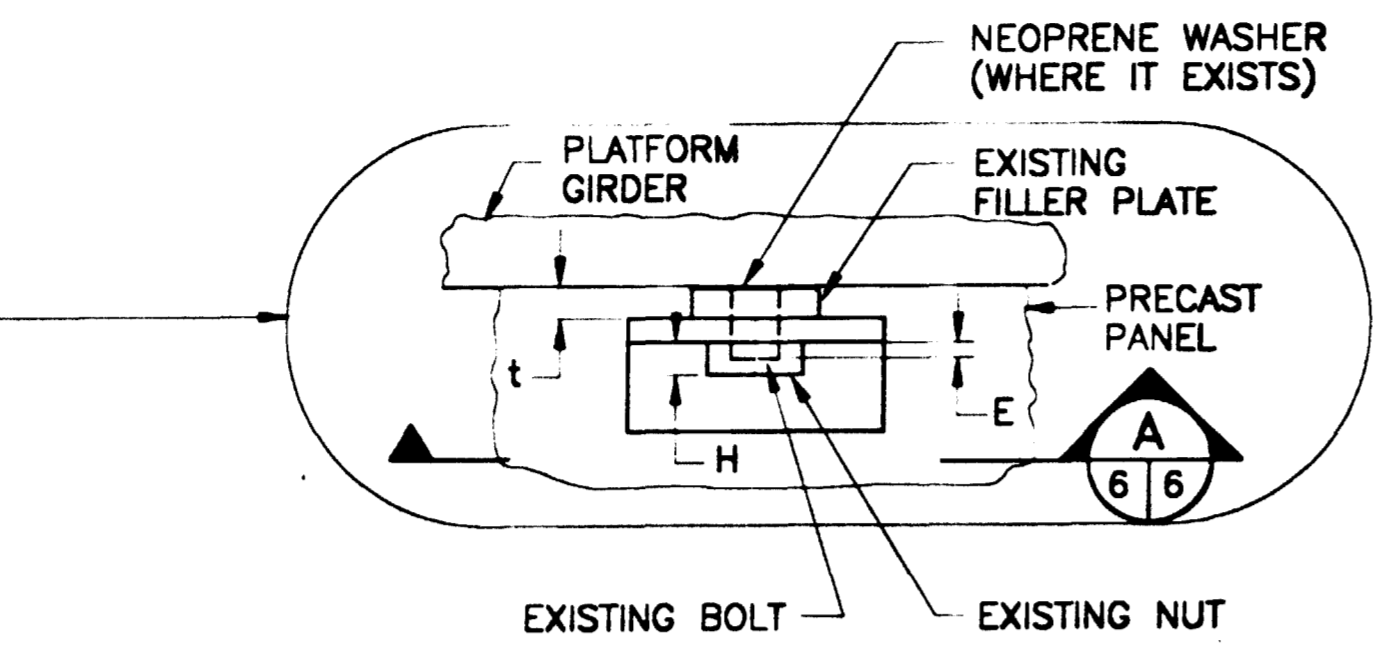
3 REPAIRED ANGLE SUPPORT
N.T.S.



* IF "E" IS LARGER THAN 1/2" USE AISC MIN. WELD.

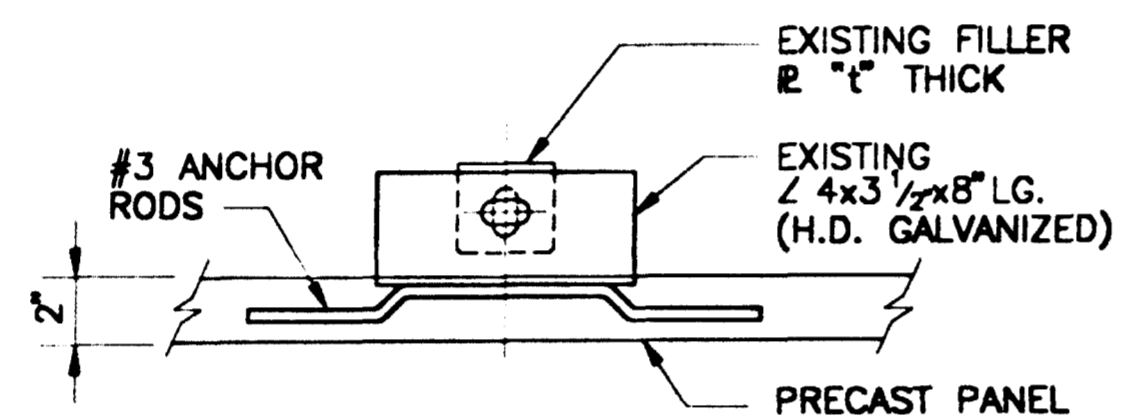
B SECTION
N.T.S.

SHOWING REPAIRS OF PANEL SUPPORT ANGLE, WHEN THE ENGAGED THREAD LENGTH "E" IS LESS THAN THE NUT HEIGHT "H". (SEE PROCEDURE FOR RAISING AND REINSTALLING THE CEILING PANEL ON DWG. B4s-S-7)



2 EXISTING ANGLE SUPPORT WITH E < H
N.T.S.

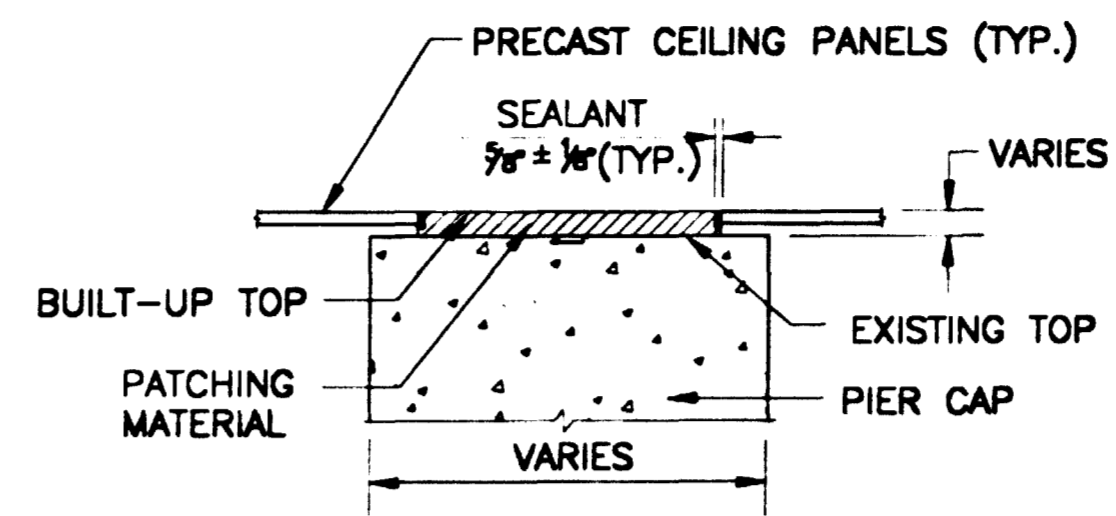
(WHEN THE THREADS OF BOLT ARE NOT FLUSH OR DO NOT PROJECT OUT OF NUT)



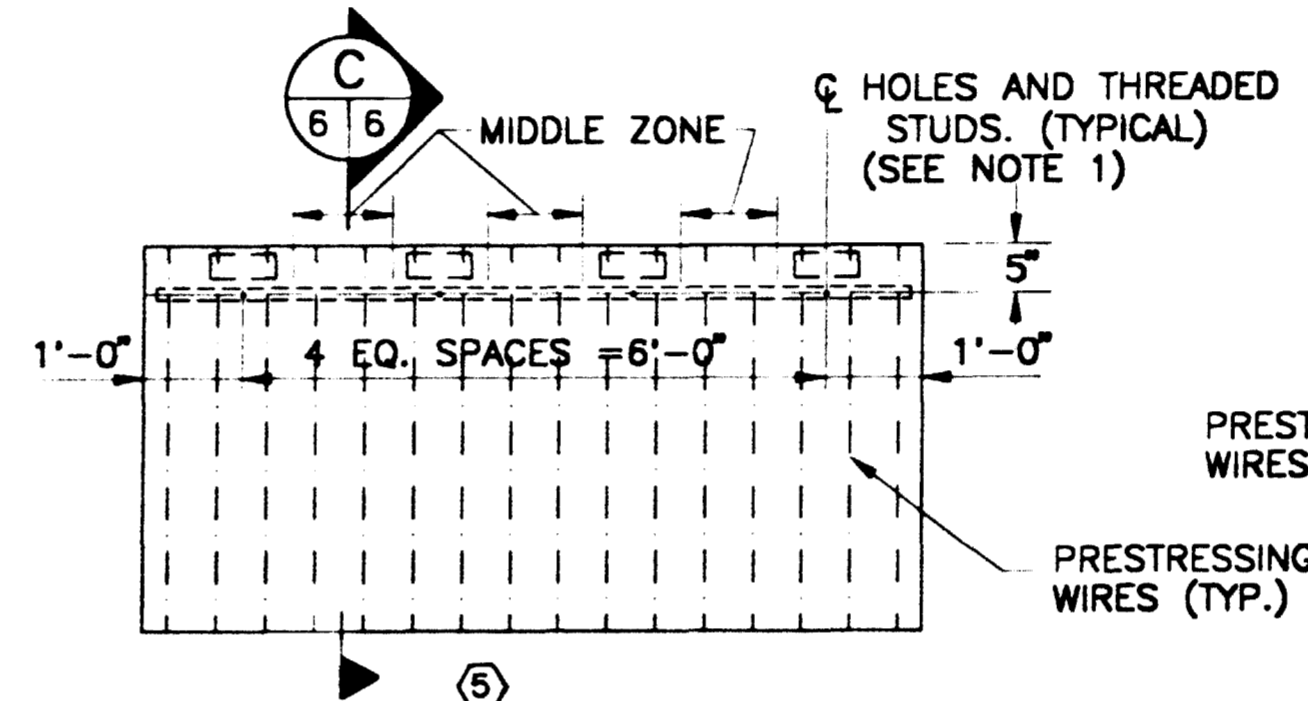
A SECTION
N.T.S.

REPAIR PROCEDURE FOR PRECAST CEILING PANEL ANGLE SUPPORTS

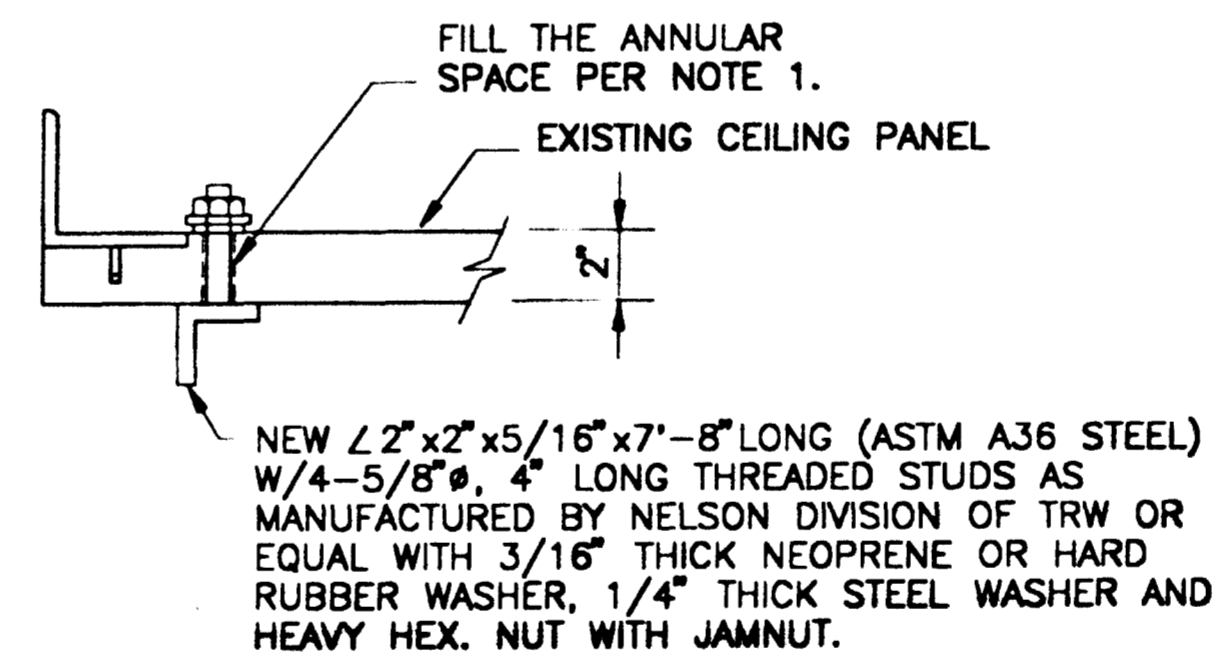
1. MARK THE LOCATION OF THE NUTS ON THE ANGLES. MEASURE THE THICKNESSES OF THE EXISTING FILLER PLATES BETWEEN THE ANGLE AND THE PLATFORM GIRDER.
2. PROCURE THE NECESSARY NEW GALVANIZED 3 1/4x6 PLATES WITH SLOTTED HOLES.
3. SUPPORT THE PANELS WHICH NEED REPAIRS, FROM UNDERSIDE.
4. REMOVE THE EXISTING NUTS AND MOVE THE PANEL AWAY FROM THE PLATFORM GIRDER.
5. CUT A NOTCH IN THE SUPPORT ANGLE AS SHOWN. WELD A NEW PLATE HAVING SAME THICKNESS AS THE "EXISTING" FILLER PLATE (MATCH THE LOCATION OF BOLT HOLES TO ORIGINAL BOLT LOCATION IN THE ANGLE BEFORE WELDING).
6. CLEAN AND TOUCH-UP THE NEW PLATE AND THE SUPPORT ANGLE ASSEMBLY WITH ZINC PAINT.
7. REINSTALL THE PANEL.



G SECTION (SEE DWG. S-7)
N.T.S.
(BUILD-UP OF PIER CAP TOP)



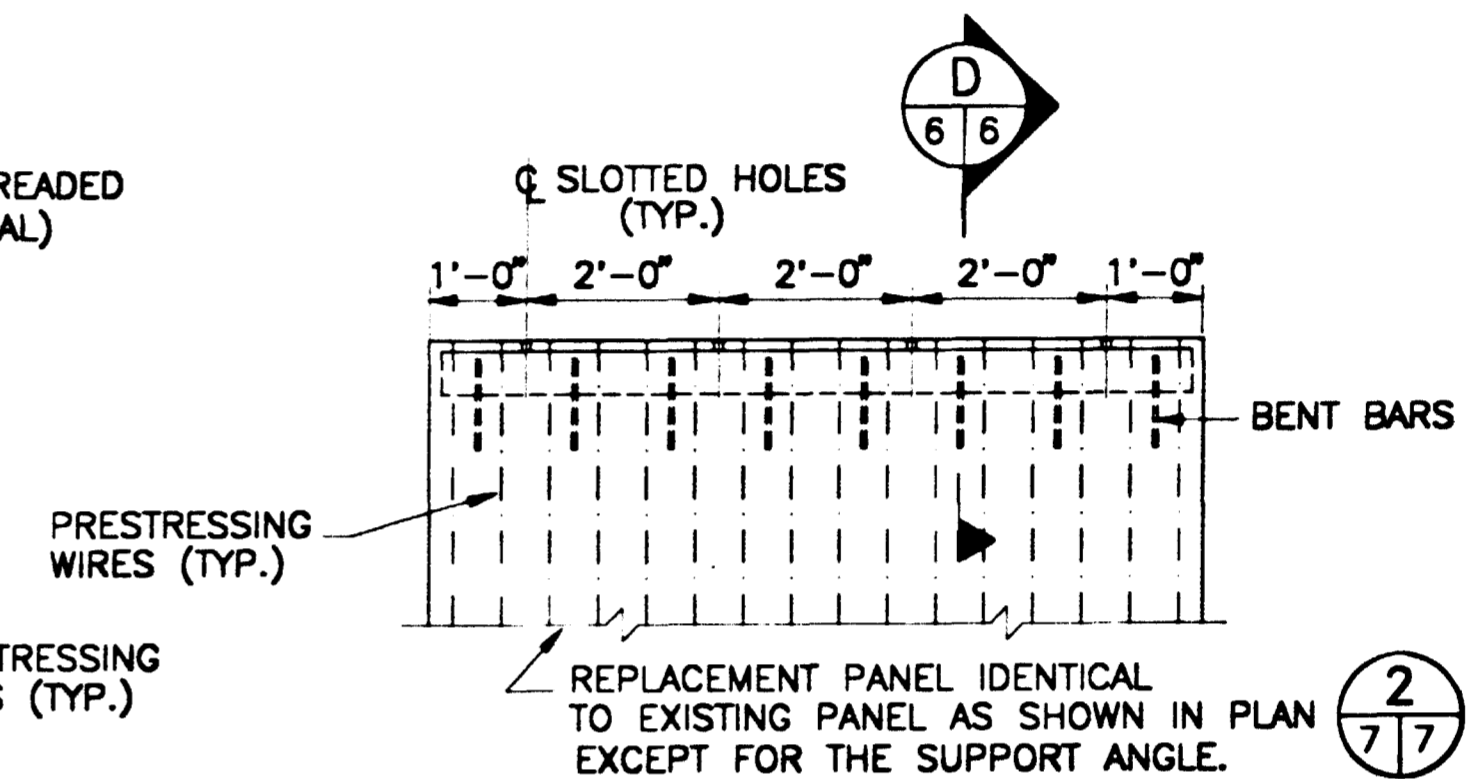
4 PLAN
N.T.S.
CEILING PANEL CRACK REPAIRS



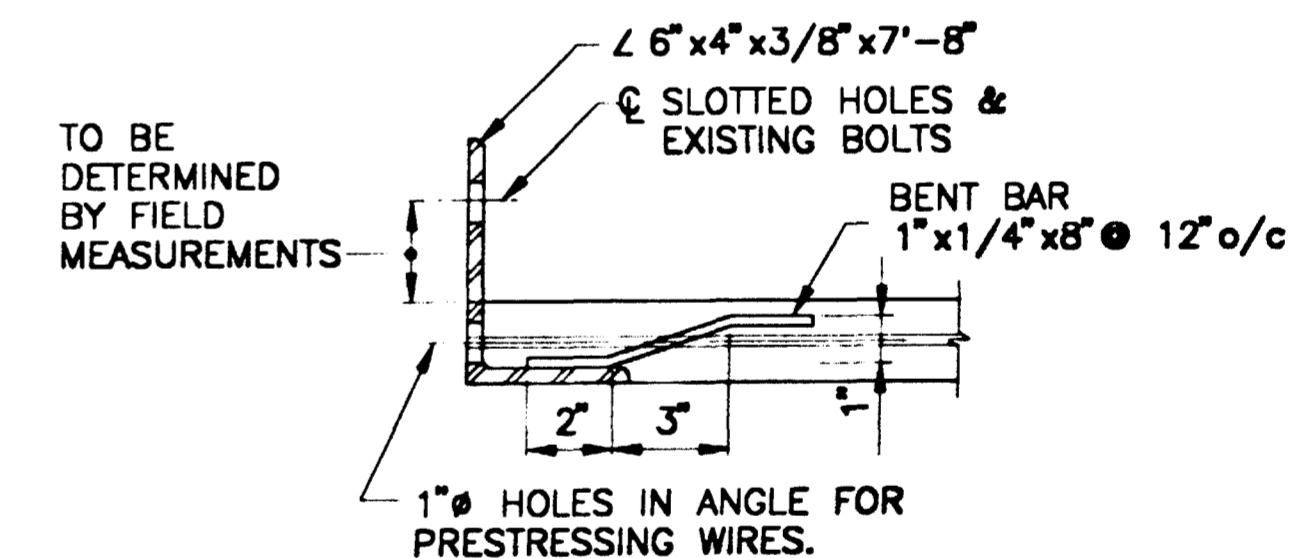
C SECTION
N.T.S.

NOTES:

1. DRILL 1" HOLES FOR STUDS IN PRECAST PANEL. LOCATE HOLES BETWEEN THE PRESTRESSING TENDONS AS SHOWN IN PLAN 4. WELD THE THREADED STUDS TO ANGLE 2" x 2" x 5/16" AND HOT DIP GALVANIZE. INSERT THE STUDS THROUGH THE HOLES. HOLD THE ANGLE SNUG WITH THE UNDERSIDE OF THE PANEL. FILL THE ANNULAR SPACE IN THE HOLE WITH STUD, WITH FX928 NON-SHRINK GROUT OR EQUAL. TAKE PRECAUTIONS THAT THE THREADS ABOVE THE TOP OF PANEL REMAIN CLEAN. INSERT RUBBER OR NEOPRENE WASHER & STEEL WASHER & INSTALL HEAVY HEX NUT. TIGHTEN THE NUT SUCH THAT THE TENSION IN THE THREADED STUD SHALL BE 1.5 KIPS. THEN INSTALL JAM NUT. COVER THE WASHER, NUTS AND EXPOSED STUD WITH SILICONE SEALANT.



5 DETAILS OF EDGE SUPPORT FOR REPLACEMENT PANELS
N.T.S.



D DETAILS EDGE SUPPORT ANGLE
N.T.S.

NOTES: AS BUILT

SEE DWG. B4s-S-3 FOR LOCATION.

AS-BUILT

I certify that this drawing accurately depicts the work as constructed

Signature: *Alfredo* Date: 1/8/98
President GUARINO CORPORATION

CONTRACT NO. 7T172H

DESIGNED: K MANGALMATH 4/93
DRAWN: CHACKO/SHEIKS 1/94
CHECKED: RACKETT 1/94
APPROVED: [Signature] DATE: 1/94

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4s-S-7	PRECAST PANEL LIFTING & OTHER DETAILS	12-5-97	CPG (5)	AS BUILT INFORMATION
		12-5-97	CPG (7)	AS BUILT INFORMATION
		12-5-97	CPG (6)	AS BUILT INFORMATION

DATE	BY	DESCRIPTION
12-5-97	CPG (5)	AS BUILT INFORMATION
12-5-97	CPG (7)	AS BUILT INFORMATION
12-5-97	CPG (6)	AS BUILT INFORMATION

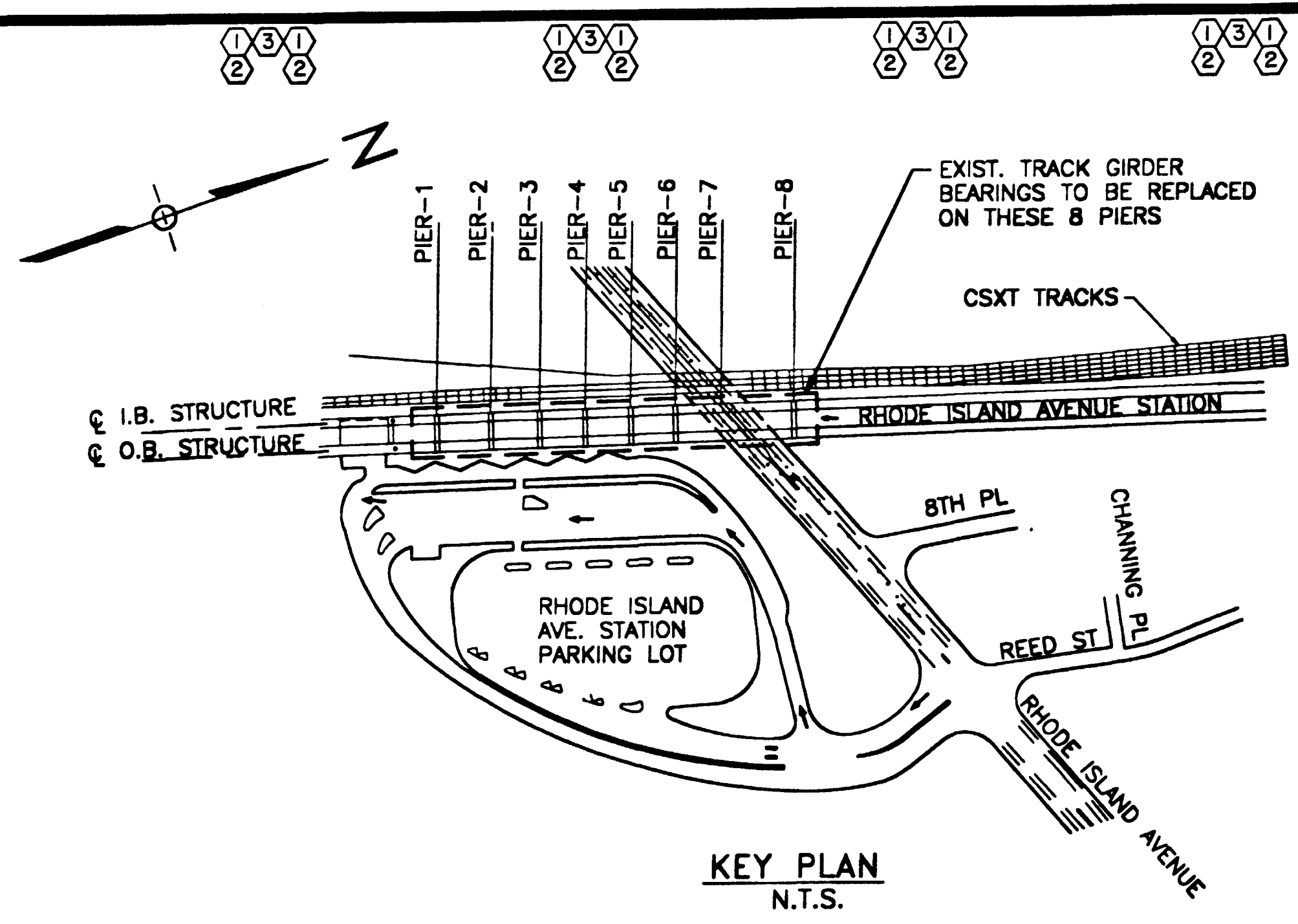
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

PARSONS DE LEUW, INC.
SECTION DESIGNER

SUBMITTED BY: [Signature]

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
CONCRETE REPAIR DETAILS

SCALE: N.T.S.
DRAWING NO. B4s-S-6
M898-16

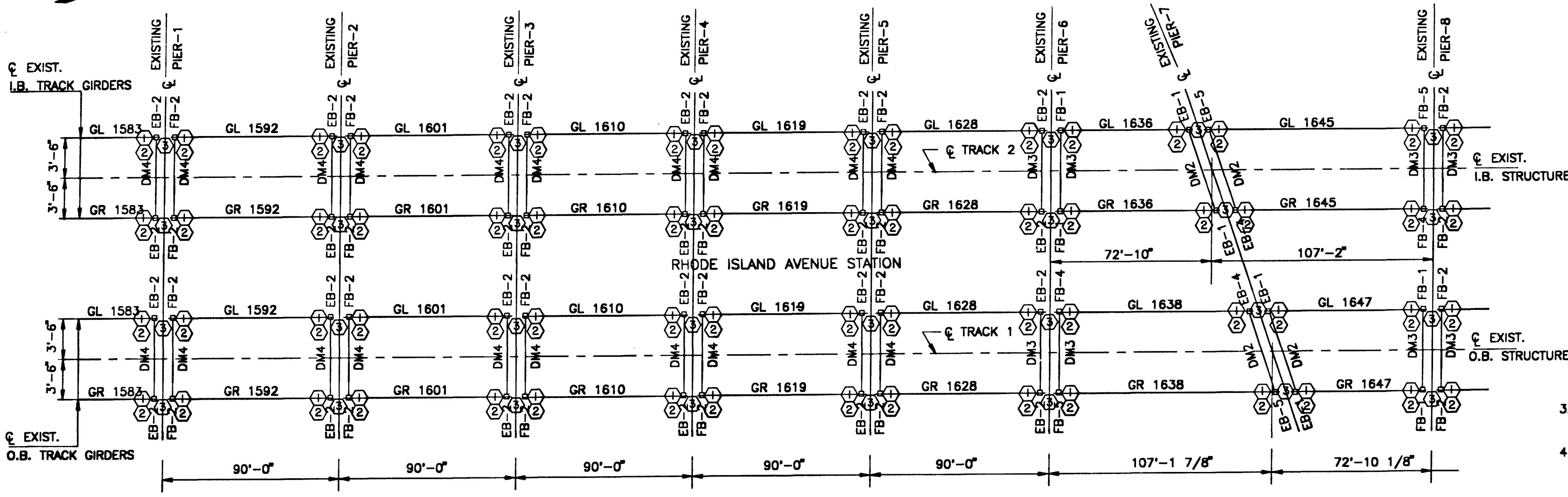


STRUCTURAL NOTES

1. GENERAL:
 - a. THE SCOPE OF WORK INCLUDES REPLACEMENT OF 64 BEARING PADS WITH FABREEKA BEARING PADS INCLUDING RETROFITTING THE EXISTING CONCRETE PADS (IF REQUIRED) ON 8 PIERS, 1 THROUGH 8, AT RHODE ISLAND AVENUE STATION. REFER KEY PLAN FOR LOCATION OF RETROFIT AREA.
 - b. EXISTING CONDITIONS SHOWN ARE IN ACCORDANCE WITH AS-BUILT DRAWINGS DATED MARCH, 1976. THE CONTRACTOR SHALL FIELD VERIFY ALL NECESSARY INFORMATION SHOWN PRIOR TO STARTING THE WORK.
 - c. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR WMATA'S REVIEW AND APPROVAL.
 - d. PERFORM SURVEYS AS NECESSARY TO INSURE THAT RAILS ARE RETURNED TO DESIGN LINE AND GRADE AFTER BEARING REHABILITATION.
 - e. IF DURING THE COURSE OF A BEARING REPLACEMENT OPERATION, IT BECOMES EVIDENT THAT IT WOULD NOT BE FEASIBLE TO COMPLETE THE RETROFIT WORK WITHIN THE STIPULATED 52-HOUR TIME PERIOD, THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO INSTALL TEMPORARY SHIMS AS SHOWN ON DRAWING S-15A, SO THAT THE AFFECTED TRACK MAY BE OPENED TO REVENUE TRAFFIC PRIOR TO EXPIRATION OF THE SINGLE TRACKING PERIOD. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR HIS INABILITY TO COMPLETE THE BEARING REPLACEMENT WORK THAT RESULTS IN A NEED TO INSTALL TEMPORARY SHIMS WITH ASSOCIATED TRAIN SPEED RESTRICTION. THE ATTENDANT LIQUIDATED DAMAGES SHALL BE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
2. MATERIALS:
 - a. ALL STRUCTURAL STEEL SHALL CONFORM ASTM A36, F_y=36,000 PSI.
 - b. HIGH EARLY STRENGTH FX-742 POLYMER CONCRETE, MANUFACTURED BY FOX INDUSTRIES OR ITS APPROVED EQUAL WITH A MINIMUM TWO-HOUR COMPRESSIVE STRENGTH OF 5000 PSI SHALL BE USED FOR RETROFITTING EXISTING CONCRETE PADS.
 - c. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS STRUCTURAL WELDING CODE AWS D1.1-88. MINIMUM FILLET WELD SIZE SHALL NOT BE LESS THAN 5/16" UNLESS OTHERWISE NOTED.
 - d. USE ELASTOMERIC BEARING PADS PER SPEC. SECTION 3.13A INDICATED AS "FABREEKA".

RETROFIT PROCEDURE

1. PRIOR SITE PREPARATION AND VERIFICATION:
 - 1.1 ERECT THE ACCESS SCAFFOLD IN FRONT OF THE PIER AND PROVIDE A SECURE WORK PLATFORM AT LEAST 5'-0" WIDE AND DESIGNED FOR A LIVE LOAD OF 250 PSF. THE PLATFORM SHALL BE IN COMPLIANCE WITH APPLICABLE OSHA REQUIREMENTS AND AS APPROVED BY THE AUTHORITY.
 - 1.2 VERIFY ALL NECESSARY DIMENSIONS SHOWN ON THE DRAWINGS.
 - 1.3 THE CONTRACTOR SHALL DEMONSTRATE, THAT THE EPOXY W/FILLER TO BE USED FOR RETROFITTING THE CONCRETE PADS ACHIEVES MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 5000 PSI IN TWO HOURS. THIS WILL BE DONE BY POURING A TRIAL GROUT PAD OFF SITE AND TESTING THE TWO-HOUR STRENGTH USING A SCHMIDT HAMMER OR A SIMILAR DEVICE.
 - 1.4 STIFFEN DIAPHRAGM DM-2, DM-3 & DM-4 AT JACKING AND TEMPORARY SUPPORT LOCATIONS PER DETAILS SHOWN ON DWG. B4s-S-14.
 - 1.5 INSTALL JACKS AT THE SPECIFIED POSITIONS ON THE PIER CAP BRACKET, CUT CONCRETE TO A MAXIMUM DEPTH OF 1" IF REQUIRED FOR JACK INSTALLATION CLEARANCE UNDER THE END DIAPHRAGMS. DO NOT CUT REBAR.
2. RETROFIT WORK DURING STIPULATED NON-OPERATING 52-HOUR PERIOD FOR INBOUND GIRDER:
 - 2.1 NOT USED
 - 2.2 RAILS, SAFETY WALK AND HANDRAILS OVER THE AERIAL STRUCTURE SHALL BE UNFASTENED AS NECESSARY BY THE WMATA PERSONNEL.
 - 2.3 SYNCHRONIZE JACKS FOR EVEN LIFT OF TRACK GIRDERS. UNSCREW EXISTING TIE DOWN NUTS.
 - 2.4 LIFT ONLY ONE END OF TRACK GIRDERS USING TWO ENERPAC TYPE JACKS OF MINIMUM CAPACITY AS SPECIFIED IN "NOTES" IN DWG S-14 TO A MAXIMUM TOTAL LIFT OF 2". JACKS SHALL HAVE COLLAPSED HEIGHT NOT TO EXCEED 6" WITHOUT SADDLE AND 7 1/2 INCHES WITH SADDLE. LIMIT EACH LIFT TO 1/4".
 - 2.5 INSTALL TEMPORARY STEEL SUPPORTS AT SPECIFIED LOCATIONS TO SECURE THE RAISED GIRDER.
 - 2.6 REMOVE THE EXISTING BEARING PADS. CLEAN AND POLISH THE EXISTING STAINLESS STEEL CLADDING UNDERSIDE OF SOLE PLATE TO ACHIEVE A SMOOTH AND SHINING FINISH.
 - 2.7 SCRAPE AND CLEAN THE CONCRETE PAD BY SAND BLASTING AND OR WIRE BRUSHING. IF THE EXISTING CONCRETE PAD IS DAMAGED OR NEEDS ANY REPAIRS, REPAIR PER 'CONCRETE PAD REPAIRS' IN DWG S-15A. VERIFY THE STRENGTH OF REPAIRED PORTION OF PADS BY SCHMIDT HAMMER OR SIMILAR DEVICE BEFORE APPLYING ADHESIVE TO THE TOP SURFACE FOR FABREEKA PAD.
 - 2.8 BUFF AND SOLVENT WIPE THE FABREEKA PAD SURFACE TO BE BONDED TO CONCRETE PAD.
 - 2.9 APPLY FX-742 HI-MOD EPOXY (MANUFACTURED BY FOX INDUSTRIES) OR APPROVED EQUAL OVER THE CONCRETE CONTACT SURFACE PER MANUFACTURER'S SPECIFICATIONS. TAKE PRECAUTIONS TO AVOID LEAVING EPOXY ON SURFACES NOT TO BE BONDED. SEE NOTE 1.5 IN DWG. B4s-S-5.
 - 2.10 INSTALL NEW FABREEKA BEARING PAD UNDER EACH TRACK GIRDER AT THE SPECIFIED POSITION. INSTALL KEEPER PLATES IN FRONT OF & TIGHT AGAINST EACH NEW EXPANSION FABREEKA BEARING PAD.
 - 2.11 REMOVE TEMPORARY STEEL SUPPORTS AND JACK DOWN THE TRACK GIRDER ONTO THE NEW FABREEKA PAD.
 - 2.12 SECURE EACH TRACK GIRDER TO THE PIER BY TIGHTENING THE NUTS SNUG TIGHT OVER EXISTING ANCHOR BOLTS.
 - 2.13 PATCH THE CUT CONCRETE MENTIONED IN STEP 2.3 WITH FX-742, (MANUFACTURED BY FOX INDUSTRIES) OR EQUAL, TO ORIGINAL ELEVATION.
3. REPEAT STEPS 2.1 THROUGH 2.13 FOR REPLACING THE BEARING PADS OF THE OUT BOUND GIRDER.
4. REPEAT STEPS 1 THROUGH 3 FOR REPLACING THE BEARING PADS AT OTHER PIERS. DO NOT JACK UP BOTH ENDS OF THE SAME GIRDER AT THE SAME TIME.



NOTES: AS BUILT

- ① RETROFITTED CONCRETE PAD. SEE DETAIL DWG. B4s-S-15A.
- ② REMOVED EXISTING BEARING PAD AND INSTALLED ELASTOMERIC BEARING PAD AND INSTALLED KEEPER PLATE. SEE DETAIL DWG. B4s-S-11.
- ③ PERFORMED SURVEY OF DETERIORATION OF EXISTING SOLE PLATES. SEE DETAIL DWG. B4s-S-11.

PLAN NOTES:

1. EB-1, EB-2 ETC. DENOTE NEW REPLACEMENT EXPANSION BEARINGS AND FB-1, FB-2 ETC. DENOTE NEW REPLACEMENT FIXED BEARINGS. SEE DWG B4s-S-15 FOR DETAILS AND SIZES OF NEW REPLACEMENT FABREEKA BEARING PADS.
2. DM2, DM3 AND DM4 DENOTE EXISTING END DIAPHRAGMS. SEE DWG B4s-S-14 FOR DETAILS.
3. EXISTING INTERMEDIATE DIAPHRAGMS ARE NOT SHOWN.
4. GL 1575, GL 1592, GR 1575, GR 1592 ETC. ARE EXISTING TRACK GIRDERS.

AS-BUILT

I certify that this drawing accurately depicts the work as constructed.
Signature 1/8/98
 President Date
 GUARINO CORPORATION

CONTRACT NO.
7172H

DESIGNED	J. PATEL	5/93
DRAWN	<i>Signature</i>	5/93
CHECKED	<i>Signature</i>	10/93
APPROVED	<i>Signature</i>	

NUMBER	DESCRIPTION

DATE	BY	DESCRIPTION
2-28-94	O.H.	REVISED PAD SPEC. & SURVEY
11-25-97	C.P.G.	AS BUILT INFORMATION
11-25-97	C.P.G.	AS BUILT INFORMATION
11-25-97	C.P.G.	AS BUILT INFORMATION

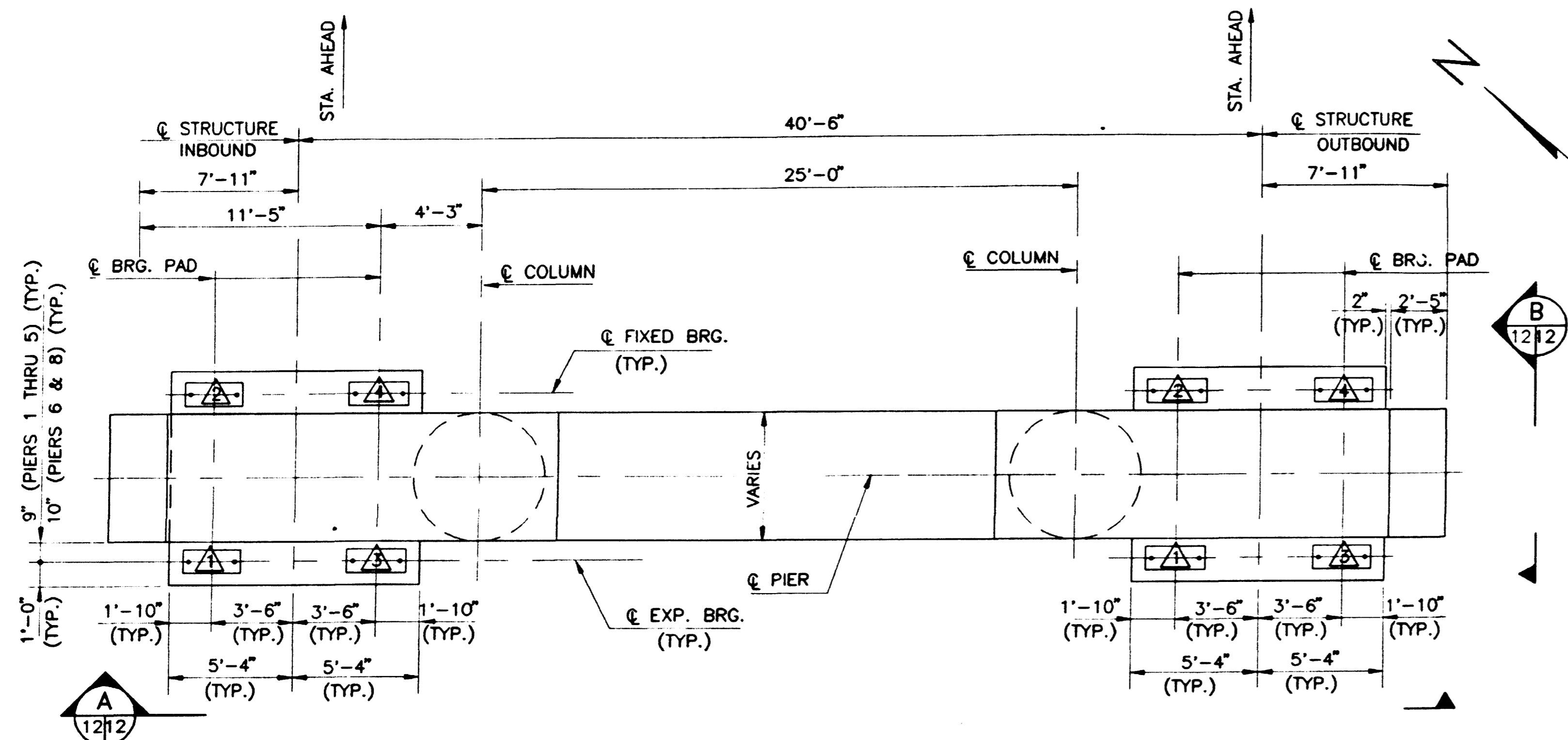
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

PARSONS DE LEUW, INC.
SECTION DESIGNER

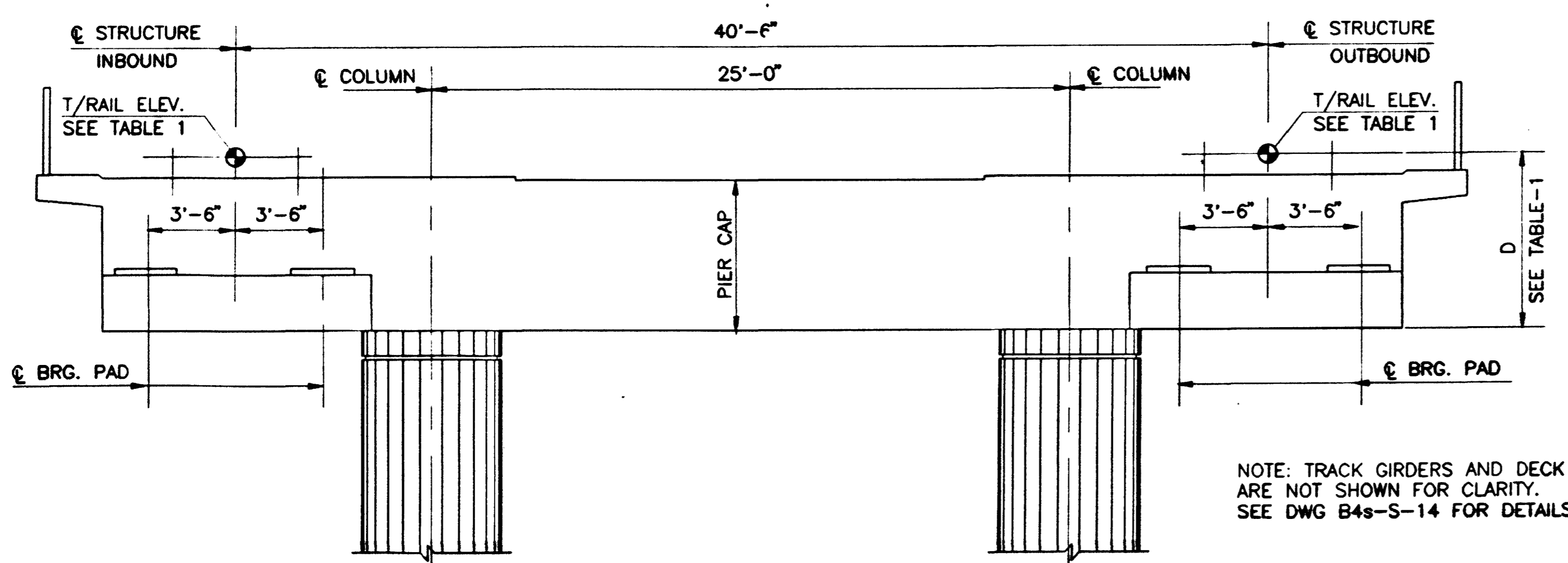
SUBMITTED BY *Signature*

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
T.G. BEARING REPAIR: PLANS, NOTES & PROCEDURE

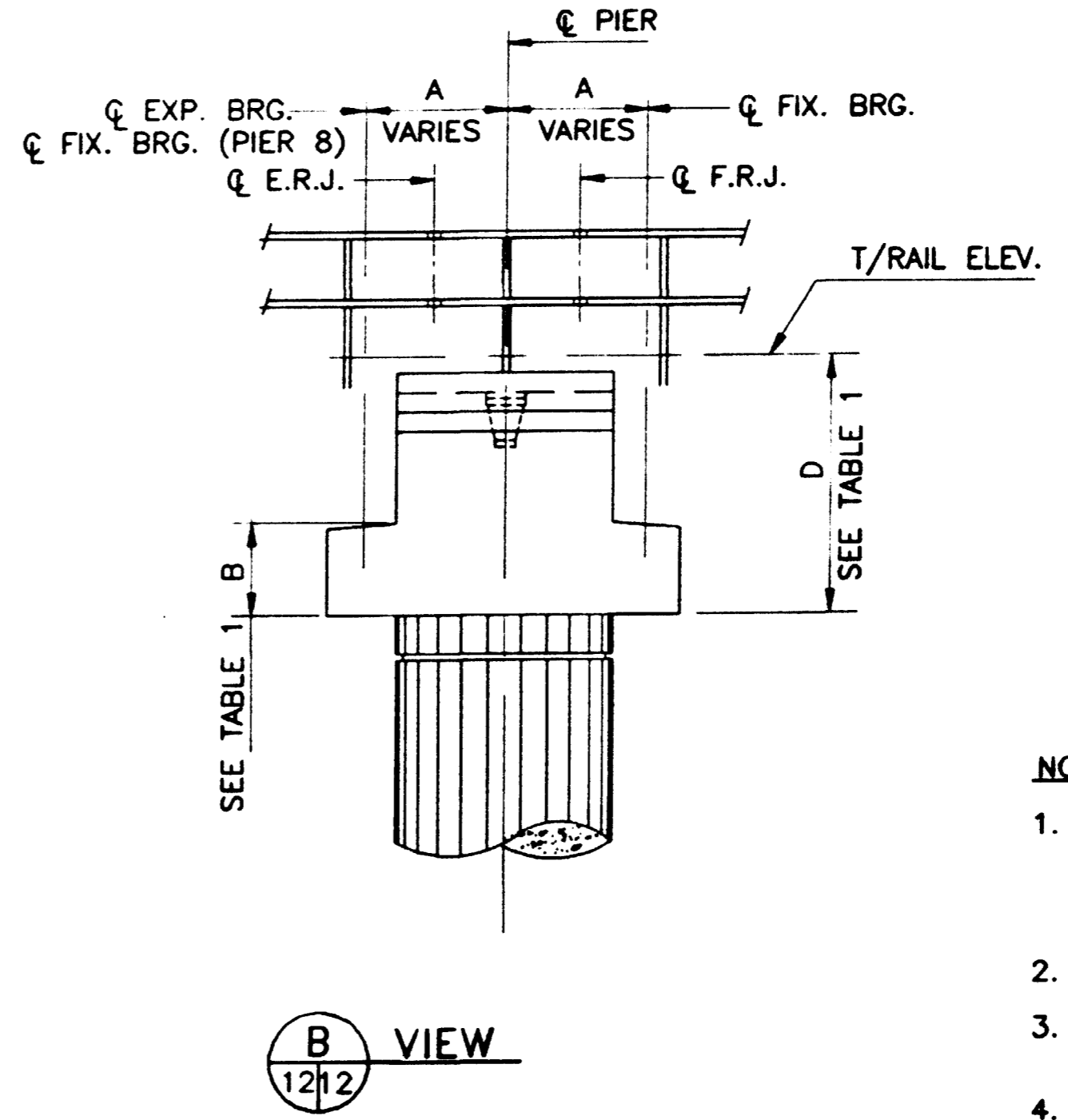
SCALE: AS NOTED
DRAWING NO. B4s-S-11
M898-20



PLAN OF EXIST. PIER
(PIERS 1 THRU 6 AND 8)



ELEVATION A



ELEVATION B

TABLE -1
PIERS 1 THROUGH 8: EXISTING ELEVATIONS AND DIMENSIONS

PIER	TRACK		T/EXIST. PAD ELEVATIONS (SEE NOTE 1)				DIMENSIONS			
	NO.	T/RAIL ELEV.	PAD Δ ELEV.	PAD Δ ELEV.	PAD Δ ELEV.	PAD Δ ELEV.	A	B	D	
① B1587	O.B.	1	142.03	138.32	138.36	138.32	138.36	3'-3"	1'-9"	5'-6"
	I.B.	2	142.03	138.32	138.36	138.32	138.36	3'-3"	1'-9"	5'-6"
② B1596	O.B.	1	142.34	138.63	138.67	138.63	138.67	3'-3"	1'-9"	5'-6"
	I.B.	2	142.34	138.63	138.67	138.63	138.67	3'-3"	1'-9"	5'-6"
③ B1605	O.B.	1	142.66	138.95	138.99	138.95	138.99	3'-3"	1'-9"	5'-6"
	I.B.	2	142.66	138.95	138.99	138.95	138.99	3'-3"	1'-9"	5'-6"
④ B1614	O.B.	1	142.97	139.26	139.30	139.26	139.30	3'-3"	1'-9"	5'-6"
	I.B.	2	142.97	139.26	139.30	139.26	139.30	3'-3"	1'-9"	5'-6"
⑤ B1623	O.B.	1	143.29	139.58	139.62	139.58	139.62	3'-3"	1'-9"	5'-6"
	I.B.	2	143.29	139.58	139.62	139.58	139.62	3'-3"	1'-9"	5'-6"
⑥ B1632	O.B.	1	143.60	139.22	139.26	139.22	139.26	3'-7"	2'-0"	6'-5"
	I.B.	2	143.60	139.22	139.26	139.22	139.26	3'-7"	2'-0"	6'-5"
⑦ B1643	O.B.	1	143.98	138.19	138.25	138.19	138.27		3'-1 7/8"	9'-1"
	I.B.	2	143.86	138.09	138.09	138.11	138.13		3'-1 7/8"	8'-11 1/2"
⑧ B1650	O.B.	1	144.23	139.88	139.88	139.88	139.88	3'-7"	2'-3 1/4"	6'-8"
	I.B.	2	144.23	139.88	139.88	139.88	139.88	3'-7"	2'-3 1/4"	6'-8"

NOTES:

1. TOP OF RAIL & PAD ELEVATIONS, SHOWN IN TABLE-1, ARE DERIVED FROM AS-BUILT DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ALL NECESSARY EXISTING CONDITIONS & ELEVATIONS BEFORE STARTING THE RETROFIT JOB.
2. SEE DWG B4s-S-13 FOR EXISTING PIER 7.
3. SEE DWG B4s-S-11 FOR STRUCTURAL NOTES AND RETROFIT PROCEDURE.
4. SEE DWG B4s-S-14 TRACK GIRDER JACKING DETAILS.
5. SEE DWG B4s-S-15 FOR NEW BEARING DETAILS.

AS-BUILT

I certify that this drawing accurately depicts the work as constructed

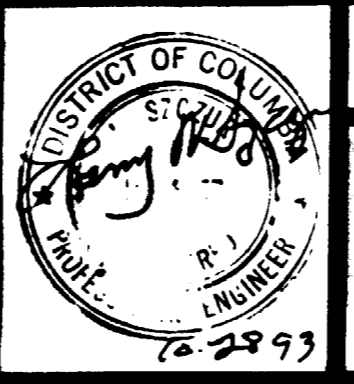
President *[Signature]* 4/8/98
Date
GUARINO CORPORATION

CONTRACT NO.
7T172H

DESIGNED J. PATEL 5/93
DATE
DRAWN M. CHACKO 5/93
DATE
CHECKED S. MANGALAM 10/93
DATE
APPROVED [Signature] DATE

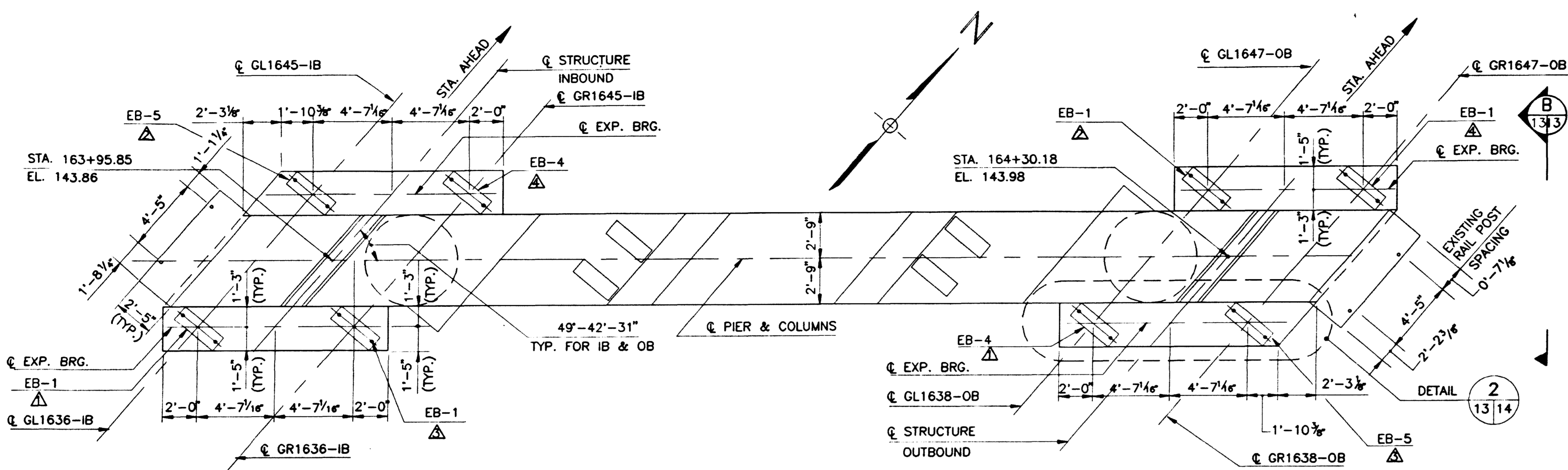
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NUMBER	REFERENCE DRAWINGS DESCRIPTION	DATE	BY	REVISIONS DESCRIPTION

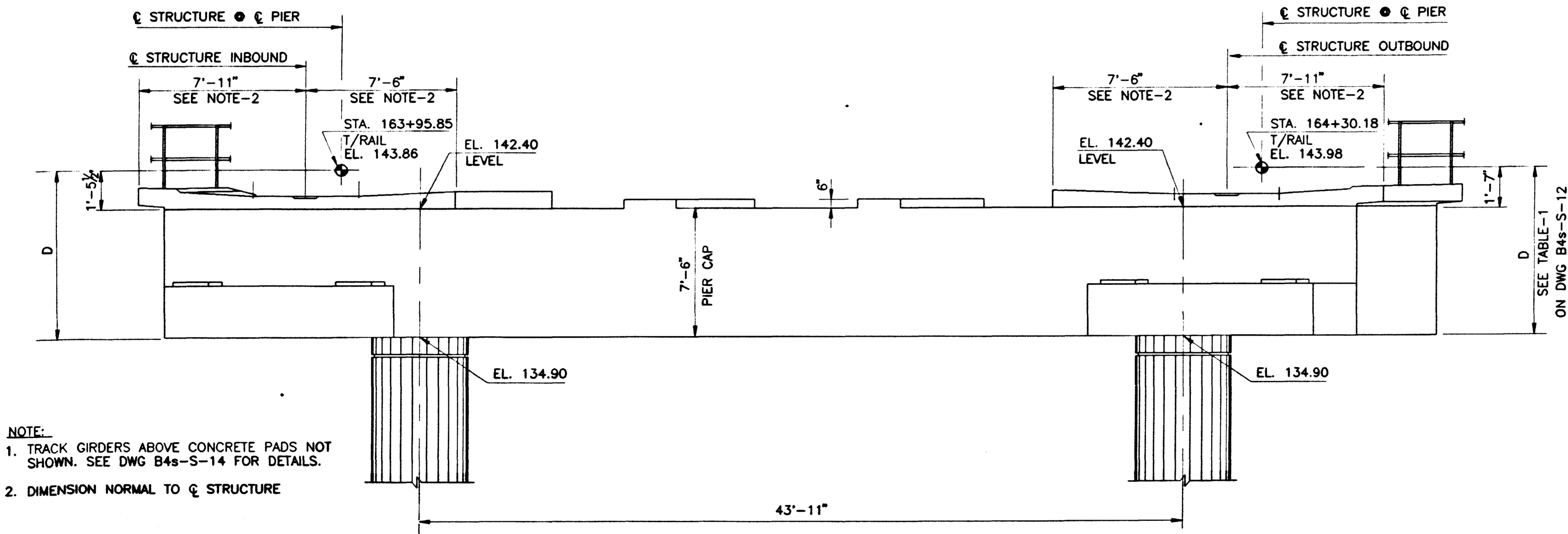


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
PARSONS DE LEUW, INC.
SECTION DESIGNER
SUBMITTED BY [Signature]

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
EXISTING PIERS 1 THRU 6 & 8: B & OB
SCALE 1/4" = 1'-0"
DRAWING NO. B4s-S-12
M898-21

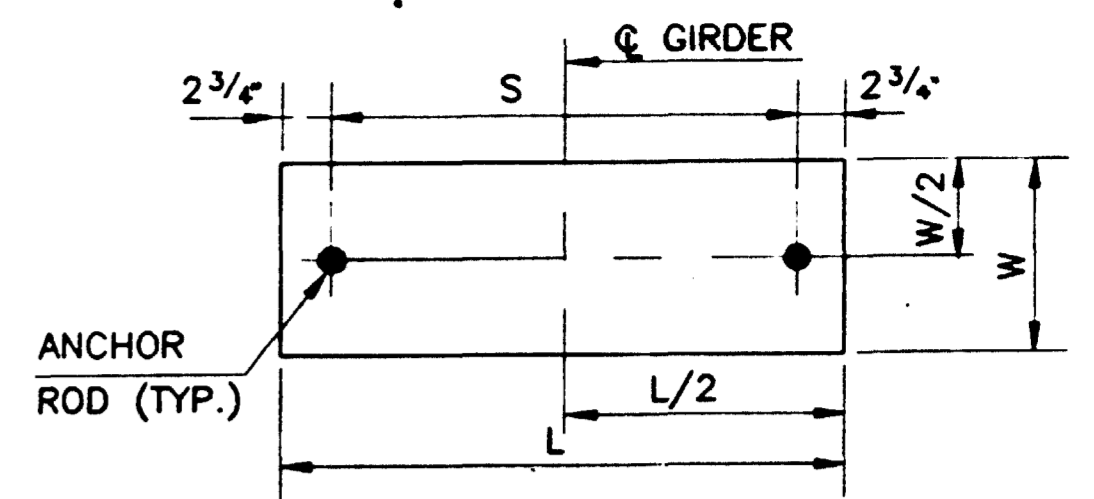


PLAN OF PIER
SCALE: 1/4" = 1'-0"



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

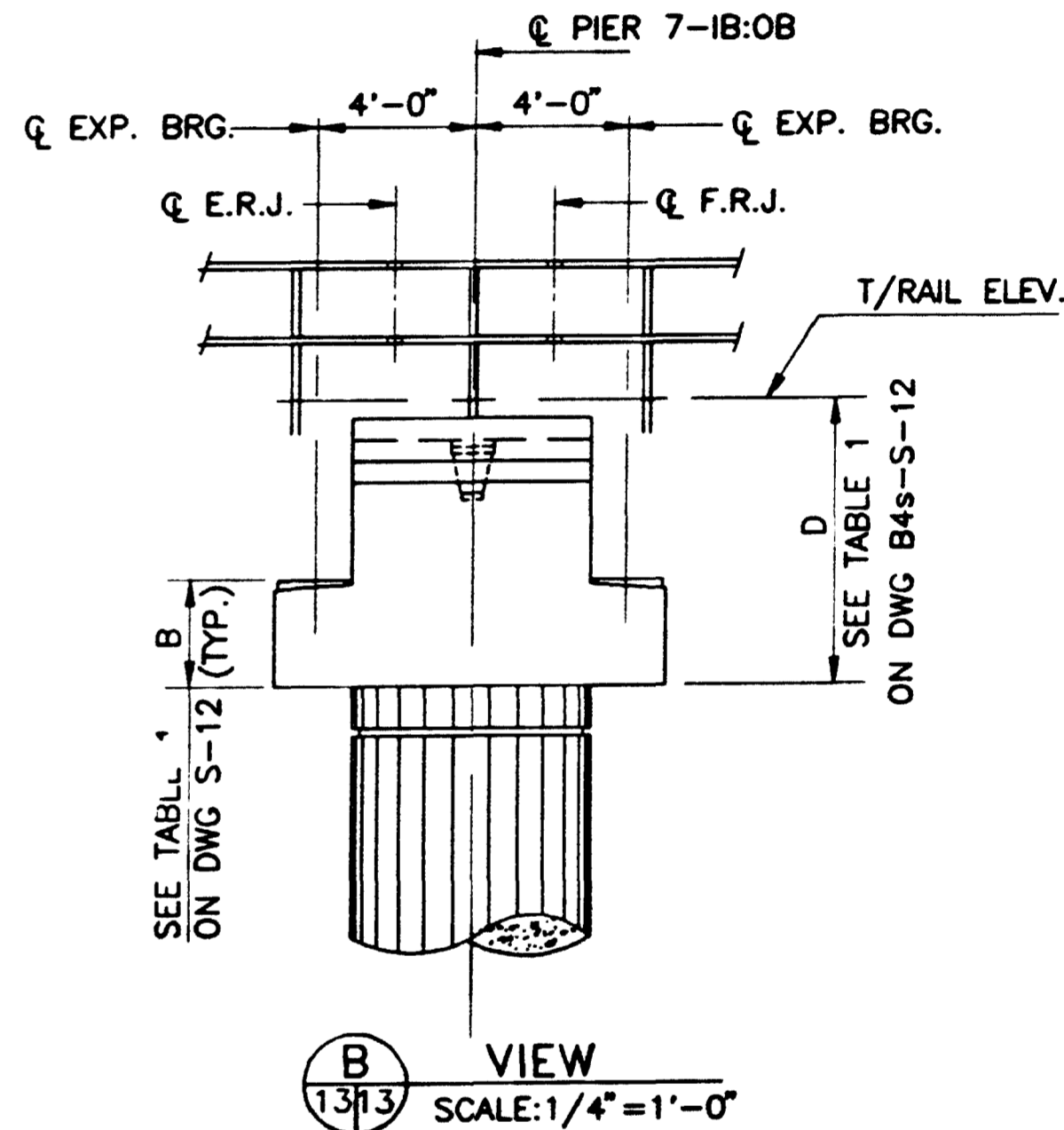
NOTE:
1. TRACK GIRDERS ABOVE CONCRETE PADS NOT SHOWN. SEE DWG B4s-S-14 FOR DETAILS.
2. DIMENSION NORMAL TO C STRUCTURE



EXIST. CONCRETE PAD DETAIL
NOT TO SCALE

EXISTING CONCRETE PAD

TYPE OF BEARING PAD	CONCRETE PAD DIM.		ANCH. ROD	
	L	W	DIA.	S
EB-1	28"	13"	2"	22 1/2"
EB-4	32"	13"	2"	26 1/2"
EB-5	34"	14"	2 1/2"	28 1/2"



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

- NOTES:
- EXISTING PAD NUMBERS ARE INDICATED THUS Δ . SEE TABLE-1 ON DWG B4s-S-12 FOR TOP OF RAIL & BEARING PAD ELEVATIONS.
 - TOP OF RAIL & PAD ELEVATIONS, SHOWN IN TABLE-1 ON DWG B4s-S-12 ARE DERIVED FROM AS-BUILT DRAWINGS. THE CONTRACTOR SHALL FIELD-VERIFY ALL NECESSARY EXISTING CONDITIONS & ELEVATIONS BEFORE STARTING THE RETROFIT JOB.
 - SEE DWG B4s-S-11 FOR STRUCTURAL NOTES AND RETROFIT PROCEDURE.
 - SEE DWG B4s-S-14 FOR TRACK GIRDER JACKING DETAILS.
 - SEE DWG B4s-S-15 FOR NEW BEARING DETAILS.

AS-BUILT

I certify that this drawing accurately depicts the work as constructed

[Signature] 1/8/98
President Date
GUARINO CORPORATION

CONTRACT NO.
7T172H

DESIGNED J.PATEL 5/93
DATE
DRAWN M.CHACKO 5/93
DATE
CHECKED S. MANNING 10/93
DATE
APPROVED BRSMD 10/93
DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
B4-S-266	PLAN-PIER B1640-IB: 1643-OB		

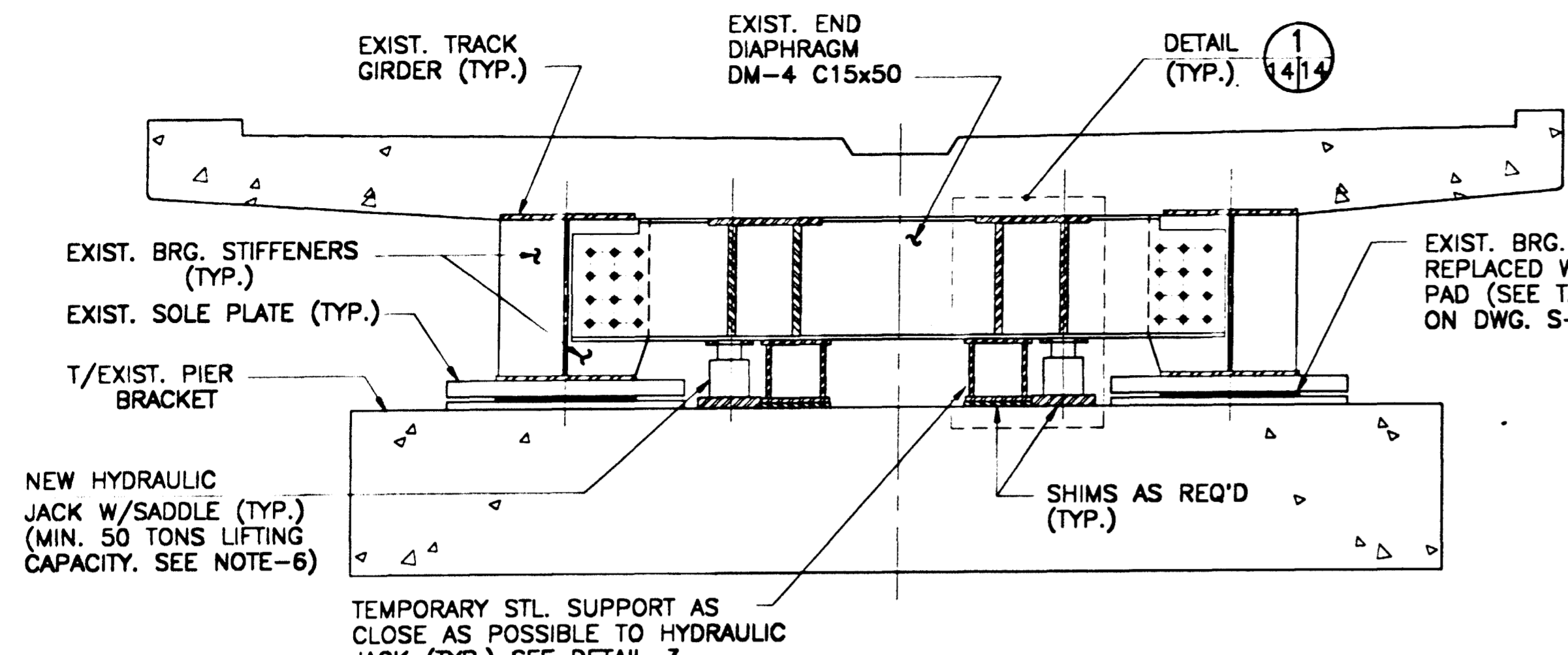
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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SECTION DESIGNER

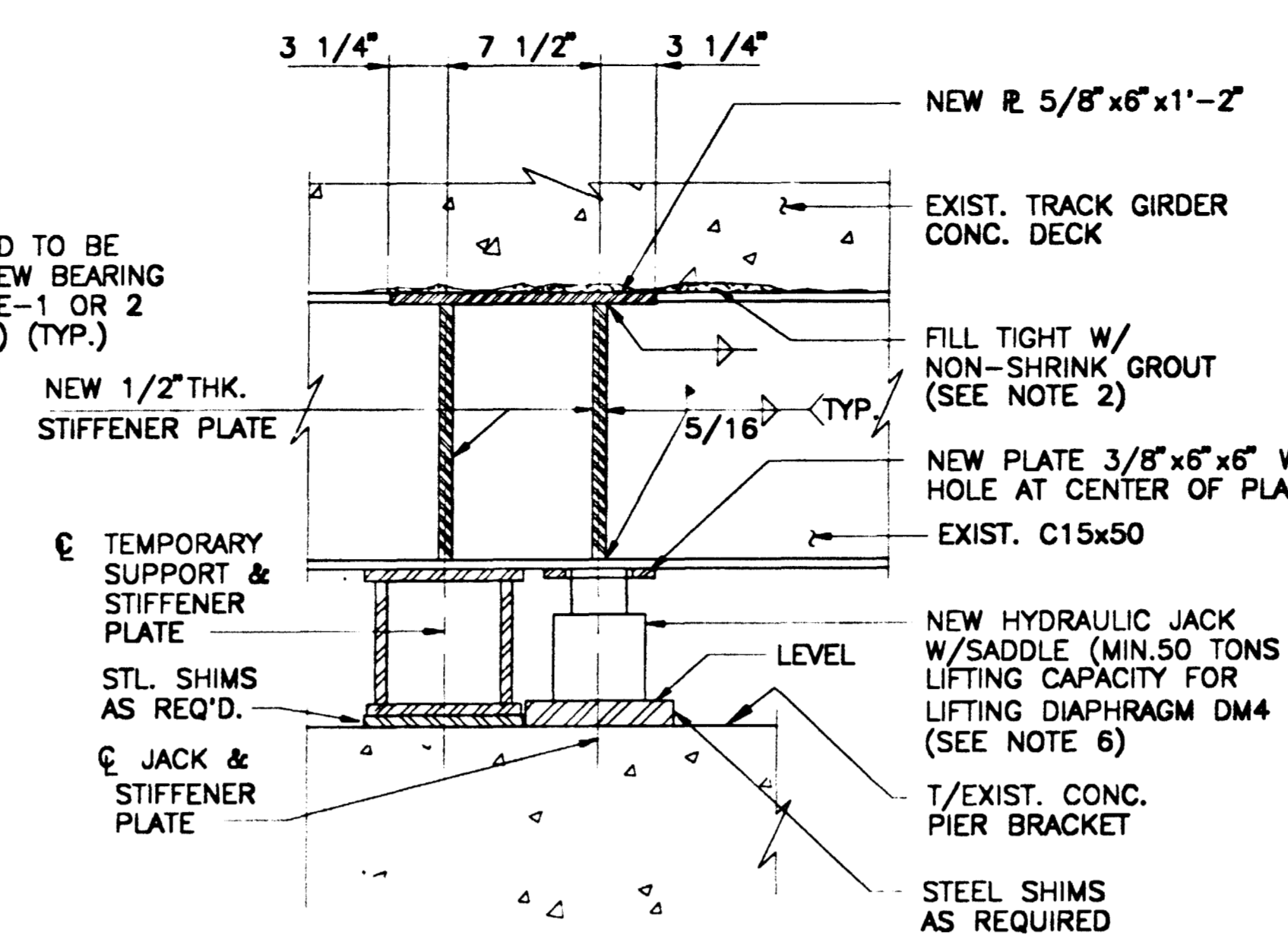
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RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
EXISTING PIER 7

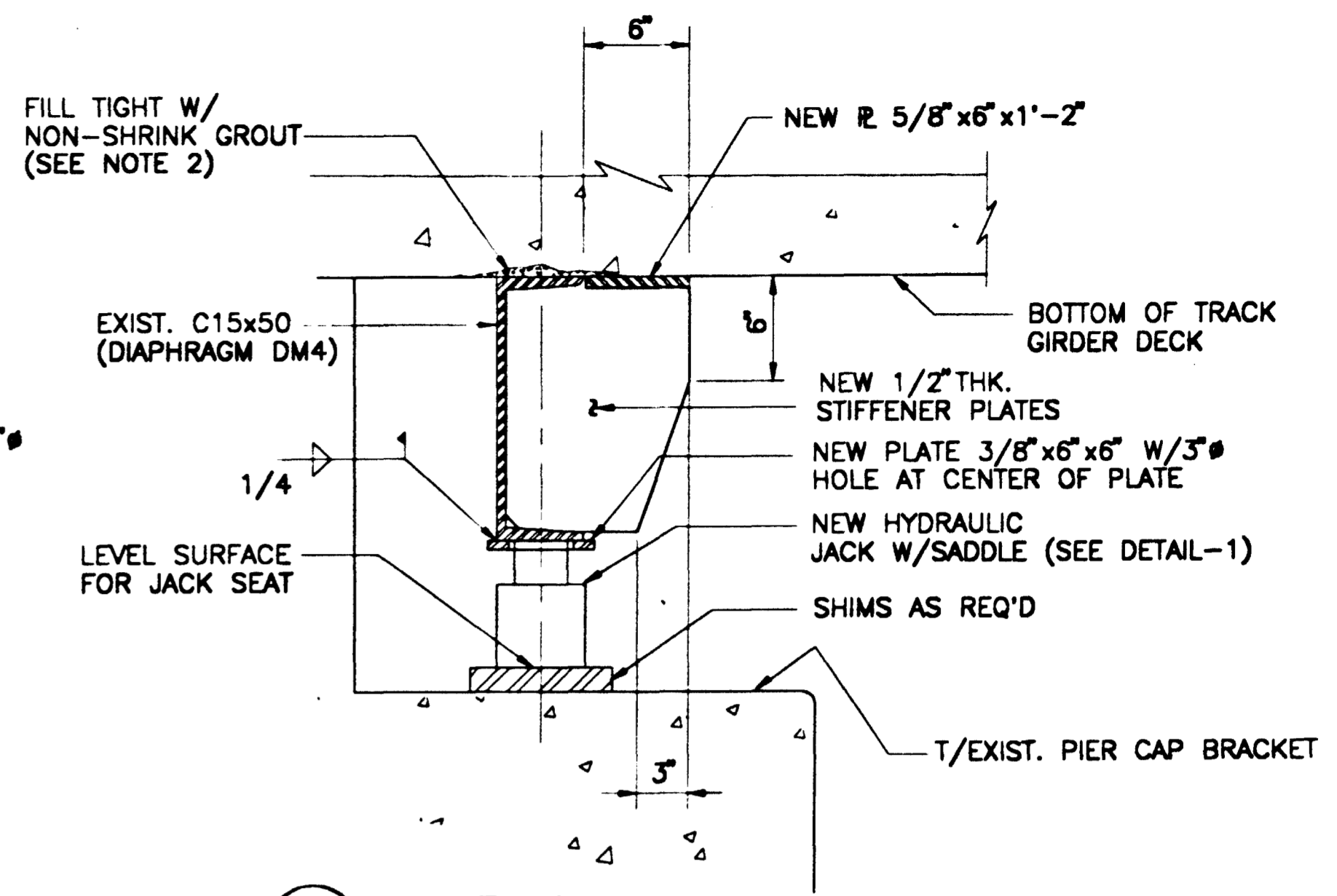
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DRAWING NO. B4s-S-13
M898-22



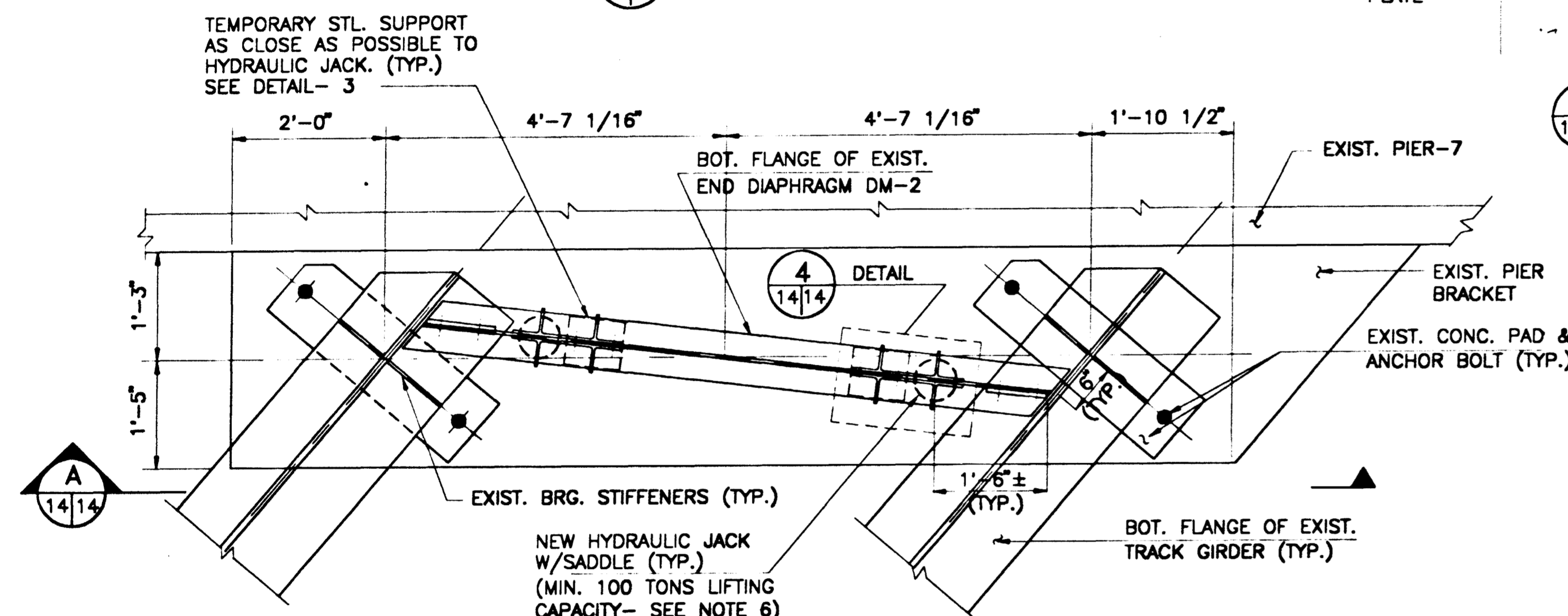
A VIEW
SCALE: 3/4"=1'-0"



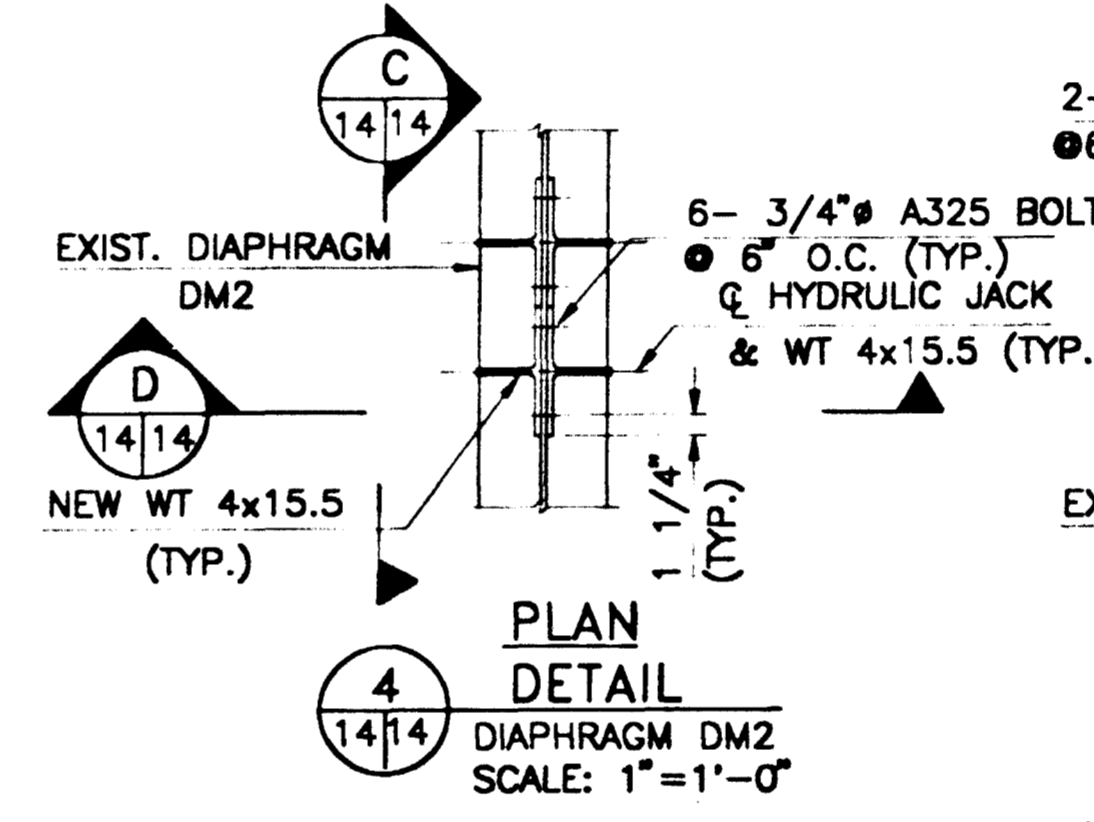
1 TYP. DETAIL
SCALE: 1 1/2"=1'-0"



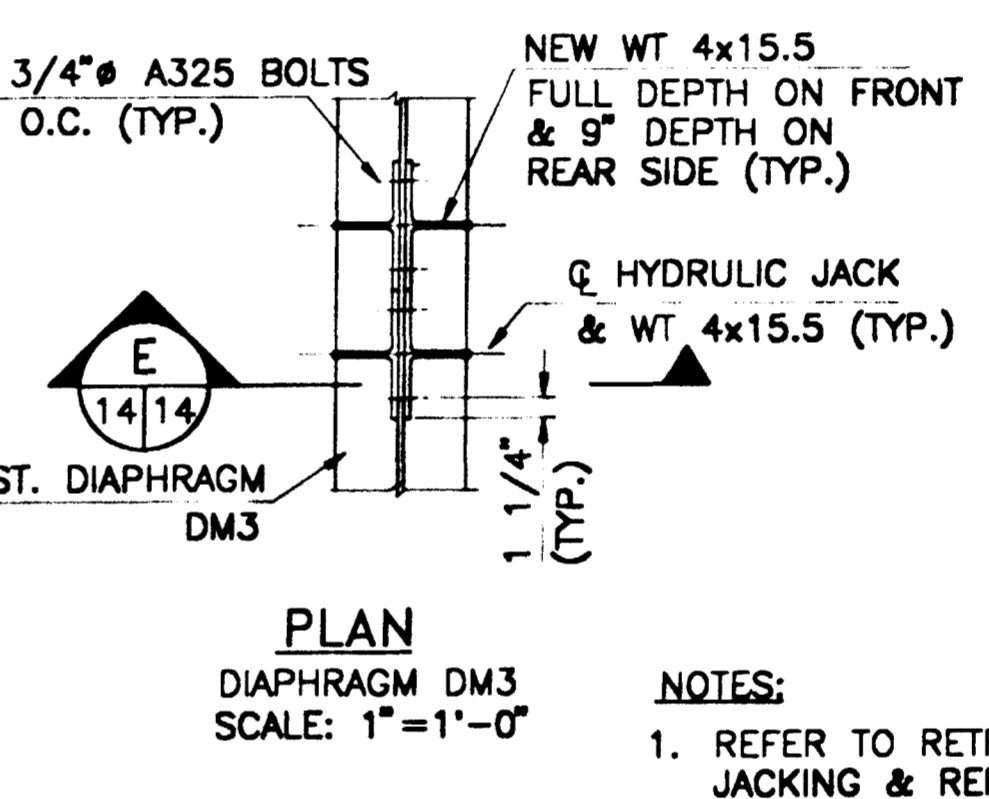
B SECTION
SCALE: 1 1/2"=1'-0"



2 DETAIL
SCALE: 3/4"=1'-0"

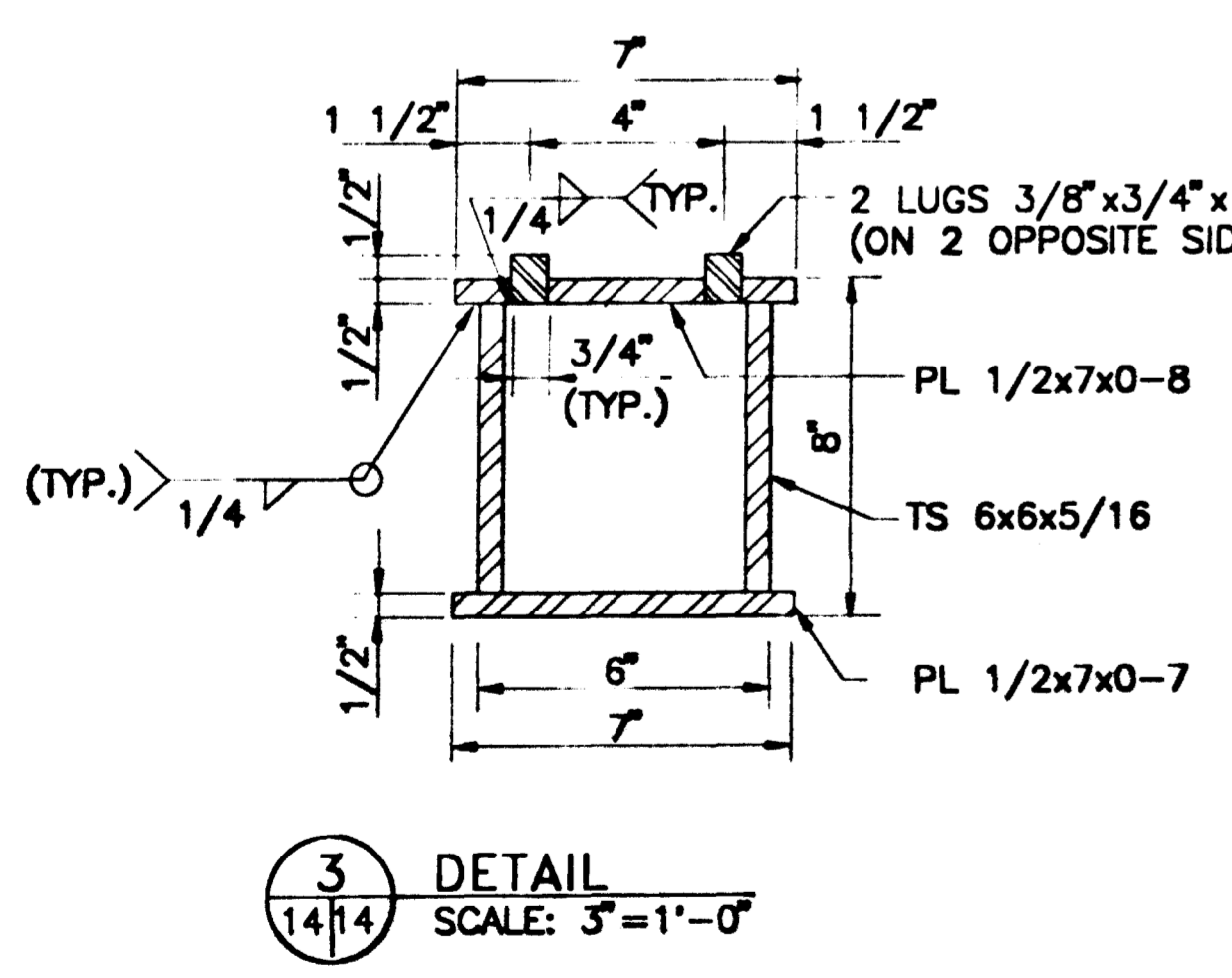


4 DETAIL
DIAPHRAGM DM2
SCALE: 1"=1'-0"

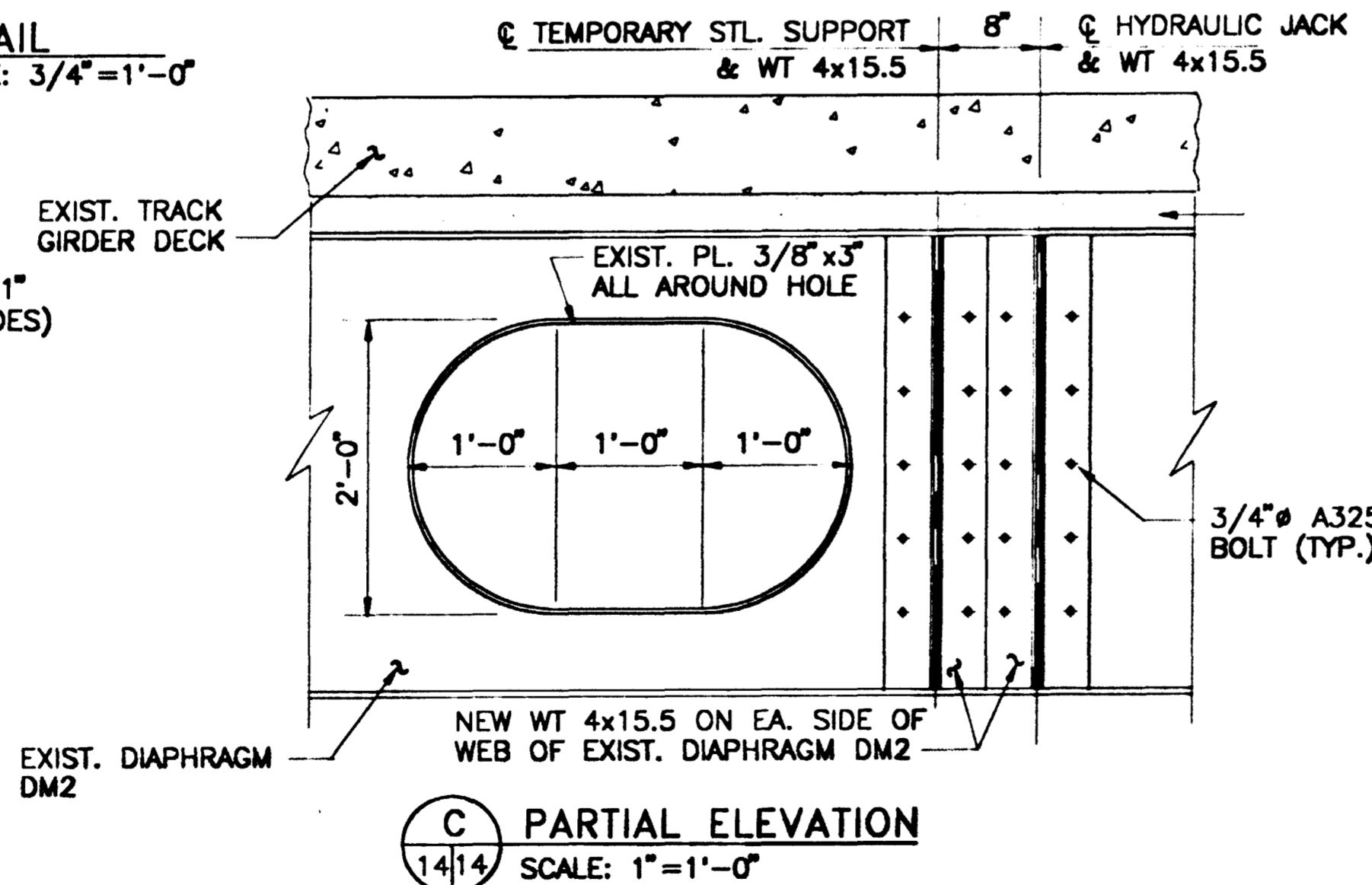


PLAN
DIAPHRAGM DM3
SCALE: 1"=1'-0"

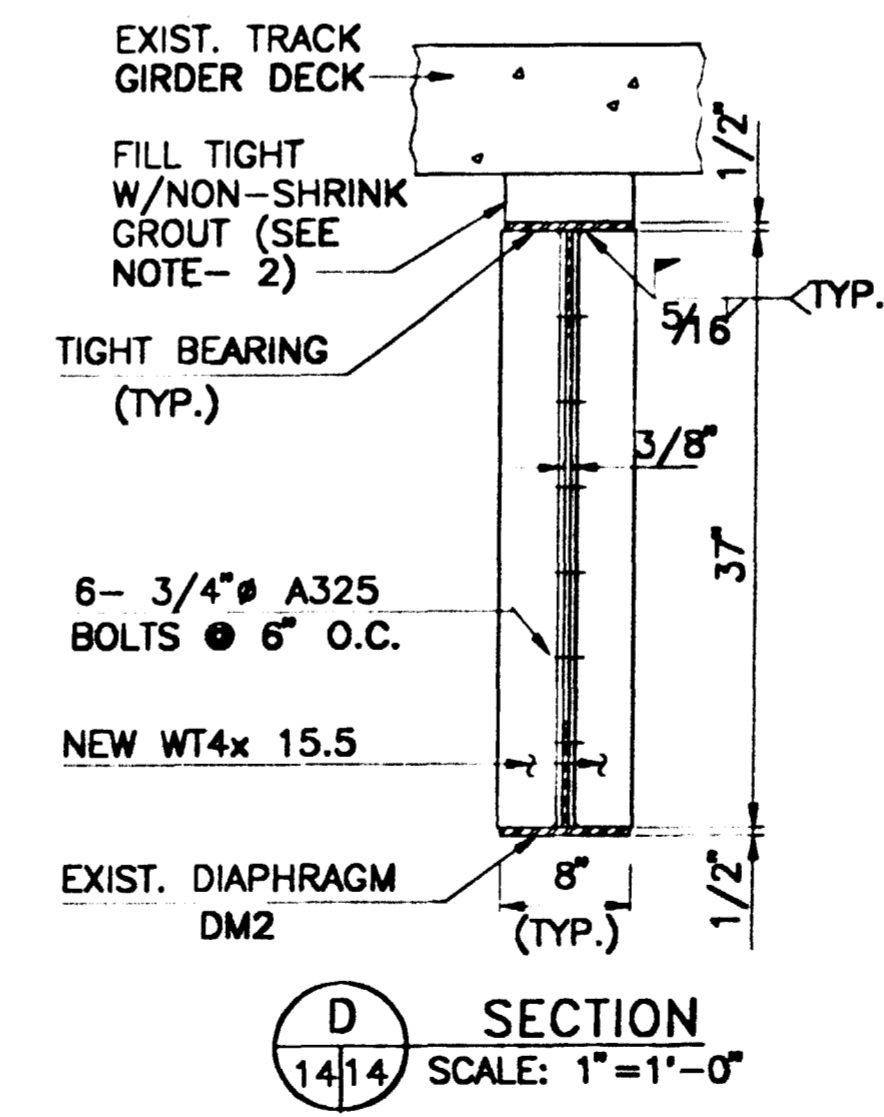
NOTE:
TOP FLANGES OF EXIST. TRACK GIRDERS & DIAPHRAGM ARE NOT SHOWN.



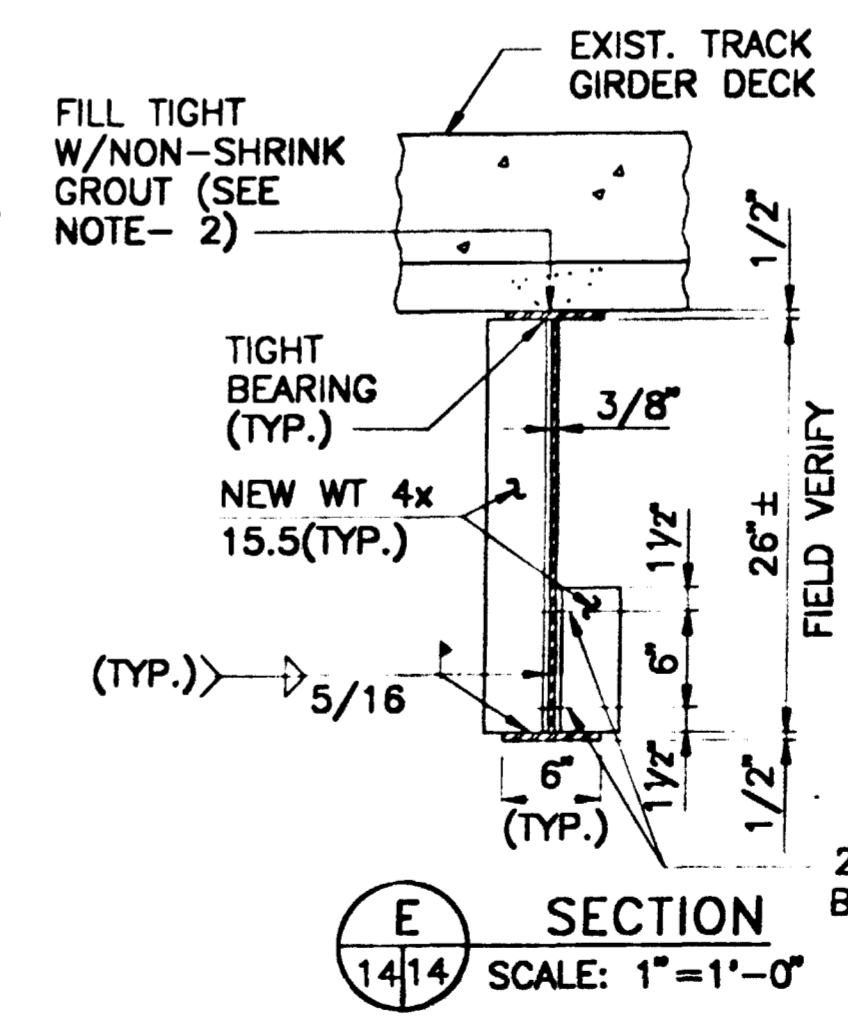
3 DETAIL
SCALE: 3"=1'-0"



C PARTIAL ELEVATION
SCALE: 1"=1'-0"



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



E SECTION
SCALE: 1"=1'-0"

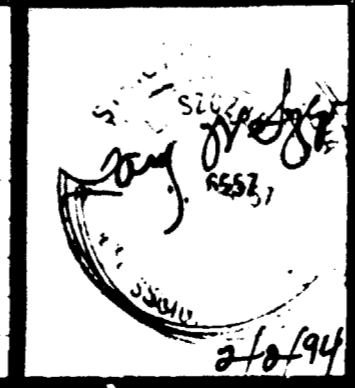
AS-BUILT
I certify that this drawing accurately depicts the work as constructed.
AC Guarino 1/8/88
President Date
GUARINO CORPORATION

- NOTES:**
- REFER TO RETROFIT PROCEDURE ON DWG. S-11 FOR JACKING & REPLACING THE EXISTING BEARING PADS.
 - USE GROUT FX742 MANUFACTURED BY FOX INDUSTRIES INC. OR EQUAL FOR STRUCTURAL GROUTING, IF REQUIRED, BETWEEN TOP OF END DIAPHRAGM AND BOTTOM OF TRACK GIRDER DECK.
 - DIAPHRAGM DM4 SHALL BE STIFFENED FOR JACKING UP PER DETAIL 1 AND SECTION-B. DIAPHRAGMS DM2 & DM3 SHALL BE STIFFENED FOR JACKING UP PER SECTIONS C,D AND E.
 - SEE DWG. S-11 FOR LOCATIONS OF DIAPHRAGMS.
 - INSTALL HYDRAULIC JACKS UNDER THE BOTTOM FLANGE OF DIAPHRAGM AS CLOSE TO THE ENDS AS POSSIBLE.
 - USE LOW HEIGHT ENERPAC HYDRAULIC JACKS W/SADDLES WITH MIN. 50 TONS CYLINDER CAPACITY FOR DIAPHRAGM DM4 & 100 TONS CYLINDER CAPACITY FOR DIAPHRAGM DM2 & DM3. 100 TON JACKS W/SADDLES MAY BE USED FOR ALL DIAPHRAGMS IF CLEARANCES ARE VERIFIED IN FIELD.

DESIGNED	J. PATEL	6/93
DRAWN	D. TYLER/CHACKO	6/93
CHECKED	S. MANGALURTI	10/93
APPROVED	M. SHARMA	DATE

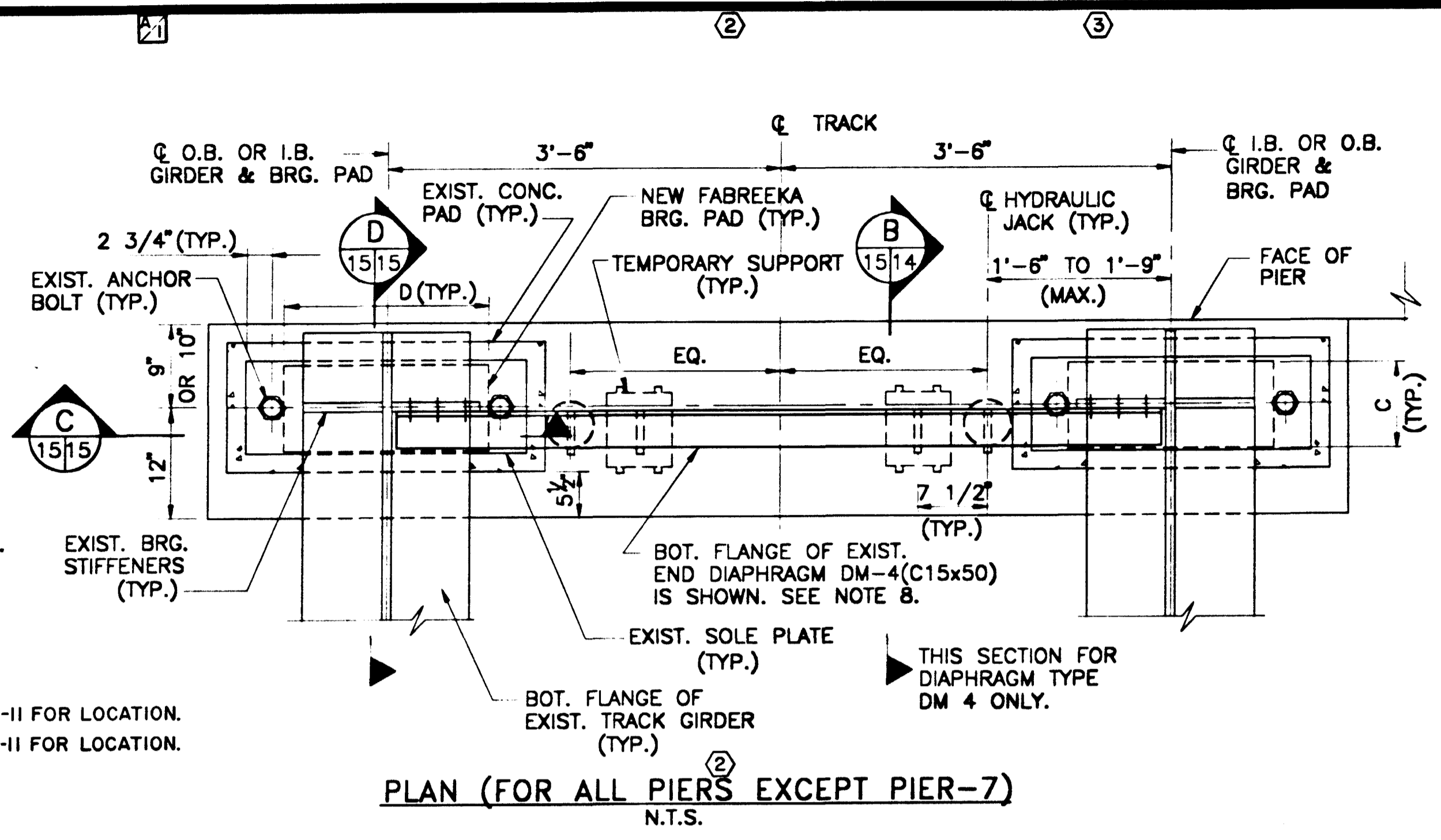
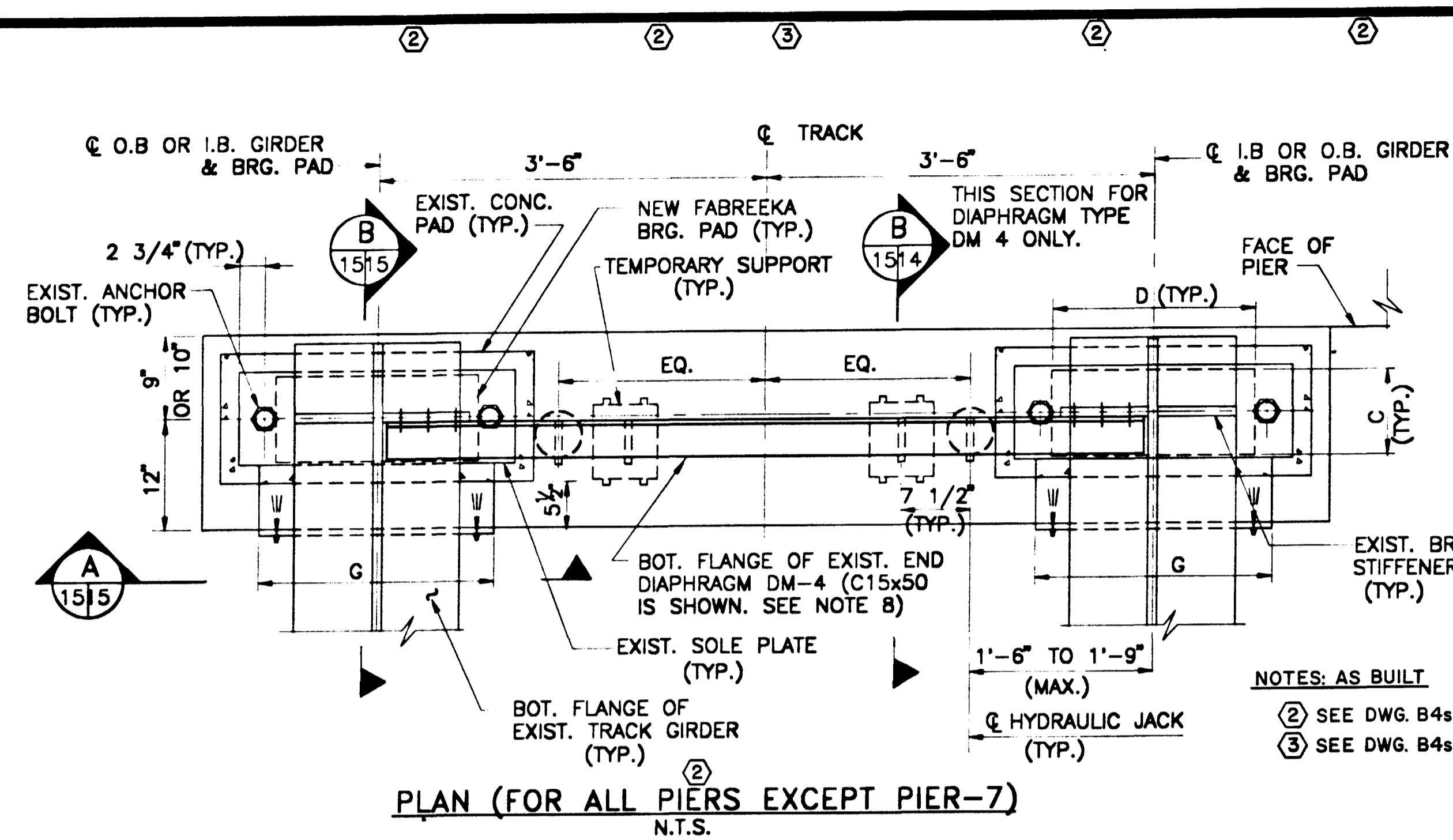
NUMBER	DESCRIPTION

DATE	BY	REVISIONS DESCRIPTION

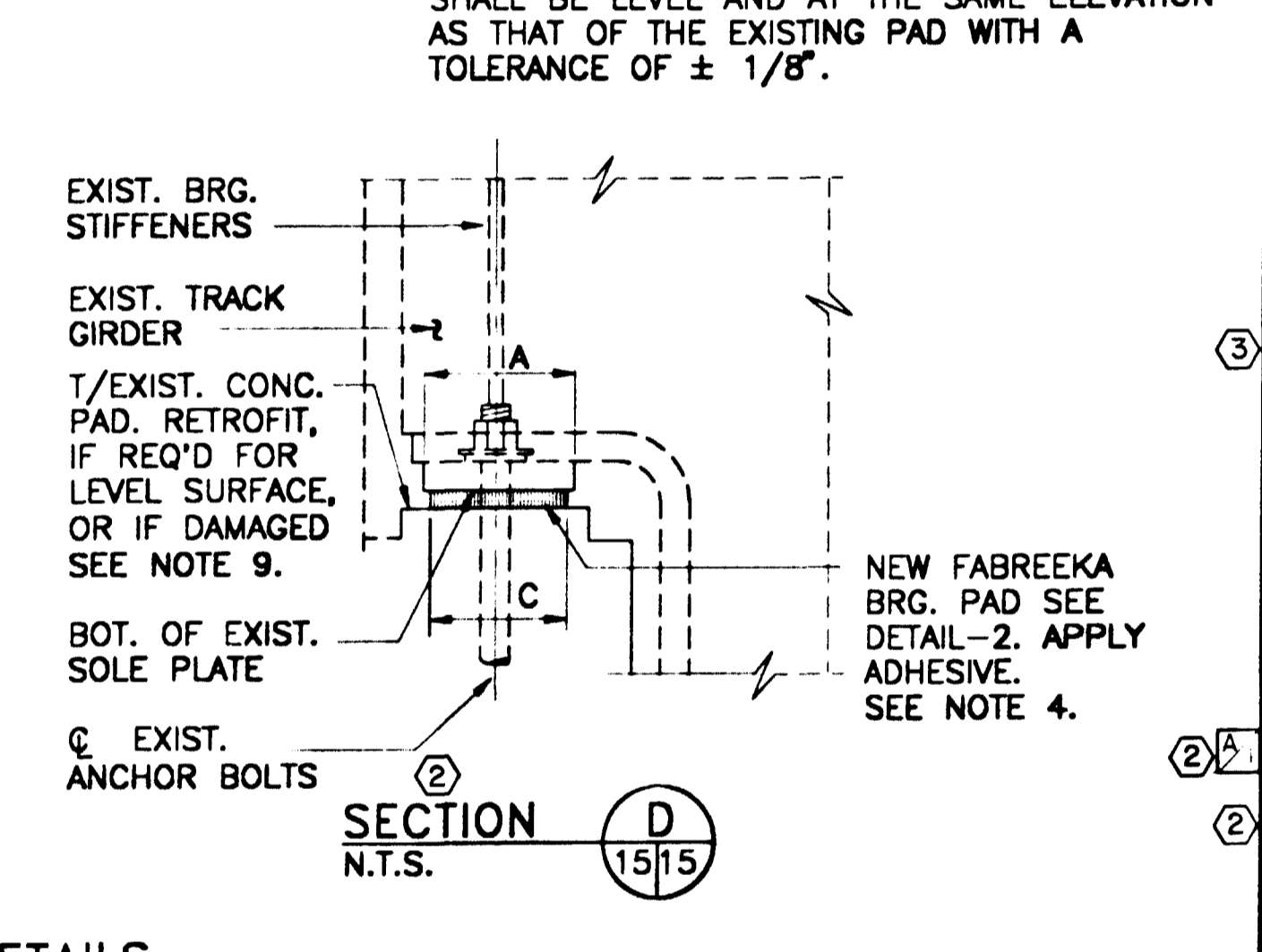
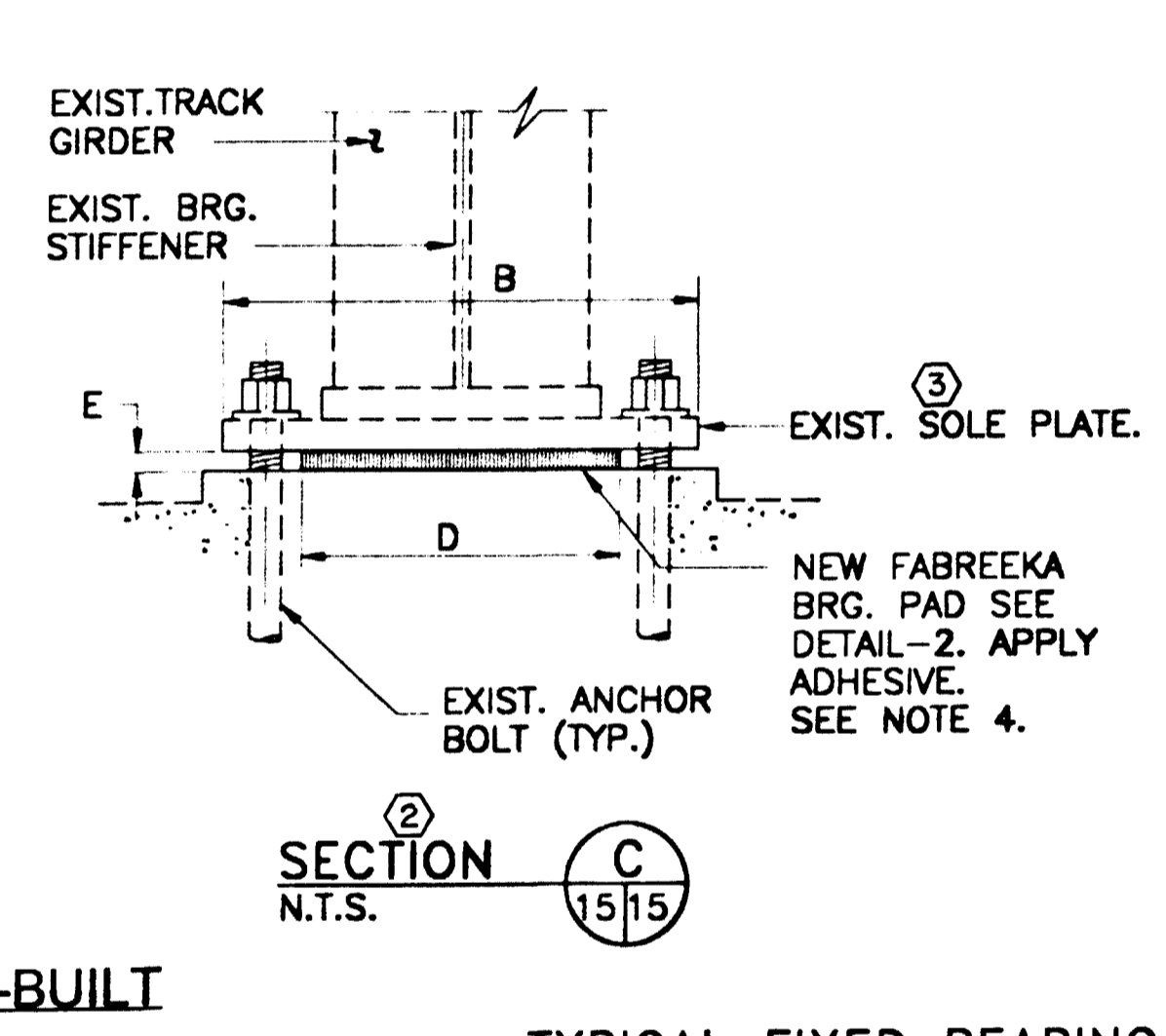
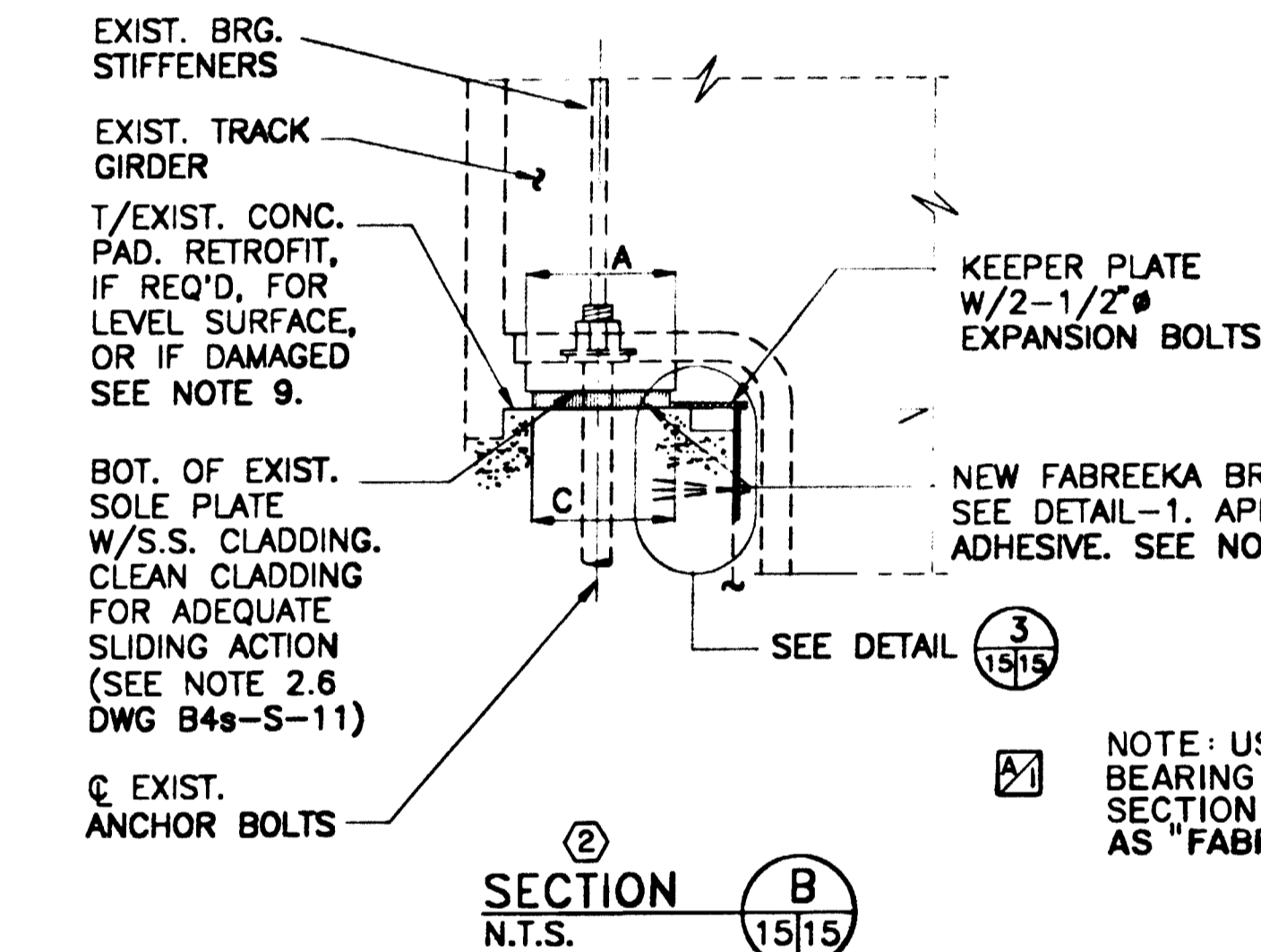
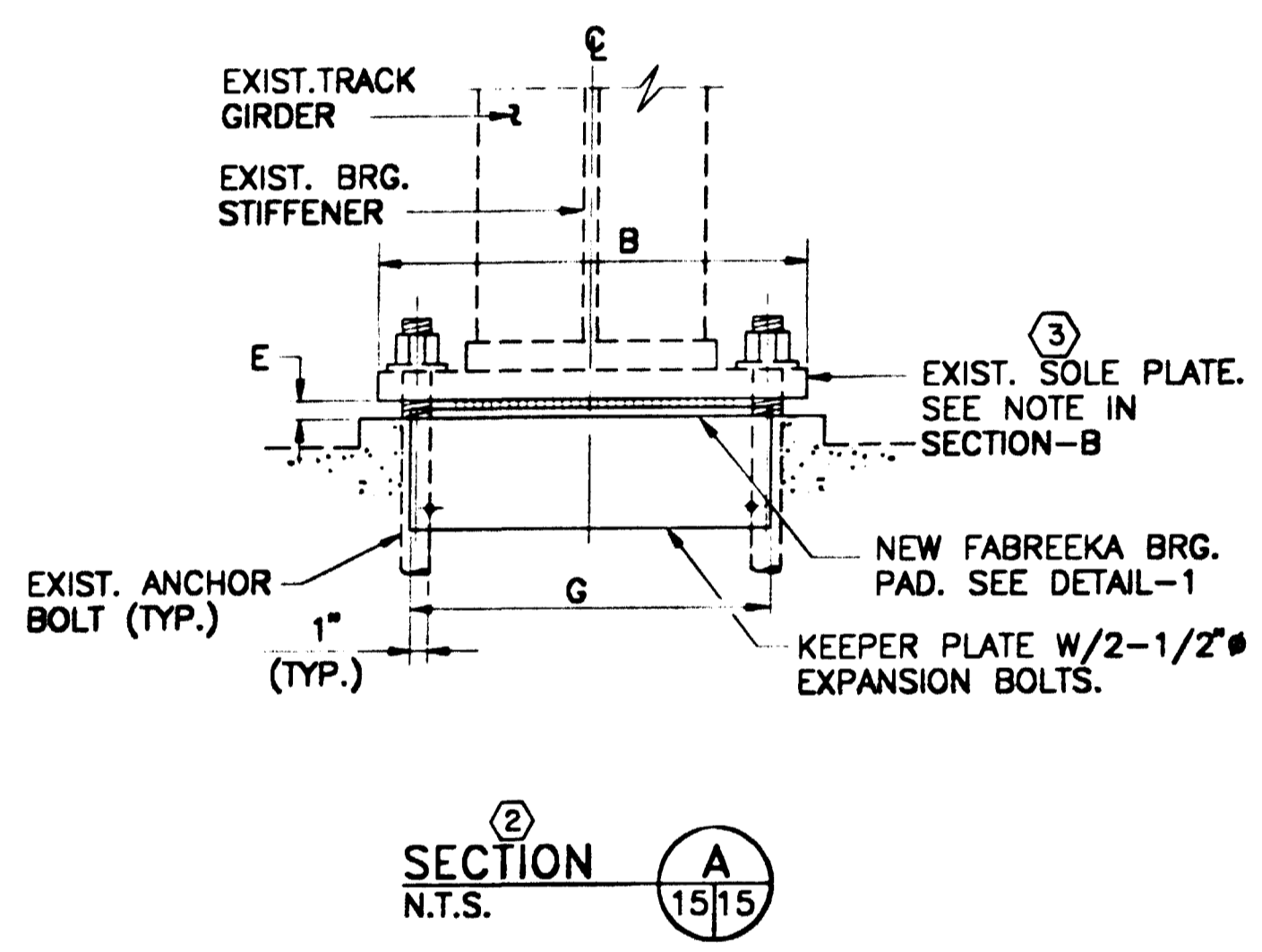


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DE LEUW, CATHER & COMPANY
SECTION DESIGNER
SUBMITTED BY *J. Patel*
APPROVED _____
DIRECTOR OF ENGINEERING AND ARCHITECTURE

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
TRACK GIRDER BEARING JACKING & NOTES
SCALE AS NOTED
DRAWING NO. B4s-S-14
M898-23



- NOTES:
- SEE DWG B4s-S-11 FOR BEARING PAD LOCATIONS, GENERAL NOTES AND RETROFIT PROCEDURE.
 - SEE DETAIL-1 FOR TYPICAL BEARING PAD AT EXPANSION BEARING END. USE TABLE-1 FOR BEARING PAD DIMENSIONS.
 - SEE DETAIL-2 FOR TYPICAL BEARING PAD AT FIXED BEARING END. USE TABLE-2 FOR BEARING PAD DIMENSIONS.
 - APPLY ADHESIVE FX-742, MANUFACTURED BY FOX INDUSTRIES, OR EQUAL PER MANUFACTURER'S SPECIFICATIONS OVER THE CONCRETE CONTACT SURFACE. TAKE PRECAUTIONS TO AVOID LEAVING EPOXY ON SURFACES NOT TO BE BONDED. SEE NOTE 1.5 IN DWG B4s-S-5.
 - DIMENSIONS OF EXISTING ITEMS ARE DERIVED FROM AS-BUILT DWGS. THE CONTRACTOR MUST VERIFY ALL THE NECESSARY EXISTING DIMENSIONS.
 - SEE DWG B4s-S-14 FOR TRACK GIRDER JACKING DETAILS.
 - SEE DWGS B4s-S-12 AND B4s-S-13 FOR DIMENSIONS AND DETAILS OF EXISTING PIERS-1 THROUGH 8.
 - DIAPHRAGM TYPE DM 4 IS SHOWN HERE. DIAPHRAGMS TYPE DM 2 AND DM 3 ARE PLATE GIRDERS AS SHOWN ON DWG B4s-S-14.
 - THE TOP OF THE RETROFITTED CONCRETE PADS SHALL BE LEVEL AND AT THE SAME ELEVATION AS THAT OF THE EXISTING PAD WITH A TOLERANCE OF $\pm 1/8"$.



TYPICAL EXPANSION BEARING DETAILS

AS-BUILT

TYPICAL FIXED BEARING DETAILS

I certify that this drawing accurately depicts the work as constructed
Al Guarino 4/8/98
 President GUARINO CORPORATION Date

TABLE-1

EXPANSION BEARINGS	DIMENSIONS IN INCHES						EXISTING ANCHOR ROD #	TOTAL NUMBER OF BEARINGS REQ'D
	SOLE PLATE		BRG. PAD		KEEPER PLATE			
	A	B	C	D	E	G		
EB-1	11 1/2	28	9	20	1 1/4	25"	2	4
EB-2	11 1/2	30	9	22	1 1/4	25"	2	24
EB-4	11 1/2	32	9	24	1 1/4	27"	2	2
EB-5	12 1/2	34	10	24	1 1/4	27"	2 1/4	2

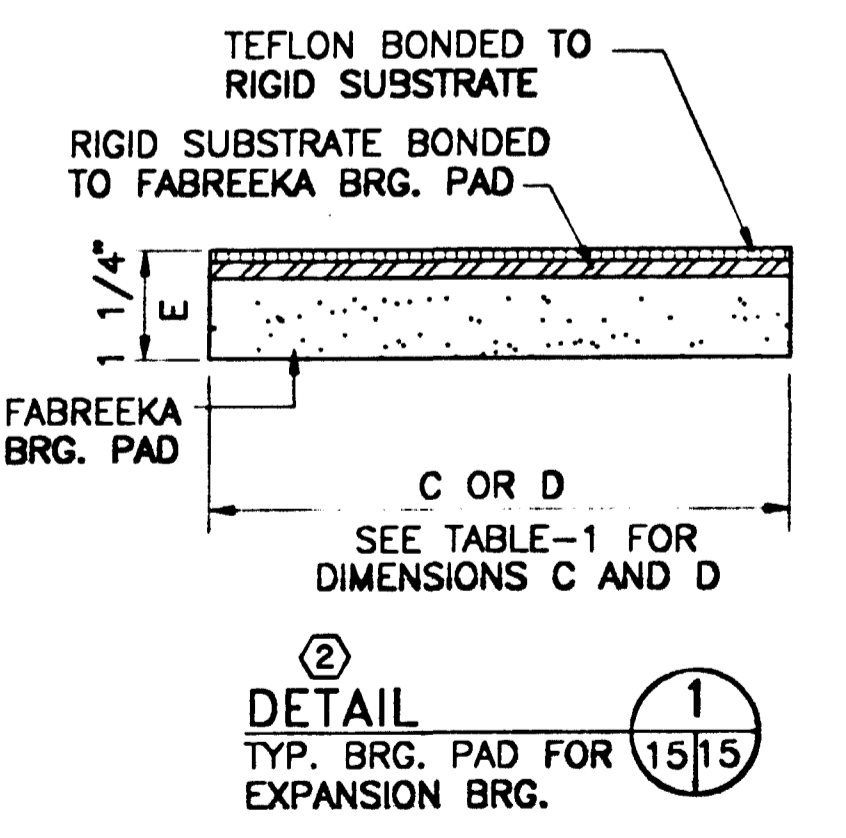
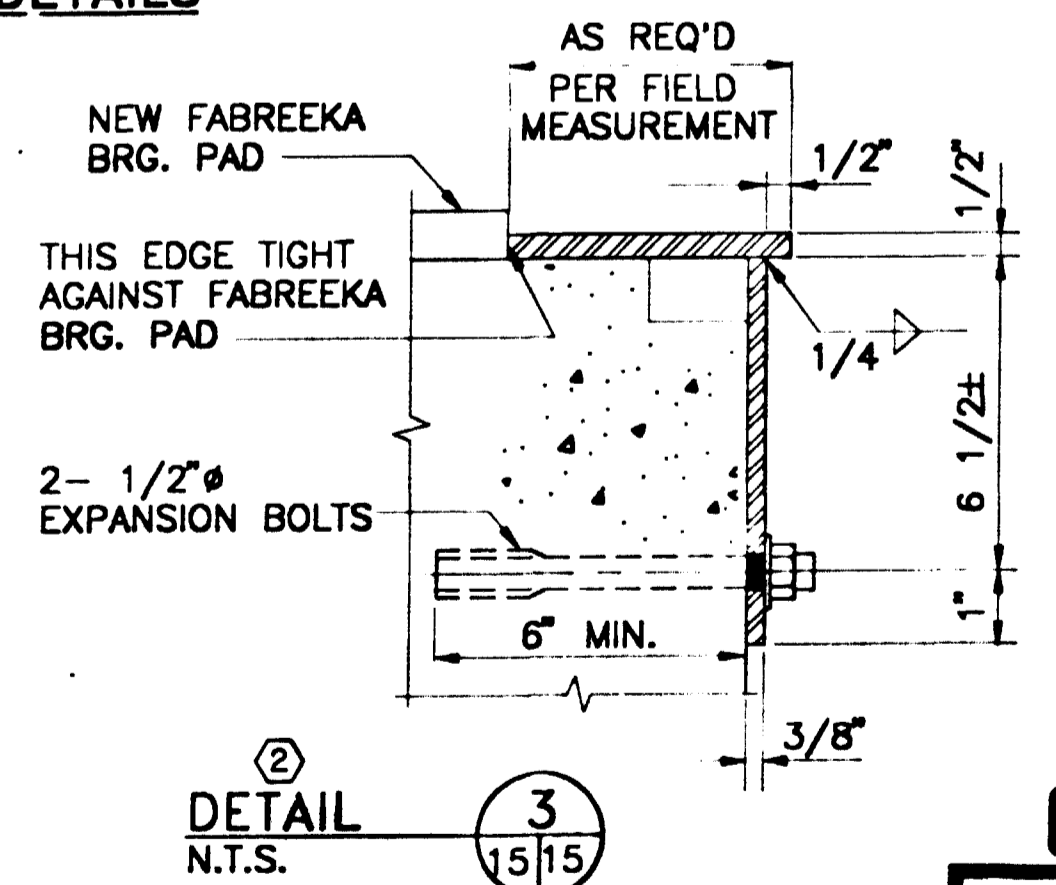
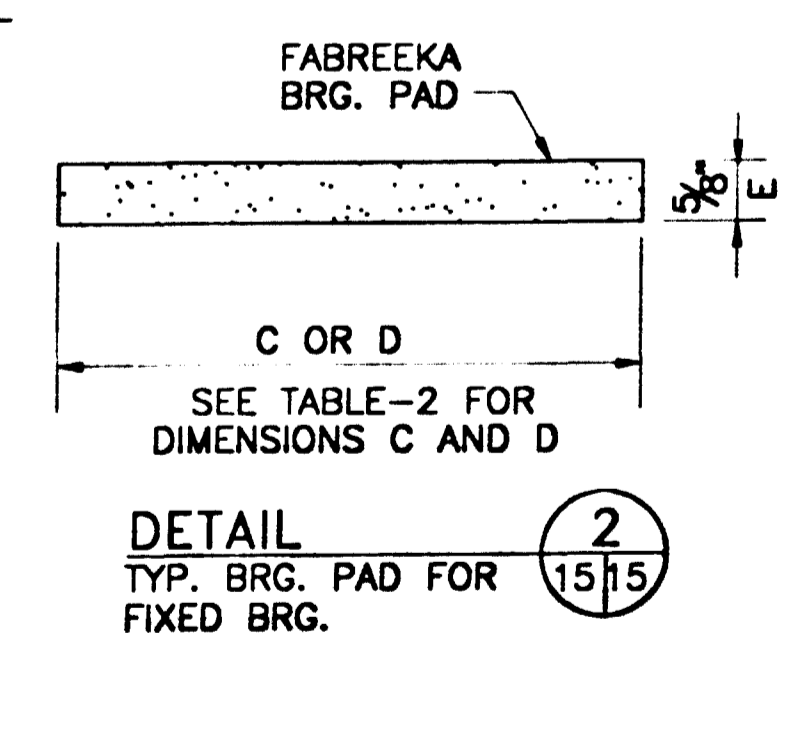


TABLE-2

FIXED BEARINGS	DIMENSIONS IN INCHES					EXISTING ANCHOR ROD #	TOTAL NUMBER OF BEARINGS REQ'D
	SOLE PLATE		BRG. PAD				
	A	B	C	D	E		
FB-1	10	28	9	20	5/8	2	4
FB-2	10	30	9	22	5/8	2	24
FB-4	10	32	9	24	5/8	2	2
FB-5	11	34	10	24	5/8	2 1/4	2



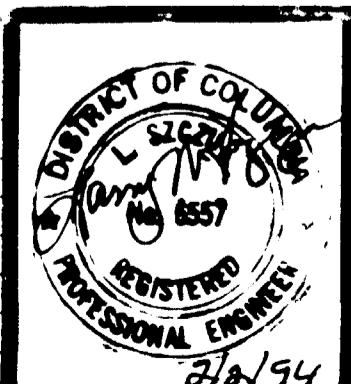
DESIGNED J. PATEL 4/93
 DRAWN BY CHUCKO 4/93
 CHECKED S. MANICHAU 10/93
 APPROVED [Signature] 2/2/94

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

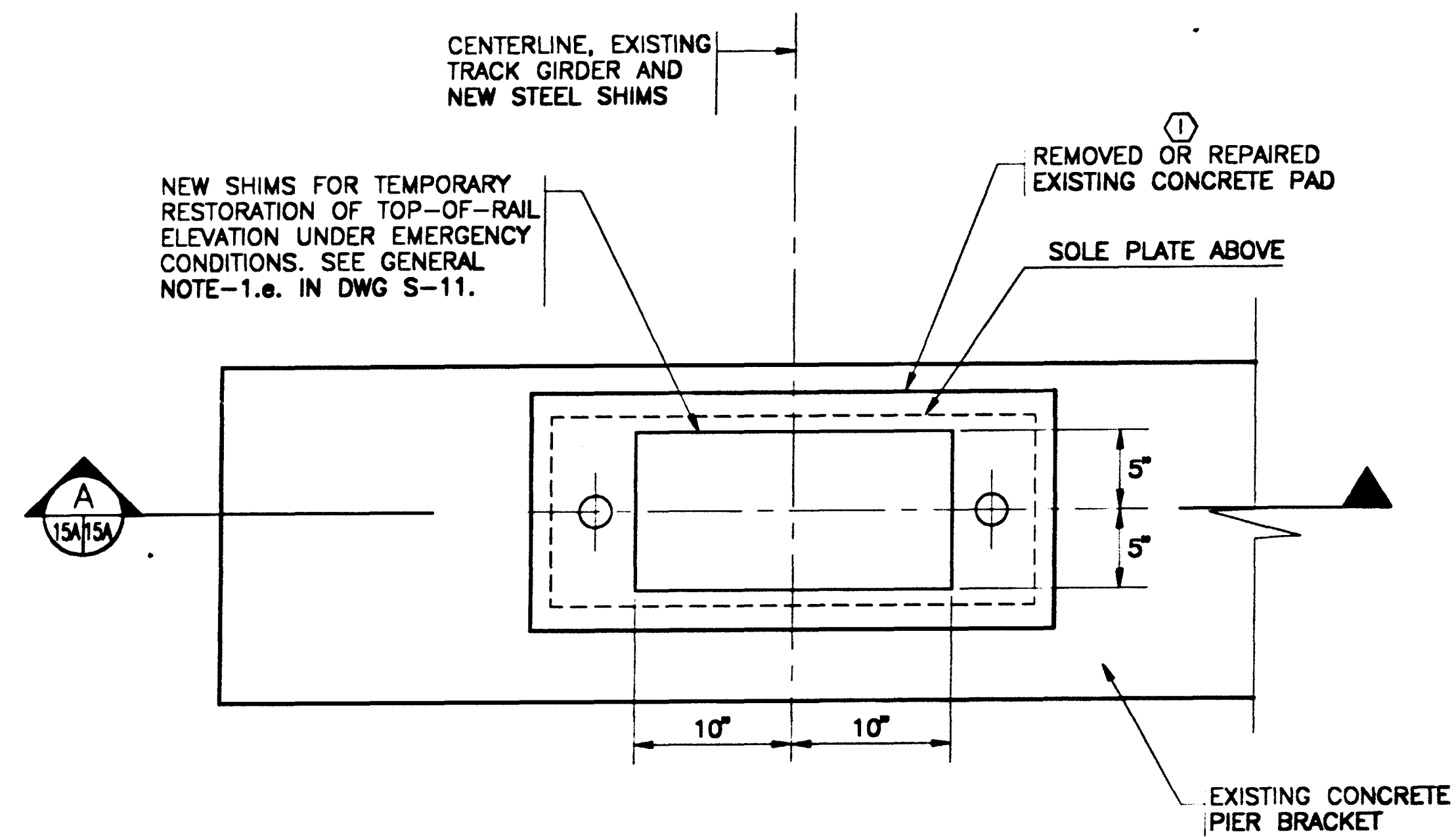
REVISIONS

DATE	BY	DESCRIPTION
3-14-94	O.H.	ADDED NOTE
12-4-97	C.P.G.	(2) AS BUILT INFORMATION
12-4-97	C.P.G.	(3) AS BUILT INFORMATION

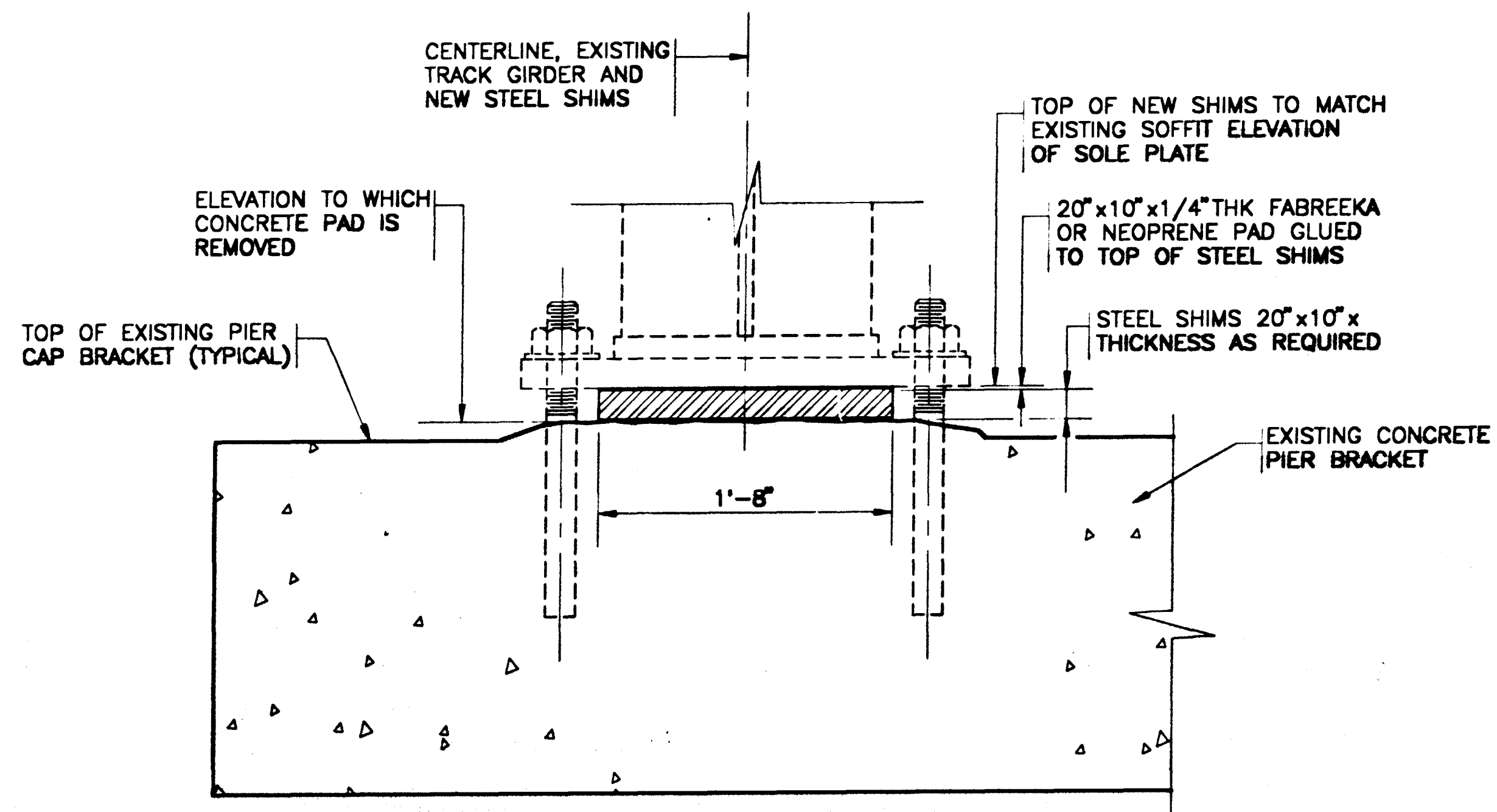


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DE LEUW, CATHER & COMPANY
 SECTION DESIGNER
 SUBMITTED BY [Signature]

RHODE ISLAND AVENUE STATION
 STRUCTURAL REHABILITATION
 TRACK GIRDER NEW BEARING DETAILS
 SCALE AS NOTED
 DRAWING NO. B4s-S-15
 M898-24
 CONTRACT NO. 7T172H



A PLAN
SCALE: 1-1/2"=1'-0"



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

CONCRETE PAD REPAIRS

TYPE	DESCRIPTION	REPAIR PROCEDURE
1	SURFACE CRACKS: NOT WIDER THAN 20 MILS	APPLY FX-742, HI-MOD GEL (MANUFACTURED BY FOX INDUSTRIES) OR APPROVED EQUAL OVER THE CONCRETE PAD TO ADHERE FABREEKA PAD TO IT. NO CRACK FILLER PER SE IS NEEDED.
2	SURFACE CRACKS: WIDER THAN 20 MILS	<ol style="list-style-type: none"> SHIELD STAINLESS STEEL SURFACE OF SOLE PLATE AND PREPARE TOP SURFACE OF CONCRETE PAD ACCORDING TO RECOMMENDATIONS OF GROUT MATERIAL MANUFACTURER. VACUUM TO REMOVE FINE PARTICLES OF DUST, SAND OR CEMENT. APPLY FX-742 (MANUFACTURED BY FOX INDUSTRIES) OR APPROVED EQUAL PER MANUFACTURER'S SPECIFICATIONS (GROUT).
3	LOCAL SPALLING/BROKEN EDGES (DAMAGED AREA NOT EXCEEDING 25% OF TOTAL AREA)	<ol style="list-style-type: none"> REMOVE SPALLED/BROKEN AND UNSOUND CONCRETE. SHIELD STAINLESS STEEL SURFACE OF SOLE PLATE AND PREPARE TOP SURFACE OF CONCRETE PAD ACCORDING TO RECOMMENDATIONS OF INJECTION MATERIAL MANUFACTURER. COAT THE SURFACE WITH FX-742 OR APPROVED EQUAL. SET THE FORMWORK FOR CONCRETE PAD. PLACE FX-742 WITH FILLER OR APPROVED EQUAL TO MATCH TOP ELEVATION OF EXISTING CONCRETE PAD.
4	SPALLING AREA EXCEEDING 25% OF TOTAL AREA	<ol style="list-style-type: none"> REMOVE EXISTING PAD. FOLLOW STEPS 2 THRU 5 OF TYPE 3 REPAIR PROCEDURE.

NOTES: AS BUILT

① SEE DWG. B4s-S-II FOR LOCATION.

AS-BUILT

I certify that this drawing accurately depicts the work as constructed

AC Guarino 4/8/98
President GUARINO CORPORATION Date

CONTRACT NO.
7T172H

DESIGNED J. PATEL 1/94
DRAWN S. HICKS 1/94
CHECKED O. HACKETT 1/94
APPROVED [Signature] 2/19/94

NUMBER	DESCRIPTION


















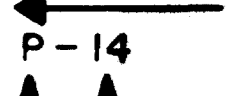
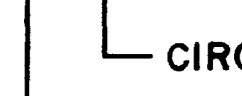
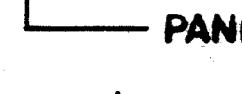
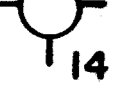

DATE	BY	DESCRIPTION
3-8-94	O.H.	REVISED REPAIR PROCEDURE
12-5-97	C.R.G.	① AS-BUILT INFORMATION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
PARSONS DE LEUW, INC.
SECTION DESIGNER
SUBMITTED BY [Signature]

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
CONCRETE PAD REPAIRS AND EMERGENCY SHIMMING
SCALE 1-1/2"=1'-0" 0 3 6 12"
DRAWING NO. B4s-S-15A M898-24A

SYMBOLS

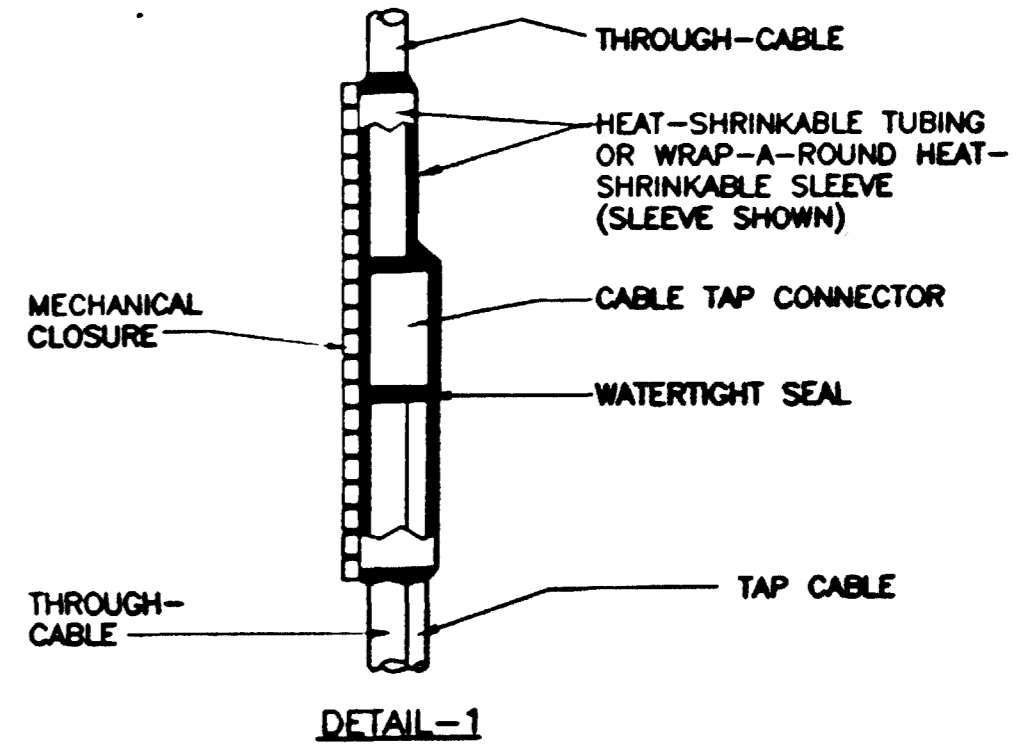
-  DUPLEX RECEPTACLE, SURFACE MOUNTED, E INDICATES EXISTING.
-  NEW INSULATED GROUND CABLE, SIZE #6 A.W.G. UNLESS OTHERWISE NOTED, INSTALLED IN THE PLATFORM FLOOR UNDER THE PAVER TILES. SEE DETAIL-5, DWG. B4s-E-4 AND DETAIL-4, DWG. B4s-E-5
-  NEW INSULATED GROUND CABLE, SIZE #4/0 A.W.G. UNLESS OTHERWISE NOTED, INSTALLED UNDER STATION PLATFORM. SEE DETAIL-5, DWG. B4s-E-4.
-  POINT OF CONNECTION FOR CABLES OF DIFFERENT SIZES.
-  CONDUIT OR CABLE TURNING DOWNWARDS OR AWAY.
-  CONDUIT OR CABLE TURNING UPWARDS OR TOWARDS.
-  DIORAMA AND MAP CASE (EXISTING)
-  PLATFORM SHELTER (EXISTING)
-  WINDSCREEN AND PASSENGER BENCH (EXISTING)
-  PYLON TYPE A-1, WITH LIGHTS. (EXISTING)
-  PYLON TYPE A-2 (NO ELECTRICAL WIRING) (EXISTING)
-  STRUCTURAL COLUMN. (EXISTING)
-  TELEPHONE PEDESTAL (EXISTING)
-  SECTION IDENTIFICATION: TOP No. IS SECTION NUMBER AND LOWER No. IS DWG. SHOWN ON.
-  NEW NON-METALLIC JUNCTION BOX TO SERVE S-5 LT OR INFRARED HEATERS. NUMBER SUBSCRIPT IS J.B. NUMBER.
-  NEW FIBERGLASS CABLE TRAY
-  END OF CABLE TRAY
-  NEW WIRING AND NON-METALLIC LTFC (U.O.N) CIRCUIT HOMERUNS TO PANELBOARDS. WIRE AND CONDUIT SIZES NOTED ARE TYPICAL FOR ENTIRE LENGTH OF CIRCUITS.
-  CIRCUIT NUMBER
-  PANEL DESIGNATION
-  RELOCATED TYPE S-5 LT. NUMBER SUBSCRIPT DENOTES CIRCUIT NUMBER
-  RELOCATED INFRARED HEATER

ABBREVIATIONS

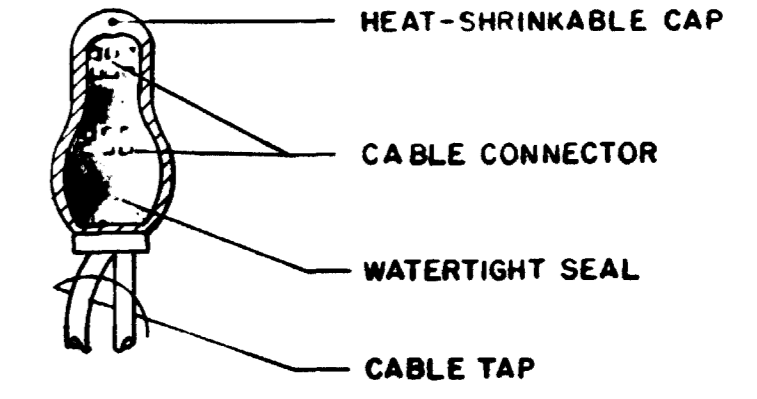
- AWG AMERICAN WIRE GAUGE
- CONC. CONCRETE
- DIA. DIAMETER
- DN. DOWN
- DWG. DRAWING
- ELEC. ELECTRICAL
- ELEV. ELEVATOR
- EXIST. EXISTING
- EXP. EXPANSION
- GNDG. GROUNDING
- GSC. GALVANIZED STEEL RIGID CONDUIT
- HEX. HEXAGON
- INF. INFORMATION
- JB JUNCTION BOX
- JT. JOINT
- LT LIGHT
- MEZZ. MEZZANINE
- MIN. MINIMUM
- NTS NOT TO SCALE
- PVC POLYVINYL CHLORIDE
- REF. REFERENCE
- SEJ. STRUCTURAL EXPANSION JOINT
- REINF. REINFORCED
- STA. STATION
- STRUCT. STRUCTURAL
- SWBD SWITCHBOARD
- TEJ TILE EXPANSION JOINT
- TRK TRACK
- TYP. TYPICAL
- U.O.N UNLESS OTHERWISE NOTED
- W/ WITH
- WWF WELDED WIRE FABRIC
- LTFC LIQUID TIGHT FLEXIBLE CONDUIT
- I.B. INBOUND
- O.B. OUTBOUND
- RM ROOM

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AND THE REQUIREMENTS OF ALL LOCAL CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORK.
2. THE CONTRACTOR SHALL CAREFULLY EXAMINE ALL CONTRACT DRAWINGS/SPECIFICATIONS AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIALS AND EQUIPMENT AT EACH LOCATION AS INDICATED. INASMUCH AS THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. FURNISHING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS SHALL BE AT NO ADDITIONAL COST TO THE AUTHORITY.
3. THE CONTRACTOR SHALL EXAMINE THE SITE AND OBSERVE THE CONDITION UNDER WHICH THE WORK WILL BE DONE OR OTHER CIRCUMSTANCES WHICH WILL AFFECT THE WORK.
4. THE CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE AND EXTENT OF ALL EXISTING UTILITIES, OBSTRUCTIONS AND/OR OTHER CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK UNDER THE PROJECT. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO EXISTING WORK AND SHALL REPAIR ANY DAMAGE AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO THE AUTHORITY.
5. THE CONTRACTOR SHALL COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
6. UNLESS OTHERWISE NOTED, MINIMUM CONDUCTOR SIZE IS NO. 12 AWG. AND MINIMUM CONDUIT SIZE IS 3/4".
7. DRAWINGS SHOW EXISTING CONDITIONS UNLESS OTHERWISE NOTED. FOR DETAILS SEE ELECTRICAL INF. DWGS. LISTED ON DWG. B4s-G-1.



NEW WATERTIGHT CABLE TAP
NOT TO SCALE (SEE DWG. B4s-E-2)



NEW WATERTIGHT CABLE END CAP
NOT TO SCALE (SEE DWG. B4s-E-2)

AS-BUILT

I certify that this drawing accurately depicts the work as constructed
[Signature] 1/8/98
 President Date
 GUARINO CORPORATION

CONTRACT NO.
7T172H

DESIGNED	D. VANCOTT	4-93
		DATE
DRAWN	W. MASSEY	4-93
		DATE
CHECKED	D. GLEN	4-93
		DATE
APPROVED	R. GARNER	4-93
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	DESCRIPTION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

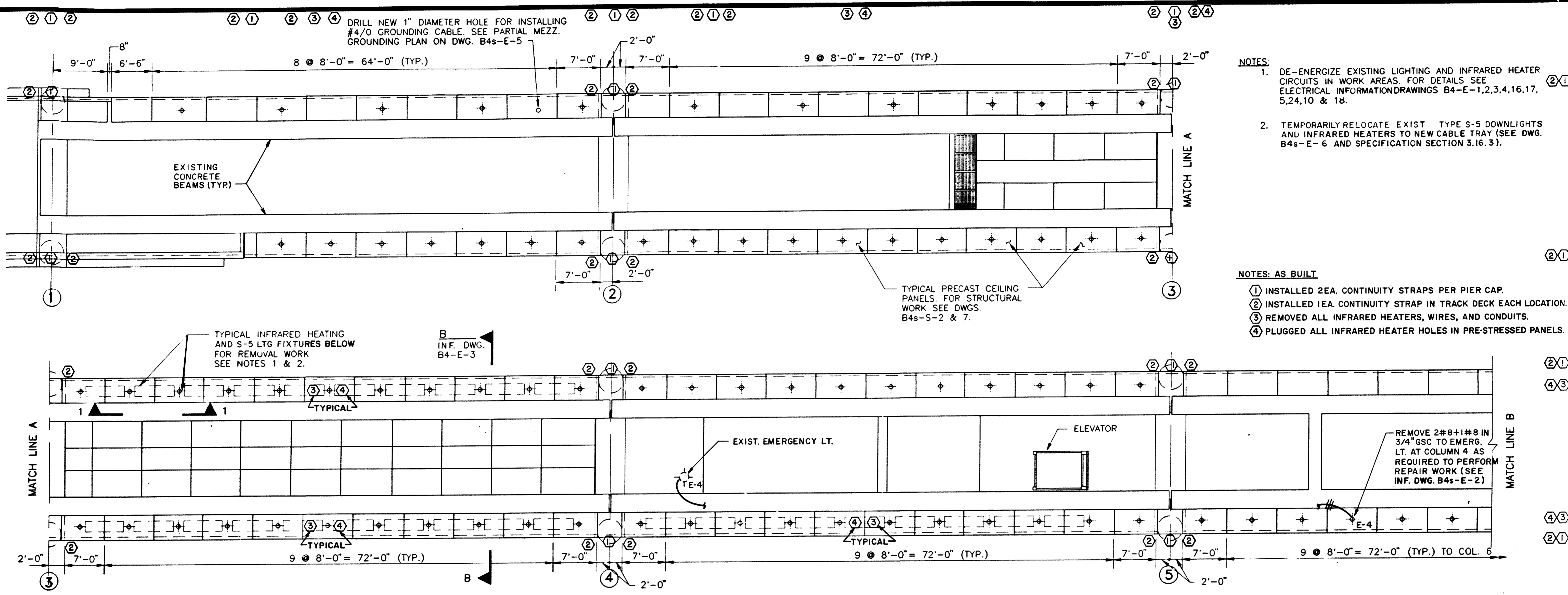
PARSONS DE LEUW, INC
SECTION DESIGNER

SUBMITTED BY *[Signature]*

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION, SYMBOLS,
ABBREVIATIONS, NOTES AND
TYPICAL DETAILS

SCALE NONE	DRAWING NO. B4s-E-1	M898-25
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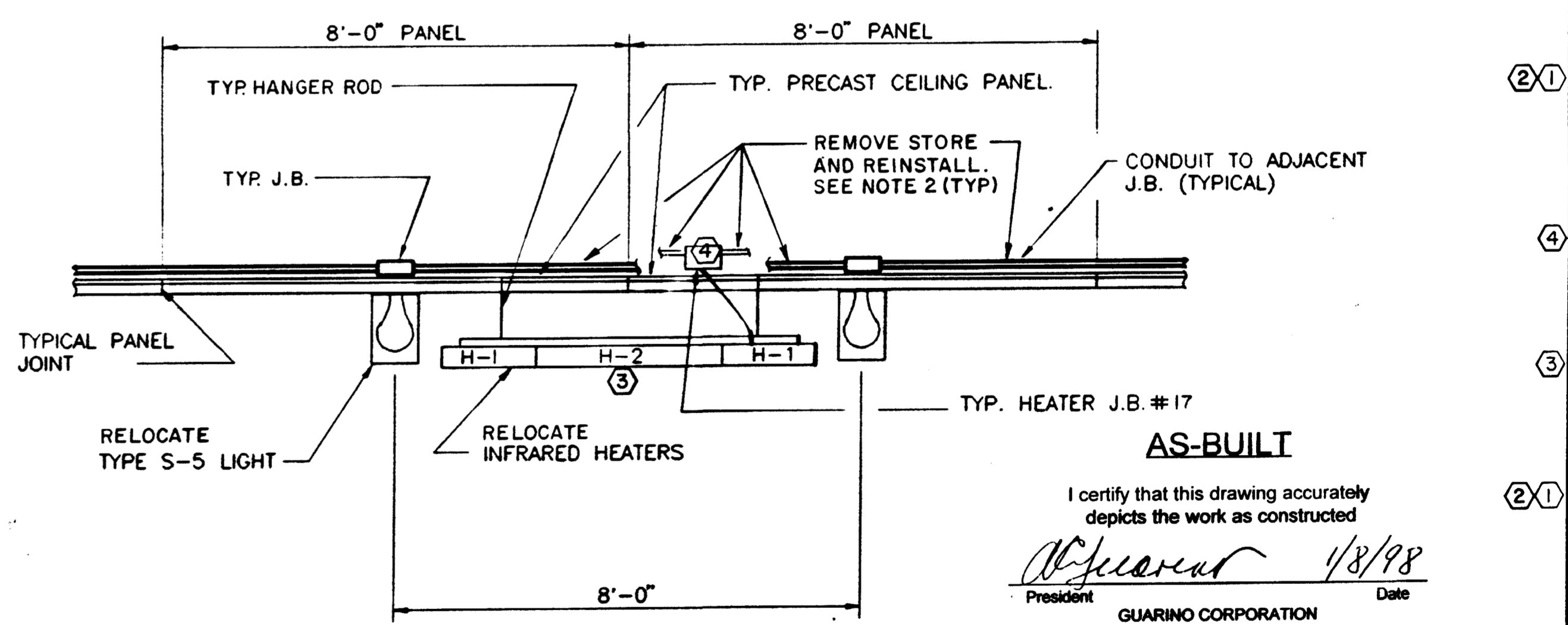
8-93BLLC/DWGS/RAA/RMA-E



NOTES:
 1. DE-ENERGIZE EXISTING LIGHTING AND INFRARED HEATER CIRCUITS IN WORK AREAS. FOR DETAILS SEE ELECTRICAL INFORMATION DRAWINGS B4-E-1, 2, 3, 4, 16, 17, 5, 24, 10 & 18.
 2. TEMPORARILY RELOCATE EXIST TYPE S-5 DOWNLIGHTS AND INFRARED HEATERS TO NEW CABLE TRAY (SEE DWG. B4s-E-6 AND SPECIFICATION SECTION 3.16.3).

NOTES: AS BUILT
 (1) INSTALLED 2EA. CONTINUITY STRAPS PER PIER CAP.
 (2) INSTALLED 1EA. CONTINUITY STRAP IN TRACK DECK EACH LOCATION.
 (3) REMOVED ALL INFRARED HEATERS, WIRES, AND CONDUITS.
 (4) PLUGGED ALL INFRARED HEATER HOLES IN PRE-STRESSED PANELS.

PLAN VIEW - TRACK LEVEL



SECTION 1-1 (REMOVAL WORK)
 NOT TO SCALE

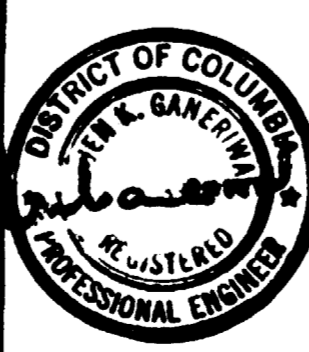
AS-BUILT
 I certify that this drawing accurately depicts the work as constructed
[Signature] 4/8/98
 President Date
 GUARINO CORPORATION

CONTRACT NO.
7T172H

DESIGNED D. VANCOTT 7-93
 DATE
 DRAWN M. CHACKO 7-93
 DATE
 CHECKED D. GLEN 7-93
 DATE
 APPROVED R. GANERIAL 7-93
 DATE

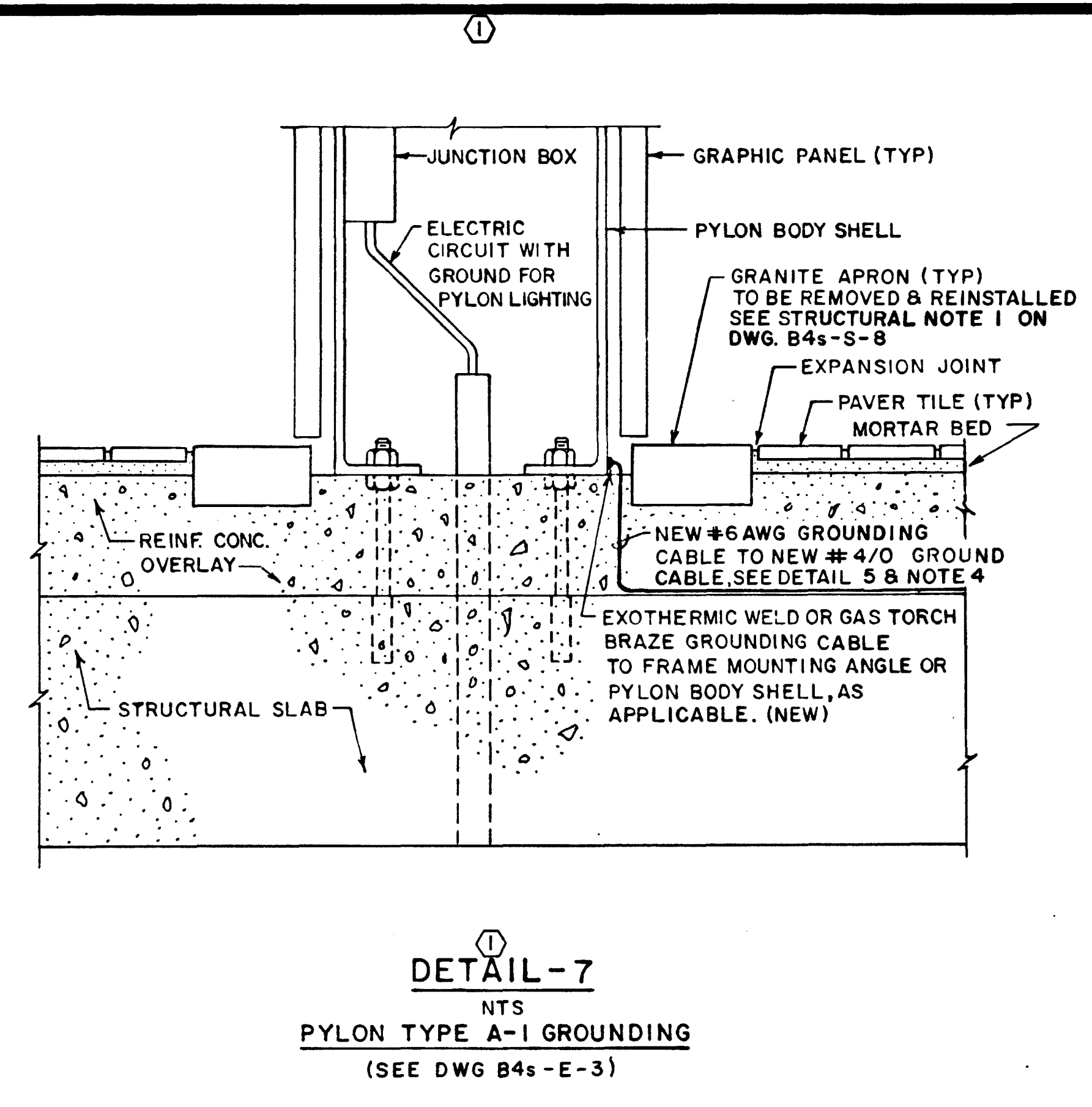
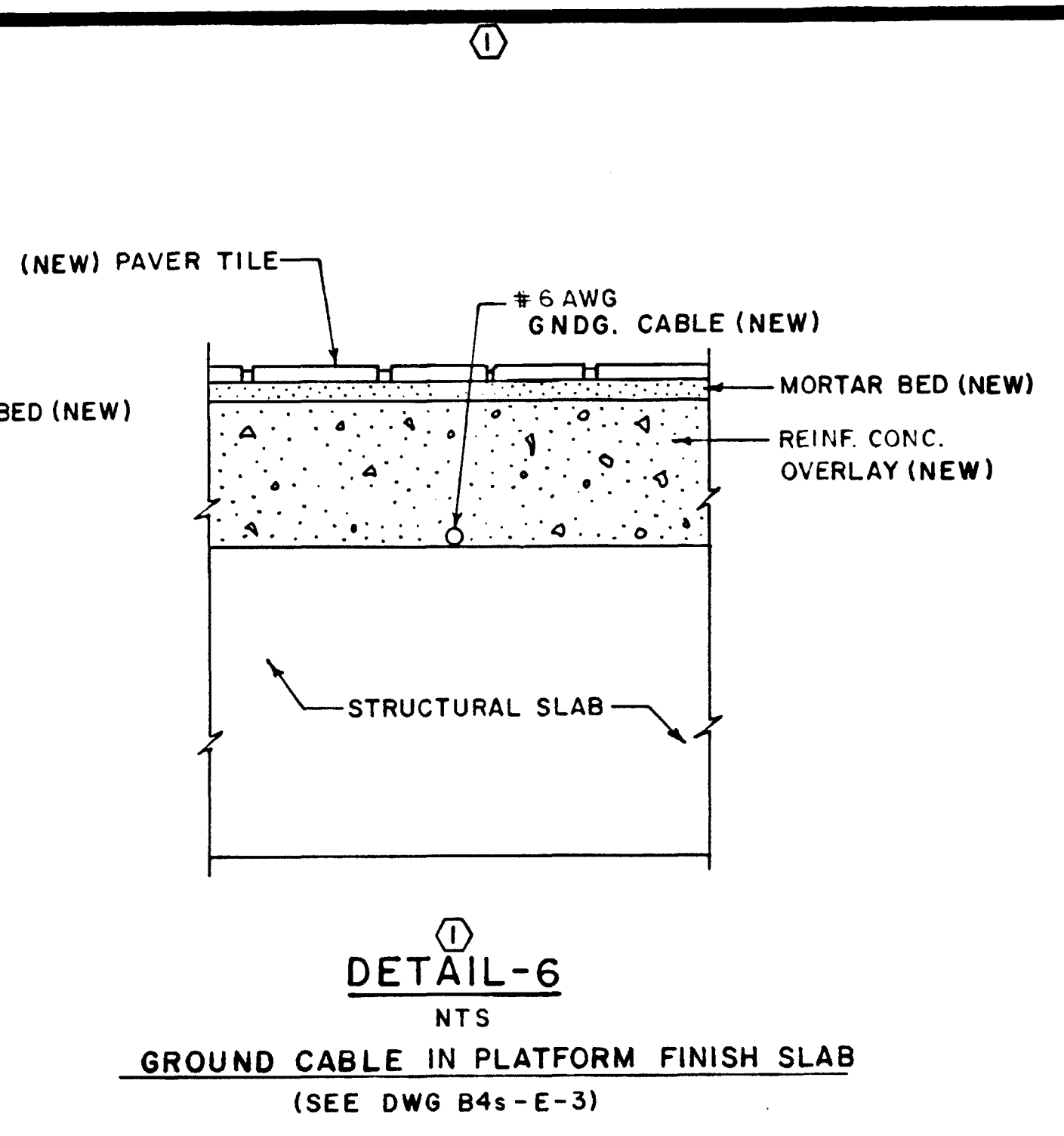
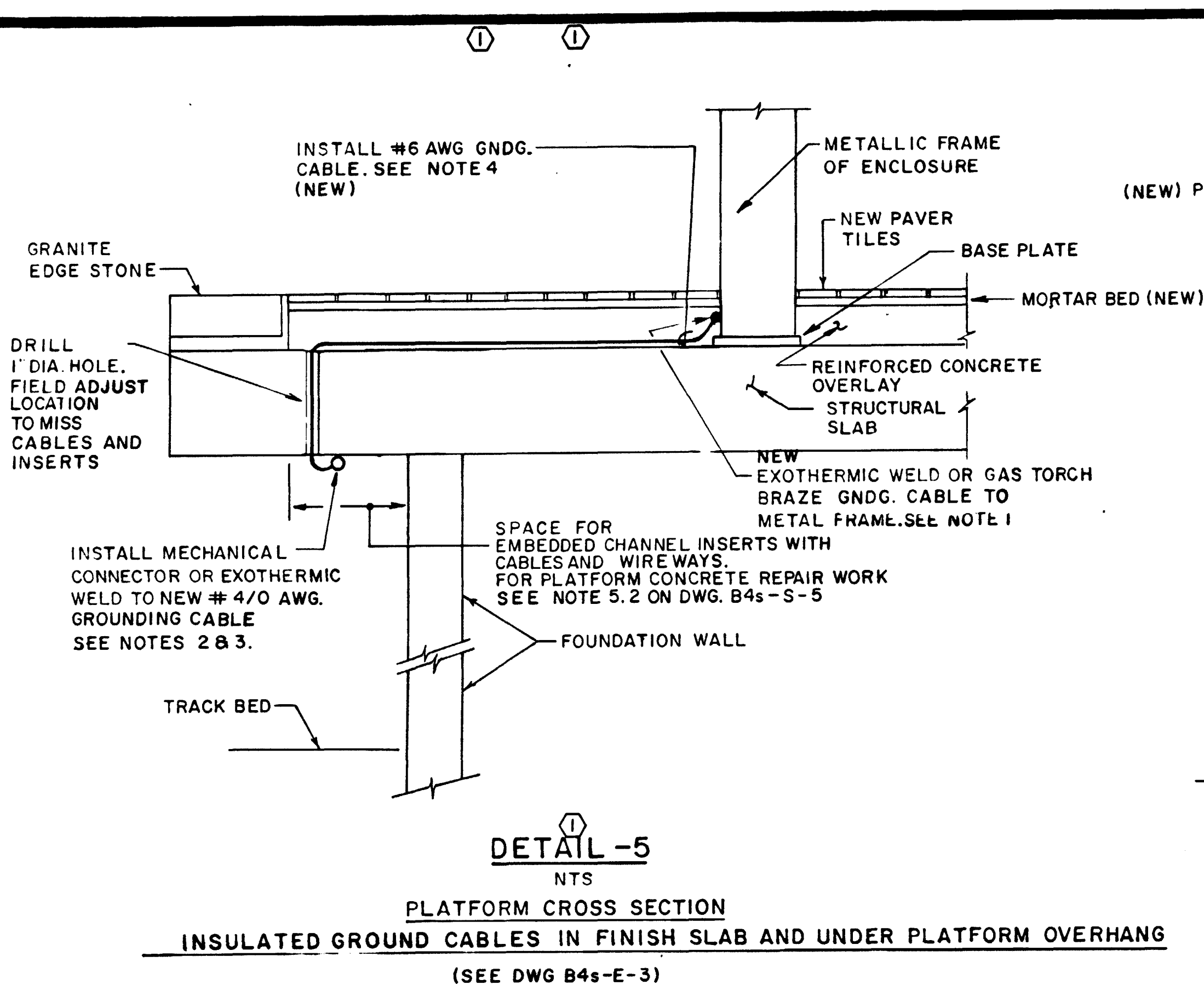
NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
B4s-S-7	PRECAST PANEL LIFTING & OTHER DETAILS	11-14-97	C.P.G.	(1) AS BUILT INFORMATION
		11-14-97	C.P.G.	(2) AS BUILT INFORMATION
		11-14-97	C.P.G.	(3) AS BUILT INFORMATION
		11-14-97	C.P.G.	(4) AS BUILT INFORMATION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 PARSONS DE LEUW, INC.
 SECTION DESIGNER
 SUBMITTED BY *[Signature]*

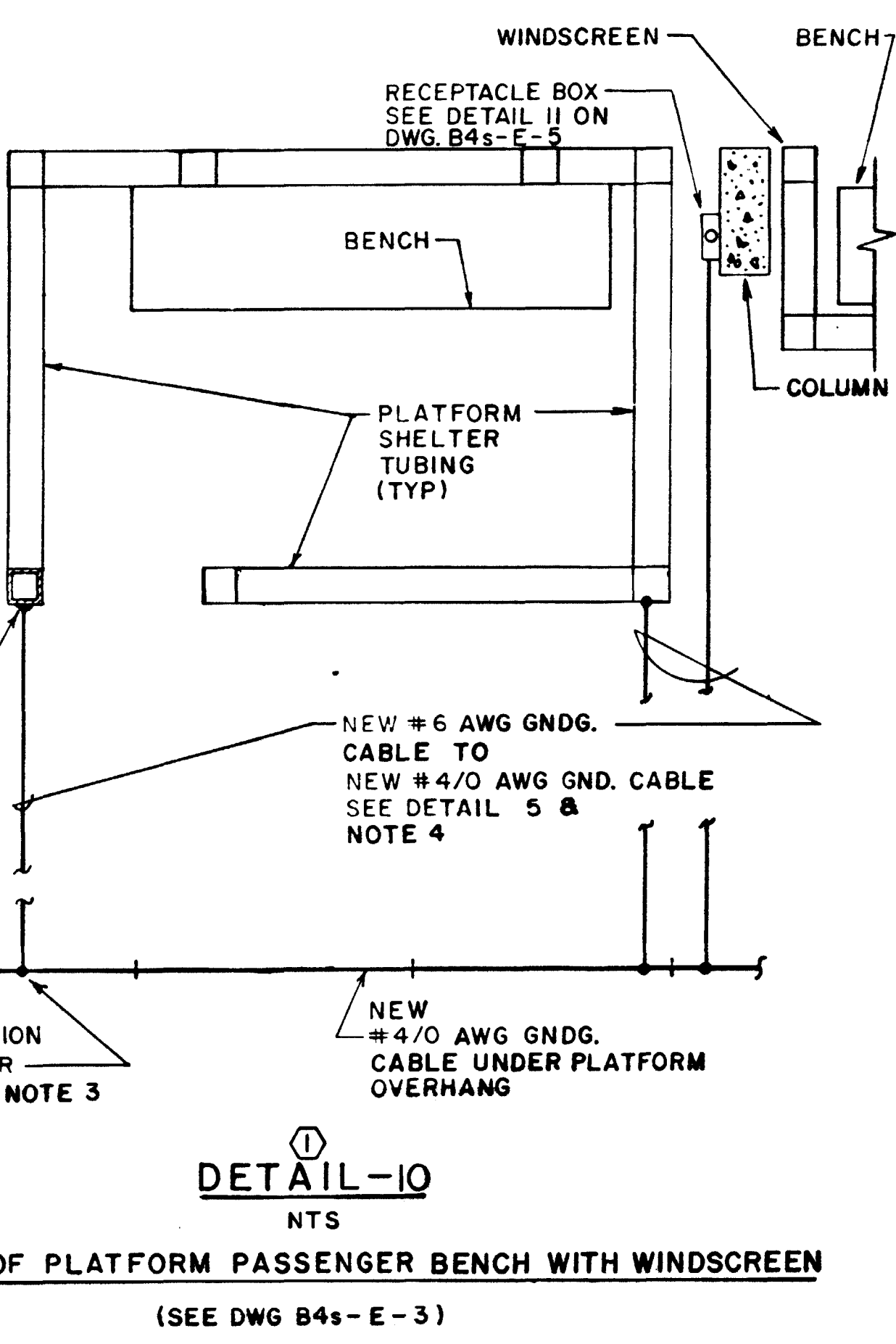
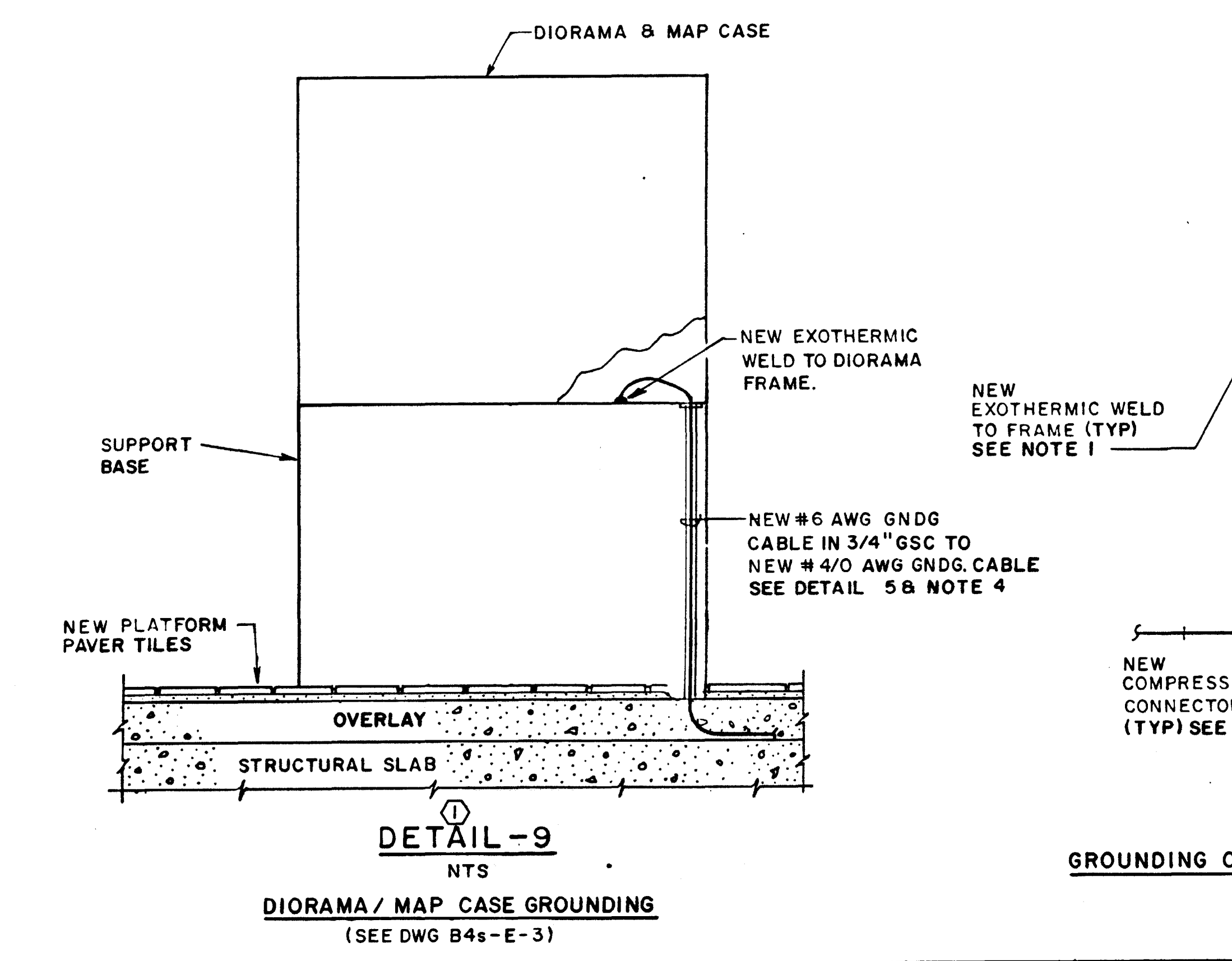


RHODE ISLAND AVENUE STATION
 STRUCTURAL REHABILITATION
 ELECTRICAL PLAN AND DETAILS-SHEET 1
 SCALE 1/8" = 1'-0"
 DRAWING NO. B4s-E-2
 M898-26

8-93JPC./DWGS/RIA/RIA_B2



- NOTES:**
1. NEW GROUNDING CONNECTION SHALL BE MADE TO STEEL FRAME 1" MINIMUM BELOW THE MORTAR BED UNLESS OTHERWISE SHOWN.
 2. ATTACH #4/0 AWG GNDG. CABLE TO EXISTING CHANNEL INSERTS EVERY 4'-0".
 3. WRAP WELDED JOINTS AND COMPRESSION CONNECTORS WITH THREE LAYERS OF PLASTIC TAPE AND FINAL LAYER OF RUBBER TAPE.
 4. FOR INSTALLING #6 AWG GNDG CABLE WHERE OVERLAY IS REPLACED, SEE DETAIL 6. WHERE OVERLAY IS NOT REPLACED, SEE DETAIL 4 ON DWG. B4s-E-5. (SEE DWG. B4s-S-8).

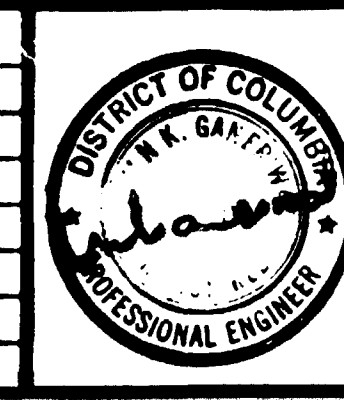


NOTES: AS BUILT
① SEE DWG. B4s-E-3 FOR LOCATION.

AS-BUILT
I certify that this drawing accurately depicts the work as constructed.
[Signature] 1/8/98
President Date
GUARINO CORPORATION

CONTRACT NO.
7T172H

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS		
		NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
D. VANCOTT	4-93	B4s-S-2	LOCATION OF REPAIR WORK	12-4-97	C.P.G.	① AS BUILT INFORMATION
W. MASSEY	4-93	B4s-S-4	CONCRETE REPAIR DETAILS			
D. GLEN	4-93	B4s-S-8	PAVER TILE REPAIR BY LOCATION			
R. GANERIAL	4-93	B4s-S-9	PAVER TILE/GRANITE EDGE /OVERLAY REPAIR			



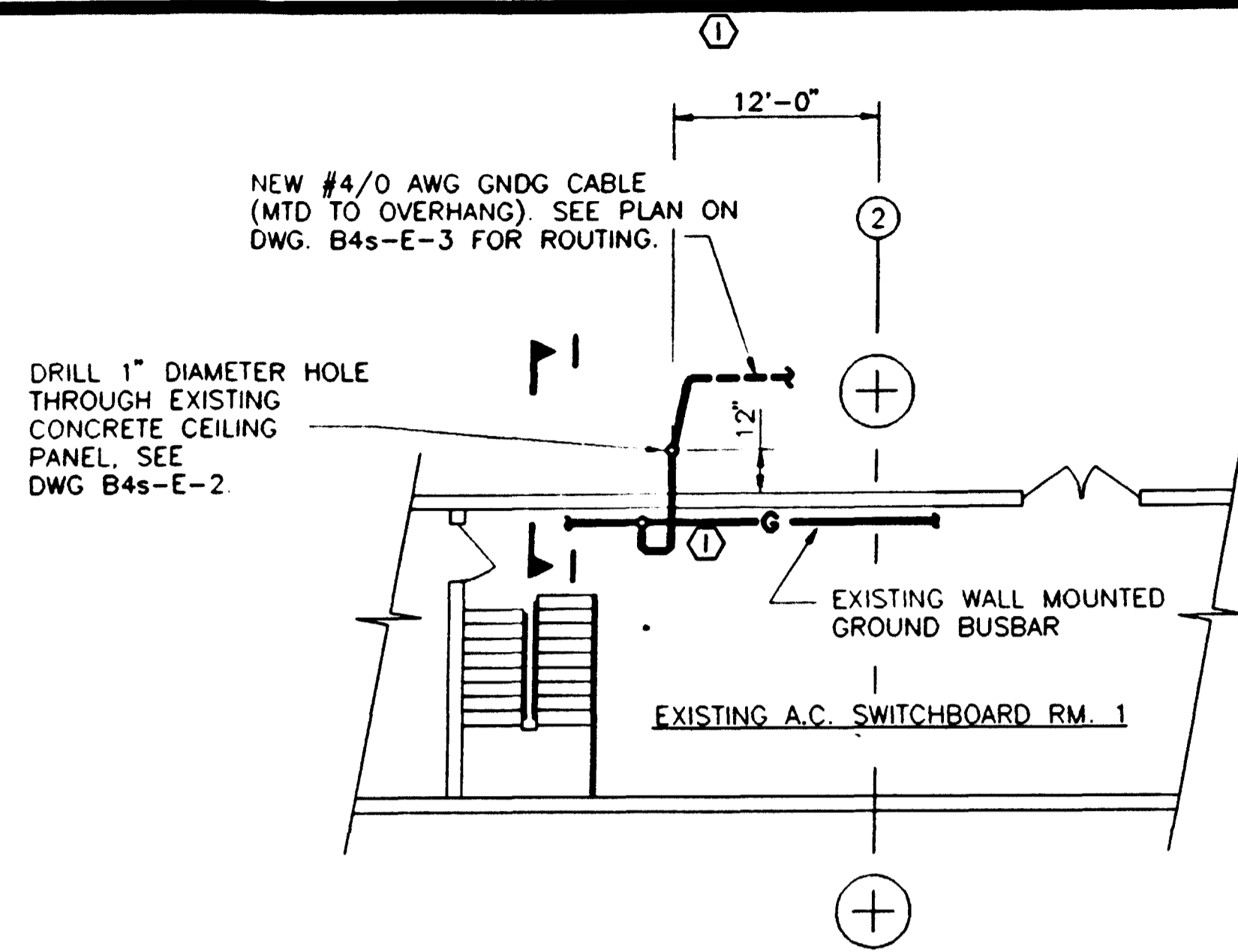
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

PARSONS DE LEUW, INC.
SECTION DESIGNER
[Signature]

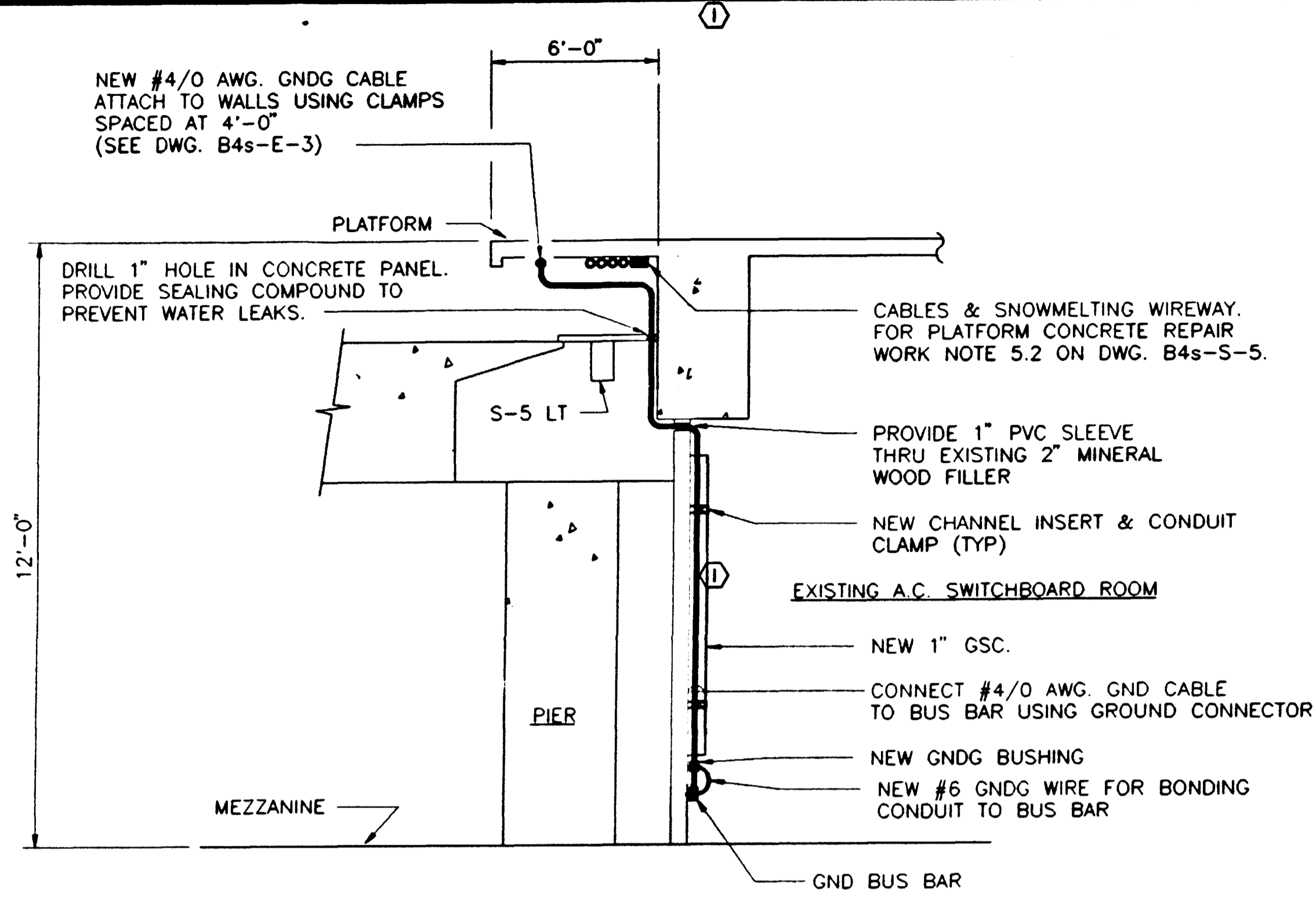
SUBMITTED

**RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
ELECTRICAL DETAILS
SHEET 2**

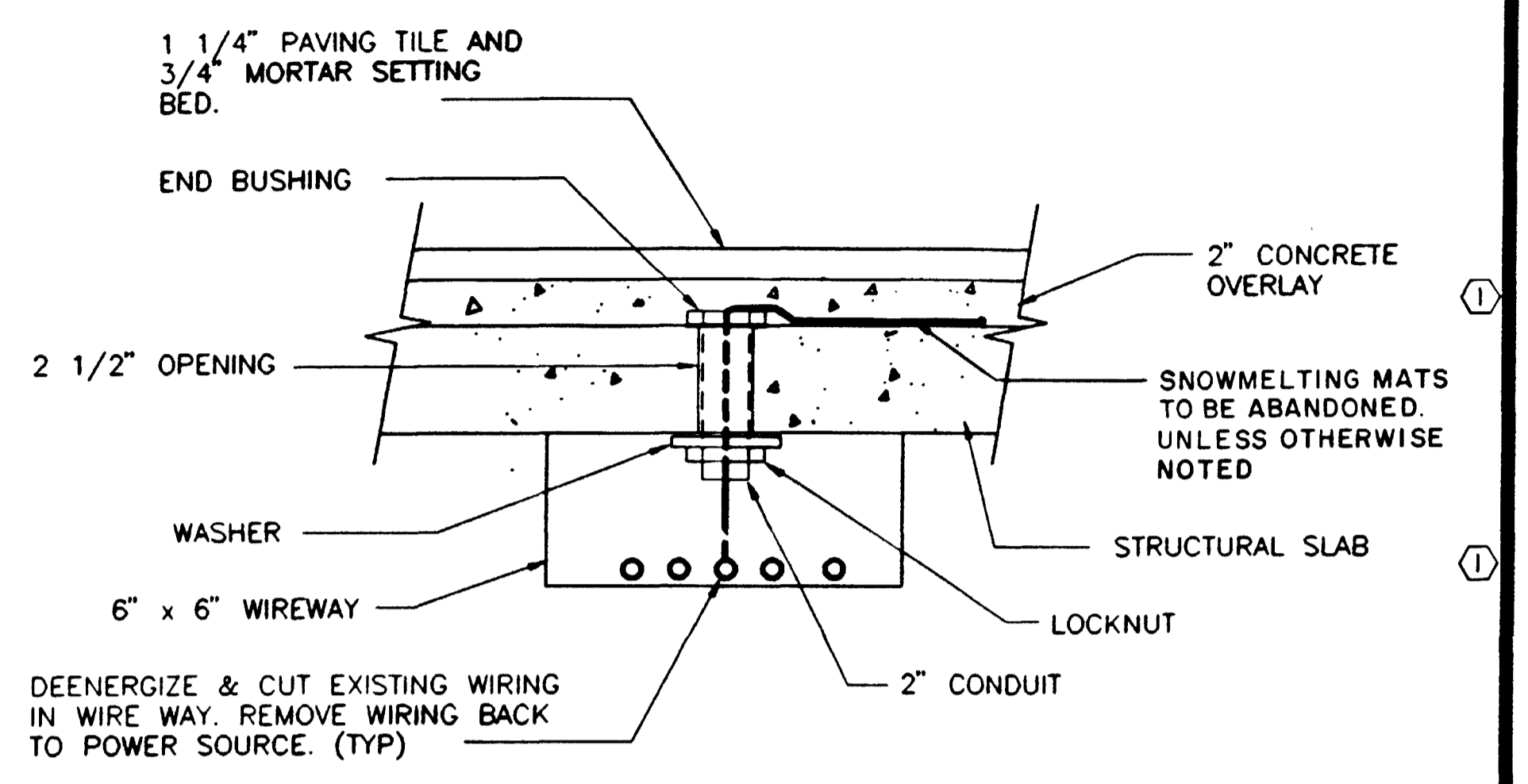
SCALE: NOT TO SCALE
DRAWING NO.: B4s-E-4
M898-28



PARTIAL MEZZANINE GROUNDING PLAN
NOT TO SCALE (SEE DWGS B4s-E-2 & 3)

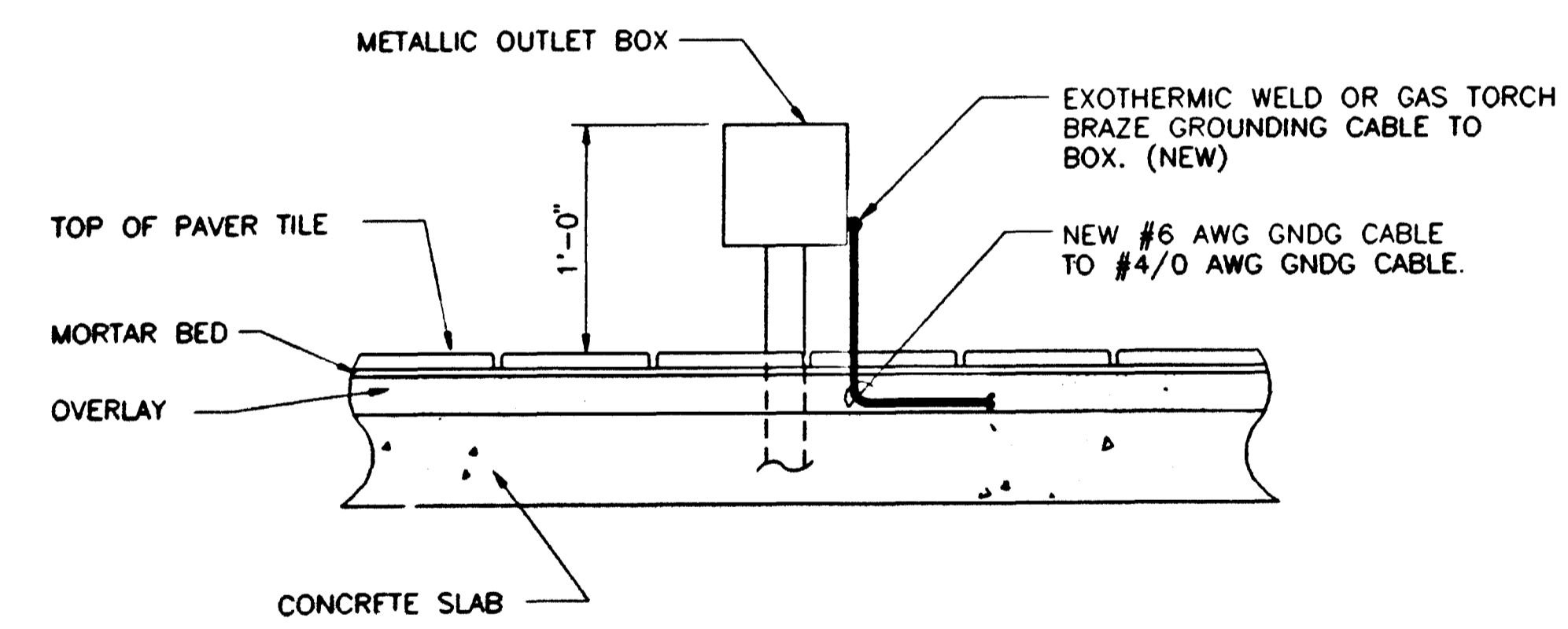


SECTION I-I
NOT TO SCALE

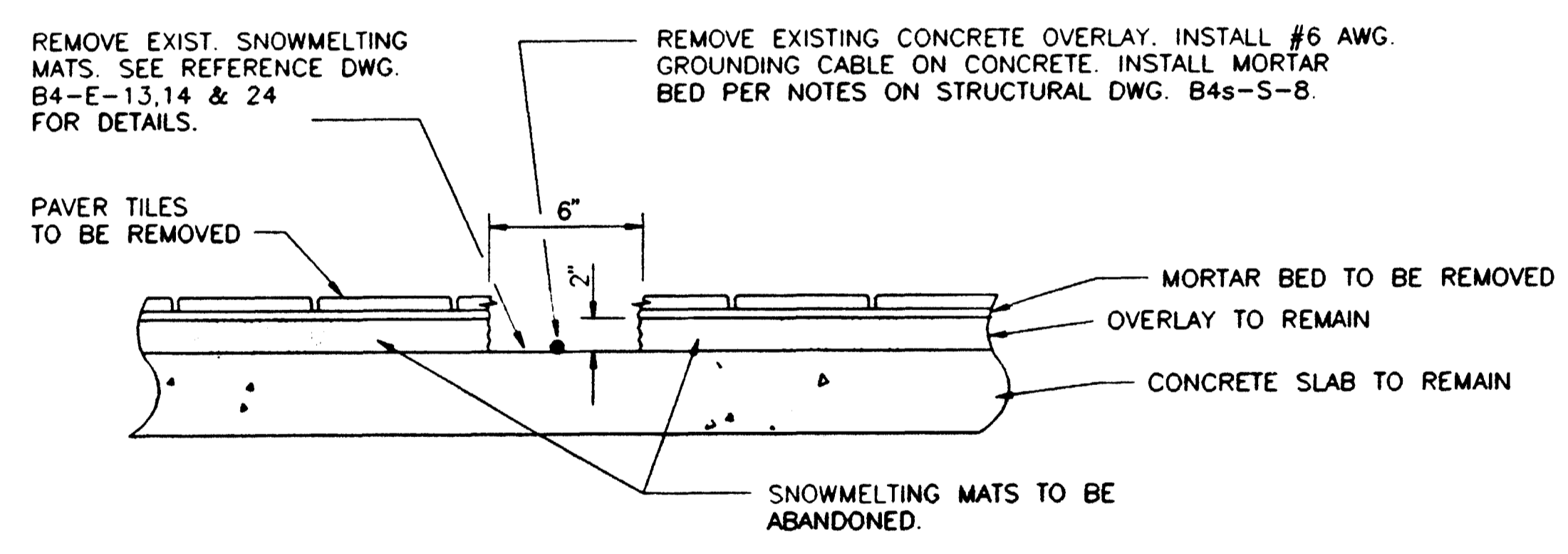


SNOWMELTING CABLE DETAIL 8
NOT TO SCALE (SEE DWG. B4s-E-3)
(FOR STRUCTURAL REPAIR WORK TO PLATFORM EDGE AND MEDIAN SEE DWGS. B4s-S-2 THRU 5,8,9,10)

NOTES: AS BUILT
① PLATFORM FURNITURE GROUNDING CABLE TIE-IN. SEE DWG. B4s-E-3 FOR LOCATIONS.



RECEPTACLE GROUNDING DETAIL-11
NOT TO SCALE (SEE DWG B4s-E-3)



TYPICAL METHOD OF RUNNING GROUNDING CONDUCTOR IN PLATFORM-DETAIL 4
NOT TO SCALE (SEE DWG B4s-E-3 AND B4s-S-2.8 & 9)

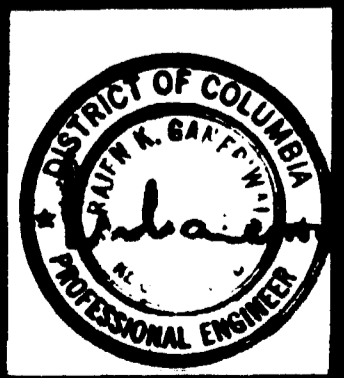
AS-BUILT

I certify that this drawing accurately depicts the work as constructed
R. Guarino 1/8/98
President GUARINO CORPORATION Date

CONTRACT NO. 7T172H

DESIGNED D. VANCOTT 5-93
DRAWN L. POWELL 5-93
CHECKED D. GLEN 5-93
APPROVED R. GANERVAL FOR ENG. 5-93

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY
		11-26-97	CPG (1) AS BUILT INFORMATION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
PARSONS DE LEUW, INC
SECTION DESIGNER
SUBMITTED BY *[Signature]*

RHODE ISLAND AVENUE STATION
STRUCTURAL REHABILITATION
ELECTRICAL MEZZANINE GROUNDING PLAN AND DETAILS
SCALE: NOT TO SCALE
DRAWING NO. B4s-E-5
M898-29

10-BJLPC/DWGS/RW/RALC

OUTBOUND TRACK B1													HORIZONTAL GEOMETRY DATA	
ELEMENT DESC.	BEARING	STATION	NORTHING	EASTING	RADIUS	LENGTH	DELTA	Dc	C	T	V	Ea	Eu	
L-48	N39° 22' 43.20"E	123+19.72	392524.0877	799797.7344		798.33								
S-49A		131+18.05	393141.1712	800304.2278		300.00	10°44'34.65"							
C-49		134+18.05	393384.1142	800479.4357	800	313.15	22°25'38.70"	7° 09' 43.10"	311.15	158.60	45 MPH	6"	4.15"	
S-49B		137+31.20	393680.9907	800572.5964		300.00	10°44'34.65"							
L-50	N4° 32' 04.80"W	140+31.20	393980.4807	800567.6054		239.70								
S-51A		142+70.90	394219.4305	800548.6541		300.00	8°59'57.61"							
C-51		145+70.90	394518.9940	800540.6240	955	279.00	16°44'20.09"	5° 59' 58.41"	278.01	140.50	50 MPH	6"	4.50"	
S-51B		148+49.90	394790.0598	800602.3784		300.00	8°59'57.61"							
L-52	N30° 12' 10.52"E	151+49.90	395056.5833	800739.3750		74.97								
S-53A		152+24.87	395121.3731	800777.0880		200.00	3°49'10.99"							
C-53		154+24.87	395296.3812	800873.8162	1500	122.36	4°40'25.38"	3° 49' 10.99"	122.32	61.21	50 MPH	4"	2.68"	
S-53B		155+47.23	395408.0892	800923.6601		200.00	3°49'10.99"							
L-54	N17° 53' 23.16"E	157+47.23	395596.9697	800989.2983		838.64								
S-55A		165+86.19	396395.0604	801246.9172		100.00	0°44'59.80"							
C-55		166+86.19	396490.3577	801277.2202	3820	133.35	2°00'00.15"	1° 29' 59.60"	133.34	66.68	55 MPH	2"	1.18"	
S-55B		168+19.53	396618.4414	801314.2860		100.00	0°44'59.80"							
L-56	N14° 23' 23.41"E	169+19.53	396715.1941	801339.5600		89.51								
S-57A		170+09.04	396801.8941	801361.8044		120.00	0°53'59.76"							
C-57		171+29.04	396917.9703	801392.2344	3820	113.35	1°42'00.27"	1° 29' 59.60"	113.34	56.68	60 MPH	2.25"	1.53"	
S-57B		172+42.39	397026.8456	801423.7416		120.00	0°53'59.76"							
L-58	N17° 53' 23.20"E	173+62.39	397141.2337	801460.0052		359.50								

INBOUND TRACK B2													HORIZONTAL GEOMETRY DATA	
ELEMENT DESC.	BEARING	STATION	NORTHING	EASTING	RADIUS	LENGTH	DELTA	Dc	C	T	V	Ea	Eu	
L-45	N21° 30' 23.07"E	132+72.27	393475.4764	800012.7537		862.29								
S-46A		141+34.56	394277.7313	800328.8740		250.00	2°26'54.74"							
C-46		143+84.56	394508.9775	800423.8214	2925	193.97	3°47'58.31"	1° 57' 31.79"	193.93	97.02	70 MPH	5"	1.72"	
S-46B		145+78.53	394683.4991	800508.3941		250.00	2°26'54.74"							
L-47	N30° 12' 10.85"E	148+28.53	394901.3130	800631.0601		119.19								
S-48A		149+47.72	395004.3262	800691.0225		200.00	3°17'34.30"							
C-48		151+47.72	395179.0458	800788.2918	1740	177.66	5°51'00.66"	3° 17' 34.30"	177.59	88.91	55 MPH	4"	2.97"	
S-48B		153+25.39	395341.2970	800860.4800		192.55	3°10'12.73"							
L-49	N17° 53' 23.17"E	155+17.94	395523.3903	800922.9896		933.36								
S-350A		165+90.58	396411.6247	801209.7063		100.00	0°00'20.63"							
C-350		166+99.00	396506.7886	801240.4281	500000	16.84	0°00'06.95"	0° 00' 41.25"	16.84	8.42	55 MPH	0"	0.02"	
S-350B		167+07.42	396522.8118	801245.6024		100.00	0°00'20.63"							
L-51	N17° 54' 11.36"E	168+07.42	396617.9706	801276.3401		84.00								
S-352A		168+91.42	396697.9041	801302.1628		100.00	0°00'20.63"							
C-352		169+91.42	396793.0628	801332.9005	500000	16.35	0°00'06.74"	0° 00' 41.25"	16.35	8.18	65 MPH	0"	0.03"	
S-352B		170+07.77	396808.6217	801337.9249		100.00	0°00'20.63"							
L-53	N17° 53' 23.37"E	171+07.77	396903.7856	801368.6468		614.22								

OUTBOUND TRACK B1										CURVE DATA	
CURVE #	PIC STATION	RADIUS	LENGTH	DELTA	TANGENT	MID ORDINATE	SPEED	Ea	Eu		
C-49	135+76.66	800	313.15	22°25'38.70"	158.60	15.27	45 MPH	6"	4.15"		
C-51	147+11.40	955	279.00	16°44'20.09"	140.50	10.17	50 MPH	6"	4.50"		
C-53	154+86.08	1500	122.36	4°40'25.38"	61.21	1.25	50 MPH	4"	2.68"		
C-55	167+52.86	3820	133.35	2°00'00.15"	66.68	0.58	55 MPH	2"	1.18"		
C-57	171+85.72	3820	113.35	1°42'00.27"	56.68	0.42	60 MPH	2.25"	1.53"		

INBOUND TRACK B2										CURVE DATA	
CURVE #	PIC STATION	RADIUS	LENGTH	DELTA	TANGENT	MID ORDINATE	SPEED	Ea	Eu		
C-46	144+81.58	2925	193.97	3°47'58.31"	97.02	1.61	70 MPH	5"	1.72"		
C-48	152+36.63	1740	177.66	5°51'00.66"	88.91	2.27	55 MPH	4"	2.97"		
C-350	166+99.00	500000	16.84	0°00'06.95"	8.42	0.00	55 MPH	0"	0.02"		
C-352	169+99.60	500000	16.35	0°00'06.74"	8.18	0.00	65 MPH	0"	0.03"		

OUTBOUND TRACK B1										SPIRAL DATA	
SPIRAL #	STATION	Os	X	Y	P	K	LT	ST	LS		
S-49A	131+18.05	10°44'34.7"	298.95	18.70	4.68	149.82	200.37	100.34	300.00		
S-49B	137+31.20	10°44'34.7"	298.95	18.70	4.68	149.82	200.37	100.34	300.00		
S-51A	142+70.90	8°59'57.6"	299.26	15.68	3.92	149.88	200.26	100.24	300.00		
S-51B	148+49.90	8°59'57.6"	299.26	15.68	3.92	149.88	200.26	100.24	300.00		
S-53A	152+24.87	3°49'11.0"	199.91	4.44	1.11	99.99	133.36	66.69	200.00		
S-53B	155+47.23	3°49'11.0"	199.91	4.44	1.11	99.99	133.36	66.69	200.00		
S-55A	165+86.19	0°44'59.8"	100.00	0.44	0.11	50.00	66.67	33.33	100.00		
S-55B	168+19.53	0°44'59.8"	100.00	0.44	0.11	50.00	66.67	33.33	100.00		
S-57A	170+09.04	0°53'59.8"	120.00	0.63	0.16	60.00	80.00	40.00	120.00		
S-57B	172+42.39	0°53'59.8"	120.00	0.63	0.16	60.00	80.00	40.00	120.00		

INBOUND TRACK B2										SPIRAL DATA	
SPIRAL #	STATION	Os	X	Y	P	K	LT	ST	LS		
S-46A	141+34.56	2°26'54.7"	249.95	3.56	0.89	124.99	166.68	83.35	250.00		
S-46B	145+78.53	2°26'54.7"	249.95	3.56	0.89	124.99	166.68	83.35	250.00		
S-48A	149+47.72	3°17'34.3"	199.93	3.83	0.96	99.99	133.36	66.69	200.00		
S-48B	153+25.39	3°10'12.7"	192.49	3.55	0.89	96.27	128.39	64.20	192.55		
S-350A	165+90.58	0°00'20.6"	100.00	0.00	0.00	50.00	66.67	33.33	100.00		
S-350B	167+07.42	0°00'20.6"	100.00	0.00	0.00	50.00	66.67	33.33	100.00		
S-352A	168+91.42	0°00'20.6"	100.00	0.00	0.00	50.00	66.67	33.33	100.00		
S-352B	170+07.77	0°00'20.6"	100.00	0.00	0.00	50.00	66.67	33.33	100.00		

- NOTES:
- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12-12-2017.
PCAR B4-1, 1973 FOR THE OUTBOUND TRACK
PCAR B4-3-1, 1975 FOR THE INBOUND TRACK.

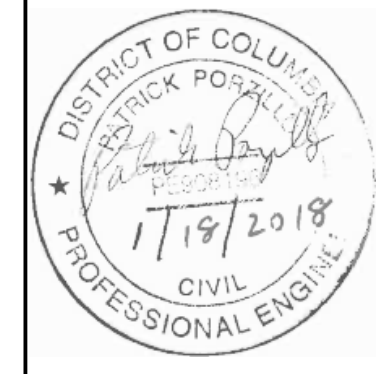
HORIZONTAL GEOMETRY DATA
OUTBOUND TRACK B1

1
B04-TW-001

HORIZONTAL GEOMETRY DATA
INBOUND TRACK B2

2
B04-TW-001

GFP A Gannett Fleming/Parsons
JOINT VENTURE



"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED	R. WALKER	01/17/2018
DRAWN	S. HICKS	01/17/2018
CHECKED	F. BLACHLY	01/17/2018

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		12/08/2017	A PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B FINAL CONTRACT DRAWINGS

M WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

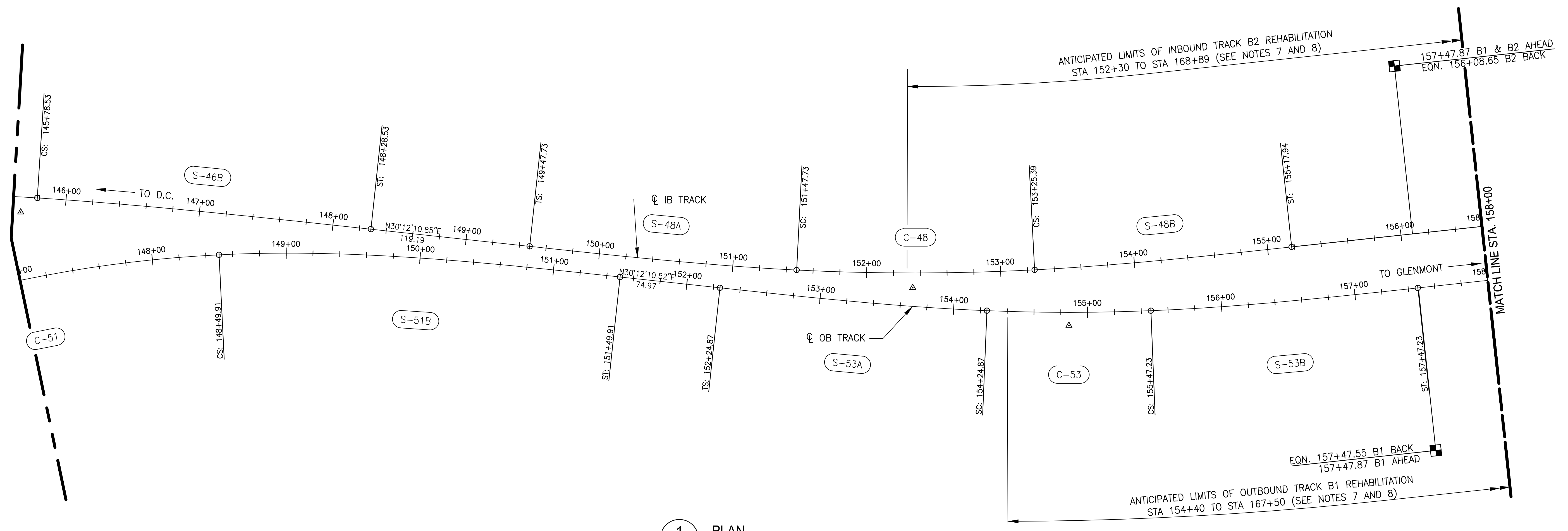
01/17/2018

OHN PURDY
ENGINEERING MANAGER

PATRICK PORILLO
ENGINEER OF RECORD

01/17/2018

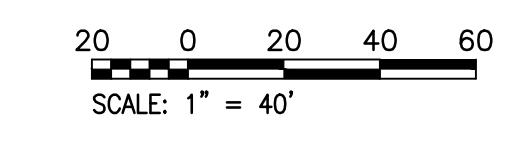
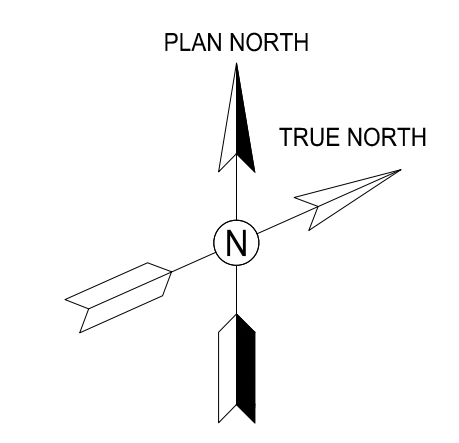
PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION			
B04 - RHODE ISLAND AVENUE TRACKS B1 AND B2 - HORIZONTAL ALIGNMENT GEOMETRY			
M NO. M 1302	CONTRACT NO. F 18086	SCALE N/A	DRAWING NO. B04-TW-001
			SHEET NO. 1 of 11



1 PLAN
B04-PP-101 SCALE: 1" = 40'

NOTES:

- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12/12/17. PCAR B4-1, 1973 FOR THE OUTBOUND TRACK. PCAR BR-3-1, 1975 FOR THE INBOUND TRACK.
- SEE DWG B4-TW-001 FOR HORIZONTAL GEOMETRY DATA.
- SEE DWG B4-PP-201 FOR VERTICAL TRACK PROFILE.
- TRACK REHABILITATION TO RESTORE TRACK TO PCAR B4-1 AND PCAR B4-3-1 HORIZONTAL ALIGNMENT AND ADJUST THE VERTICAL TRACK PROFILE TO PCAR PROFILE WITH OUTBOUND TRACK RAISED ONE INCH WITHIN THE PLATFORM AREA AND INBOUND TRACK PROFILE RAISED TO MATCH THE OUTBOUND TRACK.
- WORK SHALL CONSIST OF REMOVING DIRECT FIXATION TRACK, CONTACT RAIL, AND GROUT PADS. INSTALLING NEW GROUT PADS, NEW DIRECT FIXATION FASTENERS, NEW RAIL AND NEW CONTACT RAIL. RELOCATION OF SOME EXISTING CONTACT RAIL END APPROACHES AND CONTACT RAIL ANCHORS IS ALSO INCLUDED.
- CONTRACTOR SHALL COORDINATE TRACKWORK WITH OTHER DISCIPLINES.
- LIMITS OF REHABILITATION TO BE CONFIRMED UPON RECEIPT OF TRACK AMBERG SURVEY DATA.
- LIMITS MAY CHANGE BASED ON DIFFERENCES IN ELEVATIONS BETWEEN AS-BUILT DATA AND THE PCAR PROFILE, AS WELL AS METHOD OF TRANSITIONING TO THE EXISTING PROFILE OUTSIDE THE PLATFORM LIMITS.



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
PROFESSIONAL ENGINEER
17/19/2018

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

DESIGNED	R. WALKER	01/17/2018
		DATE
DRAWN	S. HICKS	01/17/2018
		DATE
CHECKED	F. BLACHLY	01/17/2018
		DATE

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		12/08/2017	A PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B FINAL CONTRACT DRAWINGS

M WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

01/17/2018

OHN PURDY
ENGINEERING MANAGER

PATRICK PORILLO
ENGINEER OF RECORD

01/17/2018

PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION

B04 - RHODE ISLAND AVENUE
TRACK PLAN - STA 147+00 TO STA 158+00

M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	1" = 40'	B04-PP-101	2 of 11

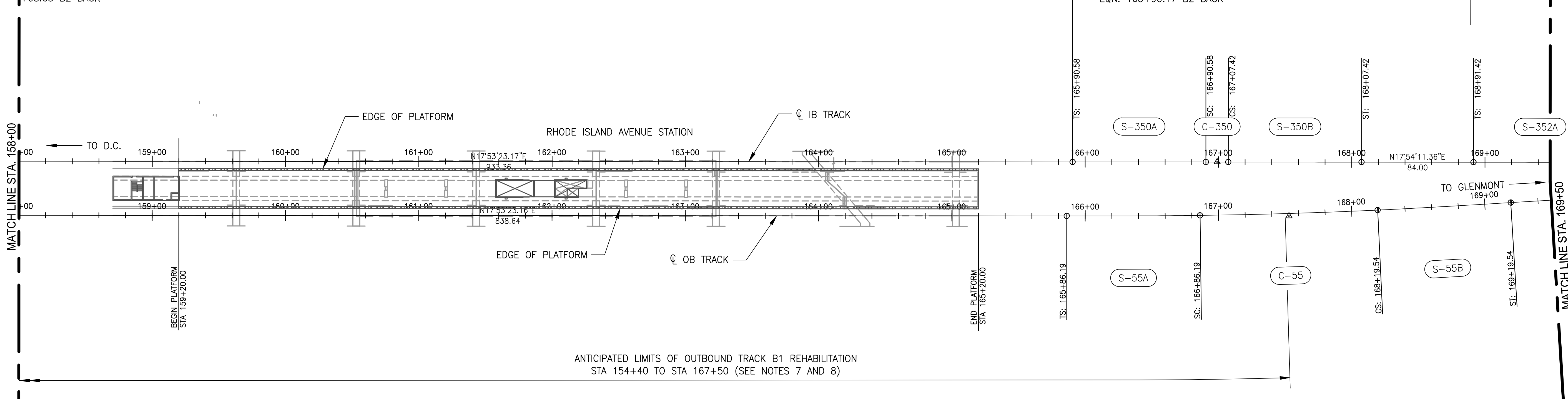
ANTICIPATED LIMITS OF INBOUND TRACK B2 REHABILITATION
STA 152+30 TO STA 168+89 (SEE NOTES 7 AND 8)

7 B1 & B2 AHEAD
+08.65 B2 BACK

165+90.53 B1 & B2 AHEAD
EQN. 165+90.47 B2 BACK

MATCH LINE STA. 158+00

MATCH LINE STA. 169+50

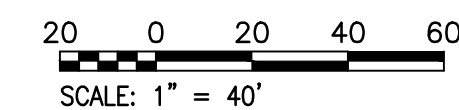
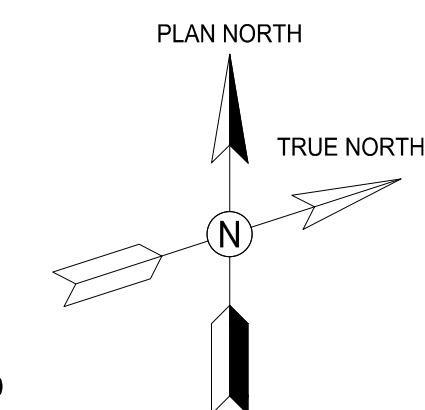


ANTICIPATED LIMITS OF OUTBOUND TRACK B1 REHABILITATION
STA 154+40 TO STA 167+50 (SEE NOTES 7 AND 8)

1 PLAN
B04-PP-102 SCALE: 1" = 40'

NOTES:

- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12/12/17. PCAR B4-1, 1973 FOR THE OUTBOUND TRACK. PCAR BR-3-1, 1975 FOR THE INBOUND TRACK.
- SEE DWG B4-TW-001 FOR HORIZONTAL GEOMETRY DATA.
- SEE DWG B4-PP-202 FOR VERTICAL TRACK PROFILE.
- TRACK REHABILITATION TO RESTORE TRACK TO PCAR B4-1 AND PCAR B4-3-1 HORIZONTAL ALIGNMENT AND ADJUST THE VERTICAL TRACK PROFILE TO PCAR PROFILE WITH OUTBOUND TRACK RAISED ONE INCH WITHIN THE PLATFORM AREA AND INBOUND TRACK PROFILE RAISED TO MATCH THE OUTBOUND TRACK.
- WORK SHALL CONSIST OF REMOVING DIRECT FIXATION TRACK, CONTACT RAIL, AND GROUT PADS. INSTALLING NEW GROUT PADS, NEW DIRECT FIXATION FASTENERS, NEW RAIL AND NEW CONTACT RAIL. RELOCATION OF SOME EXISTING CONTACT RAIL END APPROACHES AND CONTACT RAIL ANCHORS IS ALSO INCLUDED.
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- LIMITS MAY CHANGE BASED ON DIFFERENCES IN ELEVATIONS BETWEEN AS-BUILT DATA AND THE PCAR PROFILE, AS WELL AS METHOD OF TRANSITIONING TO THE EXISTING PROFILE OUTSIDE THE PLATFORM LIMITS.



GFP A Gannett Fleming/Parsons
JOINT VENTURE

DISTRICT OF COLUMBIA
DISTRICT OF PROFESSIONAL ENGINEERS
17/19/2018
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LICENSE No. 908196
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DESIGNED	R. WALKER	01/17/2018
		DATE
DRAWN	S. HICKS	01/17/2018
		DATE
CHECKED	F. BLACHLY	01/17/2018
		DATE

REFERENCE DRAWINGS		REVISIONS		
NUMBER	TITLE	DATE	NUM	DESCRIPTION
		12/08/2017	A	PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B	FINAL CONTRACT DRAWINGS

M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

OHN PURDY
ENGINEERING MANAGER

PATRICK PORILLO
ENGINEER OF RECORD

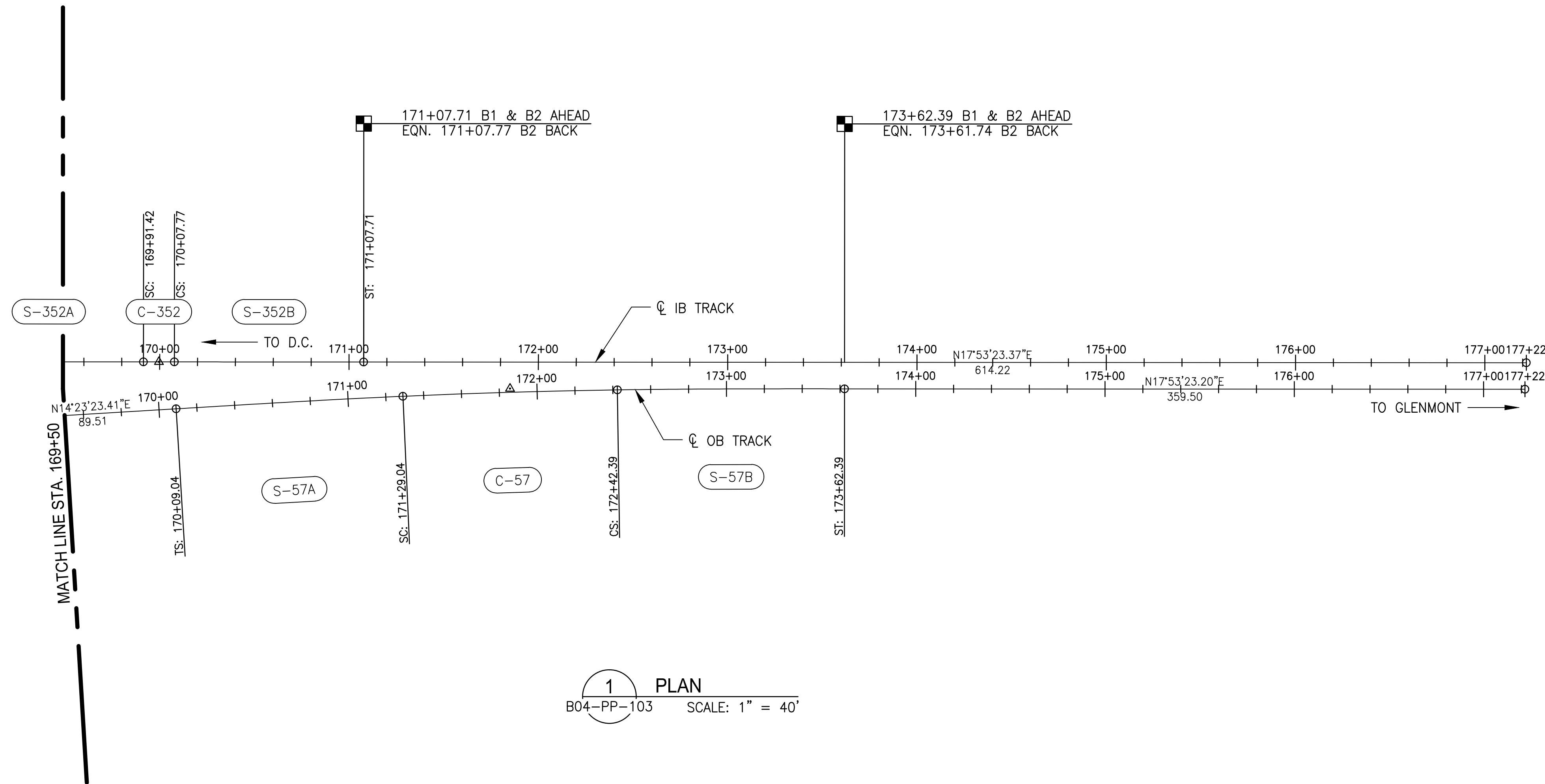
01/17/2018

01/17/2018

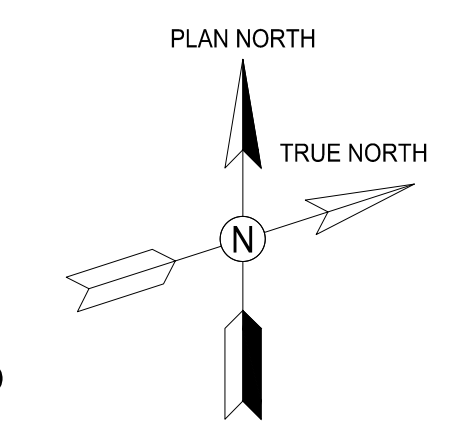
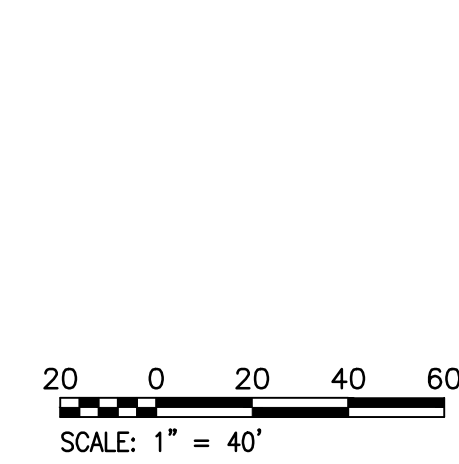
PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION				
B04 - RHODE ISLAND AVENUE TRACK PLAN - STA 158+00 TO STA 169+50				
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	1" = 40'	B04-PP-102	3 of 11

NOTES:

- HORIZONTAL GEOMETRY PROVIDED BY WMATA 12/12/17. PCAR B4-1, 1973 FOR THE OUTBOUND TRACK. PCAR B4-3-1, 1975 FOR THE INBOUND TRACK.
- SEE DWG B4-TW-001 FOR HORIZONTAL GEOMETRY DATA.
- SEE DWG B4-PP-203 FOR VERTICAL TRACK PROFILE.
- NO PROPOSED WORK THIS SHEET. ALIGNMENT SHOWN FOR INFORMATION ONLY.



1 PLAN
B04-PP-103 SCALE: 1" = 40'



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
PROFESSIONAL ENGINEER
17/19/2018

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
EXPIRATION DATE: 08/31/18

- DC REGISTER SECTION 1516

	DESIGNED		DRAWN		CHECKED	
	NAME	DATE	NAME	DATE	NAME	DATE
	R. WALKER	01/17/2018	S. HICKS	01/17/2018	F. BLACHLY	01/17/2018

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	NUM
		12/08/2017	A
		01/17/2018	B

M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

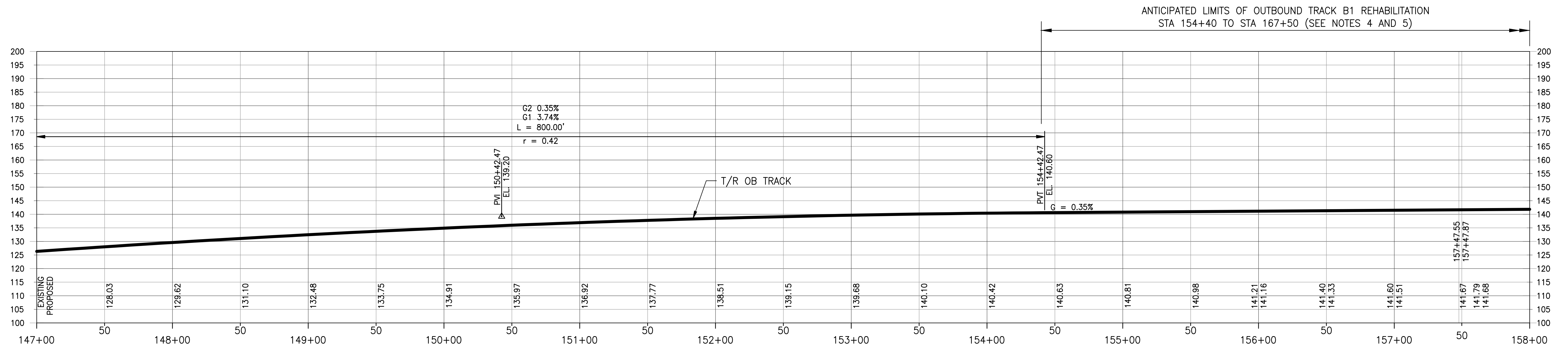
OHN PURDY
ENGINEERING MANAGER

PATRICK PORILLO
ENGINEER OF RECORD

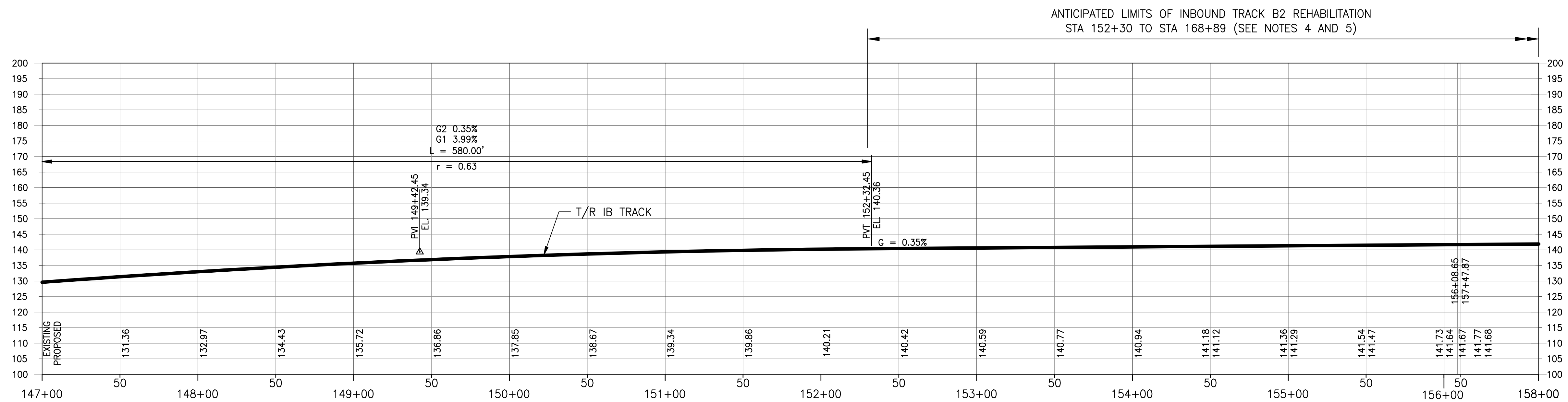
PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION

B04 - RHODE ISLAND AVENUE
TRACK PLAN - STA 169+50 TO STA 175+00

M NO. M 1302	CONTRACT NO. F 18086	SCALE 1" = 40'	DRAWING NO. B04-PP-103	SHEET NO. 4 of 11
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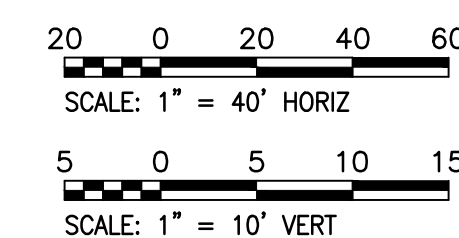
1 PROFILE OUTBOUND TRACK B1
 B04-PP-201 SCALE: 1" = 40' H, 1" = 10' V



2 PROFILE INBOUND TRACK B2
 B04-PP-201 SCALE: 1" = 40' H, 1" = 10' V

NOTES:

- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12/12/17. PCAR B4-1, 1973 FOR THE OUTBOUND TRACK. PCAR B4-3-1, 1975 FOR THE INBOUND TRACK.
- WORK SHALL CONSIST OF REMOVING DIRECT FIXATION TRACK, CONTACT RAIL, AND GROUT PADS. INSTALLING NEW GROUT PADS, NEW DIRECT FIXATION FASTENERS, NEW RAIL AND NEW CONTACT RAIL. RELOCATION OF SOME EXISTING CONTACT RAIL ANCHORS IS ALSO INCLUDED.
- CONTRACTOR SHALL COORDINATE TRACKWORK WITH OTHER DISCIPLINES.
- LIMITS OF REHABILITATION TO BE CONFIRMED UPON RECEIPT OF TRACK AMBERG SURVEY DATA.
- LIMITS MAY CHANGE BASED ON DIFFERENCES IN ELEVATIONS BETWEEN AS-BUILT DATA AND THE PCAR PROFILE, AS WELL AS METHOD OF TRANSITIONING TO THE EXISTING PROFILE OUTSIDE THE PLATFORM LIMITS.
- TRACK REHABILITATION TO RESTORE TRACK VERTICALLY TO THE PROFILES SHOWN ON B4-PP-1 (M39-037) THRU B4-PP-6 (M37-042) AS MODIFIED BY PCAR B4-2, 1973. ADJUST THE VERTICAL TRACK PROFILE TO PCAR PROFILE WITH OUTBOUND TRACK RAISED ONE INCH WITHIN THE PLATFORM AREA AND INBOUND TRACK PROFILE RAISED TO MATCH THE OUTBOUND TRACK.



GFP A Gannett Fleming/Parsons JOINT VENTURE

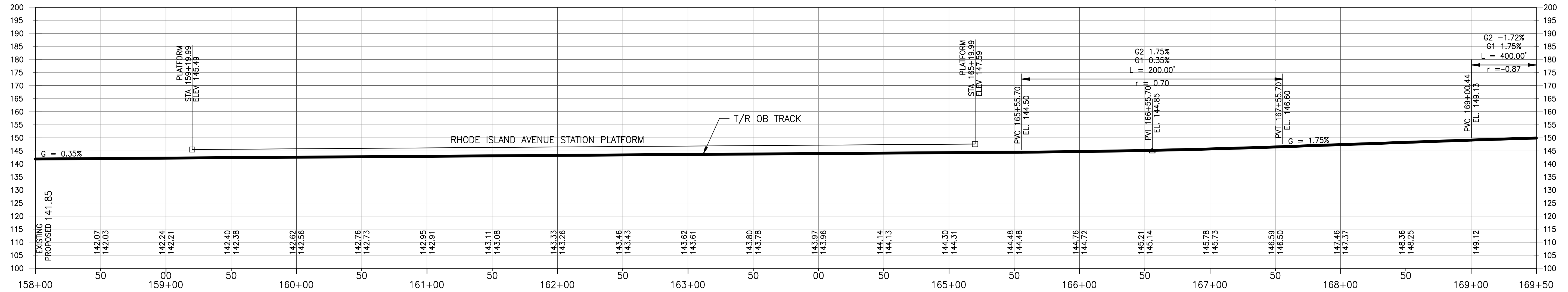
DISTRICT OF COLUMBIA
 PATRICK PORILLO
 17/19/2018
 CIVIL ENGINEER

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
 EXPIRATION DATE: 08/31/18
 -DC REGISTER SECTION 1516

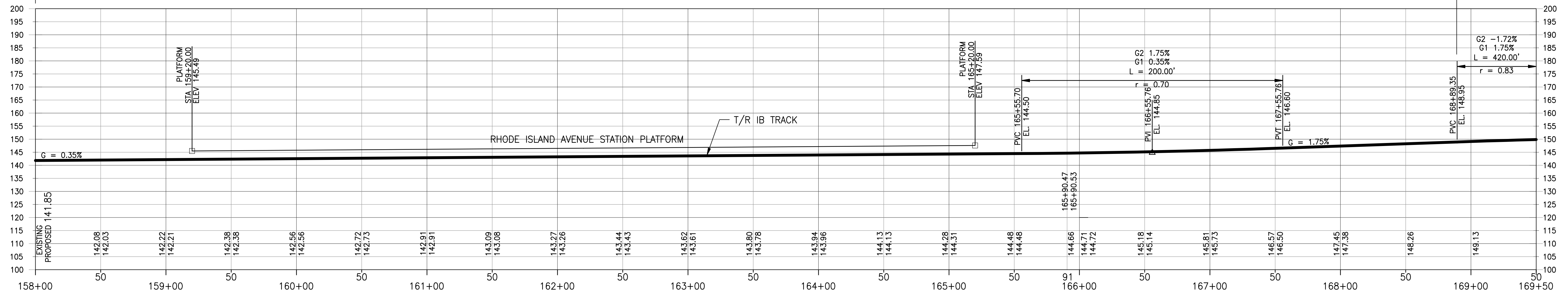
DESIGNED			DATE			REVISIONS			WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY			PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION		
NUMBER	TITLE	DATE	NUM	DESCRIPTION	DATE	NUM	DESCRIPTION	OFFICE OF DESIGN AND CONSTRUCTION			B04 - RHODE ISLAND AVENUE			
1	PRE-FINAL CONTRACT DRAWINGS	12/08/2017	A	PRE-FINAL CONTRACT DRAWINGS	12/08/2017	B	FINAL CONTRACT DRAWINGS	IRPG - FIXED FACILITIES			TRACK PROFILES - STA 147+00 TO STA 158+00			
2	FINAL CONTRACT DRAWINGS	01/17/2018	B	FINAL CONTRACT DRAWINGS	01/17/2018			01/17/2018			01/17/2018			
DESIGNED R. WALKER 01/17/2018			DATE						JOHN PURDY ENGINEERING MANAGER			PATRICK PORILLO ENGINEER OF RECORD		
DRAWN S. HICKS 01/17/2018			DATE											
CHECKED F. BLACHLY 01/17/2018			DATE											
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.										
M 1302	F 18086	1" = 40' H, 1" = 10' V	B04-PP-201	5 of 11										

ANTICIPATED LIMITS OF OUTBOUND TRACK B1 REHABILITATION
STA 154+40 TO STA 167+50 (SEE NOTES 4 AND 5)



1 PROFILE - OUTBOUND TRACK B1
B04-PP-202 SCALE: 1" = 40' H, 1" = 10' V

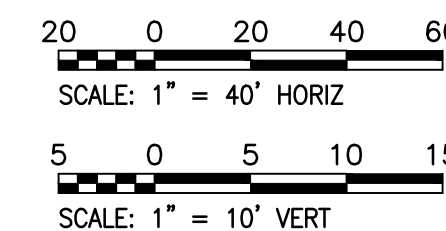
ANTICIPATED LIMITS OF INBOUND TRACK B2 REHABILITATION
STA 152+30 TO STA 168+89 (SEE NOTES 4 AND 5)



2 PROFILE - INBOUND TRACK B2
B04-PP-202 SCALE: 1" = 40' H, 1" = 10' V

NOTES:

- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12/12/17.
PCAR B4-1, 1973 FOR THE OUTBOUND TRACK.
PCAR B4-3-1, 1975 FOR THE INBOUND TRACK.
- WORK SHALL CONSIST OF REMOVING DIRECT FIXATION TRACK, CONTACT RAIL, AND GROUT PADS. INSTALLING NEW GROUT PADS, NEW DIRECT FIXATION FASTENERS, NEW RAIL AND NEW CONTACT RAIL. RELOCATION OF SOME EXISTING CONTACT RAIL ANCHORS IS ALSO INCLUDED.
- CONTRACTOR SHALL COORDINATE TRACKWORK WITH OTHER DISCIPLINES.
- LIMITS OF REHABILITATION TO BE CONFIRMED UPON RECEIPT OF TRACK AMBERG SURVEY DATA.
- LIMITS MAY CHANGE BASED ON DIFFERENCES IN ELEVATIONS BETWEEN AS-BUILT DATA AND THE PCAR PROFILE, AS WELL AS METHOD OF TRANSITIONING TO THE EXISTING PROFILE OUTSIDE THE PLATFORM LIMITS.
- TRACK REHABILITATION TO RESTORE TRACK VERTICALLY TO THE PROFILES SHOWN ON B4-PP-1 (M39-037) THRU B4-PP-6 (M37-042) AS MODIFIED BY PCAR B4-2, 1973. ADJUST THE VERTICAL TRACK PROFILE TO PCAR PROFILE WITH OUTBOUND TRACK RAISED ONE INCH WITHIN THE PLATFORM AREA AND INBOUND TRACK PROFILE RAISED TO MATCH THE OUTBOUND TRACK.



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
PROFESSIONAL ENGINEER
17/19/2018

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

	DESIGNED		DRAWN		CHECKED	
	NAME	DATE	NAME	DATE	NAME	DATE
	R. WALKER	01/17/2018	S. HICKS	01/17/2018	F. BLACHLY	01/17/2018

REFERENCE DRAWINGS		REVISIONS		
NUMBER	TITLE	DATE	NUM	DESCRIPTION
		12/08/2017	A	PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B	FINAL CONTRACT DRAWINGS

M metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

01/17/2018

JOHN PURDY
ENGINEERING MANAGER

PATRICK PORILLO
ENGINEER OF RECORD

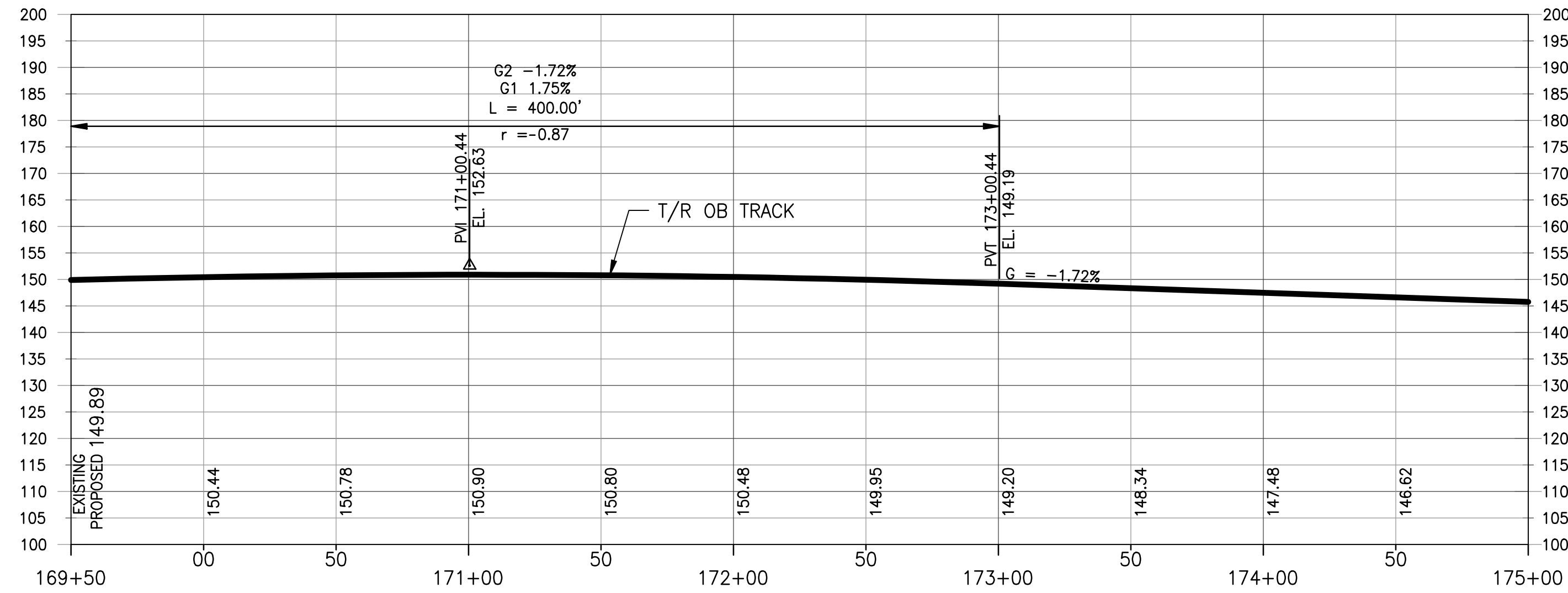
PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION

B04 - RHODE ISLAND AVENUE
TRACK PROFILES - STA 158+00 TO STA 169+50

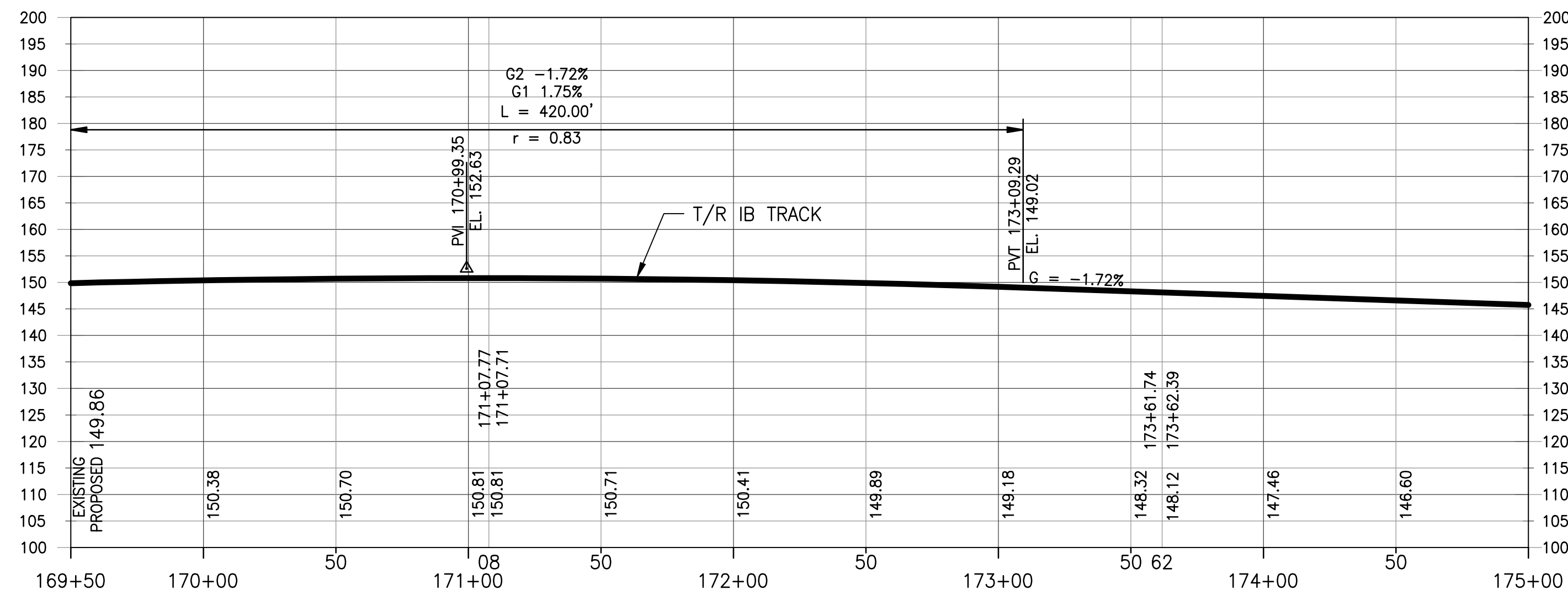
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	1" = 40' H, 1" = 10' V	B04-PP-202	6 of 11

NOTES:

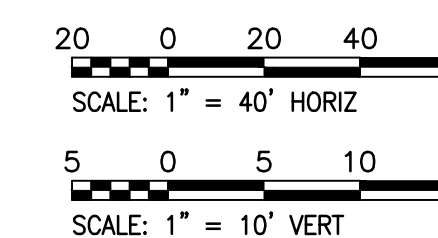
- HORIZONTAL GEOMETRY PROVIDED BY WMATA, 12/12/17.
PCAR B4-1, 1973 FOR THE OUTBOUND TRACK.
PCAR B4-3-1, 1975 FOR THE INBOUND TRACK.
- CONTRACTOR SHALL COORDINATE TRACKWORK WITH OTHER DISCIPLINES.
- NO PROPOSED WORK THIS SHEET. ALIGNMENT SHOWN FOR INFORMATION ONLY.
- TRACK REHABILITATION TO RESTORE TRACK VERTICALLY TO THE PROFILES SHOWN ON B4-PP-1 (M39-037) THRU B4-PP-6 (M37-042) AS MODIFIED BY PCAR B4-2, 1973. ADJUST THE VERTICAL TRACK PROFILE TO PCAR PROFILE WITH OUTBOUND TRACK RAISED ONE INCH WITHIN THE PLATFORM AREA AND INBOUND TRACK PROFILE RAISED TO MATCH THE OUTBOUND TRACK.



1 PROFILE - OUTBOUND TRACK B1
B04-PP-203 SCALE: 1" = 40' H, 1" = 10' V



2 PROFILE - INBOUND TRACK B2
B04-PP-203 SCALE: 1" = 40' H, 1" = 10' V



GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA
PATRICK PORILLO
17/19/2018
PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA.

LICENSE No. 908196
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED R. WALKER 01/17/2018 DATE	REFERENCE DRAWINGS		REVISIONS		<p>WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY</p> <p>OFFICE OF DESIGN AND CONSTRUCTION</p> <p>IRPG - FIXED FACILITIES</p> <p>JOHN PURDY ENGINEERING MANAGER 01/17/2018</p> <p>PATRICK PORILLO ENGINEER OF RECORD 01/17/2018</p>	PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION				
	DRAWN S. HICKS 01/17/2018 DATE CHECKED F. BLACHLY 01/17/2018 DATE	NUMBER	TITLE	DATE		NUM	DESCRIPTION	B04 - RHODE ISLAND AVENUE TRACK PROFILES - STA 169+50 TO STA 175+00		
				A	PRE-FINAL CONTRACT DRAWINGS	M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
				B	FINAL CONTRACT DRAWINGS	M 1302	F 18086	1" = 40' H, 1" = 10' V	B04-PP-203	7 of 11

STATION	LEFT RAIL		PGL	RIGHT RAIL		SUPERELEVATION
	TOP OF RAIL	TOP OF GROUT PAD		TOP OF RAIL	TOP OF GROUT PAD	
158+00.00	141.86	141.16	141.86	141.86	141.16	0.00
158+10.00	141.90	141.20	141.90	141.90	141.20	0.00
158+20.00	141.93	141.23	141.93	141.93	141.23	0.00
158+30.00	141.97	141.27	141.97	141.97	141.27	0.00
158+40.00	142.00	141.30	142.00	142.00	141.30	0.00
158+50.00	142.04	141.34	142.04	142.04	141.34	0.00
158+60.00	142.07	141.37	142.07	142.07	141.37	0.00
158+70.00	142.11	141.41	142.11	142.11	141.41	0.00
158+80.00	142.14	141.44	142.14	142.14	141.44	0.00
158+90.00	142.18	141.48	142.18	142.18	141.48	0.00
159+00.00	142.21	141.51	142.21	142.21	141.51	0.00
159+10.00	142.25	141.55	142.25	142.25	141.55	0.00
159+20.00	142.28	141.58	142.28	142.28	141.58	0.00
159+30.00	142.32	141.62	142.32	142.32	141.62	0.00
159+40.00	142.35	141.65	142.35	142.35	141.65	0.00
159+50.00	142.39	141.69	142.39	142.39	141.69	0.00
159+60.00	142.42	141.72	142.42	142.42	141.72	0.00
159+70.00	142.46	141.76	142.46	142.46	141.76	0.00
159+80.00	142.49	141.79	142.49	142.49	141.79	0.00
159+90.00	142.53	141.83	142.53	142.53	141.83	0.00
160+00.00	142.56	141.86	142.56	142.56	141.86	0.00
160+10.00	142.60	141.90	142.60	142.60	141.90	0.00
160+20.00	142.63	141.93	142.63	142.63	141.93	0.00
160+30.00	142.67	141.97	142.67	142.67	141.97	0.00
160+40.00	142.70	142.00	142.70	142.70	142.00	0.00
160+50.00	142.74	142.04	142.74	142.74	142.04	0.00
160+60.00	142.77	142.07	142.77	142.77	142.07	0.00
160+70.00	142.81	142.11	142.81	142.81	142.11	0.00
160+80.00	142.84	142.14	142.84	142.84	142.14	0.00
160+90.00	142.88	142.18	142.88	142.88	142.18	0.00
161+00.00	142.91	142.21	142.91	142.91	142.21	0.00
161+10.00	142.95	142.25	142.95	142.95	142.25	0.00
161+20.00	142.98	142.28	142.98	142.98	142.28	0.00
161+30.00	143.02	142.32	143.02	143.02	142.32	0.00
161+40.00	143.05	142.35	143.05	143.05	142.35	0.00
161+50.00	143.09	142.39	143.09	143.09	142.39	0.00
161+60.00	143.12	142.42	143.12	143.12	142.42	0.00
161+70.00	143.16	142.46	143.16	143.16	142.46	0.00
161+80.00	143.19	142.49	143.19	143.19	142.49	0.00
161+90.00	143.23	142.53	143.23	143.23	142.53	0.00

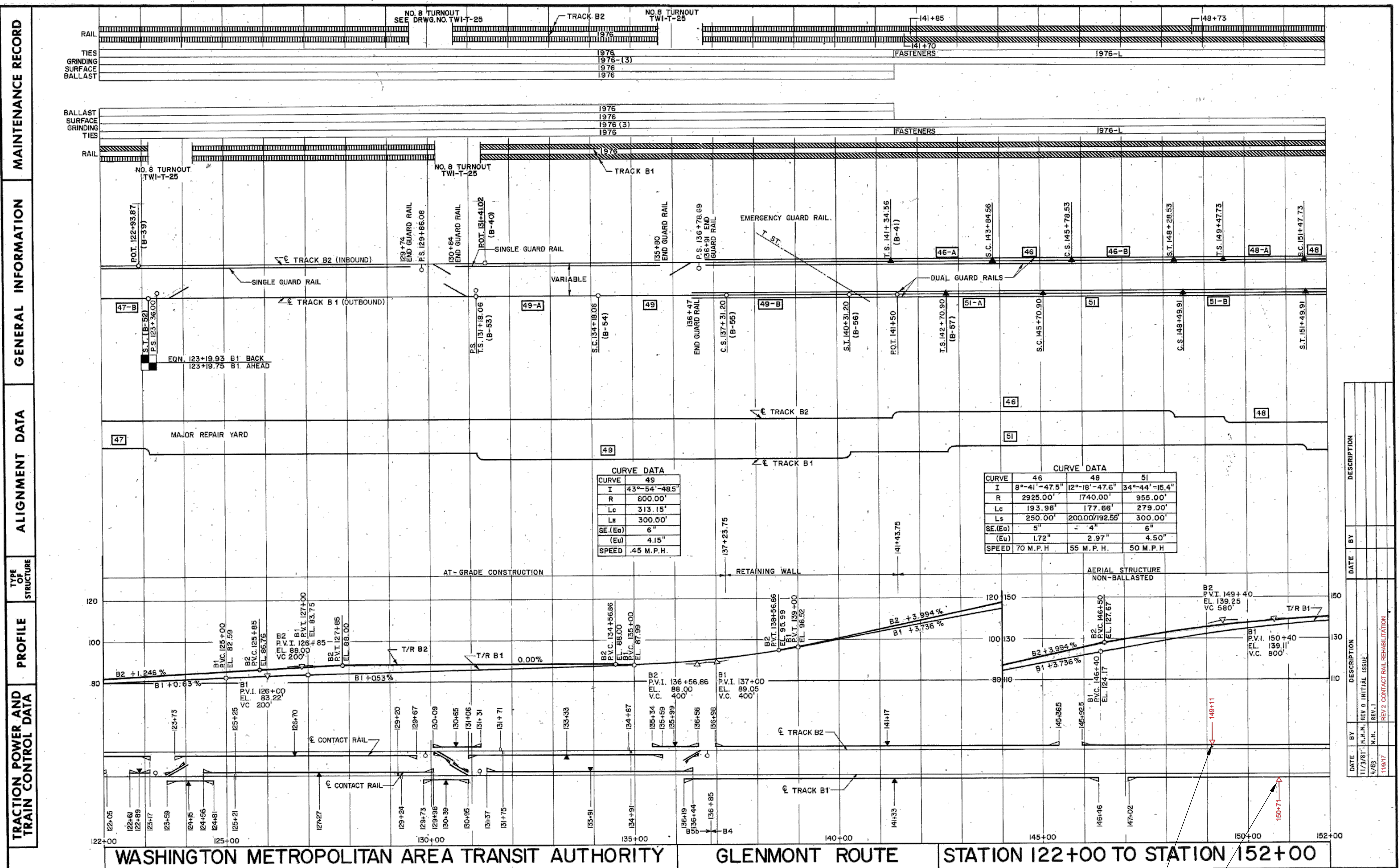
STATION	LEFT RAIL		PGL	RIGHT RAIL		SUPERELEVATION
	TOP OF RAIL	TOP OF GROUT PAD		TOP OF RAIL	TOP OF GROUT PAD	
162+00.00	143.26	142.56	143.26	143.26	142.56	0.00
162+10.00	143.30	142.60	143.30	143.30	142.60	0.00
162+20.00	143.33	142.63	143.33	143.33	142.63	0.00
162+30.00	143.37	142.67	143.37	143.37	142.67	0.00
162+40.00	143.40	142.70	143.40	143.40	142.70	0.00
162+50.00	143.44	142.74	143.44	143.44	142.74	0.00
162+60.00	143.47	142.77	143.47	143.47	142.77	0.00
162+70.00	143.51	142.81	143.51	143.51	142.81	0.00
162+80.00	143.54	142.84	143.54	143.54	142.84	0.00
162+90.00	143.58	142.88	143.58	143.58	142.88	0.00
163+00.00	143.61	142.91	143.61	143.61	142.91	0.00
163+10.00	143.65	142.95	143.65	143.65	142.95	0.00
163+20.00	143.68	142.98	143.68	143.68	142.98	0.00
163+30.00	143.72	143.02	143.72	143.72	143.02	0.00
163+40.00	143.75	143.05	143.75	143.75	143.05	0.00
163+50.00	143.79	143.09	143.79	143.79	143.09	0.00
163+60.00	143.82	143.12	143.82	143.82	143.12	0.00
163+70.00	143.86	143.16	143.86	143.86	143.16	0.00
163+80.00	143.89	143.19	143.89	143.89	143.19	0.00
163+90.00	143.93	143.23	143.93	143.93	143.23	0.00
164+00.00	143.96	143.26	143.96	143.96	143.26	0.00
164+10.00	144.00	143.30	144.00	144.00	143.30	0.00
164+20.00	144.03	143.33	144.03	144.03	143.33	0.00
164+30.00	144.07	143.37	144.07	144.07	143.37	0.00
164+40.00	144.10	143.40	144.10	144.10	143.40	0.00
164+50.00	144.14	143.44	144.14	144.14	143.44	0.00
164+60.00	144.17	143.47	144.17	144.17	143.47	0.00
164+70.00	144.21	143.51	144.21	144.21	143.51	0.00
164+80.00	144.24	143.54	144.24	144.24	143.54	0.00
164+90.00	144.28	143.58	144.28	144.28	143.58	0.00
165+00.00	144.31	143.61	144.31	144.31	143.61	0.00
165+10.00	144.35	143.65	144.35	144.35	143.65	0.00
165+20.00	144.38	143.68	144.38	144.38	143.68	0.00

GFP A Gannett Fleming/Parsons
JOINT VENTURE

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196
EXPIRATION DATE: 08/31/18
- DC REGISTER SECTION 1516

DESIGNED R. WALKER 01/17/2018 DATE	REFERENCE DRAWINGS	REVISIONS		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION					
DRAWN S. HICKS 01/17/2018 DATE	NUMBER TITLE	DATE NUM DESCRIPTION		OFFICE OF DESIGN AND CONSTRUCTION		B04 - RHODE ISLAND AVENUE STATION					
CHECKED F. BLACHLY 01/17/2018 DATE				IRPG - FIXED FACILITIES		INBOUND TRACK - TABLE OF ELEVATIONS					
				01/17/2018		01/17/2018	M NO. M 1302	CONTRACT NO. F 18086	SCALE NONE	DRAWING NO. B04-TW-501	SHEET NO. 8 of 11



- NOTES
- DRAWING SHOWS PROPOSED DESIGN FOR NEW CONTACT RAIL.
 - REFER TO DRAWINGS B04-TW-001, B04-PP-101 THRU B4-PP103, AND B04-PP-201 THRU B4-PP-203 FOR PROPOSED ALIGNMENT DESIGN.

MAINTENANCE RECORD
 GENERAL INFORMATION
 ALIGNMENT DATA
 TYPE OF STRUCTURE
 PROFILE
 TRACTION POWER AND TRAIN CONTROL DATA

DATE	BY	DESCRIPTION
11/2/01	M.M.H.	REV 0 INITIAL ISSUE
1/03	M.H.	REV 1
11/07		REV 2 CONTACT RAIL REHABILITATION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY GLENMONT ROUTE STATION 122+00 TO STATION 152+00

RELOCATE EXISTING CONTACT RAIL ANCHOR FROM 152+30

RELOCATE EXISTING CONTACT RAIL ANCHOR FROM 152+01

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA PROFESSIONAL ENGINEER

11/19/2018

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

LICENSE No. 908196

EXPIRATION DATE: 08/31/18

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DESIGNED	R. WALKER	01/17/2018
DRAWN	S. HICKS	01/17/2018
CHECKED	F. BLACHLY	01/17/2018

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		12/08/2017	A PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF DESIGN AND CONSTRUCTION

IRPG - FIXED FACILITIES

01/17/2018

OHN PURDY ENGINEERING MANAGER

PATRICK PORILLO ENGINEER OF RECORD

PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION		B04 - RHODE ISLAND AVENUE	
TRACK CHART - GLENMONT ROUTE - STA 122+00 TO STA 152+00			
M NO.	CONTRACT NO.	SCALE	DRAWING NO.
M 1302	F 18086	N/A	B04-TW-503
SHEET NO.		10 of 11	

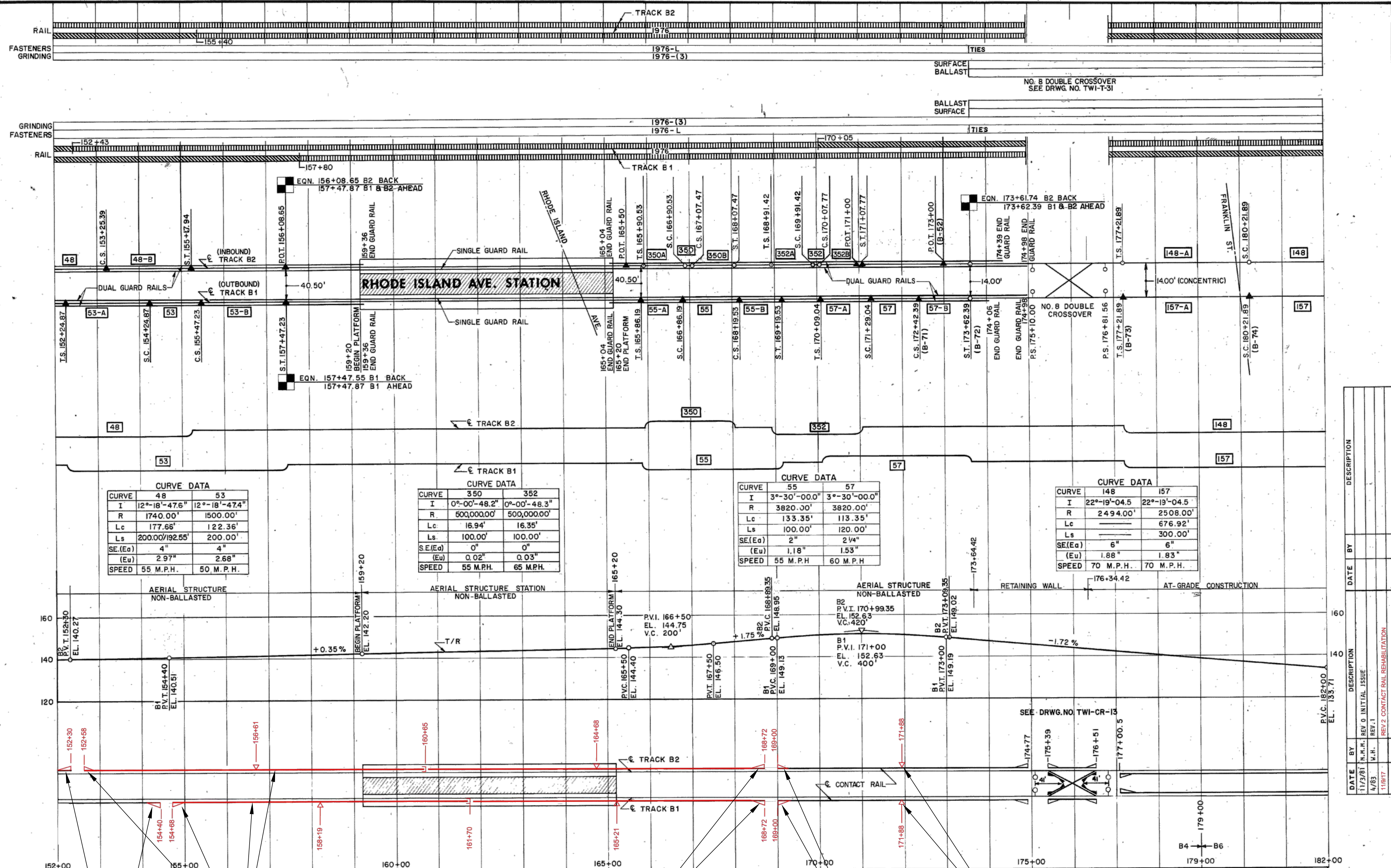
MAINTENANCE RECORD

GENERAL INFORMATION

ALIGNMENT DATA

PROFILE

TRACTION POWER AND TRAIN CONTROL DATA



CURVE DATA

CURVE	48	53
I	12°-18'-47.6"	12°-18'-47.4"
R	1740.00'	1500.00'
Lc	177.66'	122.36'
Ls	200.00'/92.55'	200.00'
SE(Ea)	4"	4"
(Eu)	2.97"	2.66"
SPEED	55 M.P.H.	50 M.P.H.

CURVE DATA

CURVE	350	352
I	0°-00'-48.2"	0°-00'-48.3"
R	500,000.00'	500,000.00'
Lc	16.94'	16.35'
Ls	100.00'	100.00'
SE(Ea)	0"	0"
(Eu)	0.02"	0.03"
SPEED	55 M.P.H.	65 M.P.H.

CURVE DATA

CURVE	55	57
I	3°-30'-00.0"	3°-30'-00.0"
R	3820.00'	3820.00'
Lc	133.35'	113.35'
Ls	100.00'	120.00'
SE(Ea)	2"	2 1/4"
(Eu)	1.18"	1.53"
SPEED	55 M.P.H.	60 M.P.H.

CURVE DATA

CURVE	148	157
I	22°-19'-04.5"	22°-19'-04.5"
R	2494.00'	2508.00'
Lc	676.92'	676.92'
Ls	300.00'	300.00'
SE(Ea)	6"	6"
(Eu)	1.88"	1.83"
SPEED	70 M.P.H.	70 M.P.H.

DATE	BY	DESCRIPTION
11/3/81	N.M.H.	REV. 0 INITIAL ISSUE
4/83	M.H.	REV. 1
11/9/17		REV. 2 CONTACT RAIL REHABILITATION

NOTES

- DRAWING SHOWS PROPOSED DESIGN FOR NEW CONTACT RAIL.
- REFER TO DRAWINGS B04-TW-001, B04-PP-101 THRU B4-PP103, AND B04-PP-201 THRU B4-PP-203 FOR PROPOSED ALIGNMENT DESIGN.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY GLENMONT ROUTE STATION 152+00 TO STATION 182+00

NEW COMPOSITE CONTACT RAIL AND APPURTENANCES
11 FT END APPROACHES FOR 150 NMC CONTACT RAIL

NEW COMPOSITE CONTACT RAIL AND APPURTENANCES

11 FT END APPROACHES FOR 150 NMC CONTACT RAIL

RELOCATE EXISTING CONTACT RAIL ANCHORS FROM 167+50

GFP A Gannett Fleming/Parsons JOINT VENTURE

DISTRICT OF COLUMBIA PROFESSIONAL ENGINEER
11/19/2018
LICENSE No. 908196
EXPIRATION DATE: 08/31/18
-DC REGISTER SECTION 1516

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE DISTRICT OF COLUMBIA."

DESIGNED	R. WALKER	01/17/2018
DRAWN	S. HICKS	01/17/2018
CHECKED	F. BLACHLY	01/17/2018

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	DESCRIPTION
		12/08/2017	A PRE-FINAL CONTRACT DRAWINGS
		01/17/2018	B FINAL CONTRACT DRAWINGS

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
OFFICE OF DESIGN AND CONSTRUCTION
IRPG - FIXED FACILITIES

01/17/2018
OHN PURDY ENGINEERING MANAGER
PATRICK PORILLO ENGINEER OF RECORD

PLATFORM, TRACK DECK SLAB AND CEILING REHABILITATION				
B04 - RHODE ISLAND AVENUE				
TRACK CHART - GLENMONT ROUTE - STA 152+00 TO STA 182+00				
M NO.	CONTRACT NO.	SCALE	DRAWING NO.	SHEET NO.
M 1302	F 18086	N/A	B04-TW-504	11 of 11