

BOURNE MEADOW / MARLA BAY STORMWATER TREATMENT PROJECT

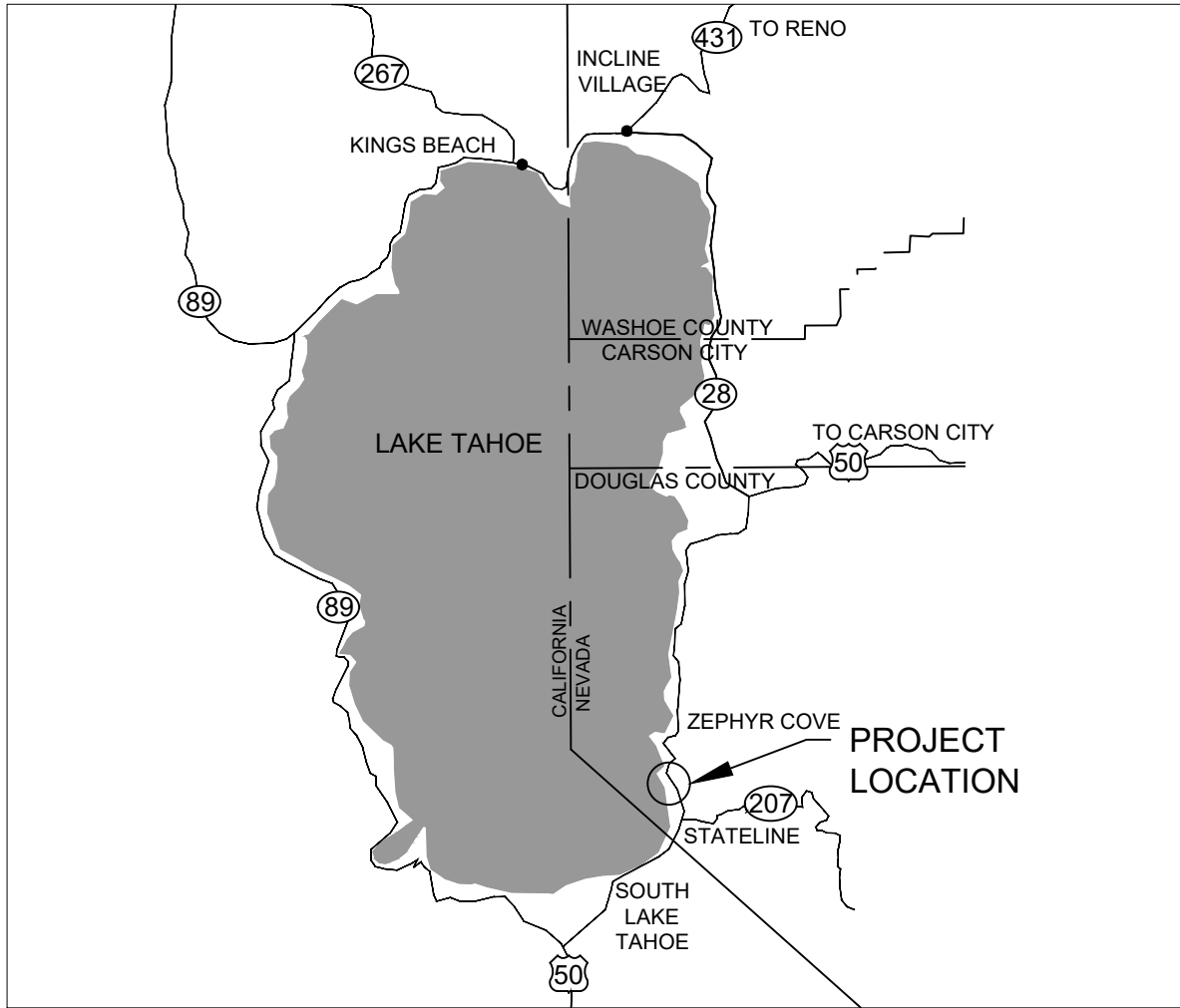
DOUGLAS COUNTY, NV
PWP-DO-2025-374



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PROJECT LOCATION MAP

SCALE: NTS



VICINITY MAP

SCALE: NTS

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS SURVEY IS NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE NAD83(94) BASED UPON REAL TIME KINEMATIC GPS OBSERVATIONS, OBSERVED MAY 8, 2017, USING A SURVEY GRADE DUAL FREQUENCY GPS RECEIVER FROM NDOT MONUMENT NO. 5411833, MODIFIED BY A COMBINED FACTOR OF 1.000263, SCALED FROM 0.00N, 0.00E AND CONVERTED TO U.S. SURVEY FEET. ALL DIMENSIONS ON THIS MAP ARE GROUND DISTANCES. SURVEY BASE MAPPING PROVIDED BY LUMOS AND ASSOCIATED AUGUST 2020.

PUBLIC UTILITY COMPANIES

SEWER:
TAHOE DOUGLAS SEWER DISTRICT
1303 HIGHWAY 50,
ZEPHYR COVE, NV 89448
775-588-5641

WATER:
DOUGLAS COUNTY PUBLIC WORKS
1615 8TH STREET,
MINDEN, NV 89423
775-782-9011

FIRE PROTECTION:
TAHOE DOUGLAS FIRE PROTECTION DISTRICT
193 ELKS POINT RD,
ZEPHYR COVE, NV 89448
775-588-3591

POWER:
NV ENERGY
6100 NEIL ROAD
RENO, NV 89511
775-834-4444

GAS:
SOUTHWEST GAS CORPORATION
400 EAGLE STATION LANE
CARSON CITY, NV 89701
775-882-2126

CABLE:
CHARTER COMMUNICATIONS
9335 PROTOTYPE DRIVE
RENO, NV 89521-8992
775-850-1291

TELEPHONE:
FRONTIER / VERIZON
1520 CHURCH STREET
GARDNERVILLE, NV 89410
775-781-2325

NEVADA TAHOE CONSERVATION DISTRICT

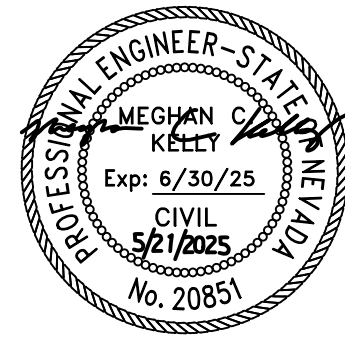
SIGNATURE

DATE

REVISIONS

NO.	DATE	BY	DESCRIPTION

TITLE SHEET
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN	MJ
CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET

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OF 20



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GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("ORANGE BOOK"). ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE AMENDED SPECIFICATIONS AND DETAILS, AND NOT APPROVED BY THE ENGINEER PRIOR, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
2. ONE WEEK PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE DOUGLAS COUNTY INSPECTOR AT (775) 782-6237 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRECONSTRUCTION MEETING AT THE PROJECT SITE WITH DOUGLAS COUNTY CONSTRUCTION INSPECTOR. FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED.
3. CONTRACTOR'S SHALL COMPLY WITH THE REQUIREMENTS TO OBTAIN THE NECESSARY SITE IMPROVEMENT PERMITS AND SHALL COMPLY WITH THE SITE IMPROVEMENT PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.
4. THE APPROVED PLAN, PERMIT AND INSPECTION RECORD MUST BE ON THE JOB SITE AT ALL TIMES.
5. DOUGLAS COUNTY PARKS AND RECREATION, COMMUNICATIONS, AND SHERIFF'S OFFICE IS NOT REPRESENTED BY USA DIGS. WHEN THE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO ANY OF THESE FACILITIES/PROPERTIES, THE CONTRACTOR SHALL CONTACT THE ADMINISTRATOR OF APPLICABLE DEPARTMENT AT PHONE NUMBER SHOWN ON COUNTY WEBSITE TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES. THIS REQUIREMENT MAY ALSO APPLY TO ANY OTHER COUNTY FACILITY/PROPERTY.
6. THE CONTRACTOR SHALL OBTAIN A STORMWATER GENERAL OR A SURFACE AREA DISTURBANCE PERMIT FROM THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS REQUIRED, AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL ON ALL APPLICABLE PROJECTS.
7. THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL AND SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED. ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS TO THE BEST OF ENGINEER'S KNOWLEDGE AND BASED ON INFORMATION FROM THE UTILITY COMPANY. THE ENGINEER ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN CORRECTLY PLOTTED AND SHOWN.
8. THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM DRAINAGE, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT"/RECORD DRAWINGS PROVIDED BY THE ENGINEER TO THE COUNTY'S ENGINEERING DIVISION.
9. THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATIONS BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.
10. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING FOR THE PROJECT.
11. THE OWNER IS RESPONSIBLE FOR ARRANGING THE RELOCATION OR REMOVAL OF ALL UTILITIES OR FACILITIES THAT RE IN CONFLICT WITH THE PROPOSED PUBLIC IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ALL UTILITIES, POWER POLES, IRRIGATION DRY-UPS, RESETS, REMOVALS BY OTHERS, ETC.
12. THE CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATION. CALL 811 FOR USA DIGS A MINIMUM TWO WORKING DAYS PRIOR TO COMMENCING WORK.
13. CONTRACTORS SHALL COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AND BARRICADING PER APPROVED TRAFFIC CONTROL PLANS.
14. IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM DOUGLAS COUNTY PUBLIC WORKS OR APPLICABLE WATER PURVEYOR AND PAY ALL APPLICABLE FEES AND CHARGES.
15. IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST TO THE ENGINEERING INSPECTOR, AND IT IS NECESSARY FOR COUNTY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE COUNTY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY COUNTY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.
16. THE CONTRACTOR IS ADVISED THAT DAMAGE TO PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE ENGINEERING INSPECTOR, UNLESS OTHERWISE APPROVED BY THE COUNTY. ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES AND SYSTEMS AS A RESULT OF CONTRACTOR'S ACTIVITIES SHALL BE BORNE BY THE CONTRACTOR.
17. RELOCATION AND/OR ABANDONMENT OF SEWER, WATER OR GAS APPURTENANCES SHALL CONFORM TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AS ADOPTED BY DOUGLAS COUNTY, KGID, OLIVER PARK GID, SOUTHWEST GAS, NDOT AND/OR TRPA REQUIREMENTS FOR THE THIS PROJECT.

PUBLIC STREET / RIGHT-OF-WAY IMPROVEMENT NOTES:

1. THE CONTRACTOR IS REQUIRED TO COORDINATE THE PLACEMENT OR INSTALLATION OF DRIVEWAYS IN ORDER TO AVOID CONFLICT WITH UTILITY SERVICES.
2. ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC., SHALL BE INSTALLED TO FINISH GRADE OR SHALL BE ADJUSTED TO FINISH GRADE AFTER PLACING OF ASPHALTIC SURFACE COURSE BY THE CONTRACTOR PER APPLICABLE DOUGLAS COUNTY STANDARDS.
3. THE CONTRACTOR SHALL ADJUST ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. THAT ARE LOCATED WITHIN THE PARKWAY AREA AFTER THE FINAL GRADING AND INSTALLATION OF LANDSCAPING.
4. THE STREET PAVING PERMITTEE/CONTRACTOR IS HEREBY NOTIFIED THAT IN THE EVENT THAT ACCEPTANCE OF THE PUBLIC STREET PAVING IS DELAYED; SIX MONTHS OR MORE AFTER THE PAVEMENT IS INSTALLED, THE PERMITTEE/CONTRACTOR SHALL APPLY A SEAL COAT TO THE PAVEMENT. TYPE OF MATERIAL AND RATE OF APPLICATION WILL BE DIRECTED BY THE DOUGLAS COUNTY ENGINEERING DEPARTMENT.
5. A STANDARD RESIDENTIAL DRIVEWAY APPROACH SHALL BE CONSTRUCTED TO A MAXIMUM WIDTH OF 24 FEET UNLESS SPECIAL APPROVAL HAS BEEN OBTAINED.

WATER UTILITY NOTES:

1. ALL PUBLIC WATER MAIN MATERIALS SHALL BE PER SECTION 203.06 (DIP) OR 203.15 (PVC) OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. ALL NEW WATERLINES THAT REQUIRE SERVICE DISRUPTION IN ORDER TO CONNECT TO THE COUNTY SYSTEM SHALL REQUIRE A DAYTIME TIE-IN. THE CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY TO RESTORE UTILITY SERVICE AND FULLY OPEN THE TIE-IN AREA TO VEHICULAR TRAFFIC WITHIN THE TIME FRAME ALLOWED BY THE COUNTY ENGINEERING INSPECTOR.
3. THE CONTRACTOR SHALL INSTALL A TEMPORARY PLUG OR VALVE ON A SECTION OF NEW WATER LINE TO TEST LINES BEFORE CONNECTING TO THE EXISTING PUBLIC WATER SYSTEM WHERE THERE IS NO WATER VALVE ON THE EXISTING LINE.
4. WATER LINE TEST SHALL BE CONDUCTED SO THAT EXISTING WATER LINES WILL NOT BE INCLUDED IN THE TEST OF THE NEW LINE.
5. THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE A MANUFACTURER AND MODEL DESIGNATED IN THE CURRENT "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES" AS PUBLISHED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
6. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN PRIOR TO THE REQUEST FOR FINAL INSPECTION.
7. WATER MAIN SHUTDOWNS/INTERRUPTION OF SERVICE: WATER UTILITY APPROVAL IS REQUIRED FORTY- EIGHT (48) HOURS PRIOR TO NOTIFICATION OF CUSTOMERS. COMMERCIAL AND RESIDENTIAL CUSTOMERS SHALL BOTH RECEIVE FORTY-EIGHT (48) HOURS WRITTEN NOTICE OF A SHUTDOWN, AND SPECIAL ARRANGEMENTS MAY HAVE TO BE MADE TO ACCOMMODATE CUSTOMER'S OPERATIONAL NEEDS. THE WATER UTILITY IS RESPONSIBLE FOR THE NOTIFICATION WHEN WORK IS PERFORMED BY THE WATER UTILITY. THE CONTRACTOR IS RESPONSIBLE IN ALL OTHER CASES. A LIST SHALL BE KEPT BY THE RESPONSIBLE PARTY LISTING THE DATE, TIME, AND ADDRESS OF ALL PERSONS NOTIFIED. THE PERSON NOTIFIED SHALL BE INCLUDED ON THE LIST FOR ALL COMMERCIAL CUSTOMERS. THE CONTRACTOR WILL BE SUBJECT TO DAMAGE CLAIMS SHOULD THEY FAIL TO NOTIFY CUSTOMERS OR MAINTAIN DOCUMENTATION OF NOTIFICATION OF CUSTOMERS. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING WATER VALVES WITHOUT AUTHORIZATION OF THE WATER UTILITY.
8. ALL WATER SERVICES 2" OR LESS SHALL BE CTS, PE PIPE (AWWA STANDARD C901); SERVICES 3" OR GREATER SHALL BE CLASS 150 C900 PVC OR AS SPECIFIED ON THE PLANS.
9. LINE SEPARATION MUST MEET THE PROVISIONS OF NAC 445A.6715 THROUGH 445A.6718 IN ITS ENTIRETY, NDEP'S VERTICAL CROSSING SUMMARY, AND BE APPROVED BY STATE AND WATER UTILITIES.
10. ALL HOT TAPS ARE TO BE PERFORMED BY A LICENSED CONTRACTOR APPROVED BY THE WATER UTILITY. THE CONTRACTOR SHALL CONTACT THE WATER UTILITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO SCHEDULING HOT TAP DATE AND TIME.
11. WATER VALVE MAKERS SHALL BE BLUE CARSONITE UTILITY MARKER (CRM-3066), 5'-2" WITH WATER UTILITY'S DECAL OR APPROVED EQUAL. PLACE MARKER NO MORE THAN FIVE (5) FEET FROM THE VALVE OR AS DIRECTED BY THE WATER UTILITY.
12. ALL WATER MAIN AND WATER SERVICE INSPECTIONS MUST BE COMPLETED PRIOR TO ANY CERTIFICATION OF OCCUPANCY OR NOTICE OF COMPLETION BY THE WATER UTILITY ACCEPTING IMPROVEMENTS.

WASTEWATER UTILITY NOTES:

1. CONTRACTOR SHALL VERIFY ALL INVERT ELEVATIONS BEFORE PROCEEDING WITH UTILITY TRENCHING.
2. STEPS SHALL NOT BE INSTALLED WITHIN THE MANHOLE.
3. ALL SEWER MAINS AND LATERALS IN THE RIGHT-OF-WAY/EASEMENT SHALL BE PVC SDR 35 OR HDPE UNLESS OTHERWISE NOTED.
4. FLEXIBLE TRANSITION COUPLINGS MAY BE USED WHEN CONNECTING SEWER MAINS TO EXISTING SEWER MAINS, PER SEWER UTILITY APPROVAL.
5. SEWER MANHOLE MARKERS SHALL BE INSTALLED WHEN MANHOLES ARE LOCATED OUTSIDE OF THE PAVED SURFACE. SEWER MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKERS, 5'-2" WITH MANHOLE DECAL (668-MH) OR APPROVED EQUAL. PLACE MARKERS WITHIN EASEMENT IN CLOSE PROXIMITY TO MANHOLE OR AS DIRECTED BY THE SEWER UTILITY.
6. THE CONTRACTOR SHALL INSTALL A PLUG AT THE POINT OF EXTENSION OF A SEWER MAIN PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL ALL LINES HAVE BEEN INSPECTED, TESTED, CLEANED, FLUSHED, AND ACCEPTED BY THE SEWER UTILITY.
7. SEWER LINES SHALL BE TESTED PER SECTION 336.06 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AN AIR PRESSURE TEST AND ALIGNMENT TEST PER THE DOUGLAS COUNTY DESIGN CRITERIA AND STANDARDS, AND A DEFLECTION TEST PER SECTION 336.06 OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION SHALL BE PERFORMED ON ALL SEWER LINES.
8. ALL SEWER MAINS SHALL HAVE A COLOR TELEVISION INSPECTION PRIOR TO ACCEPTANCE BY THE SEWER UTILITY AND PRIOR TO PAVING.

STORM DRAIN NOTES:

1. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION.
2. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MINIMUM COMPRESSIVE STRENGTH @ 28 DAY, (CURB AND GUTTER TRANSITION ONLY, ALL UNEXPOSED CONCRETE MAY BE 3000 PSI), MINIMUM 8 SACKS OF CEMENT PER CUBIC YARD WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6%±1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 202.
3. REINFORCING STEEL SHALL BE GRADE 40 AND 1.5 INCHES MINIMUM CLEAR COVER.
4. ALL STORM DRAIN PIPE AND STRUCTURES SHALL BE CLEANED OF SEDIMENT AND DEBRIS PRIOR TO ISSUANCE OF A NOTICE OF COMPLETION OR CERTIFICATE OF OCCUPANCY.
5. FRAMES AND GRATES SHALL BE MATCHED TO ACHIEVE A CLOSE TOLERANCE FIT, WITH MINIMAL GAPS, AS APPROVED BY THE STORM DRAIN UTILITY.
6. PRECAST MANHOLES SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE PLASTIC GASKET MATERIAL SUCH AS RAM-NEK OR APPROVED EQUAL PER MANUFACTURER'S RECOMMENDATIONS.
7. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE ALL WEATHER ACCESS ROADWAY CONSISTING OF 6 INCHES TYPE 2, CLASS B AGGREGATE BASE (CONFORMING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 200.01.02) AND STORM DRAIN MANHOLE MARKERS BE INSTALLED. STORM DRAIN MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (CUM 375), 5'-2" WITH DECAL READING "STORM DRAIN MANHOLE". PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY STORM DRAIN UTILITY.
8. GRATES SHALL BE PLACED OUTSIDE OF THE ADA TRAVELED WAY. GRATE OPENINGS SHALL NOT EXCEED 0.5 INCHES IN WIDTH OR 4 INCHES IN LENGTH. GRATES SHALL BE TRAFFIC RATED AND ADA COMPLIANT.

GRADING GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, OSHA REQUIREMENTS FOR EXCAVATION, AND SPECIAL REQUIREMENTS OF THE PERMIT. VIOLATIONS WILL RESULT IN THE STOPPAGE OF ALL WORK UNTIL THE VIOLATION IS CORRECTED.
2. NO WORK SHALL BE STARTED WITHOUT FIRST NOTIFYING THE COUNTY ENGINEERING INSPECTOR AT (775) 782-6237 AT LEAST 2 WORKING DAYS BEFORE WORK IS COMMENCED.
3. SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE COUNTY.
4. ALL GRADING SHALL BE IN CONFORMANCE WITH THE APPROVED GEOTECHNICAL REPORT PREPARED BY RENO TAHOE GEO ASSOCIATES, INC. DATED 01/04/2022.
5. FILLS SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."
6. THE ENGINEER OF RECORD SHALL PROVIDE THE COUNTY AND ALL OTHER APPROPRIATE ENTITIES WITH COPIES OF ALL TEST RESULTS ON A WEEKLY BASIS AND A BOUND REPORT OF THE TEST RESULTS AND INSPECTION REPORTS, ARRANGED IN CHRONOLOGICAL ORDER, AT THE COMPLETION OF THE PROJECT. THE ENGINEER OF RECORD SHALL PROVIDE THE COUNTY WITH AN OPINION REGARDING THE CONSTRUCTION.
7. FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED, AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO THE PLACING OF FILL.
8. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING CONSTRUCTION OF IMPROVEMENTS.
9. DUST SHALL BE CONTROLLED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY, AND IN ACCORDANCE WITH THE AIR QUALITY PERMIT FROM THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION WHEN REQUIRED.
10. ALL STREETS SHALL BE MAINTAINED FREE OF DUST AND MUD CAUSED BY GRADING OPERATIONS. ALL OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE STORMWATER DISCHARGE PERMIT FROM THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION.
11. ALL CESSPOOLS, SEPTIC TANKS, ETC., TO BE ABANDONED SHALL BE FILLED OR REMOVED IN ACCORDANCE WITH THE STATE OF NEVADA STANDARDS AND CERTIFIED BY THE ENGINEER OF RECORD.
12. EXISTING WELLS TO BE ABANDONED SHALL BE CAPPED IN ACCORDANCE WITH THE STATE OF NEVADA DIVISION OF WATER RESOURCES REGULATIONS FOR WATER WELL AND RELATED DRILLING.
13. THE DEVELOPER'S ENGINEER OR SURVEYOR SHALL SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND THE CONTRACTOR SHALL OBTAIN INSPECTION BEFORE PLACING CONCRETE.
14. FINISHED GRADING WILL BE COMPLETED AND APPROVED, AND SLOPE PLANTING AND IRRIGATION SYSTEMS INSTALLED BEFORE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
15. NO ROCK OR SIMILAR MATERIAL GREATER THAN 4" IN DIAMETER SHALL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE GEOTECHNICAL ENGINEER IN ADVANCE AND APPROVED BY THE COUNTY.
16. IN THE EVENT OF CHANGES ARISING DURING CONSTRUCTION, THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR REVIEW AND APPROVAL BY THE COUNTY. NO CHANGES IN THE DESIGN WILL BE PERMITTED UNLESS WRITTEN APPROVAL IS GIVEN BY THE COUNTY.

17. EROSION CONTROL:
 - A. IN CASE OF EMERGENCY CALL CONTRACTOR OR ENGINEER.
 - B. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT APPROVED LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR DAMAGED EROSION CONTROL MEASURES.
 - C. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING FACILITIES. GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING THE RAINSTORM SHALL ALSO BE REPAIRED.
 - D. FILL SLOPES AT THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE TOP OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
 - E. A SIX-FOOT HIGH PERIMETER FENCE OR A 24-HOUR GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF THE WATER IN A FACILITY EXCEEDS 18 INCHES.
 - F. STORMWATER SHALL BE CONTROLLED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY AND IN ACCORDANCE WITH THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION STORMWATER PERMIT.
 - G. CONTRACTOR SHALL CONDUCT REVEGETATION PER PROJECT PLANS WITH TEMPORARY IRRIGATION ON ALL CUT AND FILL SLOPES AND ALL OTHER DISTURBED AREAS UNLESS OTHERWISE DIRECTED BY DOUGLAS COUNTY.

UTILITY GENERAL NOTES

1. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES EXISTING AND APPROVED, THE SANITARY LINE SHALL BE ENCASED IN A POLY-WRAPPED STEEL CASING ALLOWABLE PIPE PRODUCTS ARE PVC SDR 25 OR SDR 35 PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATERLINE SHALL HAVE MECHANICAL JOINTS FOR AT LEAST 10 FEET ON EACH SIDE OF THE CROSSING. THE MINIMUM CLEARANCE BETWEEN PROPERLY MITIGATED LINES IS 6 INCHES. IF A POTABLE WATER MAIN WILL CROSS ABOVE A NON-POTABLE LINE BY AT LEAST 18 INCHES OR BELOW BY ANY DEPTH, BOTH LINES REQUIRE PROTECTION. CONTRACTOR SHALL MEET REQUIREMENTS OF ANSI A21.10 OR ANSI A21.11 / MOST CURRENT NAC 445A.6715 - NAC 445A.6718.
2. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.

STAGING AND STOCKPILING NOTES:

1. STAGING AND STOCKPILE AREAS SHALL BE LIMITED ONLY TO APPROVED AREAS AS DETERMINED BY THE ENGINEER.
2. STAGING AND STOCKPILE AREAS SHALL BE PROTECTED WITH TEMPORARY BMP'S AS OUTLINED IN THE MOST CURRENT TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES. MATERIALS, AS WELL AS TIMING AND METHODS OF INSTALLATION, MAINTENANCE AND REMOVAL, MUST COMPLY WITH THE RECOMMENDATIONS OUTLINED IN THE HANDBOOK.
3. TEMPORARY CONSTRUCTION STAGING BMP'S INCLUDE, BUT ARE NOT LIMITED TO:
 - A. CONSTRUCTION BOUNDARY FENCING
 - B. VEGETATION PROTECTION
 - C. VEHICLE INGRESS/EGRESS MANAGEMENT
 - D. EROSION AND SEDIMENT CONTROL:
 - i. SIDEWALKKEEPING
 - ii. DRAIN INLET PROTECTION
 - iii. FIBER ROLLS
 - iv. SILT FENCE
 - v. EROSION CONTROL BLANKET
 - vi. HYDROMULCH, TACKIFIER AND SOIL BINDER
3. MINIMUM REQUIREMENTS FOR TEMPORARY CONSTRUCTION STAGING BMP'S ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MAINTAINING AND REMOVING TEMPORARY CONSTRUCTION STAGING BMP'S TO THE SATISFACTION OF THE TRPA INSPECTOR.
4. UPON COMPLETION OF PROJECT, ALL STAGING AND STOCKPILE AREAS ARE TO BE RESTORED TO PRE-PROJECT CONDITIONS.
5. ANY AREAS DISTURBED WITHIN OR OUTSIDE THE PROJECT BOUNDARY SHALL BE REVEGETATED IN ACCORDANCE WITH THE TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES AND TO THE SATISFACTION OF THE TRPA INSPECTOR.

TRPA NOTES:

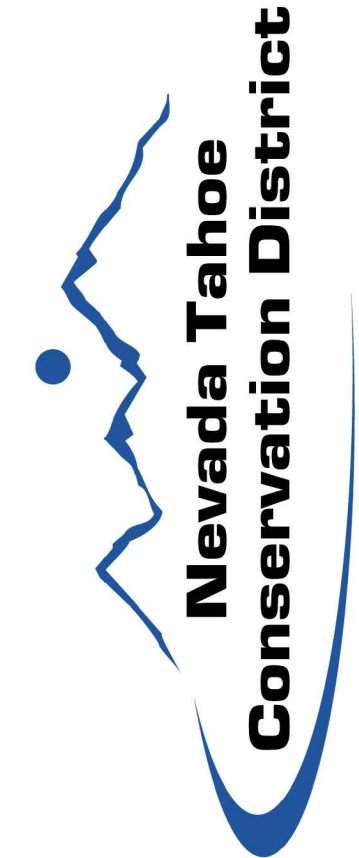
1. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE TRPA PERMIT.
2. ALL EXISTING DISTURBED AREAS IN THE PROJECT AREA, AND AREAS DISTURBED BY CONSTRUCTION ACTIVITY, SHALL BE REVEGETATED WITH VEGETATION SPECIES IN ACCORDANCE WITH THE TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES.
3. TEMPORARY AND PERMANENT BMP'S AS SHOWN ON THESE PLANS WILL BE INSTALLED AND MAINTAINED BY CONTRACTOR IN ACCORDANCE WITH THE TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES AND TO THE SATISFACTION OF THE ENGINEER AND THE TRPA INSPECTOR.
4. DUST SHALL BE CONTROLLED BY THE CONTRACTOR TO THE SATISFACTION OF THE STATE AND TRPA.
5. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF DISTURBANCE IN NATIVE AREAS FOR COMPLETION OF WORK. IF ADDITIONAL NATIVE AREAS ARE DISTURBED, ADDITIONAL BMP'S WILL BE REQUIRED.

DEWATERING NOTES:

1. IF DEWATERING IS NECESSARY, WATER CAN BE PUMPED TO THE EXISTING STORMWATER BASINS ON KAHLE DRIVE WITH APPROVAL FROM DOUGLAS COUNTY OR USED AS CONSTRUCTION WATER. NO WATER SHOULD BE PUMPED INTO SANITARY SEWER MANHOLES WITHOUT APPROVAL FROM DCLTSA. IF STANDING WATER IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATION DURING CONSTRUCTION, THE CONTRACTOR SHALL CONSTRUCT COLLECTION SUMPS THAT ARE APPROXIMATELY 24" DEEP BY 36" LONG AND PROVIDE ALL NECESSARY PUMPING AND APPURTENANCES REQUIRED TO KEEP FREE OF STANDING WATER. A SUBMERSIBLE PUMP OR SUCTION HOSE SHALL BE PLACED IN THE SUMP AND FILLED WITH 3" DRAIN ROCK COVERED WITH FILTER FABRIC. THE PUMP SHALL BE OPERATED TO MAINTAIN THE GROUNDWATER LEVEL BELOW THE BOTTOM OF THE TRENCH UNTIL THE BEDDING AND BACKFILL TO 1' ABOVE THE GROUNDWATER IS COMPLETED EXCEPT IN THE AREA OF THE SUMP. THE PUMP OR SUCTION HOSE SHALL BE REMOVED AND THE AREA OF THE SUMP IMMEDIATELY BACKFILLED BEFORE THE GROUNDWATER LEVEL RISES. FREQUENCY OF THE SUMPS ALONG THE TRENCH LENGTH SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE RATE OF WATER ENCOUNTERED. MEANS AND METHODS OF CONSTRUCTION ARE THE CONTRACTORS SOLE RESPONSIBILITY.
2. DEWATERING WATER SHALL BE DISPOSED IN ACCORDANCE WITH ALL LOCAL AND FEDERAL REGULATIONS. ADDITIONAL PERMITS AND PLANS MAY APPLY.

REVEGETATION NOTES:

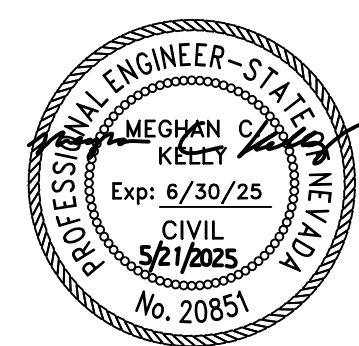
1. WORK SHALL BE CONDUCTED AND/OR OVERSEEN BY A LICENSED LANDSCAPE CONTRACTOR (C-10) IN THE STATE OF NEVADA AND WILL BE INSPECTED BY THE ENGINEER, IN CONJUNCTION WITH A REVEGETATION SPECIALIST (RS). THE CONTRACTOR SHALL PERFORM ALL REVEGETATION WORK AS SPECIFIED HEREIN AND IN ACCORDANCE WITH THE PROVISIONS OF THESE SPECIAL TECHNICAL PROVISIONS, THE PROJECT PLANS, AND THE STANDARD SPECIFICATIONS. THE REVEGETATION WORK SHALL CONSIST OF ALL SITE PREPARATION ASSOCIATED WITH THE REVEGETATION TREATMENTS; AND RECORD KEEPING.
2. AREAS TO RECEIVE REVEGETATION TREATMENTS SHALL INCLUDE ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL AREAS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER AND/OR THE RS.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND RS NO LESS THAN TEN (10) WORKING DAYS IN ADVANCE OF REVEGETATION WORK AND SHALL NOT BEGIN WORK UNTIL PREPARED REVEGETATION TREATMENT AREAS HAVE BEEN ACCEPTED BY THE ENGINEER AND RS. THE CONTRACTOR SHALL REQUEST THAT TREATMENT TYPES AND BOUNDARIES ARE LOCATED BY THE ENGINEER AND/OR RS PRIOR TO PROGRESSING WITH THE WORK.
4. NO SUBSTITUTIONS OR ALTERATIONS TO THESE SPECIAL TECHNICAL PROVISIONS SHALL BE ACCEPTED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER AND THE RS. NO FURTHER DISTURBANCE OF ANY TREATMENT AREA SHALL BE ALLOWED ONCE REVEGETATION HAS BEEN INITIATED.
5. SOIL DISTURBANCE SHALL BE MINIMIZED AND LIMITED TO THOSE AREAS THAT REQUIRE TREATMENT. ALL EXISTING VEGETATION WITHIN THE PROJECT LIMITS NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED. DELINEATE PROJECT BOUNDARIES WITH FENCING PER THE REQUIREMENTS IN CONSTRUCTION LIMIT FENCING AND IN THESE SPECIAL TECHNICAL PROVISIONS. TRAFFIC OUTSIDE OF PROJECT AREA IS PROHIBITED. ANY EXISTING OR PREVIOUSLY INSTALLED VEGETATION DAMAGED SHALL BE REPLACED BY THE CONTRACTOR. AREAS TO RECEIVE REVEGETATION TREATMENTS SHALL INCLUDE ALL AREAS DISTURBED DURING CONSTRUCTION, AS INDICATED ON THE PROJECT PLANS AND AS DIRECTED BY THE ENGINEER AND/OR THE RS.
6. DECOMPACT SOILS TO ACHIEVE A MAXIMUM OF 85% COMPACTION FOR AN 8" MINIMUM DEPTH. APPLY REVEGETATION SEED MIX, INCORPORATE. APPLY RICE STRAW AND CRIMP TO ACHIEVE 100% COVER.



REVISIONS		DESCRIPTION	
NO.	DATE	BY	

NOTES

BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN
MJ
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MK
DATE
04/2025
SCALE
AS SHOWN
PROJECT
BOURNE

ABBREVIATIONS

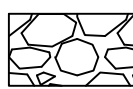
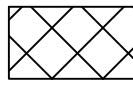
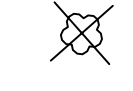
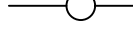
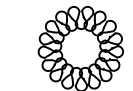
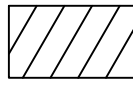
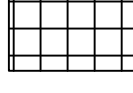
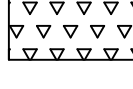
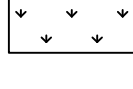
NOT ALL ABBREVIATIONS LISTED ARE USED IN THESE PLANS

MJ	AGGREGATE BASE	MDD	MAXIMUM DRY DENSITY
AC	ACRE, ASPHALT CEMENT	MJ	MECHANICAL JOINT
		MI	MILE
AGG	AGGREGATE	MIN.	MINIMUM
AP	ANGLE POINT	MISC.	MISCELLANEOUS
AVG.	AVERAGE	N	NORTH
AWWA	AMERICAN WATER WORKS ASSOCIATION	N.I.C.	NOT IN CONTRACT
BC	BEGIN CURVE	NDOT	NEVADA DEPT OF TRANSPORTATION
C&G	CURB AND GUTTER	NTCD	NEVADA TAHOE CONSERVATION DISTRICT
CATV	CABLE TELEVISION	NT.S.	NOT TO SCALE
CB	CATCH BASIN	NO.	NUMBER
CL	CENTERLINE	OC	ON CENTER
CLR.	CLEAR	OG	ORIGINAL GRADE
CO	CLEAN OUT	OH(E/T)	OVERHEAD ELECTRIC OR TELEPHONE LINES
CONST	CONSTRUCT	OPGID	OLIVER PARK GENERAL IMPROVEMENT DISTRICT
CF	CUBIC FEET	PC	POINT OF CURVATURE
CMP	CORRIGATED METAL PIPE	PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
CY	CUBIC YARD	PI	POINT OF INFLECTION
DCLTSA	DOUGLAS COUNTY LAKE TAHOE SEWER AUTHORITY	PIP	PROTECT IN PLACE
DG	DECOMPOSED GRANITE	PL	PROPERTY LINE
DEG	DEGREE(S)	PO	PUSH ON
DI	DROP INLET	POB	POINT OF BEGINNING
DIA	DIAMETER	POC	POINT ON CURVE
DR	DIMENSION RATIO	POE	POINT OF ENDING
DWG	DRAWING	POT.	POINT ON TANGENT
DW, DWY	DRIVEWAY	POS	POSITIVE
EA.	EACH	PRC	POINT OF REVERSE CURVE
EASE.	EASEMENT	PSI	POUNDS PER SQUARE INCH
EG	EXISTING GRADE	PT	POINT
ELEC	ELECTRIC	PUE	PUBLIC UTILITY EASEMENT
EP	EDGE OF PAVEMENT	PVMT	PAVEMENT
ELEV.	ELEVATION	PVC	POLYVINYL CHLORIDE
EC	END CURVE	R	RADIUS
EX.	EXISTING	RCP	REINFORCED CONCRETE PIPE
FG	FINISH GRADE	REVEG	REVEGETATION
FH	FIRE HYDRANT	RLC	ROCK LINED CHANNEL
FCA	FLANGE COUPLER ADAPTER	RT,R	RIGHT
FES	FLARED END SECTION (METAL)	RW, ROW	RIGHT-OF-WAY
FFC	FRONT FACE OF CURB	SS	SANITARY SEWER, STAINLESS STEEL
FL	FLOWLINE	SSCO.	SANITARY SEWER CLEAN OUT
FLG	FLANGED	SSFM	SANITARY SEWER FORCE MAIN
FT.	FOOT, FEET	SSMH	SANITARY SEWER MANHOLE
FTG	FOOTING	S	SLOPE, SOUTH
FV	FLUSH VALVE	SF	SQUARE FOOT/FEET
G	GAS	SHT	SHEET
GV	GRADE VALVE	STD	STANDARD
GB	GRADE BREAK	SDR	STANDARD DIMENSION RATIO
HDPE	HIGH DENSITY POLYETHYLENE	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
HDPE-NP	NON-PERFORATED HIGH DENSITY POLYETHYLENE	STA	STATION
HDPE-P	PERFORATED HIGH DENSITY POLYETHYLENE	SD	STORM DRAIN
HP	HIGH POINT	SDMH	STORM DRAIN MANHOLE
HOR., HORIZ.	HORIZONTAL	TBC	TOP BACK OF CURB
IN.	INCH	TOC	TOP OF CURB
IE	INVERT ELEVATION	TRPA	TAHOE REGIONAL PLANNING AGENCY
IRR.	IRRIGATION	TW	TOP OF WALL
JB	JUNCTION BOX	TYP	TYPICAL
JT	JOINT TRENCH	UGE	UNDERGROUND ELECTRIC LINES
KGID	KINGSBURY GENERAL IMPROVEMENT DISTRICT	UGT	UNDERGROUND TELEPHONE LINES
L, LT	LEFT	VC	VERTICAL CURVE
LEN.	LENGTH	VG	VALLEY GUTTER
LF	LINEAR FEET	VPC	VERTICAL POINT OF CURVATURE
LID	LOW IMPACT DEVELOPMENT	VPI	VERTICAL POINT OF INFLECTION
LP	LOW POINT	VPT	VERTICAL POINT OF TANGENT
LS	LUMP SUM	W	WATER
MH	MANHOLE	WL	WATERLINE
MAX.	MAXIMUM	W	WEST
		W	WITH
		WM	WATER METER
		WV	WATER VALVE

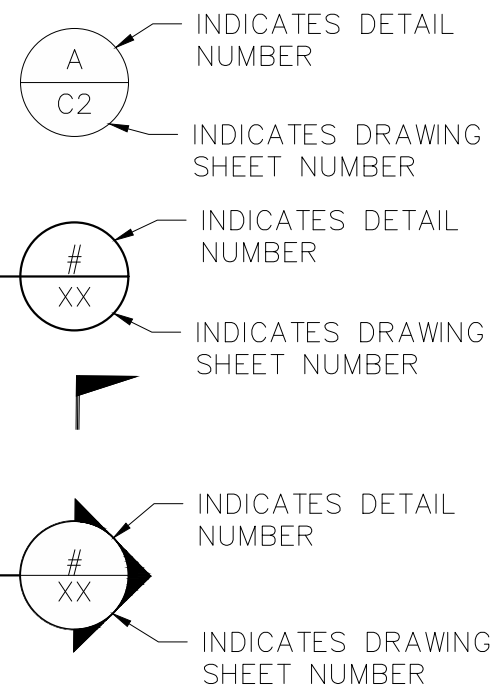
SYMBOLS

@	AT
°	DEGREE(S)
Δ	DELTA
Ø	DIAMETER
±	PLUS OR MINUS
'	FOOT/FEET, MINUTES
"	INCH, SECONDS
#	NUMBER
%	PERCENT
&	AND
=	EQUALS

LEGEND

	ACCESS ROAD
	CHANNEL RIPRAP
	REMOVE DRAINAGE STRUCTURE
	TREE REMOVAL
	REMOVE FENCE
	CONSTRUCTION FENCE
	SILT FENCE
	TREE PROTECTION
	STAGING AREA
	CONSTRUCTION ENTRANCE
	REVEGETATION - SEED MIX 1
	REVEGETATION - SOD
	CONTROL POINT

DETAIL AND SECTION DESIGNATION



DETAIL DESCRIPTION

SCALE:

SECTION DESCRIPTION

SCALE:

KEY NOTES (DEMOLITION):

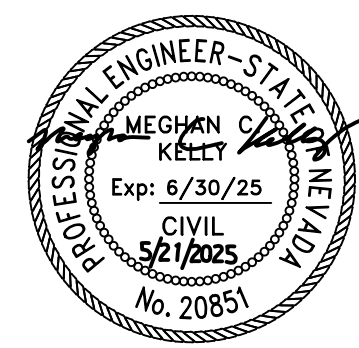
- ① REMOVE TREES - 6"-11"
- ② REMOVE TREES - 12"-17"
- ③ REMOVE TREES - 18"-23"
- ④ REMOVE TREES - 24"-29"
- ⑤ REMOVE TREES - 30"-35"

**Nevada Tahoe
Conservation District**

REVISIONS

[illegible]

LEGEND & ABBREVIATIONS



DESIGNED/DRAWN MJ
CHECKED MK
DATE 04/2025
SCALE AS SHOWN
PROJECT BOURNE

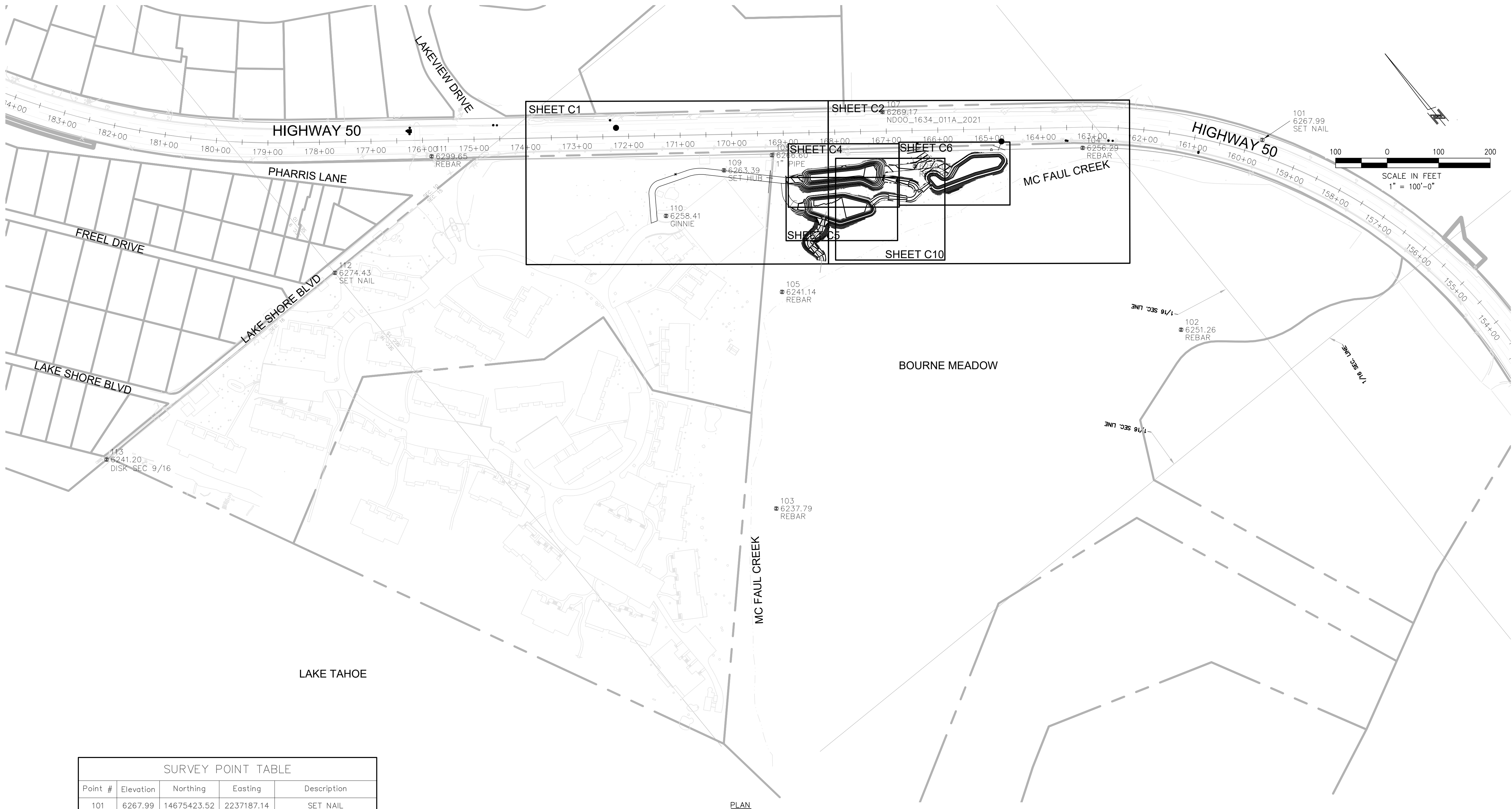
SHEET

III
3 OF 20

BID SET



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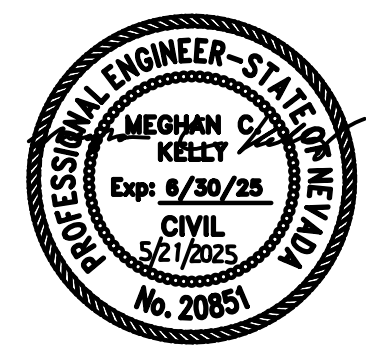


SURVEY POINT TABLE				
Point #	Elevation	Northing	Easting	Description
101	6267.99	14675423.52	2237187.14	SET NAIL
102	6251.26	14675242.73	2236829.65	REBAR
103	6237.79	14675481.68	2236004.88	REBAR
104	6256.29	14675635.81	2236910.30	REBAR
105	6241.14	14675796.59	2236283.80	REBAR
106	6259.03	14675817.52	2236638.17	REBAR
107	6269.17	14675938.76	2236657.68	ND00_1634_011A_2021
108	6266.60	14676012.42	2236439.49	1" PIPE
109	6263.39	14676049.79	2236349.11	SET HUB
110	6258.41	14676054.27	2236206.17	GINNIE
111	6299.65	14676435.22	2235931.96	REBAR
112	6274.43	14676382.62	2235642.98	SET NAIL
113	6241.20	14676389.84	2235070.59	DISK SEC 9/16



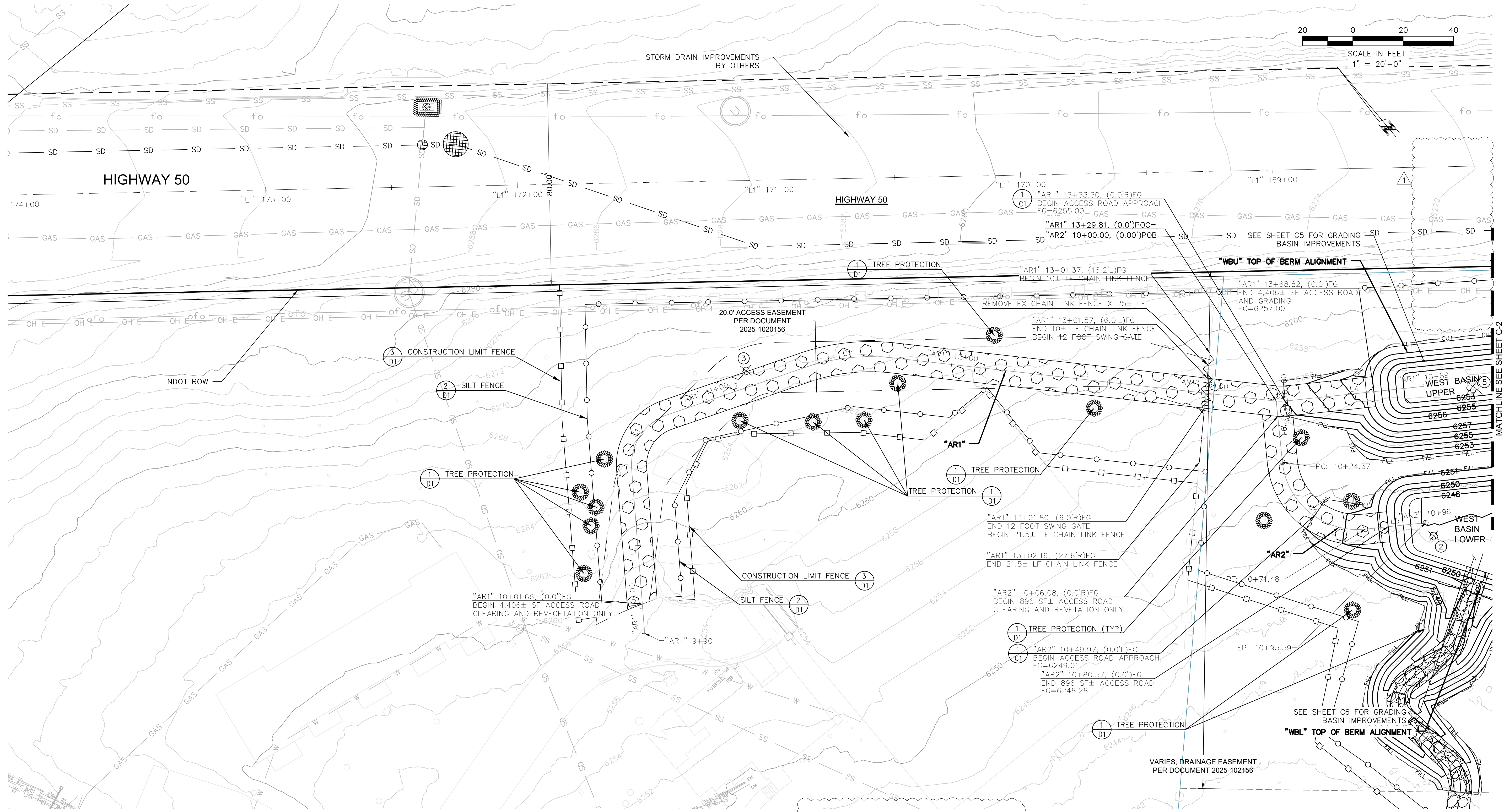
REVISIONS		DESCRIPTION	
NO.	DATE	BY	

LOCATION CONTROL & SHEET INDEX
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN	MJ
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DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

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LEGEND:

- ACCESS ROAD
- CHANNEL RIPRAP
- TREE REMOVAL
- REMOVE FENCE
- CONSTRUCTION FENCE
- SILT FENCE
- TREE PROTECTION

KEY NOTES (DEMOLITION):

- REMOVE TREES - 6"-11"
- REMOVE TREES - 12"-17"
- REMOVE TREES - 18"-23"
- REMOVE TREES - 24"-29"
- REMOVE TREES - 30"-35"

NOTES:

- ACCESS ROAD TO BE NATIVE VEGETATION / DIRT. COVER WITH WOOD CHIP MULCH AFTER USE.

REVEGETATION NOTES:

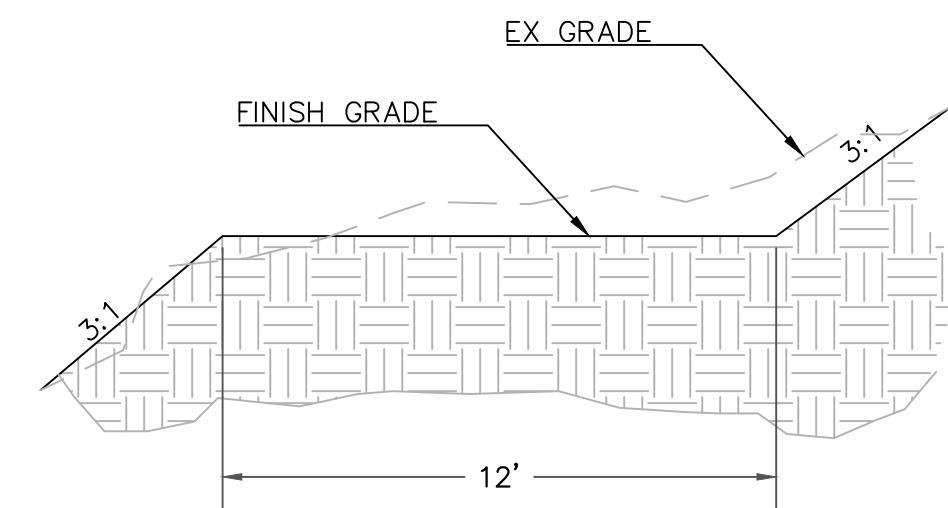
- SEED MIX 1: APPROXIMATELY 27,330 SF OF DISTURBED AREAS OUTSIDE OF BASINS SHALL BE DECOMPACTED AND SEEDED PER ENGINEERS DIRECTION. SEED MIX WILL BE PROVIDED BY NTCD. CONTRACTOR SHALL REQUEST SEED MIX FROM NTCD A MINIMUM OF 1 WEEK PRIOR TO PLACEMENT OF SEED. PLACE 1" OF NATIVE MULCH OVER SEED MIX.
- SEED MIX 2: APPROXIMATELY 14,536 SF OF DISTURBED AREA INSIDE BASINS AND ON SLOPES GREATER THAN 3:1 SHALL RECEIVE SEED MIX 2 AND EROSION CONTROL BLANKET PER DETAIL 3/D2. CONTRACTOR SHALL REQUEST SEED MIX FROM NTCD A MINIMUM 1 WEEK PRIOR TO PLACEMENT.

PLAN

GRADING SUMMARY - ENTIRE PROJECT

GRADING QUANTITIES (TO FG):
CUT (BANK) = 821 CY
FILL = 941 CY
NET = 120 CY FILL

GRADING DISTURBANCE = 31,576 SF



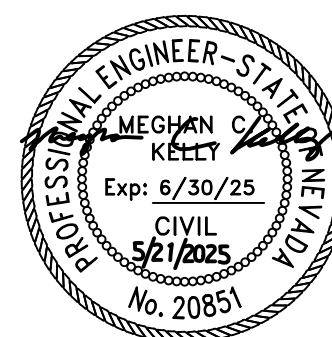
1 ACCESS ROAD TYPICAL SECTION
C1 NOT TO SCALE

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	6/13/2025	EK	REMOVE WEST BASIN CHANNEL

PLAN - ACCESS ROAD "AR1"

BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



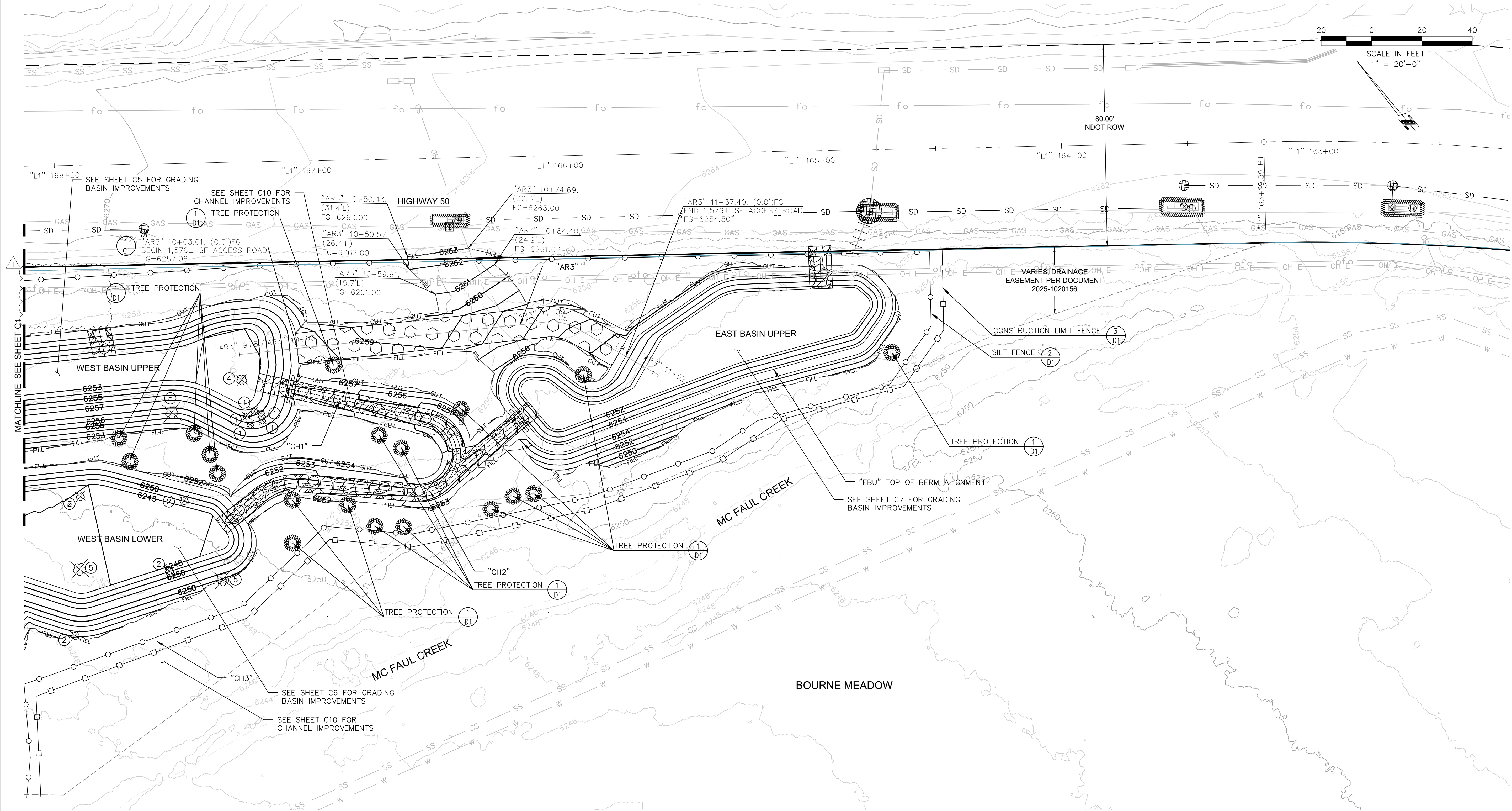
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CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET

C1
5 OF 20



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LEGEND:

- ACCESS ROAD
- CHANNEL RIPRAP
- TREE REMOVAL
- REMOVE FENCE
- CONSTRUCTION FENCE
- SILT FENCE
- TREE PROTECTION

KEY NOTES (DEMOLITION):

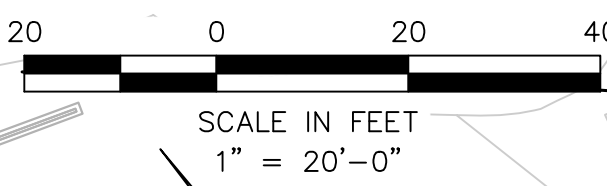
- 1 REMOVE TREES - 6"-11"
- 2 REMOVE TREES - 12"-17"
- 3 REMOVE TREES - 18"-23"
- 4 REMOVE TREES - 24"-29"
- 5 REMOVE TREES - 30"-35"

NOTES:

- 1. ACCESS ROAD TO BE NATIVE VEGETATION / DIRT. COVER WITH WOOD CHIP MULCH AFTER USE.

REVEGETATION NOTES:

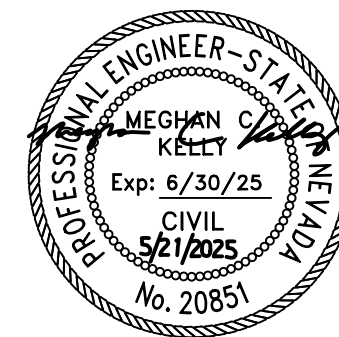
- 1. DISTURBED AREAS OUTSIDE OF BASINS SHALL BE DECOMPACTED AND SEEDED PER ENGINEERS DIRECTION. SEED MIX WILL BE PROVIDED BY NTCD. CONTRACTOR SHALL REQUEST SEED MIX FROM NTCD A MINIMUM OF 1 WEEK PRIOR TO PLACEMENT OF SEED. PLACE 1" OF NATIVE OVER SEED MIX.
- 2. ALL AREAS INSIDE BASINS, ALONG INTERIOR EMBANKMENTS, ON SLOPES GREATER THAN 3:1, AND BOTTOM OF BASINS SHALL RECEIVE SEED MIX 2 AND EROSION CONTROL BLANKET PER DETAIL 3/D2. CONTRACTOR SHALL REQUEST SEED MIX FROM NTCD A MINIMUM 1 WEEK PRIOR TO PLACEMENT.



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	6/13/2025	EK	REMOVE WEST BASIN CHANNEL

PLAN - ACCESS ROAD "AR3" & EAST BASIN UPPER
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



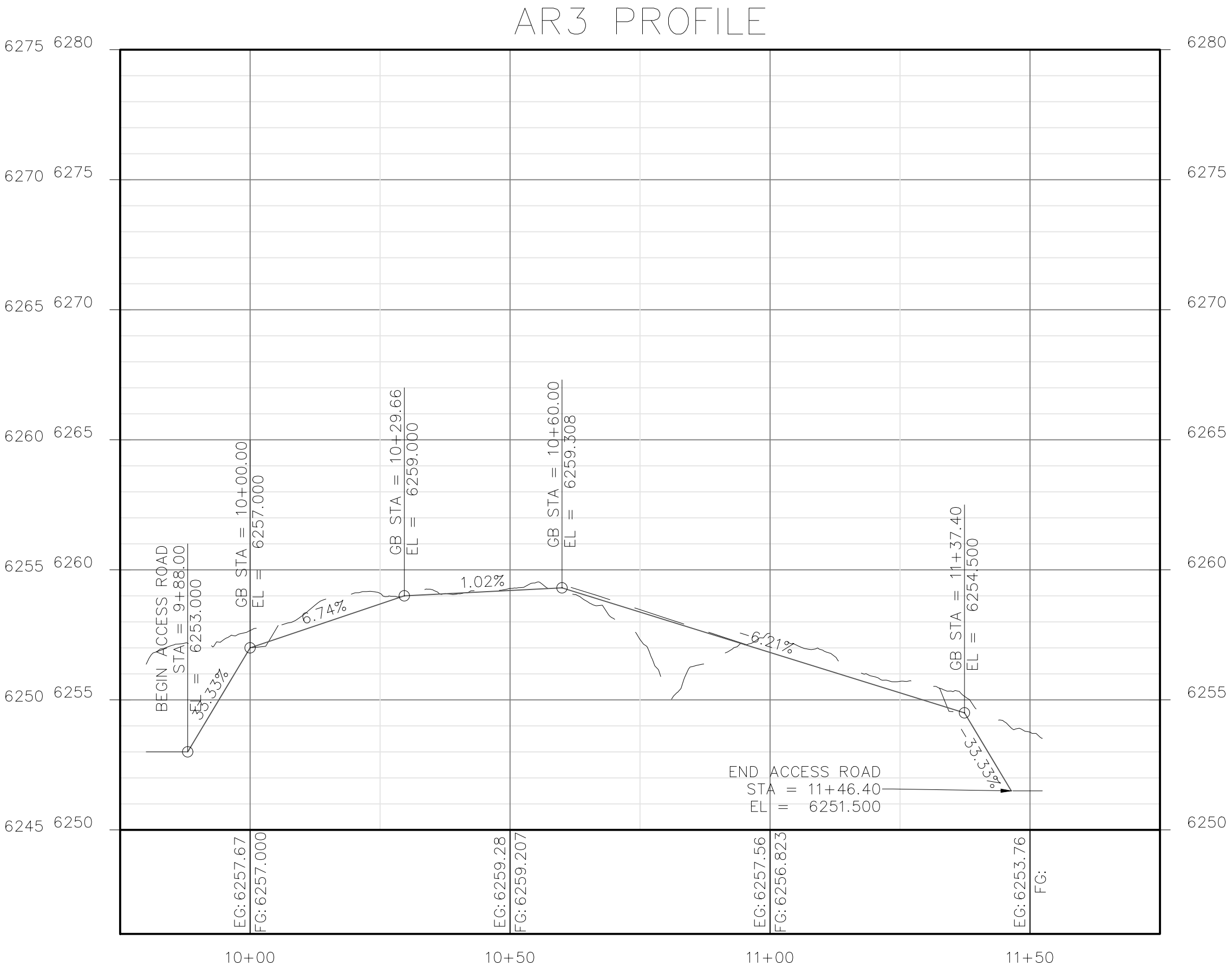
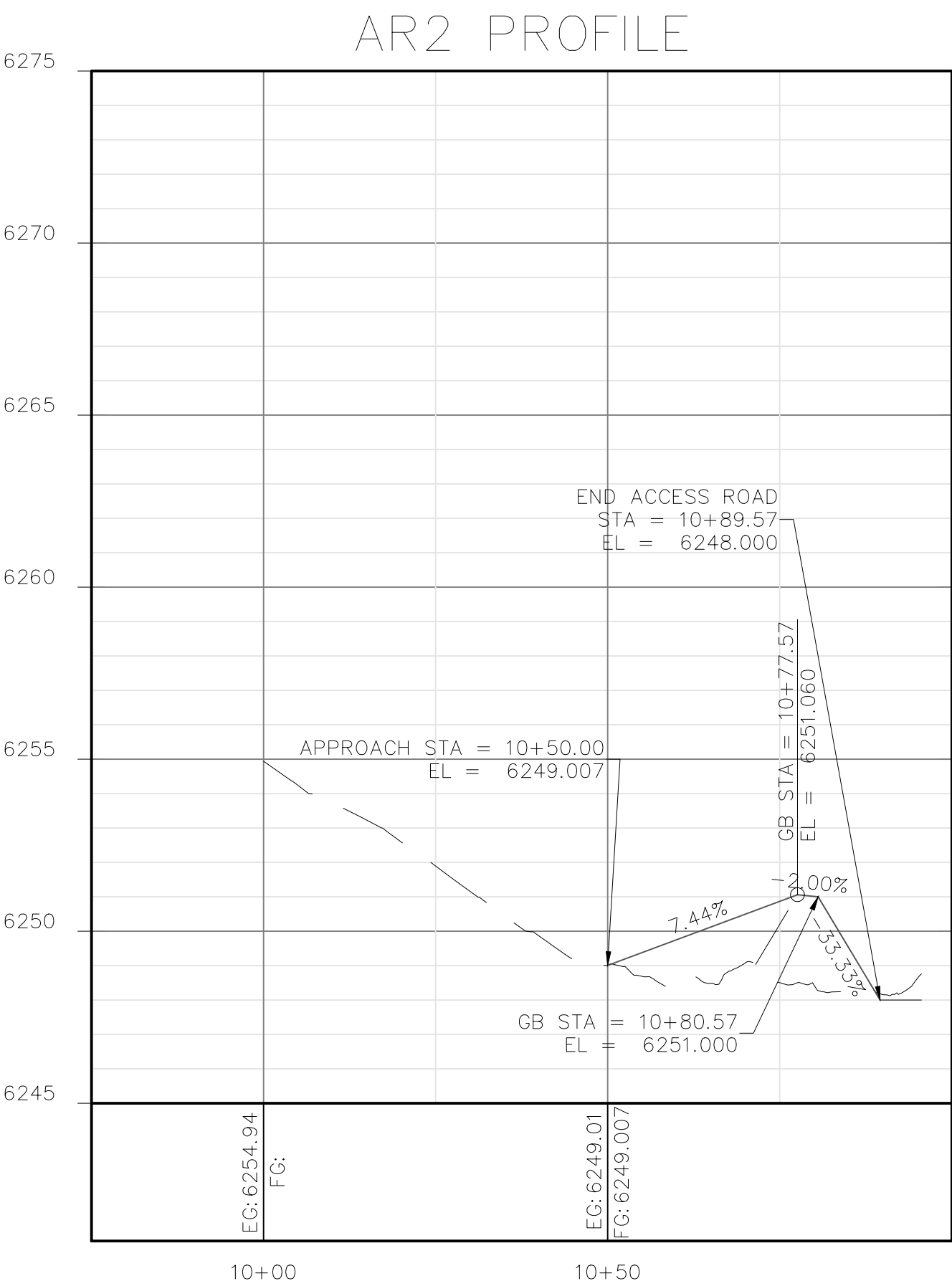
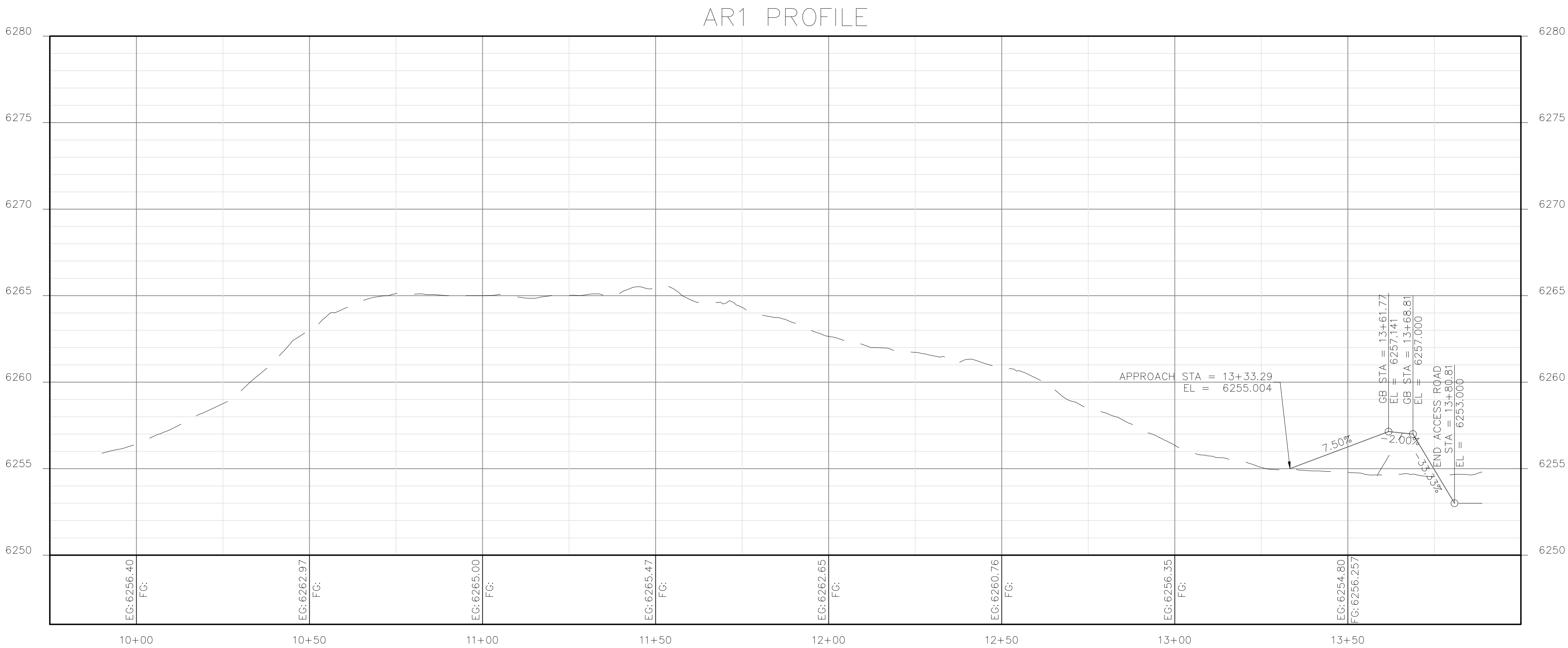
DESIGNED/DRAWN	MJ
CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET

C2
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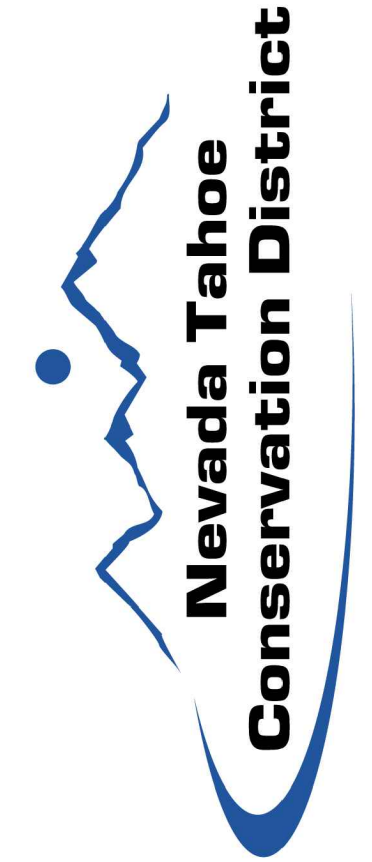
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ACCESS ROAD ALIGNMENT "AR1"								
Number	ALIGNMENT NAME	STATION	RADIUS	TANGENT	LENGTH	LINE / CHORD DIRECTION	START NORTHING	START EASTING
L1	"AR1"	9+90.00			65.50	N35° 27' 56.56"E	14676050.4252	2236174.1691
C1	AR1	10+55.50	21.00	25.73	27.69	N73° 14' 11.94"E	14676103.7752	2236212.1752
L2	"AR1"	10+83.19			57.57	S68° 59' 32.68"E	14676111.1949	2236236.8072
C2	AR1	11+40.76	81.00	35.65	35.95	S56° 16' 45.22"E	14676090.5562	2236290.5517
L3	"AR1"	11+76.71			152.43	S43° 33' 57.76"E	14676070.7644	2236320.2049
C3	AR1	13+29.13	21.00	4.57	4.58	S49° 48' 36.01"E	14675960.3202	2236425.2547
L4	"AR1"	13+33.71			55.12	S56° 03' 14.25"E	14675957.3724	2236428.7443

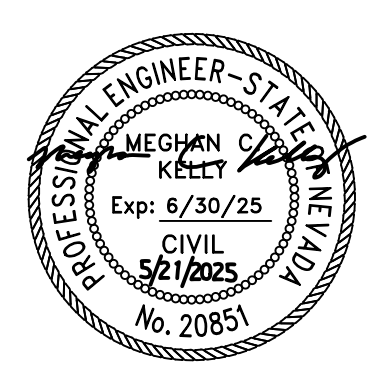
ACCESS ROAD ALIGNMENT "AR2"								
Number	ALIGNMENT NAME	STATION	RADIUS	TANGENT	LENGTH	LINE / CHORD DIRECTION	START NORTHING	START EASTING
L6	"AR2"	10+00.00			24.37	S34° 12' 25.66"W	14675959.8365	2236425.7299
C4	AR2	10+24.37	30.00	42.42	47.11	S11° 03' 59.11"E	14675939.6789	2236412.0272
L5	"AR2"	10+71.48			24.10	S56° 03' 14.25"E	14675898.0504	2236420.1690

ACCESS ROAD ALIGNMENT "AR3"								
Number	ALIGNMENT NAME	STATION	RADIUS	TANGENT	LENGTH	LINE / CHORD DIRECTION	START NORTHING	START EASTING
L7	"AR3"	9+80.00			122.19	S56° 03' 14.25"E	14675863.7727	2236569.5819
C5	AR3	11+02.19	21.00	12.89	13.10	S38° 10' 35.73"E	14675795.5410	2236670.9453
L8	"AR3"	11+15.29			37.10	S20° 17' 57.22"E	14675785.4056	2236678.9144



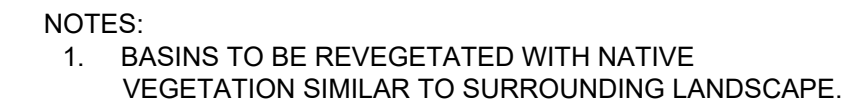
REVISIONS			
NO.	DATE	BY	DESCRIPTION

PROFILES - "AR1", "AR2", & "AR3"
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN	MJ
CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET
C3
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POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
101	6253.00	14675934.89	2236472.80	BASIN FLOOR
102	6253.00	14675885.19	2236546.63	BASIN FLOOR
103	6253.00	14675877.91	2236562.73	BASIN FLOOR
104	6253.00	14675872.82	2236573.96	BASIN FLOOR
105	6253.00	14675870.35	2236577.63	BASIN FLOOR
106	6253.00	14675863.41	2236578.98	BASIN FLOOR
107	6253.00	14675855.11	2236573.40	BASIN FLOOR
108	6253.00	14675854.88	2236573.18	BASIN FLOOR
109	6253.00	14675847.86	2236564.19	BASIN FLOOR
110	6253.00	14675849.85	2236556.51	BASIN FLOOR
111	6253.00	14675860.77	2236551.87	BASIN FLOOR
112	6253.00	14675875.24	2236539.93	BASIN FLOOR
113	6253.00	14675924.93	2236466.10	BASIN FLOOR
114	6253.00	14675927.71	2236465.56	BASIN FLOOR
115	6253.00	14675934.35	2236470.02	BASIN FLOOR
116	6257.00	14675943.76	2236473.95	TOP OF BERM
117	6257.00	14675891.83	2236551.10	TOP OF BERM
118	6257.00	14675885.64	2236564.76	TOP OF BERM
119	6257.00	14675879.46	2236578.43	TOP OF BERM
120	6257.00	14675874.76	2236585.41	TOP OF BERM
121	6257.00	14675856.71	2236588.94	TOP OF BERM
122	6257.00	14675848.41	2236583.35	TOP OF BERM
123	6257.00	14675845.43	2236580.57	TOP OF BERM
124	6257.00	14675843.51	2236578.12	TOP OF BERM
125	6256.00	14675842.28	2236576.54	SPILLWAY FLOOR

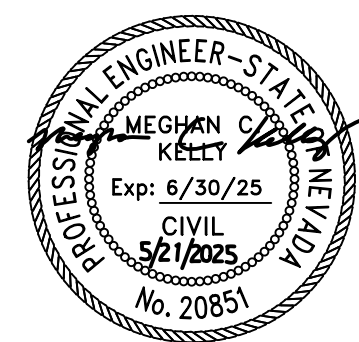
POINT TABLE				
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
151	6257.06	14675918.04	2236456.64	TOP OF BERM
152	6257.06	14675936.09	2236453.11	TOP OF BERM
153	6257.06	14675942.72	2236457.58	TOP OF BERM



**Nevada Tahoe
Conservation District**

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PLAN - WEST BASIN UPPER
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN MJ
CHECKED MK
DATE 04/2025
SCALE AS SHOWN
PROJECT BOURNE

SHEET

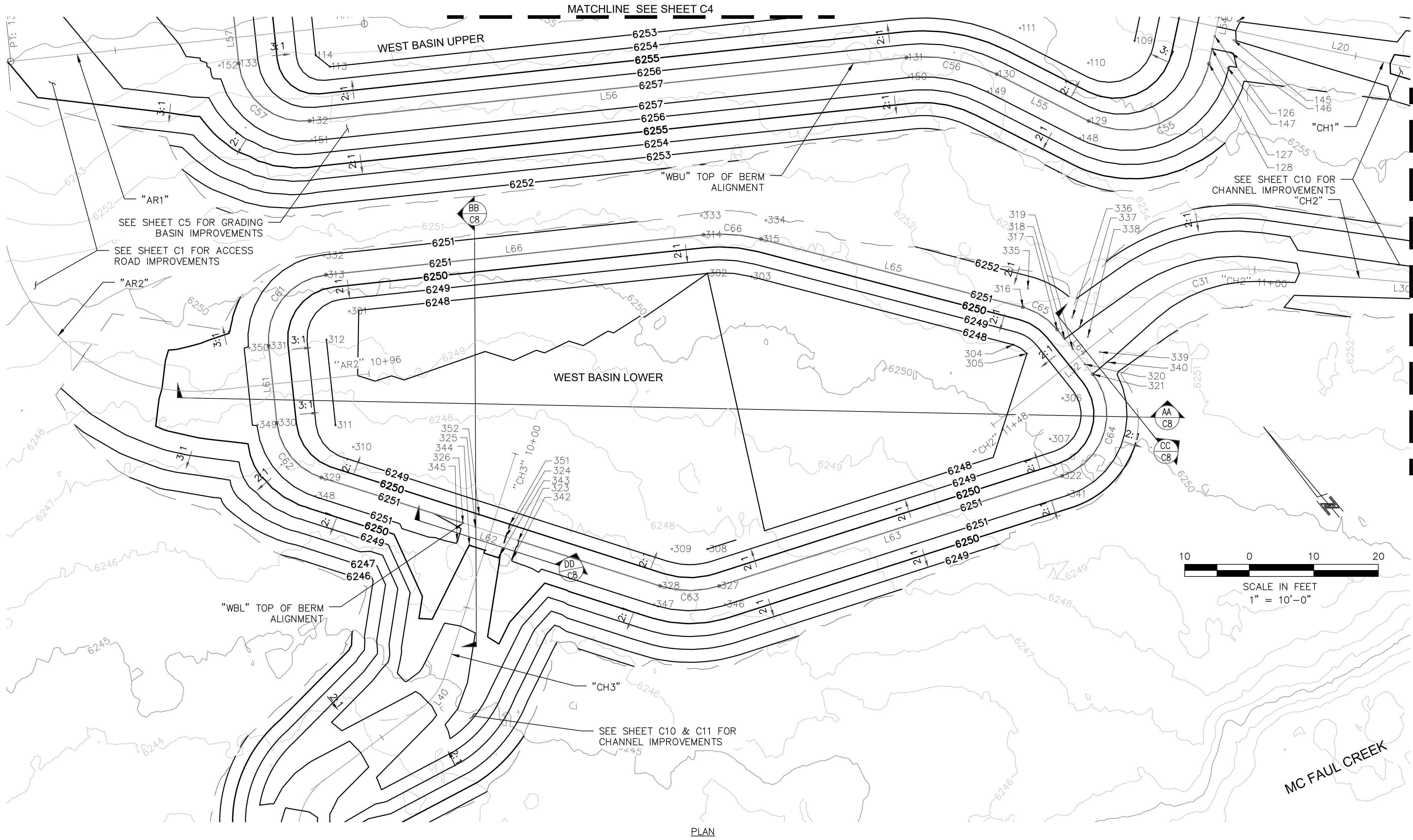
C4

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- NOTES:
1. BASINS TO BE REVEGETATED WITH NATIVE VEGETATION SIMILAR TO SURROUNDING LANDSCAPE.

INFILTRATION BASIN "WBL" TOP OF BERM ALIGNMENT								
Number	ALIGNMENT NAME	STATION	RADIUS	TANGENT	LENGTH	LINE / CHORD DIRECTION	START NORTHING	START EASTING
C61	WBL	10+00.00	10.00	14.14	15.71	S78° 56' 46.69"W	14675900.6223	2236444.9107
L61	"WBL"	10+15.71			12.00	S33° 56' 45.75"W	14675897.9109	2236431.0310
C62	WBL	10+27.71	10.00	10.92	11.55	S0° 50' 48.44"W	14675887.9561	2236424.3300
L62	"WBL"	10+39.26			55.12	S32° 15' 08.87"E	14675877.0354	2236424.1686
C63	WBL	10+94.38	15.00	9.16	9.30	S50° 01' 20.90"E	14675830.4220	2236453.5822
L63	"WBL"	11+03.68			55.80	S67° 47' 32.94"E	14675824.5394	2236460.5984
C64	WBL	11+59.49	10.00	16.46	19.33	N56° 49' 31.20"E	14675803.4484	2236512.2610
L64	"WBL"	11+78.82			8.87	N1° 26' 35.34"E	14675812.4548	2236526.0374
C65	WBL	11+87.69	10.00	6.32	6.44	N16° 59' 30.68"W	14675821.3199	2236526.2608
L65	"WBL"	11+94.12			41.93	N35° 25' 36.71"W	14675827.3684	2236524.4125
C66	WBL	12+36.05	25.00	8.95	9.00	N45° 44' 25.48"W	14675861.5356	2236500.1070
L66	"WBL"	12+45.05			58.81	N56° 03' 14.25"W	14675867.7831	2236493.6959

POINT TABLE				
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
301	6248.00	14675893.97	2236444.05	BASIN FLOOR
302	6248.00	14675862.81	2236490.35	BASIN FLOOR
303	6248.00	14675858.06	2236495.22	BASIN FLOOR
304	6248.00	14675823.89	2236519.52	BASIN FLOOR
305	6248.00	14675821.47	2236520.26	BASIN FLOOR
306	6248.00	14675812.61	2236520.04	BASIN FLOOR
307	6248.00	14675809.00	2236514.53	BASIN FLOOR
308	6248.00	14675830.09	2236462.87	BASIN FLOOR
309	6248.00	14675833.62	2236458.66	BASIN FLOOR
310	6248.00	14675877.46	2236430.99	BASIN FLOOR
311	6248.00	14675881.83	2236431.06	BASIN FLOOR
312	6248.00	14675892.89	2236438.50	BASIN FLOOR
313	6251.00	14675900.62	2236444.91	TOP OF BERM
314	6251.00	14675867.78	2236493.70	TOP OF BERM
315	6251.00	14675861.54	2236500.11	TOP OF BERM
316	6251.00	14675827.37	2236524.41	TOP OF BERM
317	6251.00	14675821.32	2236526.26	TOP OF BERM
318	6251.00	14675819.45	2236526.21	TOP OF BERM
319	6250.00	14675817.45	2236526.16	SPILLWAY FLOOR
320	6250.00	14675814.45	2236526.09	SPILLWAY FLOOR
321	6251.00	14675812.45	2236526.04	TOP OF BERM
322	6251.00	14675803.45	2236512.26	TOP OF BERM
323	6251.00	14675849.94	2236441.27	TOP OF BERM

POINT TABLE				
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
324	6250.00	14675851.63	2236440.20	SPILLWAY FLOOR
325	6250.00	14675855.86	2236437.52	SPILLWAY FLOOR
326	6251.00	14675857.55	2236436.46	TOP OF BERM
327	6251.00	14675824.54	2236460.60	TOP OF BERM
328	6251.00	14675830.42	2236453.58	TOP OF BERM
329	6251.00	14675877.04	2236424.17	TOP OF BERM
330	6251.00	14675887.96	2236424.33	TOP OF BERM
331	6251.00	14675897.91	2236431.03	TOP OF BERM
332	6251.06	14675903.11	2236446.59	TOP OF BERM
333	6251.06	14675870.27	2236495.37	TOP OF BERM
334	6251.06	14675863.27	2236502.55	TOP OF BERM
335	6251.06	14675829.11	2236526.86	TOP OF BERM
336	6251.06	14675821.24	2236529.26	TOP OF BERM
337	6251.02	14675819.38	2236529.21	TOP OF BERM
338	6250.00	14675817.38	2236529.16	SPILLWAY FLOOR
339	6250.00	14675814.38	2236529.09	SPILLWAY FLOOR
340	6251.06	14675812.38	2236529.04	TOP OF BERM
341	6251.06	14675800.67	2236511.13	TOP OF BERM
342	6251.06	14675848.34	2236438.74	TOP OF BERM
343	6250.00	14675850.03	2236437.67	SPILLWAY FLOOR
344	6250.00	14675854.25	2236434.99	SPILLWAY FLOOR
345	6251.06	14675855.94	2236433.92	TOP OF BERM
346	6251.06	14675821.76	2236459.46	TOP OF BERM

POINT TABLE				
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
347	6251.06	14675828.82	2236451.05	TOP OF BERM
348	6251.06	14675875.43	2236421.63	TOP OF BERM
349	6251.06	14675889.63	2236421.84	TOP OF BERM
350	6251.06	14675899.59	2236428.54	TOP OF BERM
351	6250.00	14675852.70	2236441.89	SPILLWAY FLOOR
352	6250.00	14675856.93	2236439.22	SPILLWAY FLOOR

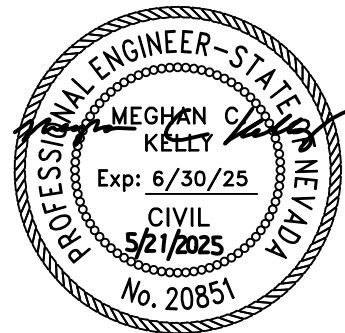


BID SET



REVISIONS		DESCRIPTION	
NO.	DATE	BY	

PLAN - WEST BASIN LOWER
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN	MJ
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DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET	C5
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POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
251	6254.56	14675769.87	2236692.00	TOP OF BERM
252	6254.56	14675770.62	2236697.74	TOP OF BERM
253	6254.56	14675767.62	2236729.17	TOP OF BERM
254	6254.56	14675761.90	2236743.64	TOP OF BERM
255	6254.56	14675734.95	2236778.49	TOP OF BERM
256	6254.56	14675726.66	2236783.39	TOP OF BERM
257	6254.56	14675722.68	2236784.00	TOP OF BERM
258	6254.56	14675708.11	2236774.46	TOP OF BERM
259	6254.56	14675705.72	2236765.35	TOP OF BERM
260	6254.56	14675706.50	2236756.57	TOP OF BERM
261	6254.56	14675724.48	2236717.86	TOP OF BERM
262	6254.56	14675726.17	2236713.73	TOP OF BERM
263	6254.56	14675750.01	2236646.31	TOP OF BERM
264	6254.56	14675764.15	2236636.31	TOP OF BERM
265	6254.56	14675768.85	2236636.31	TOP OF BERM
266	6253.50	14675770.85	2236636.31	SPILLWAY FLOOR
267	6253.50	14675773.85	2236636.31	SPILLWAY FLOOR
268	6254.56	14675775.85	2236636.31	TOP OF BERM
269	6254.56	14675778.66	2236636.31	TOP OF BERM
270	6253.50	14675770.85	2236641.31	SPILLWAY FLOOR
271	6253.50	14675773.85	2236641.31	SPILLWAY FLOOR



**Know what's below.
Call before you dig.**

BID SET

SHEET

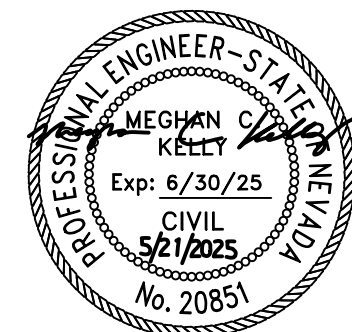
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REVISIONS

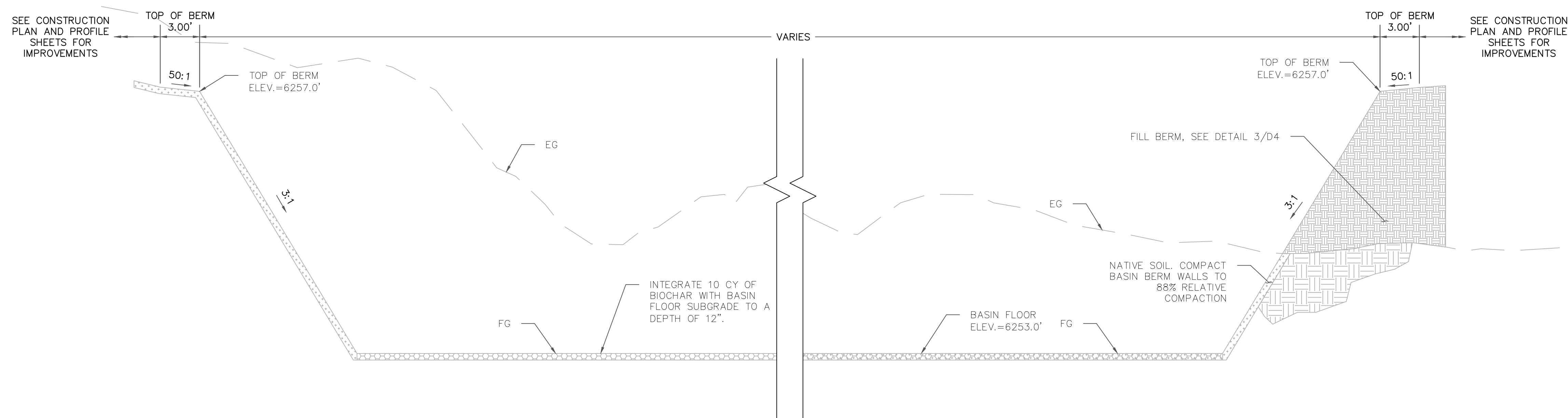
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PLAN - EAST BASIN UPPER

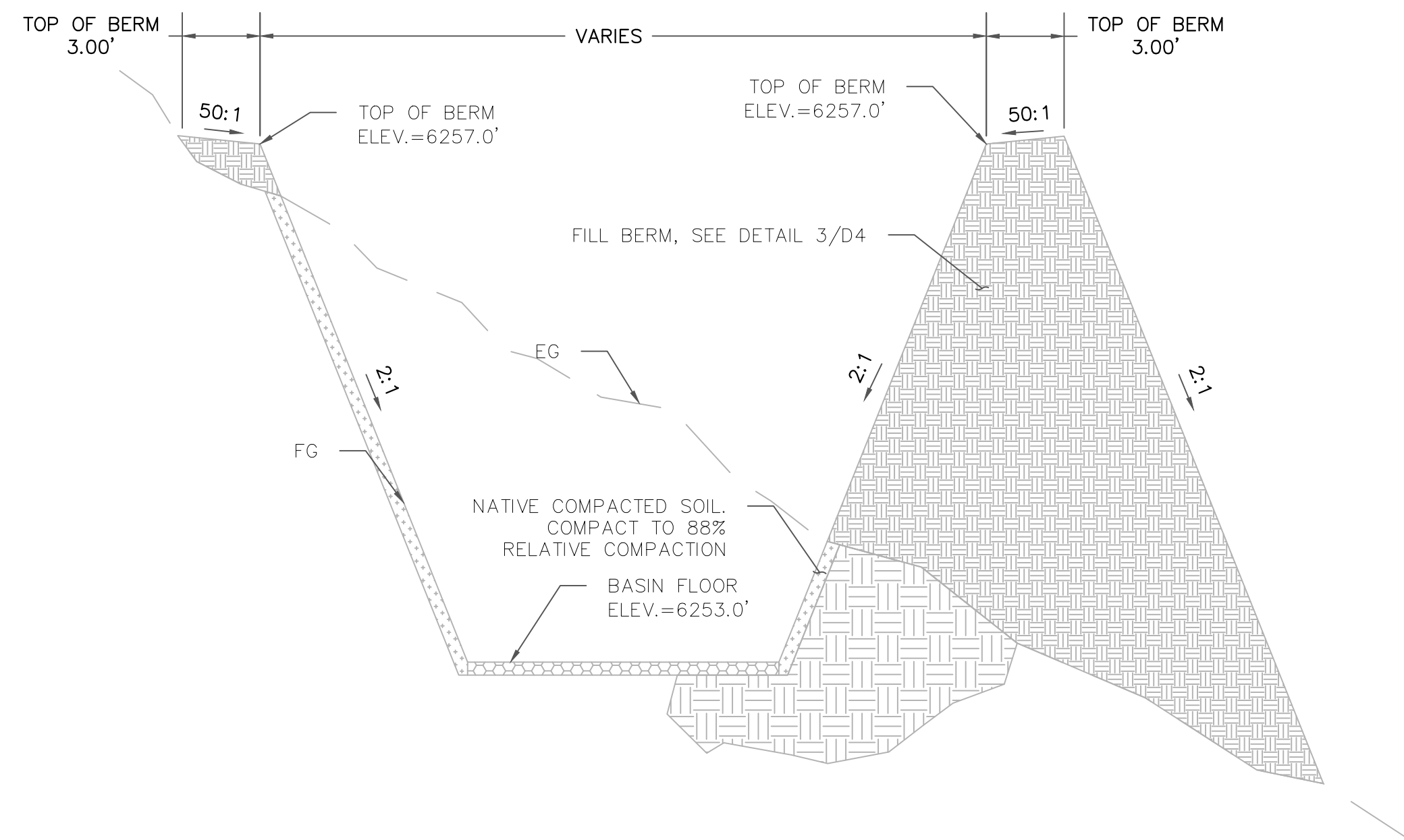


**Nevada Tahoe
Conservation District**

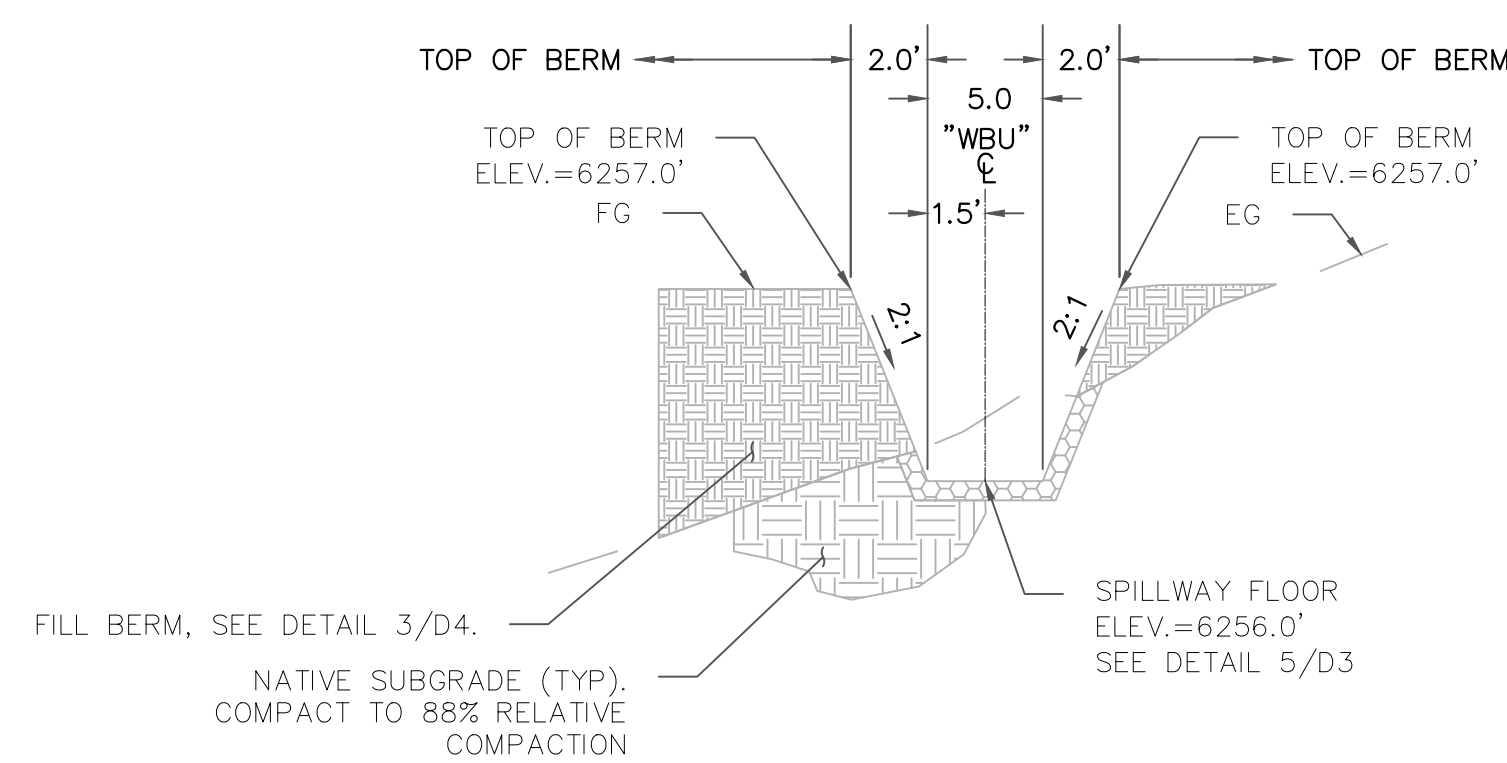
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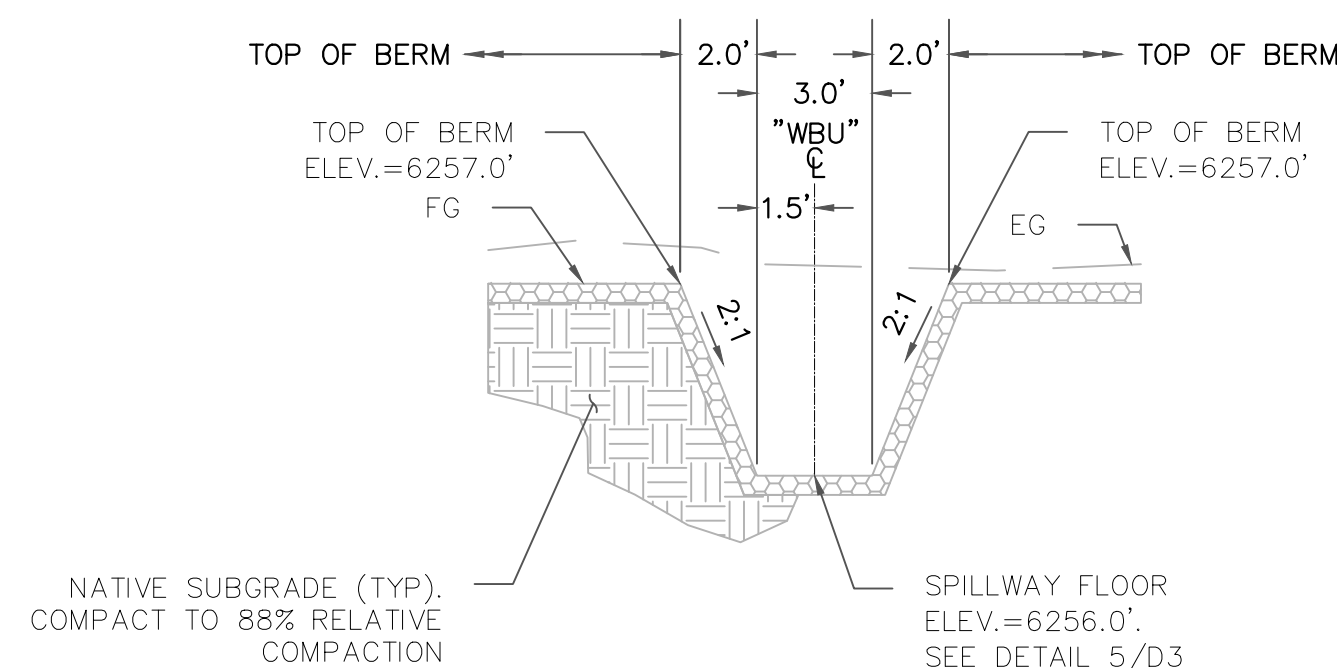
AA WEST BASIN UPPER – SECTION AA
C7 NOT TO SCALE



BB WEST BASIN UPPER – SECTION BB
C7 NOT TO SCALE



CC WEST BASIN UPPER – CHANNEL INLET – SECTION CC
C7 NOT TO SCALE



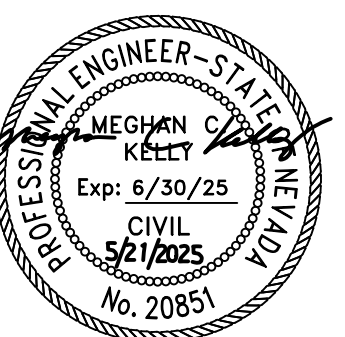
DD WEST BASIN UPPER – CHANNEL OUTLET – SECTION DD
C7 NOT TO SCALE



REVISIONS

NO. DATE BY DESCRIPTION

CROSS SECTIONS 1
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



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CHECKED MK
DATE 04/2025
SCALE AS SHOWN
PROJECT BOURNE

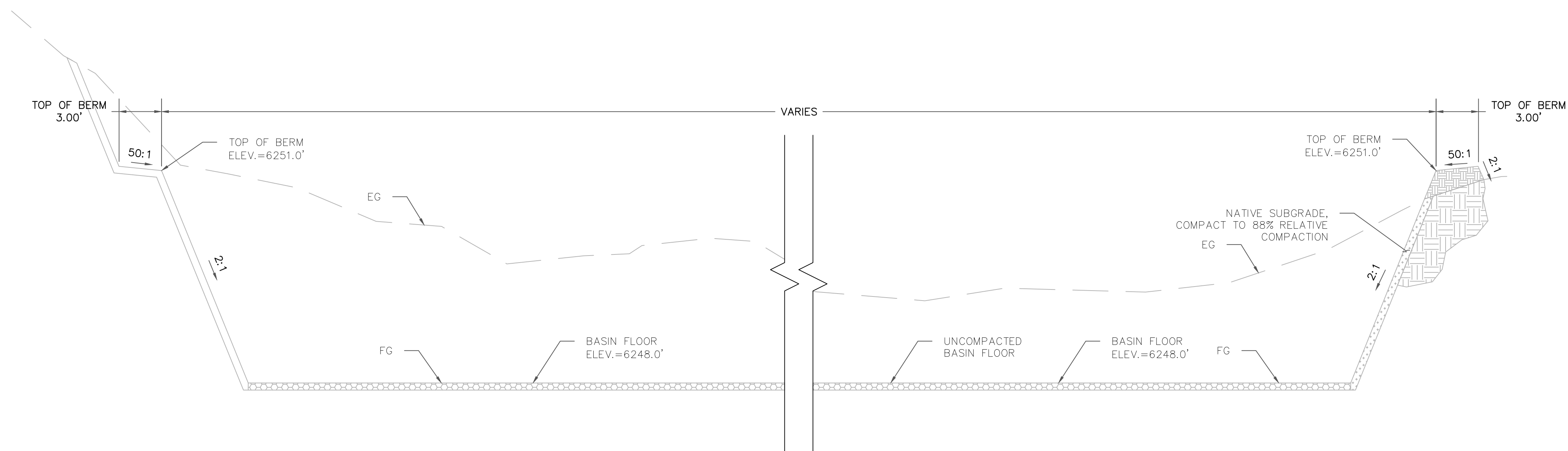
SHEET

C7
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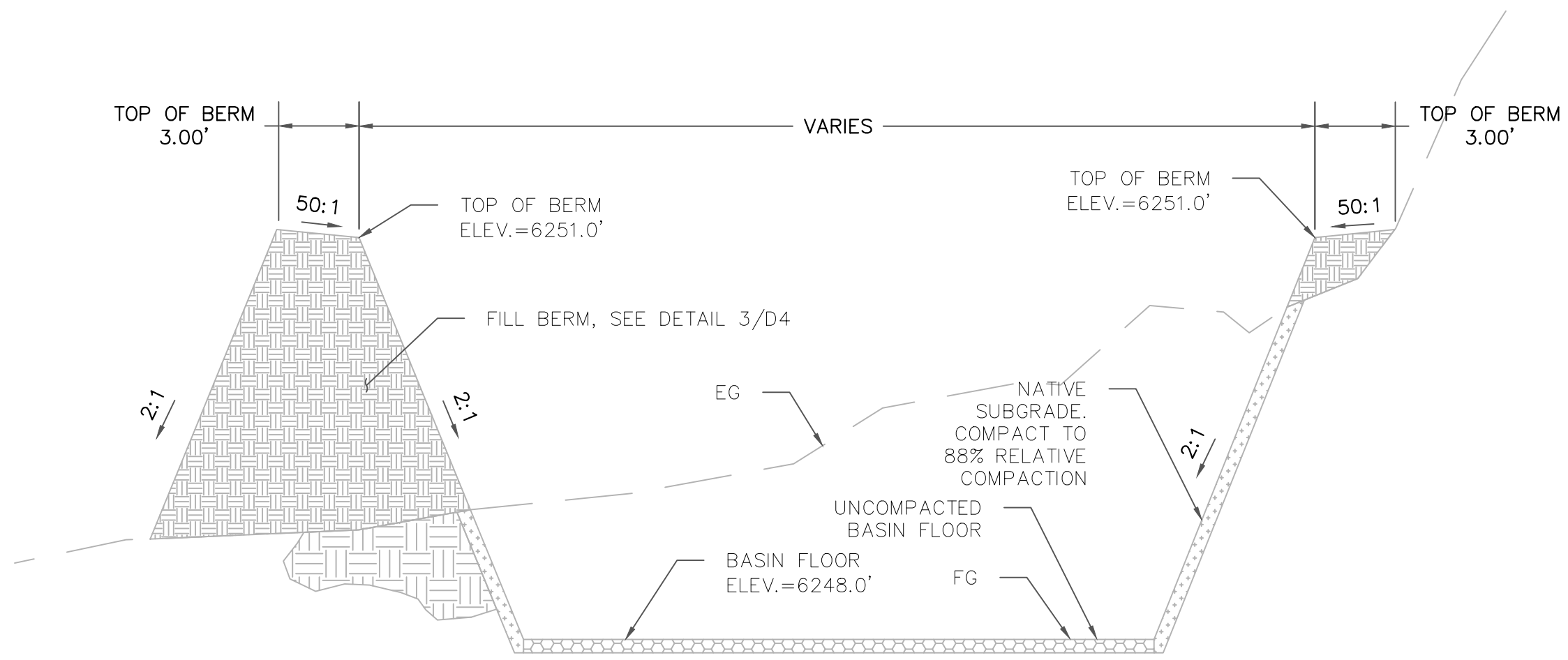


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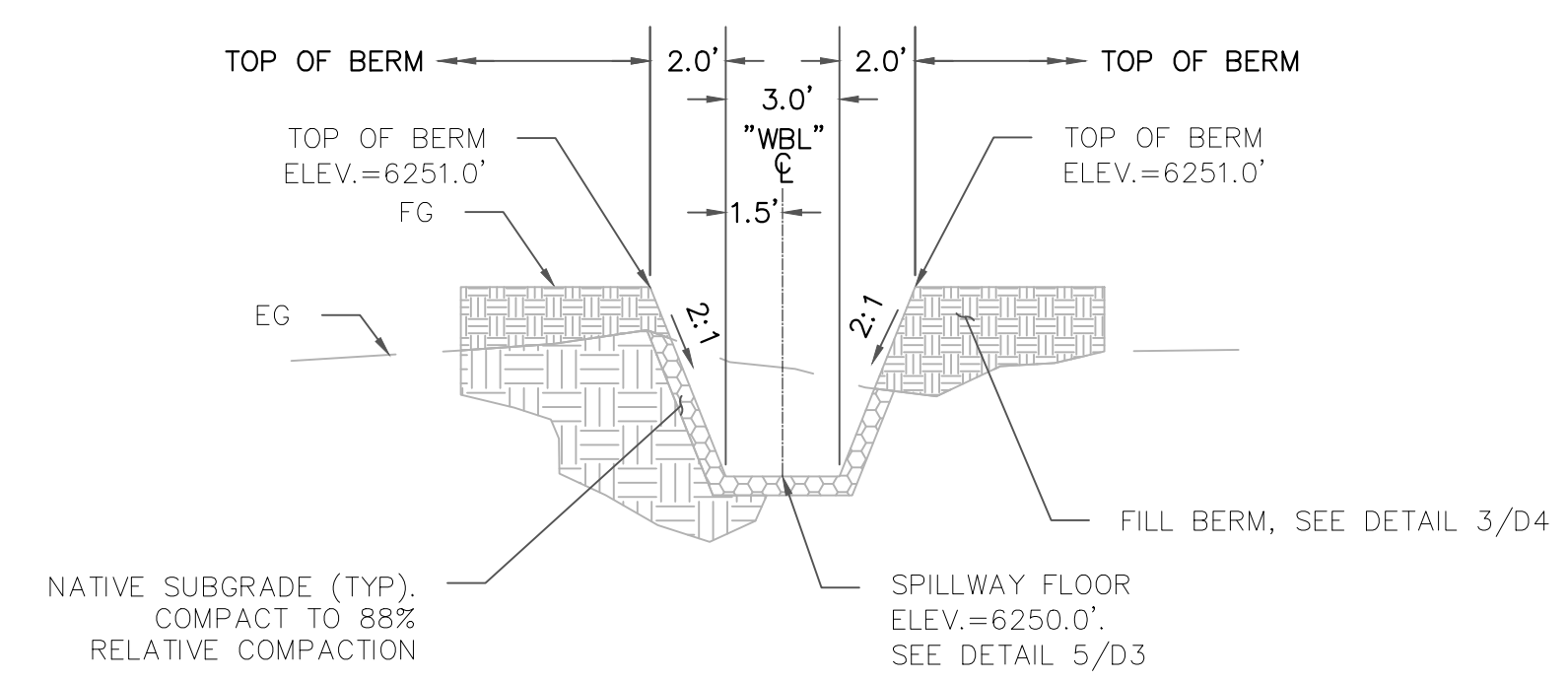
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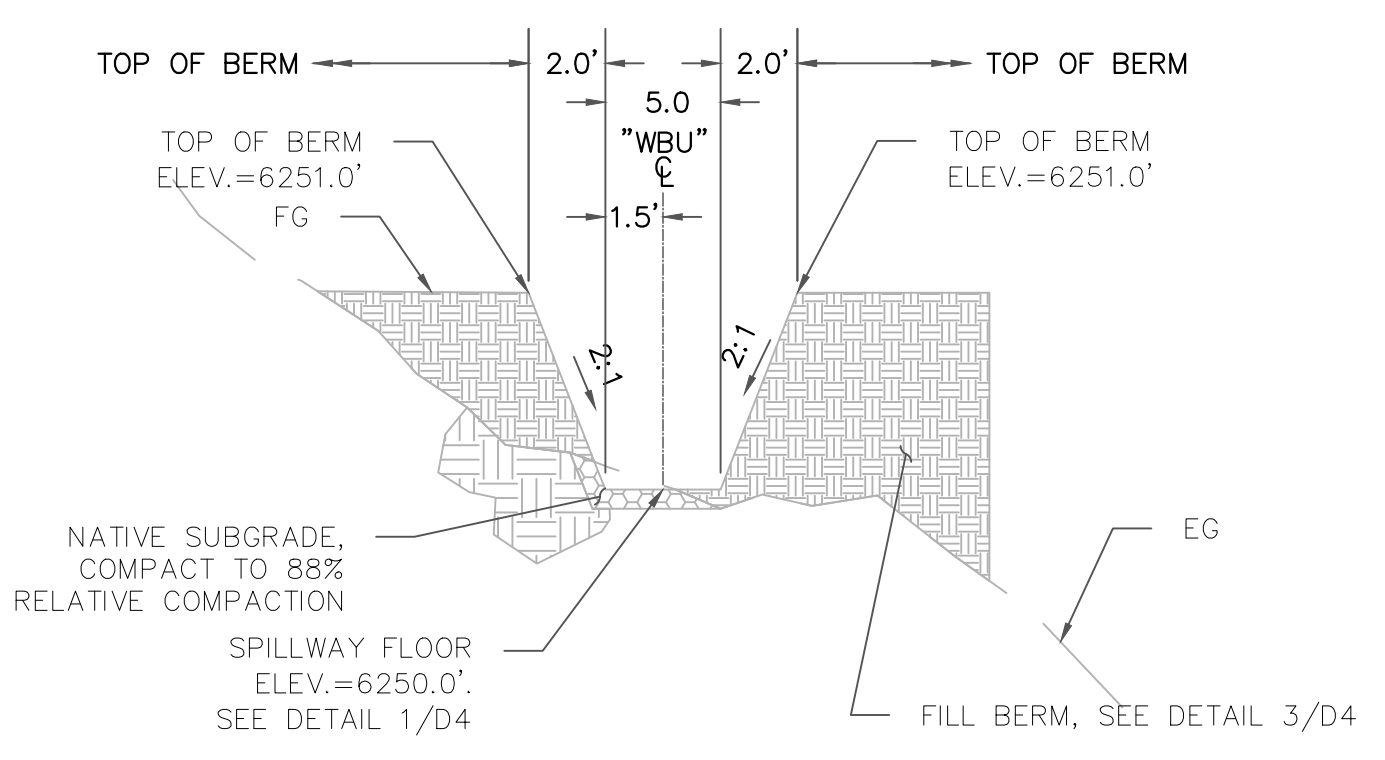
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BB WEST BASIN LOWER - SECTION BB
C8 NOT TO SCALE



CC WEST BASIN LOWER - CHANNEL INLET - SECTION CC
C8 NOT TO SCALE

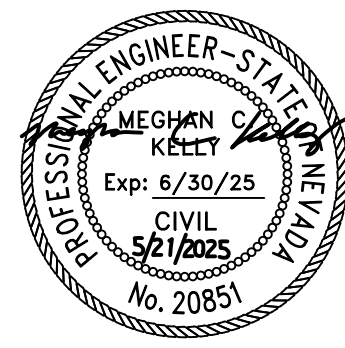


DD WEST BASIN UPPER - CHANNEL OUTLET - SECTION DD
C8 NOT TO SCALE



REVISIONS		DESCRIPTION	
NO.	DATE	BY	

CROSS SECTIONS 2
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



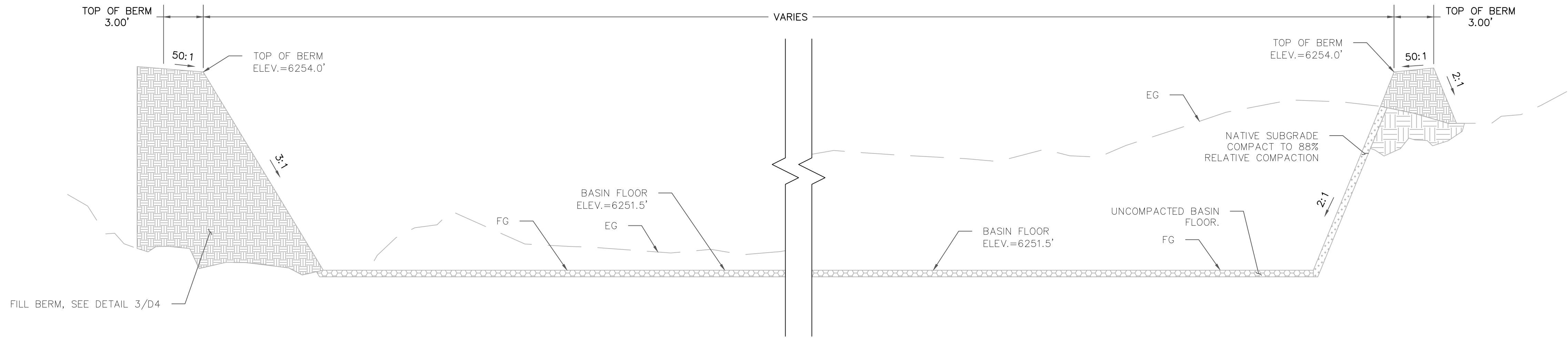
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CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET
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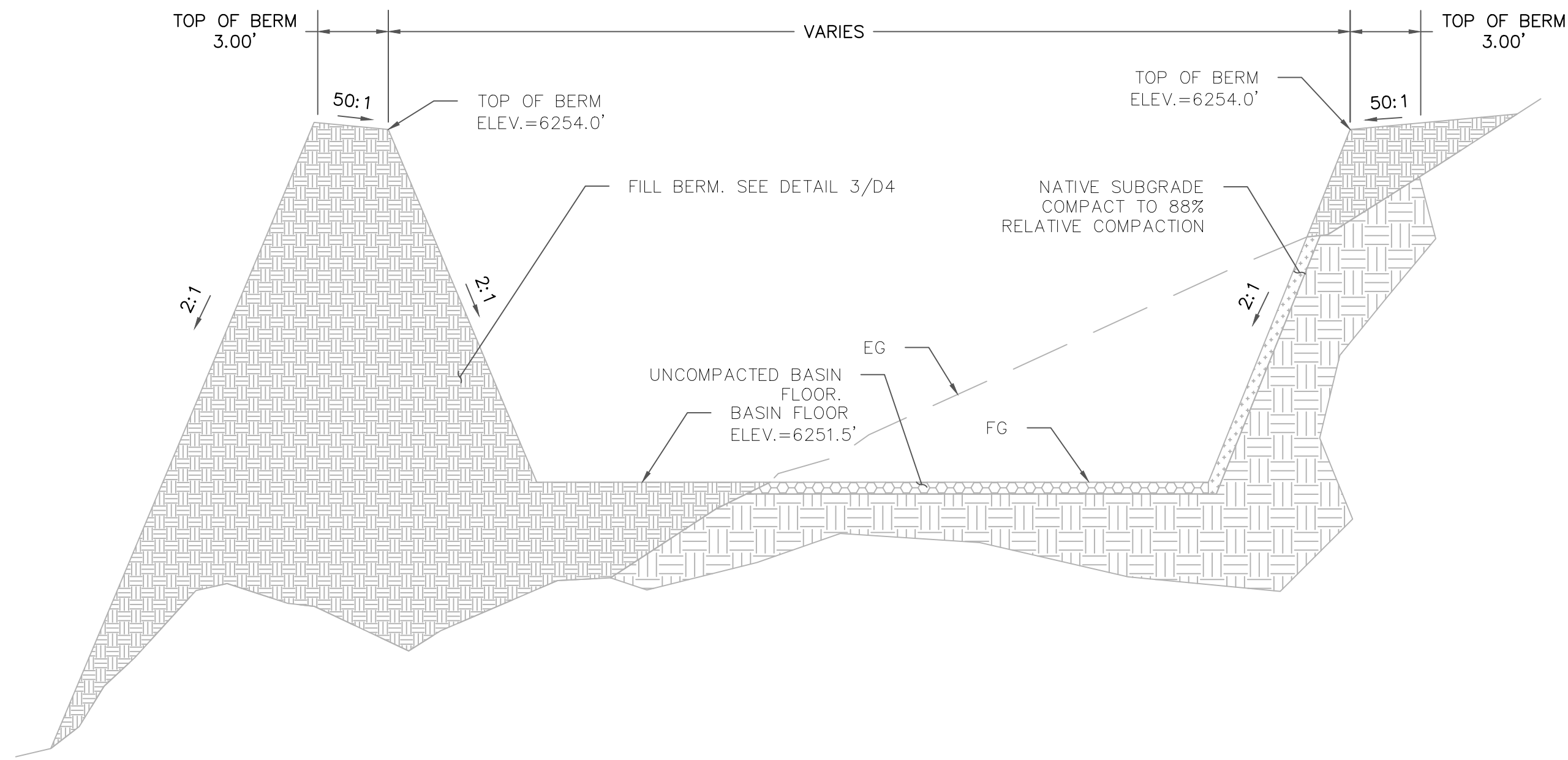


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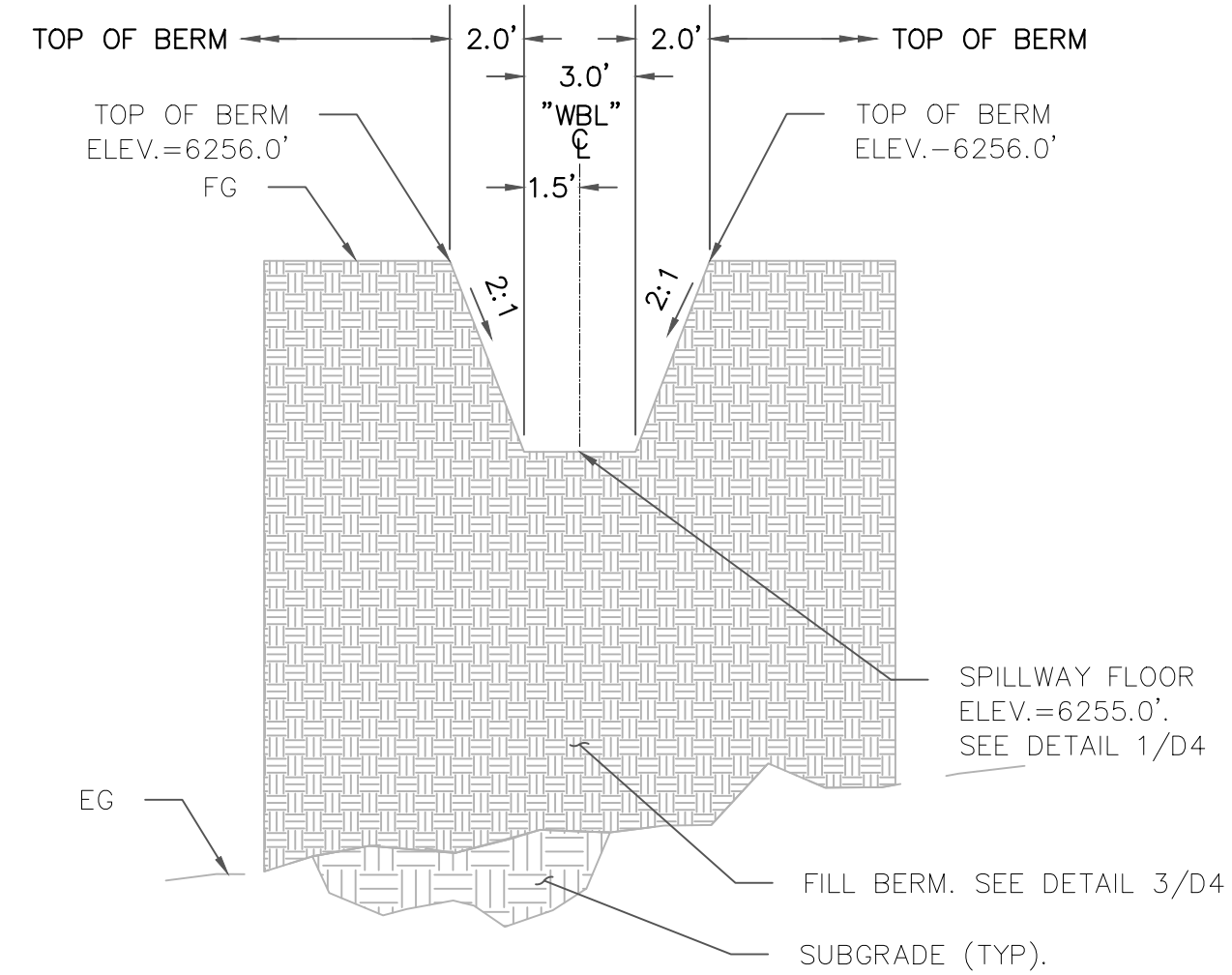
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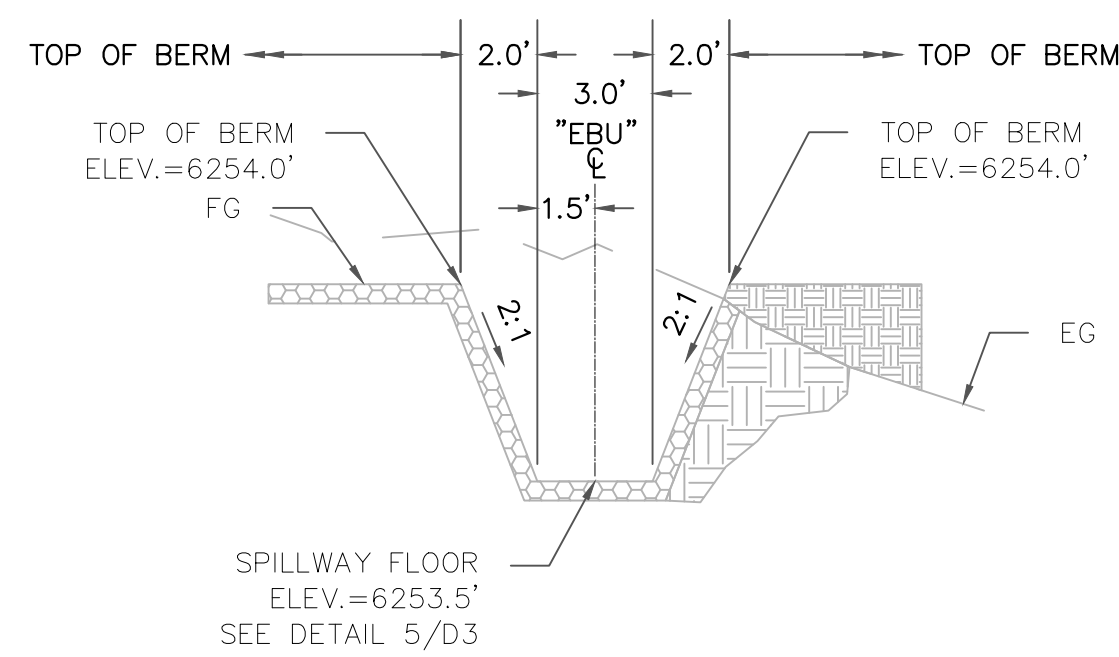
AA EAST BASIN UPPER – SECTION AA
NOT TO SCALE



BB EAST BASIN UPPER – SECTION BB
NOT TO SCALE



DD EAST BASIN UPPER – CHANNEL OUTLET – SECTION DD
NOT TO SCALE



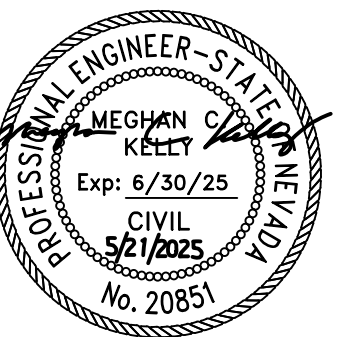
CC EAST BASIN UPPER – CHANNEL INLET – SECTION CC
NOT TO SCALE



REVISIONS

NO.	DATE	BY	DESCRIPTION

CROSS SECTIONS - EAST BASIN UPPER
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT

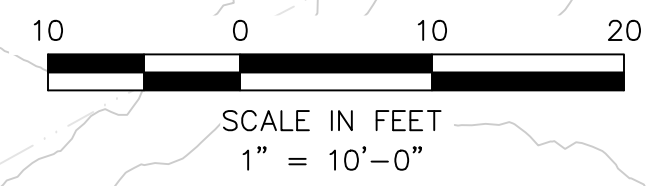


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DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET	C9
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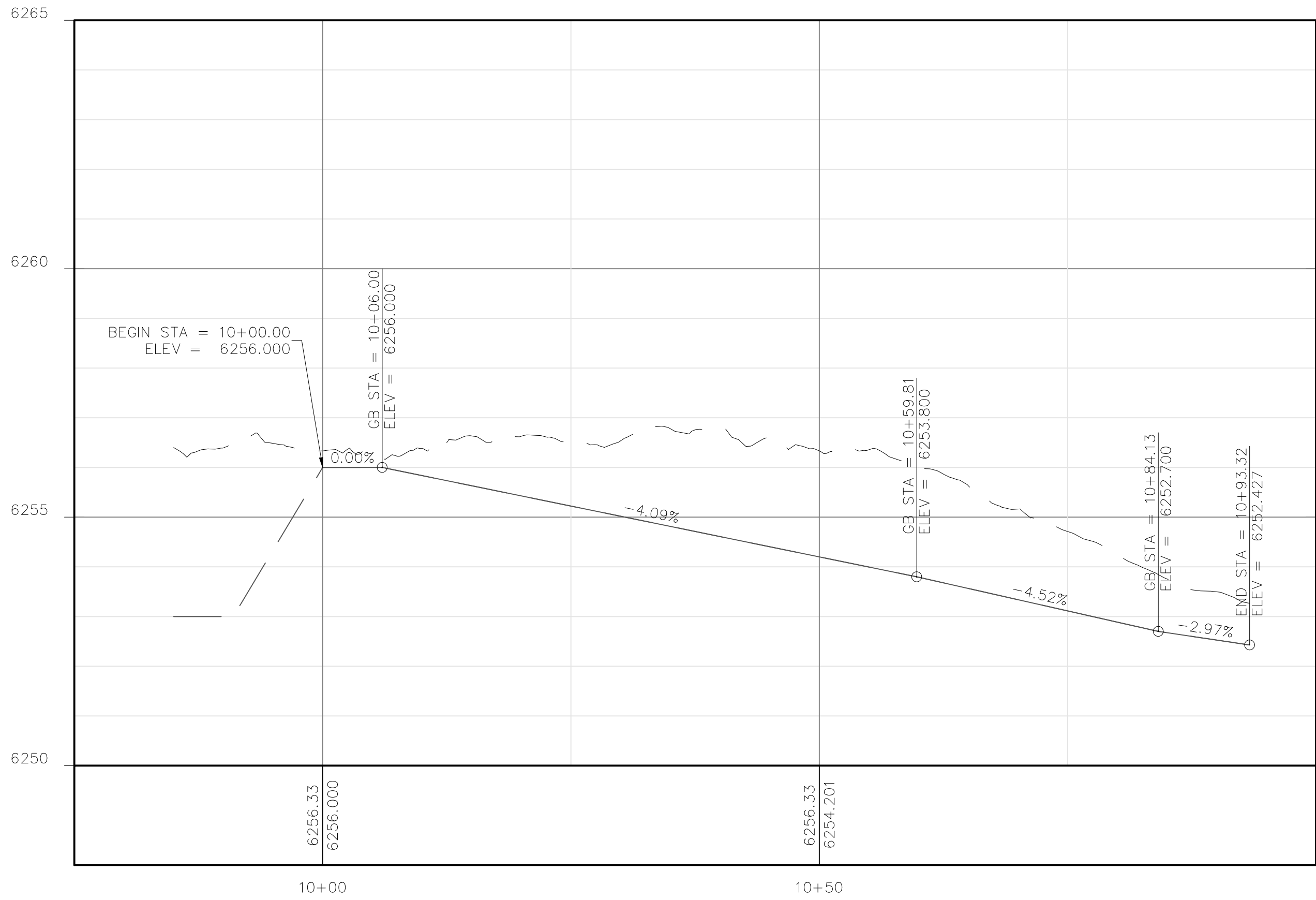


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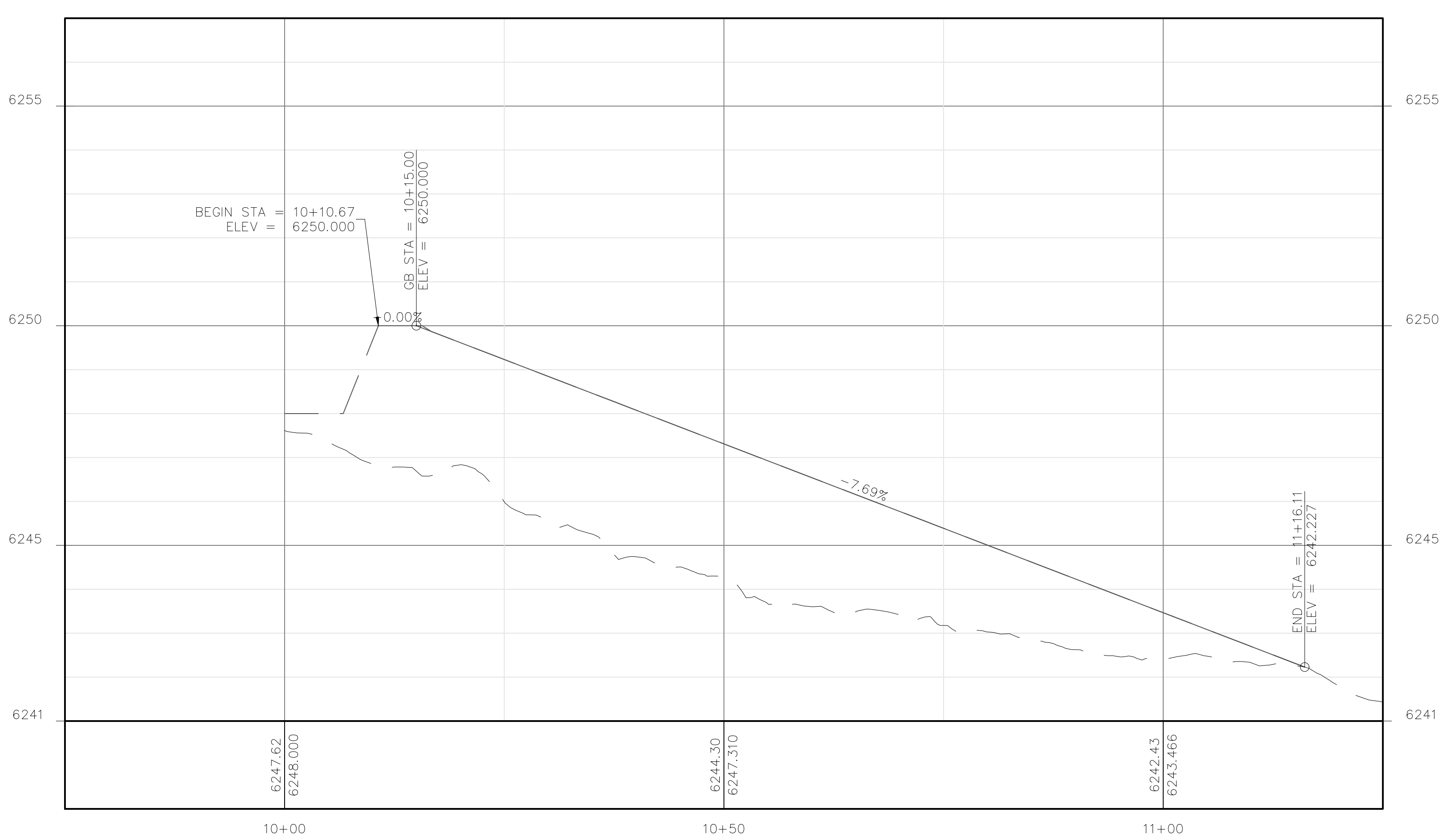
CHANNEL ALIGNMENT "CH3"								
NUMBER	ALIGNMENT NAME	STATION	RADIUS	TANGENT	LENGTH	LINE / CHORD DIRECTION	START NORTHING	START EASTING
L41	"CH3"	10+00.00			36.02	S57° 40' 51.73"W	14675860.5207	2236449.5739
L40	"CH3"	10+36.02			6.23	S75° 32' 25.26"W	14675841.2621	2236419.1321
L42	"CH3"	10+42.26			18.83	N86° 36' 01.20"W	14675839.7306	2236413.1927
C41	CH3	10+61.08	10.00	15.32	17.45	S43° 23' 47.60"W	14675840.8470	2236394.3991
L43	"CH3"	10+78.54			23.33	S6° 36' 23.60"E	14675829.7141	2236383.8725
C42	CH3	11+01.86	15.00	13.72	14.25	S20° 36' 15.30"W	14675806.5432	2236386.5562
L44	"CH3"	11+16.11			23.59	S47° 48' 54.20"W	14675793.7027	2236381.7287

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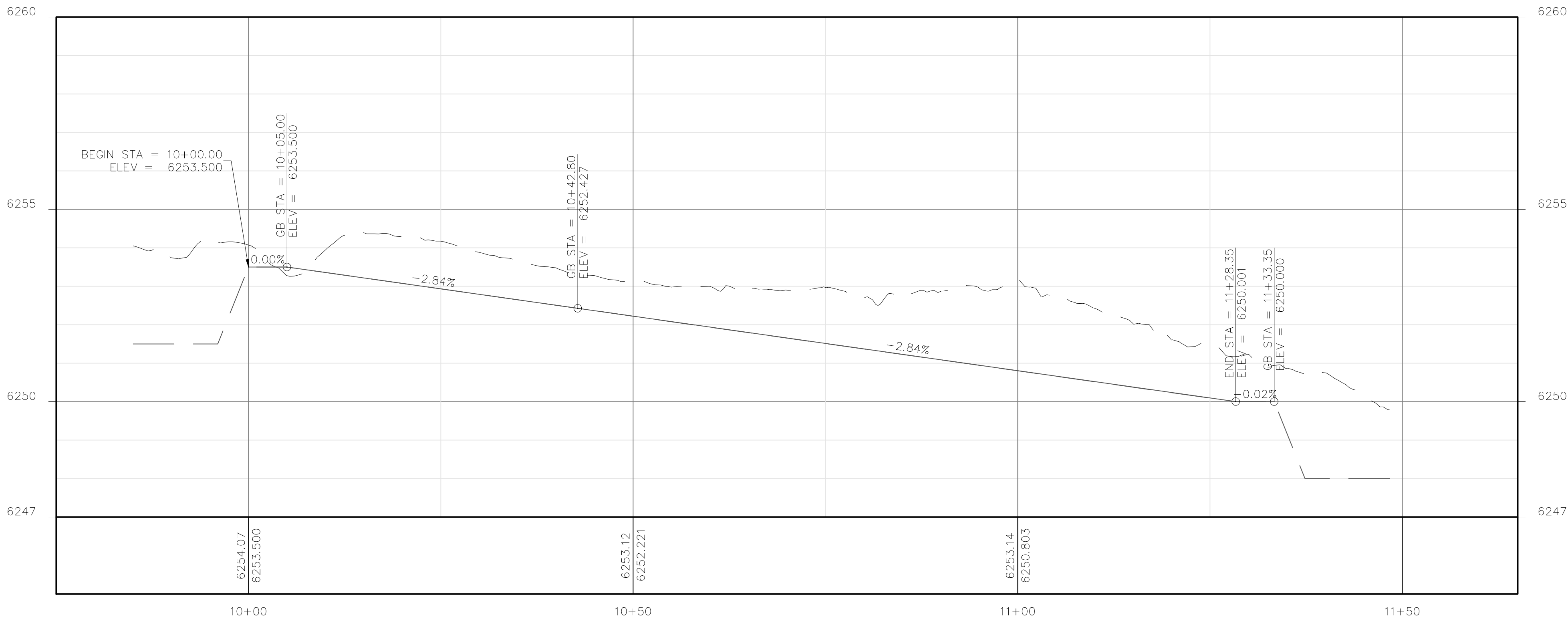


AA CHANNEL CH1 PROFILE
C11 SCALE: HORIZ 1"=10'; H:V = 1:5

SCALE:
HORIZONTAL: 1"=10'
VERTICAL: 1"=2'



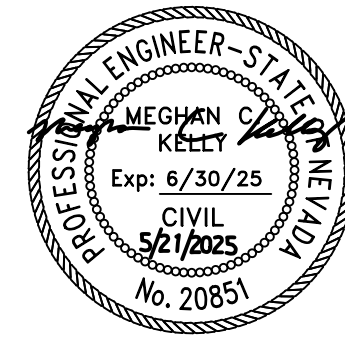
CC CHANNEL CH3 PROFILE
C12 SCALE: HORIZ 1"=10'; H:V = 1:5



BB CHANNEL CH2 PROFILE
C12 SCALE: HORIZ 1"=10'; H:V = 1:5



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SCALE	AS SHOWN
PROJECT	BOURNE

SHEET

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PROFILE - CHANNEL "CH1", "CH2", & "CH3"
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT

REVISIONS

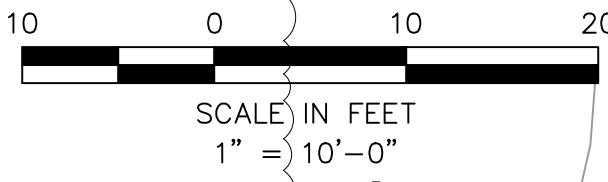
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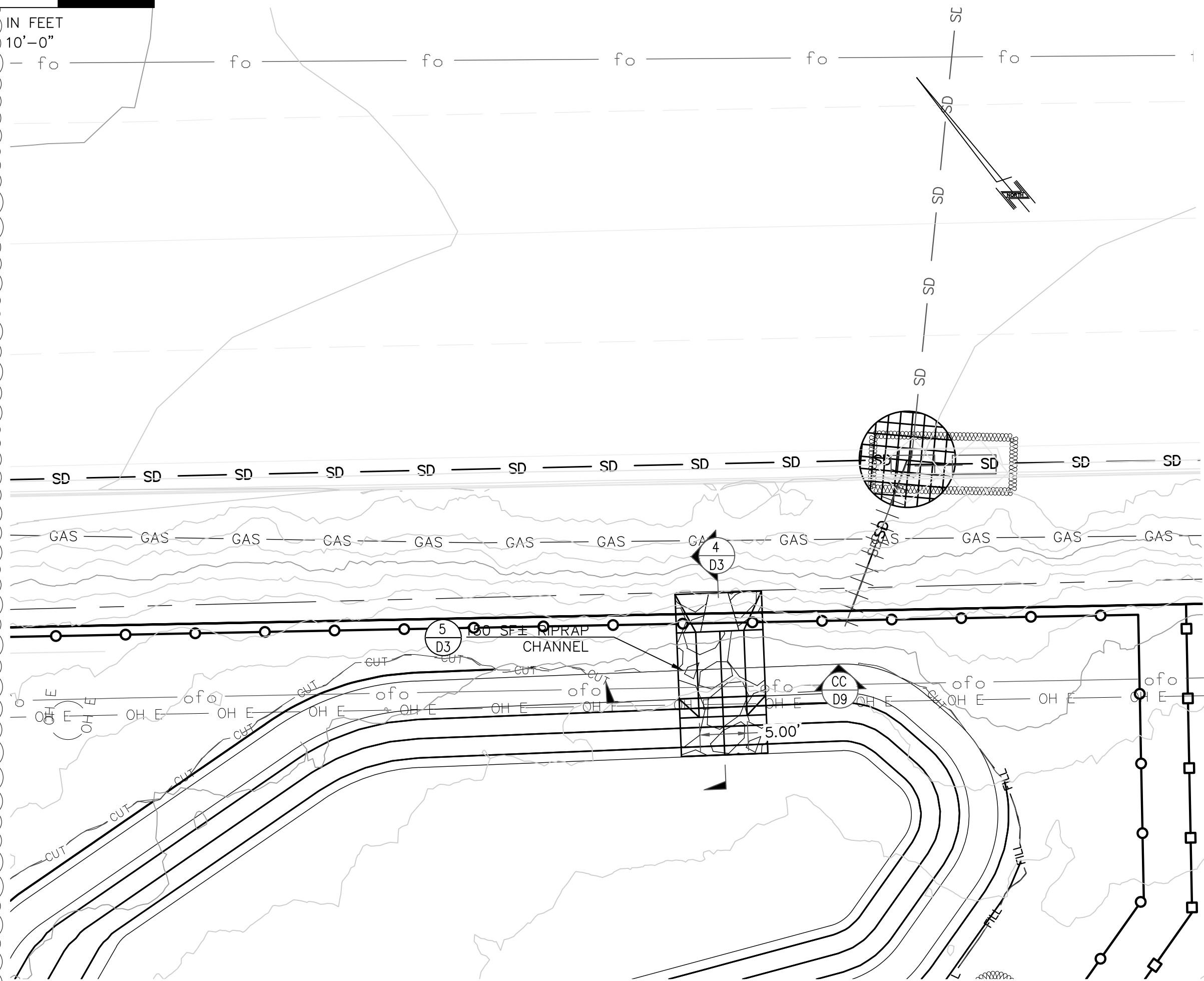
PLAN - WEST BASIN UPPER INLET CHANNEL "CH4"

PROFILE "CH4" - WEST BASIN UPPER INLET CHANNEL



NOTES:
1. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF NDOT STORM DRAIN OUTLETS PRIOR TO THE START OF CONSTRUCTION.

PLAN - EAST BASIN UPPER INLET CHANNEL

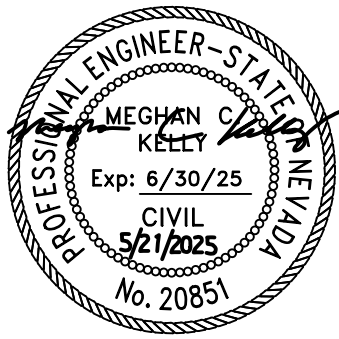


1 6/13/2025 EK REMOVE WEST BASIN CHANNEL

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	6/13/2025	EK	REMOVE WEST BASIN CHANNEL

PLAN & PROFILE - UPPER BASIN INLET CHANNELS
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



DESIGNED/DRAWN	MJ
CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

SHEET

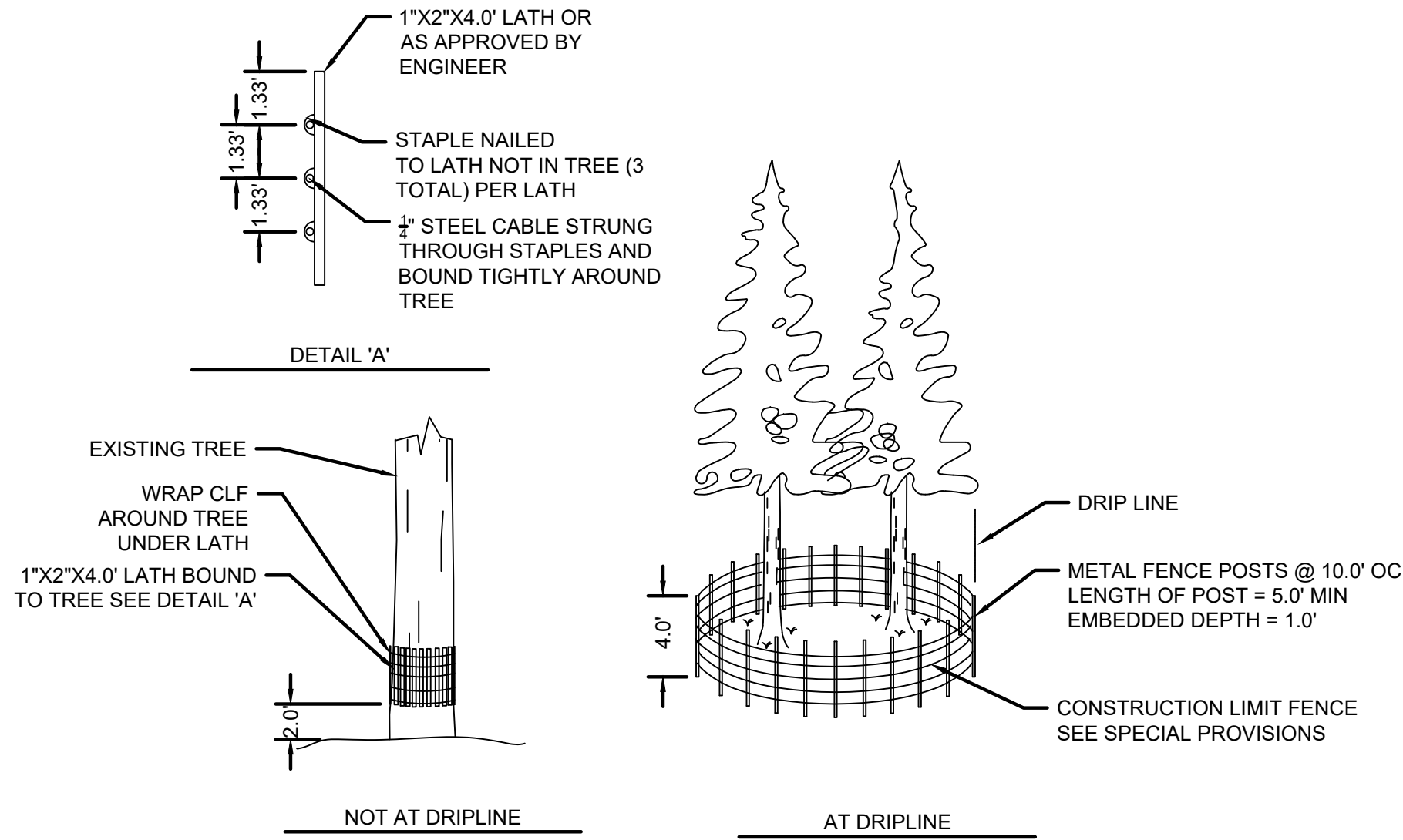
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16 OF 20



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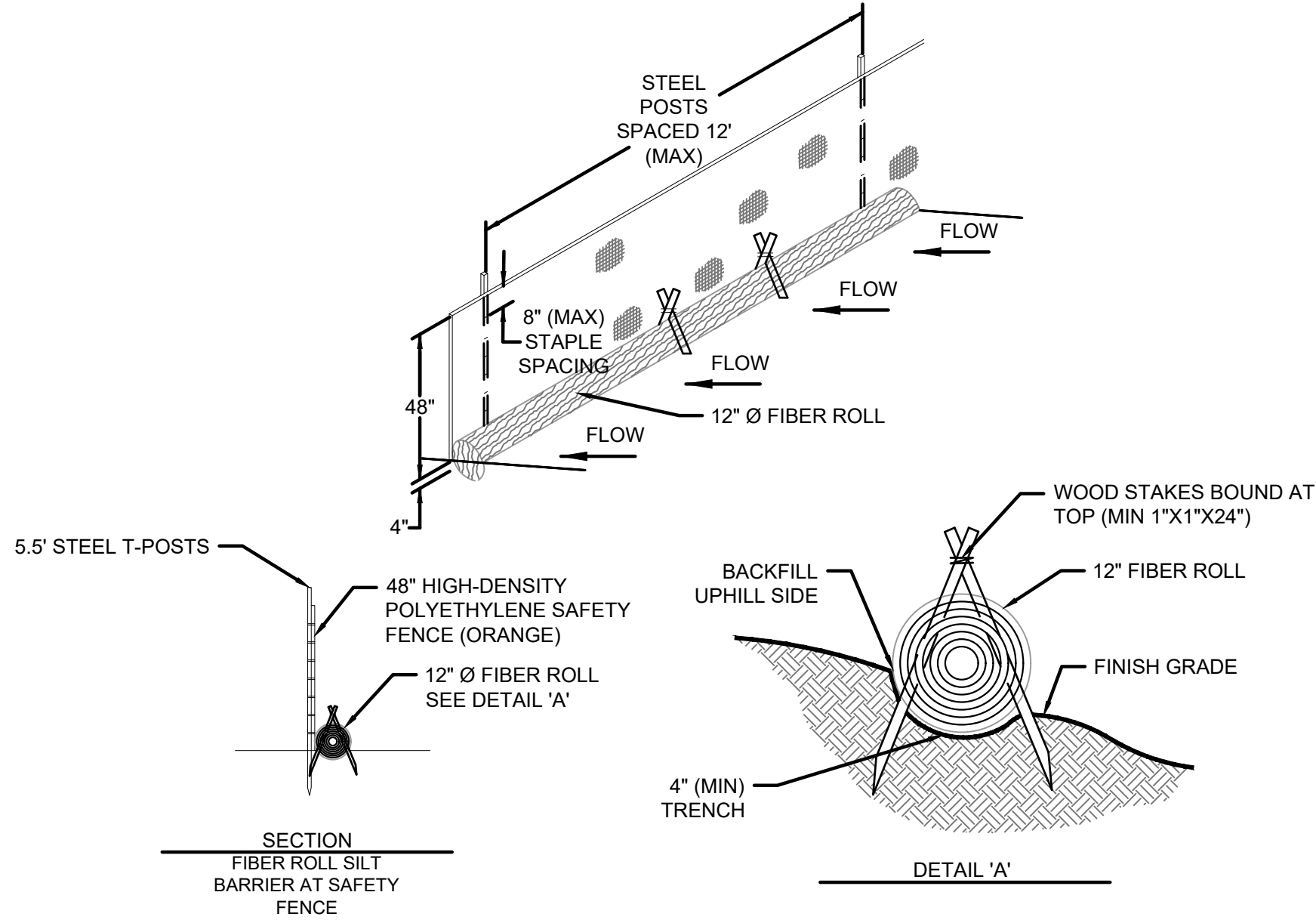
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NOTE:

1. 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.
2. THE DETAIL SHOWN IS FOR TREE PROTECTION. MATERIAL AND SPACING SHOWN ALSO APPLIES TO CLF.
3. 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.

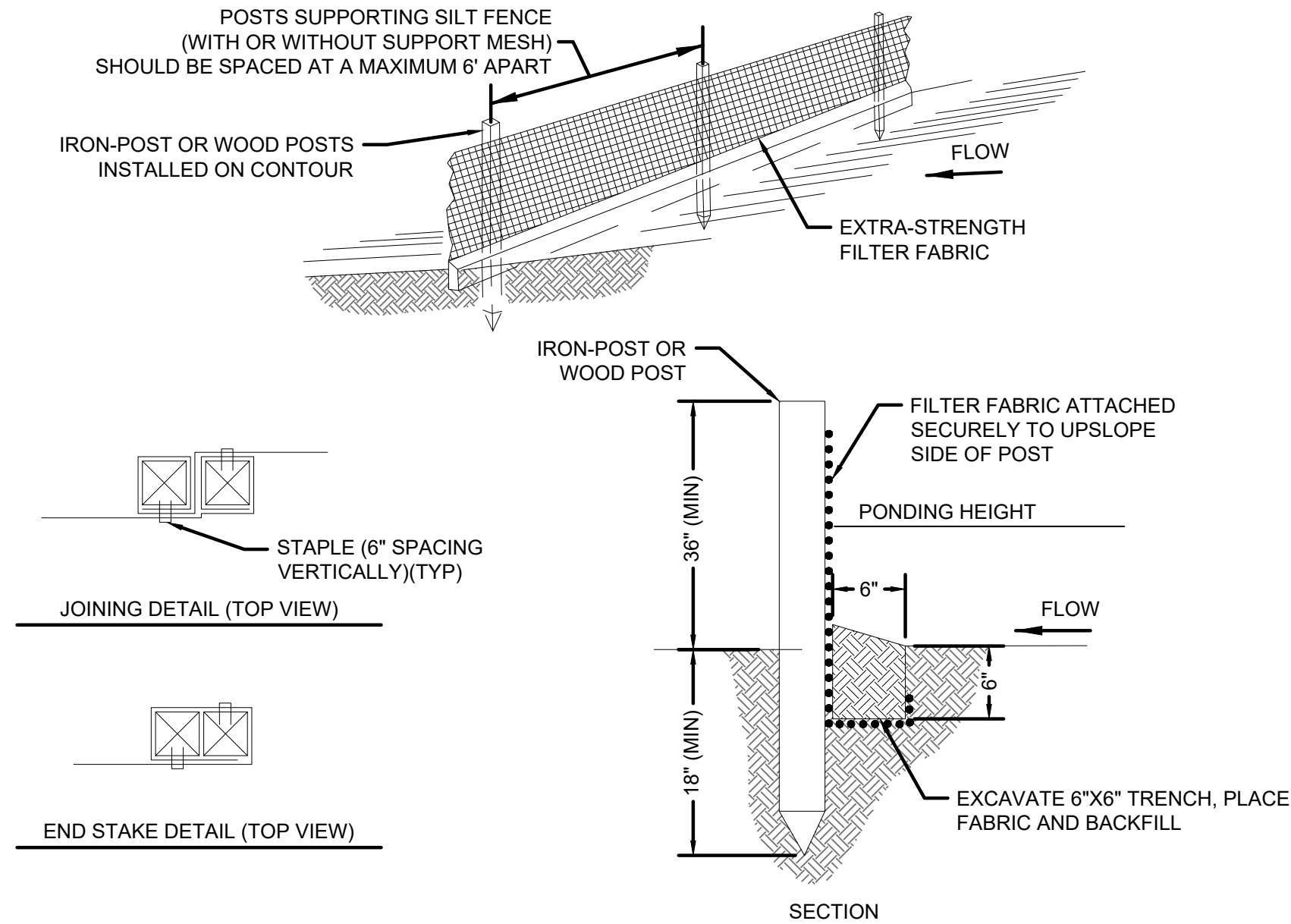
1 CONSTRUCTION LIMIT FENCE AND TREE PROTECTION DETAIL
D1 NOT TO SCALE



FIBER ROLL NOTES:

1. FIBER ROLL SHALL NOT BE MADE FROM STRAW. FIBER ROLLS SHALL BE BOUND BY HIGH STRENGTH COIR NETTING, AND HAVE A MINIMUM WEIGHT OF 5 LBS PER LINEAL FOOT.
2. ORANGE SAFETY FENCE IS INTENDED TO PROTECT FIBER ROLLS FROM COMPRESSION BY VEHICLES, CONSTRUCTION EQUIPMENT, ETC. FENCES SHALL BE HIGH DENSITY POLYETHYLENE WITH A MESH OPENING OF APPROXIMATELY 1 INCH BY 4 INCHES AND A MINIMUM HEIGHT OF 4 FEET. SAFETY FENCE MAY BE OMITTED IN LOW TRAFFIC AREAS.
3. FIBER ROLL SILT BARRIER SHALL BE INSTALLED ALONG CONTOUR AND ON SLOPES 5H:1V OR FLATTER UNLESS OTHERWISE APPROVED BY TRPA.
4. THE INSTALLATION CONFIGURATION SHALL PREVENT RUNOFF FROM LEAVING THE SITE OR ENTERING A WATERCOURSE WITHOUT PASSING THROUGH A SILT BARRIER.
5. THE MAXIMUM LENGTH OF SLOPE DRAINING TO THE SILT BARRIER SHALL BE 100 FEET.
6. FIBER ROLL SHALL BE INSTALLED BY SHAPING A 4 INCH DEEP FURROW TO MATCH THE SHAPE OF THE LOG, SECURING IN FURROW WITH WOOD STAKES, AND TAMPING THE GROUND AROUND THE FIBER ROLL TO FILL VOIDS BETWEEN THE LOG AND THE GROUND.

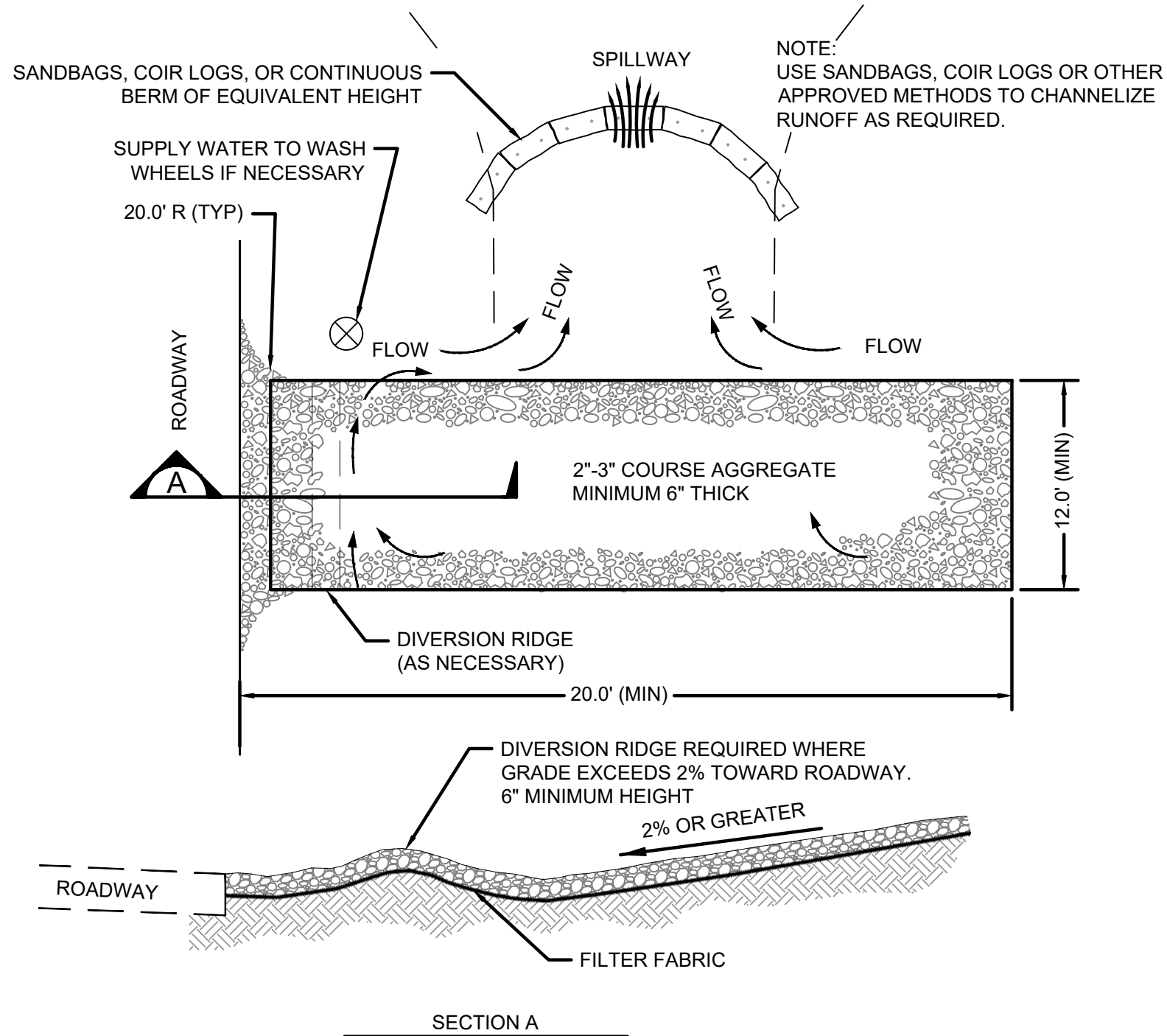
2 FIBER ROLL AND SILT BARRIER DETAIL
D1 NOT TO SCALE



SILT FENCE NOTES:

1. USED IN AREAS WHERE SHEET FLOW OCCURS.
2. DO NOT USE IN STREAMS, CHANNELS, OR ANYWHERE FLOW IS CONCENTRATED. DO NOT USE SILT FENCES TO DIVERT FLOW.
3. DO NOT USE BELOW SLOPES SUBJECT TO CREEP, SLUMPING, OR LANDSLIDES.
4. SILT FENCE SHOULD BE WOVEN POLYPROPYLENE WITH A MINIMUM WIDTH OF 36 INCHES AND A MINIMUM TENSILE STRENGTH OF 100 LB FORCE.
5. INSTALL ALONG A LEVEL CONTOUR SO WATER DOES NOT POND MORE THAN 1.5 FEET AT ANY POINT ALONG THE SILT FENCE.
6. THE MAXIMUM LENGTH OF SLOPE DRAINING TO ANY POINT ALONG THE SILT FENCE SHOULD BE 200 FEET OR LESS.
7. THE MAXIMUM SLOPE PERPENDICULAR TO THE FENCE LINE SHOULD BE 1:1.
8. PROVIDE SUFFICIENT ROOM FOR RUNOFF TO POND BEHIND THE FENCE AND TO ALLOW SEDIMENT REMOVAL EQUIPMENT TO PASS BETWEEN THE SILT FENCE AND TOES OF SLOPES OR OTHER OBSTRUCTIONS.
9. TURN THE ENDS OF THE FILTER FENCE UPHILL TO CREATE A "J" SHAPE, TO PREVENT STORMWATER FROM FLOWING AROUND THE FENCE.
10. LEAVE AN UNDISTURBED OR STABILIZED AREA IMMEDIATELY DOWN SLOPE FROM THE FENCE WHERE FEASIBLE.
11. SILT FENCES SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
12. REMOVE SEDIMENT WHEN DEPOSITS REACH APPROXIMATELY 1/3 HEIGHT OF BARRIER.

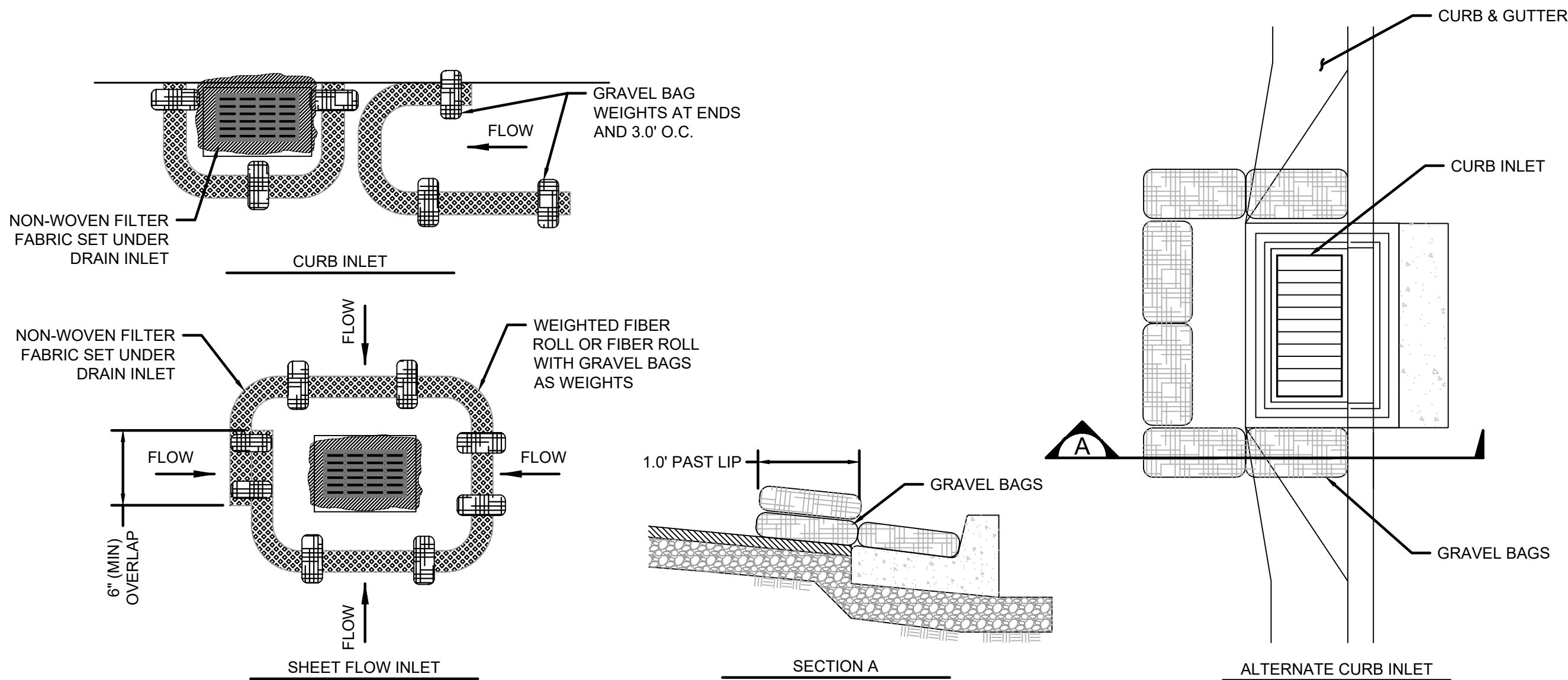
3 FILTER FENCE SILT BARRIER DETAIL
D1 NOT TO SCALE



ROCKED ENTRANCE NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

4 GRAVEL CONSTRUCTION ENTRANCE DETAIL
D1 NOT TO SCALE



DI PROTECTION NOTES:

1. FIBER ROLLS SHALL NOT BE MADE FROM STRAW, WITH THE EXCEPTION OF WEED-FREE RICE STRAW. FIBER ROLLS SHALL HAVE A MINIMUM WEIGHT OF 2.5 LBS PER LINEAL FOOT. FIBER ROLLS SHALL BE REMOVED AT THE END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
2. GRAVEL BAGS SHALL BE FILLED WITH 3/4" DIA. CLEANED, WASHED GRAVEL. SAND BAGS ARE NOT AN ACCEPTABLE SUBSTITUTE.
3. INSPECT AND REPAIR FIBER ROLLS EACH DAY AND AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN ONE THIRD OF THE FILTER DEPTH HAS BEEN FILLED. REMOVED SEDIMENT SHALL BE DISPOSED OF PROPERLY.
4. SEDIMENT AND GRAVEL DEPOSITED ON ROADWAYS SHALL BE IMMEDIATELY REMOVED.
5. IN HIGH TRAFFIC AREAS, MARK DRAIN INLET PROTECTION WITH VISIBLE BARRIERS SUCH AS SAFETY CONES.
6. REMOVE DRAIN INLET PROTECTION AFTER THE SURROUNDING AREA HAS BEEN STABILIZED.
7. ADDITIONAL OR OVERLAPPING GRAVEL BAGS MAY BE NECESSARY AS DIRECTED BY ENGINEER FOR PROPER FUNCTIONING OF BMP.

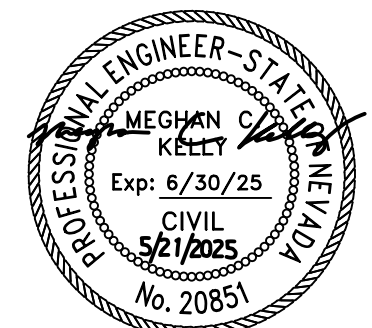
5 DROP INLET PROTECTION DETAIL
D1 NOT TO SCALE

REVISIONS

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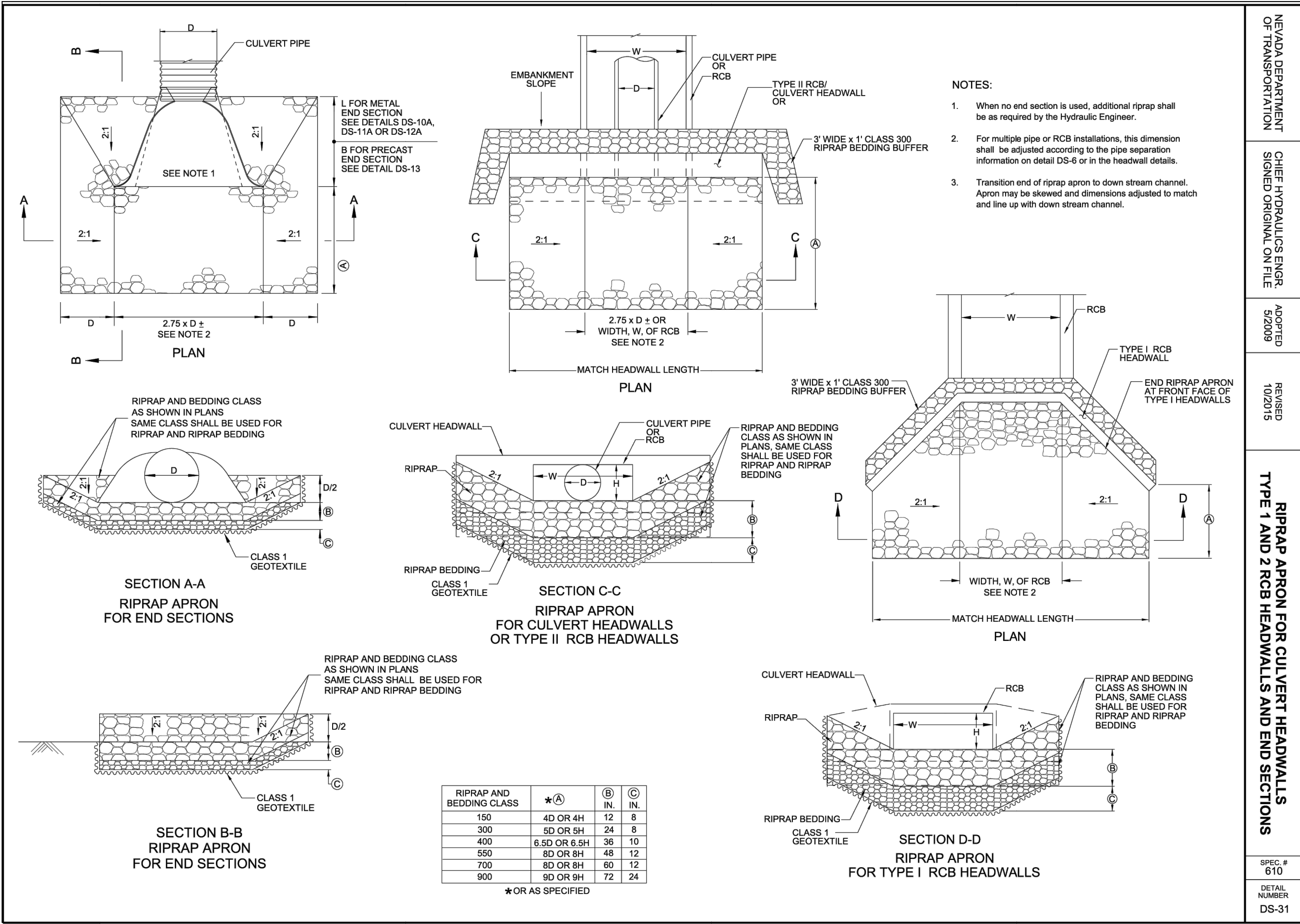
DETAILS 1

BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT

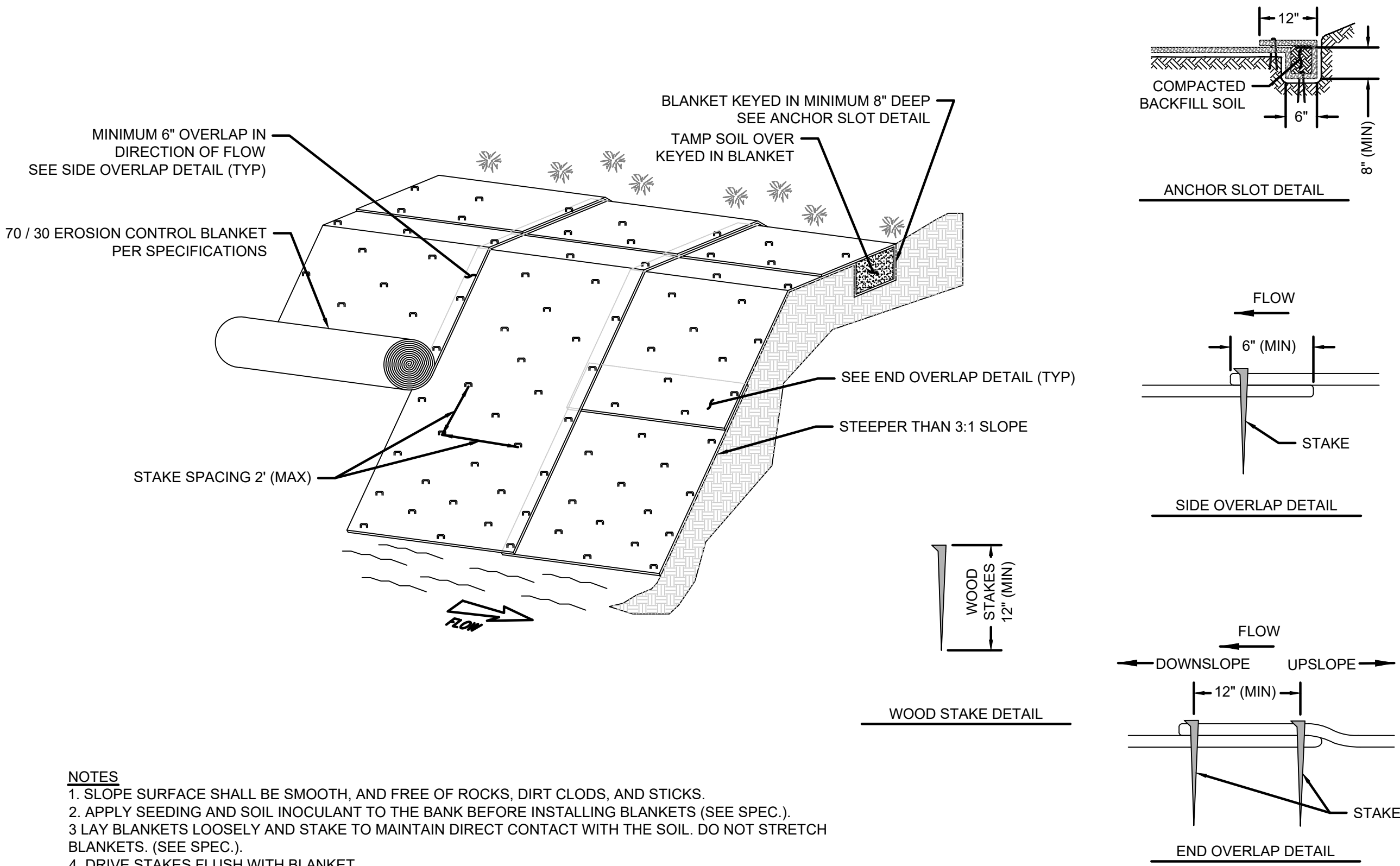


DESIGNED/DRAWN	MJ
CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE

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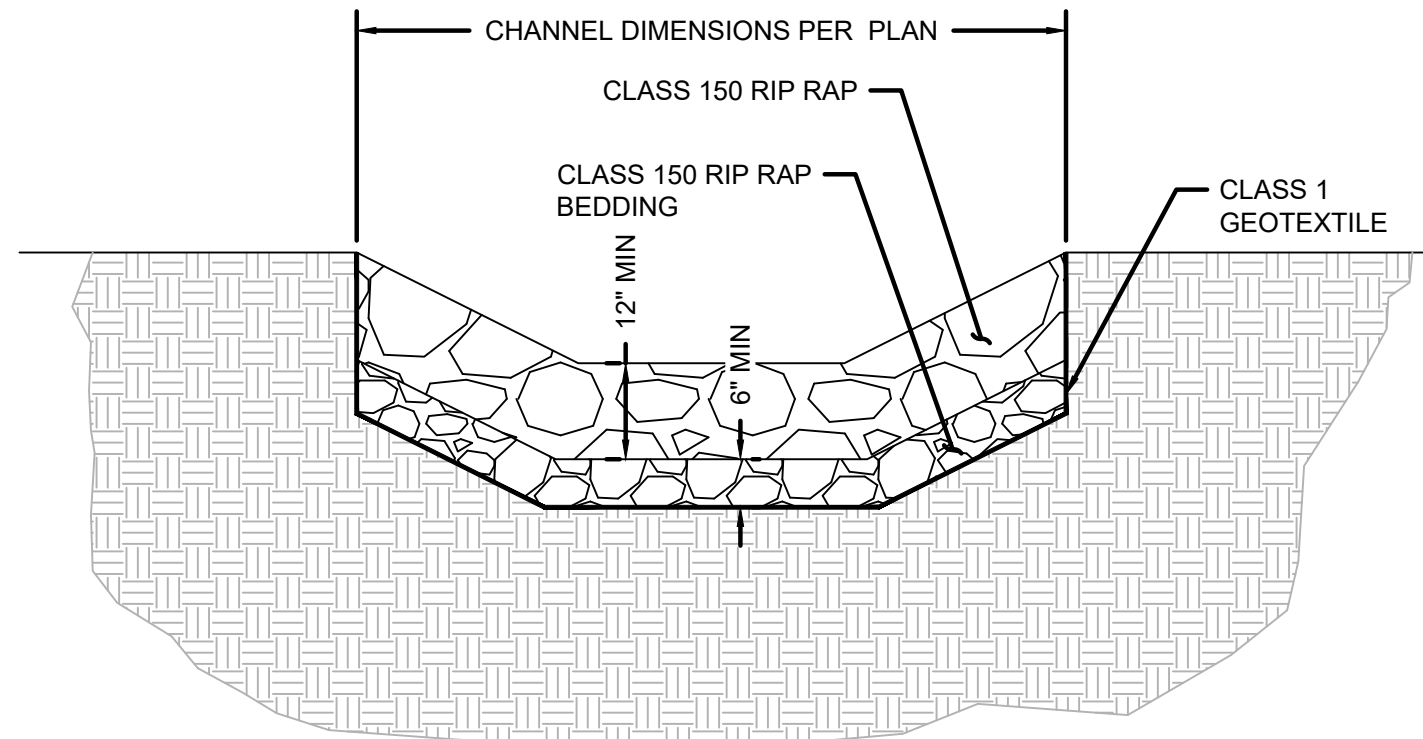
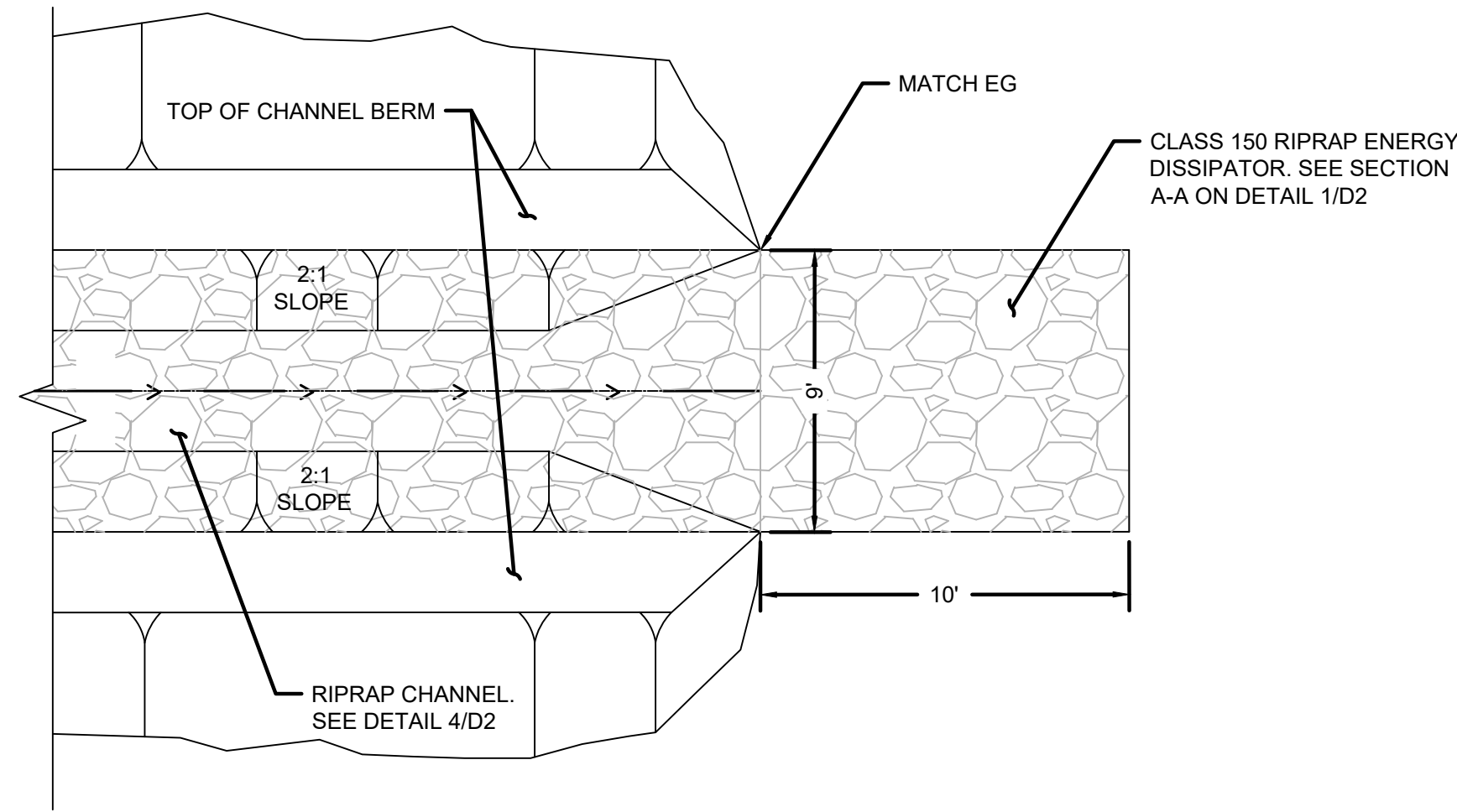
1
D2
1
D2
RIPRAP DETAIL
NOT TO SCALE



3
D2
3
D2
EROSION CONTROL BLANKET DETAIL
NOT TO SCALE

NEVADA DEPARTMENT OF TRANSPORTATION	CHIEF HYDRAULICS ENGINEER SIGNED ORIGINAL ON FILE	ADOPTED 10/20/20	REVIEWED 10/20/20	RIPRAP APRON FOR CULVERT HEADWALLS TYPE I AND 2 RCB HEADWALLS AND END SECTIONS	SPEC # 610 DETAIL NUMBER DS-31
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2
D2
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D2
RIPRAP ENERGY DISSIPATOR
NOT TO SCALE

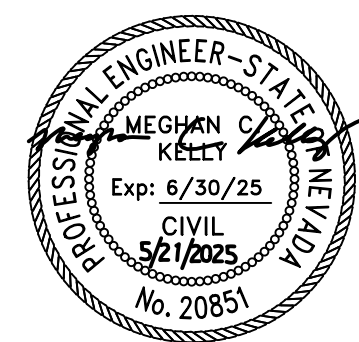


4
D2
4
D2
TYPICAL RIPRAP CHANNEL DETAIL
NOT TO SCALE



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DETAILS 2
BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT

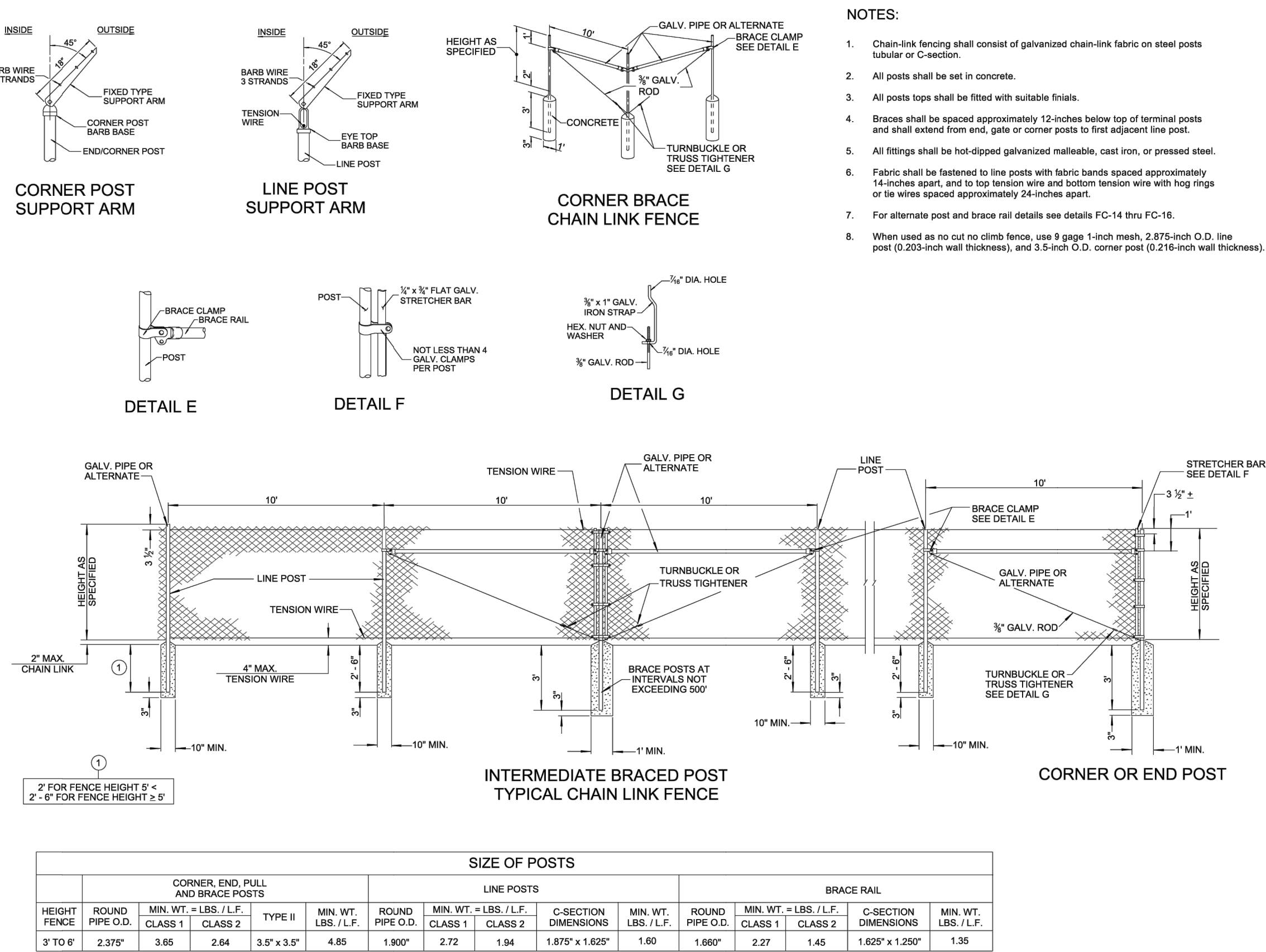


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CHECKED MK
DATE 04/2025
SCALE AS SHOWN
PROJECT BOURNE

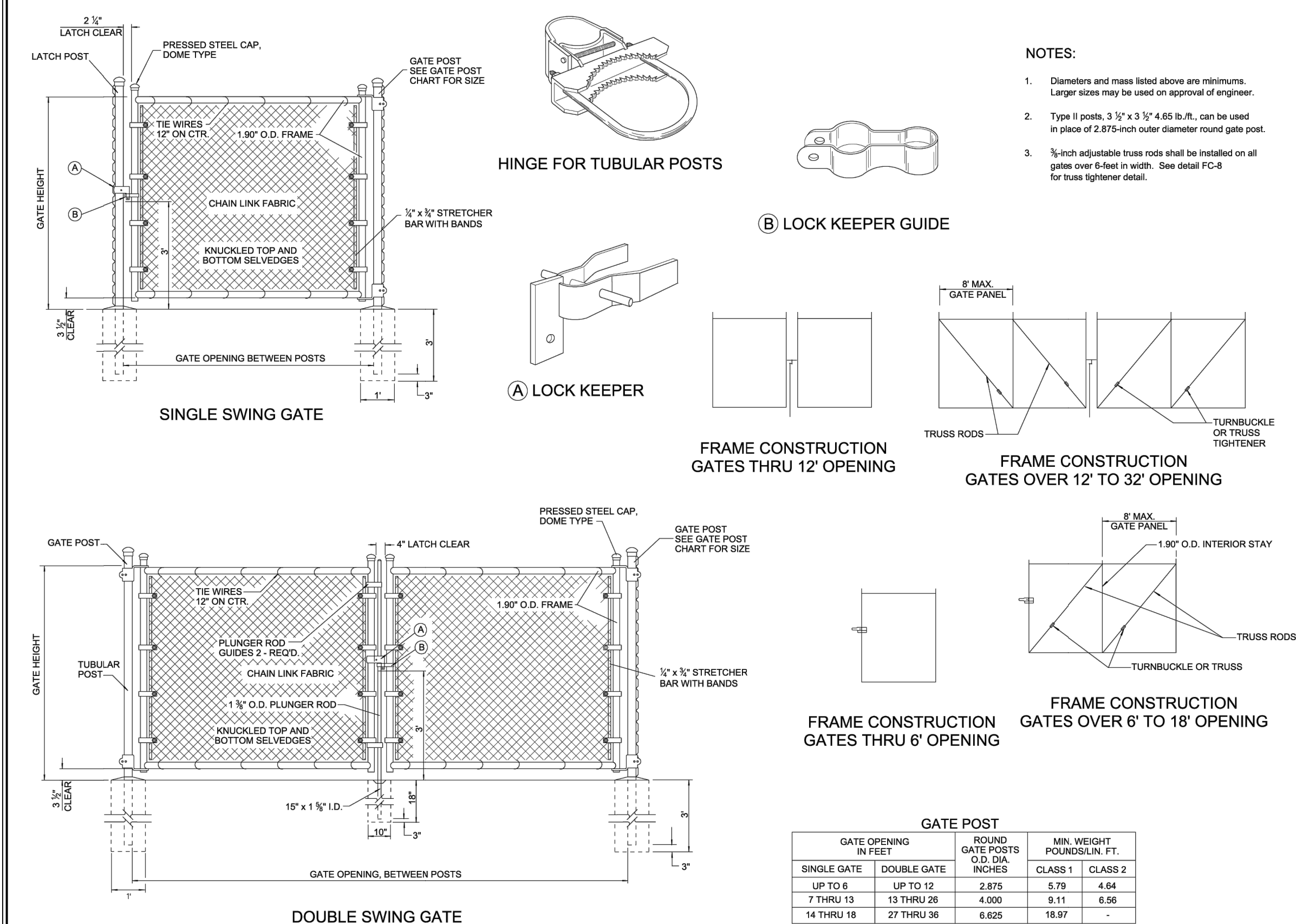
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D2
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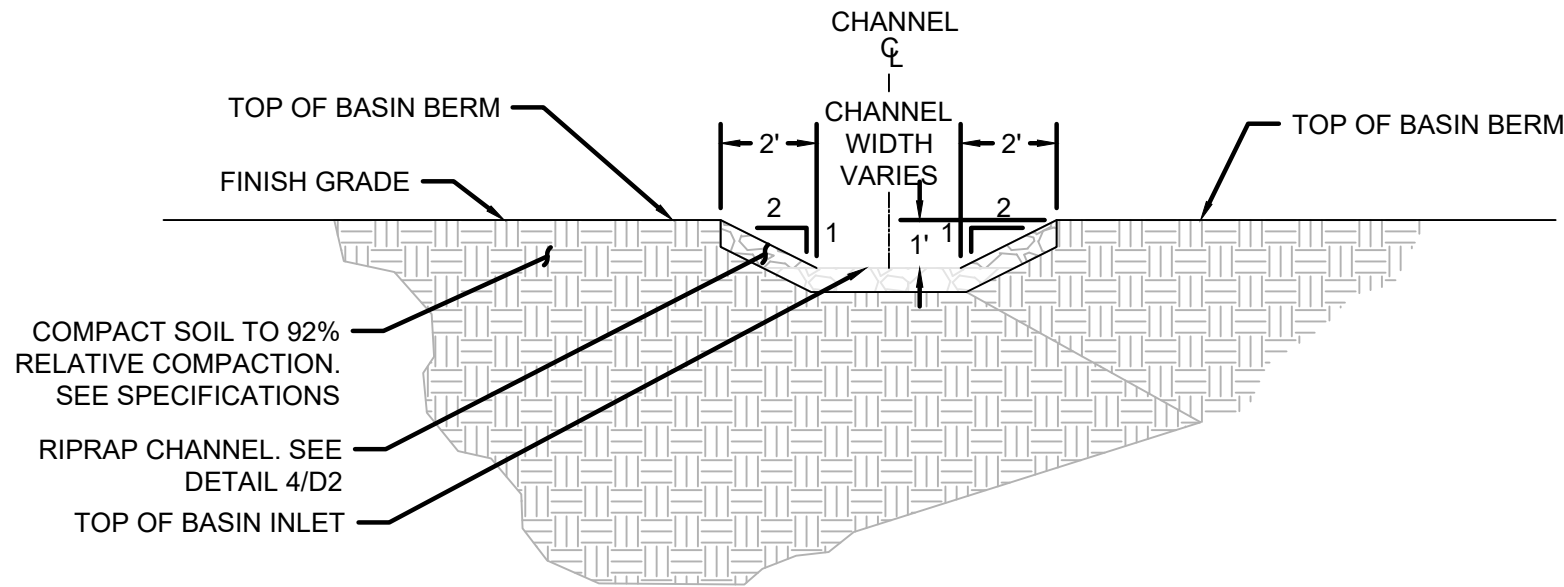
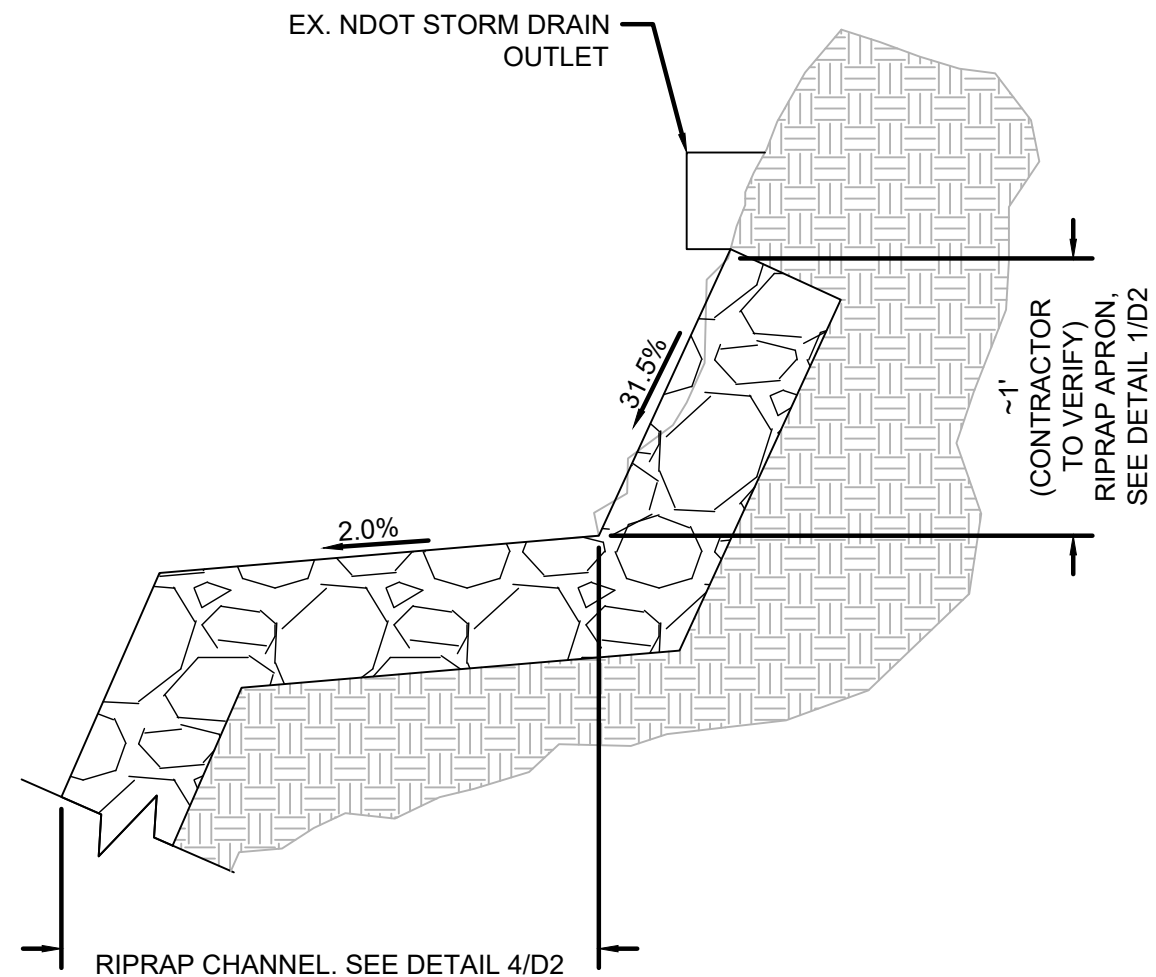
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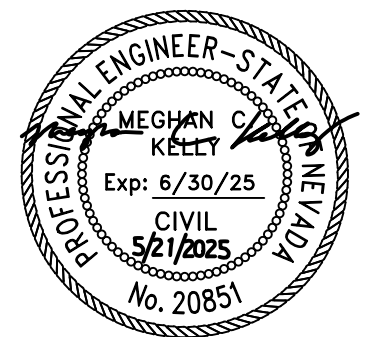
1 CHAIN LINK FENCE DETAIL
D3 NOT TO SCALE



2 SWING GATE DETAIL
D3 NOT TO SCALE

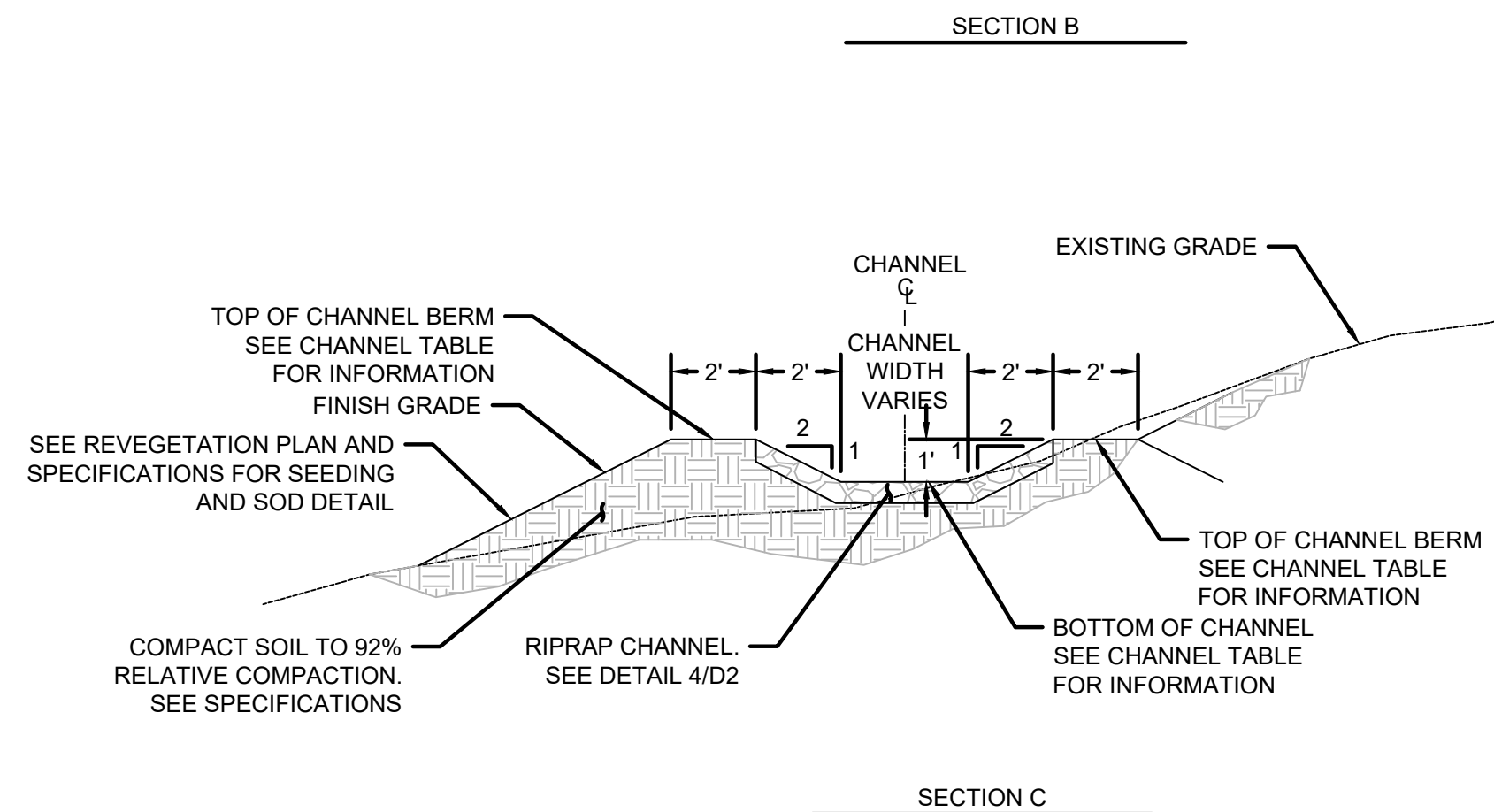


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1	6/13/2025	EK
		REMOVE WEST BASIN CHANNEL



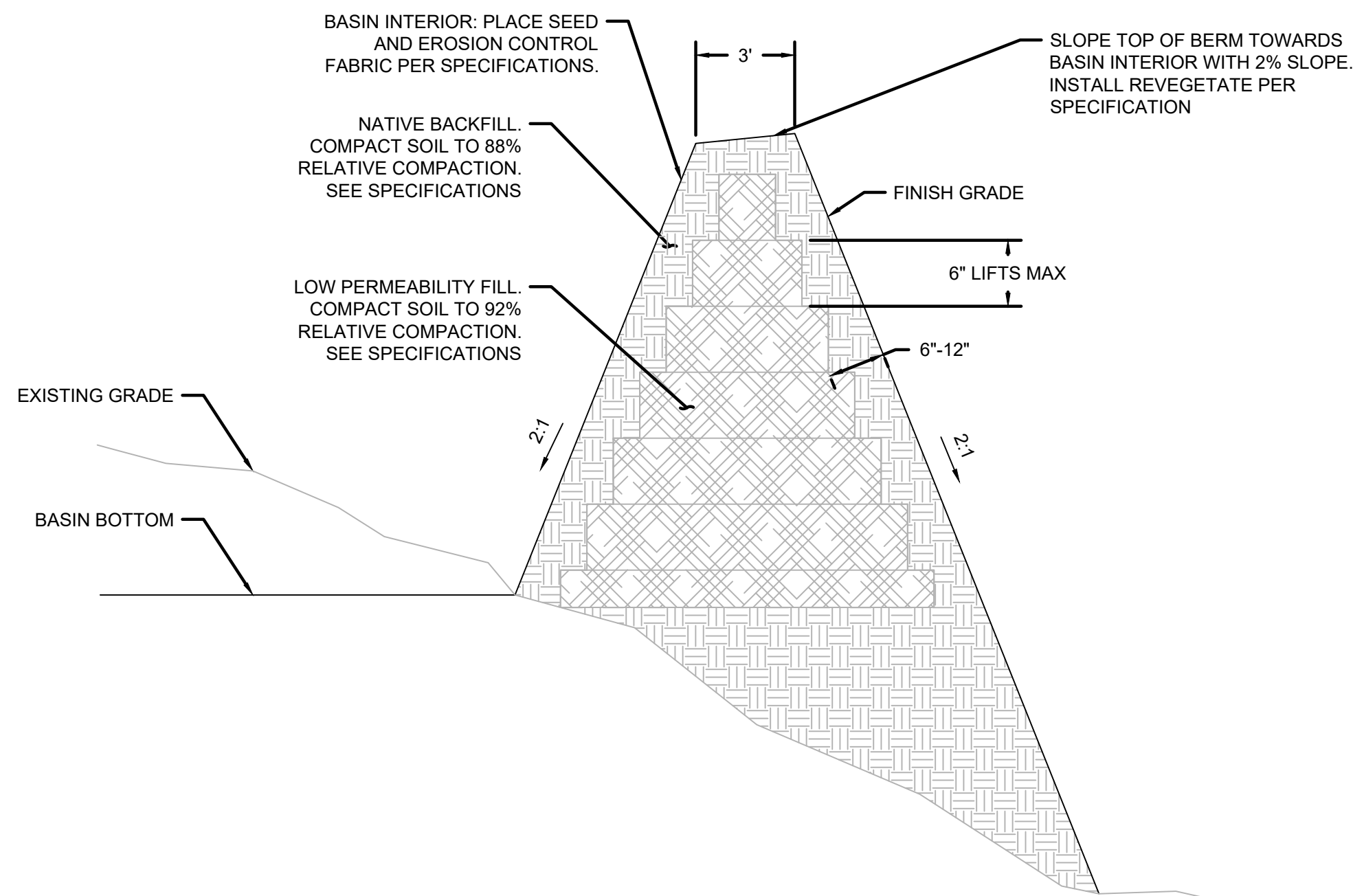
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CHECKED	MK
DATE	04/2025
SCALE	AS SHOWN
PROJECT	BOURNE





Basin Design Information Table					
Basin	Top Of Berm Elevation	Spillway / HWL Elevation	Basin Floor Elevation	Basin Side Slopes	Top Of Basin Berm Width
	(ft)	(ft)	(ft)	(H:V)	(ft)
Western Basin - Upper	6257.0	6256.0	6253.0	2:1	3.0
Western Basin - Lower	6251.0	6250.0	6248.0	2:1	3.0
Eastern Basin - Upper	6254.5	6253.5	6251.5	2:1	3.0

1 SPILLWAY BASIN DETAIL
D4 NOT TO SCALE



Channel Design Information Table					
Channel	Description	Channel Bottom Width	Channel Depth	Channel Side Slopes	Top Of Channel Berm Width
		(ft)	(ft)	(H:V)	(ft)
CH1	Western Basin (Upper) to CH-2	3.0	1.0	2:1	2.0
CH2	Eastern Basin (Upper) to Western Basin (Lower)	3.0	1.0	2:1	2.0
CH3	Western Basin (Lower) to McFaul Creek	10.0	1.0	2:1	2.0

2 CHANNEL DETAIL
D4 NOT TO SCALE

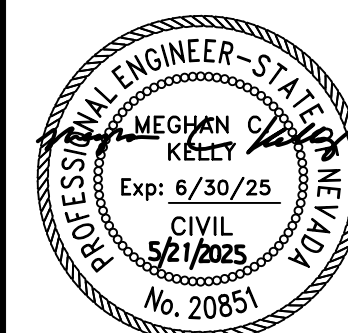
3 BASIN BERM DETAIL (FILL)
D4 NOT TO SCALE

- NOTES:
1. BASIN BERM DETAIL (FILL) SHALL APPLY TO ALL BERMS CONSTRUCTED IN FILL. LOW PERMEABILITY FILL CAN BE OMITTED FROM CUT BERMS.
 2. LOW PERMEABILITY FILL SHALL BE FREE OF ORGANICS AND COMPLY WITH SECTION XXXX OF THE TECHNICAL SPECIFICATION.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DETAILS 4

BOURNE MEADOW / MARLA BAY
STORMWATER TREATMENT PROJECT



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