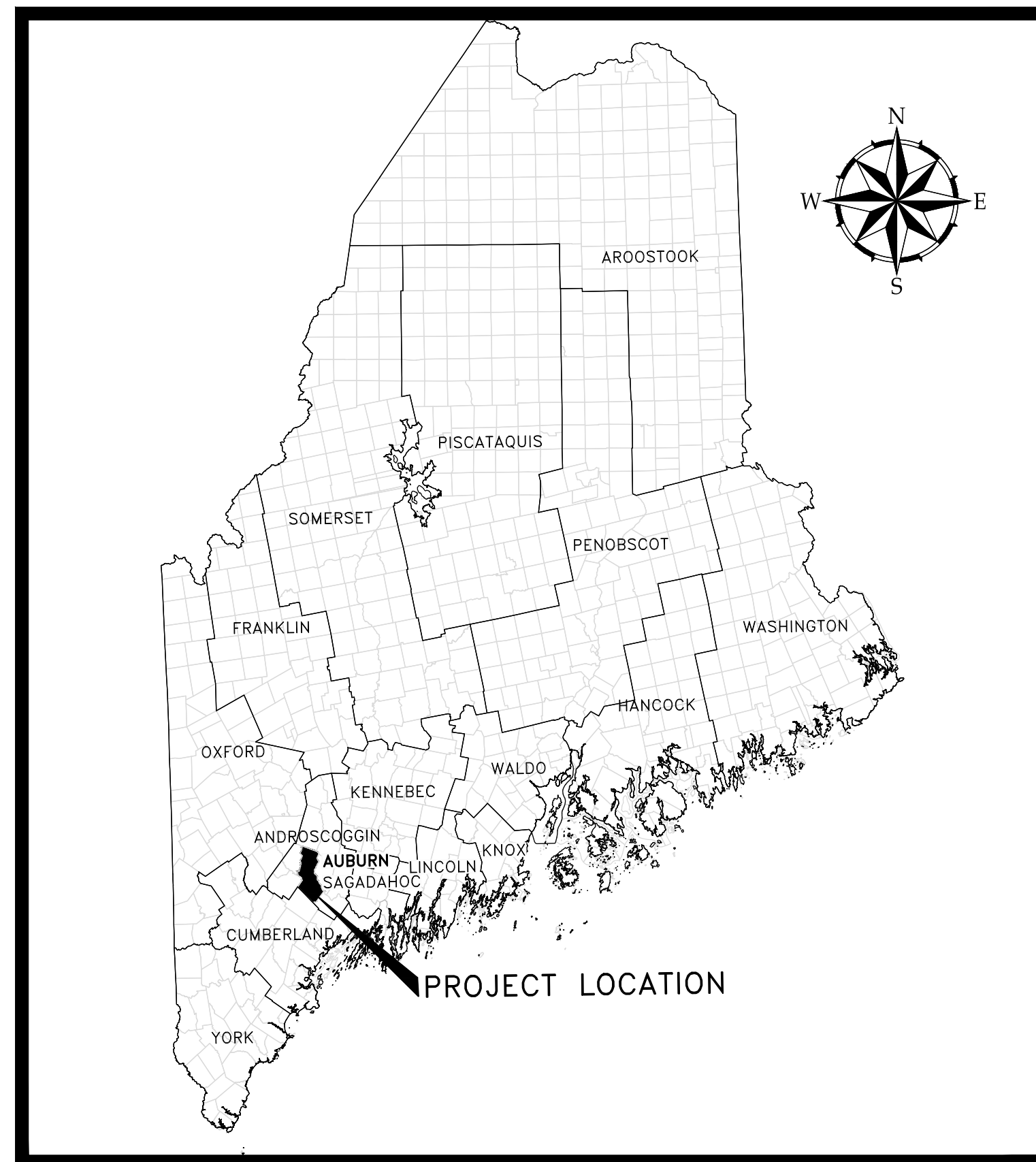
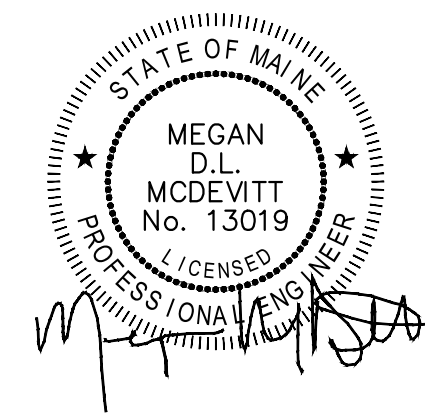


# CITY OF AUBURN ANDROSCOGGIN COUNTY SOPERS MILL ROAD CULVERT REPLACEMENT

PROJECT NO. 230620.15  
JANUARY 2021  
ISSUED FOR CONSTRUCTION



**PROJECT LOCATION MAP**



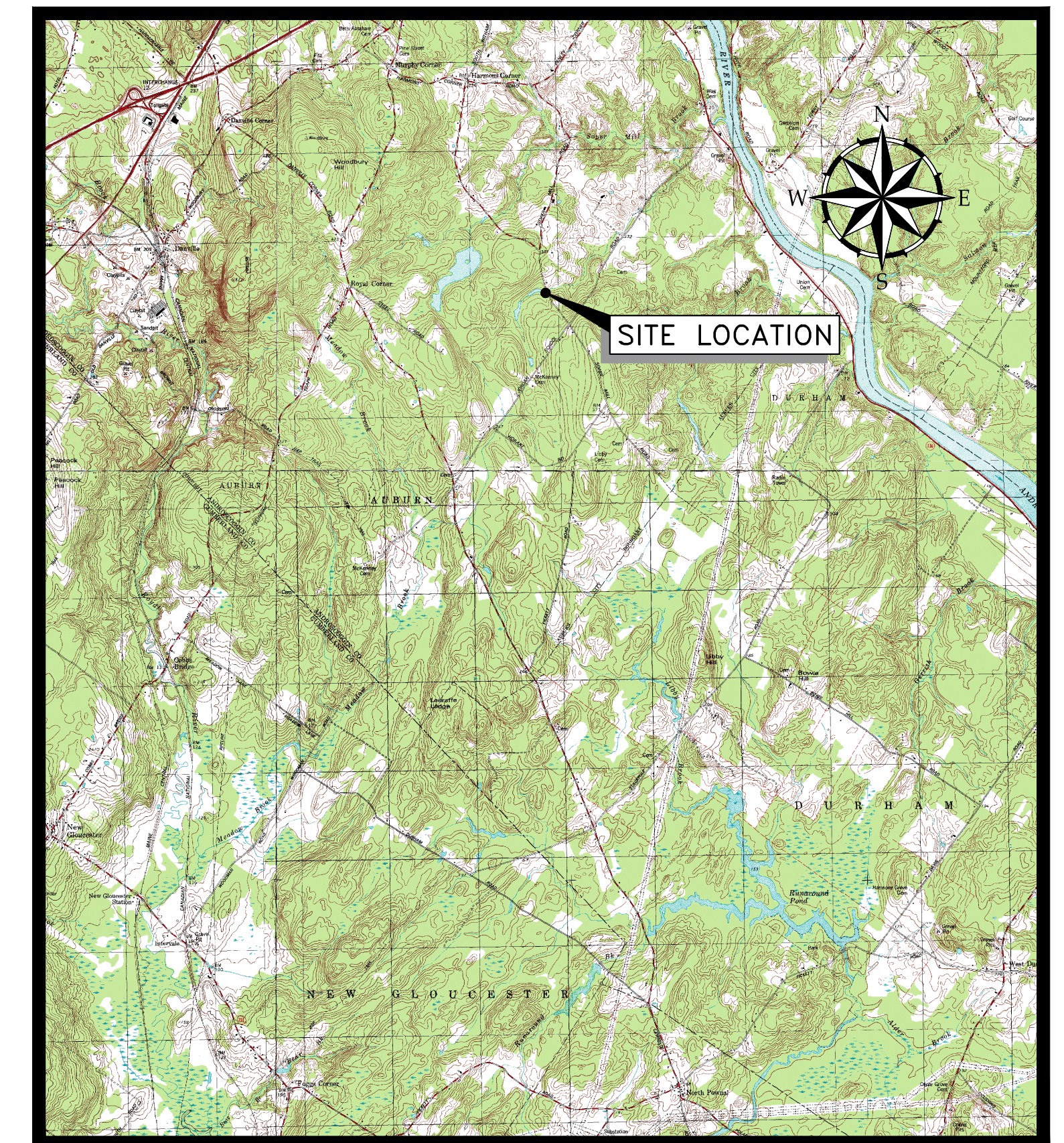
ANTHONY BEAULIEU, P.E. – CITY ENGINEER, AUBURN, ME

PHILLIP L. CROMWELL, JR. – CITY MANAGER, AUBURN, ME



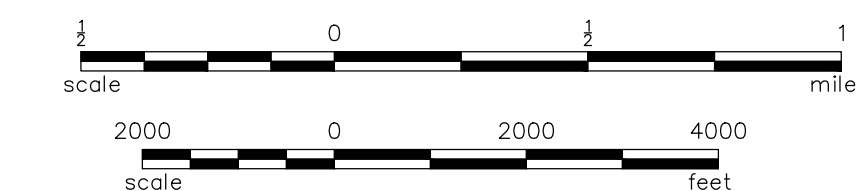
41 Hutchins Drive  
Portland, Maine 04102  
800.426.4262 | [www.woodardcurran.com](http://www.woodardcurran.com)

COMMITMENT & INTEGRITY DRIVE RESULTS



SOURCE: USGS TOPOGRAPHIC MAP

**SITE LOCATION MAP**



### GENERAL NOTES

1. SITE AND TOPOGRAPHIC DATA PROVIDED BY SGC ENGINEERING, LLC OF WESTBROOK, MAINE AS A RESULT OF A SURVEY CONDUCTED FOR THE CITY OF AUBURN IN NOVEMBER 2019. SURVEY CONTROL REFERENCED HORIZONTALLY WITH THE MAINE STATE PLAN COORDINATE SYSTEM, NAD '83, WEST ZONE AND VERTICALLY WITH NAVD '88.
2. THE UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR PRIOR TO CONSTRUCTION ACTIVITY. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.
3. CONTRACTOR SHALL CLEAN AND/OR FLUSH CULVERT AFTER THE WORK HAS BEEN COMPLETED. FLUSHING SHALL BE INCIDENTAL TO THE CONTRACT.
4. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES, AND THE CITY. NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK ACTIVITY ADJACENT TO THOSE UTILITIES.
5. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 888-344-7233, AT LEAST 72 HOURS PRIOR TO EXCAVATION.
6. CONTRACTOR SHALL RESTORE ALL AREA DISTURBED BY CONSTRUCTION ACTIVITIES TO ORIGINAL FINISH (GRAVEL, PAVEMENT, GRASS, ETC.) UNLESS OTHERWISE NOTED ON PLANS. RESTORATION OF LAWNS DAMAGED BY CONTRACTOR OPERATIONS SHALL BE INCIDENTAL TO THE PROJECT.
7. PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE, BY A REGISTERED LAND SURVEYOR APPROVED BY THE CITY OR ENGINEER.
8. EXISTING FACILITIES (E.G. GUARDRAILS, TREES, MAILBOXES, POLES, LIGHT POSTS, CATCH BASINS, ETC.) THAT ARE NOT SCHEDULED TO BE REMOVED SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE INCIDENTAL TO THE CONTRACT. THE CITY RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR TO DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF THE CITY OR RESIDENT ENGINEER AT CONTRACTOR'S EXPENSE.
9. DO NOT PARK OR STORE EQUIPMENT ON ADJACENT CITY OR PRIVATELY OWNED LOTS, UNLESS PERMISSION HAS BEEN GRANTED IN WRITING BY CITY OR LAND OWNER.
10. RESTRICT ACCESS TO CONSTRUCTION AREA THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE SOLE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
11. PROVIDE 4 INCHES OF LOAM AND SEED IN ALL LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS.
12. CONTRACTOR SHALL PREPARE A COMPLETE SET OF "RECORD" DRAWINGS THAT REFLECT THE CONSTRUCTED CONDITIONS, INCLUDING PLANIMETRICS, TOPOGRAPHY AND UTILITY INFORMATION.
13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
14. ALL WORK SHALL BE DONE IN ACCORDANCE WITH MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL, MOST RECENT EDITION.
15. CONTRACTOR TO COORDINATE ROAD CLOSURE WITH THE CITY AND SHALL PROVIDE AND MAINTAIN DETOUR SIGNAGE THROUGHOUT THE DURATION OF CONSTRUCTION.
16. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE DEPARTMENT OF THE ARMY MAINE GENERAL PERMIT NAE-2020-00667, INCLUDING REQUIREMENTS FOR WORK AREA ISOLATION AND EVACUATION OF ATLANTIC SALMON.
17. ALL IN-WATER WORK SHALL BE COMPLETED BETWEEN JUNE 15, 2021 AND SEPTEMBER 30, 2021.

### LEGEND

	IRON PIPE FOUND
	CONCRETE BOUND FOUND
	EXISTING SIGN
	UTILITY POLE
	GUY ANCHOR
	EXISTING WATER VALVE
	EXISTING HYDRANT
	PROPOSED PAVEMENT
	EXISTING SANITARY SEWER MANHOLE
	APPROXIMATE BOREHOLE LOCATION
	EXISTING CONTOUR
	EXISTING OVERHEAD ELECTRIC
	EXISTING GUARDRAIL
	RIGHT-OF-WAY
	TOP OF BANK
	WETLANDS
	PROPOSED COFFERDAM
	PROPOSED SEDIMENT BARRIER
	PROPOSED CONTOUR
	PROPOSED GUARDRAIL
	PROPOSED SAWCUT
	TURBIDITY BARRIER
	PROPOSED PAVEMENT
	PROPOSED RIP RAP

### ABBREVIATIONS

BIT.	BITUMINOUS
CONC.	CONCRETE
E.P.	EDGE OF PAVEMENT
INV.	INVERT
L.O.W.	LIMIT OF WORK
OHW	OVERHEAD WIRE
N.A.V.D.	NORTH AMERICAN VERTICAL DATUM
STA	STATION
TYP.	TYPICAL

### SHEET INDEX

SHEET NO. SHEET TITLE	
GENERAL	
G-000	COVER SHEET
G-001	NOTES, ABBREVIATIONS, LEGEND AND SHEET INDEX
CIVIL	
C-001	EXISTING CONDITIONS PLAN
C-002	SITE PREPERATION AND EROSION & SEDIMENT CONTROL PLAN
C-003	CULVERT REPLACEMENT PLAN & PROFILE
C-004	GUARDRAIL PLAN & DETAILS
C-005	PROJECT DETAILS - 1
C-006	PROJECT DETAILS - 2

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STATE OF MAINE  
MEGAN D.L. McDEVITT  
No. 13019  
PROFESSIONAL ENGINEER

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	JAN 2021
	CHECKED BY: MIDLM	
	DESIGNED BY: SET	
	DRAWN BY: MSW	
	UNSAVED DRAWING .DWG	

NOTES, ABBREVIATIONS, LEGEND AND SHEET INDEX

CITY OF AUBURN  
ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
CULVERT REPLACEMENT

JOB NO:	Z30620.15
DATE:	JANUARY 2021
SCALE:	NTS
SHEET:	2 OF 8

**G-001**

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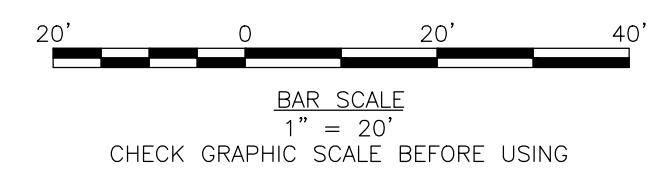
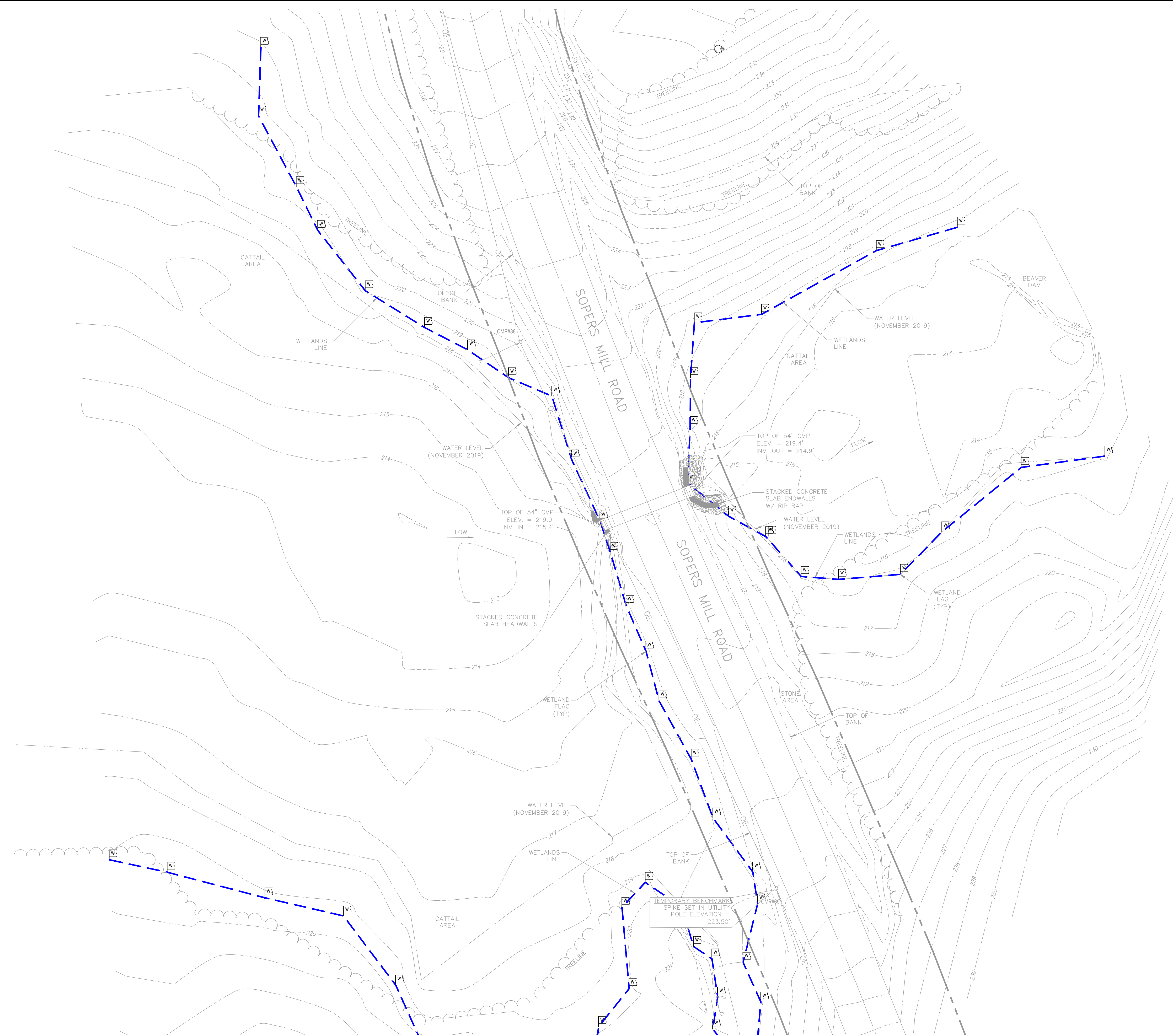
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STATE OF MAINE  
 MEGAN D.L. McDEVITT  
 No. 13019  
 PROFESSIONAL ENGINEER  
 CIVIL

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	JAN 2021
	DESIGNED BY: MDM	
	CHECKED BY: MDM	
	DRAWN BY: MSW	

**EXISTING CONDITIONS PLAN**

CITY OF AUBURN  
 ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
 CULVERT REPLACEMENT

JOB NO: 230620.15  
 DATE: JANUARY 2021  
 SCALE: 1" = 20'  
 SHEET: 3 OF 8

**C-001**

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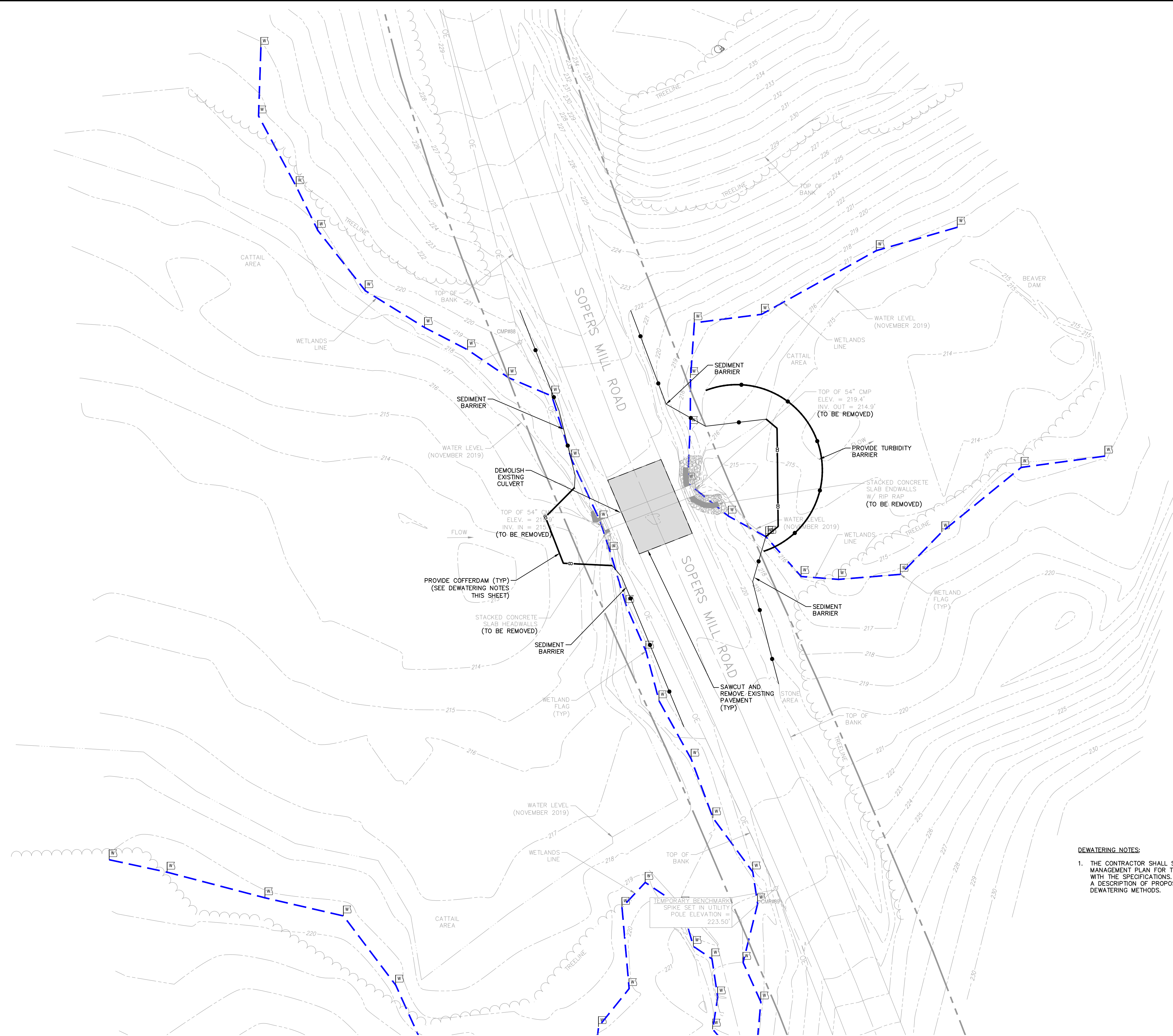
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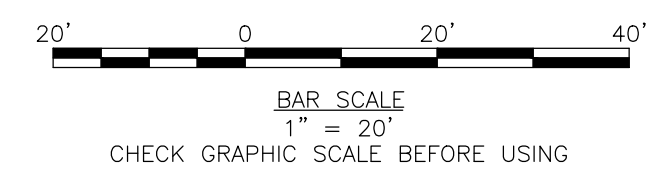
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**DEWATERING NOTES:**

1. THE CONTRACTOR SHALL SUBMIT A WATER CONTROL MANAGEMENT PLAN FOR THE PROJECT IN ACCORDANCE WITH THE SPECIFICATIONS. THE PLAN SHALL INCLUDE A DESCRIPTION OF PROPOSED PROCEDURES FOR DEWATERING METHODS.



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0	ISSUED FOR CONSTRUCTION	JAN 2021
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CHECKED BY:	MDLM	
DRAWN BY:	MSW	

**SITE PREPARATION AND EROSION & SEDIMENT CONTROL PLAN**

CITY OF AUBURN  
 ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
 CULVERT REPLACEMENT

JOB NO: 230620.15  
 DATE: JANUARY 2021  
 SCALE: 1" = 20'  
 SHEET: 4 OF 8

**C-002**

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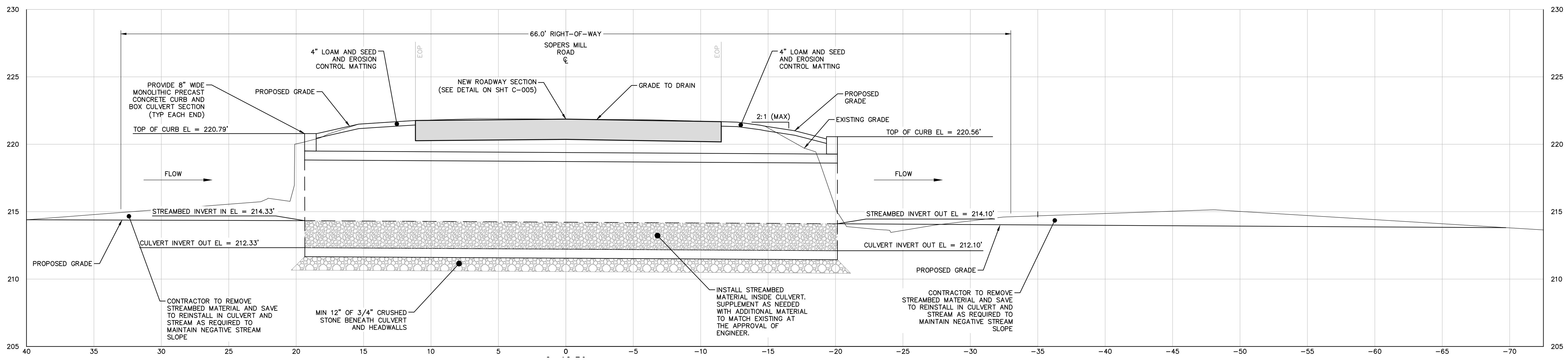
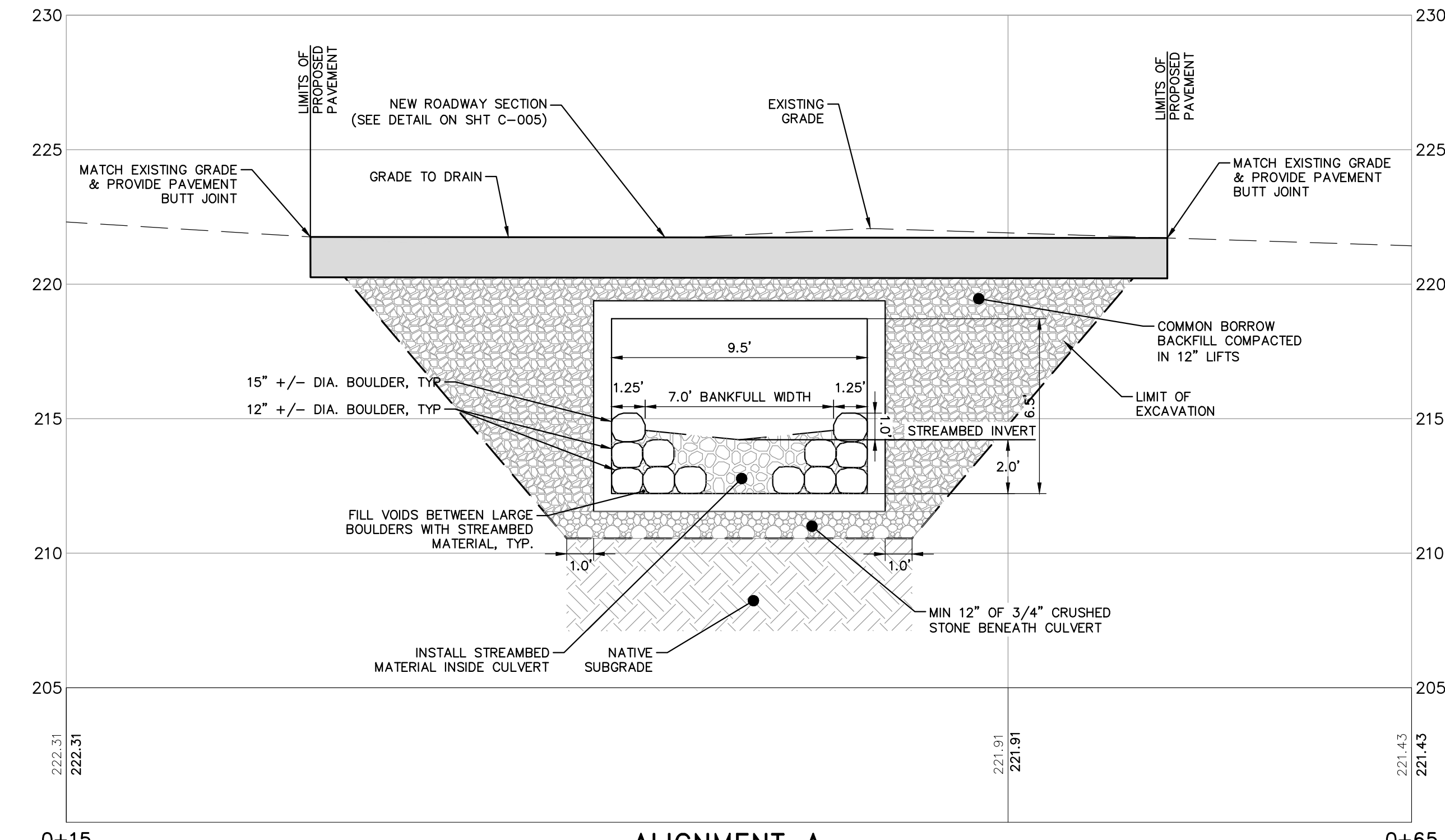
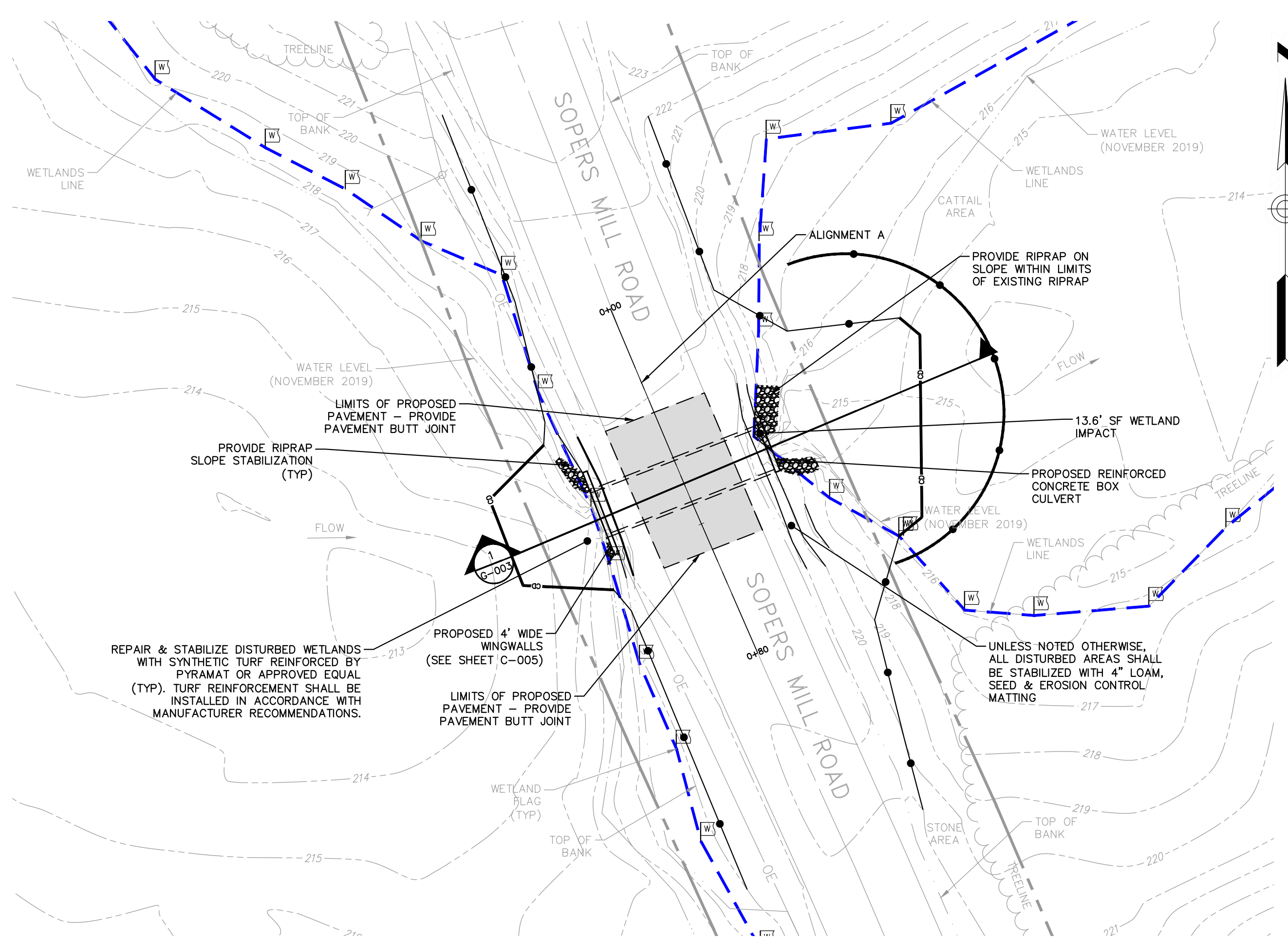
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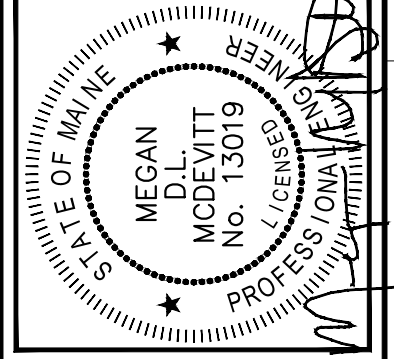
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0	ISSUED FOR CONSTRUCTION	JAN 2021
1	DESIGNED BY: SET	CHECKED BY: MIDLM
2	DRAWN BY: MSW	UNISSUED DRAWING

**CULVERT REPLACEMENT PLAN & PROFILE**

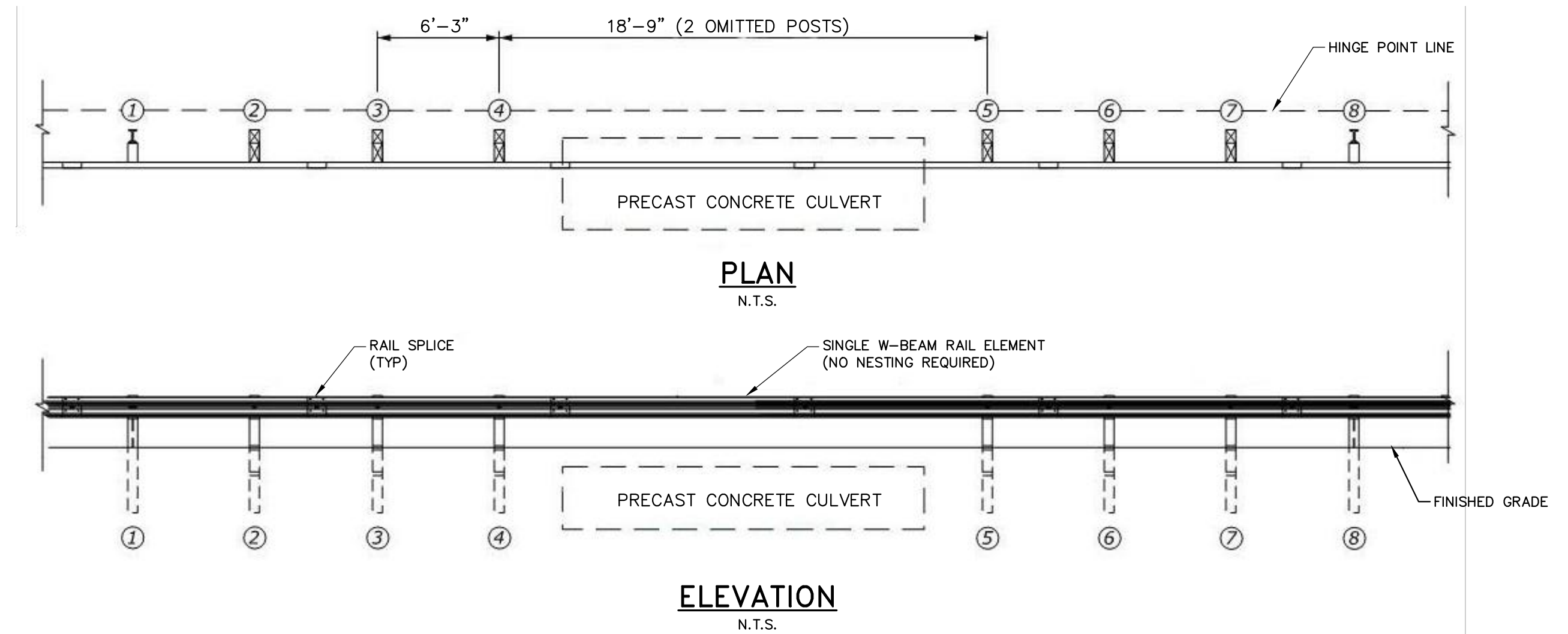
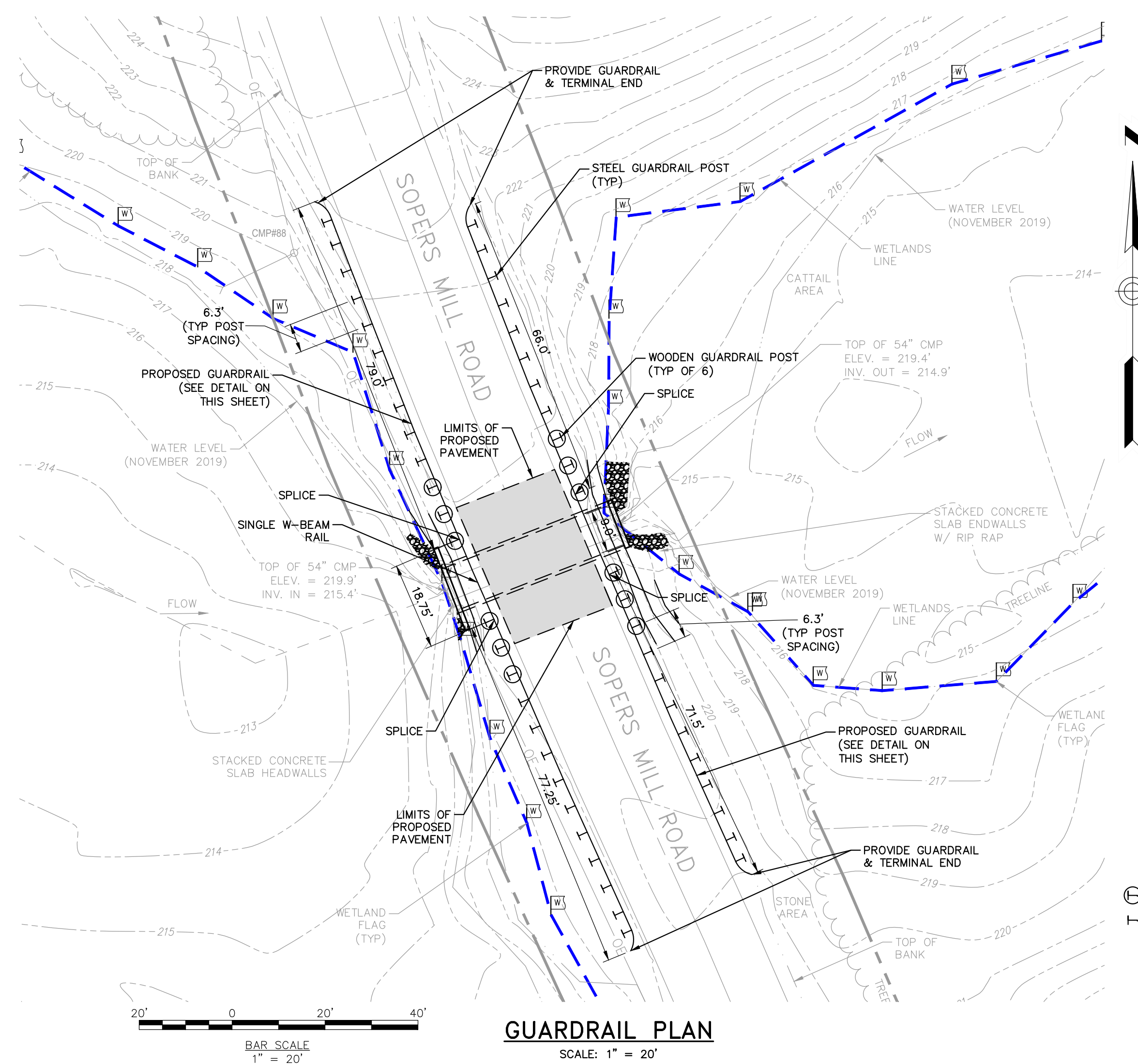
CITY OF AUBURN  
ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
CULVERT REPLACEMENT

JOB NO: 230620.15  
DATE: JANUARY 2021  
SCALE: 1" = 20'  
SHEET: 5 OF 8

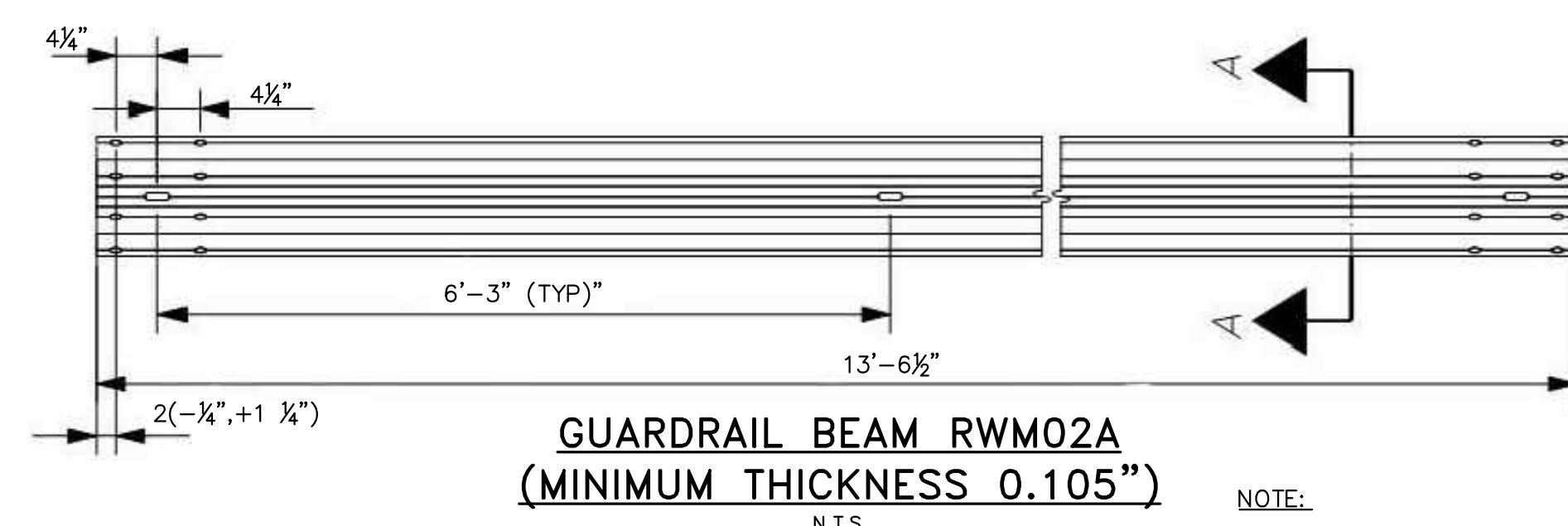
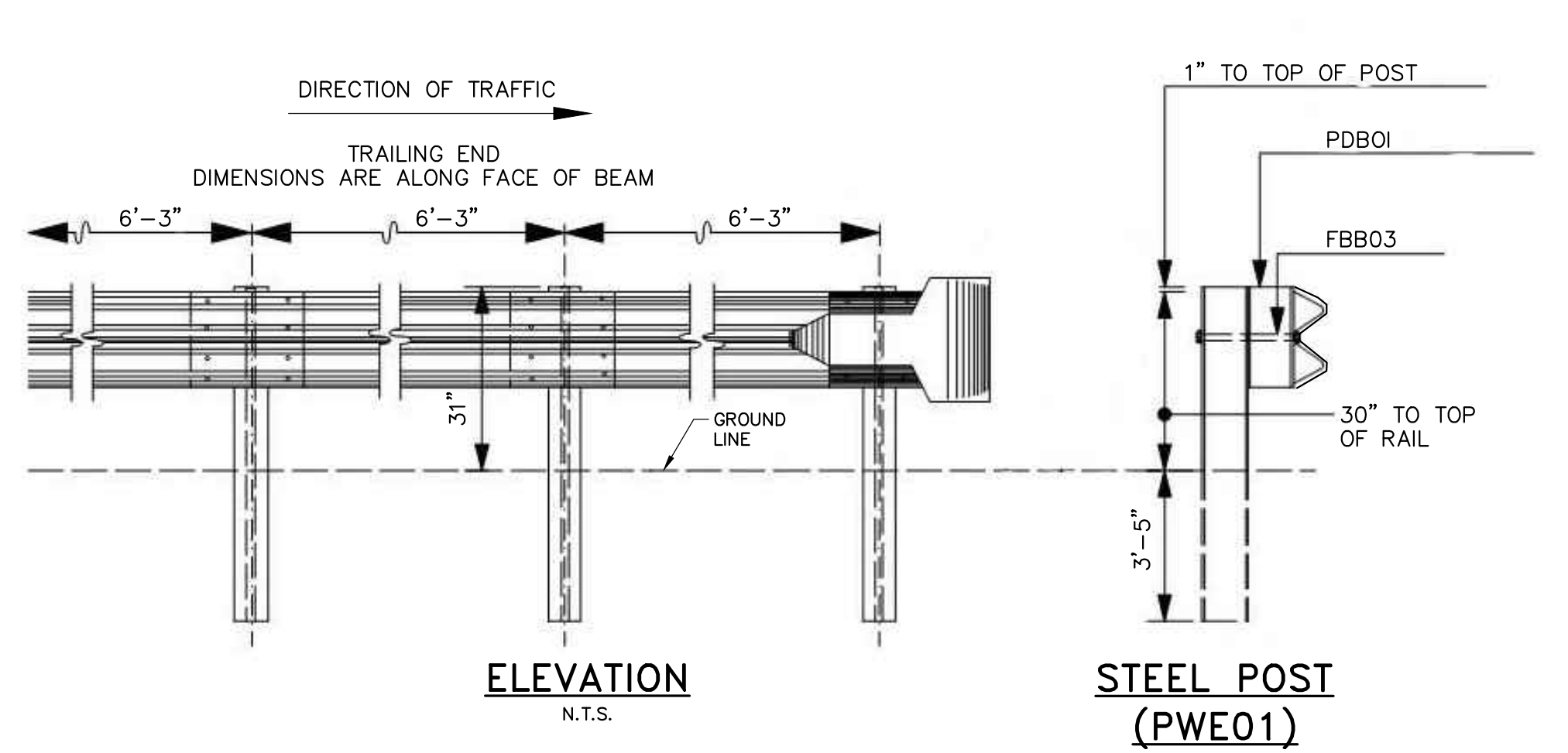
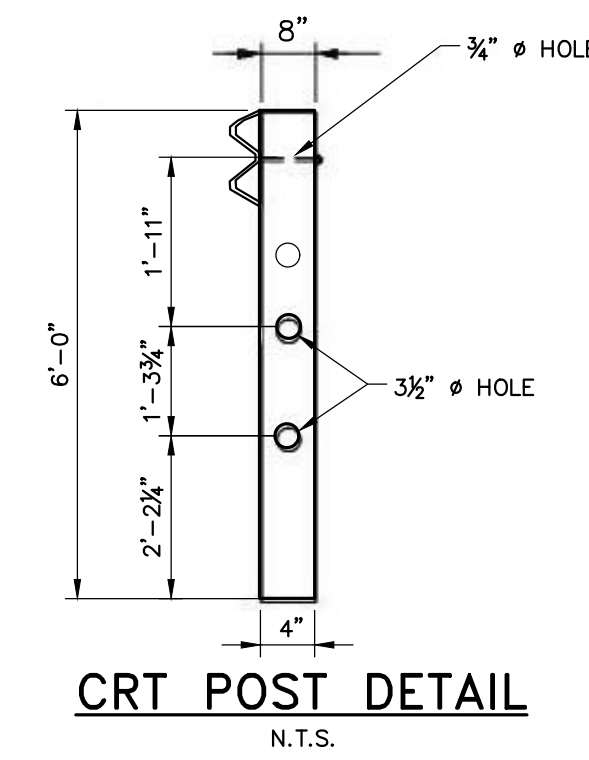
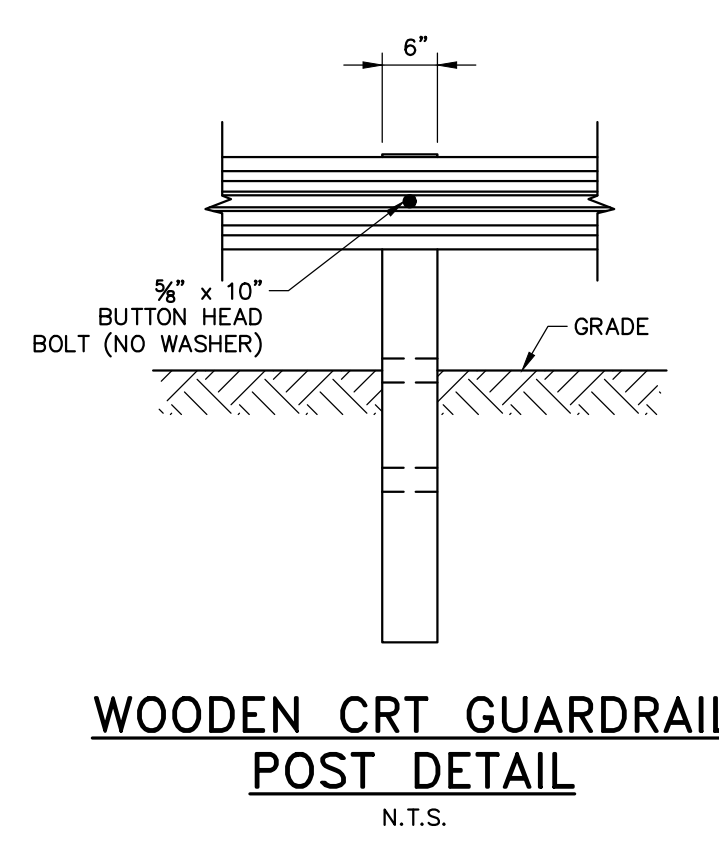
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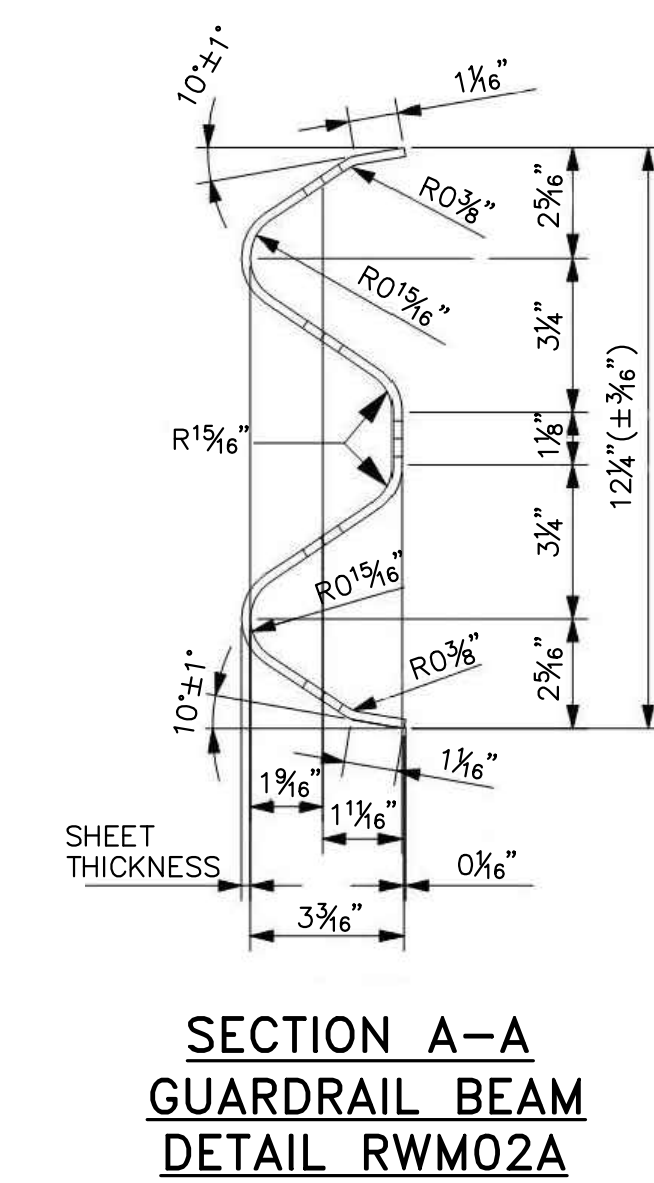
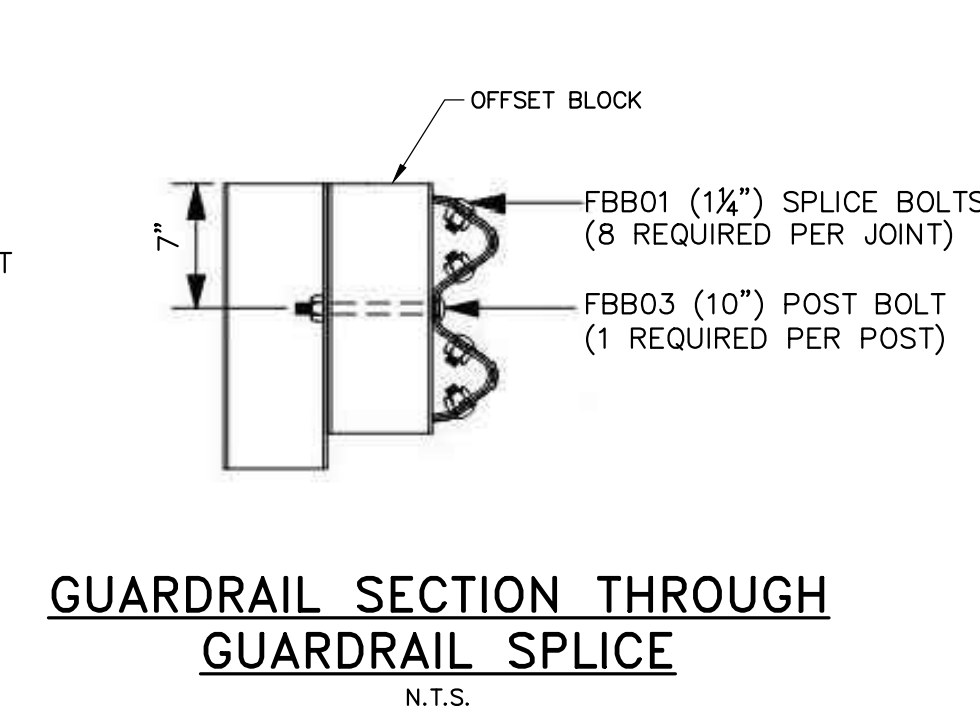
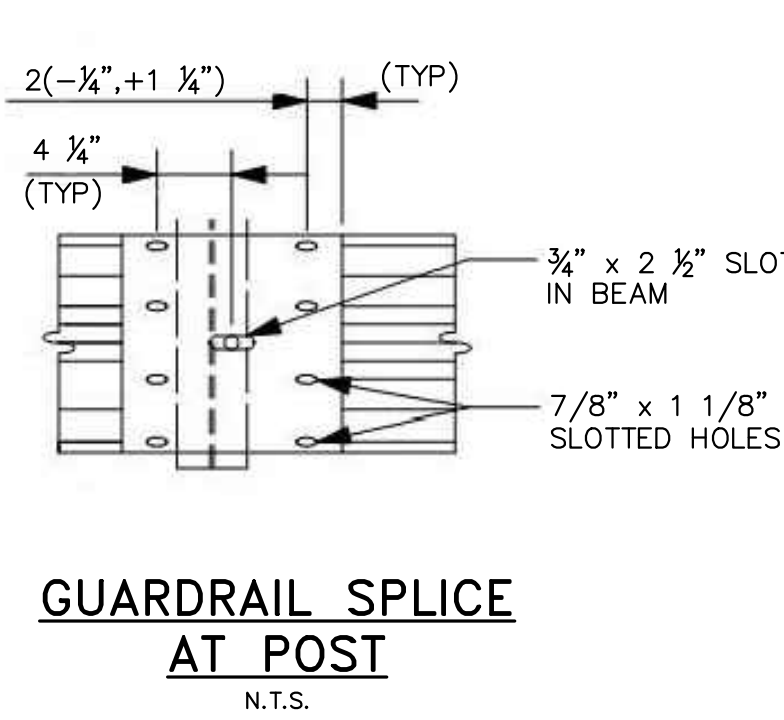


**LEGEND**

- ⊙ WOODEN CRT GUARDRAIL POST
- ⊙ STEEL GUARDRAIL POST



NOTE:  
ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.



- NOTES:**
1. INTERMEDIATE POST SPACING SHALL BE 6'-3" UNLESS OTHERWISE SHOWN.
  2. STEEL POSTS FOR GUARDRAIL SHALL BE W6x9.0 OR W6x8.5.
  3. STEEL POSTS PUNCHED WITH HOLES IN ADDITION TO THOSE SPECIFIED TO ACCOMMODATE OTHER TYPES OF GUARDRAIL, WILL BE ACCEPTED SUBJECT TO THE APPROVAL OF THE ENGINEER.
  4. COMPOSITE OFFSET BLOCKS MAY BE USED AS AN ALTERNATIVE TO WOOD OFFSET BLOCKS PROVIDED THAT THEY MEET NCHRP 350 REQUIREMENTS AND ARE INSTALLED IN ACCORDANCE TO MANUFACTURERS SPECIFICATIONS.
  5. BEAM TYPE GUARDRAIL SET ON A RADIUS OF 150' OR LESS SHALL BE CIRCULAR GUARDRAIL. OFFSET BLOCKS SHALL BE INSTALLED ON ALL POSTS.
  6. IDENTIFICATION LETTERS AND NUMBERS ON DRAWINGS REFER TO THE STANDARD DETAIL DRAWINGS SHOWN IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" BY ASHTO-AGC-ARTBA JOINT COMMITTEE.
  - 7.

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MEGAN D.L. McDEVITT  
No. 13019  
PROFESSIONAL ENGINEER  
STATE OF MAINE

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	JAN 2021
DESIGNED BY:	MSW	
CHECKED BY:	MDLM	
DRAWN BY:	UNSAVEDDRAWINGS	

**CITY OF AUBURN**  
ANDROSCOGGIN COUNTY

**SOPERS MILL ROAD**  
CULVERT REPLACEMENT

JOB NO: 230620.15  
DATE: JANUARY 2021  
SCALE: NTS  
SHEET: 6 OF 8

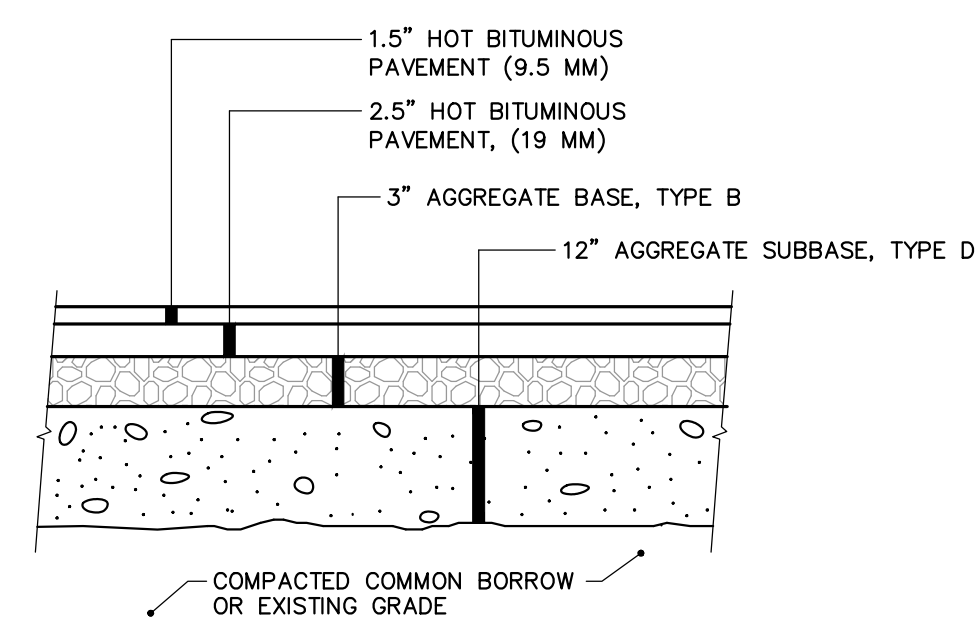
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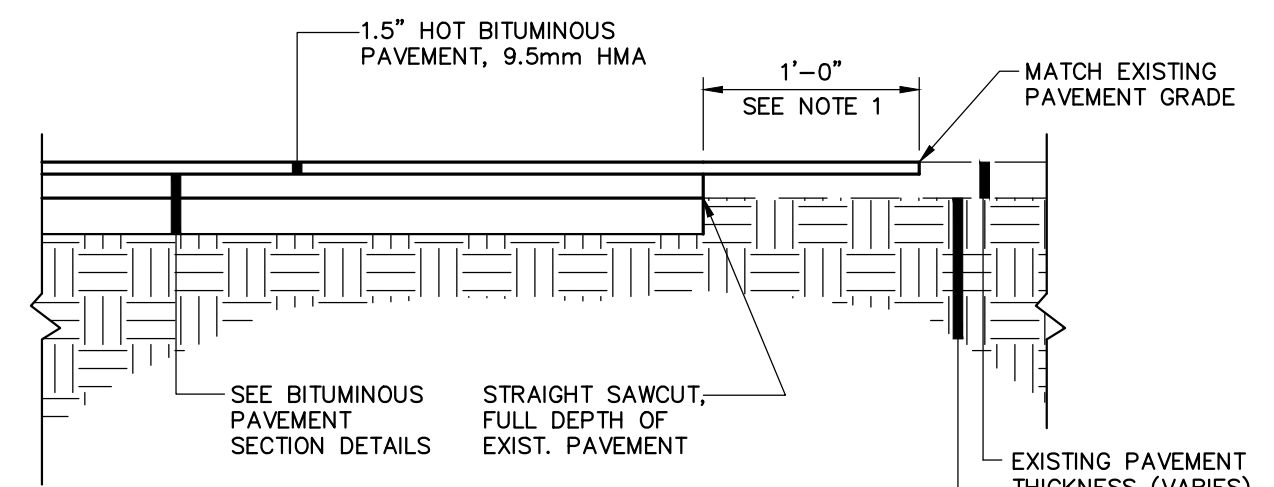
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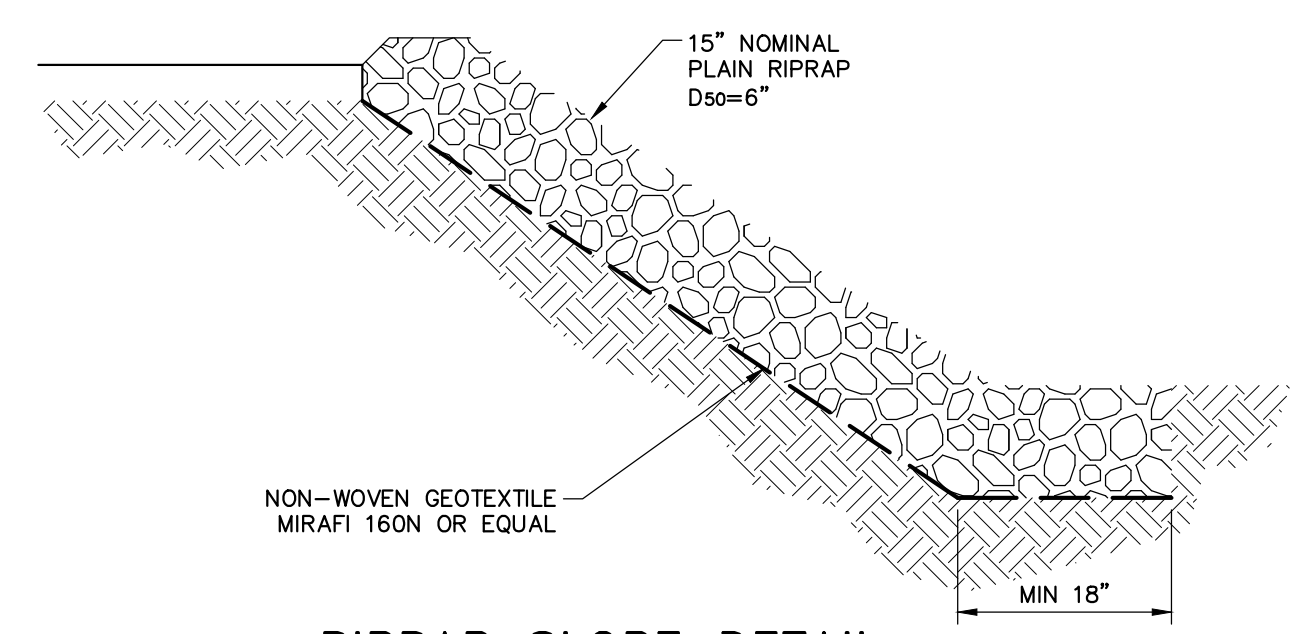
**NOTE:**  
1. AGGREGATE TYPES PER MDOT SECTION 304.02.

**BITUMINOUS PAVEMENT SECTION**  
N.T.S.

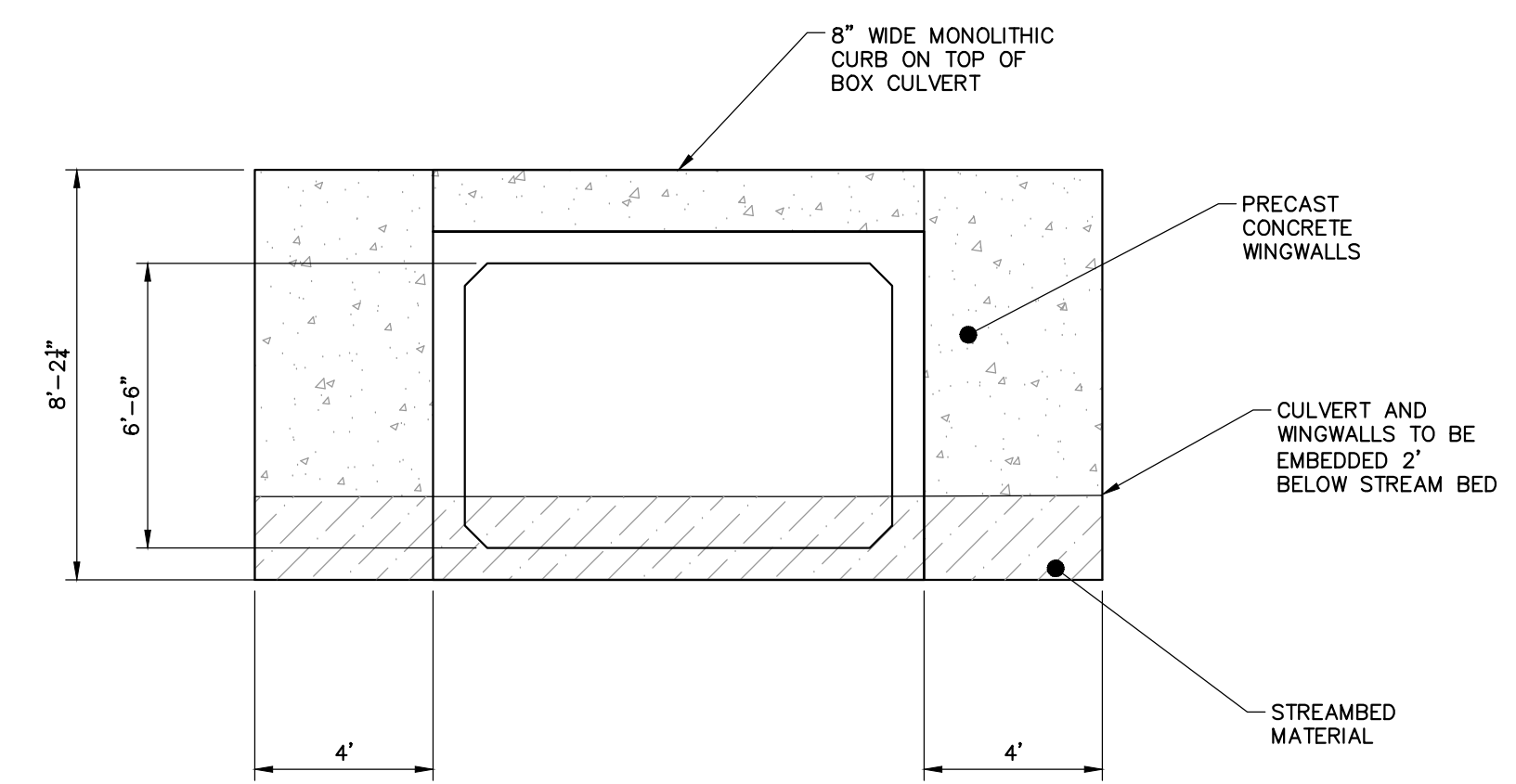


**NOTES:**  
1. GRIND EXISTING PAVEMENT, 1.5" DEPTH.  
2. PROVIDE BITUMINOUS TACK COAT ON VERTICAL AND HORIZONTAL SURFACES PRIOR TO PAVING.  
3. DETAIL APPLICABLE TO PAVEMENT BUTT JOINTS AT ROADWAY WORK LIMITS. REFER TO PIPE INSTALLATION DTL. OR PAVED ROAD SECTION DTLs. FOR TRENCH REPAIR REQUIREMENTS.

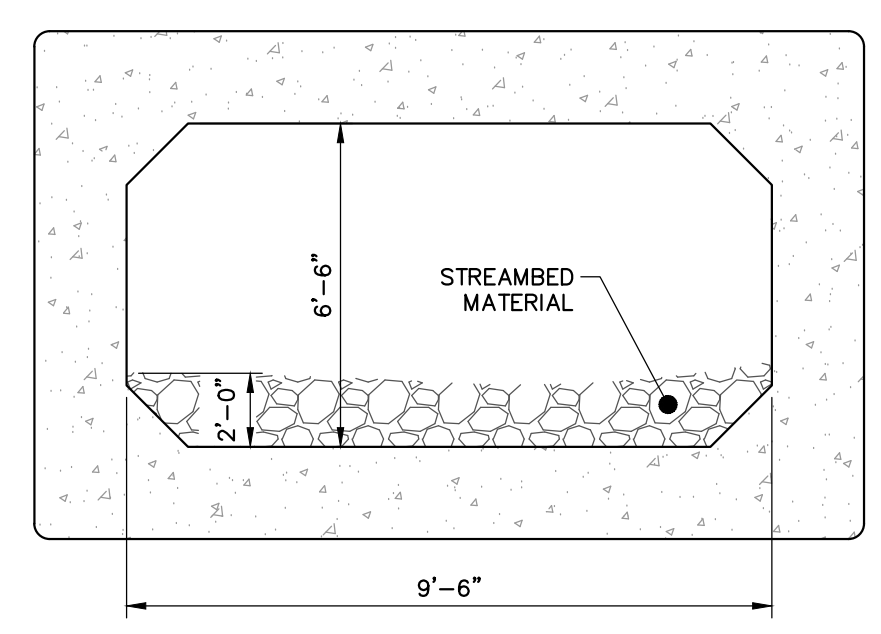
**PAVEMENT BUTT JOINT DETAIL**  
N.T.S.



**RIPRAP SLOPE DETAIL**  
N.T.S.



**CULVERT WINGWALLS ELEVATION (UPSTREAM END ONLY)**  
N.T.S.



**PRECAST BOX CULVERT DETAIL**  
N.T.S.

**NOTE:** 8" WIDE MONOLITHIC CURB ON TOP OF BOX CULVERT AT EACH END NOT SHOWN FOR CLARITY.

**BOX CULVERT NOTES:**

- THE PRE-CAST CONCRETE BOX CULVERT SHALL BE DESIGNED AND MANUFACTURED BY AN EXPERIENCED CONCRETE BOX CULVERT MANUFACTURER AS SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE MANUFACTURER WITH REGARD TO ORDERING, MANUFACTURING, AND DELIVERING THE BOX CULVERT SECTIONS TO THE SITE. THE CONTRACTOR SHALL WORK WITH THE MANUFACTURER TO DEVELOP DETAILED SHOP DRAWINGS COMPLETE WITH DESIGN CALCULATIONS TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO MANUFACTURE AND DELIVERY OF THE BOX CULVERT. THE DESIGN CRITERIA AND SUBMITTAL SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
  - DESIGNED TO MEET AASHTO HL-93 LOADS
  - 5,000 PSI, 28 DAY STRENGTH CONCRETE
  - GRADE 60 REBAR WITH 2" COVER ON ALL FACES
  - DCI CORROSION INHIBITOR ADDITIVE SHALL BE USED IN MIX DESIGN
  - PROVISION FOR LIFTING AND PLACING SECTIONS INTO PLACE (I.E. LIFTING RINGS, LIFTING HOLES, ETC.)
- MEMBRANE WATERPROOFING WITH A WATERPROOFING PROTECTIVE COURSE SHALL BE USED WHERE ROADWAY PAVEMENT IS DIRECTLY ON THE STRUCTURE AND ON ALL STRUCTURES WHERE THE CLEAR SPAN IS OVER 20'-0". USE BITUMINOUS DAMP-PROOFING WHERE ROADWAY PAVEMENT IS NOT DIRECTLY ON THE STRUCTURE AND THE CLEAR SPAN IS LESS THAN 20'-0".
- THE HORIZONTAL AND VERTICAL HAUNCH DIMENSIONS SHALL BE EQUAL TO THE SIDEWALL THICKNESS IN INCHES. IF HAUNCHES WITH OTHER DIMENSIONS ARE USED, A SPECIAL REINFORCEMENT DESIGN FOR THE ACTUAL DIMENSIONS SHALL BE COMPLETED.
- THE CONTRACTOR SHALL VERIFY THE DIMENSIONS SHOWN ON THE DESIGN PLANS WITH THE FIELD CONDITIONS PRIOR TO ORDERING THE BOX CULVERT. ANY DISCREPANCIES SHALL BE REPORTED TO ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE BOX CULVERT IN GENERAL CONFORMITY TO THE LINES AND GRADES SHOWN ON THE DESIGN PLANS AND IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.
- ALL JOINTS SHALL BE SECURELY SEATED TOGETHER TO ACHIEVE A SILT-TIGHT JOINT ALL AROUND. A SILT-TIGHT JOINT IS DEFINED AS A JOINT IN WHICH THE GASKET IS COMPRESSED TO A MINIMUM OF ONE HALF OF ITS UNCOMPRESSED WIDTH. THE GASKET SHALL BE UNIFORMLY COMPRESSED ALONG ALL VERTICAL AND HORIZONTAL SURFACES. A POSITIVE MEANS, THROUGH THE USE OF SEATING DEVICES, SHALL BE USED FOR PULLING ONE SECTION AGAINST ANOTHER TO ASSURE AN ADEQUATE SILT-TIGHT JOINT. EACH JOINT BETWEEN TWO BOX CULVERT SECTIONS SHALL BE COVERED WITH A MINIMUM 12-INCH WIDE JOINT WRAP. THE WRAP SHALL MEET THE SPECIFICATIONS OF ASTM C-877. THE JOINT SHALL BE COVERED COMPLETE AROUND THE ENTIRE STRUCTURE.
- INSTALLATION OF NEW BOX CULVERT SHALL OCCUR DURING DRY WEATHER OR DRY EXCAVATION CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR ANY WATER DIVERSION AND MANAGEMENT REQUIRED.

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STATE OF MAINE  
MEGAN D.L. McDEVITT  
No. 13019  
PROFESSIONAL ENGINEER

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	JAN 2021

CHECKED BY: MIDAM  
DESIGNED BY: SET  
DRAWN BY: NSIW  
UNSAVED DRAWING.dwg

**PROJECT DETAILS - 1**

CITY OF AUBURN  
ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
CULVERT REPLACEMENT

JOB NO:	230620.15
DATE:	JANUARY 2021
SCALE:	NTS
SHEET:	7 OF 8

**C-005**

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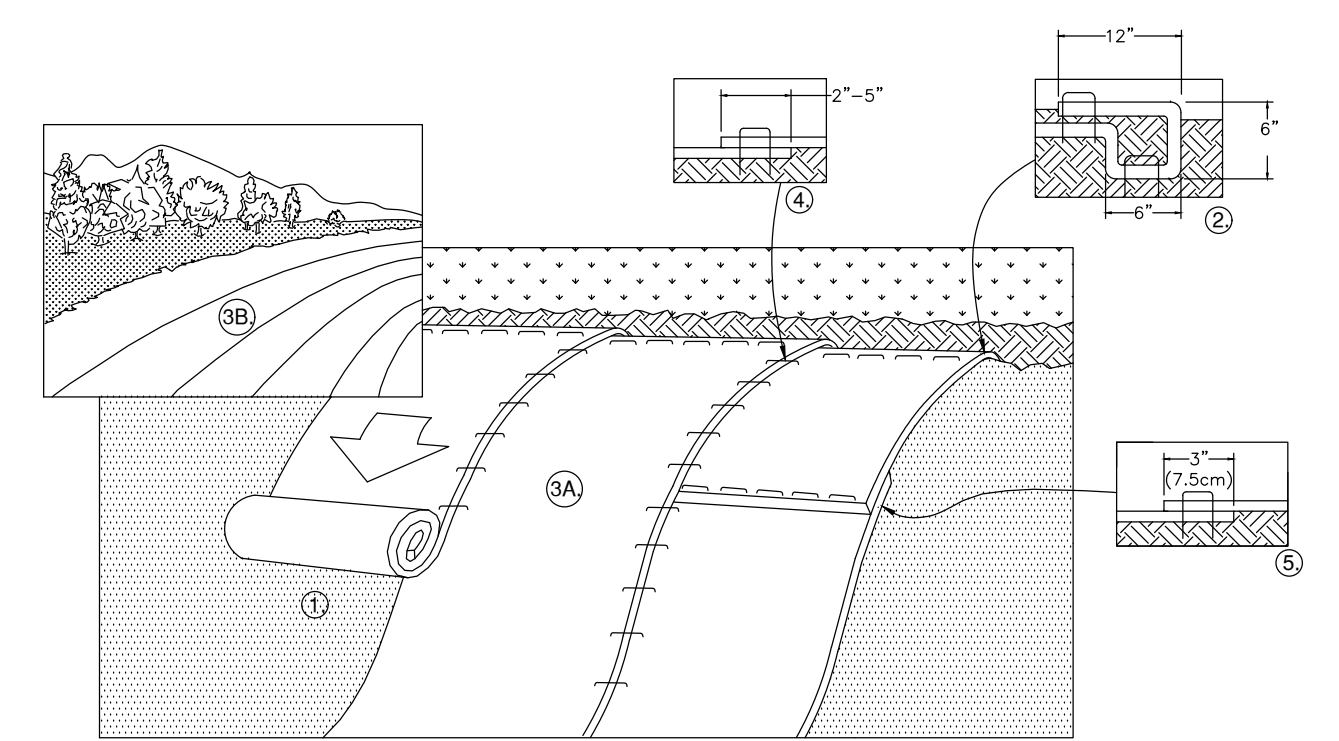
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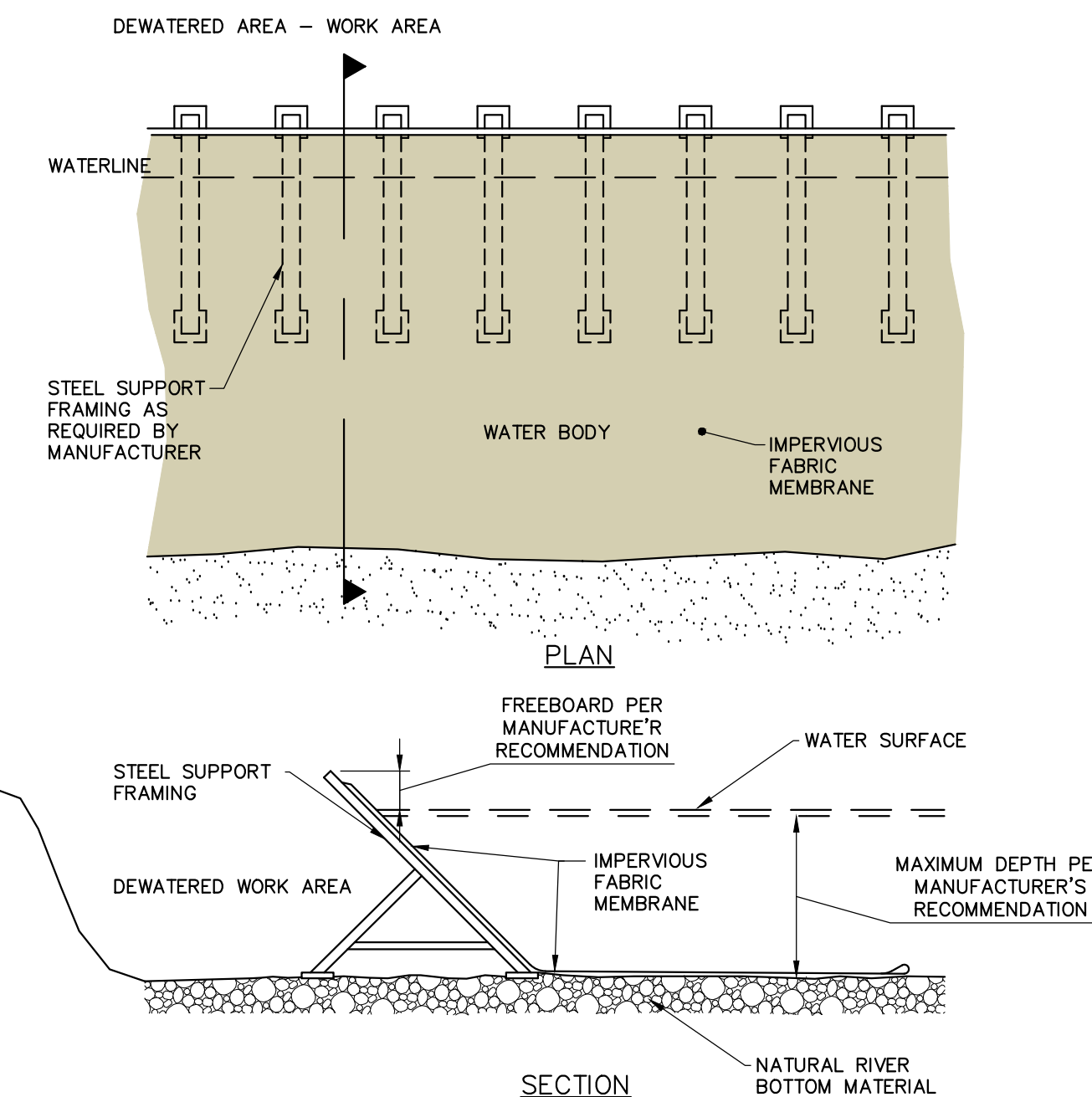
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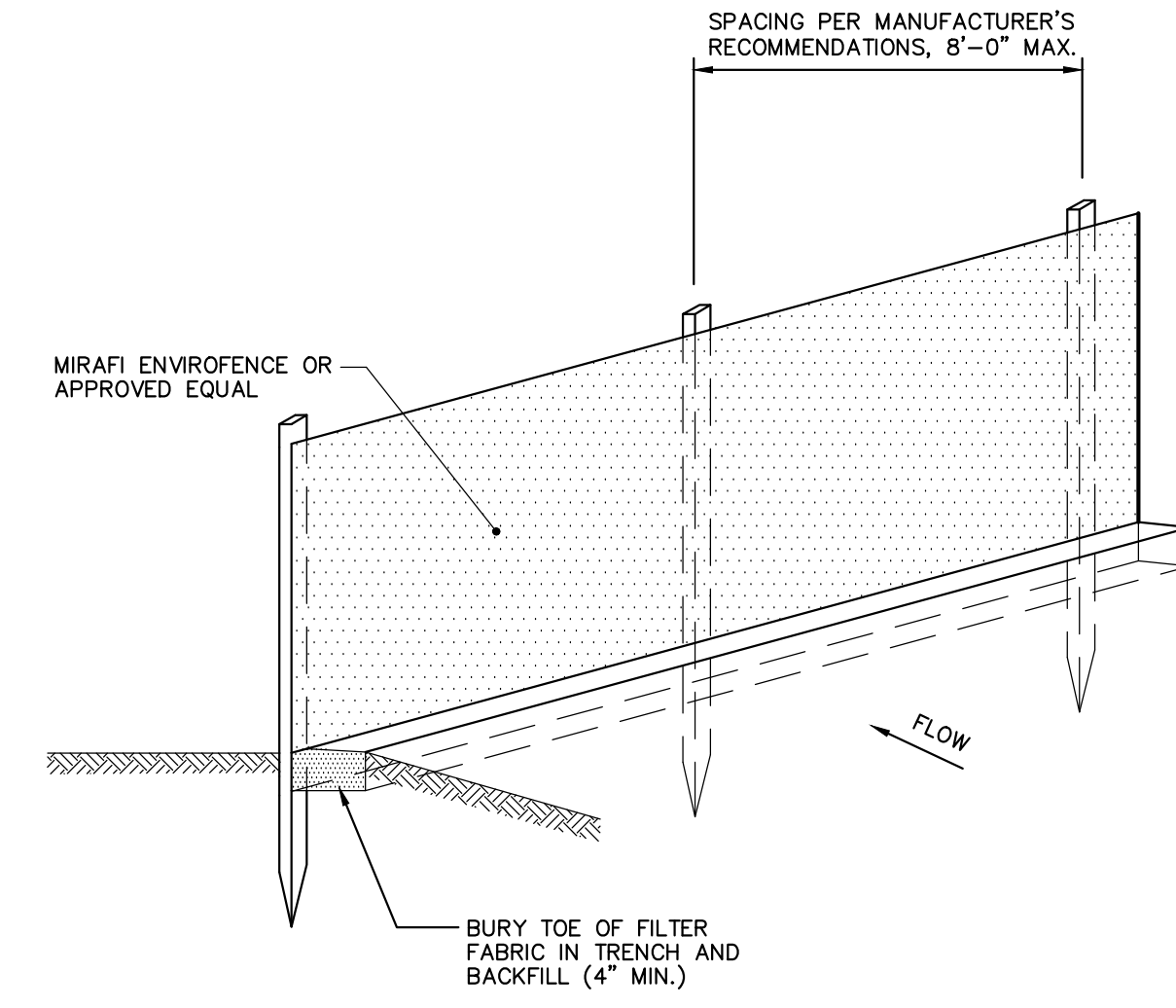
- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED AS WELL AS REMOVING ANY PROTRUDING ROCKS, STUMPS OR ROOTS. DURING THE GROWING SEASON (APRIL 15- SEPTEMBER 15) USE RECP'S ON THE BASE OF GRASSED WATERWAYS, SOIL SLOPES HAVING A GRADE GREATER THAN 15%, OR ANYWHERE WHERE HAY MULCH HAS PROVEN TO BE INEFFECTIVE AT CONTROLLING SHEET EROSION. RECP'S ARE A MANUFACTURED COMBINATION OF MULCH AND NETTING DESIGNED TO PREVENT EROSION AND RETAIN SOIL MOISTURE.
- FOR OVER WINTER PROTECTION, APPLY RECP'S ON THE BASE AND SIDE SLOPES OF GRASSED WATERWAYS AND ON SLOPES STEEPER THAN AN 8% GRADE.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
- ROLL THE RECP'S (A) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP'S TYPE.
- CONSECUTIVE RECP'S SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.
- UNTIL GRASS IS ABUNDANT, INSPECT PERIODICALLY AND AFTER EACH RAINSTORM TO CHECK FOR EROSION. IMMEDIATELY REPAIR AND ADD MORE MULCH UNTIL GRASSES ARE FIRMLY ESTABLISHED.
- DO NOT MOW THE FIRST YEAR.
- DETAIL SHALL BE CONSIDERED GENERAL GUIDANCE FOR RECP INSTALLATION; CONTRACTOR SHALL INSTALL RECP IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

**ROLLED EROSION CONTROL MATTING**  
N.T.S.



**NOTE:**  
COFFERDAM DETAIL SHOWN FOR REFERENCE PURPOSES. CONTRACTOR SHALL PROVIDE DESIGN OF TEMPORARY COFFERDAMS, STAMPED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.

**TEMPORARY FRAME & FABRIC COFFERDAM DETAIL**  
SCALE: NOT TO SCALE  
TO BE INSTALLED AROUND WORK AREA IN ACCORDANCE WITH CONTRACTOR'S WORK PLAN

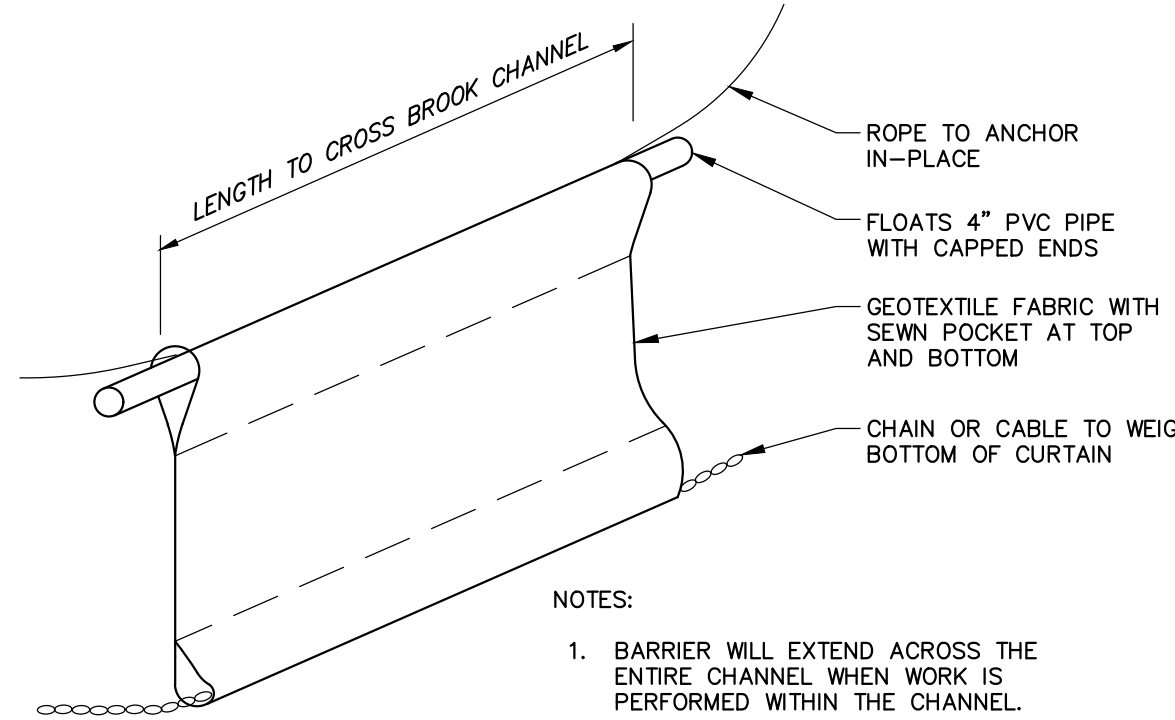


- NOTES:**
- INSTALL FABRIC ON UPHILL SIDE OF SUPPORT POSTS
  - INSTALL SILT FENCE ACROSS SLOPES
  - SILT FENCE SHALL NOT BE USED IN DRAINAGE WAYS

**MAINTENANCE:** INSPECT FOR TEARS IN THE FABRIC OR DAMAGE TO SUPPORTS. REPAIR AS NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF SIX-INCHES OR LESS.

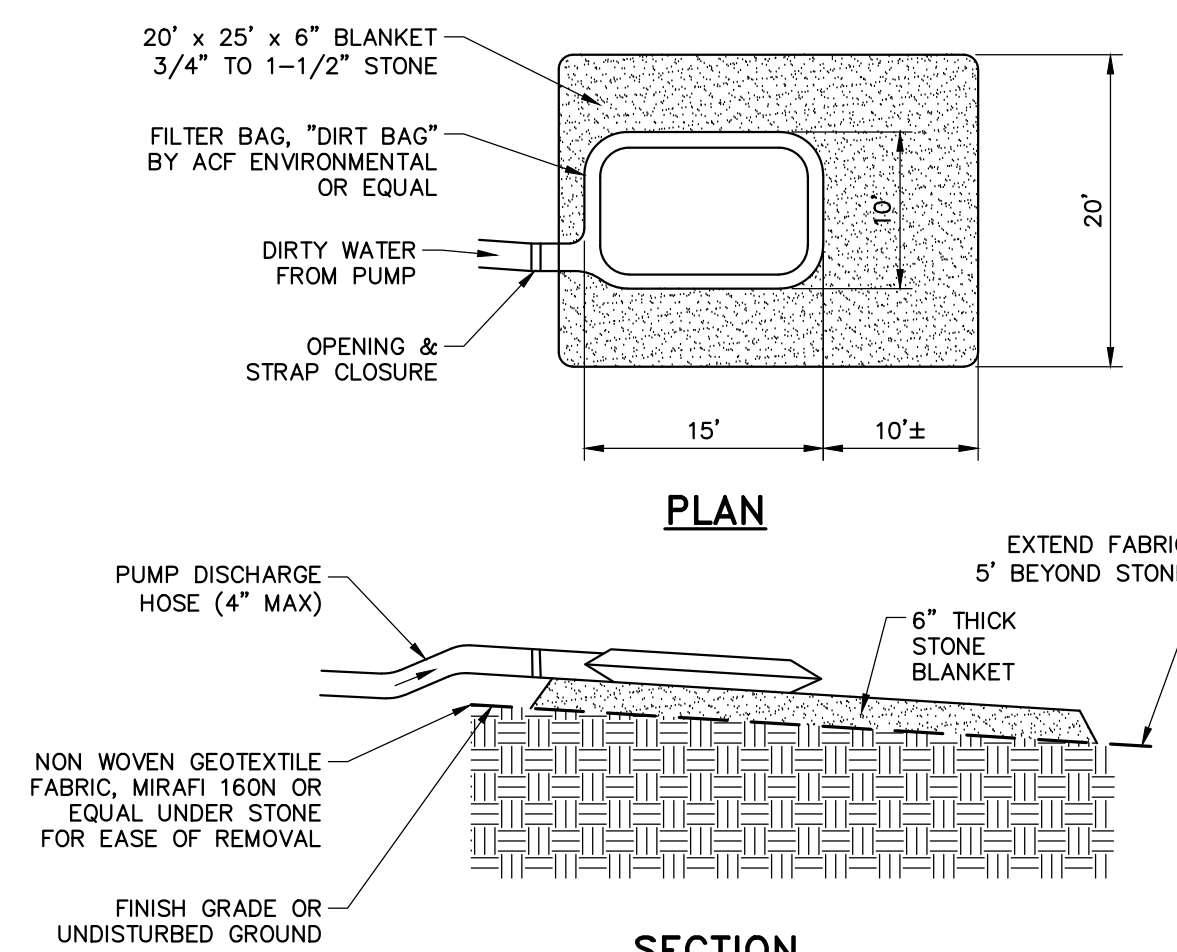
**REMOVAL:** WHEN UPSLOPE AREAS ARE STABILIZED, THE STRUCTURE AND ANY ACCUMULATED SEDIMENT WILL BE REMOVED.

**SEDIMENT BARRIER DETAIL  
SILTATION FENCE  
(CONTRACTOR OPTION)**  
N.T.S.



- NOTES:**
- BARRIER WILL EXTEND ACROSS THE ENTIRE CHANNEL WHEN WORK IS PERFORMED WITHIN THE CHANNEL.
  - ROPE SHALL BE 1/2" NYLON OR MANILA.

**FLOATING TURBIDITY BARRIER**  
N.T.S.



**DEWATERING DISCHARGE SEDIMENT CONTROL DEVICE**  
N.T.S.

**EROSION AND SEDIMENT CONTROL NOTES**

**Temporary Erosion Control**

Measure	Dates For Use	Timing, Activity, and Location
Sedimentation Barrier	ALL	Before soil disturbance, install downhill of areas to be disturbed and around material stockpiles.
Up-slope Diversion	ALL	Before soil disturbance, install uphill of areas to be disturbed and around material stockpiles.
Catch Basin Protection	ALL	Before soil or pavement disturbance, install ACF Environmental, Inc. High Flow Siltsock, Siltsover Inlet Filter, or equal, installed per manufacturer's requirements.
Dust Control	ALL	During dry weather, apply water and calcium chloride to control dust.
Temporary Seeding	April 15 to Oct. 1	Soil stockpiles that are not covered and disturbed areas that will not be disturbed again within 14 days. If grass growth provides less than 95% soil coverage by Nov. 1, apply mulch and anchor with erosion control blanket.
Hay Mulch	April 15 to Sept. 15	On all areas of exposed soil that will not be actively worked for 7 days and prior to rain events, apply 70-90 lbs (2 bales) per 1,000 sq ft. by mechanical blower. Provide anchoring on slopes greater than 5%.
Winter Mulch	Sept. 16 to Oct. 31 Nov. 1 to April 14	On all areas of exposed soil that will not be actively worked for 7 days and prior to precipitation, apply 140 to 180 lbs. mulch (4 bales) per 1,000 sq. ft. by mechanical blower. Erosion control blanket may be used as a substitute for winter mulch.
Inspections	Until site is permanently stabilized	Inspect the erosion and sedimentation control measures daily, and maintain and repair as necessary.

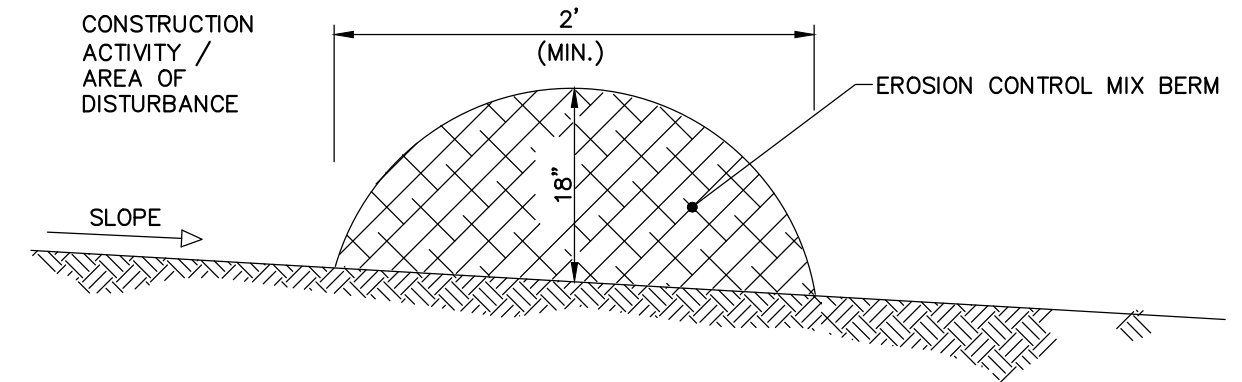
**Permanent Erosion Control:**

Measure	Dates For Use	Timing, Activity, and Location
Pavement - Base Course - Final Course	When no frost is in ground	Install only in areas shown on the plan, shortly after pavement base is brought to final grade. Install near completion of project.
Permanent Seeding	April 15 to Sept. 15	On final grade areas, within 7 days of grade preparation, prepare topsoil, followed by seed and mulch application.
Dormant Seeding	Sept. 16 to April 15	On final grade areas, with prepared topsoil. Apply seed at double the specified rate on bare soil, and follow with an application of winter mulch.
Ground Cover, Trees, Shrubs	April 15 to Nov. 1	Install with final landscaping.
Permanent Mulch	ALL	Install with final landscaping.

**Inspections:**

Regular inspections of all erosion and sedimentation controls shall be made at least weekly and prior to and following storm events. Minimum inspections shall be made as listed in the table below.

Inspected Item	Look For
Mulched Surfaces	Thin mulch or inadequate application. Wind movement.
Seeded Surfaces	Poor seed germination. Loss of mulch. Development of rivelets.
Sediment Barrier	Sediment build-up to one half the height of the barrier. Undermining of the barrier. Supporting stakes loose, toppled, or unmarked. Breaks in barrier.
Perimeter Diversion	Discharge is to stabilized area. Erosion or breaks in barrier. Supporting stakes loose, toppled or unmarked.
Catch Basin Protection	Sediment build-up and structure blockages. Slow flow/Ponding water. Breaks in fabric or voids in barrier.
Dewatering Filter	Breaks in fabric or supporting structure. Slow flow, indicating high sediment build-up.
Construction Entrance	Sedimentation of roadways. Off-site dust complaints.



**Erosion Control Mix Berms**

Erosion control mix can be manufactured on or off the project site. It must consist primarily of organic material and may include: shredded bark, stump grindings, composted bark, or acceptable manufactured products. Wood and bark chips, ground construction debris or reprocessed wood products will not be acceptable as the organic component of the mix.

**Composition**

Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of fleg, physical contaminants, and material toxic to plant growth. The mix composition shall meet the following standards:

- The organic matter content shall be between 80 and 100%, dry weight basis.
- Particle size by weight shall be 100% passing a 6" screen and a minimum of 70%, maximum of 85%, passing a 0.75" screen.
- The organic portion needs to be fibrous and elongated.
- Large portions of silts, clays or fine sands are not acceptable in the mix.
- Soluble salts content shall be < 4.0 mmhos/cm.
- The pH should fall between 5.0 and 8.0.

**SEDIMENT BARRIER DETAIL  
EROSION CONTROL MIX BERM  
(CONTRACTOR OPTION)**  
N.T.S.

41 Hutchins Drive  
Portland, Maine 04102  
800.426.4262 | www.woodardcurran.com

**WOODARD & CURRAN**  
COMMITMENT & INTEGRITY DRIVE RESULTS

STATE OF MAINE  
MEGAN D.L. MCDEVITT  
No. 13019  
PROFESSIONAL ENGINEER

NO.	ISSUED FOR CONSTRUCTION	DATE	CHECKED BY:	DATE
0	ISSUED FOR CONSTRUCTION	JAN 2021	MDLM	
	DESIGNED BY: SET		UNSAVED DRAWINGS	
	DRAWN BY: MSW			

**PROJECT DETAILS - 2**

CITY OF AUBURN  
ANDROSCOGGIN COUNTY

SOPERS MILL ROAD  
CULVERT REPLACEMENT

JOB NO: 230620.15
DATE: JANUARY 2021
SCALE: NTS
SHEET: 8 OF 8

**C-006**