STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

SWANTON COUNTY OF FRANKLIN VT ROUTE 78 (SWANTON - DEPOT STREET) BRIDGE NO.6

PROJECT LOCATION:

BEGINNING AT A POINT APPROXIMATELY 0.07 MILES NORTHERLY OF THE INTERSECTION OF VERMONT ROUTE 78 AND U.S. ROUTE 7 AND EXTENDING NORTHERLY 0.152 MILES.

PROJECT DESCRIPTION: PREVENTATIVE MAINTENANCE REPAIRS TO EXISTING BRIDGE JOINTS.

Franklin County State NO. 6

PROJECT LIMITS PLAN

NOT TO SCALE

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

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QUALITY ASSURANCE PROGRAM : LEVEL

SURVEYED BY : N/A SURVEYED DATE : N/A

DATUM

VERTICAL N/A HORIZONTAL N/A



McFarland Johnson

PROJECT MANAGER : REGGIE BELIVEAU

CANADA

MASSACHUSETTS

NEW HAMPSHIRE

State of

PROJECT NAME : SWANTON PROJECT NUMBER : BC2109

SHEET I OF 6 SHEETS

PROJECT NOTES

GENERAL

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2018, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8th EDITION, AND ITS LATEST REVISIONS.
- 2. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- 3. THESE PLANS WERE PREPARED BASED ON THE INFORMATION OBTAINED FROM THE RECORD PLANS OF THE EXISTING STRUCTURE. THE CONTRACTOR MAY BE REQUIRED TO MAKE CHANGES TO THE DIMENSIONS SHOWN ON THE PLANS TO FIT THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
- 4. THE CONTRACTOR SHALL COORDINATE WITH DIG-SAFE (1-888-344-7233) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL PREMARK PROPOSED EXCAVATION AND SIGN LOCATIONS BEFORE CALLING DIG SAFE.

PAVEMENT REMOVAL

- 5. THE PAVEMENT ON THE CONCRETE BRIDGE DECK AND AT-GRADE APPROACH SLABS SHALL BE REMOVED BY LOADER, GRADER OR EQUIPMENT APPROVED BY THE ENGINEER. COLD PLANING TO REMOVE BRIDGE PAVEMENT WILL BE INCIDENTAL TO ITEM 529.10, "REMOVAL OF BRIDGE PAVEMENT".
- 6. DURING BRIDGE AND AT-GRADE APPROACH SLAB PAVEMENT REMOVAL, THE CONTRACTOR SHALL EXERCISE CARE TO ENSURE NO DAMAGE OCCURS TO THE EXISITING CONCRETE BRIDGE DECK. ANY DAMAGE TO THE CONCRETE BRIDGE DECK OR AT-GRADE APPROACH SLAB OUTSIDE OF THE REPAIR LIMITS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. REQUIRED REPAIRS SHALL BE MADE IN ACCORDANCE WITH SECTION 580.

PAVEMENT & MEMBRANE

- 7. CARE SHALL BE EXCERCISED TO SMOOTHLY TRANSITION THE NEW BRIDGE PAVEMENT INTO THE EXISTING PAVEMENT. ANY COLD PLANING NECESSARE FOR SHAPING BRIDGE APPROACHES SHALL BE SUBSIDIDARY TO REMOVAL OF BRIDGE PAVEMENT, ITEM 529.10.
- 8. EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE OF 0.08 GAL/SY TO ALL COLD PLANED ". SURFACES AND AT A RATE OF 0.03 TO 0.04 GAL/SY BETWEEN PAVEMENT LIFTS. PAYMENT SHALL BE UNDER ITEM 404.65, "EMULSIFIED ASPHALT".

BRIDGE CONCRETE REMOVAL

- REMOVAL OF THE EXISTING DETIORATED CONCRETE WILL BE PAID FOR UNDER ITEM 580.12 "REPAIR OF CONCRETE SUPERSTRUCTURE, CLASS III.)". THIS WORK SHALL INCLUDE:
 - REMOVAL OF THE EXISTING CONCRETE AND JOINT INCLUDING ALL HARDWARE AND FASTENERS WITHIN THE PROJECT LIMITS SPECIFIED.
- 10. FOR CONCRETE REMOVAL, SAWCUT EXISTING CONCRETE 1 INCH DEEP ON ALL EXPOSED SURFACES TO PROVIDE CLEAN REMOVAL LINES.
- 11. TEMPORARY SUPPORT OF THE APPROACH SLAB SHALL AFTER CONCRETE REMOVAL MAY BE REQUIRED. TEMPORARY SUPPORT SHALL BE MADE WITH EITHER FLOWABLE FILL OR STONE AGGREGATE AS REQUIRED BY THE ENGINEER. TEMPORARY SUPPORT WILL BE PAID UNDER ITEM 580.12 "REPAIR OF CONCRETE SUPERSTRUCTURE, CLASS III.)"
- 12. REMOVAL LIMITS FOR THE EXISTING FINGER PLATE EXPANSION JOINT SHALL NOT CONFLICT WITH THE LOCATION OF THE EXISITNG GRANITE CURB.
- 13. CONSTRUCTION VEHICLE LOADING IS NOT ALLOWED TO BE PLACED ON THE APPROACH SLAB UNTIL THE CONCRETE HAS ACHIEVED DESIGN STRENGTH.

TRAFFIC CONTROL

- 14. SITE SPECIFIC TRAFFIC CONTROL PLANS SHALL BE SUBMITTED IN ACCORDANCE WITH SECTION 641 AND SUBSECTION 105.03 AND SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN AN APPROPRIATE DISCIPLINE IN THE STATE OF VERMONT. PAYMENT FOR SUBMITTING THE TRAFFIC CONTROL PLANS AND MAKING ANY NECESSARY REVISIONS TO THE PLANS WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 641.11, "TRAFFIC CONTROL, ALL INCLUSIVE". THE CONTRACTOR SHALL ALLOW TWO WEEKS FOR APPROVAL OF THE TRAFFIC CONTROL PLANS. NO WORK SHALL COMMENCE UNTIL THE CONTRACTOR HAS AN APPROVED TRAFFIC CONTROL PLAN.
- 15. ALL TRAFFIC CONTROL DEVICES SHOWN ON THESE PLANS ARE FOR ILLUSTRATIVE PURPOSES AND DO NOT RELIEVE THE CONTRACTOR FROM ADHERING TO ALL VTRANS TRAFFIC CONTROL STANDARDS, REQUIREMENTS, AND SPECIFICATIONS. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ITS LATEST REVISIONS AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA). WHERE CONFLICTS EXIST BETWEEN THE MUTCD AND AOT STANDARDS, THE MUTCD SHALL GOVERN.
- 16. FULL ACCESS TO ALL DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 641.11, "TRAFFIC CONTROL, ALL-INCLUSIVE". IF THE CONTRACTOR MUST TEMPORARILY CLOSE A DRIVE, NOTIFY THE PROPERTY OWNER 24 HOURS BEFORE THE CLOSURE. WORK WITH THE PROPERTY OWNER TO ACCOMMODATE THEIR ACCESS DURING THE CLOSURE.
- 17. INSTALLATION OF TEMPORARY TRAFFIC CONTROL SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES AND SHALL MODIFY OR BE PLACED ADJACENT TO EXISTING ROUTE MARKER SIGN ASSEMBLIES WHEN POSSIBLE. THE CONTRACTOR SHOULD MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES WHEN POSSIBLE.

- 18. LANE CLOSURES SHALL ONLY BE IN PLACE FROM 9AM TO 3PM MONDAY THRU FRIDAY. IF EXCESSIVE QUEUING OR DELAYS ARE OBSERVED, THE ENGINEER SHOULD ADJUST WORK HOURS TO ACCOMMODATE THE PEAK HOUR TRAFFIC.
- 19. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY. THIS WORK SHALL BE PAID UNDER ITEM 641.11, "TRAFFIC CONTROL, ALL-INCLUSIVE".
- 20. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE IMPLEMENTED TWO WEEKS IN ADVANCE OF LANE CLOSURES AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER ITEM 641.15 "PORTABLE CHANGEABLE MESSAGE SIGN".
- 21. PCMS PLACEMENT SHALL BE IN ACCORDANCE WITH AOT AND MUTCD STANDARDS AND APPROVED BY ENGINEER. ANTICPATED APPROXIMATE LOCATIONS FOR PCMS ARE SHOWN ON THE TRAFFIC CONTROL PLAN, CONTRACTOR TO FIELD IDENTIFY APPROPROIATE LOCATIONS FOR PCMS PLACEMENT. AN EXAMPLE OF MESSAGES TO BE DISPLAYED ON PCMS FOLLOWS.

1 ST MESSAGE	2 ND MESSAGE
SIGNAL AHEAD	VT 78
EXPECT DELAYS	ONE LANE
	ACROSS BRIDGE

TEMPORARY TRAFFIC SIGNAL SYSTEM

- 22. THE TEMPORARY TRAFFIC SIGNALS SHALL BE PLACED ON EITHER END OF THE WORK ZONE, AS APPROVED BY THE ENGINEER.
- 23. TEMPORARY TRAFFIC SIGNALS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM" AND IN COMPLIANCE WITH THE LATEST EDITION OF THE MUTCD.
- 24. SIGNAL FACES SHALL BE LED AND CONSIST OF 12 INCH LENSES (RED, YELLOW, GREEN).
- 25. LUMINARES SHALL BE INSTALLED AT EACH OG THE APPROACHES TO ADEQUATELY LIGHT THE STOP BAR AREAS, PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM".
- 26. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC. SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING UTILITY POLES, WIRES, ETC. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM".
- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIGNAL PHASING AND TIMING. THE CONTRACTOR SHALL SUBMIT A PHASING DIAGRAM AND TIMING SCHEDULE TO THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL MAKE THE SIGNALS OPERATIONAL ONLY AFTER RECEIVING APPROVAL OF BOTH THE PHASING DIAGRAM AND TIMING SCHEDULE BY THE ENGINEER. DEVELOPMENT OF THE PHASING DIAGRAM AND TIMING SCHEDULE WILL BE CONSIDERED INCIDENTAL TO ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM". ADDITIONAL ADJUSTMENTS TO SGNAL TIMINING OR PHASING REQUESTED BY THE ENGINEER SHALL BE COMPLETED WITHIN 48 HOURS OF THE REQUEST. PAYMENT FOR ADDITIONAL ADJUSTMENTS TO SIGNAL TIMING OR PHASING SHALL BE CONSIDERED INCIDENTAL TO ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM".
- 28. THE SUBMITTAL FOR ITEM 678.40 "TEMPORARY TRAFFIC SIGNAL SYSTEM" SHALL BE IN CONJUNCTION WITH THE SUBMITTAL FOR ITEM 641.11 "TRAFFIC CONTROL, ALL-INCLUSIVE" AND SHALL INCLUDE AS A MINIMUM, THE SIGNAL LOCATION, TIMING AND PHASING PLAN, VEHICLE DETECTION SYSTEM, AND EMERGENCY VEHICLE PREEMPTION SYSTEM.

CONCRETE AND REINFORCING STEEL

- 29. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE.
- 30. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE 2 INCHES UNLESS OTHERWISE NOTED.
- 31. REINFORCING STEEL SHALL MEET THE REQUIREMENTS ITEM 507.11 "REINFORCING STEEL LEVEL I".
- 32. JOINT REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 580 OF THE STANDARD SPECFICIATIONS. APPROVED CONCRETE TYPES SHALL BE AS FOLLOWS:
 - HIGH PERFORMANCE CONCRETE, RAPID SET
- 33. EXISTING REINFORCING STEEL BARS ENCOUNTERED WITHIN THE REMOVAL LIMITS THAT ARE BROKEN OR THAT ARE CORRODED 25% OR MORE SHALL BE REPLACED WITH ITEM 507.11, "REINFORCING STEEL, LEVEL I". NEW REINFORCING STEEL MAY BE DRILLED AND GROUTED INTO PLACE IF AUTHORIZED BY THE EINGINEER. PAYMENT WILL BE MADE UNDER ITEM 507.16 "DRILLING AND GROUTING DOWELS".
- 34. REPAIR CONCRETE IN THE BRIDGE DECK AND APPROACH SLAB SHALL BE WET CURED UNTIL IT HAS OBTAINED A COMPRESSIVE STRENGTH OF 3000 PSI AS VERIFIED BY TESTING OF FIELD CURED CYLINDERS.
- 35. ALL FORM SUPPORTS AND FORM TIES THAT ARE TO REMAIN PERMANENTLY IN THE CONCRETE ABOVE THE BRIDGE SEATS SHALL BE GALVANIZED AND CONFORM TO SECTION 726 OF THE STANDARD SPECIFICATIONS.
- 36. EXISTING SOUND CONCRETE ENCOUNTERED WITHIN THE REMOVAL LIMITS MAY BE LEFT IN PLACE WITH THE APPROVAL OF THE ENGINEER.

PROPOSED QUANTITY TABLE				
ITEM				
NUMBER	DESCRIPTION	UNIT	QUANTITY	
404.65	EMULSIFIED ASPHALT		0.5	
406.38	HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES	SY	67	
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	LU	1	
507.11	REINFORCING STEEL, LEVEL I	LB	1350	
507.16	DRILLING AND GROUTING DOWELS	LF	30	
516.10	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG		60	
519.20	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	SY	67	
529.10	REMOVAL OF BRIDGE PAVEMENT		67	
580.12	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS III	CY	9	
580.16	SURFACE PREPARATION FOR MEMBRANE		600	
630.10	UNIFORMED TRAFFIC OFFICERS		150	
630.15	FLAGGERS		250	
631.16	TESTING EQUIPMENT, CONCRETE		1	
631.17	TESTING EQUIPMENT, BITUMINOUS		1	
635.11	MOBILIZATION/DEMOBILIZATION		1	
641.11	TRAFFIC CONTROL, ALL-INCLUSIVE		1	
641.15	PORTABLE CHANGEABLE MESSAGE SIGN EA		3	
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	2	
900.650	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT)	LU	1	
900.650	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	LU	1	



REPAIR LAYOUT

SCALE: I" = 50'

PROJECT NAME: SWANTON PROJECT NUMBER: BC2109



FILE NAME: zi2c576notes.dgn

PLOT DATE: 6/13/2022

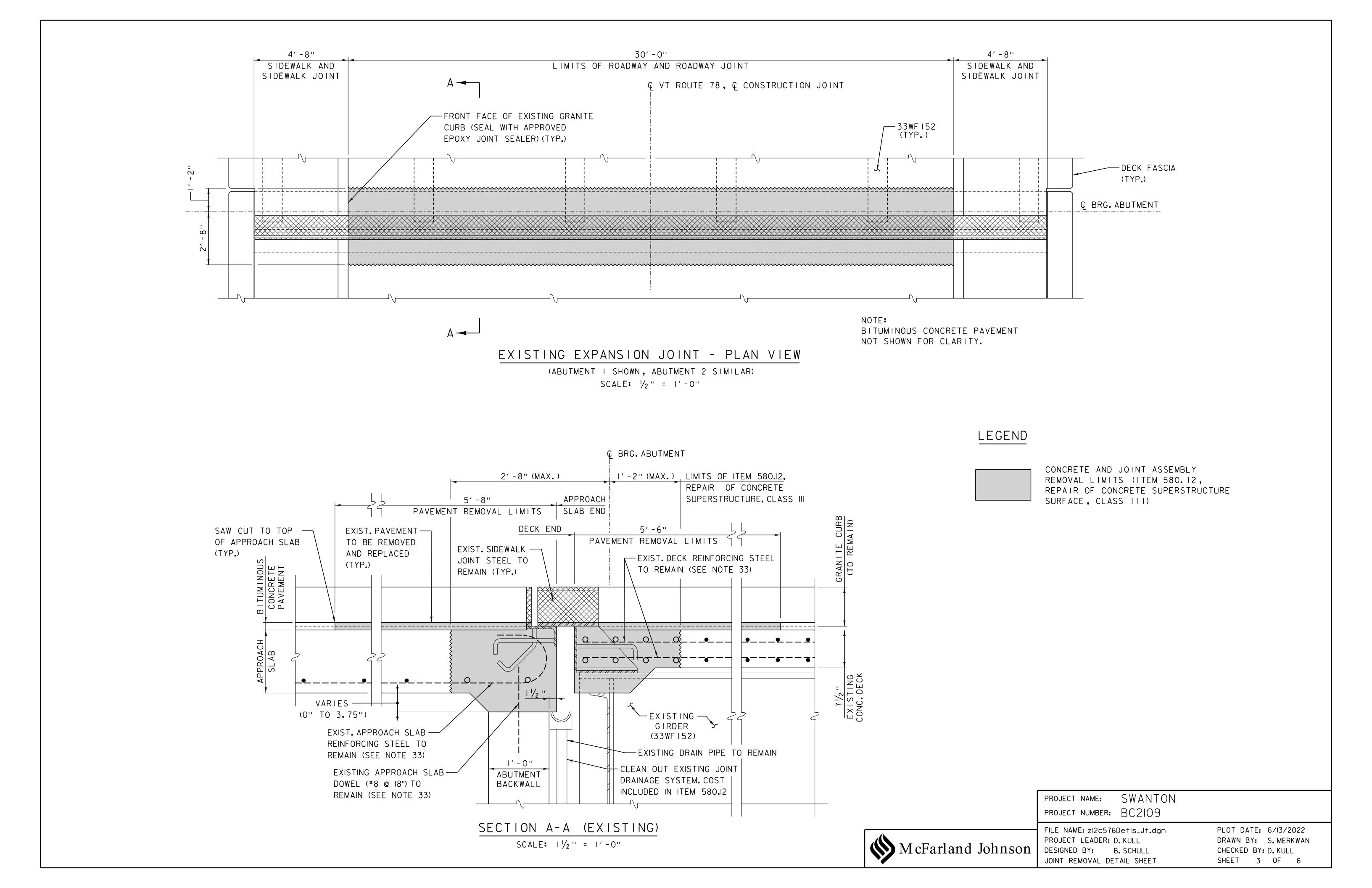
PROJECT LEADER: D. KULL

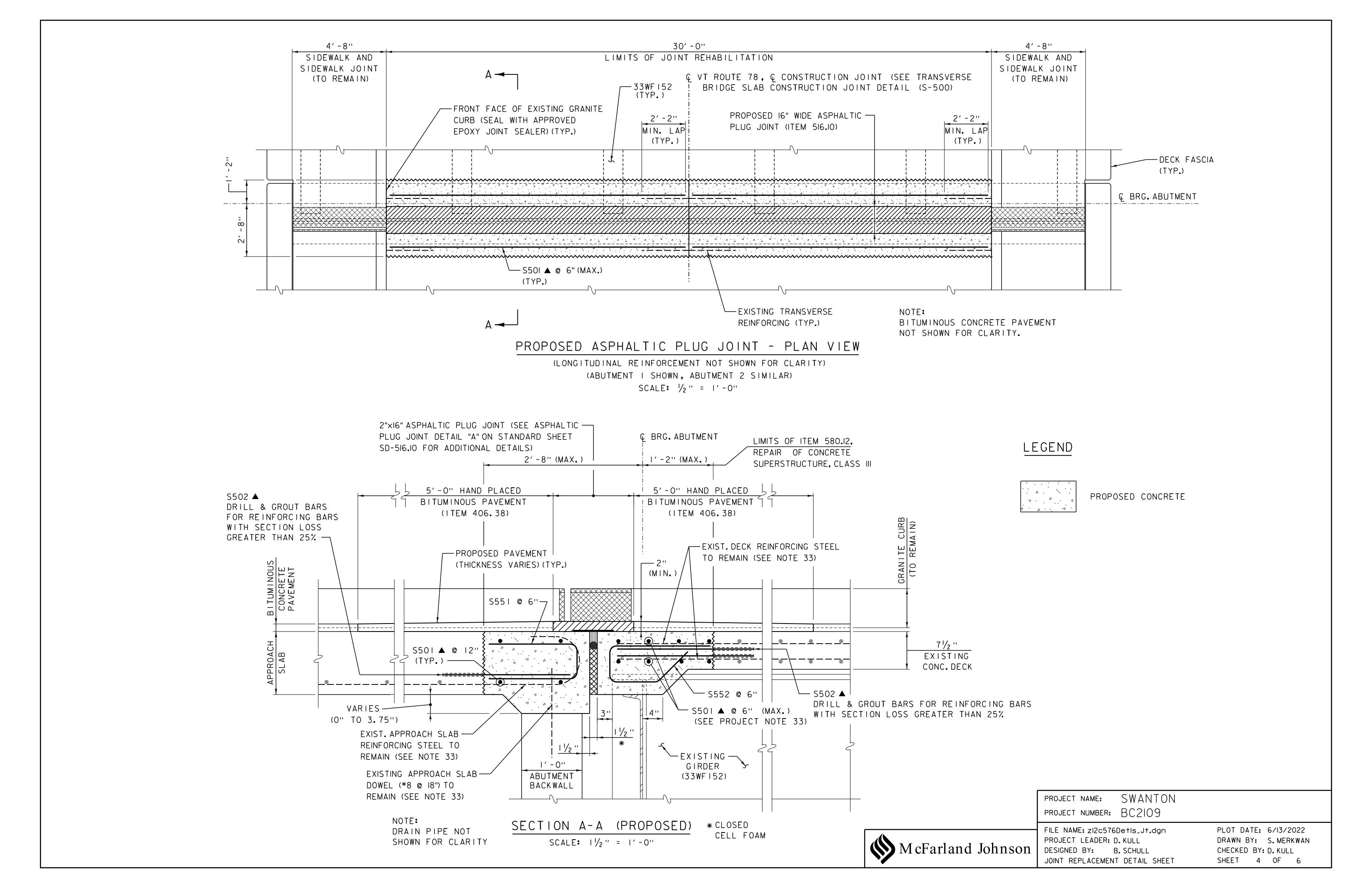
DRAWN BY: S. MERKWAN

DESIGNED BY: B. SCHULL

PROJECT NOTES AND REPAIR LAYOUT

SHEET 2 OF 6

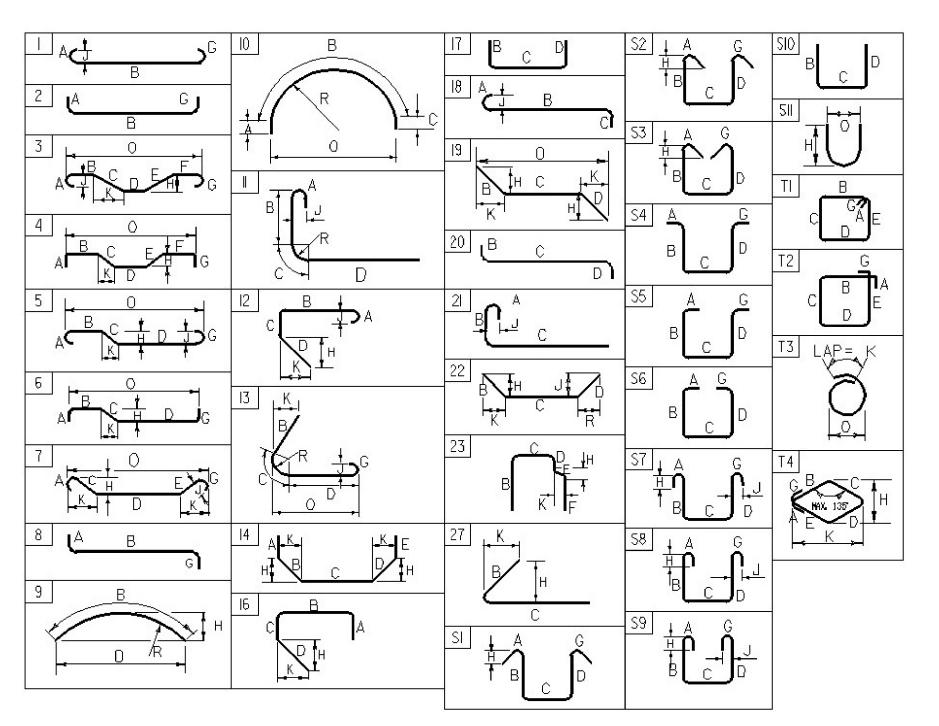




REINFORCING STEEL SCHEDULE STATE OF VERMONT **AGENCY OF TRANSPORTATION** ITEM EACH SIZE LENGTH MARK DECK AND SUPERSTRUCTURE ▲ 24 5 29'- 6" S501 STR ▲ 48 5 2'- 6" S502 STR 62 | 5 | 3'- 3" | S551 | S10 | 1'- 4" | 0'- 7" | 1'- 4" 64 5 5'- 6" S552 16 1'- 6" 0'- 7" 0'- 9" 0'- 10" 0'- 7" 0'- 7" McFarland Johnson

~ NOTES ~

- 1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
- 2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
- 3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- 4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- 5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- 6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- 7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
- 8. A DENOTES BARS TO BE CUT IN FIELD.
- 9. * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- 10. \triangle DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
- 11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD

R	REINFORCING BARS				
BAR SIZE DESIGNA- TION	WEIGHT POUNDS PERFOOT	O M IN A L D IM D IA M E T E R IN C H E S	ENSIONS RO AREA INCHES 2	PERIMETER IN CHES	
[#] 3	0.376	0.375	0.11	1.178	
# 4	0.668	0.500	0.20	1.571	
[#] 5	1.043	0.625	0.31	1.963	
[#] 6	1.502	0.750	0.44	2.356	
# 7	2.04	0.875	0.60	2.749	
[#] 8	2.670	1.000	0.79	3.14	
[#] 9	3.400	1.13	1.00	3.54	
[#] 10	4.3	1.270	1.27	3.990	
[#] 11	5.31	1.410	1.56	4.430	
[#] 14	7.65	1.69	2.25	5.32	
[#] 18	13.60	2.26	4.00	7.09	

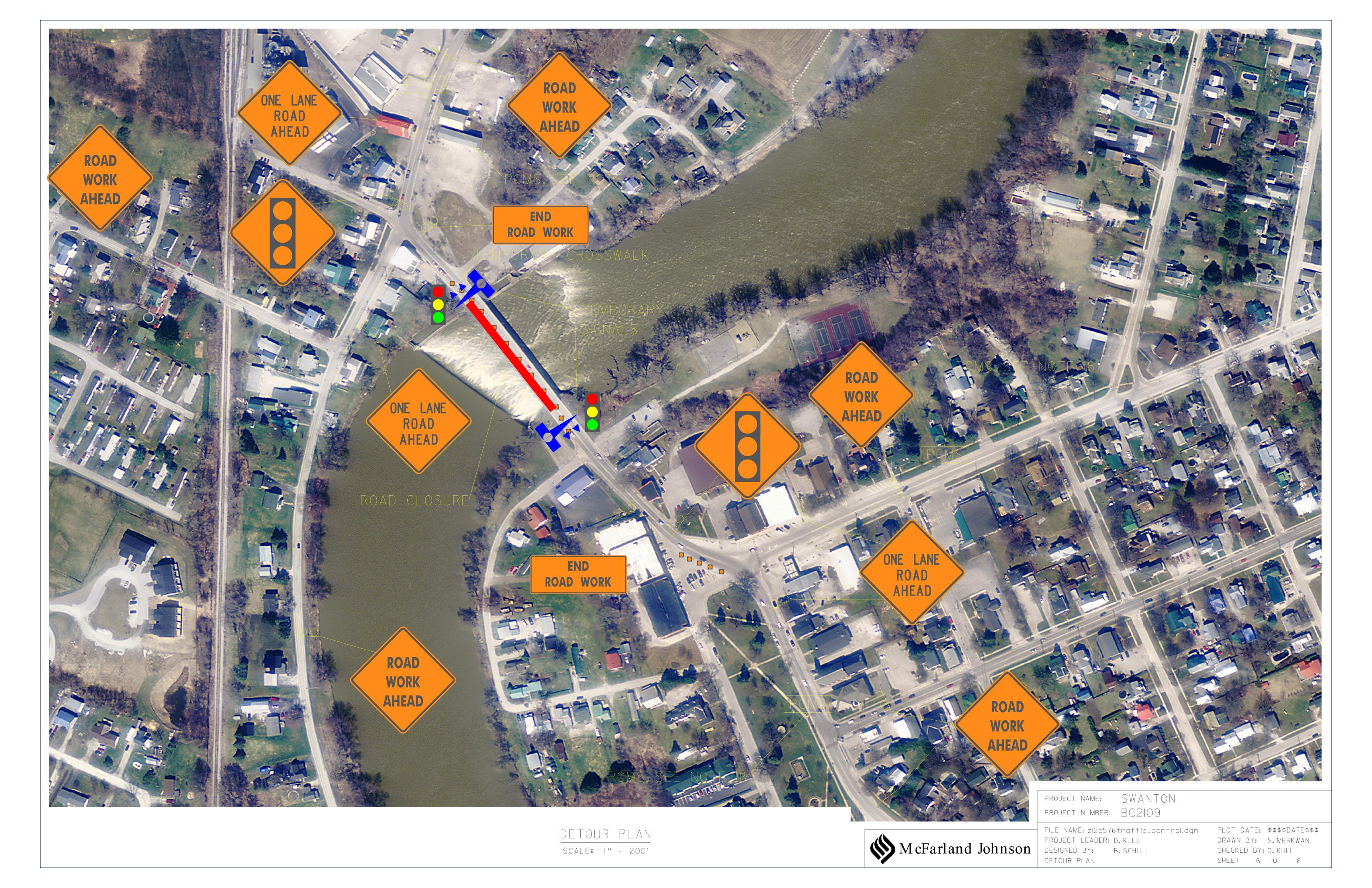
~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

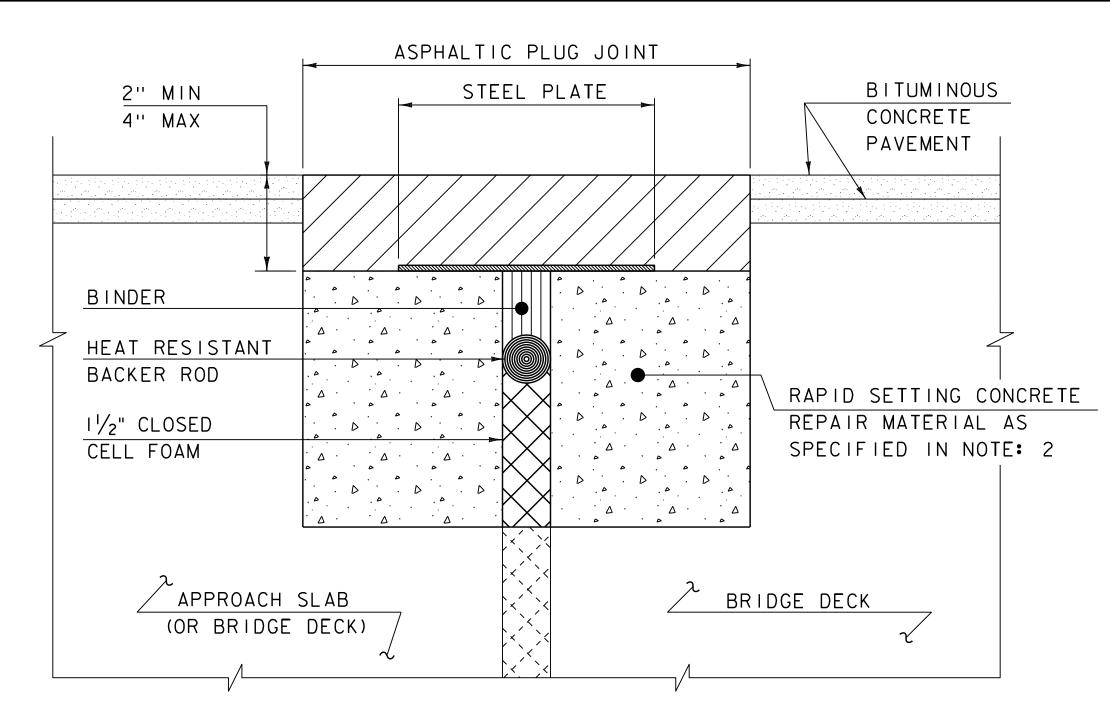
THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX, .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PI SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

PROJECT NAME: SWANTON PROJECT NUMBER: BC2109

FILE NAME: zi2c576Detis_Jt.dgn PROJECT LEADER: D. KULL DESIGNED BY: B. SCHULL REINFORCING STEEL SCHEDULE

PLOT DATE: 6/13/2022 DRAWN BY: S. MERKWAN CHECKED BY: D. KULL SHEET 5 OF 6

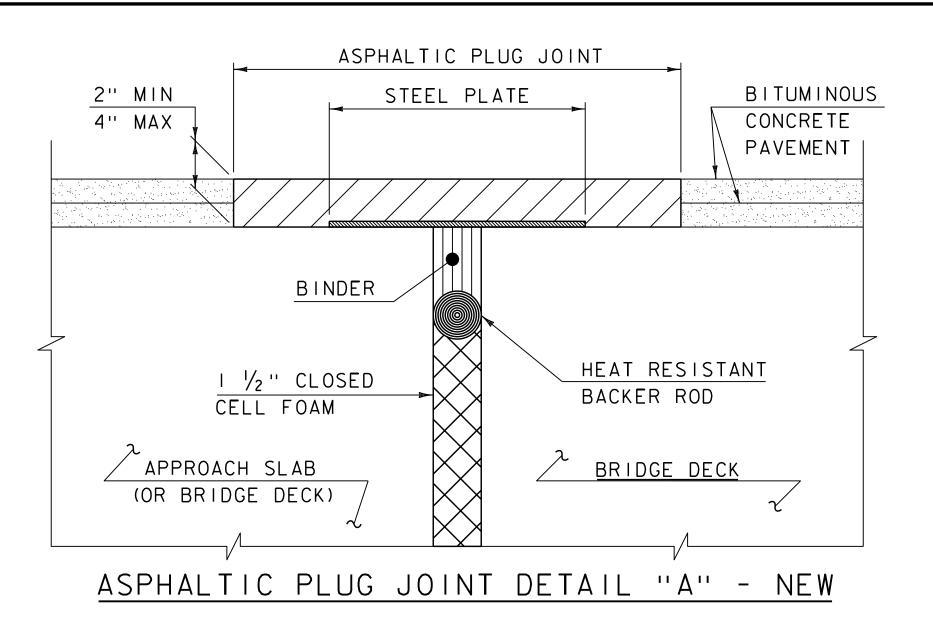




ASPHALTIC PLUG JOINT DETAIL - REHAB

NOTES:

- I. THE CONTRACTOR SHALL REMOVE ALL ASPHALTIC PLUG JOINT MATERIAL AND DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. REMOVAL OF THE FIRST 4 INCHES OF MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 516.10 BRIDGE EXPANSION JOINT, ASPHALTIC PLUG. ANY REMOVAL OF MATERIAL GREATER THAN 4 INCHES SHALL BE INCLUDED IN THE BID PRICE OF ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE.
- 2. THE CONTRACTOR SHALL REPLACE REMOVED MATERIAL THAT IS LESS THAN 4" FROM FINISHED GRADE WITH ASPHALTIC PLUG JOINT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 707.15. ALL REMOVED MATERIAL THAT IS GREATER THAN 4 INCHES FROM FINISHED GRADE SHALL BE REPLACED WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.
- 3. REINFORCING STEEL NOT SHOWN FOR CLARITY.
- 4. PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.



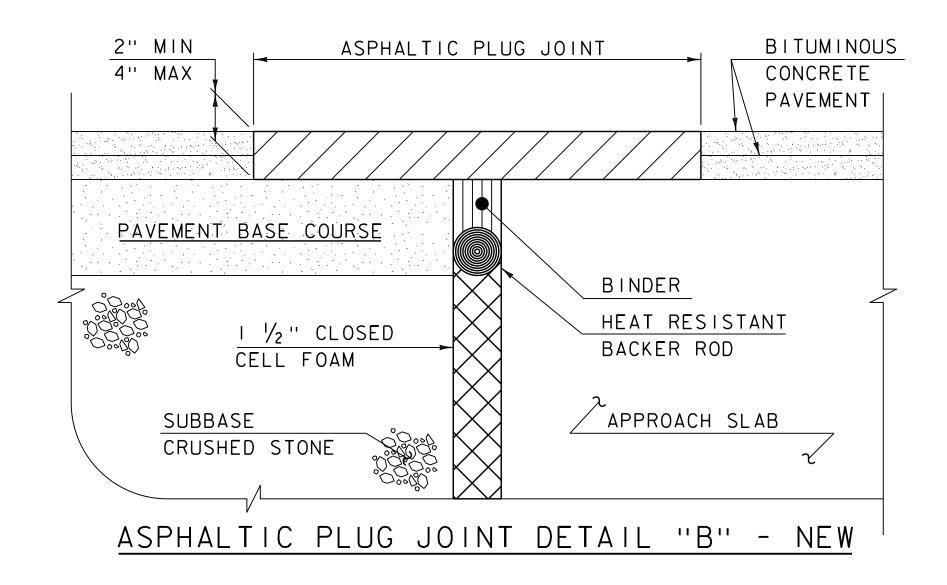
NOTE:

PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER

THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM

MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED

HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.



ASPHALTIC PLUG JOINT NOTES:

INSTALLATION

- I. LOCATE THE JOINT CENTERALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT, MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
- 2. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS.
 THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRD TO PLACE THE
 JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED TO ADJACENT TO THE CURB
 ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
- 3. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHAULT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
- 4. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR I" +/- OF BINDER ABOVE THE ROD.
- 5. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
- 6. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.

WEATHER LIMITATIONS

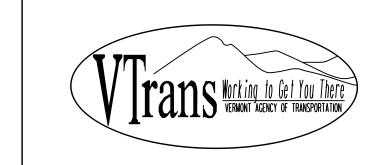
APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER:

- I. THE AMBIENT AIR TEMPERATURE IS AT LEAST 50 DEG F AND RISING.
- 2. THE ROAD SURFACE IS DRY.
- 3. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMACE OF THE SATISFACTORY WORK.

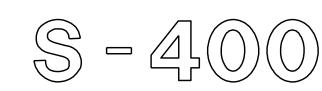
DETAILS ON THIS SHEET ARE NOT TO SCALE.

REV.	DATE	DESCRIPTION
0	APR. 7, 2020	ORIGINAL APPROVAL
OTHER STANDARDS REQUI		RED: NONE
VTRA	NS AND FHWA APPR	OVAL ON FILE WITH CONTRACT ADMINISTRATION

BRIDGE JOINT ASPHALTIC PLUG

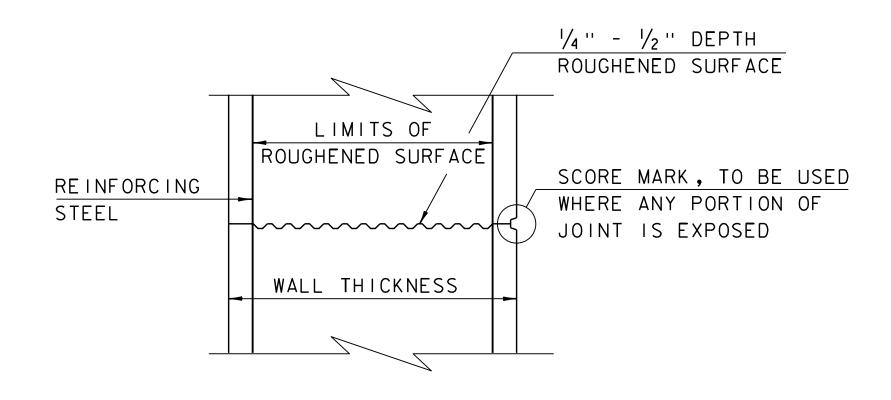






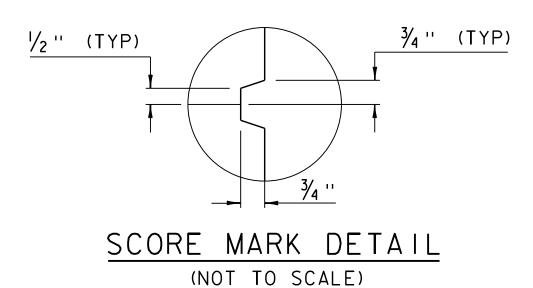
CONCRETE GENERAL NOTES

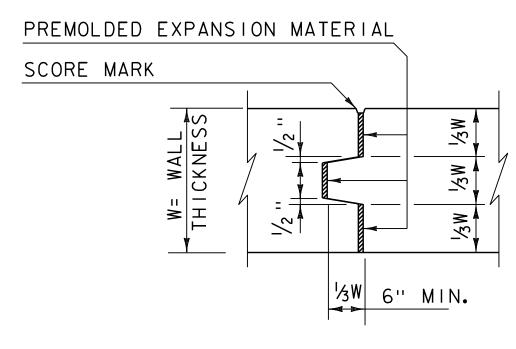
I. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED I" x I"



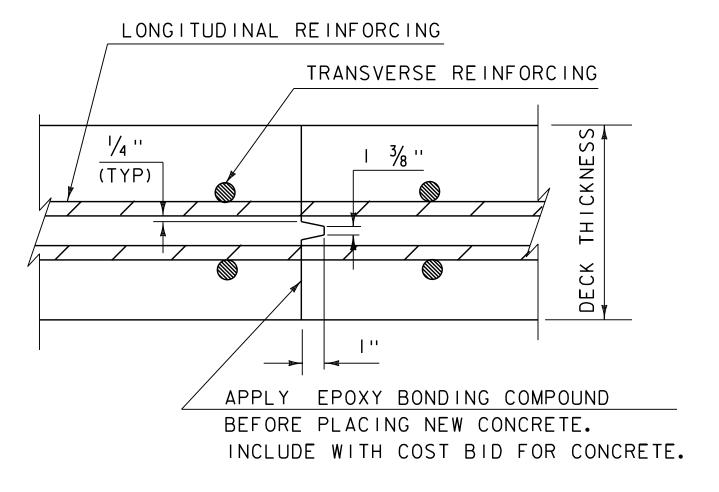
TYPICAL HORIZONTAL CONSTRUCTION JOINT (NOT TO SCALE)

- I. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
- 2. IMMEDIATELY BEFORE NEW CONCRETE
 IS PLACED, ALL CONSTRUCTION JOINTS SHALL
 BE WETTED AND STANDING WATER REMOVED.





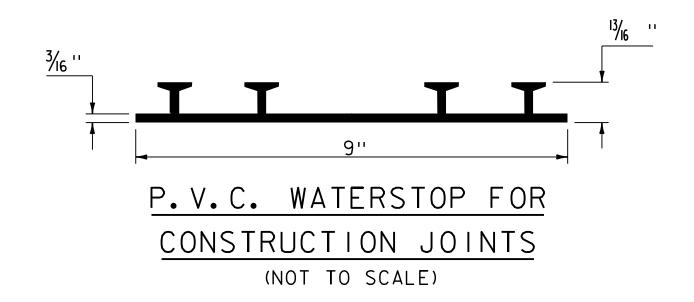
TYPICAL CONCRETE EXPANSION JOINT (NOT TO SCALE)



TRANSVERSE BRIDGE SLAB

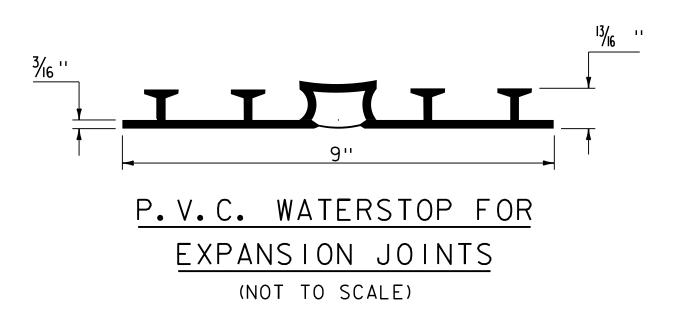
CONSTRUCTION JOINT DETAILS

(NOT TO SCALE)



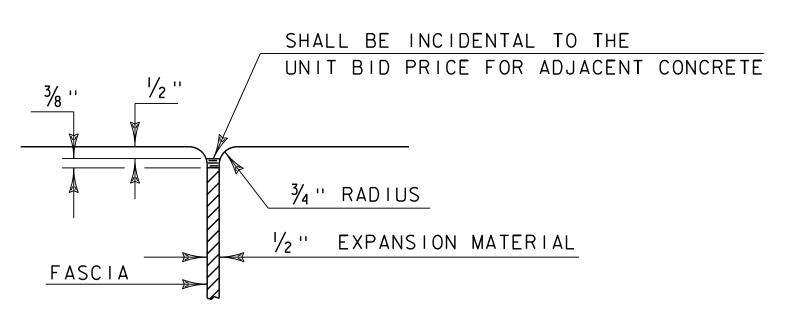
PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

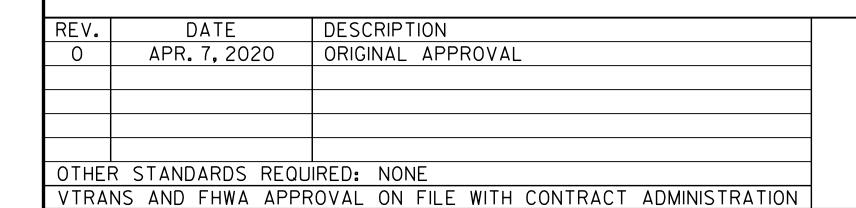
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



JOINT BETWEEN FASCIA

AND WINGWALL

(NOT TO SCALE)



CONCRETE
DETAIL AND NOTES





