

STANDARD EL PASO COUNTY GRADING & EROSION CONTROL PLAN NOTES

- Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
- Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the manual adopted by El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations from regulations and standards must be requested, and approved, in writing.
- A separate Stormwater Management Plan (SWMP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. Management of the SWMP during construction is the responsibility of the designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP shall be located on site at all times during construction and shall be kept up to date with work progress and changes in the field.
- Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.
- Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater, control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.
- All temporary sediment and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures are needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.
- Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days.
- Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.
- All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that effect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
- Earth disturbances shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state unless shown to be infeasible and specifically requested and approved.
- Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).
- Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
- Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.
- During dewatering operations of uncontaminated ground water may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.
- Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.
- Contractor shall be responsible for the removal of all wastes from the construction site for disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
- Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan, control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
- Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
- The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of site development.
- The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.
- No chemical(s) having the potential to be released in stormwater are to be stored or used onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
- Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills onsite and to prevent any spilled materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.
- No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.
- Owner/developer and their agents shall comply with the "Colorado Water Quality Control Act" (Title 25, Article 8, C.R.S.) and the "Clean Water Act" (33 USC 1344), in addition to the requirements of the Land Development Code, DCM Volume I and the ECM Appendix. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.
- All construction traffic must enter/exit the site only at approved construction access points.
- Prior to construction the permittee shall verify the location of existing utilities.
- A water source shall be available on site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.
- The soils report for this site has been prepared by Intech Engineering titled Soil, Geology and Geologic Hazard Study, Sanctuary of Peace Filing No. 1, and dated October 28, 2019, and shall be considered a part of these plans.
- At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (1) acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may be a part. For information or application materials contact:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD - Permits
4300 Cherry Creek Drive South
Denver, CO 80246-1530
Attn: Permits Unit

GRADING NOTES:

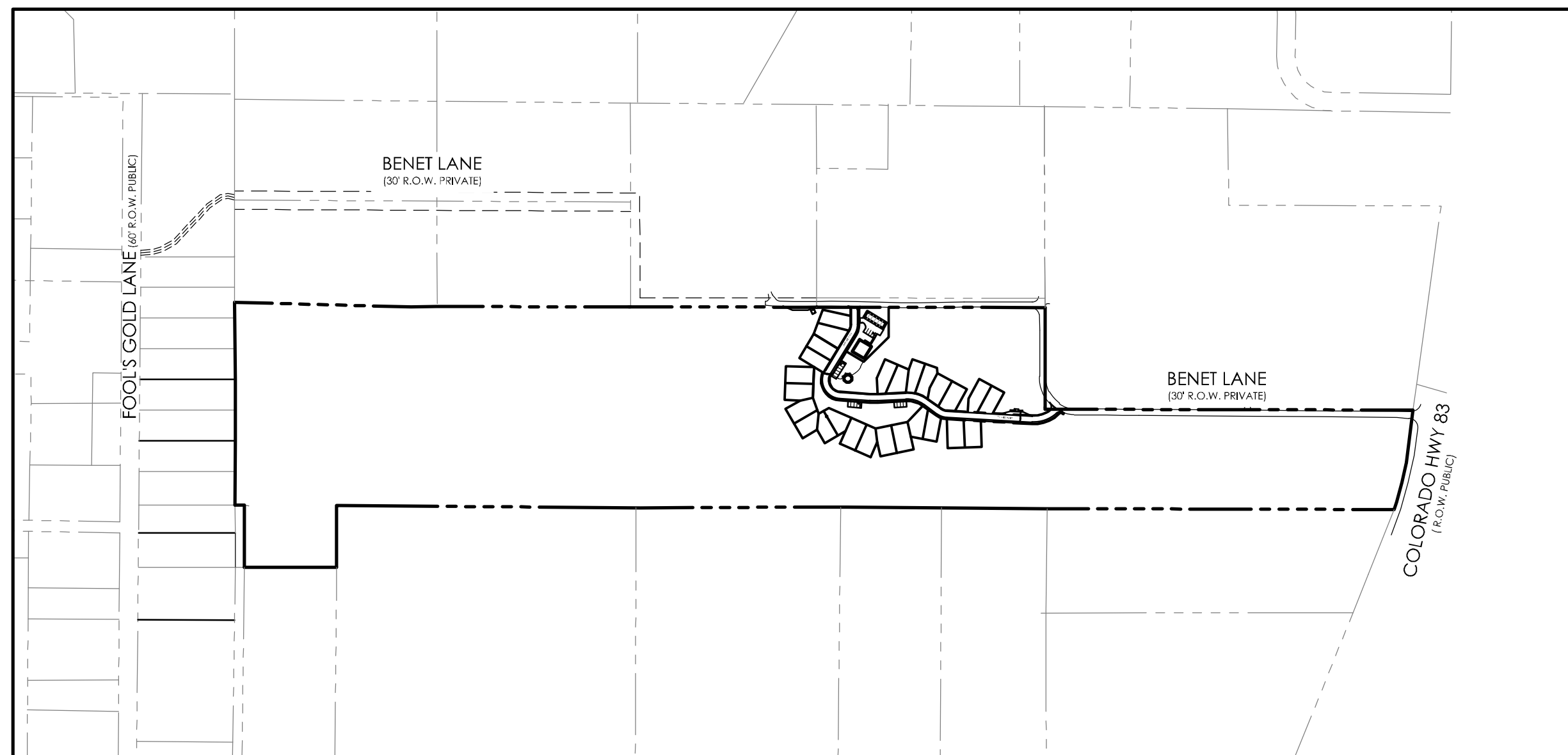
- UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DRAWN FROM AVAILABLE RECORDS AND/OR SURFACE EVIDENCE. THE LOCATION OF ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND LOCATIONS HAVE NOT BEEN PERFORMED. THEREFORE, THE RELATIONSHIP BETWEEN PROPOSED WORK AND EXISTING FACILITIES, STRUCTURES AND UTILITIES MUST BE CONSIDERED APPROXIMATE. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY EARTH WORK OR DIGGING (1-800-922-1987 OR 811). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL SUBSURFACE UTILITY OWNERS PRIOR TO BEGINNING WORK TO DETERMINE LOCATION OF UTILITY FACILITIES.
- EXISTING CONDITIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR. DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
- M.V.E., INC. OR THE ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR USE OF THIS GRADING PLAN FOR ANY OTHER PURPOSE THAN OVER LOT GRADING OPERATIONS.
- ALL WEEDS, TRASH, DEBRIS, RUBBLE, BROKEN ASPHALT, ORGANIC MATERIAL (EXCLUDING TOPSOIL) AND REFUSE, OR ANY OTHER MATERIAL WHICH WOULD NOT BE DELETTERIOUS AS FILL MATERIAL, OR INCAPABLE OF SUPPORTING THE BUILDING, VEHICULAR AND/OR OVERBURDEN LOADS TO BE IMPOSED SHALL BE CLEARED, GRUBBED OR EXCAVATED AS THE CASE MAY DICTATE PRIOR TO GRADING AND SHALL BE REMOVED FROM SITE AND DISPOSED OF LEGALLY.
- PROPOSED CONTOURS SHOWN ARE FINISH GRADES AND READ TO TOP OF PAVEMENT AND FINISH SOIL GRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT GRADED AREAS FROM, AND AS NECESSARY RESTORE TO GRADE, ANY RUTS, WASHES OR OTHER CHANGES FROM THE DESIGN ELEVATIONS SHOWN HEREON, UNTIL GRADING WORK IS ACCEPTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL ENDEAVOR NOT TO DISTURB ANY OFFSITE AREAS. THE CONTRACTOR SHALL RESTORE TO THE ORIGINAL CONDITION, ADJACENT (OFF-SITE) PROPERTY DISTURBED BY HIS OPERATIONS.
- THE GENERAL CONTRACTOR SHALL STRIP TOPSOIL FROM CONSTRUCTION AREAS AND STOCKPILE TOPSOIL AT AREA SHOWN ON THIS PLAN. PLACE TOPSOIL WITH APPROPRIATE EROSION CONTROL AND IN A MANNER SO AS TO NOT CONFLICT WITH OTHER TRADES AND CONSTRUCTION PROCESS.
- ALL GRADING SHALL BE DONE TO INSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS AND STRUCTURES.
- FINISHED GRADE OF ALL PERVIOUS EARTH SURFACES THAT CONTACT FOUNDATION WALLS SHALL BE A MINIMUM OF 6" BELOW ANY UNTREATED WOOD MATERIAL OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.
- PERVIOUS EARTH SURFACES SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 6" IN 10 FEET (5%) FOR THE FIRST 10 FEET ADJACENT TO THE FOUNDATION OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.
- CONCRETE OR OTHER IMPERVIOUS SURFACES THAT CONTACT FOUNDATION WALLS SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 1/4" PER FOOT (2.0%) OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.

GRADING AND EROSION CONTROL PLAN

for

SANCTUARY OF PEACE RESIDENTIAL COMMUNITY

EL PASO COUNTY, COLORADO



SITE MAP
1" = 400'

SHEET INDEX

PLAN SET SHEET NO.	SHEET TITLE	MVE DRAWING NO.
C-1	COVER SHEET	61087-GEC-CS
C-2	GRADING PLAN (OVERALL)	61087-GEC-GP
C-3	GRADING PLAN (DETAIL)	61087-GEC-GP1
C-4	PRIVATE DRIVE PLAN / PROFILE	61087-GEC-PP
C-5	POND PLAN (A1)	61087-GEC-PD1
C-6	POND PLAN (C1)	61087-GEC-PD2
C-7	POND PLAN (C2)	61087-GEC-PD3
C-8	EROSION CONTROL PLAN	61087-GEC-EC
C-9	EROSION CONTROL DETAILS	61087-GEC-ED

- ANY FILL MATERIAL REQUIRED TO BRING GRADES UP TO PROPOSED ELEVATIONS SHALL BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING TOPSOIL THROUGHOUT THE LAWN AND PLANTING AREAS ACCORDING TO APPROVED LANDSCAPE PLANS, BY OTHERS.
- THE NATURE OF WORK PROPOSED BY THIS PLAN IS GRADING AND THE EXTENT OF SAID PROPOSED GRADING IS SHOWN BY THE EXISTING AND PROPOSED CONTOURS HEREON.
- CONTRACTOR SHALL USE MECHANICAL METHODS TO GO FROM THE EXISTING TO PROPOSED CONTOURS IN ACCORDANCE WITH THIS GRADING PLAN. QUALITY CONTROL OF SOILS AND GRADING OPERATION WILL BE AS DIRECTED BY OWNERS GEOTECHNICAL ENGINEER.
- CONTRACTOR IN THE PERFORMANCE OF HIS GRADING WORK SHALL, AT ALL TIMES, WHETHER OR NOT SPECIFICALLY DIRECTED BY OWNER OR ENGINEER, STRICTLY OBSERVE SAFETY PROVISIONS OF ALL FEDERAL, STATE AND MUNICIPAL LAWS AND BUILDING AND CONSTRUCTION CODES RELATING TO PUBLIC SAFETY. CONTRACTOR SHALL CONTINUOUSLY CONDUCT HIS GRADING OPERATIONS WORK IN A MANNER THAT SUCH WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL OR OTHER PROPERTY SHOWN ON THIS GRADING PLAN. GRADING OPERATIONS WORK COMPLETED IN ACCORDANCE WITH THIS GRADING PLAN WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY SHOWN ON THIS GRADING PLAN.
- WHENEVER OWNER, ENGINEER OR CITY SAFETY DIRECTOR OR HIS DESIGNATED REPRESENTATIVE BECOMES AWARE OF CONTRACTOR'S FAILURE TO COMPLY WITH APPLICABLE SAFETY REGULATIONS, THE OWNER, ENGINEER OR CITY SAFETY DIRECTOR OR HIS DESIGNATED REPRESENTATIVE WILL INFORM THE CONTRACTOR WHO SHALL TAKE IMMEDIATE STEPS TO REMEDY THE NONCOMPLIANCE.
- CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL MEASURES DURING EARTHWORK OPERATIONS TO CONTROL EROSION AND SEDIMENT TRANSFER TO ADJACENT PROPERTIES. EROSION CONTROL MEASURES ARE NOT LIMITED TO THOSE NOTED ON THE EROSION CONTROL PLAN.
 - ALL DISTURBED AREAS SHALL BE REVEGETATED OR OTHERWISE LANDSCAPED AFTER CONSTRUCTION IN ACCORDANCE WITH THE REVEGETATION GUIDELINES CONTAINED IN THE STANDARD EROSION CONTROL NOTES ON THIS PLAN AND IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN FOR THIS PROJECT. THE APPROVED LANDSCAPE PLAN DEPICTS SOD AND SEEDING AREAS WITH SPECIFIED TYPES AND AMOUNTS.
 - NETTING WILL BE PLACED ON CONSTRUCTED SLOPES GREATER THAN 3:1. SLOPE VALUES ARE ARE SHOWN ON THE PLAN. NETTING SHALL BE GREENRIX AMERICA W5072 OR EQUAL. AGRICULTURAL STRAW BLANKET WITH PHOTODEGRADABLE NETTING ON BOTH SIDES. NETTING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
 - STRAW BALES WILL BE PLACED AT TOP OF NEWLY CONSTRUCTED SLOPES OF 3:1 OR GREATER AT SELECTED LOCATIONS AS REQUIRED.
 - PLACE SILT FENCE AS SHOWN ON THE EROSION CONTROL PLAN AND AS MAY BE REQUIRED TO PREVENT SEDIMENT MOVEMENT TO ADJACENT PROPERTY. STRAW BALES OR EROSION CONTROL LOGS MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER.
- ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO THE EL PASO COUNTY STANDARD SPECIFICATIONS, LATEST REVISION.

Engineering Review

01/22/2020 10:31:50 AM
dsdkuehster
stevekuehster@elpasoco.com
(719) 520-6813
EPC Planning & Community Development Department

MAP NOTES

- BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF SANCTUARY OF PEACE RESIDENTIAL COMMUNITY TO BEAR N89°51'41"W.
- THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY MVE, INC. USING DATA PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM).

FLOODPLAIN STATEMENT

NO PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA'S) AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR EL PASO COUNTY, COLORADO AND INCORPORATED AREAS - MAP NUMBER 08041C0295G, EFFECTIVE DECEMBER 7, 2018

TIMING

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: NOVEMBER 2019 - MARCH 2020
EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: FALL 2020

AREAS

TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: 3.61 ACRES

RECEIVING WATERS

NAME OF RECEIVING WATERS: BLACK SQUIRREL & SMITH CREEKS

LEGEND

---	PROPERTY LINE	---	PROPERTY LINE
- - - - -	EASEMENT LINE	- - - - -	EASEMENT LINE
---	LOT LINE	---	LOT LINE
---	BUILDING SETBACK LINE	---	BUILDING SETBACK LINE
---	ADJACENT PROPERTY LINE	---	ADJACENT PROPERTY LINE
EXISTING			
- - - - -	INDEX CONTOUR	- - - - -	INDEX CONTOUR
- - - - -	INTERMEDIATE CONTOUR	- - - - -	INTERMEDIATE CONTOUR
[Pattern]	CONCRETE AREA	[Pattern]	CONCRETE AREA
[Pattern]	ASPHALT AREA	[Pattern]	ASPHALT AREA
[Pattern]	CURB AND GUTTER	[Pattern]	CURB AND GUTTER
[Pattern]	BUILDING/ BUILDING OVERHANG	[Pattern]	BUILDING/ BUILDING OVERHANG
[Pattern]	DECK	[Pattern]	DECK
[Pattern]	RETAINING WALL - SOLID/ ROCK	[Pattern]	RETAINING WALL - SOLID/ ROCK
[Symbol]	SIGN	[Symbol]	SIGN
[Symbol]	BOLLARD	[Symbol]	BOLLARD
[Symbol]	WOOD FENCE	[Symbol]	TOP OF WALL/GRADE AT BOTTOM OF WALL
[Symbol]	CHAIN LINK FENCE	[Symbol]	TOP OF CURB/FLOWLINE
[Symbol]	BARBED WIRE FENCE	[Symbol]	SPOT ELEVATION
[Symbol]	TREE (EVERGREEN/DECIDUOUS)	[Symbol]	FL = FLOWLINE
[Symbol]	SHRUB	[Symbol]	TSW = TOP OF SIDEWALK
[Symbol]	ROCK	[Symbol]	FF = 5986.00
[Symbol]		[Symbol]	FINISHED FLOOR ELEVATION

OWNERS STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

CHARLES C. CRUM, P.E. COLORADO NO. 13348
FOR AND ON BEHALF OF M.V.E., INC. _____ DATE

ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

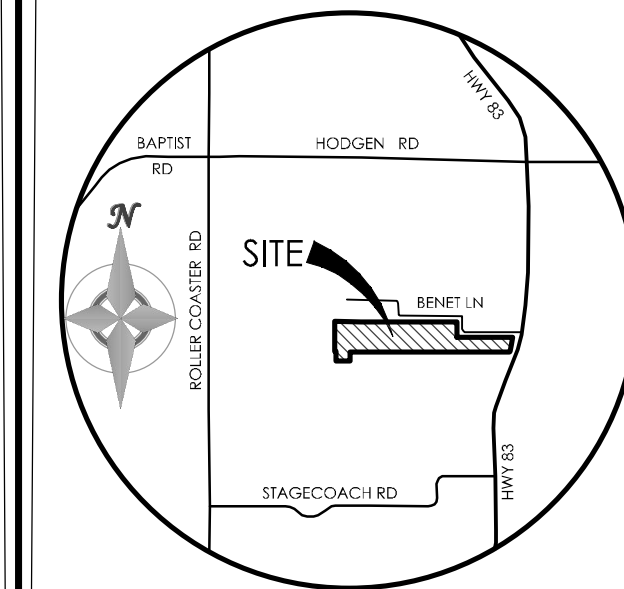
JENNIFER IRVINE, P.E.
COUNTY ENGINEER / ECM ADMINISTRATOR _____ DATE

EL PASO COUNTY

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT. FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA - MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

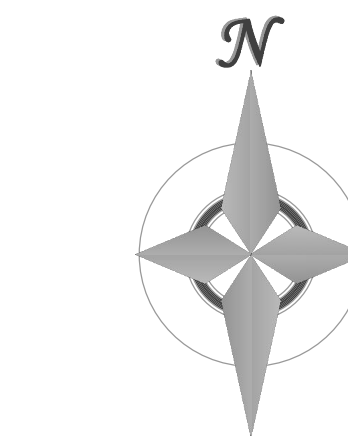
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

CALL BEFORE YOU DIG...
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS FOR LOCATING AND MARKING GAS, ELECTRIC, WATER AND WASTEWATER.
CALL 811 OR 1-800-922-1987



VICINITY MAP
NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM HIGHWAY 83). ELEVATION = 7502.79'



100 0 200 400 800
1" = 400' 1:4,800

MVE, INC.
ENGINEERS / SURVEYORS
1903 Leary street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

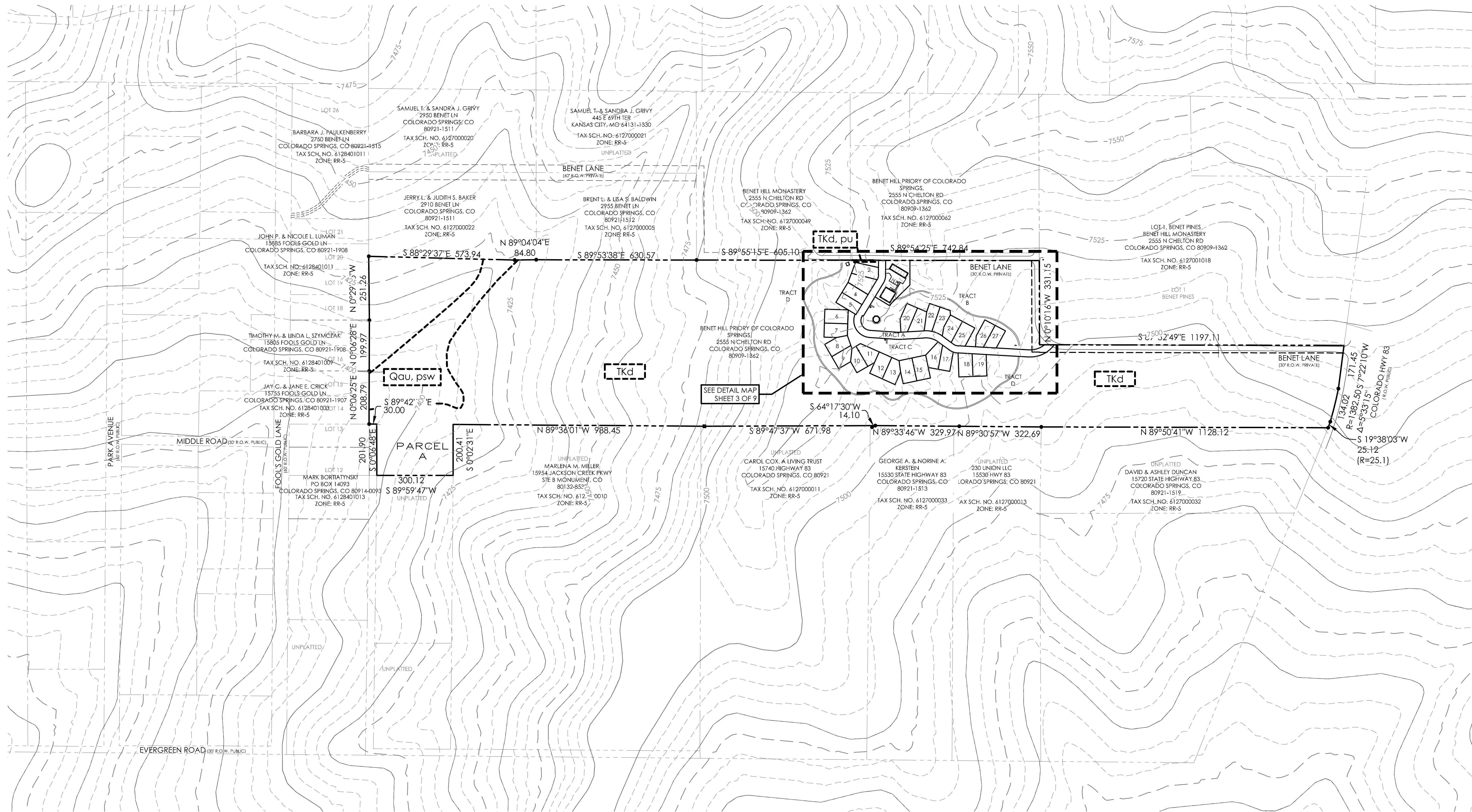
**SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY**

**GRADING & EROSION
CONTROL PLAN
COVER SHEET**

C-1 MVE PROJECT 61087
MVE DRAWING -GEC-CS

DECEMBER 16, 2019
SHEET 1 OF 9

PUDSP-19-002



OVERALL SITE MAP
1" = 200'

GEOLOGIC HAZARD LEGEND

Qau	RECENT ALLUVIUM OF QUATERNARY AGE
TKda	DAWSON FORMATION OF TERTIARY TO CRETACEOUS AGE
psw	POTENTIALLY SEASONAL SHALLOW GROUNDWATER
pu	POTENTIALLY UNSTABLE SLOPE

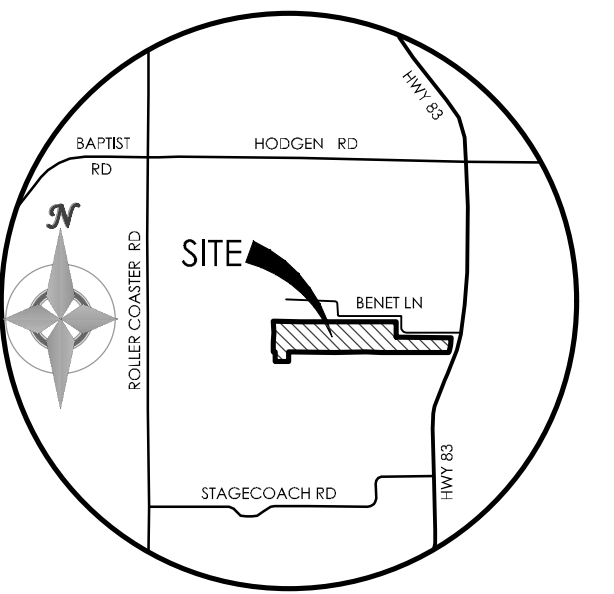
SOIL & GEOLOGY CONDITIONS

GEOLOGIC HAZARD NOTE: LOTS 1 THRU 27, TRACTS A, B, C, & D HAVE BEEN FOUND TO BE IMPACTED BY GEOLOGIC HAZARDS MITIGATION MEASURES AND A MAP OF THE HAZARD AREAS CAN BE FOUND IN THE SOIL, GEOLOGY AND GEOLOGIC HAZARD STUDY FOR SANCTUARY OF PEACE PLING NO. 1 PREPARED BY ENTECH ENGINEERING, FEBRUARY 11, 2019, JOB NO. 190118. IN THE SANCTUARY OF PEACE RESIDENTIAL COMMUNITY FILE (PUDSP-19-002) AVAILABLE AT THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT.

- EXPANSIVE SOILS (LOTS 1 THRU 27, TRACTS A, B, C, & D)
- POTENTIALLY SEASONAL SHALLOW GROUNDWATER (LOTS 1 THRU 27, TRACTS A, B, C, & D)
- POTENTIALLY UNSTABLE SLOPE (TRACT D & LOT 2)

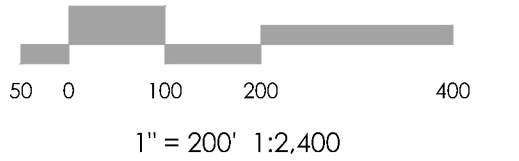
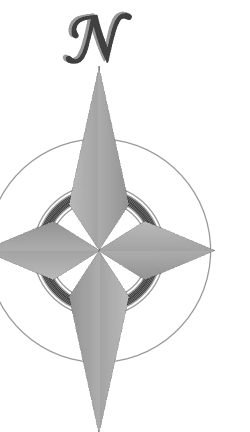
MAP NOTES

- BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1, BENET PINES, ASSUMED TO BEAR S89°52'49"E.
- THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK. (IRMS DATA)
- ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM UTILITY MAIN RECORD MAPS AND UTILITY SERVICE LOCATION MAPS. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED.



VICINITY MAP
NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83). ELEVATION = 7502.79'



REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILT BY _____
CHECKED BY _____

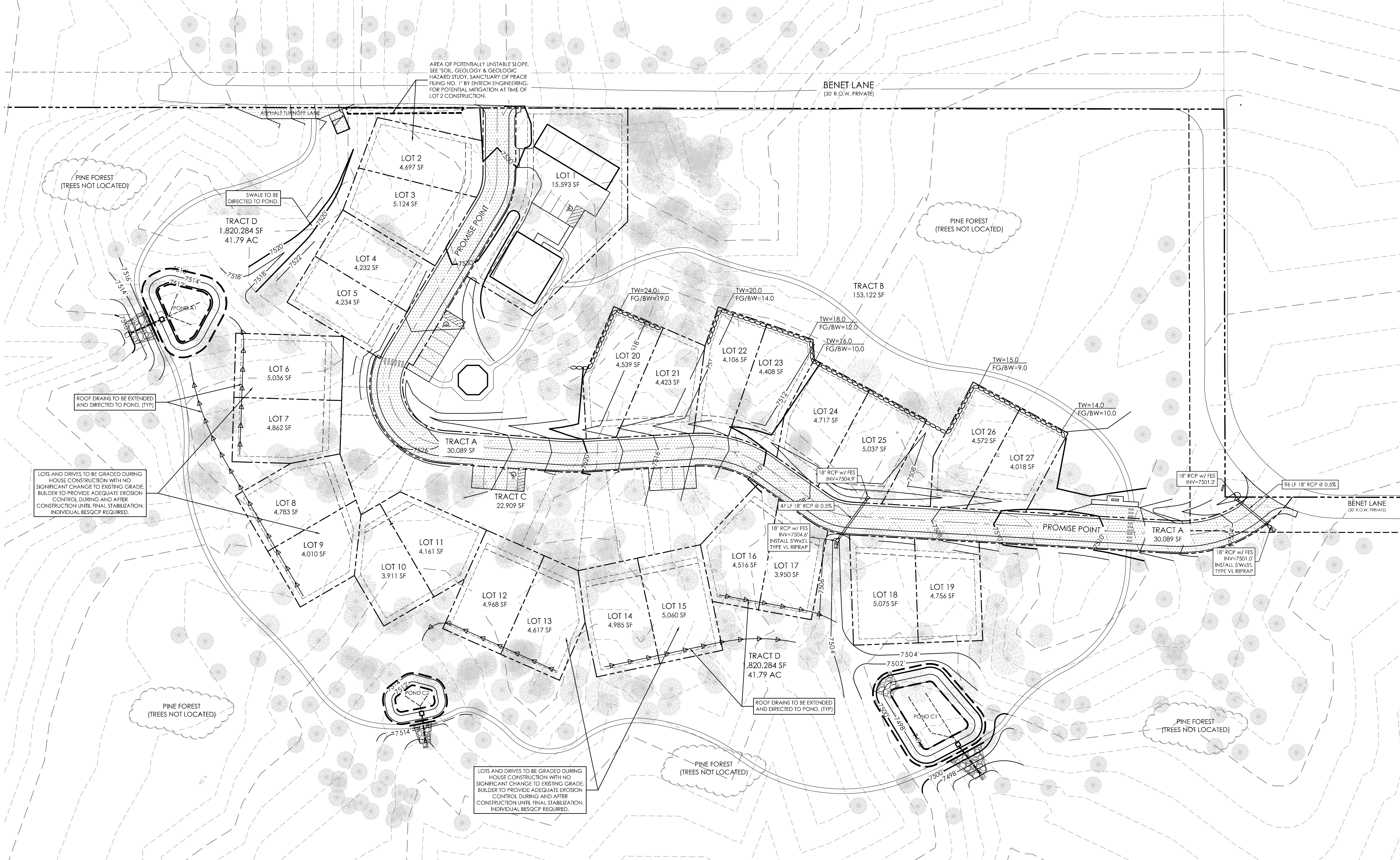
SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY

GRADING & EROSION
CONTROL PLAN
OVERALL GRADING

C-2 MVE PROJECT 61087
MVE DRAWING -GEC-CS

DECEMBER 16, 2019
SHEET 2 OF 9

PUDSP-19-002



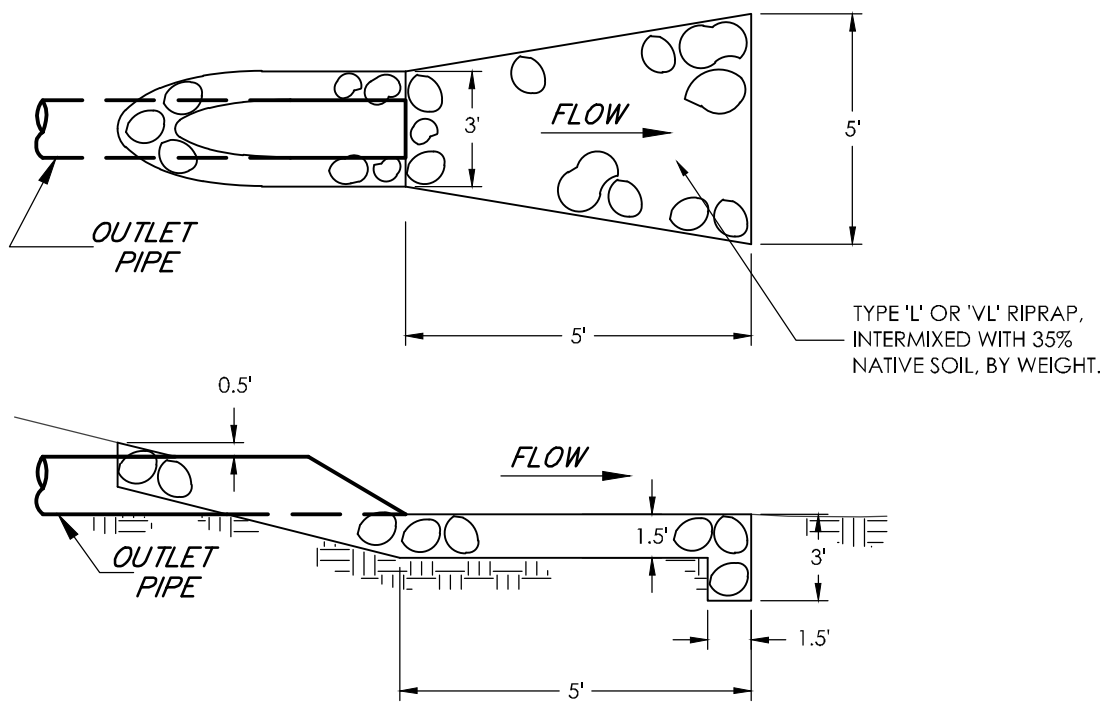
AREA OF POTENTIALLY UNSTABLE SLOPE. SEE 'SOIL, GEOLOGY & GEOLOGIC HAZARD STUDY, SANCTUARY OF PEACE' FILING NO. 1' BY ENTECH ENGINEERING, FOR POTENTIAL MITIGATION AT TIME OF LOT 2 CONSTRUCTION.

ROOF DRAINS TO BE EXTENDED AND DIRECTED TO POND. (TYP)

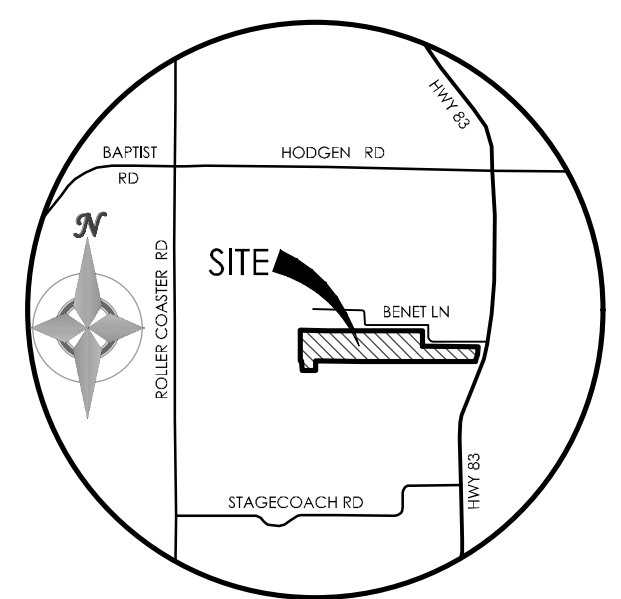
LOTS AND DRIVES TO BE GRADED DURING HOUSE CONSTRUCTION WITH NO SIGNIFICANT CHANGE TO EXISTING GRADE. BUILDER TO PROVIDE ADEQUATE EROSION CONTROL DURING AND AFTER CONSTRUCTION UNTIL FINAL STABILIZATION. INDIVIDUAL BESQCP REQUIRED.

LOTS AND DRIVES TO BE GRADED DURING HOUSE CONSTRUCTION WITH NO SIGNIFICANT CHANGE TO EXISTING GRADE. BUILDER TO PROVIDE ADEQUATE EROSION CONTROL DURING AND AFTER CONSTRUCTION UNTIL FINAL STABILIZATION. INDIVIDUAL BESQCP REQUIRED.

Label existing contours.

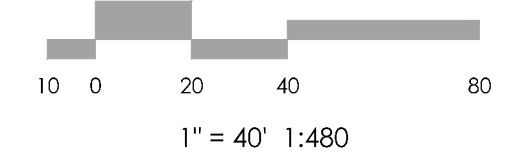
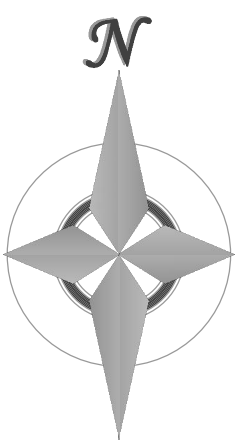


RIPRAP AT CULVERT OUTLETS
NTS



VICINITY MAP
NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83). ELEVATION = 7502.79'



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CHECKED BY _____

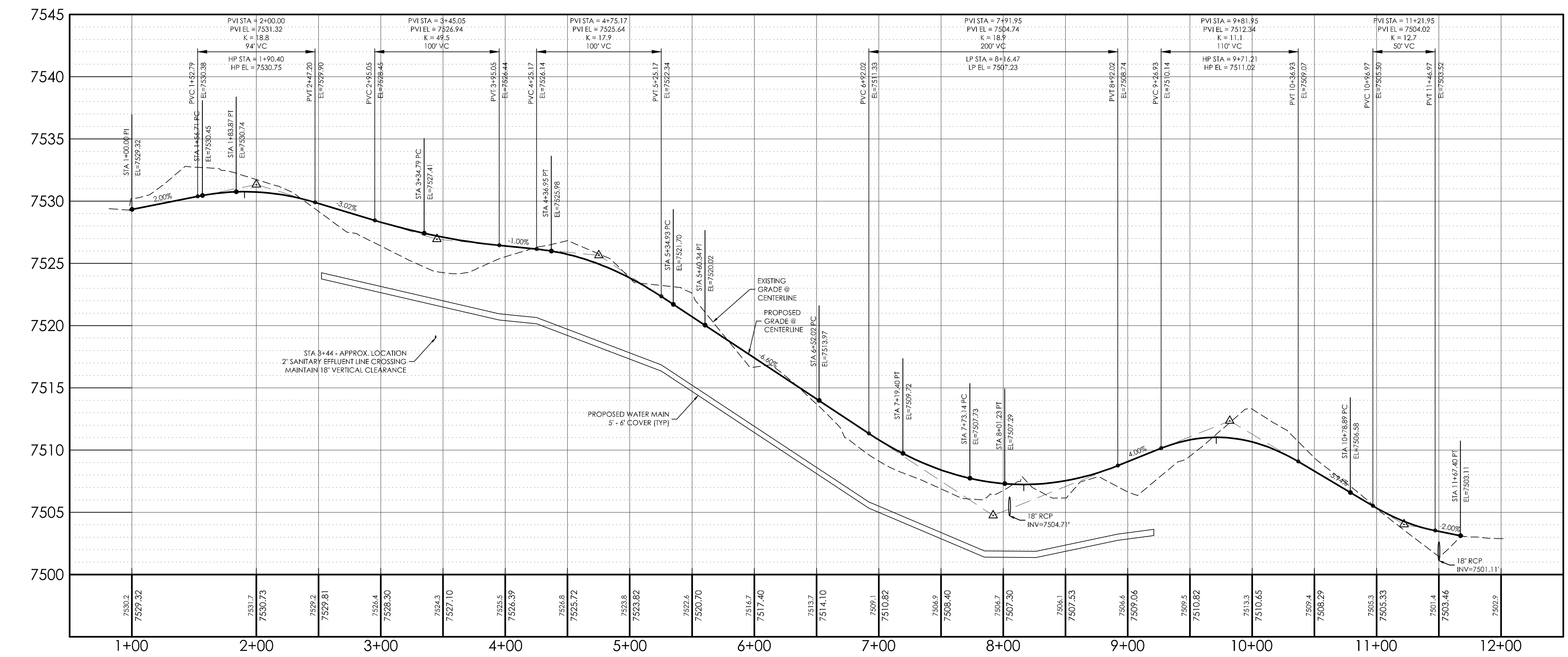
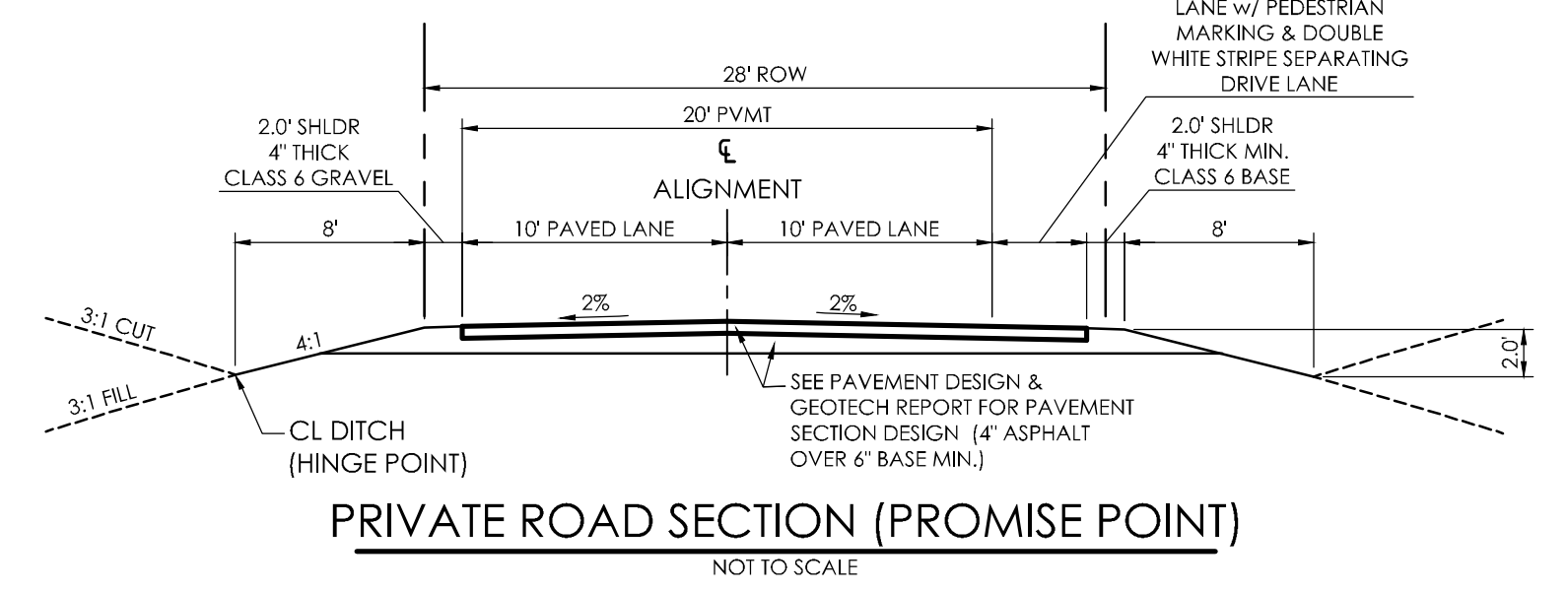
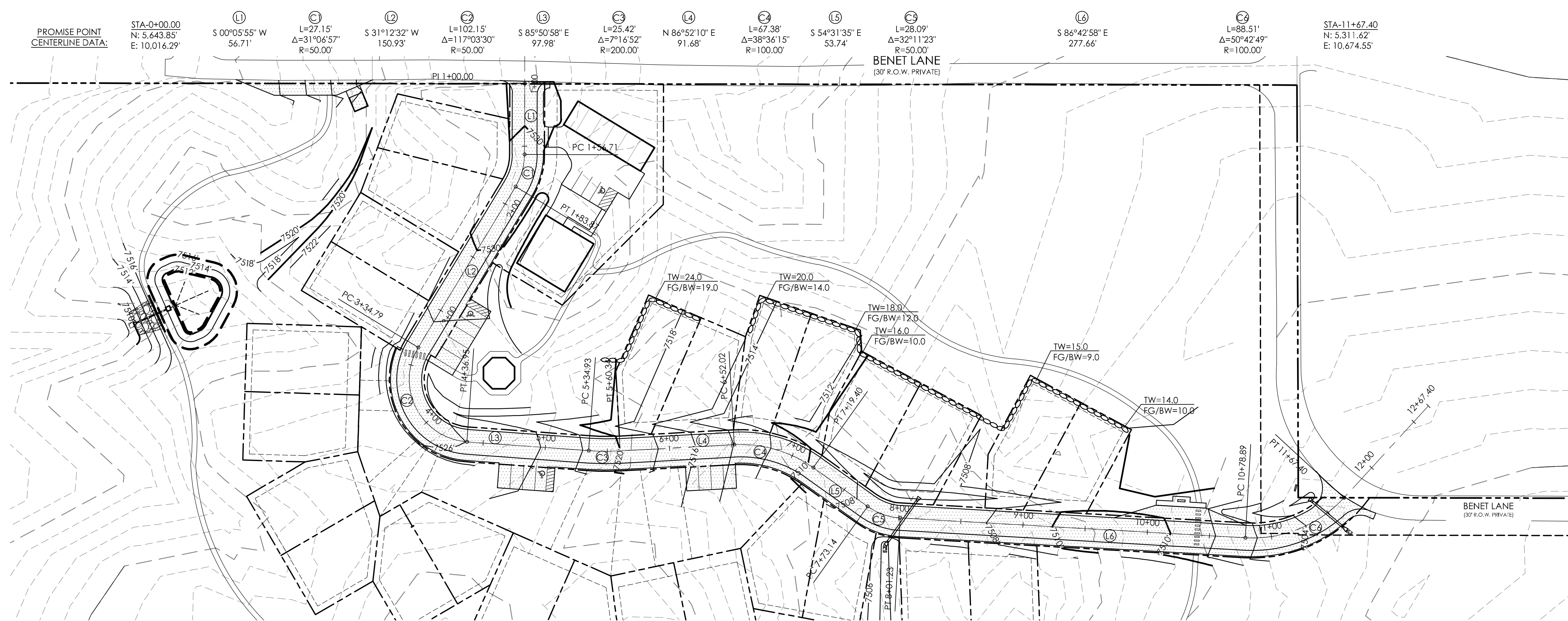
SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY

GRADING & EROSION
CONTROL PLAN
GRADING PLAN

C-3 MVE PROJECT 61087
MVE DRAWING -GEC-GP

DECEMBER 16, 2019
SHEET 3 OF 9

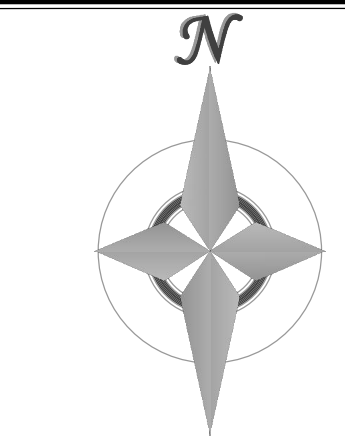
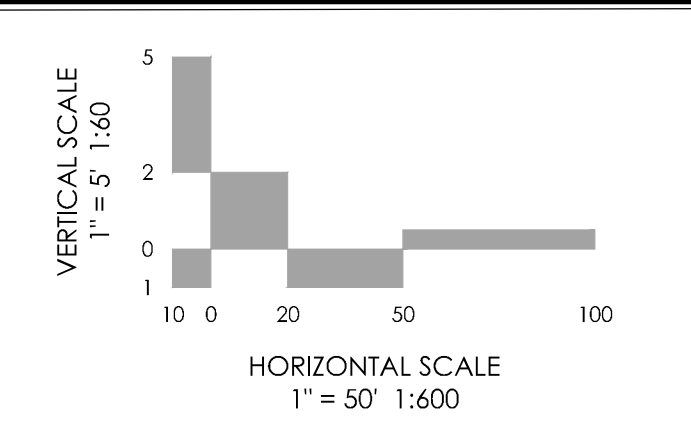
PUDSP-19-002



PUDSP-19-002

BENCHMARK:
 FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM HIGHWAY 83). ELEVATION = 7502.79'

- DESIGN DATA:**
 SIDEWALKS: WIDTH _____
 LOCATION: Attached Detached
 DESIGN SPEED _____
 CURB TYPE: 1 2 3 4 5
 ROW WIDTH: _____ FL-FL _____
 STREET TYPE: _____
- PAVEMENT:**
 TYPE: HMA PCC
 THICKNESS: _____
 COMPOSITE SECTION:
 HMA _____ BASE _____
 SUBGRADE STABILIZATION:
 CHEMICAL TYPE _____ MECHANICAL THICKNESS _____



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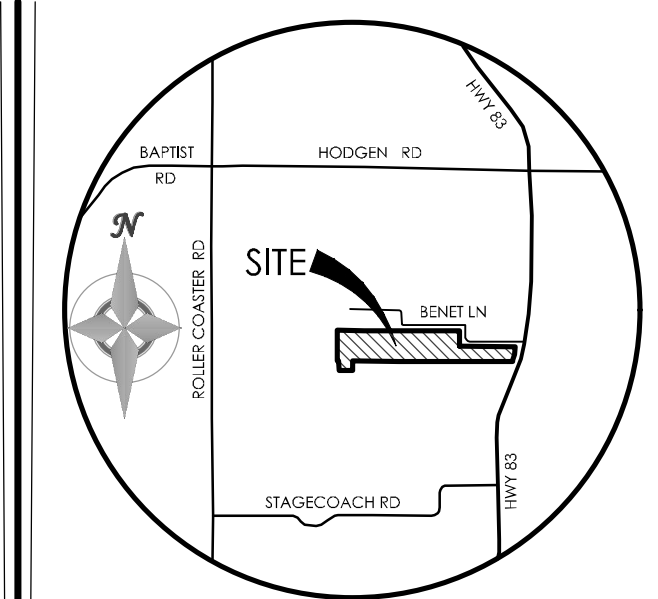
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 colorado springs
 719.635.5736

suite 200
 co 80909
 www.mvecivil.com

REVISIONS

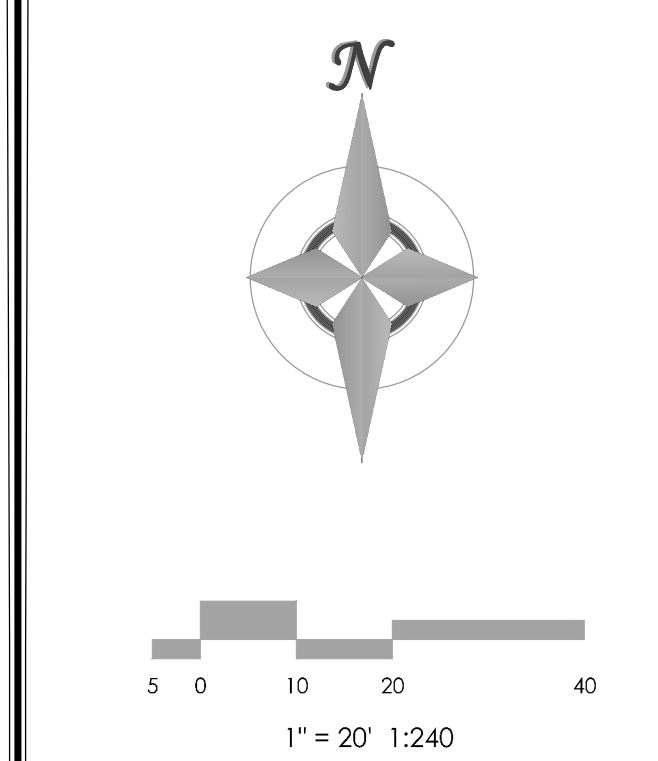
MVE PROJECT
 MVE DRAWING 61087-GEC-PP
DECEMBER 16, 2019
 DESIGNED BY _____
 DRAWN BY _____
 CHECKED BY _____
 AS-BUILTS BY _____
 CHECKED BY _____

PLAN & PROFILE SHEET
 FROM STA 0+00.00
 TO STA 15+00.00



VICINITY MAP
NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83), ELEVATION = 7502.79'



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ENGINEERS & SURVEYORS

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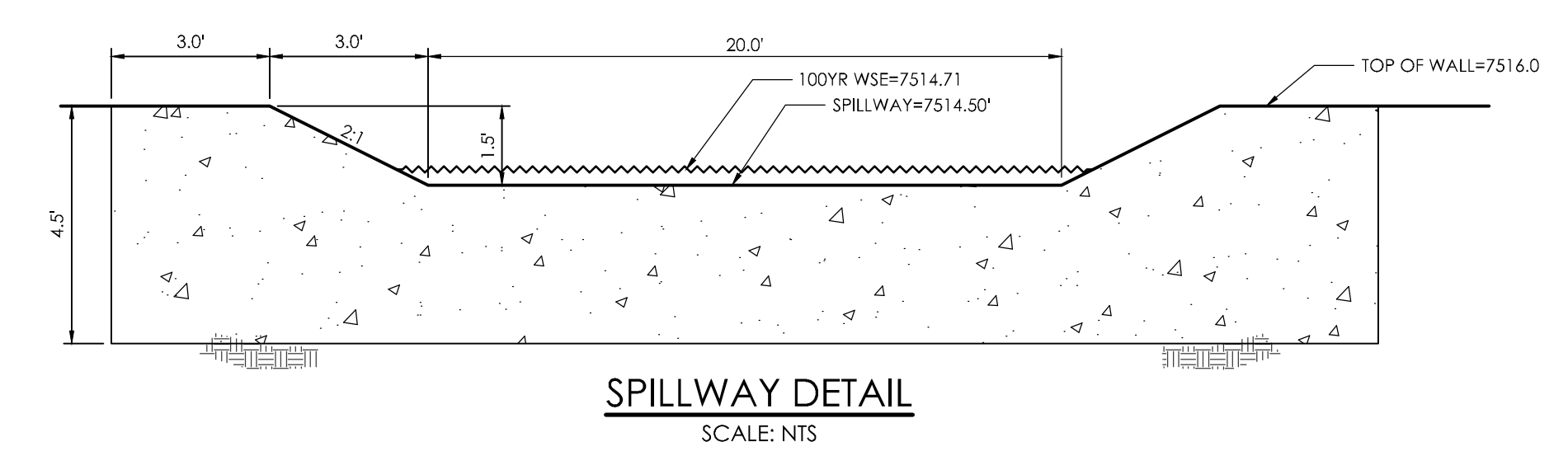
SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY

GRADING & EROSION
CONTROL PLAN
POND PLAN (A1)

C-5 MVE PROJECT 61087
MVE DRAWING -GEC-PD1

DECEMBER 16, 2019
SHEET 5 OF 9

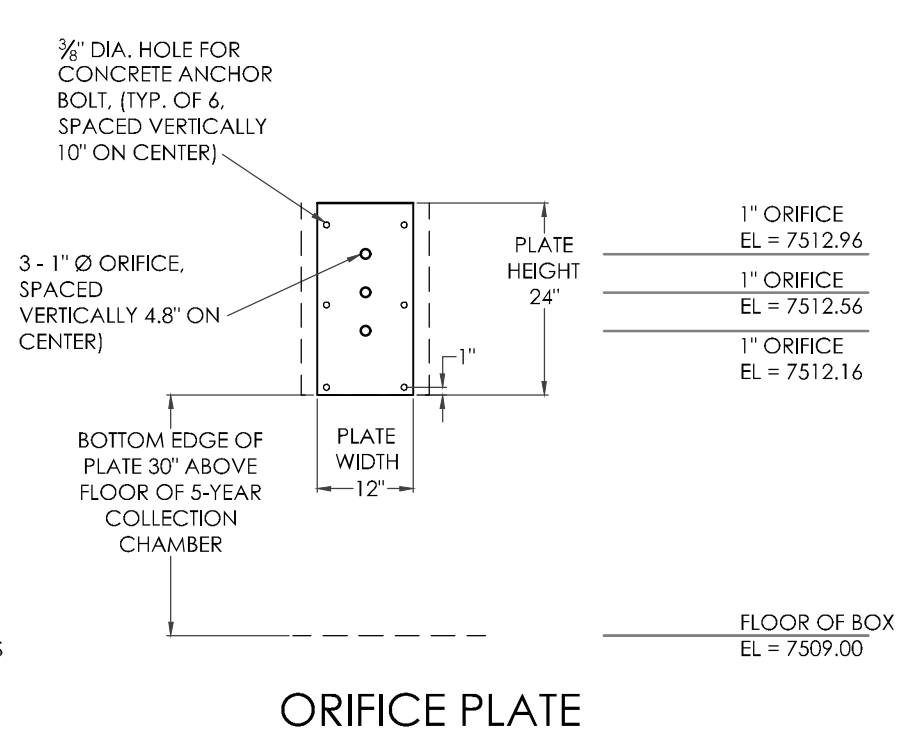
PUDSP-19-002



SPILLWAY DETAIL
SCALE: NTS

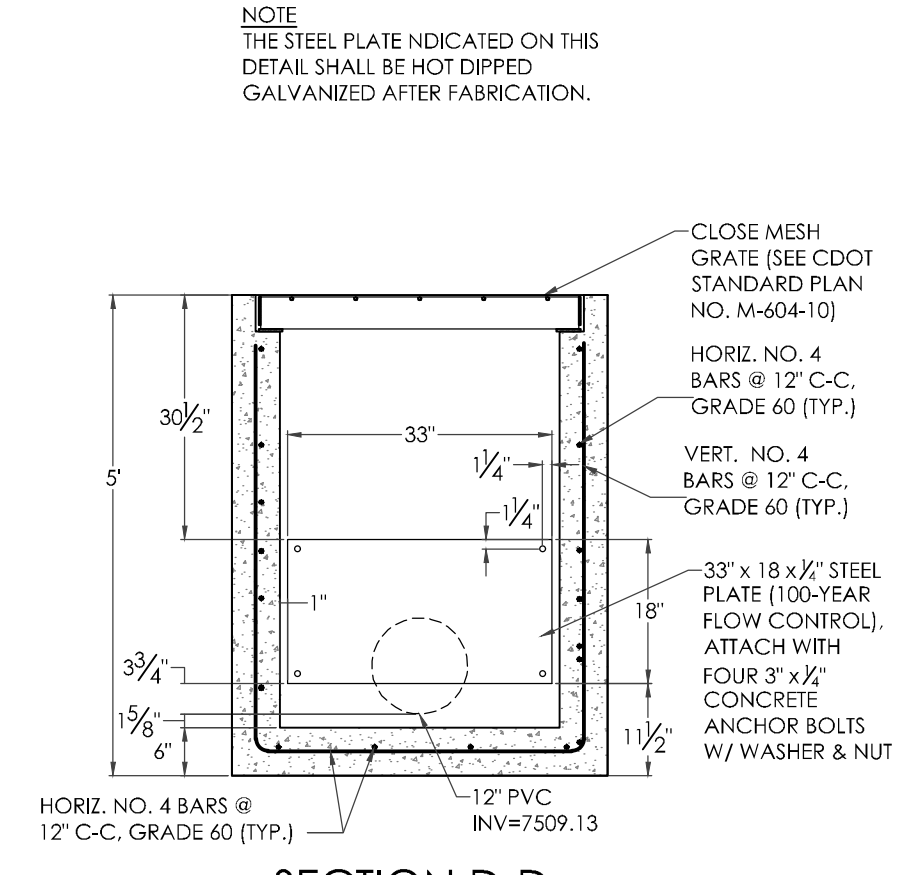
TABLE SF-2 (SLOTTED PIPE DIMENSIONS)

PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT CENTERS	OPEN AREA (PER SF)
4"	1-1/16"	0.032"	0.413"	1.90 SQ. IN.



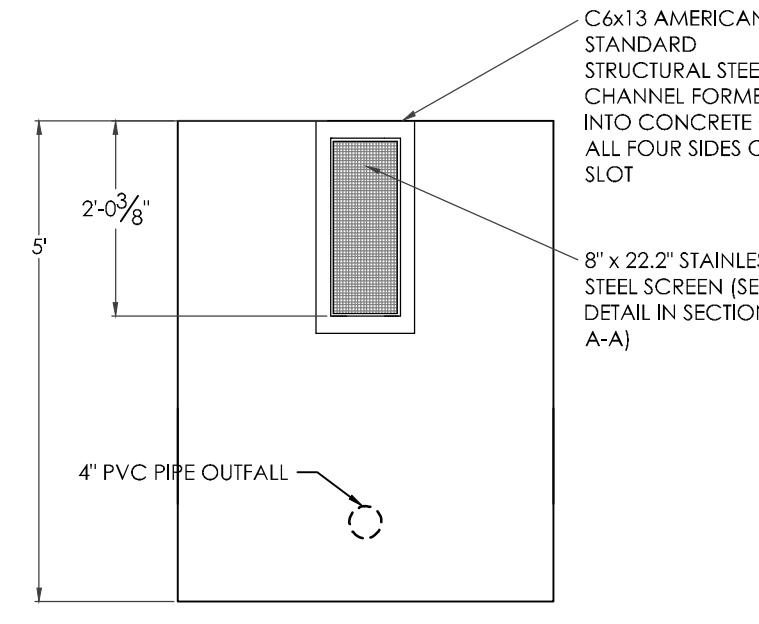
ORIFICE PLATE

- NOTES:
1. INSTALL NEOPRENE CLOSED CELL MEDIUM GASKETS WITH ADHESIVE ON ONE SIDE. 1/4" THICK x 2" WIDE BETWEEN ORIFICE PLATE AND STRUCTURE.
 2. ALL ORIFICE PLATES, STRUCTURAL STEEL CHANNEL, AND CLOSE MESH GRATES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
 3. ALL ORIFICE PLATES SHALL BE MOUNTED WITH 3" x 1/2" STAINLESS STEEL CONCRETE ANCHOR BOLTS W/ WASHERS, AND NUTS AS SHOWN.

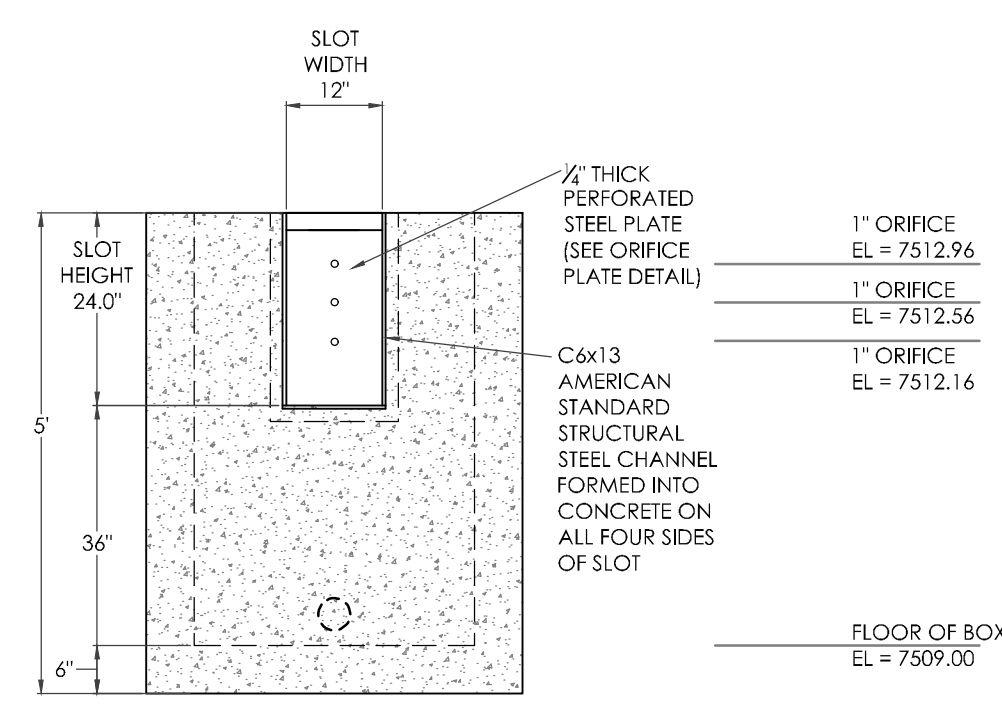


SECTION D-D

NOTE
THE STEEL CHANNEL INDICATED ON THIS
DETAIL SHALL BE HOT DIPPED GALVANIZED
AFTER FABRICATION.

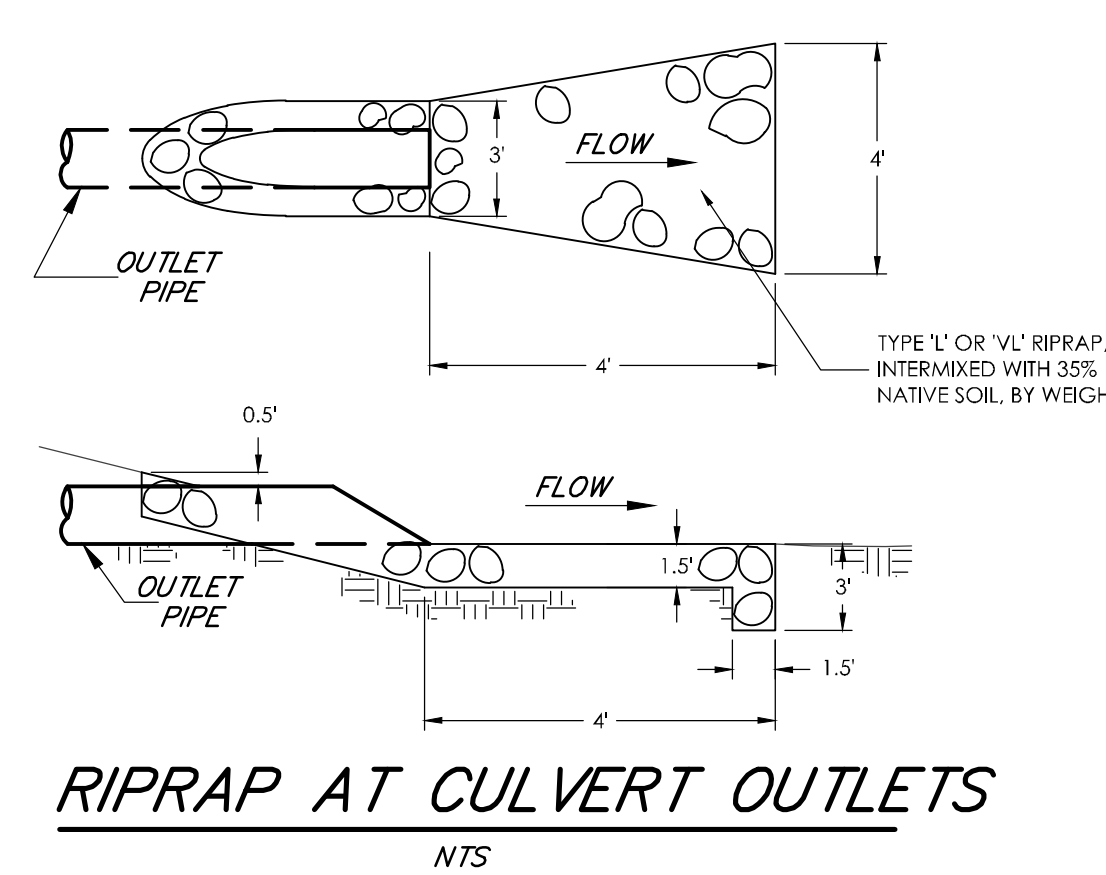


SECTION B-B

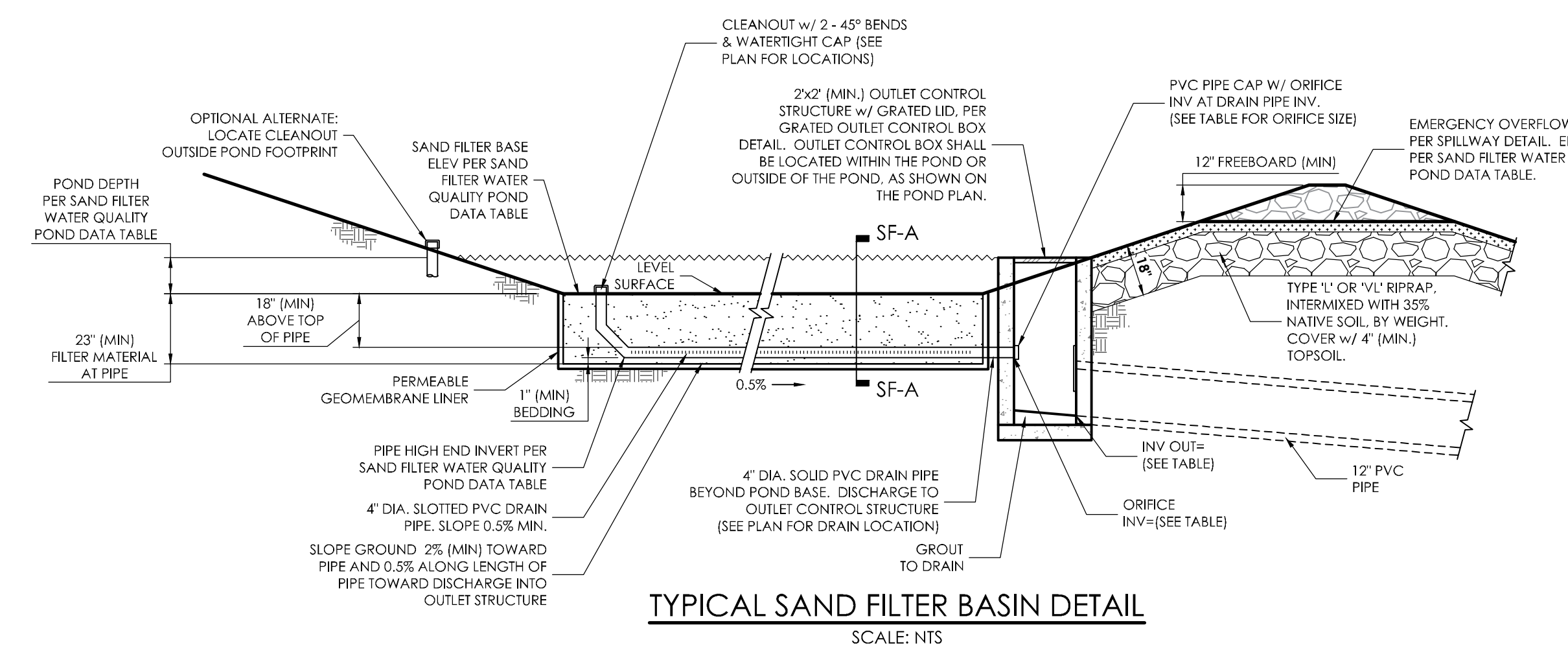


SECTION C-C

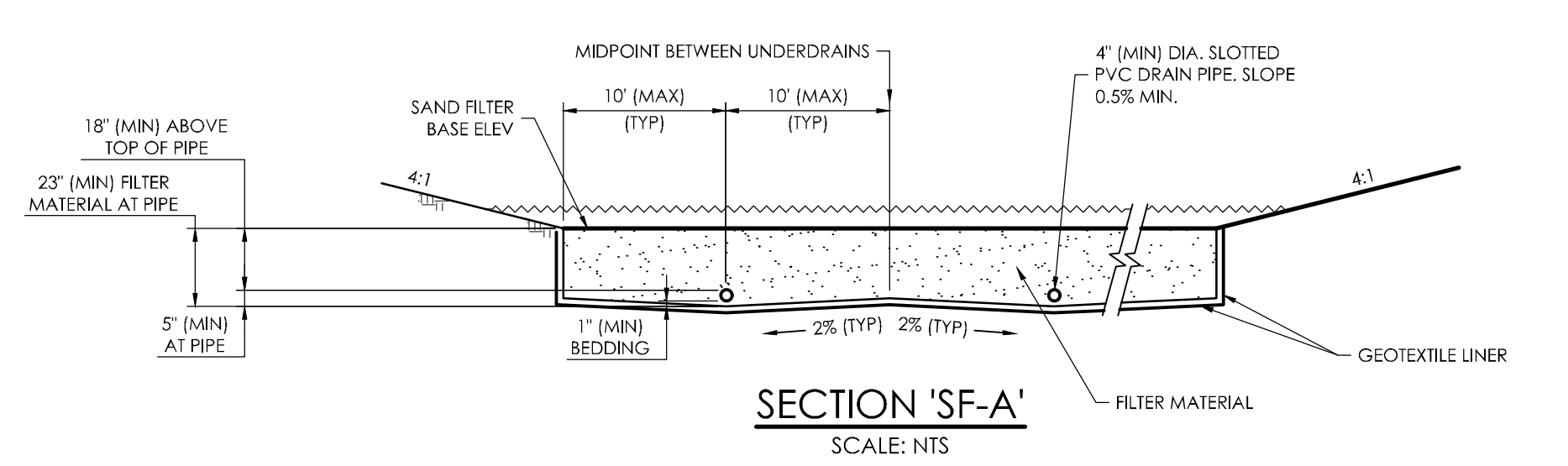
SAND FILTER BASIN OUTLET STRUCTURE DETAILS (POND A1)
SCALE: 1" = 2'



RIPRAP AT CULVERT OUTLETS
NTS



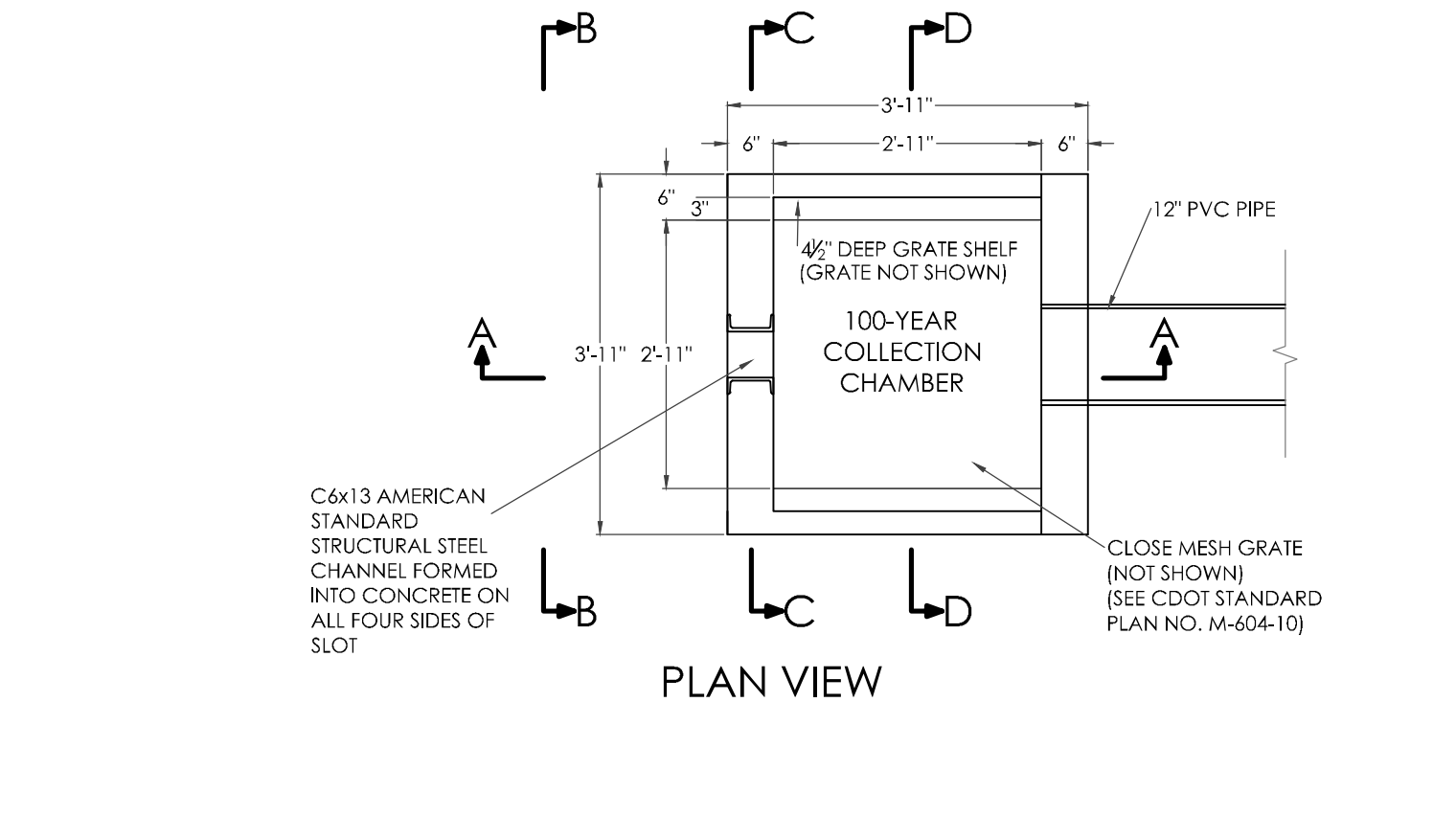
TYPICAL SAND FILTER BASIN DETAIL
SCALE: NTS



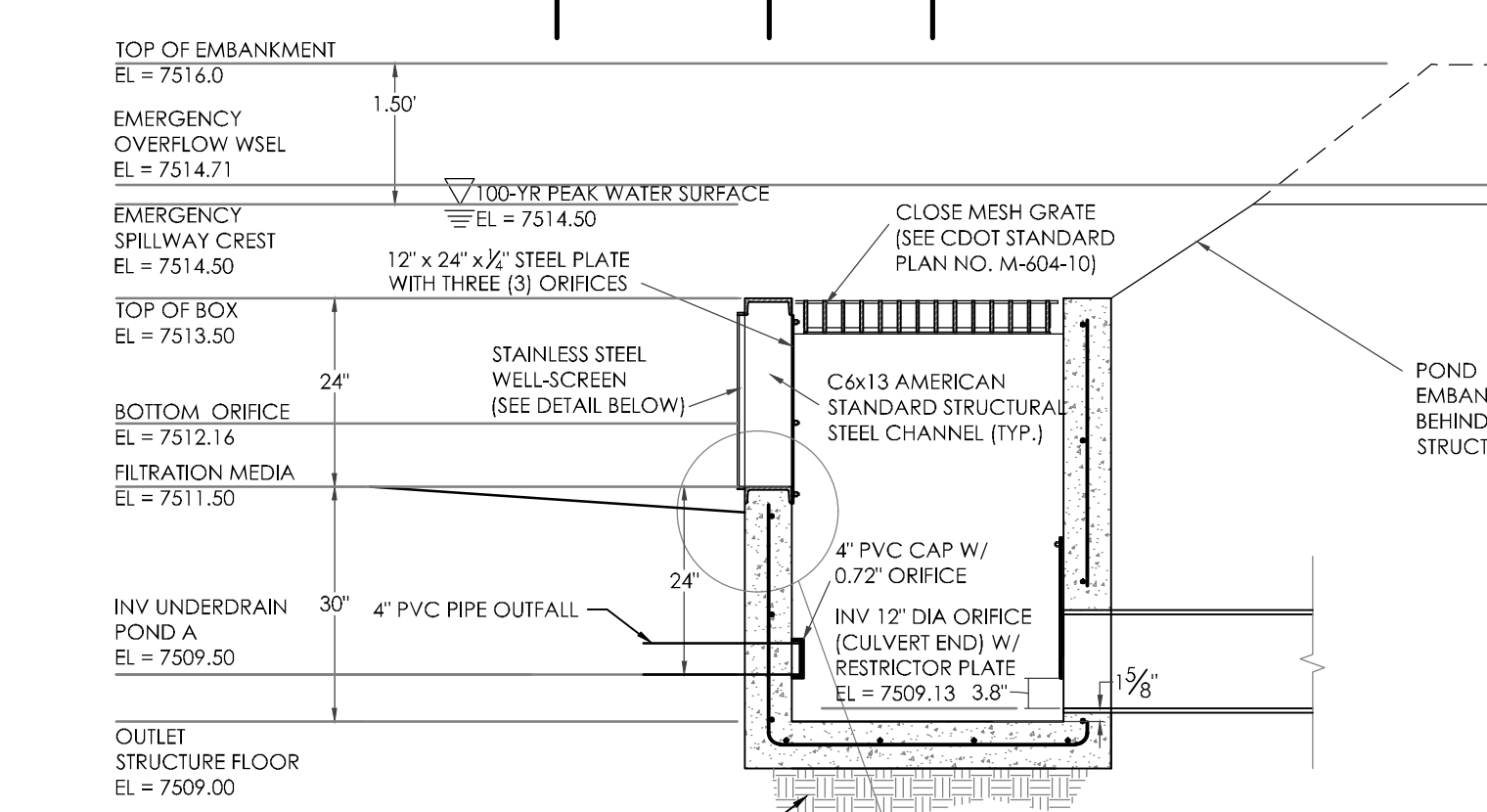
SECTION 'SF-A'
SCALE: NTS

EXTENDED DETENTION SAND
FILTER BASIN DETAIL (POND A1)
SCALE: 1" = 20'

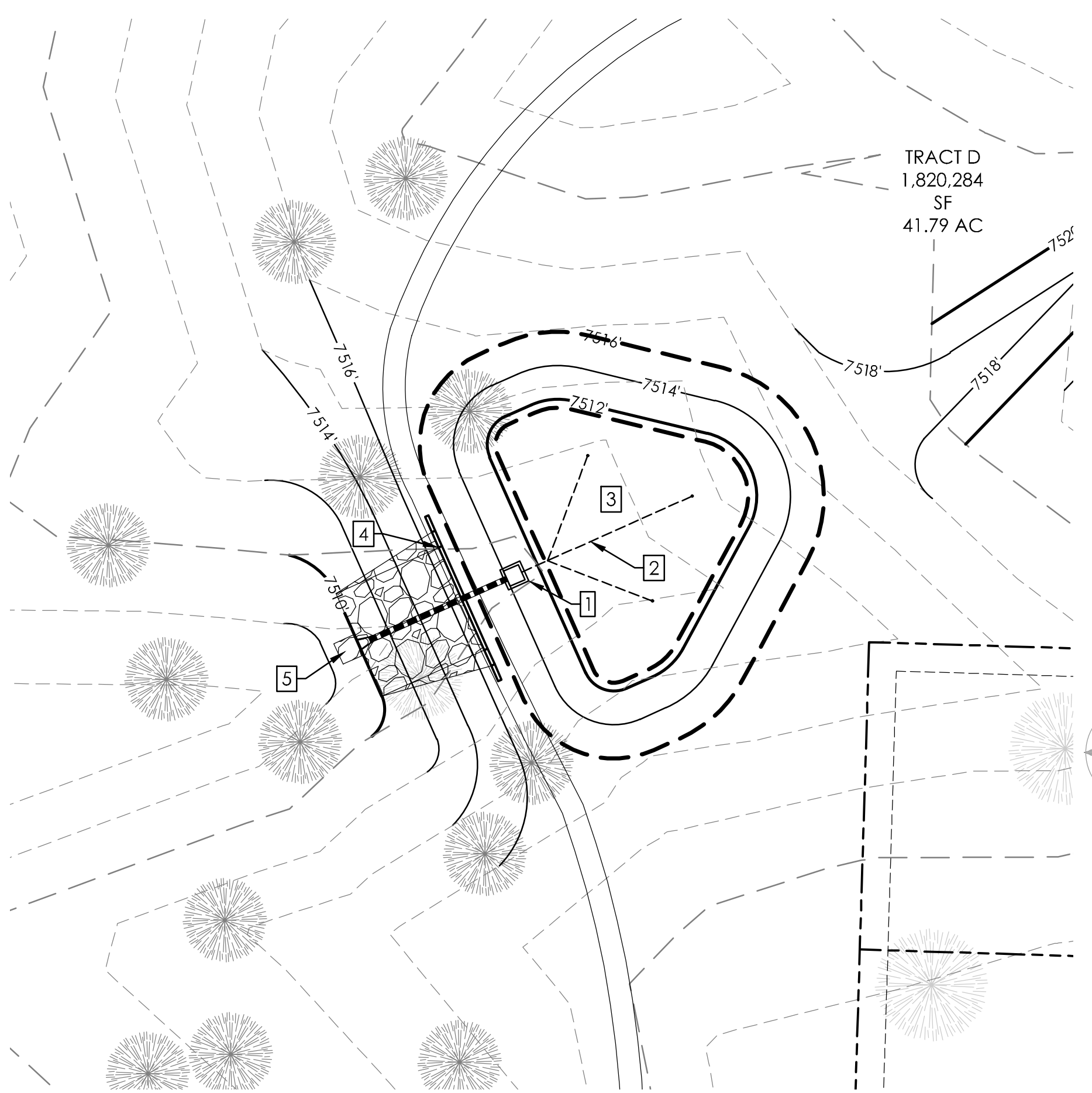
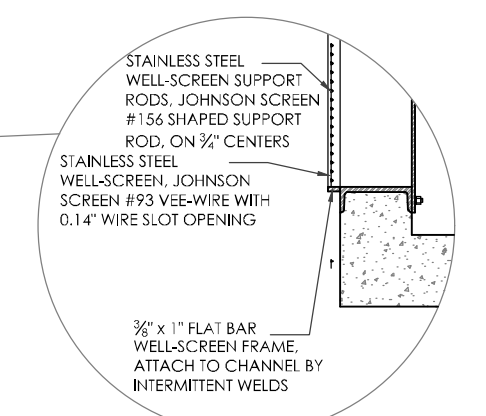
- NOTE LEGEND:
1. INSTALL OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
 2. INSTALL 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
 3. SAND FILTER (SEE DETAIL).
 4. 20' WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
 5. INSTALL 4' X 4' TYPE VL OR L SOIL RIP-RAP PAD



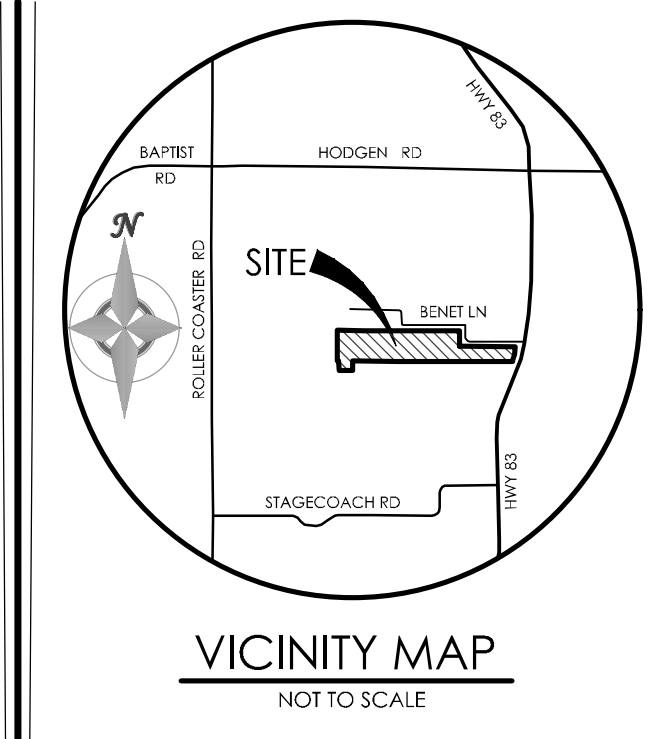
PLAN VIEW



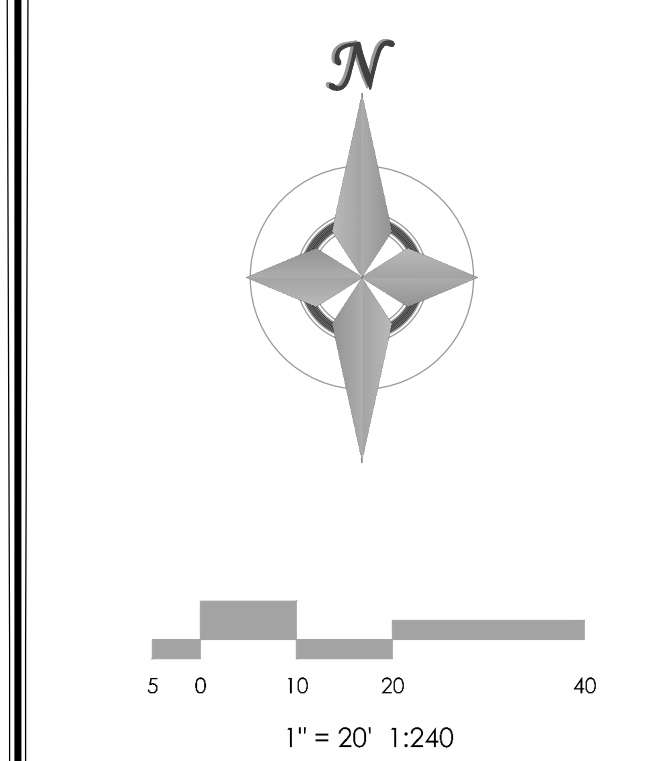
SECTION A-A



TRACT D
1,820,284
SF
41.79 AC



BENCHMARK
 FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
 WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
 HIGHWAY 83). ELEVATION = 7502.79'



REVISIONS

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SANCTUARY OF PEACE
 RESIDENTIAL COMMUNITY

GRADING & EROSION
 CONTROL PLAN
 POND PLAN (C1)

C-6 MVE PROJECT 61087
 MVE DRAWING -GEC-PD2

DECEMBER 16, 2019
 SHEET 6 OF 9

PUDSP-19-002

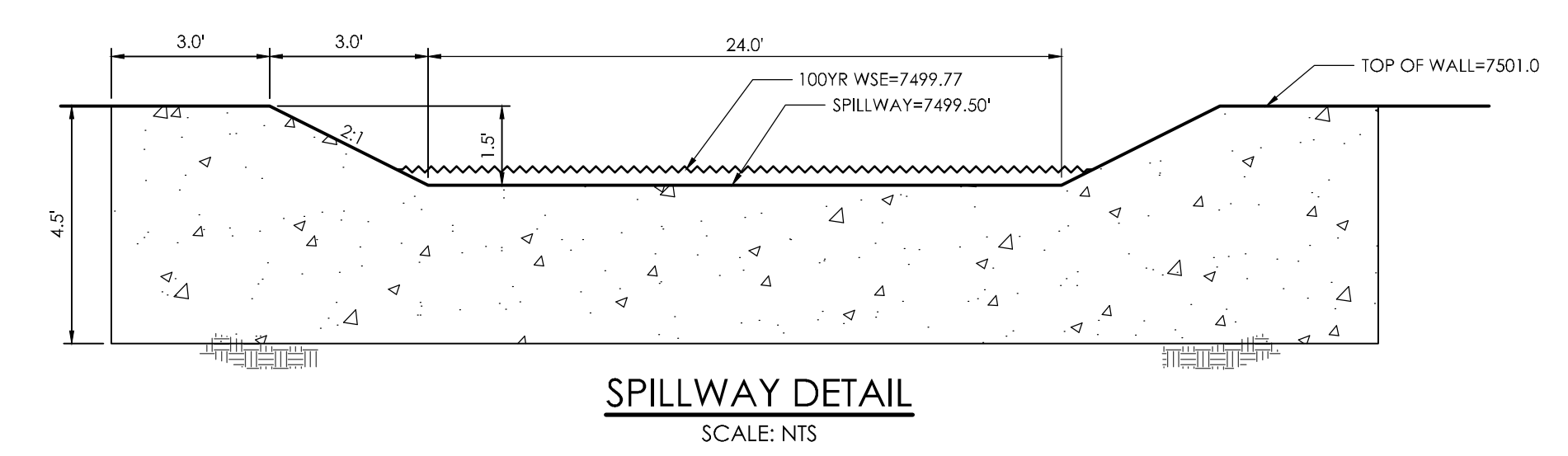


TABLE SF-2 (SLOTTED PIPE DIMENSIONS)

PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT CENTERS	OPEN AREA (PER SF)
4"	1-1/16"	0.032"	0.413"	1.90 SQ. IN.

SOIL MATERIAL GRADATION TABLE
(SOURCE: USDCO SPECIFICATION, RIGI TABLE 9-1, SAND FILTER BASIN (SFI) TABLE SF-1)

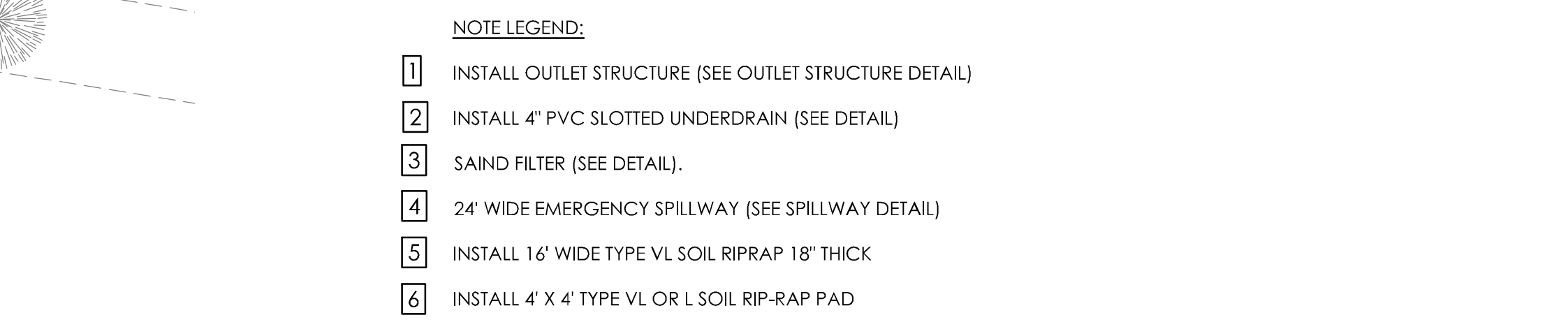
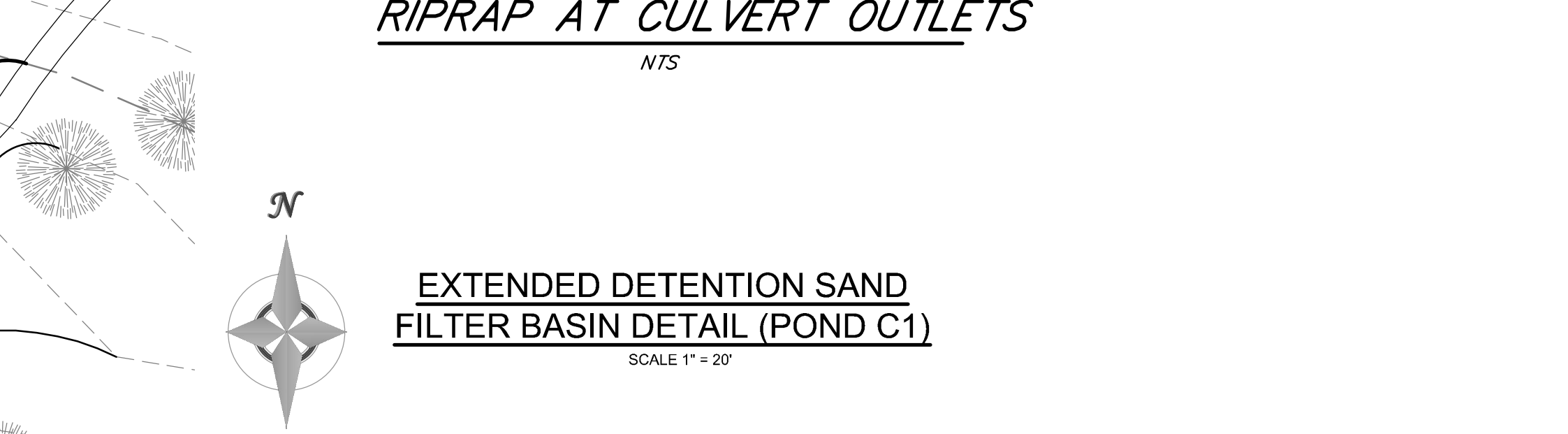
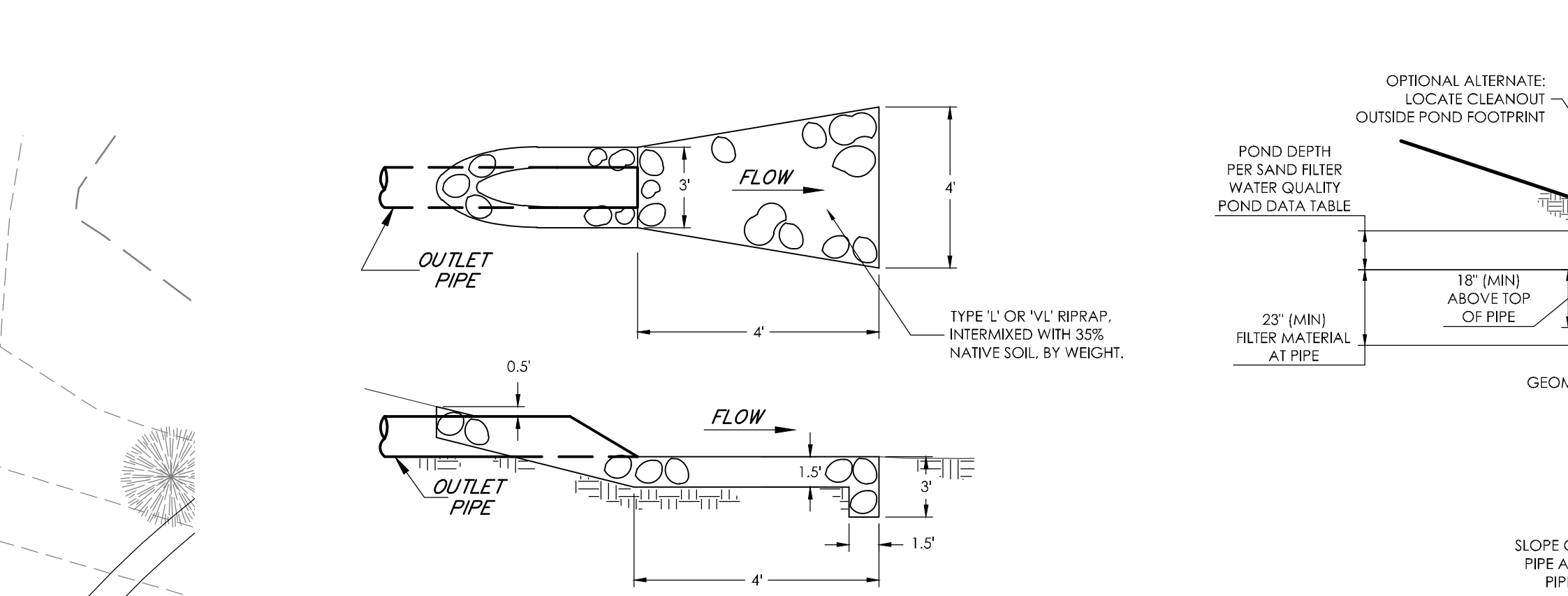
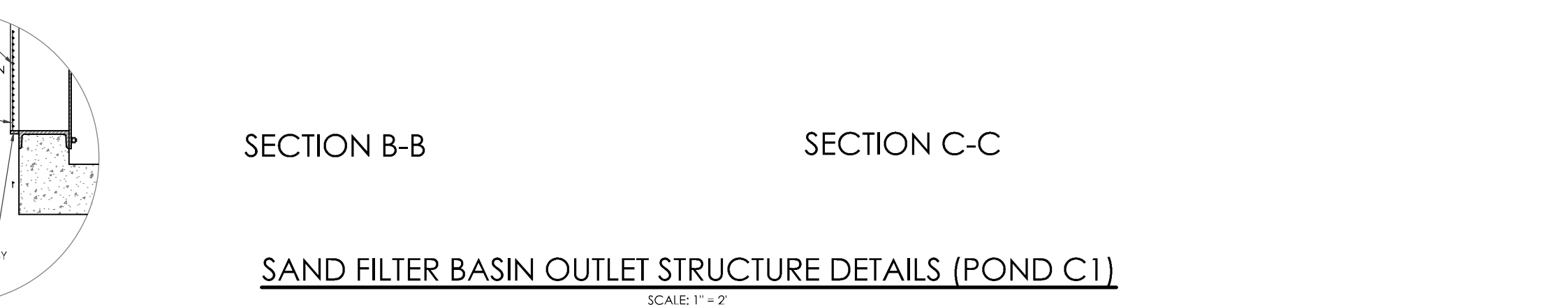
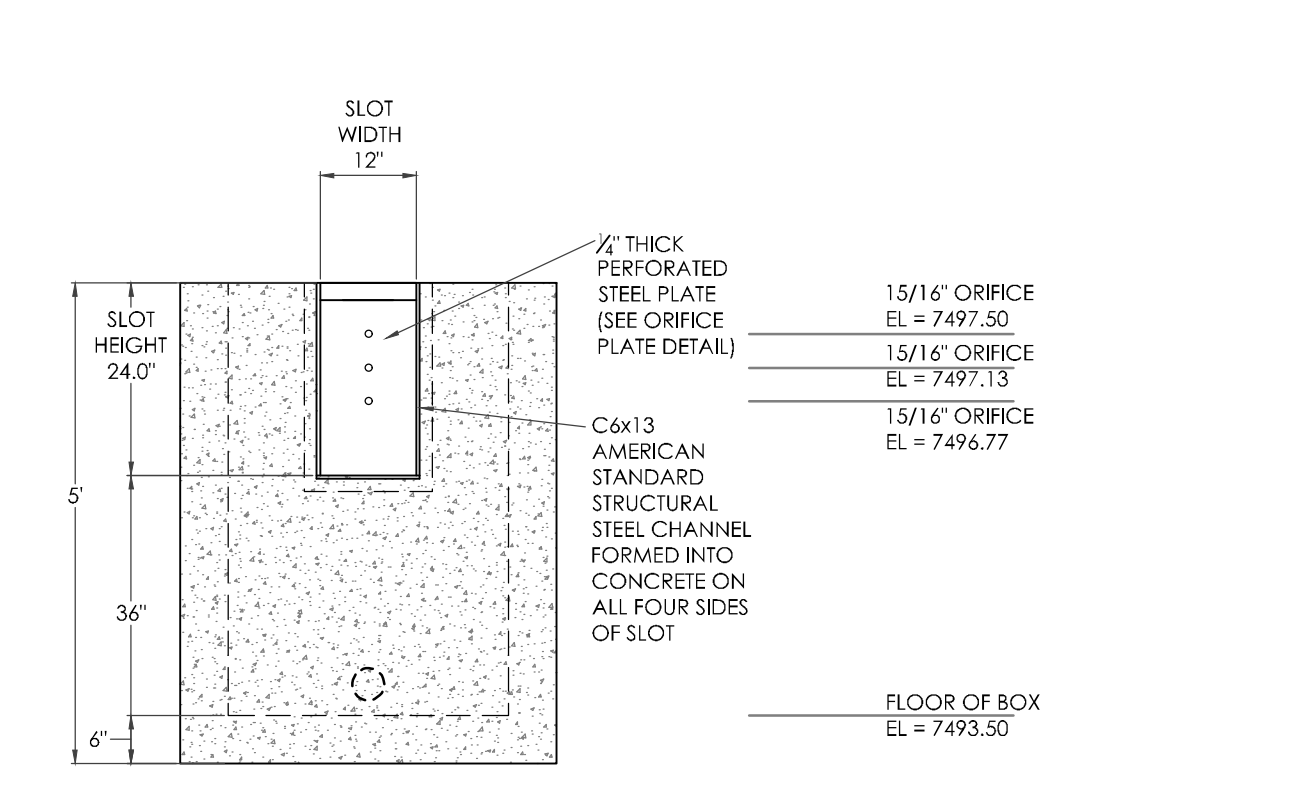
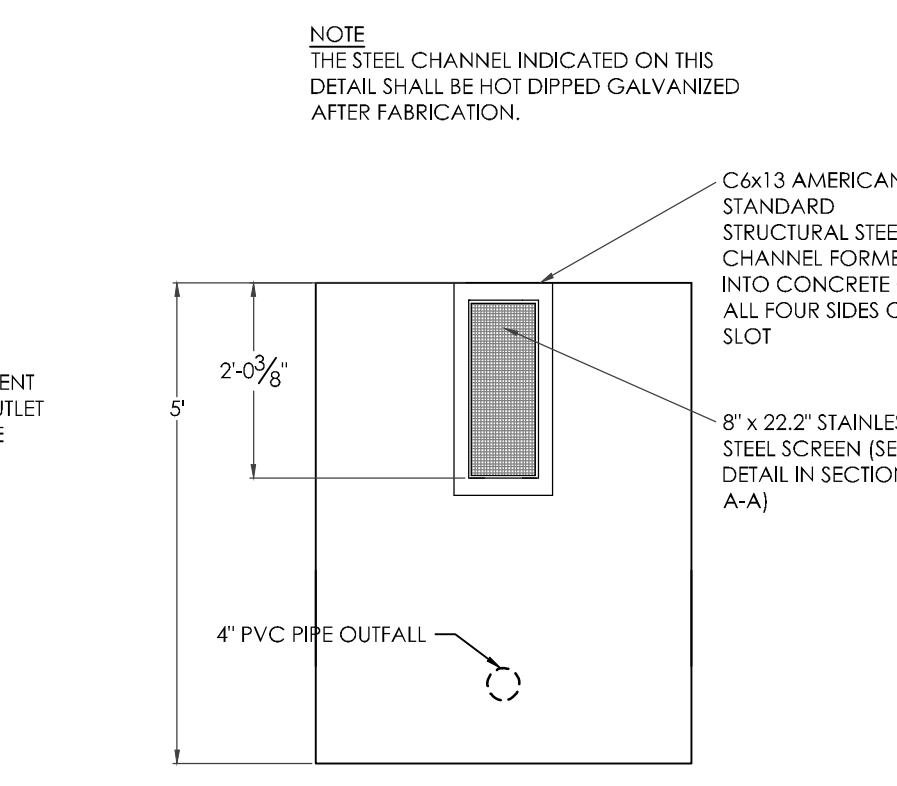
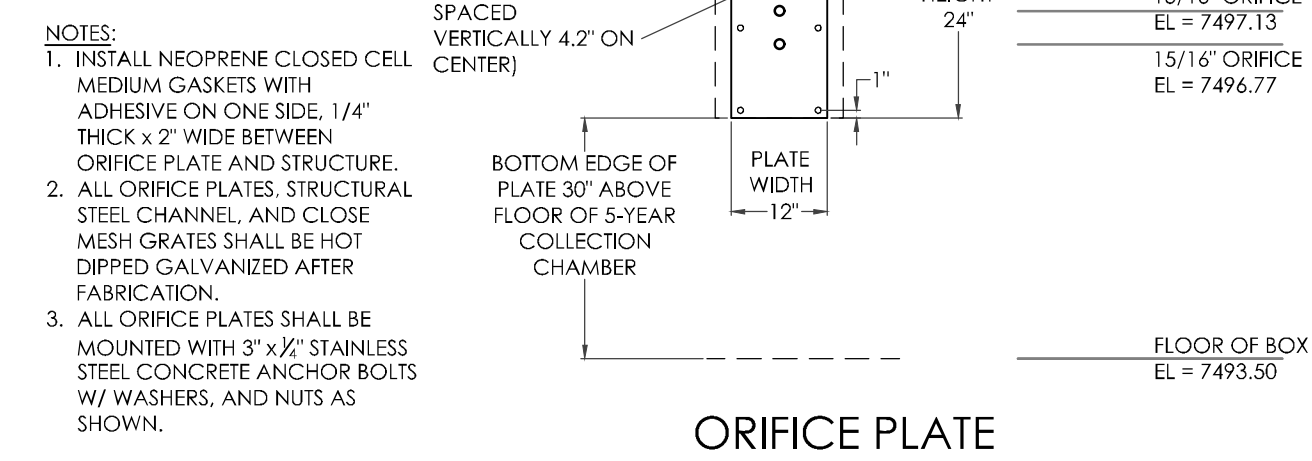
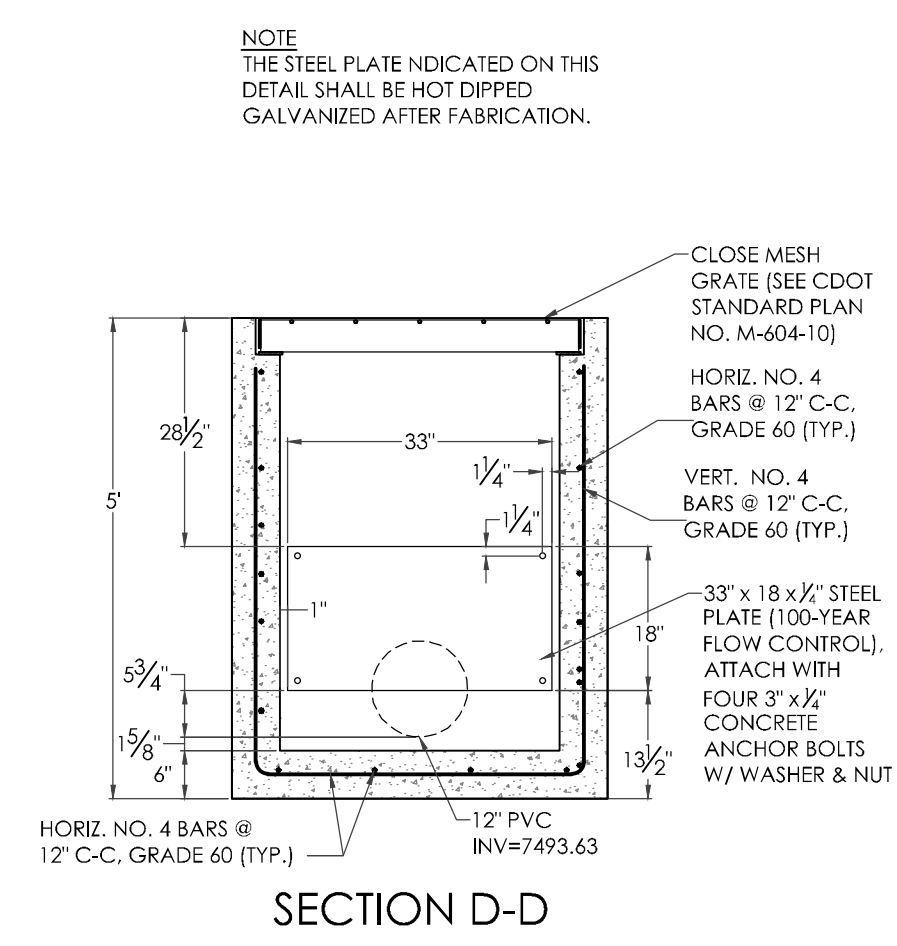
STANDARD SIEVE SIZE	% PASSING	
	GROWING MEDIA ⁽¹⁾⁽²⁾	FILTER MATERIAL ⁽³⁾
	CLASS B	CLASS C
1-1/2"	100	100
3/4"	100	100
NO. 10	85-100	20-60
NO. 50		0-30
NO. 100		10-30
NO. 200	80-90	0-3
NO. 250	3-17	0-3

⁽¹⁾ RAIN GARDEN ONLY
⁽²⁾ LESS THAN 1.5% ORGANIC MATERIAL
⁽³⁾ APPLIES TO BOTH SAND FILTER BASIN AND RAIN GARDEN

SAND FILTER SPECIFICATIONS, NOTES & REFERENCES:
 REFERENCE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT (UDFCD), URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3, SECTION 1-6, FOR FULL SET OF SAND FILTER DETAILS AND SPECIFICATIONS AS IDENTIFIED.
 - **FILTER MATERIAL** - CLASS B or CLASS C FILTER MATERIAL, PER SOIL MATERIAL GRADATION TABLE SF-3.
 - **PERMEABLE GEOTEXTILE SEPARATOR FABRIC** - TENCATE MIRAF 170N, OR EQUAL, PER UDFCD TABLE SF-3.
 - **CONCENTRATED INFLOW** - PER CONCENTRATED INFLOW DETAIL.
 - **SLOTTED PIPE** - CONTECH A-2000, OR EQUAL, PER PIPE SPECIFICATION TABLE.

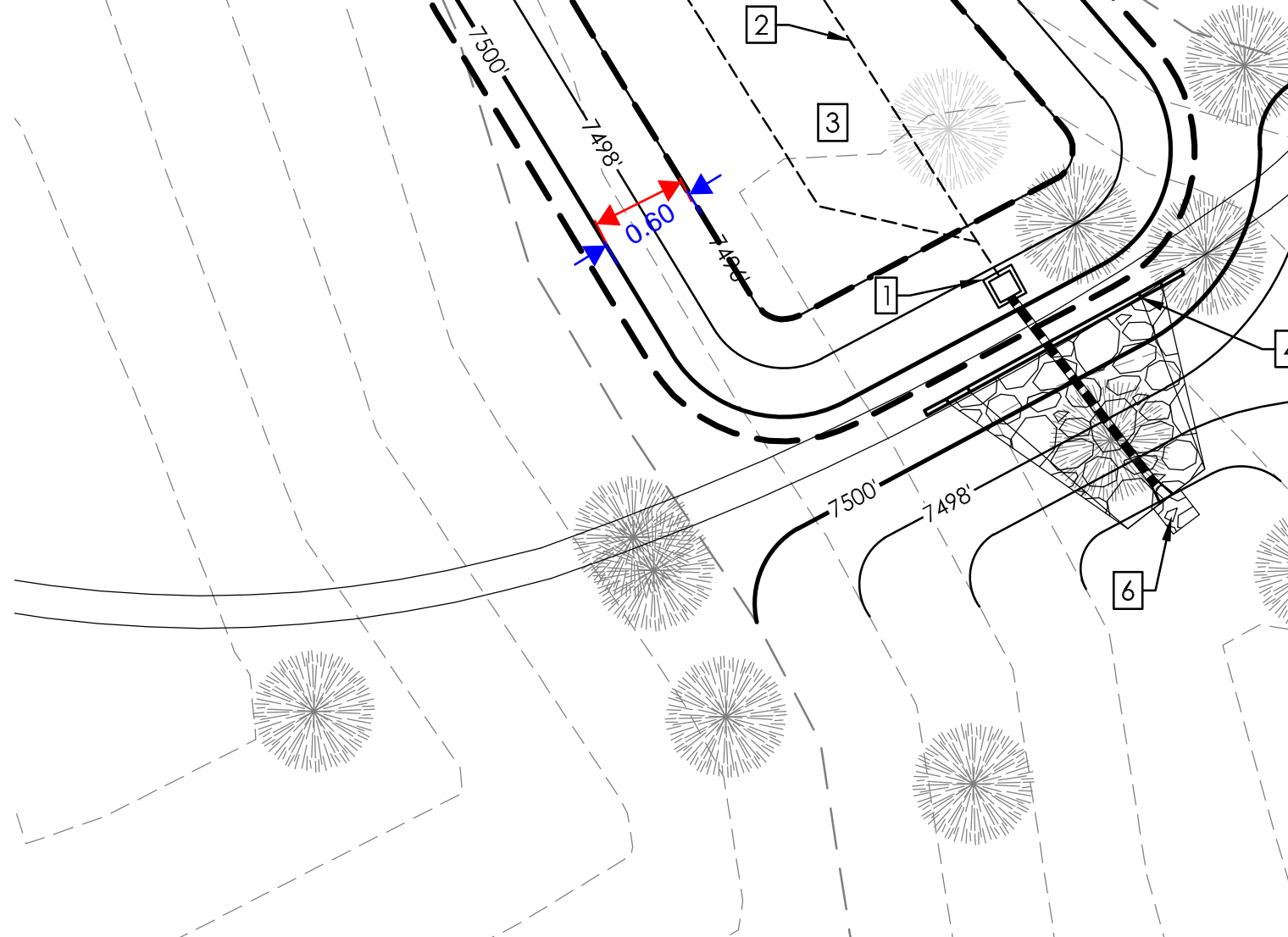
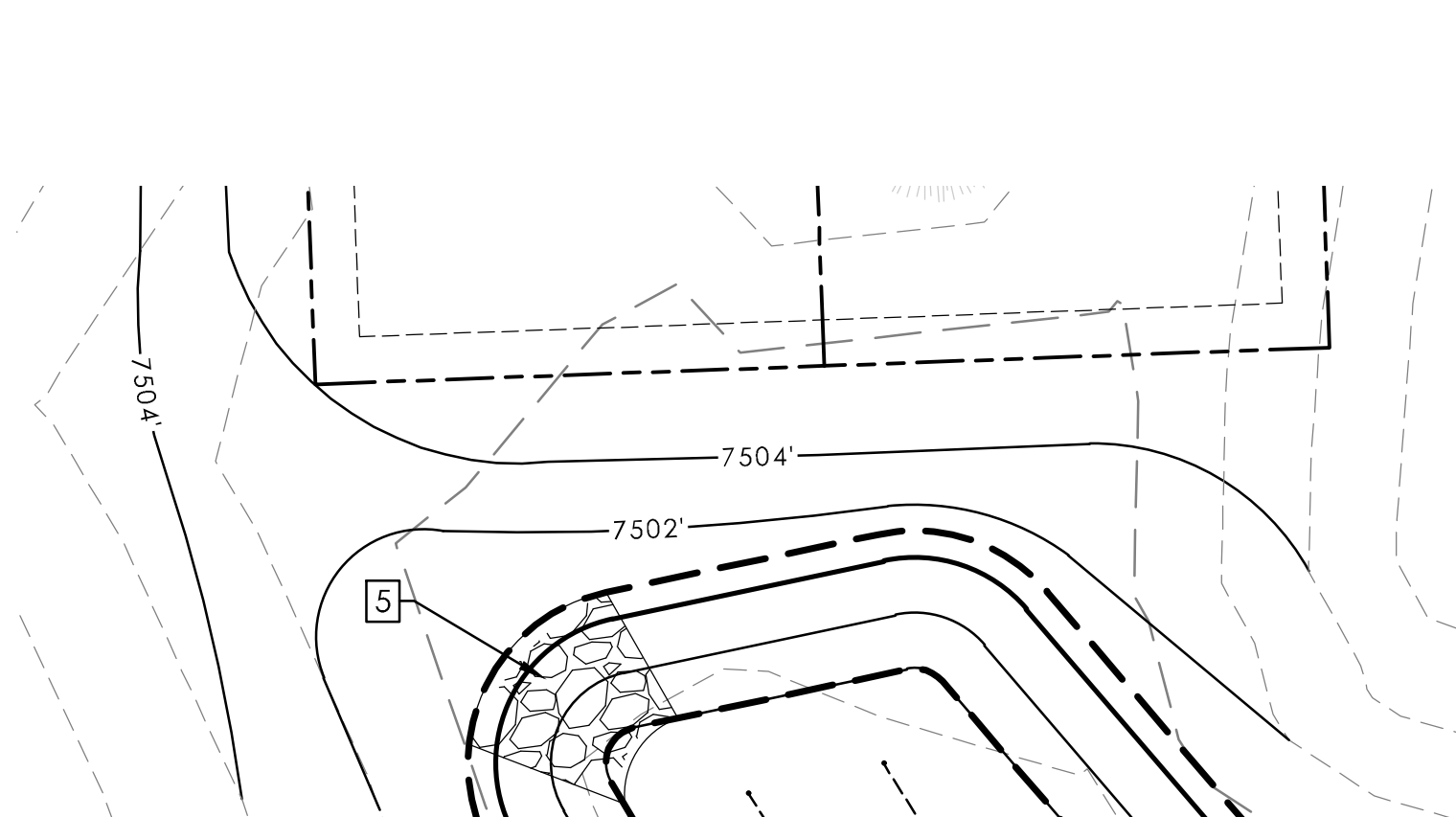
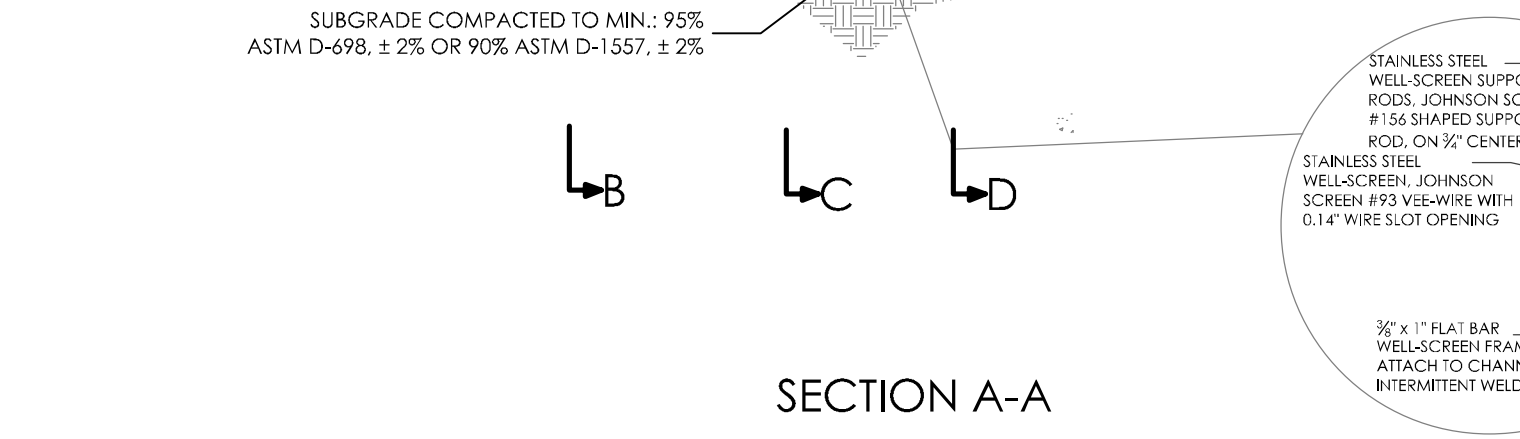
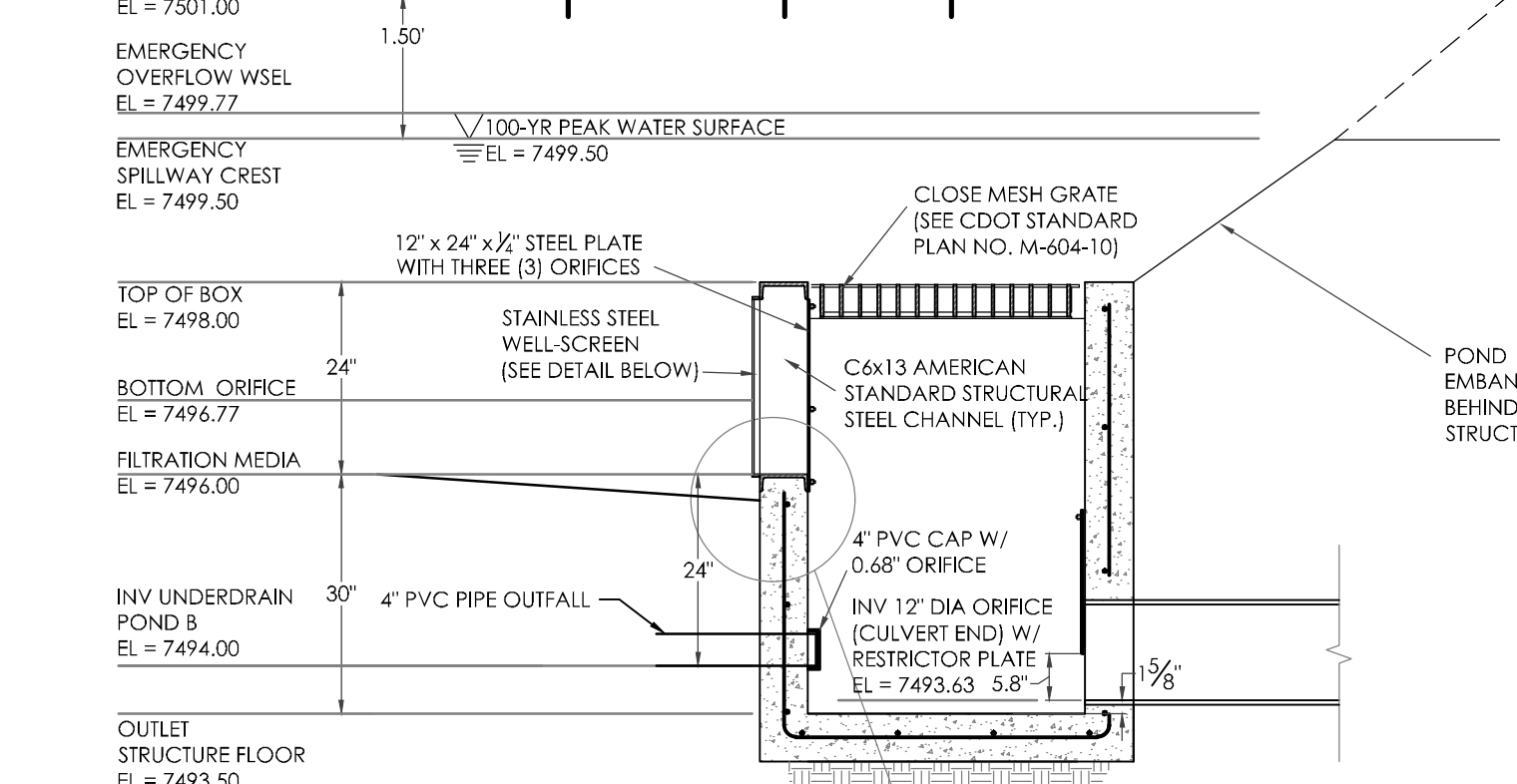
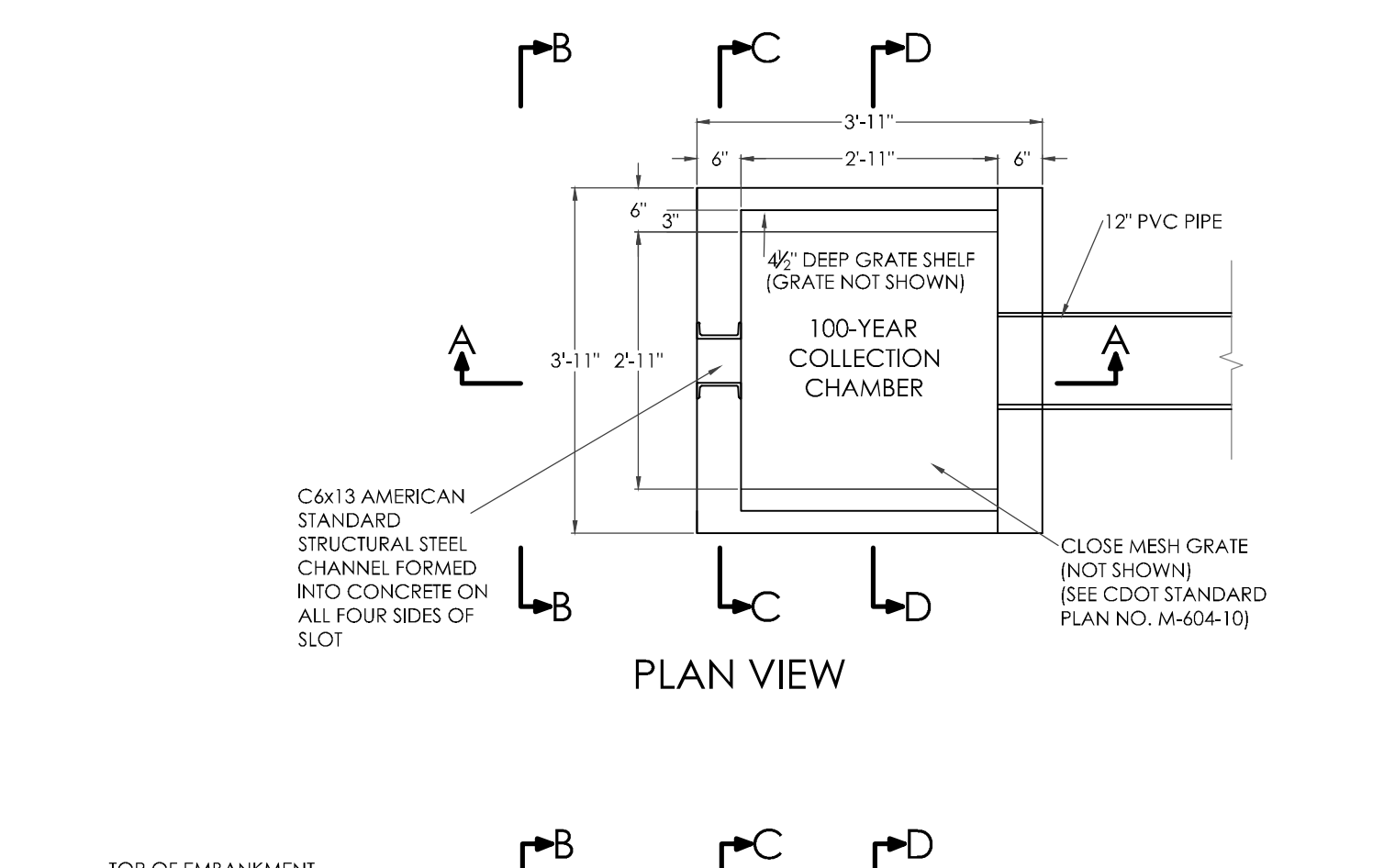
BASIN DATA TABLE

SAND FILTER BASIN	BASE AREA (SQ. FEET)	FILTER BASIN VOLUME (FT ³)	FILTER BASIN BTM/INV IN ELEV	POND DEPTH (FT)	TOP OF BOX ELEVATION (W.S.)	OUTLET ORIFICE INV	OUTLET ORIFICE DIAMETER (IN)	INV OUT ELEV	RESTRICTOR PLATE HEIGHT (FT)
POND C1	1,843	10,563	7496.0	3.5	7498.0	7494.0	1"	7493.63	5.8"



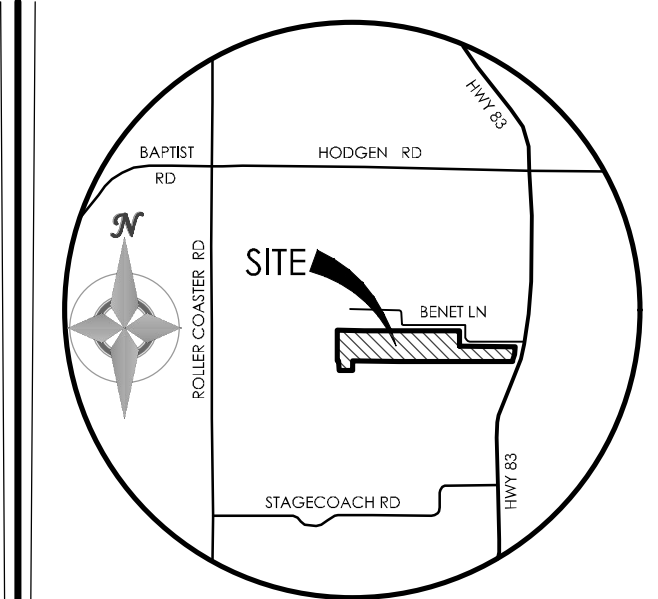
NOTE LEGEND:

- INSTALL OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
- INSTALL 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
- INSTALL SAND FILTER (SEE DETAIL).
- INSTALL 24" WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
- INSTALL 16" WIDE TYPE VL SOIL RIPRAP 18" THICK
- INSTALL 4" X 4" TYPE VL OR L SOIL RIP-RAP PAD



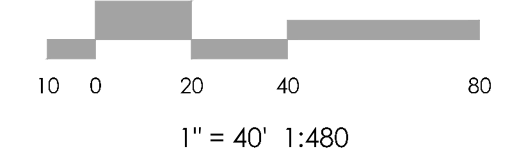
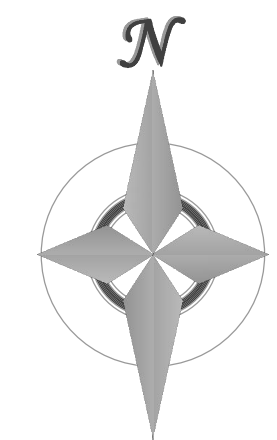
NOTE LEGEND:

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VICINITY MAP
NOT TO SCALE

BENCHMARK
FOUND PROPERTY CORNER SOUTHWEST OF BENET LANE
WHERE BENET LANES TURNS NORTH (APPROX. 1200 FT FROM
HIGHWAY 83), ELEVATION = 7502.79'



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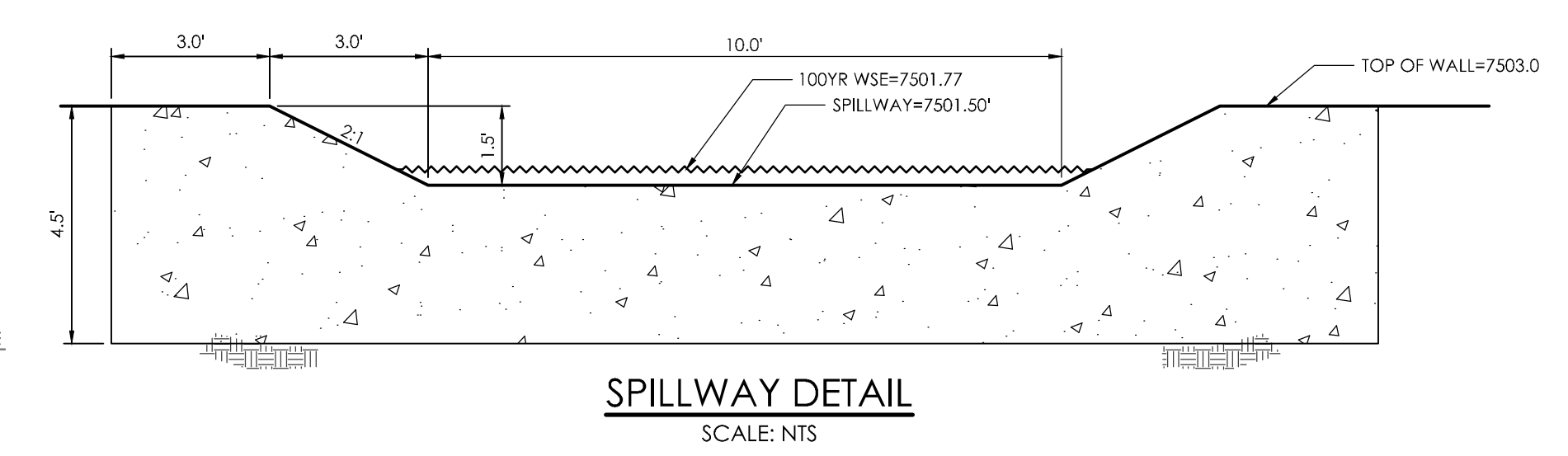
SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY

GRADING & EROSION
CONTROL PLAN
POND PLAN (C2)

C-7 MVE PROJECT 61087
MVE DRAWING -GEC-PD3

DECEMBER 16, 2019
SHEET 7 OF 9

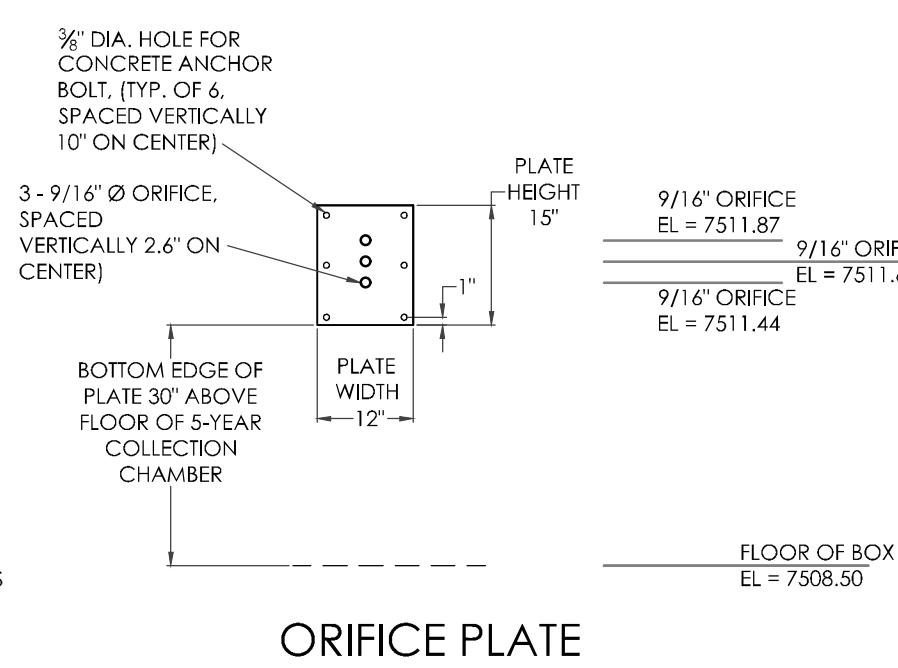
PUDSP-19-002



SPILLWAY DETAIL
SCALE: NTS

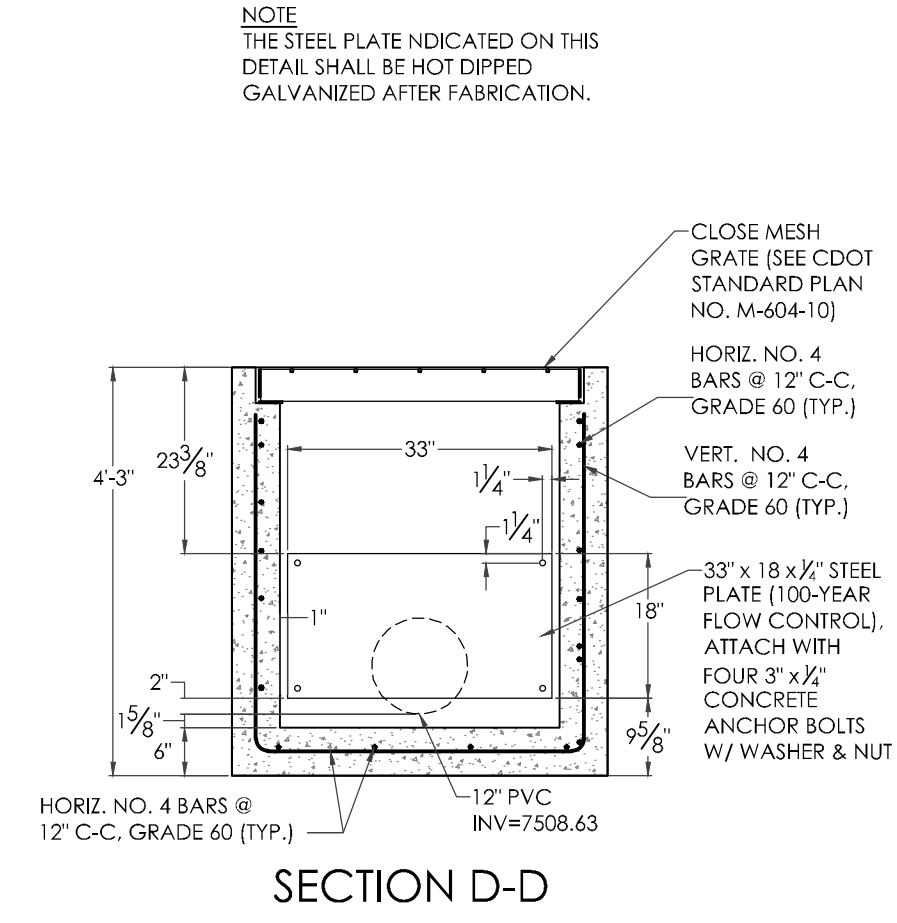
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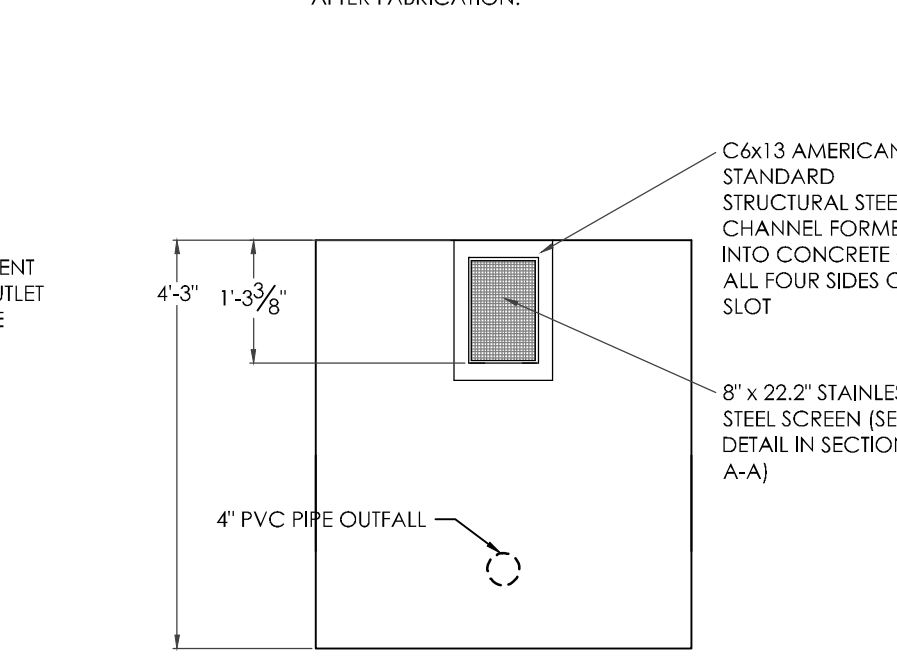
ORIFICE PLATE

- NOTES:
1. INSTALL NEOPRENE CLOSED CELL MEDIUM GASKETS WITH ADHESIVE ON ONE SIDE. 1/4" THICK x 2" WIDE BETWEEN ORIFICE PLATE AND STRUCTURE.
 2. ALL ORIFICE PLATES, STRUCTURAL STEEL CHANNEL, AND CLOSE MESH GRATES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
 3. ALL ORIFICE PLATES SHALL BE MOUNTED WITH 3" x 1/2" STAINLESS STEEL CONCRETE ANCHOR BOLTS W/ WASHERS, AND NUTS AS SHOWN.

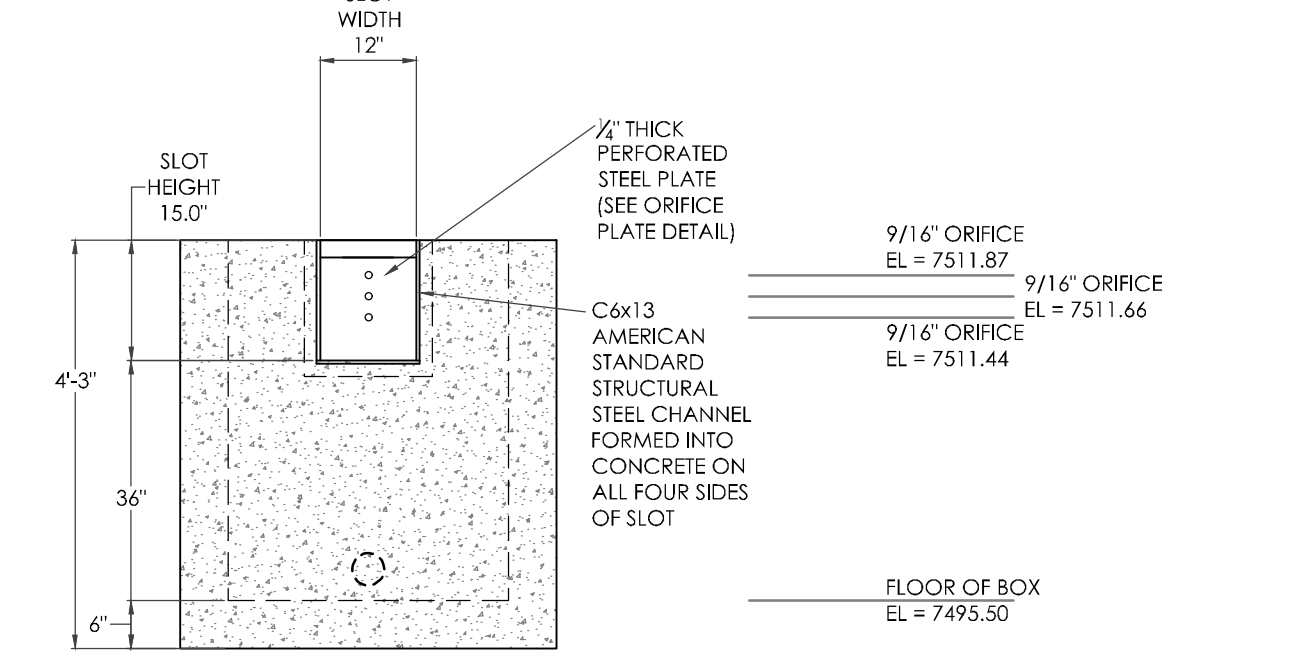


SECTION D-D

NOTE
THE STEEL CHANNEL INDICATED ON THIS
DETAIL SHALL BE HOT DIPPED GALVANIZED
AFTER FABRICATION.

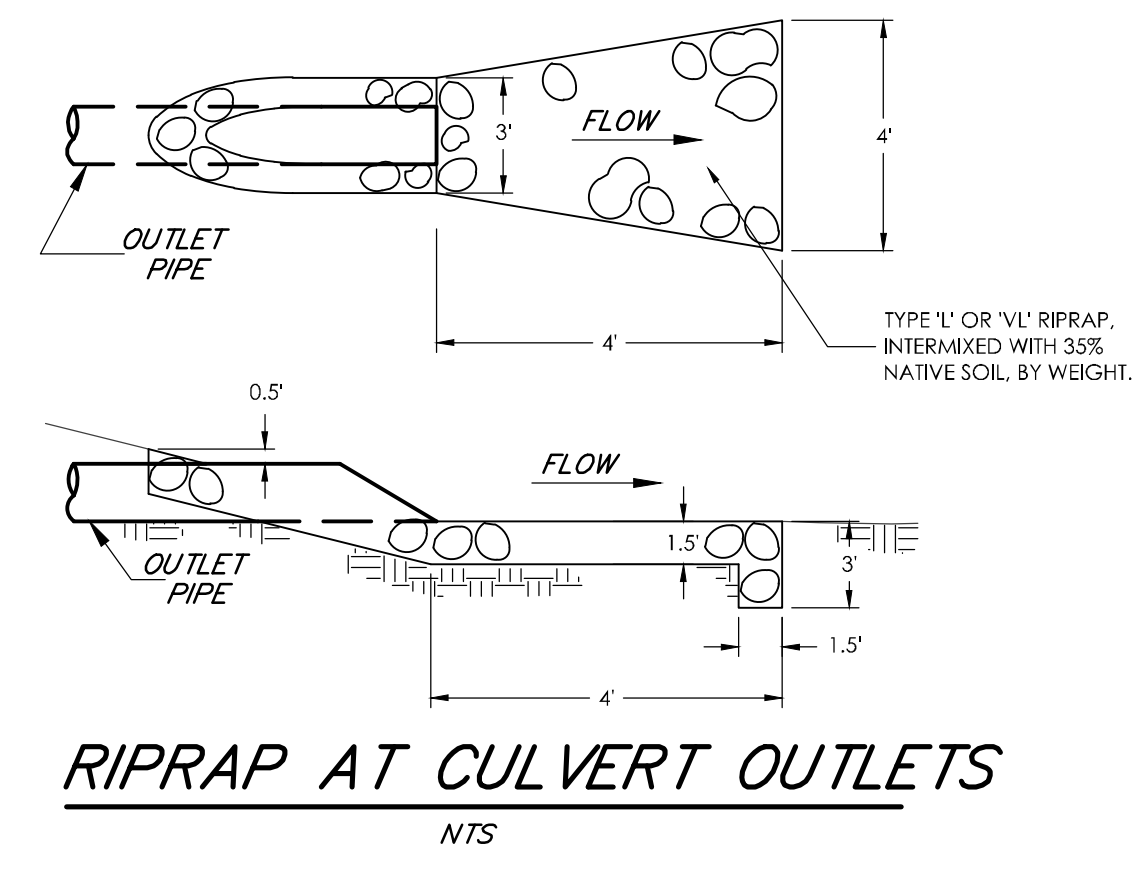


SECTION B-B

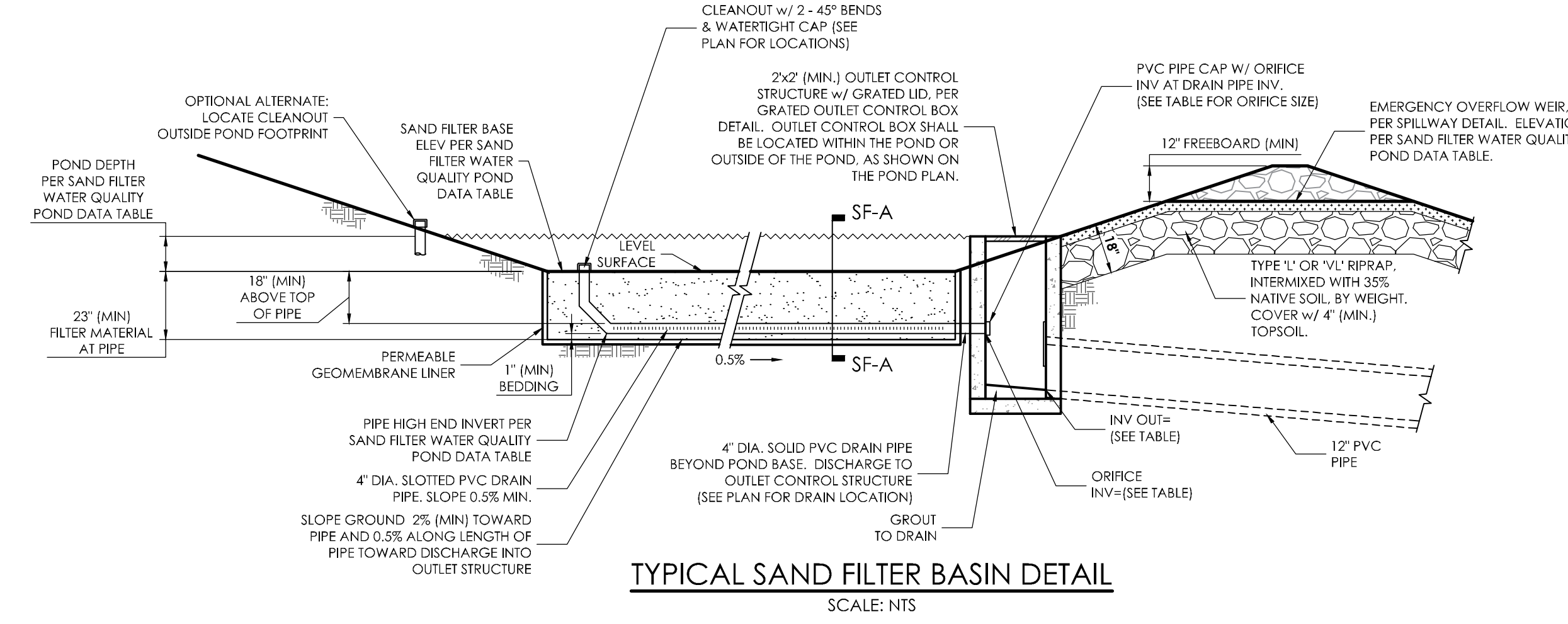


SECTION C-C

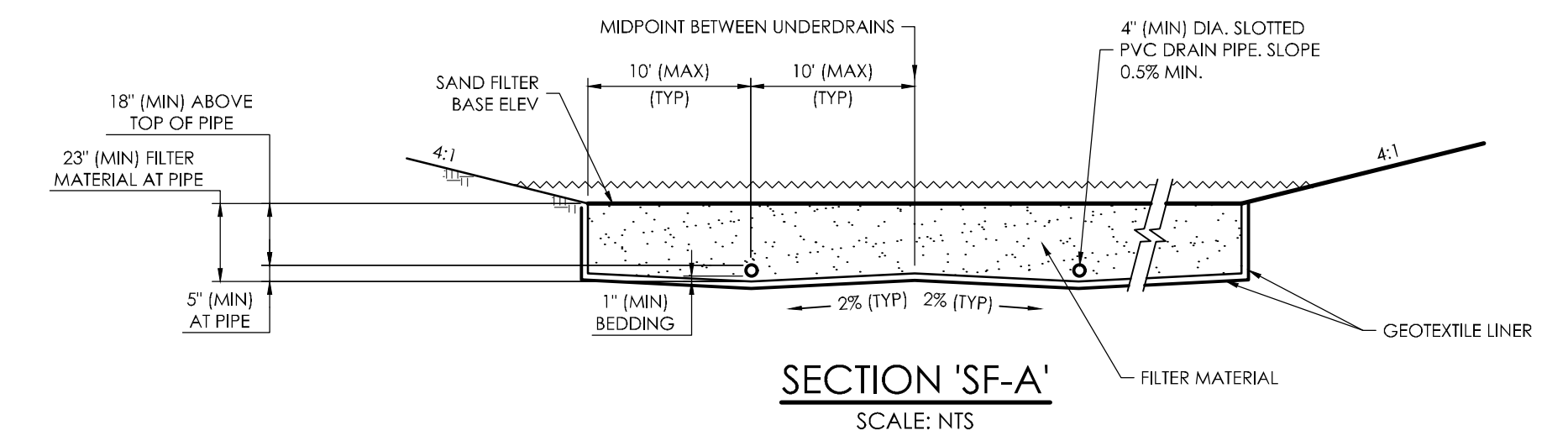
SAND FILTER BASIN OUTLET STRUCTURE DETAILS (POND C2)
SCALE: 1" = 2'



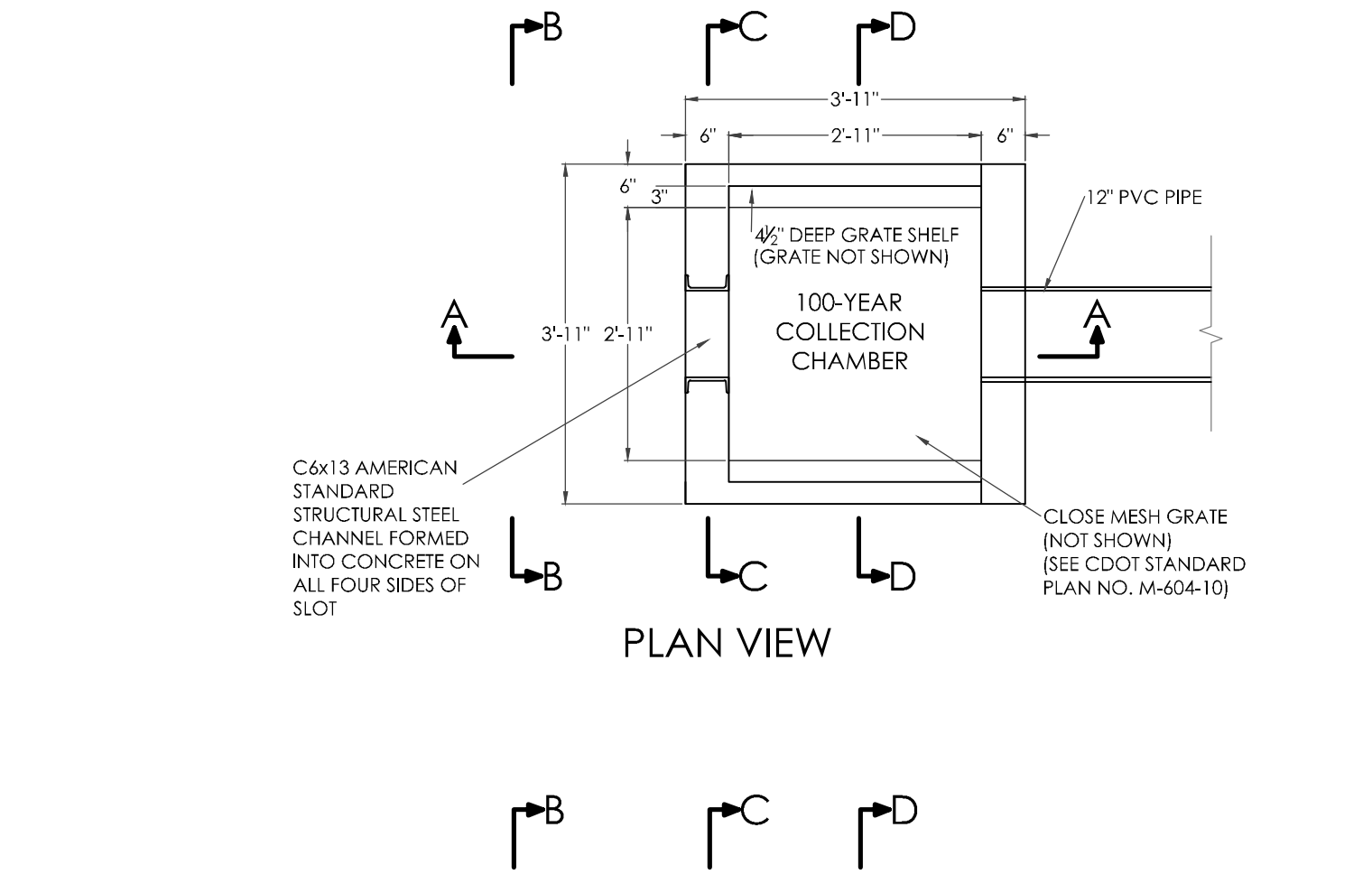
RIPRAP AT CULVERT OUTLETS
NTS



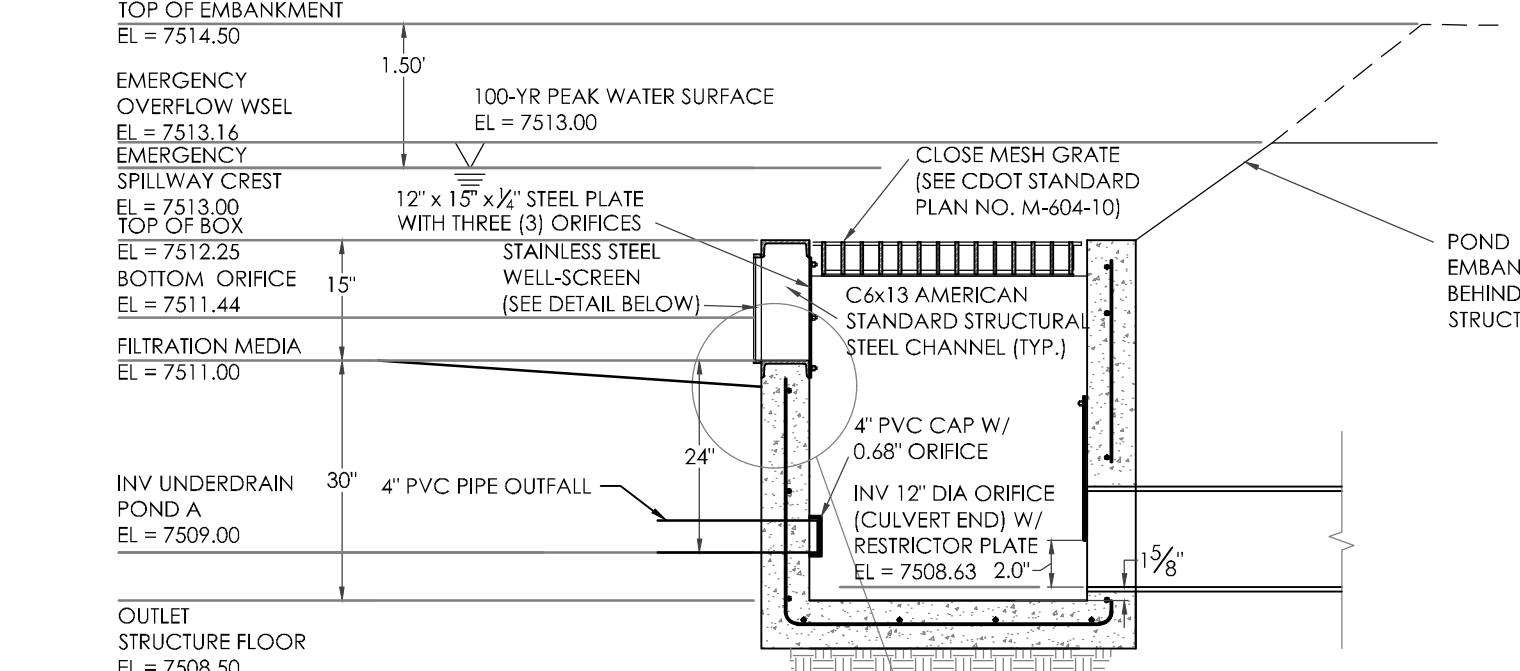
TYPICAL SAND FILTER BASIN DETAIL
SCALE: NTS



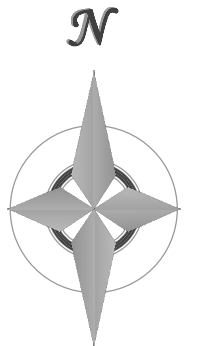
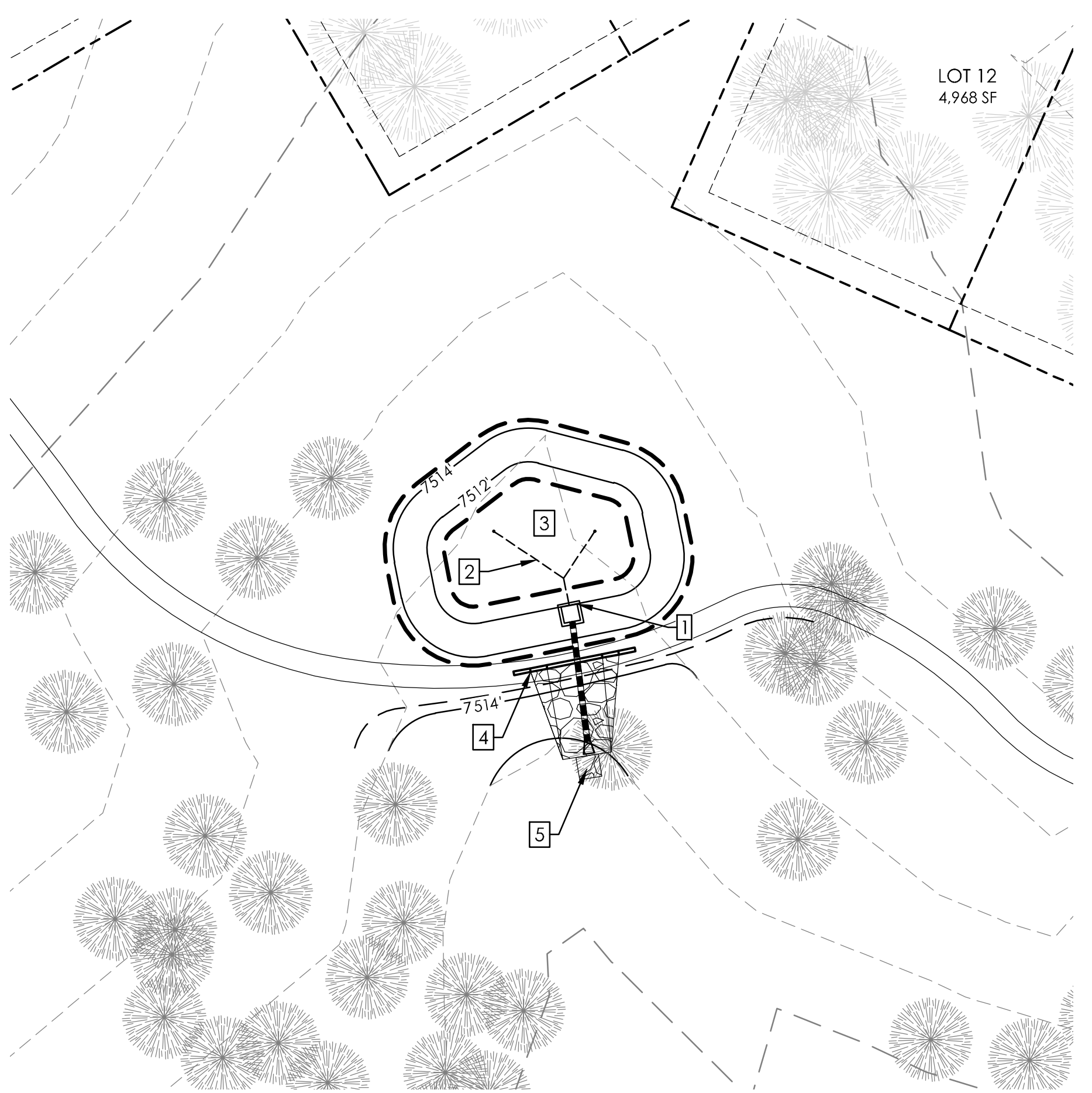
SECTION 'SF-A'
SCALE: NTS



PLAN VIEW



SECTION A-A



EXTENDED DETENTION SAND
FILTER BASIN DETAIL (POND C2)
SCALE: 1" = 20'

- NOTE LEGEND:
1. INSTALL OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
 2. INSTALL 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
 3. SAND FILTER (SEE DETAIL)
 4. 20" WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
 5. INSTALL 4' X 4' TYPE VL OR L SOIL RIP-RAP PAD

TOP OF EMBANKMENT
EL = 7514.50

EMERGENCY OVERFLOW WESEL
EL = 7513.14

EMERGENCY SPILLWAY CREST
EL = 7513.00

TOP OF BOX
EL = 7512.25

BOTTOM ORIFICE
EL = 7511.44

FILTRATION MEDIA
EL = 7511.00

INV UNDERDRAIN POND A
EL = 7509.00

OUTLET STRUCTURE FLOOR
EL = 7508.50

100-YR PEAK WATER SURFACE
EL = 7513.00

12" x 15" x 1/2" STEEL PLATE WITH THREE (3) ORIFICES WITH STAINLESS STEEL WELL-SCREEN (SEE DETAIL BELOW)

CLOSE MESH GRATE (SEE CDOT STANDARD PLAN NO. M-604-10)

C6x13 AMERICAN STANDARD STRUCTURAL STEEL CHANNEL FORMED INTO CONCRETE ON ALL FOUR SIDES OF SLOT

4" PVC CAP W/ 0.68" ORIFICE

INV 12" DIA ORIFICE (CULVERT END) W/ RESTRICTOR PLATE
EL = 7508.63 2.0'

4" PVC PIPE OUTFALL

36" x 1" PLAT BAR WELLSCREEN FRAME ATTACH TO CHANNEL BY INTERMITTENT WELDS

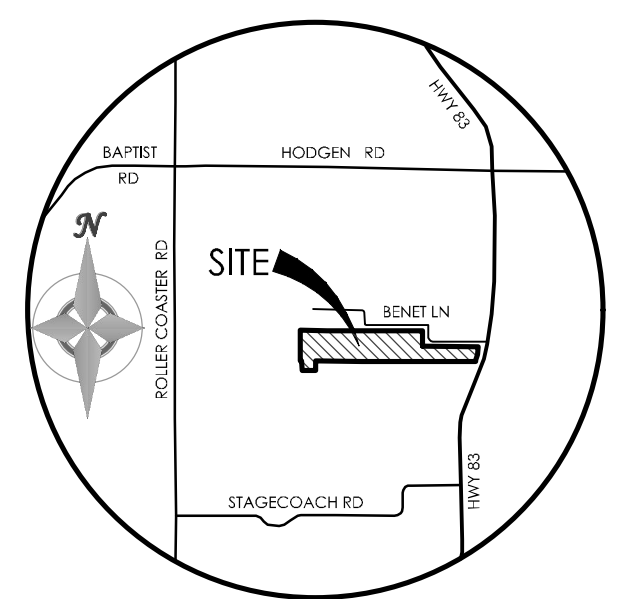
STAINLESS STEEL WELL-SCREEN SUPPORT RODS, JOINTS/SCREEN #156 SHAPED SUPPORT RODS, ON 10" CENTERS

STAINLESS STEEL WELLSCREEN, JOINTS/SCREEN #93 VIE-WIRE WITH 0.14" WIRE SLOT OPENING

POND EMBANKMENT BEHIND OUTLET STRUCTURE

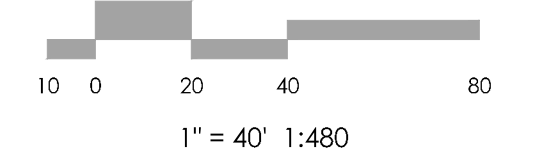
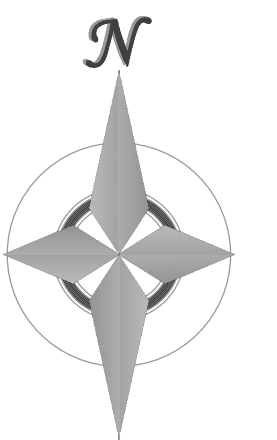
SUBGRADE COMPACTED TO MIN.: 95% ASTM D-698, ± 2% OR 90% ASTM D-1557, ± 2%

LOT 12
4,968 SF



VICINITY MAP
NOT TO SCALE

BENCHMARK



1" = 40' 1:480

MVE, INC.
ENGINEERS / SURVEYORS

1903 Library Street, Suite 200 Colorado Springs, CO 80909 719.635.5736

REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

**SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY**

**GRADING & EROSION
CONTROL PLAN
EROSION CONTROL**

C-8 MVE PROJECT 61087
MVE DRAWING -GEC-EC

DECEMBER 16, 2019
SHEET 8 OF 9

PUDSP-19-002

BMP LEGEND

MAP SYMBOL	KEY	DESCRIPTION
	(ED/DS)	EARTH DIKE / DRAINAGE SWALE (FINAL)
	(SF)	SILT FENCE (INITIAL)
	(SCL)	SEDIMENT CONTROL LOG (INTERIM)
	(SBB)	STRAW BALE BARRIER (INTERIM)
	(VTC)	VEHICLE TRACKING CONTROL (INITIAL)
		LIMITS OF CONSTRUCTION SITE BOUNDARIES
		LIMITS OF CUT/FILL/NO GRADE CHANGE
		LIMITS OF SOIL TYPE

BMP LEGEND

MAP SYMBOL	KEY	DESCRIPTION
	(SB)	TEMPORARY SEDIMENT BASIN (INITIAL)
	(PRR)	PERMANENT RIPRAP PROTECTION (FINAL) (SEE CONSTRUCTION PLANS)
	(SSA)	STABILIZED STAGING AREA (INITIAL)

add CWA to the legend.

Label the slopes into the SFB's; slopes steeper than 4:1 require Erosion control blankets (ECB). Also show the slope on sheets 5, 6 & 7. detail sheets.

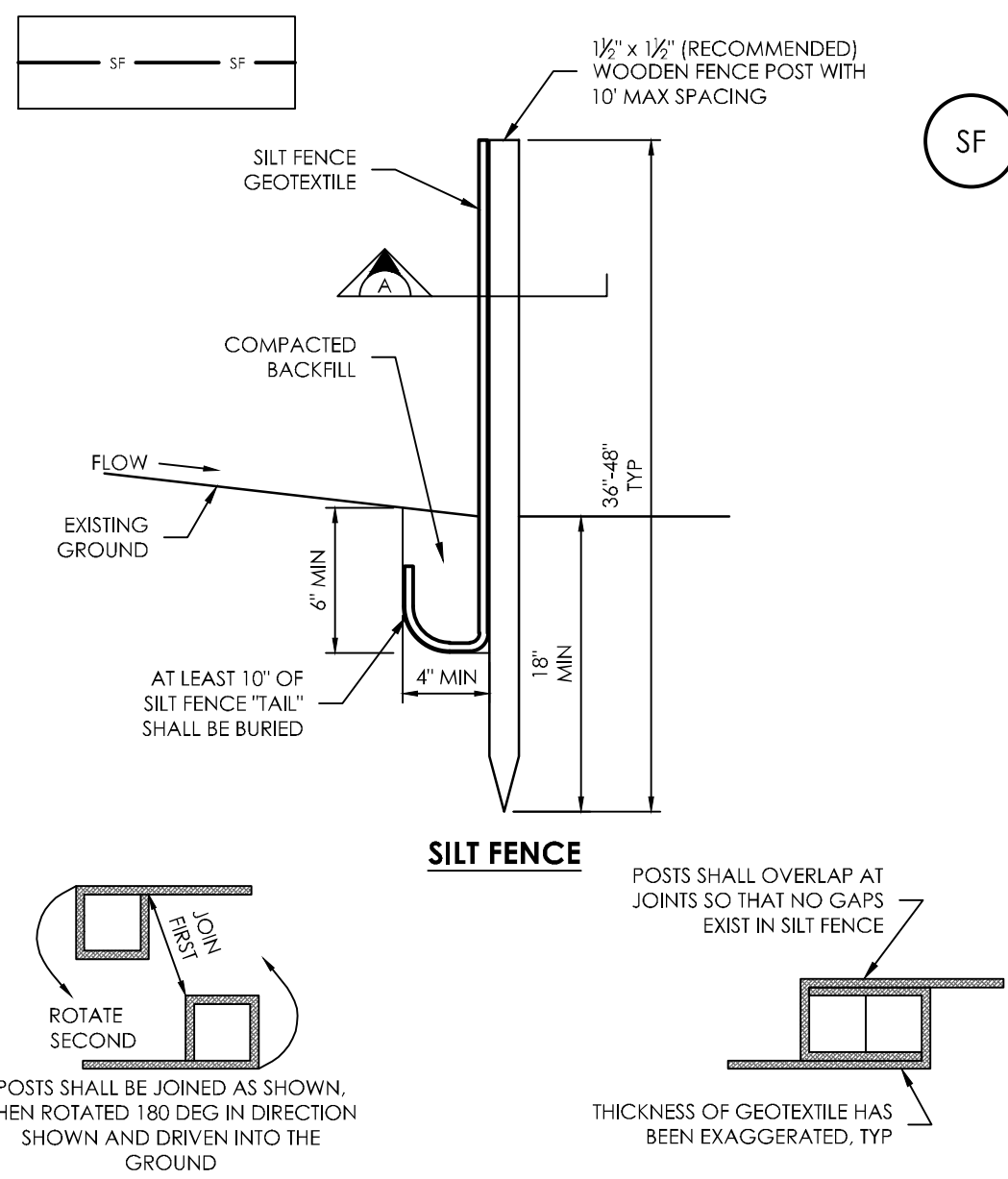
TREE LEGEND

	EXISTING PONDEROSA PINE TREE TO REMAIN
	EXISTING PONDEROSA PIPE TREE TO BE REMOVED (CLOUDED AREAS INDICATE AREAS OF TREE REMOVAL AS NECESSARY FOR DEVELOPMENT)

Label existing contours.

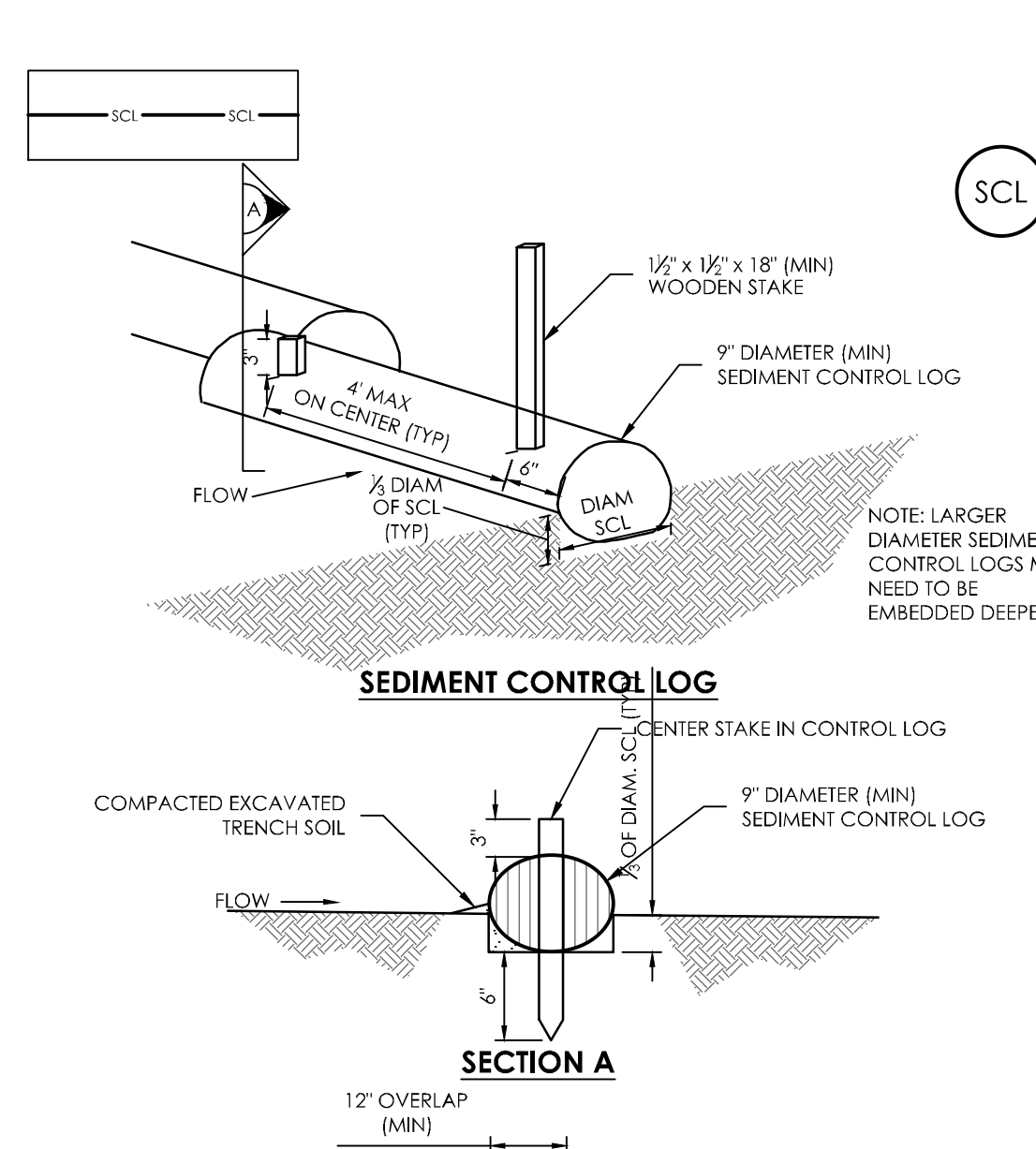
EROSION CONTROL DATA

TIMING	ANTICIPATED START & COMPLETION TIME PERIOD OF SITE GRADING	NOV 2019 TO MARCH 2020
	EXPECTED DATE ON WHICH FINAL STABILIZATION WILL BE COMPLETED	FALL 2020
AREAS	TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED	3.61 ACRES
RECEIVING WATERS	NAME OF RECEIVING WATERS	SMITH & BLACK SQUIRREL CREEKS
SOIL DATA	PRIMARY SOIL DESCRIPTION	KETTLE GRAVELLY LOAMY SAND
	PERMEABILITY	RAPID
	SURFACE RUNOFF	MEDIUM
	HAZARD OF EROSION	MODERATE
	HYDROLOGIC SOIL GROUP	B
	EXISTING PERCENT IMPERVIOUS	0.0%
	DEVELOPED PERCENT IMPERVIOUS	7.44%



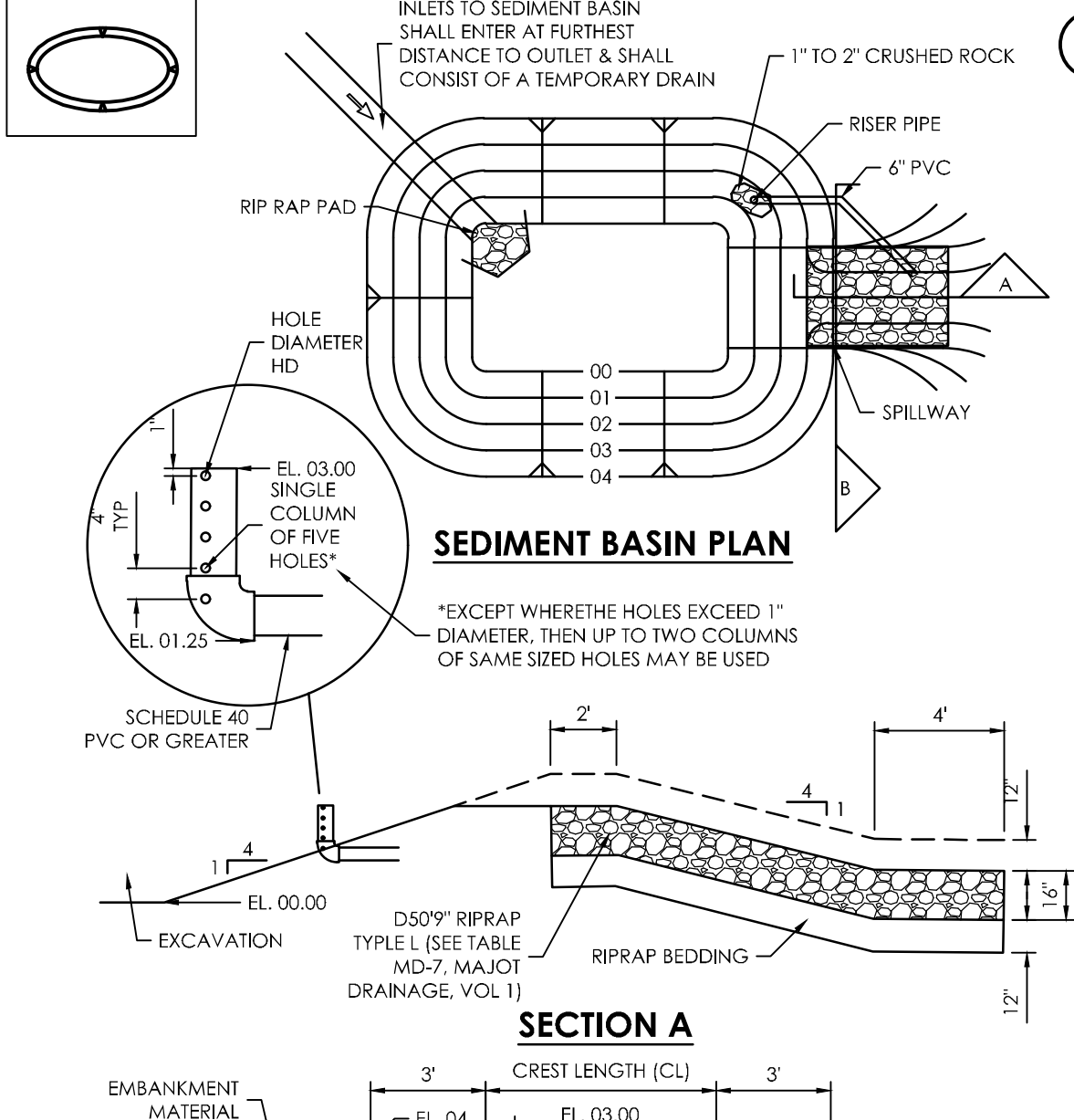
SECTION A SF-1. SILT FENCE

- SILT FENCE INSTALLATION NOTES:**
- SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
 - A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
 - COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTATION SHALL BE SUCH THAT SILT FENCE BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
 - SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
 - SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING F 1 HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
 - AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J" HOOK. THE "J" HOOK EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
 - SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- SILT FENCE MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
 - REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
 - SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
 - WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.



SECTION A SCL-1. SEDIMENT CONTROL LOG

- SEDIMENT CONTROL LOG INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
 - SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.
 - SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELISOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
 - SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
 - IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING.
 - THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
 - FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.
- SEDIMENT CONTROL LOG MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
 - SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.



SEDIMENT BASIN PLAN

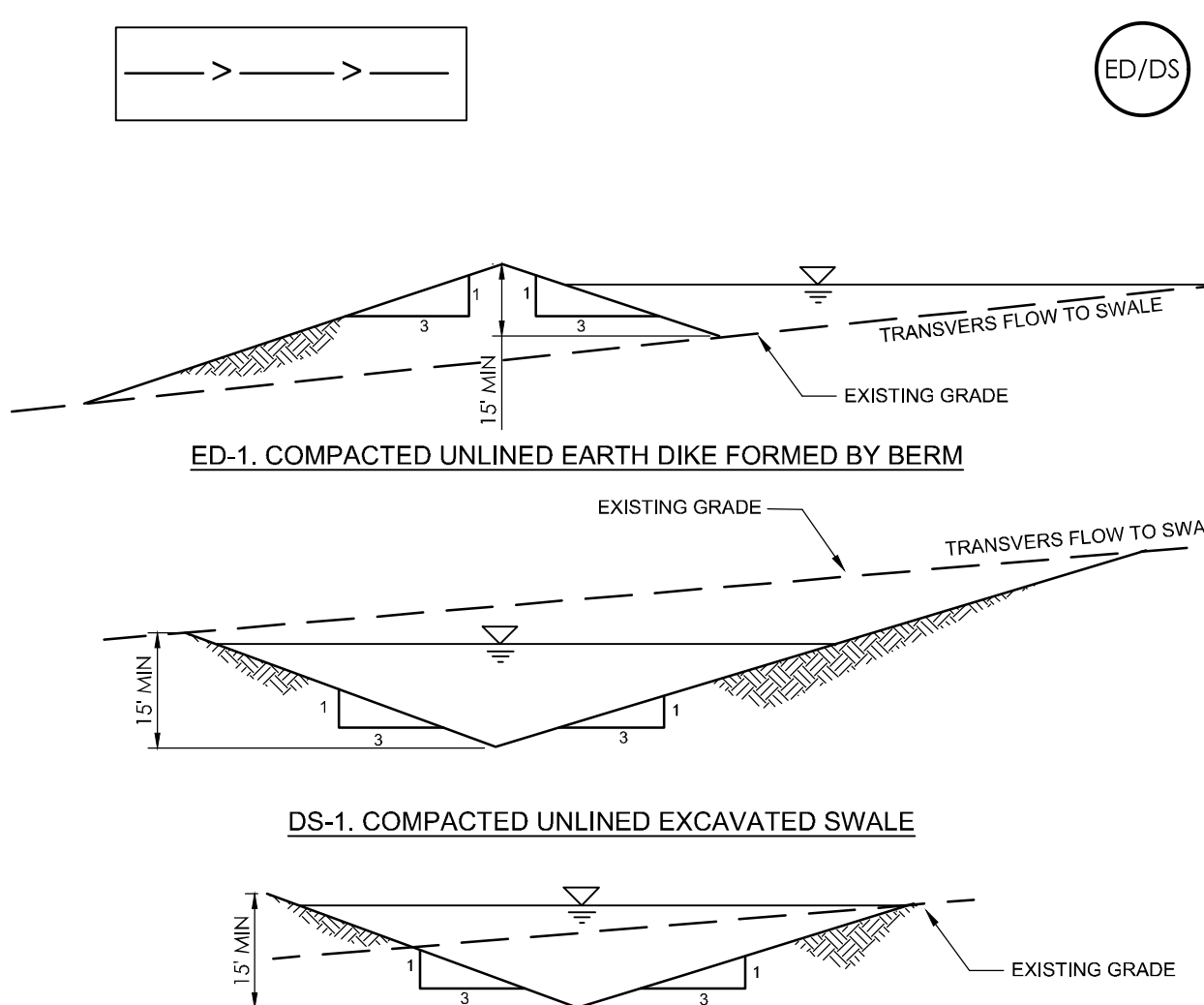
- SEDIMENT BASIN INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION OF SEDIMENT BASIN.
 - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
 - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
 - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
 - FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
 - SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON BASINS AS A STORMWATER CONTROL.
 - EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
 - EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
 - PIPE SCH 40 OR GREATER SHALL BE USED.
 - THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 1 A.CRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 1A.CRES.

UPSTREAM DRAINAGE AREA (ROUNDED TO NEAREST ACRE), (AC)	BASIN BOTTOM WIDTH (W), (FT)	SPILLWAY CREST LENGTH (CL), (FT)	HOLE DIAMETER (HD), (IN)
1	12 1/2	2	9/32
2	21	3	13/16
3	28	5	1/2
4	33 1/2	8	9/16
5	38 1/2	8	21/32
6	43	9	21/32
7	47 1/4	11	25/32
8	51	12	27/32
9	55	13	7/8
10	58 1/4	15	15/16
11	61	16	31/32
12	64	18	1
13	67 1/2	19	1 1/16
14	70 1/2	21	1 1/8
15	73 1/4	22	1 3/16

- SEDIMENT BASIN MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS. TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
 - SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
 - WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAILS ADOPTED FROM DOUGLAS COUNTY, COLORADO.)

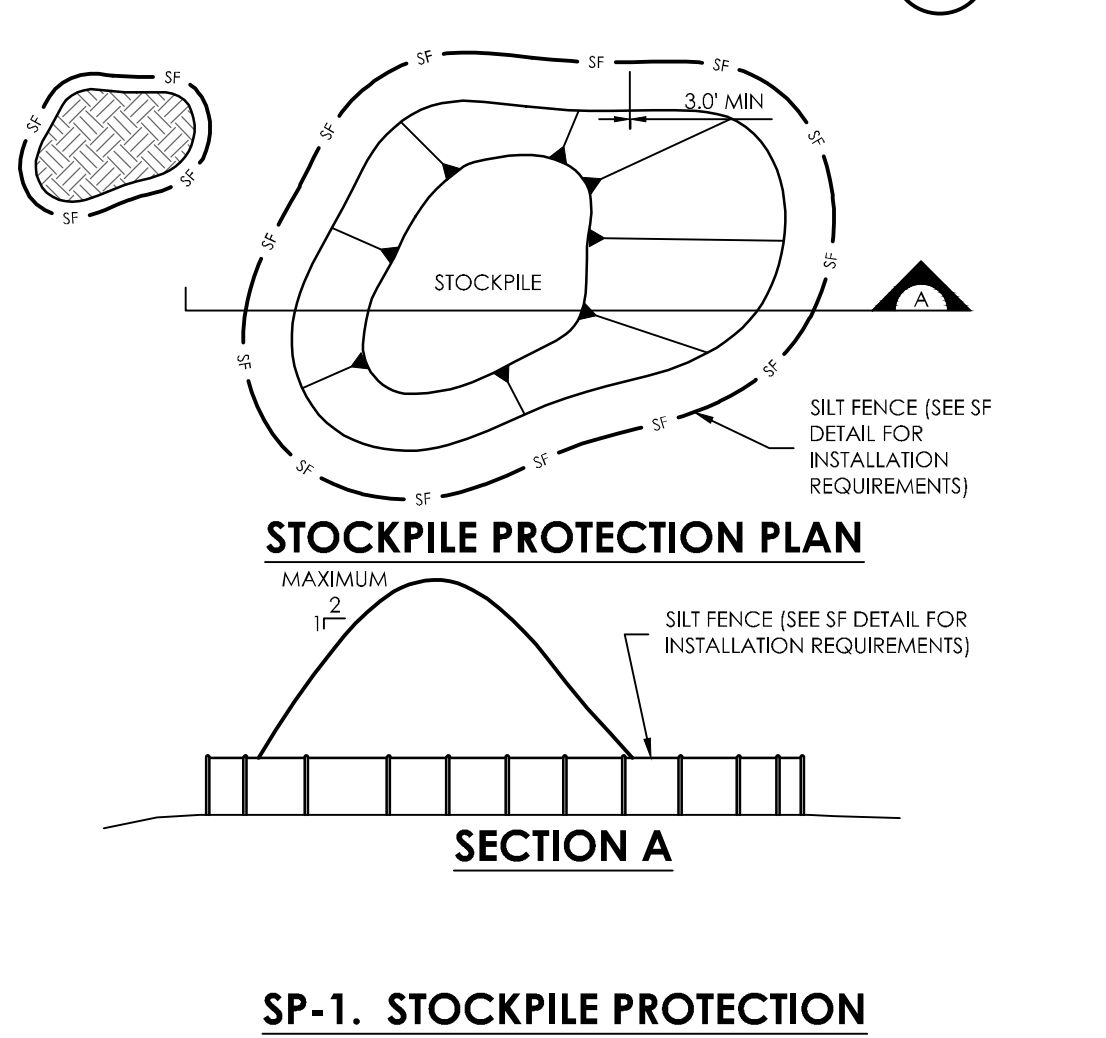
Maintenance?

- SEDIMENT BASIN MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS. TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
 - SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
 - WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAILS ADOPTED FROM DOUGLAS COUNTY, COLORADO.)



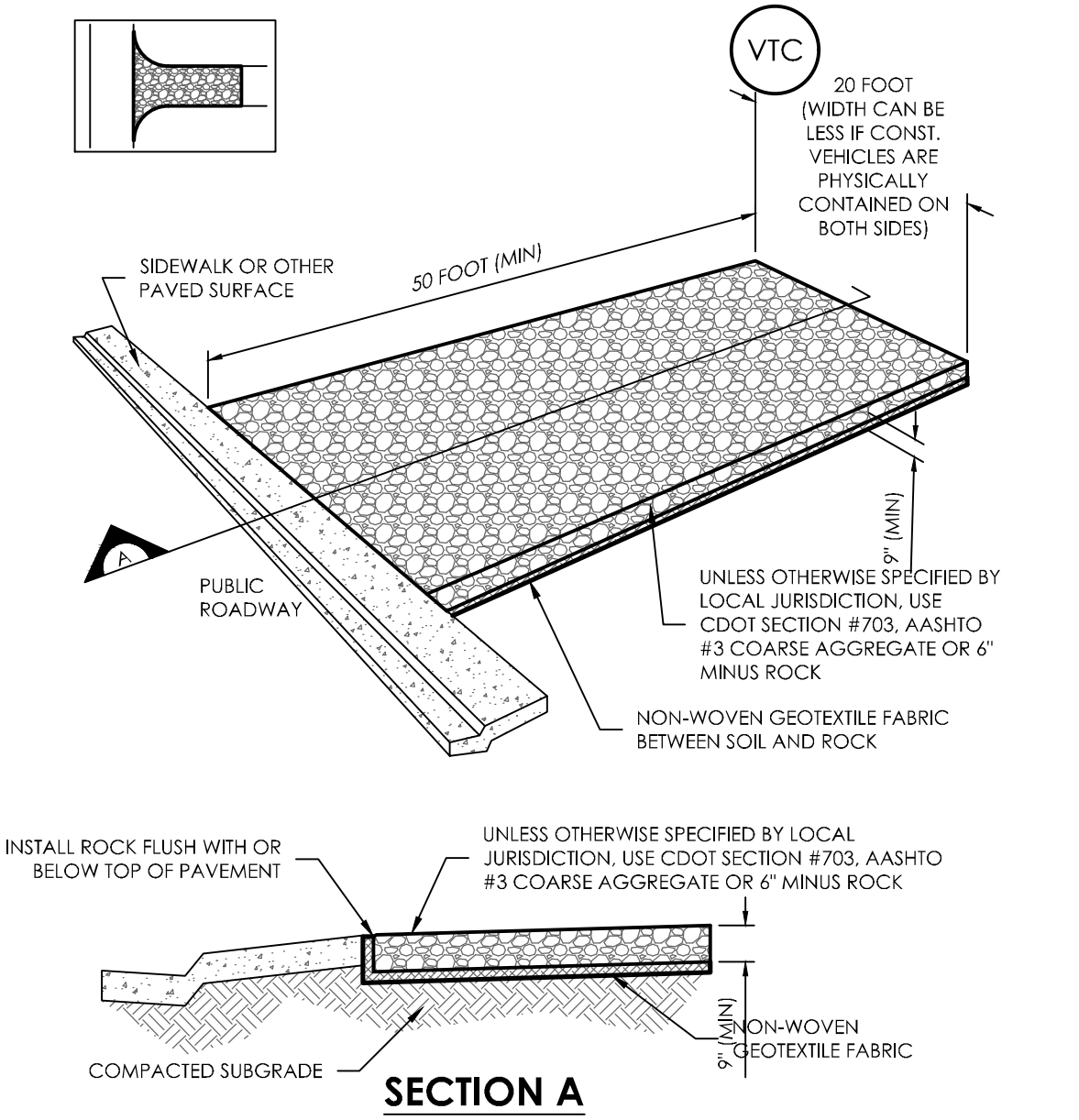
Earth Dikes and Drainage Swales (ED/DS)

- ED-1. COMPACTED UNLINED EARTH DIKE FORMED BY BERM**
- DS-1. COMPACTED UNLINED EXCAVATED SWALE**
- DS-2. COMPACTED UNLINED SWALE FORMED BY CUT AND FILL**
- Earth Dikes and Drainage Swales (ED/DS)**
NOT TO SCALE
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SWALES SHALL REMAIN IN PLACE UNTIL THE END OF CONSTRUCTION; IF APPROVED BY LOCAL JURISDICTION, SWALES MAY BE LEFT IN PLACE.
 - WHEN A SWALE IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED, AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.



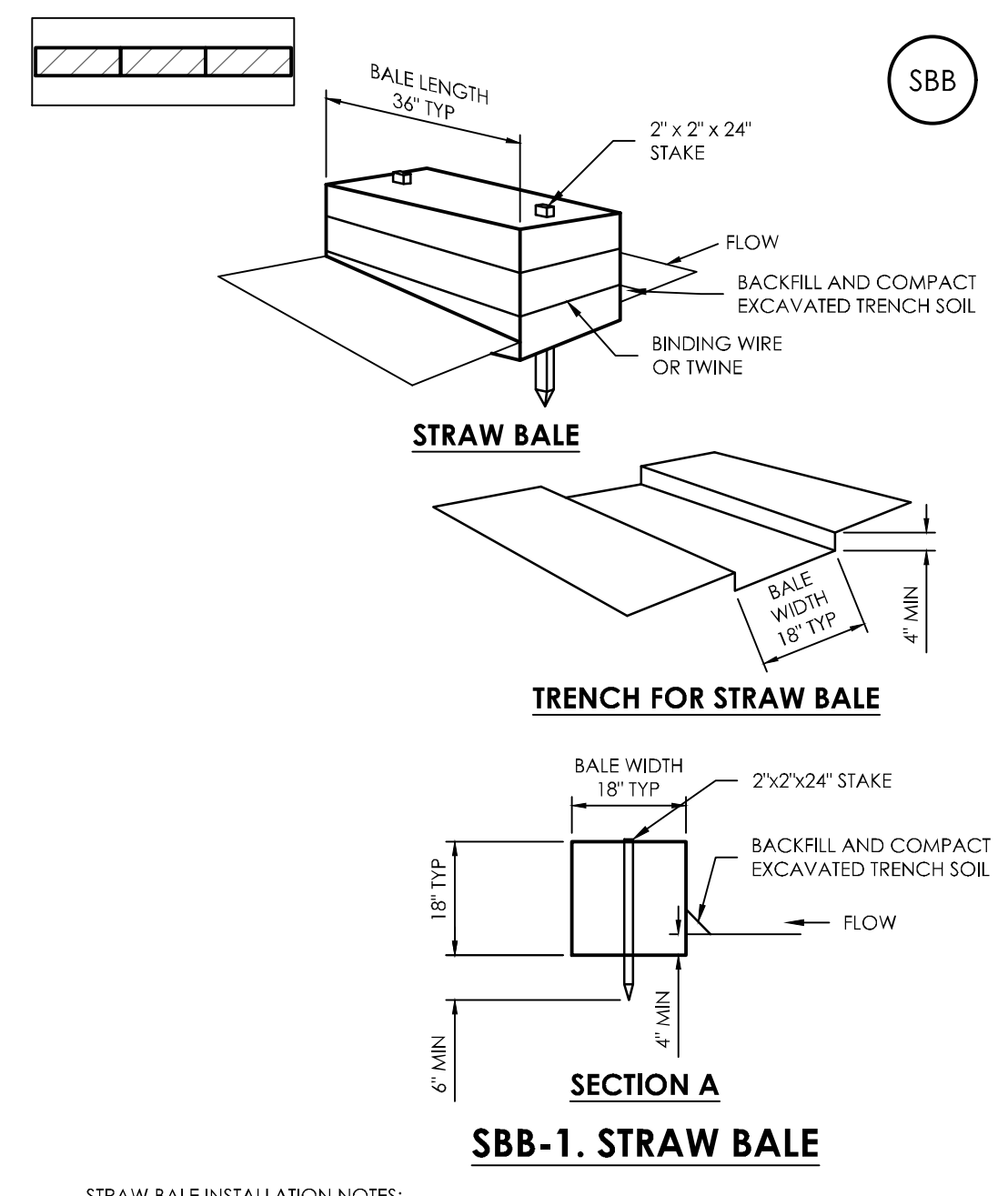
SECTION A SP-1. STOCKPILE PROTECTION

- STOCKPILE PROTECTION INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION OF STOCKPILES.
 - TYPE OF STOCKPILE PROTECTION.
 - INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
 - STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILES ARE PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
 - FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.
- STOCKPILE PROTECTION MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
 - STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.



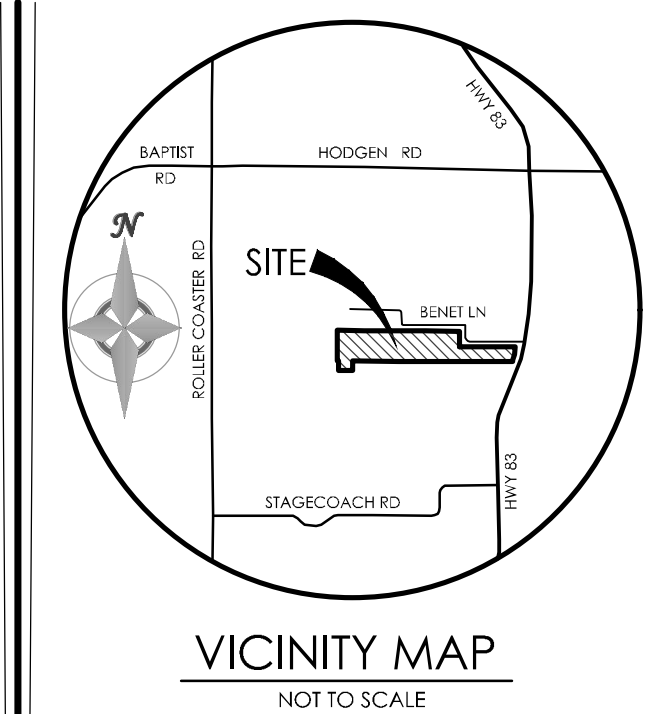
SECTION A

- STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION OF CONSTRUCTION ENTRANCES/EXITS.
 - TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
 - CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
 - A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
 - STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
 - A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
 - UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" MINUS ROCK.
- STABILIZED CONSTRUCTION ENTRANCE EXIT MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
 - SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.



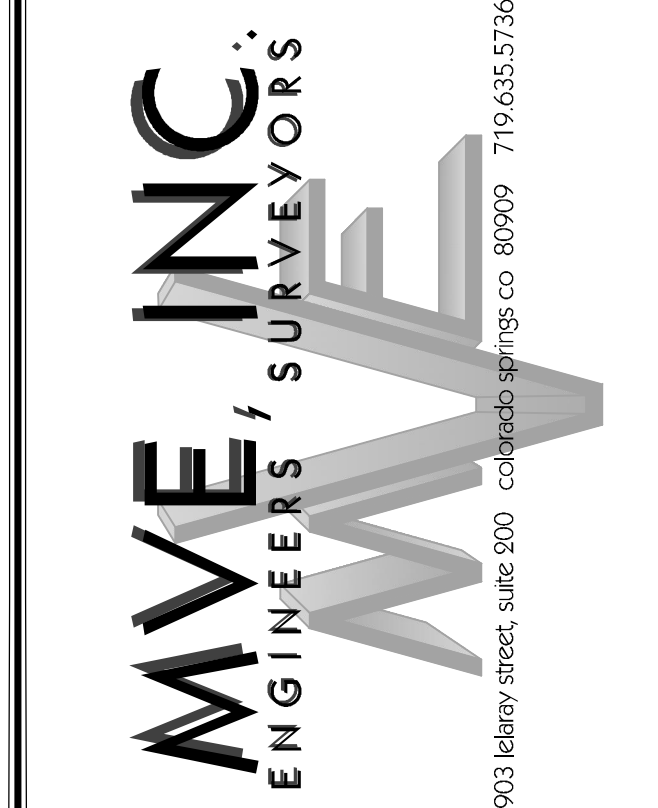
SECTION A SBB-1. STRAW BALE

- STRAW BALE INSTALLATION NOTES:**
- SEE PLAN VIEW FOR LOCATION(S) OF STRAW BALES.
 - STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.
 - STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
 - WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.
 - STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"x18"x18".
 - A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALES. ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALES) AND COMPACTED.
 - TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"x2"x24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.
- STRAW BALE MAINTENANCE NOTES:**
- INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.
 - SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE STRAW BALE BARRIER.
 - STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.



VICINITY MAP
NOT TO SCALE

BENCHMARK



REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

SANCTUARY OF PEACE
RESIDENTIAL COMMUNITY

GRADING & EROSION
CONTROL PLAN
EROSION DETAIL

C-9 MVE PROJECT 610ED
MVE DRAWING -GEC-CS

DECEMBER 16, 2019
SHEET 9 OF 9

PUDSP-19-002

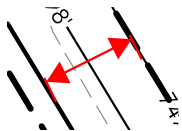
GEC V_3 redlines.pdf Markup Summary

Steve Kuhster (9)

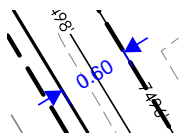


Subject: text box
Page Label: [9] 61087-GEC-ED-C-9
Author: Steve Kuhster
Date: 1/22/2020 10:00:06 AM
Status:
Color: ■
Layer:
Space:

Maintenance?



Subject: Dimension
Page Label: [6] 61087-GEC-PD2-C-6
Author: Steve Kuhster
Date: 1/22/2020 10:07:56 AM
Status:
Color: ■
Layer:
Space:



Subject: Length Measurement
Page Label: [6] 61087-GEC-PD2-C-6
Author: Steve Kuhster
Date: 1/22/2020 10:08:34 AM
Status:
Color: ■
Layer:
Space:

0.60

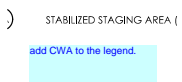


Subject: arrow & box
Page Label: [8] 61087-GEC-EC-C-8
Author: Steve Kuhster
Date: 1/22/2020 10:19:18 AM
Status:
Color: ■
Layer:
Space:

Label the slopes into the SFB's; slopes steeper than 4:1 require Erosion control blankets (ECB). Also show the slope on sheets 5,6 & 7. detail sheets.



Subject: EPC ENG Review
Page Label: [1] 61087-GEC-CS-C-1
Author: Steve Kuhster
Date: 1/22/2020 10:31:53 AM
Status:
Color: ■
Layer:
Space:



Subject: text box
Page Label: [8] 61087-GEC-EC-C-8
Author: Steve Kuhster
Date: 1/22/2020 9:50:37 AM
Status:
Color: ■
Layer:
Space:

add CWA to the legend.

Label existing contours.

Subject: text box
Page Label: [3] 61087-GEC-GP-C-3
Author: Steve Kuehster
Date: 1/22/2020 9:52:49 AM
Status:
Color: ■
Layer:
Space:

Label existing contours.

AS OF TREE REMOVAL AS NECESSARY FOR L

Label existing contours.

Subject: text box
Page Label: [8] 61087-GEC-EC-C-8
Author: Steve Kuehster
Date: 1/22/2020 9:53:20 AM
Status:
Color: ■
Layer:
Space:

Label existing contours.

FOR TREE REMOVAL OF
3ER THAN 15 ACRES.

ASIN MALIGNANCE NOTE

CT BMPS EACH WORKDA

Subject: Highlight
Page Label: [9] 61087-GEC-ED-C-9
Author: Steve Kuehster
Date: 1/22/2020 9:59:20 AM
Status:
Color: ■
Layer:
Space:

MALIGNANCE