

# PLANS FOR CONSTRUCTION OF MAIN STREET PEDESTRIAN BRIDGE PROJECT (STATE HIGHWAY, PRINCIPAL ARTERIAL, TOWN HIGHWAY #1, MINOR COLLECTOR) STP BP 14(3), STP BP 17(7) PLAINFIELD, VERMONT COUNTY OF WASHINGTON

PROJECT LOCATION: MAIN STREET IN PLAINFIELD, VERMONT  
PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE MODIFICATION OF AN EXISTING BRIDGE TO ADD A SIDEWALK ON THE SOUTH SIDE, CONCRETE SIDEWALK, GRANITE CURB, RETAINING WALL AND INCIDENTAL ITEMS.  
LENGTH OF PROJECT : APPROXIMATELY 200 FEET  
TRAFFIC DATA AND DESIGN SPEED: US ROUTE 2 POSTED SPEED IS 30 MPH, AADT (2016) IS 8,000 VEHICLES PER DAY

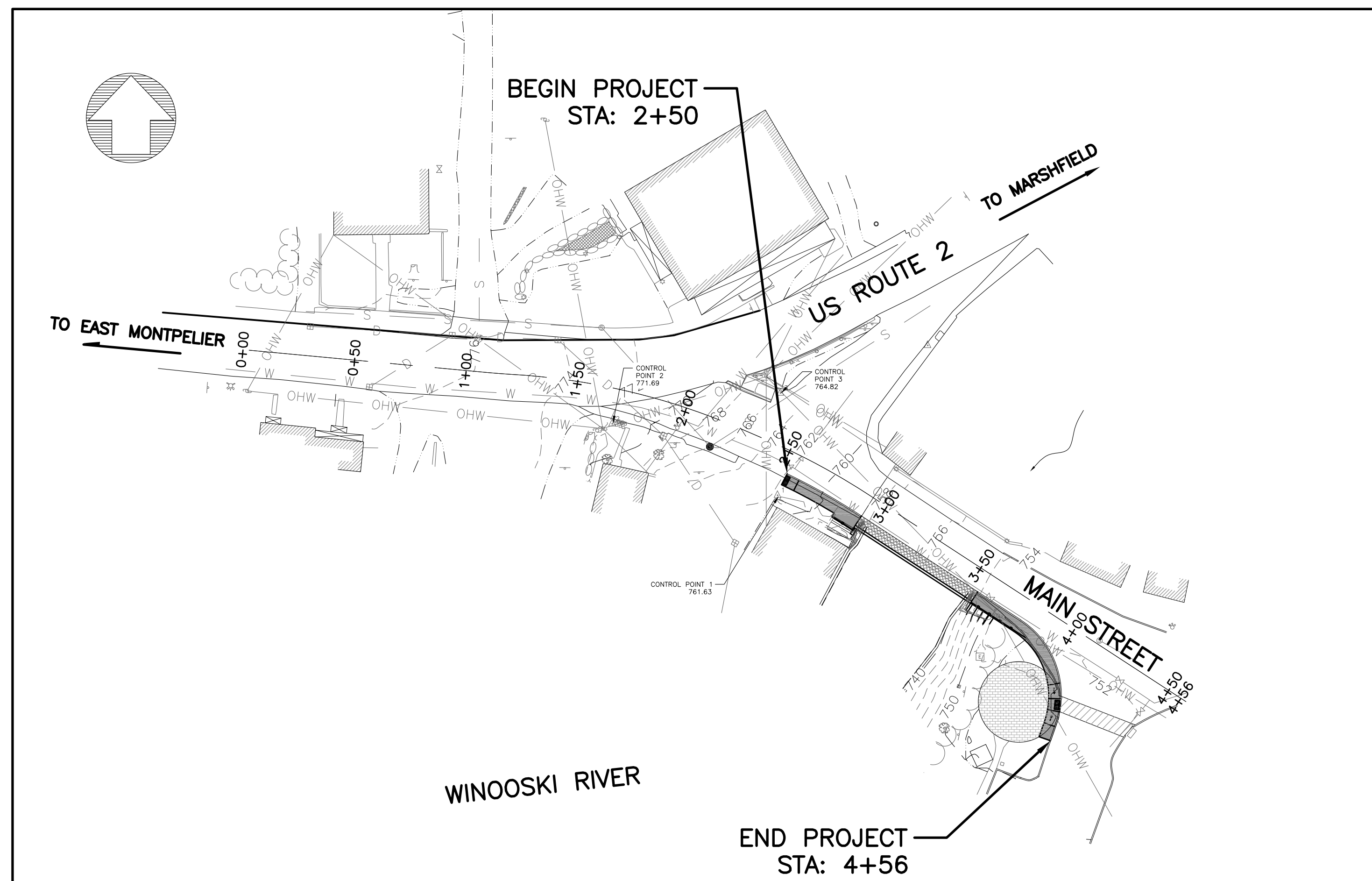
**SELECT BOARD MEMBERS:**  
SASHA THAYER (CHAIR)  
TAMMY FARNHAM  
JAMES VOLZ



**MUNICIPAL PROJECT MANAGER:**  
ALICE MERRILL

OCTOBER 9, 2020

**CONTRACT  
SUBMITTAL**



## SHEET INDEX

COVER
G1 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
G2 QUANTITIES SHEET
C1 SITE PLAN
C2 CROSS SECTIONS STATION 2+50 TO 4+00
C3 RIGHT-OF-WAY PLAN
C4 TRAFFIC CONTROL PLAN
C5 SIDEWALK AND MISCELLANEOUS DETAILS
S0.1 3D BRIDGE VIEWS
S0.2 NOTES AND BASIS OF DESIGN
S1.1 EXISTING AND DEMOLITION
S1.2 EXISTING AND NEW CONSTRUCTION
S2.1 BRIDGE SECTIONS AND DETAILS
S2.2 BRIDGE REINFORCING
S2.3A EAST ABUTMENT AND APPROACH
S2.3B EAST ABUTMENT AND APPROACH
S2.4A WEST ABUTMENT AND APPROACH
S2.4B WEST ABUTMENT AND APPROACH
S2.4C WEST ABUTMENT AND APPROACH

## VAOT STANDARDS

B-71 STANDARDS FOR RESIDENTIAL AND COMMERCIAL DRIVES (7/8/2005)
C-2A PORTLAND CEMENT CONCRETE, SIDEWALK DRIVE ENTRANCES WITH SIDEWALK ADJACENT TO CURB (10/14/2005)
C-3A SIDEWALK RAMPS (3/10/2008)
C-10 CURBING (2/11/2008)
D-15 PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE (6/1/1994)
E-121 STANDARD SIGN PLACEMENT CONVENTIONAL ROAD (8/8/1995)
E-146 REGULATORY SIGN DETAILS (9/20/1995)
E-191 PAVEMENT MARKING DETAILS (2/1/1999)
E-193 PAVEMENT MARKING DETAILS (8/18/1995)
J-3 MAILBOX SUPPORT DETAILS (8/7/1995)
T-1 TEMPORARY TRAFFIC CONTROL GENERAL NOTES (4/25/2016)
T-10 CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING (8/6/2012)
T-28 CONSTRUCTION SIGN DETAILS (8/6/2012)
T-30 CONSTRUCTION SIGN DETAILS (8/6/2012)

THIS IS A VT AOT QUALITY ASSURANCE PROGRAM LEVEL 1 PROJECT.  
ALL CONSTRUCTION TO BE CARRIED OUT IN ACCORDANCE WITH THE  
VTRANS 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION.



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**GENERAL NOTES**

- EXISTING CONDITION SURVEY FOR HIGH/MAIN STREET AREA PROVIDED BY VTRANS IN 2015. DUFRESNE GROUP COMPLETED ADDITIONAL TOPOGRAPHIC SURVEY IN OCTOBER 30, 2015 AND NOVEMBER 19, 2015. THIS IS NOT A BOUNDARY SURVEY. ELEVATIONS ARE BASED ON USGS NAD 83 DATUM.
- PROPERTY LINE INFORMATION PROVIDED BY DUFRESNE GROUP AND IS BASED ON INFORMATION PROVIDED BY THE TOWN OF PLAINFIELD.
- CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH DIG SAFE (1-888-DIG SAFE) A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION. CONTRACTOR SHALL FURTHER COORDINATE WITH THE MUNICIPALITY AND VTRANS TO VERIFY THE LOCATIONS OF EXISTING UTILITIES.
- CONTRACTOR SHALL EXERCISE DUE CARE TO PREVENT DAMAGE TO ROOT SYSTEMS OF EXISTING VEGETATION. ALL GRASS AREAS DISTURBED SHALL BE RESTORED IN ACCORDANCE WITH SPECIAL PROVISION 900.645 CLASS A RESTORATION OF GROWTH. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, CARE & REPLANTING OF ALL PLANTINGS AND SHRUBS DISTURBED DURING CONSTRUCTION
- ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN USING THE BEST AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AT NO COST TO THE TOWN.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. LOCAL ELECTRIC UTILITY IS GREEN MOUNTAIN POWER (PH. 888-835-4672). LOCAL PHONE UTILITY IS CONSOLIDATED COMMUNICATIONS (PH. 866-984-2001).
- GENERALLY HEAVY OR DARK LINE WORK OR NOTES REFER TO PROPOSED IMPROVEMENTS. LIGHT LINE WORK OR TEXT GENERALLY DENOTES EXISTING FEATURES.
- CONTRACTOR SHALL MAKE EVERY EFFORT TO ALLOW ACCESS TO AND FROM DRIVEWAYS LOCATED ALONG THE ROUTE OF CONSTRUCTION. PRIOR TO WORKING ACROSS AN ACCESS, THE PROPERTY OWNER SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL COMMERCIAL AND MUNICIPAL PROPERTIES DURING BUSINESS HOURS. COORDINATE MAJOR WORK ON COMMERCIAL AND MUNICIPAL ACCESSES WITH THE OWNER AT LEAST ONE WEEK PRIOR TO STARTING WORK. ACCESS TO RESIDENTIAL PROPERTIES MAY BE RESTRICTED FOR A MAXIMUM OF 4 HOURS, UNLESS OTHERWISE AGREED BY THE PROPERTY OWNER. THIS WORK WILL BE COORDINATED WITH THE OWNER. TRAFFIC SHALL BE CONTROLLED BY A UNIFORM TRAFFIC OFFICER OR FLAGGERS AS REQUIRED.
- CONTRACTOR SHALL MAINTAIN ONE LANE OPEN TO TRAFFIC AT ALL TIMES AND SHALL MINIMIZE IMPACTS TO AUTOMOBILE AND PEDESTRIAN TRAFFIC AS REQUIRED. ALL CONSTRUCTION SIGNAGE SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- ANY SPOT ELEVATIONS ARE PROVIDED FOR REFERENCE ONLY. FINAL ELEVATIONS MAY VARY AS NECESSARY TO MAINTAIN DRAINAGE AND COMPLIANCE OF ALL SIDEWALK IMPROVEMENTS WITH AMERICAN DISABILITIES ACT REQUIREMENTS, AND PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES.
- REFER TO ADDITIONAL DETAILS ON SHEET C5 FOR SIDEWALK, RAMP, CURB, CROSSWALK, DRIVES AND APPURTENANT CONSTRUCTION REQUIREMENTS
- CONTRACTOR SHALL COMPLY WITH THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.
- ALL EXISTING HIGHWAY SIGNS SHALL BE MAINTAINED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY INSTALLATION AS NECESSARY.
- NO WORK IS ANTICIPATED OUTSIDE THE EXISTING RIGHT-OF-WAY. SHOULD THE CONTRACTOR EXTEND THE WORK AREA OUTSIDE THE EXISTING RIGHT-OF-WAY, THE CONTRACTOR WILL BE RESPONSIBLE FOR NEGOTIATIONS WITH LANDOWNERS PRIOR TO WORK OUTSIDE THE EXISTING RIGHT-OF-WAY.
- ACCESS TO THE BASEMENT APARTMENT AT 16 MAIN STREET SHOULD BE MAINTAINED AT ALL TIMES. COORDINATION WITH BUILDING OWNER AND/OR TENANT TO DISCUSS CONSTRUCTION SCHEDULE AND POTENTIAL HAZARDS SHALL OCCUR PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- BECAUSE THE PROJECT IS WITHIN AN URBAN SOIL DESIGNATION AREA, ALL SOILS EXCAVATED FOR THIS PROJECT ARE TO REMAIN ON SITE AND INCORPORATED IN THE PROJECT AREA OR PROPERLY MANAGED IN ACCORDANCE WITH THE RULE AND SOLID WASTE RULE.

**LEGEND:**

- EXISTING:
- EDGE OF ASPHALT
  - - - - - EDGE OF GRAVEL
  - - - - - ROAD CENTERLINE
  - - - - - RIGHT-OF-WAY
  - PROPERTY PIN
  - ▨ BUILDING/STRUCTURE OUTLINE
  - SIDEWALK
  - ===== EDGE OF CURB
  - - - - - ANR POTENTIAL WETLAND
  - ○ ○ ○ ○ FENCE LINE
  - W — WATER MAIN
  - S — SEWER MAIN
  - D — STORM DRAIN
  - T — UNDERGROUND TELEPHONE
  - - - 691 - - - 1 FOOT CONTOUR
  - - - 695 - - - 5 FOOT CONTOUR
  - STONE WALL
  - OHW — OVERHEAD WIRES
  - ⊙ UTILITY POLE
  - ☆ LIGHT POLE
  - ⊕ FIRE HYDRANT
  - ⊕ CURBSTOP
  - ⊕ VALVE
  - ⊕ SIGN
  - ⊕ SEWER MANHOLE
  - ⊕ CATCH BASIN
  - ⊕ TREES
  - /// CROSSWALK
  - - - UTILITY POLE GUY WIRE
  - ⊕ STUMP
  - △<sup>1</sup> TRAVERSE POINT
  - ⊕ ELECTRICAL PANEL
- PROPOSED:
- ===== GRANITE CURB
  - ||||| PAINTED CROSSWALK
  - XXXXXX PAVEMENT
  - ===== CONCRETE
  - ===== RETAINING WALL
  - ↑ RAMP ARROW
  - ⊕ DETECTABLE WARNING SURFACE
  - TPZ — TREE PROTECTION ZONE / FENCING
  - ⊕ SIGN
  - ⊕ UTILITY POLE
  - ☆ LIGHT POST

**ABBREVIATIONS**

- |     |                       |
|-----|-----------------------|
| CB  | CATCH BASIN           |
| CI  | CAST IRON             |
| CMP | CORRUGATED METAL PIPE |
| DI  | DROP INLET            |
| DIA | DIAMETER              |
| EL  | ELEVATION             |
| HYD | FIRE HYDRANT          |
| ID  | INSIDE DIAMETER       |
| INV | INVERT                |
| IPF | IRON PIPE FOUND       |
| SMH | SEWER MANHOLE         |
| TBM | TEMPORARY BENCH MARK  |
| TYP | TYPICAL               |
| WSO | WATER SHUTOFF         |
| TOC | TOP OF CONCRETE       |



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REVISIONS		DATE	COMMENTS	BY

TOWN OF PLAINFIELD  
 PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

**GENERAL NOTES, LEGEND,  
 AND ABBREVIATIONS**

PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	B.L. BAKER
Drawn by	B.L. BAKER
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	OCTOBER 9, 2020
Scale	NO SCALE

**CONTRACT  
 SUBMITTAL**

G1

SHEET 1 OF 21

FILE: s:\plainfield VT\150029 STP BP 14(3)\CADD - from Barre server\SI\_J\_2019\150029 - Plans - recovered.dwg Dec 14, 2020 - 9:36am



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### SUMMARY OF ESTIMATED QUANTITIES

ITEM NO	ITEMS	ESTIMATED QUANTITY	UNITS	ITEM NO	ITEMS	ESTIMATED QUANTITY	UNITS
201.10	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	1	LS	616.21	VERTICAL GRANITE CURB	175	LF
203.15	COMMON EXCAVATION	72	CY	616.41	REMOVAL OF EXISTING CURB	50	LF
203.16	SOLID ROCK EXCAVATION	6	CY	618.10	PORTLAND CEMENT CONCRETE SIDEWALK, 5-INCH	80	SY
203.28	EXCAVATION OF SURFACES AND PAVEMENTS	6	CY	618.30	DETECTABLE WARNING SURFACE	20	SF
203.30	EARTH BORROW	5	CY	621.90	TEMPORARY TRAFFIC BARRIER	60	LF
204.25	STRUCTURE EXCAVATION	10	CY	630.10	UNIFORMED TRAFFIC OFFICERS	100	HR
204.30	GRANULAR BACKFILL FOR STRUCTURES	10	CY	630.15	FLAGGERS	500	HR
210.10	COARSE MILLING, BITUMINOUS PAVEMENT	50	SY	635.11	MOBILIZATION/DEMOBILIZATION	1	LS
301.26	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	30	CY	641.11	TRAFFIC CONTROL, ALL INCLUSIVE	1	LS
406.25	MARSHALL BITUMINOUS CONCRETE PAVEMENT	40	TON	646.40	DURABLE 4-INCH WHITE LINE	200	LF
519.20	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	27	SY	646.31	CROSSWALK MARKING	60	LF
529.25	REMOVAL OF CONCRETE OR MASONRY	11	CY	653.4750	SILT FENCE, TYPE I	100	LF
529.25	CONCRETE, CLASS A	38	CY	678.400	TEMPORARY TRAFFIC SIGNAL SYSTEM	1	EA
541.22	CONCRETE, CLASS B	41	CY	900.640	SPECIAL PROVISION (SAFETY RAIL AND GATE)	40	LF
580.10	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS I	10	SY	900.645	SPECIAL PROVISION (CLASS A RESTORATION OF GROWTH)	1	LS
580.11	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS II	10	SY	900.645	SPECIAL PROVISION (CONCRETE; FORMWORK, MOBILIZATION, DELEGATED DESIGN)	1	LS
580.17	RAPID SETTING CONCRETE REPAIR MATERIAL	15	CF	900.645	SPECIAL PROVISION (REMOVE, STORE AND REPLACE HISTORIC LIGHTS)	1	LS
602.2500	STONE MASONRY FACING	10	SY	900.645	SPECIAL PROVISION (TEMPORARY BASEMENT APARTMENT ACCESS)	1	LS
				900.645	SPECIAL PROVISION (REMOVE AND REPLACE EXISTING STAIRS)	1	LS

REVISIONS		BY	DATE	COMMENTS

TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

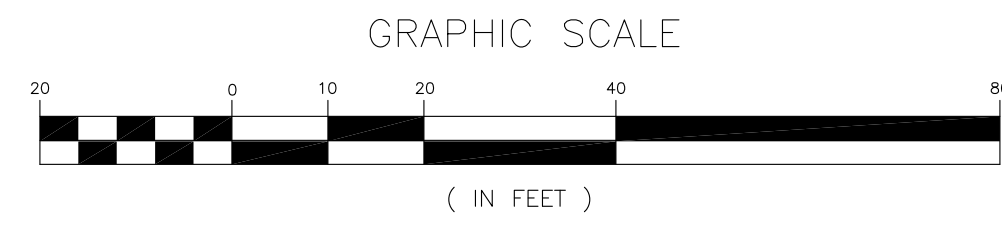
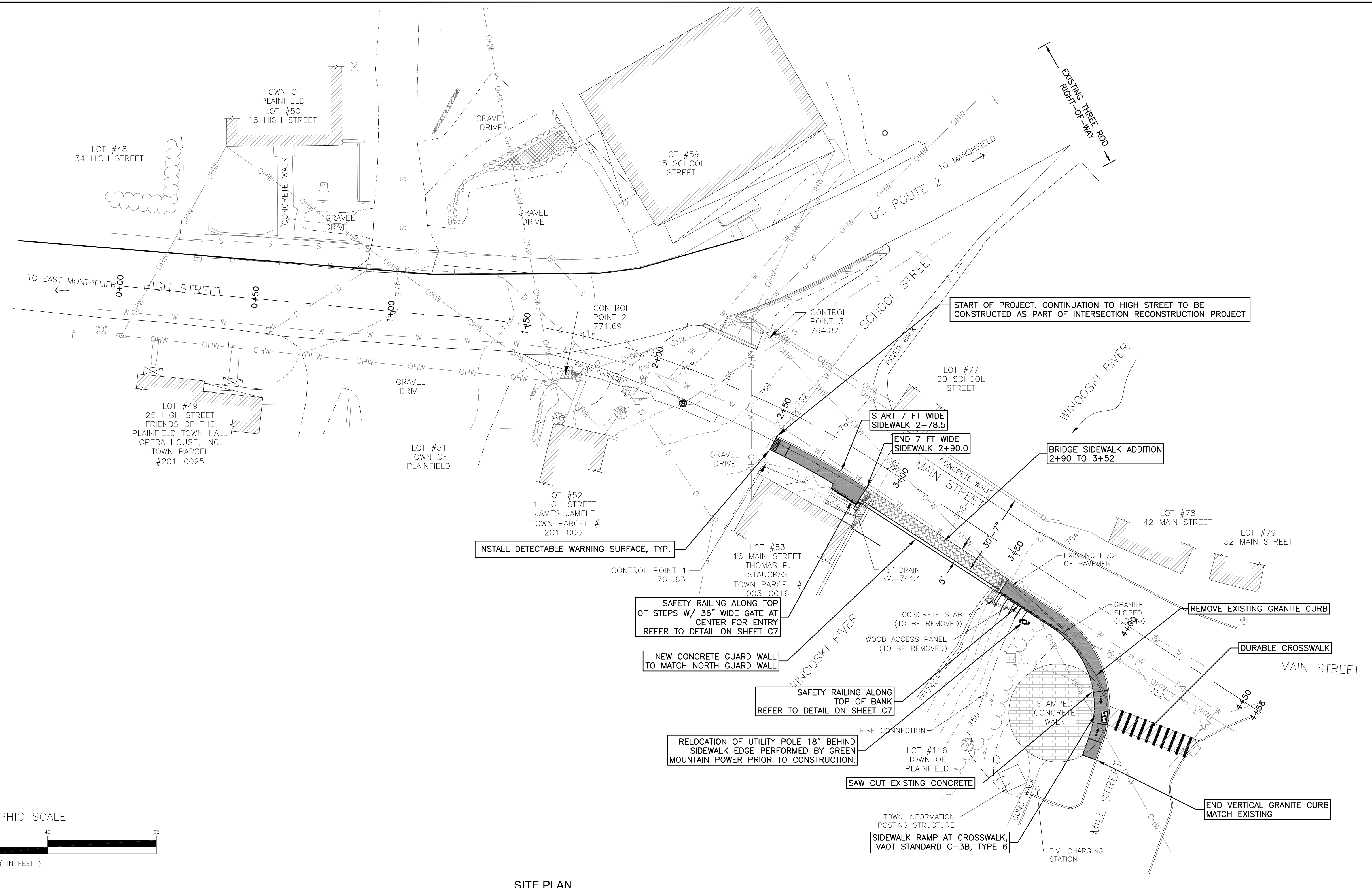
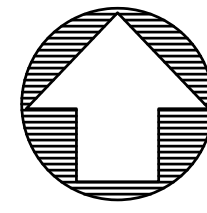
### QUANTITY SHEET

PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	AJD
Drawn by	EAE
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	OCTOBER 9, 2020
Scale	AS SHOWN

**CONTRACT  
SUBMITTAL**

# G2



SITE PLAN  
SCALE: 1" = 20'

**616.21 VERTICAL GRANITE CURB**  
STA 2+51, 10.12 FT RT TO 2+90, 10.67 FT RT  
STA 3+66, 10.67 FT RT TO 4+15, 47.56 FT RT

**618.10 5" THICK PORTLAND CEMENT CONCRETE SIDEWALK**  
STA 2+50 TO 2+90  
STA 3+52 TO 4+11

**618.30 DETECTABLE WARNING SURFACE**  
STA 2+50 LT  
STA 4+08 LT

- NOTES:**
1. US ROUTE 2 SURVEY PROVIDED BY VTRANS ON 9/30/2015.
  2. BRIDGE AND HIGH/MILL STREET AREA SURVEYED BY DUFRESNE GROUP USING A LEICA ROBOTIC TOTAL STATION AND GS 14 GPS. SURVEY COMPLETE ON 10/30/2015 AND 11/19/2015.
  3. ELEVATIONS ARE BASED ON USGS NAD 83 DATUM.

**CONTRACT SUBMITTAL**



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TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

**SITE PLAN**

PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	B.L. BAKER
Drawn by	B.L. BAKER
Reviewed by	N.R. JOHNSON
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Date	OCTOBER 9, 2020
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**C1**

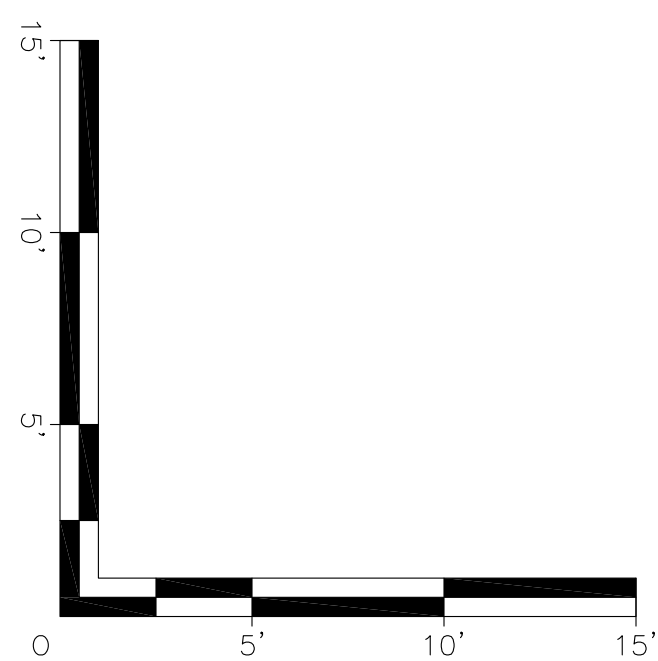
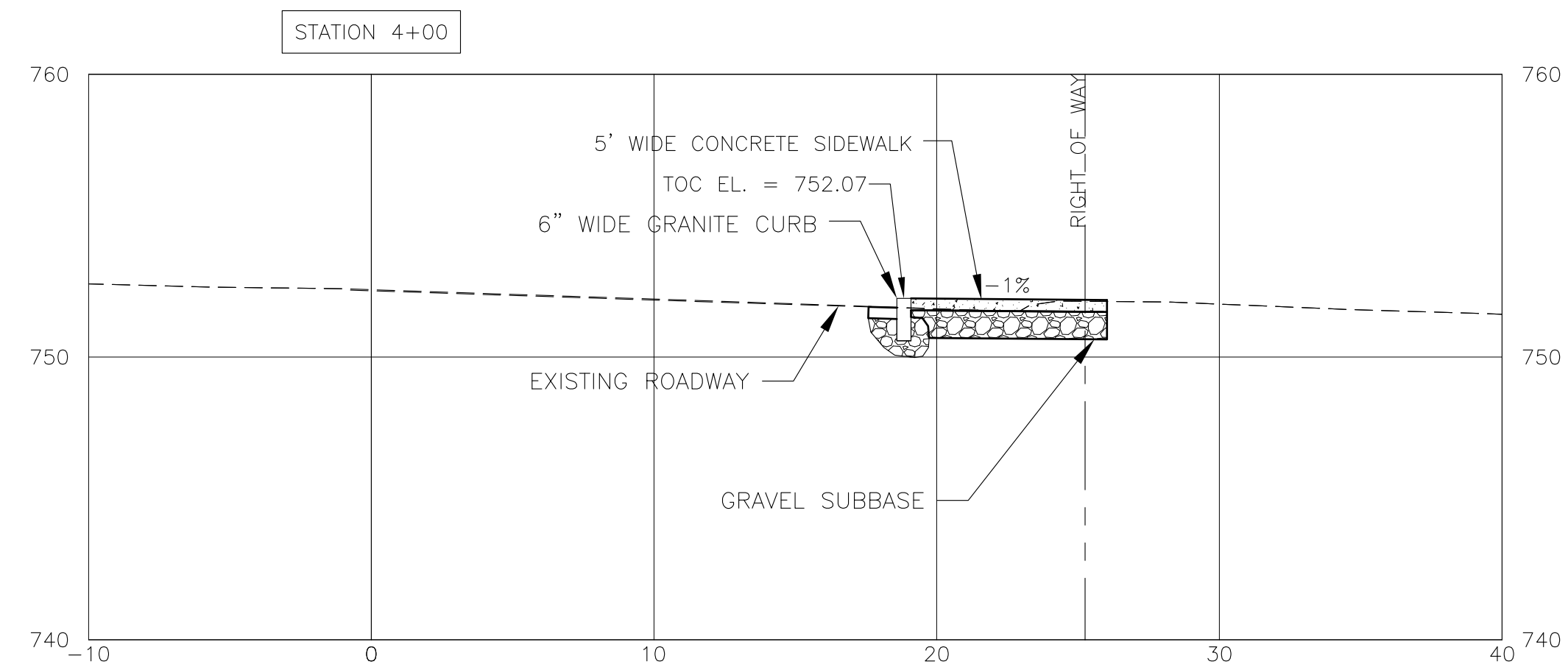
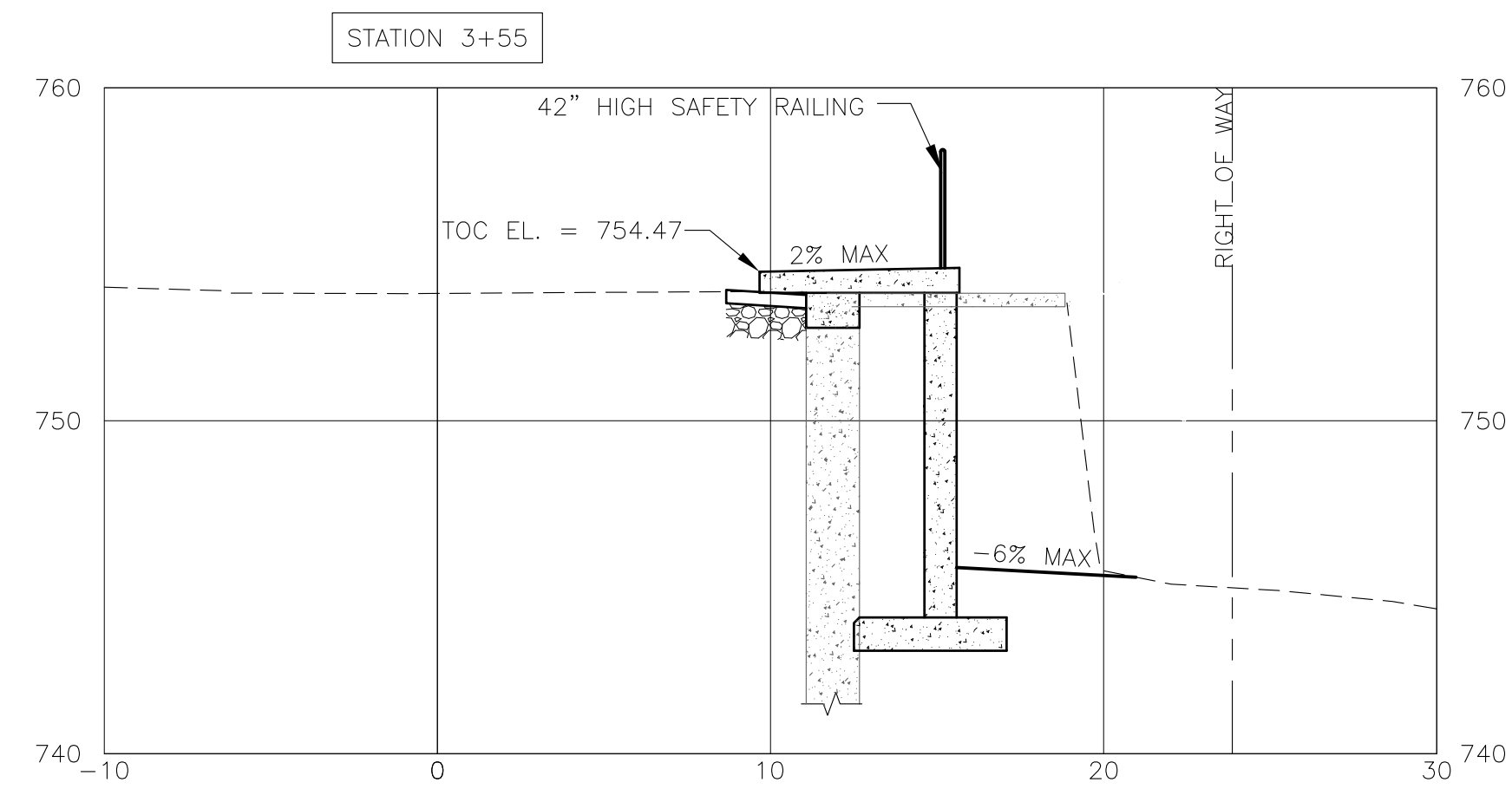
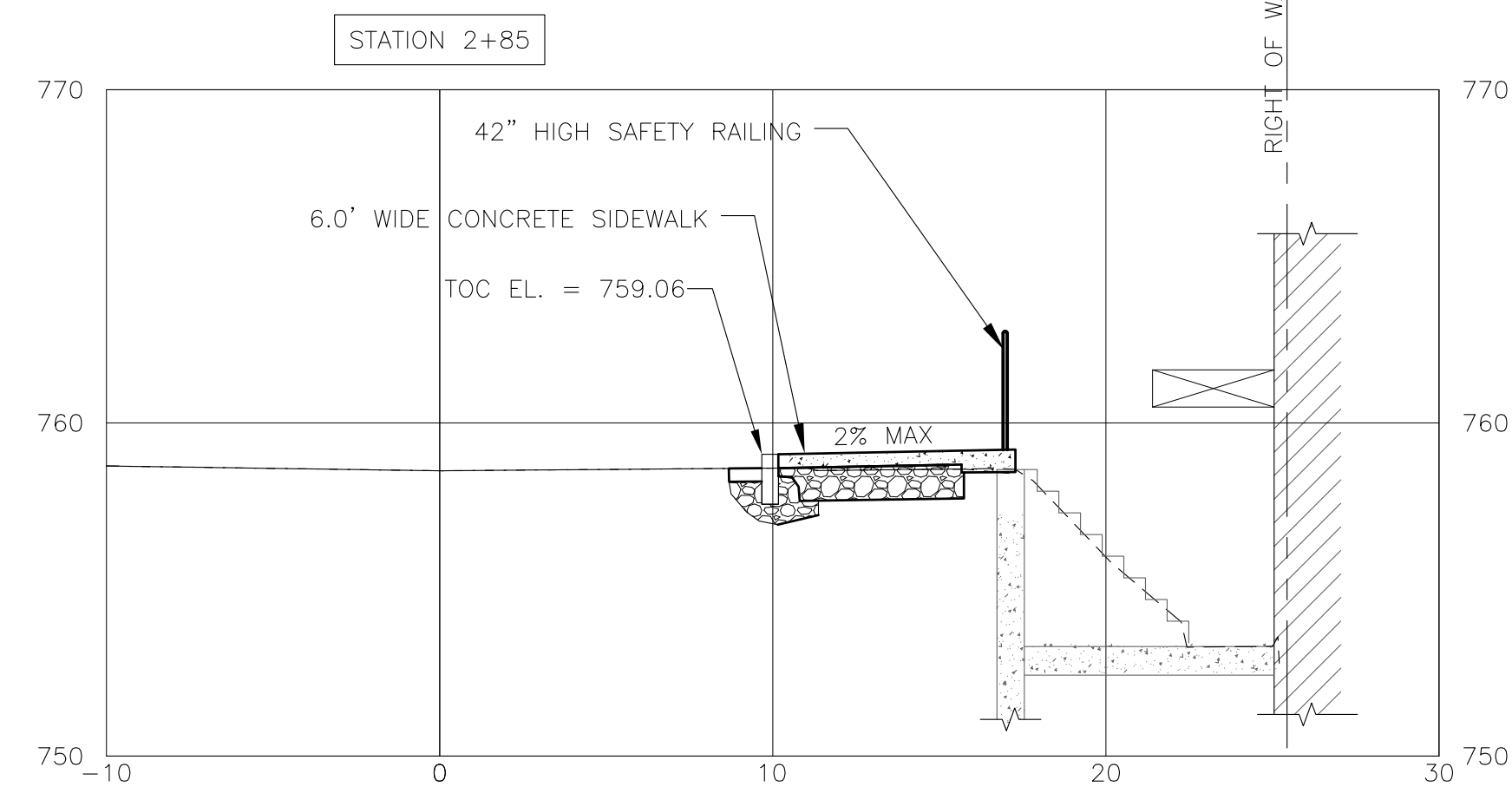
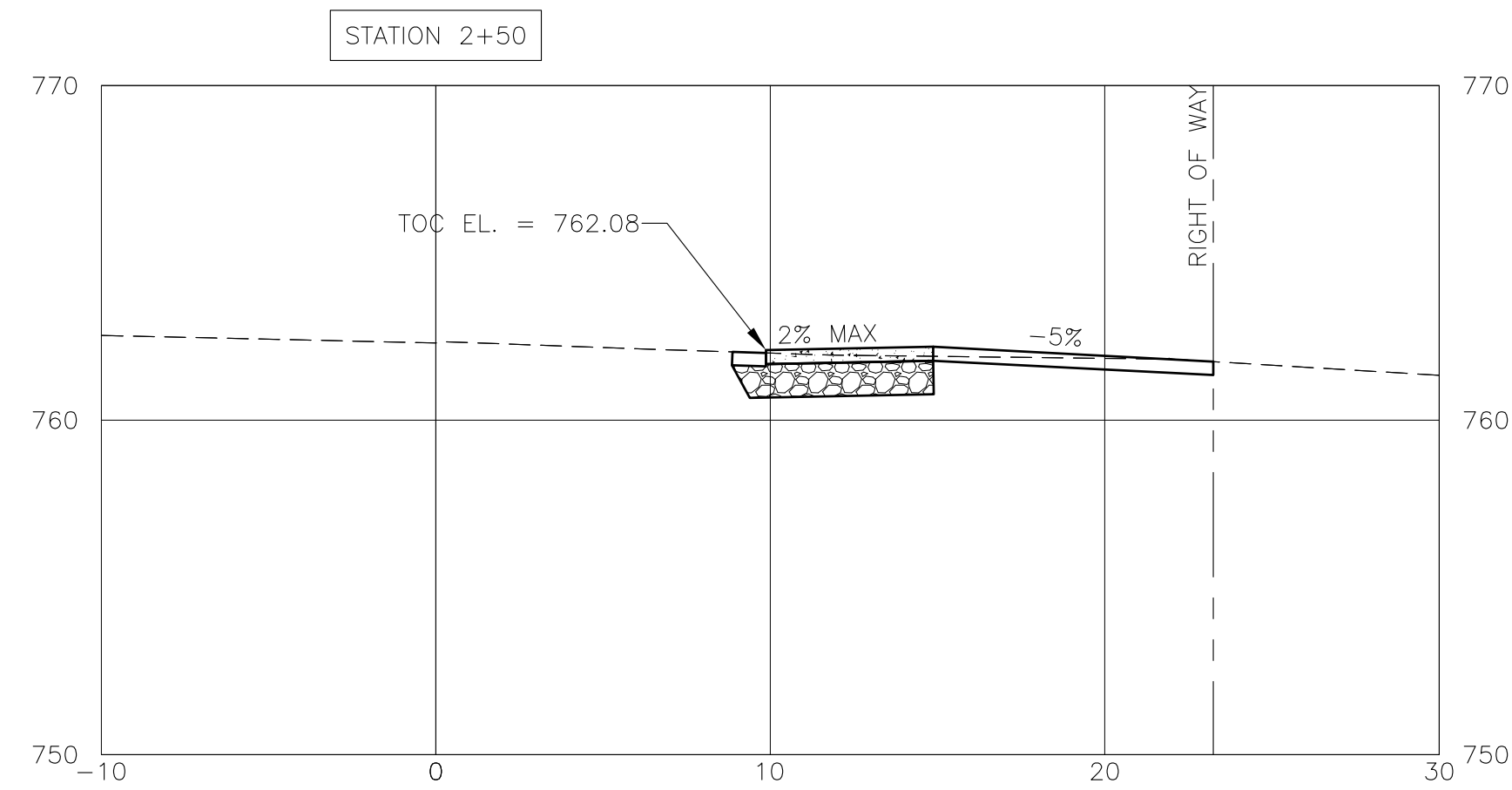
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REVISIONS	
DATE	COMMENTS

TOWN OF PLAINFIELD  
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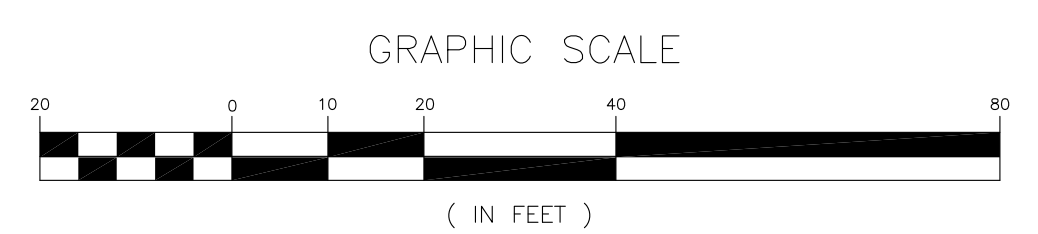
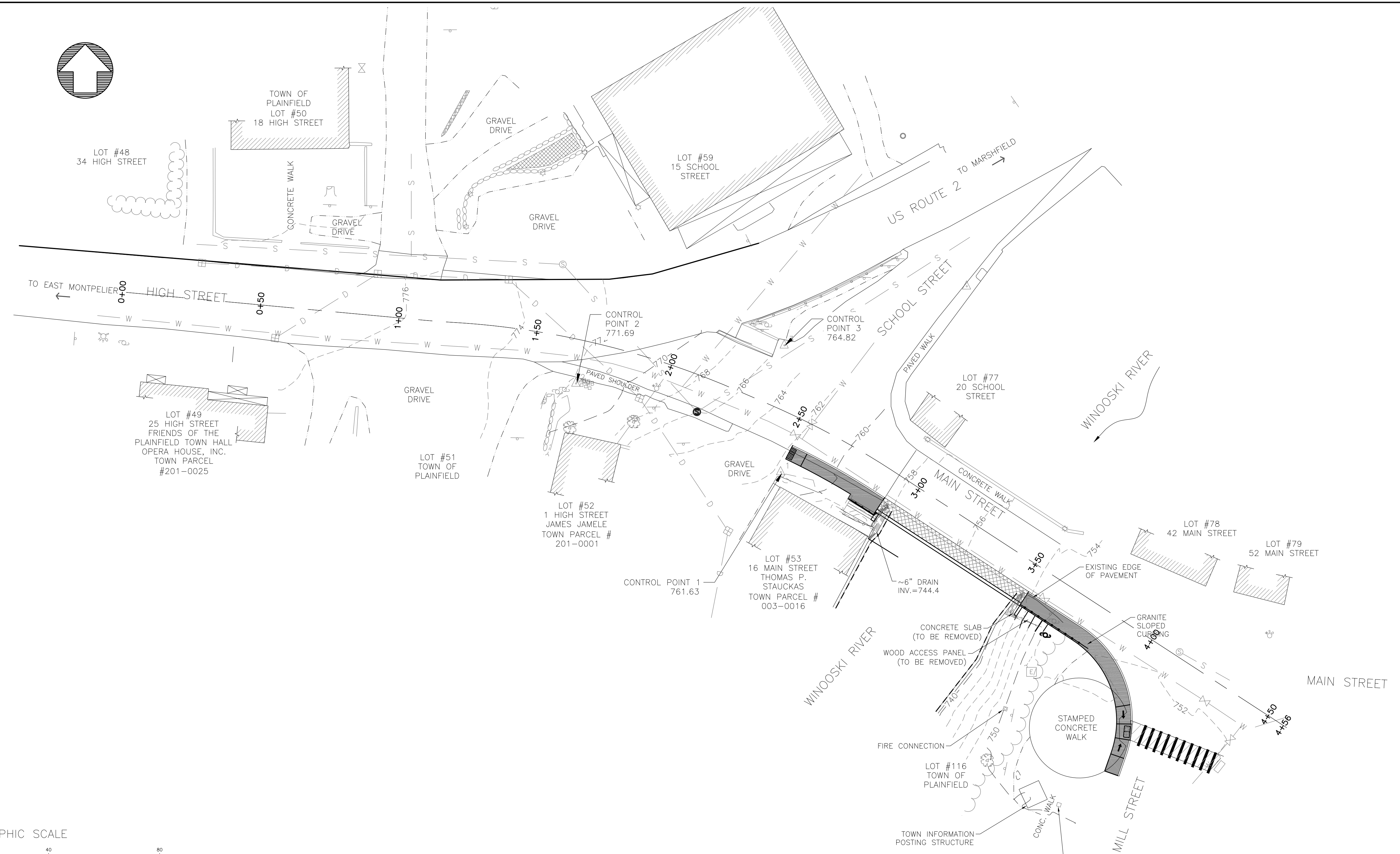
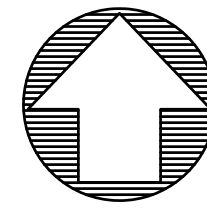
CROSS SECTIONS  
STATION 2+50 TO 4+00

PLAINFIELD, VERMONT

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Date	OCTOBER 9, 2020
Scale	AS SHOWN

CONTRACT  
SUBMITTAL

C2



SITE PLAN  
SCALE: 1" = 20'

NOTE:  
1. ALL WORK TO BE COMPLETED IN THE EXISTING ROW OR ON PROPERTY OWNED BY THE TOWN OF PLAINFIELD. NO EASEMENTS NECESSARY.

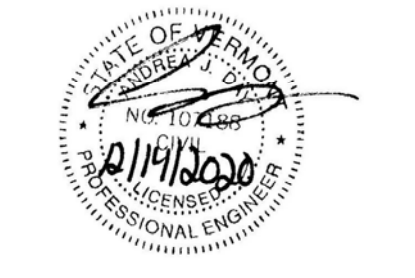
LEGEND

---	RIGHT OF WAY LINE
---	PROPERTY LINE

PROJECT NAME: TOWN OF PLAINFIELD PEDESTRIAN BRIDGE  
 PROJECT NUMBER: STP BP 14(3)  
 RIGHT-OF-WAY PLAN

CONTRACT  
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**DG**  
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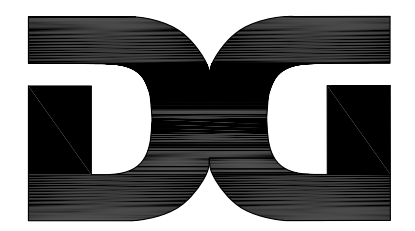
TOWN OF PLAINFIELD  
 PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)  
**RIGHT-OF-WAY PLAN**  
 PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	B.L. BAKER
Drawn by	B.L. BAKER
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	OCTOBER 9, 2020
Scale	AS SHOWN

**C3**

FILE: \\A:\Plainfield\_VT\150029\_STP\_BP14(3)\CAD\0 - from Barre server\SI - J. 2019\150029 - Plans - recovered.dwg, Dec. 14, 2020 - 9:38am





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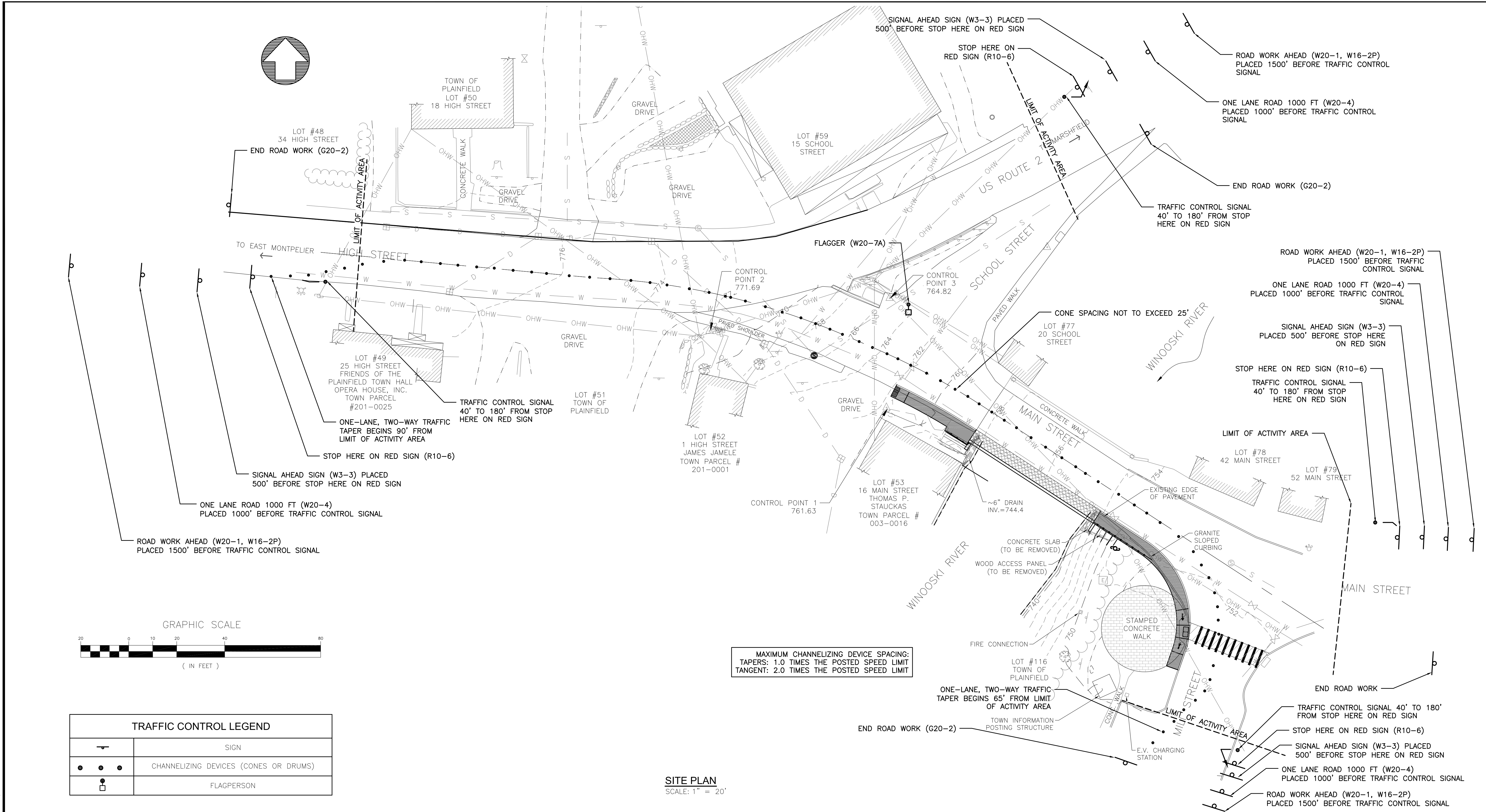
TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

**TRAFFIC CONTROL PLAN**

PLAINFIELD, VERMONT

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SHEET 6 OF 21



MAXIMUM CHANNELIZING DEVICE SPACING:  
TAPERS: 1.0 TIMES THE POSTED SPEED LIMIT  
TANGENT: 2.0 TIMES THE POSTED SPEED LIMIT

**SITE PLAN**  
SCALE: 1" = 20'

**TRAFFIC CONTROL NOTES:**

- THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) FOR REVIEW AND WRITTEN APPROVAL BY THE RESIDENT ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART 6. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES, COMMERCIAL PROPERTIES AND TRANSIT STOPS. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4- FEET. IF THE TPAR IS LESS THAN 5- FEET IN WIDTH, A 5- FOOT BY 5- FOOT PASSING SPACE MUST BE PROVIDED AT LEAST EVERY 200- FEET. THE SURFACE OF THE TPAR SHALL BE FIRM, STABLE AND SLIP- RESISTANT AND CONTINUOUS WITH A MINIMUM 80- INCHES OVERHEAD CLEARANCE FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DELECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO

CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS. CHANNELIZING DEVICES ON BOTH SIDES OF TPAR SHALL INCLUDE A CONTINUOUS SOLID TOP AND BOTTOM RAILS. THE TOP EDGE SHALL BE BETWEEN 32 AND 38- INCHES ABOVE GROUND LEVEL. THE BOTTOM EDGE SHALL BE AT LEAST 6- INCHES WIDE, WITH THE BOTTOM EDGE OF THE BOTTOM RAIL SURFACE NO HIGHER THAN 2- INCHES ABOVE THE GROUND.

- WHEN TEMPORARY CROSSWALKS ARE UTILIZED FOR THE TPAR, TEMPORARY DETECTABLE WARNINGS SHALL BE PLACED AT EACH END OF THE TEMPORARY CROSSWALKS. THE TEMPORARY CROSSWALK SHALL BE DELINEATED WITH TEMPORARY PAVEMENT MARKINGS OR TAPE. THE MARKINGS SHALL BE PARALLEL 12- INCHES WIDE WHITE LINES PLACE 7- FEET ON CENTER APART. IT SHOULD BE NOTED THAT CURB PARKING SHALL BE PROHIBITED FOR AT LEAST 20- FEET IN ADVANCE OF MIDBLOCK CROSSWALKS. TEMPORARY CROSSWALK SIGNS SHALL BE PROVIDED FOR THE CROSSWALK.
- IF TPAR IS ADJACENT TO MOVING TRAFFIC CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF MUTCD SHALL BE USED. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT, OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- THE CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES OR COORDINATE EMERGENCY ROUTES PRIOR TO CONSTRUCTION.
- COORDINATE TRAFFIC CONTROL WITH LOCAL SCHOOL TRANSPORTATION COORDINATOR TO ACCOMMODATE SCHOOL BUS STOPS AND WALKING ROUTES. CONTRACTOR SHALL MAKE ACCOMMODATIONS FOR SCHOOL BUS DROP OFF LOCATIONS DURING SCHOOL HOURS.
- CONSTRUCTION SIGNS SHALL BE ERRECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY, OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERRECTED IN A NEAT AND WORKMANLIKE MANNER.
- CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL

SHALL BE OF WOOD, PLYWOOD, HARDBOARD, OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.

- SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED, OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.
- NO CROSS- BRACING OR BACK- BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS, OR SOIL BEARING PLATES ARE NOT PERMITTED.
- CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND ON TWO POSTS. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY AND SHALL NOT OBSTRUCT CAR, PEDESTRIAN, OR BICYCLE TRAFFIC. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND A GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
- SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
- ROLL- UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 [AMERICAN SOCIETY FOR TESTING AND MATERIALS] (ASTM) D 4956] TYPE VIII OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.
- WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY

GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.

- FLAGGING PERSONNEL SHALL BE CERTIFIED AND SHALL USE MUTCD COMPLIANT HIGH VISIBILITY APPAREL, SIGN PADDLES, AND TWO- WAY RADIOS FOR COMMUNICATION.
- ALL DIAMOND SHAPED SIGN SHALL BE 48"x48" AND SHALL BE MOUNTED ON TWO 3 LBS/FT FLANGED CHANNEL POSTS. NO SIGN POSTS SHALL EXTEND OVER THE TOP EDGE OF THE SIGN INSTALLED ON SAID POSTS. NO SIGN POST STUB HEIGHT TO EXCEED 4" ABOVE THE GROUND HEIGHT.
- NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES. TEMPORARY TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, OR CORNER SIGHT DISTANCE FROM DISTANCE FROM DRIVES AND TOWN HIGHWAYS. EXISTING SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED OR REMOVED.
- WORK SHALL BE COORDINATED WITH TOWN OFFICIALS TO ENSURE WORK IS NOT PERFORMED DURING SPECIAL COMMUNITY EVENTS IN ORDER TO MINIMIZE PEDESTRIAN AND VEHICLE TRAFFIC.
- ACCOMMODATIONS FOR POSTAL DELIVERIES, NEWSPAPER ROUTES, TRASH SERVICES AND/OR OTHER SERVICES INTERRUPTED BY THE PROJECT OR DETOUR SHALL BE COORDINATED WITH PROPER CONTACTS.
- WORK HOURS SHOULD BE PLANNED WITH CONSIDERATION TO PEAK HOUR TRAFFIC VOLUMES IN ORDER TO REDUCE THE POTENTIAL FOR LONG DELAYS AND QUEUING TRAFFIC ALONG US RTE 2 AND THE

INTERSECTION TOWN HIGHWAYS. WORK HOURS SHALL BE FROM 8AM UNTIL 4PM UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER.

- ACCOMMODATIONS SHALL BE MADE TO ENSURE THAT OBSTACLES, EQUIPMENT, CONSTRUCTION MATERIALS, TRAFFIC CONTROL DEVICES, ETC., DO NOT ENCR OACH INTO THE BICYCLE PATH OF TRAVEL. IT IS IMPORTANT THAT CYCLIST ROUTES ARE FREE OF RUTS, SAND, AND MUD TO REDUCE THE DANGER TO CYCLISTS. FLAGGERS SHALL REQUEST THAT CYCLISTS DISMOUNT THE BICYCLE AND WALK WITH THE BICYCLE THROUGH ALL CONSTRUCTION AREAS.
- CONTRACTOR SHALL PROVIDE TEMPORARY CROSSWALK(S) TO DIRECT PEDESTRIAN TRAFFIC AWAY FROM THE CONSTRUCTION AREA PARTICULARLY WHILE CONSTRUCTION IS OCCURRING NEAR THE INTERSECTION OF MAIN STREET AND MILL STREET. CROSSWALKS SHALL LEAD PEDESTRIANS ONLY TO SIDEWALK OR ALTERNATIVE PEDESTRIAN PATHS THAT ARE SEPARATED FROM VEHICLE TRAFFIC WITH APPROPRIATE CHANNELIZING DEVICES. A PEDESTRIAN TEMPORARY TRAFFIC CONTROL PLAN PREPARED IN ACCORDANCE WITH THE CURRENT MUTCD AND ITS REVISIONS, VERMONT STATE STANDARDS, AND VT BICYCLE AND PEDESTRIAN WORK ZONE TRAFFIC CONTROL GUIDE (JULY 2018) MUST BE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO THE START OF CONSTRUCTION.

**CONTRACT SUBMITTAL**

**C4**

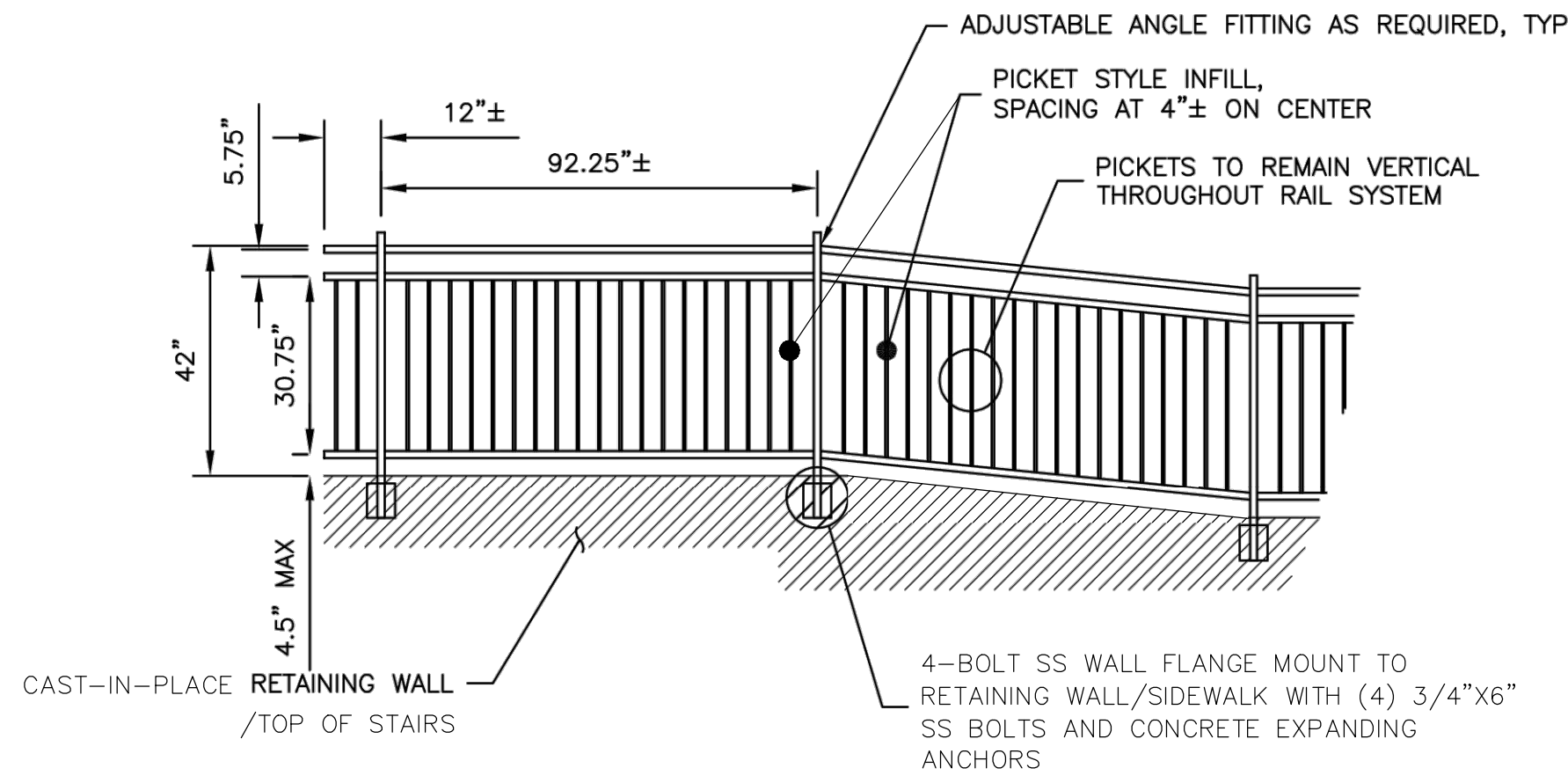
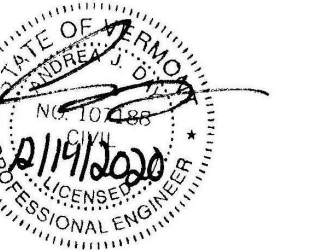
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**SAFETY RAILING DETAIL**

NOT TO SCALE  
 INSTALL AT STA 2+90 AND STA 3+50

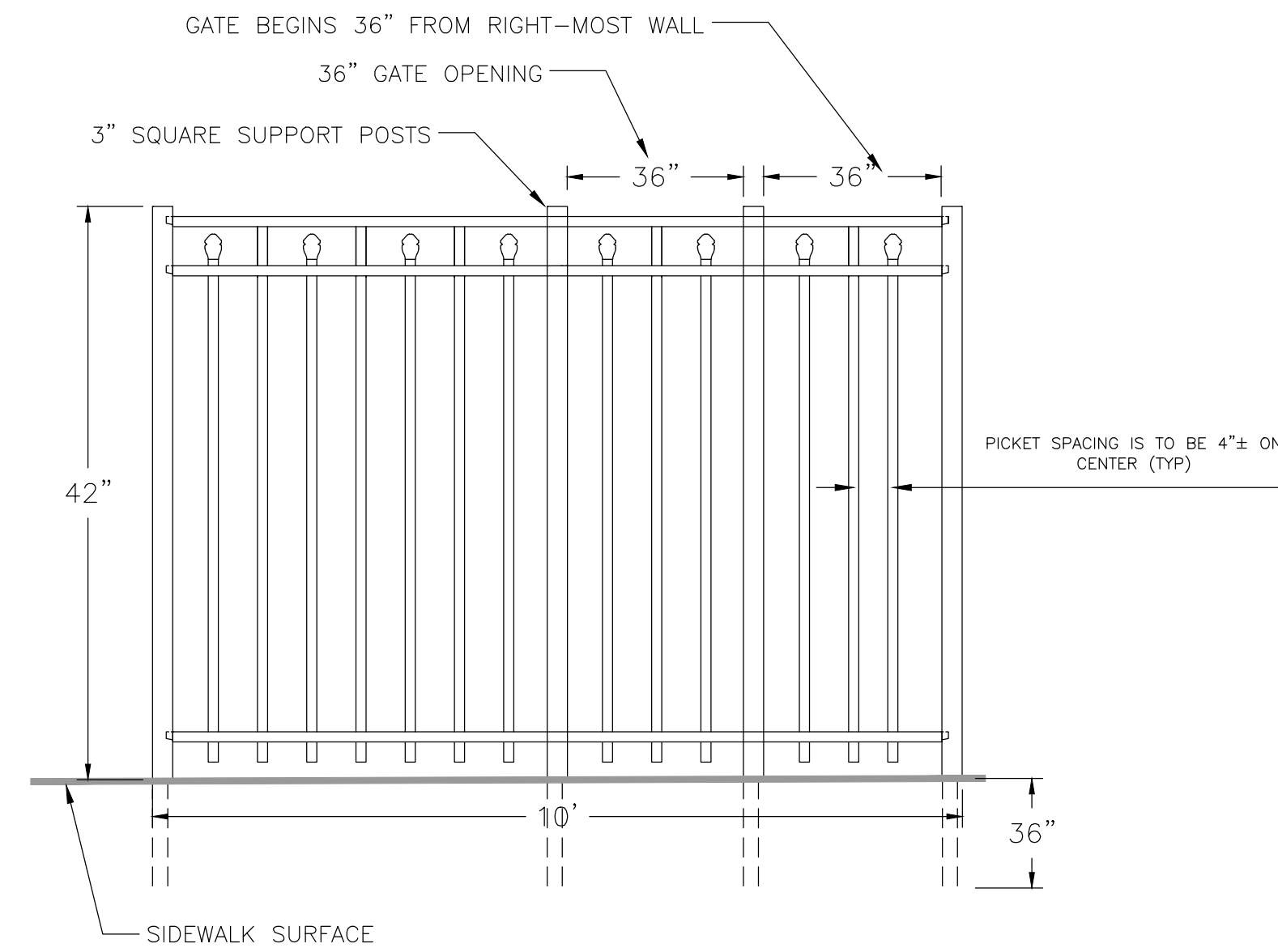
- NOTE:
1. ALL DIMENSIONS SHOWN ARE TYPICAL
  2. REFER TO SPECIFICATIONS FOR RAILING STYLE INFORMATION.



**BLOCK PATTERN CROSSWALK DETAIL**

NOT TO SCALE  
 INSTALL AT STA 0+43 AND STA 4+09

- NOTES:
1. THE BAR SPACING SHOULD AVOID WHEEL PATHS.
  2. ESTABLISH THE CENTER LINE OF THE ROADWAY (DOUBLE YELLOW LINE OR LANE LINE)/
  3. BLOCKS SHALL BE PARALLEL TO THE CENTER LINE (DOUBLE YELLOW LINE OR LANE LINE), OFFSET BLOCKS VERTICALLY TO ACHIEVE REQUIRED SKEW.
  4. ALWAYS START MEASURING FROM THE ROAD CENTERLINE.
  5. PAINTED BLOCKS ARE 24 INCHES WIDE, WHITE DURABLE PAINT.
  6. THIS DISTANCE SHALL BE INCREASED TO 1.0' FOR A 12 FOOT LANE.



**SLIDING GATE DETAIL**

NOT TO SCALE  
 INSTALL FROM STA 2+80 TO STA 2+90

- NOTES:
1. GATE IS TO BE SLIDE-LEFT-OPENING
  2. POSTS TO BE SET IN CONCRETE WITH MINIMUM 2.5\"/>

REVISIONS	
DATE	COMMENTS

TOWN OF PLAINFIELD  
 PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)  
**SIDEWALK MISCELLANEOUS  
 DETAILS**  
 PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	B.L. BAKER
Drawn by	B.L. BAKER
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	OCTOBER 9, 2020
Scale	AS SHOWN

**CONTRACT  
 SUBMITTAL**

**C5**

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① NEW PLAINFIELD PEDESTRIAN BRIDGE



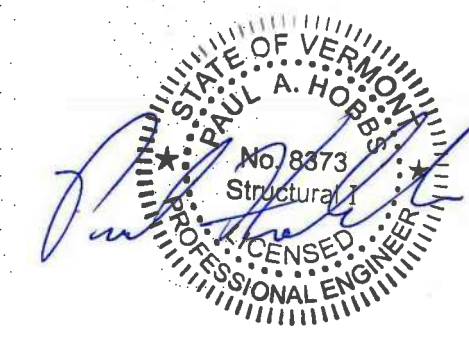
② NEW WEST ABUTMENT



③ ELEVATION



④ NEW EAST ABUTMENT



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DATE	COMMENTS	BY

REVISIONS

THIS DRAWING SHALL NOT BE REPRODUCED OR ALTERED IN ANY MANNER WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF DUFRESNE GROUP AND REVISIONS SHALL BE MADE BY DUFRESNE GROUP

TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

3D BRIDGE VIEWS

PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	PH
Drawn by	AS
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	MARCH 18, 2018
Scale	AS SHOWN

S0.1



**A. GENERAL**

- ALL STRUCTURAL WORK SHALL CONFORM TO THE PROJECT DRAWINGS, AND THE VTRANS STRUCTURES DESIGN MANUAL (5TH EDITION).
- CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH RELATED TRADES AND WITH OTHER DESIGN DISCIPLINE REQUIREMENTS PRIOR TO MAKING SUBMITTALS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PERFORMING WORK.
- REFER TO OTHER DESIGN DISCIPLINE DRAWINGS FOR ADDITIONAL INFORMATION REQUIRED FOR THE SUBMITTALS AND INSTALLATION OF STRUCTURES, INCLUDING BUT NOT LIMITED TO DIMENSIONS, ELEVATIONS, SLOPES, LOCATIONS OF OTHER SYSTEMS AND EQUIPMENT, OPENINGS, WALLS, STAIRS, FINISHES, COATINGS, AND OTHER NON-STRUCTURAL ITEMS.
- DETAILS LABELED AS TYPICAL DETAILS ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH TYPICAL DETAILS SHALL APPLY WHETHER OR NOT THEY ARE DEMARKED AT EACH LOCATION IN THE DRAWINGS. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTALS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES, FOR TECHNIQUES OF ASSEMBLY AND FOR PERFORMING ALL WORK IN A SAFE AND SECURE MANNER IN ACCORDANCE WITH GOVERNING JOB SAFETY STANDARDS.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE SITE, INCLUDING LOCATIONS OF ALL EXISTING STRUCTURES AND EXISTING UTILITIES ABOVE AND BELOW GROUND (AS ANY INFORMATION SHOWN IS APPROXIMATE AND NOT NECESSARILY COMPLETE). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PERFORMING WORK.
- LOADS APPLIED DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS NOTED ON THE DRAWINGS OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTIONS AS DETERMINED BY THE CONTRACTOR. THE STRUCTURAL ELEMENTS OF THE PROJECT AS SHOWN IN THE CONSTRUCTION DOCUMENTS HAVE BEEN DESIGNED FOR THE SPECIFIED VERTICAL AND LATERAL FORCES ACTING ON THE COMPLETED STRUCTURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND PROVIDE ALL REQUIRED SHORING AND BRACING NEEDED DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF THE PARTIALLY-COMPLETED STRUCTURE AND FOR CONSTRUCTION LOADINGS THAT EXCEED THE SPECIFIED DESIGN LOADS
- SHORING, BRACING, PROTECTING, AND MAINTAINING THE INTEGRITY OF ANY EXISTING, ADJACENT, AND/OR ONGOING PARTIALLY COMPLETED STRUCTURES OR ROADWAYS IS THE RESPONSIBILITY OF THE CONTRACTOR.

**B. EXISTING STRUCTURES**

- DIMENSIONS, ELEVATIONS, MEMBER SIZES, AND DETAILS OF EXISTING STRUCTURE SHOWN IN THE STRUCTURAL DRAWINGS HAVE BEEN EXTRACTED FROM LIMITED FIELD MEASUREMENTS. AS SUCH THEY ARE NOT TO BE CONSIDERED SUITABLY ACCURATE FOR ANY CONSTRUCTION WORK SHOWN, INCLUDING FABRICATIONS, SUBMITTALS, ETC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING CONSTRUCTION AT THE JOB SITE PRIOR TO SUBMITTAL. FABRICATION OR CONSTRUCTION WORK, ANY DEVIATIONS FOUND IN THE FIELD FROM WHAT IS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION.
- REPORT EXISTING CONDITIONS UNCOVERED, REVEALED, FOUND OR DEVELOPED DURING CONSTRUCTION INDICATIVE OF STRUCTURAL INTEGRITY LOSS OR DETERIORATION, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
- DO NOT CUT, DRILL OR ALTER ANY EXISTING STRUCTURAL ELEMENTS UNLESS SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS WITHOUT NOTIFY THE ENGINEER FOR REVIEW, INCLUDING TEMPORARY MEASURES OR FOR THE INSTALLATION OF OTHER DESIGN DISCIPLINE WORK.

**C. FOUNDATION RELATED EARTHWORK**

- DESIGN IS BASED ON RECOMMENDATION CONTAINED IN THE GEOTECHNICAL REPORT PREPARED BY CQCA LABS IN SCHUYLERVILLE, NY, DATED JANUARY 8, 2016.
- A LICENSED GEOTECHNICAL ENGINEER SHALL INSPECT AND REPORT ON ALL NATIVE SUB-GRADES FOR BACKFILL OF STRUCTURAL ELEMENTS.
- UNLESS NOTED OTHERWISE, PLACE AND COMPACT BACKFILL IN EQUAL CONTINUOUS LAYERS NOT EXCEEDING A MAXIMUM OF 8" OF COMPACTED DEPTH FOR HAND-HELD COMPACTION EQUIPMENT AND A MAXIMUM OF 12" INCHES COMPACTED DEPTH FOR VIBRATORY ROLLERS. MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS TO ATTAIN COMPACTION DENSITY.
- BACKFILL MATERIALS:
  - "SAND-GRAVEL" Typically below Slab-on-Grade Concrete:
 

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
4 INCH	100
1/2 INCH	50-95
No. 4	45-75
No. 100	10-35
No. 200	0-6
  - "GRANULAR": General fill around footings and below Sand-Gravel layer at SOG.
 

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
No. 4	100
No. 10	30-95
No. 40	10-60
No. 200	0-8
  - "CRUSHED STONE": Where noted on plan
 

SIEVE DESIGNATION	% WEIGHT BY PASSING SIEVES
1 INCH	100
3/4 INCH	90-100
3/8 INCH	0-55
No.4	0-10
No.8	0-5

**D. CONCRETE**

- TESTING SHALL BE PERFORMED AS DESCRIBED IN SECTION 541.06 OF THE VTRANS STANDARD SPECIFICATION FOR CONSTRUCTION.
- FOR UNAUTHORIZED ADMIXTURES, MAXIMUM WATER SOLUBLE CHLORIDE ION (CL-) IN CONCRETE FOR NON-EXPOSED, AND EXTERIOR EXPOSED CONCRETES, AND CRITERIA PERTAINING TO CONCRETE PROTECTION IN RELATION TO AMBIENT TEMPERATURES, REFER TO SECTION 540 OF THE VTRANS STANDARD SPECIFICATION FOR CONSTRUCTION.
- CONCRETE PLACEMENT MAY REQUIRE ADJUSTMENT OF REINFORCEMENT, EMBEDDED ITEMS OR ANCHOR BOLTS. REVIEW DRAWINGS AND IDENTIFY THESE LOCATIONS TO ENGINEER PRIOR TO SUBMITTALS. PROVIDE ADDITIONAL SUPERVISION AT ALL STEEL TO CONCRETE CONNECTION LOCATIONS AND MODIFY PLACEMENT MEASURES TO ACCOUNT FOR CONGESTIONS.
- BEAM AND CORBELS TO BE PLACED MONOLITHIC WITHOUT CONSTRUCTION JOINTS. DO NOT PERMIT COLD JOINTS TO OCCUR.
- GROUT TO BE PRE-MIXED NON-SHRINK GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 7000 PSI.

**E. CONCRETE REINFORCEMENT**

- SHOP DRAWINGS SHALL BE PROVIDED PRIOR TO START OF CONCRETE PLACING AND BE IN ACCORDANCE WITH VTRANS STANDARD SPECIFICATION SECTION 541.
- SHOW ALL SLABS IN PLAN AND ALL WALLS IN ELEVATION WITH OPENINGS AND PENETRATIONS SHOWN. SUBMIT PROPOSED CONTROL AND CONSTRUCTION JOINTS FOR REVIEW ON REINFORCING SUBMITTALS.
- PROVIDE EPOXY-COATED BARS MEETING ASTM A775 AND USING EPOXY COATED SUPPORTS, COATED WIRE, AND EPOXY COATING FOR REPAIR OF SURFACE PRIOR TO POURING.
- ALL LAPS SHALL BE FULL TENSION LAPS (CLASS B SPLICE) UNLESS SPECIFICALLY NOTED OTHERWISE. DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNLESS OTHERWISE NOTED.
- CHAIRS AND SPACERS SHALL BE PLACED TO ADEQUATELY SUPPORT REINFORCING DURING PLACEMENT. FOREIGN MATERIALS SUCH AS WOOD, CLAY BRICK OR OTHER UNSUITABLE SUPPORTS SHALL NOT BE USED TO SUPPORT REINFORCING. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE WHERE CONCRETE WILL BE EXPOSED.

**F. CONCRETE FINISHING**

- ALL CONCRETE SURFACES SHALL RECEIVE A DRESSED FINISH EXCEPT FACES OF GUARD WALL TO RECEIVE A RUBBED FINISH.
- REPAIR MIXES
  - BONDING GROUT: 1 PART PORTLAND CEMENT TO 1 PART NO. 30 MESH SAND, MIXED TO THE CONSISTENCY OF A THICK CREAM.
  - PATCHING MORTAR: MAKE THE PATCHING MORTAR OF THE SAME MATERIALS AND OF APPROXIMATELY THE SAME PROPORTIONS AS USED FOR THE CONCRETE, EXCEPT OMIT THE COARSE AGGREGATE. USE NOT MORE THAN 1 PART PORTLAND CEMENT TO 2-1/2 PARTS SAND BY DAMP LOOSE VOLUME, AND SUBSTITUTE WHITE PORTLAND CEMENT FOR A PORTION OF THE REGULAR GRAY PORTLAND CEMENT TO PRODUCE PATCHING MIX MATCHING THE SURROUNDING CONCRETE IN COLOR WHEN DRY. DETERMINE THE PROPORTION OF WHITE PORTLAND CEMENT BY TRIAL MIXES AND TEST AREAS, PRIOR TO REPAIR OF ACTUAL DEFECTIVE AREAS.
- CURING MATERIALS
  - WATERPROOF SHEET MATERIALS: ASTM C171, WATERPROOF PAPER WITH WHITE PAPER FACE, POLYETHYLENE FILM PIGMENTED WHITE, OR WHITE BURLAP-POLYETHYLENE SHEETING.
  - BURLAP: AASHTO M182, OF CLASS OR WEIGHT SUITABLE FOR THE USE AND LOCATION. DO NOT USE BURLAP WHERE CONCRETE IS EXPOSED TO DIRECT SUNLIGHT.
- REPAIR OF SURFACE DEFECTS
  - BEGIN REPAIR OF SURFACE DEFECTS IMMEDIATELY AFTER FORM REMOVAL. FOR REPAIR WITH EPOXY MORTAR, CONCRETE SHALL BE DRY.
  - SURFACE DEFECTS ARE DEFINED TO INCLUDE: FORM-TIE HOLES, AIR VOIDS AND POCKETS, BUG HOLES WITH A NOMINAL DIAMETER OR DEPTH GREATER THAN 1/4-INCH, HONEYCOMBED AREAS, ROCK POCKETS, FINS AND BURRS.
  - REPAIR OF SURFACE DEFECTS SHALL BE TIGHTLY BONDED AND SHALL RESULT IN CONCRETE SURFACES OF UNIFORM COLOR AND TEXTURE, MATCHING ADJACENT SURFACES, AND FREE OF SHRINKAGE CRACKS.
- REPAIR OF NEW CONCRETE
  - REMOVE HONEYCOMBED AND OTHER DEFECTIVE CONCRETE DOWN TO SOUND CONCRETE. SAW-CUT THE EDGES PERPENDICULAR TO THE SURFACE OR SLIGHTLY UNDERCUT. FEATHER-EDGES WILL NOT BE PERMITTED. DAMPEN THE AREA TO BE PATCHED AND AN AREA AT LEAST 6 INCHES WIDE SURROUNDING IT TO PREVENT ABSORPTION OF WATER FROM THE PATCHING MORTAR.
  - WHERE ROCK POCKETS OR SIMILAR DEFECTS OR VOIDS EXPOSE STEEL REINFORCEMENT, CUTOUT TO SOLID SURFACE BEHIND THE REINFORCING STEEL TO PROVIDE SUITABLE KEY-LOCK FOR PATCHING MORTAR. ENVELOP EXPOSED REINFORCING BAR WITH PATCHING MORTAR.
  - BOND PATCHING MORTAR TO CONCRETE WITH BONDING GROUT OR EPOXY ADHESIVE. BRUSH BONDING GROUT WELL ONTO THE CONCRETE. BOND COMMERCIAL PATCHING MORTAR TO CONCRETE IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
  - AFTER SURFACE WATER HAS EVAPORATED FROM THE AREA TO BE PATCHED, BRUSH THE BOND COAT WELL INTO THE SURFACE. WHEN THE BOND COAT BEGINS TO LOSE THE WATER SHEEN, APPLY THE PATCHING MORTAR. COMPACT THE MORTAR INTO PLACE AND STRIKE OFF SO AS TO LEAVE THE PATCH SLIGHTLY HIGHER THAN THE SURROUNDING SURFACE. TO PERMIT INITIAL SHRINKAGE, LEAVE THE PATCH UNDISTURBED FOR AT LEAST 1 HOUR BEFORE BEING FINALLY FINISHED. KEEP THE PATCHED AREA DAMP FOR 7 DAYS.
  - NEATLY FINISH PATCHED SURFACES TO MATCH ADJACENT SURROUNDING SURFACE TEXTURE OF CONCRETE. GRIND OR FILL SURFACES TO PRODUCE LEVEL AND PLUMB, TRUE PLANES.
  - FOR WALLS EXPOSED IN THE FINISH WORK, FORM TIE HOLES SHALL BE PATCHED AND FINISHED FLUSH WITH ADJACENT SURFACE.
  - IN ORDER TO PATCH HONEYCOMBED AREAS OR ROCK POCKETS WHICH ARE TOO LARGE AND UNSATISFACTORY FOR MORTAR PATCHING, CUT OUT TO SOLID SURFACE, KEY, AND PACK SOLID WITH MATCHING CONCRETE TO PRODUCE FIRM BOND AND FLUSH SURFACE. PATCHING SHALL MATCH TEXTURE OF ADJACENT SURFACES WHERE EXPOSED IN THE FINISHED WORK.
  - REMOVE REPAIR WORK IN EXPOSED LOCATIONS WHICH DOES NOT MATCH THE TEXTURE AND COLOR OF SURROUNDING ADJACENT SURFACES OR WHICH WAS NOT WELL PERFORMED AND PERFORM AGAIN UNTIL THE REPAIR WORK CONFORMS TO SPECIFIED REQUIREMENTS.
  - REMOVE FINES AND LOOSE MATERIALS FROM SURFACES TO RECEIVE MEMBRANE WATERPROOFING, AND PATCH VOIDS AND CRACKS FLUSH WITH ADJACENT SURFACES.
  - CURE COMPLETED REPAIRS AS SPECIFIED HEREIN UNDER CURING.

- CLEANUP: MAINTAIN CONTROL OF CONCRETE CHIPS, DUST, AND DEBRIS IN EACH AREA OF THE WORK. CLEAN UP AND REMOVE SUCH MATERIAL AT THE COMPLETION OF EACH DAY OF OPERATION. PREVENT MIGRATION OF AIRBORNE MATERIALS BY USE OF TARPULINS, WIND BREAKS, AND SIMILAR CONTAINING DEVICES.
- CURING
  - CURE CONCRETE WITH WATERPROOF SHEET MATERIALS, DAMP BURLAP, OR CURING COMPOUNDS.
  - DO NOT USE CURING COMPOUNDS ON SURFACES WHEN THEIR USE MAY BE DETRIMENTAL TO BONDING OF CONCRETE, MORTAR, MEMBRANE WATERPROOFING, CALKING AND SEALANTS.
  - VERTICAL SURFACES SHALL BE CURED BY KEEPING THE FORMS WET AT ALL TIMES AND BY LEAVING THE FORMS IN PLACE AS LONG AS POSSIBLE AS SPECIFIED IN 'CONCRETE FORMWORK'. AFTER REMOVAL OF FORMS, CONCRETE SHALL BE KEPT CONTINUOUSLY WET FOR 72 HOURS IN AN ACCEPTED MANNER. PROTECT EXPOSED SURFACES BY COVERING WITH SHEET MATERIALS OR BURLAP KEPT CONTINUOUSLY MOIST.
  - HORIZONTAL SURFACES SHALL BE CURED AND PROTECTED BY COVERING THE FINISHED SURFACES WITH WATERPROOF SHEET MATERIALS OR DAMP BURLAP.

**F. CONCRETE FORMWORK**

- CONCRETE FORMS SHALL BE CLEAN AND FREE FROM DEBRIS. IF FORMS ARE COATED WITH A VEGETABLE BASED (SOY) RELEASE AGENT, WHICH SHALL NOT STAIN CONCRETE OR ABSORB MOISTURE OR IMPAIR NATURAL BONDING OF CONCRETE.
- COORDINATE WITH REINFORCING SUBMITTAL FOR OPENING AND ADDITIONAL REQUIREMENTS. SUBMIT, BEFORE FRAMING OPENINGS IN STRUCTURAL ELEMENTS WHICH ARE NOT INDICATED ON DRAWINGS.
- PROVIDE FORMWORK SHORING DESIGN FOR BRIDGE ELEMENTS NOT LESS THAN 14 DAYS PRIOR TO FORMWORK CONSTRUCTION. CALCULATIONS AND SKETCHES ARE TO SHOW THE COMPLETE DESIGN INCLUDING ERECTION AND DECONSTRUCTION PROCESS AND INCLUDE STAMPED CALCULATIONS BY A PROFESSIONAL ENGINEER REGISTERED IN VERMONT FOR REVIEW BY THE STRUCTURAL EOR.
- PROVIDE BRACING TO ENSURE STABILITY OF FORMWORK FOR PLACEMENT OPERATIONS. DO NOT REMOVE FORMS OR BRACING UNTIL CONCRETE HAS GAINED SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT AND IMPOSED LOADS.
- CLEAR COVER TO REINFORCING:
  - 1 1/2" TYPICAL
  - 3" WHERE CAST AGAINST THE GROUND
  - OR UNLESS NOTED OTHERWISE.

**H. POST-INSTALLED ANCHORS INTO CONCRETE AND STONE**

- WHERE A MANUFACTURER'S ANCHORS IS SPECIFICALLY CALLED OUT ON THE DRAWINGS, IT SHALL BE CONSIDERED THE DESIGN BASIS FOR THE REQUIRED ANCHOR. ALTERNATES MEETING OR EXCEEDING ANCHOR SYSTEM DEMANDS, INCLUDING, BUT NOT LIMITED TO CAPACITY LOADING, EDGE DISTANCE, SUBSTRATE THICKNESS FOR CONNECTION ELEMENTS AND BASE MATERIAL SHALL BE SUBMITTED FOR PROPOSED USE PENDING ACCEPTABLE REVIEW. SUBMIT ICC-ES CODE REPORTS.

**BASIS OF DESIGN**

- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE SPECIFICATION, 7TH EDITION, 2014 WITH LATEST INTERIM REVISIONS AND VTRANS STRUCTURES DESIGN MANUAL 5TH EDITION
- LIVE LOADS H20

**ABBREVIATIONS**

AB	ANCHOR BOLT	N.S.	NEAR SIDE
AL	ALUMINUM	oc	ON CENTER
B.O.F.	BOTTOM OF FOOTING	PH	PIER DESIGNATION
DWG	DRAWING	PL	PLATE
E.F.	EACH FACE	SS	STAINLESS STEEL
ELEV.	ELEVATION	STD	STANDARD
EP	EMBED PLATE	T.O.C.	TOP OF CONCRETE
EPC	EPOXY COATED	T.O.S.	TOP OF STEEL
EQ	EQUAL	T.O.SHELF	TOP OF SHELF
E.S.	EACH SIDE	T.O.W.	TOP OF WALL
E.W.	EACH WAY	TYP.	TYPICAL
EX.	EXISTING	UNO	UNLESS NOTED OTHERWISE
FND	FOUNDATION	VIF	VERIFY IN FIELD
F.S.	FAR SIDE		

**DRAWING LEGEND**

NOTE: NOT ALL SYMBOLS AND NOTATIONS USED

	NORTH ARROW		CONCRETE
	ELEVATION		GROUT or FINE CRUSHED GRAVEL
[XX' - XX']	TOP OF FOOTING ELEV.		GRATING
	SECTION NUMBER DRAWING WHERE SHOWN		LEDGE/ROCK
	DECK SPAN DIRECTION OR GRATING DIRECTION		3/4" CRUSHED STONE
	SLOPE DIRECTION, and MAGNITUDE		COMPACTED GRANULAR FILL
	FOOTING STEP		RIGID INSULATION
	OPENING		UNDISTURBED SUBGRADE
	GUARDRAIL/RAILING		
	BEAM PENETRATION		

CONCRETE MIXTURES				
APPLICATION	STRENGTH	CONCRETE CLASS	MAX W/C	AIR CONTENT
FOOTINGS AT APPROACH LOCATIONS, NOT AT BRIDGE	3000 PSI @ 28 DAY	B	0.490	5.5 +/-1.5
WALLS, PIERS AND SIDEWALK AT APPROACH LOCATIONS	4000 PSI @ 28 DAY	A	0.400	7.0 +/-1.5
BEAM, CORBELS, BLOCKING, SIDEWALK AT BRIDGE AND GUARD WALL	5000 PSI @ 28 DAY	A	0.400	7.0 +/-1.5

- ALL CONCRETE TO BE NORMAL WEIGHT
- SEE VTRANS TABLE 541.03A FOR ADDITIONAL INFORMATION

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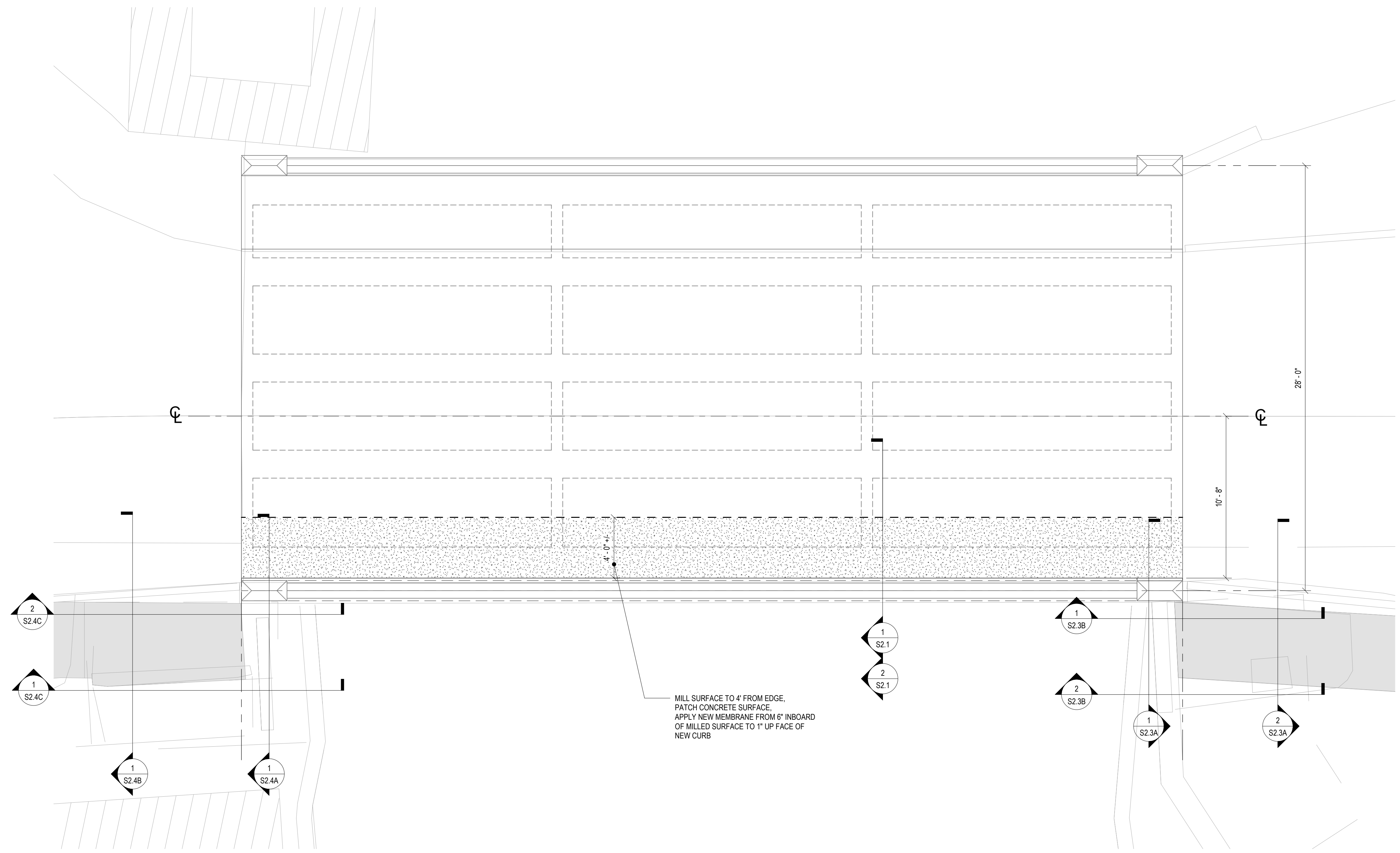
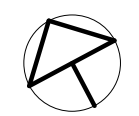
TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

NOTES AND BASIS OF DESIGN

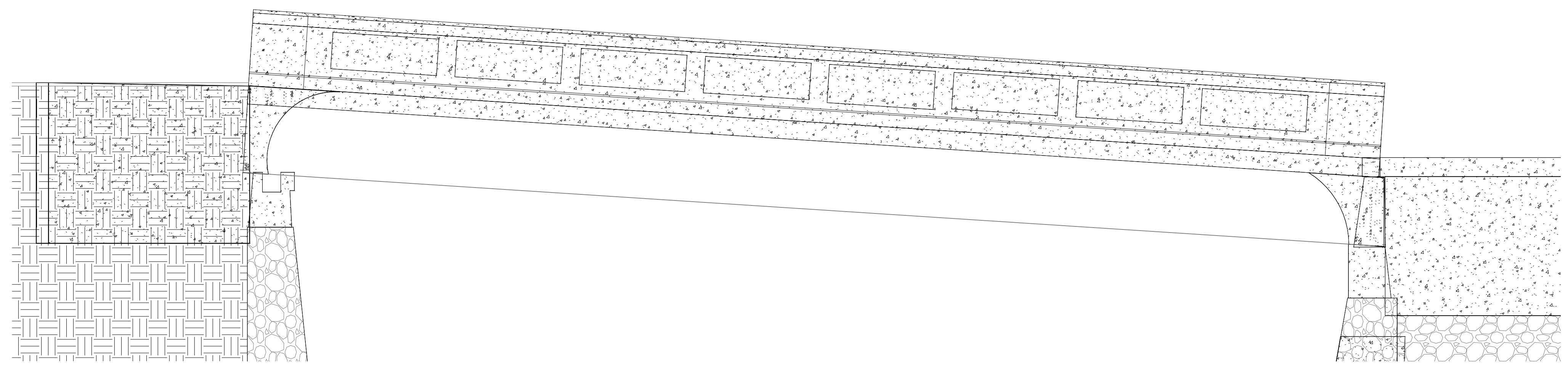
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Design by	PH
Drawn by	AS
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	MARCH 18, 2018
Scale	AS SHOWN





1 PLAN EXISTING CONDITIONS  
1/4" = 1'-0"



2 A-SOUTH ELEVATION - EXISTING CONDITIONS  
1/4" = 1'-0"



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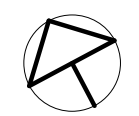
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**EXISTING AND DEMOLITION**  
PLAINFIELD, VERMONT

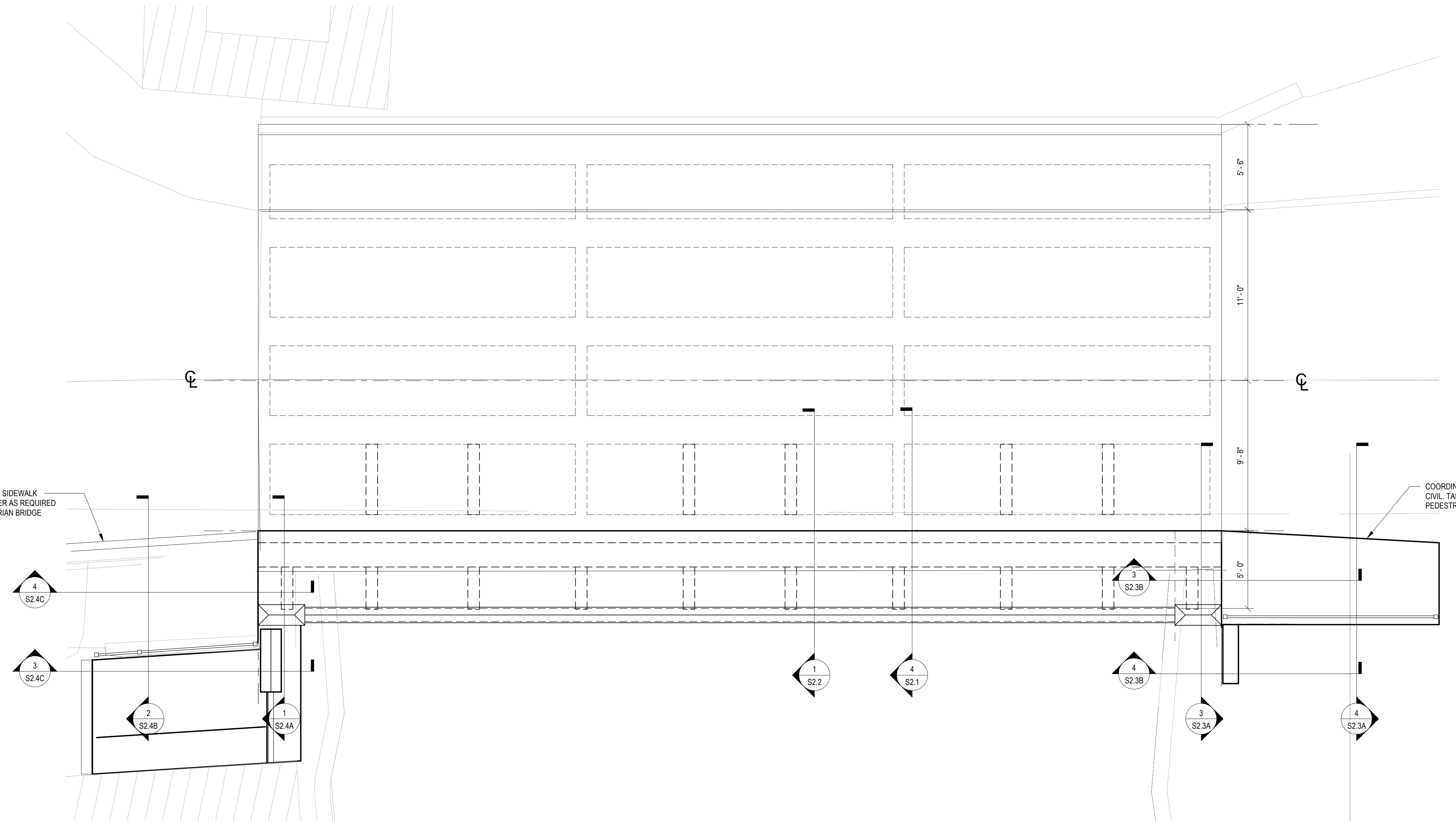
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**S1.1**

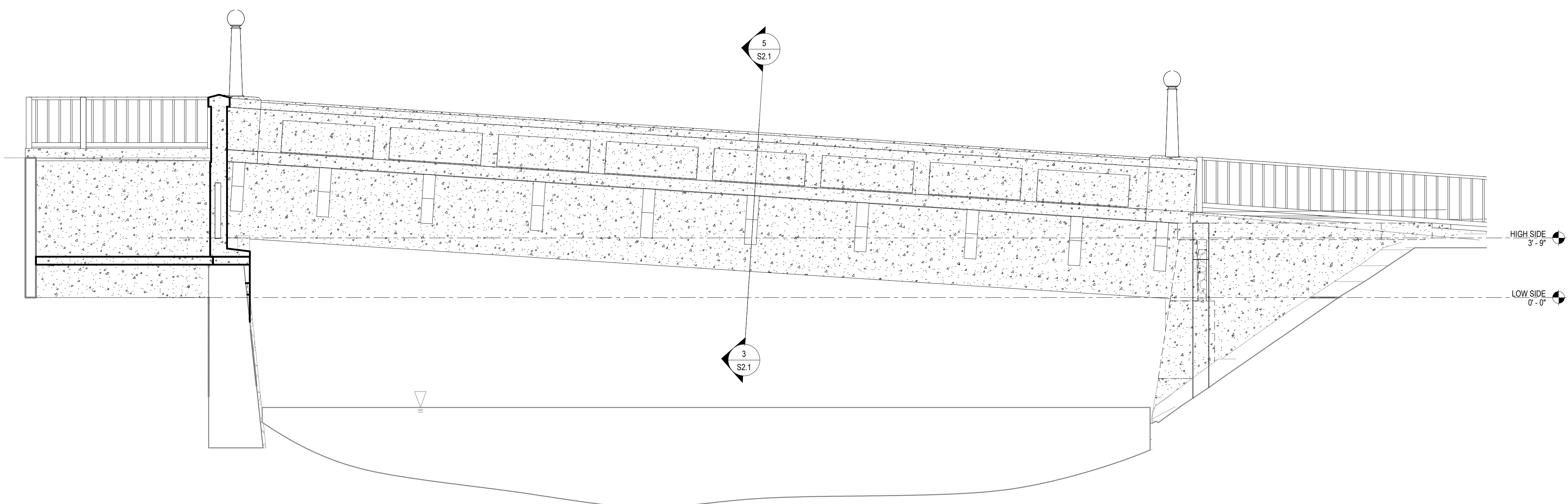


COORDINATE NEW SITE SIDEWALK WIDTH WITH CIVIL TAPER AS REQUIRED TO MEET NEW PEDESTRIAN BRIDGE SIDEWALK WIDTH.

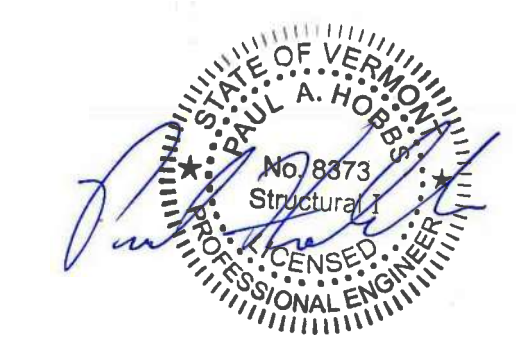
COORDINATE NEW SITE SIDEWALK WIDTH WITH CIVIL TAPER AS REQUIRED TO MEET NEW PEDESTRIAN BRIDGE SIDEWALK WIDTH.



1 PLAN PROPOSED CONSTRUCTION  
1/4" = 1'-0"



2 B-SOUTH ELEVATION - PROPOSED CONSTRUCTION  
1/4" = 1'-0"



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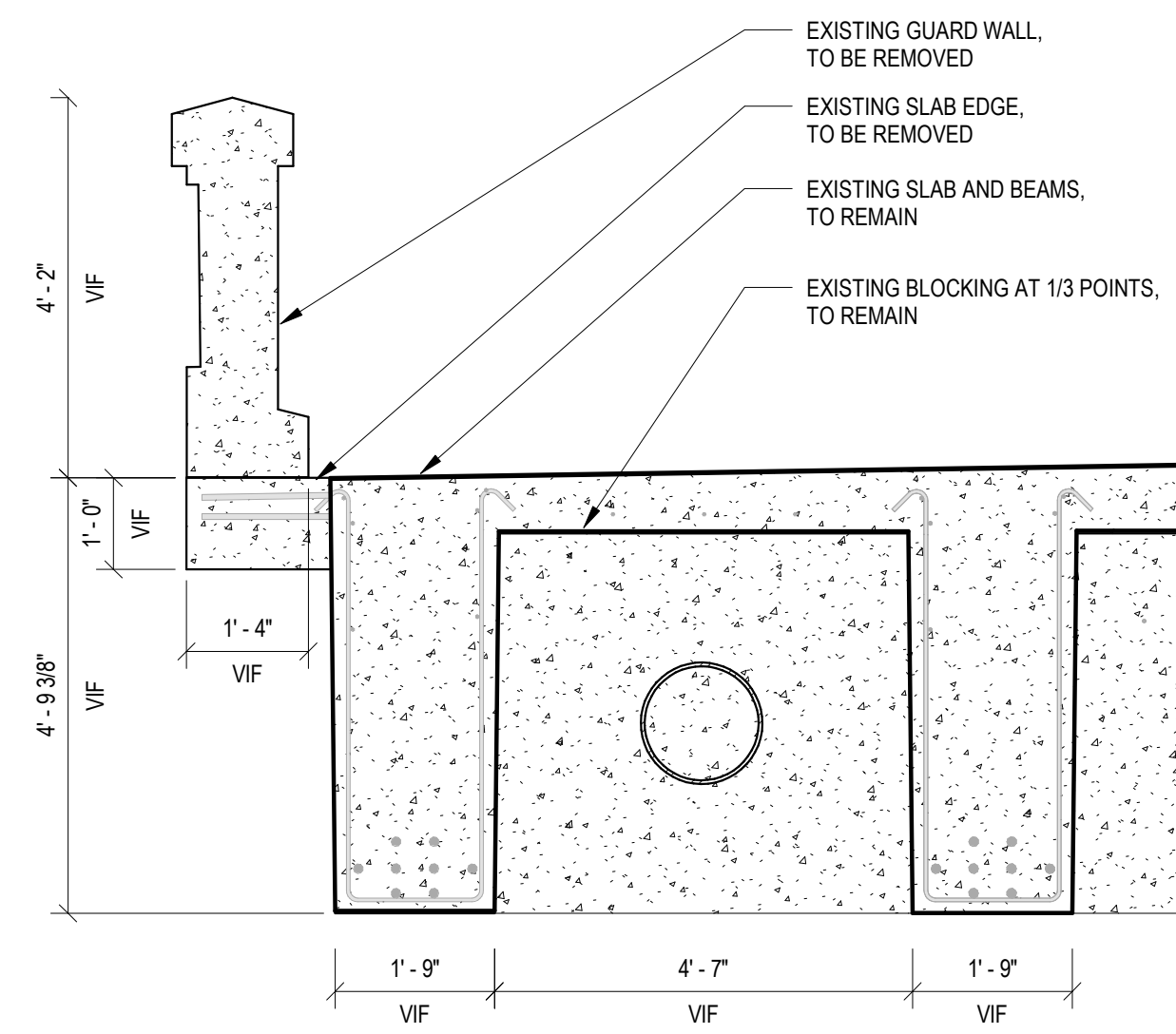
EXISTING AND NEW CONSTRUCTION

PLAINFIELD, VERMONT

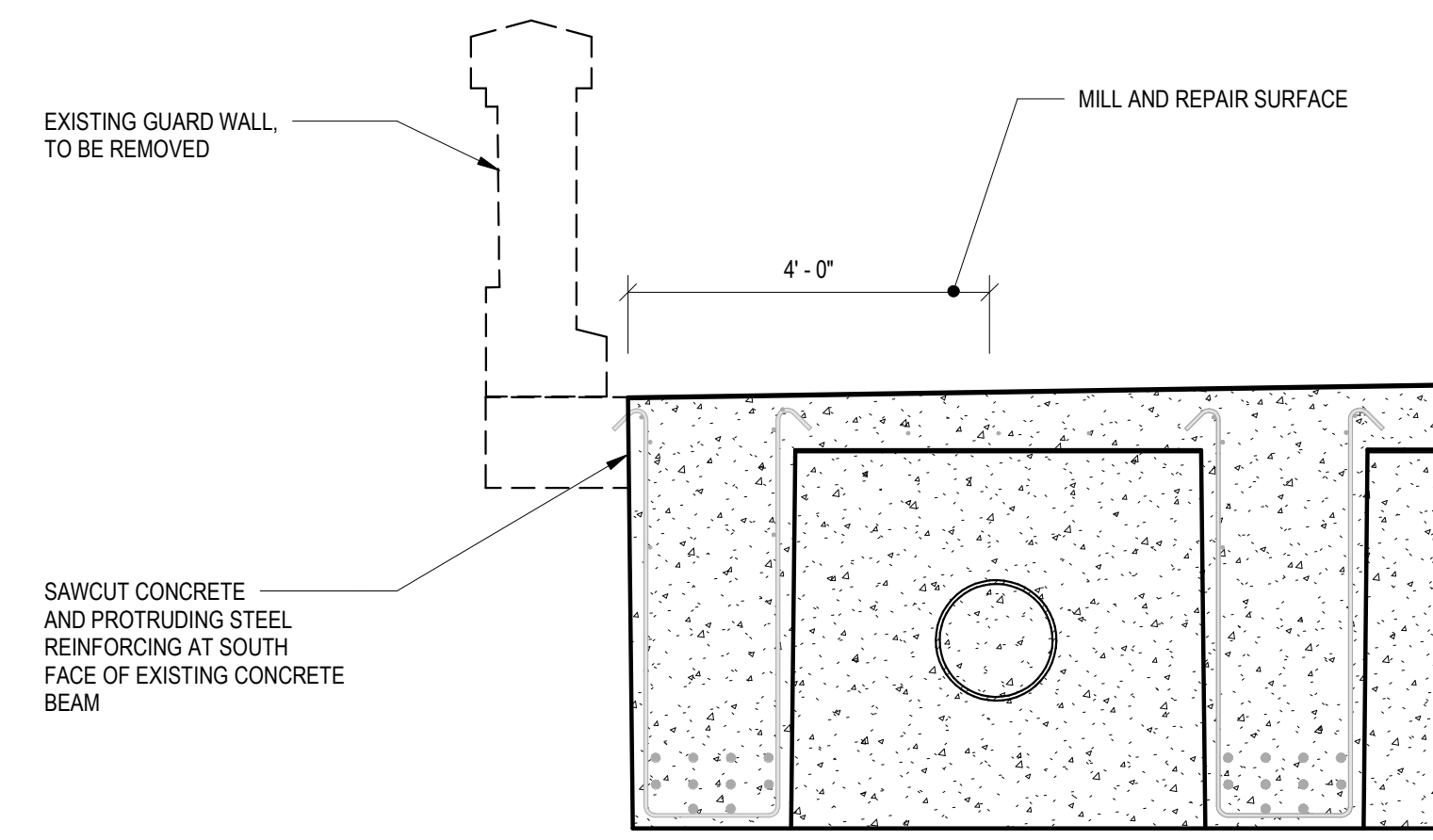
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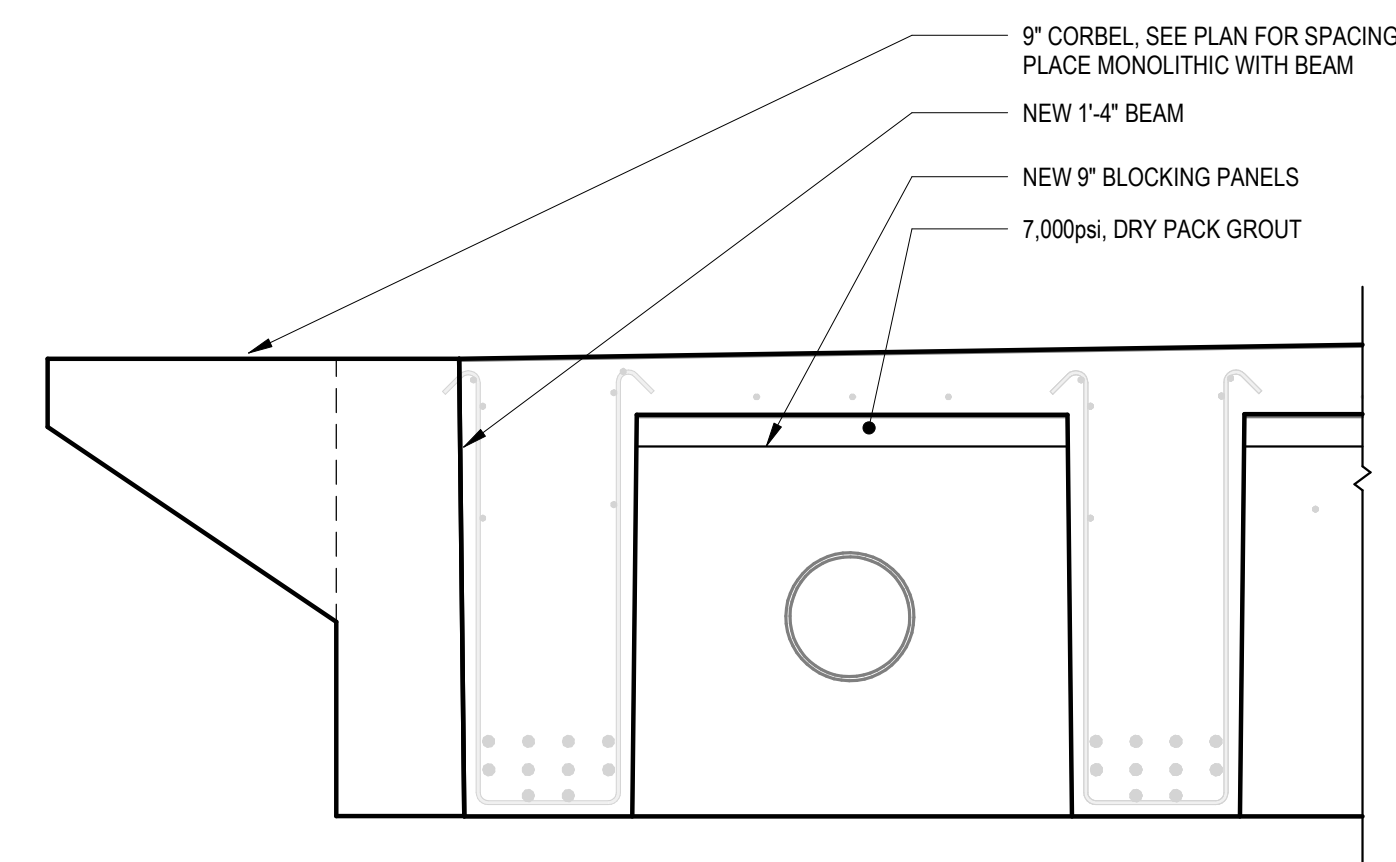




1 EXISTING CONDITION AND DIMENSIONS  
 1/2" = 1'-0"

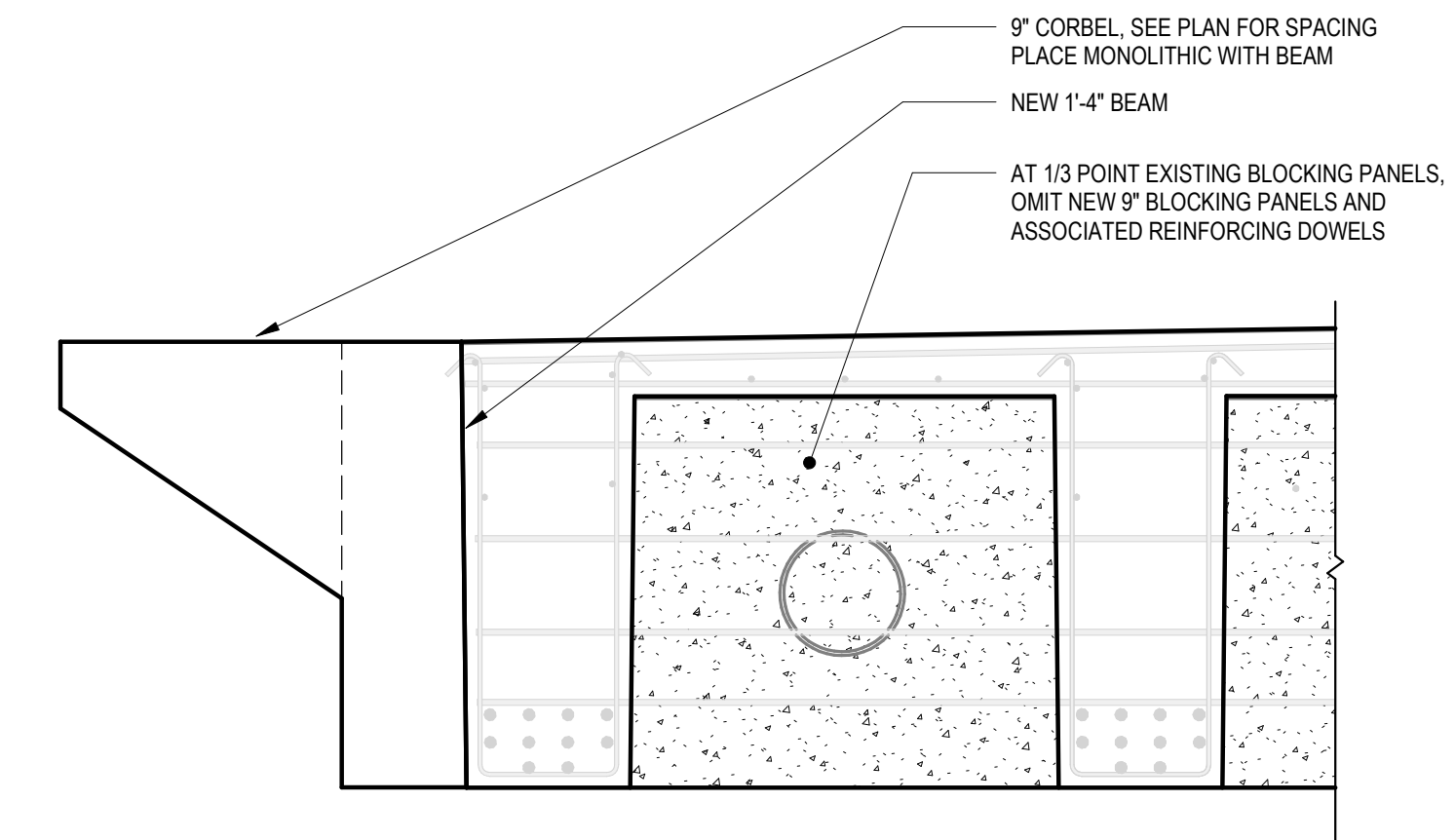


2 WALL AND SLAB EDGE REMOVAL  
 1/2" = 1'-0"



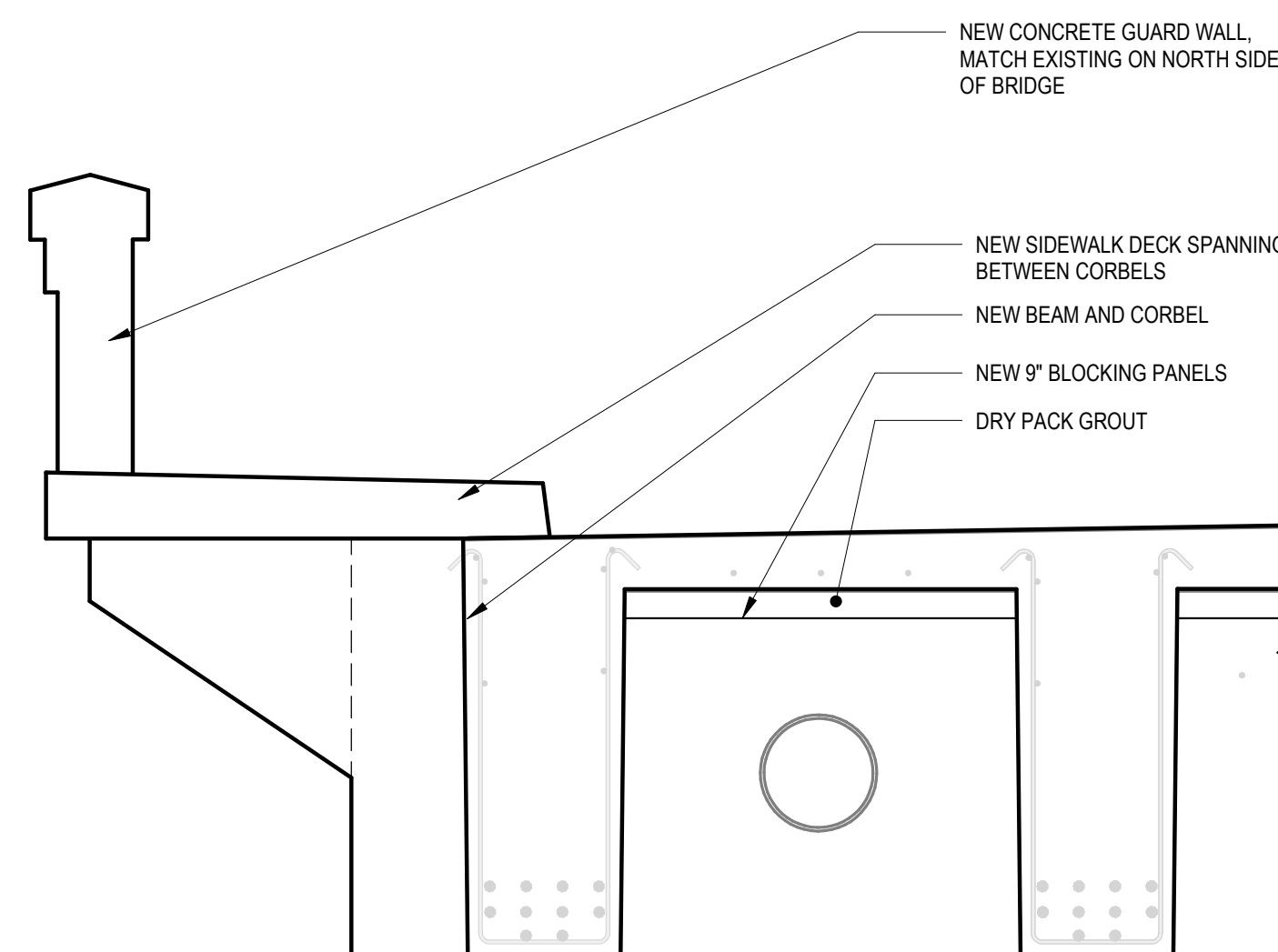
SEE 1/S2.2 FOR BEAM, CORBEL AND BLOCKING REINFORCING

3 NEW BEAM, CORBEL AND BLOCKING  
 1/2" = 1'-0"



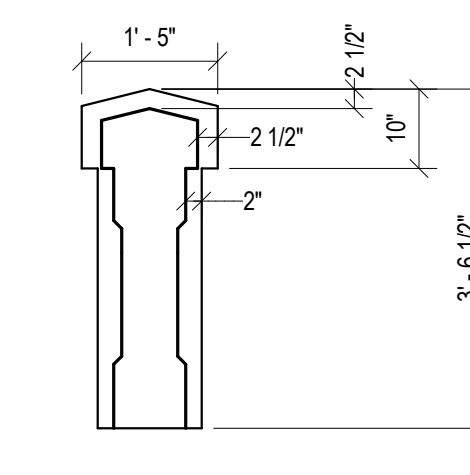
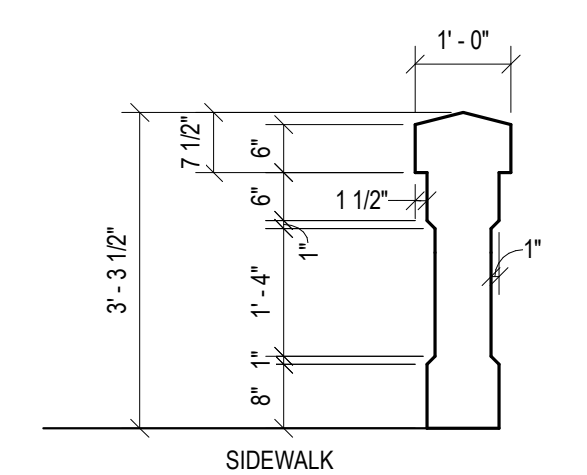
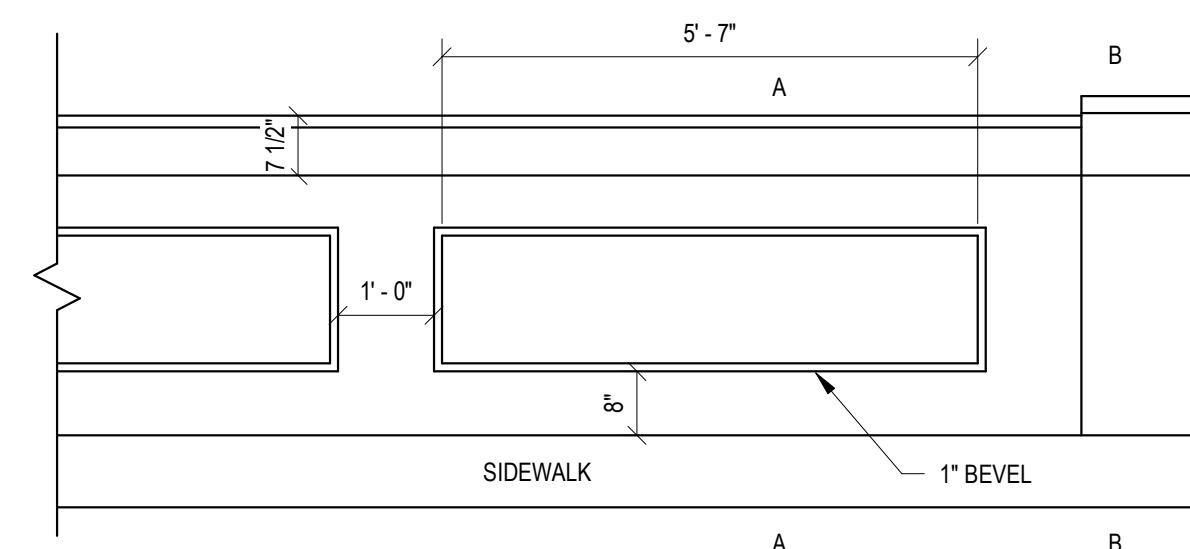
SEE 1/S2.2 FOR BEAM, CORBEL AND BLOCKING REINFORCING

4 NEW BEAM AND CORBEL AT EXISTING BLOCKING  
 1/2" = 1'-0"



SEE 1/S2.2 FOR BEAM, CORBEL, DECK, WALL AND BLOCKING REINFORCING

5 NEW SIDEWALK AND GUARD WALL  
 1/2" = 1'-0"



6 GUARD RAIL  
 1/2" = 1'-0"

REFLECTION OF 6/7/18  
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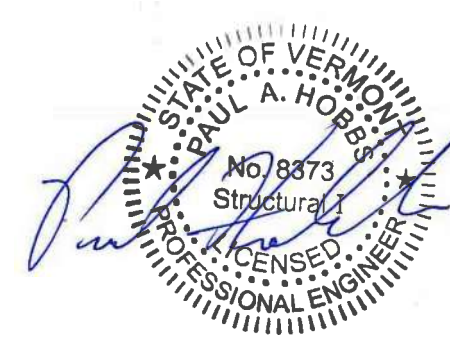
TOWN OF PLAINFIELD  
 PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

BRIDGE SECTIONS AND DETAILS

PLAINFIELD, VERMONT

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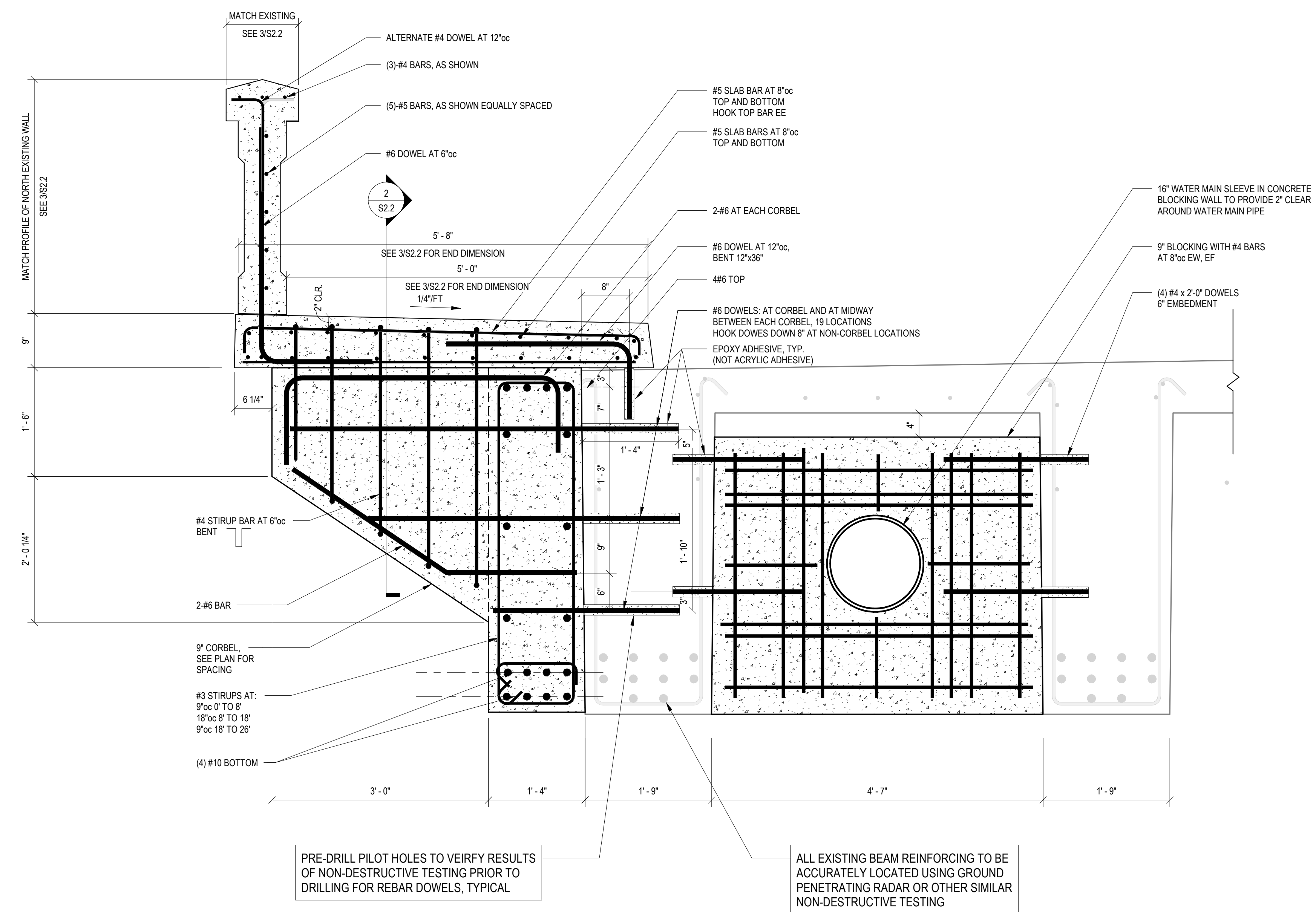
S2.1



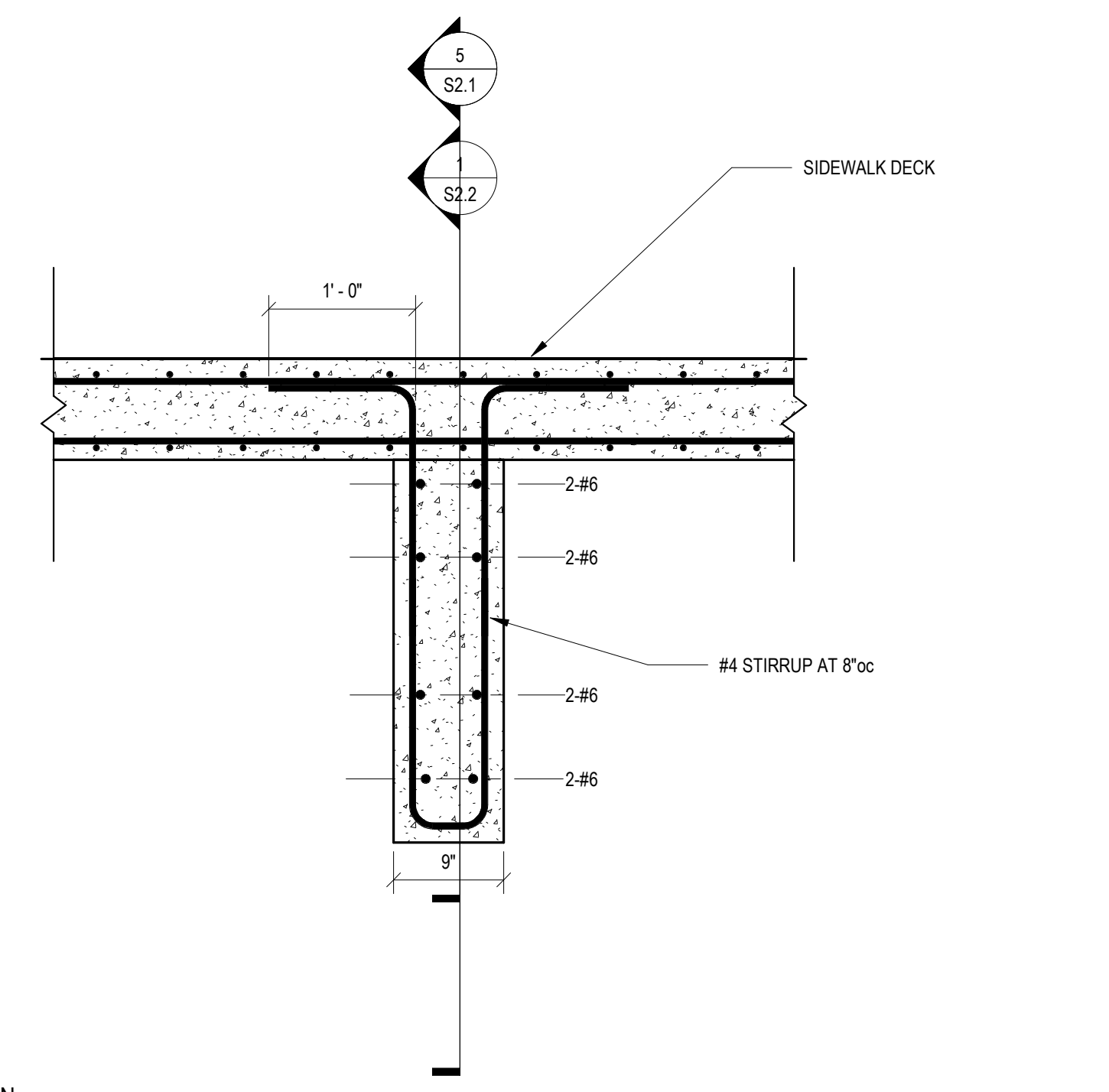
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**BRIDGE REINFORCING**  
 PLAINFIELD, VERMONT

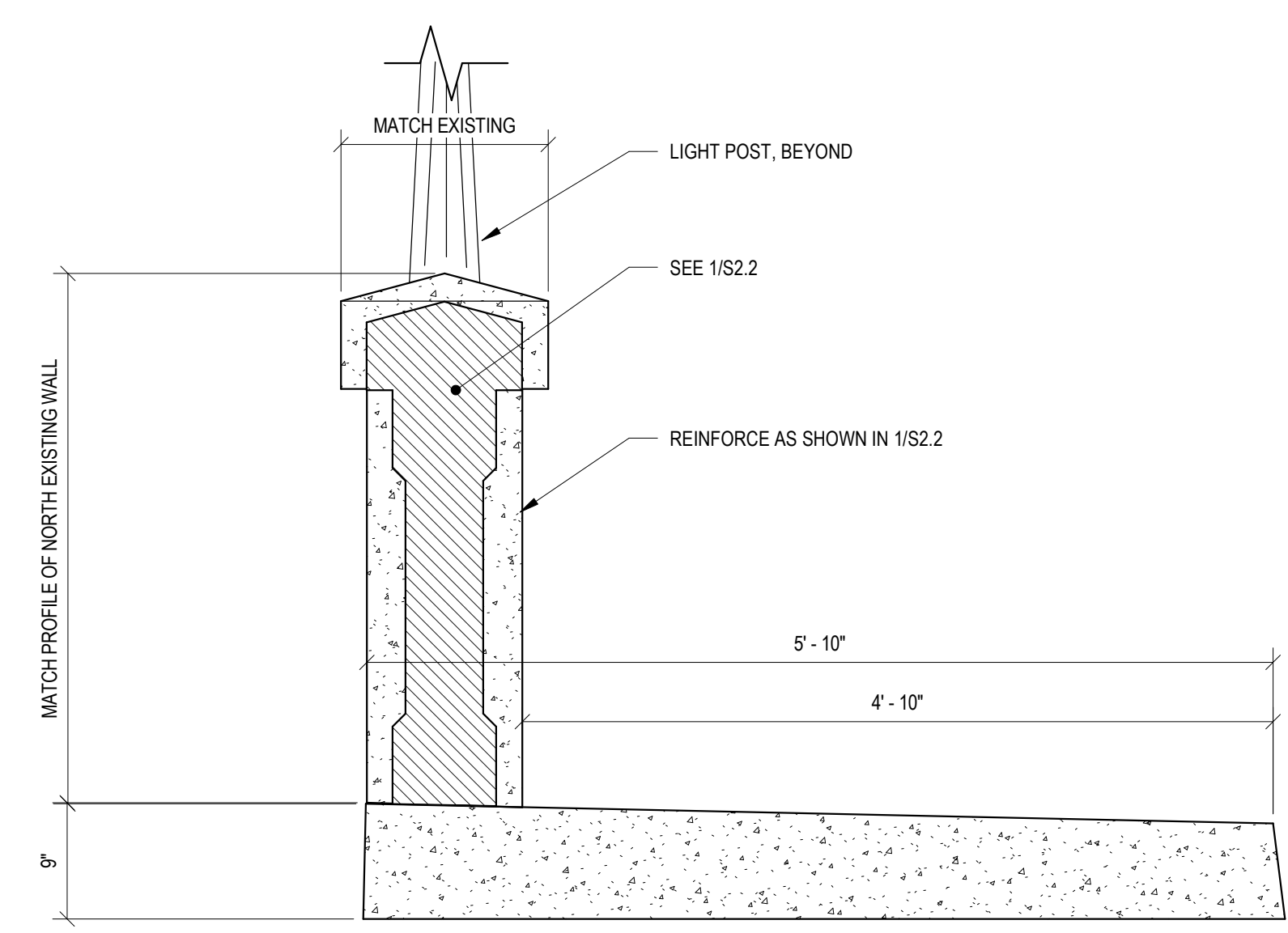
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① ENLARGED SECTION  
 1" = 1'-0"



② ENLARGED SECTION  
 1" = 1'-0"

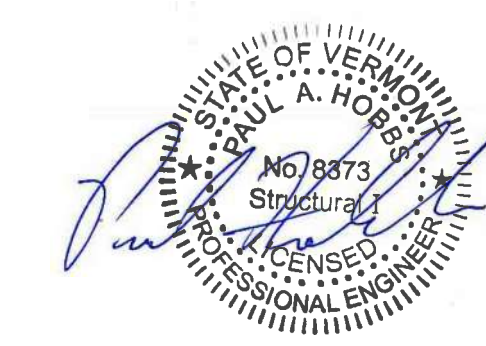


③ SECTION AT BRIDGE ENDS  
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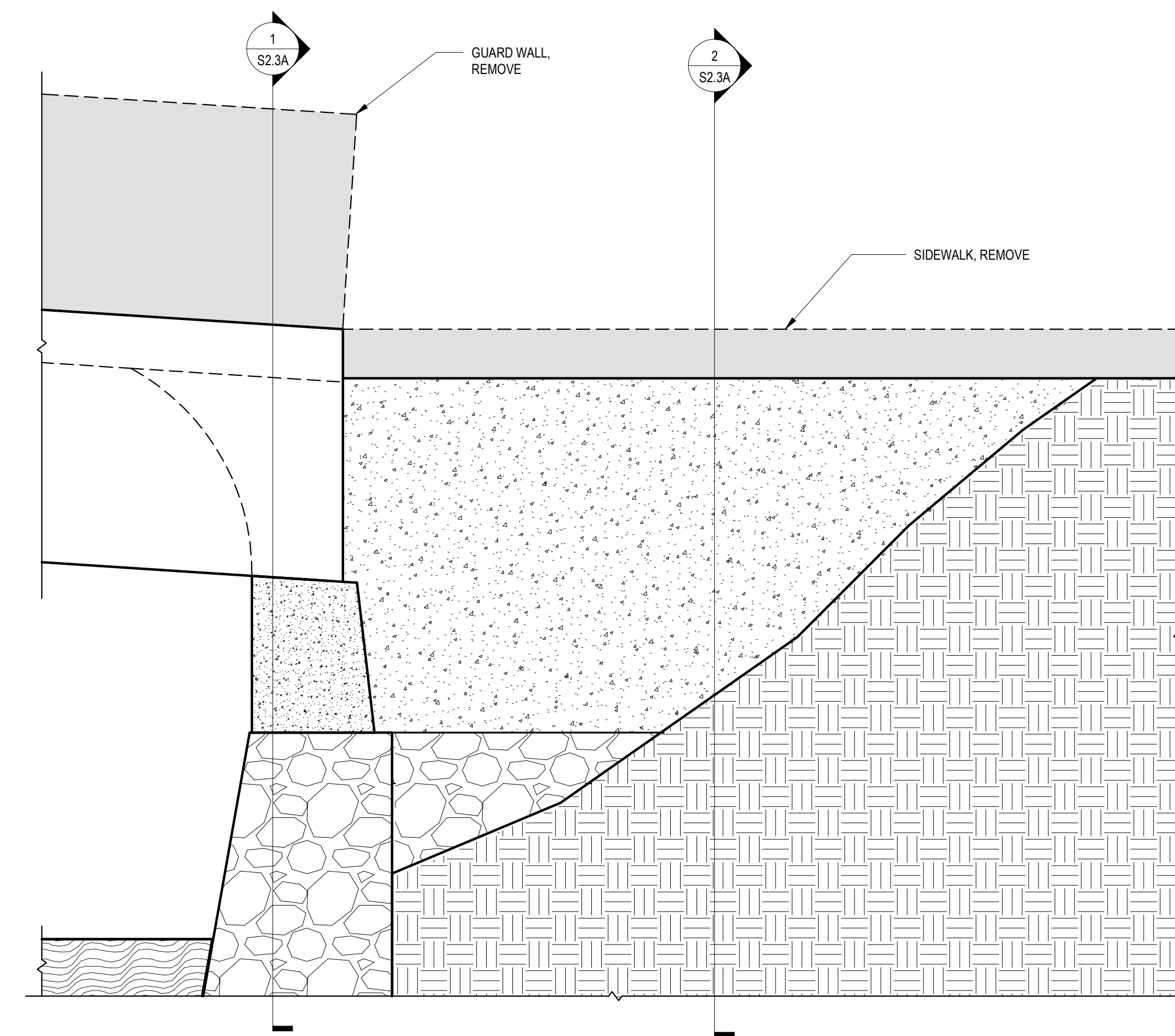


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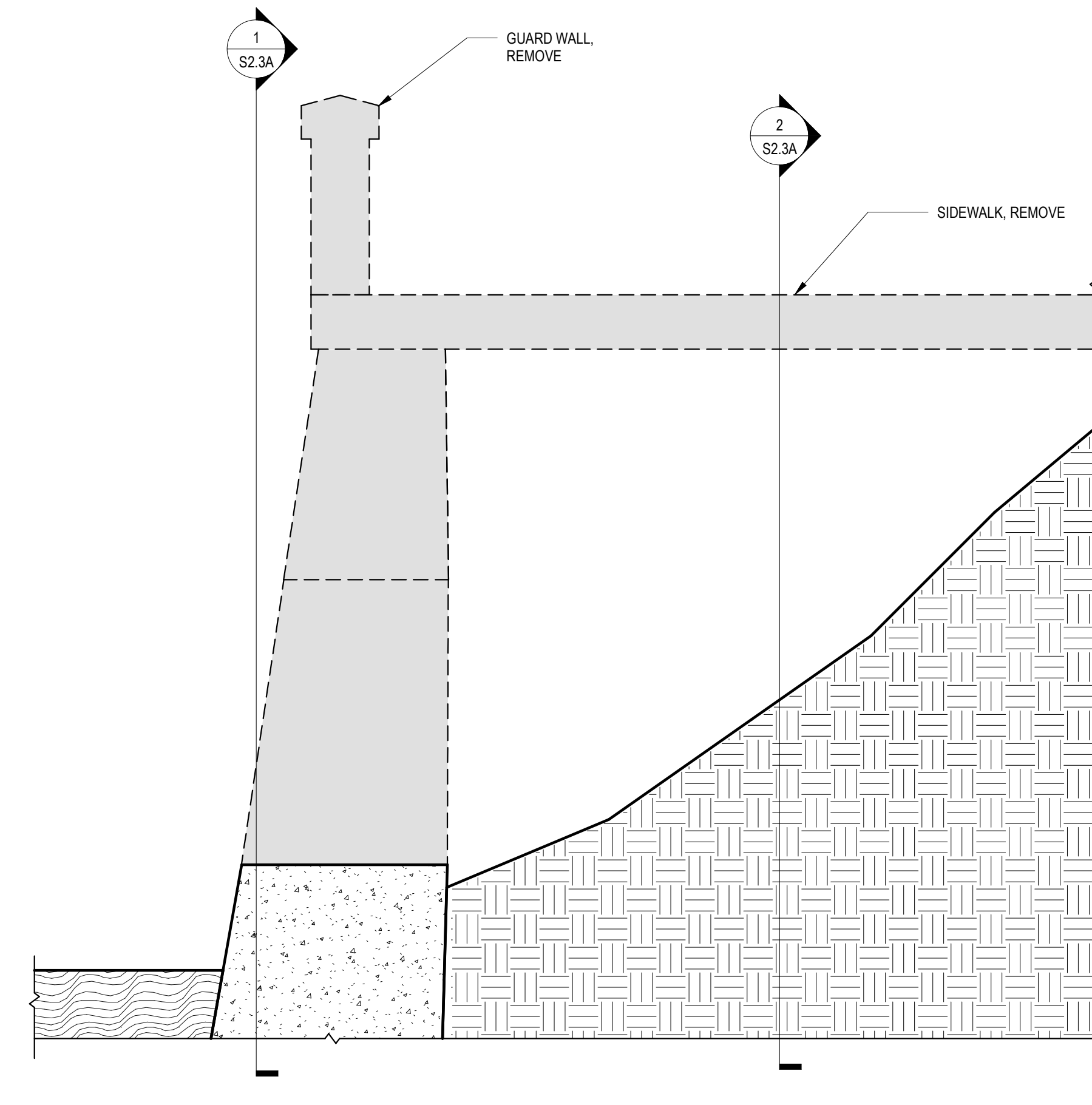
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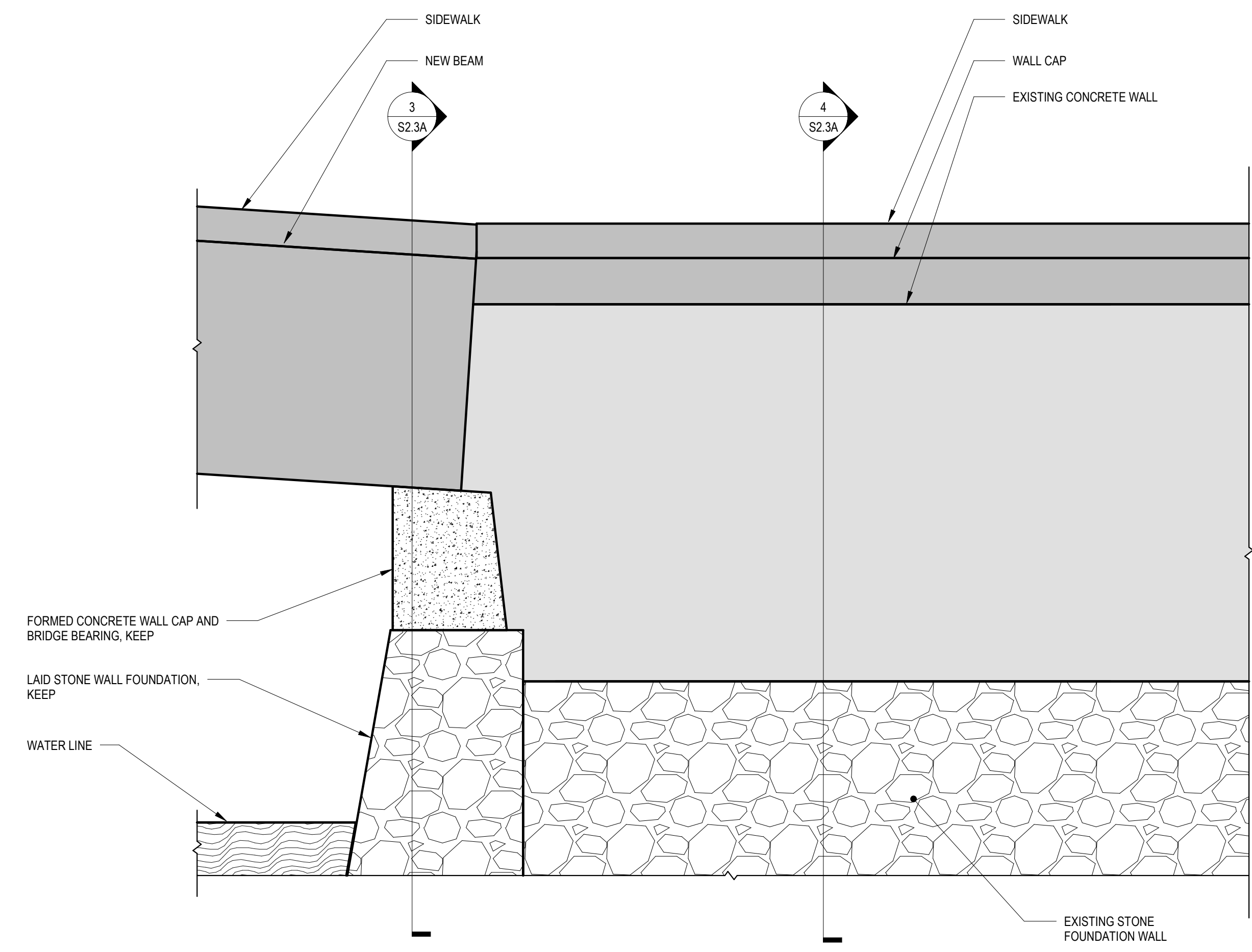
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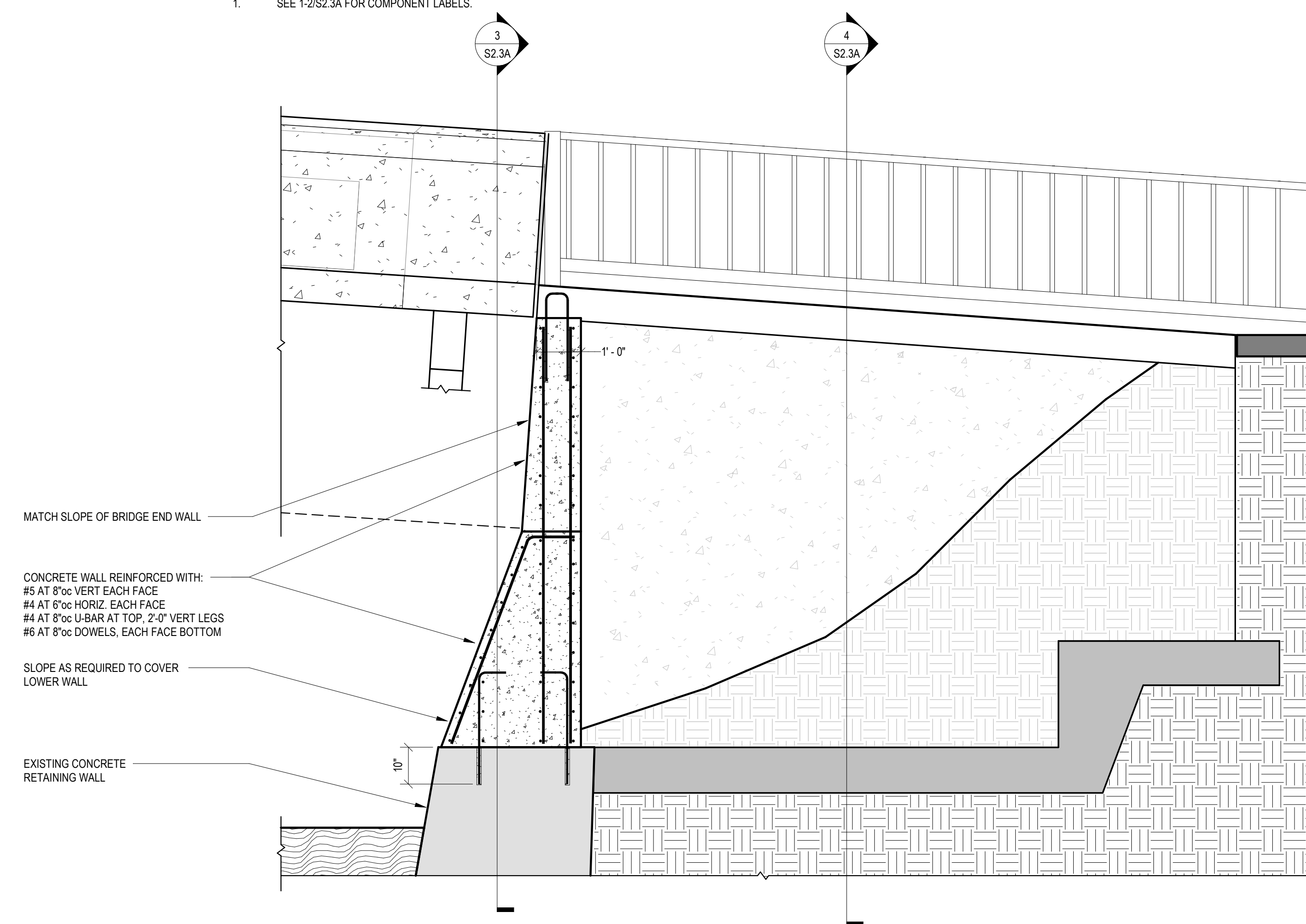
① EAST ABUTMENT INBOARD SECTION - EXISTING  
1/2" = 1'-0"  
NOTES:  
1. SEE 1-2/S2.3A FOR COMPONENT LABELS.



② EAST ABUTMENT OUTBOARD SECTION - EXISTING  
1/2" = 1'-0"  
NOTES:  
1. SEE 1-2/S2.3A FOR COMPONENT LABELS.



③ EAST ABUTMENT INBOARD SECTION - REINFORCED  
1/2" = 1'-0"



④ EAST ABUTMENT OUTBOARD SECTION - REINFORCED  
1/2" = 1'-0"

REVISIONS		BY
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TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)

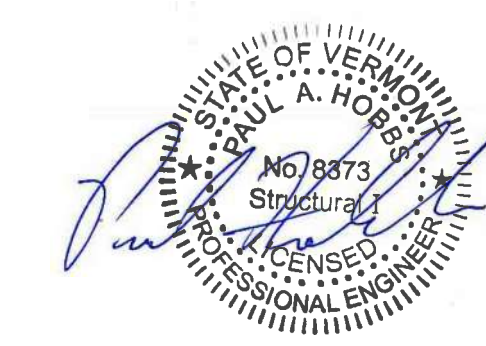
EAST ABUTMENT AND APPROACH

PLAINFIELD, VERMONT

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**S2.3B**





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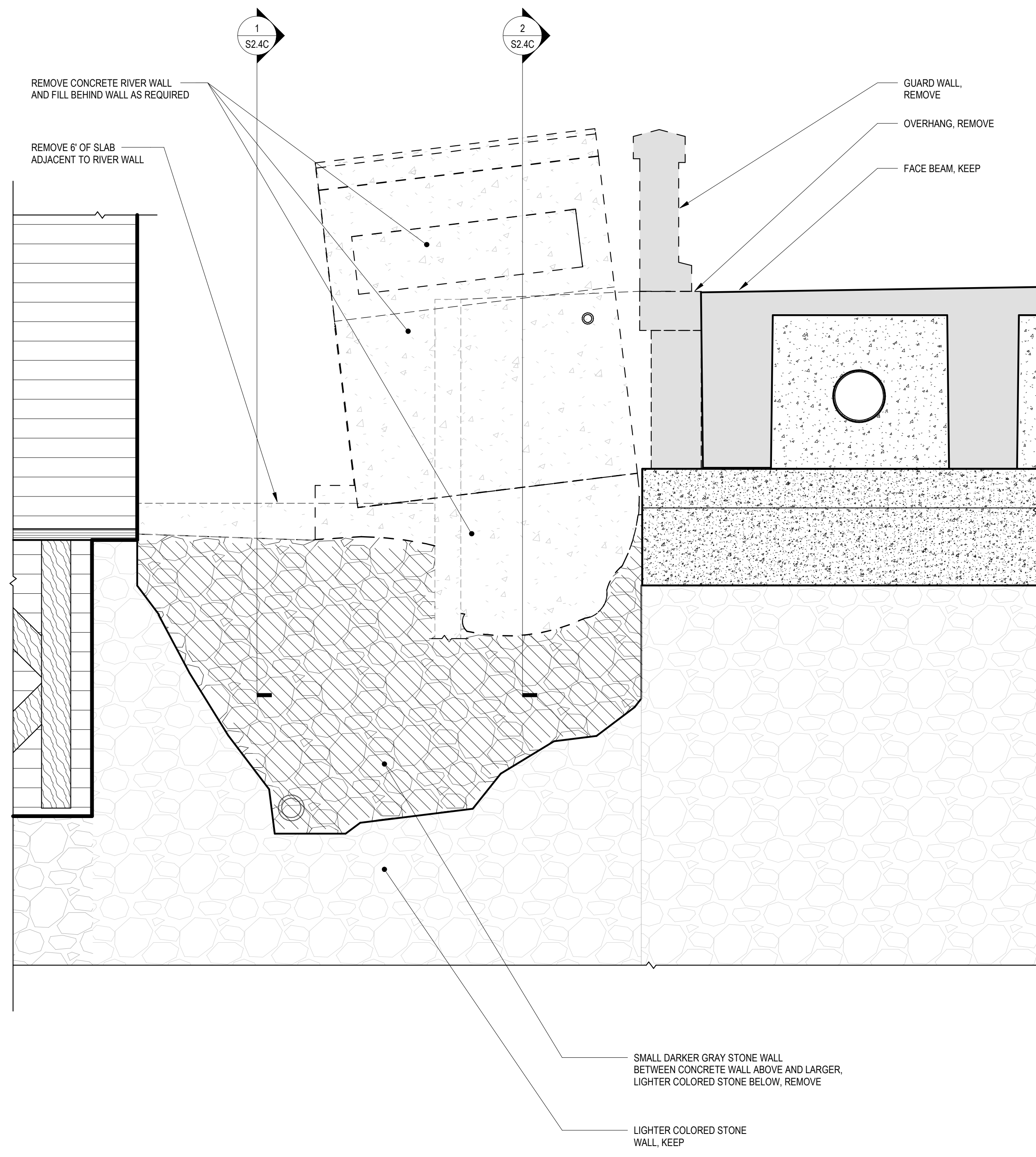
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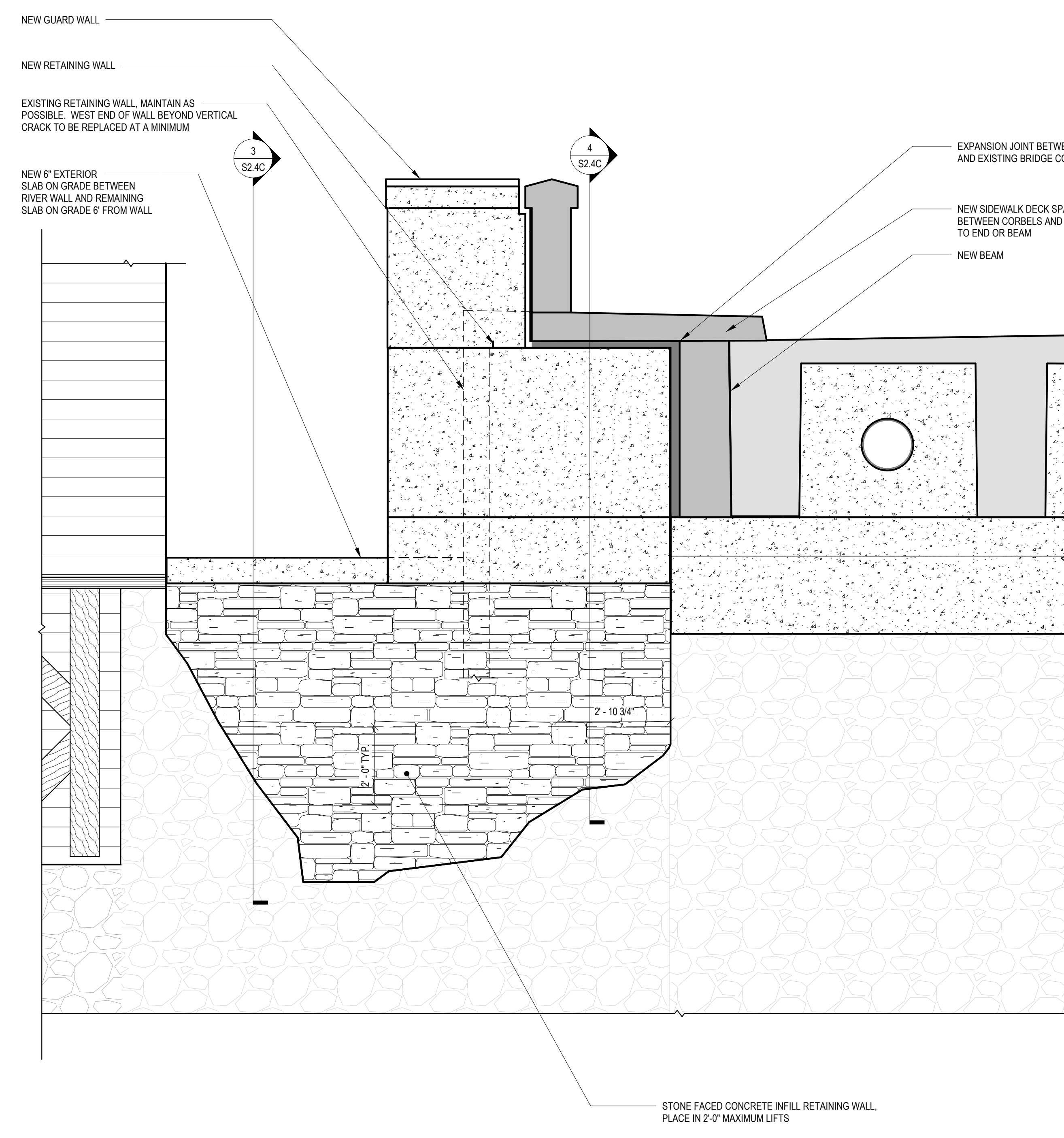
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1 WEST ABUTMENT ELEVATION - EXISTING  
1/2" = 1'-0"



2 NEW CONDITION AT WEST END OF BRIDGE  
1/2" = 1'-0"

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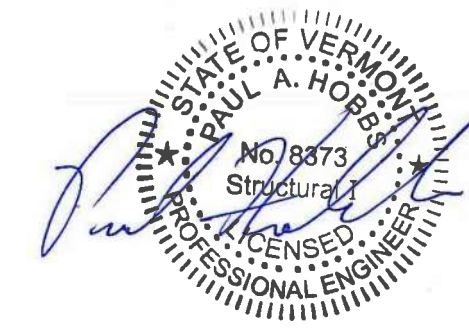
WEST ABUTMENT AND APPROACH

PLAINFIELD, VERMONT

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**S2.4A**





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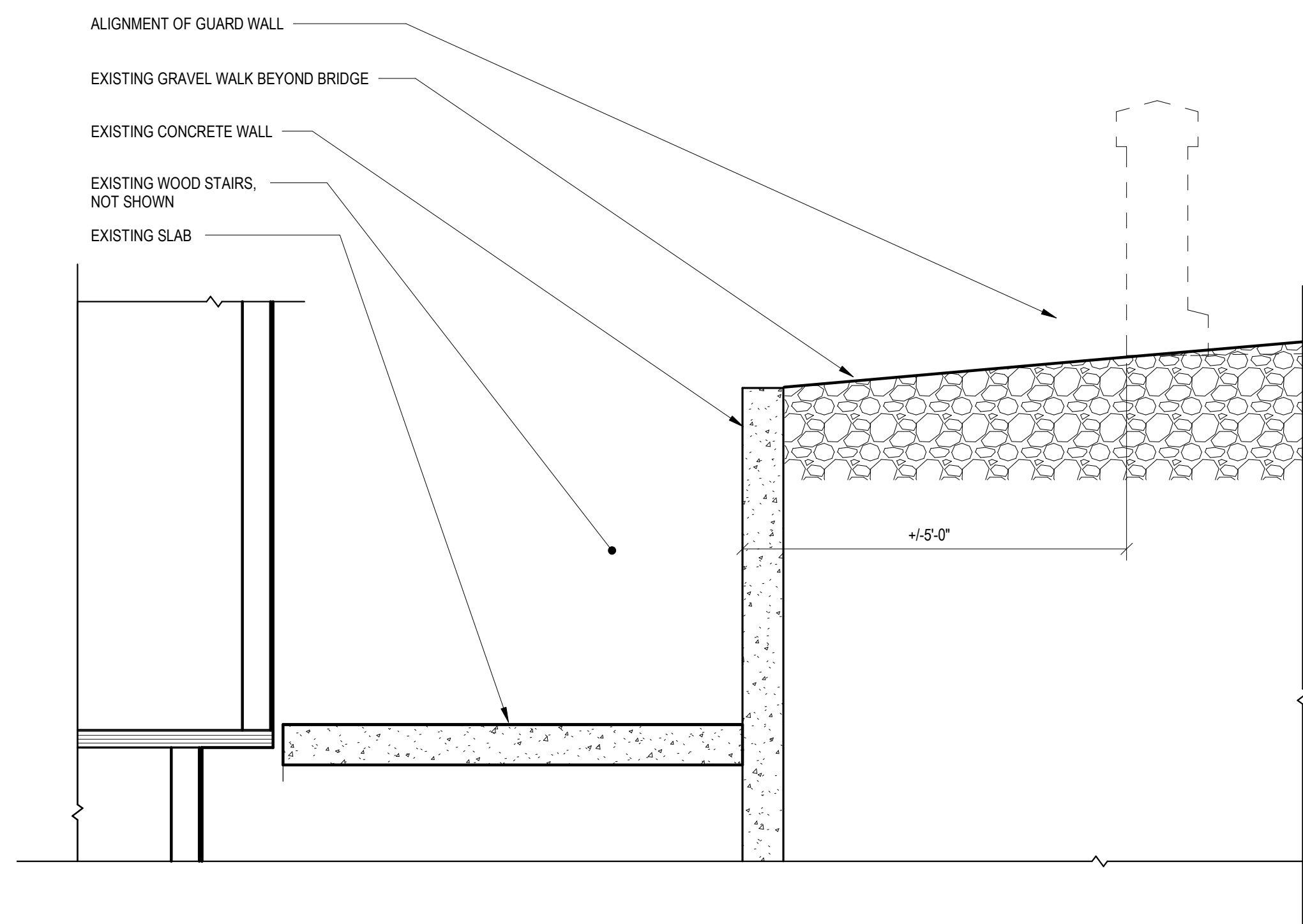
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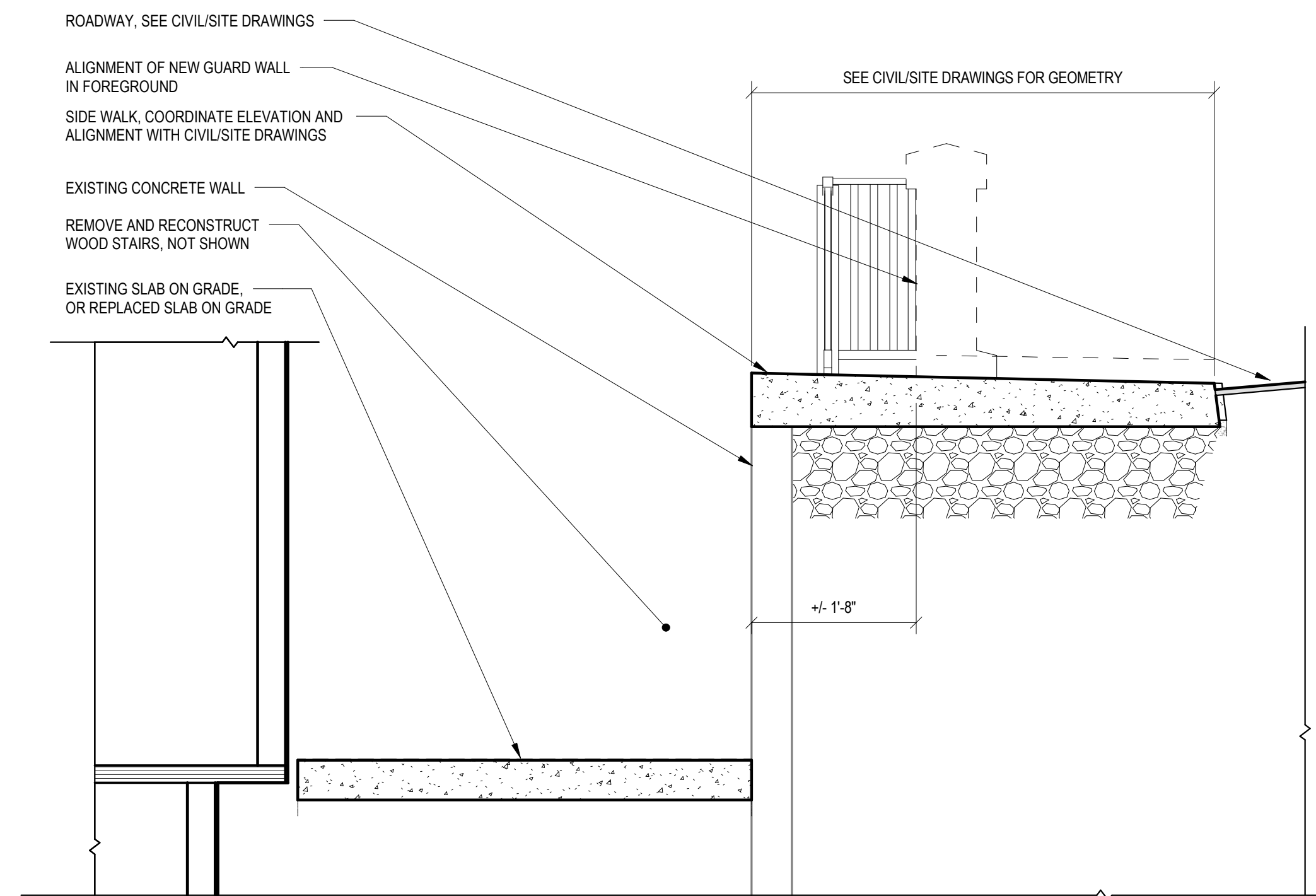
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1 WEST ABUTMENT ELEVATION - EXISTING  
1/2" = 1'-0"



2 WEST ABUTMENT ELEVATION - REINFORCED  
1/2" = 1'-0"

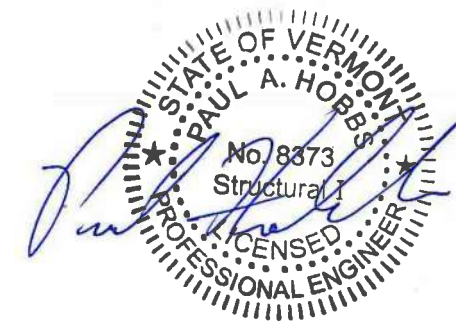
REVISIONS		DATE	COMMENTS	BY
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TOWN OF PLAINFIELD  
PEDESTRIAN BRIDGE STP BP 14(3), STP BP 17(7)  
**WEST ABUTMENT AND APPROACH**  
PLAINFIELD, VERMONT

Project #	7150029
Project Mgr.	A.J. DAY
Design by	PH
Drawn by	AS
Reviewed by	N.R. JOHNSON
Approved by	A.J. DAY
Date	MARCH 18, 2018
Scale	AS SHOWN

**S2.4B**



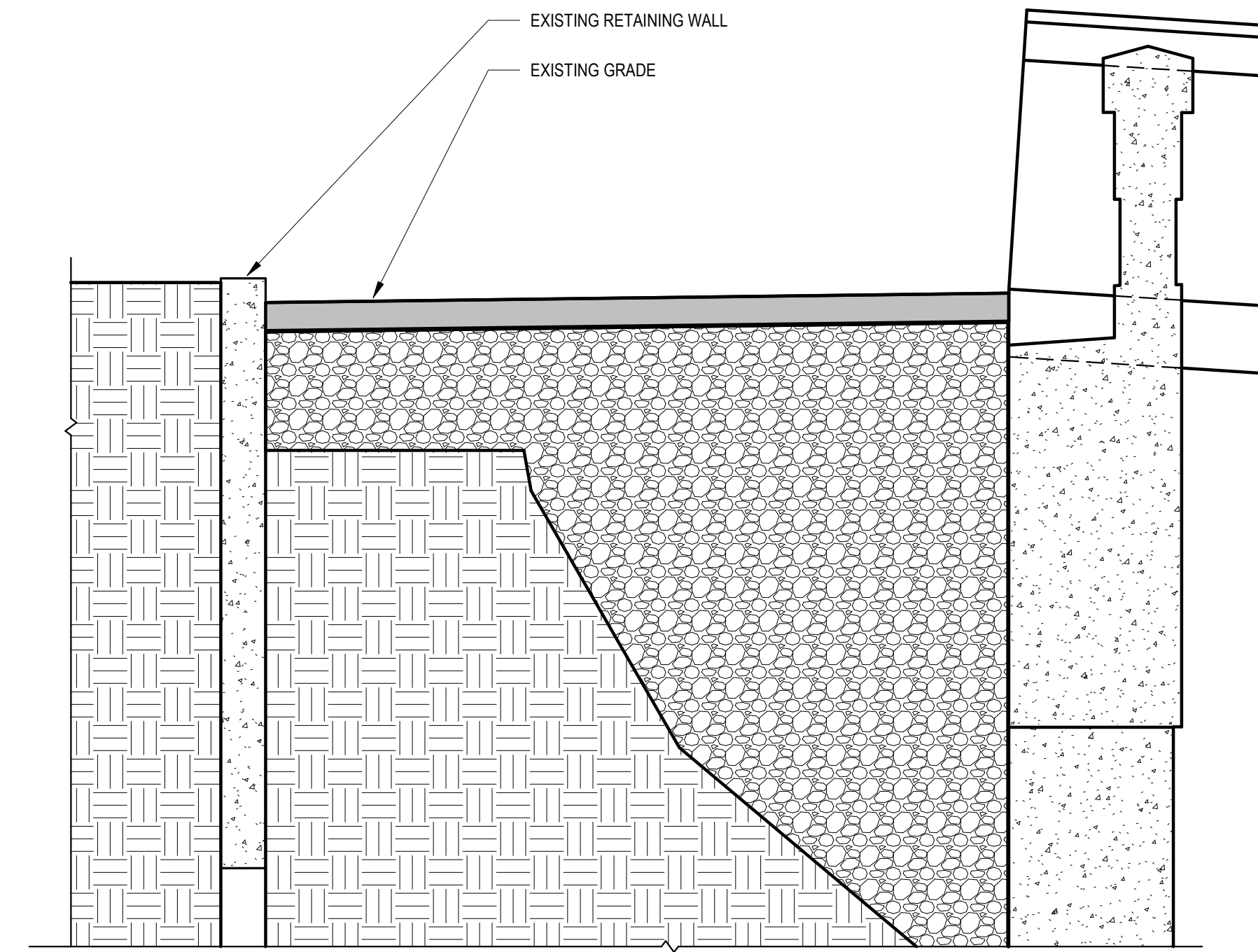
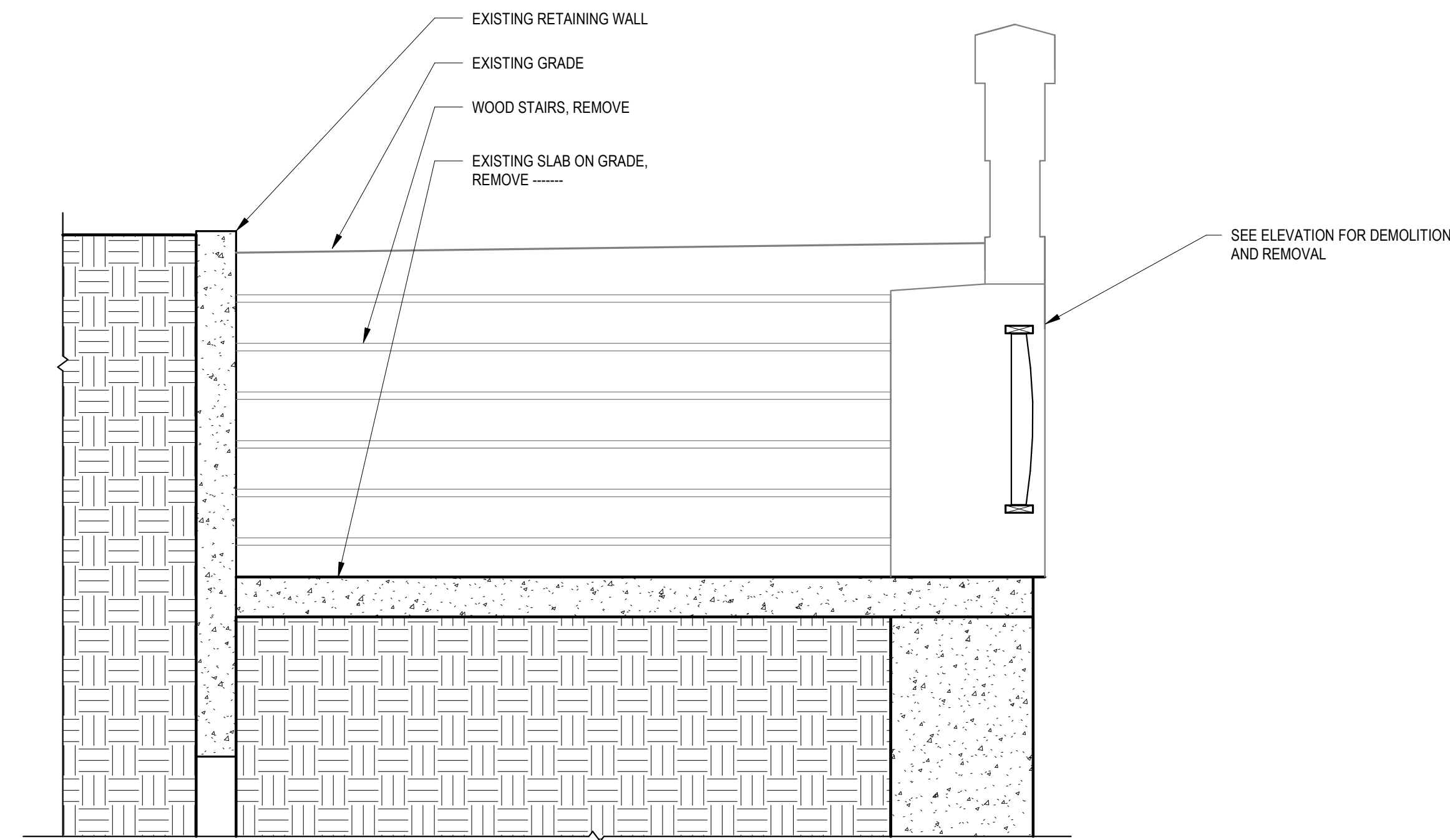


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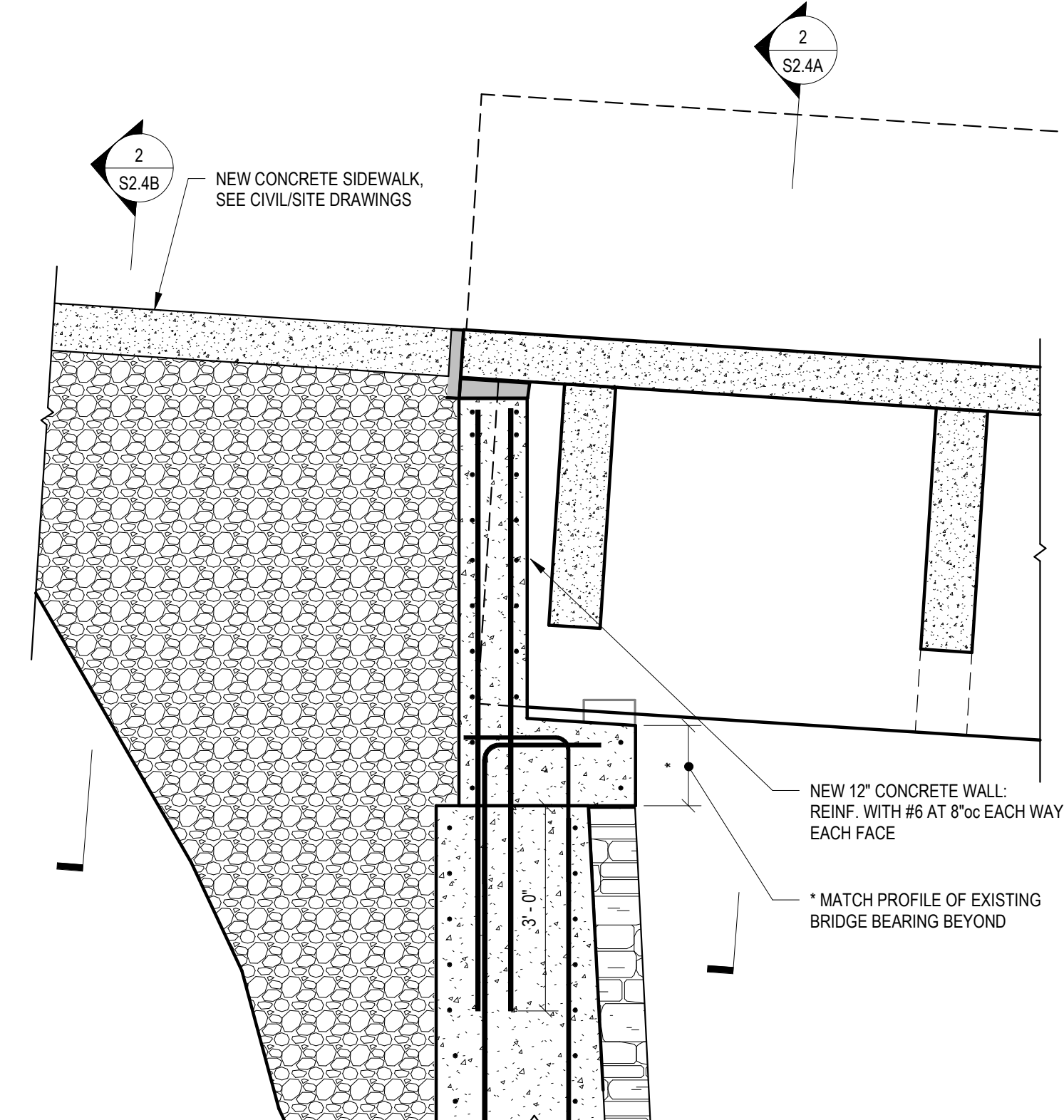
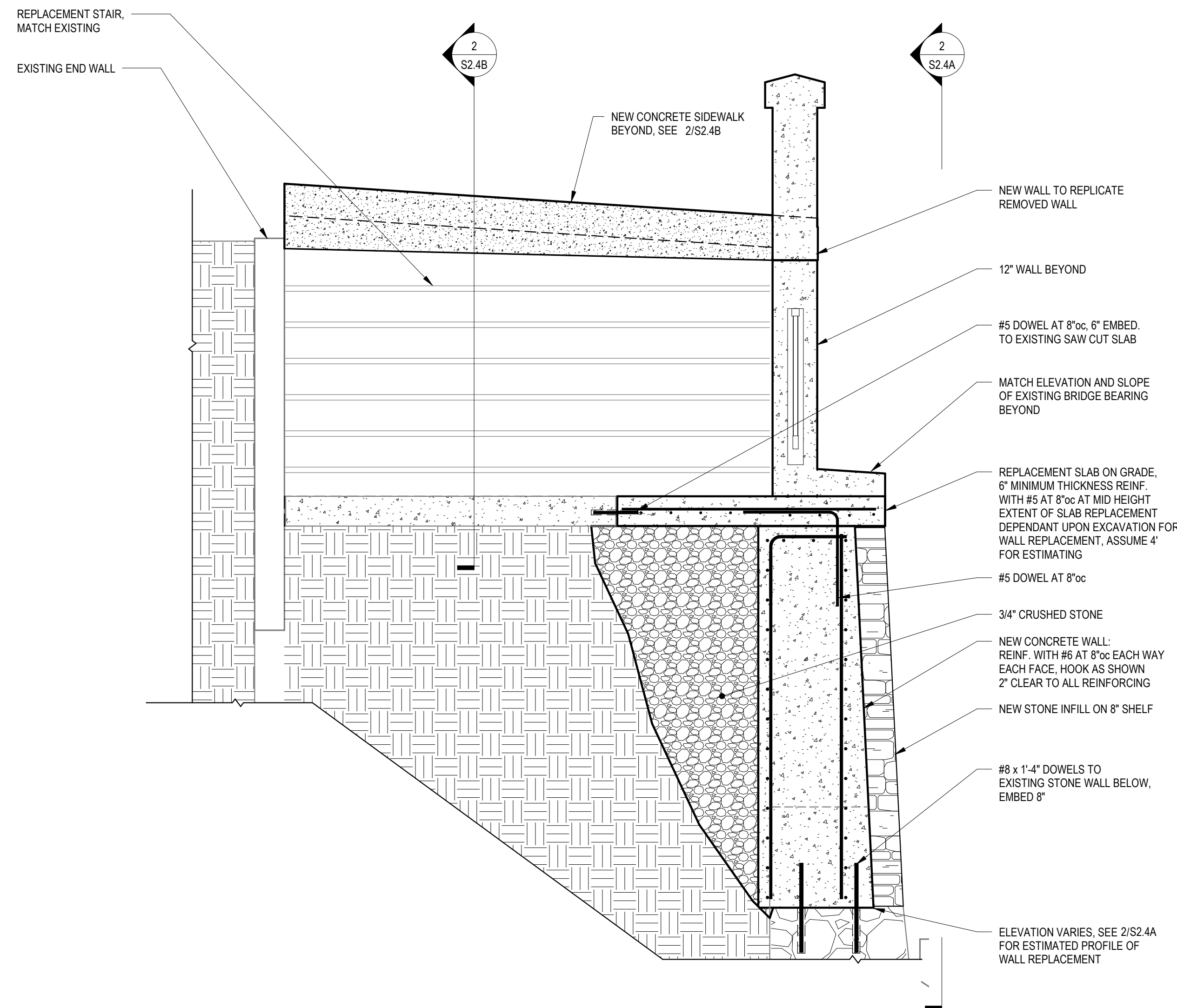


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1 WEST ABUTMENT SECTION - EXISTING  
1/2" = 1'-0"

2 WEST ABUTMENT SECTION - EXISTING  
1/2" = 1'-0"



3 WEST ABUTMENT SECTION - REINFORCED  
1/2" = 1'-0"

4 WEST ABUTMENT SECTION - REINFORCED  
1/2" = 1'-0"

DATE	COMMENTS	BY

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S2.4C