

NEVADA TAHOE CONSERVATION DISTRICT BURKE CREEK HIGHWAY 50 CROSSING AND REALIGNMENT PROJECT - PHASE 1 IN THE COUNTY OF DOUGLAS EIP # 01.02.03.0001



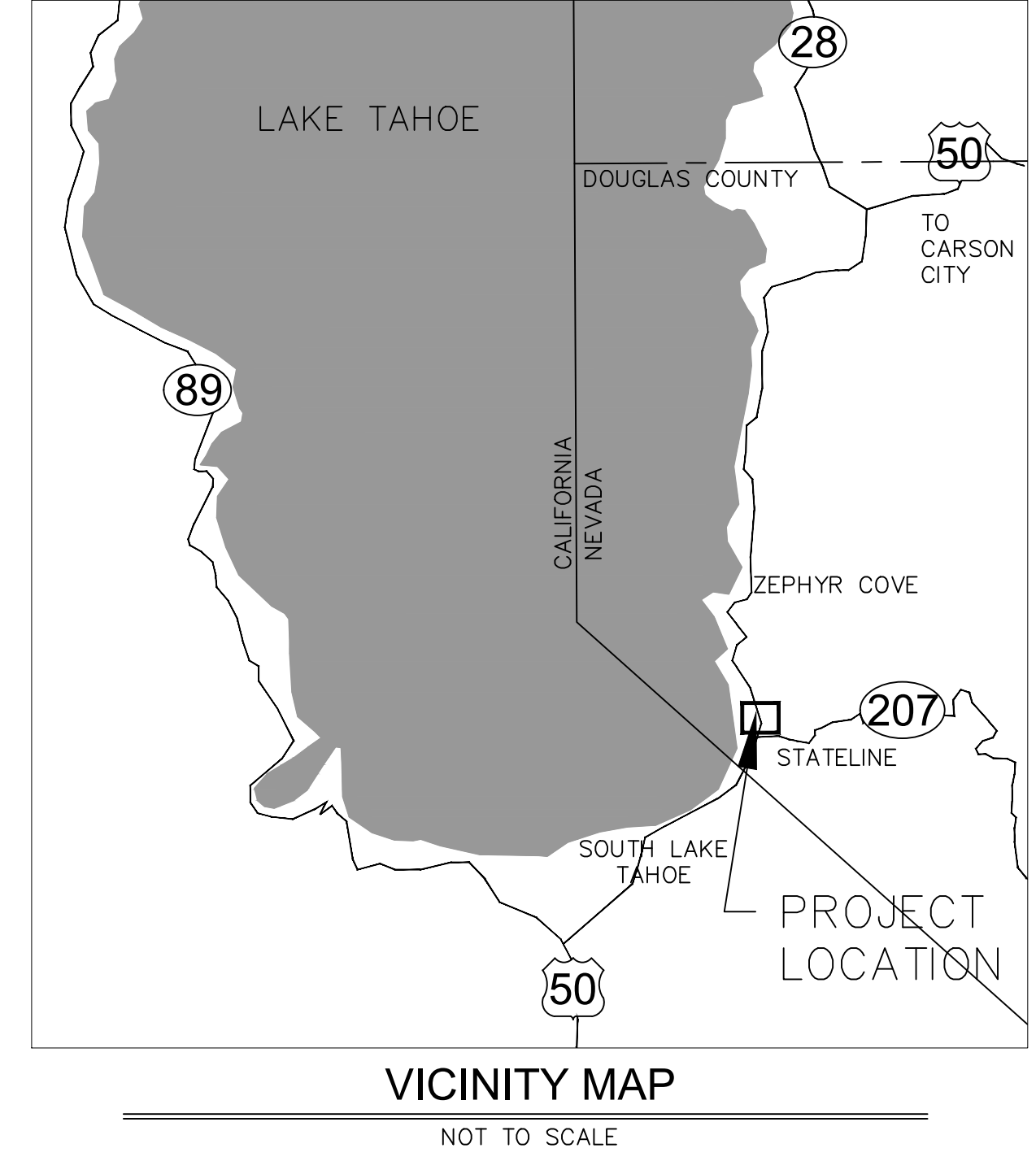
TITLE
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1



PLAN
SCALE: 1" = 150'

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ENGINEER:

Meghan C. Kelly 5/22/16

MEGHAN C. KELLY, P.E.
REGISTERED CIVIL ENGINEER
STATE OF NEVADA, NO. 20851
NEVADA TAHOE CONSERVATION DISTRICT
400 DORLA CT.
ZEPHYR COVE, NV 89448
(775) 586-1610

DATE



RECORD DRAWINGS
1/20/17

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	<i>i</i>
	1 OF 25

GENERAL NOTES

1. ALL IMPROVEMENTS SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF NEVADA TAHOE CONSERVATION DISTRICT (NTCD) & THE NEVADA DEPARTMENT OF TRANSPORTATION (NDOT). IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THESE PLANS AND THE MOST RECENT STANDARD SPECIFICATIONS & PLANS FOR ROAD & BRIDGE CONSTRUCTION ("STANDARD SPECIFICATIONS"), AND CONSTRUCTION NOT SPECIFIED IN THESE PLANS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. THE CONTRACTOR IS OBLIGATED TO BE FAMILIAR WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS NOT DISCUSSED IN THE GENERAL NOTES. THE CONTRACT SPECIAL TECHNICAL PROVISIONS SHALL SUPERSEDE THOSE OF THE STANDARD SPECIFICATIONS WHERE DISCREPANCIES OCCUR.
2. CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON SITE SHOWING "AS CONSTRUCTED" CHANGES. UPON COMPLETION, CONTRACTOR SHALL SUPPLY NDOT, DOUGLAS COUNTY, AND NTCD A SET OF "AS BUILT" PLANS. SEE SPECIAL PROVISIONS.
3. MOBILIZATION/STAGING AND STORAGE AREAS ARE TO BE SECURED BY THE CONTRACTOR AND APPROVED BY TRPA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF MOBILIZATION SITES, INCLUDING PLACEMENT AND MAINTENANCE OF BMPS.
4. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL INSTALL TEMPORARY BMP MEASURES AT LOCATIONS WHERE NEEDED TO CONTROL EROSION AND WATER POLLUTION DURING THE CONSTRUCTION OF THE PROJECT. THE BMP MEASURES SHALL REMAIN IN PLACE AND SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION FOR THE DURATION OF THE CONSTRUCTION. DURING CONSTRUCTION ENVIRONMENTAL PROTECTION DEVICES, SUCH AS EROSION CONTROL, DUST CONTROL, AND VEGETATION PROTECTION DEVICES SHALL BE MAINTAINED AT ALL TIMES. SILT FENCE OR SEDIMENT LOGS WILL BE REQUIRED AT OTHER LOCATIONS AS SHOWN ON THE DRAWINGS OR STAKED IN THE FIELD BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL MEET OR EXCEED TRPA REQUIREMENTS.
5. ALL EXISTING VEGETATION SHALL BE PRESERVED UNLESS SPECIFICALLY IDENTIFIED BY THE ENGINEER FOR REMOVAL. BMP'S TO PROTECT VEGETATION SHALL BE INSTALLED BY THE CONTRACTOR IF REQUIRED BY TRPA. CONTRACTOR TO REVEGETATE ANY AREAS OUTSIDE THE DISTURBED AREA SHOWN ON THE PLANS WITH PLANTS APPROVED BY TRPA AT THEIR OWN EXPENSE.
6. NTCD WILL PROVIDE ONE SET OF CONSTRUCTION STAKES AT NTCD'S EXPENSE. ADDITIONAL CONSTRUCTION STAKES WILL BE PROVIDED AT THE CONTRACTOR'S EXPENSE. LIMITS FOR ALL ITEMS OF WORK SHALL BE STAKED IN THE FIELD BY THE ENGINEER. THESE LIMITS AND THE RESULTING TREATMENT LENGTH/AREAS MAY VARY FROM THOSE SHOWN ON THE DRAWINGS. PAYMENT FOR ITEMS OF WORK WILL BE MADE FOR THE AMOUNT AUTHORIZED BY THESE FIELD STAKED LIMITS AND THE SPECIAL TECHNICAL PROVISIONS.
7. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. WHERE EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AND ALL AFFECTED UTILITY COMPANIES TO LOCATE ALL BURIED UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR RELOCATION OF UTILITIES AS REQUIRED BY THE WORK. WHENEVER CONNECTIONS TO OR CLEARANCE FROM ANY UTILITY IS REQUIRED, THE CONTRACTOR SHALL POTHOLE TO VERIFY THE LOCATION, SIZE AND MATERIAL OF THE UTILITY PRIOR TO CONSTRUCTION.
8. ASPHALT REPLACEMENT SHALL INCORPORATE A 4% ±1% CROSS SLOPE BETWEEN THE SAWCUT AND THE NEW ROADSIDE TREATMENT. NEW ROADSIDE FLOW CONVEYANCES SHALL INCORPORATE SUCH GRADE AS NECESSARY TO GUARANTEE WATER CONTINUES TO FLOW IN THE PRESENT DIRECTION, WITHOUT PONDING OR BREAKOUTS.
9. ANY DAMAGE DONE BY THE CONTRACTOR OR HIS SUBCONTRACTORS TO PRIVATE PROPERTY AND/OR OUTSIDE OF THE NOTED LIMITS OF WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND/OR HIS SUBCONTRACTORS.
10. NTCD WILL PROVIDE INITIAL TESTING AND INSPECTION OF WORK AND MATERIAL AT NTCD'S EXPENSE. THE COST OF REMOVAL AND/OR REPLACEMENT OF ANY DEFECTIVE WORK OR MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF RETESTING AND/OR INSPECTING OF REPLACED WORK AND MATERIAL IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR. SUCH COSTS WILL BE DEDUCTED FROM ANY MONEYS DUE OR WHICH MAY BECOME DUE TO THE CONTRACTOR.
11. STANDARD WORK DAYS SHALL BE MONDAY THROUGH FRIDAY. SATURDAY AND SUNDAY MAY BE WORKED ON OCCASION ONLY TO MAKE UP FOR WEATHER DELAYS OR OTHER SCHEDULE DELAYS WITH TRPA APPROVAL. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.
12. NOISE SHALL BE REDUCED BY THE MANDATORY USE OF MUFFLERS ON ALL CONSTRUCTION VEHICLES AND EQUIPMENT. WHERE FEASIBLE, SOLENOIDAL PAVEMENT BREAKERS WILL BE USED IN LIEU OF AIR POWERED JACK HAMMERS. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.
13. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK TO WATER AREAS AS NECESSARY TO CONTROL DUST. THE CONTRACTOR WILL PROVIDE SWEEPING PER SPECIFICATION.
14. ALL TREES AND NATURAL VEGETATION TO REMAIN ON THE SITE SHALL BE PROTECTED PER TRPA.
15. SOIL AND CONSTRUCTION MATERIAL SHALL NOT BE TRACKED OFF THE CONSTRUCTION SITE. GRADING OPERATIONS SHALL CEASE IN THE EVENT THAT A DANGER OF VIOLATING THIS CONDITION EXISTS.
16. LOOSE SOIL MOUNDS OR SURFACES SHALL BE PROTECTED FROM WIND OR WATER EROSION BY BEING APPROPRIATELY COVERED WHEN CONSTRUCTION IS NOT IN ACTIVE PROGRESS OR WHEN REQUIRED BY TRPA.
17. EXCAVATED MATERIAL SHALL BE STORED UPGRADE FROM THE EXCAVATED AREA WHENEVER POSSIBLE. NO MATERIAL SHALL BE STORED IN ANY STREAM ENVIRONMENT ZONE (SEZ) OR WET AREA.
18. ONLY EQUIPMENT OF A SIZE AND TYPE THAT WILL DO THE LEAST AMOUNT OF DAMAGE, UNDER PREVAILING SITE CONDITIONS, AND CONSIDERING THE NATURE OF THE WORK TO BE PERFORMED, WILL BE USED.
19. NO WASHING OF VEHICLES OR HEAVY EQUIPMENT, INCLUDING CEMENT MIXERS, SHALL BE PERMITTED ANYWHERE ON THE SUBJECT PROPERTY UNLESS AUTHORIZED BY TRPA IN WRITING.
20. NO VEHICLE OR HEAVY EQUIPMENT SHALL BE ALLOWED IN A STREAM ENVIRONMENT ZONE OR WET AREA EXCEPT AS AUTHORIZED BY TRPA.
21. ALL CONSTRUCTION SHALL BE WINTERIZED BY OCTOBER 15 TO REDUCE THE WATER QUALITY IMPACTS ASSOCIATED WITH WINTER WEATHER.
22. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE NDOT RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SYSTEM.
23. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LONGER THAN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED.
24. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMP'S WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OF SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO STORM WATER GENERAL PERMIT NVR100000, SECTION 1.B.1.g. AND THE PROJECT SWPPP

26. TRAFFIC CONTROL AND LANE CLOSURES WILL BE PER NDOT STANDARD SPECIFICATIONS.
27. ACCESS TO BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION

ABBREVIATIONS

NOT ALL ABBREVIATIONS LISTED ARE USED IN THESE PLANS

<p>A.B. AGGREGATE BASE AC. ACRE AC OR A.C. ASPHALT CONCRETE OR ASBESTOS CEMENT @ AT APPROX. APPROXIMATE AVG. AVERAGE AWWA AMERICAN WATER WORKS ASSOCIATION BC BEGIN CURVE BGN BEGIN C&G CURB AND GUTTER CATV CABLE TELEVISION C.B. CATCH BASIN CBM CHANNEL BED MATERIAL CL CENTERLINE CLF CONSTRUCTION LIMIT FENCE CLR. CLEAR CO. CLEAN OUT CONST. CONSTRUCT CF CUBIC FEET CMP CORRIGATED METAL PIPE CMAP CORRIGATED METAL ARCH PIPE CY CUBIC YARD DBH DIAMETER AT BREST HEIGHT DEG DEGREE(S) D.G. DECOMPOSED GRANITE DI DROP INLET DIA. DIAMETER DR DIMENSION RATIO DWG DRAWING DW, DWY DRIVEWAY EA. EACH EASE. EASEMENT EG EXISTING GRADE ELEC ELECTRIC EP EDGE OF PAVEMENT ELEV. OR EL. ELEVATION EC END CURVE EWEF EACH WAY EACH FACE EX. EXISTING FG FINISH GRADE FH FIRE HYDRANT FCA FLANGE COUPLER ADAPTER FES FLARED END SECTION (METAL) FF FILTER FENCE FL FLOWLINE FLG FLANGED FT. FOOT, FEET FTG FOOTING FV FLUSH VALVE G. DEGREE GAS GV GATE VALVE GB GRADE BREAK HDPE HIGH DENSITY POLYETHYLENE HDPE-NP NON-PERFORATED HIGH DENSITY POLYETHYLENE HDPE-P PERFORATED HIGH DENSITY POLYETHYLENE HP HIGH POINT HOR., HORIZ. HORIZONTAL HWY. HIGHWAY IN. INCH IE INVERT ELEVATION IRR. IRRIGATION IVGID INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT L. LEFT LEN. LENGTH LF LINEAR FEET LID LOW IMPACT DEVELOPMENT LP LOW POINT LS LUMP SUM MH MANHOLE MAX. MAXIMUM</p>	<p>MDD MAXIMUM DRY DENSITY MJ MECHANICAL JOINT MI. MILE MIN. MINIMUM MISC. MISCELLANEOUS N NORTH NAC NEVADA ADMINISTRATIVE CODE N.I.C. NOT IN CONTRACT NDOT NEVADA DEPT OF TRANSPORTATION NTCD NEVADA TAHOE CONSERVATION DISTRICT N.T.S. NOT TO SCALE NO. NUMBER OC ON CENTER OD OUTSIDE DIAMETER OFF OFFSET OG ORIGINAL GRADE OH(E/T) OVERHEAD ELECTRIC OR TELEPHONE LINES PLUS OR MINUS ± PT. POINT PCC POINT OF COMPOUND CURVE, PORTLAND CEMENT PC POINT OF CURVATURE PI POINT OF INFLECTION PIP PROTECT IN PLACE PVC POLYVINYL CHLORIDE PVMT PAVEMENT POC POINT ON CURVE POS POSITIVE PRC POINT OF REVERSE CURVE PSI POUNDS PER SQUARE INCH PL PROPERTY LINE PO PUSH ON PUE PUBLIC UTILITY EASEMENT R RADIUS RCP REINFORCED CONCRETE PIPE REVEG REVEGETATION RLC ROCK LINED CHANNEL RT,R RIGHT R/W, ROW RIGHT-OF-WAY S. SLOPE OR SOUTH SD STORM DRAIN SDMH STORM DRAIN MANHOLE SDR STANDARD DIMENSION RATIO SF SQUARE FOOT/FEET SHT SHEET STA STATION STD STANDARD SS SANITARY SEWER, STAINLESS STEEL SSCO. SANITARY SEWER CLEAN OUT SSMH SANITARY SEWER MANHOLE SSPWC STANDARD SPECIFICATIONS FOR PUBLIC WORKS SWPPP STORM WATER POLLUTION PREVENTION PLAN SY SQUARE YARD TBC TOP BACK OF CURB TOC TOP OF CURB TRPA TAHOE REGIONAL PLANNING AGENCY TW TOP OF WALL (TYP) TYPICAL UGE UNDERGROUND ELECTRIC LINES UGT UNDERGROUND TELEPHONE LINES VC VERTICAL CURVE VG VALLEY GUTTER VPC VERTICAL POINT OF CURVATURE VPI VERTICAL POINT OF INFLECTION VPT VERTICAL POINT OF TANGENT W WATER WL WATERLINE W WEST W WITH WM WATER METER</p>	<p>MDD MAXIMUM DRY DENSITY MJ MECHANICAL JOINT MI. MILE MIN. MINIMUM MISC. MISCELLANEOUS N NORTH NAC NEVADA ADMINISTRATIVE CODE N.I.C. NOT IN CONTRACT NDOT NEVADA DEPT OF TRANSPORTATION NTCD NEVADA TAHOE CONSERVATION DISTRICT N.T.S. NOT TO SCALE NO. NUMBER OC ON CENTER OD OUTSIDE DIAMETER OFF OFFSET OG ORIGINAL GRADE OH(E/T) OVERHEAD ELECTRIC OR TELEPHONE LINES PLUS OR MINUS ± PT. POINT PCC POINT OF COMPOUND CURVE, PORTLAND CEMENT PC POINT OF CURVATURE PI POINT OF INFLECTION PIP PROTECT IN PLACE PVC POLYVINYL CHLORIDE PVMT PAVEMENT POC POINT ON CURVE POS POSITIVE PRC POINT OF REVERSE CURVE PSI POUNDS PER SQUARE INCH PL PROPERTY LINE PO PUSH ON PUE PUBLIC UTILITY EASEMENT R RADIUS RCP REINFORCED CONCRETE PIPE REVEG REVEGETATION RLC ROCK LINED CHANNEL RT,R RIGHT R/W, ROW RIGHT-OF-WAY S. SLOPE OR SOUTH SD STORM DRAIN SDMH STORM DRAIN MANHOLE SDR STANDARD DIMENSION RATIO SF SQUARE FOOT/FEET SHT SHEET STA STATION STD STANDARD SS SANITARY SEWER, STAINLESS STEEL SSCO. SANITARY SEWER CLEAN OUT SSMH SANITARY SEWER MANHOLE SSPWC STANDARD SPECIFICATIONS FOR PUBLIC WORKS SWPPP STORM WATER POLLUTION PREVENTION PLAN SY SQUARE YARD TBC TOP BACK OF CURB TOC TOP OF CURB TRPA TAHOE REGIONAL PLANNING AGENCY TW TOP OF WALL (TYP) TYPICAL UGE UNDERGROUND ELECTRIC LINES UGT UNDERGROUND TELEPHONE LINES VC VERTICAL CURVE VG VALLEY GUTTER VPC VERTICAL POINT OF CURVATURE VPI VERTICAL POINT OF INFLECTION VPT VERTICAL POINT OF TANGENT W WATER WL WATERLINE W WEST W WITH WM WATER METER</p>
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UTILITIES

<p>CABLE TELEVISION NATURAL GAS ELECTRIC STORM DRAIN SEWER WATER PHONE USA DIGS</p>	<p>CHARTER COMMUNICATIONS, (775) 588-1077 SOUTHWEST GAS, (877) 860-6022 NV ENERGY, (775) 834-4444 DOUGLAS COUNTY PUBLIC WORKS (775) 782-9989 DOUGLAS COUNTY SEWER IMPROVEMENT DISTRICT (775) 588-3558 KINGSBURY GID, (775) 588-3548 FRONTIER (775) 782-0966 (800) 642-2444 OR 811</p>
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LEGEND

NOTE: LEGENDS PROVIDED ON INDIVIDUAL PLAN SHEETS OVERRIDE THIS LEGEND

EXISTING	PROPOSED
MAJOR CONTOUR	MAJOR CONTOUR
MINOR CONTOUR	MINOR CONTOUR
EXISTING MAJOR CONTOUR LABEL	PROPOSED MAJOR CONTOUR LABEL
EXISTING ALIGNMENT	PROPOSED ALIGNMENT(ROAD CENTERLINE)
EXISTING GRADE (SECTION VIEW)	GRADING DAYLIGHT LINE/GRADING LIMIT
PROPERTY LINE	GRADING LINE/FEATURE LINE
EXISTING FENCE	PROPOSED GRADE (SECTION VIEW)
OR PAVEMENT	CLF CONSTRUCTION LIMIT FENCE
STORM DRAIN LINE	FILTER FENCE
CATCH BASIN	SEDIMENT ROLL
STORM DRAIN MANHOLE	EROSION CONTROL BLANKET
WATER LINE	STAGING AREA
WATER METER/ VALVE	PROPOSED PIPE
SANITARY SEWER LINE	PROPOSED CONCRETE
SANITARY SEWER MANHOLE	PROPOSED VEGETATION/WILLOW
OVERHEAD ELECTRIC LINE	ROCK LINED CHANNEL (PLAN VIEW)
POWER POLE	SEDIMENT REMOVAL
UNDER GROUND TELEPHONE LINES	ROCK (SECTION VIEW)
OVERHEAD TELEPHONE LINES	ROCK DISSIPATER
UNDERGROUND FIBER OPTIC LINES	PROJECT BOUNDARY
UNDERGROUND GAS LINES	PROPOSED FENCE (TYPE SPECIFIED ON PLAN)
DRAINAGE	
TREE	
FIRE HYDRANT	
CURB	
OR CONCRETE	
CONTROL POINT	
BUILDING	
PRIVATE DRIVEWAY	
SIGN	
ROCK LINED CHANNEL	
EXISTING ROCK WALL	
ASSESSOR PARCEL NUMBER	
PHYSICAL ADDRESS (PRIVATE LOT)	

		SECTION OR DETAIL IDENTIFICATION
		NUMBER OF SHEET ON WHICH SECTION OR DETAIL IS DRAWN
		SECTION OR DETAIL IDENTIFICATION
		SYMBOL FOR DETAIL ON THE SAME SHEET

HORIZONTAL AND VERTICAL PROJECTION

VERTICAL CONTROL IS DATUM NGVD 29 US FEET;
HORIZONTAL CONTROL IS NDOT CONTROL LINE LPN 907 HORIZONTAL DATUM NAD 83/94 (aka NAD 83HARN) STATE PLANE COORDINATE SYSTEM NEVADA ZONE WEST (U.S. FEET) AND MODIFIED TO GROUND COMBINED SCALE FACTOR OF 0.9997370692

RECORD DRAWINGS

1/20/17



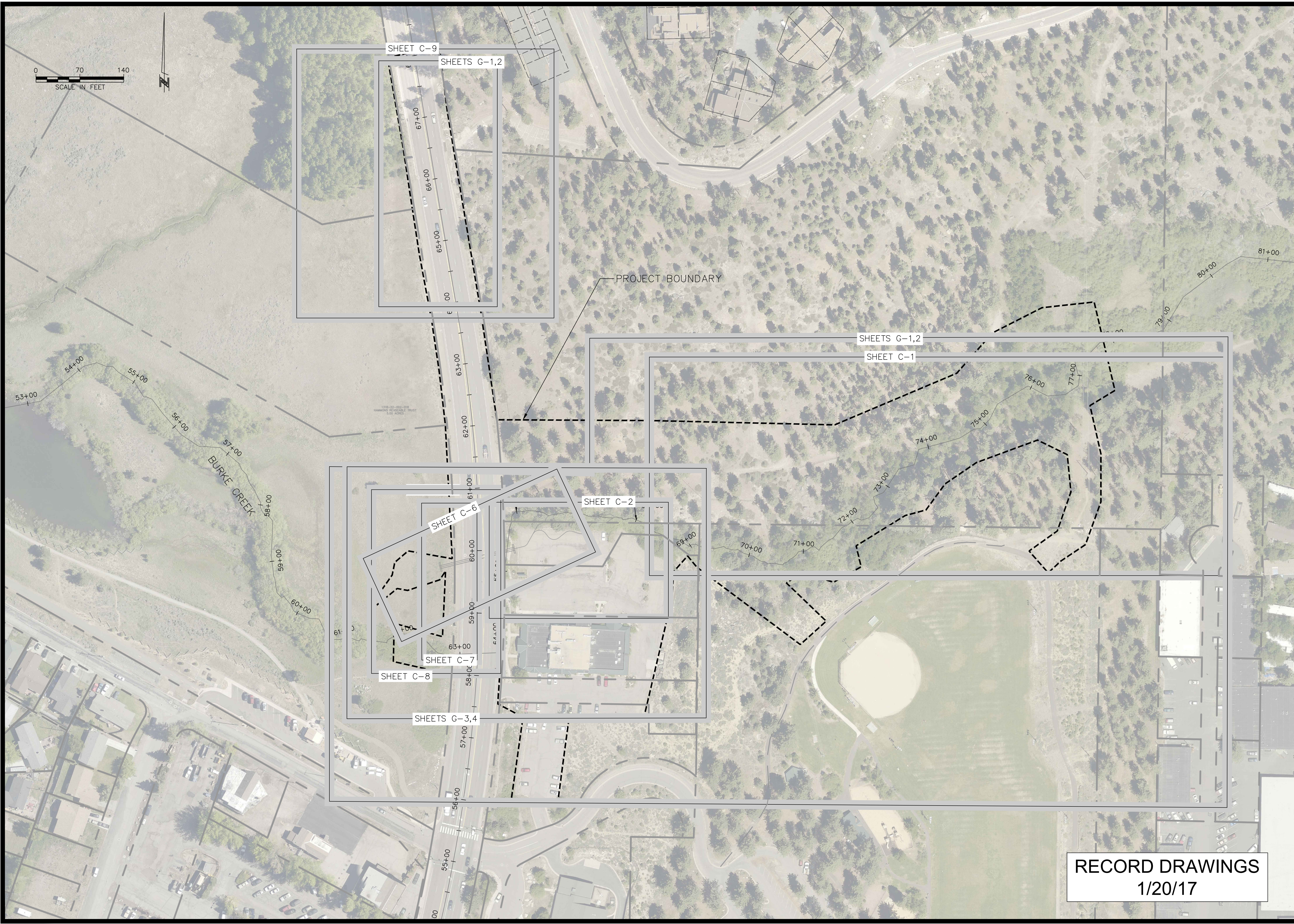
GENERAL NOTES
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN MK/MK
CHECKED MG
DATE 05/13/2016
SCALE AS SHOWN
PROJECT BCC
SHEET <i>ii</i>
2 OF 25

INDEX
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

RECORD DRAWINGS
1/20/17





NOTES:

1. ACCESS LOCATION SHOWN FROM KAHLE COMMUNITY CENTER IS APPROXIMATE. CONTRACTOR TO KEEP ACCESS WITHIN EXISTING TRAIL SYSTEM.
2. ACCESS TO THE STAGING AND STORAGE AREA SHOWN WITHIN THE PARKING LOT ON DOUGLAS COUNTY PROPERTY SHALL BE FROM KAHLE DRIVE ONLY.
3. ANY DISTURBANCE SHALL BE RETURNED TO EXISTING CONDITIONS PRIOR TO THE COMPLETION OF CONSTRUCTION. REFER TO SPECIFICATION AND SWPPP FOR ADDITIONAL EROSION CONTROL MEASURES FOR UPSTREAM IMPROVEMENTS.
4. AT NO TIME WILL ACCESS TO BUSINESS BE BLOCKED. CONTRACTOR TO COORDINATE ACCESS PLAN WITH BUSINESS OWNERS. SEE SPECIFICATIONS.
5. ANY ADDITIONAL STAGING AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

PLAN - STREAM WORK
SCALE: 1" = 50'



PLAN - NORTHERN DRAINAGE WORK
SCALE: 1" = 50'

RECORD DRAWINGS
1/20/17

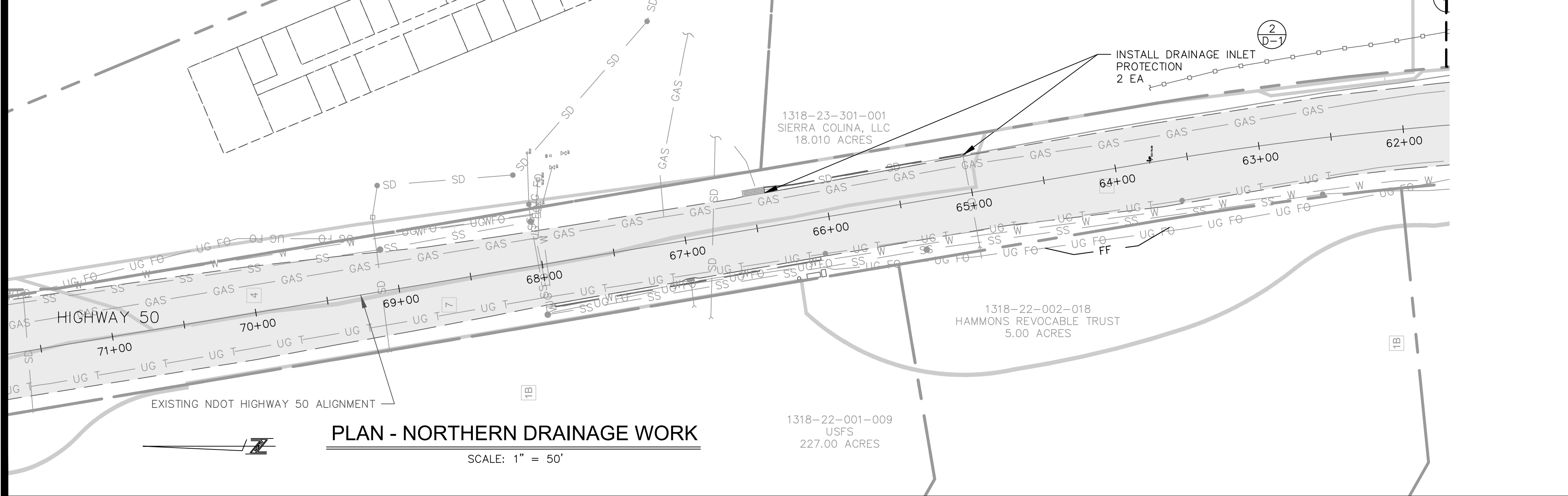
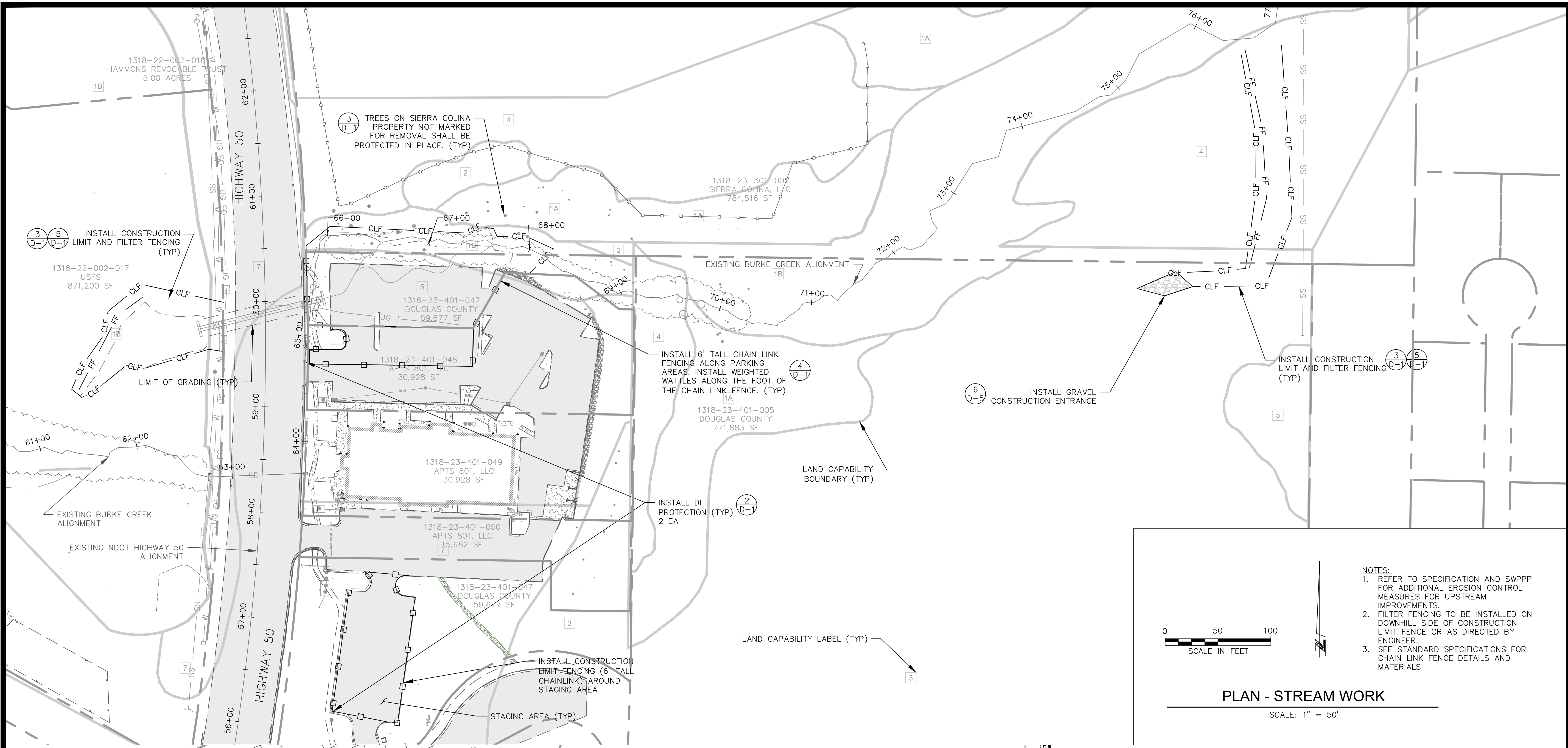
- NOTES:**
1. NO STAGING OR STORAGE WILL BE ALLOWED IN NORTHERN DRAINAGE WORK AREA.
 2. LANE CLOSURES TO PERFORM WORK SHALL BE PER TRAFFIC CONTROL PLAN AND COORDINATED WITH NDOT.

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	G-1
	4 OF 25

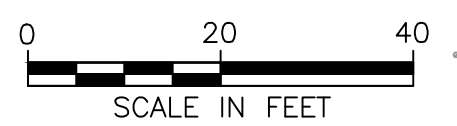


**TEMPORARY EROSION CONTROL PLAN
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1**

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC



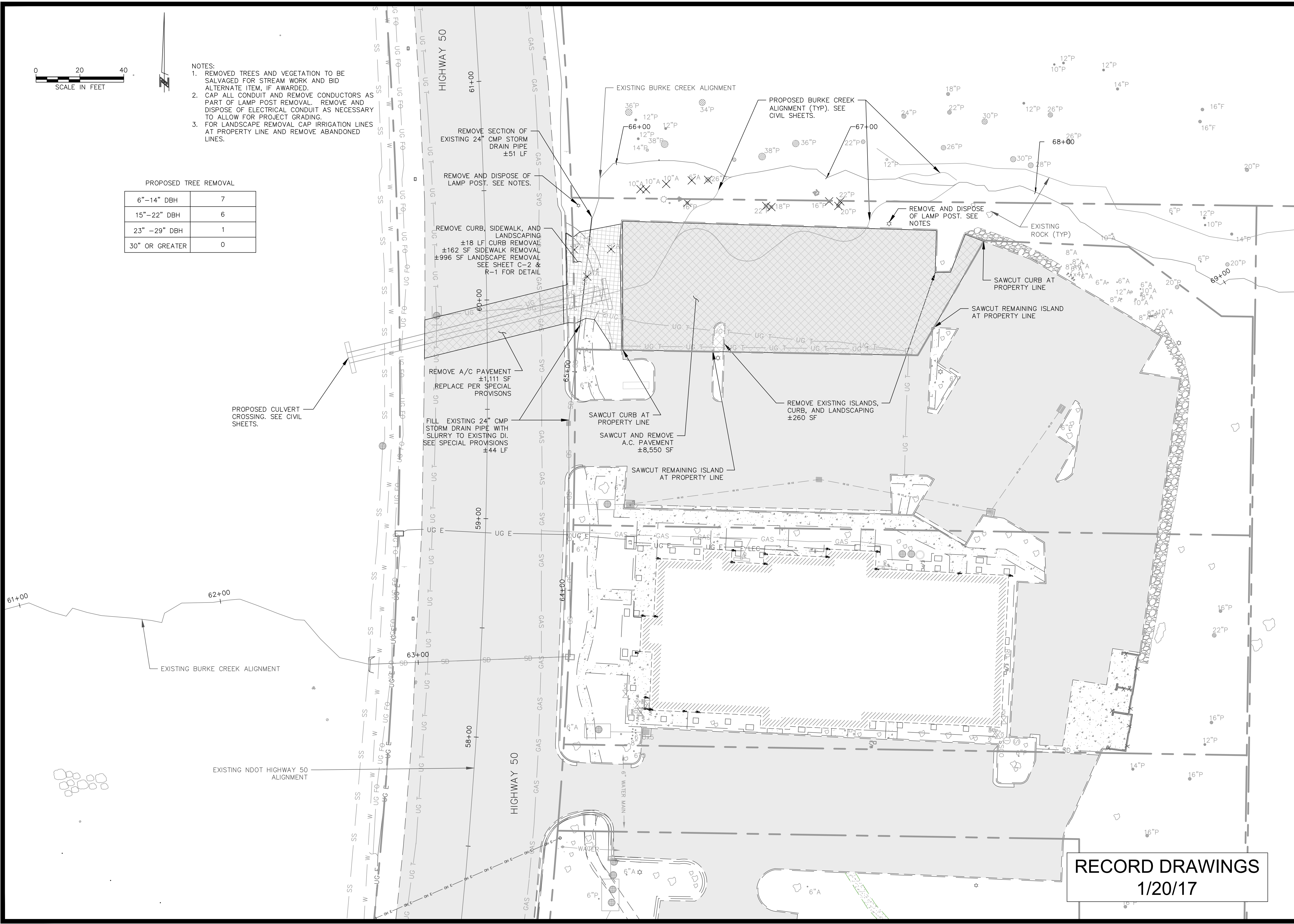
RECORD DRAWINGS
1/20/17



- NOTES:
1. REMOVED TREES AND VEGETATION TO BE SALVAGED FOR STREAM WORK AND BID ALTERNATE ITEM, IF AWARDED.
 2. CAP ALL CONDUIT AND REMOVE CONDUCTORS AS PART OF LAMP POST REMOVAL. REMOVE AND DISPOSE OF ELECTRICAL CONDUIT AS NECESSARY TO ALLOW FOR PROJECT GRADING.
 3. FOR LANDSCAPE REMOVAL CAP IRRIGATION LINES AT PROPERTY LINE AND REMOVE ABANDONED LINES.

PROPOSED TREE REMOVAL

6"-14" DBH	7
15"-22" DBH	6
23" -29" DBH	1
30" OR GREATER	0

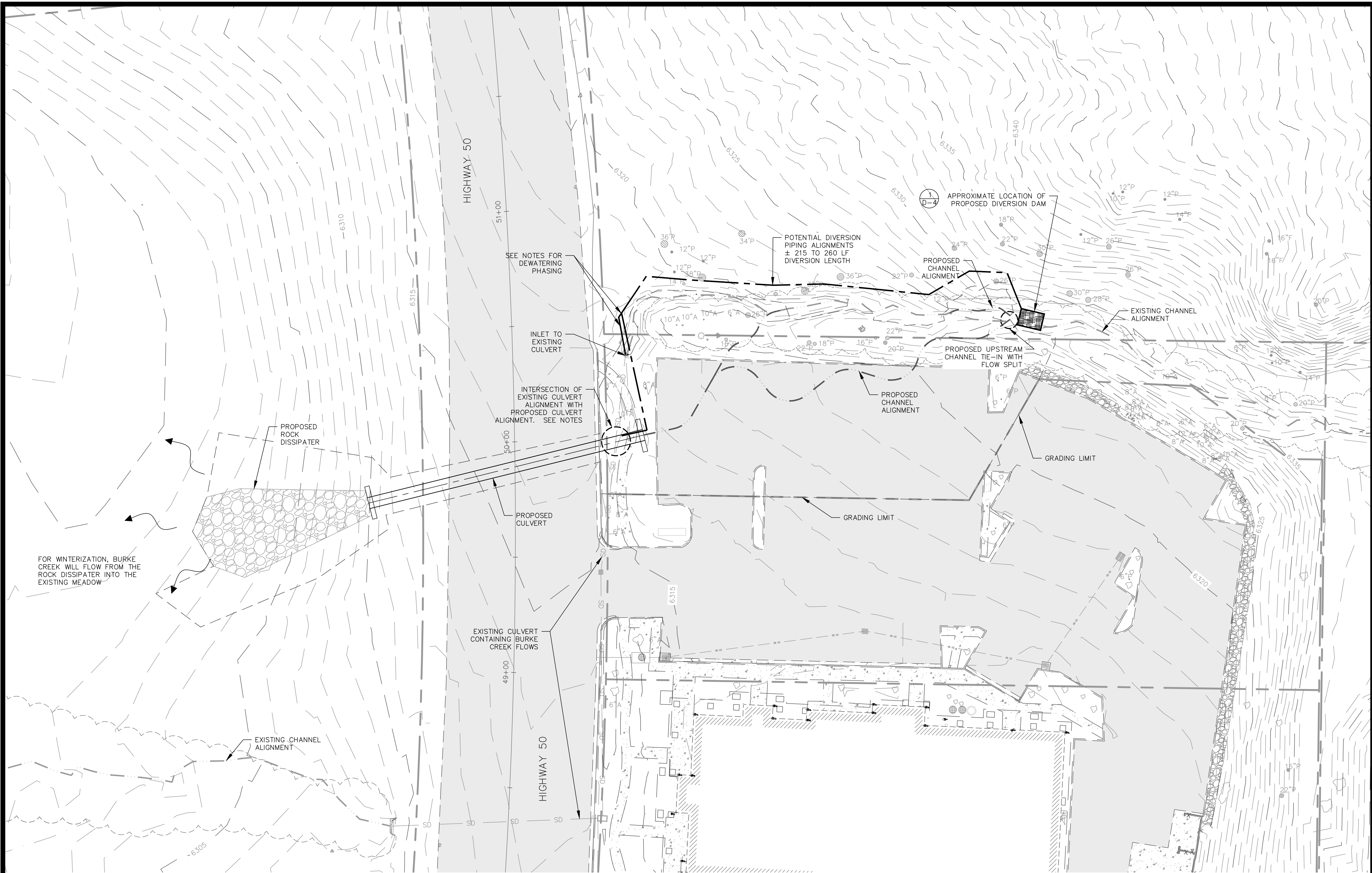


**RECORD DRAWINGS
1/20/17**



DEWATERING & DIVERSION PLAN
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	DS/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	1" = 20'
PROJECT	BCC

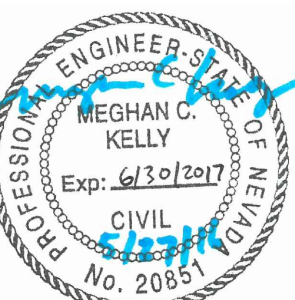


- NOTES:
1. DEWATERING AND DIVERSION MAY ALSO OCCUR AT UPSTREAM IMPROVEMENTS NOT SHOWN ON THIS SHEET. SEE PRELIMINARY DEWATERING AND DIVERSION PLAN, SPECIAL PROVISIONS, AND SWPPP FOR ALL DEWATERING AND DIVERSION REQUIREMENTS
 2. CONTRACTOR TO SUBMIT PLAN AND PHASING FOR DIVERSION BEFORE, DURING, AND AFTER PROPOSED CULVERT CONSTRUCTION BEFORE ANY DEWATERING OR DIVERSION OCCURS.
 3. DEWATERING AND DIVERSION PLAN SHALL PROTECT EXISTING VEGETATION ON SIERRA COLINA PROPERTY

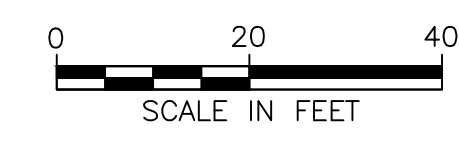
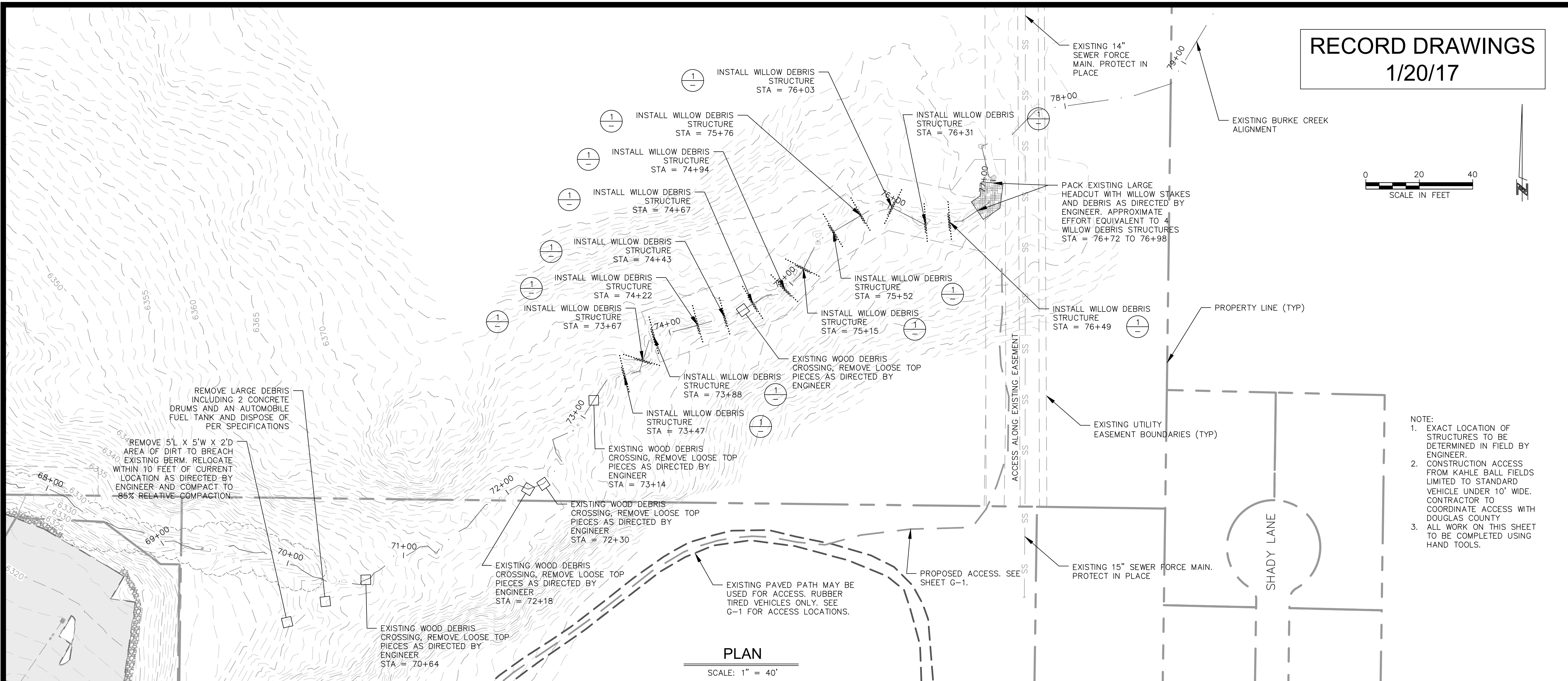


RECORD DRAWINGS
1/20/17

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1/20/17



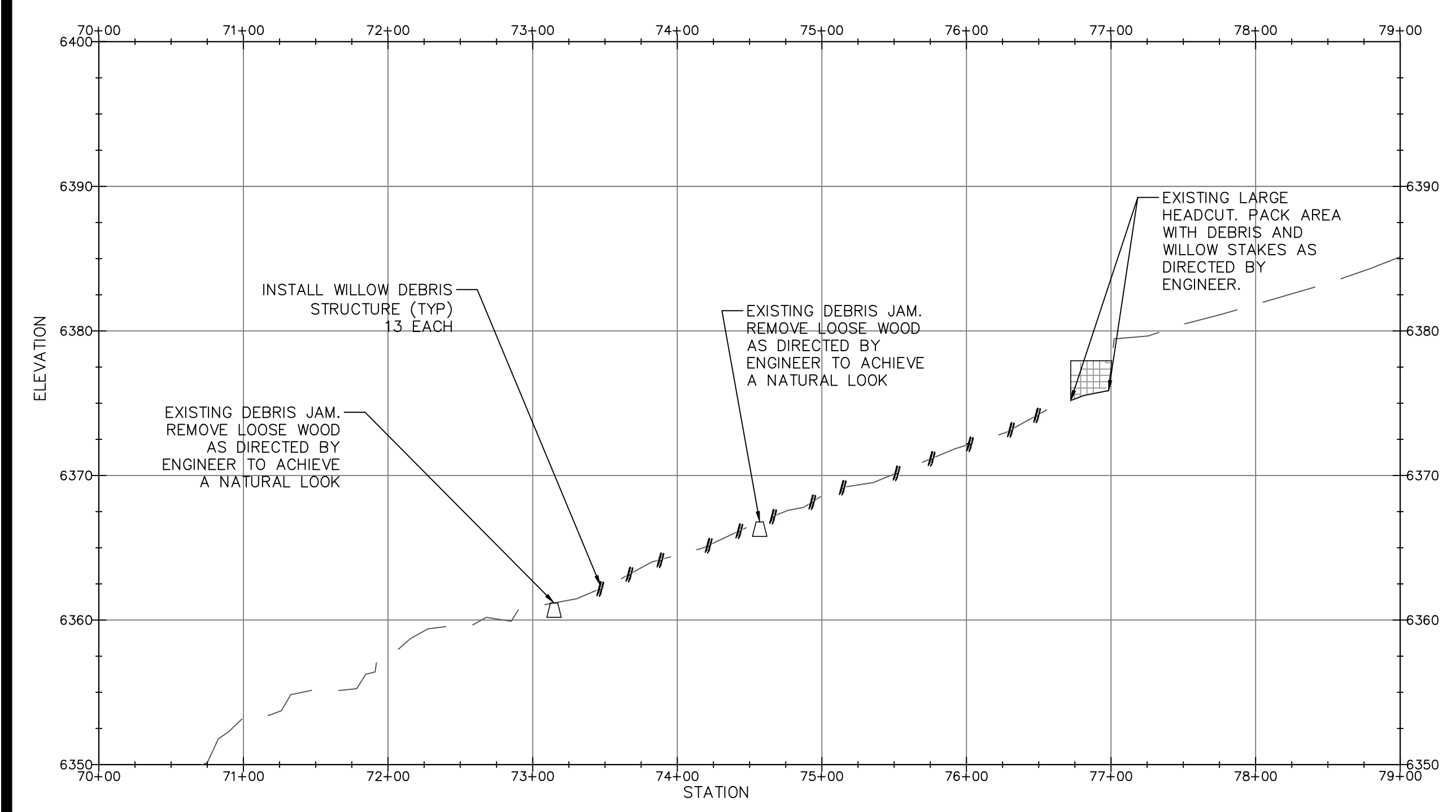
**UPSTREAM IMPROVEMENTS
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1**



- NOTE:
1. EXACT LOCATION OF STRUCTURES TO BE DETERMINED IN FIELD BY ENGINEER.
 2. CONSTRUCTION ACCESS FROM KAHLE BALL FIELDS LIMITED TO STANDARD VEHICLE UNDER 10' WIDE. CONTRACTOR TO COORDINATE ACCESS WITH DOUGLAS COUNTY
 3. ALL WORK ON THIS SHEET TO BE COMPLETED USING HAND TOOLS.

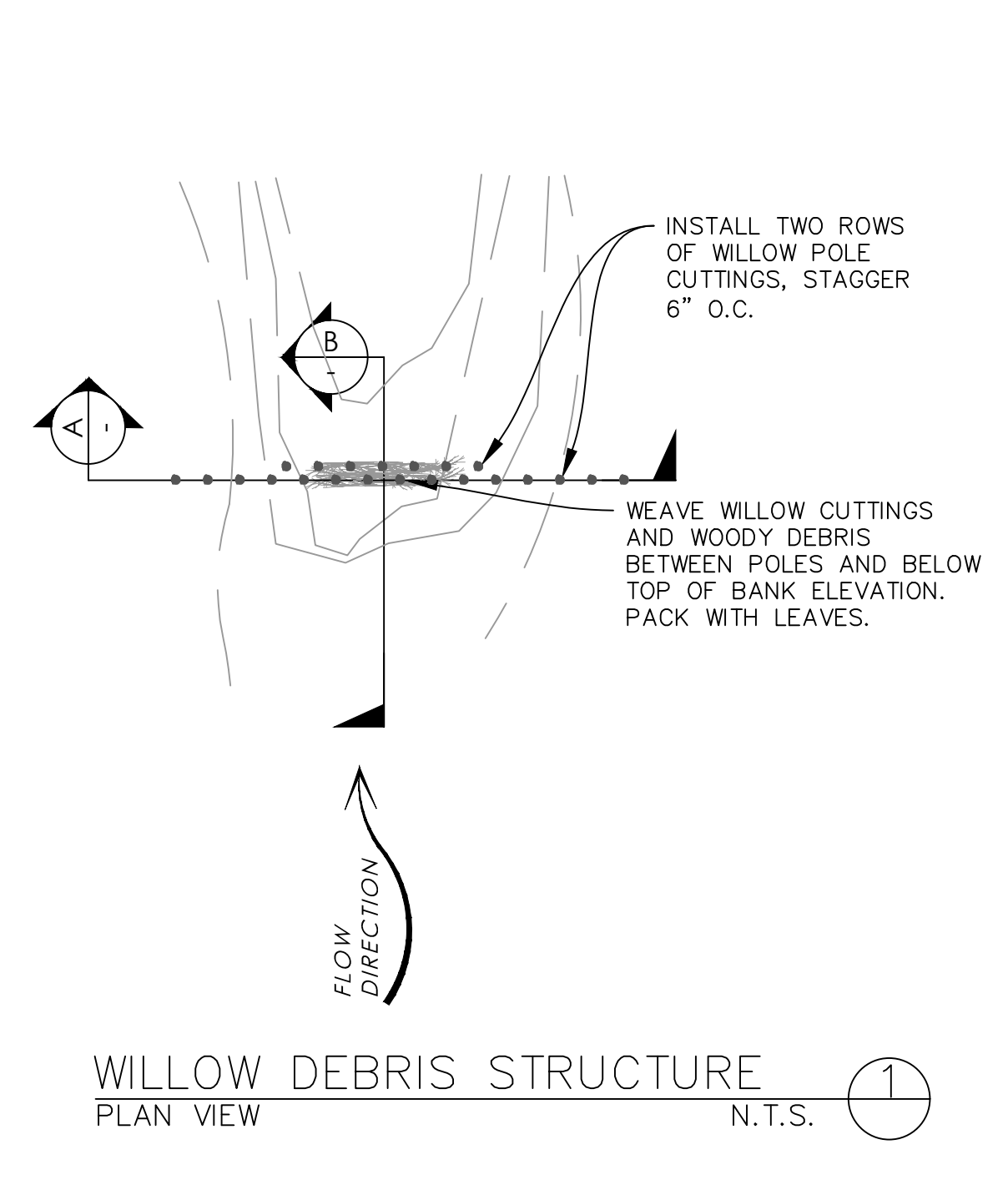
PLAN

SCALE: 1" = 40'

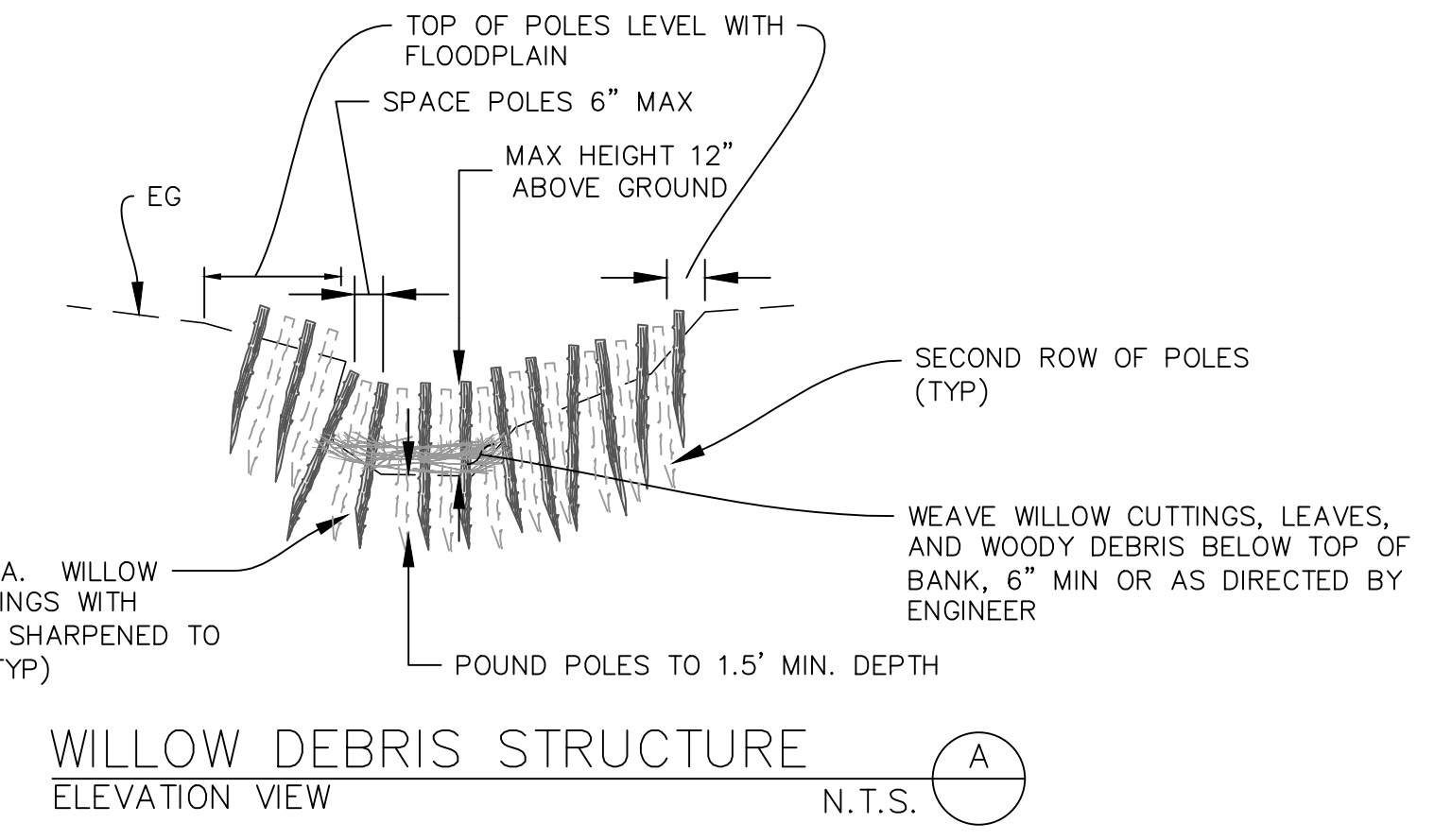


PROFILE - BURKE CREEK

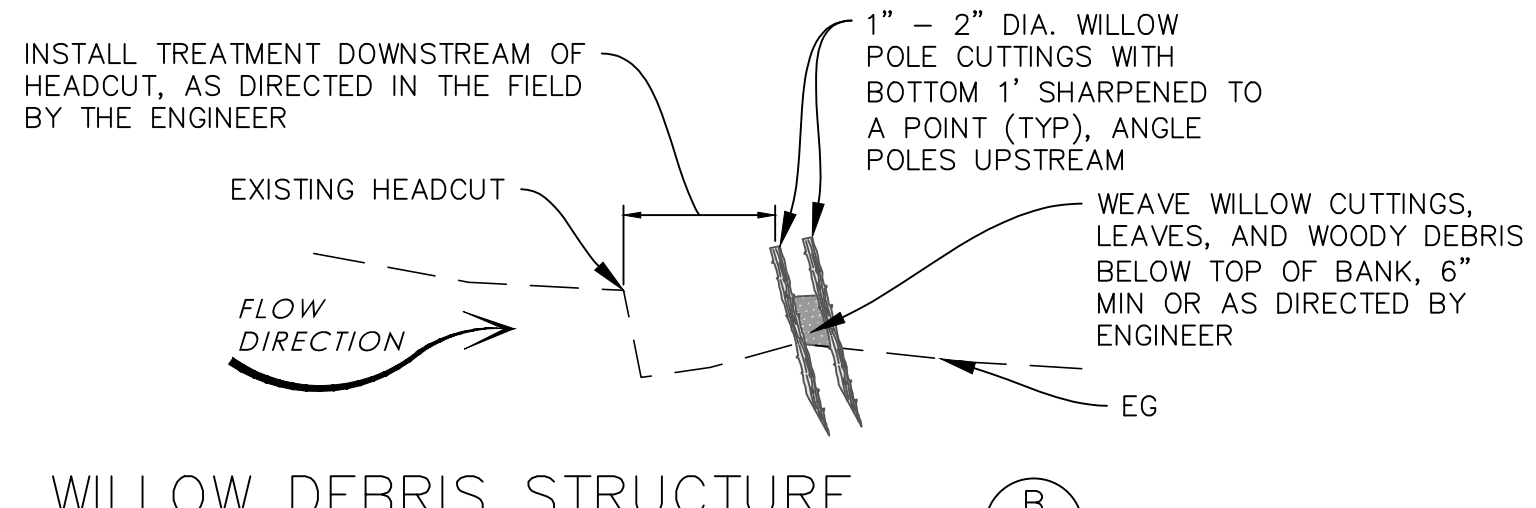
SCALE: HORIZ: 1" = 75', H:V = 1:10



WILLOW DEBRIS STRUCTURE
PLAN VIEW N.T.S. (1)



WILLOW DEBRIS STRUCTURE
ELEVATION VIEW N.T.S. (A)



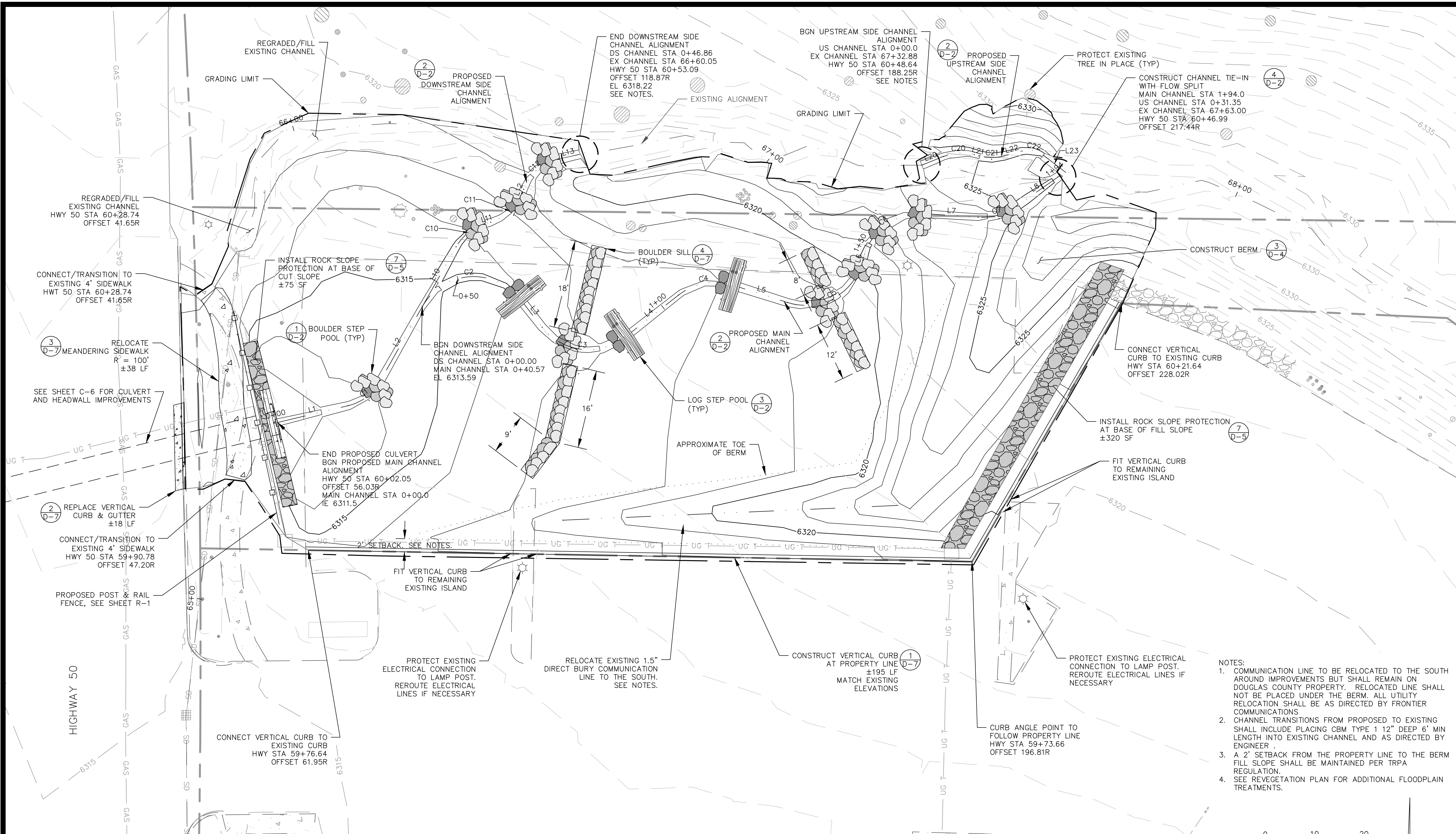
WILLOW DEBRIS STRUCTURE
PROFILE VIEW N.T.S. (B)

DESIGNED/DRAWN	MCK
CHECKED	MBG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

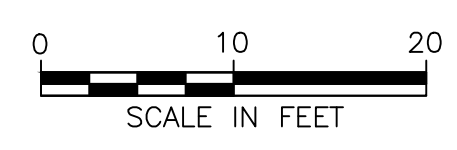
SHEET



PROPOSED CREEK REALIGNMENT PLAN
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1



- NOTES:
1. COMMUNICATION LINE TO BE RELOCATED TO THE SOUTH AROUND IMPROVEMENTS BUT SHALL REMAIN ON DOUGLAS COUNTY PROPERTY. RELOCATED LINE SHALL NOT BE PLACED UNDER THE BERM. ALL UTILITY RELOCATION SHALL BE AS DIRECTED BY FRONTIER COMMUNICATIONS.
 2. CHANNEL TRANSITIONS FROM PROPOSED TO EXISTING SHALL INCLUDE PLACING CBM TYPE 1 12" DEEP 6' MIN LENGTH INTO EXISTING CHANNEL AND AS DIRECTED BY ENGINEER.
 3. A 2' SETBACK FROM THE PROPERTY LINE TO THE BERM FILL SLOPE SHALL BE MAINTAINED PER TRPA REGULATION.
 4. SEE REVEGETATION PLAN FOR ADDITIONAL FLOODPLAIN TREATMENTS.



EARTHWORK TABLE	
CUT	707 CY
FILL	292 CY
NET	415 CY CUT

MAIN CHANNEL ALIGNMENT					
Number	Align Start Sta	Radius	Length	Line/Chord Direction	
L1	0+00.00		14.75	N76° 35' 11.34"E	
C1	0+14.75	10.00	8.22	N53° 02' 07.48"E	
L2	0+22.97		17.60	N29° 29' 03.61"E	
C2	0+40.57	12.00	23.53	N85° 39' 33.41"E	
L3	0+64.10		7.25	S38° 09' 56.80"E	
C3	0+71.35	12.00	18.86	S83° 11' 55.35"E	
L4	0+90.22		13.80	N51° 46' 06.09"E	
C4	1+04.01	12.00	11.69	N79° 40' 22.28"E	

MAIN CHANNEL ALIGNMENT					
Number	Align Start Sta	Radius	Length	Line/Chord Direction	
L5	1+15.70		11.67	S72° 25' 21.52"E	
C5	1+27.38	12.00	19.46	N61° 06' 38.14"E	
L6	1+46.84		0.72	N14° 38' 37.80"E	
C6	1+47.56	12.00	16.57	N54° 11' 42.75"E	
L7	1+64.13		10.91	S86° 15' 12.30"E	
C7	1+75.04	12.00	8.14	N74° 18' 36.22"E	
L8	1+83.19		10.82	N54° 52' 24.74"E	

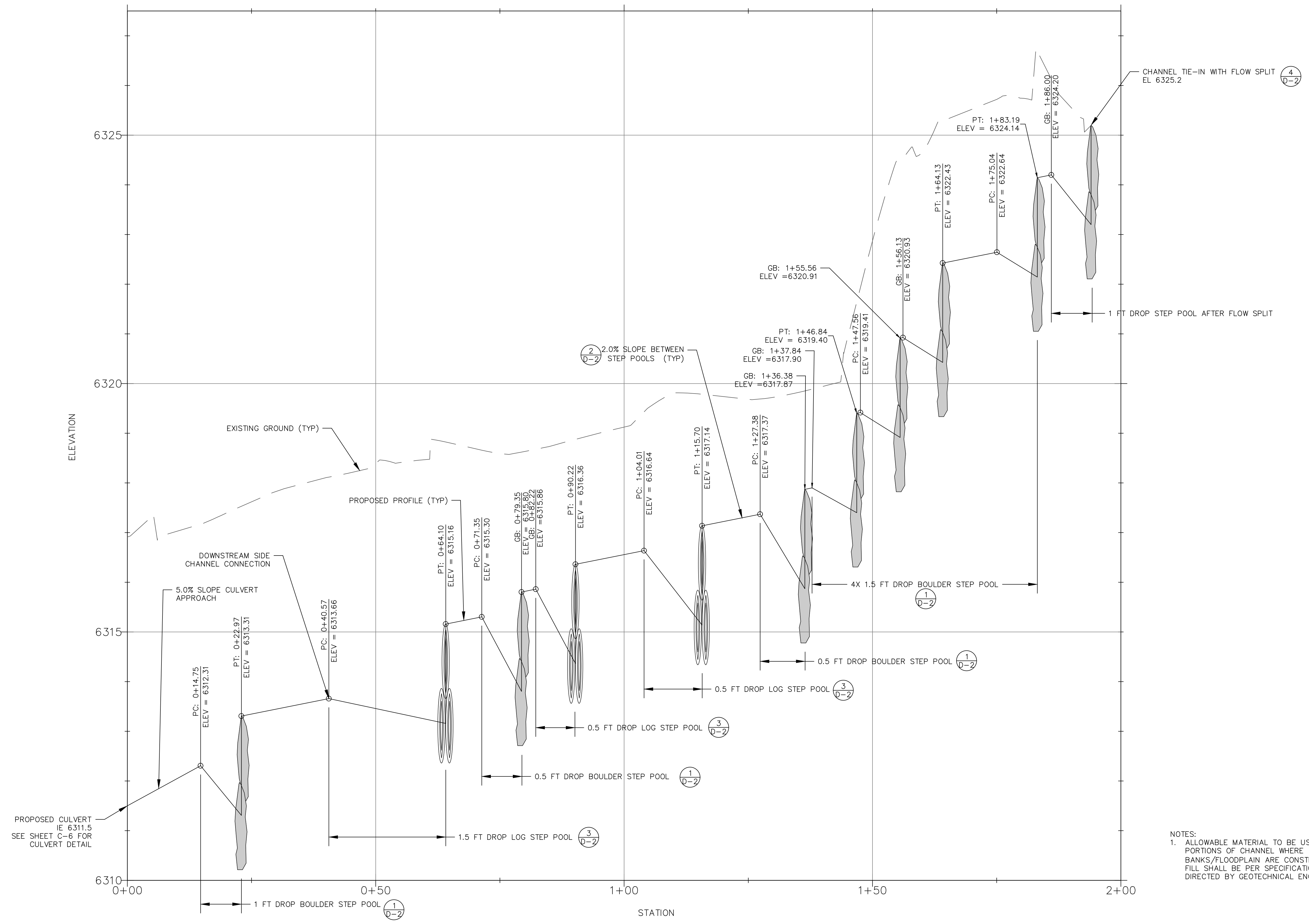
DOWNSTREAM SIDE CHANNEL ALIGNMENT					
Number	Align Start Sta	Radius	Length	Line/Chord Direction	
L10	0+00.00		13.95	N29° 32' 48.14"E	
C10	0+13.95	10.00	7.60	N51° 18' 26.27"E	
L11	0+21.54		1.29	N73° 04' 04.39"E	
C11	0+22.83	10.00	9.06	N47° 06' 37.89"E	
L12	0+31.89		0.79	N21° 09' 11.38"E	
C12	0+32.68	10.00	9.81	N49° 14' 43.83"E	
L13	0+42.49		4.38	N77° 20' 16.29"E	

UPSTREAM SIDE CHANNEL ALIGNMENT					
Number	Align Start Sta	Radius	Length	Line/Chord Direction	
L20	0+00.00		4.69	N68° 11' 40.69"E	
C20	0+04.69	10.00	6.41	N86° 34' 04.65"E	
L21	0+11.11		0.95	S75° 03' 31.39"E	
C21	0+12.06	10.00	5.25	N89° 54' 47.21"E	
L22	0+17.31		3.73	N74° 53' 05.82"E	
C22	0+21.04	5.00	4.57	S78° 54' 13.31"E	
L23	0+25.61		5.74	S52° 41' 32.45"E	

RECORD DRAWINGS
1/20/17

DESIGNED/DRAWN DS/MBG
CHECKED MCK
DATE 05/13/2016
SCALE AS SHOWN
PROJECT BCC
SHEET C-2
9 OF 25

MAIN CHANNEL CREEK PROFILE
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

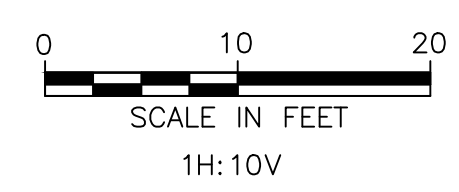


PROPOSED CULVERT
IE 6311.5
SEE SHEET C-6 FOR
CULVERT DETAIL

- NOTES:
1. ALLOWABLE MATERIAL TO BE USED ON PORTIONS OF CHANNEL WHERE BANKS/FLOODPLAIN ARE CONSTRUCTED WITH FILL SHALL BE PER SPECIFICATION AND AS DIRECTED BY GEOTECHNICAL ENGINEER

PROPOSED BURKE CREEK PROFILE
MAIN CHANNEL

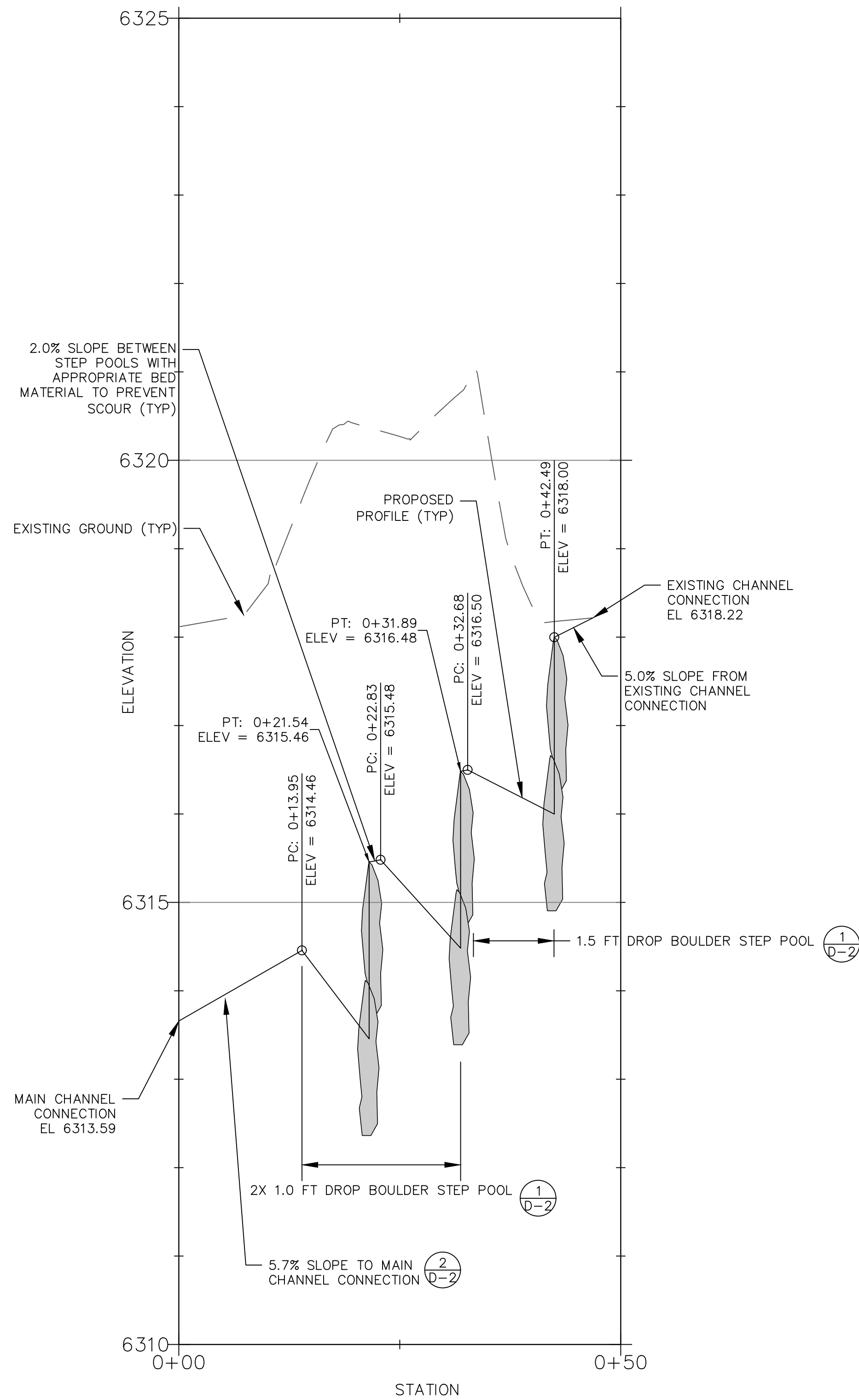
SCALE: HORIZ: 1" = 10'; H: V = 1: 10



RECORD DRAWINGS
1/20/17

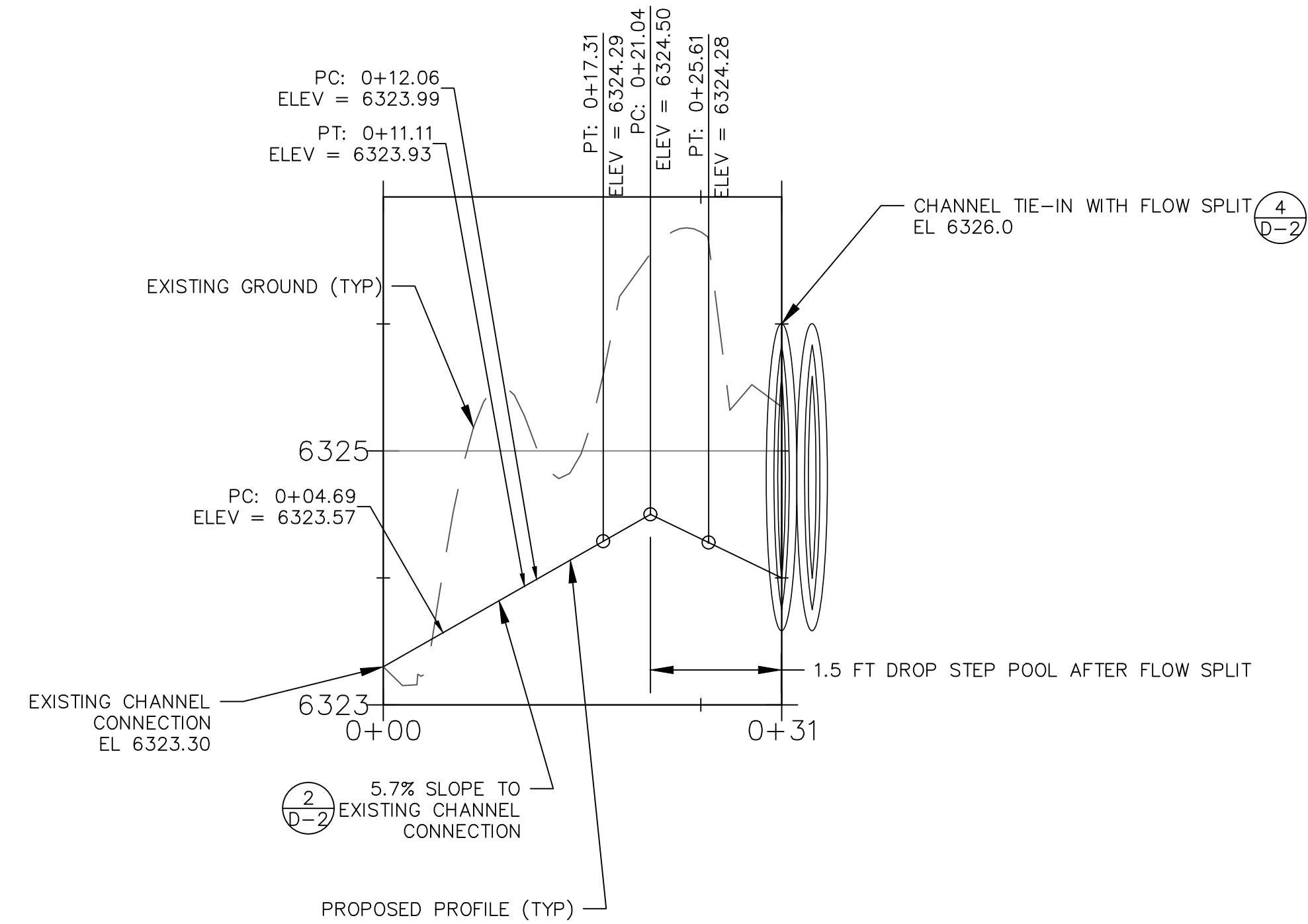
DESIGNED/DRAWN	DS/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
C-3
10 of 25



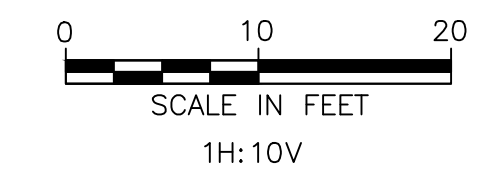
**PROPOSED BURKE CREEK PROFILE
DOWNSTREAM SIDE CHANNEL**

SCALE: HORIZ:1" = 10'; H:V = 1:10



**PROPOSED BURKE CREEK PROFILE
UPSTREAM SIDE CHANNEL**

SCALE: HORIZ:1" = 10'; H:V = 1:10



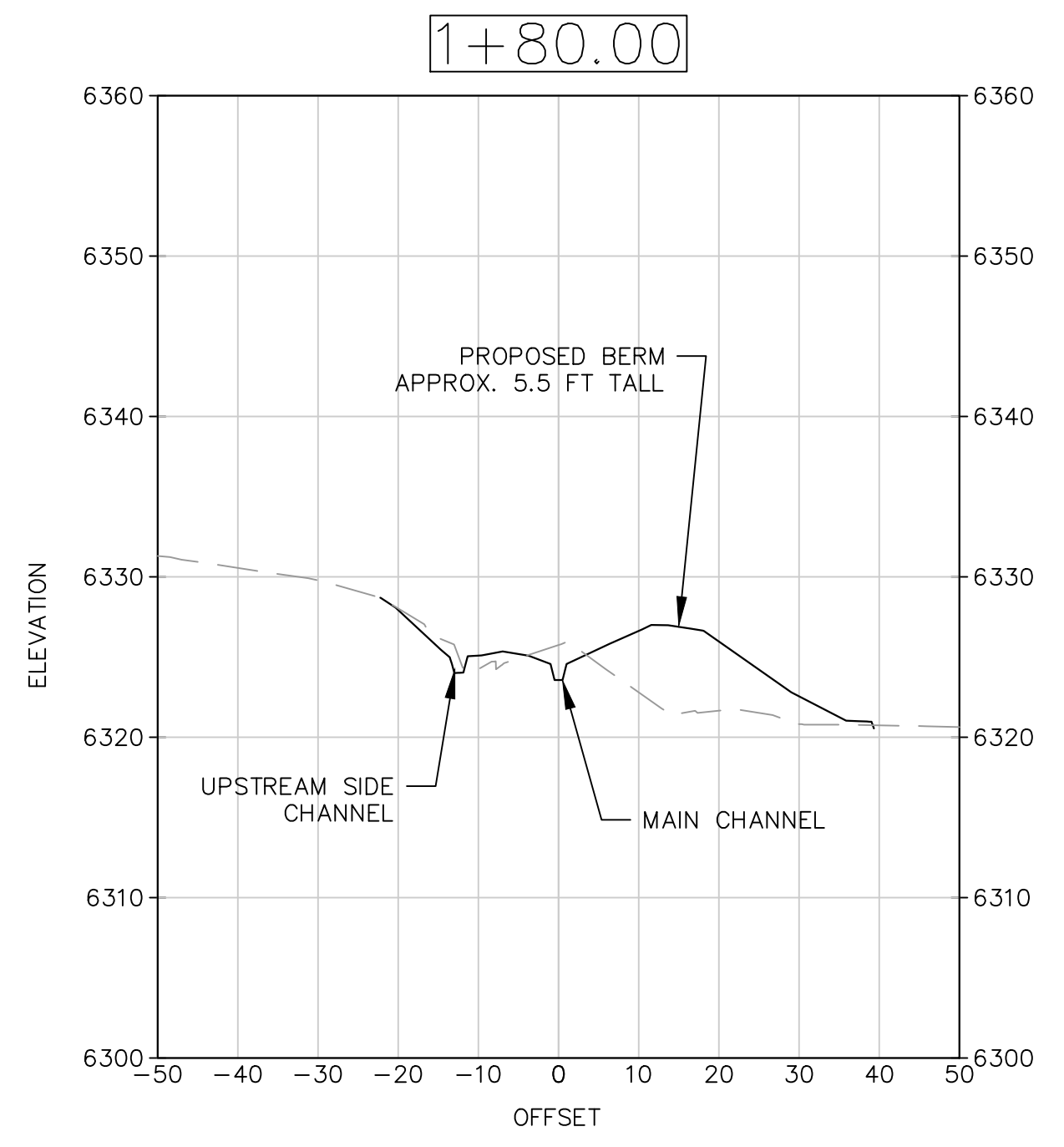
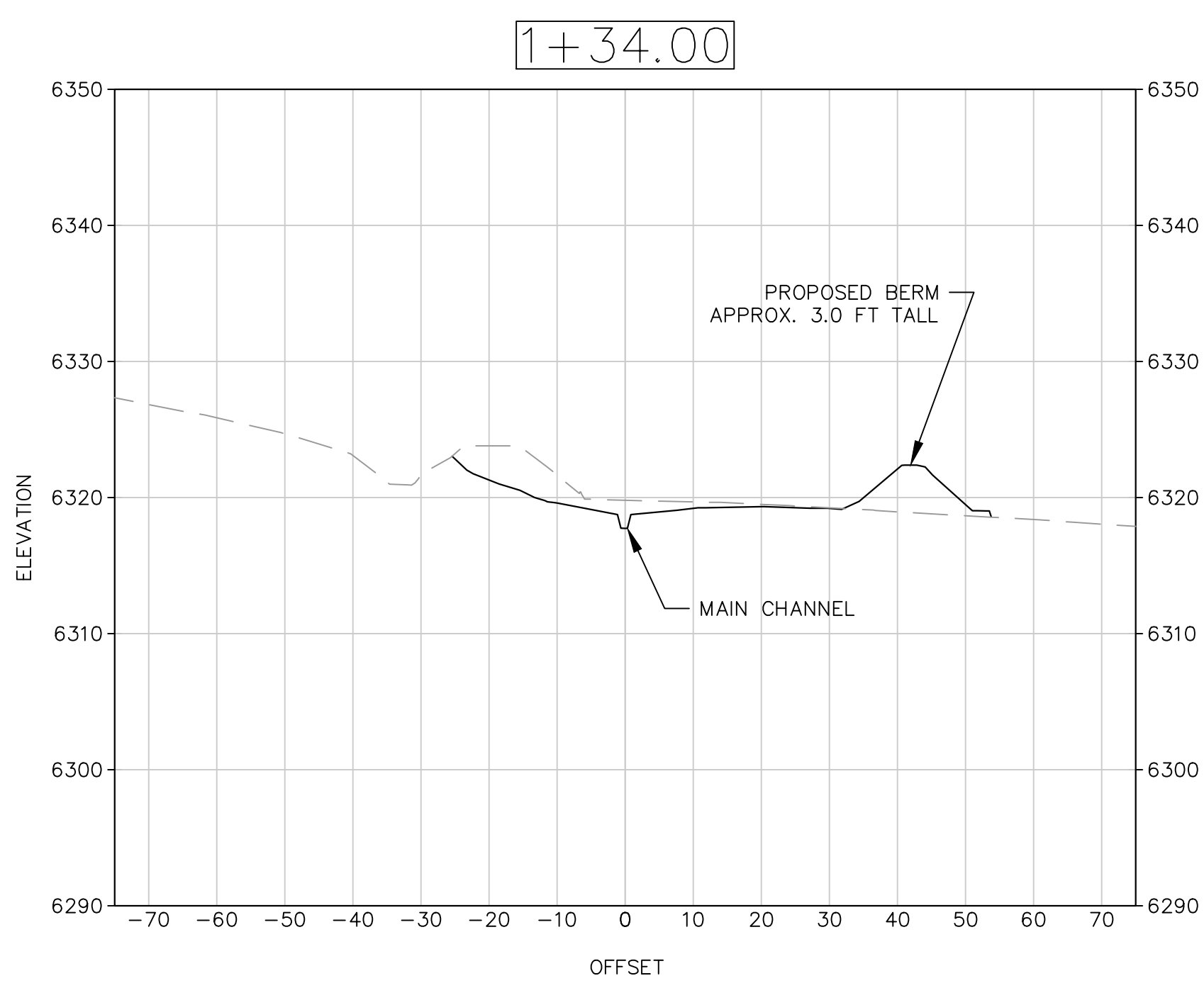
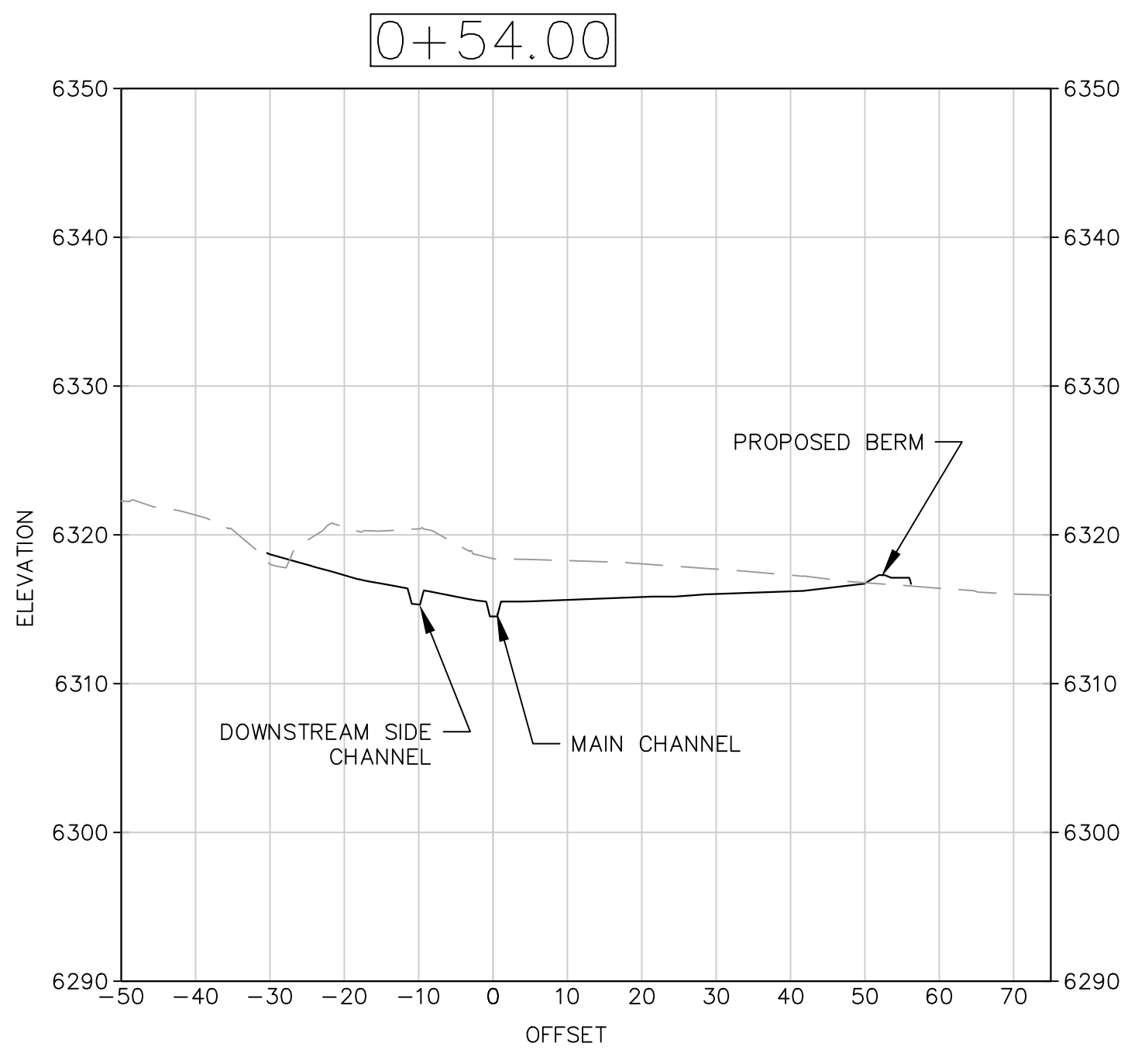
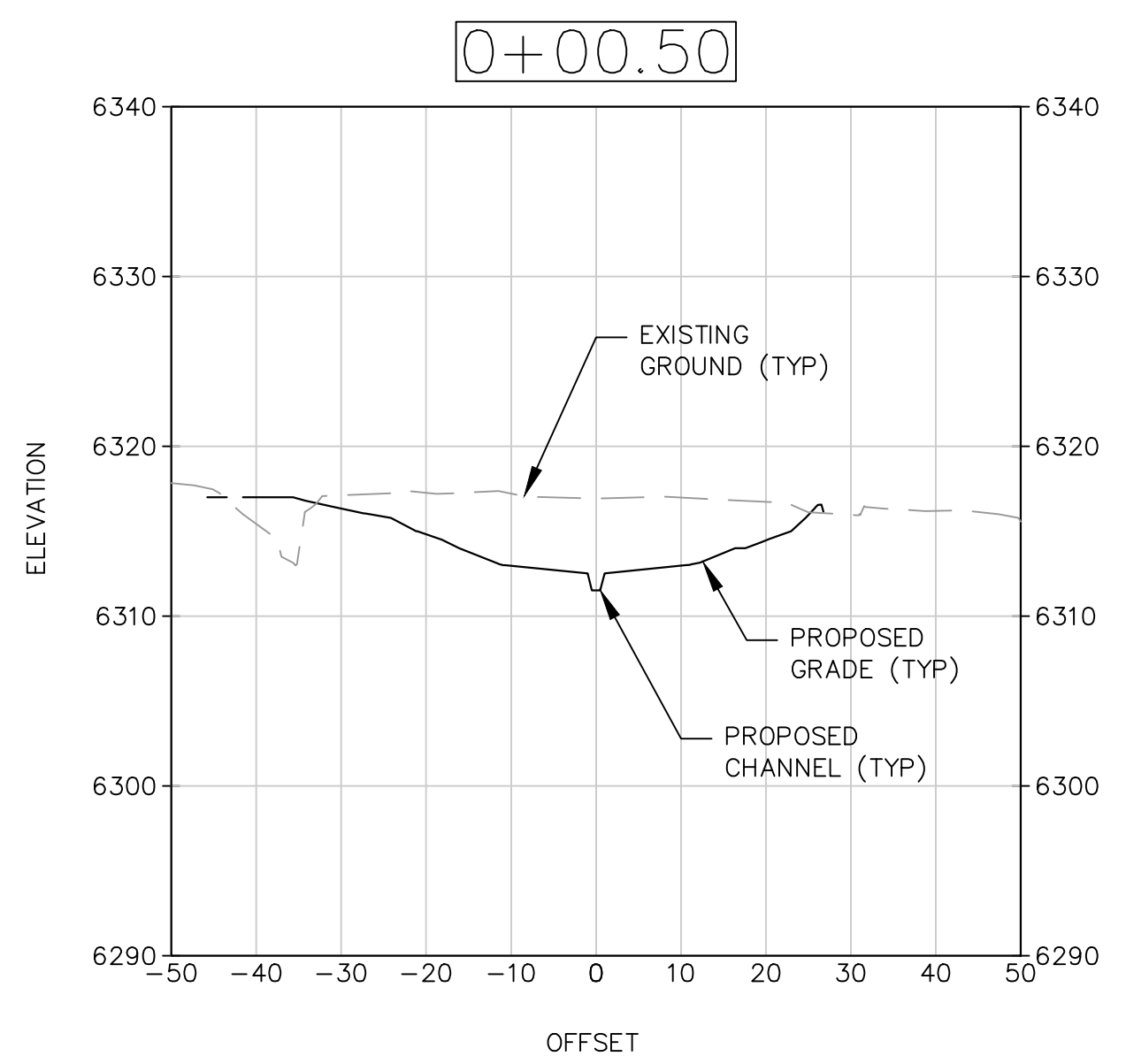
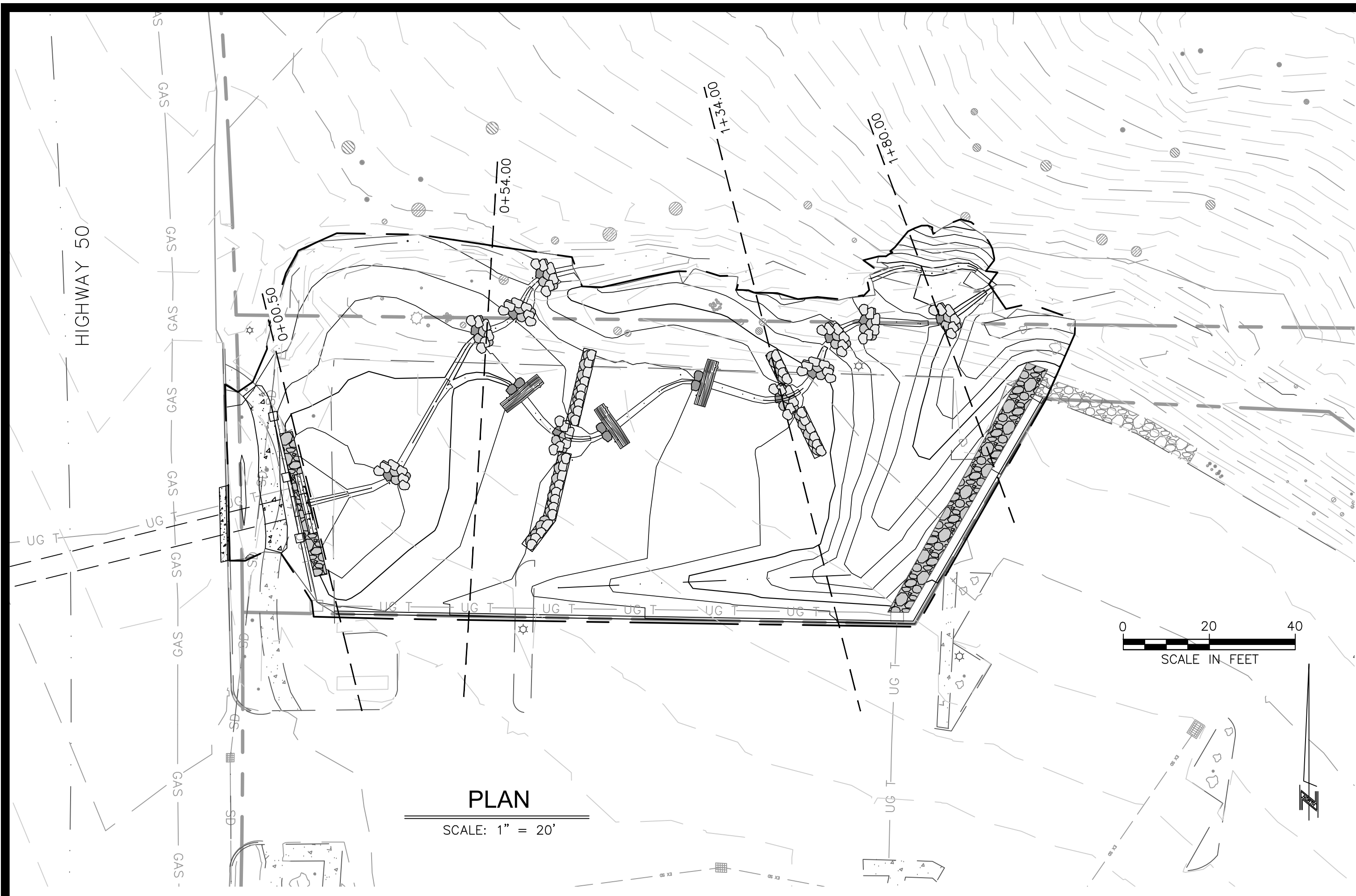
RECORD DRAWINGS
1/20/17



PROPOSED FLOODPLAIN CROSS SECTIONS
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN
MBG/MBG
CHECKED
MCK
DATE
05/13/2016
SCALE
AS SHOWN
PROJECT
BCC

SHEET
C-5
12 OF 25



**FLOODPLAIN CROSS SECTIONS
UPSTREAM OF HIGHWAY 50**
SCALE: HORIZ: 1" = 20'; H:V = 1:2

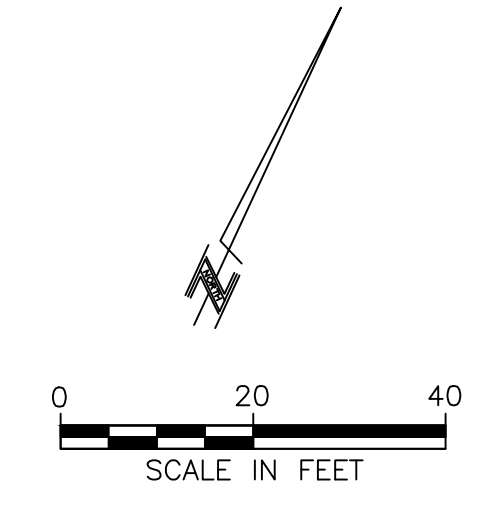
RECORD DRAWINGS
1/20/17



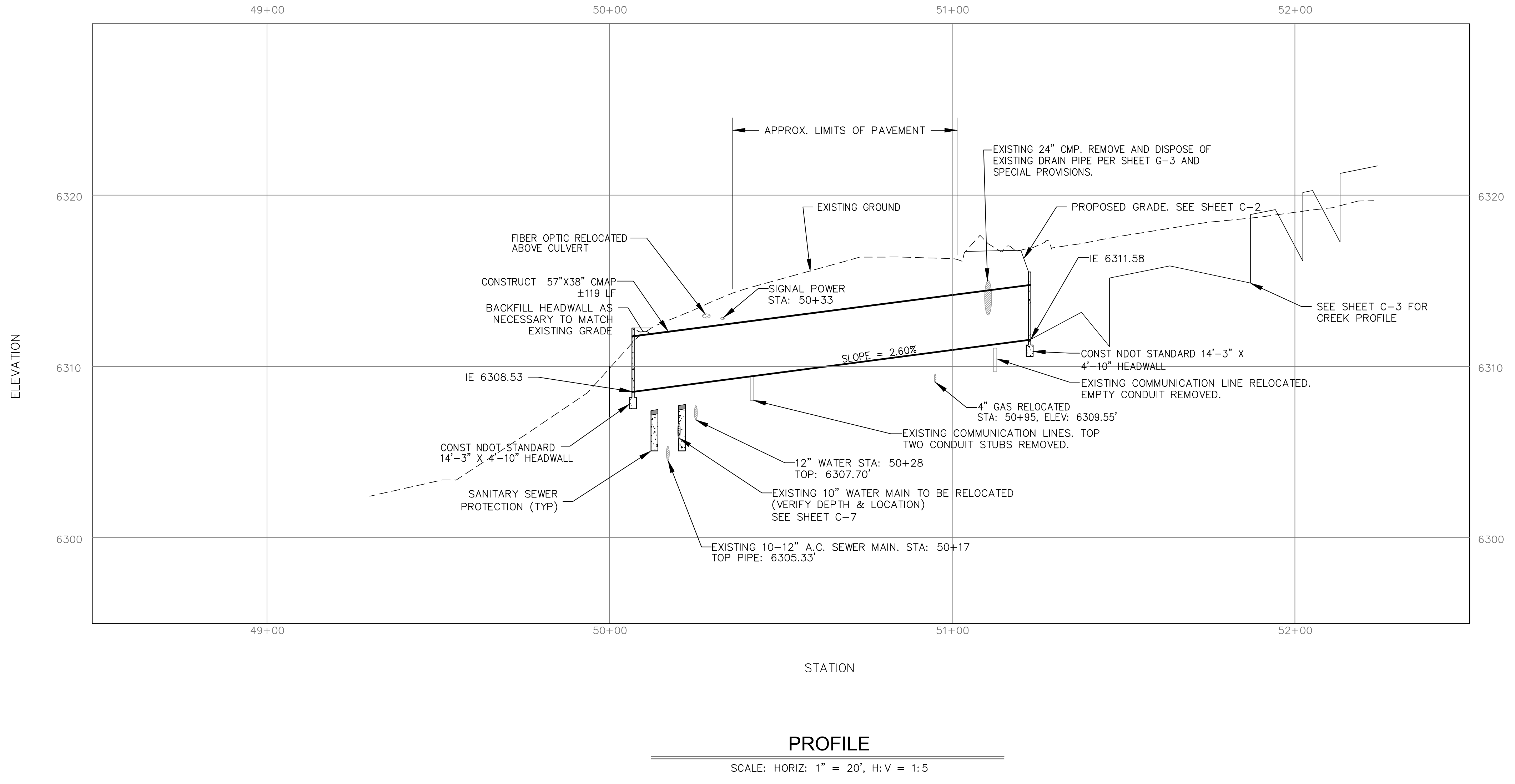
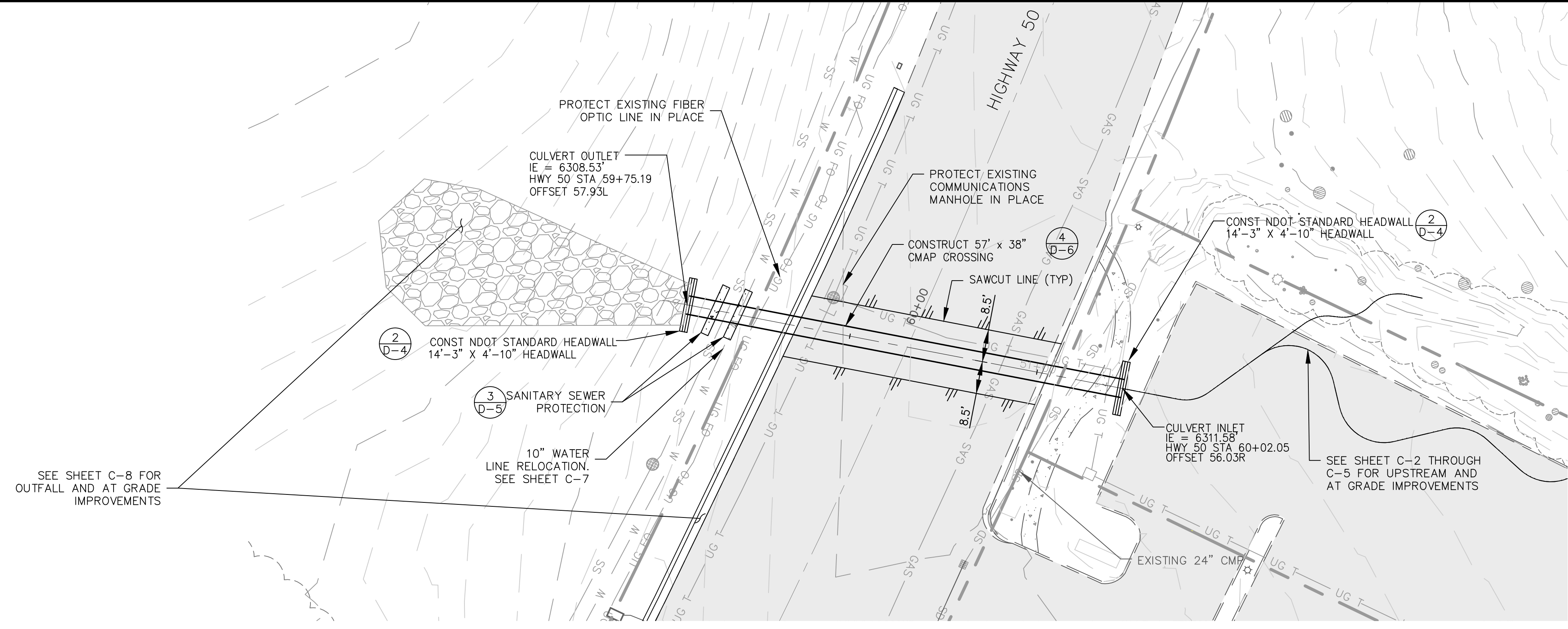
CULVERT CROSSING PLAN AND PROFILE
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

REVISIONS		
NO	DATE	DESCRIPTION
3	9/15/16	CHANGE ORDER 1

DESIGNED/DRAWN AL
CHECKED MG/MK
DATE 09/15/2016
SCALE 1"=20' H, H:V=1:5
PROJECT BCC



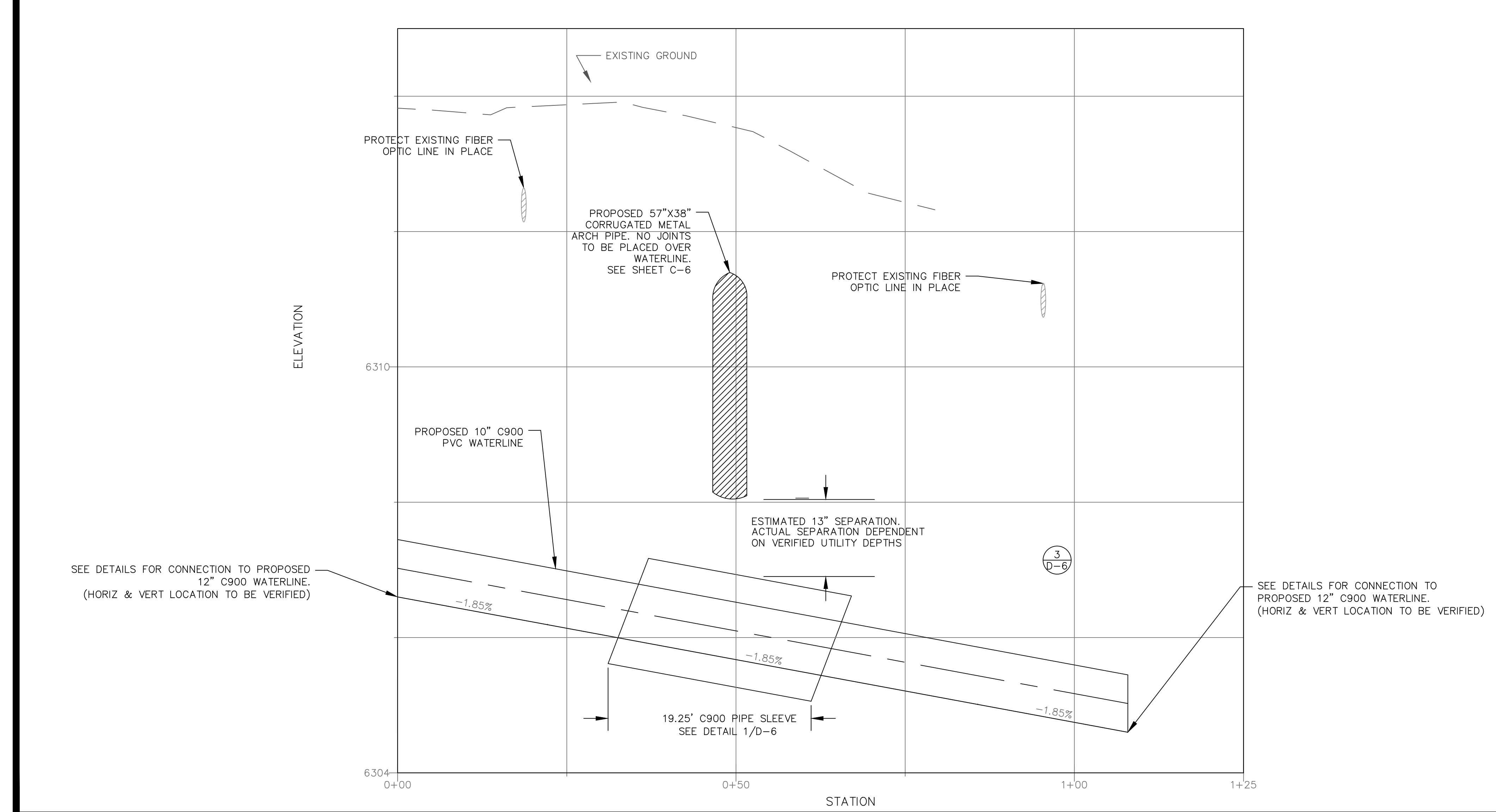
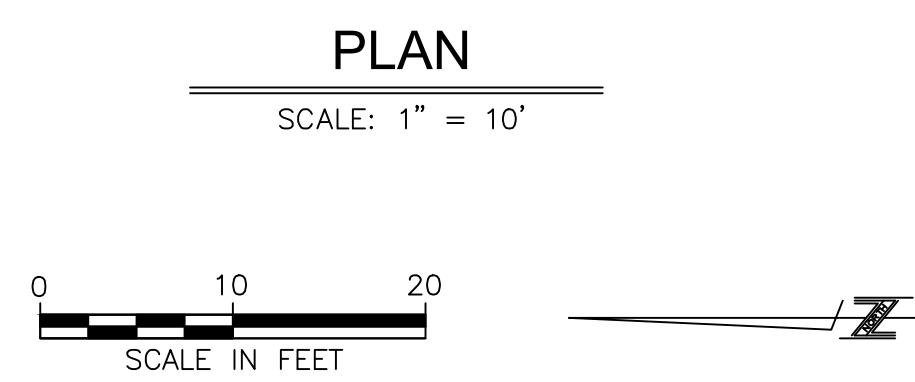
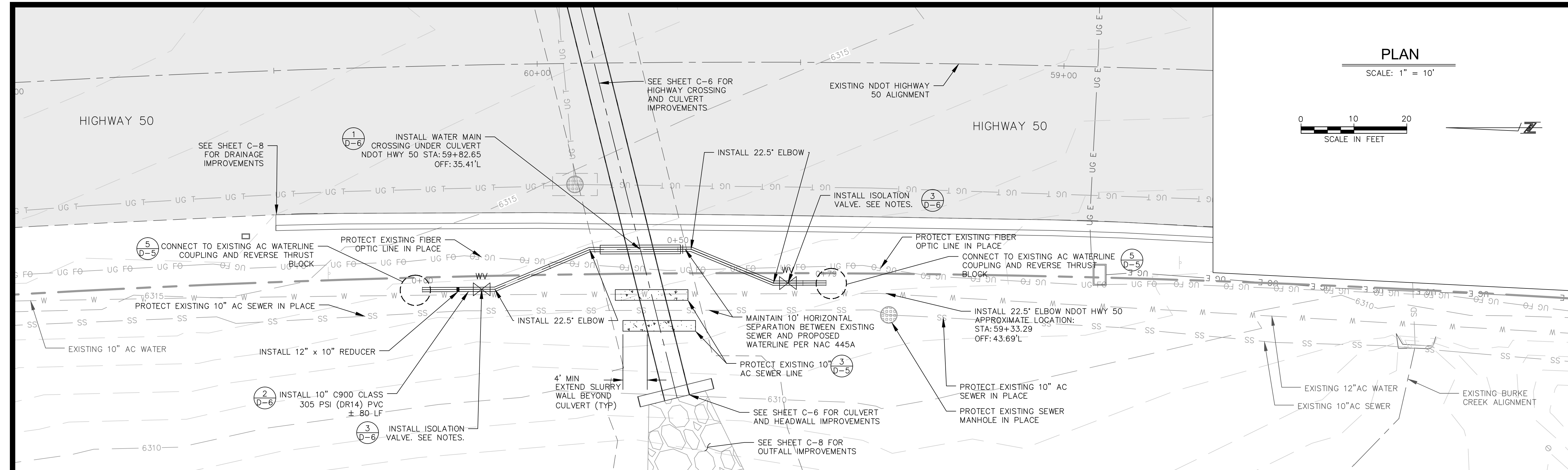
- NOTES:
- SEE C-2, C-7, DEMOLITION, AND LANDSCAPING SHEETS FOR ADDITIONAL IMPROVEMENTS ABOVE CMAP AT STREET LEVEL.
 - ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.



RECORD DRAWINGS
1/20/17

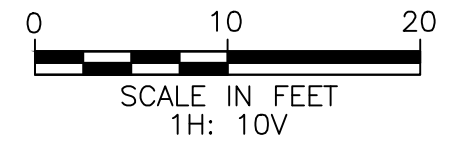


DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK/ATS
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC



PROPOSED 10" WATER MAIN RELOCATION PROFILE

SCALE: HORIZ 1" = 10'; H:V = 1:10



- NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS OR DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 2. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE. EXACT LOCATION OF WATERLINE, INCLUDING CONNECTIONS, FITTINGS, AND VALVES, IS DEPENDENT ON EXISTING UTILITY LOCATION VERIFICATION. FIELD FIT OF WATERLINE MAY BE NECESSARY. INSTALLATION SHALL BE WITHIN ALL NAC AND KGID STANDARDS.
 3. IF FIELD CONDITIONS REVEAL A HIGH POINT WILL BE CREATED WITHIN THE RELOCATED WATERLINE, AN AIR VACUUM VALVE WILL NEED TO BE INSTALLED. THIS KIND OF DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 4. CONTRACTOR TO COORDINATE WITH KGID WATER UTILITY FOR IRRIGATION CONNECTION.
 5. APPROVAL FOR WATERLINE RELOCATION AND SUBMITTALS MUST BE OBTAINED FROM KGID BEFORE INSTALLATION.
 6. SEE SHEET C-9 FOR LOCATION OF ISOLATION VALVE INSTALLATION ON EXISTING 10" AC WATERLINE. INSTALLATION TO BE PERFORMED BEFORE WATERLINE RELOCATION WORK AND COORDINATED WITH KGID.
 7. VALVES IN THE KGID WATER SYSTEM SHALL ONLY BE TURNED BY KGID OPERATORS. IN NO CASE SHALL THE CONTRACTOR TURN ANY VALVES WITHIN THE KGID SYSTEM.
 8. SEE DETAILS FOR ADDITIONAL NOTES ON COMMUNICATIONS WITH DCSID.

RECORD DRAWINGS
1/20/17

- NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 2. TRANSITION CHANNEL FROM 58" CULVERT TO 24" CHANNEL TOP WIDTH OVER 10 FEET.
 3. LIMITS OF CBM TO BE STAKED IN FIELD BY ENGINEER.
 4. SALVAGE EXISTING VEGETATION TO BE USED IN STREAM WORK.

SCALE IN FEET

EARTHWORK TABLE	
CUT	170 CY
FILL	0 CY
NET	170 CY CUT

SEE SHEET C-6 FOR HIGHWAY CROSSING IMPROVEMENTS

EXISTING NDOT HIGHWAY 50 ALIGNMENT

HIGHWAY 50

EXISTING 24" CMP

BGN CURB TBC STATION 60+50.58 OFFSET 31.79'L

2
D-7
CONSTRUCT ROLLED CURB AND GUTTER ±206 LF

SEE SHEET C-6 FOR CULVERT AND HEADWALL DIMENSIONS

7
D-5
INSTALL ROCK SLOPE PROTECTION (TYP) ±82 SF

CULVERT OUTLET. SEE NOTE 2. HWY 50 STA 59+75.19 OFFSET 57.93L EL 6308.18

PROP BURKE CREEK CENTERLINE 12.3% SLOPE

WILLOW STAKES (TYP) INSTALL ON GRID PATTERN, 5' O.C. MAX

4" EMBEDDED BOULDER (TYP). SEE SECTION F-F

FORM EXISTING ELECTRICAL VAULT INTO CURB OR RELOCATE AS NECESSARY

2
D-3
BGN CURB TRANSITION TO VERTICAL APPROX. STA 58+42.47 OFF 32.79' L

BGN VERTICAL CURB APPROX. STA 58+39.43 OFF 32.79' L RADIUS=15' ±6' LF

END VERTICAL CURB APPROX. STA 58+28.01 OFF 32.86' L RADIUS=15' ±3' LF

INSTALL SINGLE SEDIMENT TRAP TIED-IN TO EXISTING 24" CMP AND CONCRETE APRON

12" RIP RAP ±33 SF

2
D-3

CHANNEL BED MATERIAL. SEE SECTION F-F THIS SHEET. LIMITS OF CBM TO BE STAKED IN THE FIELD BY ENGINEER ±2,170 SF

EMBED LOG END INTO EG

WING LOG

PLACE 4' BALLAST BOULDERS ON TOP OF LOGS AS SHOWN

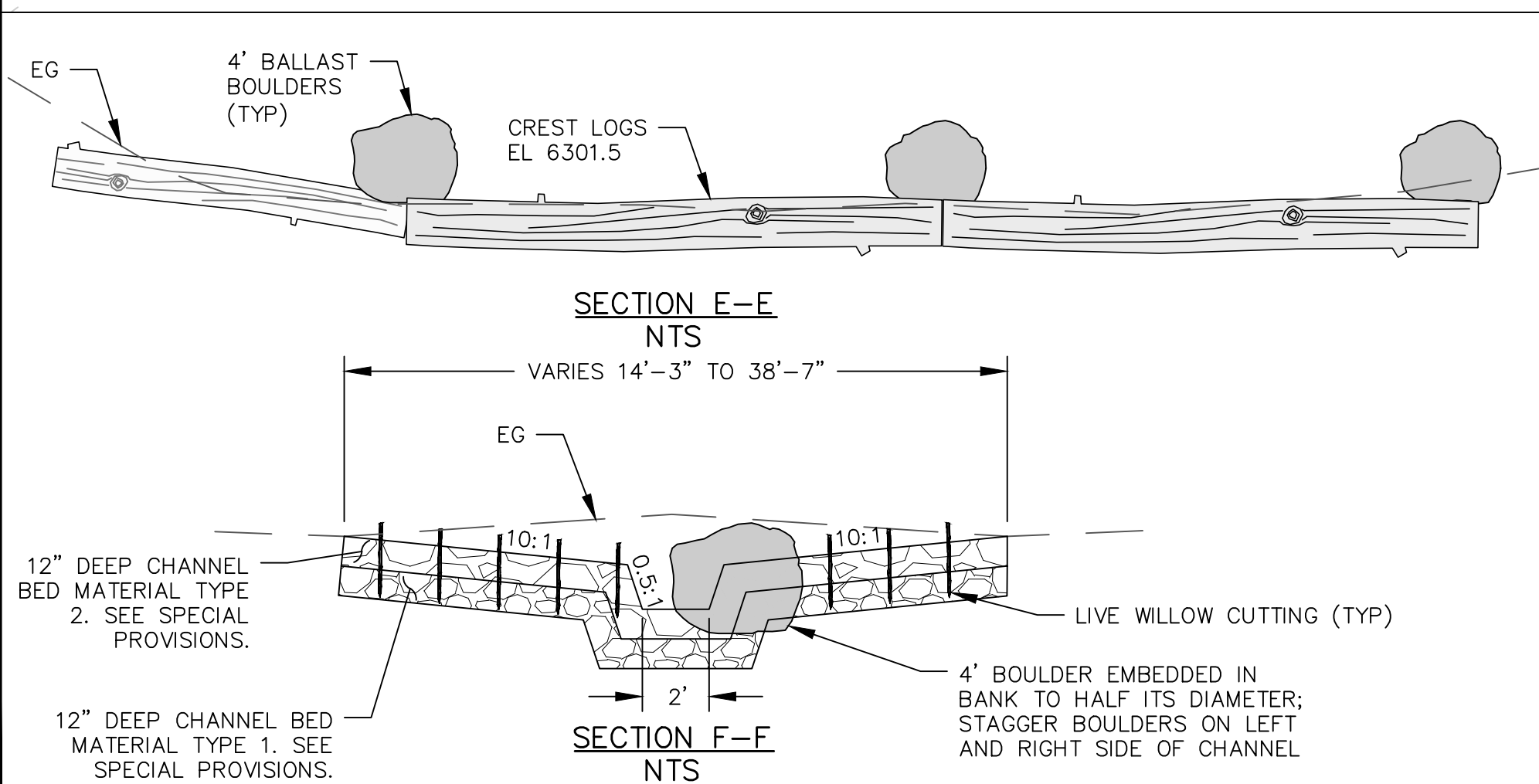
GRADE BREAK HWY 50 STA 59+63.73 OFFSET 106.25L EL 6302.0

EMBED LOG END INTO EG

EXISTING BURKE CREEK ALIGNMENT

EDGE OF DENSE VEGETATION (TYP)

MINIMIZE MEADOW DISTURBANCE TO EXTENT PRACTICABLE.



CULVERT OUTFALL
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

REVISIONS		
NO	DATE	DESCRIPTION
1		
2	8/01/16	WORK DIRECTIVE 1
3	9/15/16	CHANGE ORDER 1

DESIGNED/DRAWN
MBG/MBG
CHECKED
MCK
DATE
09/15/2016
SCALE
AS SHOWN
PROJECT
BCC

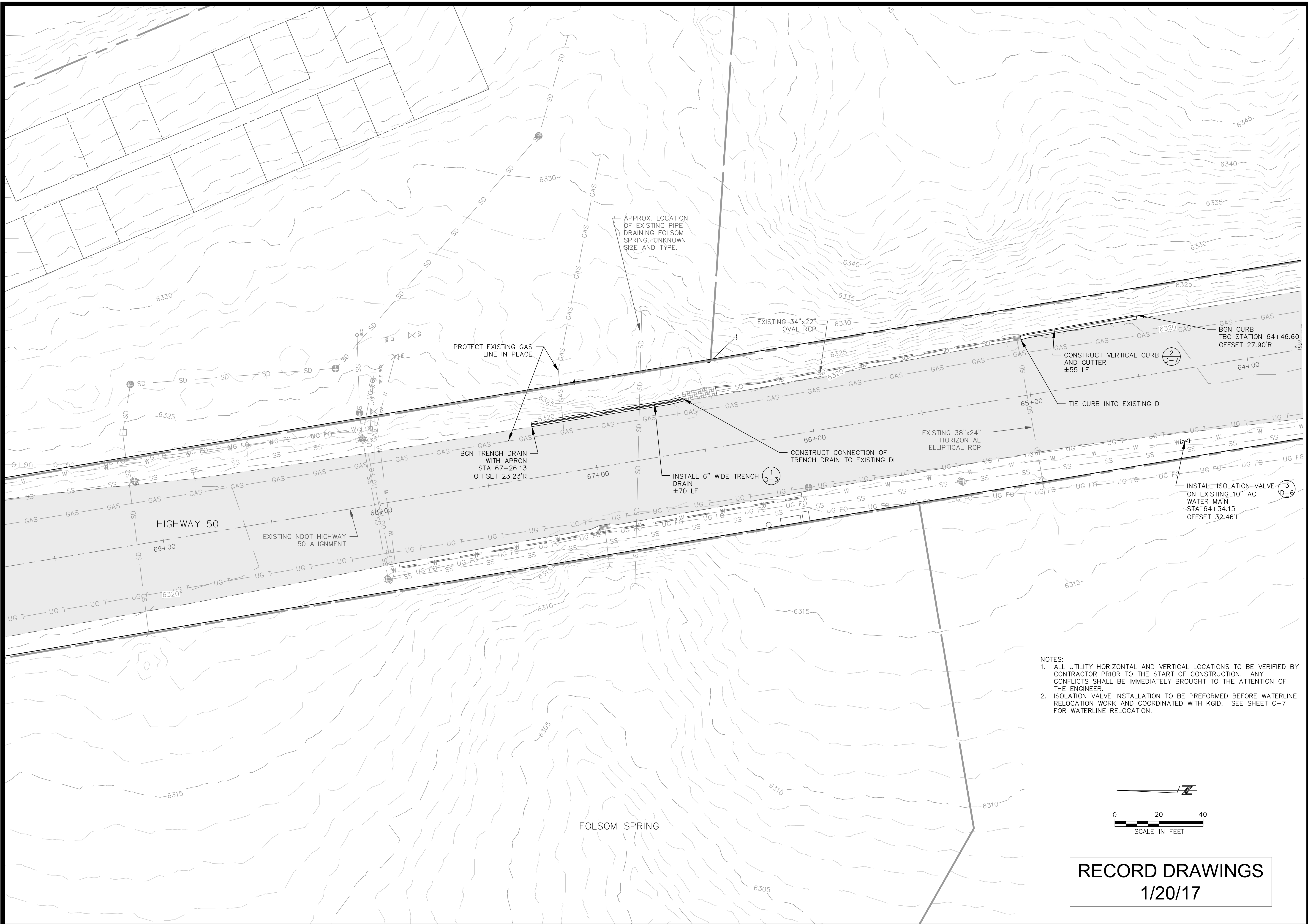
SHEET

C-8
15 OF 24

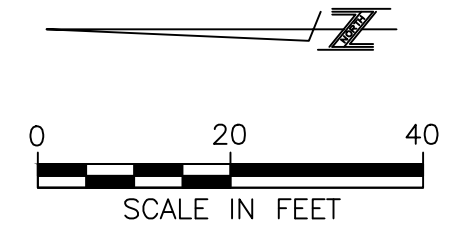
RECORD DRAWINGS
1/20/17



DRAINAGE PLAN NORTH
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1



- NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 2. ISOLATION VALVE INSTALLATION TO BE PERFORMED BEFORE WATERLINE RELOCATION WORK AND COORDINATED WITH KGID. SEE SHEET C-7 FOR WATERLINE RELOCATION.

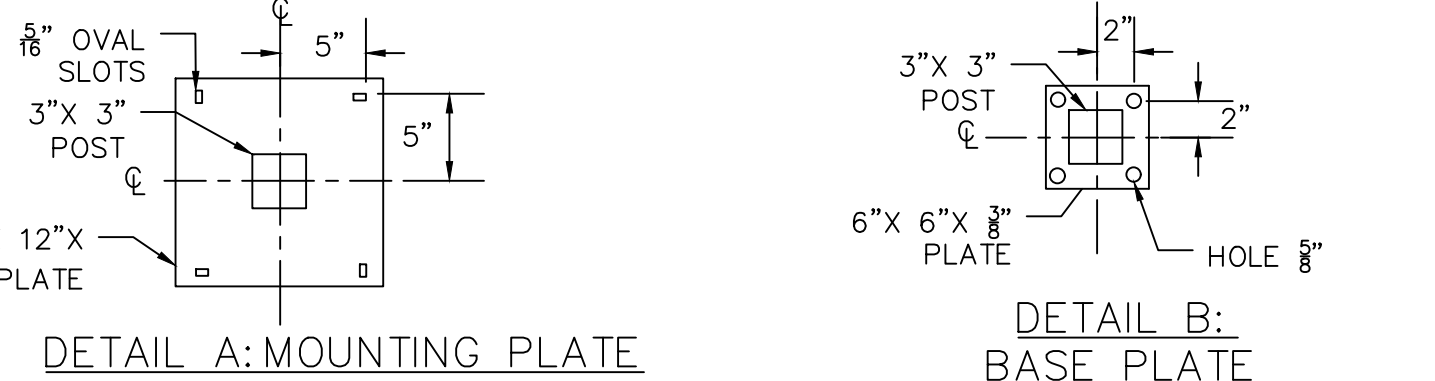
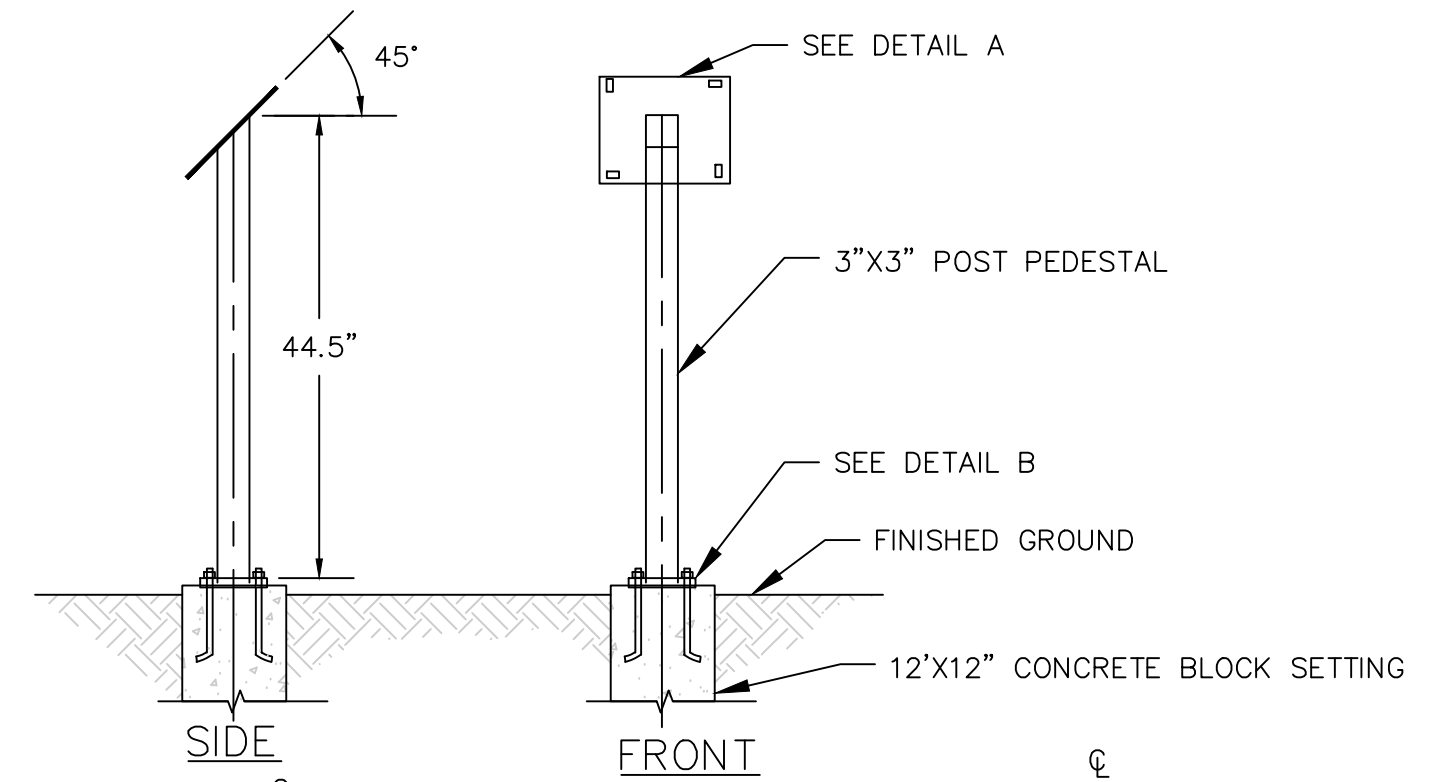
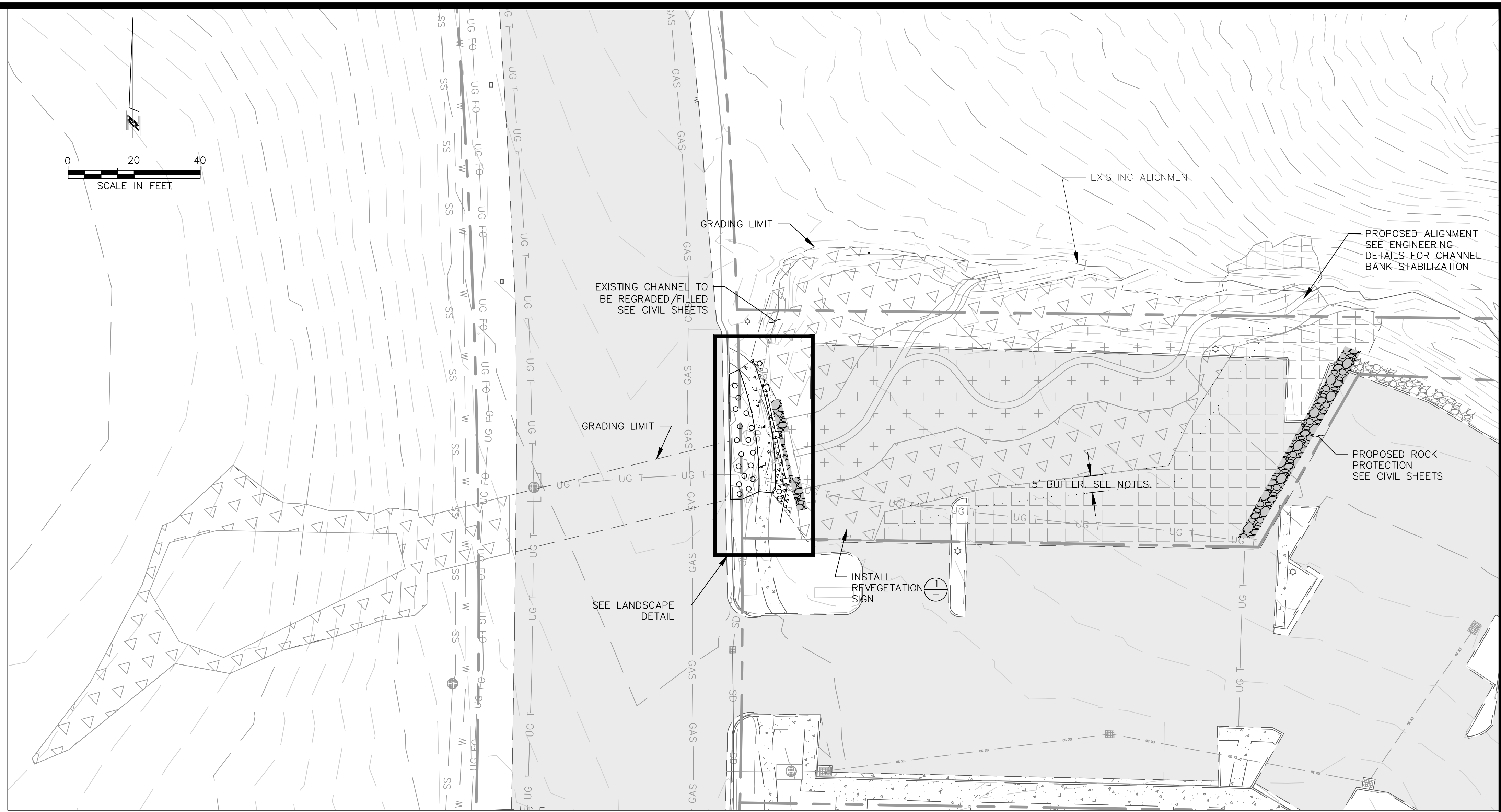
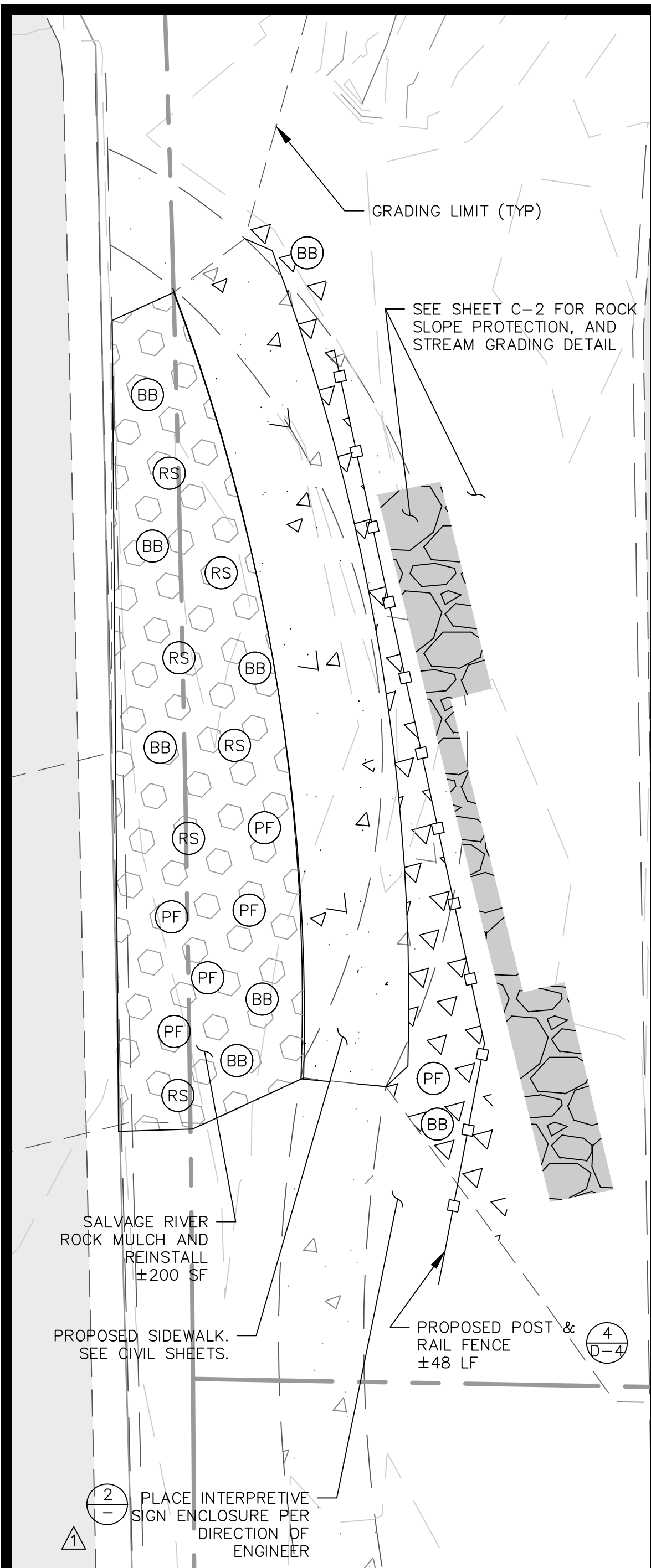


RECORD DRAWINGS
1/20/17

DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
C-9
16 of 24

REVEGETATION PLAN
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1



INTERPRETIVE SIGN NOTES:

1. INTERPRETIVE SIGN ENCLOSURE SHALL BE FOSSIL INDUSTRIES ANGLED SINGLE POST PEDESTAL SURFACE MOUNT PART#SP1212 OR APPROVED EQUAL.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. SEE [HTTP://FOSSILGRAPHICS.COM/HARDWARE/ANGLED-SINGLEPOST](http://FOSSILGRAPHICS.COM/HARDWARE/ANGLED-SINGLEPOST)
3. INTERPRETIVE SIGN MOUNT SHALL BE "DARK BROWN" IN POWDER COATING COLOR
4. FINAL LOCATION MUST BE APPROVED BY THE NTCO PRIOR TO INSTALLATION. ANY SUBSTITUTIONS SHALL BE APPROVED BY NTCO PRIOR TO INSTALLATION
5. THE DESIGN AND INSTALLATION OF THE SIGN TO BE MOUNTED ON THE PEDESTAL SHALL BE PROVIDED AND INSTALLED BY NTCO

INTERPRETIVE SIGN ENCLOSURE
NTS

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE
AS	<i>Populus tremuloides</i>	Aspen	12	5-gal
SB	<i>Amelanchier alnifolia</i>	Servicberry	8	T-pot
SW	<i>Salix scouleriana</i>	Scouler's Willow	4	D-pot
SH	<i>Salix lucida ssp. Lasianra</i>	Shining Willow	4	D-pot
LW	<i>Salix lemmonii</i>	Lemmon's Willow	4	D-pot
DW	<i>Cornus sericea</i>	Red-Osier Dogwood	8	D-pot
EB	<i>Sambucus nigra (mexicana)</i>	Blue Elderberry	5	1-gal
MS	<i>Spiraea densiflora</i>	Mountain Spirea	10	1-gal
SC	<i>Ribes nevadense</i>	Sierra Currant	10	1-gal
TW	<i>Lonicera involucrata</i>	Twinberry	6	1-gal
WC	<i>Ribes cereum</i>	Wax Currant	5	1-gal
WR	<i>Rosa woodsii</i>	Woods' Rose	10	1-gal
WB	<i>Betula occidentalis</i>	Water Birch	6	Supercell
MA	<i>Sorbus californica</i>	Mountain Ash	6	Supercell
RS	<i>Perovskia atriplicifolia</i>	Russian Sage	8	1-gal
PF	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	7	1-gal
BB	<i>Arctostaphylos uva-ursi</i>	Bearberry	11	1-gal

PERENNIALS	BOTANICAL NAME	COMMON NAME	QTY.	SIZE
	<i>Gaillardia pulchella</i>	Indian Blanketflower	20	Supercell
	<i>Arnica nevadensis</i>	Sierra Arnica	20	Supercell
	<i>Delphinium glaucum</i>	Towering Larkspur	20	Supercell
	<i>Potentilla gracilis</i>	Slender Cinquefoil	20	Supercell
	<i>Mimulus guttatus</i>	Common Monkeyflower	20	Supercell
	<i>Castilleja miniata ssp. Miniata</i>	Giant Red Paintbrush	20	Supercell
	<i>Castilleja parviflora</i>	Small-Flowered Paintbrush	20	Supercell
	<i>Arnica longifolia</i>	Seep-Spring Arnica	20	Supercell
	<i>Arnica mollis</i>	Soft Arnica	20	Supercell
	<i>Rubus parviflorus</i>	Thimbleberry	30	4"
	<i>Aquilegia formosa</i>	Columbine	20	4"
	<i>Lupinus polyphyllus</i>	Big-Leafed Lupine	20	4"
	<i>Lilium parvum</i>	Alpine Lily	10	4"
	<i>Potentilla glandulosa</i>	Sticky Cinquefoil	20	4"
	<i>Mimulus lewisii</i>	Lewis' Monkeyflower	20	4"
	<i>Helenium bigelovii</i>	Bigelow Sneezeweed	20	4"
	<i>Penstemon rydbergii var. oreocharis</i>	Meadow Penstemon	20	4"

REVEGETATION LEGEND	
	TREATMENT TYPE 1 (±3,590 SF)
	TREATMENT TYPE 2 (±8,450 SF)
	TREATMENT TYPE 3 (±3,610 SF)
	TREATMENT TYPE 4 (±220 SF)
	ROCK SLOPE PROTECTION
	TREE/SHRUB WITH SPECIES SYMBOL

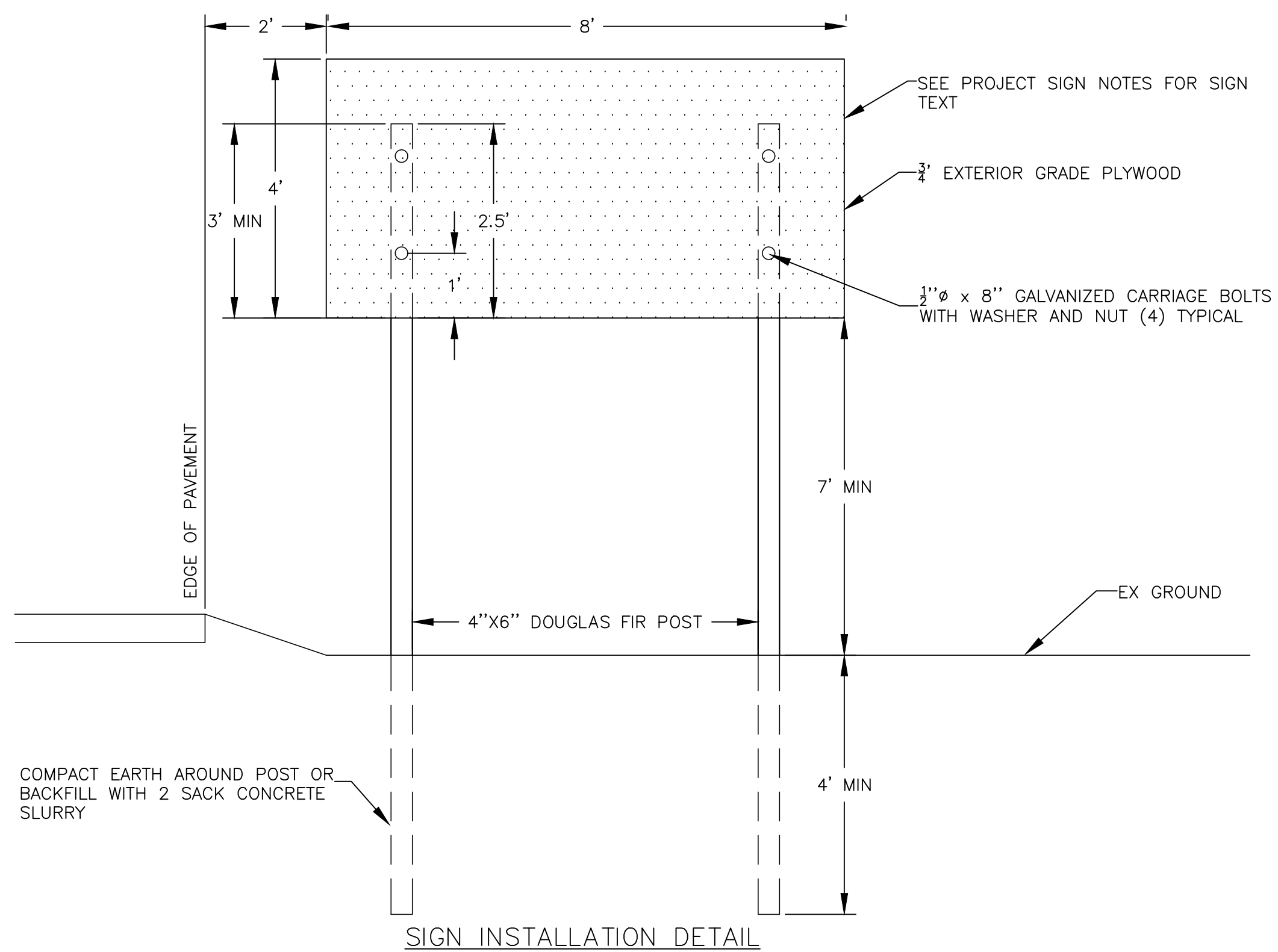
NOTES:

1. FINAL PLANT AND PERENNIAL LOCATIONS TO BE DETERMINED IN FIELD BY REVEGETATION SPECIALIST.
2. SALVAGED WETLAND PLUGS TO BE PLANTED AS DIRECTED BY REVEGETATION SPECIALIST.
3. SEEDS AND CONTAINER PLANTS TO BE SUPPLIED BY NTCO. ALL PLANTS SHALL BE APPROVED/ACCEPTED BY CONTRACTOR.
4. SEE CIVIL ENGINEERING PLANS AND DETAILS FOR CHANNEL STABILIZATION AND GRADING DETAILS.
5. NO TREES OR SHRUBS TO BE PLACED WITHIN LIMITS OF BERM OR AS DIRECTED BY ENGINEER.
6. A 5 FOOT BUFFER ZONE WILL BE MAINTAINED AT THE TOE OF THE BERM ON THE CHANNEL/FLOODPLAIN SIDE. NO PLANTING OF WOOD OR DEEP ROOTED PLANTS OR BURIED STRUCTURES SHALL BE ALLOWED IN THIS ZONE.
7. ALL DISTURBED AREAS TO BE REVEGETATED. ADDITIONAL REVEGETATION IN NORTHERN DRAINAGE AND UPSTREAM IMPROVEMENTS WILL BE AS DIRECTED BY ENGINEER AND PER SPECIFICATION
8. IRRIGATION CONNECTION SHALL BE ESTABLISHED FROM IRRIGATION LINES WITHIN DOUGLAS COUNTY PARKING LOT STAGING AREA PARCEL APN 1318-23-401-047 OR OTHERWISE AS APPROVED BY KGID.

REVISIONS		
NO.	DATE	DESCRIPTION
1	6/23/16	ADDENDUM 1

DESIGNED/DRAWN	MCP/MBG
CHECKED	MCK
DATE	06/23/2016
SCALE	AS SHOWN
PROJECT	BCC

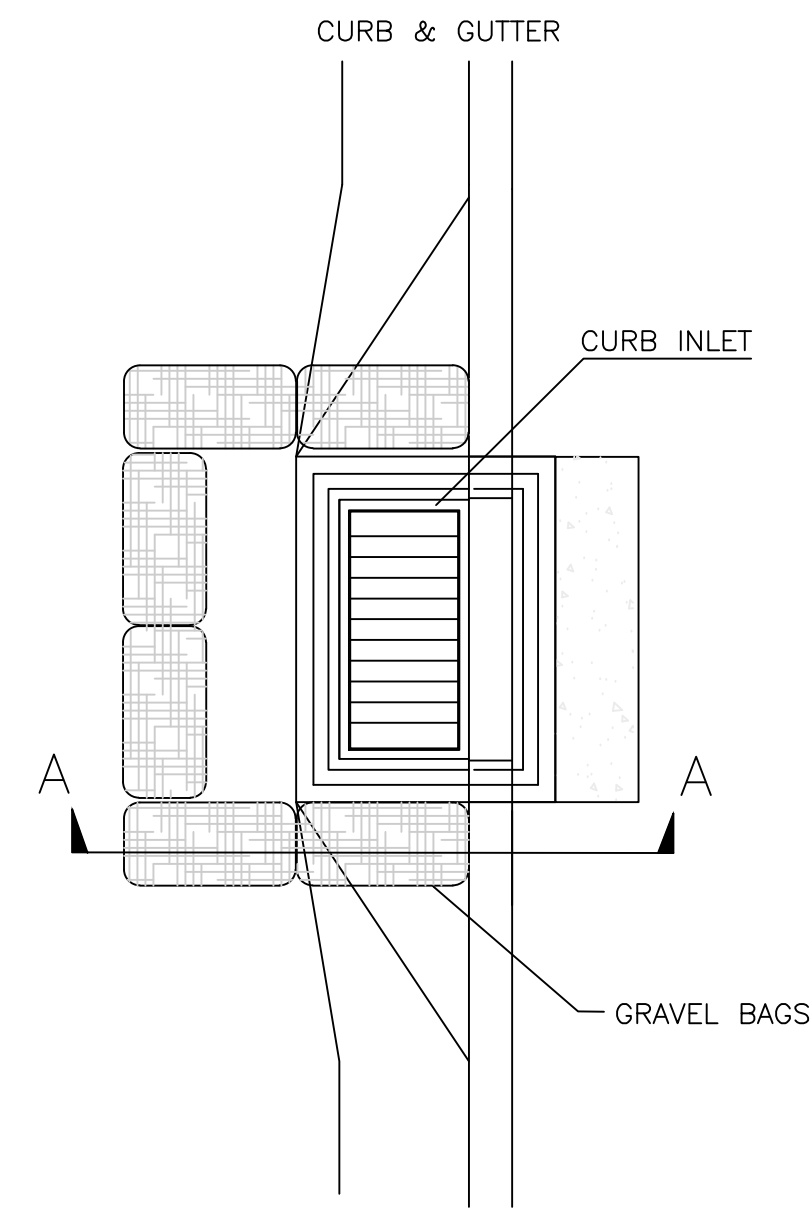
SIGN NOTES:
 1. CONTRACTOR SHALL CONTACT NTCO FOR THE LETTER FONT, STYLE, SIZE, SPACING, AND GRAPHIC ART. SIGN MAY BE ADJUSTED BY THE CONTRACTOR AS NEEDED TO CREATE THE HIGHEST QUALITY CRAFTSMANSHIP DISPLAYED BY THE FINISHED PRODUCT.
 2. LOCATION AS DIRECTED BY ENGINEER.



TEMPORARY PROJECT SIGN

SCALE: N.T.S.

1
D-1



SECTION A-A

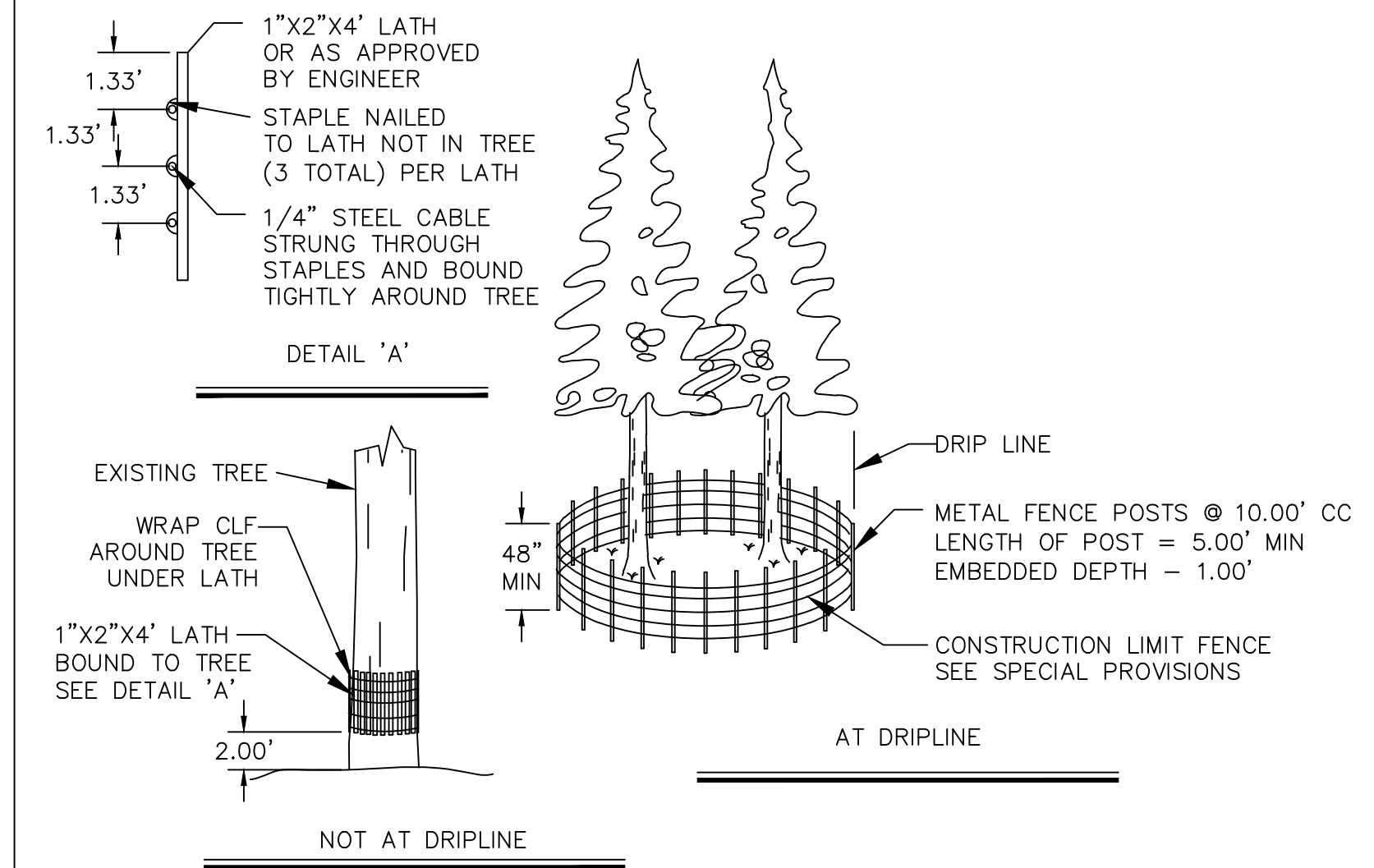
DRAINAGE INLET PROTECTION

SCALE: N.T.S.

2
D-1

RECORD DRAWINGS

1/20/17

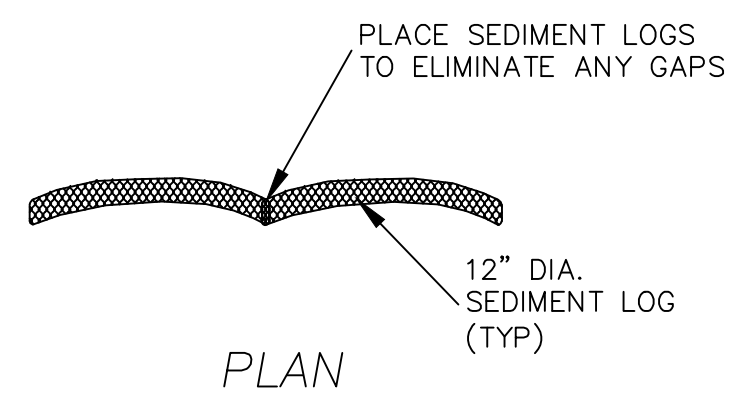


- NOTE:
- CLF AND TREE PROTECTION FENCE SHALL BE A MINIMUM OF 48" HIGH. FOR TREES WITH DRIPLINES THAT OVERHANG THE CONSTRUCTION AREAS, THE LOCATION OF THE TREE PROTECTION FENCE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND/OR THE TRPA AT THE PREGRADE MEETING.
 - THE DETAIL SHOWN IS FOR TREE PROTECTION. MATERIAL AND SPACING SHOWN ALSO APPLIES TO CLF.
 - QUANTITY OF FILTER FENCE AND CONSTRUCTION LIMIT FENCE DOES NOT INCLUDE MINIMUM LIMITS FOR TREE PROTECTION. TREE PROTECTION FENCING TO BE PER DETAIL THIS SHEET AND/OR AS DETERMINED IN THE FIELD.

CONSTRUCTION LIMIT AND TREE PROTECTION FENCING

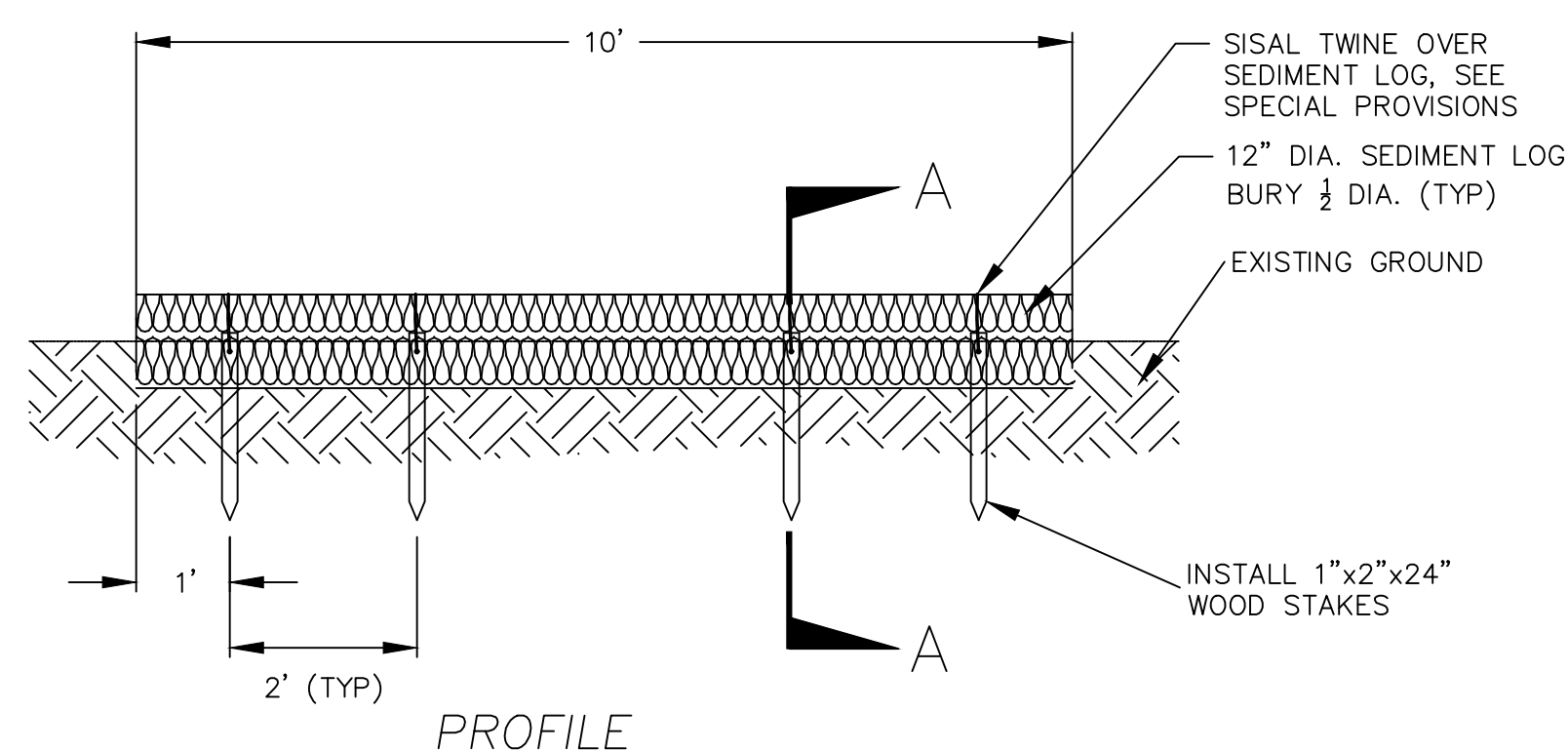
NOT TO SCALE

3
D-1



NOTES:

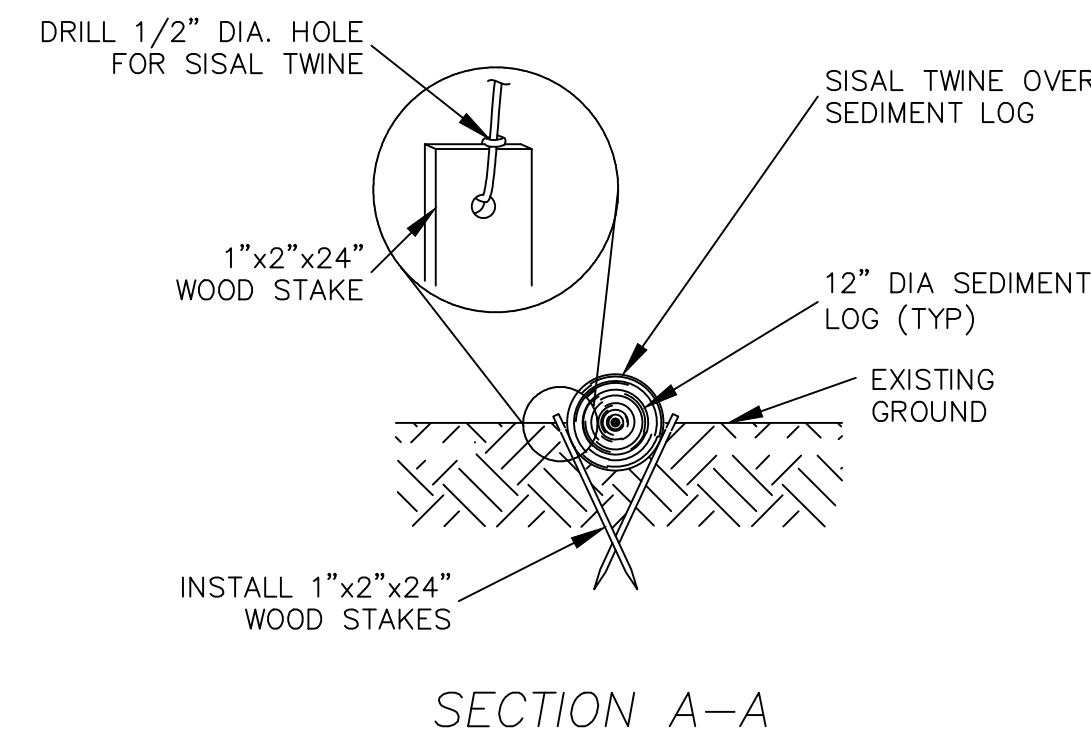
- PLACEMENT OF SEDIMENT LOGS IS SUBJECT TO EXISTING CONDITIONS. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
- SEE SPECIAL PROVISIONS FOR SPECIFICATIONS REGARDING SEDIMENT LOG MATERIAL REQUIREMENTS.
- WEIGHTED SEDIMENT LOGS MAY BE NECESSARY ON PAVED AREAS.



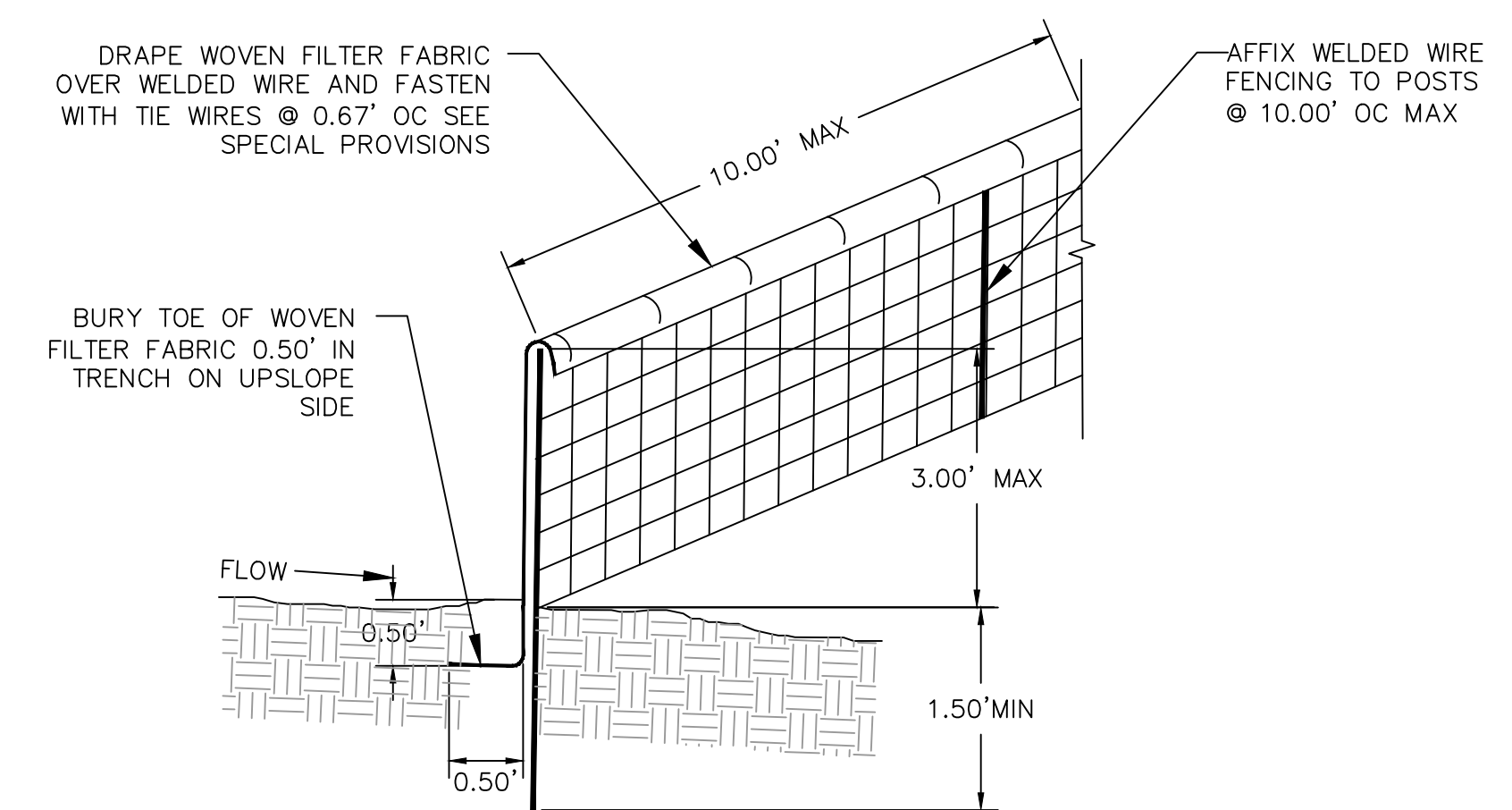
SEDIMENT ROLL (COIR LOG)

NOT TO SCALE

4
D-1



SECTION A-A



- NOTES:
- CONTRACTOR MAY USE PRE MANUFACTURED SEDIMENT CONTROL FENCE AS APPROVED BY TRPA. SEE SPECIAL PROVISIONS.
 - PLACE FENCING SUCH THAT STORM RUNOFF CANNOT PASS AROUND OR UNDER FENCE

FILTER FENCE

NOT TO SCALE

5
D-1

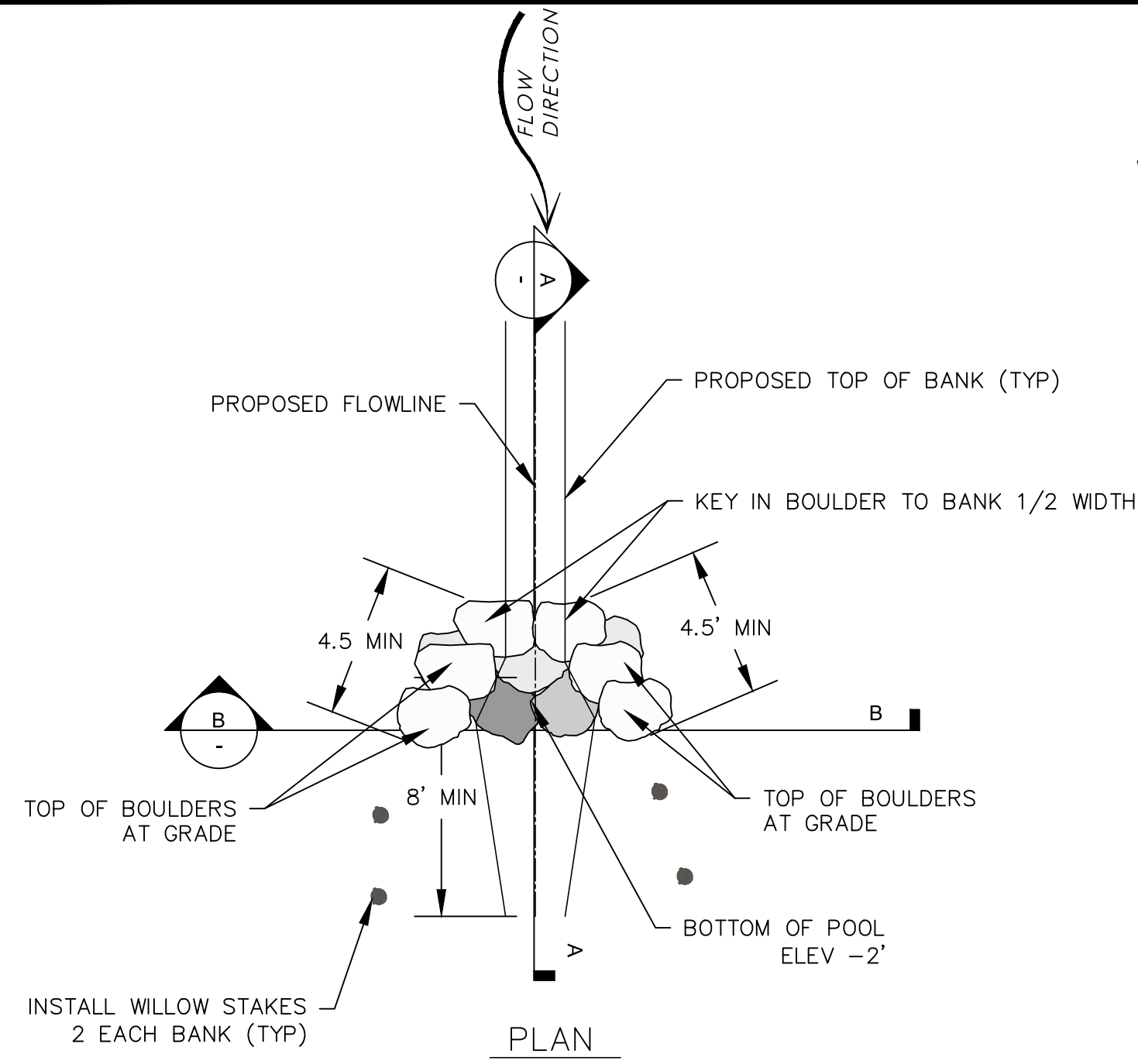
DETAILS
 BURKE CREEK HWY 50 CROSSING AND
 REALIGNMENT PROJECT
 PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

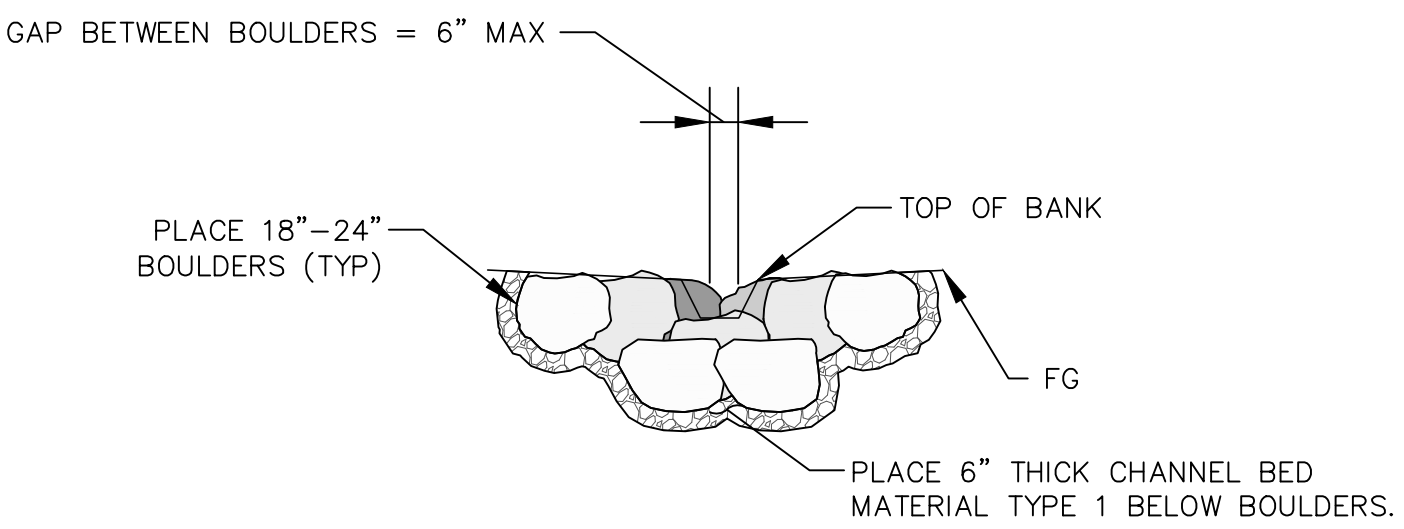
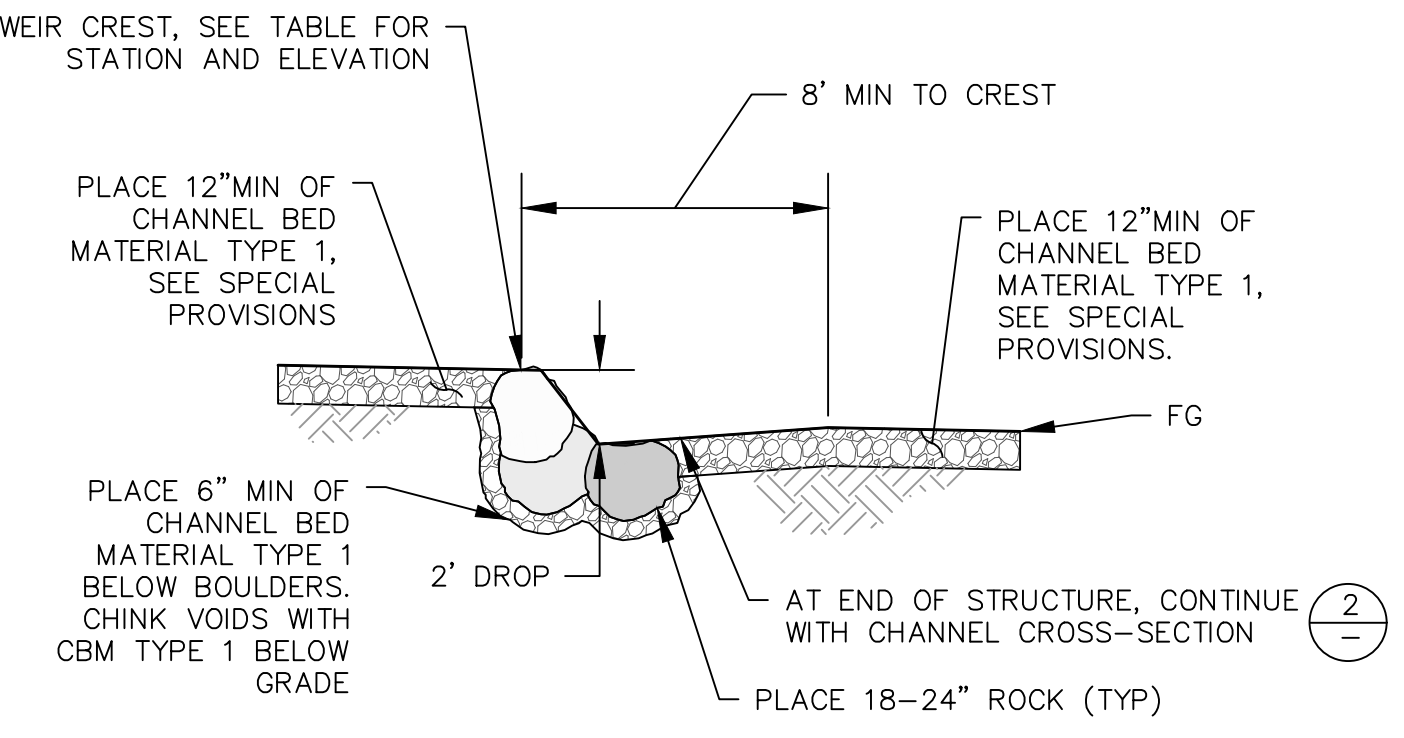
SHEET

D-1
 18 of 25

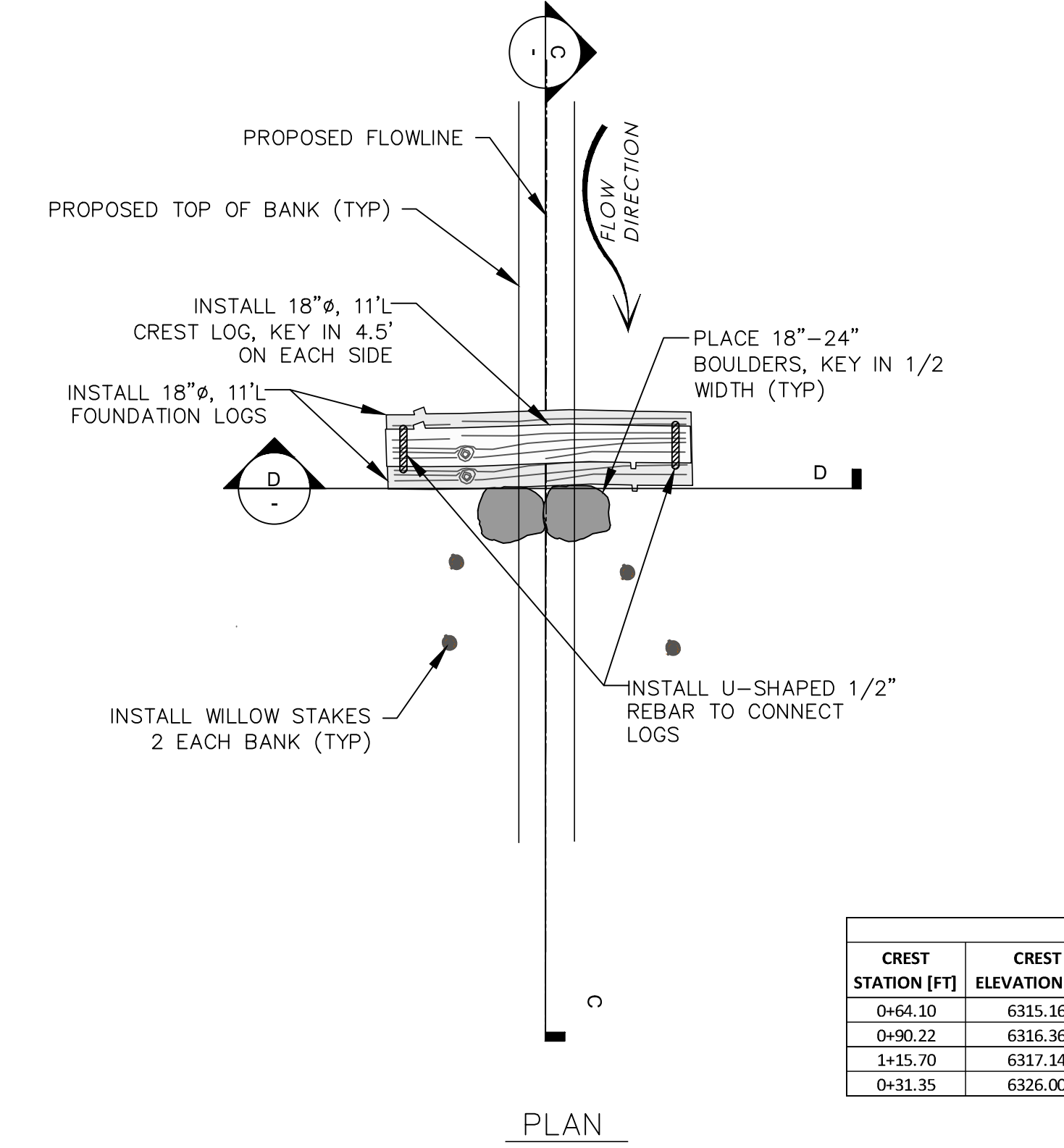




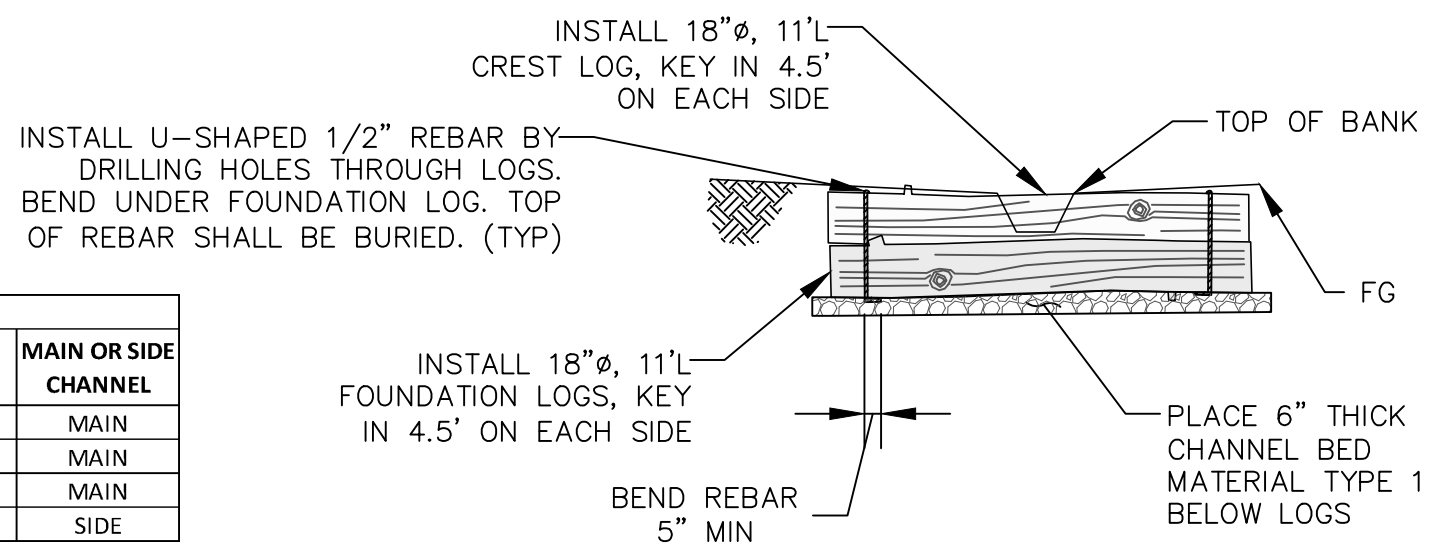
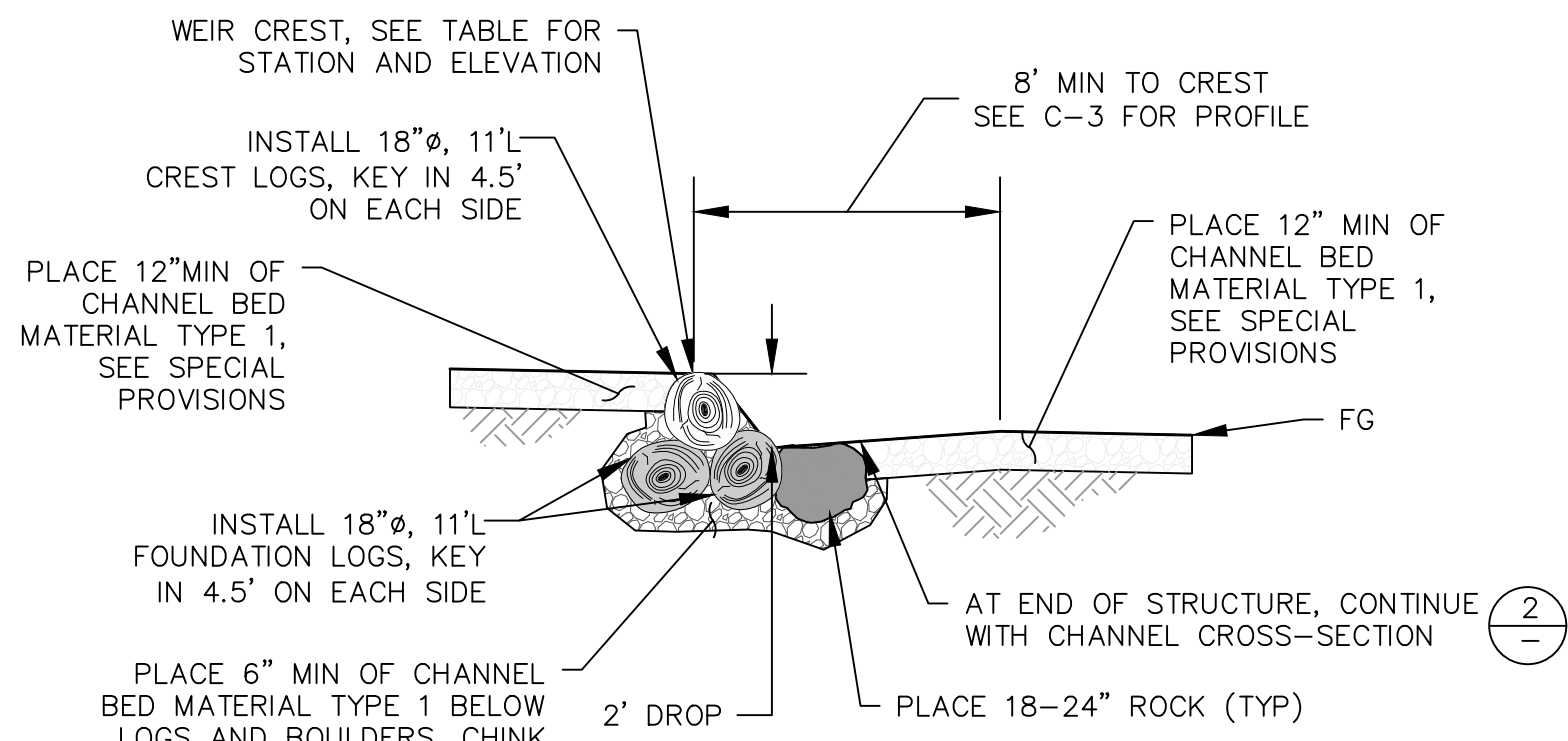
BOULDER STEP POOLS					
CREST STATION [FT]	CREST ELEVATION [FT]	POOL LENGTH [FT]	OVERALL DROP [FT]	ASSOCIATED CHORD/LINE	MAIN OR SIDE CHANNEL
0+22.97	6316.24	8.22	1.0	C1	MAIN
0+79.35	6315.80	8.00	0.5	C3	MAIN
1+36.38	6317.87	9.00	0.5	C5	MAIN
1+46.84	6319.40	9.00	1.5	C5	MAIN
1+55.56	6320.91	8.00	1.5	C6	MAIN
1+64.13	6322.43	8.00	1.5	C6	MAIN
1+83.19	6324.14	8.14	1.5	C7	MAIN
1+94.00	6325.20	8.00	1.0	L8	MAIN
0+21.54	6315.46	7.59	1.0	C10	SIDE
0+31.89	6316.48	9.06	1.0	C11	SIDE
0+42.49	6318.00	9.80	1.5	C12	SIDE



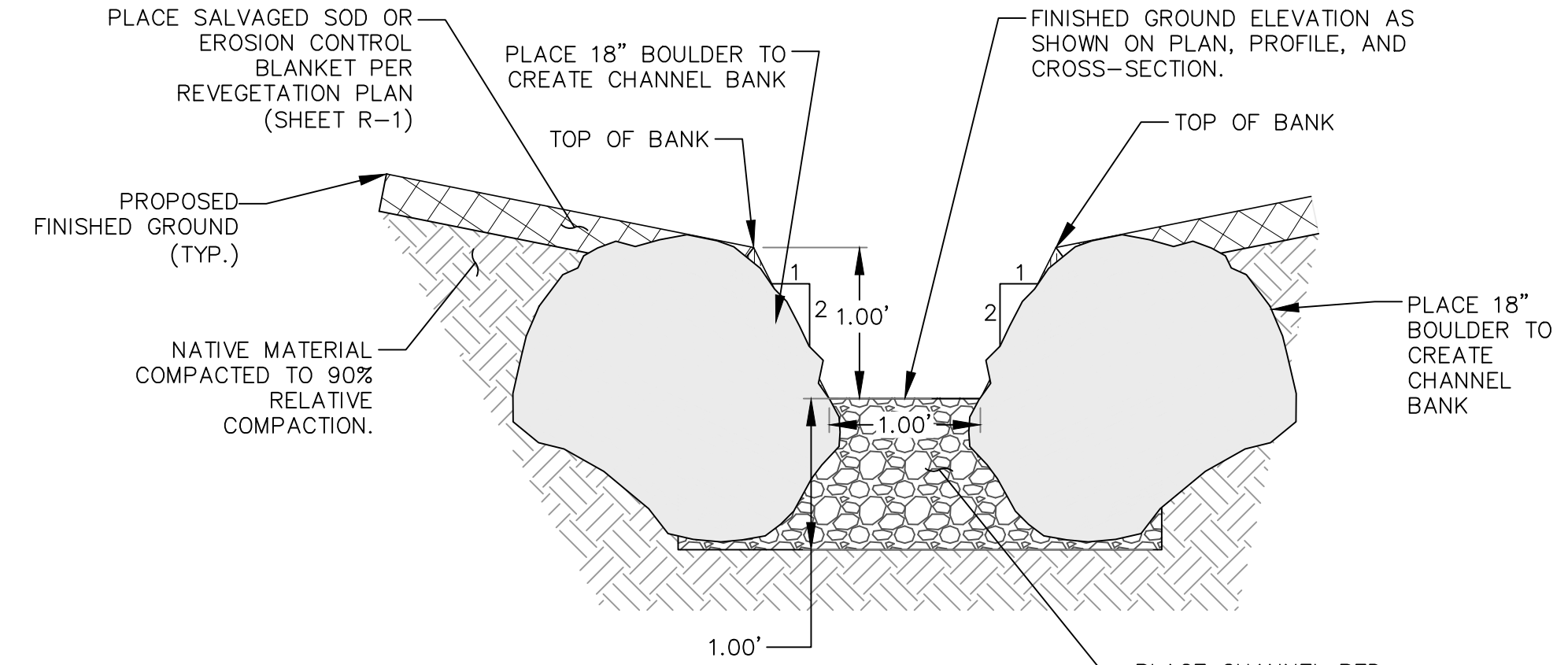
BOULDER STEP POOL
SCALE: 1" = 5'
1 D-2



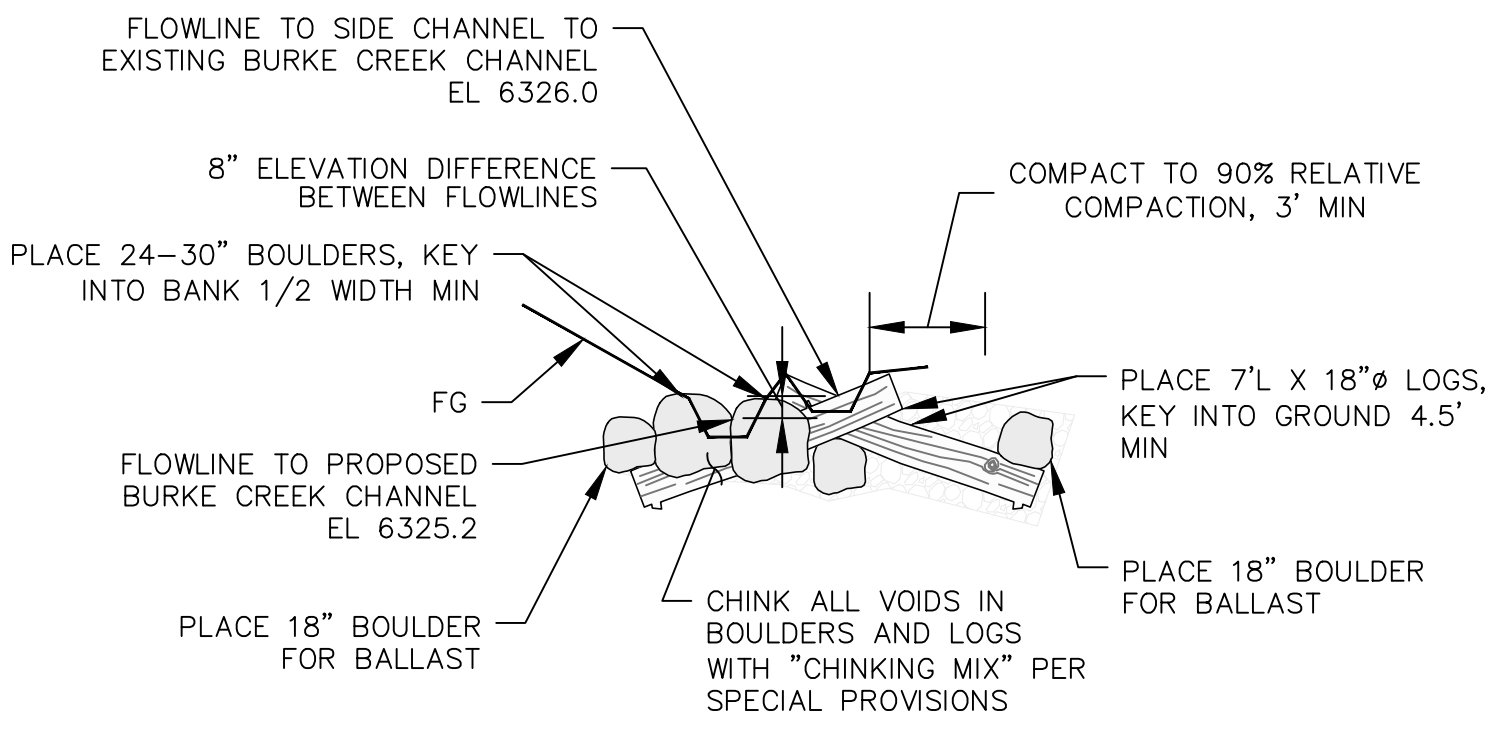
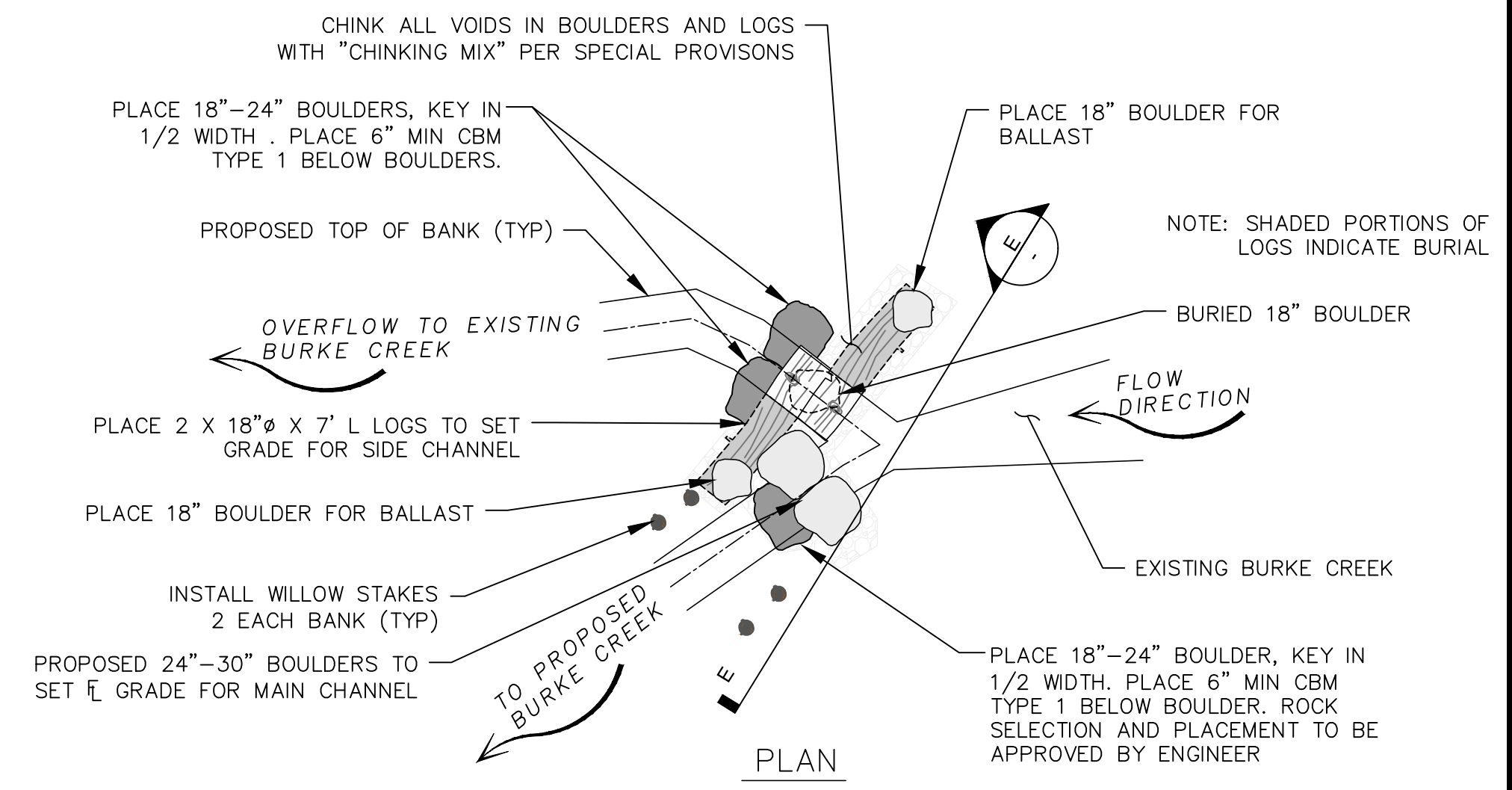
LOG STEP POOLS					
CREST STATION [FT]	CREST ELEVATION [FT]	POOL LENGTH [FT]	OVERALL DROP [FT]	ASSOCIATED CHORD/LINE	MAIN OR SIDE CHANNEL
0+64.10	6315.16	23.53	1.5	C2	MAIN
0+90.22	6316.36	8.00	0.5	C3	MAIN
1+15.70	6317.14	11.69	0.5	C4	MAIN
0+31.35	6326.00	10.32	1.5	L23	SIDE



LOG STEP POOL
SCALE: 1" = 5'
3 D-2

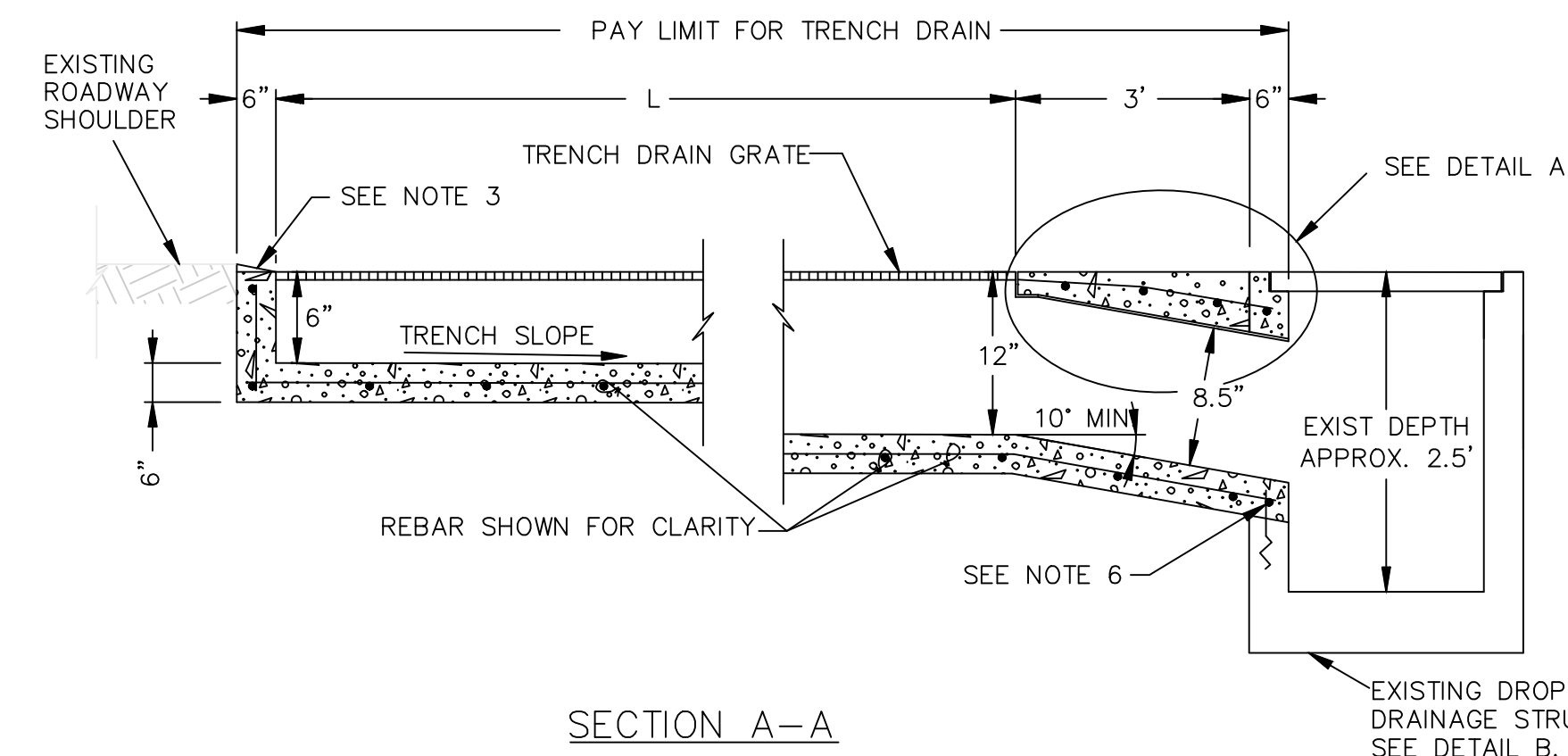


CHANNEL CROSS-SECTION
SCALE: 1" = 1'
2 D-2

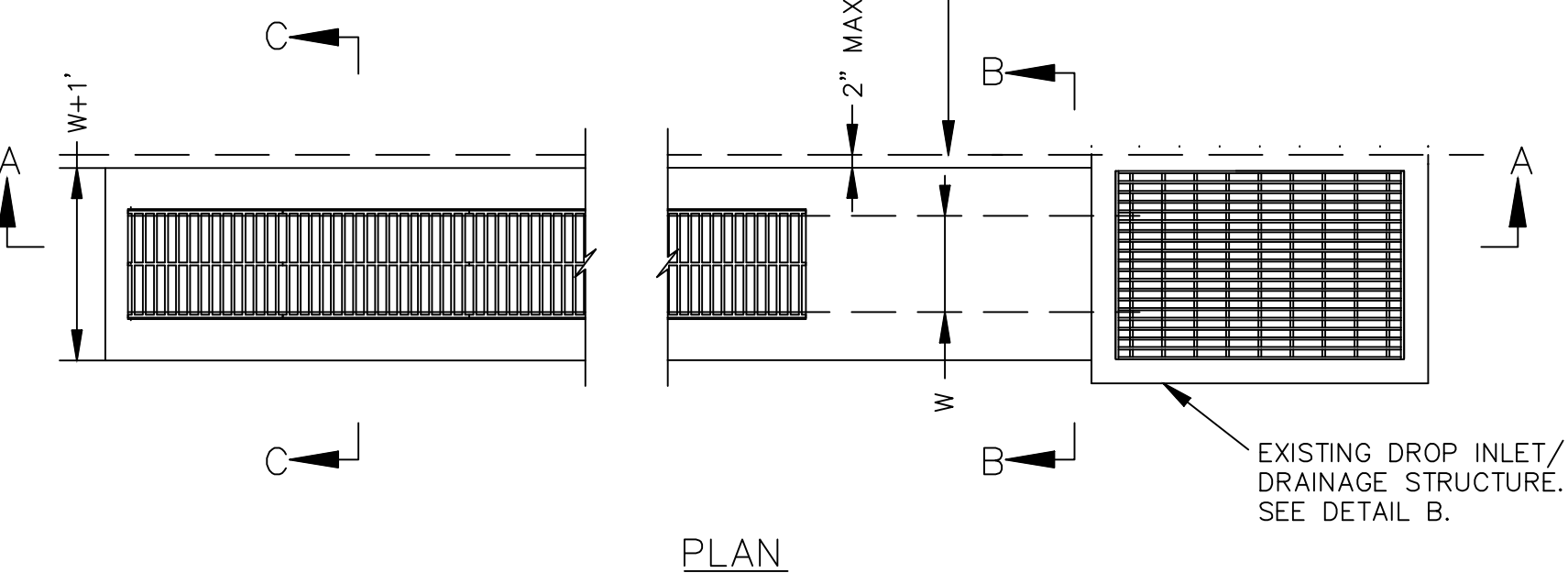


CHANNEL TIE-IN WITH FLOW SPLIT
NOT TO SCALE
4 D-2

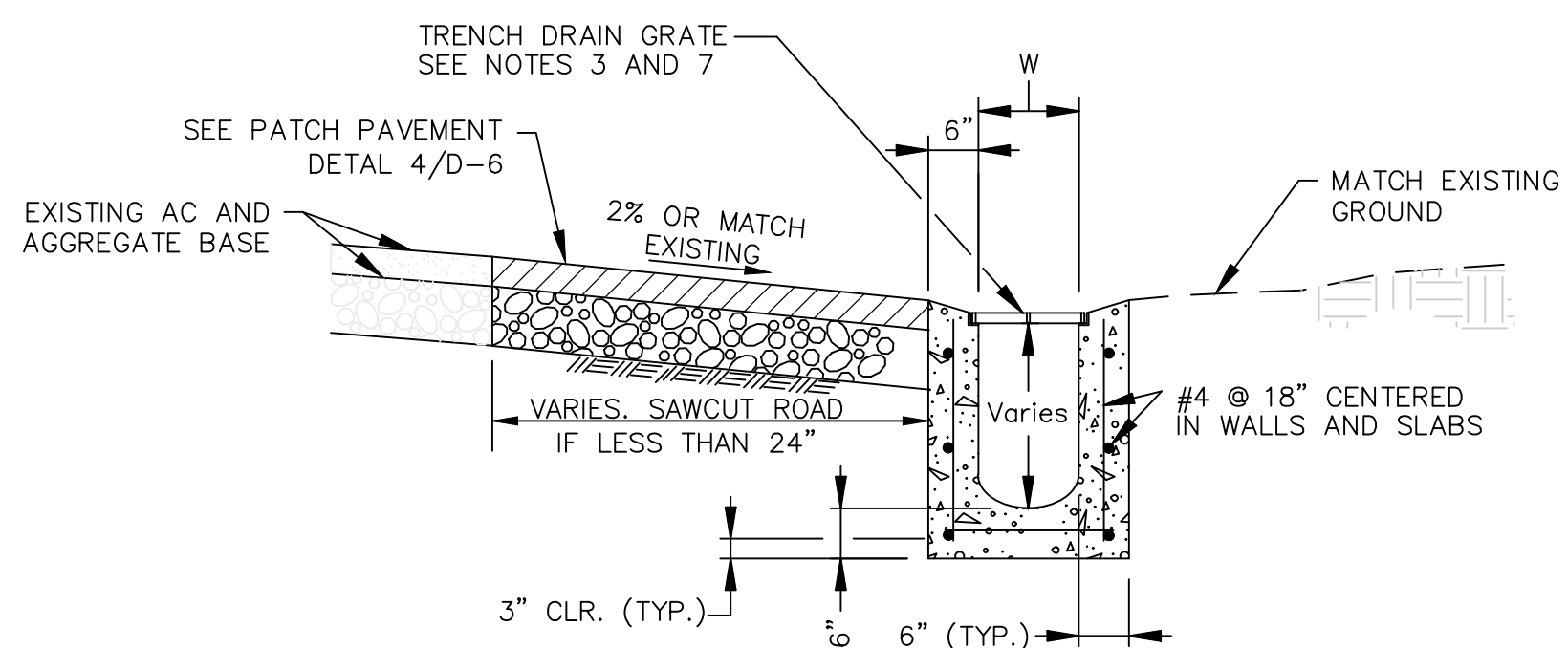
RECORD DRAWINGS
1/20/17



SECTION A-A



PLAN



SECTION C-C

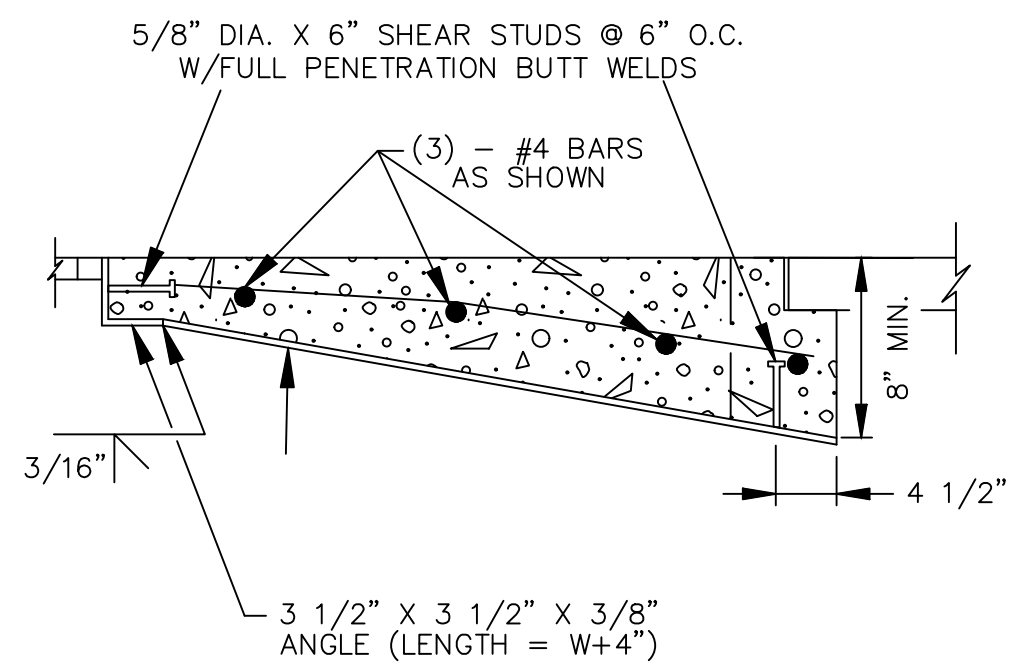
TRENCH DRAIN NOTES:

- TRENCH DRAIN PRODUCTS SHALL BE FROM NDOT QUALIFIED PRODUCT LIST (QPL) FOUND AT http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Research/Qualified_Products_List.aspx
- REVISIONS REQUIRE APPROVAL BY THE ENGINEER IN WRITING PRIOR TO CONSTRUCTION.
- CONSTRUCTION OF THE TRENCH DRAIN SHALL FOLLOW THE MANUFACTURERS RECOMMENDATIONS.
- TRENCH DRAIN GRATE TO BE 1/4" TO 3/8" BELOW ADJACENT PAVEMENT SURFACE.
- L, W, AS SPECIFIED ON PLANS.
- ALL CONCRETE SHALL BE CLASS I OR AA.
- IF RETROFITTING TO AN EXISTING DROP INLET PRESERVE EXISTING REBAR DURING REMOVAL OF SIDE WALL AS NEEDED TO TIE TO TRENCH DRAIN REINFORCEMENT. INSTALL ADDITIONAL REBAR TO FACILITATE CONNECTION TO DROP INLET AND REPLACE DAMAGED EXISTING REBAR. DOWELING PERPENDICULAR TO SIDE WALL IN LIEU OF CONNECTING TO EXISTING REBAR IS NOT PERMITTED.
- GRATE SHALL BE HS-25 LOAD RATED AND BICYCLE SAFE.
- ALL GRATES SHALL BE REMOVABLE. USE TWO-PIECE GRATES THROUGHOUT.

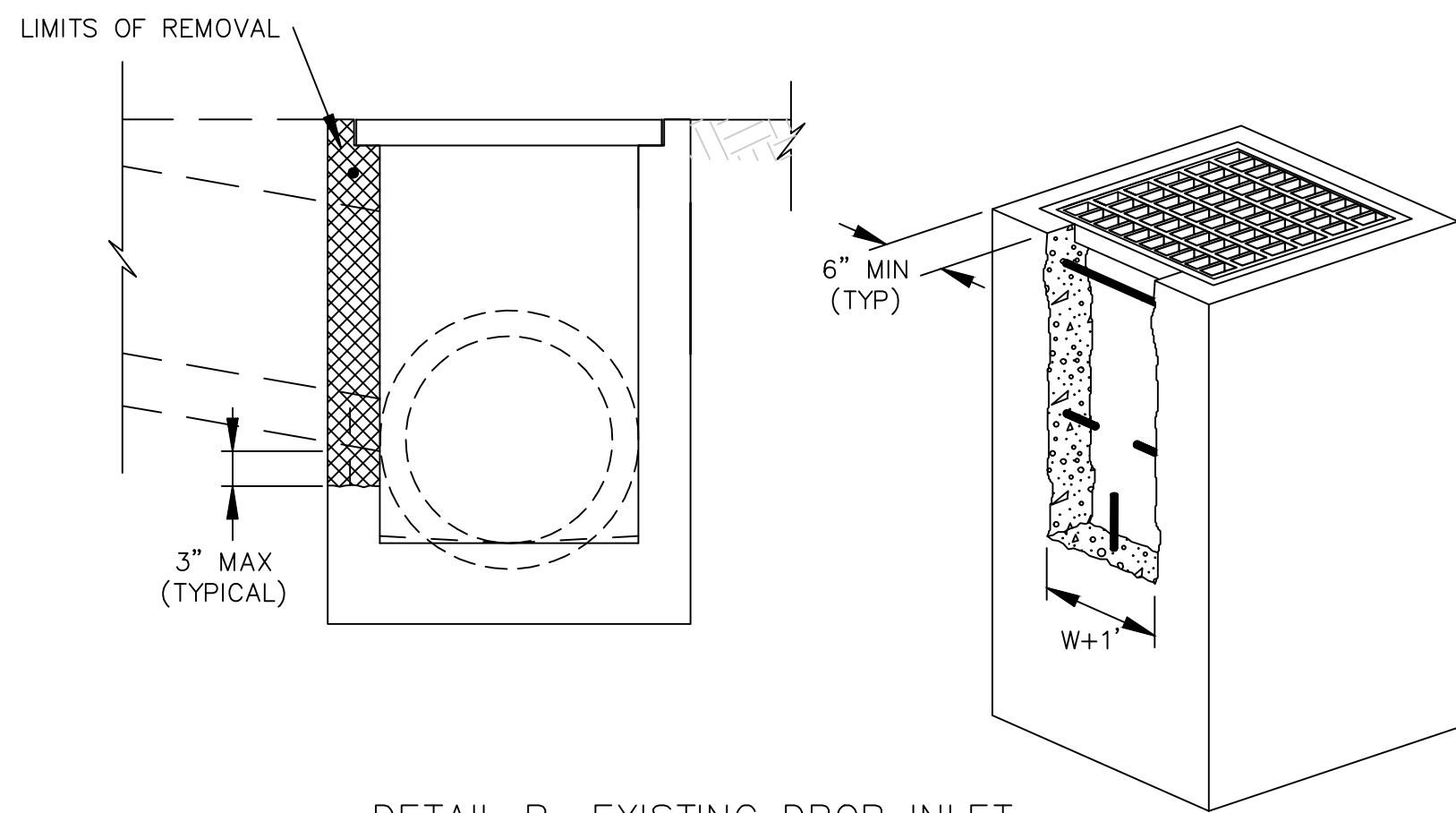
TRENCH DRAIN

SCALE: N.T.S.

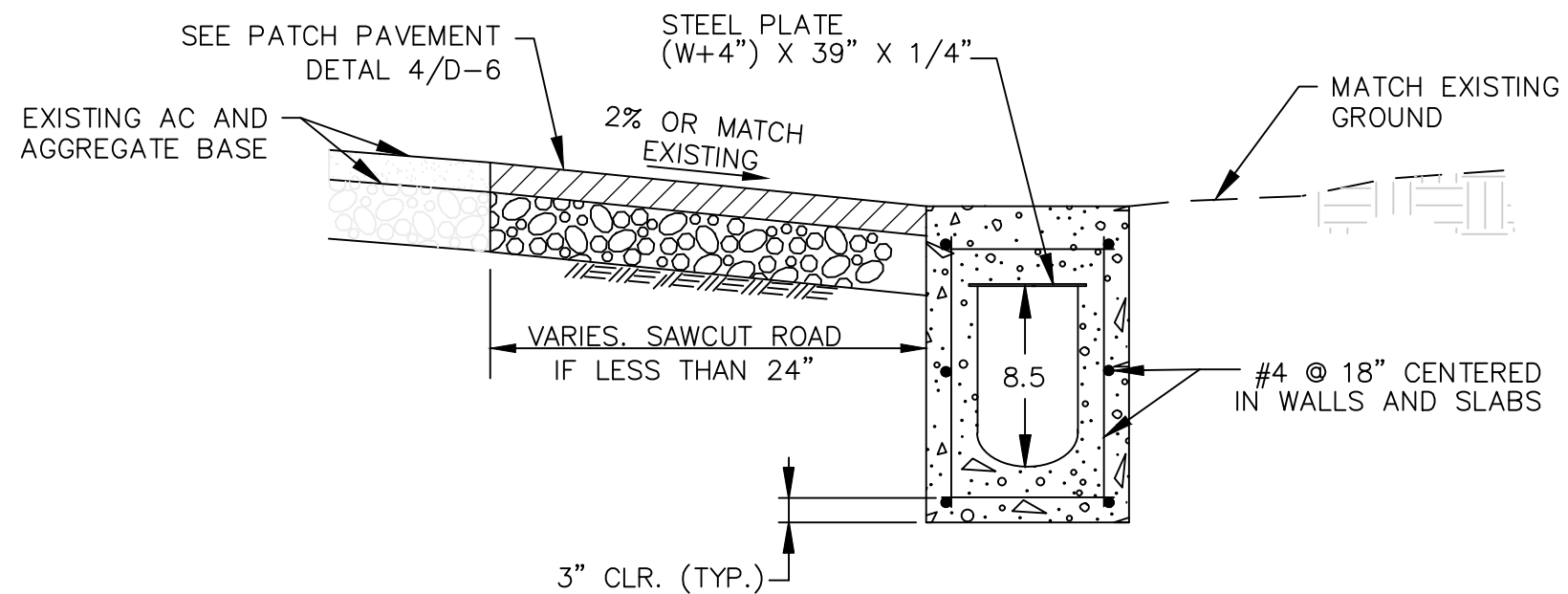
1
D-3



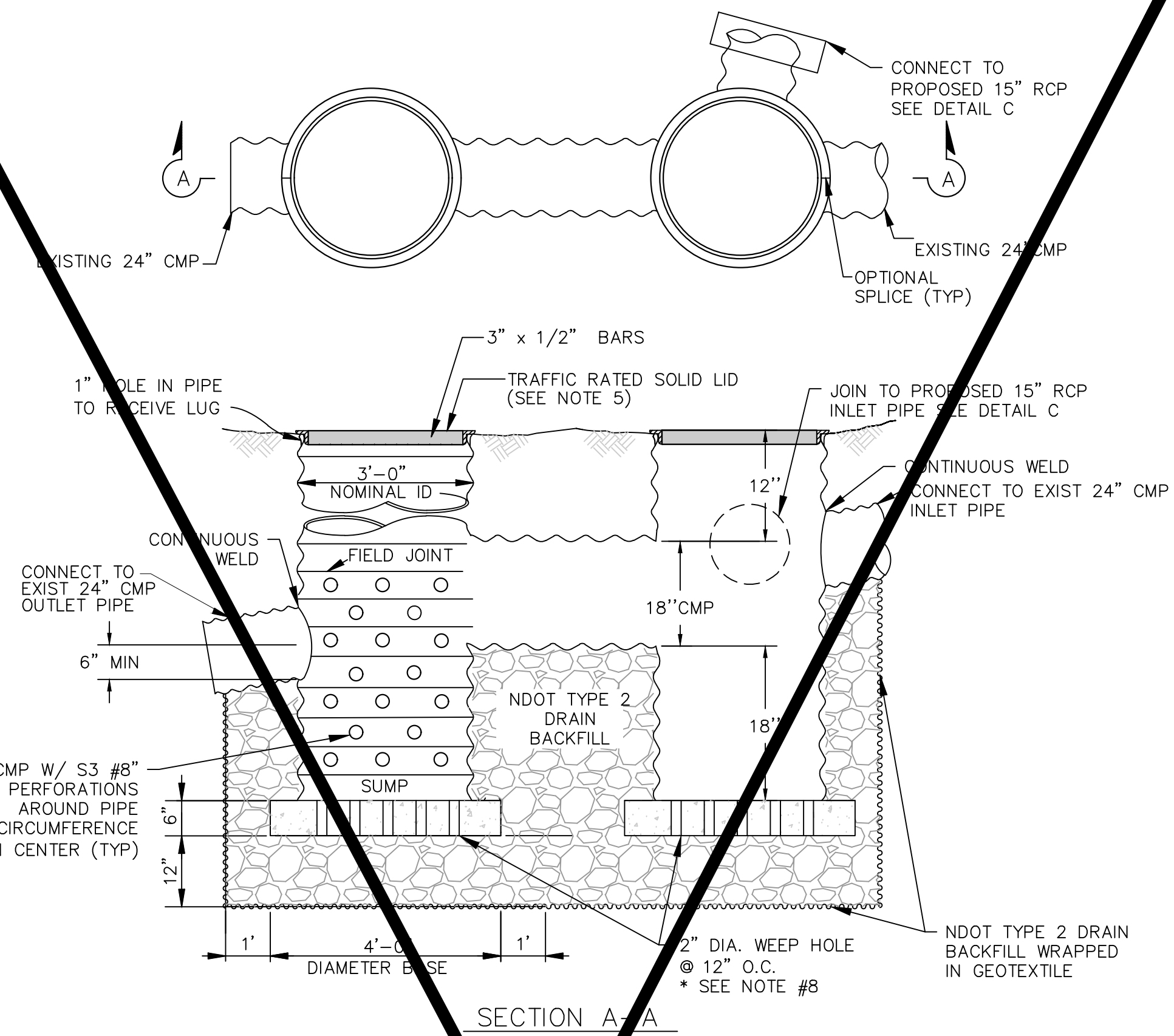
DETAIL A



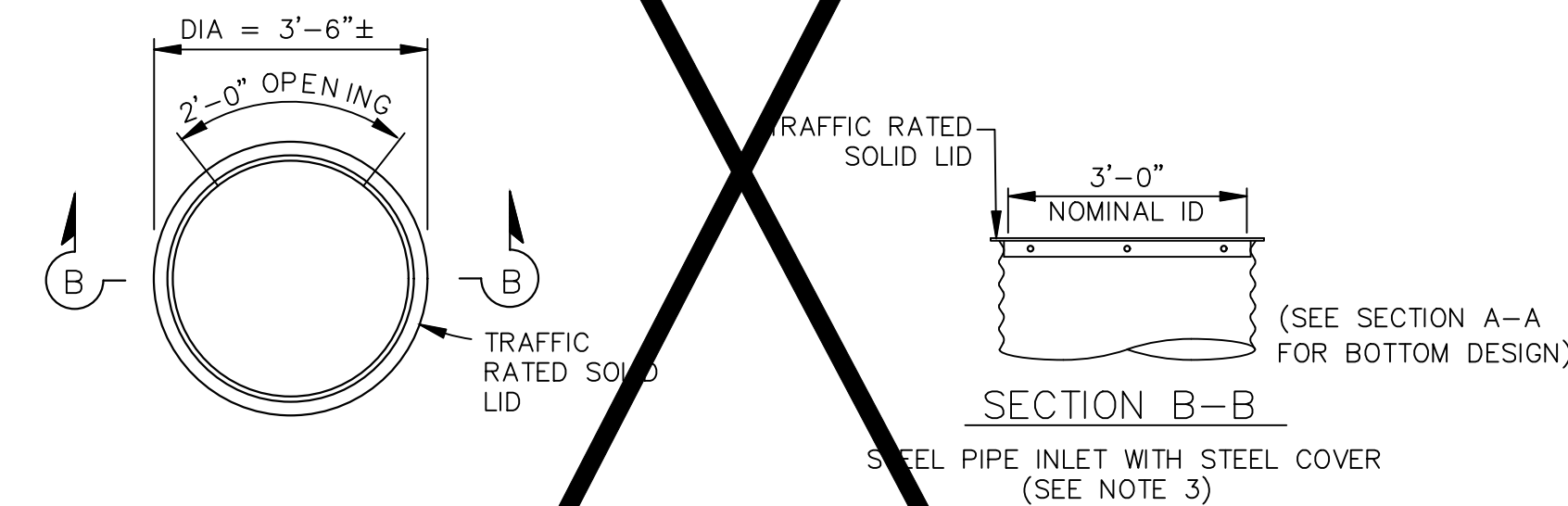
DETAIL B: EXISTING DROP INLET (REMOVAL)



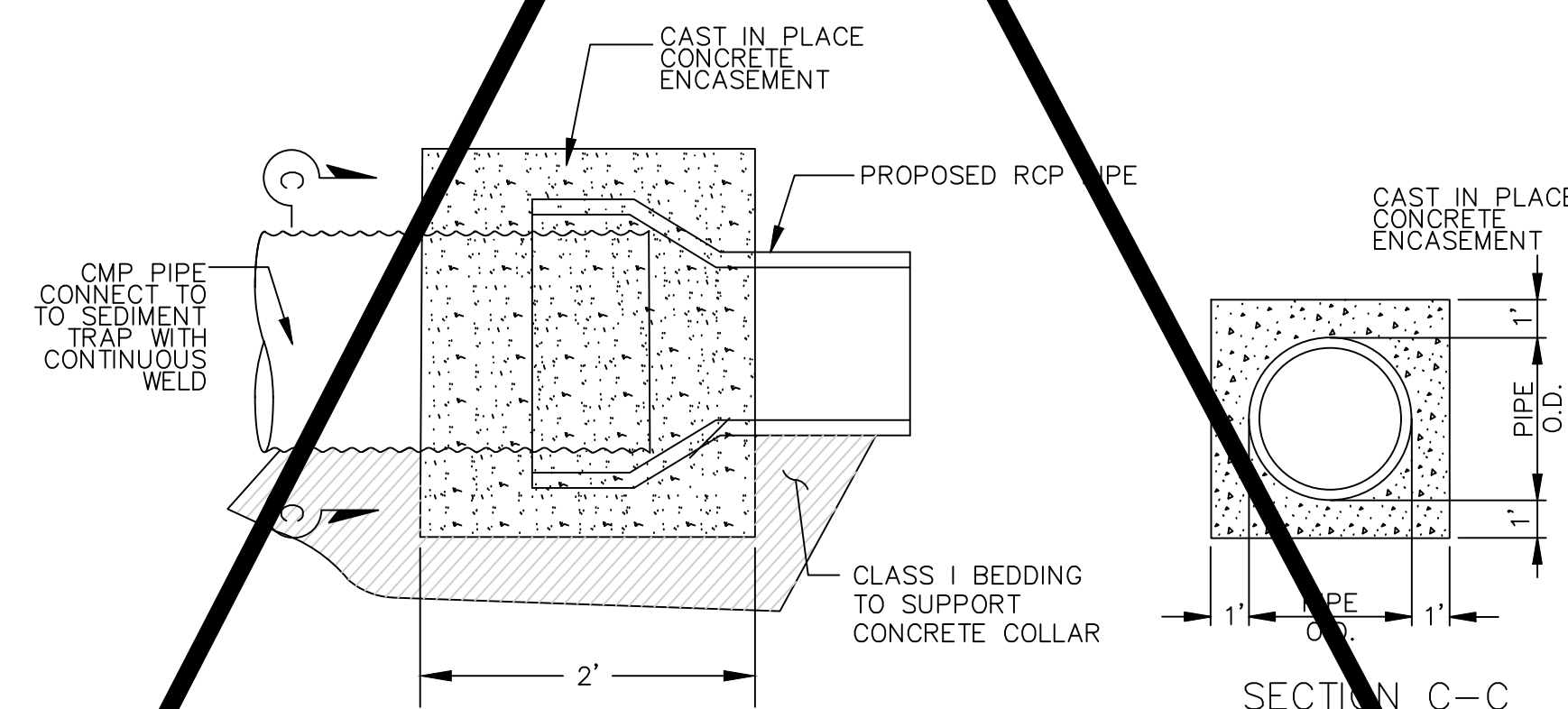
SECTION B-B



SECTION A-A



DETAIL B



DETAIL C: CMP TO RCP TRANSITION

DOUBLE SEDIMENT TRAP NOTES:

- PLANS WILL NOTE WHERE CONNECTION TO EXISTING SD IS REQUIRED OR IF NEW STORM DRAIN NEEDS TO BE CONSTRUCTED.
- CMP SHALL BE 12 GAUGE AND 36" DIAMETER.
- INLET PIPES SHALL NOT PROTRUDE INTO BASIN.
- ALL HARDWARE TO BE GALVANIZED AFTER FABRICATION. SEE NDOT STANDARD SPECIFICATIONS OR SPECIAL PROVISIONS.
- LID SHALL BE H2O TRAFFIC RATED, SOLID, AND DETACHABLE. SEE NDOT SPECIAL PROVISIONS.

DOUBLE SEDIMENT CAN

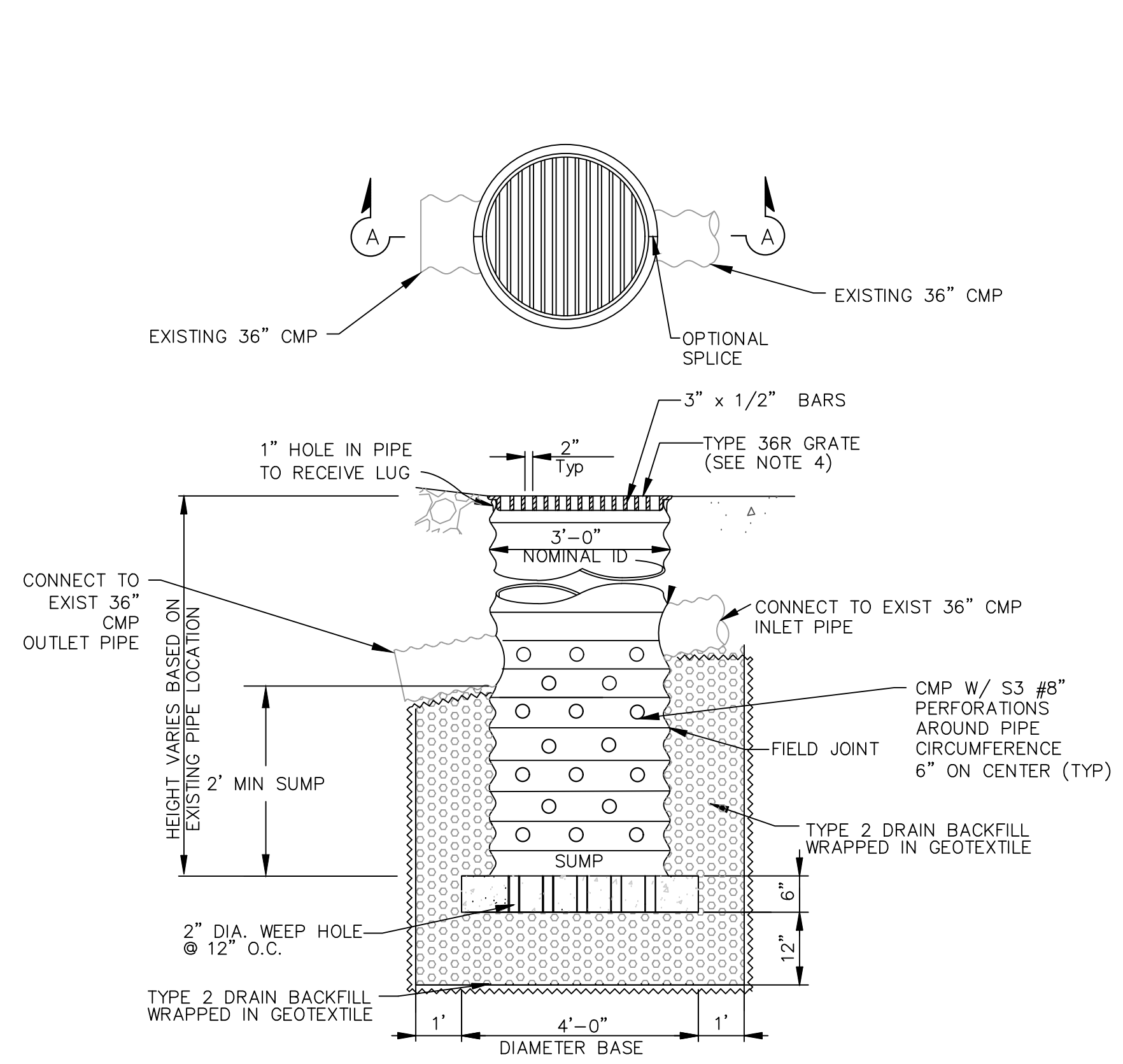
SCALE: N.T.S.

2
D-3

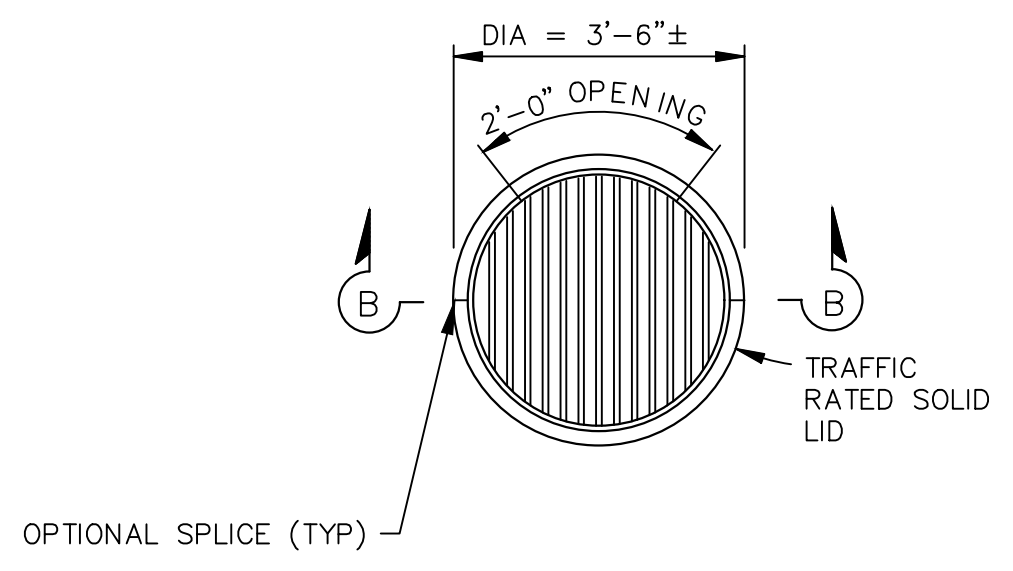
DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET

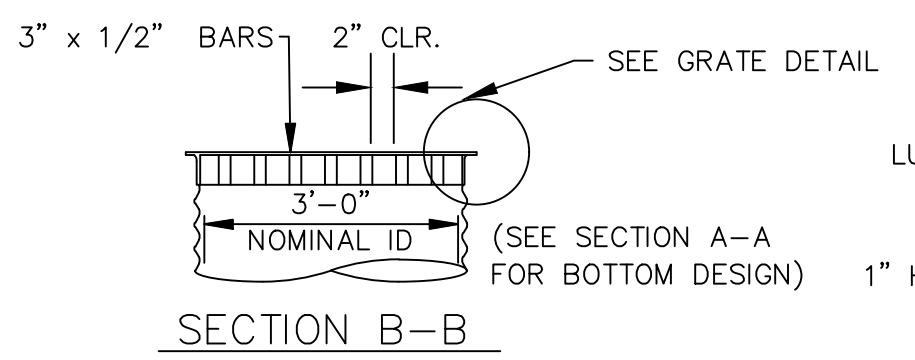
D-3A



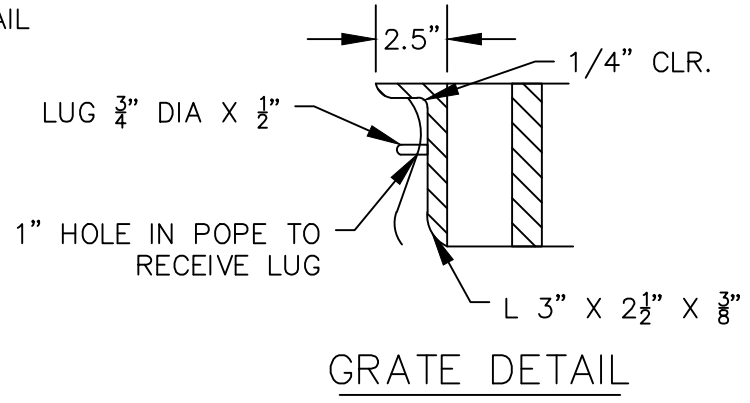
SECTION A-A
PERFORATED SEDIMENT CAN
STEEL PIPE INLET WITH GRATE



DETAIL B

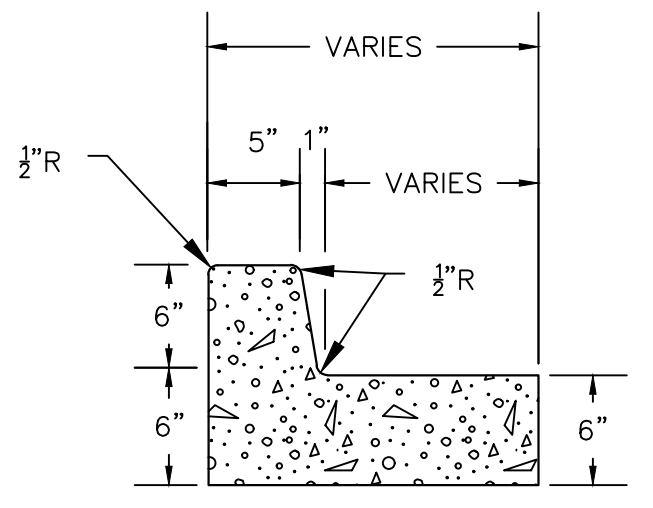


SECTION B-B
STEEL PIPE INLET WITH SIDE OPENING
AND STEEL COVER (SEE NOTE 3)

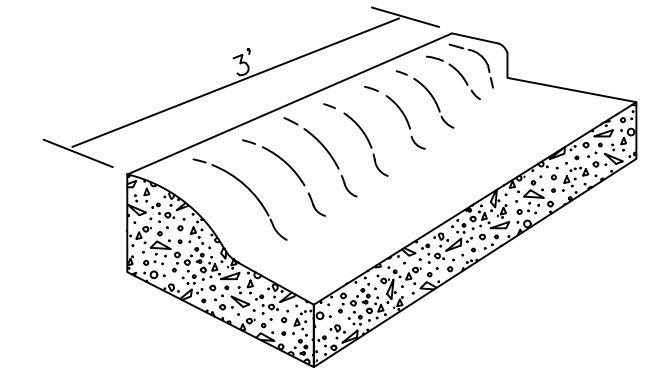


GRATE DETAIL

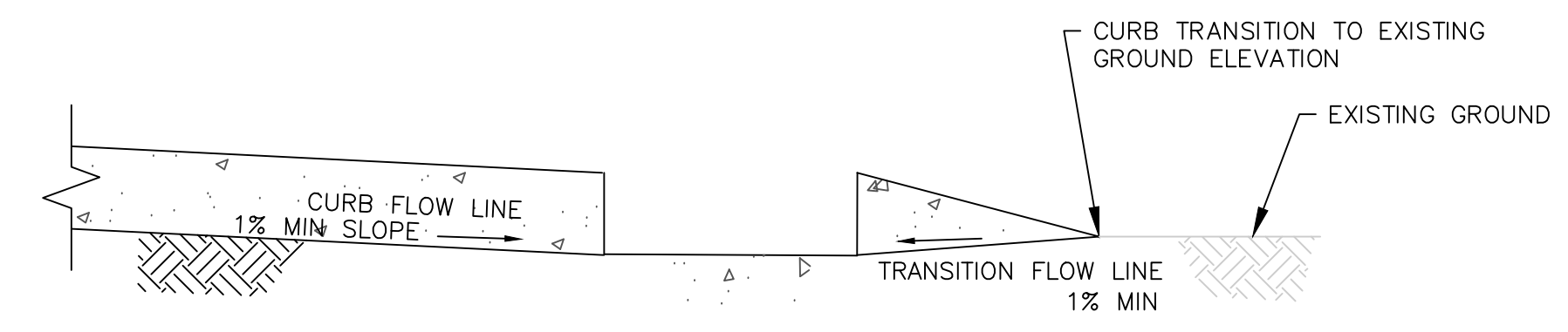
- SEDIMENT TRAP NOTES:
1. PLANS WILL NOTE WHERE CONNECTION TO EXISTING SD IS REQUIRED OR IF NEW STORM DRAIN NEEDS TO BE CONSTRUCTED.
 2. CMP SHALL BE 12 GAUGE AND 36" DIAMETER.
 3. INLET PIPES SHALL NOT PROTRUDE INTO BASIN.
 4. ALL HARDWARE TO BE GALVANIZED AFTER FABRICATION. SEE NDOT STANDARD SPECIFICATIONS OR SPECIAL PROVISIONS.
 5. DEPRESSION FROM FLOW LINE TO SEDIMENT TRAP GRATE SHALL BE 3" MAX.
 6. CONCRETE ENCASEMENT TO JOIN 36" EXISTING PIPE TO 36" CULVERT.



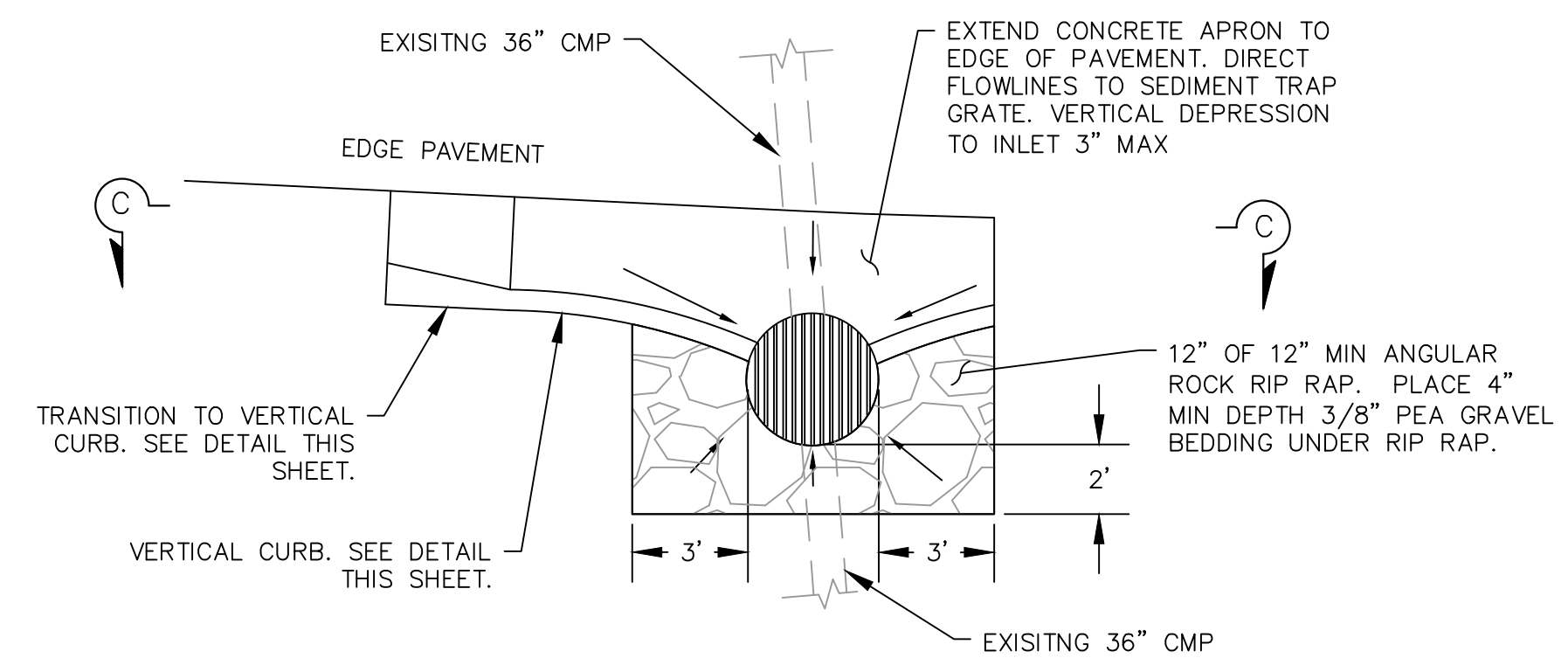
VERTICAL CURB SECTION
NDOT MODIFIED TYPE 4



TRANSITION FROM ROLLED CURB
TO VERTICAL FACE



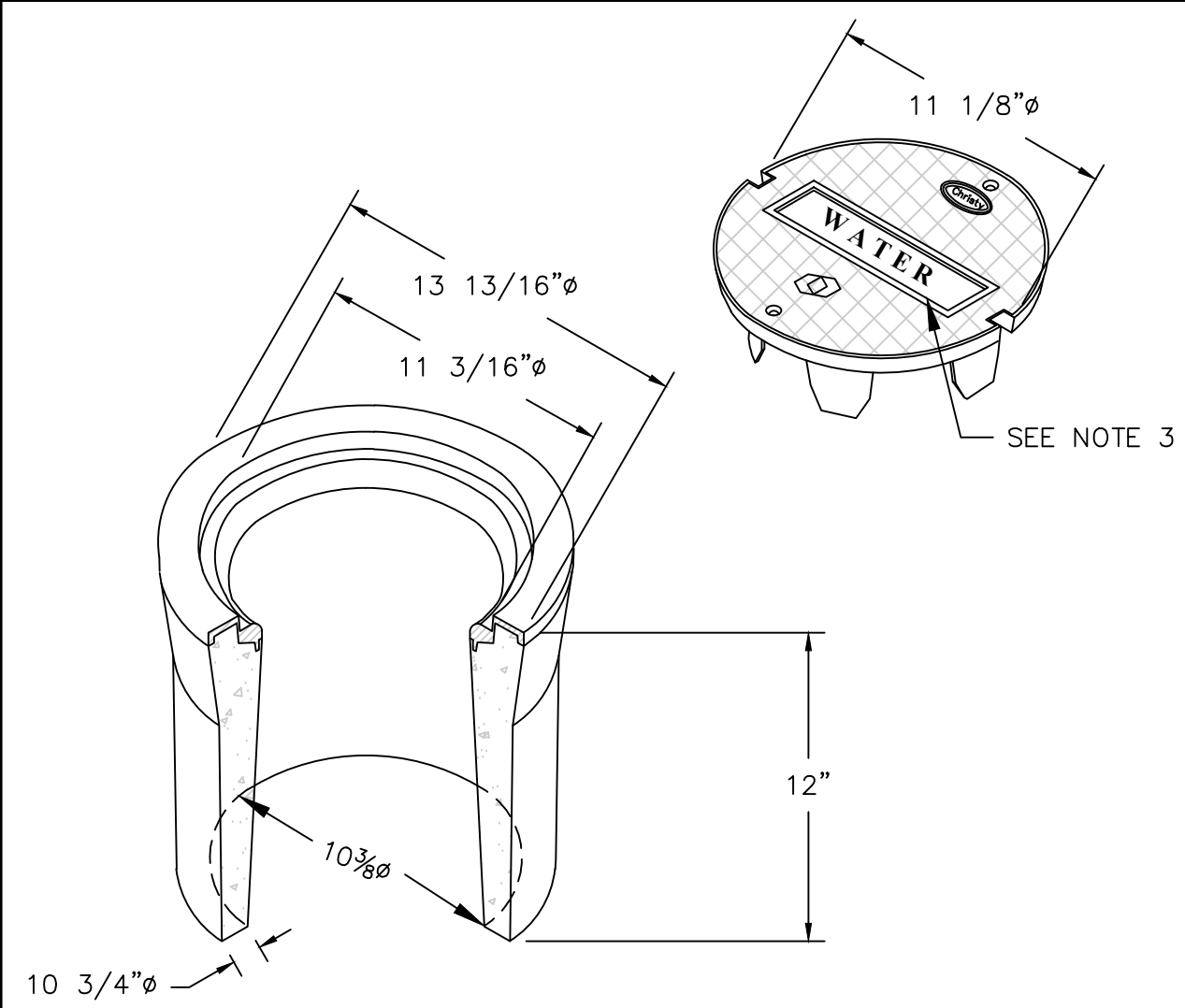
SECTION C-C



CONCRETE APRON PLAN

REVISIONS		
NO	DATE	DESCRIPTION
2	8/01/16	WORK DIRECTIVE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	08/01/2016
SCALE	AS SHOWN
PROJECT	BCC



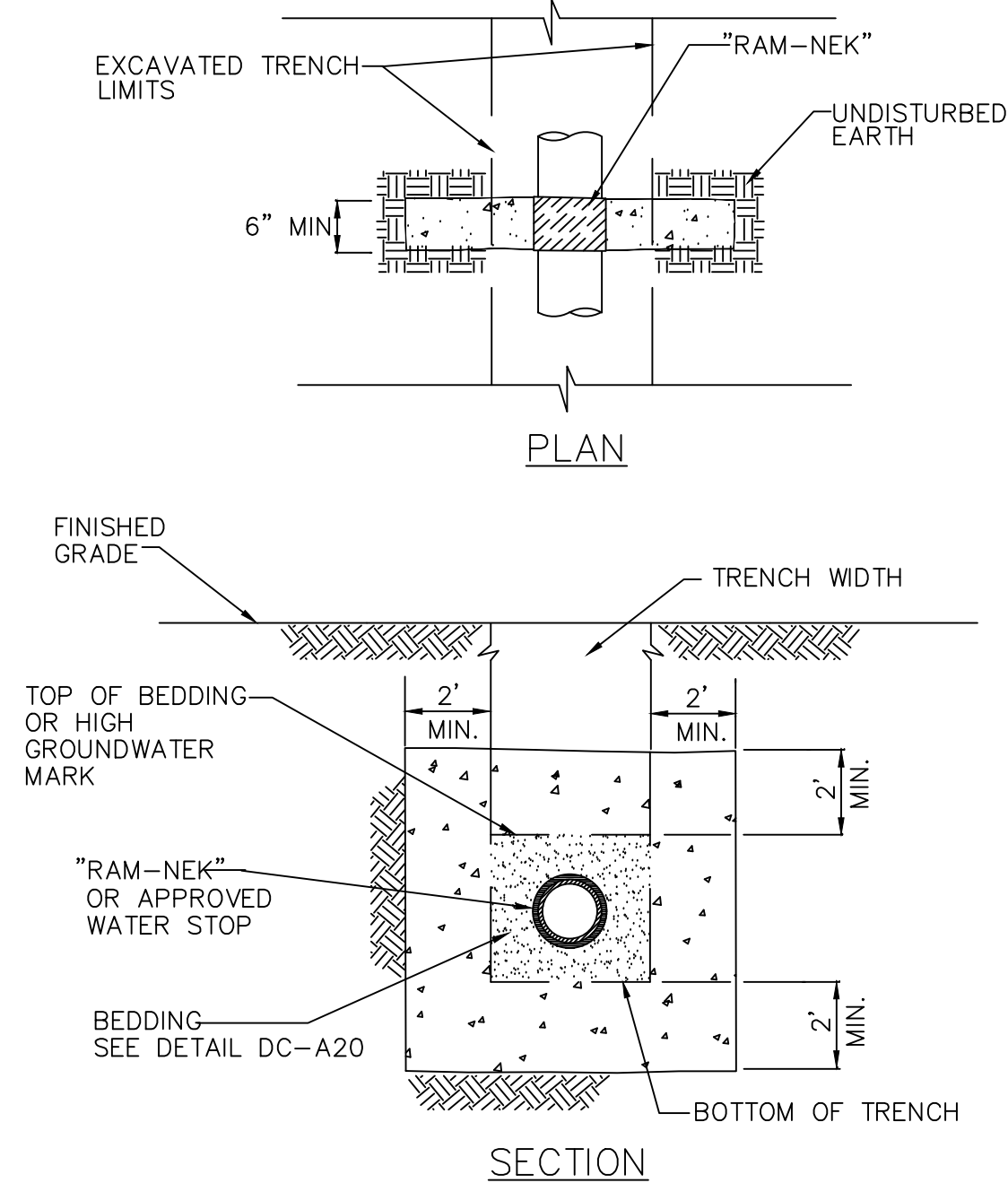
VALVE BOX NOTES:

1. VALVE BOX MUST BE TRAFFIC RATED (CHRISTY G-5 BOX OR APPROVED EQUAL).
2. MINIMUM OF 10" INSIDE DIAMETER.
3. CAST IRON LID MARKED "WATER" FOR WATER LINE APPLICATIONS. CAST IRON LID MARKED "RECLAIMED WATER" OR "RCW" WHEN INSTALLED ON A RECLAIMED WATER MAIN. LID SHALL BE MARKED "SS FORCE MAIN" OR "SS FM" WHEN INSTALLED ON A SANITARY SEWER FORCE MAIN.
4. RISER OF 6" MAX PVC EXTENDED IN VALVE CAN A MINIMUM OF 6".
5. ALL NEW VALVE BOXES TO BE SET TO GRADE PER DETAIL 3/D-6.
6. SET VALVE BOX AND ONE POINT OF TRIANGULAR LID TO POINT IN DIRECTION OF WATER MAIN.

VALVE BOX

SCALE: N.T.S.

1
D-5



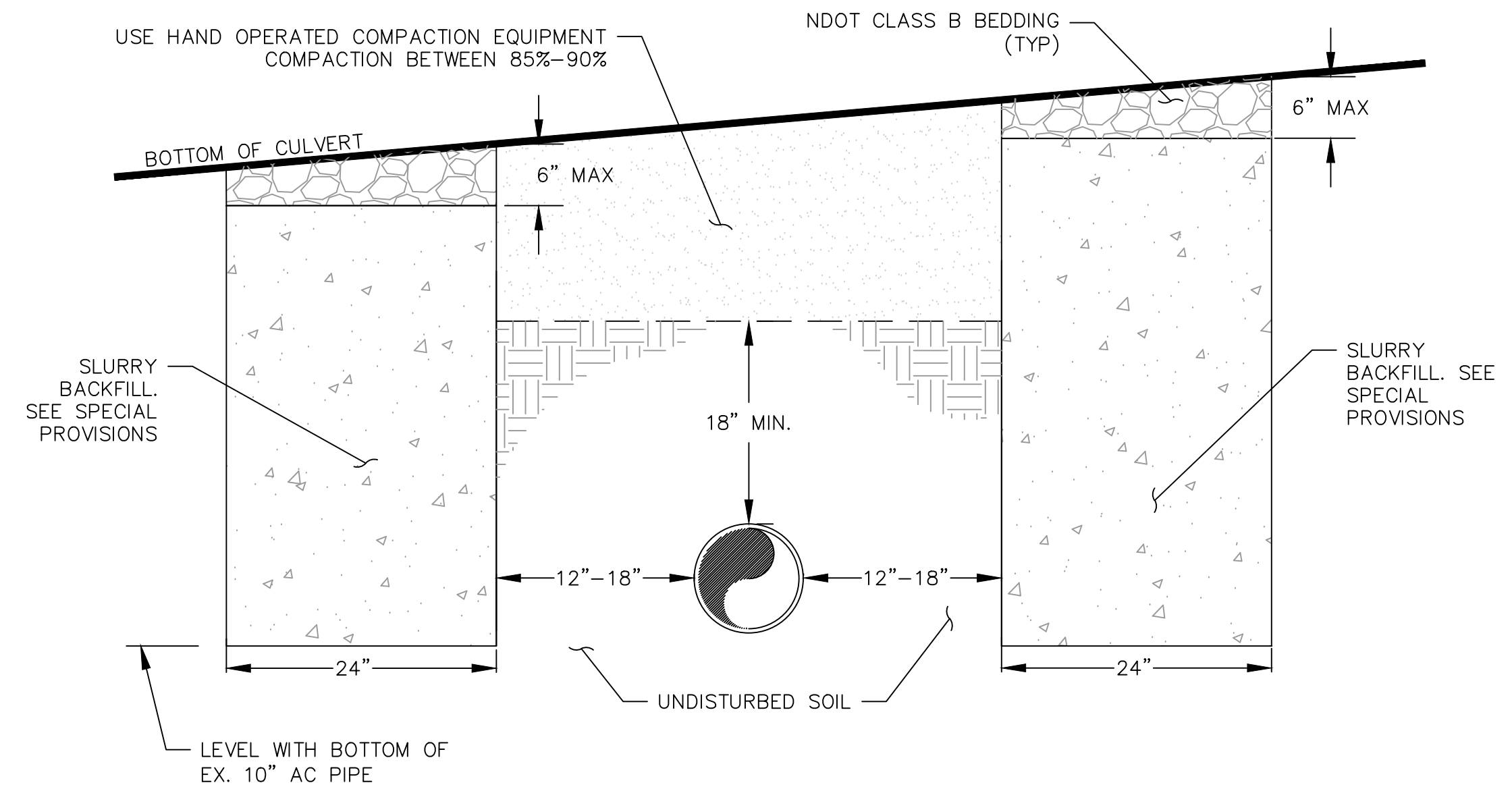
WATER STOP NOTES:

1. WATER STOPS SHALL BE CONSTRUCTED AT 200' MAXIMUM SPACING IN GROUNDWATER CONDITIONS AND WHERE TYPE "C" BEDDING IS USED, AS DIRECTED BY THE ENGINEERING DIVISION.
2. WRAP PIPE WITH "RAM-NEK" OR EQUIVALENT WHERE PIPE IS EXPOSED TO CONCRETE PRIOR TO POURING.
3. USE LIGHT CONCRETE, TWO SACK SLURRY. IF DRYWALL IS USED FOR CONCRETE FORMS, IT MAY BE LEFT IN PLACE.

WATER STOP

SCALE: N.T.S.

2
D-5



SEWER PROTECTION NOTES:

1. PROVIDE 48 HOUR NOTIFICATION TO DCSID OF CONSTRUCTION SCHEDULE PRIOR TO COMMENCING CONSTRUCTION, AS WELL AS FOR ANY CHANGES TO THAT SCHEDULE, TO ALLOW DCSID THE OPPORTUNITY TO INSPECT EACH STEP OF CONSTRUCTION IN THE VICINITY OF THEIR INFRASTRUCTURE PRIOR TO IT BEING COVERED
2. LOCATE EXISTING PIPE AT EACH END OF SLURRY SUPPORTS BY EXPOSING IT USING A NON-FORCE METHOD SUCH AS A VACTOR TRUCK OR HYDRO-EXCAVATION
3. A PRE-CONSTRUCTION VIDEO WAS PERFORMED BY DCSID ON 10/7/15. ACCEPT THIS VIDEO AS PRE-PROJECT CONDITION OR PERFORM INDEPENDENT VIDEO PRIOR TO MOBILIZATION OF HEAVY EQUIPMENT
4. PERFORM POST-CONSTRUCTION VIDEO AFTER BACKFILL AND FINAL GRADING IS COMPLETE
5. REPAIR ANY DAMAGE TO DCSID INFRASTRUCTURE TO THE SATISFACTION OF DCSID AND IN ACCORDANCE WITH DCSID APPROVED METHODOLOGY
6. LIMIT USE OF VIBRATORY EQUIPMENT WITHIN 5' (VERTICAL AND HORIZONTAL) FROM EXISTING PIPE
7. IN THE EVENT OF A PIPE FAILURE DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESULTING COSTS INCLUDING BUT NOT LIMITED TO EMERGENCY CONTAINMENT, ENVIRONMENTAL CLEANUP, BYPASS PUMPING, REPAIR, FINES, AND FEES
8. DCSID SHALL BE NOTIFIED IMMEDIATELY OF ANY DAMAGE TO OR ISSUES WITH THEIR INFRASTRUCTURE

SANITARY SEWER PROTECTION

SCALE: N.T.S.

3
D-5

TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND
TYPICAL INSTALLATION			
TYPE OF FITTING	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
TYPICAL INSTALLATION			

THRUST BLOCK BEARING AREA - SQUARE FEET

TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
4"	2	1	1	2	2	2
6"	5	3	2	4	5	5
8"	8	5	3	6	8	8
10"	13	7	4	9	13	13
12"	18	10	5	13	18	18
14"	25	13	7	17	25	25
16"	32	17	9	23	32	32

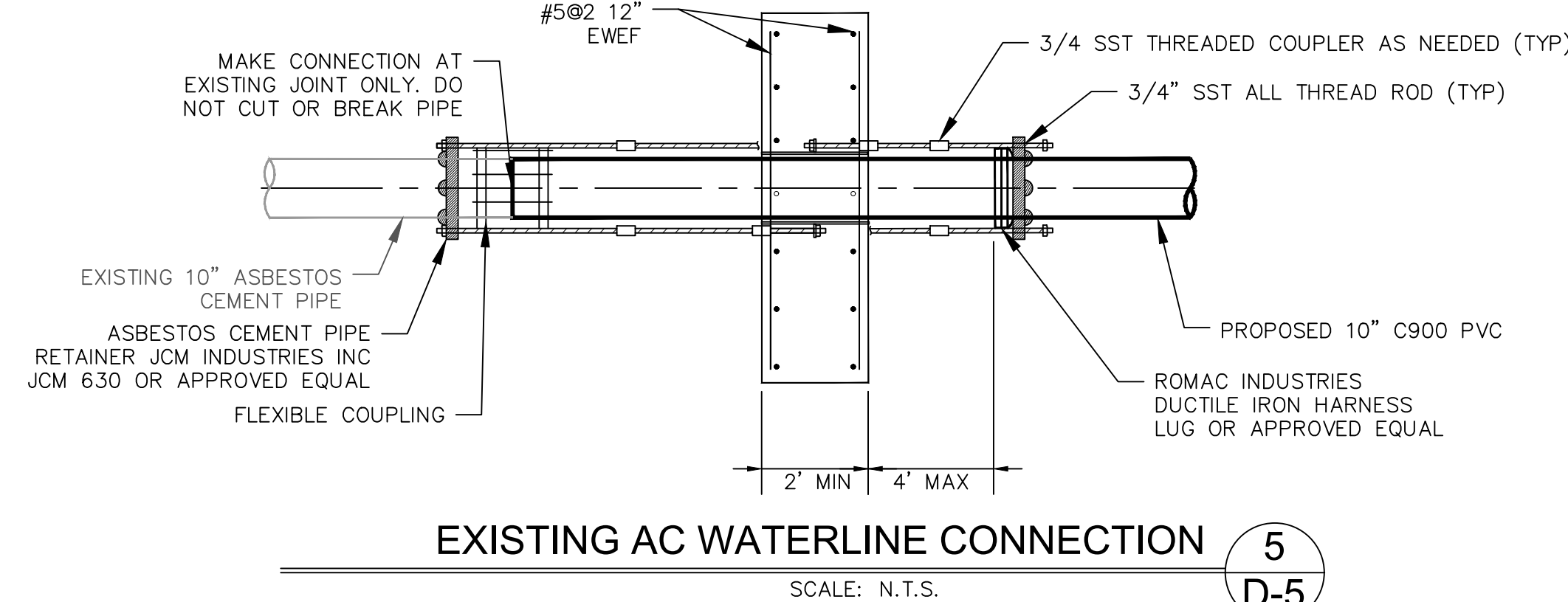
THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL.
3. JOINTS AND FACE OF PLUGS SHALL BE KEPT CLEAR OF CONCRETE.
4. THRUST BLOCK BEARING AREAS ARE FOR A 150 PSI TEST PRESSURE WITH 2000 PSF BEARING CAPACITY, NOMINAL PIPE DIAMETER, AND A FACTOR OF SAFETY OF 1.5 INSTALLATIONS USING DIFFERENT TEST PRESSURES, AND/OR SOIL TYPES SHALL BE ADJUSTED BY THE DESIGN ENGINEER.

THRUST BLOCKS

SCALE: N.T.S.

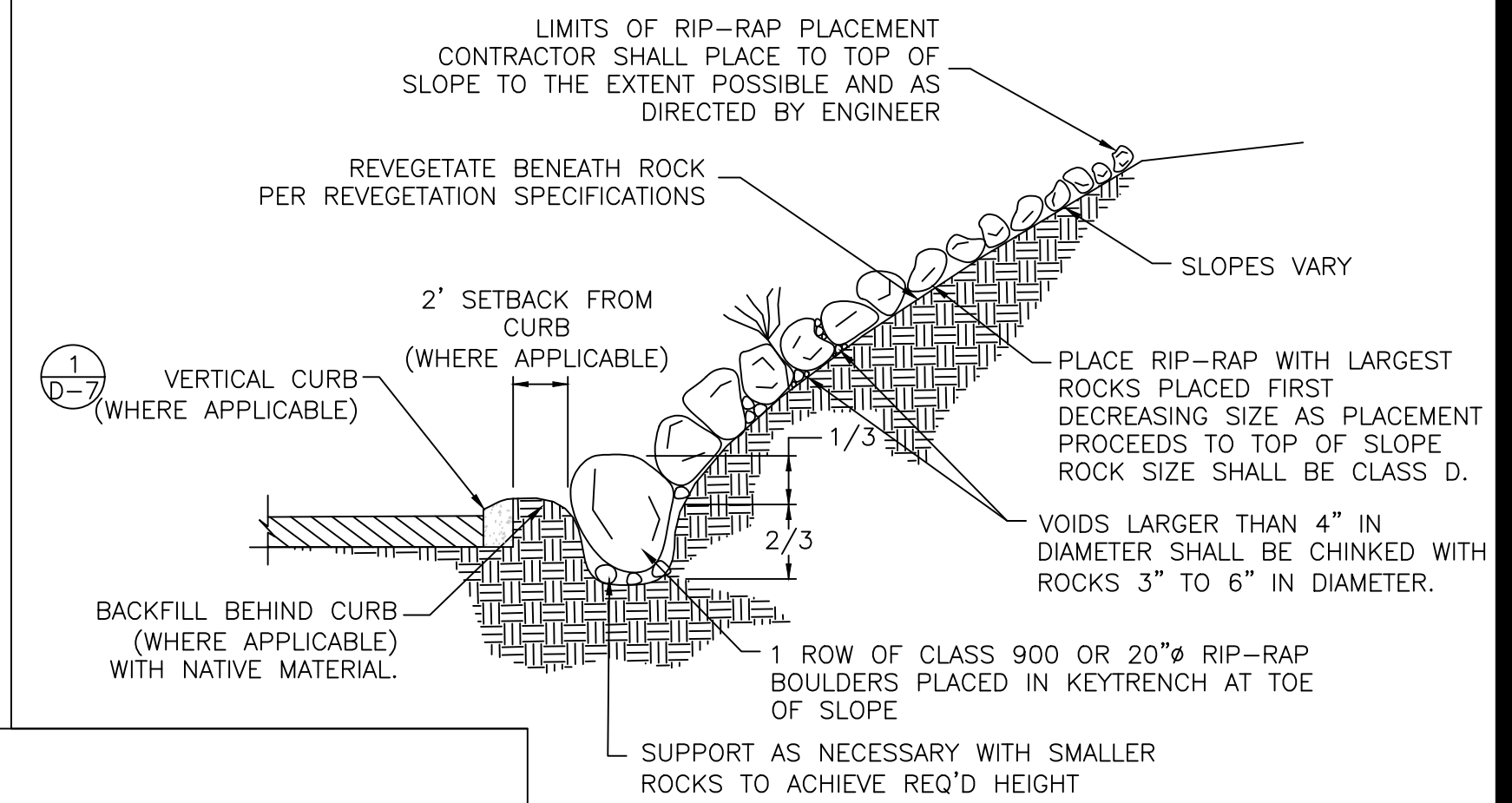
4
D-5



EXISTING AC WATERLINE CONNECTION

SCALE: N.T.S.

5
D-5



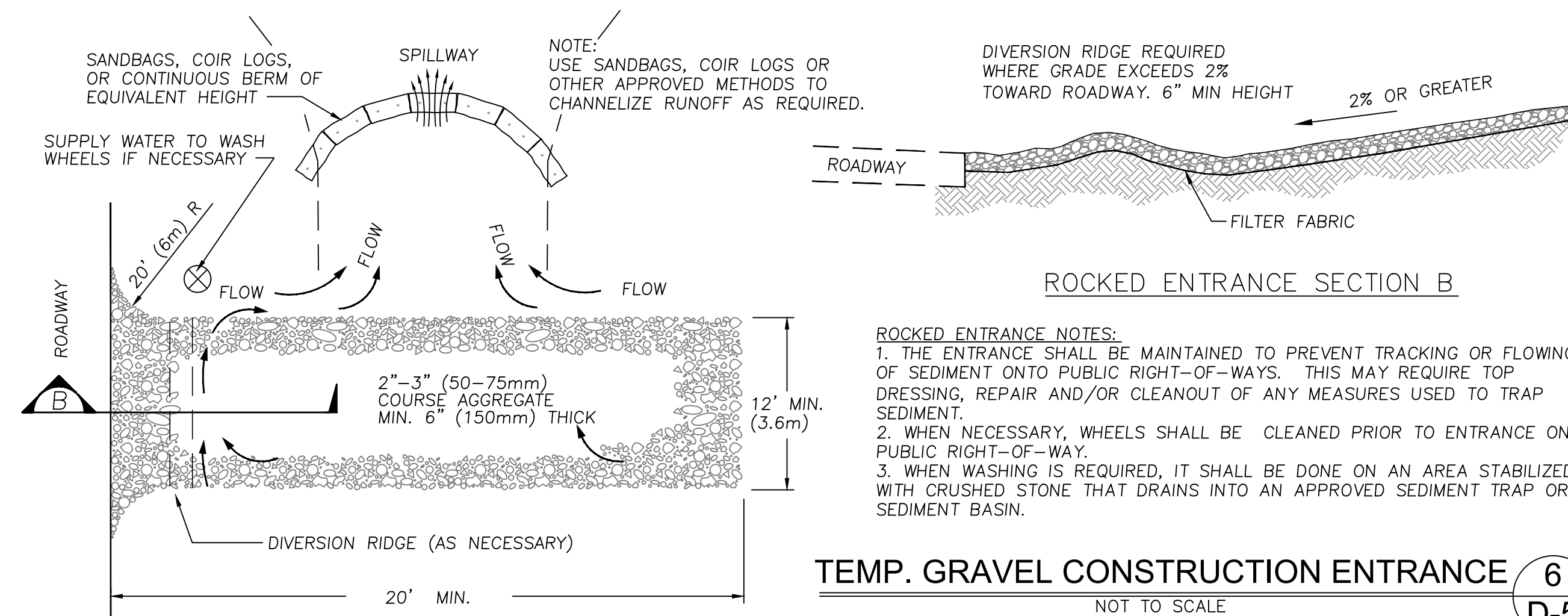
RSP NOTES:

1. CONTRACTOR SHALL ENCOURAGE THE USE OF ORGANIC MATERIAL REMOVED FROM SLOPES AND GRADING AS A SOURCE OF MULCH FOR REVEGETATION TREATMENT.
2. CONTRACTOR SHALL ENSURE THAT ROCK SLOPE PROTECTION IS NOT WEIGHT BEARING ON CURB (WHERE APPLICABLE).

ROCK SLOPE PROTECTION

NOT TO SCALE

7
D-5



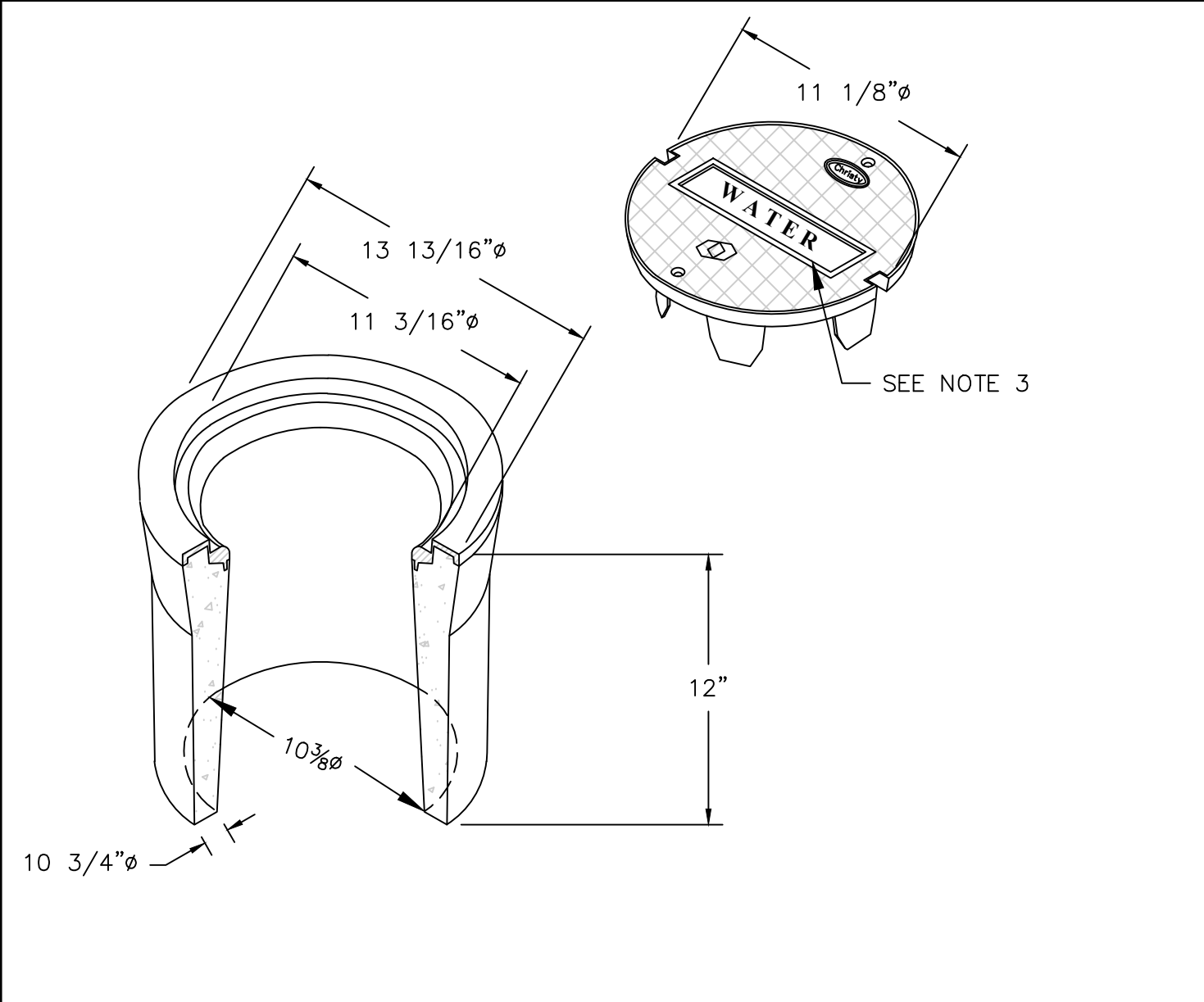
TEMP. GRAVEL CONSTRUCTION ENTRANCE

NOT TO SCALE

6
D-5

RECORD DRAWINGS

1/20/17



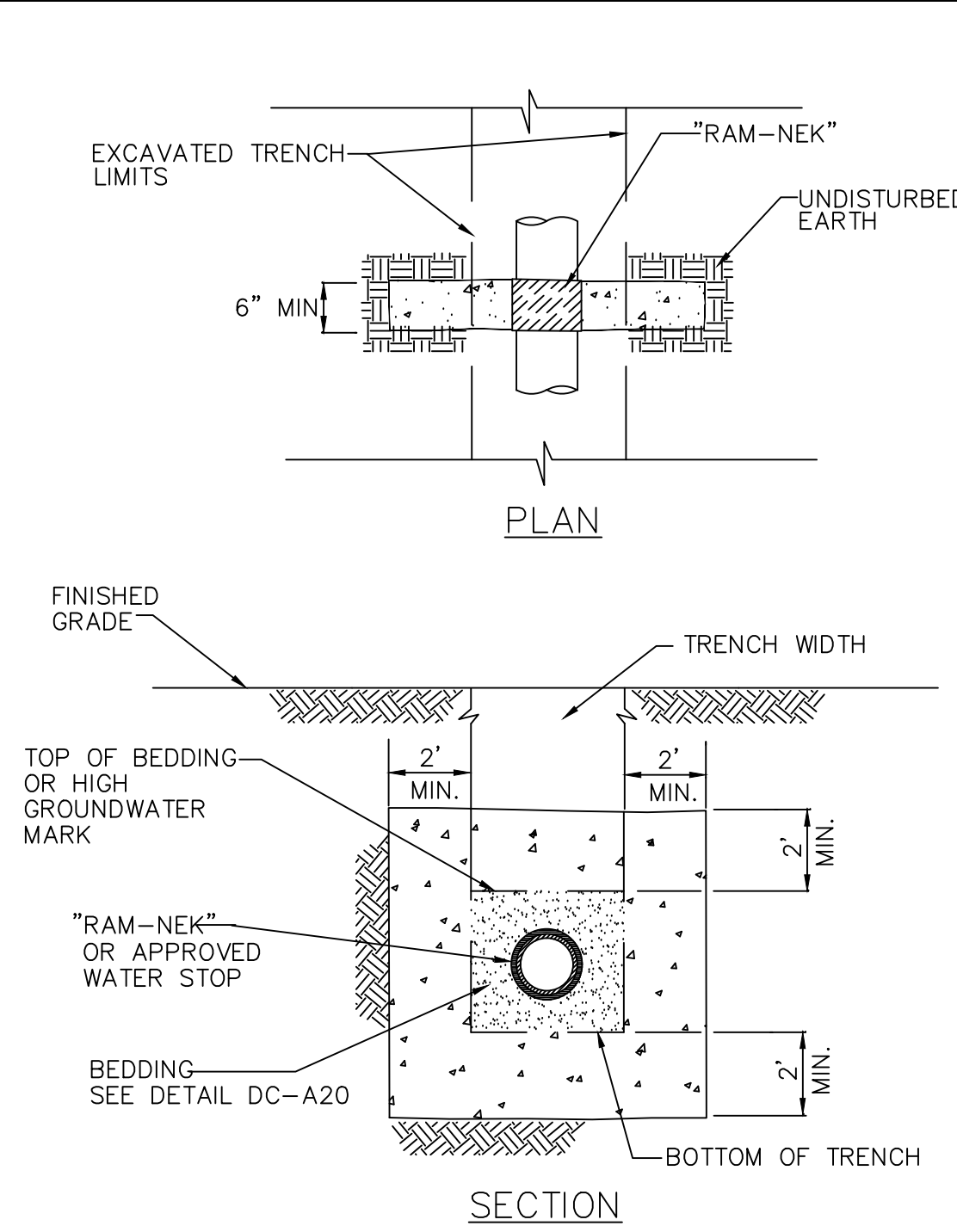
VALVE BOX NOTES:

1. VALVE BOX MUST BE TRAFFIC RATED (CHRISTY G-5 BOX OR APPROVED EQUAL).
2. MINIMUM OF 10" INSIDE DIAMETER.
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4. RISER OF 6" MAX PVC EXTENDED IN VALVE CAN A MINIMUM OF 6".
5. ALL NEW VALVE BOXES TO BE SET TO GRADE PER DETAIL 3/D-6.
6. SET VALVE BOX AND ONE POINT OF TRIANGULAR LID TO POINT IN DIRECTION OF WATER MAIN.

VALVE BOX

SCALE: N.T.S.

1
D-5



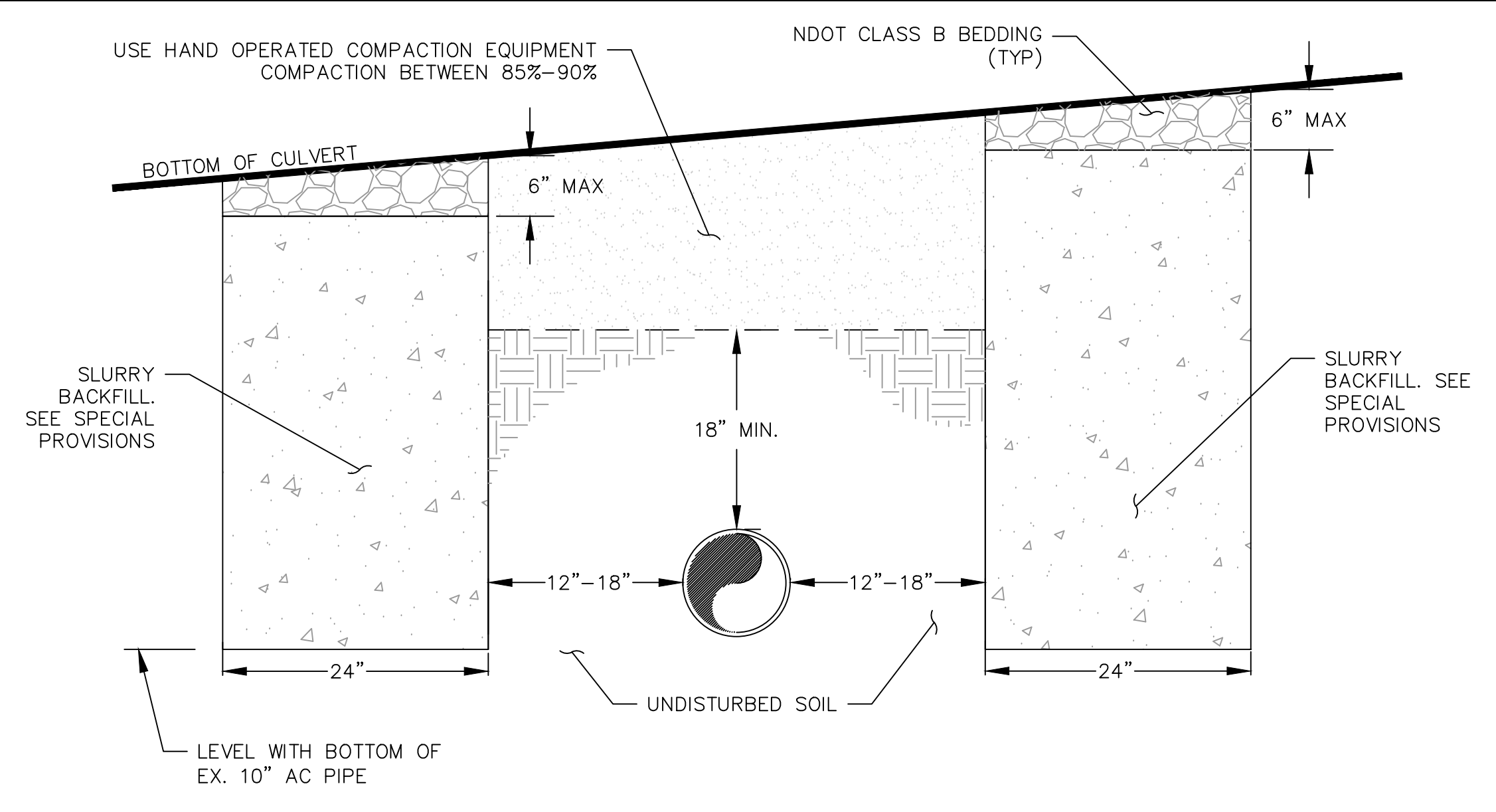
WATER STOP NOTES:

1. WATER STOPS SHALL BE CONSTRUCTED AT 200' MAXIMUM SPACING IN GROUNDWATER CONDITIONS AND WHERE TYPE "C" BEDDING IS USED, AS DIRECTED BY THE ENGINEERING DIVISION.
2. WRAP PIPE WITH "RAM-NEK" OR EQUIVALENT WHERE PIPE IS EXPOSED TO CONCRETE PRIOR TO POURING.
3. USE LIGHT CONCRETE, TWO SACK SLURRY. IF DRYWALL IS USED FOR CONCRETE FORMS, IT MAY BE LEFT IN PLACE.

WATER STOP

SCALE: N.T.S.

2
D-5



SEWER PROTECTION NOTES:

1. PROVIDE 48 HOUR NOTIFICATION TO DCSID OF CONSTRUCTION SCHEDULE PRIOR TO COMMENCING CONSTRUCTION, AS WELL AS FOR ANY CHANGES TO THAT SCHEDULE, TO ALLOW DCSID THE OPPORTUNITY TO INSPECT EACH STEP OF CONSTRUCTION IN THE VICINITY OF THEIR INFRASTRUCTURE PRIOR TO IT BEING COVERED
2. LOCATE EXISTING PIPE AT EACH END OF SLURRY SUPPORTS BY EXPOSING IT USING A NON-FORCE METHOD SUCH AS A VACTOR TRUCK OR HYDRO-EXCAVATION
3. A PRE-CONSTRUCTION VIDEO WAS PERFORMED BY DCSID ON 10/7/15. ACCEPT THIS VIDEO AS PRE-PROJECT CONDITION OR PERFORM INDEPENDENT VIDEO PRIOR TO MOBILIZATION OF HEAVY EQUIPMENT
4. PERFORM POST-CONSTRUCTION VIDEO AFTER BACKFILL AND FINAL GRADING IS COMPLETE
5. REPAIR ANY DAMAGE TO DCSID INFRASTRUCTURE TO THE SATISFACTION OF DCSID AND IN ACCORDANCE WITH DCSID APPROVED METHODOLOGY
6. LIMIT USE OF VIBRATORY EQUIPMENT WITHIN 5' (VERTICAL AND HORIZONTAL) FROM EXISTING PIPE
7. IN THE EVENT OF A PIPE FAILURE DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESULTING COSTS INCLUDING BUT NOT LIMITED TO EMERGENCY CONTAINMENT, ENVIRONMENTAL CLEANUP, BYPASS PUMPING, REPAIR, FINES, AND FEES
8. DCSID SHALL BE NOTIFIED IMMEDIATELY OF ANY DAMAGE TO OR ISSUES WITH THEIR INFRASTRUCTURE

SANITARY SEWER PROTECTION

SCALE: N.T.S.

3
D-5

TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND
TYPICAL INSTALLATION			
TYPE OF FITTING	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
TYPICAL INSTALLATION			

THRUST BLOCK BEARING AREA - SQUARE FEET

TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
4"	2	1	1	2	2	2
6"	5	3	2	4	5	5
8"	8	5	3	6	8	8
10"	13	7	4	9	13	13
12"	18	10	5	13	18	18
14"	25	13	7	17	25	25
16"	32	17	9	23	32	32

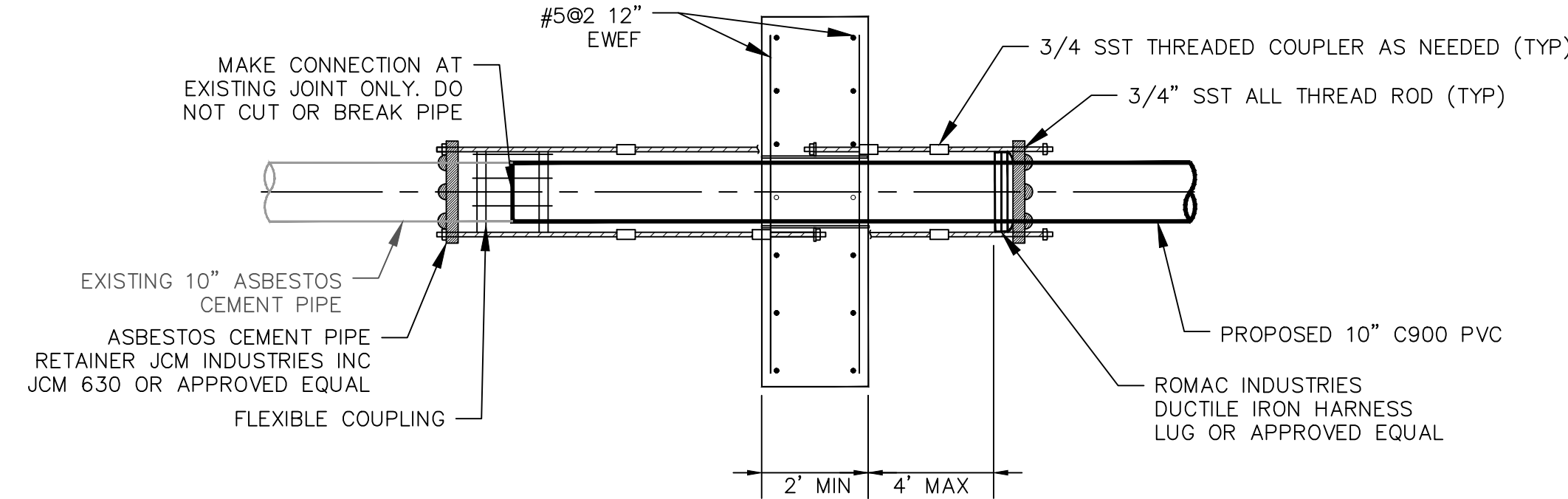
THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL.
3. JOINTS AND FACE OF PLUGS SHALL BE KEPT CLEAR OF CONCRETE.
4. THRUST BLOCK BEARING AREAS ARE FOR A 150 PSI TEST PRESSURE WITH 2000 PSF BEARING CAPACITY, NOMINAL PIPE DIAMETER, AND A FACTOR OF SAFETY OF 1.5 INSTALLATIONS USING DIFFERENT TEST PRESSURES, AND/OR SOIL TYPES SHALL BE ADJUSTED BY THE DESIGN ENGINEER.

THRUST BLOCKS

SCALE: N.T.S.

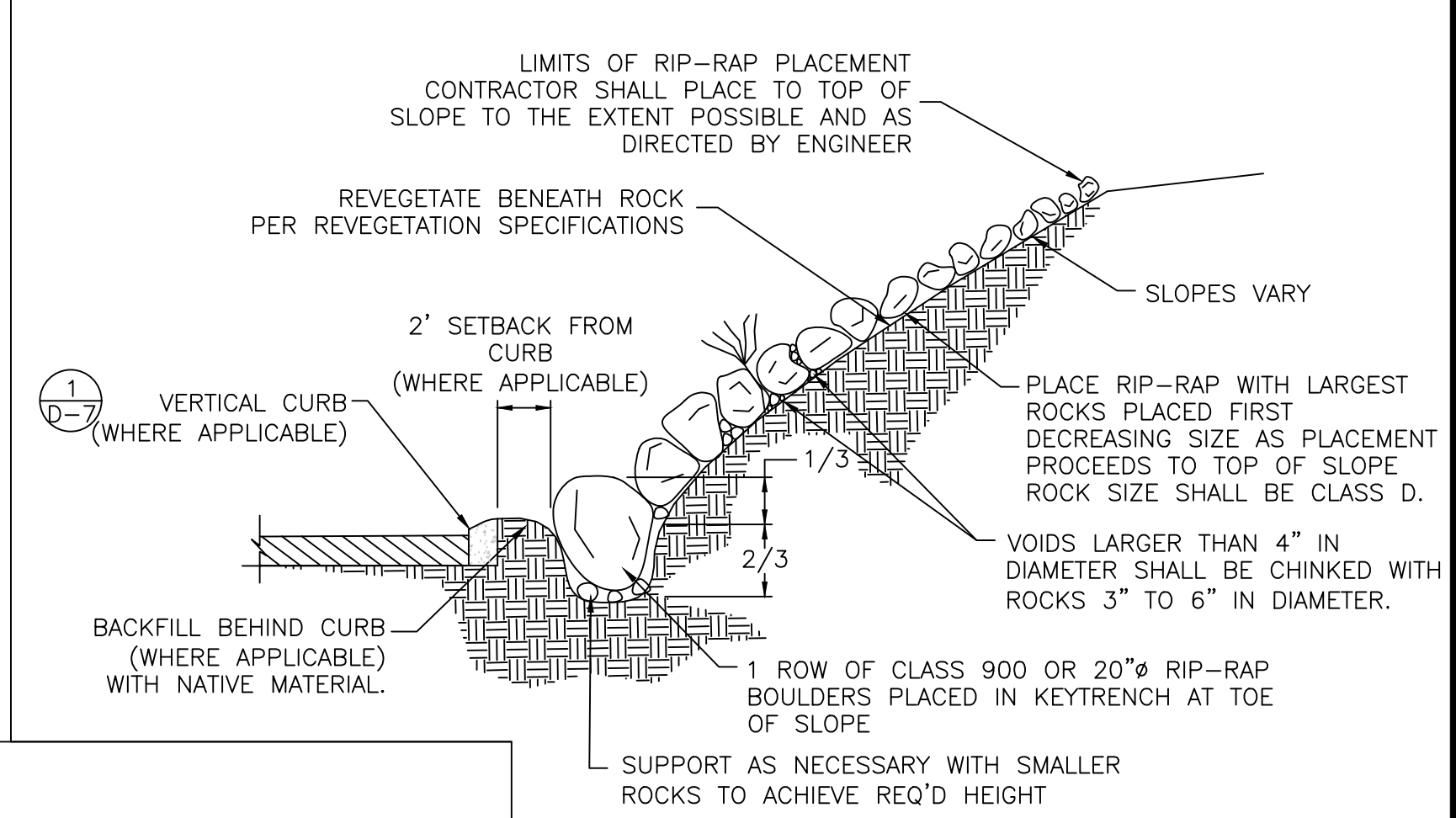
4
D-5



EXISTING AC WATERLINE CONNECTION

SCALE: N.T.S.

5
D-5



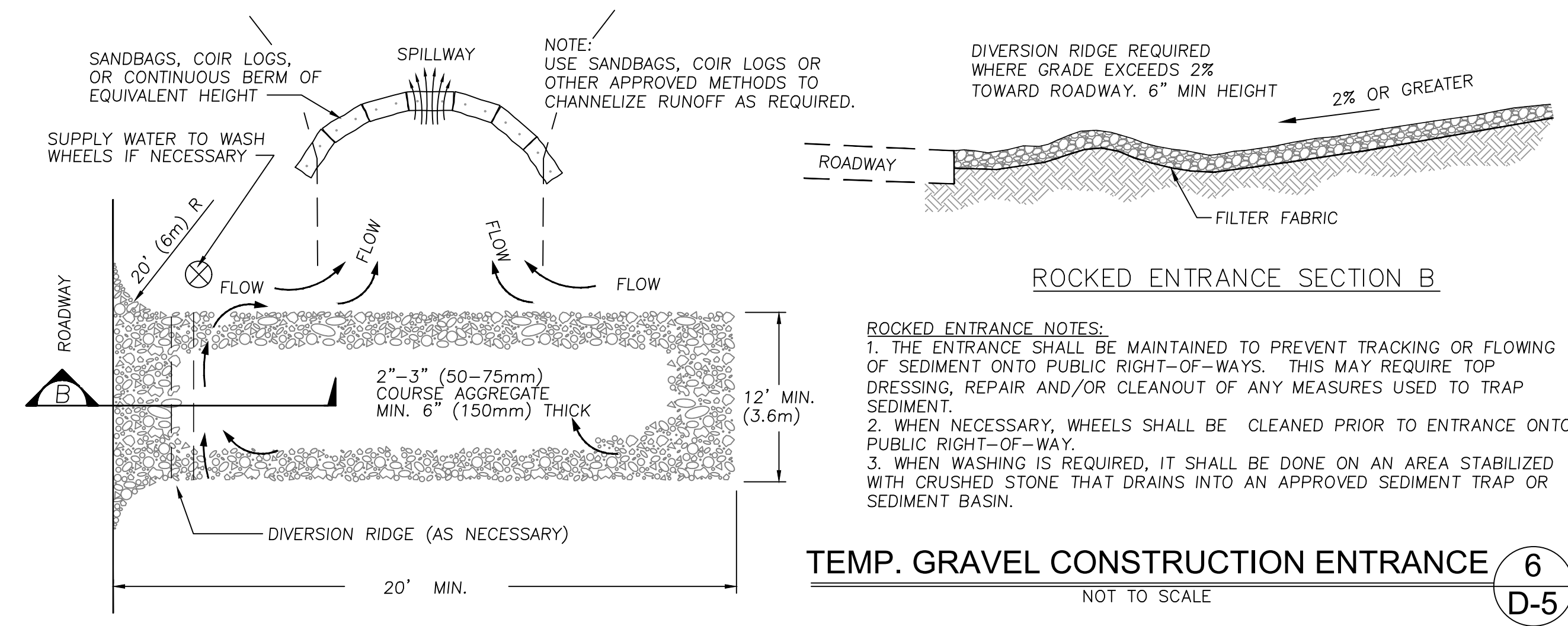
RSP NOTES:

1. CONTRACTOR SHALL ENCOURAGE THE USE OF ORGANIC MATERIAL REMOVED FROM SLOPES AND GRADING AS A SOURCE OF MULCH FOR REVEGETATION TREATMENT.
2. CONTRACTOR SHALL ENSURE THAT ROCK SLOPE PROTECTION IS NOT WEIGHT BEARING ON CURB (WHERE APPLICABLE).

ROCK SLOPE PROTECTION

NOT TO SCALE

7
D-5

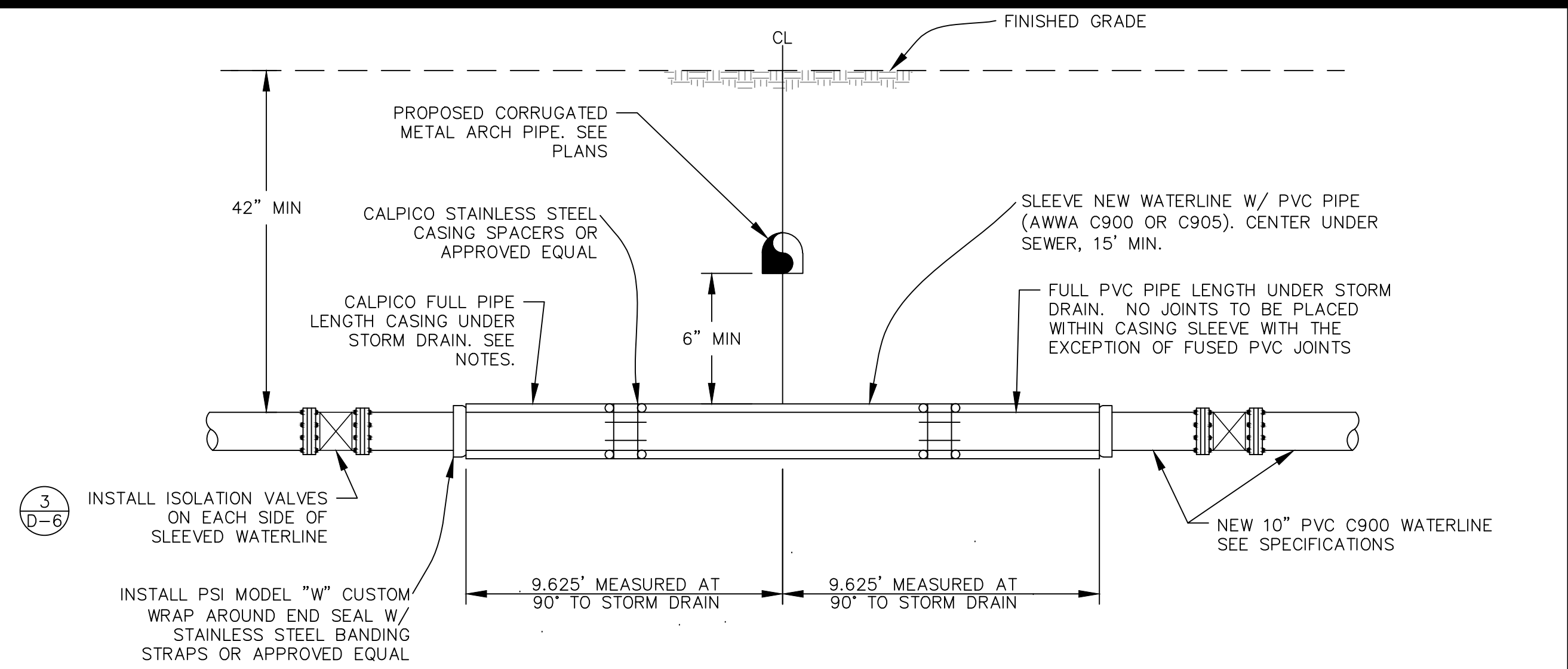


TEMP. GRAVEL CONSTRUCTION ENTRANCE

NOT TO SCALE

6
D-5

RECORD DRAWINGS
1/20/17

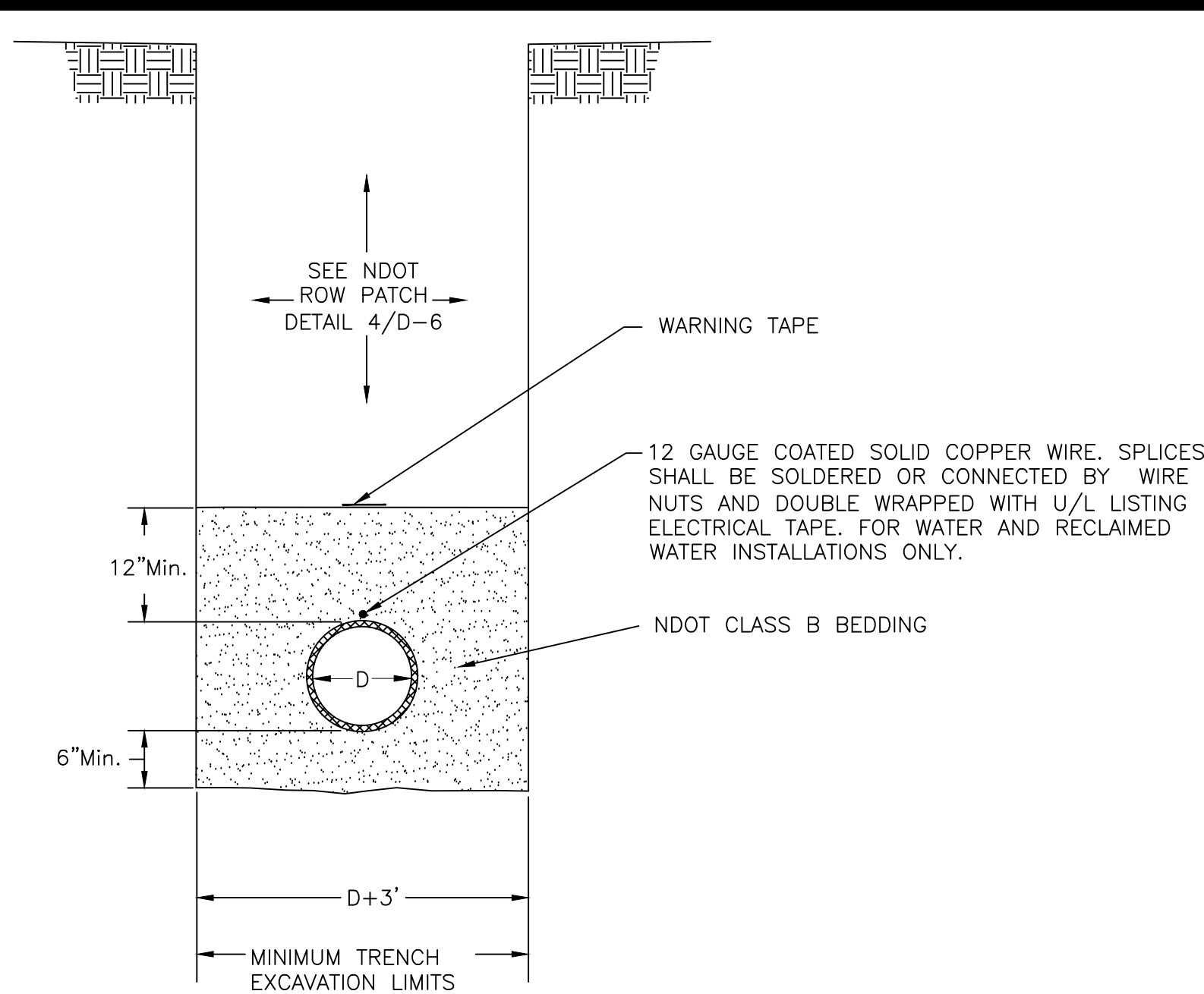


- CROSSING NOTES:**
- FOR PURPOSES OF SEPARATION AND PROTECTION OF THE WATER SUPPLY, RECLAIMED WATER AND STORM DRAIN LINE SHALL BE CONSIDERED A SEWER LINE.
 - CUT ADJACENT PIPE SECTIONS AS REQUIRED TO CENTER FULL 20' WATERLINE PIPE LENGTH UNDER SEWER.
 - SLEEVE/CASING PIPE SHALL BE SIZED TO FIT 10" WATER MAIN, SPACERS, AND ALL OTHER APPURTENANCES. CASING PIPE SHALL BE NO LARGER THAN 1.5 TIMES THE O.D. OF THE WATER MAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE CORRECT DIAMETER OF CASING.
 - CONCRETE FOR THRUST BLOCKS SHALL NOT INTERFERE WITH THE REMOVAL OF BOLTED ASSEMBLIES.
 - ROUTING WATER LINE UNDER SEWER LINE REQUIRES APPROVAL BY THE WATER UTILITY.
 - CROSSING MUST COMPLY WITH NAC 445A
 - CMAP SHALL BE INSTALLED WITH NO JOINTS OVER WATERLINE

WATER MAIN CROSSING

SCALE: N.T.S.

1
D-6



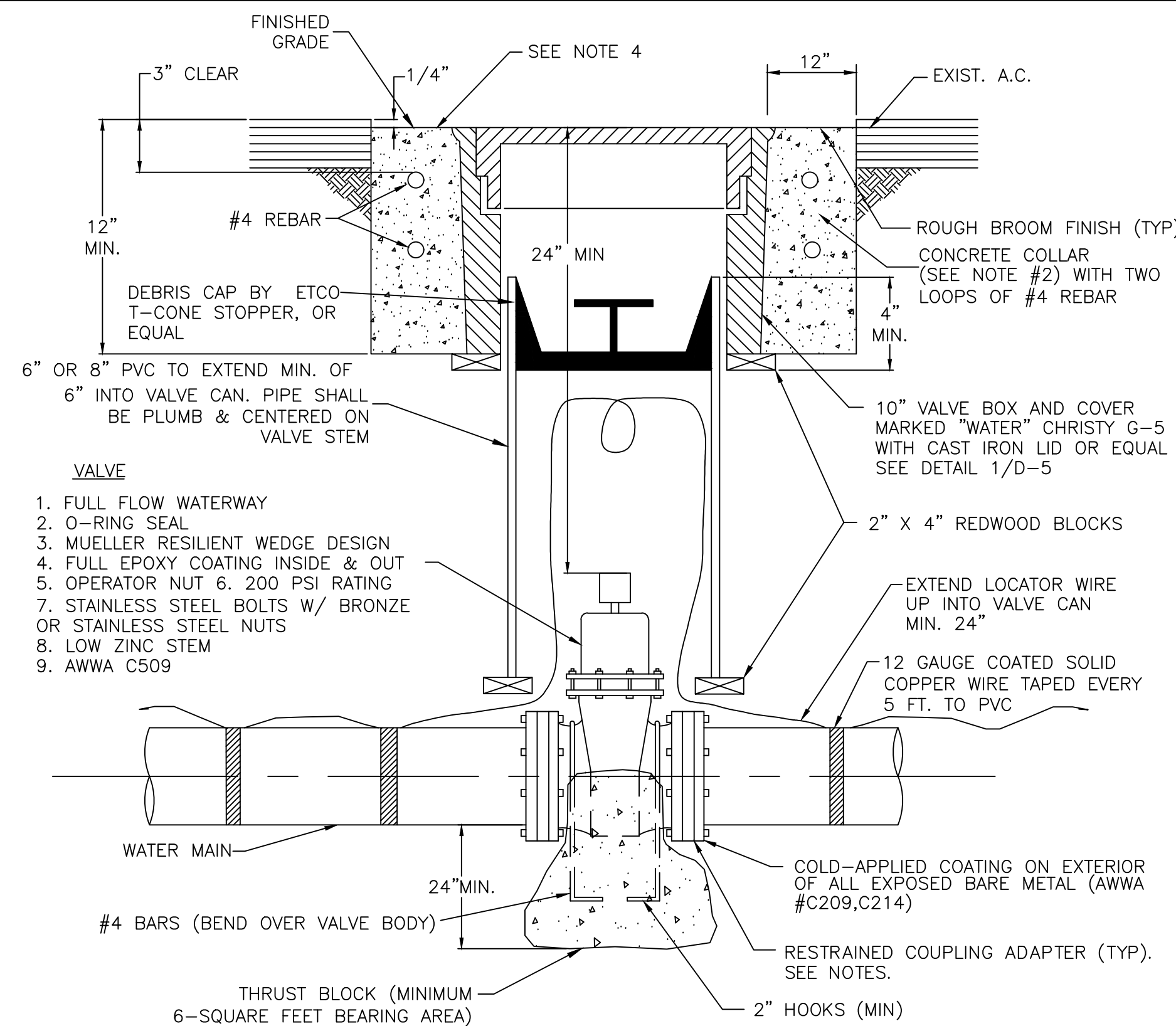
WATER LINE TRENCH NOTES:

- TRENCHES MORE THAN 4' DEEP SHALL BE SHORED, LAID BACK TO AT LEAST THE ANGLE OF REPOSE FOR EXISTING FIELD CONDITIONS, OR SOME OTHER MEANS OF PROTECTION SHALL BE PROVIDED.
- IF HAZARDOUS FIELD CONDITIONS INDICATE GROUND MOVEMENT MAY BE EXPECTED, TRENCHES LESS THAN 4' DEEP SHALL BE PROTECTED AS INDICATED IN NOTE 1.
- A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
- ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
- SLURRY BACKFILL TRENCH TO BE USED WHEN UNABLE TO MAINTAIN A 12' TRAVEL LANE WITH THE STANDARD TRENCH OR AS DIRECTED BY THE ENGINEER.
- COMPACTION SHALL BE PERCENT RELATIVE COMPACTION BASED ON THE MAXIMUM DRY DENSITY DETERMINED WITH TEST METHOD NO. NEV. T101.
- IN HIGH GROUND WATER, GRANULAR BACKFILL WRAPPED IN AN APPROVED GEOTEXTILE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- THERE SHALL BE NO ADDITIONAL COMPENSATION FOR ANY ADDITIONAL EXCAVATION OR BACKFILL REQUIRED FOR EXCAVATIONS TO MEET OSHA REGULATIONS.
- PLACE WARNING TAPE 1 FT. ABOVE WATER, AND RECLAIMED WATER PIPE.
- WATER STOPS SHALL BE USED IN HIGH GROUND- WATER CONDITIONS PER DETAIL 2/D-5.

WATER LINE TRENCH EXCAVATION AND BACKFILL

SCALE: N.T.S.

2
D-6



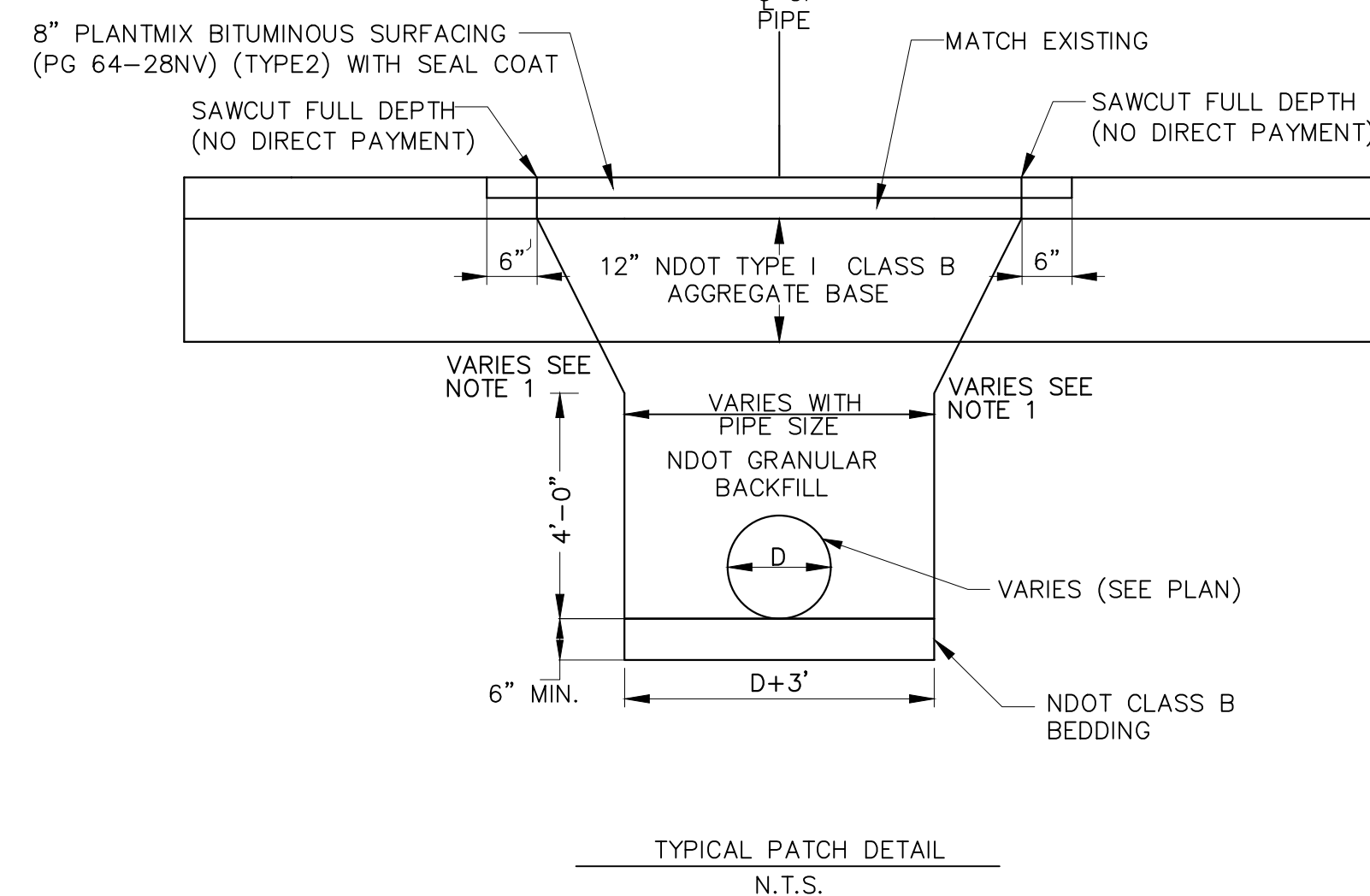
VALVE NOTES:

- MATERIAL USED FOR THRUST BLOCKING SHALL NOT PREVENT ACCESS TO THE BOLT ASSEMBLY.
- CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 202.12 OF THE STANDARD SPECIFICATIONS.
- IN ALL AREAS, LIDS SHALL BE SET FLUSH WITH FINISHED GRADE UNLESS OTHERWISE NOTED.
- THE CONCRETE COLLAR SHALL BE 1/4" BELOW SURROUNDING PAVEMENT. APPLY BLACK COLORANT TO SURFACE OF CONCRETE.
- SPLICES IN WIRE SHALL BE CONNECTED BY SOLDER OR WIRE NUTS AND WRAPPED WITH UL LISTED ELECTRICAL TAPE.
- PROVIDE AND INSTALL EXTENSION STEMS SO THAT VALVE OPERATING NUT IS NOT GREATER THAN FIVE (5) FEET BELOW FINISHED GRADE.
- THRUST BLOCK MAY BE ELIMINATED OR FLANGED VALVES WITH MUELLER AQUAGRIP OR APPROVED EQUAL FLANGED RESTRAINT ADAPTOR.
- PROVIDE PIPE POLYETHYLENE PROTECTIVE WRAP ON ALL VALVES, 8-MILS MINIMUM, SECURED WITH 2-INCH WIDE PRESSURE SENSITIVE PLASTIC TAPE, 10-MILS MINIMUM.

ISOLATION VALVE

SCALE: N.T.S.

3
D-6



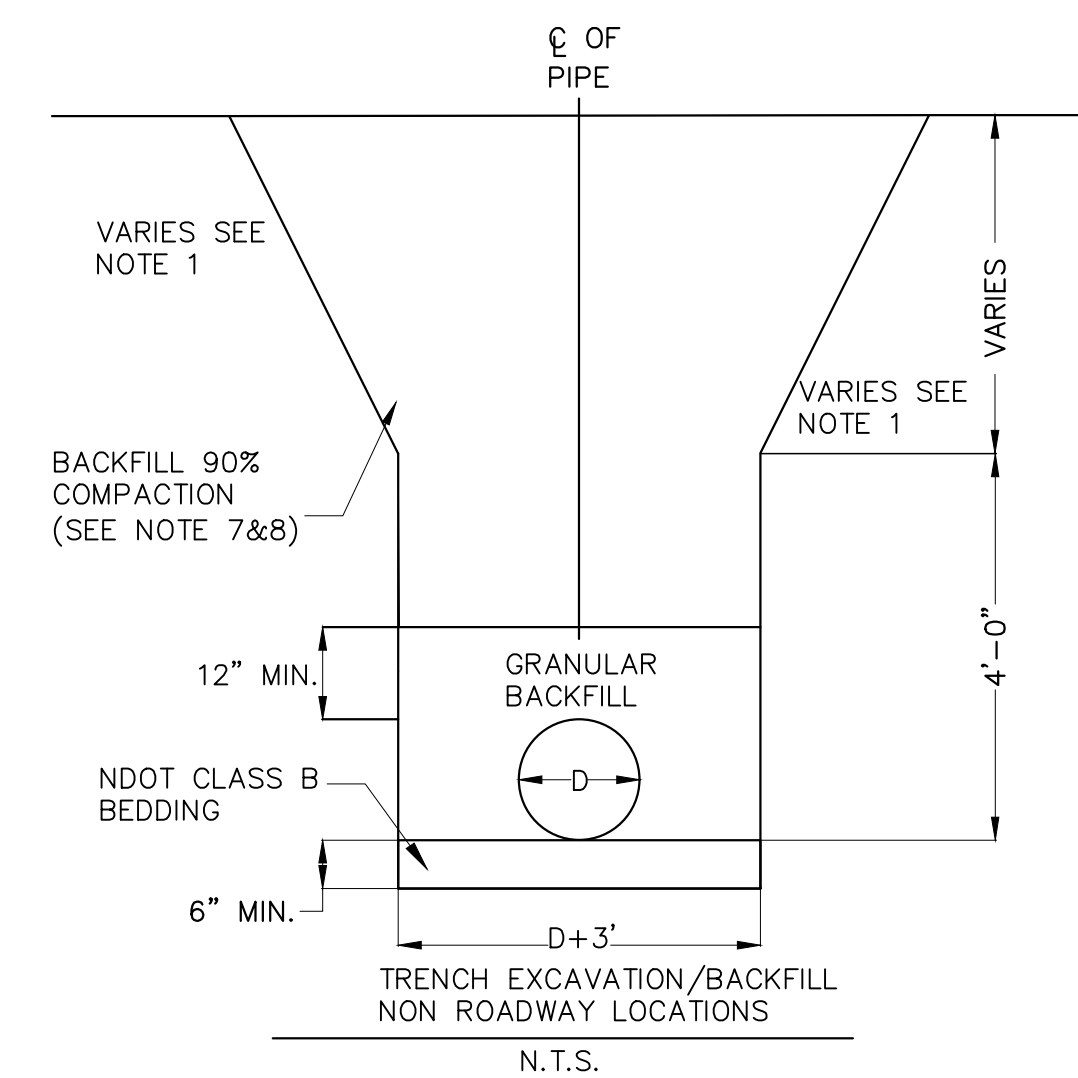
TRENCH/PATCHING NOTES:

- TRENCHES MORE THAN 4' DEEP SHALL BE SHORED, LAID BACK TO AT LEAST THE ANGLE OF REPOSE FOR EXISTING FIELD CONDITIONS, OR SOME OTHER MEANS OF PROTECTION SHALL BE PROVIDED.
- IF HAZARDOUS FIELD CONDITIONS INDICATE GROUND MOVEMENT MAY BE EXPECTED, TRENCHES LESS THAN 4' DEEP SHALL BE PROTECTED AS INDICATED IN NOTE 1.
- PAVING JOINTS IN ROADWAY ARE NOT ALLOWED IN WHEEL PATHS.
- MATCH EXISTING STRIPING THROUGH LIMITS OF PATCH AREA.
- A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
- ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
- SLURRY BACKFILL TRENCH TO BE USED WHEN UNABLE TO MAINTAIN A 12' TRAVEL LANE WITH THE STANDARD TRENCH OR AS DIRECTED BY THE ENGINEER.
- COMPACTION SHALL BE PERCENT RELATIVE COMPACTION BASED ON THE MAXIMUM DRY DENSITY DETERMINED WITH TEST METHOD NO. NEV. T101.
- IN HIGH GROUND WATER, GRANULAR BACKFILL WRAPPED IN AN APPROVED GEOTEXTILE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- THERE SHALL BE NO ADDITIONAL COMPENSATION FOR ANY ADDITIONAL EXCAVATION OR BACKFILL REQUIRED FOR EXCAVATIONS TO MEET OSHA REGULATIONS.

NDOT ROW TRENCH/PATCHING

SCALE: N.T.S.

4
D-6



N.T.S.

DETAILS
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

NO	DATE	DESCRIPTION
1	6/23/16	ADDENDUM 1

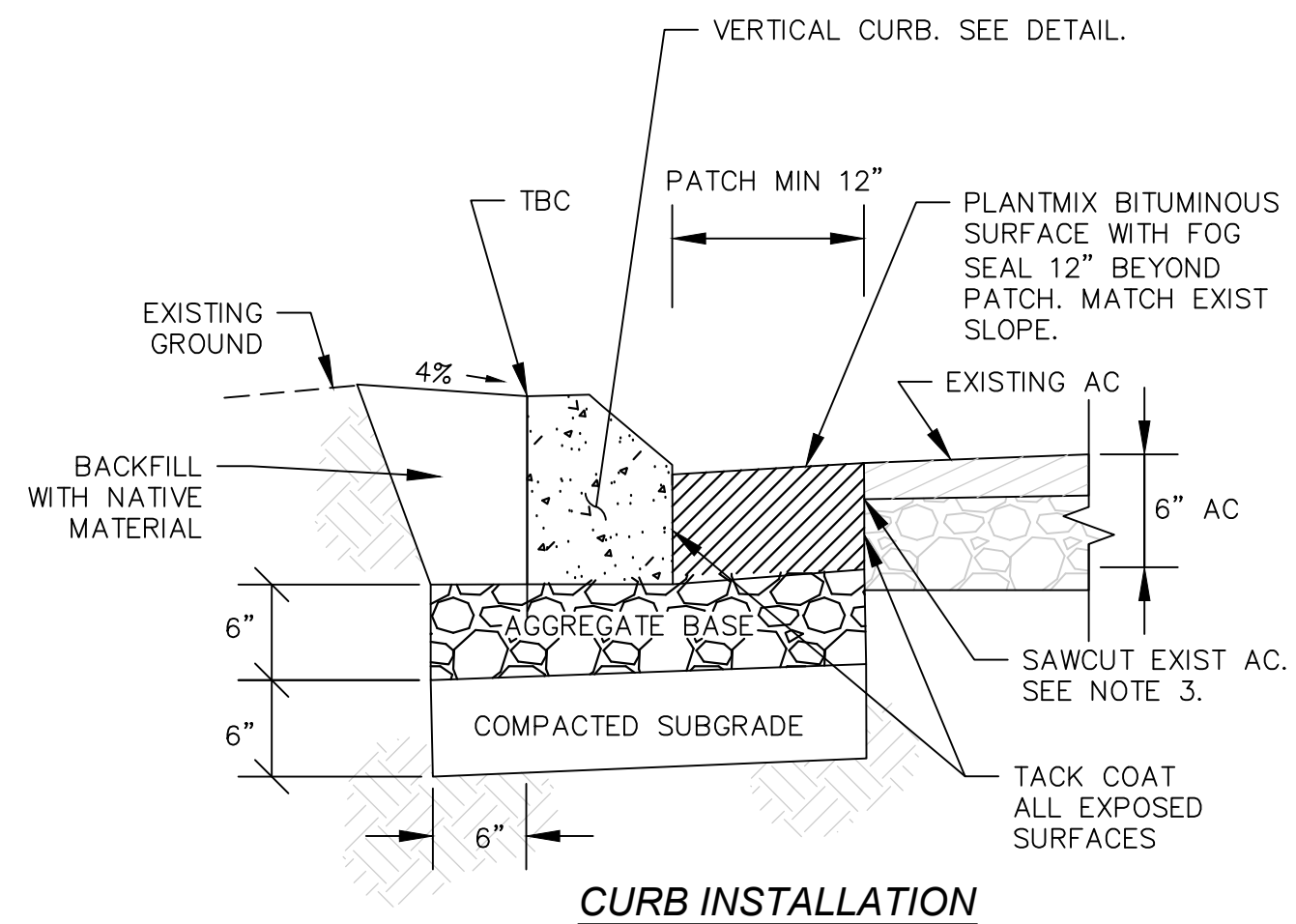
DESIGNED/DRAWN	MK/JB
CHECKED	MG
DATE	06/23/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET

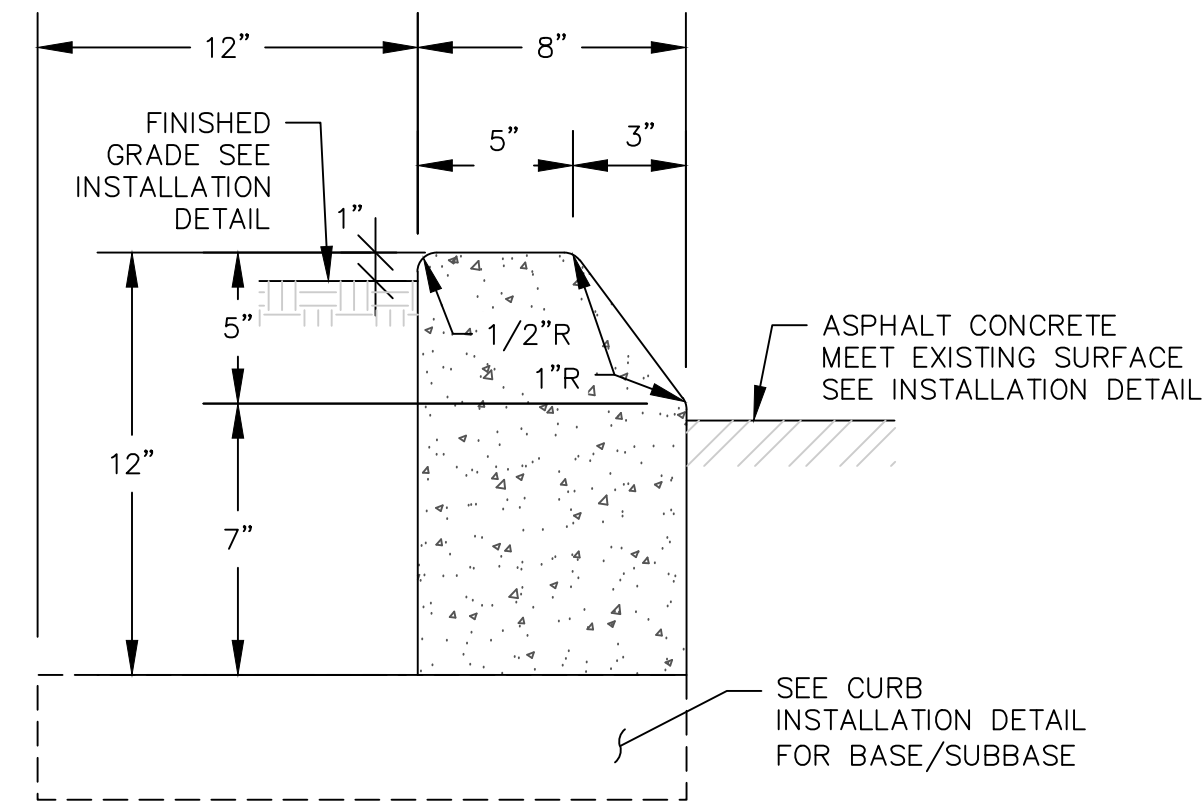
RECORD DRAWINGS
1/20/17

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24 of 25

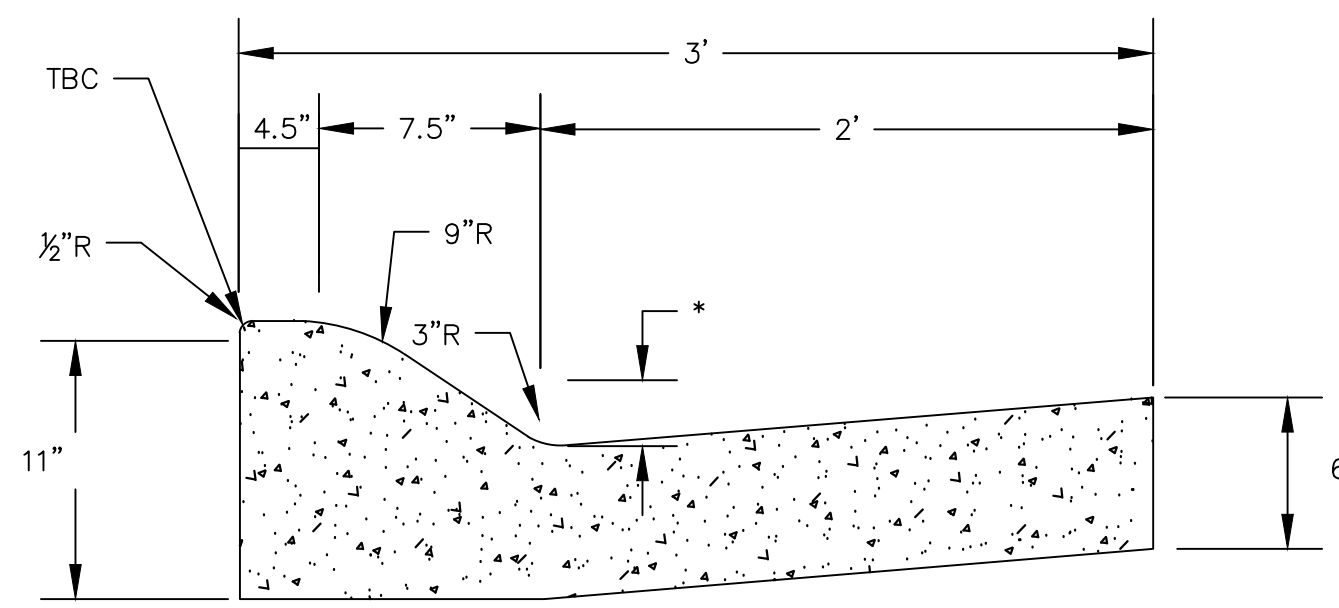




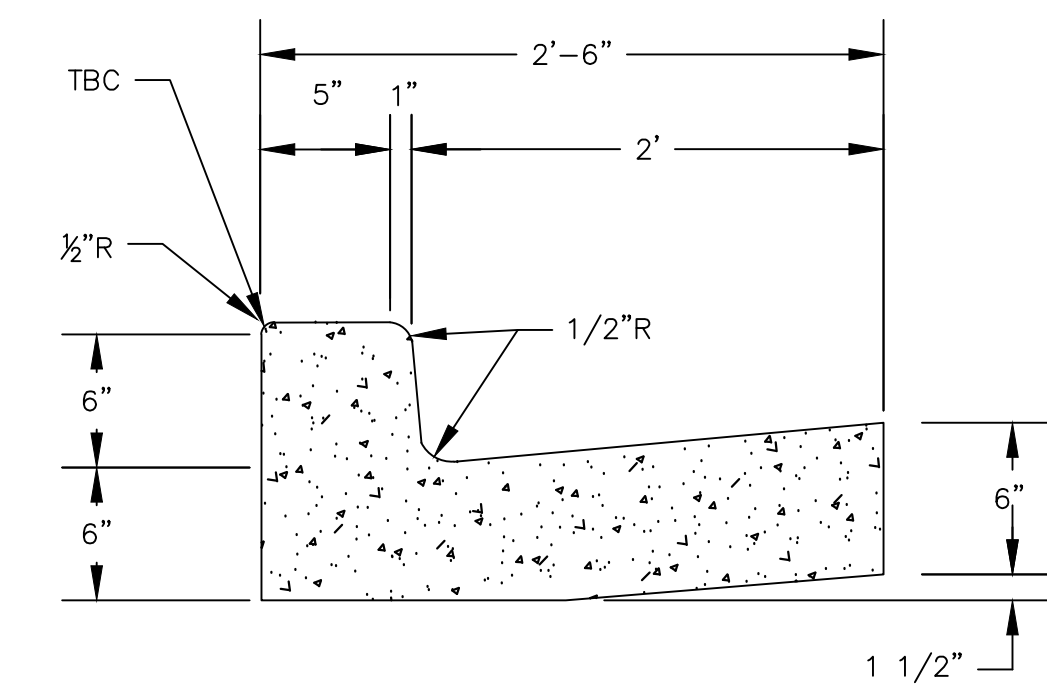
CURB INSTALLATION



VERTICAL CURB



ROLLED CURB AND GUTTER (NDOT TYPE 6)



VERTICAL CURB AND GUTTER (NDOT TYPE 1)

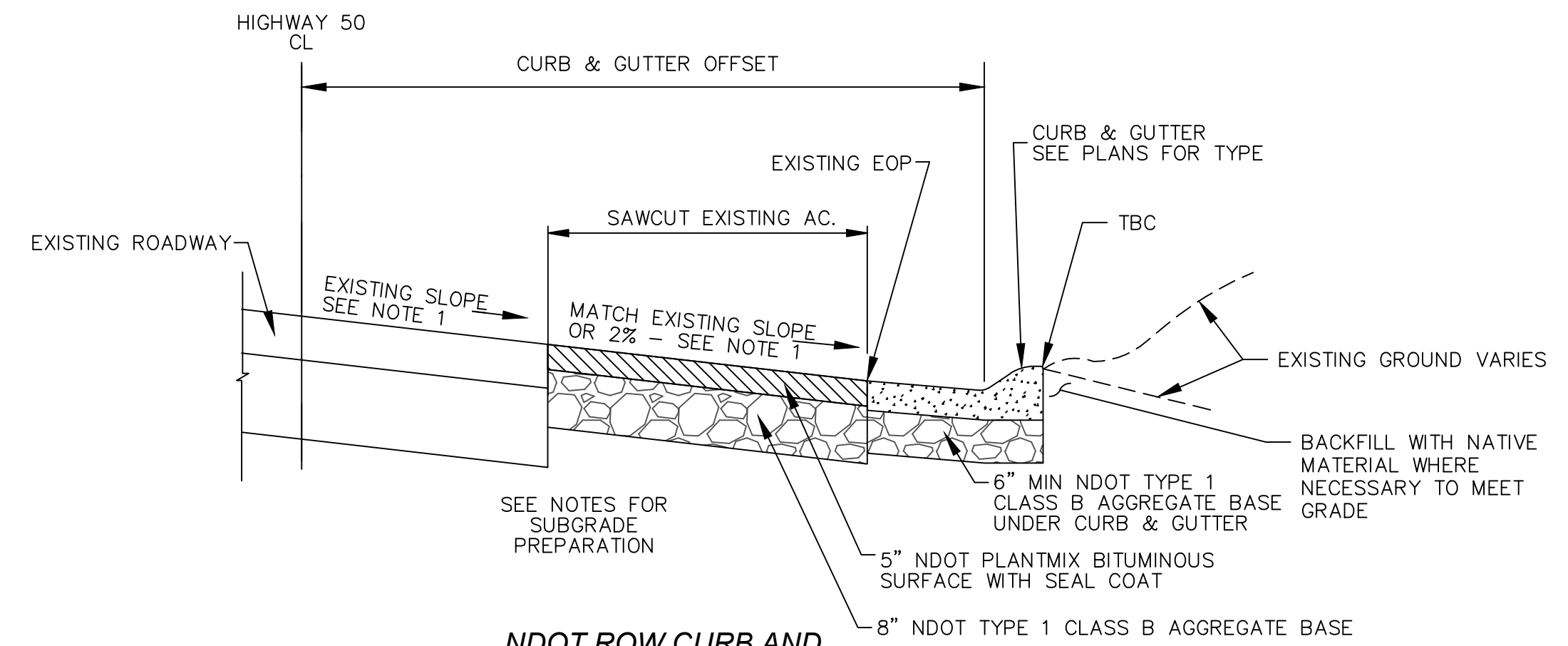
- CURB NOTES:**
1. CURB TYPE PER PLAN.
 2. SAW CUT ALONG STRAIGHT LINES. NO SAW CUTS WITHIN WHEEL PATH.
 3. SURFACE TOLERANCES FOR AC PAVEMENT REPAIR SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK).
 4. ASPHALT CONCRETE MATERIALS AND TESTING SHALL CONFORM TO THE CURRENT EDITION OF THE ORANGE BOOK.
 5. AGGREGATE BASE SHALL BE TYPE 2 CLASS B COMPACTED TO 95% MDD.
 6. COMPACTED SUBGRADE SHALL BE CLASS A OR CLASS E (NATIVE) BACKFILL COMPACTED TO 90% MDD.
 7. TACKCOAT ALL EXPOSED SURFACES SS-1h, 0.07-0.13 GAL/SY.
 8. PORTLAND CEMENT SHALL CONFORM TO SECTION 337.10.01.01 OF THE STANDARD SPECIFICATIONS (ORANGE BOOK) FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.
 9. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED EVERY 5 FEET. THE JOINTS SHALL PENETRATE TO A DEPTH OF 2 INCHES AND BE CONSTRUCTED IN CONFORMANCE WITH SECTION 312.09.02 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 10. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED IN SECTION 312.09.01A OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

CONCRETE VERTICAL CURB

SCALE: NTS

1
D-7

NOTE:
* 2" WHEN POSITIONED ON LOW SIDE OF ROADBED. OTHERWISE GUTTER CROSS SLOPE TO MATCH THAT ON ADJACENT ROADBED



NDOT ROW CURB AND GUTTER INSTALLATION

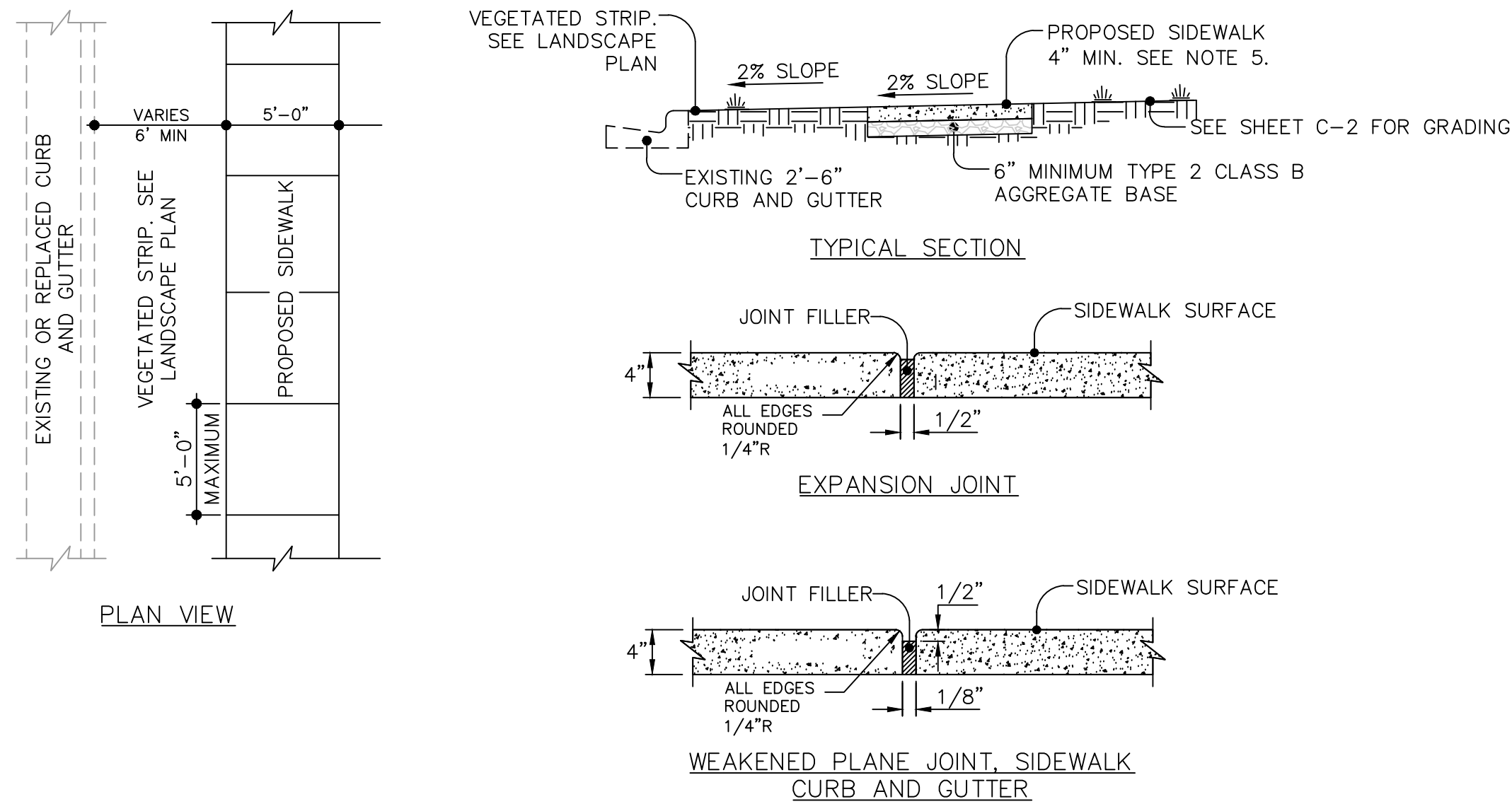
C&G NOTES:

1. WHERE EXISTING CROSS SLOPE IS LESS THAN 2% OR SLOPING AWAY FROM ROADSIDE DITCH, PAVE DITCH AT 2% SLOPE.
2. WHERE POSSIBLE, PAVING JOINTS IN ROADWAY ARE NOT ALLOWED IN WHEEL PATHS.
3. MATCH EXISTING STRIPING THROUGH LIMITS OF PATCH AREA.
4. A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
5. ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
6. PREPARE SUBGRADE 6" MIN PER NDOT STANDARD SPECIFICATION SECTION 302.

NDOT CONCRETE CURB AND GUTTER

SCALE: NTS

2
D-7

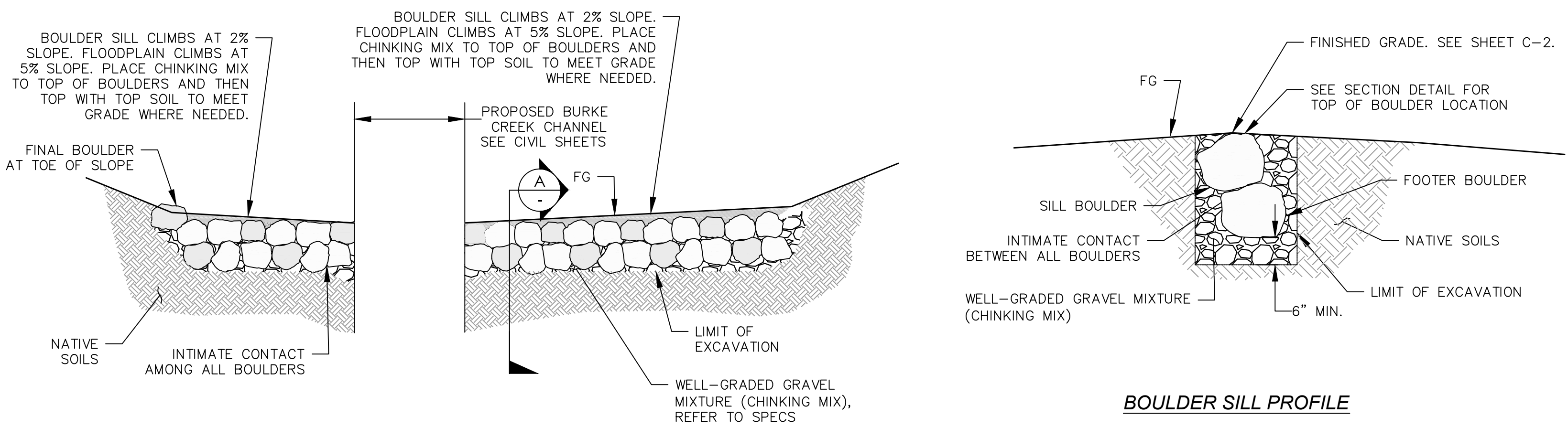


SIDEWALK

SCALE: NTS

3
D-7

- NOTES:**
1. ALL CONCRETE SHALL BE REMOVED AT EXISTING JOINTS. SEE SECTION 311.10.07 OF THE STANDARD SPECIFICATIONS "CONSTRUCTION JOINTS" FOR POURING CONCRETE NEXT TO EXISTING CONCRETE.
 2. PORTLAND CEMENT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.
 3. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED EVERY 5 FEET. THE JOINTS SHALL PENETRATE TO A DEPTH OF 2 INCHES AND BE CONSTRUCTED IN CONFORMANCE WITH SECTION 312.09.02 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 4. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED IN SECTION 312.09.01A OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 5. TYPE 2, CLASS B AGGREGATE BASE SHALL CONFORM TO SECTION 20 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND SHALL BE MECHANICALLY COMPACTED IN CONFORMANCE WITH SECTION 308.05 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 6. CONCRETE SIDEWALKS ADJACENT TO DRIVEWAYS SHALL HAVE A MINIMUM THICKNESS OF 6".
 7. NO OBSTRUCTIONS, SUCH AS UTILITY POLES, SIGNAL POLES AND CONTROLS, WATER METER BOXES, PULL BOXES, ETC. ARE ALLOWED WITHIN SIDEWALKS.
 8. PROPOSED SIDEWALK SHALL BE TRANSITIONED TO EXISTING 4' SIDEWALK FOR 1' MINIMUM LENGTH.



BOULDER SILL SECTION

BOULDER SILL PROFILE

BOULDER SILL

SCALE: NTS

4
D-7

BOULDER SILL NOTES:

1. IF BEDROCK ENCOUNTERED DURING EXCAVATION, NOTIFY ENGINEER IMMEDIATELY. BOULDER SILL WILL BE CONSTRUCTED AROUND BEDROCK WITH BEDROCK TAKING PLACE OF SOME BOULDERS.

RECORD DRAWINGS

1/20/17



DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC