

GENERAL NOTES

- WORK IN THIS PROJECT SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF SUSQUEHANNA TOWNSHIP PLUS PENNDOT STANDARDS AND SPECIFICATIONS. IN CASE OF CONFLICT, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR, DURING THE PERFORMANCE OF ALL WORK ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT, IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
- THE DEVELOPER WILL COMPLY WITH ALL APPLICABLE SUSQUEHANNA TOWNSHIP ORDINANCES IN EFFECT AT THE TIME OF THE SUBMISSION OF THE PLANS.
- THE CONTRACTOR SHALL NOTIFY SUSQUEHANNA TOWNSHIP AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK AND 72 HOURS PRIOR TO EACH REQUEST FOR INSPECTION.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ALL EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL CALL THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 AT LEAST 3 WORKING DAYS PLUS 2 HOURS PRIOR TO ANY EXCAVATION.
- ELEVATIONS, DIMENSIONS, AND THE LOCATIONS OF LINEAR FEATURES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER. IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
- THE BASE MAP INFORMATION CONTAINED IN THESE DRAWINGS WAS TAKEN FROM A SKELLY AND LOY SURVEY PERFORMED IN 2018-2019.
- THE SOURCE OF TITLE FOR THE PARCEL (T.M.P. # 62-026-029) IS INSTRUMENT # 20170000313.
- THE PROJECT SITE IS SERVED BY PUBLIC WATER SUPPLY.
- THE PROJECT SITE IS SERVED BY PUBLIC SEWER.
- THE CONTRACTOR SHALL NOTIFY THE DAUPHIN COUNTY CONSERVATION DISTRICT 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- ANY SOIL EROSION CONTROL MEASURES, IN ADDITION TO THOSE OUTLINED IN THESE PLANS, WHICH ARE DEEMED NECESSARY BY THE TOWNSHIP OR THE DAUPHIN COUNTY CONSERVATION DISTRICT SHALL BE IMPLEMENTED IMMEDIATELY BY THE CONTRACTOR, AS DIRECTED BY AN AUTHORIZED OFFICIAL.
- HEAVY, SOLID CONTOUR LINES WITH ELEVATIONS LABELED REPRESENT FINAL GRADE OF IMPROVED SURFACE.
- ALL CUT SLOPES TO BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL. ALL FILL SLOPES TO BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL UNLESS SATISFACTORILY STABILIZED AS APPROVED BY THE DAUPHIN COUNTY CONSERVATION DISTRICT.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED WITH A MINIMUM OF 6 INCHES OF TOPSOIL AND SEEDED.
- ALL MATERIALS USED FOR FILL OR BACKFILL SHALL BE FREE OF WOOD, ROOTS, ROCKS, BOULDERS OR ANY OTHER NONCOMPACTIBLE SOIL TYPE MATERIAL. UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS AND REFUSE DEBRIS DERIVED FROM ANY SOURCE.
- MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE OR USED TO BACKFILL AROUND DRAINAGE STRUCTURES, IN UTILITY TRENCHES, OR IN ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST SPECIFIED IN ASTM STANDARD D-698. THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A CERTIFIED MATERIALS TESTING LABORATORY AND THE CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING THE LABORATORY.
- ALL EXCAVATIONS, INCLUDING TRENCHES, SHALL BE KEPT DRY TO PROTECT THEIR INTEGRITY.
- ALL CONSTRUCTION DEBRIS INCLUDING EXCESS EXCAVATED MATERIAL, SCRAP WOOD, BRICKS, BLOCKS, ETC. SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- THE HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83 AND VERTICAL DATUM IS NAVD 88. SURVEY CONTROL POINTS AND COORDINATE TABLE ARE SHOWN ON DRAWING NO. C-3.
- THE PA ONE-CALL HAS BEEN CONTACTED AND ANY KNOWN EASEMENTS, RIGHTS-OF-WAY, AND UTILITIES HAVE BEEN SHOWN ON THE PLANS. THE PA ONE-CALL SERIAL NUMBER FOR THIS PROJECT IS 20190042347.
- THE APPLICANT/DEVELOPER IS RESPONSIBLE FOR THE PAYMENT AND PLACEMENT OF ALL STREET AND TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS REQUIRED FOR THIS PROJECT AS DEEMED NECESSARY BY SUSQUEHANNA TOWNSHIP.
- THE OWNER OF THE LAND IS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF STORMWATER FACILITIES.
- THERE ARE NO FLOODPLAINS ON THIS PROPERTY PER FLOOD INSURANCE RATE MAP, MAP NUMBER 42043C0340D.
- A SEWAGE FACILITIES PLANNING MODULE HAS BEEN SUBMITTED TO THE SUSQUEHANNA TOWNSHIP SEWER AUTHORITY IN COMPLIANCE WITH THE REQUIREMENTS OF THE PA SEWAGE FACILITIES ACT AND CHAPTER 71 OF TITLE 25 OF THE PA CODE.
- SANITARY SEWER PLANS AS CONTAINED IN THIS PLAN SET HAVE BEEN SUBMITTED TO THE SUSQUEHANNA TOWNSHIP SEWER AUTHORITY FOR REVIEW AND APPROVAL.
- A ZONING PERMIT SHALL BE REQUIRED FOR THE PLAN.
- PRIOR TO THE ERECTION OF ANY SIGNS, A SIGN PLAN SHALL BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL.
- ALL TREES IDENTIFIED TO BE PRESERVED SHALL BE FIELD MARKED AND FENCED OFF FOR PROTECTION DURING CONSTRUCTION.
- NOTHING SHALL BE PLANTED, CONSTRUCTED, OR INSTALLED WITHIN AN EASEMENT THAT WILL AFFECT THE FUNCTIONALITY OF SAID EASEMENT.
- THE OWNER OF THE LAND GRANTS THE TOWNSHIP OR THEIR DESIGNEE ACCESS TO THE STORMWATER MANAGEMENT FACILITIES IN THE CASE OF AN EMERGENCY TO REPAIR FAILING FACILITY AND THE RIGHT TO INSPECT SAID STORMWATER FACILITIES LOCATED ON THE SITE FROM THE NEAREST PUBLIC RIGHT-OF-WAY UPON THE TOWNSHIP NOTIFYING SAID PROPERTY OWNERS.
- THE OVERFLOW PARK AREA AS SHOWN ON THE PLANS SHALL BE CONSTRUCTED AS A STABILIZED VEGETATIVE AREA.

TABLE OF SITE DATA

TYPE OF DEVELOPMENT:	WORSHIP CENTER AND COMMUNITY CENTER
ZONING DISTRICT:	R-4 RESIDENTIAL URBAN DISTRICT
TOTAL TRACT AREA:	4.59 AC
TOTAL AREA TO BE DEVELOPED:	4.59 AC
TOTAL AREA OF PROPOSED RECREATION:	N/A
TOTAL NUMBER OF LOTS:	1
TOTAL NUMBER OF DWELLING UNITS:	N/A
MINIMUM LOT SIZE PROPOSED:	N/A
PROPOSED WATER SUPPLY:	PUBLIC
PROPOSED SEWAGE DISPOSAL:	PUBLIC

ENVIRONMENTAL NOTES:

- CLEAN FILL IS DEFINED AS UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT SOLID MATERIAL. THIS INCLUDES SOIL, ROCK, STONE, AND DREDGED MATERIAL.
- ENVIRONMENTAL DUE DILIGENCE - REGARDING CLEAN FILL IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

SITE ANALYSIS

ZONING DISTRICT:	R-4 RESIDENTIAL URBAN DISTRICT
USE:	EXISTING: VACANT PROPOSED: WORSHIP CENTER AND COMMUNITY CENTER
WATER SUPPLY SOURCE:	PUBLIC WATER
SEWAGE DISPOSAL SOURCE:	PUBLIC SEWER
LIMIT OF DISTURBANCE:	3.05 AC.

ZONING REQUIREMENT:

	REQUIREMENT	PROPOSED
MIN. LOT AREA:	20,000 SF	199,940.40 SF
MIN LOT WIDTH AT BSL:	100'-0"	241.28'
MAX. BUILDING COVERAGE:	30%	6.32%
MIN. VEGETATIVE COVER:	30%	69.07%
MAX. IMPERVIOUS COVERAGE:	70%	30.94%
MAX. BUILDING HEIGHT:	35'-0"	18'-9 3/4"

BUILDING SETBACKS REQUIREMENT

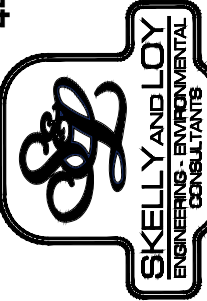
MIN. FRONT YARD:	50'-0"
MIN. SIDE YARD:	20'-0"
MIN. REAR YARD:	50'-0"
LANDSCAPE BUFFER:	15'-0"

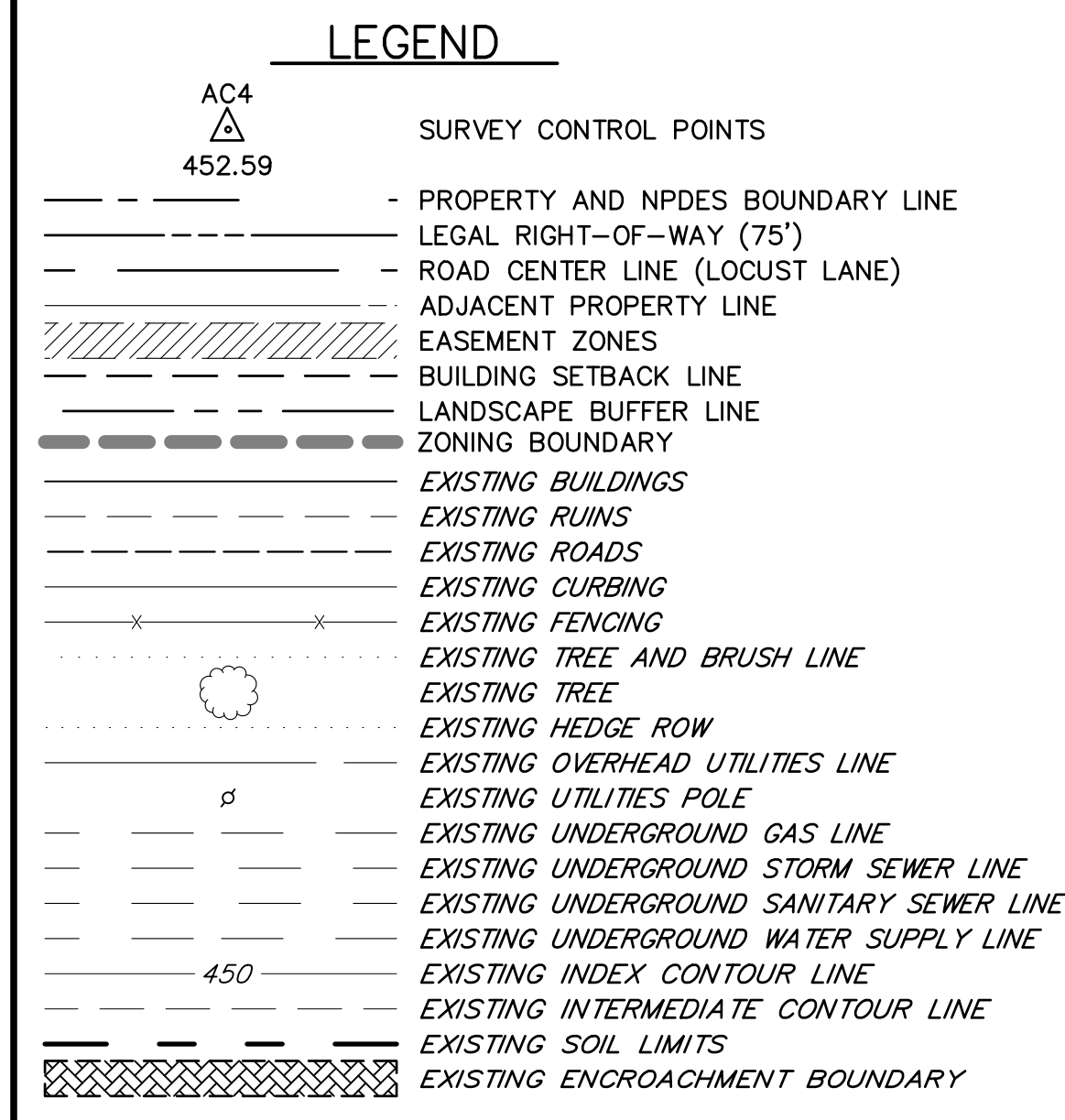
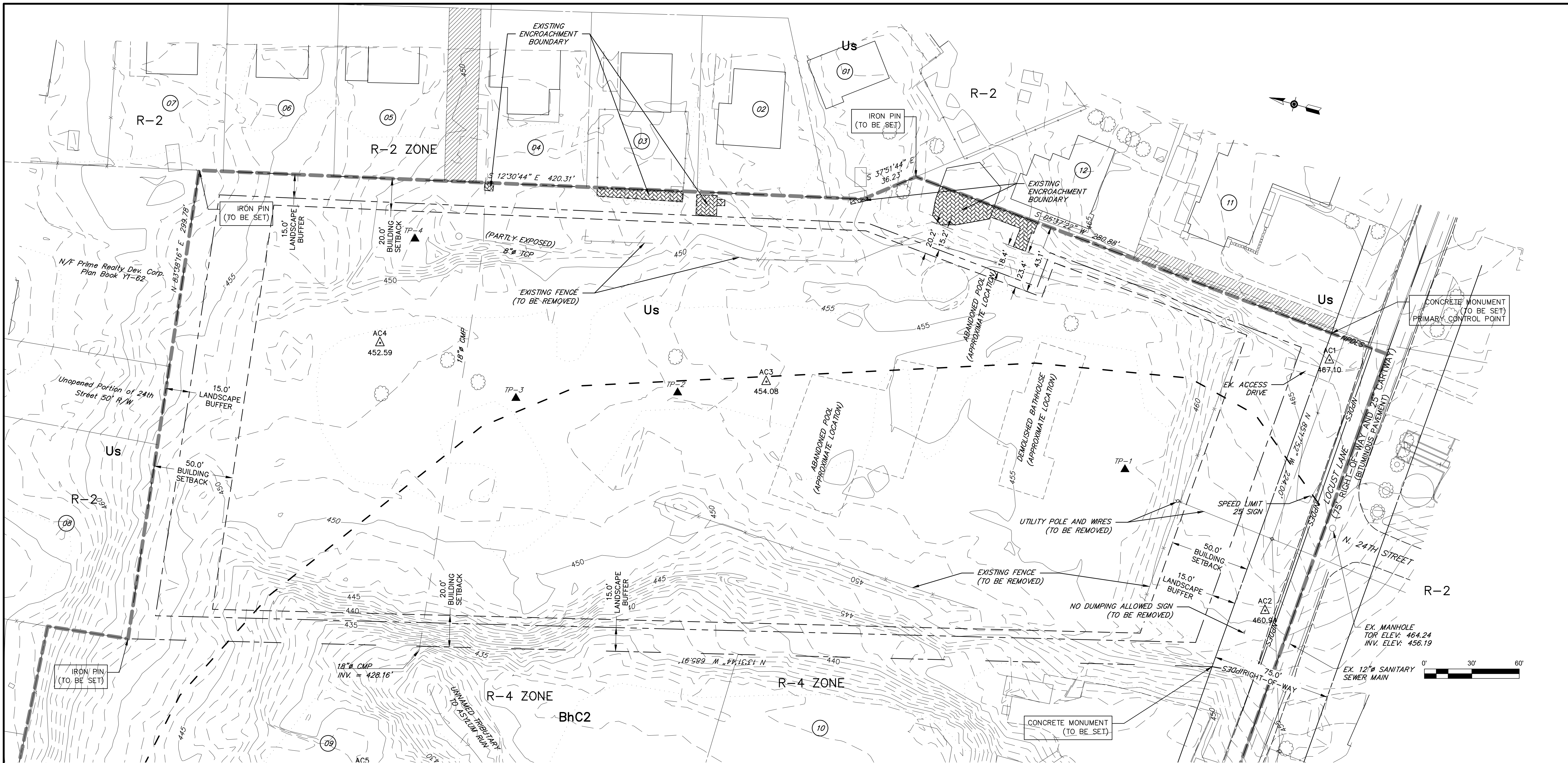
PARKING CALCULATIONS

CHURCH AND RELIGIOUS INSTITUTIONS:	1 SPACE FOR EACH 3.5 SEATS IN A PLACE OF WORSHIP
	REQUIREMENT PROPOSED
384 OCC / 3.5 =	110 SPACES 110 SPACES
HANDICAP SPACES:	5 SPACES 6 SPACES

AREA CALCULATIONS (POST DEVELOPMENT) EXCLUDING ROAD R/W'S

	ACRES	PERCENT OF LOT AREA
BUILDING AREA:	0.29 AC	6.32%
PAVEMENT / SIDEWALKS:	1.13 AC	24.62%
VEGETATED AREA:	3.17 AC	69.06%
TOTAL LOT AREA:	4.59 AC	100.00%

PROJECT NUMBER: R18-0633.000	TASK: 4	DATE: MAY 21, 2019	SUBTASK: -	FOR PERMITTING PURPOSE ONLY NOT RELEASED FOR CONSTRUCTION
				
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0593 FAX: (717) 232-1799 www.skellyloy.com				
"LAND DEVELOPMENT PLAN" FOR SOLID ROCK MISSIONARY BAPTIST CHURCH 2400 LOCUST LANE Dauphin County Susquehanna Township Pennsylvania				
DRAWING NO. C-2 SHEETS: 2 OF 20				
GENERAL NOTES AND SITE ANALYSIS				
DSGN G.C.C.G.	DFTSMN D.J.J.	CHKD B.A.S.	APPV G.C.C.G.	SCALE NO SCALE BY: APPV DATE



NOTES:

- ABANDONED POOL LOCATIONS SHOWN HEREON ARE ASSUMED TO HAVE BEEN "FILLED-IN" OR "BROKEN-UP" AND DEMOLISHED.
- SOIL TEST RESULTS

	LIMITING ZONE	INFILTRATION RATE
▲ TP-1	EL. 448.5	3.5 in/hr
▲ TP-2	EL. 443.8	3.5 in/hr
▲ TP-3	EL. 443.8	3.5 in/hr
▲ TP-4	-	3.5 in/hr

ON-SITE SOILS	
MAP UNIT SYMBOL	MAP UNIT NAME
BhC2	BERKS CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES
Us	URBAN LAND, SHALE MATERIALS

SURVEY CONTROL POINT LIST

NOTE: ALL MAPPING AND COORDINATES ARE LOCATED IN PENNSYLVANIA STATE PLANE NAD 83 SOUTH ZONE DATUM, AND ELEVATION DATA IS IN NAVD 88 DATUM.

DESCRIPTION	NORTHING	EASTING	ELEVATION
AC1	348,437.4850	2,218,404.7130	467.10
AC2	348,435.7970	2,218,241.1170	460.94
AC3	348,778.0080	2,218,299.3660	454.08
AC4	349,020.3140	2,218,259.8260	452.59
AC5	348,961.1310	2,217,995.8750	436.16

ADJACENT PROPERTY TABLE

PROPERTY ID	PROPERTY OWNER	DEED BOOK & PAGE	Plan Book/Page
01	MARGIE L. LAWSON	INS# 20100030195	W/12
02	LEONARD F. EVANS	3490 & 465	W/12
03	AMIE L. YAGER	INS# 20120038119	W/12
04	DEBBIE J. SEELEY	INS# 20150026198	W/12
05	CRYSTAL R. SMITH	2286 & 112	W/12
06	JOHN T. MADDEN	M-53 & 347	W/12
07	MAMIE L. WALKER	1151 & 248	W/12
08	JENELLE S. ROACH	INS# 20180017479	Y/62
09	SUSQUEHANNA TWP.	0-54 & 181	n/a
10	ROKITA PROP., LLC.	INS# 20130037963	n/a
11	EDDIE L. RUTH, SR.	INS# 20170004273	U/15
12	IVELISSE CLASS	INS# 20160034097	n/a

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PROJECT NUMBER: R18-0633.000
 TASK: 4
 DATE: MAY 21, 2019

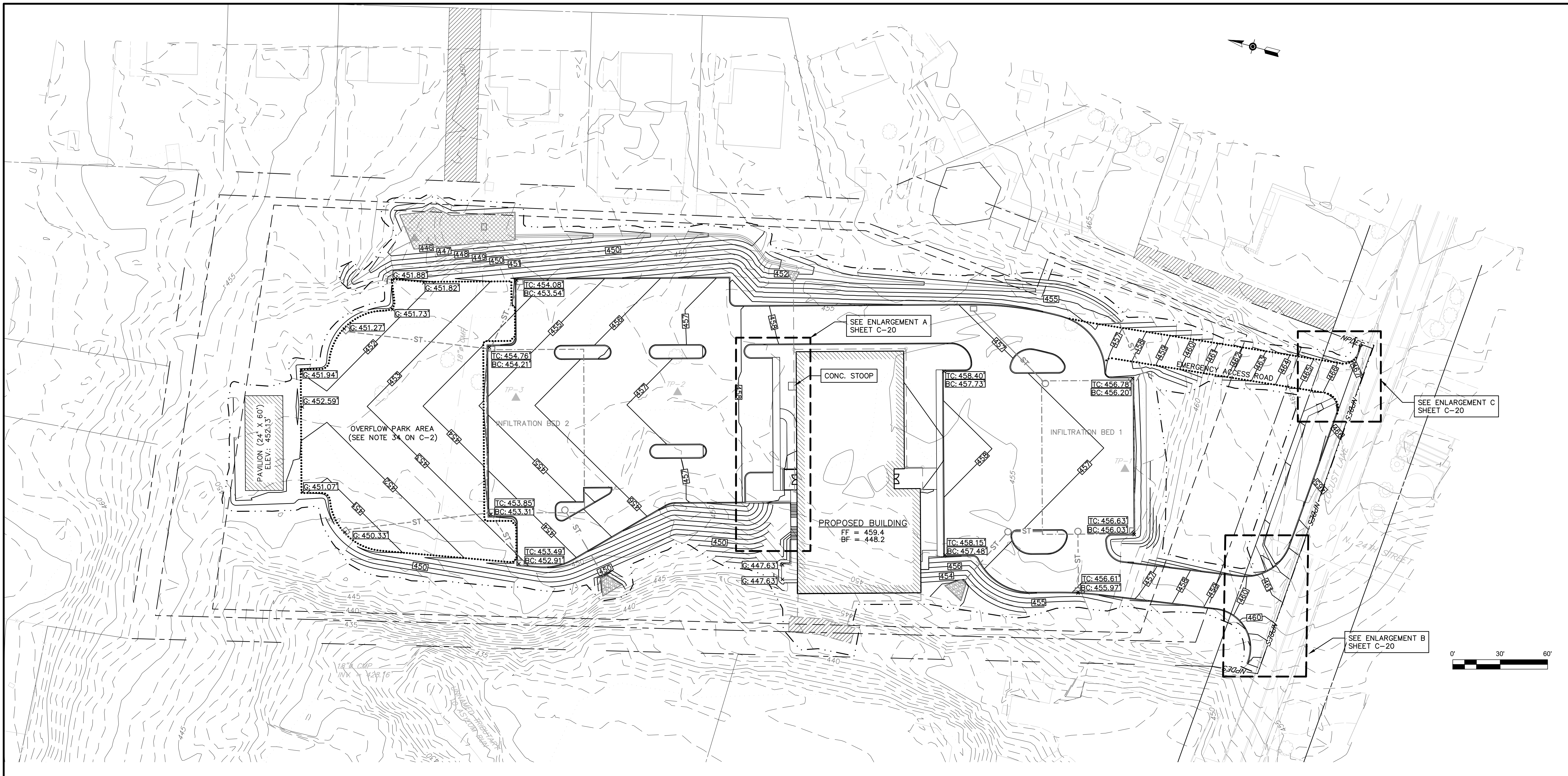
449 EISENHOWER BOULEVARD
 SUITE 300
 HARRISBURG, PA 17111
 TEL: (717) 232-0593
 FAX: (717) 232-1799
 www.stekeljoy.com

SKELLY AND LOY
 ENGINEERS AND ARCHITECTS

DESIGN: G.C.C.G.
 DTS/SM: D.J.J.
 CHK: B.A.S.
 APP: G.C.C.G.
 SCALE: 1" = 30'

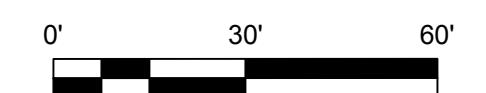
"LAND DEVELOPMENT PLAN"
 FOR
 Solid Rock Missionary Baptist Church
 2400 LOCUST LANE
 Susquehanna Township, Dauphin County, Pennsylvania

EXISTING CONDITIONS PLAN
 SHEETS: 3 OF 20



LEGEND

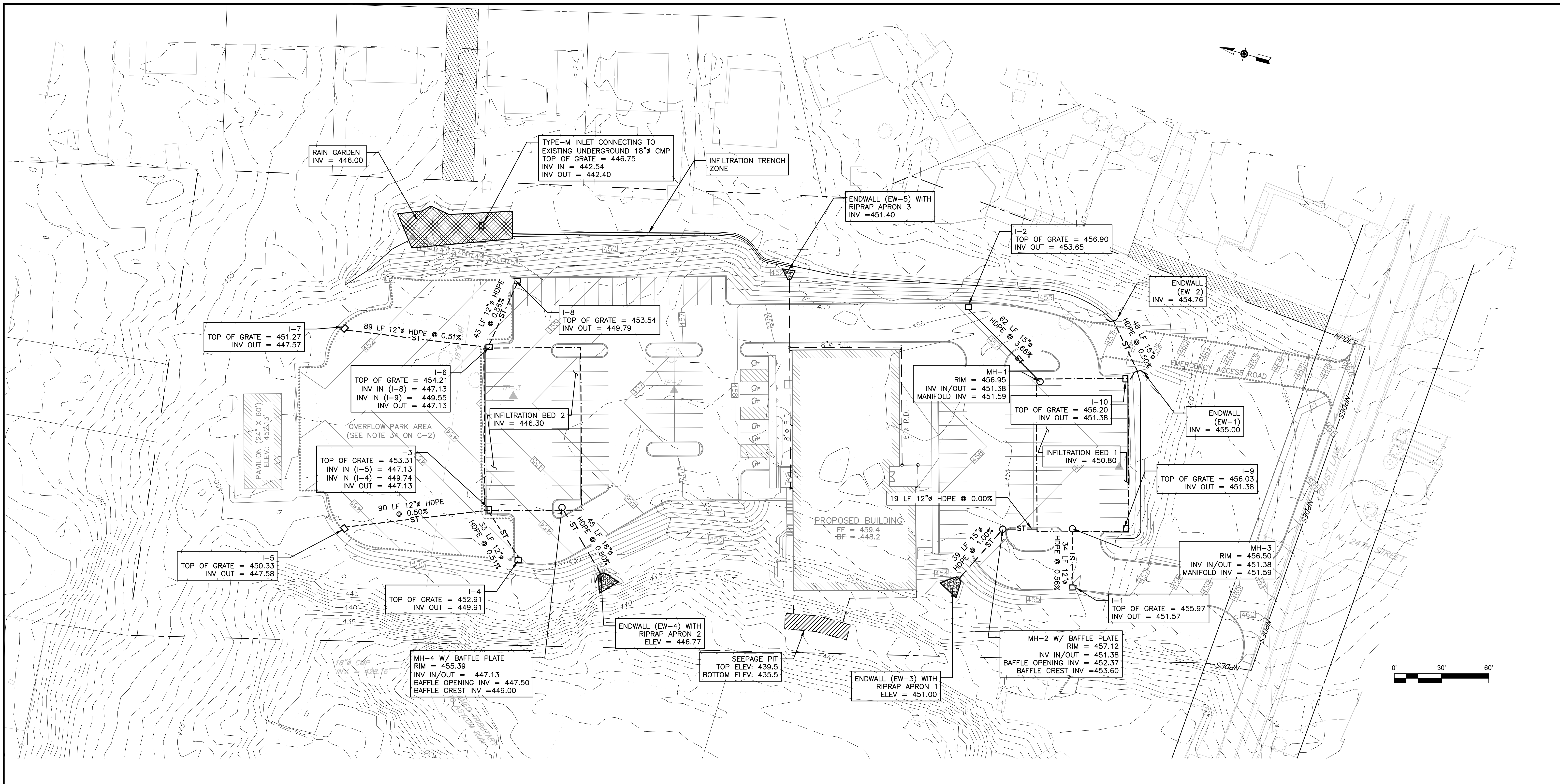
- | | |
|--|--|
| <ul style="list-style-type: none"> --- PROPERTY AND NPDES BOUNDARY LINE --- LEGAL RIGHT-OF-WAY (75') --- ROAD CENTER LINE (LOCUST LANE) --- ADJACENT PROPERTY LINE --- EASEMENT ZONES --- BUILDING SETBACK LINE --- LANDSCAPE BUFFER LINE --- ZONING BOUNDARY --- EXISTING BUILDINGS --- EXISTING RUINS --- EXISTING ROADS --- EXISTING CURBING --- EXISTING FENCING --- EXISTING TREE AND BRUSH LINE --- EXISTING TREE --- EXISTING HEDGE ROW --- EXISTING OVERHEAD UTILITIES LINE --- EXISTING UTILITIES POLE --- EXISTING UNDERGROUND GAS LINE --- EXISTING UNDERGROUND STORM SEWER LINE --- EXISTING UNDERGROUND SANITARY SEWER LINE --- EXISTING UNDERGROUND WATER SUPPLY LINE --- EXISTING INDEX CONTOUR LINE --- EXISTING INTERMEDIATE CONTOUR LINE | <ul style="list-style-type: none"> --- PROPOSED LIMIT OF DISTURBANCE --- PROPOSED BUILDING LIMITS --- PROPOSED EDGE OF ASPHALT --- PROPOSED EDGE OF STABILIZED GRASS AREA --- PROPOSED RETAINING WALL --- PROPOSED HANDICAP SIGNS --- PROPOSED CONTOURS --- PROPOSED STORMWATER SUBSURFACE INFILTRATION BASIN --- PROPOSED STORMWATER INLET --- PROPOSED STORMWATER PIPE END TREATMENTS --- PROPOSED STORMWATER ROCK APRONS --- PROPOSED STORMWATER MANHOLE --- PROPOSED STORMWATER UNDERGROUND PIPES --- PROPOSED STORMWATER ROOF DRAIN CLEANOUTS --- PROPOSED STORMWATER ROOF DRAIN PIPES |
|--|--|



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PROJECT NUMBER: R18-0633.000 SUBTASK: 4 DATE: MAY 21, 2019	DSGN: G.C.C. DFTSMN: D.J.J. CHKR: B.A.S. APPV: G.C.C.	"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township, Dauphin County, Pennsylvania	DRAWING NO.: C-5 SHEETS: 5 OF 20	GRADING PLAN SCALE: 1" = 30' BY: APPV. DATE:
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0593 FAX: (717) 232-1799 www.skelloy.com				

Printed on: 2019-05-31 Plotted by: Johnston, Don File Name: \\Projects\2018 Projects and Progress\R18-0633.000_Solid Rock Missionary Baptist Church Land Development Plan Drawings\CADD\Design Package\C-5 GRADING PLAN.dwg



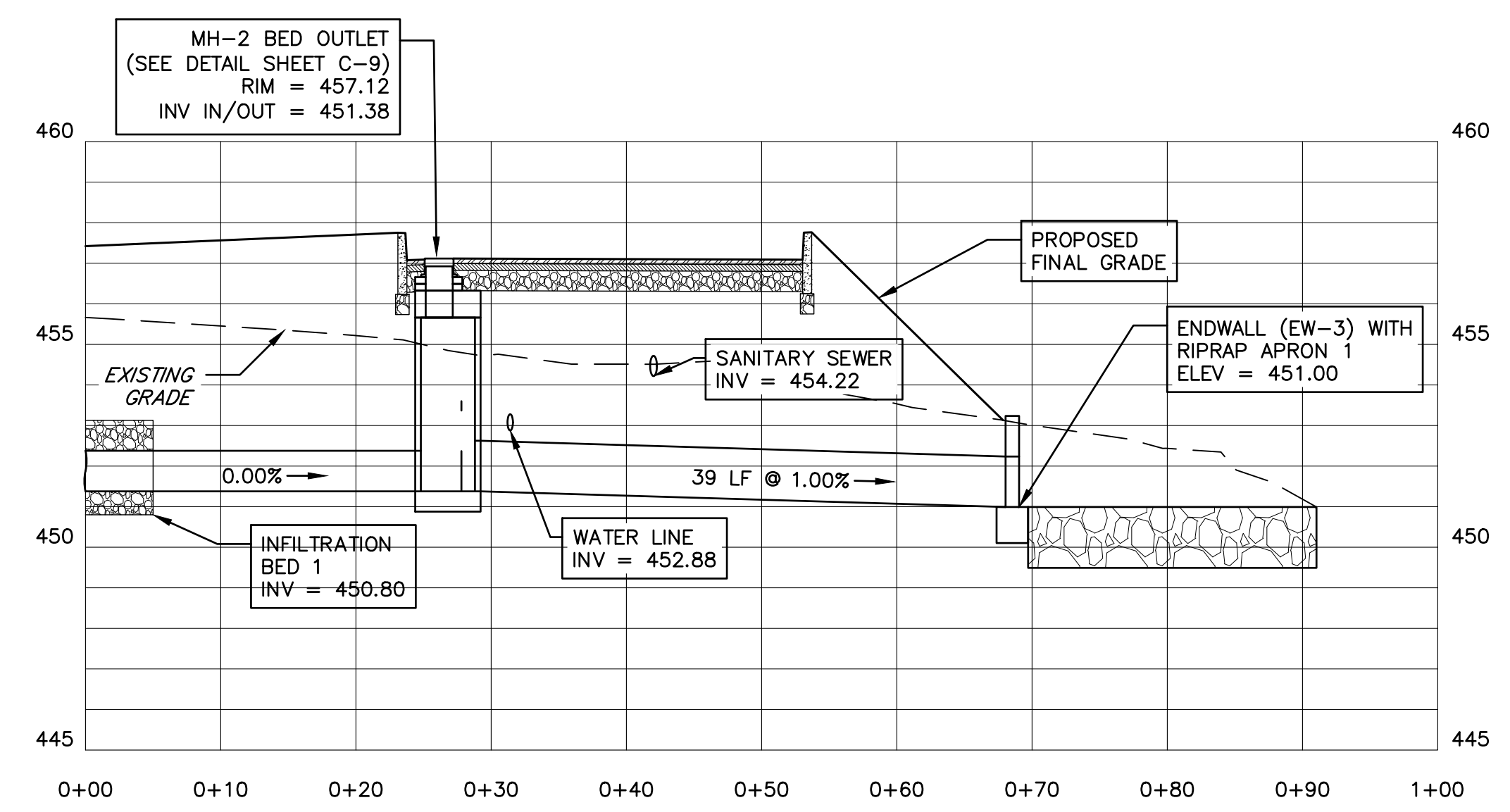
LEGEND

- | | | | |
|-----|--|-----|---|
| --- | PROPERTY AND NPDES BOUNDARY LINE | --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | LEGAL RIGHT-OF-WAY (75') | --- | PROPOSED BUILDING LIMITS |
| --- | ROAD CENTER LINE (LOCUST LANE) | --- | PROPOSED EDGE OF ASPHALT |
| --- | ADJACENT PROPERTY LINE | --- | PROPOSED EDGE OF STABILIZED GRASS AREA |
| --- | EASEMENT ZONES | --- | PROPOSED RETAINING WALL |
| --- | BUILDING SETBACK LINE | --- | PROPOSED HANDICAP SIGNS |
| --- | LANDSCAPE BUFFER LINE | --- | PROPOSED CONTOURS |
| --- | ZONING BOUNDARY | --- | PROPOSED STORMWATER SUBSURFACE INFILTRATION BASIN |
| --- | EXISTING BUILDINGS | --- | PROPOSED STORMWATER INLET |
| --- | EXISTING RUINS | --- | PROPOSED STORMWATER PIPE END TREATMENTS |
| --- | EXISTING ROADS | --- | PROPOSED STORMWATER ROCK APRONS |
| --- | EXISTING CURBING | --- | PROPOSED STORMWATER MANHOLE |
| --- | EXISTING FENCING | --- | PROPOSED STORMWATER UNDERGROUND PIPES |
| --- | EXISTING TREE AND BRUSH LINE | --- | PROPOSED STORMWATER ROOF DRAIN CLEANOUTS |
| --- | EXISTING TREE | --- | PROPOSED STORMWATER ROOF DRAIN PIPES |
| --- | EXISTING HEDGE ROW | --- | |
| --- | EXISTING OVERHEAD UTILITIES LINE | --- | |
| --- | EXISTING UTILITIES POLE | --- | |
| --- | EXISTING UNDERGROUND GAS LINE | --- | |
| --- | EXISTING UNDERGROUND STORM SEWER LINE | --- | |
| --- | EXISTING UNDERGROUND SANITARY SEWER LINE | --- | |
| --- | EXISTING UNDERGROUND WATER SUPPLY LINE | --- | |
| --- | EXISTING INDEX CONTOUR LINE | --- | |
| --- | EXISTING INTERMEDIATE CONTOUR LINE | --- | |

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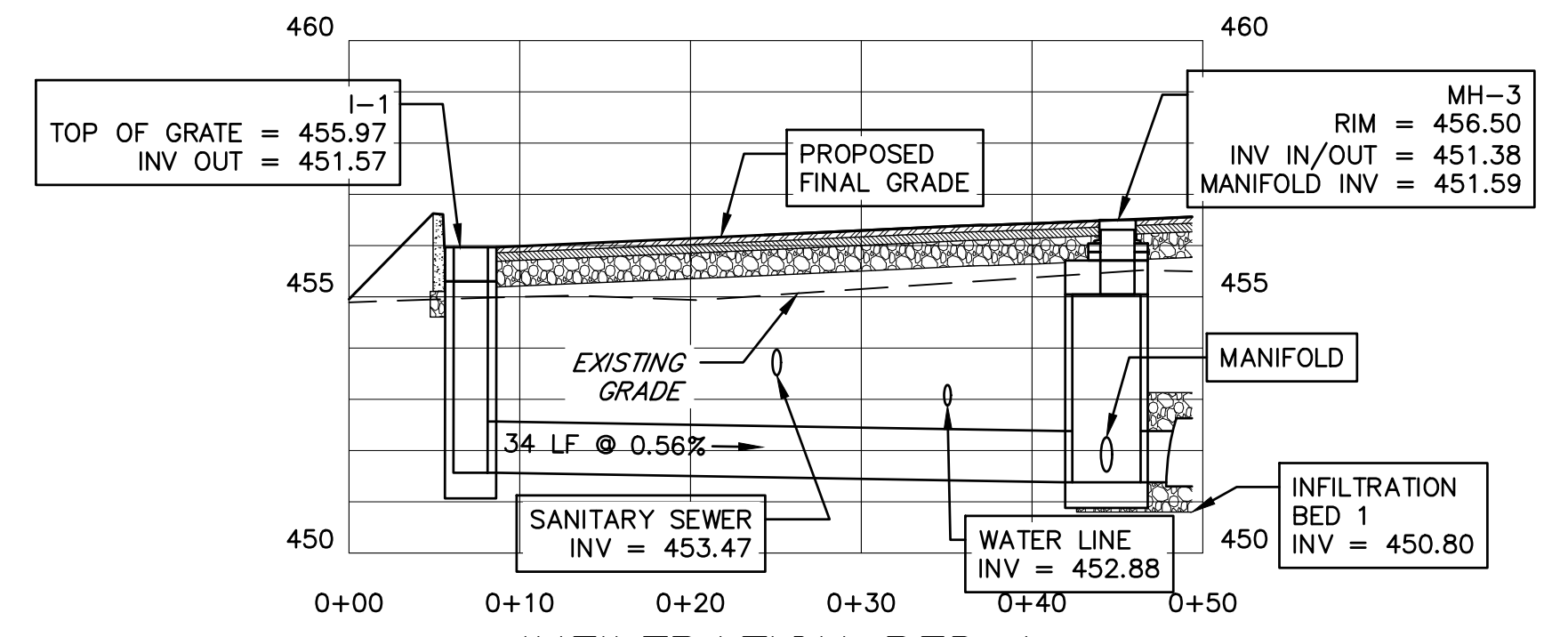
NOTE:
1. A BLANKET STORMWATER EASEMENT IS PROVIDED ON THE ENTIRE SITE. NOTHING SHALL BE PLANTED OR CONSTRUCTED THAT WOULD AFFECT THE FUNCTIONALITY OF SAID EASEMENT.

DRAWING NO. C-6		SHEETS: 6 OF 20	
"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania			
DESIGN: G.C.C.G.	DRAWN: D.J.J.	CHECKED: B.A.S.	SCALE: 1" = 30'
DATE: 5/21/2019	BY: APPV	DATE: 5/21/2019	REV. DESCRIPTION:
PROJECT NUMBER: R18-0633.000		SUBTASK: 4	
DATE: MAY 21, 2019		TEL: (717) 232-0593 FAX: (717) 232-1799 www.stelljoy.com	

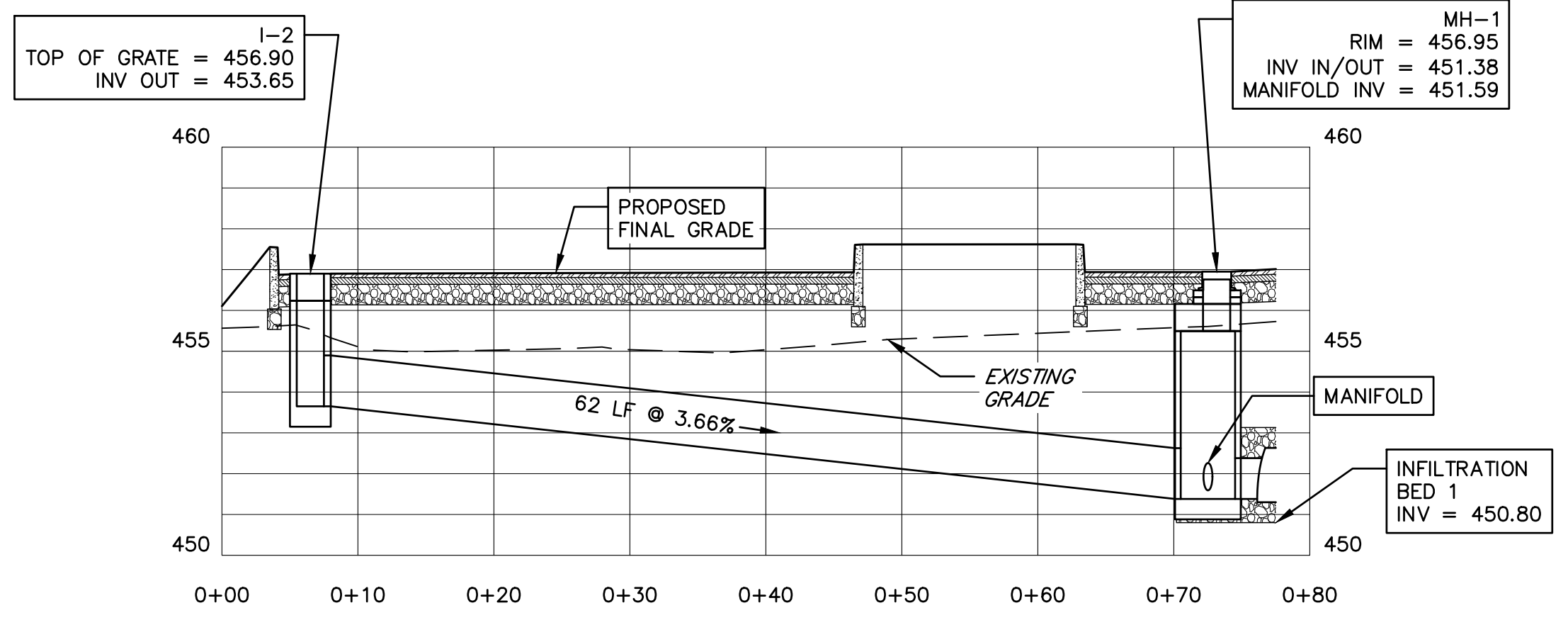


INFILTRATION BED 1
MH-2 TO EW-3

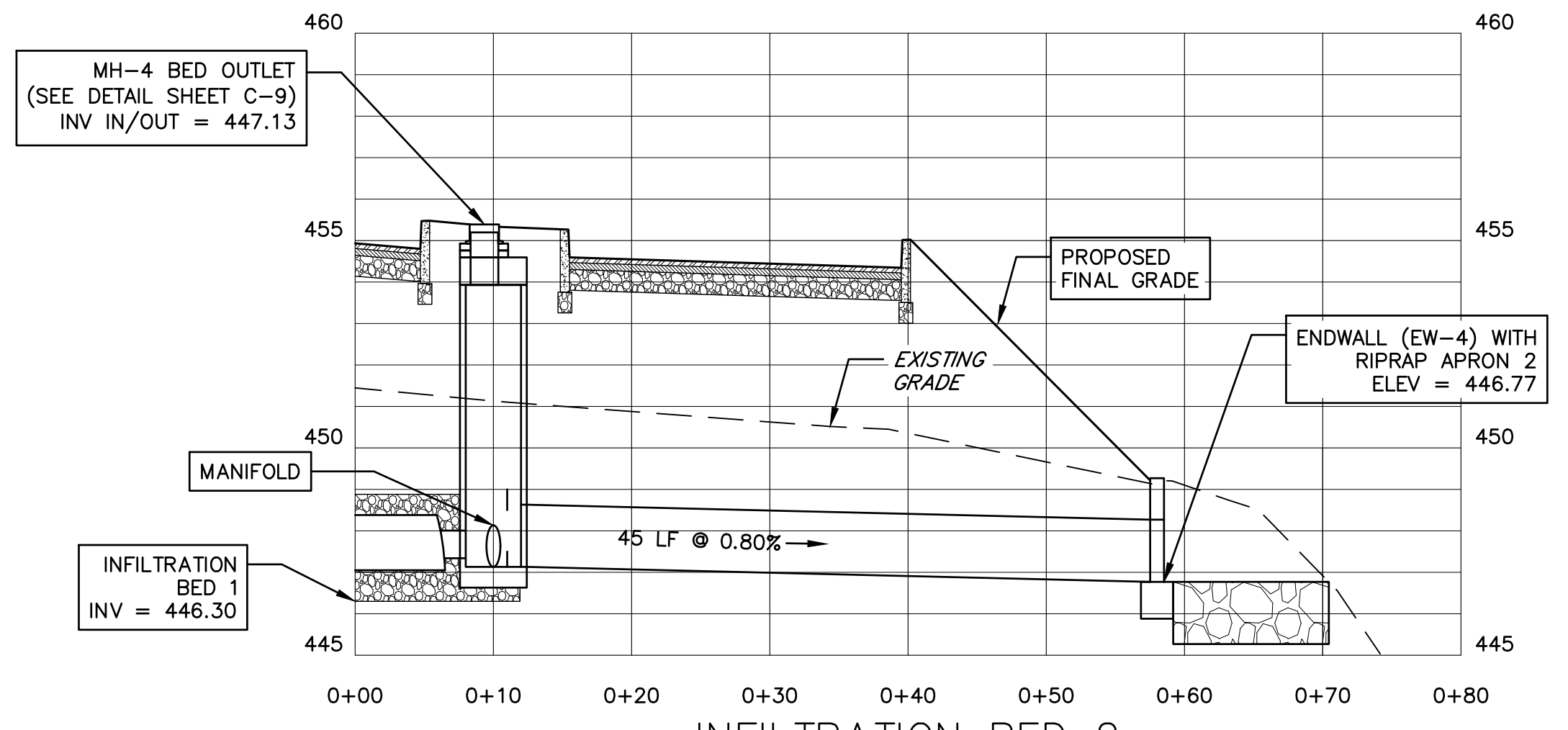
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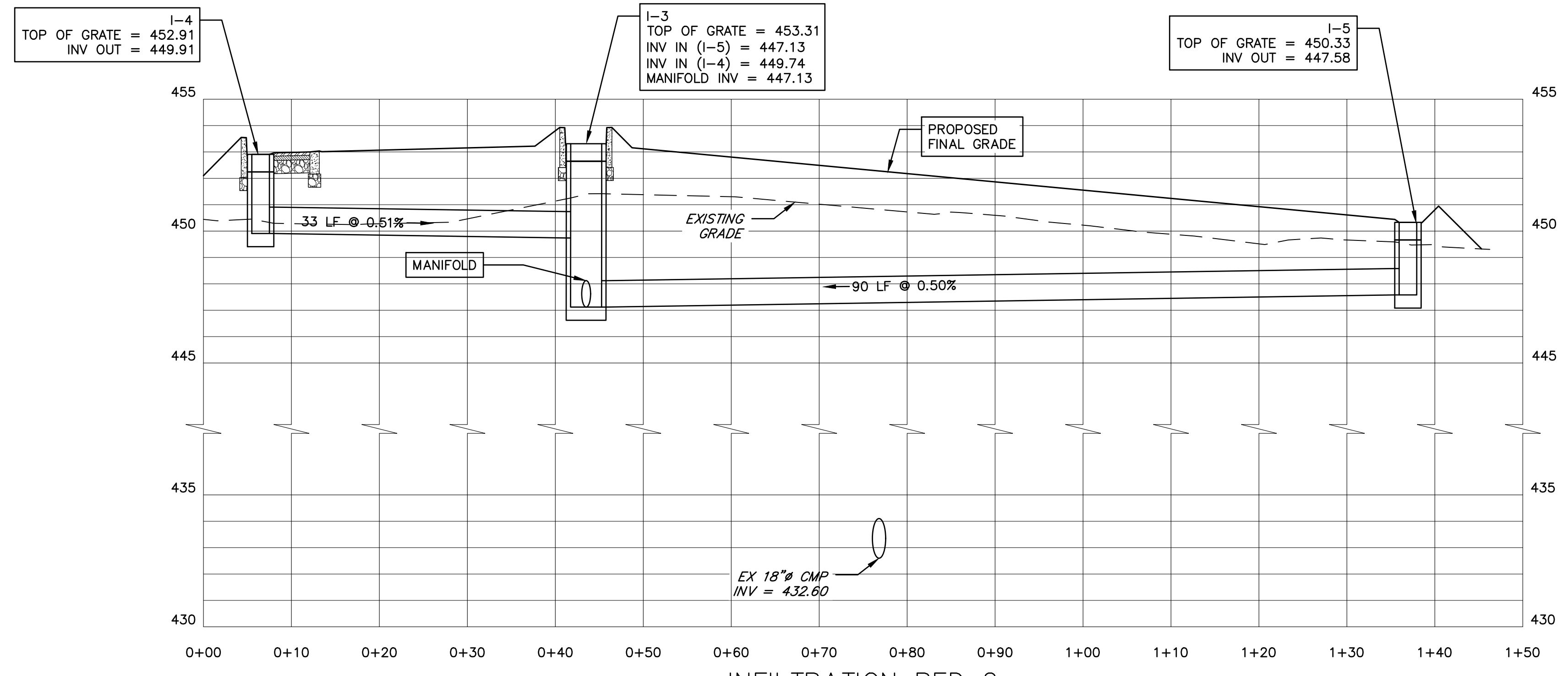
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I-1 TO MH-3



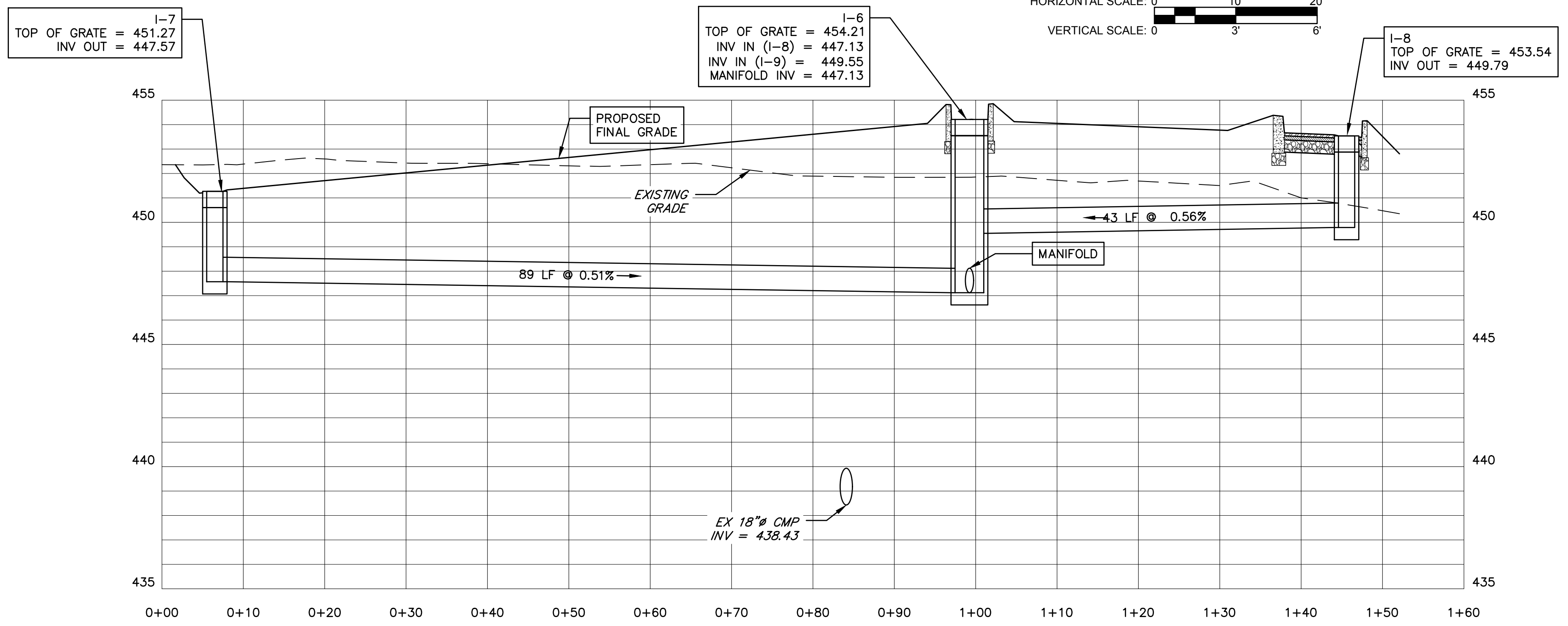
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I-2 TO MH-1



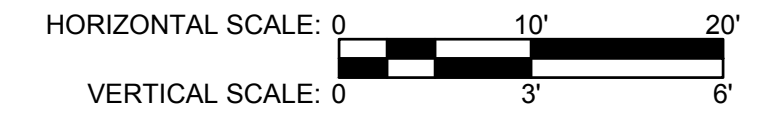
INFILTRATION BED 2
MH-4 TO EW-4



INFILTRATION BED 2
I-4 TO I-3 TO I-5



INFILTRATION BED 2
I-7 TO I-6 TO I-8



DRAWING NO. C-7		SHEETS: 7 OF 20	
"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania			
PROJECT NUMBER: R18-0633.000	TASK: 4	DATE: MAY 21, 2019	SCALE AS NOTED
DESIGNER: G.C.C.G.	DRAWN BY: D.J.J.	CHECKED BY: E.A.S.	BY: [] DATE: []
APPVED BY: G.C.C.G.	DATE: []	DATE: []	DATE: []
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0593 FAX: (717) 232-1799 www.skellyjoy.com			

[CONSTRUCTION SEQUENCE OF EACH STRUCTURAL BMP]

[PA DEP BMP 6.7.2] RE-VEGETATE DISTURBED AREAS/LANDSCAPE RESTORATION

1. CONFIRM SITE IS SUITABLE FOR RESTORATION, SHOULD BE SUNNY, OPEN AND WELL-VENTILATED.
2. EVALUATE SITE'S PHYSICAL CONDITIONS (SOIL ATTRIBUTES, GEOLOGY, TERRAIN)
3. EVALUATE SITE'S VEGETATIVE FEATURES (DESIRABLE AND UNDESIRABLE SPECIES, NATIVE SPECIES, AND SENSITIVE HABITATS).
4. AREAS WITH A HISTORY OF HEAVY WEED GROWTH MAY REQUIRE A FULL YEAR OR LONGER TO PREPARE FOR PLANTING
5. SELECT PLANTS THAT ARE WELL ADAPTED TO THE SPECIFIC SITE CONDITIONS. MEADOW PLANTS MUST BE ABLE TO OUT COMPETE WEED SPECIES IN THE FIRST FEW YEARS AS THEY BECOME ESTABLISHED.
6. ALL WEEDS OR EXISTING VEGETATION MUST BE ELIMINATED PRIOR TO SEEDING.
7. PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE WITH EQUIPMENT THAT CAN UPROOT AND KILL PERENNIAL WEEDS.
8. PLANTING CAN TAKE PLACE FROM SPRING THAW THROUGH JUNE 30 OR FROM SEPTEMBER 1 THROUGH SOIL FREEZE-UP ("DORMANT SEEDING")
9. PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMEND DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME.
10. SEEDING CAN BE ACCOMPLISHED BY A VARIETY OF METHODS: NO-TILL SEEDER FOR MULTI-ACRE PLANTING; BROADCAST SEEDER; HAND BROADCAST FOR SMALL AREAS OF ONE ACRE OR LESS.
11. SEED QUALITY IS CRITICAL AND A SEED MIX SHOULD BE USED WITH A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS.

[PA DEP BMP 6.4.3] SUBSURFACE INFILTRATION BED

1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY.
3. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
4. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
5. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
6. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
7. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER THE PENNSYLVANIA EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL) DURING CONSTRUCTION.
8. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
9. FOR PRIORITY INFILTRATION SYSTEMS FOLLOW MANUFACTURE CONSTRUCTION SEQUENCE/SPECIFICATIONS.
10. AFTER INSTALLATION, PREVENT SEDIMENT-LADEN WATER FROM ENTERING INLETS AND PIPES.
11. AFTER INSTALLATION, FENCE OFF INFILTRATION BED UNTIL SUCH TIME AS SITE IS READY FOR PERMANENT STABILIZATION (PAVED). VEHICLE TRAVEL OVER BEDS IS PROHIBITED DURING THIS TIME.
12. IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE.
13. IF APPLICABLE SEED AND STABILIZE TOPSOIL.
14. IF POSSIBLE, DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

[PA DEP BMP 6.4.4] INFILTRATION TRENCH / VEGETATED CHANNEL

1. PROTECT INFILTRATION TRENCH AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL INFILTRATION TRENCH DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT LADEN WATER FROM ENTERING INLETS AND PIPES.
3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
4. EXCAVATE INFILTRATION TRENCH BOTTOM TO A UNIFORM UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. GRADE BOTTOM OF CHANNEL AS INDICATED ON CONSTRUCTION DRAWINGS
5. PLACE NONWOVEN GEOTEXTILE ALONG BOTTOM AND SIDES OF TRENCH*. NONWOVEN GEOTEXTILE ROLLS SHOULD OVERLAP BY A MINIMUM OF 16 INCHES WITHIN THE TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT.
6. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, ETC.
7. PLACE UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 8-INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
8. IF APPLICABLE INSTALL CONTINUOUSLY PERFORATED PIPE AS INDICATED ON PLANS. BACKFILL WITH UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 8-INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
9. FOLD AND SECURE NONWOVEN GEOTEXTILE OVER INFILTRATION TRENCH, WITH MINIMUM OVERLAP OF 16-INCHES.
10. PLACE 6-INCH LIFT OF APPROVED TOPSOIL OVER INFILTRATION TRENCH, AS INDICATED ON PLANS.
11. SEED AND STABILIZE TOPSOIL.
12. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
13. ANY SEDIMENT THAT ENTERS INLETS DURING CONSTRUCTION IS TO BE REMOVED WITHIN 24 HOURS.

[PA DEP BMP 6.4.5] RAIN GARDEN/BIO-INFILTRATION

1. EXISTING SUB-GRADE IN BIORETENTION AREAS SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC.
2. INITIAL EXCAVATION CAN BE PERFORMED DURING ROUGH SITE GRADING BUT SHALL NOT BE CARRIED TO WITHIN ONE FEET OF THE FINAL BOTTOM ELEVATION. FINAL EXCAVATION SHOULD NOT TAKE PLACE UNTIL ALL DISTURBED AREAS IN THE DRAINAGE AREA HAVE BEEN STABILIZED.
3. WHERE EROSION OF SUB-GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING IN THE GRADED BOTTOM, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT BY LIGHT TRACTOR.
4. BRING SUB-GRADE OF BIORETENTION AREA TO LINE, GRADE, AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSION, PONDING, OR TRAFFIC COMPACTION. ALL BIORETENTION AREAS SHALL BE LEVEL GRADE ON THE BOTTOM.
5. HALT EXCAVATION AND NOTIFY ENGINEER IMMEDIATELY IF EVIDENCE OF SINKHOLE ACTIVITY OR PINNACLES OF CARBONATE BEDROCK ARE ENCOUNTERED IN THE BIORETENTION AREA.

6. UPON COMPLETION OF SUB-GRADE WORK, THE ENGINEER SHALL BE NOTIFIED AND SHALL INSPECT AT HIS/HER DISCRETION BEFORE PROCEEDING WITH BIORETENTION INSTALLATION.
7. FOR THE SUBSURFACE STORAGE/INFILTRATION BED INSTALLATION, AMENDED SOILS SHOULD BE PLACED ON THE BOTTOM TO THE SPECIFIED DEPTH
8. PLANTING SOIL SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB-GRADE PREPARATION/BED INSTALLATION. ANY ACCUMULATION OF DEBRIS OR SEDIMENT THAT TAKES PLACE AFTER APPROVAL OF SUB-GRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF PLANTING SOIL AT NO EXTRA COST TO THE OWNER.
9. INSTALL PLANTING SOIL (EXCEEDING ALL CRITERIA) IN 18-INCH MAXIMUM LIFTS AND LIGHTLY COMPACT (TAMP WITH BACKHOE BUCKET OR BY HAND). KEEP EQUIPMENT MOVEMENT OVER PLANTING SOIL TO A MINIMUM - DO NOT OVER COMPACT. INSTALL PLANTING SOIL TO GRADES INDICATED ON THE DRAWINGS.
10. PLANT TREES AND SHRUBS ACCORDING TO SUPPLIER'S RECOMMENDATIONS AND ONLY FROM MID-MARCH THROUGH THE END OF JUNE OR FROM MID-SEPTEMBER THROUGH MID-NOVEMBER.
11. INSTALL 2-3" SHREDDED HARDWOOD MULCH (MINIMUM AGE 6 MONTHS) OR COMPOST MULCH EVENLY AS SHOWN ON PLANS. DO NOT APPLY MULCH IN AREAS WHERE GROUND COVER IS TO BE GRASS OR WHERE COVER WILL BE ESTABLISHED BY SEEDING.
12. PROTECT RAIN GARDENS FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION. HAY BALES, DIVERSION BERMS AND/OR OTHER APPROPRIATE MEASURES SHALL BE USED AT THE TOE OF SLOPES THAT ARE ADJACENT TO RAIN GARDENS TO PREVENT SEDIMENT FROM WASHING INTO THESE AREAS DURING SITE DEVELOPMENT.
13. WHEN THE SITE IS FULLY VEGETATED AND THE SOIL MANTLE STABILIZED THE PLAN DESIGNER SHALL BE NOTIFIED AND SHALL INSPECT THE RAIN GARDEN DRAINAGE AREA AT HIS/HER DISCRETION BEFORE THE AREA IS BROUGHT ONLINE AND SEDIMENT CONTROL DEVICES REMOVED
14. INSPECT WATER VEGETATION AT THE END OF EACH DAY FOR TWO WEEKS AFTER PLANTING IS COMPLETED

[PA DEP BMP 6.4.6] DRY WELL/SEEPAGE PIT

1. PROTECT INFILTRATION AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL DRY WELLS DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY.
3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AS PER THE PENNSYLVANIA EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MARCH 2000, OR LATEST EDITION).
4. EXCAVATE DRY WELL BOTTOM TO A UNIFORM, LEVEL UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. TO THE GREATEST EXTENT POSSIBLE, EXCAVATION SHOULD BE PERFORMED WITH THE LIGHTEST PRACTICAL EQUIPMENT. EXCAVATION EQUIPMENT SHOULD BE PLACED OUTSIDE THE LIMITS OF THE DRY WELL.
5. COMPLETELY WRAP DRY WELL WITH NONWOVEN GEOTEXTILE. (IF SEDIMENT AND/OR DEBRIS HAVE ACCUMULATED IN DRY WELL BOTTOM, REMOVE PRIOR TO GEOTEXTILE PLACEMENT.) GEOTEXTILE ROLLS SHOULD OVERLAP BY A MINIMUM OF 24 INCHES WITHIN THE TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT.
6. INSTALL CONTINUOUSLY PERFORATED PIPE, OBSERVATION WELLS, AND ALL OTHER DRY WELL STRUCTURES. CONNECT ROOF LEADERS TO STRUCTURES AS INDICATED ON PLANS.
7. PLACE UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 6-INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
8. FOLD AND SECURE NONWOVEN GEOTEXTILE OVER TRENCH, WITH MINIMUM OVERLAP OF 12-INCHES.
9. PLACE 12-INCH LIFT OF APPROVED TOPSOIL OVER TRENCH, AS INDICATED ON PLANS.
10. SEED AND STABILIZE TOPSOIL.
11. CONNECT SURCHARGE PIPE TO ROOF LEADER AND POSITION OVER SPLASHBOARD.
12. DO NOT REMOVE EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

[OPERATION AND MAINTENANCE OF BMPS]

NOT ALL OF THE BMPS REQUIRE MAINTENANCE SUCH AS CERTAIN NON-STRUCTURAL BMPS. THOSE THAT DO AND ALL STRUCTURAL BMPS ARE LISTED BELOW.

1. **[PADEP BMP 5.4.3] PROTECT/UTILIZE NATURAL FLOW PATHWAYS**
 - A. OPERATION
THIS BMP EMPLOYS USE OF THE EXISTING DRAINAGEWAYS (CHANNELS) AND INFILTRATION SUMP ON THE EASTSIDE OF THE SITE IN ORDER TO ALLOW STORMWATER TO FOLLOW PRE-DEVELOPMENT DRAINAGE PATTERNS. THEY ARE PRESENTLY CLUTTERED WITH JUNK, DEAD AND OVERGROWN VEGETATION. THIS PROJECT PROPOSED TO CLEAN AND ENHANCE THEM. PLANTING VEGETATIVE BUFFER ON SIDE SLOPES. REF. BMP MAPS DS-1 AND DS-4 APPENDIX B
 - B. MAINTENANCE REQUIREMENTS
ONCE CLEANED, ENHANCED AND RE-VEGETATED THIS BMP SHOULD REQUIRE VERY LITTLE MAINTENANCE. HOWEVER, PERIODIC INSPECTIONS AND MAINTENANCE ACTIONS SHOULD TAKE PLACE. INSPECTIONS SHOULD ASSESS EROSION, BANK STABILITY, SEDIMENT/DEBRIS ACCUMULATION AND VEGETATIVE CONDITIONS INCLUDING PRESENCE OF INVASIVE SPECIES. PROBLEMS SHOULD BE CORRECTED IN A TIMELY MANNER. IF VEGETATION IS BEING REESTABLISHED IT MAY REQUIRE WATERING, WEEDING, MULCHING AND REPLANTING, ETC.- DURING THE FIRST FEW YEARS. UNDESIRABLE SPECIES SHOULD BE REMOVED AND DESIRABLE REPLACEMENTS PLANTED, IF NECESSARY.
2. **[PA DEP BMP 5.6.3/6.7.2] RE-VEGETATE DISTURBED AREAS/LANDSCAPE RESTORATION**
 - A. OPERATION
THIS BMP IS PRIMARILY EMPLOYED IN THE FRINGE AREAS AROUND THE PERIMETER OF THE DISTURBED AREA. THESE AREAS WILL BE PLANTED WITH MEADOW GRASS SIMILAR TO WHAT IS PRESENTLY ON THE SITE. WHEN MATURE, THIS VEGETATION WILL REDUCE RUNOFF VOLUME AND RATE AND SERVES AS A NON-POINT SOURCE LOAD REDUCTION/PREVENTION. APPLICATION OF CHEMICAL FERTILIZERS IS NOT REQUIRED WHICH IS IMPORTANT FOR WATER QUALITY.
 - B. MAINTENANCE REQUIREMENTS
 - MINIMUM MAINTENANCE IS REQUIRED IN THE LONG-TERM; ANNUAL MOWING IS RECOMMENDED.
 - IN THE FIRST YEAR, WEEDS MUST BE CAREFULLY CONTROLLED AND CONSISTENTLY CUT BACK TO 4 TO 6 INCHES WHEN THEY REACH 12 INCHES IN HEIGHT.
 - IN THE SECOND YEAR, WEEDS SHOULD CONTINUE TO BE MONITORED AND MOWED AND RHIZOMATOUS WEEDS SHOULD BE HAND-TREATED WITH HERBICIDE.
 - WEEDS SHOULD NOT BE SPRAYED WITH HERBICIDE AS THE DRIFT FROM THE SPRAY MAY KILL LARGE PATCHES OF DESIRABLE PLANTS, ALLOWING WEEDS TO MOVE INTO THESE NEW OPEN AREAS.
 - IN THE BEGINNING OF THE THIRD SEASON, THE YOUNG VEGETATION SHOULD BE BURNED OFF IN MID-SPRING. IF BURNING IS NOT POSSIBLE, THE VEGETATION SHOULD INSTEAD BE MOWED VERY CLOSELY TO THE GROUND. THE MOWED MATERIAL SHOULD BE REMOVED FROM THE SITE TO EXPOSE THE SOIL TO THE SUN.
3. **[PA DEP BMP 5.9.1] STREETSWEEEPING**
 - A. LOCATION AND FUNCTION
THIS BMP WILL BE EMPLOYED FOR ALL THE PAVED AREAS, PERVIOUS AND IMPERVIOUS, WITHIN ALL OF THE DRAINAGE AREAS (ENTIRE SITE). THIS BMP WILL EMPLOY THE USE OF A VACUUM FILTER STREETSWEEPER WHICH WILL RESULT IN REMOVING LARGER DEBRIS AND SMALLER PARTICULATE POLLUTANTS, PREVENTING THIS MATERIAL FROM CLOGGING STORMWATER MANAGEMENT SYSTEMS AND WASHING INTO RECEIVING WATERWAYS.
 - B. MAINTENANCE REQUIREMENTS

- PAVEMENTS SHALL BE VACUUMED BIANNUALLY AT A MINIMUM, IN THE SPRING AND FALL OF THE YEAR.

4. **[PA DEP BMP 6.4.3] SUBSURFACE INFILTRATION BED**

- A. OPERATION
TWO (2) SUBSURFACE INFILTRATION BEDS WILL BE EMPLOYED IN DRAINAGE AREAS 3 AND 4 OF THIS PROJECT. ONE BED WILL BE LOCATED IN THE PARKING AREA IN FRONT OF THE CHURCH BUILDING AND ONE TO THE REAR OF THE BUILDING. THESE BEDS WILL CONSIST OF UNIFORMLY GRADED AGGREGATE COMBINED WITH PREFABRICATED POLYETHYLENE "SHELL" STRUCTURES, WHICH INCOMING FLOW AND ALLOWS FOR STORAGE AND INFILTRATION OF THE DIFFERENCE BETWEEN THE 2-YEAR POST- AND THE 2-YEAR PRE-DEVELOPMENT RUNOFF VOLUMES. THE STORAGE VOLUME IN THE BED IN CONJUNCTION WITH OUTLET CONTROLS IS LARGE ENOUGH TO ATTENUATE THE PEAK RATE OF RUNOFF TO REQUIRED PRE-DEVELOPMENT LEVELS FOR THE 1- THROUGH 100-YEAR STORM EVENTS REF. DS-4 APPENDIX B
 - B. MAINTENANCE
ALL CATCH BASINS AND INLETS ASSOCIATED WITH THE BED SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.
5. **[PA DEP BMP 6.4.4] INFILTRATION TRENCH / VEGETATED CHANNEL**
- A. OPERATION
CHANNEL 1 LOCATED ALONG THE EAST SIDE OF THE SITE ADJACENT TO THE PARKING LOT IS DESIGNED AS VEGETATED INFILTRATION CHANNEL. WHAT STORMWATER FLOW THROUGH IT THAT IS NOT INFILTRATED WILL FLOW INTO A RAIN GARDEN. THIS BMP ALLOWS FOR INFILTRATION OF STORMWATER.
 - B. MAINTENANCE
MAINTENANCE STRATEGY SHOULD FOCUS ON SUSTAINING THE HYDRAULIC AND POLLUTION REMOVAL EFFICIENCY OF THE CHANNEL, AS WELL AS MAINTAINING A DENSE VEGETATIVE COVER. MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (> 1 INCH RAINFALL DEPTH):
 - INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
 - INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
 - INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
 - MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
 - INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
 - INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
 - INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED:

- PLANT ALTERNATIVE GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT
- RESEED BARE AREAS: INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING
- ROTOTILL AND REPLANT SWALE IF DRAW DOWN TIME IS MORE THAN 48 HOURS
- INSPECT AND CORRECT CHECK DAMS, IF APPLICABLE, WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION, ETC.) ARE IDENTIFIED
- WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY

6. **[PA DEP BMP 6.4.5] RAIN GARDEN/BIO-INFILTRATION**

- A. OPERATION
THIS BMP WILL BE EMPLOYED WITHIN DRAINAGE AREA 6 OF THE PROJECT. THE GARDEN IS AN EXCAVATED SURFACE DEPRESSION PLANTED WITH SPECIALLY SELECTED VEGETATION. THE VEGETATION FILTERS POLLUTANTS AND PROVIDES SOME VOLUME REDUCTION BY EVAPOTRANSPIRATION BUT PRIMARILY BY ALLOWING INFILTRATION THE DIFFERENCE BETWEEN THE 2-YEAR POST- AND THE 2-YEAR PRE-DEVELOPMENT RUNOFF VOLUMES THROUGH THE FLOOR OF THE GARDEN INTO SUBSOIL AND GROUNDWATER. IN ADDITION THIS BMP WILL EFFECTIVELY AVOID, MINIMIZE AND OR MITIGATE THERMAL IMPACTS FROM STORMWATER RUNOFF AND PROVIDE A HABITAT FOR WILDLIFE. REF. DS-4 APPENDIX B
- B. MAINTENANCE REQUIREMENTS

PROPERLY DESIGNED AND INSTALLED BIO-RETENTION AREAS REQUIRE SOME REGULAR MAINTENANCE

- WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING MAY BE REQUIRED.
- DETRITUS MAY ALSO NEED TO BE REMOVED EVERY YEAR. PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE GROWING SEASON.
- MULCH SHOULD BE RE-SPREAD WHEN EROSION IS EVIDENT AND BE REPLENISHED AS NEEDED. ONCE EVERY 2 TO 3 YEARS THE ENTIRE AREA MAY REQUIRE MULCH REPLACEMENT.
- BIO-RETENTION AREAS SHOULD BE INSPECTED AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC.
- DURING PERIODS OF EXTENDED DROUGHT, BIO-RETENTION AREAS MAY REQUIRE WATERING.
- TREES AND SHRUBS, IF CALLED FOR IN THE DESIGN, SHOULD BE INSPECTED TWICE PER YEAR TO EVALUATE HEALTH.

7. **[PA DEP BMP 6.4.6] DRY WELL/SEEPAGE PIT**

- A. OPERATION
THIS BMP WILL BE EMPLOYED AT TWO LOCATIONS, ONE EACH IN DRAINAGE AREA 3 AND 4 OF THE PROJECT. THEY ARE DESIGNED TO TEMPORARILY STORE AND INFILTRATE THE DIFFERENCE BETWEEN THE 2-YEAR POST- AND THE 2-YEAR PRE-DEVELOPMENT RUNOFF VOLUMES FROM TWO SMALL SECTIONS OF ROOF THAT CANNOT BE CONNECTED TO THE ROOFTOP DRAINAGE SYSTEM THAT CONVEYS RUNOFF TO CHANNEL 1. IN ADDITION THIS BMP WILL EFFECTIVELY AVOID, MINIMIZE AND OR MITIGATE THERMAL IMPACTS FROM STORMWATER RUNOFF. REF. DS-4 APPENDIX B
- B. MAINTENANCE REQUIREMENTS
 - INSPECT DRY WELLS AT LEAST FOUR TIMES A YEAR, AS WELL AS AFTER EVERY STORM EXCEEDING 1 INCH.
 - DISPOSE OF SEDIMENT, DEBRIS/TRASH, AND ANY OTHER WASTE MATERIAL REMOVED FROM A DRY WELL AT SUITABLE DISPOSAL/RECYCLING SITES AND IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL WASTE REGULATIONS.
 - EVALUATE THE DRAIN-DOWN TIME OF THE DRY WELL TO ENSURE THE MAXIMUM TIME OF 72 HOURS IS NOT BEING EXCEEDED. IF DRAIN-DOWN TIMES ARE EXCEEDING THE MAXIMUM, DRAIN THE DRY WELL VIA PUMPING AND CLEAN OUT PERFORATED PIPING, IF INCLUDED. SLOW DRAINAGE PERSISTS, THE SYSTEM MAY NEED REPLACING.
 - REGULARLY CLEAN OUT GUTTERS AND ENSURE PROPER CONNECTIONS TO FACILITATE THE EFFECTIVENESS OF THE DRY WELL.
 - REPLACE FILTER SCREEN THAT INTERCEPTS ROOF RUNOFF AS NECESSARY.

IF AN INTERMEDIATE SUMP BOX EXISTS, CLEAN IT OUT AT LEAST ONCE PER YEAR.

[APPLICANT/OWNER/ RESPONSIBLE PARTY]

SOLID ROCK MISSIONARY BAPTIST CHURCH
8000 DERRY STREET, SUITES C & D
HARRISBURG, PENNSYLVANIA 17111
717-558-0133
ATTENTION: MR. KENNETH L. MICKENS, ESQ.

[SITE SPECIFIC SEQUENCE OF BMP INSTALLATION]

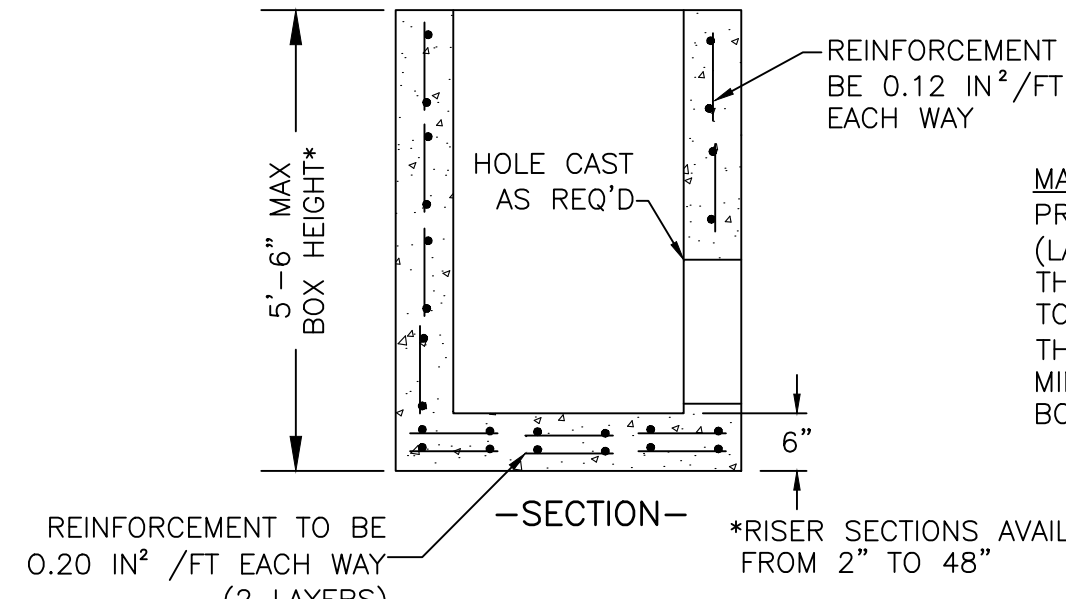
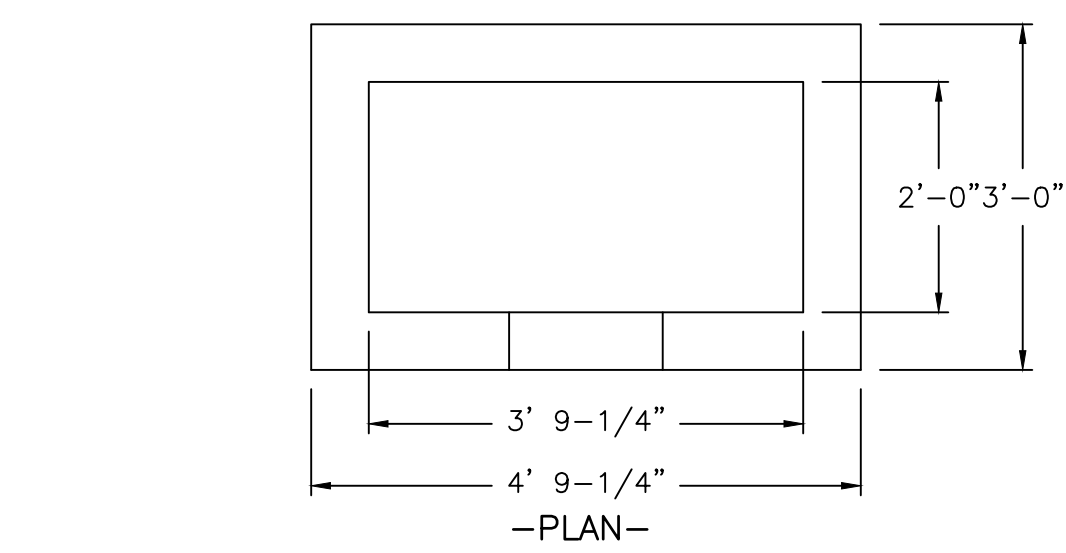
- BMPS SHALL BE INSTALLED IN THE FOLLOWING SEQUENCE
1. [PADEP BMP 5.4.3] PROTECT/UTILIZE NATURAL FLOW PATHWAYS
 - A. THE CLEAN-UP OF EXISTING DRAINAGEWAYS (CHANNELS) AND INFILTRATION SUMP ON THE EASTSIDE OF THE SITE.
 2. **PA DEP BMP 6.4.3] SUBSURFACE INFILTRATION BEDS: THIS IS A CRITICAL STAGE BMP INSTALLATION REQUIRING DESIGN ENGINEER INSPECTION**
 - A. THE FRONT INFILTRATION BED BENEATH THE PARKING LOT SHALL BE INSTALLED FIRST FOLLOWED BY THE REAR BED.
 3. [PA DEP BMP 6.4.4] INFILTRATION TRENCH / VEGETATED CHANNELS 1A AND 1B
 4. **[PA DEP BMP 6.4.6] RAIN GARDEN/BIO-INFILTRATION BED: THIS IS A CRITICAL STAGE BMP INSTALLATION REQUIRING DESIGN ENGINEER INSPECTION**
 5. [PA DEP BMP 5.8.1] ROOFTOP DISCONNECTION
 - A. INSTALLATION OF ROOFTOP PERIMETER DRAINAGE SYSTEM (COORDINATE WITH BUILDING CONSTRUCTION)
 6. **[PA DEP BMP 6.4.6] DRY WELL/SEEPAGE PIT: THIS IS A CRITICAL STAGE BMP INSTALLATION REQUIRING DESIGN ENGINEER INSPECTION**
 - A. INSTALLATION OF SEEPAGE PITS OFF OF THE NORTHEAST AND SOUTHWEST CORNERS OF THE BUILDING (COORDINATE WITH BUILDING CONSTRUCTION)
 7. [PA DEP BMP 5.6.3/6.7.2] RE-VEGETATE DISTURBED AREAS/LANDSCAPE RESTORATION

DRAWING NO. C-8	SHEET'S: 8 OF 20	"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Dauphin County Susquehanna Township Pennsylvania	CONSTRUCTION OPERATION AND MAINTENANCE STORMWATER BMPS	DSGN	G.C.C.G.	DATE
				DTSMM	D.J.J.	
				CHKR	E.A.S.	
				APPV	G.C.C.G.	
				SCALE	NO SCALE	
				BY	DATE	
				REV	DESCRIPTION	
PROJECT NUMBER: R18-0633.000		SUBTASK: 4		DATE: MAY 21, 2019		

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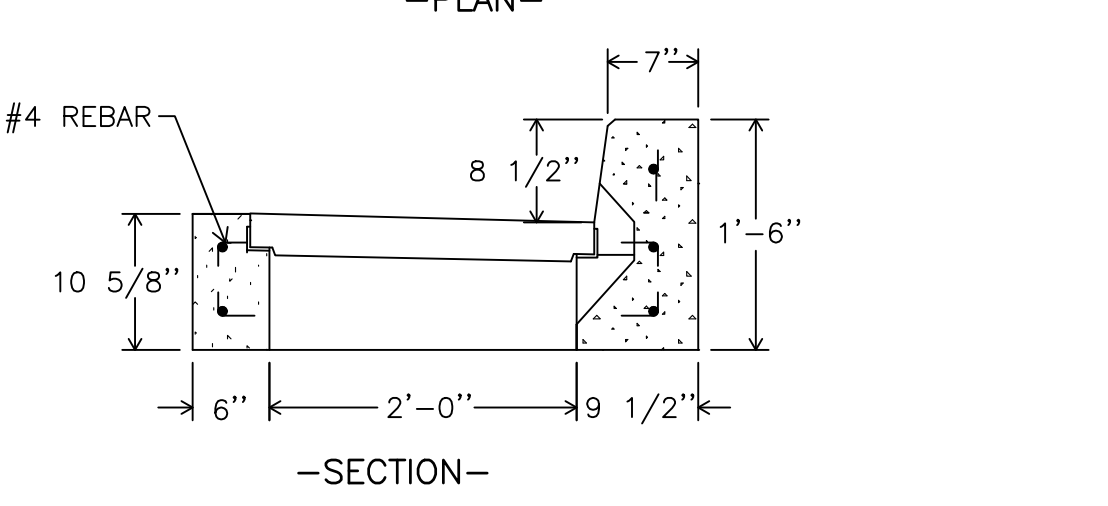
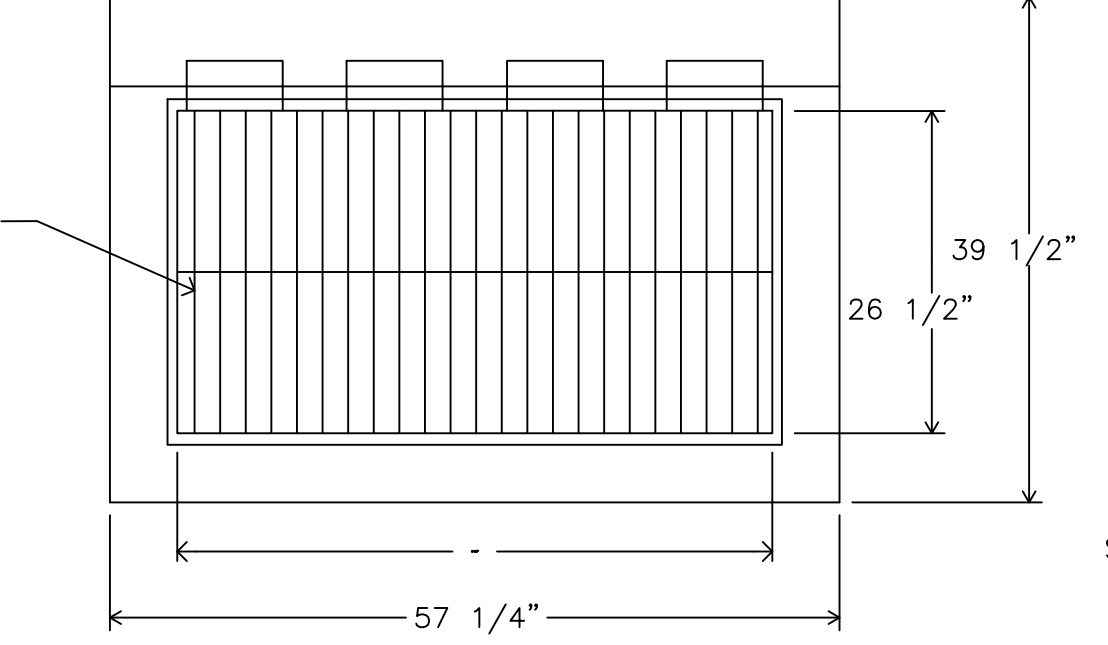
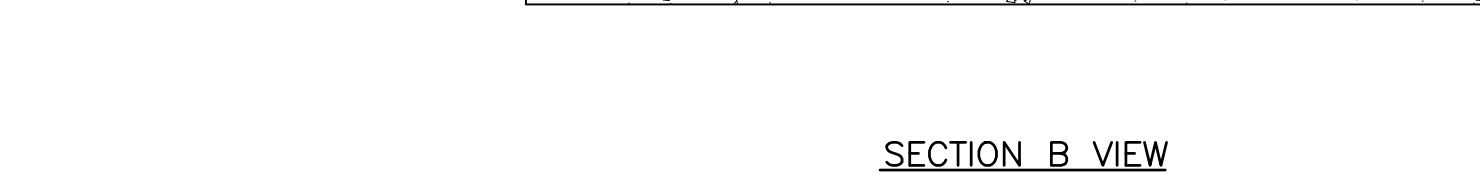
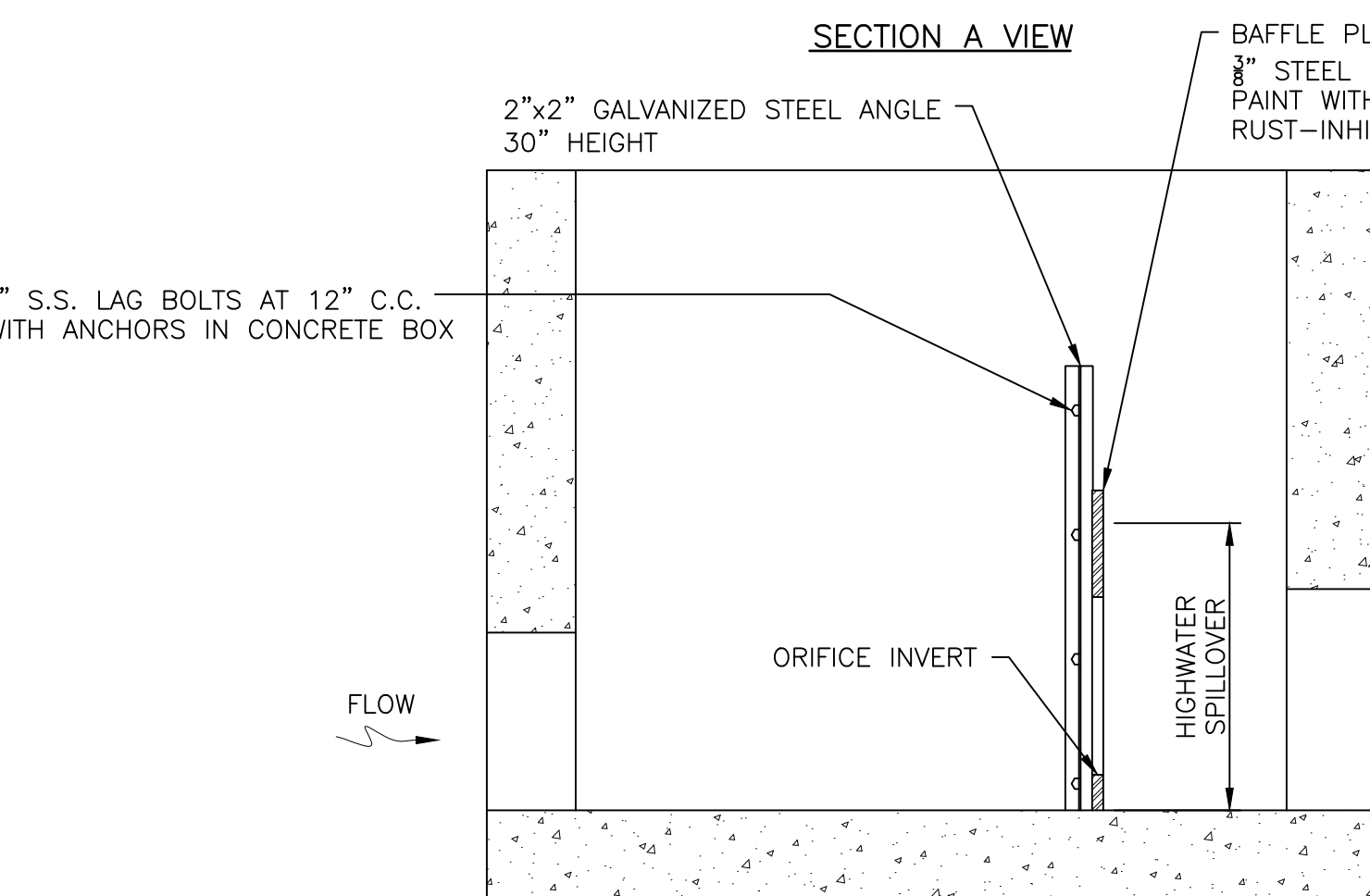
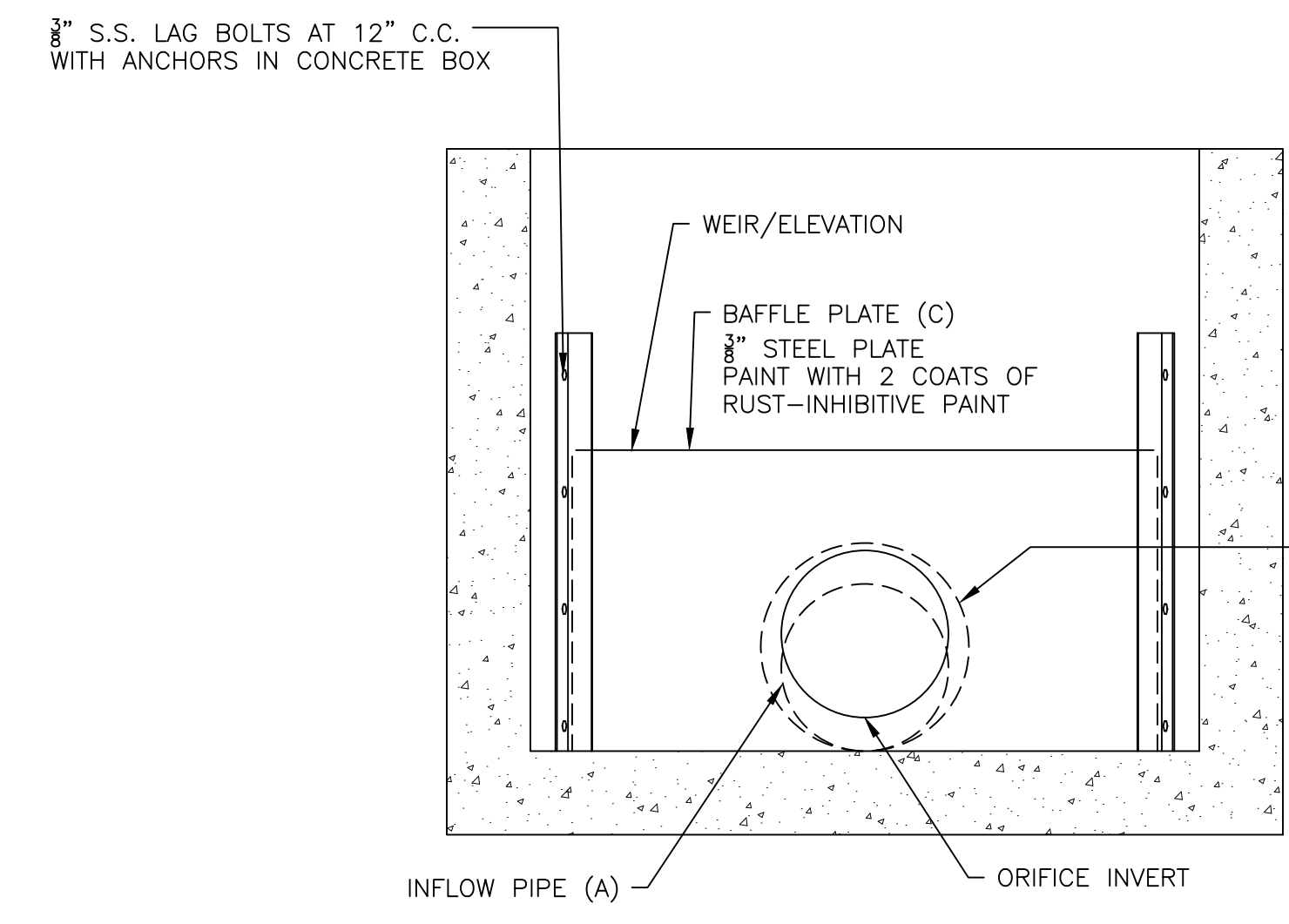
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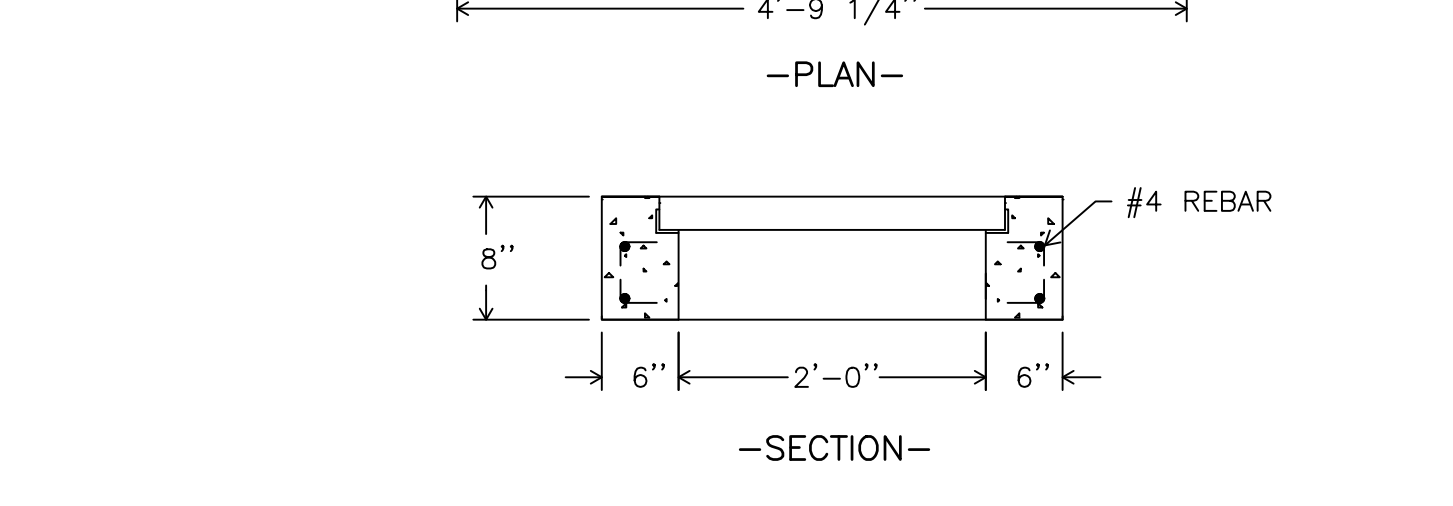
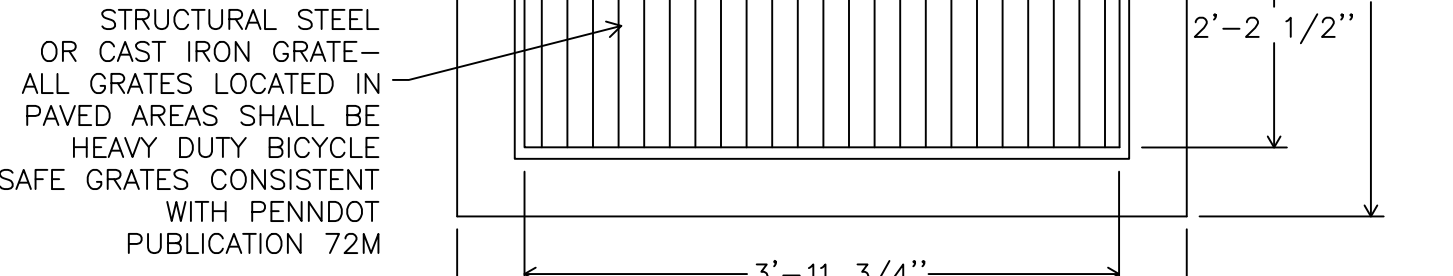
MANHOLE/INLET BOX STEPS:
 PROVIDE MANHOLE/INLET BOX STEPS (LADDER RUNGS) WHEN THE DEPTH BETWEEN THE FINISHED GRADE ELEVATION AND THE TOP OF BOTTOM SLAB ELEVATION IS GREATER THAN 5'-0". LOCATE THE TOP STEP 6" MINIMUM BELOW THE TOP OF THE INLET BOX.

NOTE:
 1. ALL INLETS ARE SIZED TO ACCEPT THE SPECIFIED PIPE SIZES WITHOUT KNOCKING OUT ANY OF THE INLET CORNERS.

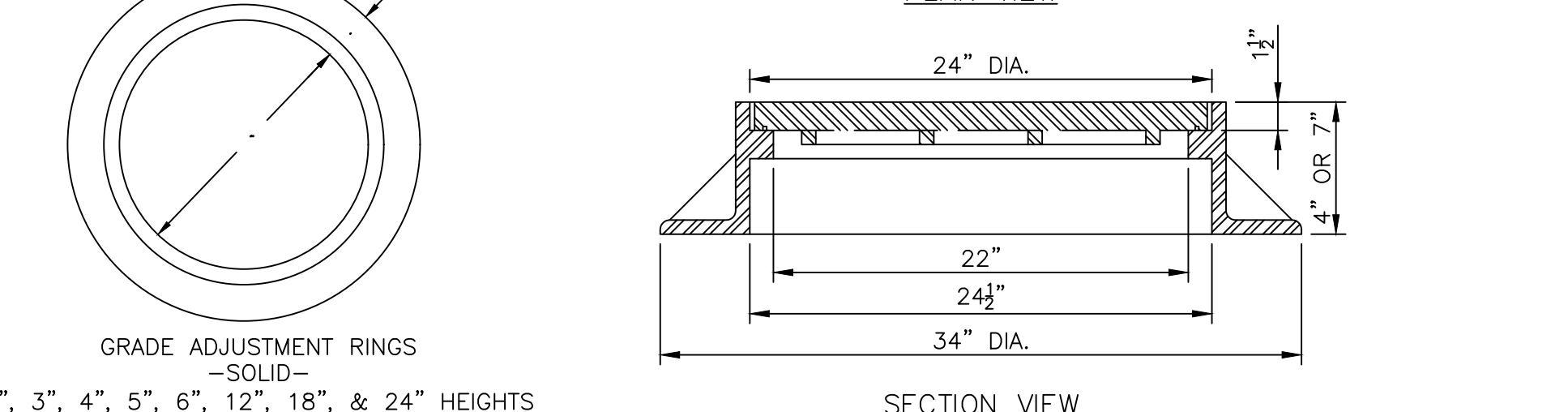
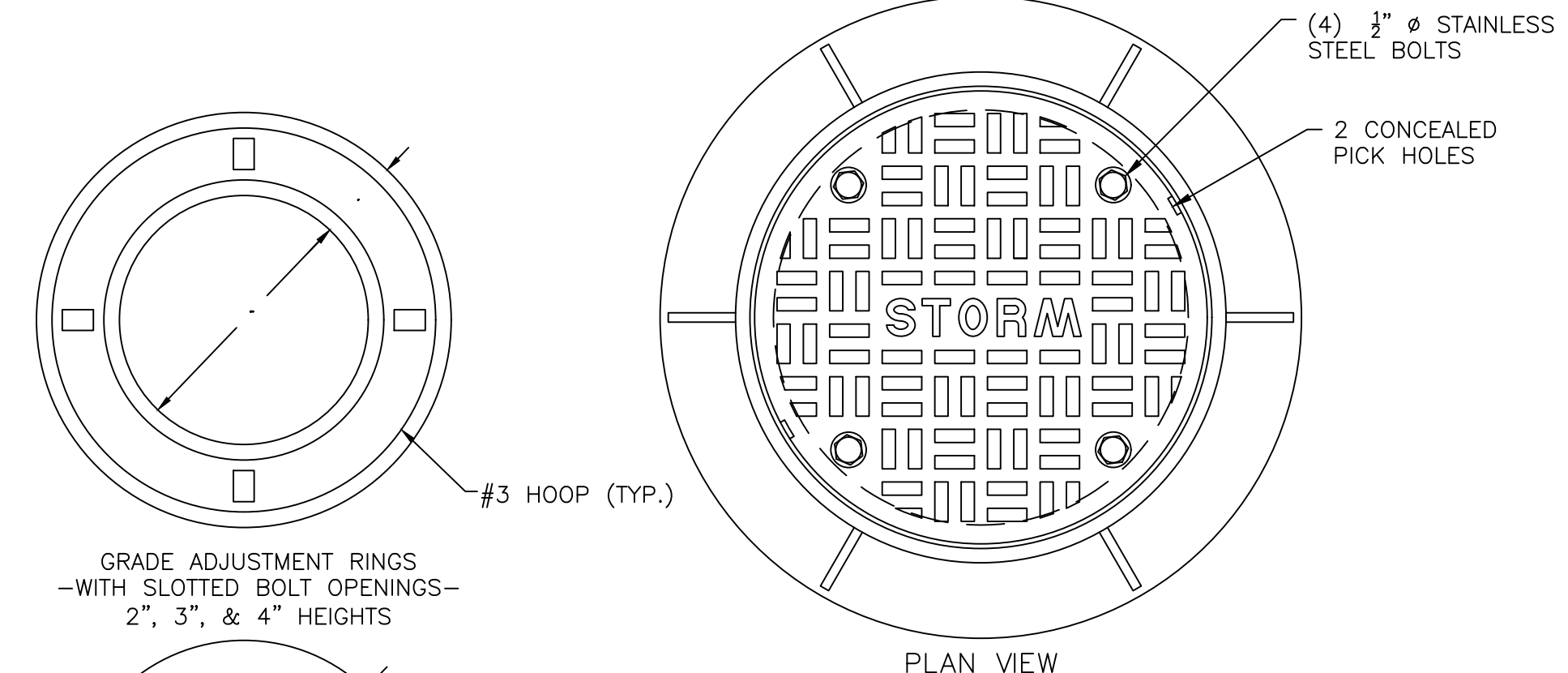
PRECAST INLET BOX FOR PENNDOT INLET TOPS
 NO SCALE



PENNDOT TYPE C CONCRETE INLET TOP
 NO SCALE

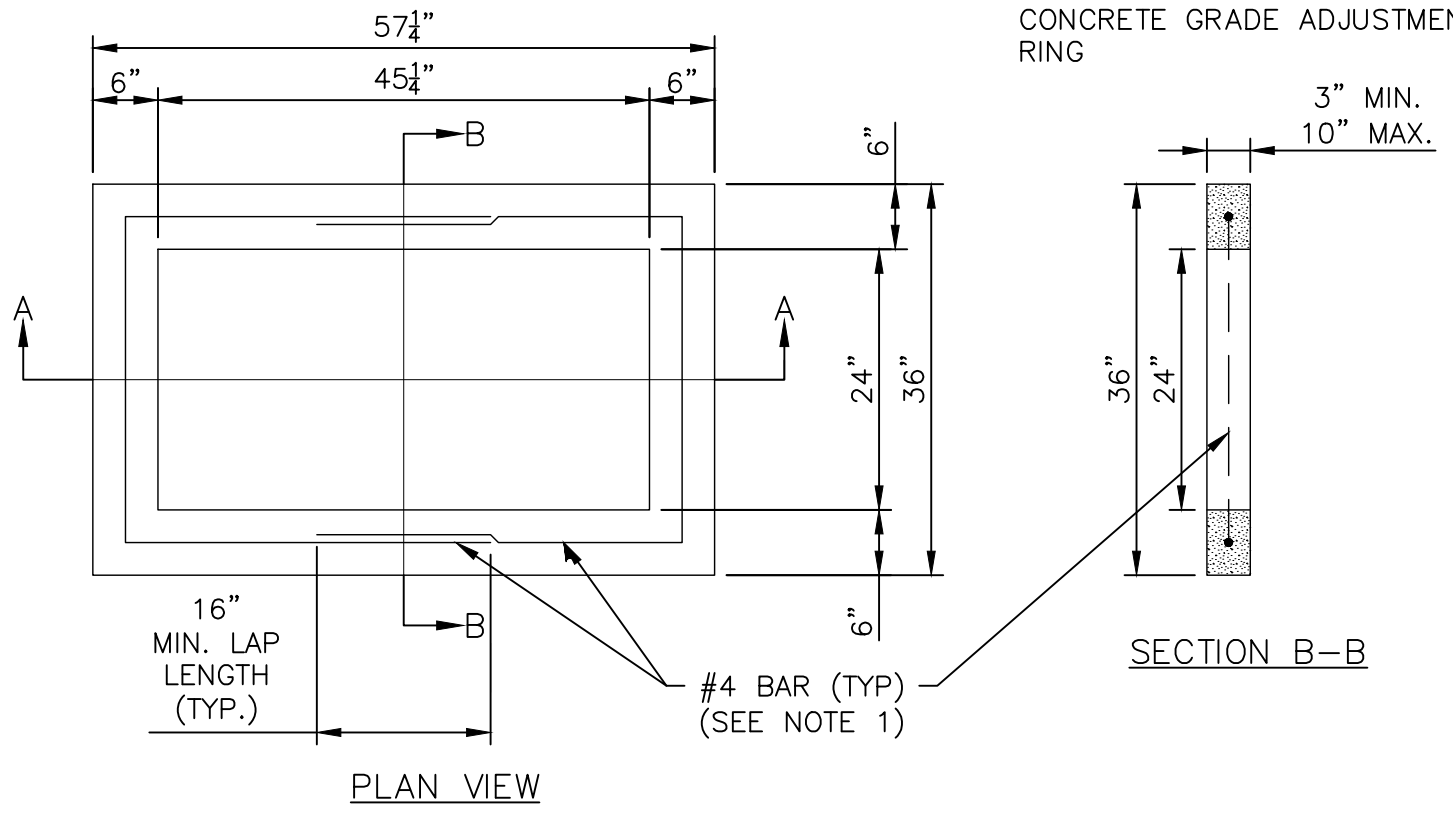
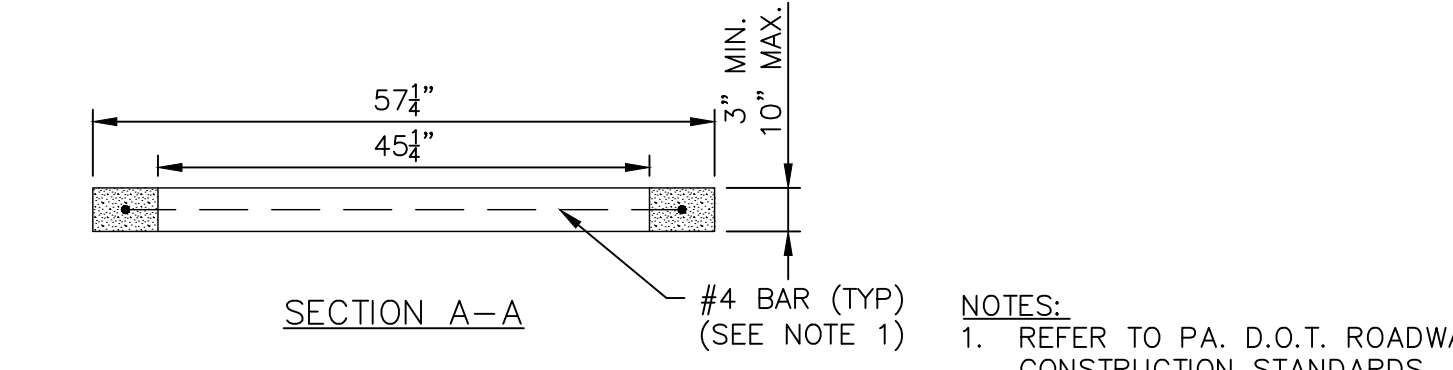


PENNDOT TYPE M CONCRETE INLET TOP
 NO SCALE

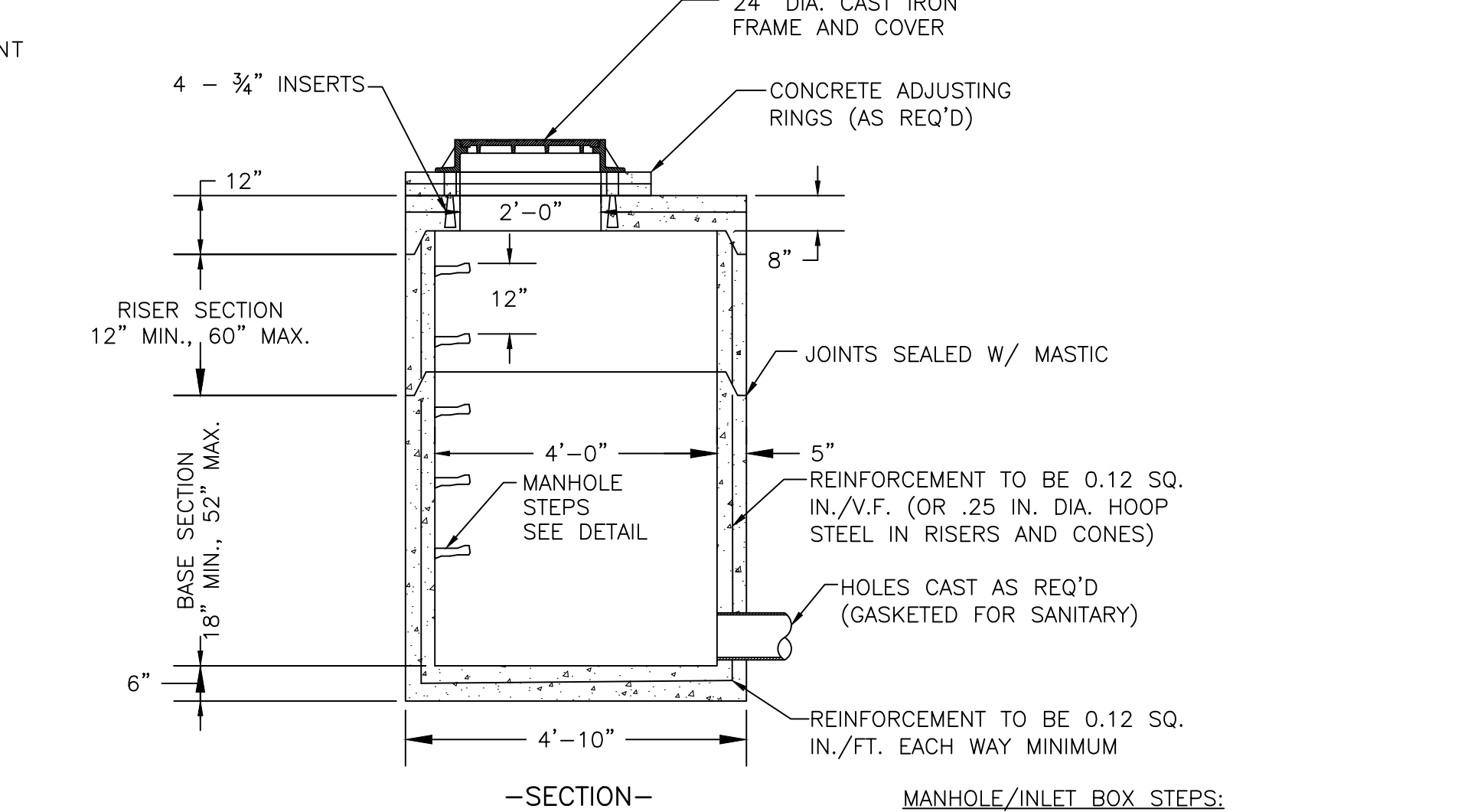


24" DIA. MANHOLE FRAME AND COVER
 NO SCALE

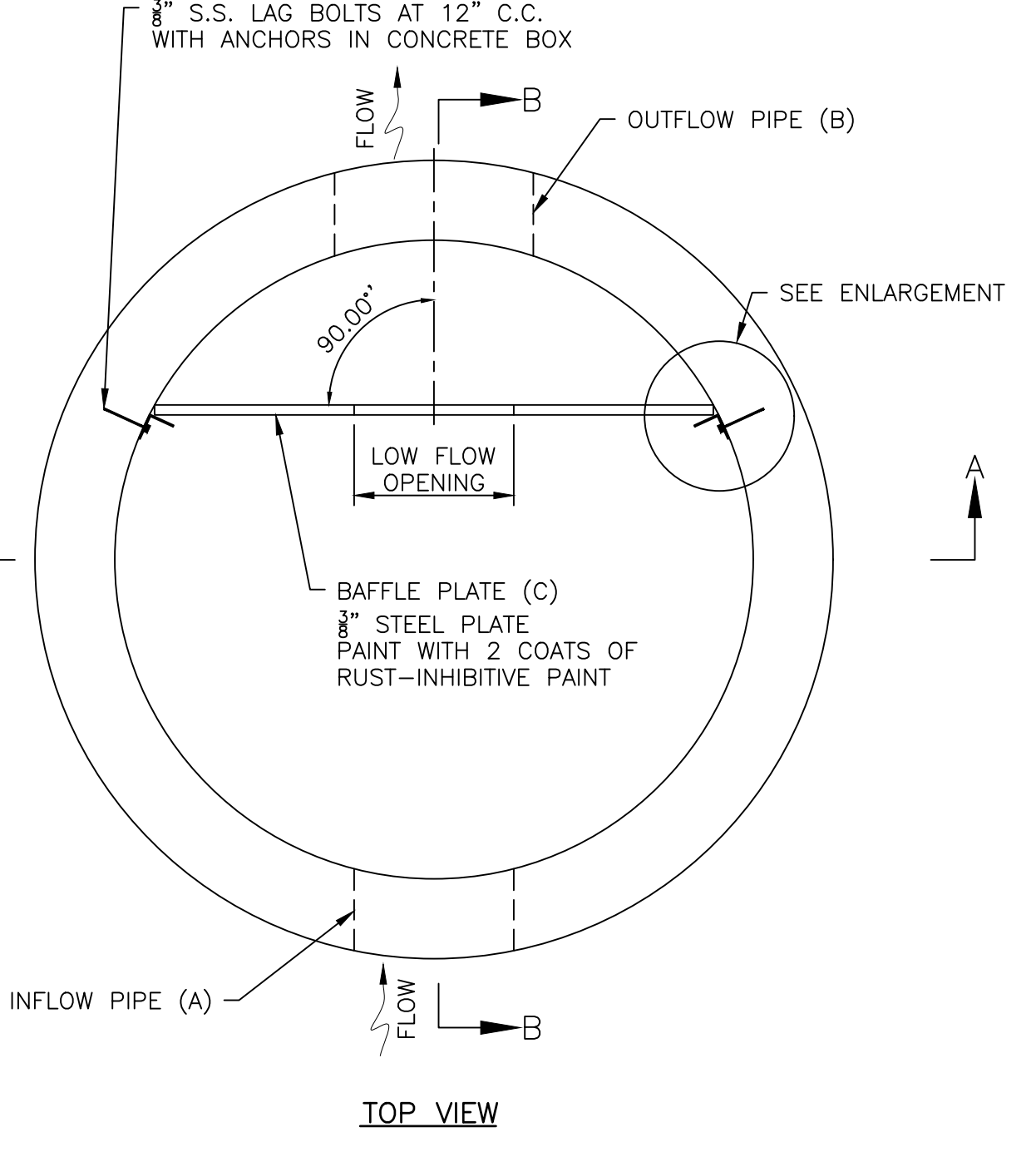
MANHOLE GRADE ADJUSTING RINGS
 NO SCALE



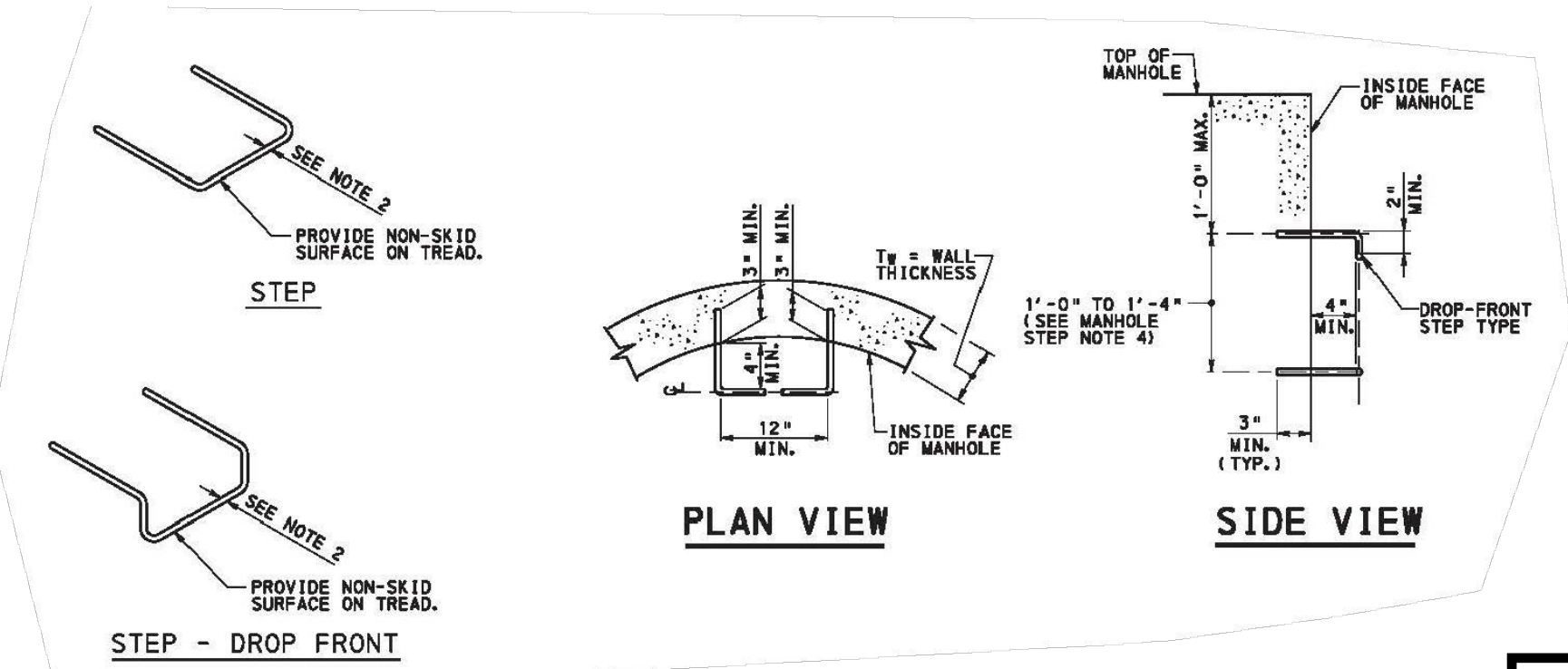
PRECAST CONCRETE GRADE ADJUSTMENT RING
 NO SCALE



PRECAST CONCRETE MANHOLE
4 FT. DIAMETER W/ FLAT LID
 NO SCALE



TOP VIEW



MANHOLE/INLET BOX STEP DETAIL
 NO SCALE

NOTES:
 1. PROVIDE MINIMUM 1" SECTION DIMENSION FOR METAL STEPS. PROVIDE 3/4" SECTION DIMENSION FOR NON-DETERIORATING MATERIAL STEPS.
 2. SECURELY EMBED STEPS INTO INSERTS CAST INTO THE WALLS OR PREFORMED HOLES.
 3. PROVIDE UNIFORM SPACING OF MANHOLE STEPS WITHIN A MANHOLE/INLET ASSEMBLY.

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INFILTRATION BED (INFILTRATION BED) OUTLET WORKS									
INFILTRATION BED NO.	MANHOLE NO.	INFLOW PIPE (A)		OUTFLOW PIPE (B)		WEIR/BAFFLE PLATE			
		DIA. (INCHES)	INVERT ELEVATION	DIA. (INCHES)	INVERT ELEVATION	LENGTH (INCHES)	WEIR ELEVATION	ORIFICE OPENING DIA. (INCHES)	ORIFICE INVERT ELEVATION
INFILTRATION BED 1	MH-1	12	451.38	15	451.38	42	453.6	12	452.37
INFILTRATION BED 2	MH-2	12	447.13	18	447.13	42	449.00	12	447.50

MANHOLE WITH BAFFLE PLATE DETAIL
 NO SCALE

PROJECT NUMBER: R18-0633.000
 TASK: 4
 DATE: MAY 21, 2019

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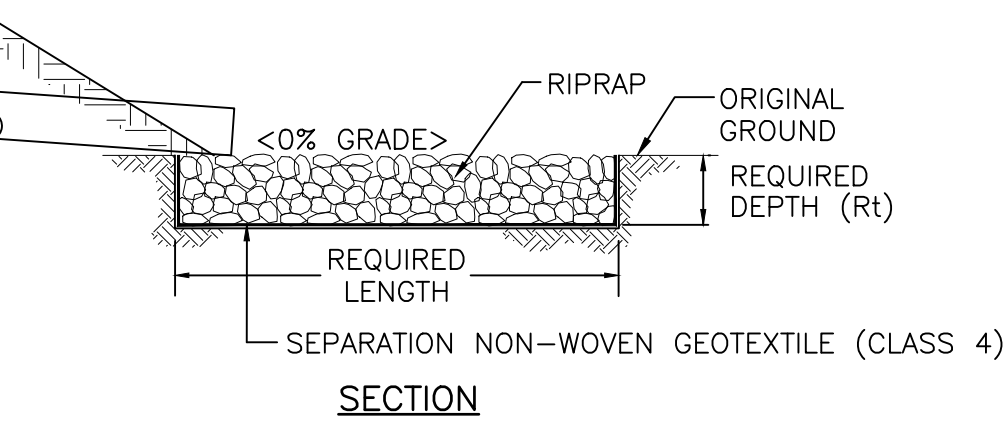
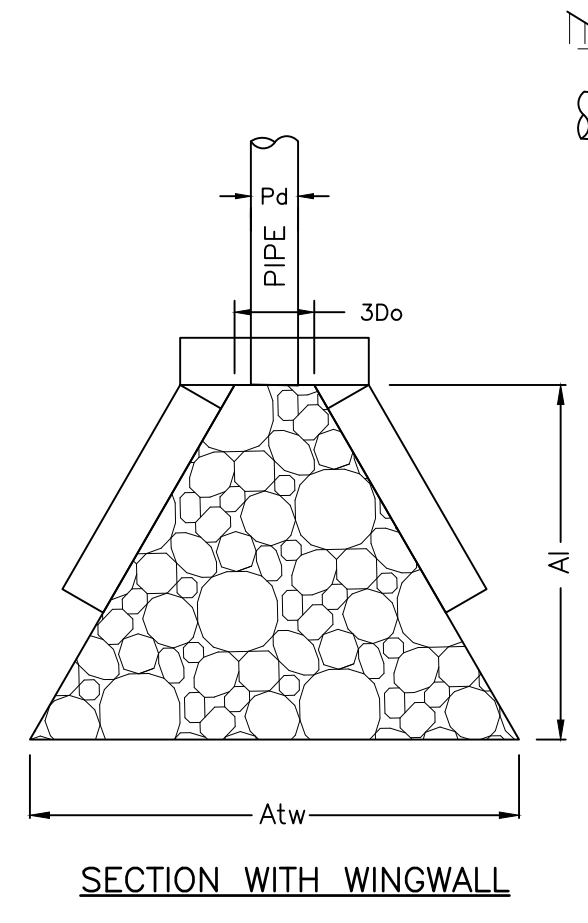
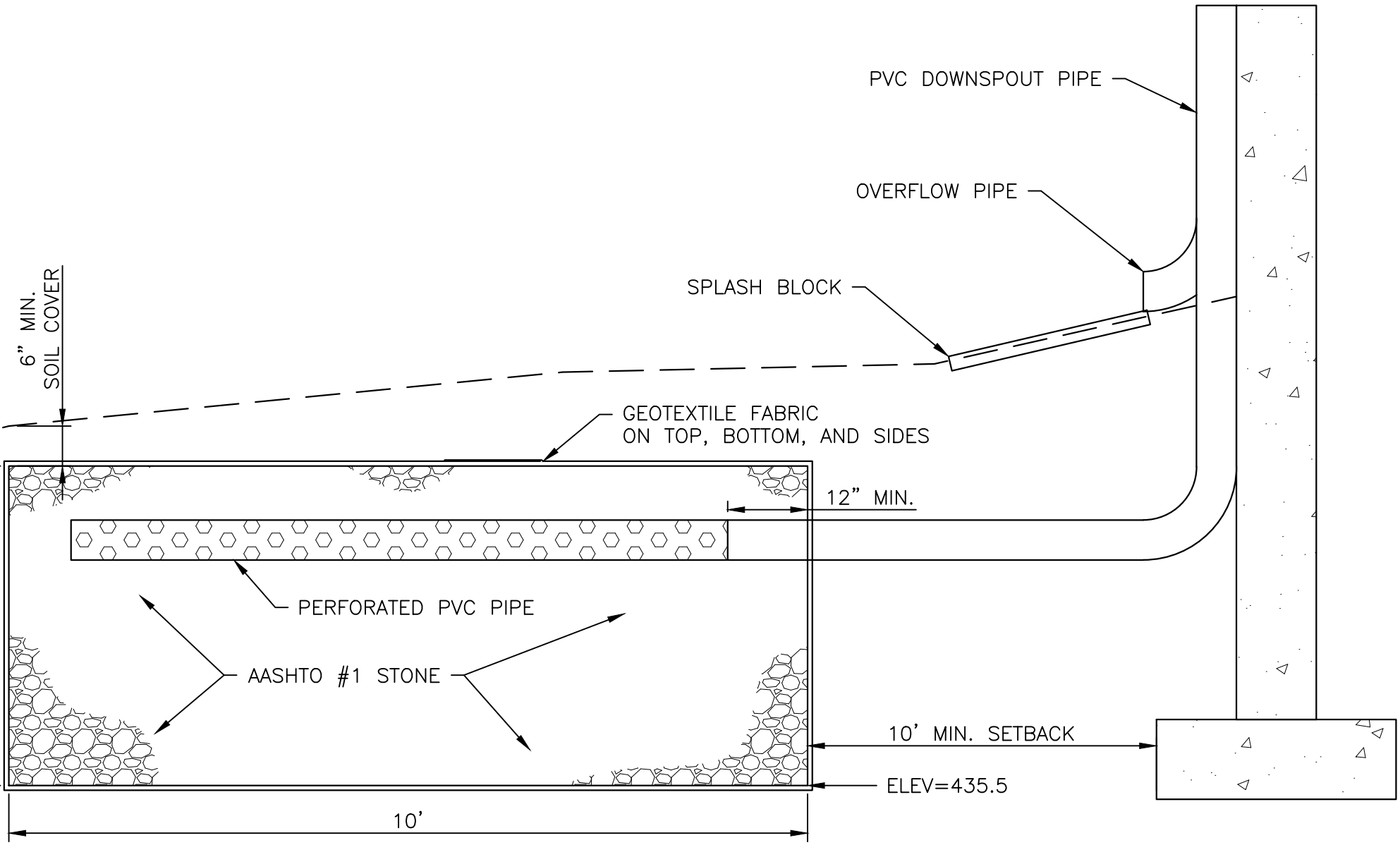
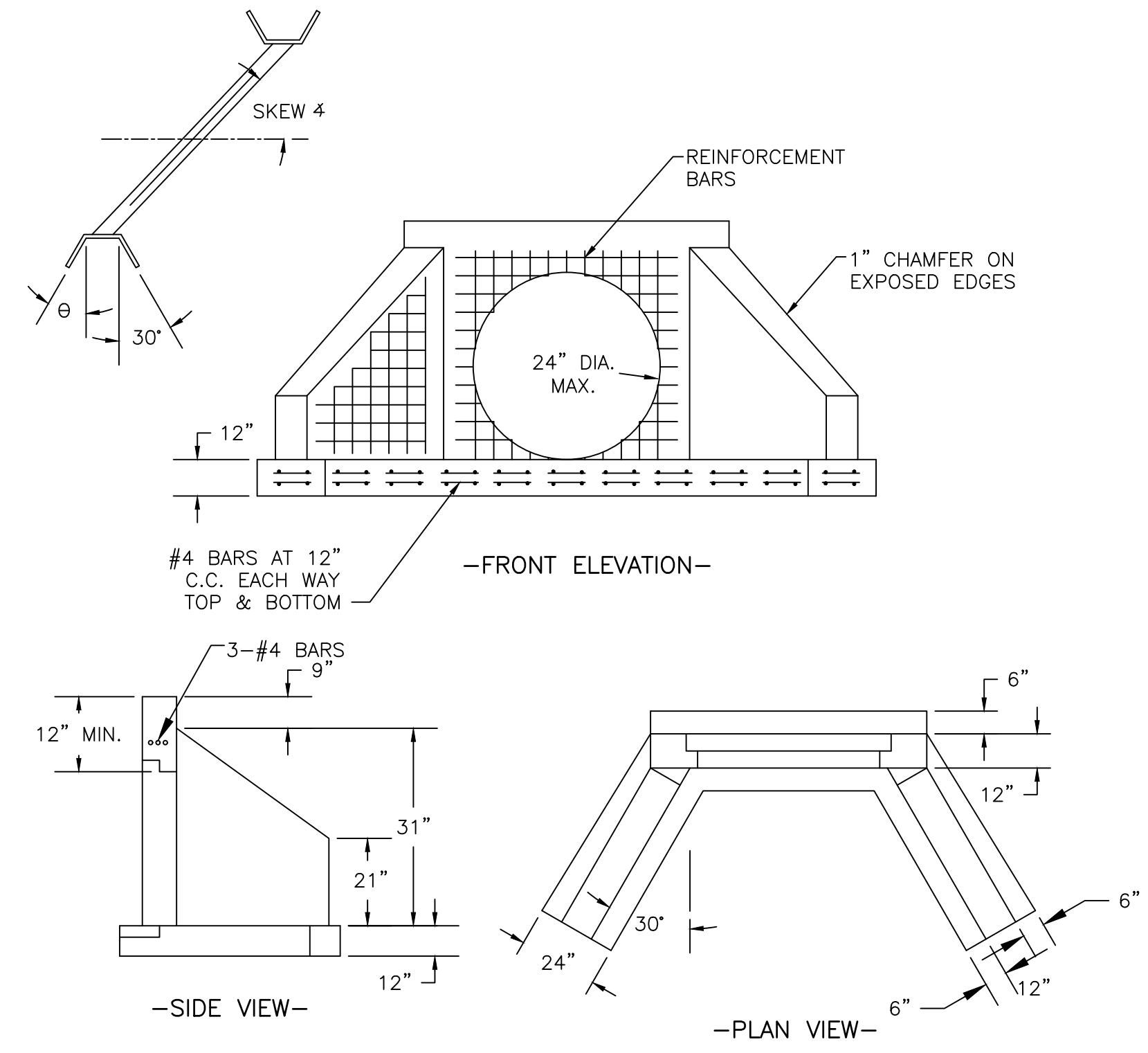
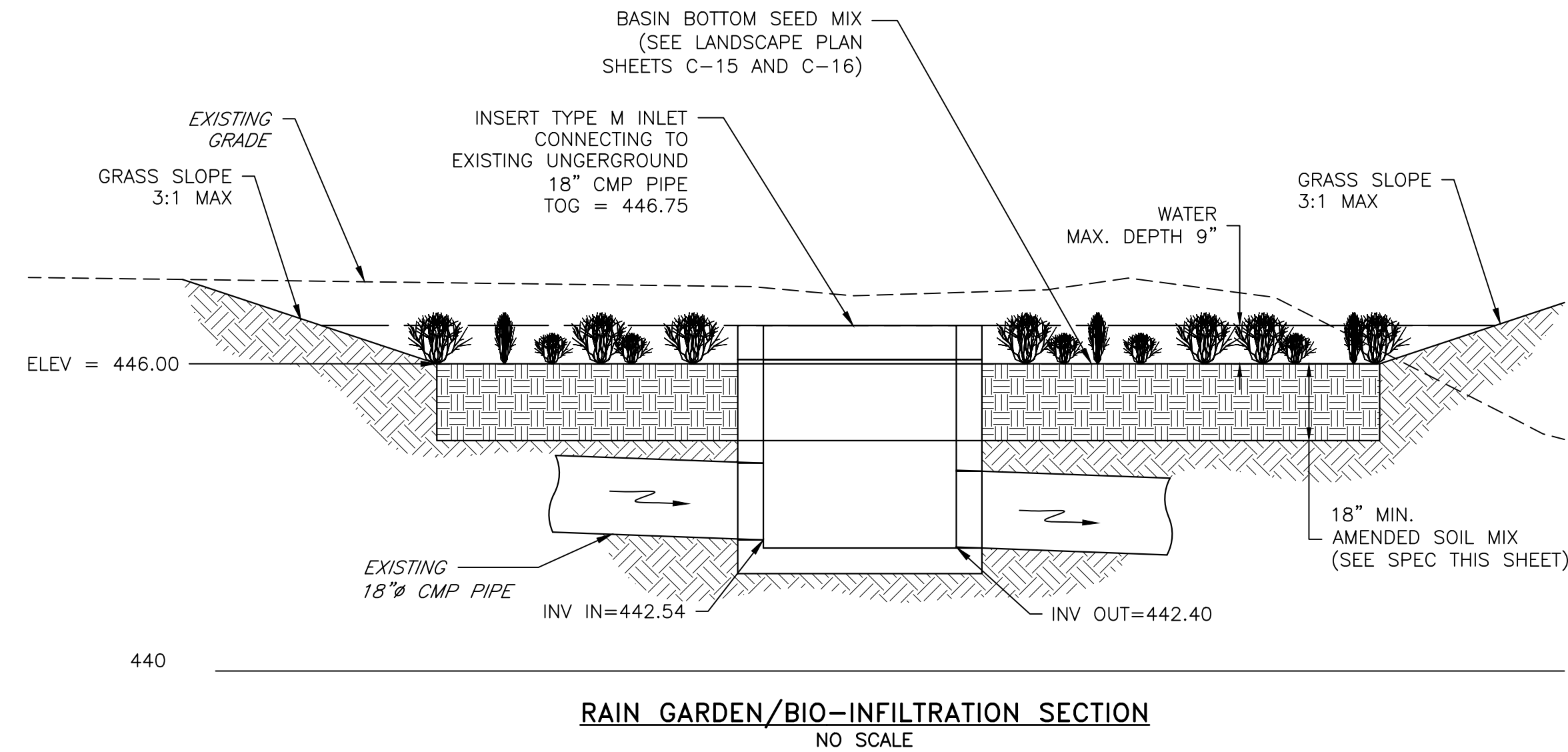
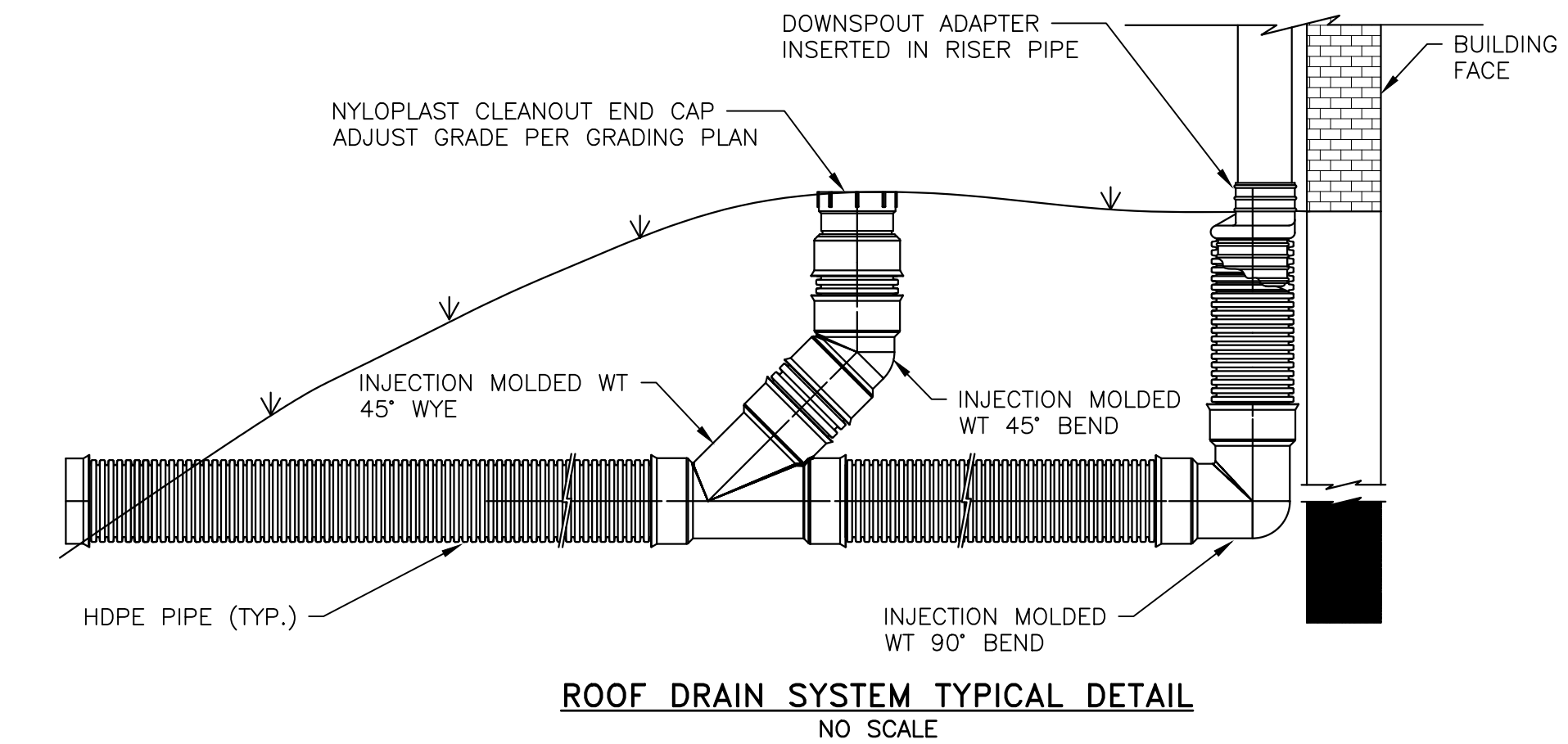
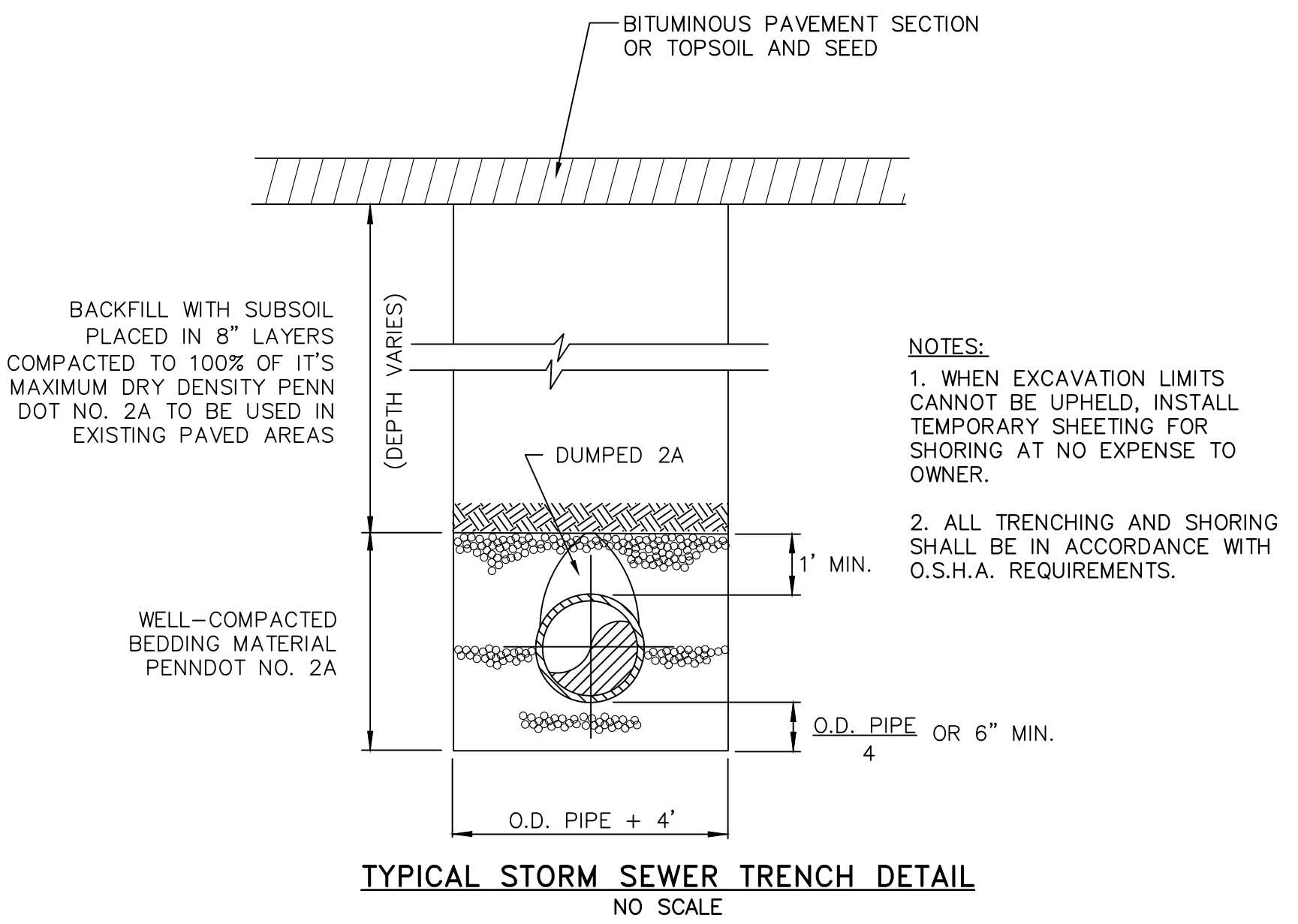
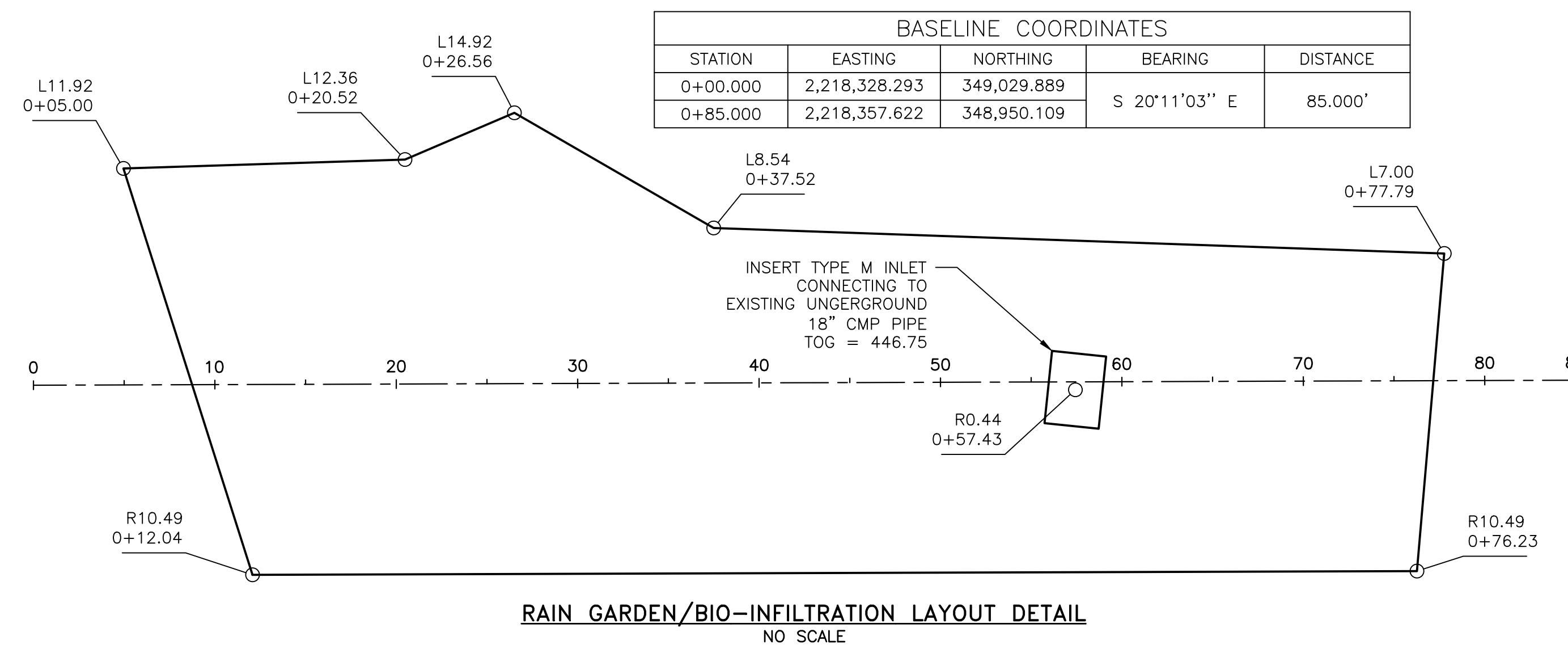
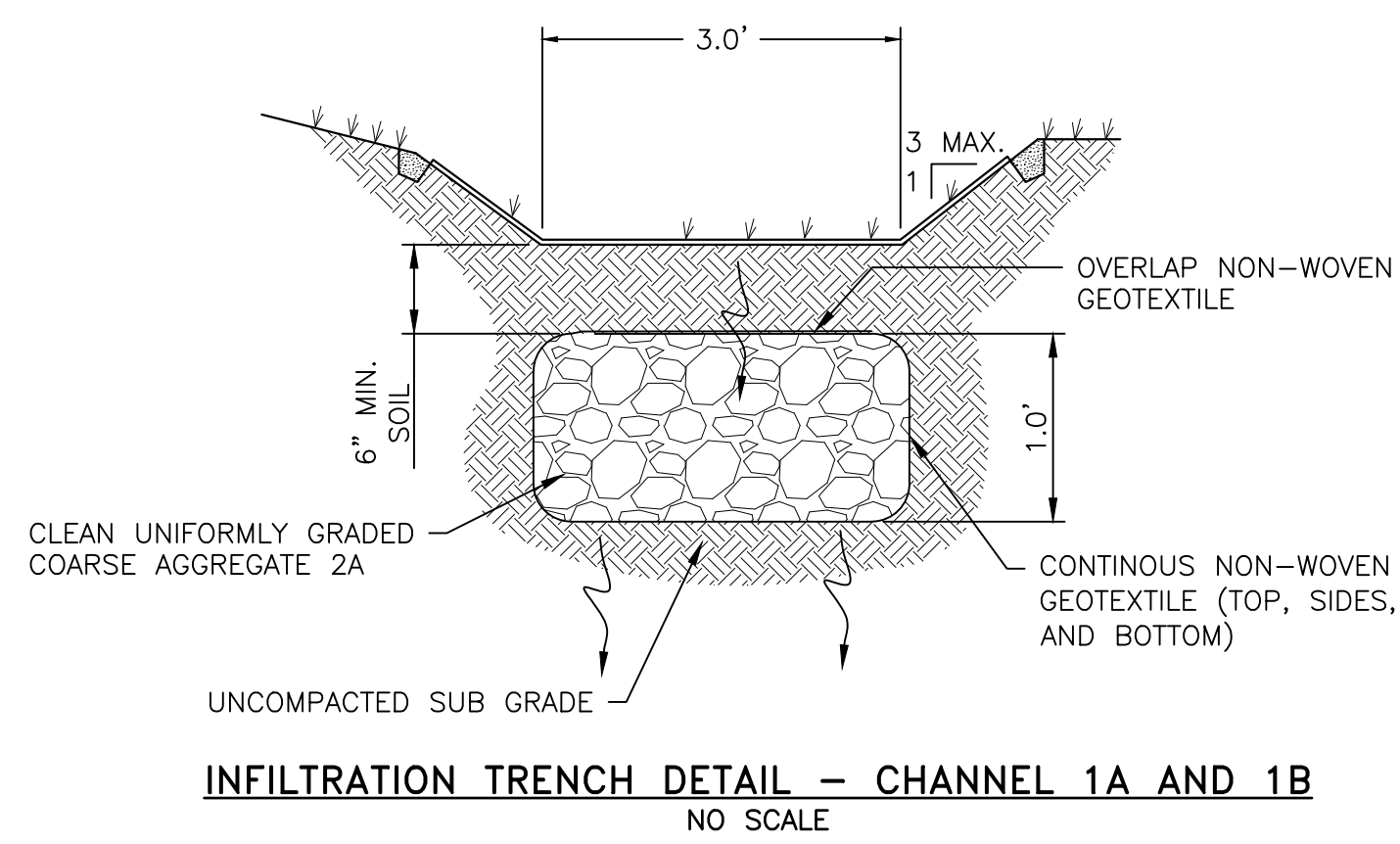
SKELLY AND JOY
 ENGINEERS AND ARCHITECTS

LAND DEVELOPMENT PLAN FOR
 Solid Rock Missionary Baptist Church
 2400 LOCUST LANE
 Susquehanna Township Dauphin County Pennsylvania

DESIGN: G.C.C.
 CHECKER: D.J.J.
 APPROVER: E.A.S.
 SCALE: NO SCALE

DRAWING NO. C-9
 SHEETS: 9 OF 20

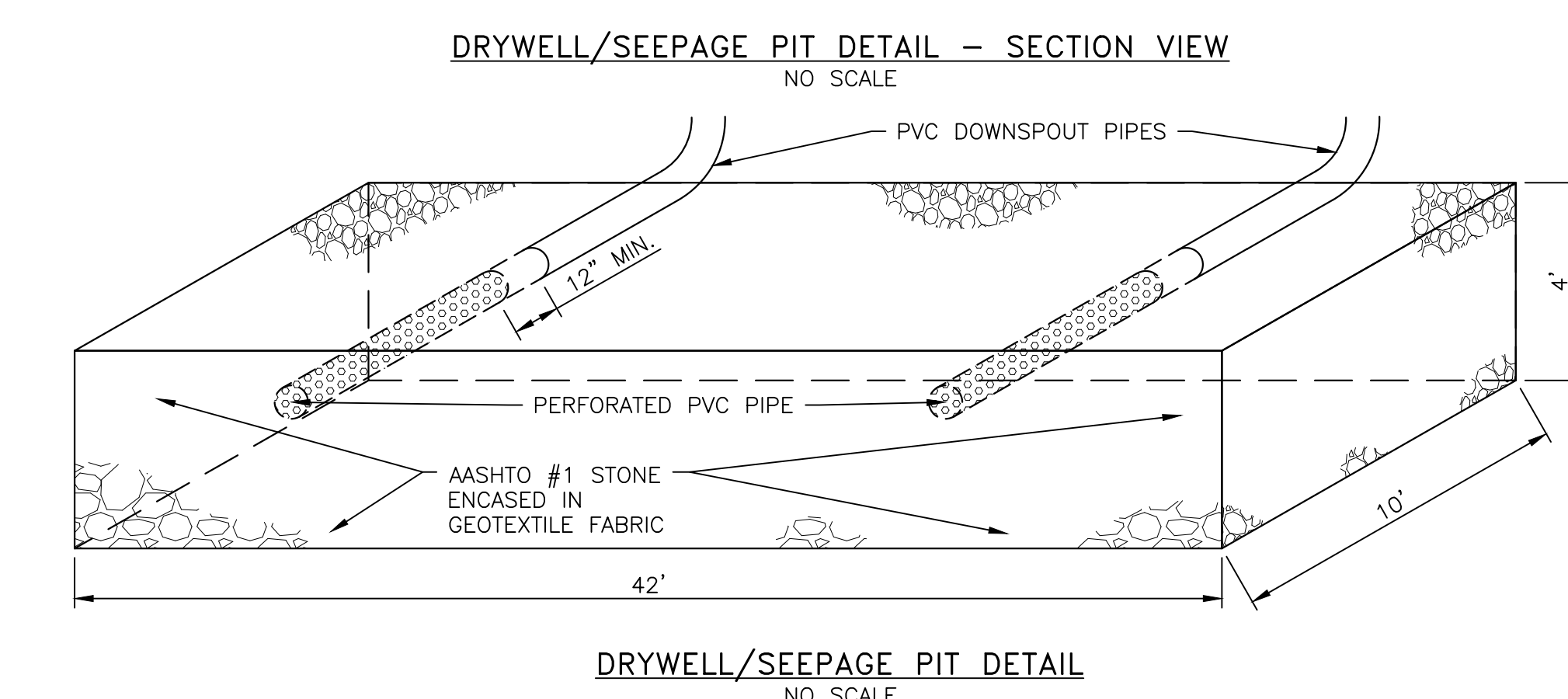
STORMWATER DETAILS



NOTES:
 ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN.
 ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
 EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

DESIGNATION	Pd	3D ₂	A*	Atw*	SIZE	REQUIRED DEPTH
RIPRAP APRON #1	1.25'	3.75'	12'	16'	R-4	18"
RIPRAP APRON #2	1.50'	4.50'	11'	16'	R-3	9"
RIPRAP APRON #3	0.67'	2'	6'	8'	R-3	9"

* MINIMUM DIMENSIONS
 CLASS R-3 RIPRAP SHALL HAVE A D50=3\"/>



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 NOT RELEASED FOR CONSTRUCTION**

NOTE:
 1. PRECAST INLET BOX, INLET TOPS, STORM MANHOLES, GRADE ADJUSTMENT RINGS, AND D-W ENDWALL, AS MANUFACTURED BY MONARCH PRODUCTS COMPANY, INC. OR APPROVED EQUAL.

DRAWING NO. **C-10** SHEETS: **10 OF 20**

"LAND DEVELOPMENT PLAN" FOR
 Solid Rock Missionary Baptist Church
 2400 LOCUST LANE
 Susquehanna Township Dauphin County Pennsylvania

DSGN G.C.C. DTSMM D.J.J. CHKR B.A.S. APPV G.C.C. SCALE NO SCALE BY: DATE: REV DESCRIPTION

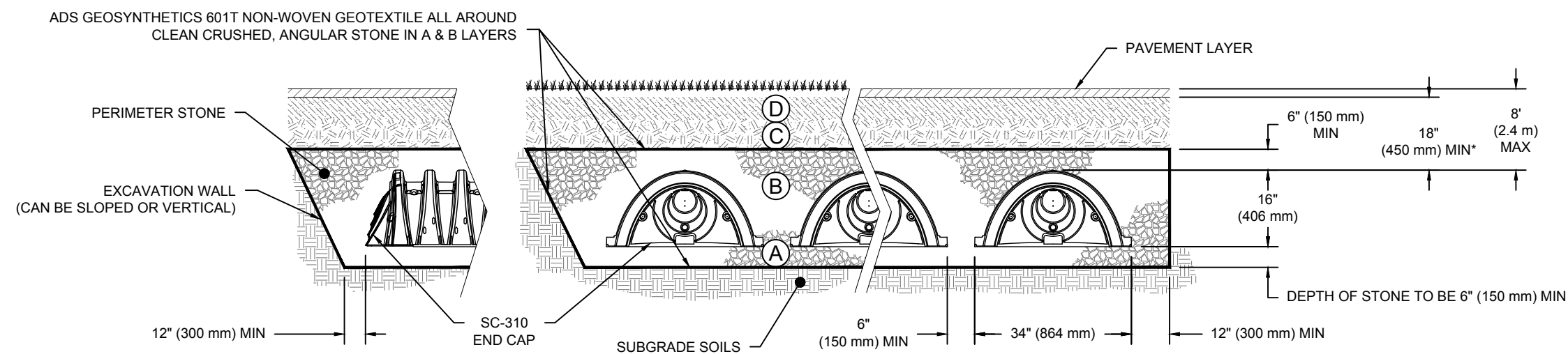
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PROJECT NUMBER: **R18-0633.000**
 TASK: **4**
 DATE: **MAY 21, 2019**

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145' A-1, A-2.4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (63 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 4. ONCE LAYER 'C' IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



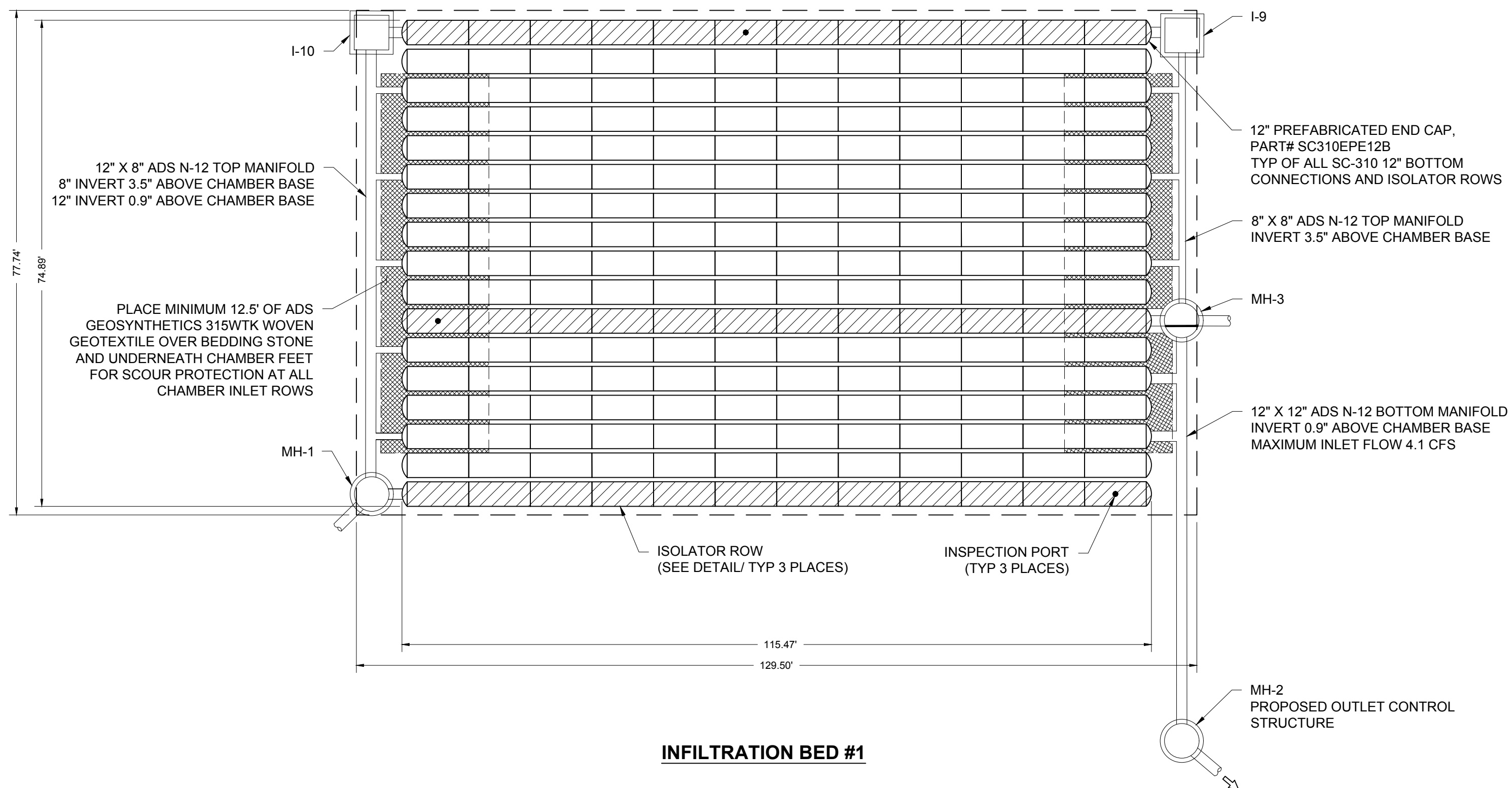
NOTES FOR THE INSTALLATION OF THE SC-310 SYSTEM

- STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.
- ADS REPRESENTATIVE SHALL BE CONTACTED PRIOR TO CONSTRUCTION AND BE IN ATTENDANCE DURING PRE-CONSTRUCTION CONFERENCE.

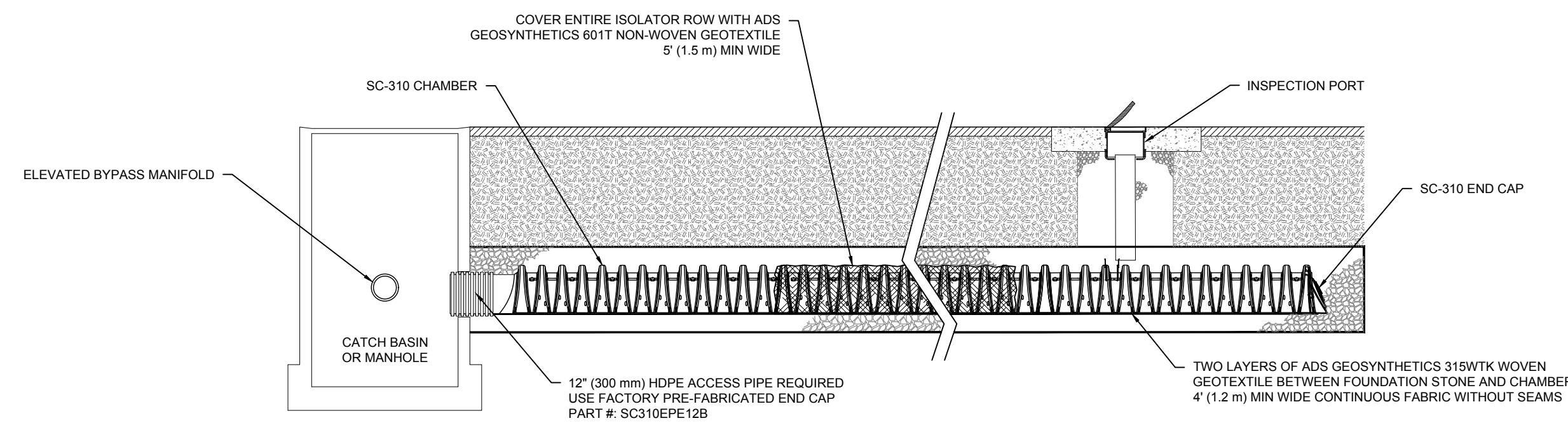
NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIERED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.



INFILTRATION BED #1



SC-310 ISOLATOR ROW DETAIL

PROPOSED LAYOUT - INFILTRATION BED-1

204	STORMTECH SC-310 CHAMBERS
34	STORMTECH SC-310 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
7091	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
5662	SYSTEM AREA (ft ²)
311	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS - INFILTRATION BED-1

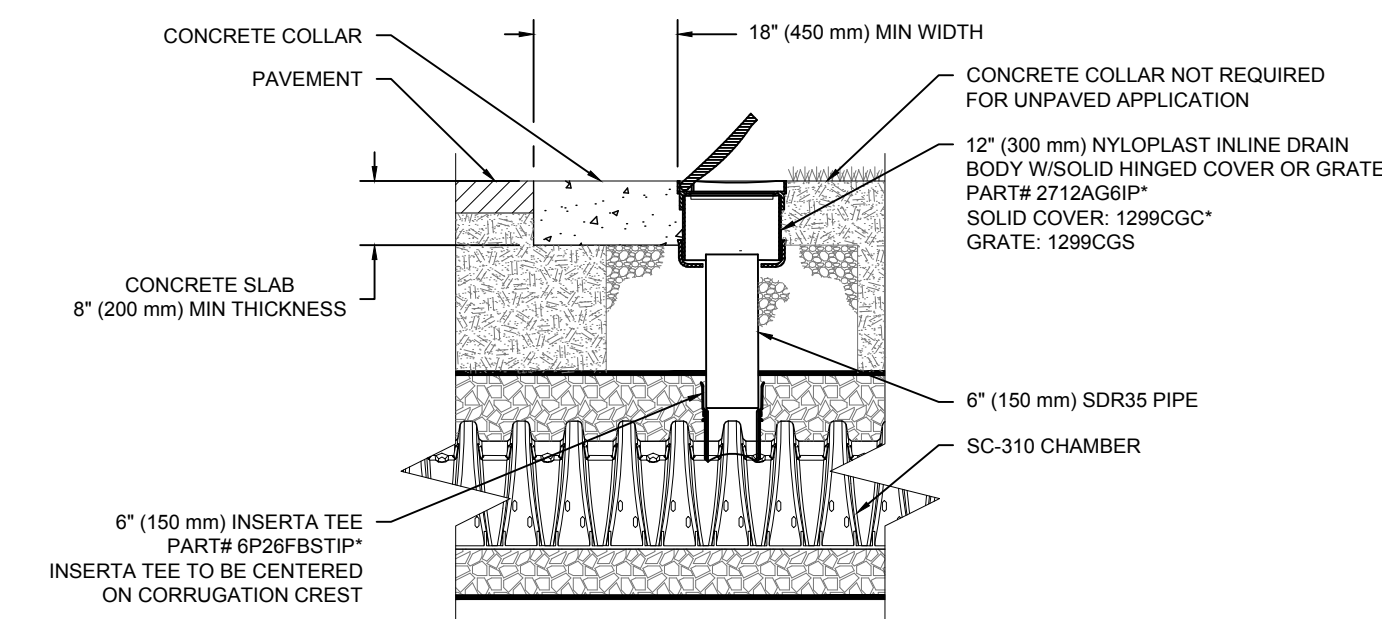
460.63	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
454.63	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
454.13	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
454.13	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
454.13	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
453.13	TOP OF STONE
452.63	TOP OF SC-310 CHAMBER
451.59	8" TOP MANIFOLD INVERT
451.38	12" ISOLATOR ROW CONNECTION INVERT
451.38	12" BOTTOM MANIFOLD TRUNK INVERT
451.30	BOTTOM OF SC-310 CHAMBER
450.80	BOTTOM OF STONE

PROPOSED LAYOUT - INFILTRATION BED-2

234	STORMTECH SC-310 CHAMBERS
36	STORMTECH SC-310 END CAPS
6	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
8645	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
6361	SYSTEM AREA (ft ²)
330	SYSTEM PERIMETER (ft)

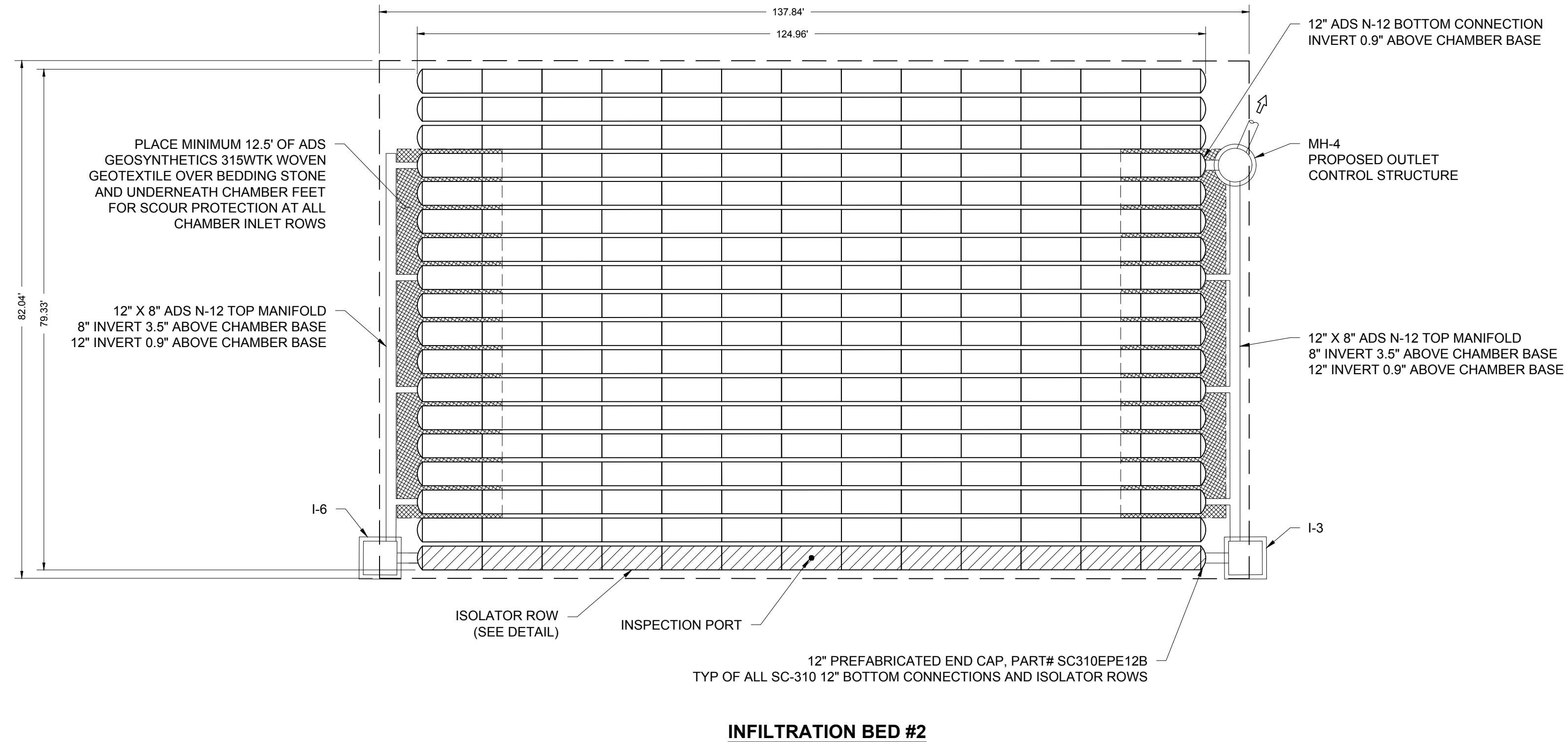
PROPOSED ELEVATIONS - INFILTRATION BED-2

456.38	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
450.38	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
449.88	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
449.88	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
449.88	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
448.88	TOP OF STONE
448.38	TOP OF SC-310 CHAMBER
447.34	8" TOP MANIFOLD INVERT
447.13	12" ISOLATOR ROW/OUTLET CONNECTION INVERT
447.13	12" BOTTOM MANIFOLD TRUNK INVERT
447.05	BOTTOM OF SC-310 CHAMBER
446.30	BOTTOM OF STONE



SC-310 6" (150 mm) INSPECTION PORT DETAIL

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INFILTRATION BED #2

DRAWING NO. **C-11** SHEETS: **11 OF 20**

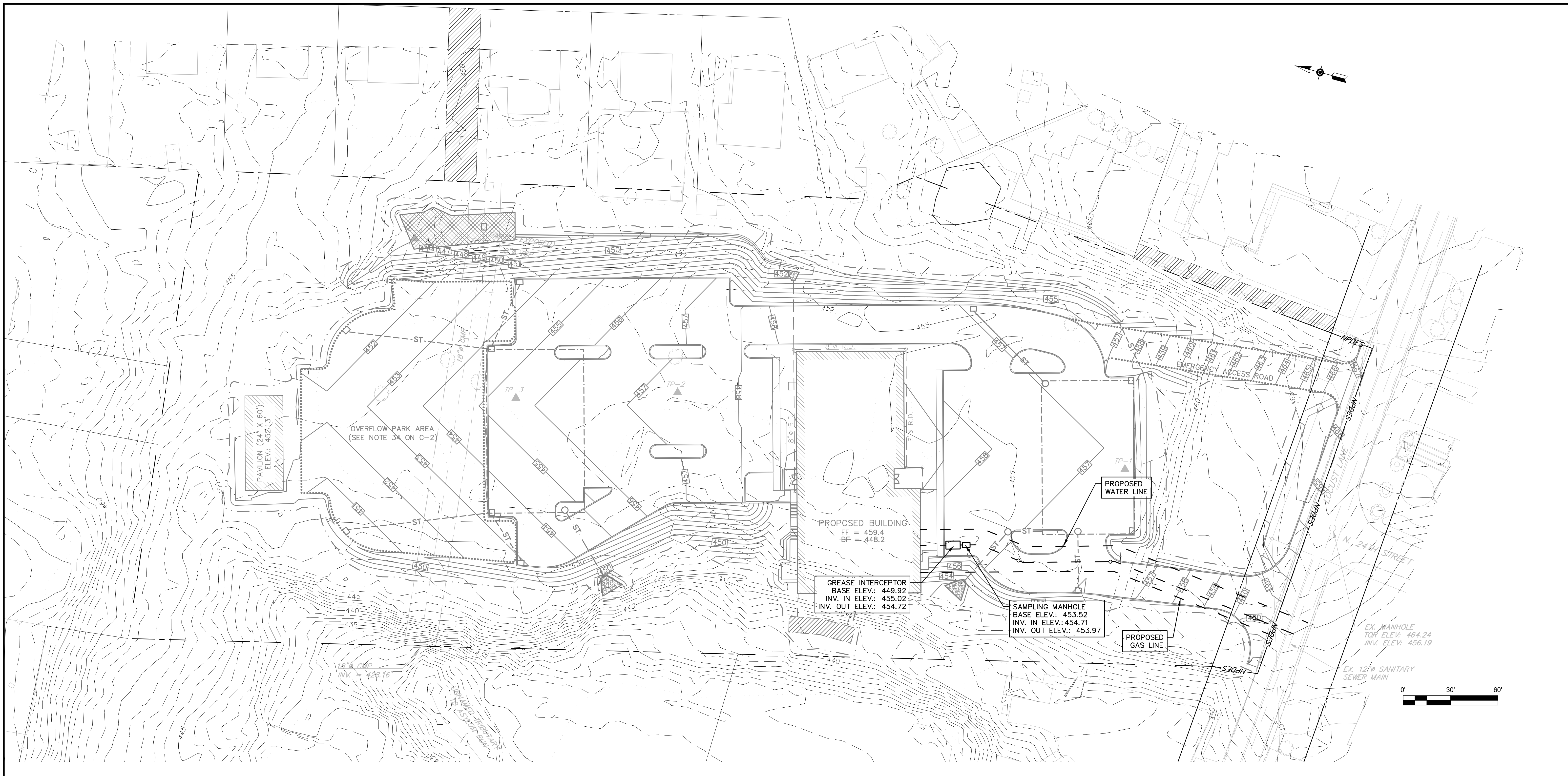
"LAND DEVELOPMENT PLAN" FOR
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 2400 LOCUST LANE
 Susquehanna Township Dauphin County Pennsylvania

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 TASK: **4**
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SKELLY AND JOY
 ENGINEERS AND ARCHITECTS

DESIGN: G.C.C.G. DTS: D.J.J. CHK: E.A.S. APP: G.C.C.G. SCALE: NO SCALE BY: DATE: REV: DESCRIPTION



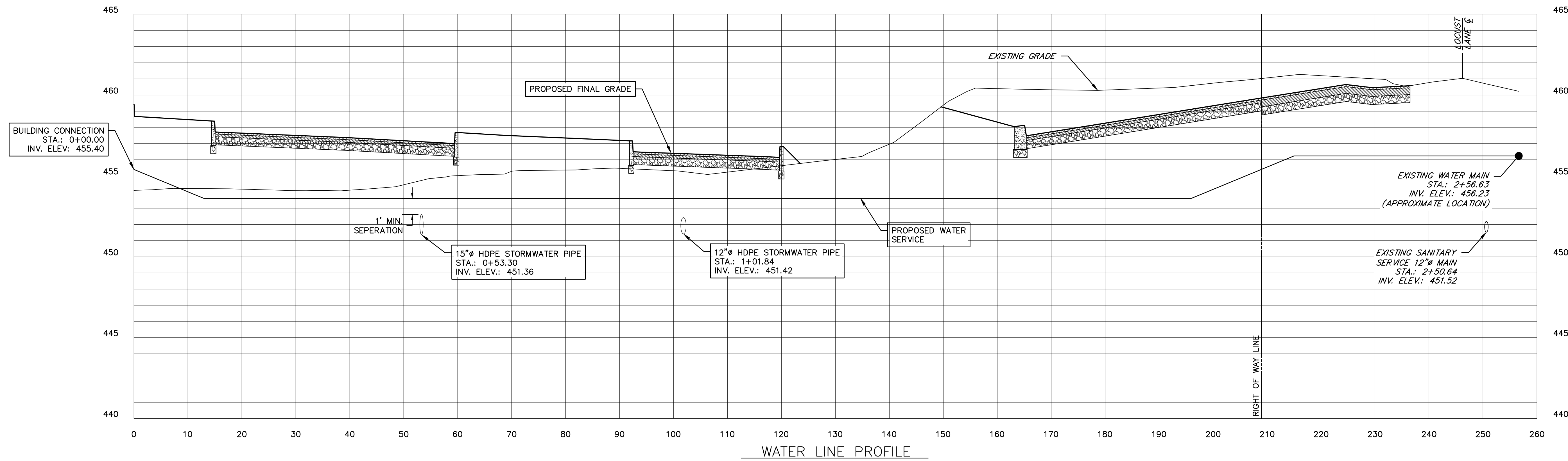
LEGEND

- | | | | |
|-----|--|-----|---|
| --- | PROPERTY AND NPDES BOUNDARY LINE | --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | LEGAL RIGHT-OF-WAY (75') | --- | PROPOSED BUILDING LIMITS |
| --- | ROAD CENTER LINE (LOCUST LANE) | --- | PROPOSED EDGE OF ASPHALT |
| --- | ADJACENT PROPERTY LINE | --- | PROPOSED EDGE OF STABILIZED GRASS AREA |
| --- | EASEMENT ZONES | --- | PROPOSED RETAINING WALL |
| --- | BUILDING SETBACK LINE | --- | PROPOSED HANDICAP SIGNS |
| --- | LANDSCAPE BUFFER LINE | --- | PROPOSED CONTOURS |
| --- | ZONING BOUNDARY | --- | PROPOSED STORMWATER SUBSURFACE INFILTRATION BASIN |
| --- | EXISTING BUILDINGS | --- | PROPOSED STORMWATER INLET |
| --- | EXISTING RUINS | --- | PROPOSED STORMWATER PIPE END TREATMENTS |
| --- | EXISTING ROADS | --- | PROPOSED STORMWATER ROCK APRONS |
| --- | EXISTING CURBING | --- | PROPOSED STORMWATER MANHOLE |
| --- | EXISTING FENCING | --- | PROPOSED STORMWATER UNDERGROUND PIPES |
| --- | EXISTING TREE AND BRUSH LINE | --- | PROPOSED STORMWATER ROOF DRAIN CLEANOUTS |
| --- | EXISTING TREE | --- | PROPOSED STORMWATER ROOF DRAIN PIPES |
| --- | EXISTING HEDGE ROW | --- | PROPOSED SANITARY SEWER LINE |
| --- | EXISTING OVERHEAD UTILITIES LINE | --- | PROPOSED SANITARY SEWER CLEANOUT |
| --- | EXISTING UTILITIES POLE | --- | PROPOSED WATER LINE |
| --- | EXISTING UNDERGROUND GAS LINE | --- | PROPOSED WATER LINE |
| --- | EXISTING UNDERGROUND STORM SEWER LINE | --- | |
| --- | EXISTING UNDERGROUND SANITARY SEWER LINE | --- | |
| --- | EXISTING UNDERGROUND WATER SUPPLY LINE | --- | |
| --- | EXISTING INDEX CONTOUR LINE | --- | |
| --- | EXISTING INTERMEDIATE CONTOUR LINE | --- | |

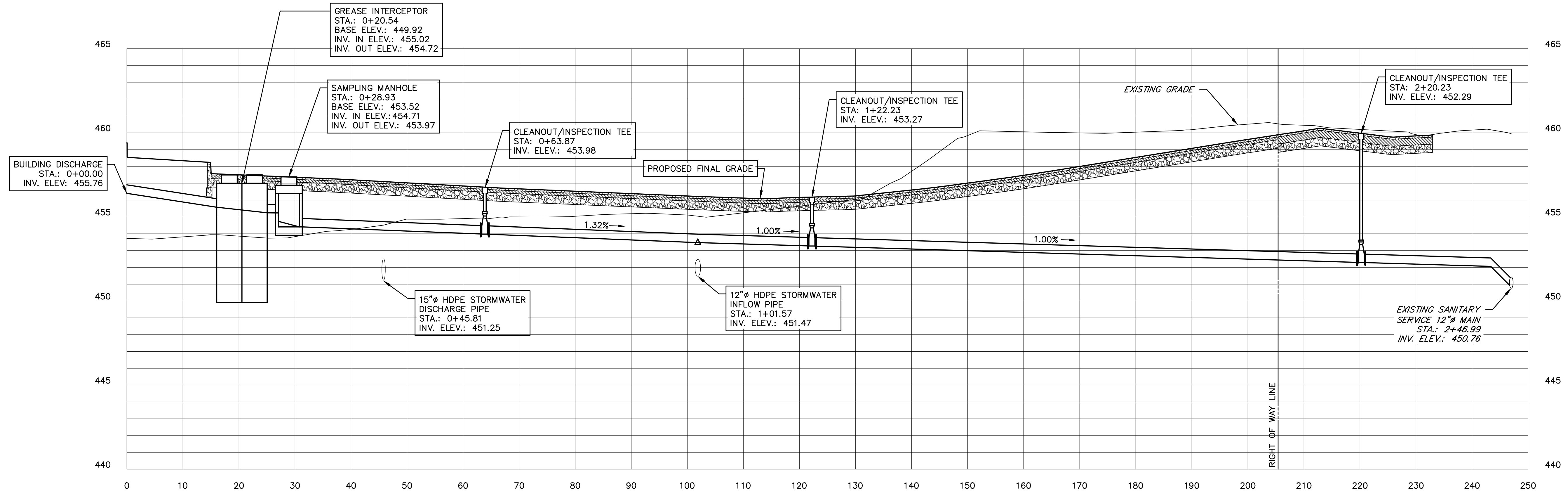
- NOTES:**
- CONTRACTOR SHALL COORDINATE FINAL LOCATION AND CONSTRUCTION OF WATER AND GAS LINES WITH SERVICING UTILITY.
 - SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SEWER AUTHORITY SPECIFICATIONS. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH SEWER AUTHORITY.

**FOR PERMITTING PURPOSE ONLY
NOT RELEASED FOR CONSTRUCTION**

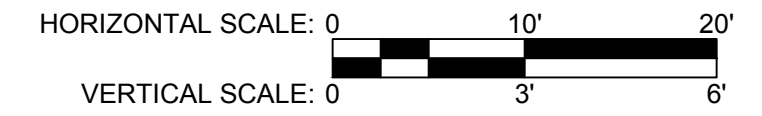
DRAWING NO. C-12		SHEETS: 12 OF 20	
"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania			
DSGN	G.C.C.G.	BY	DATE
DFTSMN	D.J.J.		
CHKR	B.A.S.		
APPV	G.C.C.G.		
SCALE: 1" = 30'			
PROJECT NUMBER: R18-0633.000	SUBTASK: 4	DATE: MAY 21, 2019	
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111		TEL: (717) 232-0693 FAX: (717) 232-1799 www.stelljoy.com	



WATER LINE PROFILE



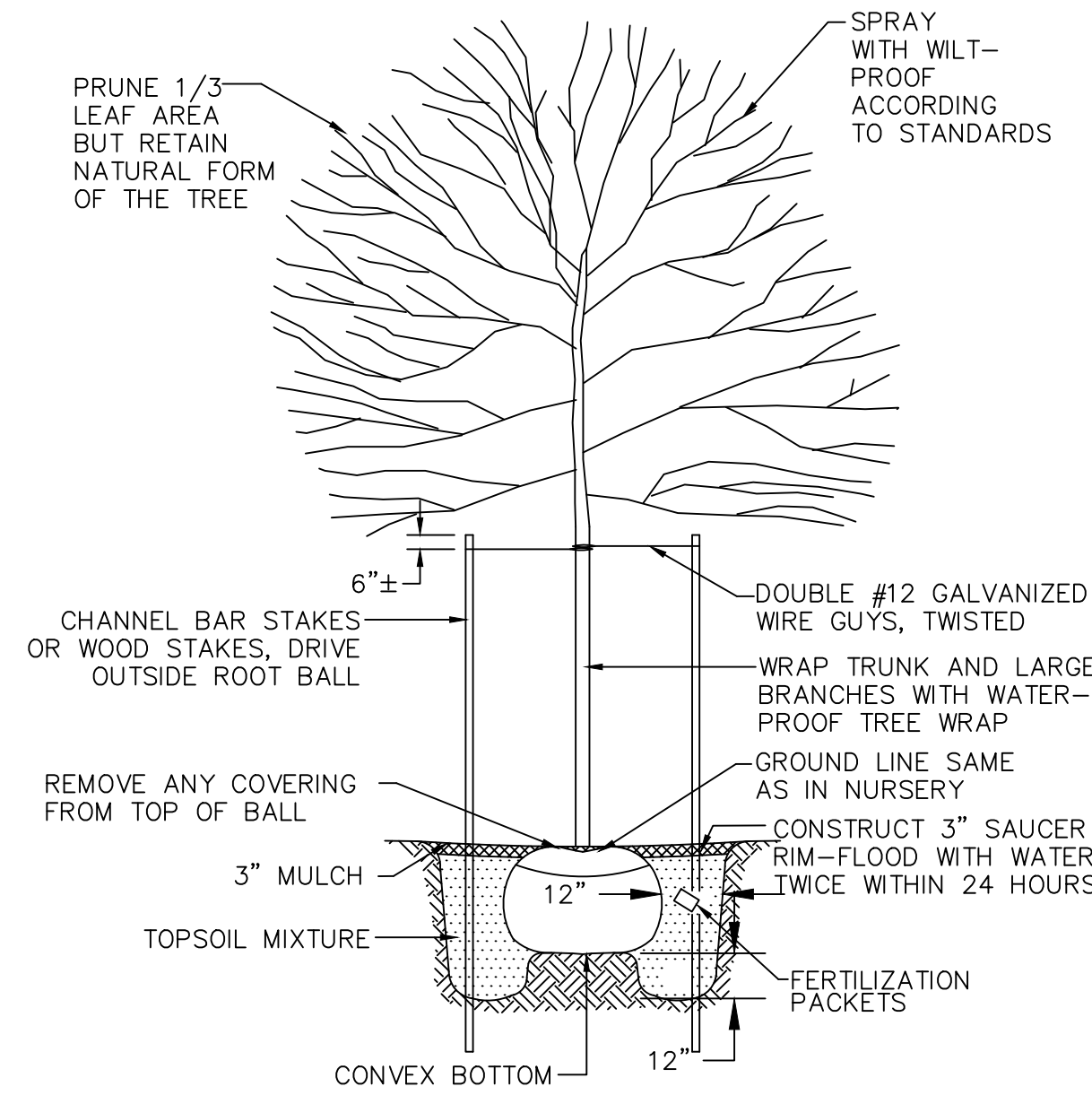
SANITARY SEWER LINE PROFILE



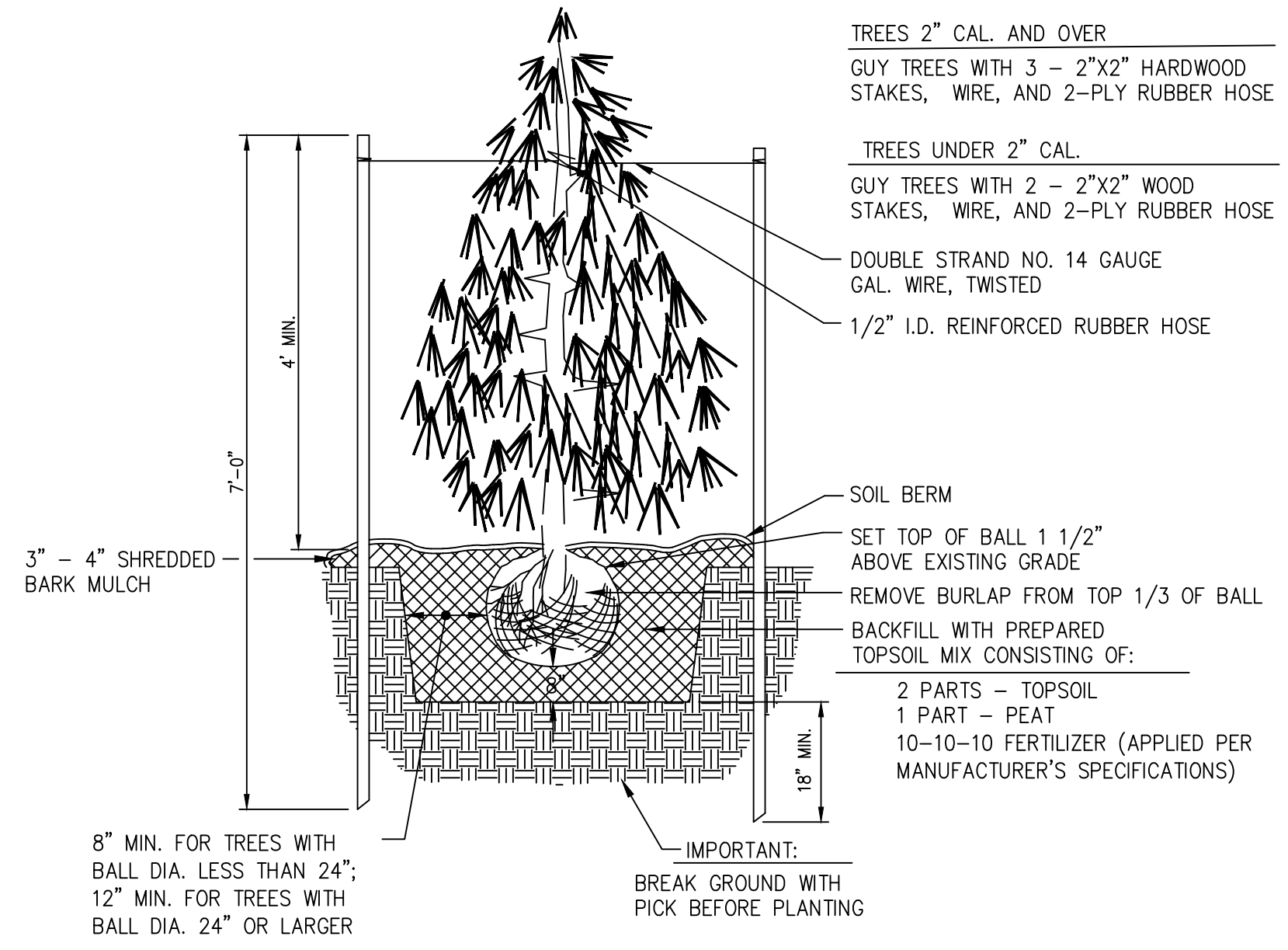
**FOR PERMITTING PURPOSE ONLY
NOT RELEASED FOR CONSTRUCTION**

DRAWING NO. C-13		SHEETS: 13 OF 20	
"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania			
DSGN	G.C.C.G.	CHKR	SCALE AS SHOWN
DFTSMN	D.J.J.	APPV	G.C.C.G.
BY	DATE	REV	DESCRIPTION
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0693 FAX: (717) 232-1799 www.stekeljoy.com			
PROJECT NUMBER: R18-0633.000	TASK: 4	DATE: MAY 21, 2019	

Printed on: 2019-05-31 Plotted By: Johnston, Don File Name: W:\Projects\2018 Projects and Progress\R18-0633.000_Solid Rock Missionary Baptist Church Land Development Plan\Drawings\CADD\Design Package\C-13 SITE UTILITIES PROFILES.dwg

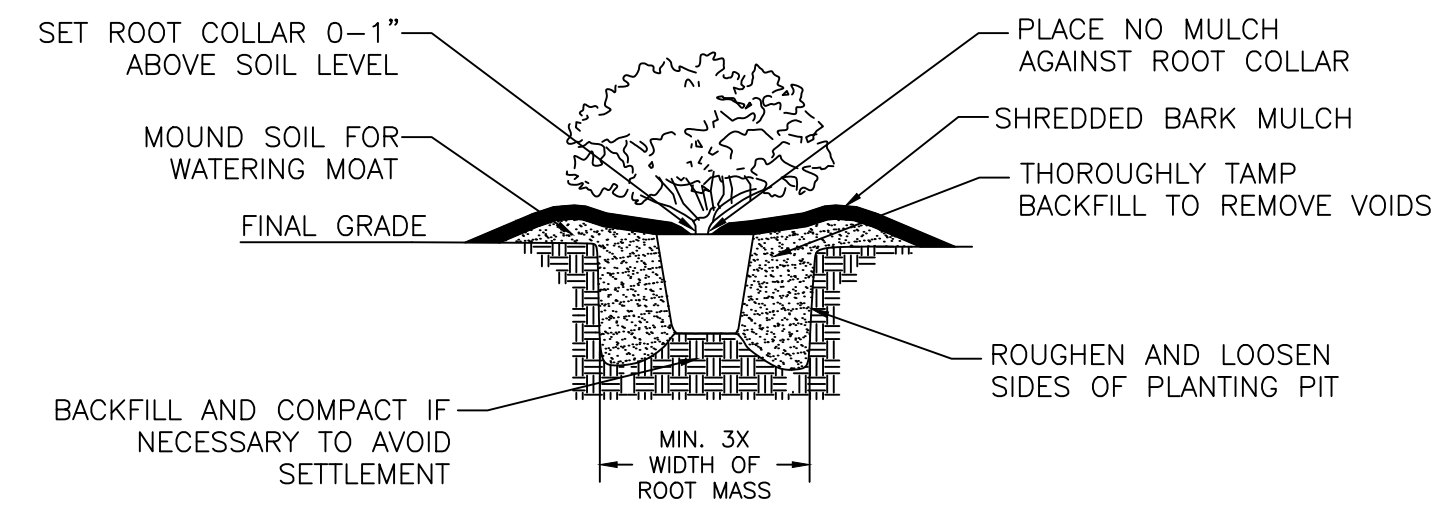


TYPICAL DECIDUOUS TREE PLANTING DETAIL
NO SCALE



- PLANT SPECIFICATIONS :**
1. THE TREES SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT.
 2. ALL TREES SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS, THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
 3. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE. REQUIREMENTS FOR THE MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND THE BURLAPPING OF TREES SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60, CURRENT EDITION, AS AMENDED.
 4. THE TREES SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT.

TYPICAL EVERGREEN TREE PLANTING DETAIL
NO SCALE



CONTAINER PLANTING DETAIL
NO SCALE

OVERFLOW PARKING AND EMERGENCY ACCESS DRIVE MIX
THREE-WAY
TALL FESCUE MIX
MIX COMPOSITION
34.0% FESTUCA ARUNDINACEA, 'TITANIUM LS' (TALL FESCUE, 'TITANIUM LS')
33.0% FESTUCA ARUNDINACEA, 'NINJA III' (TALL FESCUE, 'NINJA III')
33.0% FESTUCA ARUNDINACEA, 'RAPTOR III' (TALL FESCUE, 'RAPTOR III' (TURF TYPE))

GENERAL PRODUCT INFORMATION:
ITEM NUMBER: ERNMX-136
PRODUCT CATEGORIES:
LAWN & TURFGRASS SITES

STEEP SLOPES: 14,805 SQUARE FEET

GROUND COVERS

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SUN	CONDITION	PLANTING SIZE	"MATURE SIZE (HEIGHT X WIDTH)"	FLOWER COLOR	FALL COLOR	COMMENT
318	VM	Vinca Minor	PERIWINKLE	FULL SHADE TO FULL	B&B	50-PLANT FLATS	8" x 3'	PURPLE	EVERGREEN	TOTAL INDIVIDUAL PLANTS: 15,900 PLANTS 12" O.C. STAGGERED

QUANTITIES	%PLS	BOTANICAL NAME	COMMON NAME
5.25 Lbs.	6%	agrostis hyemalis	WINTER BENTGRASS
	7%	carex vulpinoidea	FOX SEDGE
	20%	elymus virginicus	VIRGINIA WILDRYE
	3%	juncus effusus	SOFT RUSH
	30%	panicum anceps	BEAKED PANICGRASS
	18%	panicum clandestinum	DEERTONGUE
	16%	panicum rigidulum	REDTOP PANICGRASS

TREE AND SHRUB LIST

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SUN	CONDITION	PLANTING SIZE	"MATURE SIZE (HEIGHT X WIDTH)"	FLOWER COLOR	FALL COLOR	COMMENT
SHRUBS										
DECIDUOUS										
6	AA	Aronia arbutifolia	RED CHOKEBERRY	FULL-PART	#3 CONT	18-24"	2-8' x 3-6'	WHITE-PINK	RED	FLOWER MID-MAY
8	IV	Ilex verticillata	WINTERBERRY	FULL	#3 CONT	48"	1-15' x 3-12'			SEMI-EVERGREEN RED BERRIES
EVERGREEN										
14	JC	Juniperus chinnsis 'Monlep'	MINT JULEP JUNIPER	FULL	#3 CONT	24-30"	4-6' x 6-8'		EVERGREEN	
9	NS	Picea abies 'Nidiformis'	NEST SPRUCE	FULL-PART	#3 CONT	24-30"	3-5' x 4-6'		EVERGREEN	
TREES										
DECIDUOUS - STREET										
4	AR	Acer Rubrum	RED MAPLE	FULL	B&B	2-1/2" CALIPER	35-60' x 30'-50'	RED	RED	
7	BN	Betula Nigra	RIVER BIRCH	FULL-PART	B&B	2-1/2" CALIPER	30-50' x 25-35'		YELLOW	
5	NS	Nyssa Sylvatica	BLACK TUPELO	FULL	B&B	2-1/2" CALIPER	25-30' x 15-20'		RED	
6	QR	Quercus rubra	RED OAK	FULL	B&B	2-1/2" CALIPER	60-75' x 40-50'		RED	
EVERGREEN										
4	PA	Picea Abies	NORWAY SPRUCE	FULL	B&B	6' HEIGHT	40-60' x 25-30'		EVERGREEN	
4	PP	Picea Pungens	COLORADO BLUE SPRUCE	FULL	B&B	6' HEIGHT	90-135' x 20-30'		EVERGREEN	
15	PN	Pinus Nigra	AUTRIAN PINE	FULL	B&B	6' HEIGHT	50-60' x 20-40'		EVERGREEN	

NOTE: PLANT SUBSTITUTION IS PERMITTED AT THE DIRECTION OF THE OWNER AND AUTHORIZATION OF SUSQUEHANNA TOWNSHIP.

**FOR PERMITTING PURPOSE ONLY
NOT RELEASED FOR CONSTRUCTION**

DRAWING NO. **C-16** SHEETS: **16 OF 20**

"LAND DEVELOPMENT PLAN" FOR
Solid Rock Missionary Baptist Church
2400 LOCUST LANE
Susquehanna Township Dauphin County Pennsylvania

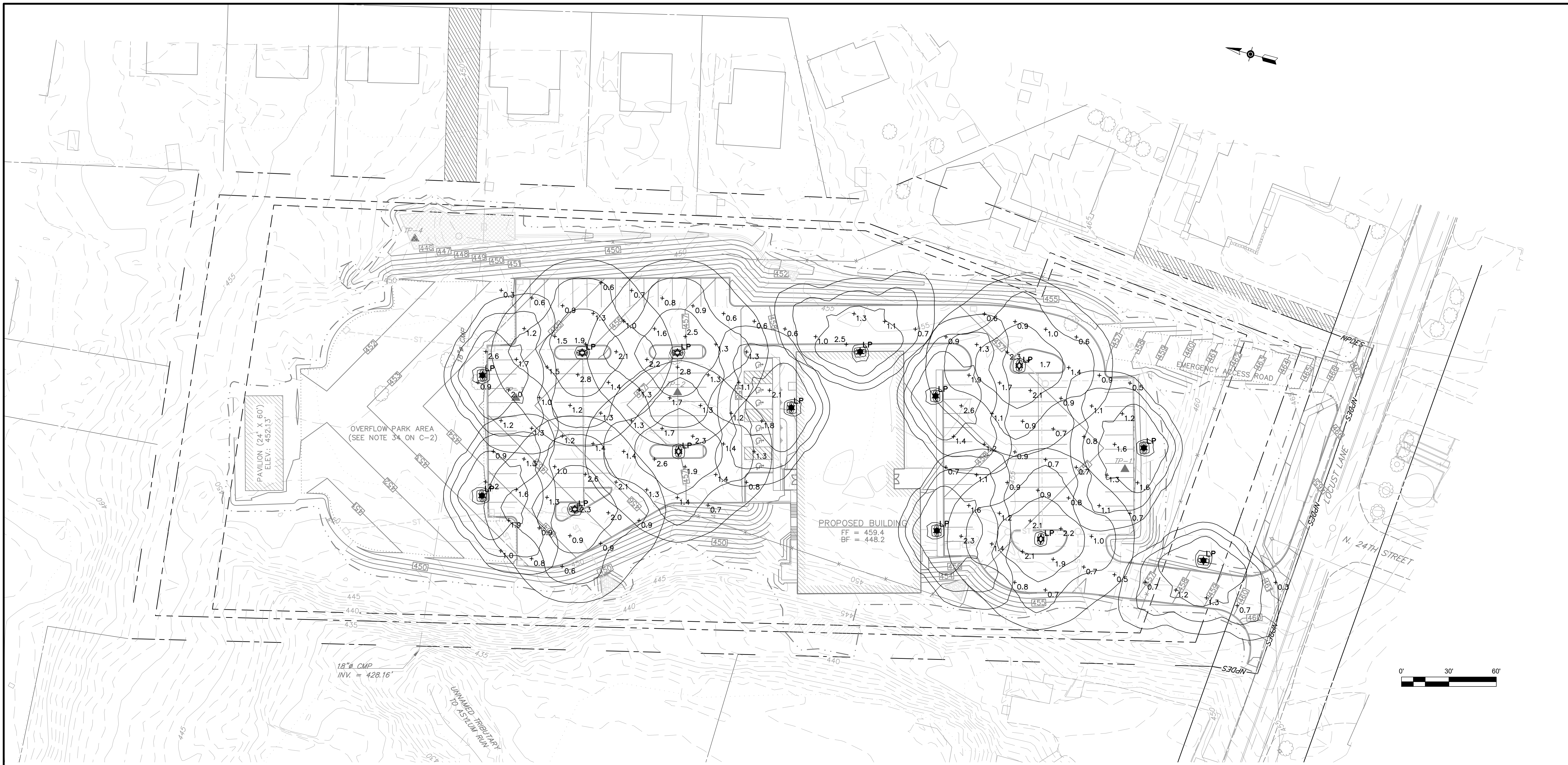
LANDSCAPING PLAN DETAILS

DSGN G.C.C.G. DFTSMN D.J.J. CHKR B.A.S. APPV G.C.C.G. SCALE NO SCALE BY APPV DATE

REV DESCRIPTION

449 EISENHOWER BOULEVARD
SUITE 300
HARRISBURG, PA 17111
TEL: (717) 232-0593
FAX: (717) 232-1799
www.steijljoy.com

PROJECT NUMBER: R18-0633.000
SUBTASK: 4
DATE: MAY 21, 2019



LEGEND

- PROPERTY AND NPDES BOUNDARY LINE
- LEGAL RIGHT-OF-WAY (75')
- ROAD CENTER LINE (LOCUST LANE)
- ADJACENT PROPERTY LINE
- EASEMENT ZONES
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- ZONING BOUNDARY
- EXISTING BUILDINGS
- EXISTING RUINS
- EXISTING ROADS
- EXISTING CURBING
- EXISTING FENCING
- EXISTING TREE AND BRUSH LINE
- EXISTING TREE
- EXISTING HEDGE ROW
- EXISTING OVERHEAD UTILITIES LINE
- EXISTING UTILITIES POLE
- EXISTING UNDERGROUND GAS LINE
- EXISTING UNDERGROUND STORM SEWER LINE
- EXISTING UNDERGROUND SANITARY SEWER LINE
- EXISTING UNDERGROUND WATER SUPPLY LINE
- EXISTING INDEX CONTOUR LINE
- EXISTING INTERMEDIATE CONTOUR LINE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED BUILDING LIMITS
- PROPOSED EDGE OF ASPHALT
- PROPOSED EDGE OF STABILIZED GRASS AREA
- PROPOSED RETAINING WALL
- PROPOSED HANDICAP SIGNS
- PROPOSED CONTOURS
- PROPOSED STORMWATER SUBSURFACE INFILTRATION BASIN
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER PIPE END TREATMENTS
- PROPOSED STORMWATER ROCK APRONS
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER UNDERGROUND PIPES
- PROPOSED STORMWATER ROOF DRAIN CLEANOUTS
- PROPOSED STORMWATER ROOF DRAIN PIPES
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED WATER LINE
- PROPOSED WATER LINE
- PROPOSED LIGHT POLES - S5 LIGHTS
- PROPOSED LIGHT POLES - S3 LIGHTS

STATISTICS

DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
DESIGN AREA	+	1.3 FC	2.8 FC	0.3 FC	9.3:1	4.3:1

MEETS ILLUMINATION ENGINEERING RECOMMENDED PRACTICE PER RP-20 FOR PARKING LOT LIGHTING

**FOR PERMITTING PURPOSE ONLY
NOT RELEASED FOR CONSTRUCTION**

SCHEDULE

LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP	NUMBER LAMPS	LUMENS PER LAMP	LIGHT LOSS FACTOR	WATTAGE
S5	6	HOLOPHANE	WFCL2 P40 40K XX L5	WASHINGTON FCO LED 2, P40, 4000KM TYPE 5 OPTIC	LED	1	8509	1	89
S3	8	HOLOPHANE	WFCL2 P40 40K XX L3 HSS	WASHINGTON FCO LED 2, P40, 4000K, TYPE 3 OPTIC, WITH HOUSE SIDE SHIELD	LED	1	5586	1	89

DRAWING NO. **C-17**
SHEETS: **17 OF 20**

"LAND DEVELOPMENT PLAN"
FOR
Solid Rock Missionary Baptist Church
2400 LOCUST LANE
Susquehanna Township Dauphin County Pennsylvania

DESIGN: G.C.C.G.
DRAFTSMAN: D.J.J.
CHECKER: B.A.S.
APPROVED: G.C.C.G.
SCALE: 1" = 30'

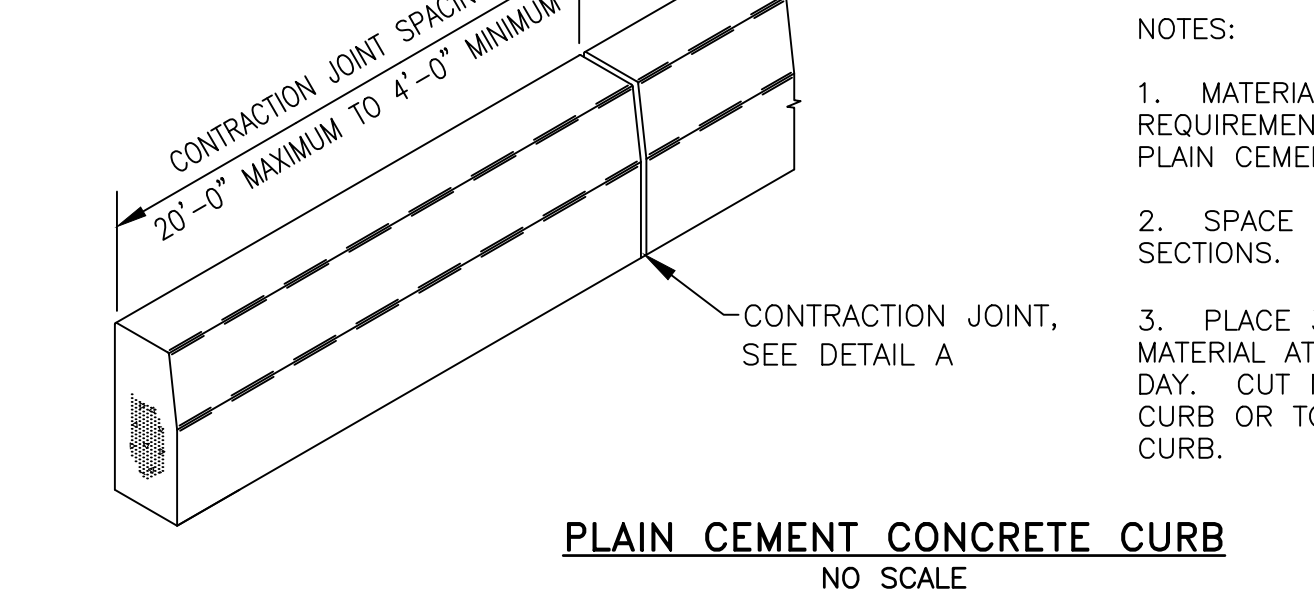
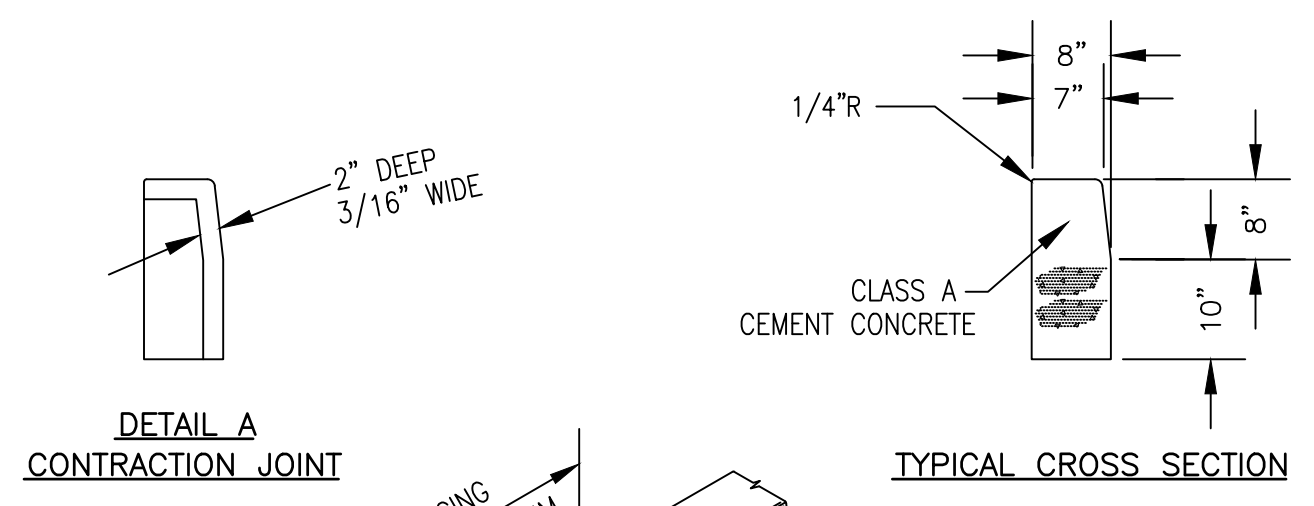
REV	DESCRIPTION	DATE

SKELLY AND LOY
ENGINEERS ARCHITECTS

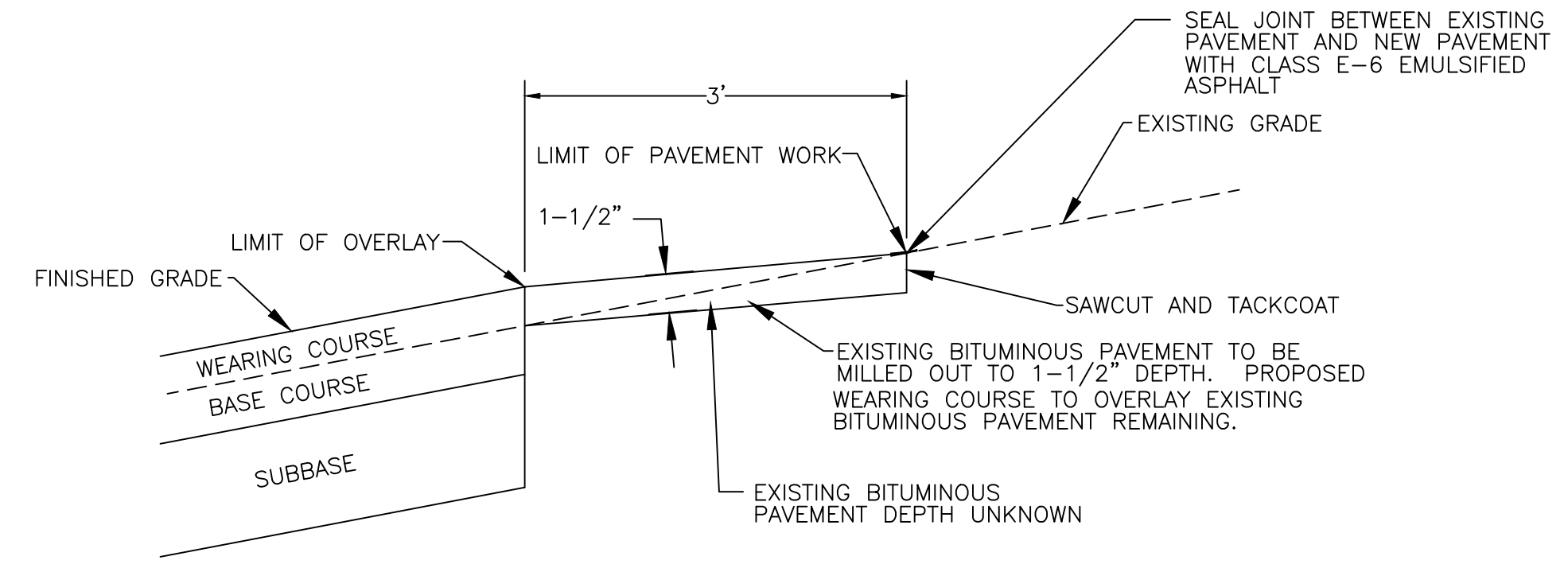
449 EISENHOWER BOULEVARD
SUITE 300
HARRISBURG, PA 17111
TEL: (717) 232-0593
FAX: (717) 232-1799
www.skeljoy.com

PROJECT NUMBER: **R18-0633.000**
SUBTASK: **4**
DATE: **MAY 21, 2019**

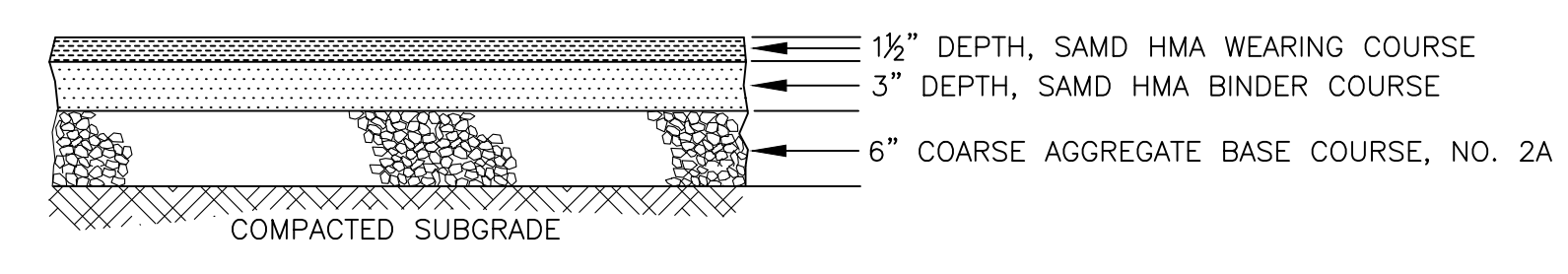
Printed on: 2019-05-31 Plotted by: Johnston, Don File Name: W:\Projects\2018 Projects and Progress\R18-0633.000_Solid Rock Missionary Baptist Church_Land Development Plan Drawings\CADD\Design Package\C-17 LIGHTING PLAN.dwg



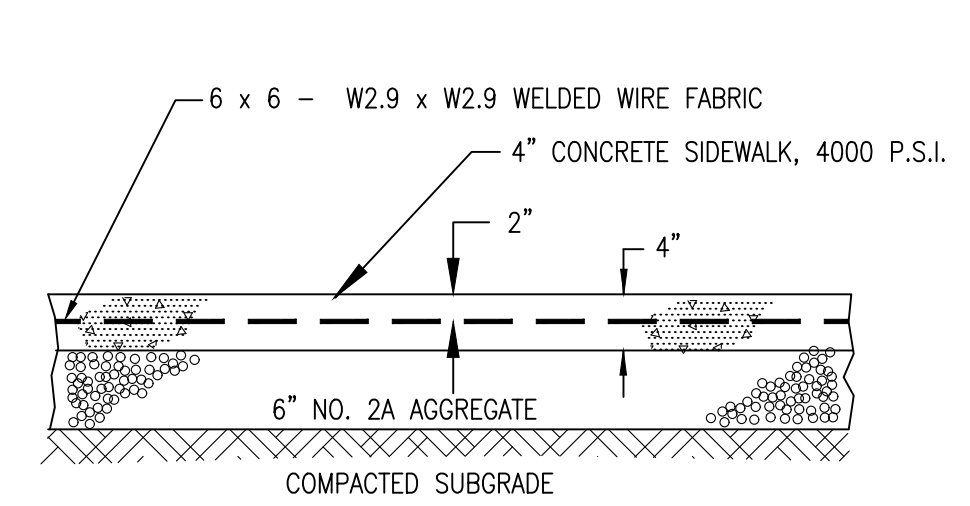
- NOTES:
1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB.
 2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
 3. PLACE 3/4" PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.



STANDARD PAVEMENT NOTCH DETAIL
NO SCALE

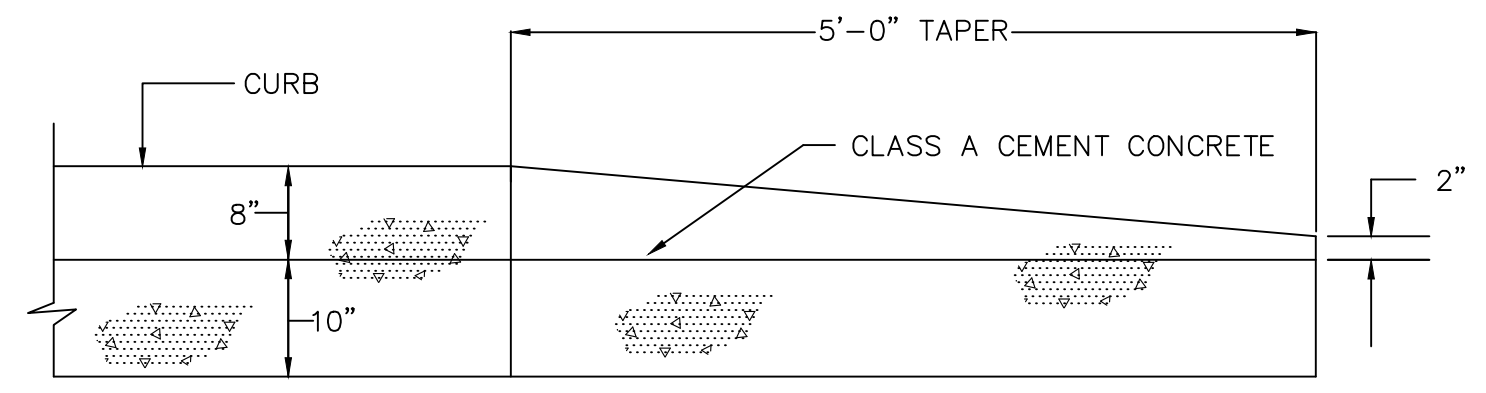


BITUMINOUS PAVEMENT SECTION
(ON-SITE)
NO SCALE

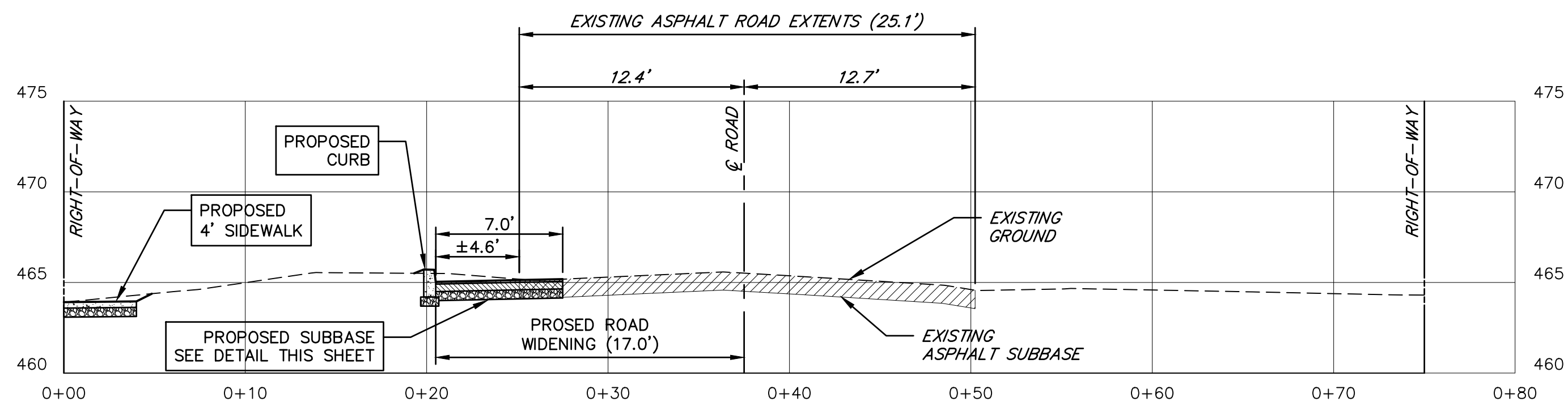


TYPICAL SIDEWALK SECTION
NO SCALE

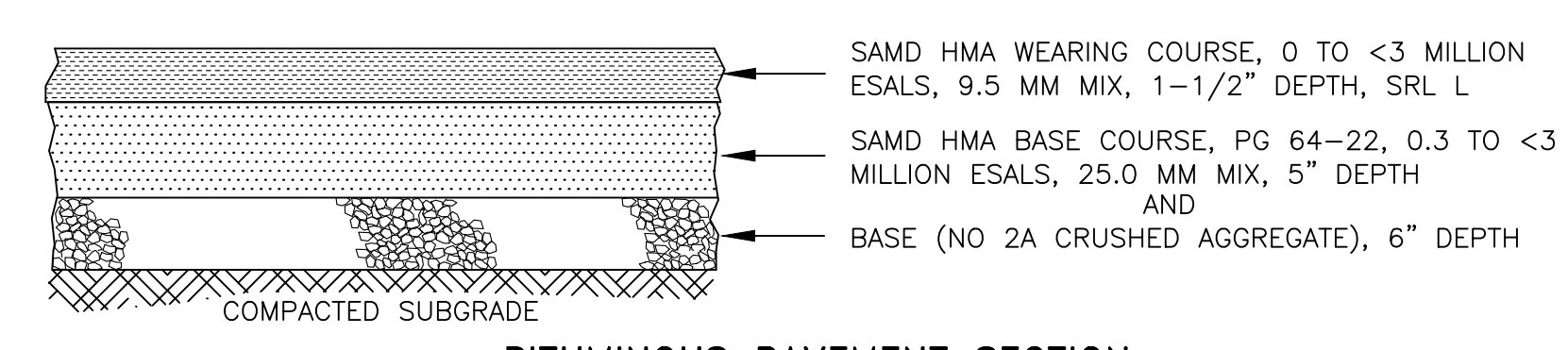
- NOTES:
1. CONTRACTION CONTROL JOINTS ACROSS THE SIDEWALK SHALL BE CONSTRUCTED AT 4'-0" ON CENTER.
 2. NON-BITUMINOUS, PREMOLDED EXPANSION JOINTS WITH A 1/2" DEEP SEALANT SHALL BE CONSTRUCTED AT 20'-0" ON CENTER ACROSS THE SIDEWALK.
 3. SIDEWALKS AND RAMPS SHALL BE SLOPED TO DRAIN AND WOOD FLOATED WITH A LIGHT BROOM FINISH.
 4. WHEN CONCRETE ABUTS BUILDING, A NON-BITUMINOUS, PRE-MOLDED EXPANSION JOINT WITH A 1/2" DEEP SEALANT SHALL BE CONSTRUCTED BETWEEN BUILDING AND WALK.



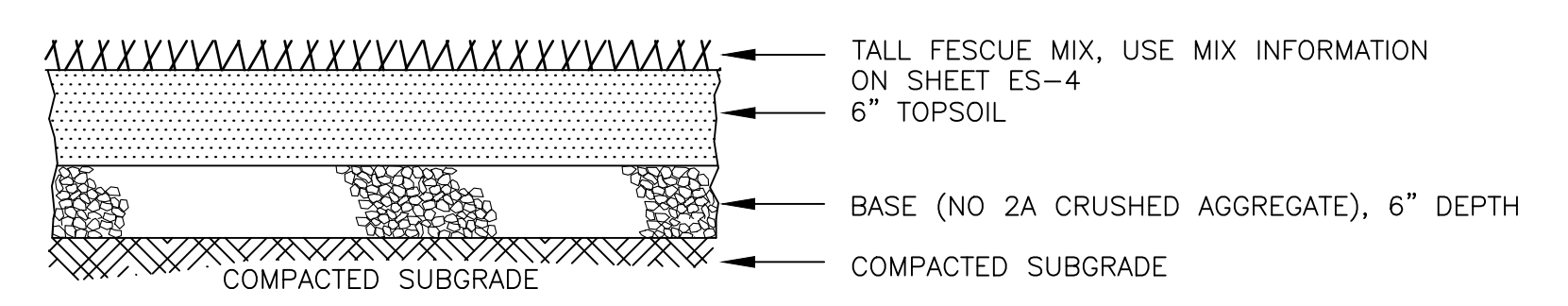
END OF CURB SECTION
NO SCALE



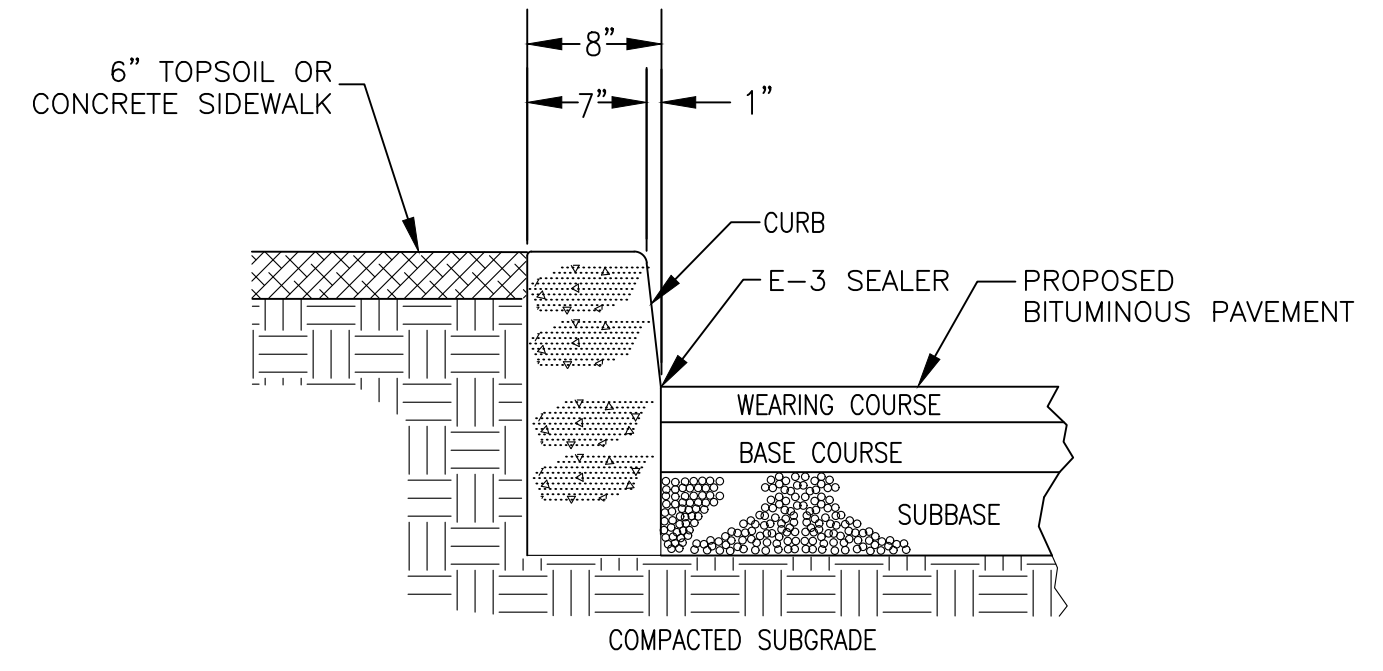
ROAD WIDENING TYPICAL SECTION
(WITHIN LOCUST LANE R/W)
NO SCALE



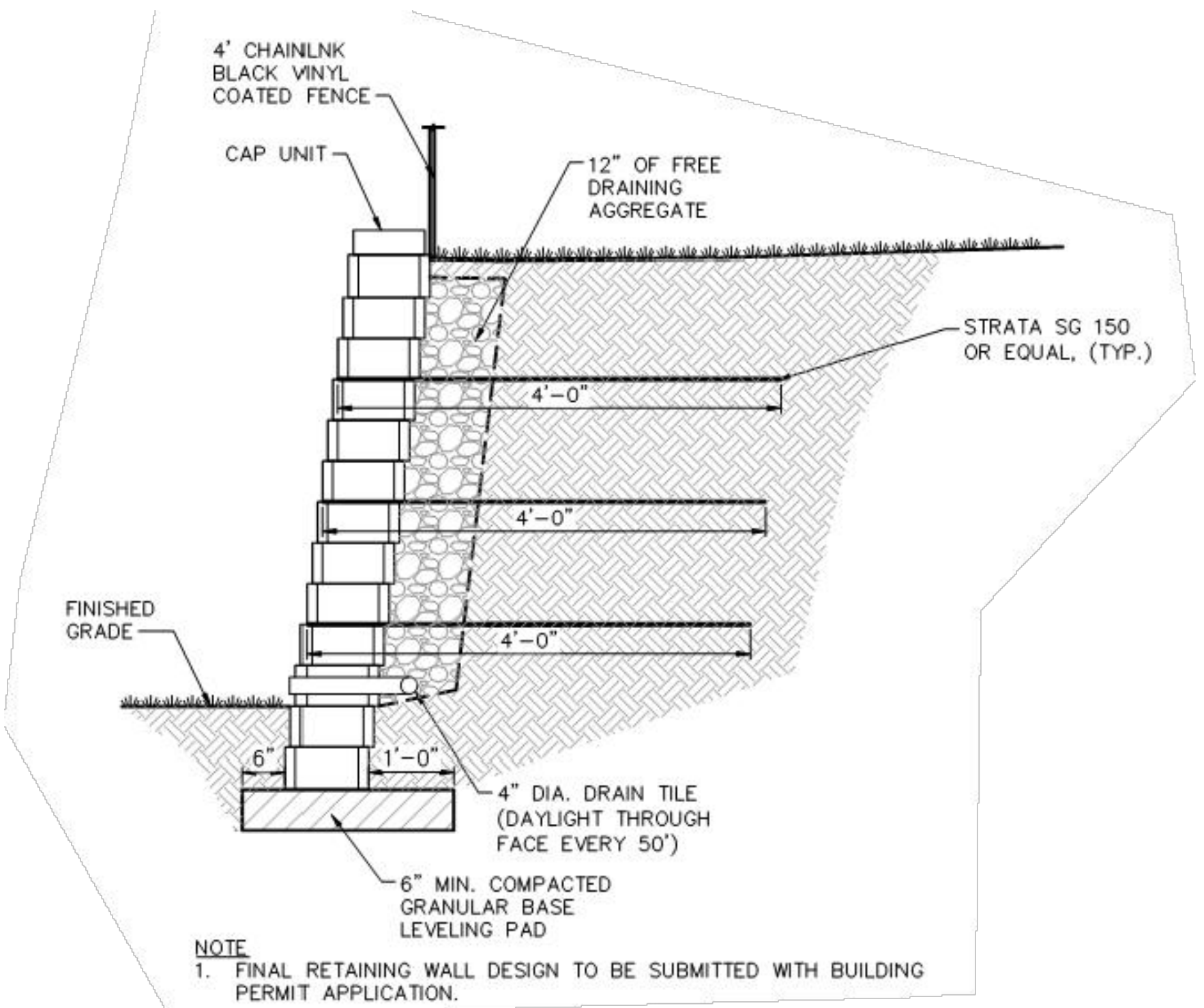
BITUMINOUS PAVEMENT SECTION
(LOCUST LANE R/W)
NO SCALE



OVERFLOW PARKING AND EMERGENCY ACCESS SECTION
NO SCALE

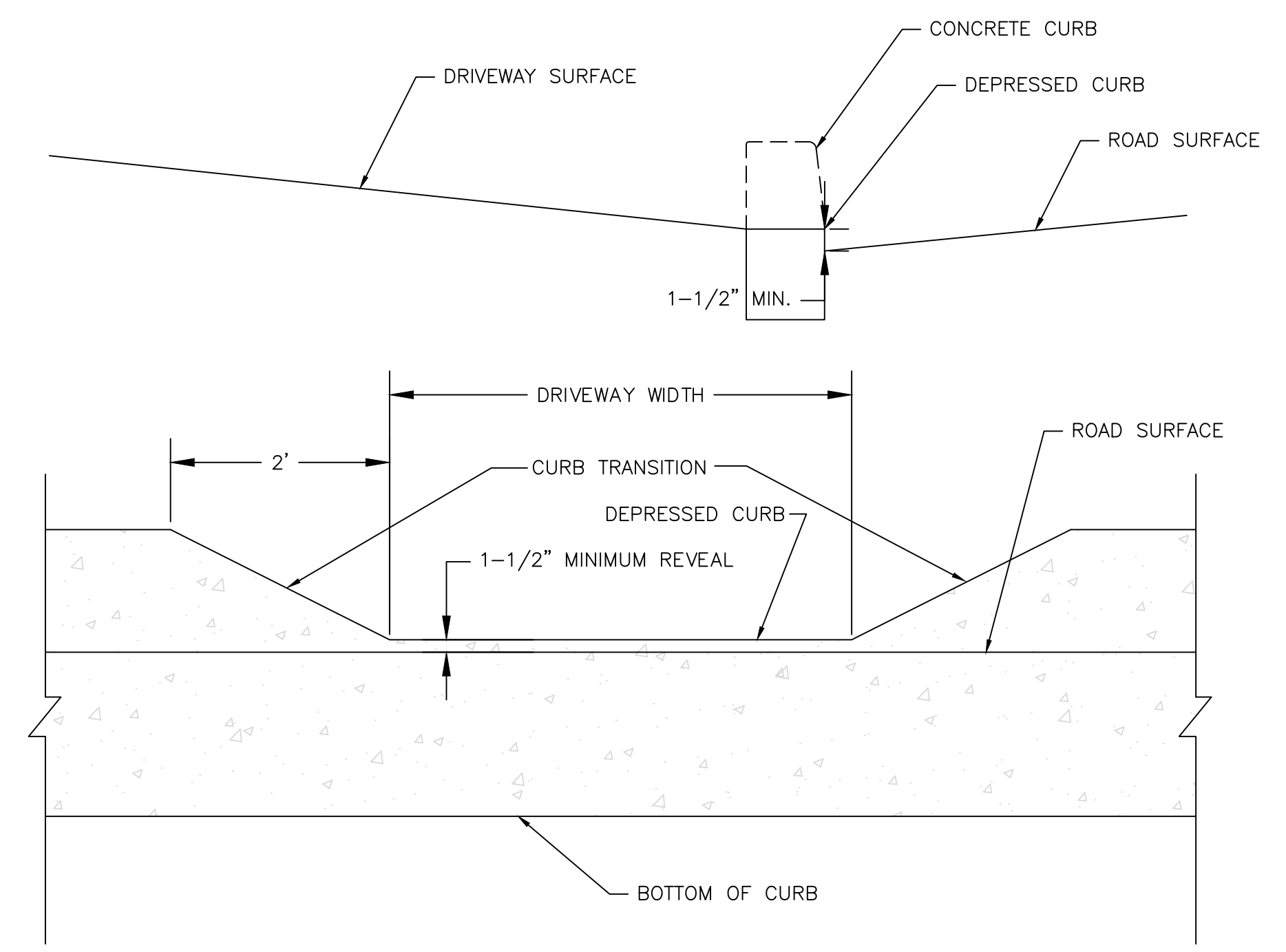


PAVEMENT AND CURB DETAIL
NO SCALE

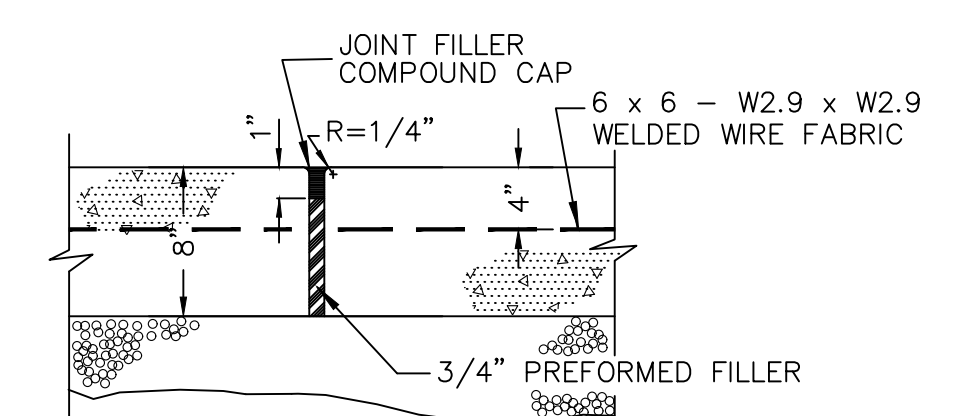


TYPICAL RETAINING WALL SECTION
NO SCALE

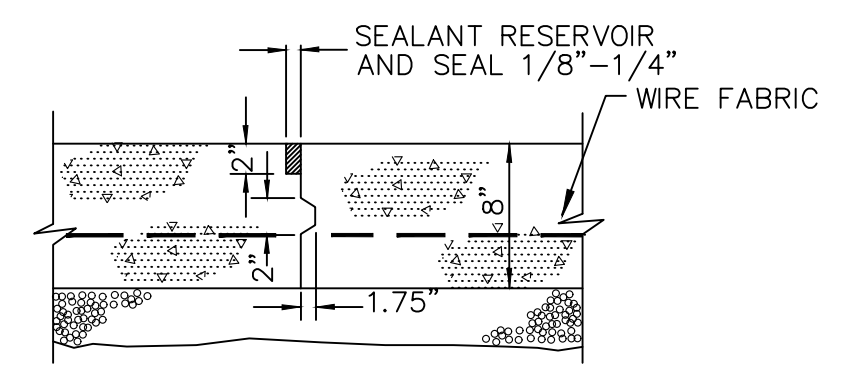
NOTE:
1. FINAL RETAINING WALL DESIGN TO BE SUBMITTED WITH BUILDING PERMIT APPLICATION.



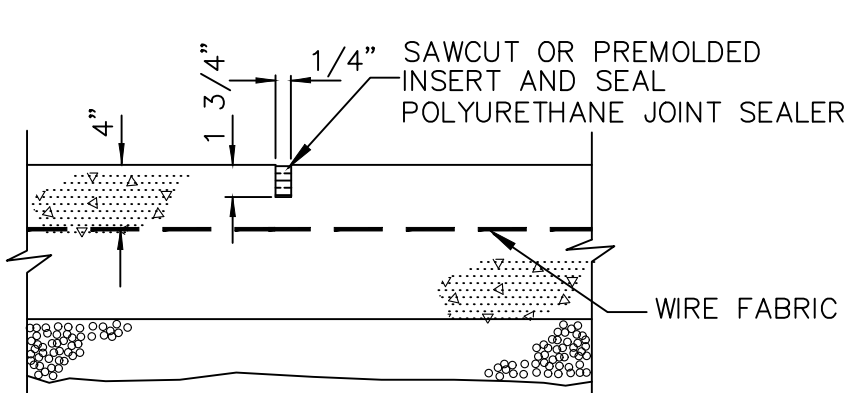
DEPRESSED CURB AT DRIVEWAY OPENING
NO SCALE



EXPANSION JOINT DETAIL



KEYED CONSTRUCTION JOINT DETAIL

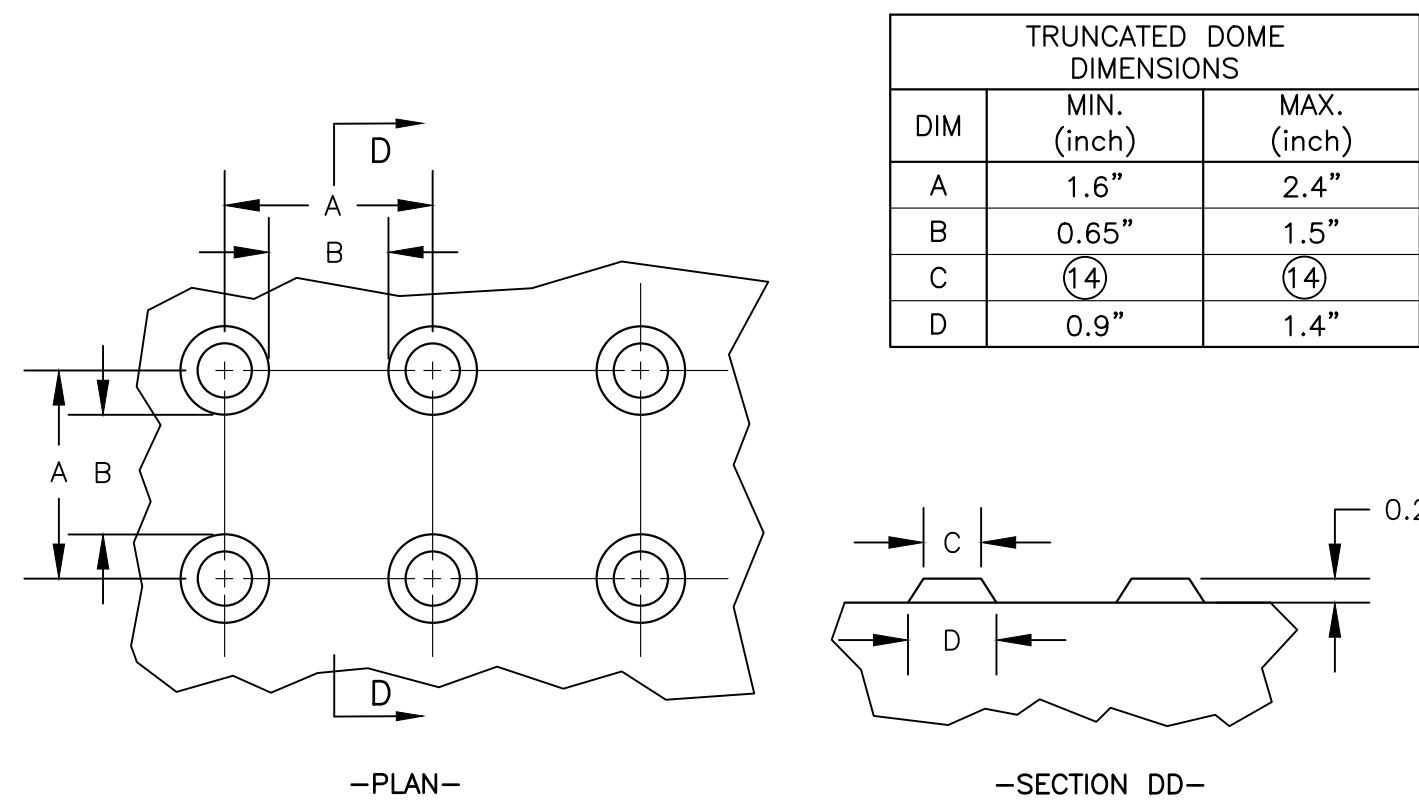


CONTRACTION CONTROL JOINT DETAIL

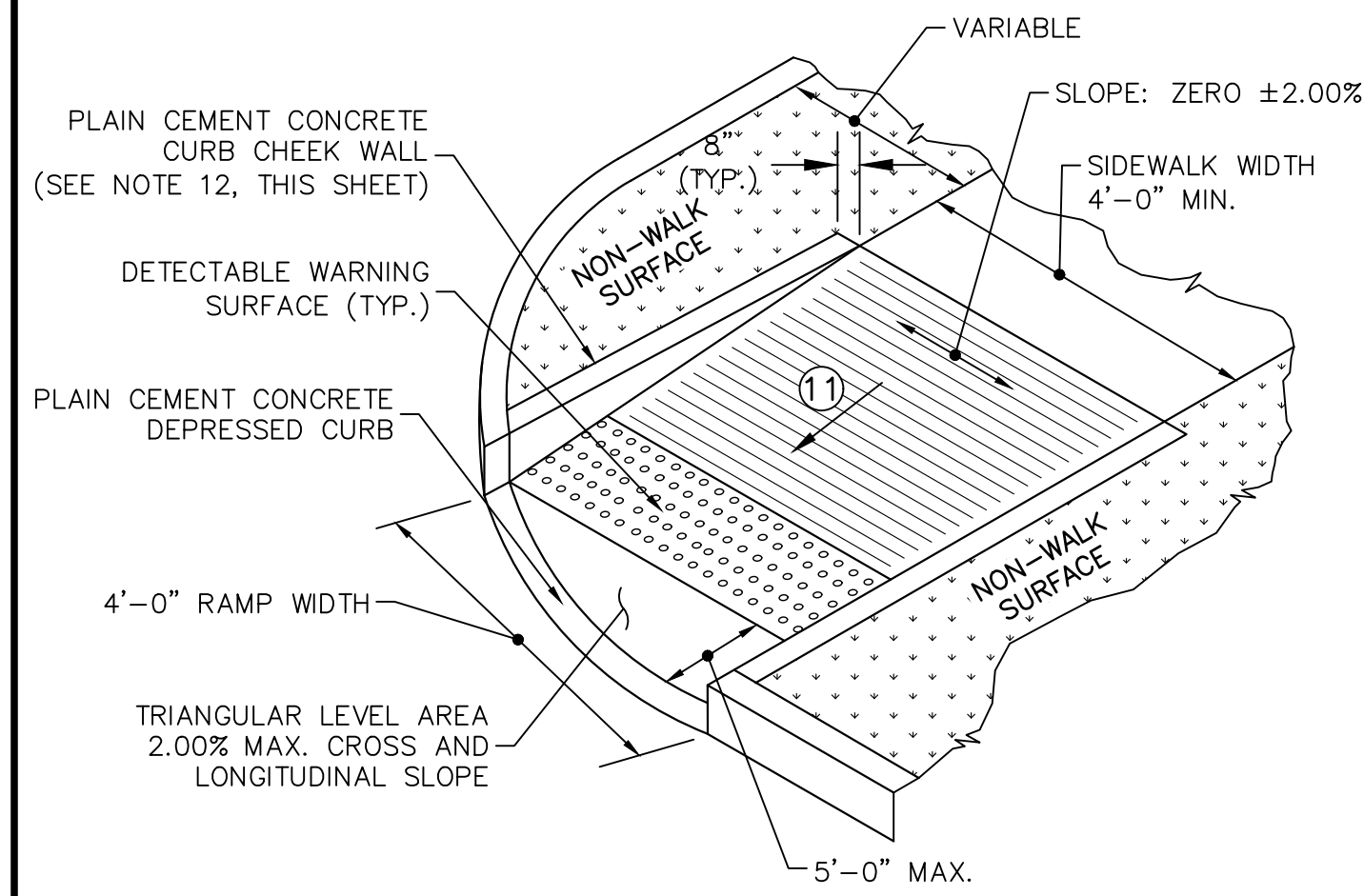
CONCRETE PAVEMENT JOINT DETAILS
NO SCALE

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NOT RELEASED FOR CONSTRUCTION

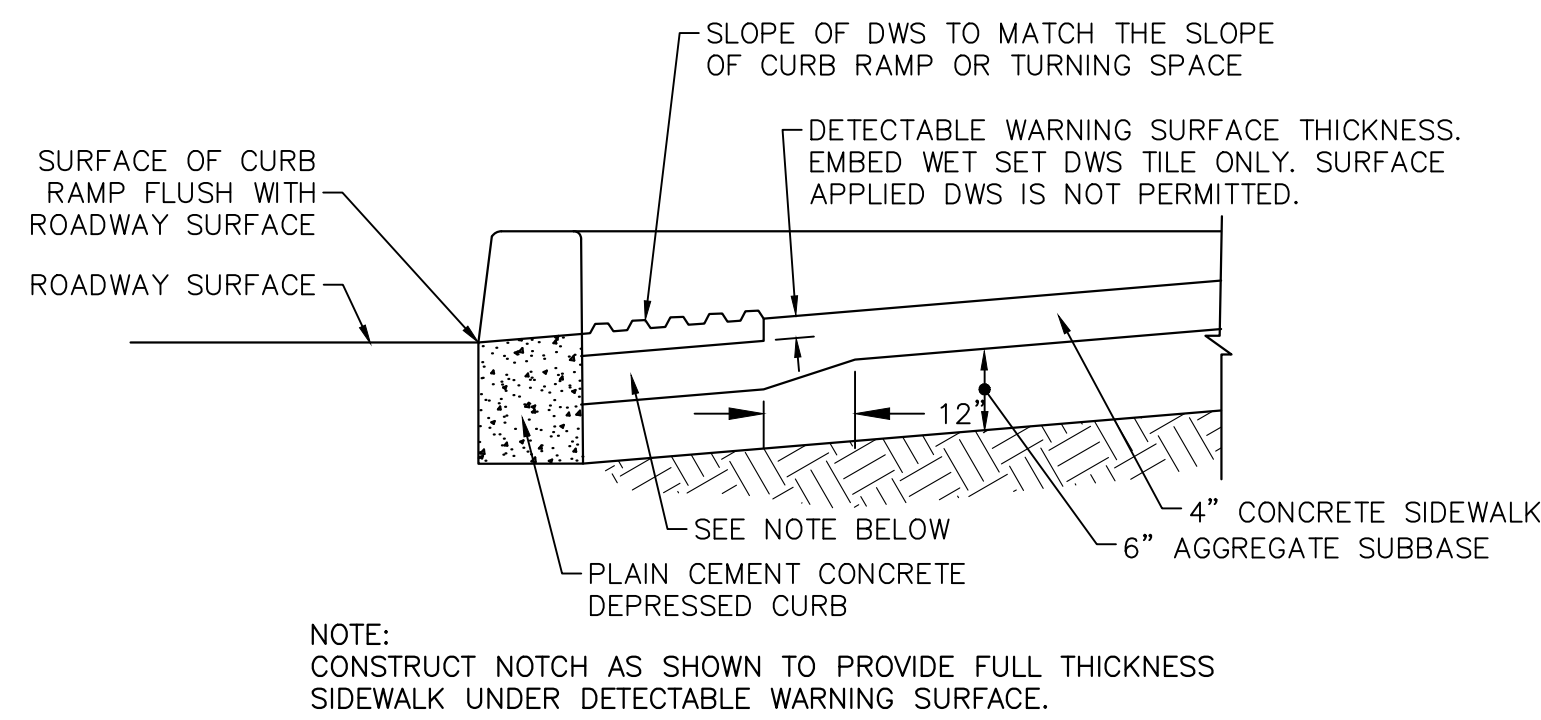
DRAWING NO. C-19		SHEET NO. 19 OF 20	
"LAND DEVELOPMENT PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania			
PROJECT NUMBER: R18-0633.000	TASK: 4	DATE: MAY 21, 2019	BY: SKELLY
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111		TEL: (717) 232-0593 FAX: (717) 232-1799 www.skelloy.com	



DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAIL
NO SCALE

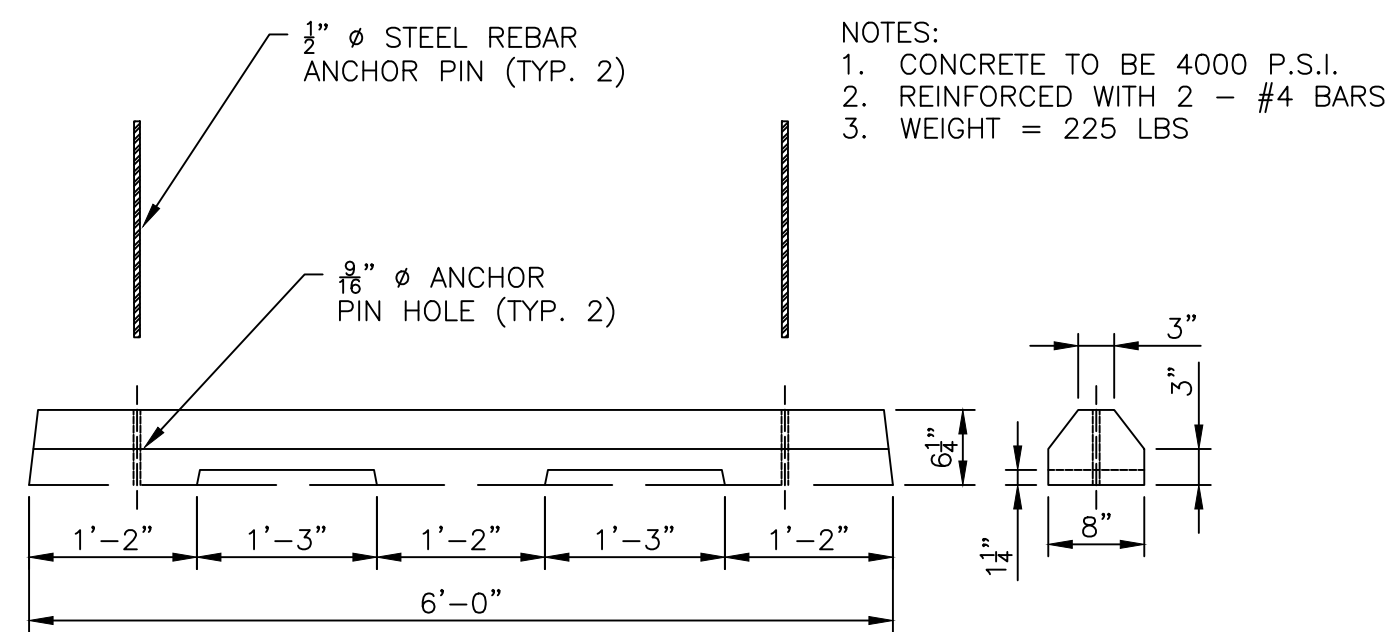


CURB RAMP DETAIL
NO SCALE



DETECTABLE WARNING SURFACE EMBEDDING DETAIL
NO SCALE

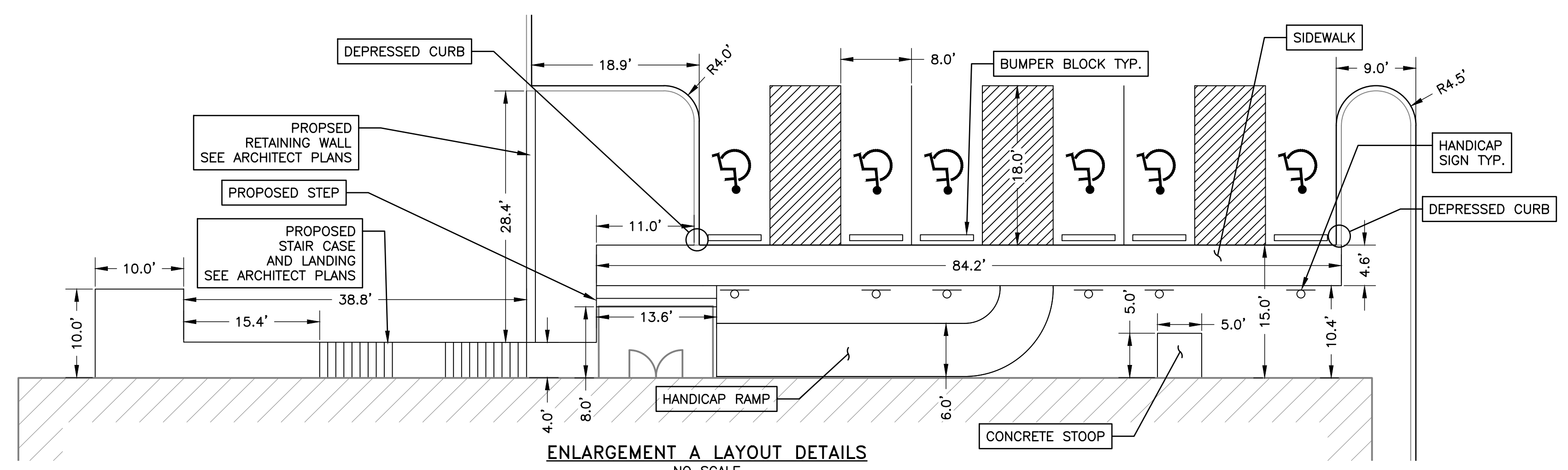
CURB RAMP DETAILS
NO SCALE



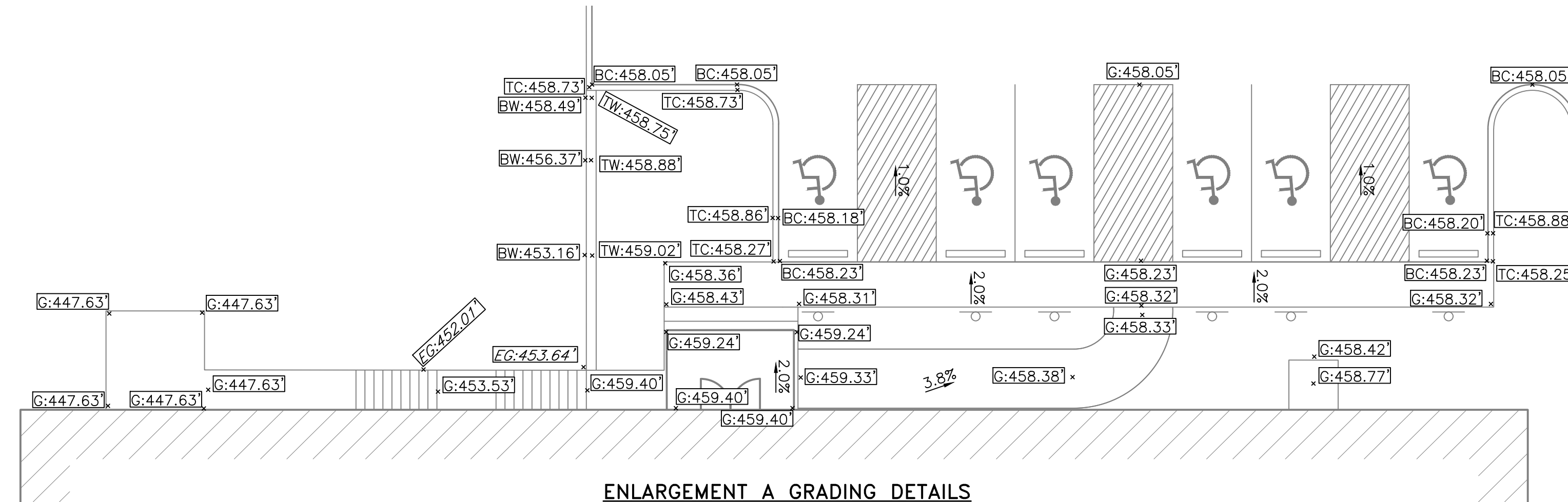
6' BUMPER BLOCK WITH DRAINAGE SLOT DETAILS
NO SCALE

NOTES:

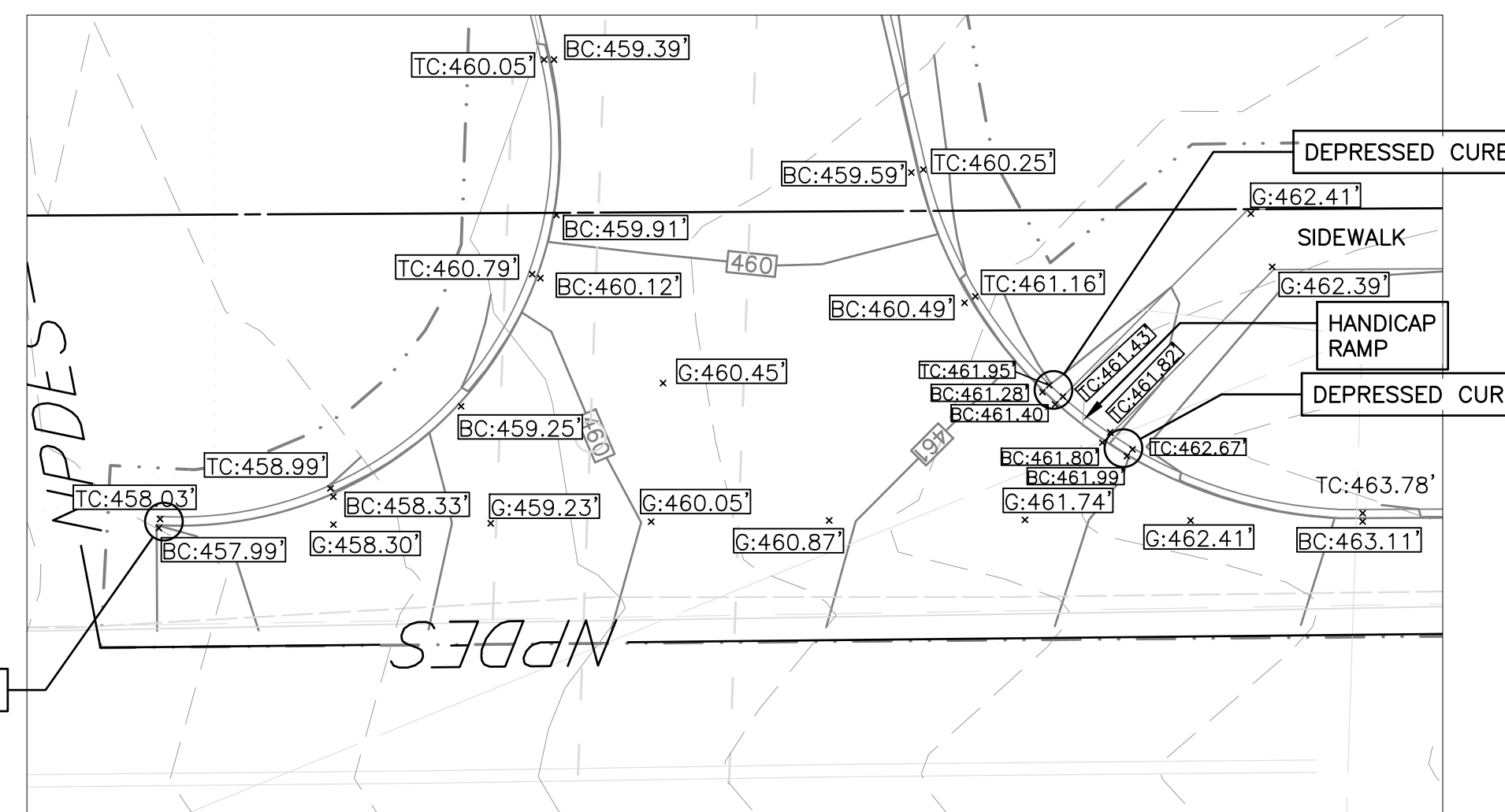
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 350, 409, 630, 676, 694, AND 695.
2. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
4. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES.
5. ALIGN DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
6. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
7. DO NOT EXCEED 2.0% CROSS SLOPE ON THE CURB RAMP.
8. CONSTRUCT DEPRESSED CURB FOR CURB RAMP FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS, REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.
9. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
10. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. SEE NOTE 4.
11. 8.33% MAXIMUM RAMP SLOPE.
12. CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 OR FLATTER.
13. THE 'C' DIMENSION IS 50% TO 65% OF THE 'D' DIMENSION.
14. PLACE ADJACENT DWS TILES WITH MANUFACTURED SURFACE. CUT TILES ALONG THE PERIMETER ONLY.
15. LOCATE ONE CORNER OF THE DWS AT THE BACK OF CURB. NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 5'-0" AWAY FROM THE BACK OF CURB.



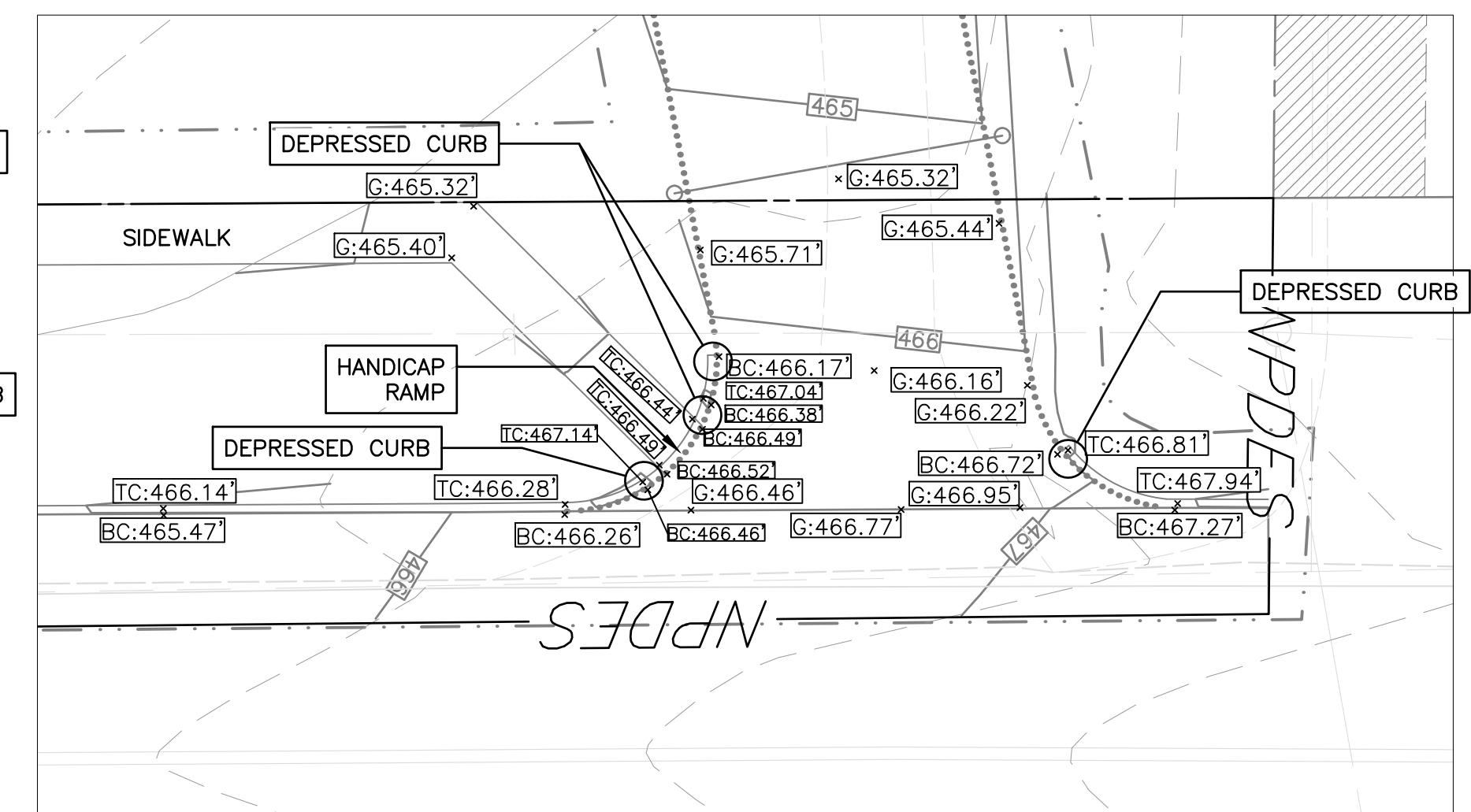
ENLARGEMENT A LAYOUT DETAILS
NO SCALE



ENLARGEMENT A GRADING DETAILS
1"=10'



ENLARGEMENT B GRADING DETAILS
MAIN ACCESS DRIVEWAY
1"=10'



ENLARGEMENT C GRADING DETAILS
EMERGENCY ACCESS DRIVEWAY
1"=10'

DRAWING NO. **C-20** SHEETS: **20 OF 20**

"LAND DEVELOPMENT PLAN" FOR
Solid Rock Missionary Baptist Church
2400 LOCUST LANE
Susquehanna Township Dauphin County Pennsylvania

CONSTRUCTION DETAILS

DSGN	G.C.C.G.	DTSN	D.J.J.	CHKR	E.A.S.	APPV	G.C.C.G.	SCALE	AS SHOWN	BY	APPV	DATE	REV	DESCRIPTION

PROJECT NUMBER: **R18-0633.000**
TASK: **4**
DATE: **MAY 21, 2019**

449 EISENHOWER BOULEVARD
SUITE 300
HARRISBURG, PA 17111
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SKELLY AND LOY
ENGINEERS AND ARCHITECTS

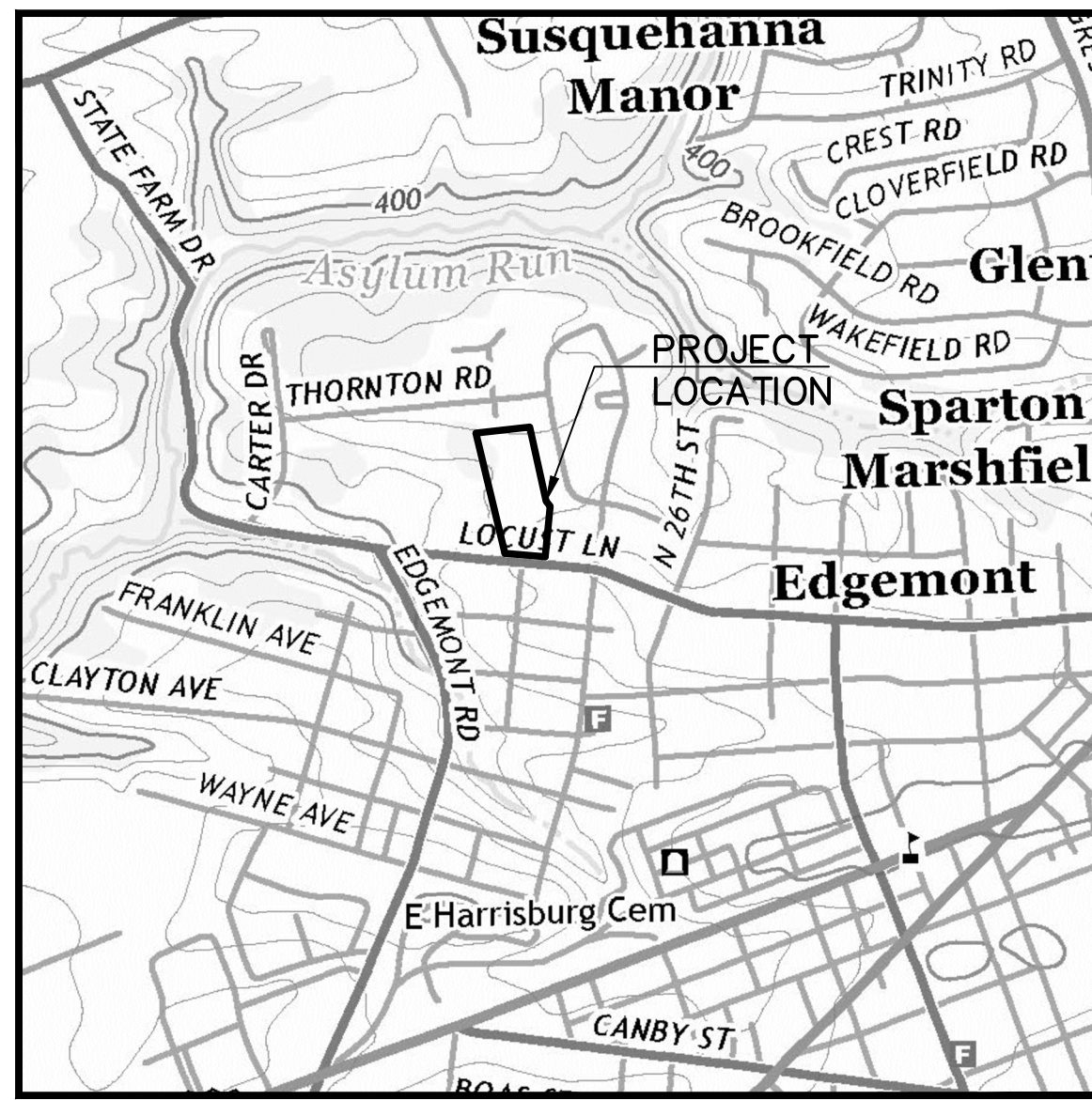
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EROSION AND SEDIMENT CONTROL PLAN

FOR

SOLID ROCK MISSIONARY BAPTIST CHURCH

PREPARED BY:
SKELLY AND LOY, INC.
 449 EISENHOWER BOULEVARD, SUITE 300
 HARRISBURG, PENNSYLVANIA 17111
May 21, 2019



LOCATION MAP
 SCALE: 1"=1,000'

SITE PLAN NOTES

1. FINAL STABILIZATION SHALL BE COMPLETED WITHIN 3 MONTHS OF END OF CONSTRUCTION.
2. UTILITY EASEMENTS SHALL REMAIN CLEAR AND SUBJECT TO PERIODIC CLEARING TO MAINTAIN LINE; HOWEVER ADEQUATE GROUND COVER SHALL BE ESTABLISHED WITHIN THE EASEMENT AREA.
3. A NOTICE OF TERMINATION SHALL BE SUBMITTED WITHIN 9 MONTHS OF PROJECT COMPLETION.
4. PERMANENT PCSM BMP'S ARE REQUIRED FOR THIS PROJECT; THEREFORE PLAN RECORDATION WILL BE REQUIRED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL BMPS DURING CONSTRUCTION, NO UNAUTHORIZED WORK OUTSIDE THE LIMITS OF DISTURBANCE WILL BE PERMITTED. THE INTEGRITY OF ALL WATER FEATURES, STREAMS OR OTHERWISE WILL BE MAINTAINED AT ALL TIMES.

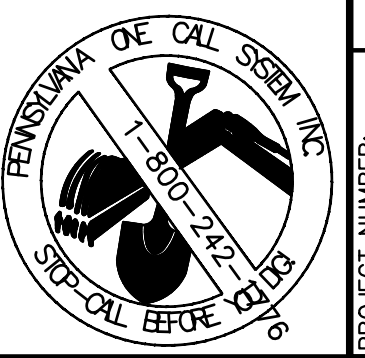
PLAN NOTES AND RESTRICTIONS

1. THIS PLAN PROVIDES PROTECTION FOR EXISTING DRAINAGE FEATURES IN THE VICINITY OF THE PROJECT. CONTRACTOR TO STAY WITHIN THE LIMITS OF DISTURBANCE OF THE PLAN UNLESS OTHERWISE DIRECTED BY THE OWNER, ENGINEER OF RECORD, OR THE CONSERVATION DISTRICT. ANY REVISION TO THE LIMITS MUST BE SUBMITTED TO THE CONSERVATION DISTRICT PRIOR TO COMMENCEMENT OF LAND DISTURBING ACTIVITIES.
2. SOIL COMPACTION SHALL BE MINIMIZED BY LIMITING CONSTRUCTION VEHICLES TO DESIGNATED ACCESS ROADS. IMPERVIOUS AREAS HAVE BEEN MINIMIZED BY ONLY INSTALLING GRAVEL AND ASPHALT IN HEAVY USE AREAS.
3. LAND CLEARING WILL BE MINIMIZED TO THE EXTENT PRACTICABLE. CONTRACTOR SHALL ONLY CLEAR AREAS NECESSARY FOR CONSTRUCTION OF INFRASTRUCTURE.
4. THE PRESERVATION OF THE INTEGRITY OF STREAM CHANNELS, MAINTENANCE AND PROTECTION OF THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF THE RECEIVING STREAM WILL BE ACHIEVED BY THE CONSTRUCTION OF THE PROPOSED E&S AND STORMWATER BMP FACILITIES.
5. E&S PLAN MINIMIZES THE EXTENT AND DURATION OF DISTURBANCE BY ONLY DISTURBING AREAS AS NECESSARY FOR NEW INFRASTRUCTURE CONSTRUCTION.
6. A DIVERSION CHANNEL HAS BEEN PROPOSED TO DIVERT OFFSITE RUNOFF AROUND PROJECT AREA. THIS CHANNEL WILL MINIMIZE INCREASE IN STORMWATER RUNOFF VOLUME AND PREVENT AN INCREASE IN STORMWATER RUNOFF RATES.

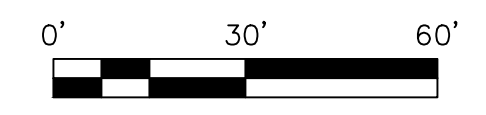
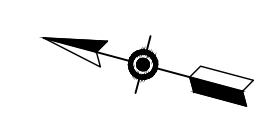
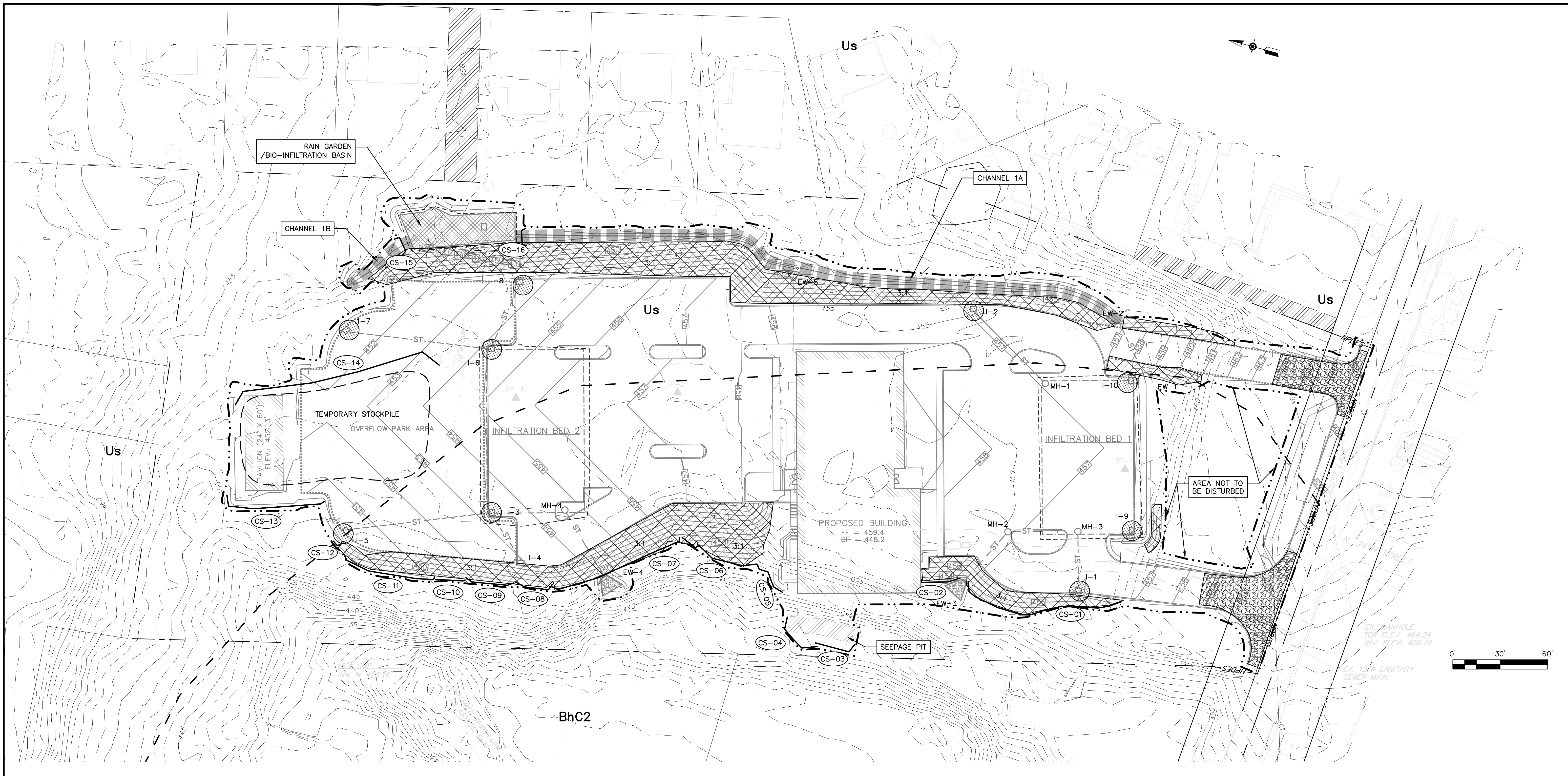
INDEX OF DRAWINGS	
DRAWING NO.	TITLE
ES-1	COVER SHEET
ES-2	EROSION AND SEDIMENT CONTROL PLAN
ES-3	EROSION AND SEDIMENT CONTROL NOTES
ES-4	EROSION AND SEDIMENT CONTROL NOTES
ES-5	EROSION AND SEDIMENT CONTROL DETAILS
ES-6	EROSION AND SEDIMENT CONTROL DETAILS

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PA ONE-CALL
 THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PA ONE-CALL SYSTEM AT 1-800-242-1776 NO LESS THAN THREE (3) WORKING DAYS PLUS TWO (2) HOURS PRIOR TO THE BEGINNING OF WORK. PA ONE-CALL SITE SERIAL NUMBER 20190042347 HAS BEEN ASSIGNED TO THIS PROJECT FOR DESIGN PHASE.



PROJECT NUMBER: R18-0633.000	SUBTASK: 4	DATE: MAY 21, 2019	DRAWING NO. ES-1	SHEETS: 1 OF 6
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0693 FAX: (717) 232-1799 www.skelloy.com			"EROSION AND SEDIMENT CONTROL PLAN" FOR SOLID ROCK MISSIONARY BAPTIST CHURCH 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania	
PROJECT DESCRIPTION: EROSION AND SEDIMENT CONTROL PLAN			COVER SHEET	
DSGN G.C.C.G. DFTSMN A.J.B. CHKR B.A.S. APPV G.C.C.G. SCALE AS SHOWN			BY: APPV DATE:	



LEGEND

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> --- PROPERTY AND NPDES BOUNDARY LINE --- LEGAL RIGHT-OF-WAY (75') --- ROAD CENTER LINE (LOCUST LANE) --- ADJACENT PROPERTY LINE --- EASEMENT ZONES --- BUILDING SETBACK LINE --- LANDSCAPE BUFFER LINE --- ZONING BOUNDARY --- EXISTING BUILDINGS --- EXISTING RUINS --- EXISTING ROADS --- EXISTING CURBING --- EXISTING FENCING --- EXISTING TREE AND BRUSH LINE --- EXISTING TREE --- EXISTING HEDGE ROW --- EXISTING OVERHEAD UTILITIES LINE --- EXISTING UTILITIES POLE --- EXISTING UNDERGROUND GAS LINE --- EXISTING UNDERGROUND STORM SEWER LINE --- EXISTING UNDERGROUND SANITARY SEWER LINE --- EXISTING UNDERGROUND WATER SUPPLY LINE --- EXISTING INDEX CONTOUR LINE --- EXISTING INTERMEDIATE CONTOUR LINE --- EXISTING SOIL LIMITS | <ul style="list-style-type: none"> --- PROPOSED LIMIT OF DISTURBANCE --- PROPOSED BUILDING LIMITS --- PROPOSED EDGE OF ASPHALT --- PROPOSED EDGE OF STABILIZED GRASS AREA --- PROPOSED RETAINING WALL --- PROPOSED HANDICAP SIGNS --- PROPOSED CONTOURS --- PROPOSED STORMWATER SUBSURFACE INFILTRATION BASIN --- PROPOSED STORMWATER INLET --- PROPOSED STORMWATER PIPE END TREATMENTS --- PROPOSED STORMWATER ROCK APRONS --- PROPOSED STORMWATER MANHOLE --- PROPOSED STORMWATER UNDERGROUND PIPES --- PROPOSED STORMWATER ROOF DRAIN CLEANOUTS --- PROPOSED STORMWATER ROOF DRAIN PIPES --- PROPOSED SANITARY SEWER LINE --- PROPOSED SANITARY SEWER CLEANOUT --- PROPOSED WATER LINE --- PROPOSED WATER LINE | <ul style="list-style-type: none"> CS-02 COMPOST FILTER SOCK I-3 INLET PROTECTION --- EXCLUSION FENCE --- COMPOST APPLICATION AREA --- CHANNEL LINING |
|--|--|--|

NOTE:
 1. CONCRETE WASHOUT FACILITY AND PUMPED WATER FILTER BAGS SHALL BE INSTALLED PER DETAILS AND AT LOCATIONS AS NEEDED WITHIN LIMIT OF DISTURBANCE.

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ON-SITE SOILS	
MAP UNIT SYMBOL	MAP UNIT NAME
BhC2	BERKS CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES
Us	URBAN LAND, SHALE MATERIALS

PROJECT NUMBER: R18-0633.000	TASK: 4	DATE: MAY 21, 2019	DRAWING NO. ES-2	SHEETS: 2 OF 6
449 EISENHOWER BOULEVARD SUITE 300 HARRISBURG, PA 17111 TEL: (717) 232-0593 FAX: (717) 232-1799 www.stekeljoy.com			"EROSION AND SEDIMENT CONTROL PLAN" FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania	
DESIGN: G.C.C. DRAFTSMAN: D.J.J. CHECKER: B.A.S. APPROVER: G.C.C.			SCALE: 1" = 30' BY: APPV. DATE:	
REV. DESCRIPTION			EROSION AND SEDIMENT CONTROL PLAN	

SOIL LIMITATIONS AND CONSTRUCTION TECHNIQUES

LIMITATIONS FOR SRBMC ARE 1,2,3,4,7,9,10,11

SOIL USE LIMITATIONS RESOLUTIONS

LIMITATION	RESOLUTION
1 CUT BANKS CAVE	EXCAVATIONS WILL BE PROPERLY SUPPORTED BY SHEETING AND SHORING TO PREVENT CAVES.
2 CORROSIVE TO CONCRETE OR STEEL	NO CONCRETE OR STEEL PIPING IS PROPOSED WITHOUT APPROPRIATE COATINGS AND PROTECTION.
3 DROUGHTY	EXISTING SUITABLE TOPSOIL AND SOIL AMENDMENTS WILL BE USED DURING CONSTRUCTION AS NECESSARY.
4 EASILY ERODIBLE	TEMPORARY AND PERMANENT E&SC BMPS WILL BE EMPLOYED THROUGHOUT THE CONSTRUCTION AND OPERATION OF THE SITE.
7 "HYDRIC/HYDRIC INCLUSIONS"	A WETLAND INVESTIGATION WAS COMPLETED. NO IMPACTS TO WETLANDS ARE PROPOSED.
9 SLOW PERCOLATION	A FIELD INVESTIGATION OF PERCOLATION RATES AT THE INFILTRATION AREAS DEMONSTRATED INFILTRATIVE CAPACITY.
10 PIPING	WATERTIGHT PIPE, ANTISEEP COLLARS, CLAY CORES THROUGH BASIN BERMS, AND CONCRETE ENDWALLS WILL BE USED TO MINIMIZE WATER MOVEMENT VIA PIPE BEDDING.
11 "POOR SOURCE OF TOPSOIL"	"EXISTING TOPSOIL, WHICH HAS PROVEN TO BE SUITABLE, WILL BE REUSED ON THE SITE. COMPOST AMMENDMENTS WILL BE UTILIZED WHERE INDICATE ON THE PLAN DRAWINGS."

LIMITATIONS TO SOILS

SOIL NAME	1. CUTBANKS CAVE	2. CORROSIVE TO CONCRETE/STEEL	3. DROUGHTY	4. EASILY ERODIBLE	5. FLOODING	6. DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	7. HYDRIC/HYDRIC INCLUSIONS	8. LOW STRENGTH/ LANDSLIDE PRONE	9. SLOW PERCOLATION	10. PIPING	11. POOR SOURCE OF TOPSOIL	12. FROST ACTION	13. SHRINK - SWELL	14. POTENTIAL SINKHOLE	15. PONDING	16. WETNESS
Berks	X	C	X	X			X		X	X	X					
*Urban, Shale																

*Limitations for Urban Shale soils are undefined

SEEDING AND MULCHING SPECIFICATIONS

THE DEPARTMENT RECOMMENDS THE USE OF THE PENN STATE PUBLICATION, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND," AS THE STANDARD TO USE FOR THE SELECTION OF SPECIES, SEED SPECIFICATIONS, MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM PENNDOT'S PUBLICATION # 408, SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT. UPON SELECTION OF A REFERENCE, THAT REFERENCE SHOULD BE USED TO PROVIDE ALL SPECIFICATIONS FOR SEEDING, MULCHING, AND SOIL AMENDMENTS. THE FOLLOWING SPECIFICATION WILL BE USED FOR THIS PROJECT:

(TEMPORARY)	ANNUAL RYE GRASS	(PERMANENT)	LAWN AREAS ONLY
*SPECIES:	THREE-WAY TALL FESCUE (ERNX 136 OR EQUIV.)	*SPECIES:	THREE-WAY TALL FESCUE (ERNX 136 OR EQUIV.)
% PURE LIVE SEED:	89%	% PURE LIVE SEED:	89%
APPLICATION RATE:	40 LB./ACRE	APPLICATION RATE:	400 LB./ACRE
FERTILIZER TYPE:	10-10-10 (N-P-K)	FERTILIZER TYPE:	10-10-10 (N-P-K)
FERTILIZER APPL. RATE:	500 LB./ACRE	FERTILIZER APPL. RATE:	500 LB./ACRE
LIMING RATE:	1.00 TON/ACRE	LIMING RATE:	1.00 TON/ACRE
MULCH TYPE:	HAY, STRAW, MULCH	MULCH TYPE:	HAY, STRAW, MULCH
MULCHING RATE:	3 TON/ACRE	MULCHING RATE:	3 TON/ACRE

SEEDING DATES : APRIL 15 TO OCTOBER 31

THREE-WAY TALL FESCUE MIX
MIX COMPOSITION
34.0% FESTUCA ARUNDINACEA, 'TITANIUM LS' (TALL FESCUE, 'TITANIUM LS')
33.0% FESTUCA ARUNDINACEA, 'NINJA III' (TALL FESCUE, 'NINJA III')
33.0% FESTUCA ARUNDINACEA, 'RAPTOR III' (TALL FESCUE, 'RAPTOR III'(TURF TYPE))

GENERAL PRODUCT INFORMATION:
ITEM NUMBER: ERNMX-136
PRODUCT CATEGORIES:
LAWN & TURFGRASS SITES

GROUND COVERS

RAINGARDEN AND SWALE FLOOR AREA: 8,467 SQUARE FEET			
BFM: BASIN FLOOR MIX FOR CHANNEL 1			
SEEDING RATE: 0.6 POUNDS PER 1,000 SQUARE FEET			
QUANTITIES	%PLS	BOTANICAL NAME	COMMON NAME
5.25 Lbs.	6%	agrostis hyemalis	WINTER BENTGRASS
	7%	carex vulpinoidea	FOX SEDGE
	20%	elymus virginicus	VIRGINIA WILDRYE
	3%	juncus effusus	SOFT RUSH
	30%	panicum anceps	BEAKED PANICGRASS
	18%	panicum clandestinum	DEERTONGUE
	16%	panicum rigidulum	REDTOP PANICGRASS

3:1 STEEP SLOPES PLANTING MIX

QUANTITY	BOTANICAL NAME	COMMON NAME	SUN	CONDITION	PLANTING SIZE	"MATURITY SIZE (HEIGHT X WIDTH)"	COMMENT
318	Vinca Minor	PERIWINKLE	FULL SHADE TO FULL	B&B	50-PLANT FLATS	8" x 3'	TOTAL INDIVIDUAL PLANTS: 15,900 PLANTS 12" O.C. STAGGERD

COMPOST STANDARDS

ORGANIC MATTER CONTENT	80% - 100% (dry weight basis)
ORGANIC PORTION	Fibrous and elongated
pH	5.5 - 8.0
MOISTURE CONTENT	35% - 55%
PARTICLE SIZE	98% pass through 1" screen
SOLUBLE SALT CONCENTRATION	5.0 Ds Maximum

NOTE: THE ABOVE COMPOST MIX TO BE BLOWN ON 3:1 SLOPES AS IDENTIFIED ON THE E&S PLAN.

COMPOST APPLICATION RATES

SLOPE LENGTH (FT)	< 3H:1V SLOPES	3H:1V TO 2H:1V SLOPES
20 OR LESS	270 CUBIC YD / ACRE (2" LAYER)	540 CUBIC YD/ACRE (4" LAYER)
20 TO 60	405 CUBIC YD/ACRE (3" LAYER)	675 CUBIC YD/ACRE (5" LAYER)
60 TO 100	540 CUBIC YD/ACRE (4" LAYER)	810 CUBIC YD/ACRE (6" LAYER)

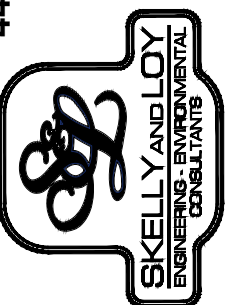
DRAWING NO. **ES-4**
SHEETS: **4 OF 6**

"EROSION AND SEDIMENT CONTROL PLAN" FOR
Solid Rock Missionary Baptist Church
2400 LOCUST LANE
Susquehanna Township Dauphin County Pennsylvania

DSGN G.C.C.G.
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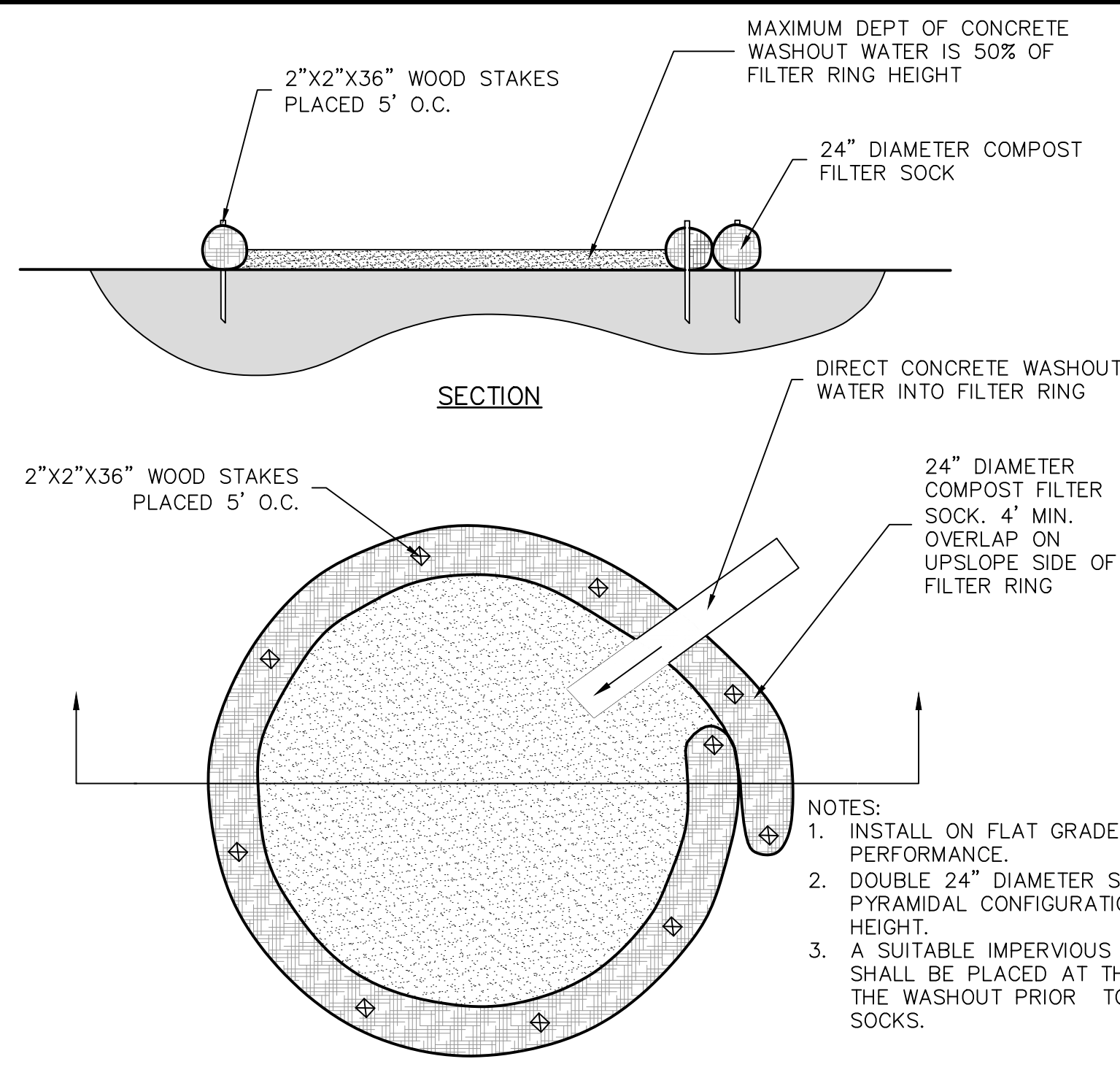
REV	DESCRIPTION	DATE	BY	APPV

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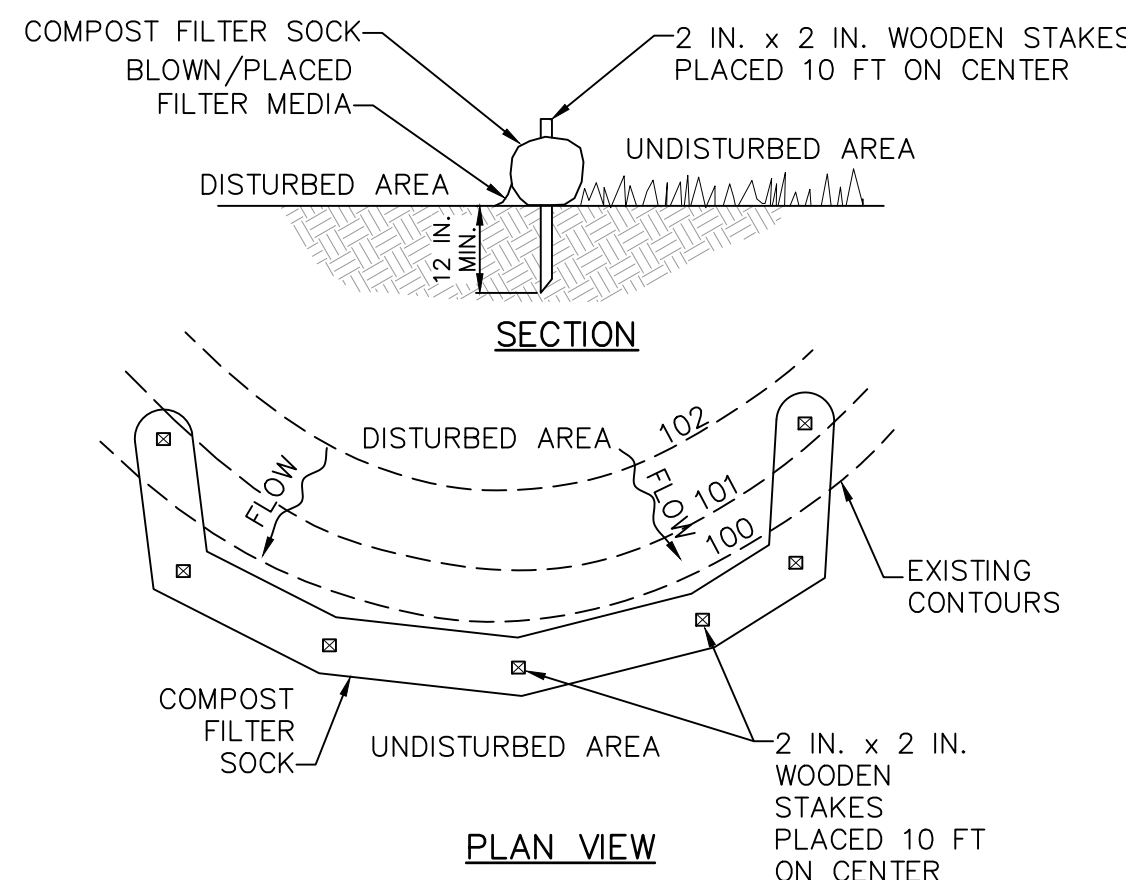
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CONCRETE WASHOUT
NO SCALE

- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 2. DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
 3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.



COMPOST FILTER SOCK DETAIL
NO SCALE

- NOTES:
- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

Two-ply systems

System	HDPE biaxial net	Continuously wound	Fusion-welded junctures	3/4" X 3/4" Max. aperture size	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)	3/16" Max. aperture size
Inner Containment Netting						
Outer Filtration Mesh						

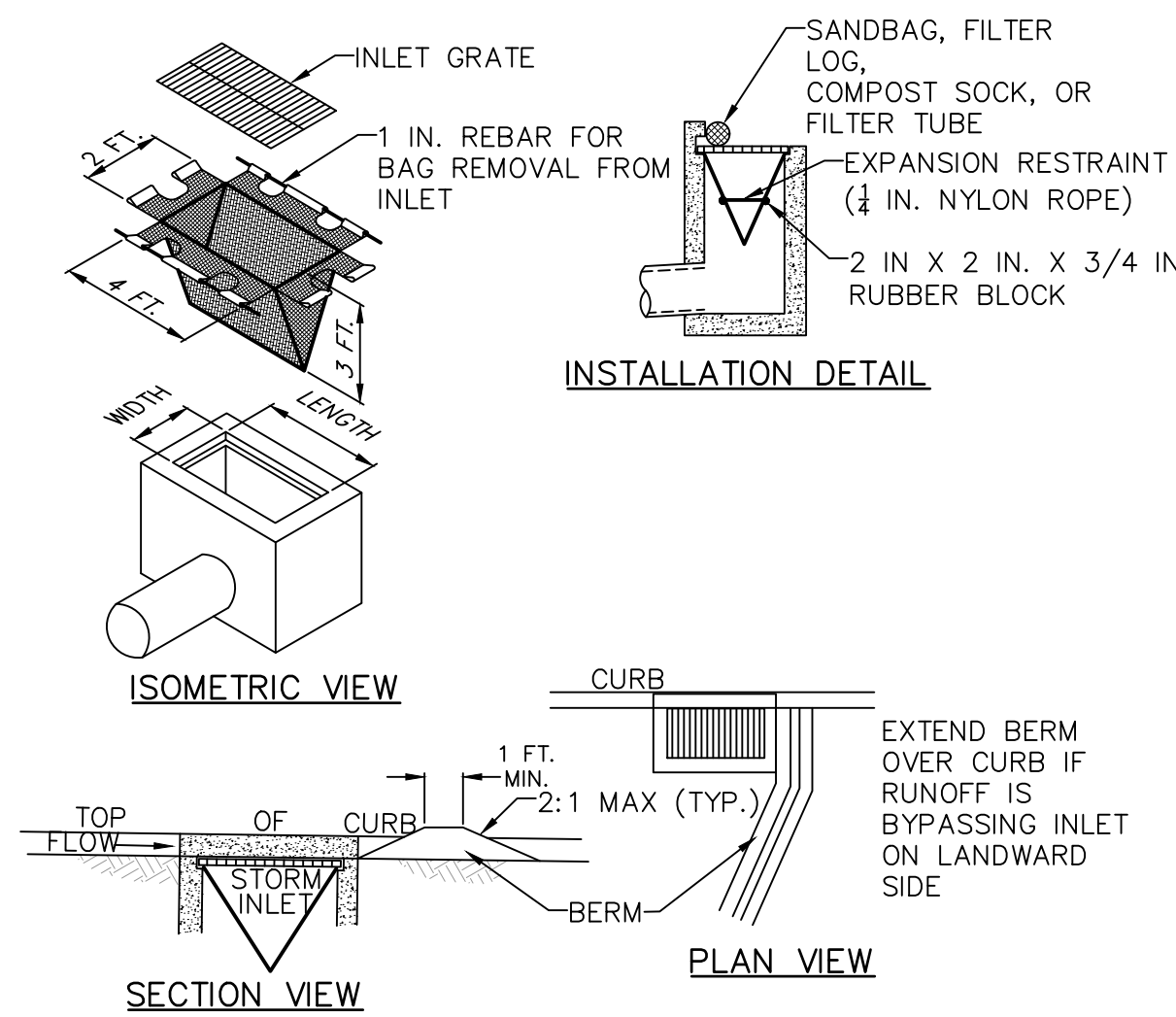
Sox fabrics composed of burlap may be used on projects lasting 6 months or less.

Fitrex & JMD

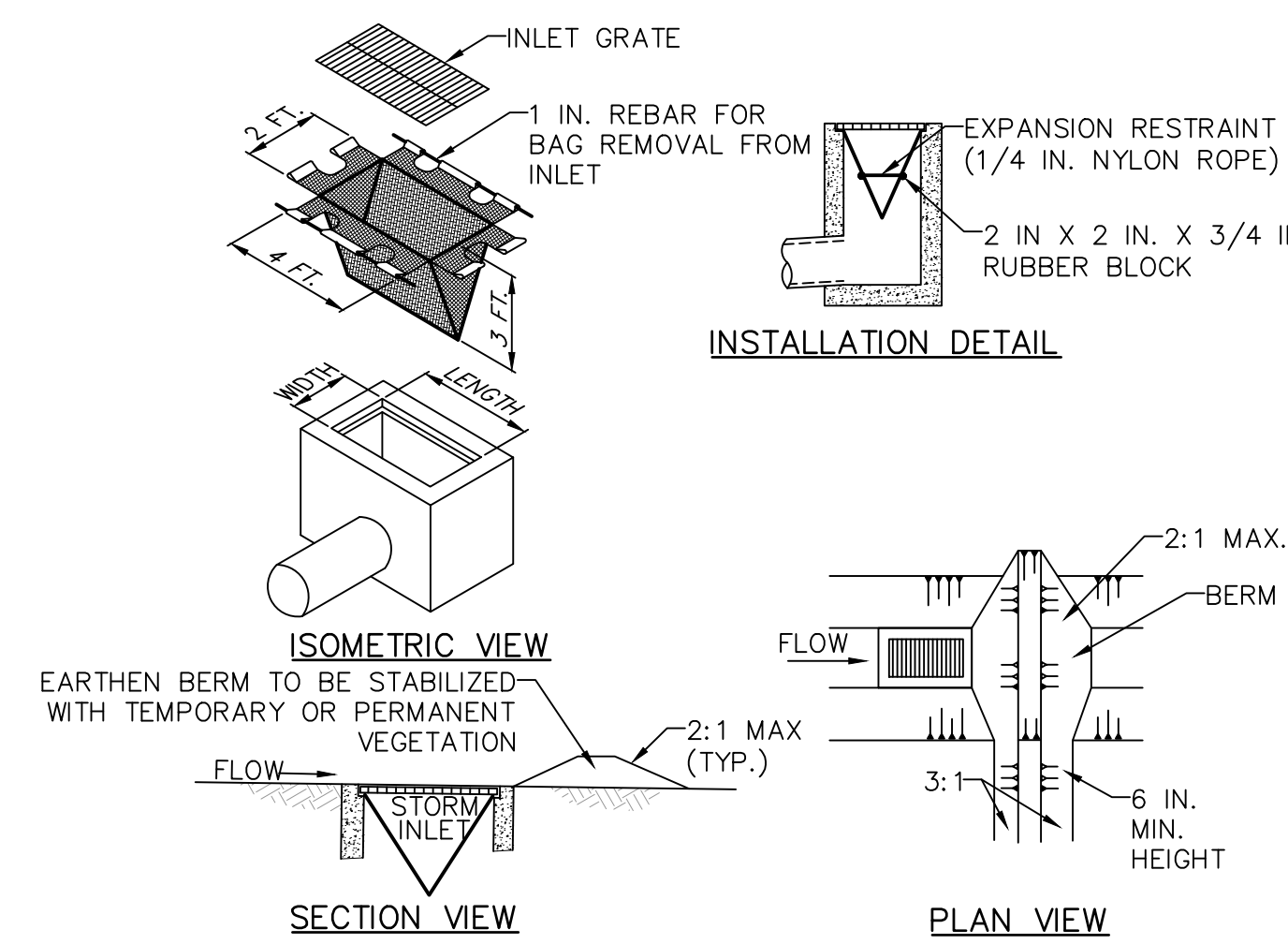
TABLE 4.2
COMPOST STANDARDS

ORGANIC MATTER CONTENT	80%–100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 – 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

SOCK FABRIC AND COMPOST STANDARDS
NO SCALE

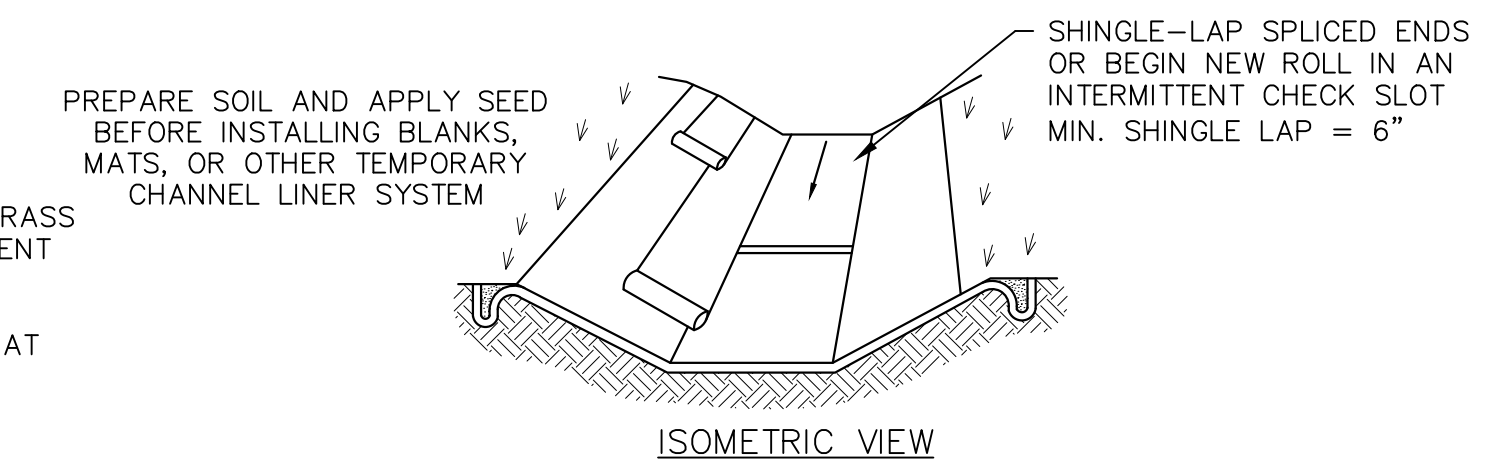


- NOTES:
- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.
- FILTER BAG INLET PROTECTION—TYPE C INLET**
NO SCALE



- NOTES:
- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.
- FILTER BAG INLET PROTECTION—TYPE M INLET**
NO SCALE

- CHANNEL NOTES:**
1. CHANNEL LINING WILL CONSIST OF BIO-DEGRADABLE TURF REINFORCEMENT MATTING FOR TEMPORARY LINING WHILE GRASS MIXTURE GETS ESTABLISHED FOR PERMANENT LINING.
 2. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
 3. SEE MANUFACTURER'S LINING INSTALLATION DETAILS FOR STAPLE PATTERN, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS. SEED MIXTURE AND MULCHING INFORMATION.
 4. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
 5. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
 6. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.



CHANNEL CROSS-SECTION LINED/GRASS CHANNELS

BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	LINING*
2	2	3	3	TRM- NAG SBN150

TYPICAL VEGETATED CHANNEL SECTION
NO SCALE

FOR PERMITTING PURPOSE ONLY
NOT RELEASED FOR CONSTRUCTION

DRAWING NO. **ES-5** SHEETS: **5 OF 6**

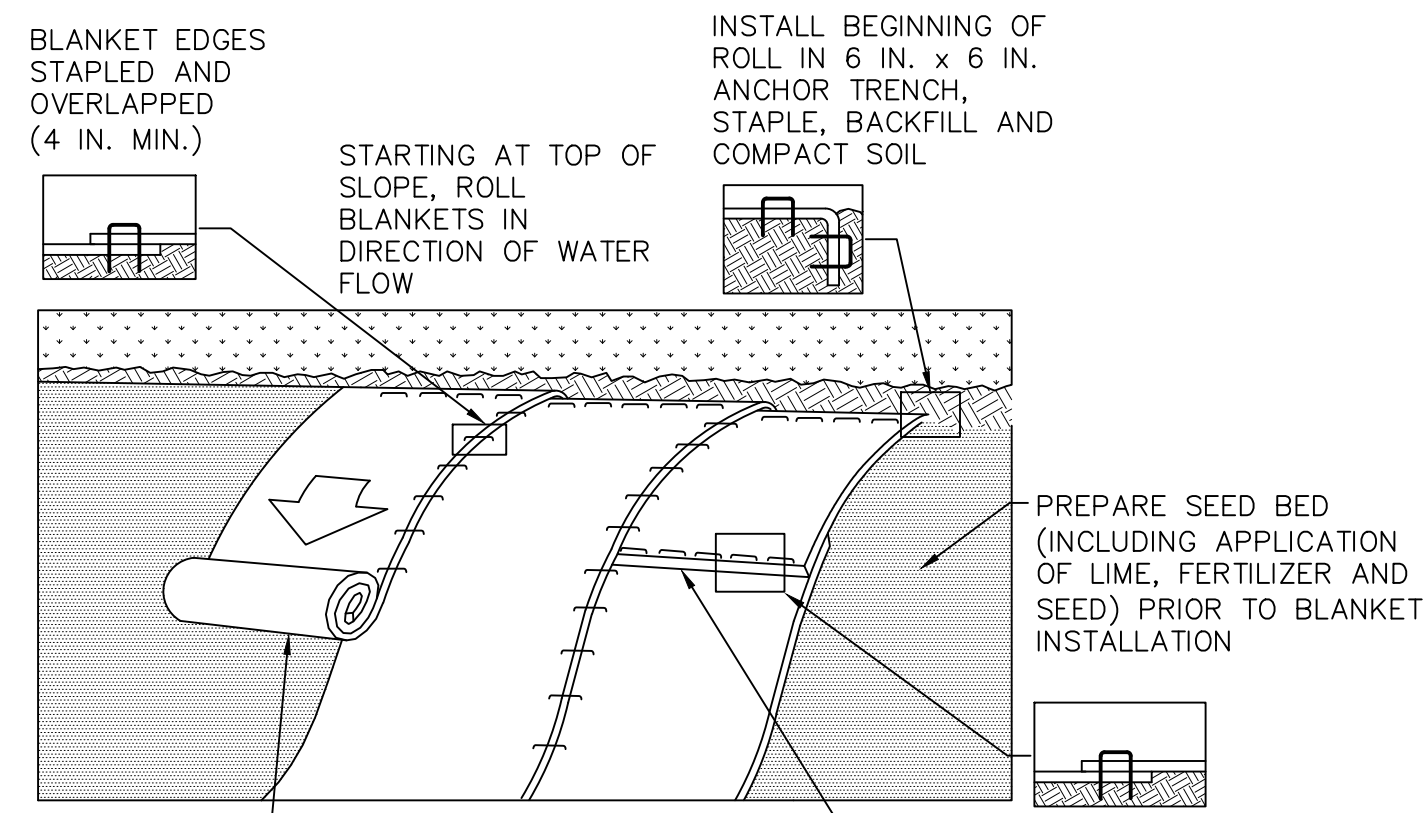
"EROSION AND SEDIMENT CONTROL PLAN" FOR
Solid Rock Missionary Baptist Church
2400 LOCUST LANE
Susquehanna Township Dauphin County Pennsylvania

DSGN G.C.G. DTSMN D.J.J. CHKR E.A.S. APPV G.C.G. SCALE BY: DATE

PROJECT NUMBER: **R18-0633.000** SUBTASK: **4** DATE: **MAY 21, 2019**

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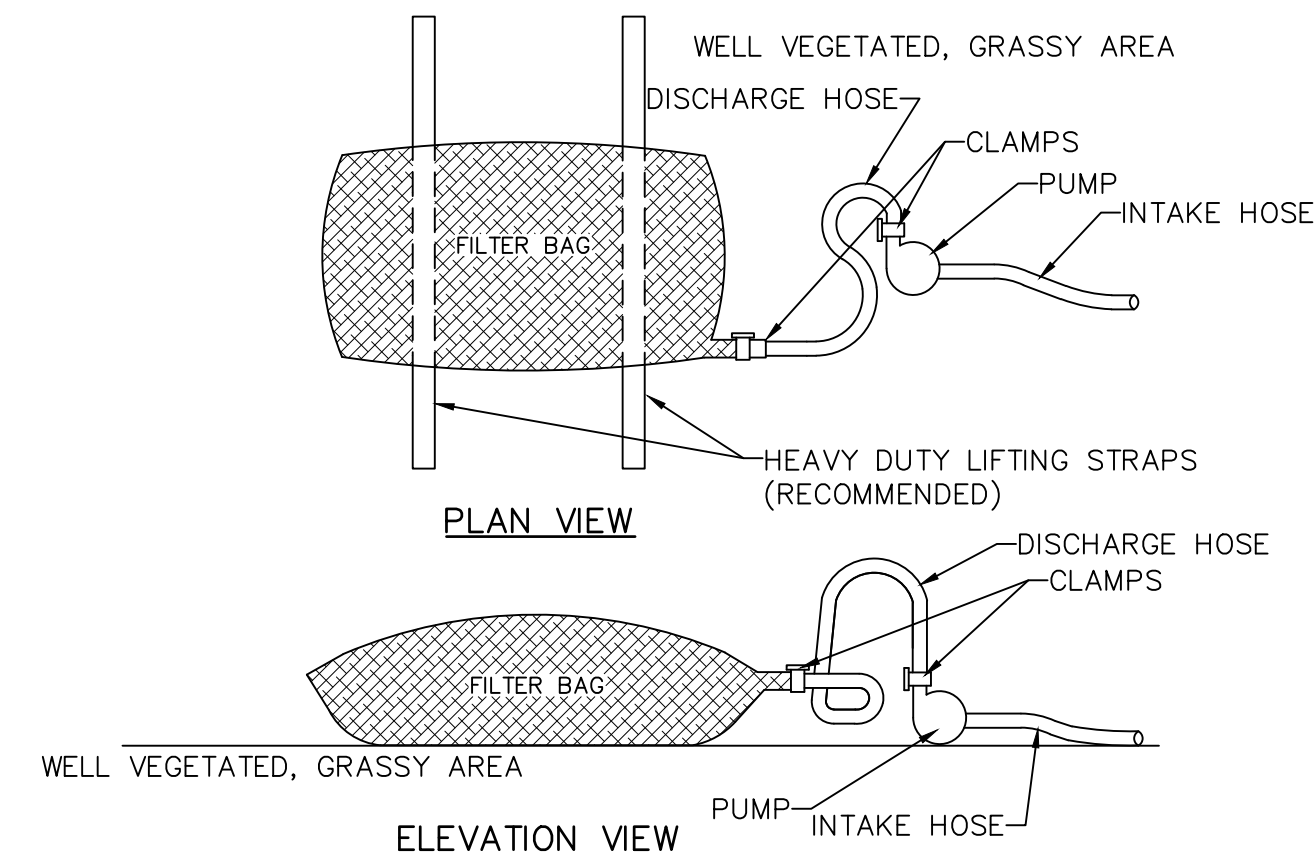
STEKELJOY AND LOY
ENGINEERS AND ARCHITECTS



NOTES:
SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

ADDITIONAL NOTES:
HYDRAULICALLY APPLIED BLANKETS MAY BE SUBSTITUTED FOR EROSION CONTROL BLANKETS IN ACCORDANCE WITH THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, MARCH 2012.
MANUFACTURER'S INFORMATION ON TYPE OF HYDRAULICALLY APPLIED BLANKET SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

EROSION CONTROL BLANKET INSTALLATION
NO SCALE

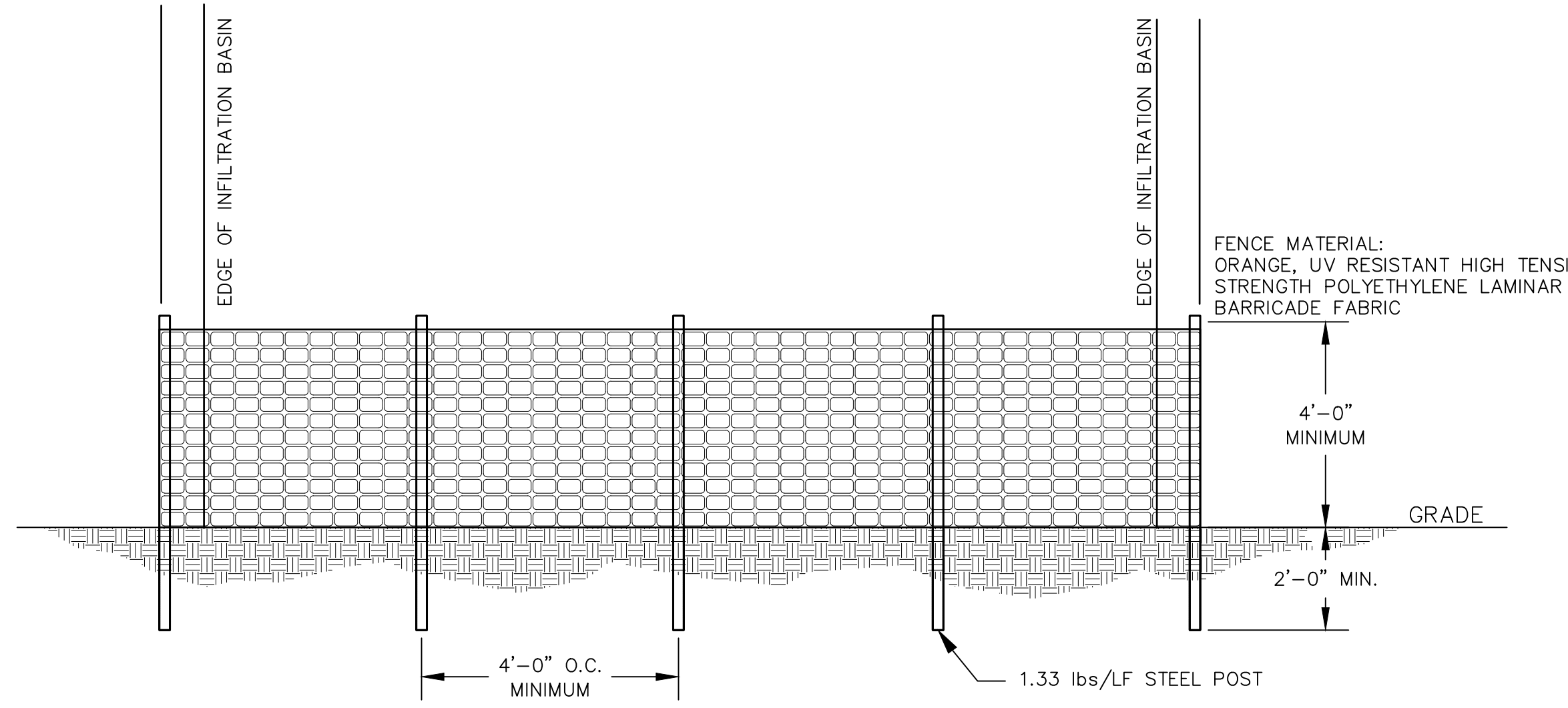


NOTES:
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

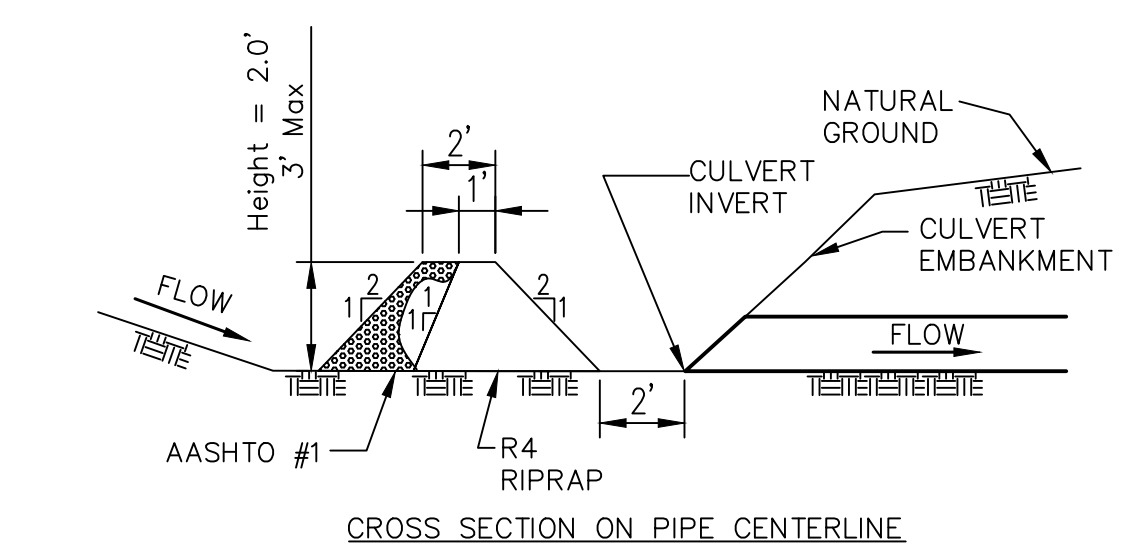
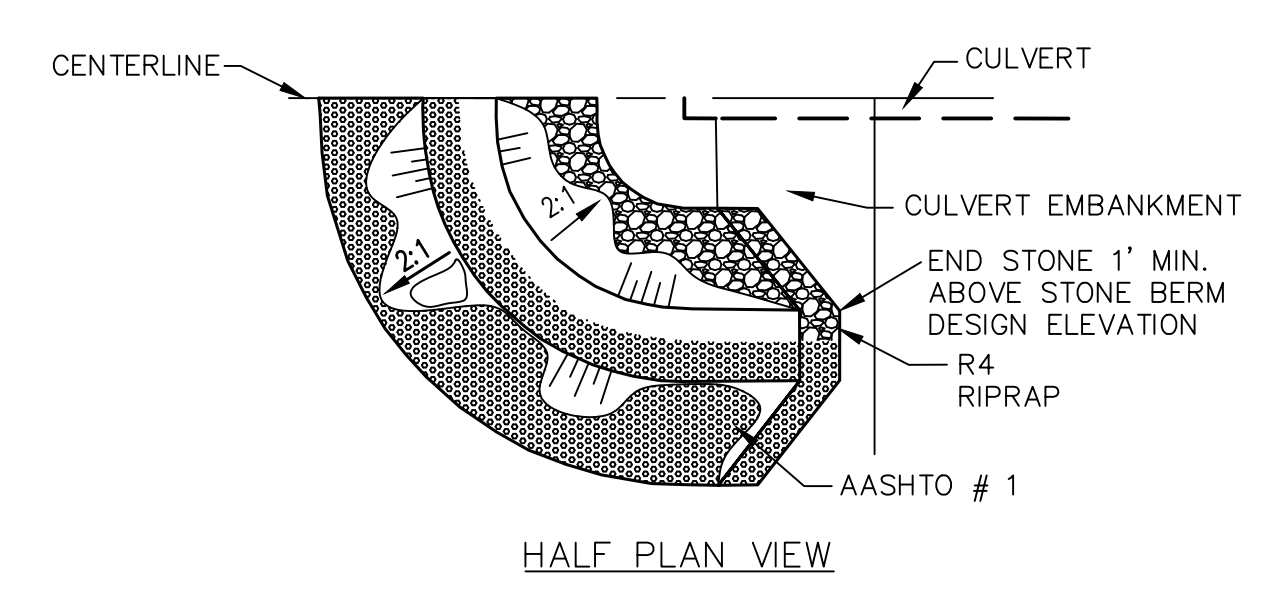
A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
CONTRACTOR SHALL UTILIZE PUMPED WATER FILTER BAGS AS NEEDED THROUGHOUT THE CONSTRUCTION PERIOD. BAGS SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE AREA AS NEEDED.

PUMPED WATER FILTER BAG DETAIL
NO SCALE



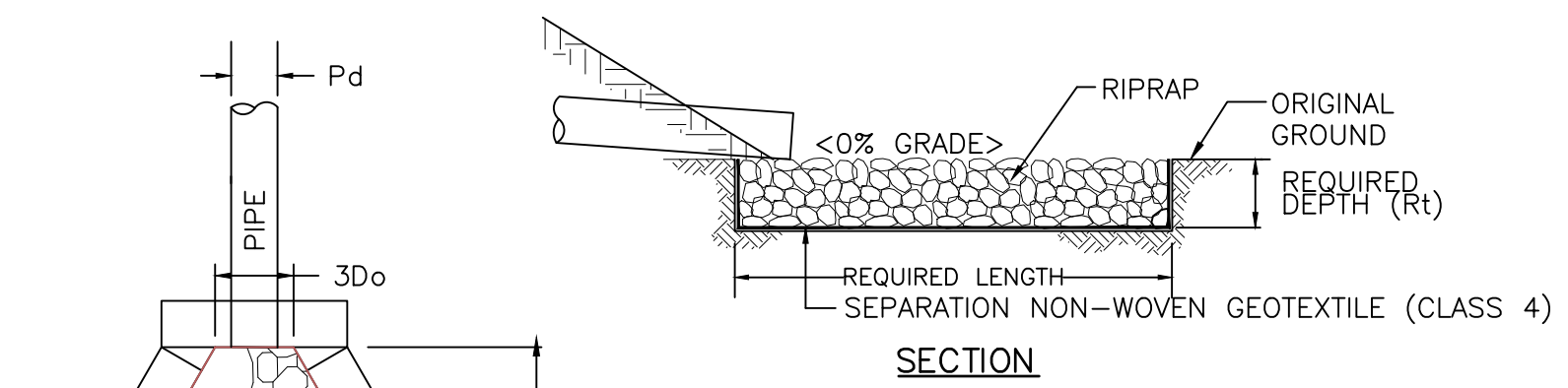
NOTES:
1. INSTALL PROTECTION FENCE AT AT EDGE OF THE INFILTRATION BASINS.
2. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE PROTECTION FENCING.
3. PROTECTION FENCING SHALL BE MAINTAINED UNTIL CONSTRUCTION AND BACKFILL OF THE INFILTRATION BASIN IS COMPLETE.

EXCLUSION FENCE
NO SCALE



NOTES:
SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE STONE BERM.
THE MAXIMUM DRAINAGE AREA TO THE CULVERT BEING PROTECTED IS 3 ACRES.
SEE PLANS FOR H DIMENSION.
TIE THE STONE BERM INTO THE CULVERT EMBANKMENT A MINIMUM OF 1 FOOT ABOVE THE DESIGN ELEVATION OF THE STONE BERM.

CULVERT INLET PROTECTION
NO SCALE



NOTES:
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN.
ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

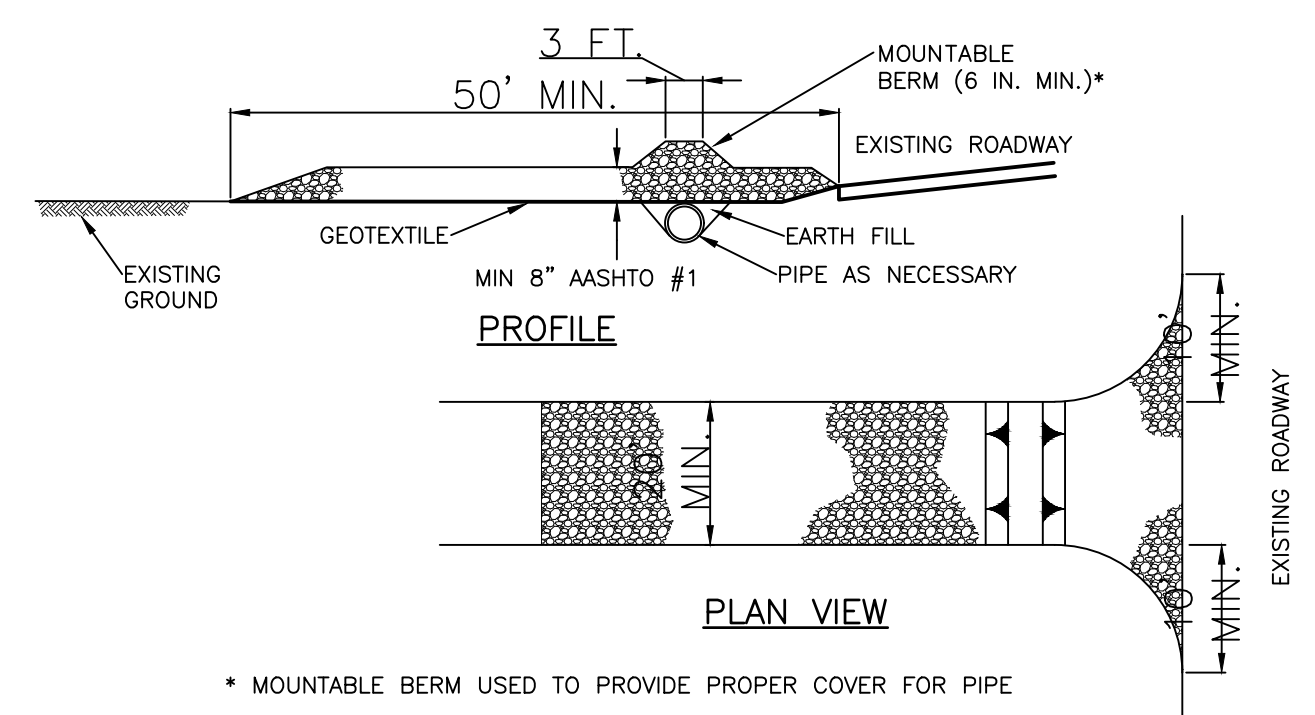
DESIGNATION	Pd	3Do	Alt*	Atw*	SIZE	REQUIRED DEPTH
RIPRAP APRON #1	1.25'	3.75'	12'	16'	R-4	18"
RIPRAP APRON #2	1.50'	4.50'	11'	16'	R-3	9"
RIPRAP APRON #3	0.67'	2'	6'	8'	R-3	9"

* MINIMUM DIMENSIONS
CLASS R-3 RIPRAP SHALL HAVE A D50=3" RANGING FROM 2" TO 6".
CLASS R-4 RIPRAP SHALL HAVE A D50=6" RANGING FROM 3" TO 12".

RIPRAP APRON DETAIL
NO SCALE

NOTES:
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH ROCK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.



ROCK CONSTRUCTION ENTRANCE DETAIL
NO SCALE

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SKELLY AND JOY
ENGINEERS AND ARCHITECTS

EROSION AND SEDIMENT CONTROL PLAN FOR Solid Rock Missionary Baptist Church 2400 LOCUST LANE Susquehanna Township Dauphin County Pennsylvania

ES-6 SHEETS: 6 OF 6

EROSION AND SEDIMENT CONTROL DETAILS

DESIGN: G.C.G. DTS/SM: D.J.J. CHK: B.A.S. APPV: G.C.G. SCALE: BY: APPV: DATE: REV: DESCRIPTION: