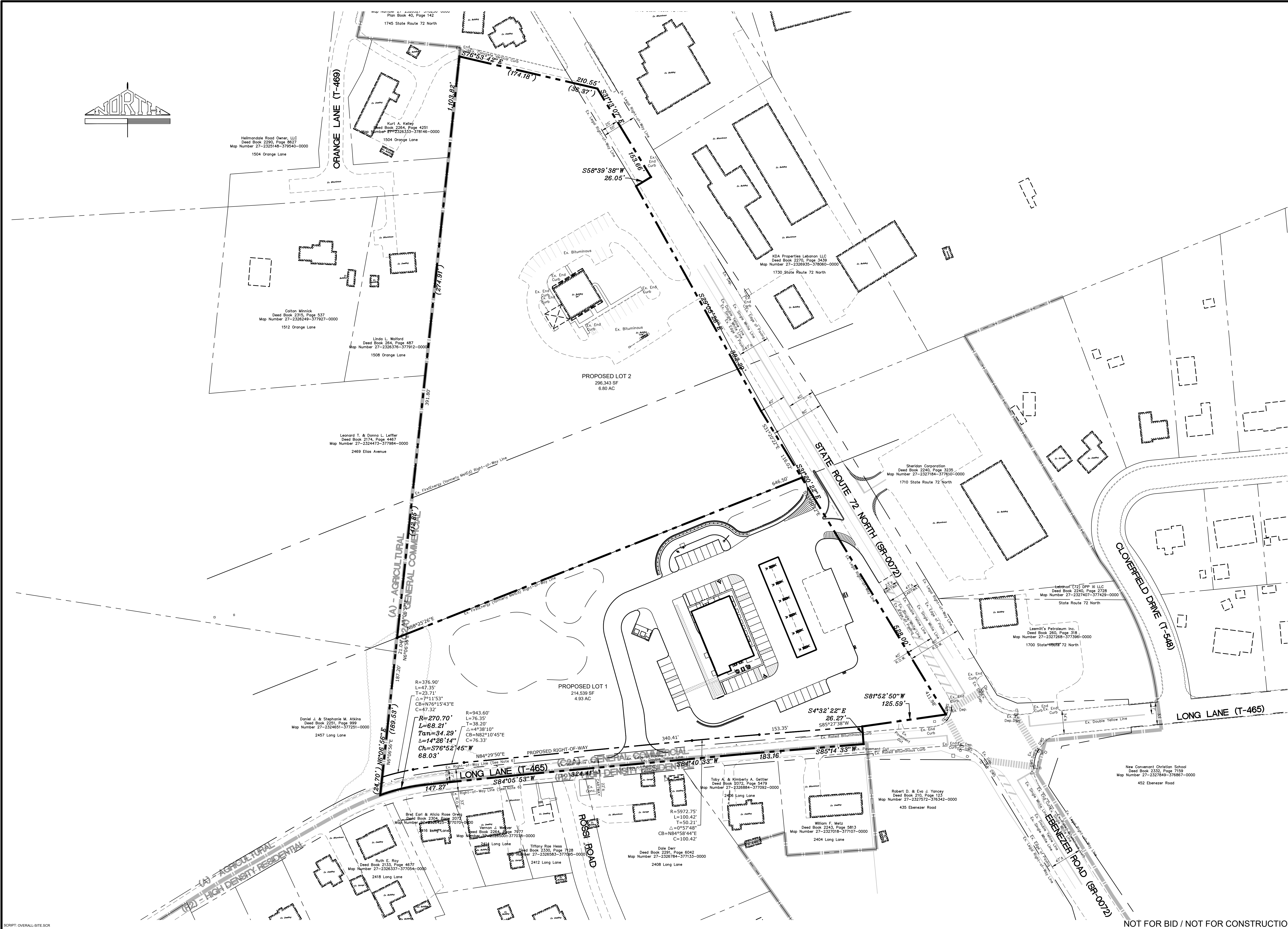


DATE:	DECEMBER 6, 2024
PROJECT NO.:	2024A84-020
MANAGER:	CHRIS VENARCHICK
SHEET NO.:	

PLOTTED: Wednesday, December 11, 2024 @ 10:03AM
 FILENAME: P:\2024\2024A84-020\CADD\FINAL\PlotZ-Overall-Site.dwg
 XREFS: Layout-HOP-Layout;Existing;Existing-GIS-Survey-Demolition

SCRIPT: OVERALL-SITE.SCR



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SHEETZ
 351 SHEETZ WAY
 CLAYSBURG, PA 16625
 (814) 238-6013

1" = 60'

SHEETZ - LEBANON, PA
 (LONG LANE)
 FINAL SUBDIVISION AND
 LAND DEVELOPMENT PLAN
 NORTH LEBANON TOWNSHIP
 LEBANON COUNTY, PA

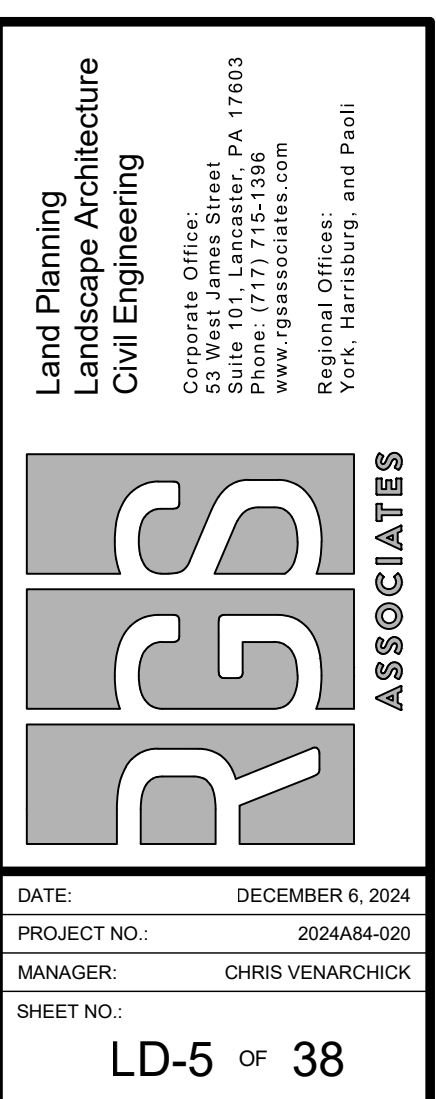
SUBDIVISION & OVERALL SITE PLAN

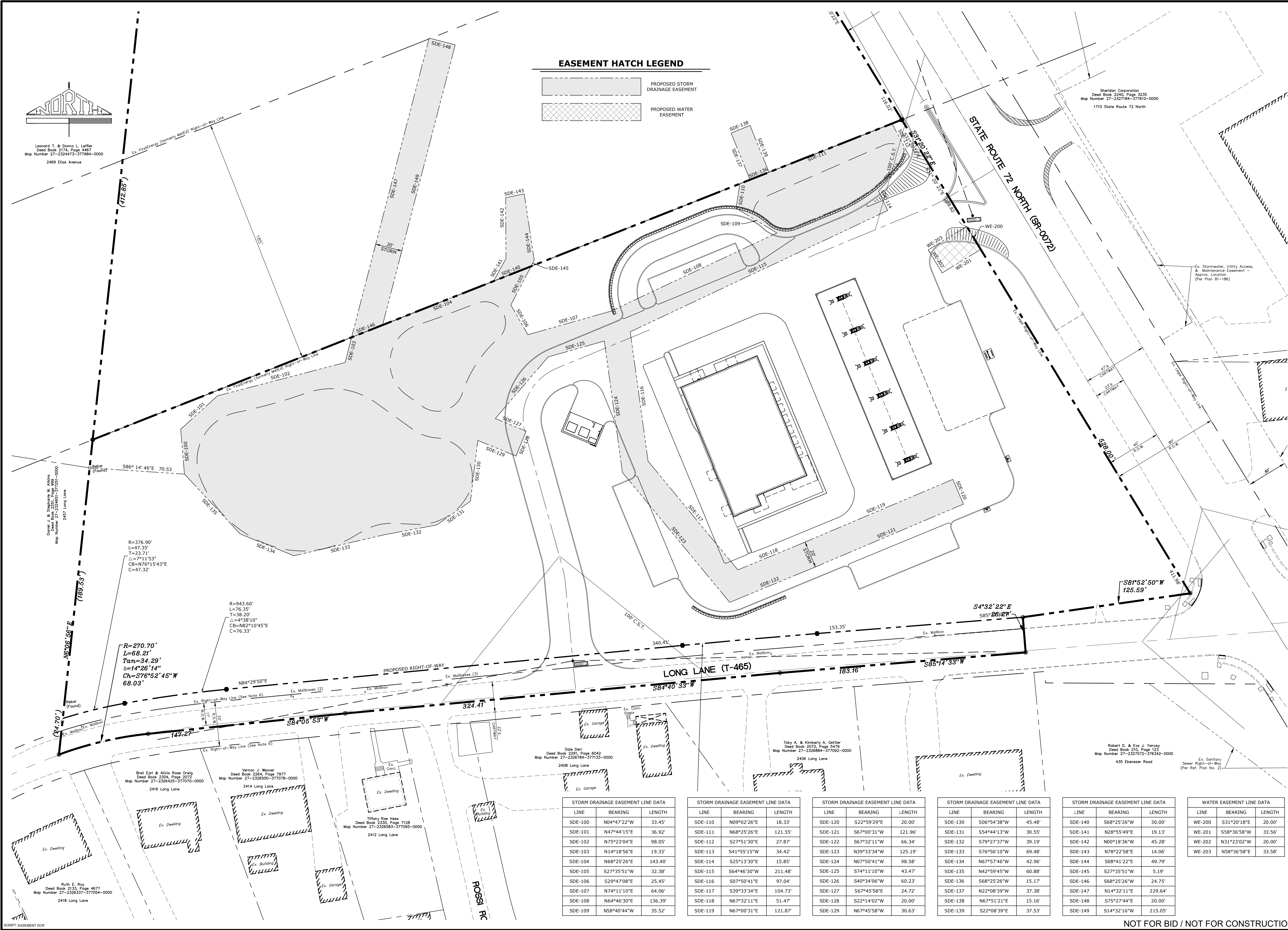
Land Planning
 Landscape Architecture
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DATE: DECEMBER 6, 2024
 PROJECT NO.: 2024A84-020
 MANAGER: CHRIS VENARCHICK
 SHEET NO.: LD-4 OF 38





STORM DRAINAGE EASEMENT LINE DATA		
LINE	BEARING	LENGTH
SDE-100	N04°47'22"W	33.45'
SDE-101	N47°44'15"E	36.92'
SDE-102	N75°23'04"E	98.05'
SDE-103	N14°18'56"E	19.33'
SDE-104	N68°25'26"E	143.40'
SDE-105	S27°35'51"W	32.38'
SDE-106	S29°47'08"E	25.45'
SDE-107	N74°11'10"E	64.06'
SDE-108	N64°46'30"E	136.39'
SDE-109	N58°40'44"W	35.52'

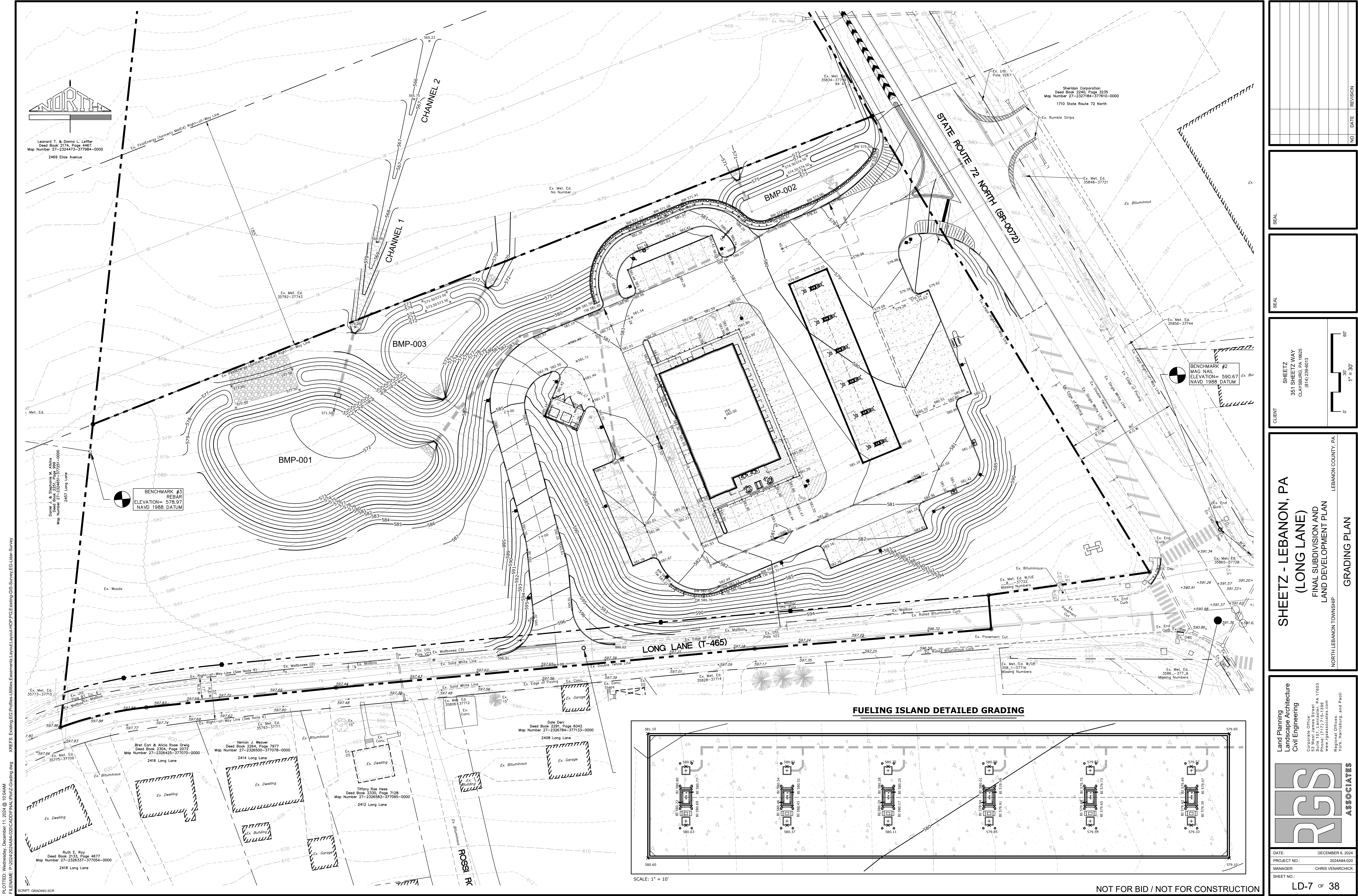
STORM DRAINAGE EASEMENT LINE DATA		
LINE	BEARING	LENGTH
SDE-110	N09°02'26"E	18.33'
SDE-111	N68°25'26"E	121.55'
SDE-112	S27°51'30"E	27.87'
SDE-113	S41°55'15"W	34.42'
SDE-114	S25°13'30"E	15.85'
SDE-115	S64°46'30"W	211.48'
SDE-116	S07°50'41"E	97.04'
SDE-117	S39°33'34"E	104.73'
SDE-118	N67°32'11"E	51.47'
SDE-119	N67°00'31"E	121.87'

STORM DRAINAGE EASEMENT LINE DATA		
LINE	BEARING	LENGTH
SDE-120	S22°59'29"E	20.00'
SDE-121	S67°00'31"W	121.96'
SDE-122	S67°32'11"W	66.34'
SDE-123	N39°33'34"W	125.19'
SDE-124	N07°50'41"W	98.58'
SDE-125	S74°11'10"W	43.47'
SDE-126	S40°34'06"W	60.23'
SDE-127	S67°45'58"E	24.72'
SDE-128	S22°14'02"W	20.00'
SDE-129	N67°45'58"W	30.63'

STORM DRAINAGE EASEMENT LINE DATA		
LINE	BEARING	LENGTH
SDE-130	S06°54'38"W	45.48'
SDE-131	S54°44'13"W	30.55'
SDE-132	S79°27'37"W	39.19'
SDE-133	S76°56'10"W	69.48'
SDE-134	N67°57'46"W	42.96'
SDE-135	S27°35'51"W	60.88'
SDE-136	S68°25'26"W	15.17'
SDE-137	N22°08'39"W	37.38'
SDE-138	N67°51'21"E	15.16'
SDE-139	S22°08'39"E	37.53'

STORM DRAINAGE EASEMENT LINE DATA		
LINE	BEARING	LENGTH
SDE-140	S68°25'26"W	30.00'
SDE-141	N28°55'49"E	19.13'
SDE-142	N00°18'36"W	45.28'
SDE-143	N78°22'58"E	14.06'
SDE-144	S08°41'22"E	49.79'
SDE-145	N42°59'45"W	5.19'
SDE-146	S68°25'26"W	24.75'
SDE-147	N14°32'11"E	229.64'
SDE-148	S75°27'44"E	20.00'
SDE-149	S14°32'16"W	215.05'

WATER EASEMENT LINE DATA		
LINE	BEARING	LENGTH
WE-200	S31°20'18"E	20.00'
WE-201	S58°36'58"W	33.56'
WE-202	N31°23'02"W	20.00'
WE-203	N58°36'58"E	33.58'



PLOTTED: Wednesday, December 11, 2024 @ 10:04AM
FILENAME: P:\2024\2024A84-020\CADD\FINAL\PlotZ-Grading.dwg XREFS: Existing,EG Profiles,Utilities,Layout,Layout-HOP-PG Existing-GIS Survey,EG-Linear-Survey
SCRIPT: GRADING.SCR

NO	DATE	REVISION

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Land Planning
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ASSOCIATES

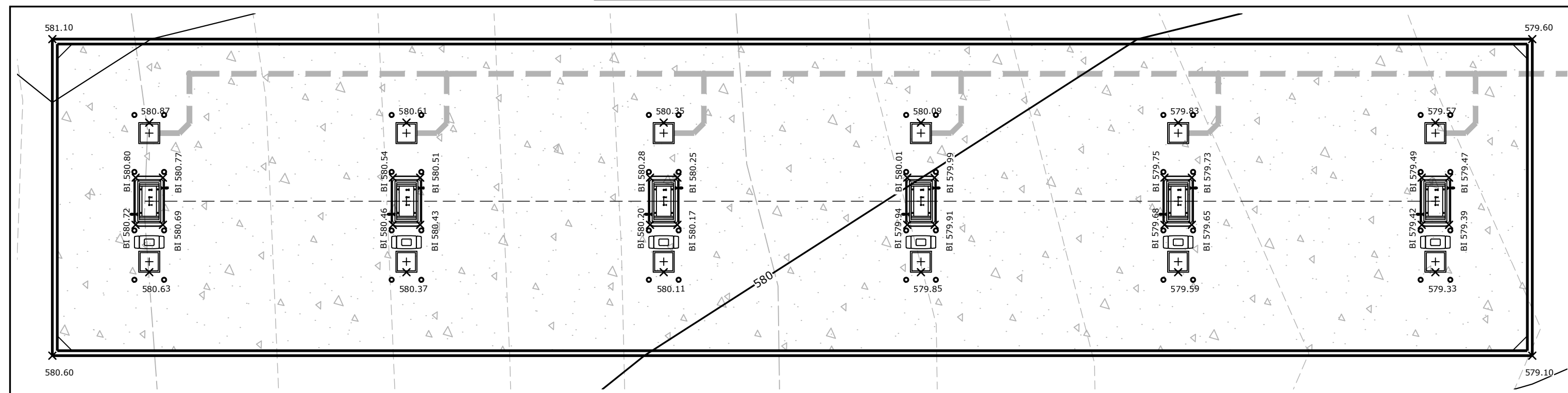
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DATE: DECEMBER 6, 2024

PROJECT NO.: 2024A84-020

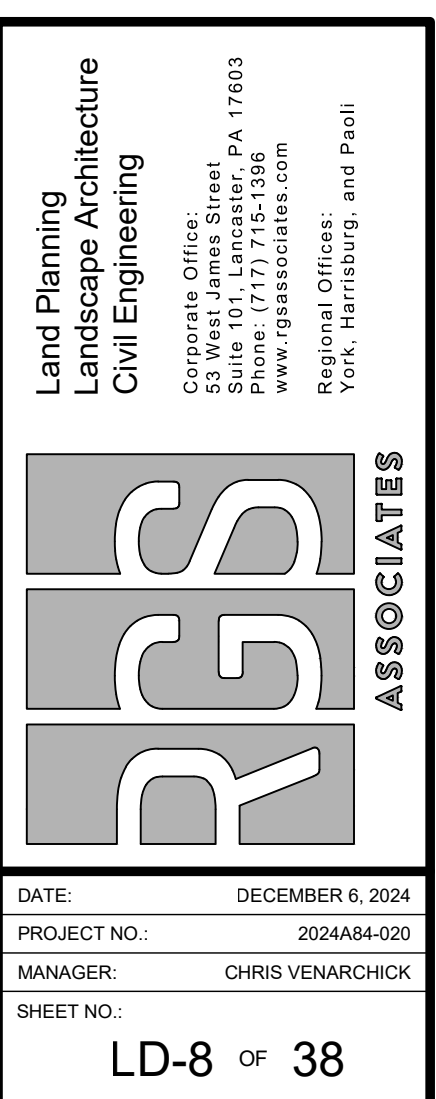
MANAGER: CHRIS VERNARCHICK

SHEET NO.: LD-7 OF 38



SCALE: 1" = 10'

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LANDSCAPE CONTRACTOR NOTES:

- GENERAL PLANTING NOTES.
 - CONTRACTOR SHALL CONTACT PA ONE CALL (8-1-1), AND SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA PRIOR TO INSTALLATION OF PLANT MATERIALS.
 - THE LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO ANY PLANTING, AND SHALL FIELD-ADJUST THE LOCATIONS OF TREES AND SHRUBS, IF NECESSARY, TO AVOID ANY CONFLICT WITH THESE UTILITIES. **CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL OF ANY PROPOSED DESIGN CHANGES.** THIS PLAN IS FOR PLANTING INFORMATION ONLY. REFER TO GRADING, UTILITY, SITE LAYOUT AND SEDIMENT EROSION CONTROL PLANS FOR ALL RELATED INFORMATION.
 - ALL PLANTS AND SHRUBS SHALL BE AS SPECIFIED AND INSTALLED IN ACCORDANCE WITH THE DETAILS AND COMMENTS NOTED ON THESE DRAWINGS.
 - ALL PLANT MATERIALS SHALL BE SUBJECT TO APPROVAL OR REJECTION BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.** PLANT MATERIALS INSTALLED WITHOUT PRIOR APPROVAL ARE SUBJECT TO REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE IF DETERMINED TO BE UNSATISFACTORY. REJECTED PLANT MATERIALS SHALL BE REMOVED IMMEDIATELY FROM THE PROJECT SITE.
 - PROPOSED LOCATIONS OF ALL NON-HERBACEOUS PLANT MATERIALS AND PLANTING BED OUTLINES SHALL BE STAKED AND OUTLINED IN THE FIELD BY THE **CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT** OR THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
 - THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS, AND SHALL REPORT ANY IDENTIFIED DISCREPANCIES TO THE LANDSCAPE ARCHITECT. IF SITE WORK HAS BEEN MODIFIED AND DIFFERS FROM INFORMATION SHOWN ON THE APPROVED PLANS, AND POTENTIAL CHANGES TO THE PLANTING DESIGN ARE NECESSARY, THE CONTRACTOR **MUST CONTACT THE LANDSCAPE ARCHITECT FOR INSTRUCTIONS.**
 - PROCEED WITH WORK ONLY WHEN PRESENT AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING WITHOUT EXCESSIVE SOIL COMPACTION AND/OR UNNECESSARY PLANT DAMAGE.
 - REMOVE ANY EXCESS SOIL FROM PLANT ROOT FLARES, IF PRESENT.
 - BEFORE PLANTING ANY TURF AREAS UNLESS OTHERWISE INDICATED.
 - THE CONTRACTOR SHALL INSPECT ALL PLANTING AREAS BEFORE ANY TOPSOIL IS PLACED OR PLANTING BEGINS TO ENSURE ADEQUATE DRAINAGE EXISTS. IF ANY AREAS TO BE PLANTED SHOW EVIDENCE OF POOR DRAINAGE, THE CONTRACTOR **MUST NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CORRECTIVE ACTION.** ANY PLANT MATERIAL THAT DIES DUE TO POOR OR INADEQUATE DRAINAGE SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
 - REMOVE ANY EXCESS SOIL FROM PLANT ROOT FLARES, IF PRESENT.
 - LANDSCAPE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING IN AREAS OF EXISTING VEGETATION THAT IS TO BE REMOVED AND TO BE PROTECTED. IF SUCH VEGETATION IS INJURED OR DESTROYED DURING CONSTRUCTION, IT SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR WITH PLANTS OF A SIZE AND SPECIES **AS DETERMINED BY THE LANDSCAPE ARCHITECT**, AND SUCH REPLACEMENT SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
 - PLANT QUANTITIES NOTED ON THE PLANT LIST SHOULD MATCH THE PLANT SYMBOLS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL PLANT MATERIAL BASED UPON GRAPHIC SYMBOL QUANTITIES **AND SHALL CONTACT THE LANDSCAPE ARCHITECT** IF A DIFFERENCE IS FOUND BETWEEN THE QUANTITIES NOTED IN THE PLANT LIST AND THE DRAWING SYMBOLS.
 - ALL AREAS DISTURBED BY PLANTING OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE, AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- PLANT STANDARDS**
 - ALL TREES SHALL HAVE BEEN NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE FINAL PLANTING SITE.
 - ALL PLANTS SHALL HAVE A NORMAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY, AND VIGOROUS. THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
 - ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
 - REQUIREMENTS FOR PLANT MEASUREMENTS, BRANCHING, GRADING, QUALITY, AND BALLING AND BURLAPPING SHALL FOLLOW THE CODE OF STANDARDS AS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1, CURRENT EDITION, AS AMENDED. DO NOT PRUNE TO ATTAIN REQUIRED SIZES.
 - IF FORMAL PLANTING ARRANGEMENTS OR A CONSISTENT ORDER OF PLANTS IS INDICATED ON THE DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD.
 - ALL STREET TREES AND SCREENING PLANT MATERIALS SHALL BE INSTALLED DURING THE FIRST PLANTING SEASON FOLLOWING COMPLETION OF OTHER SITE WORK.
 - THE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS PRIOR TO THE BEGINNING OF THE GUARANTEE PERIOD BY WATERING, FERTILIZING, DISEASE CONTROL, PRUNING, AND WEEDING TO KEEP THE COMPLETED WORK AND/OR UNCOMPLETED WORK IN A CLEAN AND NEAT CONDITION AT ALL TIMES.
- PLANT GUARANTEE:**
 - ALL MATERIAL SHALL BE GUARANTEED BY INSTALLER FOR THE DURATION OF 18 MONTHS FOLLOWING THE DATE OF PLANTING, OR 12 MONTHS AFTER FINAL INSPECTION AND ACCEPTANCE OF THE WORK, WHICHEVER IS GREATER. PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWING CONDITION AT THE END OF THE GUARANTEE PERIOD.
 - AT TIME OF PLANTING, REPLACEMENT TREES SHALL BE A MINIMUM TRUNK CALIPER OF TWO (2) INCHES AT A HEIGHT OF SIX (6) INCHES ABOVE FINISHED GRADE AND LOCATED WITHIN UNBUILDABLE SECTIONS OF THE SITE.
 - THE CONTRACTOR SHALL GUARANTEE THAT PLANTS SHALL BE IN VIGOROUS AND THRIVING CONDITION AT THE END OF THE GUARANTEE PERIOD. SHOULD ANY PLANTS APPEAR TO BE IN POOR HEALTH OR LACK NORMAL GROWTH HABIT, AS DETERMINED BY THE LANDSCAPE ARCHITECT, THEY SHALL BE REMOVED AT ONCE AND REPLACED.
 - DURING THE TIME BETWEEN THE INSTALLATION OF PLANTS AND THE BEGINNING OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPERINTENDENCE OF THE PLANTINGS. SHOULD ANY PLANT BE STOLEN OR OTHERWISE REMOVED, ANY SUCH PLANT SHALL BE REPLACED BY THE CONTRACTOR. THE GUARANTEE PERIOD WILL BEGIN WHEN ALL PLANTS ARE INSTALLED AS SHOWN AND SPECIFIED IN THESE PLANS.
 - WITHIN THE GUARANTEE PERIOD, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY MAINTENANCE PRACTICES BEING FOLLOWED OR OMITTED WHICH WOULD BE DETRIMENTAL TO THE HEALTHY VIGOROUS GROWING CONDITIONS OF PLANTS.
 - INSPECTION TO DETERMINE WORK COMPLETION FOR BEGINNING THE ONE-YEAR GUARANTEE PERIOD WILL BE MADE BY THE OWNER AND LANDSCAPE ARCHITECT UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION SUBMITTED BY THE CONTRACTOR AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
 - AFTER INSPECTION, THE CONTRACTOR WILL BE NOTIFIED OF ANY DEFICIENCIES TO BE CORRECTED.
 - IF DEFICIENCIES ARE NOTED, A SECOND INSPECTION TO DETERMINE WORK COMPLETION FOR BEGINNING THE ONE-YEAR GUARANTEE PERIOD WILL BE MADE BY THE OWNER AND LANDSCAPE ARCHITECT UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION SUBMITTED BY THE CONTRACTOR AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
 - ONCE ANY AND ALL DEFICIENCIES ARE ADDRESSED, THE CONTRACTOR WILL BE NOTIFIED OF THE DATE THAT THE WORK HAS BEEN APPROVED FOR BEGINNING THE GUARANTEE PERIOD.
 - ONE-YEAR FROM THE FROM THE START OF THE PLANT GUARANTEE PERIOD, OR 18 MONTHS AFTER PLANTING, WHICHEVER IS GREATER, THE CONTRACTOR, OWNER AND LANDSCAPE ARCHITECT WILL INSPECT THE SITE TO LOCATE ANY PLANTS THAT ARE NOT IN A VIGOROUS AND THRIVING CONDITION. A SITE INSPECTION REPORT WILL BE ISSUED TO THE CONTRACTOR. THE CONTRACTOR WILL HAVE 30 DAYS TO REPLACE ANY PLANTS IDENTIFIED AS FAILING THE GUARANTEE STANDARD.

- SOIL PREPARATION:**
- NOTES IN THIS SECTION APPLY TO ALL PLANTING AREAS OTHER THAN LANDSCAPED PCSM BMPS. SOIL PREPARATION REQUIREMENTS FOR PCSM BMPS CAN BE FOUND ON SHEET SW-34.
- PRIOR TO PLANTING, THE LANDSCAPE CONTRACTOR SHALL OBTAIN, AND FORWARD TO THE LANDSCAPE ARCHITECT, SOIL AGRONOMY TESTING REPORTS FROM AN APPROVED SOILS LABORATORY SUCH AS THE PENNSYLVANIA STATE UNIVERSITY'S AGRICULTURAL ANALYTICAL SERVICES LABORATORY. TESTS SHALL BE COMPLETED FOR EACH EXISTING SOIL TYPE AND FOR EACH BATCH OF IMPORTED TOPSOIL. TESTS TO INCLUDE SOIL FERTILITY, PARTICLE SIZE, SAND SEIVE ANALYSIS, ORGANIC MATTER AND SOLUBLE SALTS. CONTRACTOR TO REQUEST SOIL AMENDMENT RECOMMENDATIONS FOR EACH CATEGORY OF TURF AND/OR LANDSCAPE PLANT TO BE INSTALLED IN THE SUBJECT SOIL.
- ALL SOIL AMENDMENTS SHALL BE INSTALLED PER THE SOIL AGRONOMY REPORT, AND SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR.
- PERENNIAL, ANNUAL AND BULB PLANTING AREAS SHALL HAVE AMENDED SOILS AS FOLLOWS
FOR EACH 100 S.F. AREA:
6 CU. FT. OF CLEAN COMPOST
5-6 LBS. MILORGANITE OR EQUAL
2-3 LBS. OF 0-20-20 FERTILIZER
- AGRIFORM 20-10-5 PLANTING TABLETS OR EQUIVALENT SHALL BE USED FOR ALL TREE AND SHRUB PLANTINGS PER THE MANUFACTURER'S SPECIFICATIONS. TABLETS ARE NOT A REPLACEMENT FOR AMENDMENTS REQUIRED BY THE SOIL AGRONOMY TEST RESULTS.
- APPLY AMENDMENTS ON-SITE, AND MIX SOIL TO FULLY ADDRESS ALL EXISTING SOIL DEFICIENCIES. DO NOT APPLY AMENDMENTS NOR TILL IF EXISTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- LANDSCAPE PLANTING AREAS SHALL BE FREE OF ANY DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE RUBBLE, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE TAR, ROOFING COMPOUND, ACID, AND STONES LARGER THAN 3" IN ANY DIRECTION.
- TOPSOIL SHALL BE PLACED AT A MINIMUM DEPTH OF 6".
- IN ALL PLANTING AREAS, IF INSUFFICIENT TOPSOIL IS PRESENT PRIOR TO PLANTING, THE SITE CONTRACTOR SHALL PROVIDE AND PLACE THE REQUIRED TOPSOIL AT THE LANDSCAPE CONTRACTOR'S REQUEST. THE TOPSOIL SHALL BE ROUGH GRADED BY THE SITE CONTRACTOR AND FINISH GRADED BY THE LANDSCAPE CONTRACTOR.
- CONTRACTOR SHALL KILL OFF ANY EXISTING TURF AND UNWANTED VEGETATION WITHIN PROPOSED BED LIMITS. COMPLETE REMOVAL OF TURF BY MEANS OF A SOD CUTTER OR SCUFFING IS AN ACCEPTABLE ALTERNATIVE METHOD TO HERBICIDE APPLICATION. IF HERBICIDE IS NOT USED, THE CONTRACTOR SHALL COMPLETELY REMOVE ALL EXISTING PLANT ROOTS.

- MULCH:**
 - THE CONTRACTOR MAY APPLY A PRE-EMERGENT HERBICIDE PER THE MANUFACTURERS SPECIFICATIONS TO THE ENTIRE PLANTING BED FOR CONTROL OF WEED GERMINATION.
 - A LAYER OF 3" THICK DOUBLE SHREDDED HARDWOOD MULCH DYED BROWN OR BLACK SHALL BE APPLIED ACROSS THE ENTIRE PLANTING BED AREA UNLESS OTHERWISE INDICATED ON THE PLAN.
 - MULCH SHALL NOT COVER THE CROWNS OF ANY HERBACEOUS PLANTS, NOR THE ROOT FLARES OF ANY WOODY PLANTS.
 - PLACE "DEWITT" 15 YEAR WEED BARRIER" WOVEN POLYPROPYLENE OR APPROVED EQUAL IN ALL PLANTED BEDS AND AT EACH TREE KING.
 - SEED/SOD ESTABLISHMENT NOTES:**
 - GRASS SEED SHALL BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULING FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.
 - TURFGRASS SOD SHALL COMPLY WITH "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" IN TPI GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING. TURFGRASS SOD SHALL BE A VIABLE SOD OF UNIFORM DENSITY, COLOR, AND TEXTURE. IT SHALL BE STRONGLY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT.
 - RECOMMENDED TIME OF TURFGRASS SEEDING IS SEPTEMBER 1ST TO OCTOBER 15TH. WHERE SPRING SEEDINGS ARE NECESSARY, SEED NO LATER THAN APRIL 1ST FOR BEST RESULTS.
 - SOW RECOMMENDED SEED MIXTURE ADAPTED TO 1/3 OF FINAL DENSITY OF THE SPECIFIC SITE AREA.
 - PRIOR TO SEEDING AND/OR SODDING, REMOVE ANY EXISTING VEGETATION FROM PROPOSED LAWN AREAS.
 - EXCESS DEAD VEGETATION SHOULD BE TURNED UNDER, IF THE SITE IS NOT TOO WET FOR TILLING WITHOUT EXCESSIVE SOIL COMPACTION.
 - IF TOPSOIL HAS BEEN DEPLETED OR REMOVED IN THE AREA TO BE SEEDDED OR SODDED, PROVIDE SOIL AMENDMENTS PER THE SOIL AGRONOMY REPORT.
 - DIVIDE TOTAL SEED QUANTITY INTO TWO EQUAL LOTS, SOWING ONE LOT IN ONE DIRECTION, AND THE SECOND LOT AT RIGHT ANGLES TO THE FIRST WITH A MECHANICAL SEEDER OR SPREADER.
 - EXTRA CARE SHALL BE TAKEN TO ELIMINATE DEPRESSIONS OR AIR POCKETS BY ROLLING OR TAMPING LAWN BASE BEFORE INSTALLATION. ALL SOD MUST BE DELIVERED AND INSTALLED WITHIN 36 HOURS OF BEING CUT. SOD SHALL BE LAID SMOOTHLY, EDGE TO EDGE WITH STAGGERED JOINTS. IMMEDIATELY AFTER INSTALLATION, THE SOD SHALL BE WATERED TO A DEPTH OF 4" INTO THE SOIL.
 - MULCHING WITH STRAW, HYDROMULCH, OR FIBER MATS IS RECOMMENDED TO PROTECT SEED FROM DRYING OUT OR WASHING AWAY. HEAVY MULCHES SHOULD BE REMOVED FROM THE AREA WITHIN A FEW DAYS AFTER SEED GERMINATION.
 - BOUNDARIES OF NEWLY SEEDDED AREAS SHALL BE WELL DEFINED WITH SIGNS OR OTHER MARKERS TO DETER INTRUSION UNTIL LAWN AREAS ARE FULLY ESTABLISHED.
 - CONTRACTOR IS RESPONSIBLE FOR TURF MAINTENANCE UNTIL SATISFACTORY TURF IS ESTABLISHED, AS DETERMINED BY THE LANDSCAPE ARCHITECT. MAINTENANCE TO INCLUDE WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL INSTALLATION.
 - A FILL IN AS NECESSARY SOIL SUSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUSIDENCE.
 - IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH AND ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.
 - APPLY TREATMENTS AS REQUIRED TO KEEP TURF AND SOIL FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.
 - WATERING; INSTALL AND MAINTAIN TEMPORARY PIPING, HOSES, AND TURF-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND TO KEEP TURF UNIFORMLY MOIST TO A DEPTH OF 4 INCHES.**
 - SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
 - WATER TURF WITH FINE SPRAY AT A MINIMUM RATE OF 1 INCH PER WEEK UNLESS RAINFALL PRECIPITATION IS ADEQUATE.
 - MOW TURF AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIED HEIGHT WITHOUT CUTTING MORE THAN ONE-THIRD OF GRASS HEIGHT. REMOVE NO MORE THAN ONE-THIRD OF GRASS-LEAF GROWTH IN INITIAL OR SUBSEQUENT MOWINGS. DO NOT MOW WHEN GRASS IS WET.
 - TURF POST-FERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY. USE FERTILIZER THAT PROVIDES ACTUAL NITROGEN OF AT LEAST 1 LB/1000 SQ. FT. TO TURF AREA.
 - SATISFACTORY TURF - TURF INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA AS DETERMINED BY LANDSCAPE ARCHITECT/ENGINEER: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 70 PERCENT OVER ANY 10 sq. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.
 - CONTRACTOR TO USE SPECIFIED MATERIALS TO REESTABLISH TURF THAT DOES NOT COMPLY WITH REQUIREMENTS, AND CONTINUE MAINTENANCE UNTIL TURF IS SATISFACTORY.
- PLUG INSTALLATION NOTES:**
 - PRIOR TO FINAL SEEDING/PLANTING OF THE STORMWATER MANAGEMENT FACILITIES, THE CONTRACTOR SHALL PROVIDE POST-CONSTRUCTION INFILTRATION TESTING IN THE BIO-RETENTION FACILITIES TO DETERMINE ACTUAL DEWATERING RATES. RESULTS TO BE PROVIDED TO PROJECT'S LANDSCAPE ARCHITECT AND/OR CIVIL ENGINEER WHO WILL THEN RECOMMEND ANY REQUIRED ADJUSTMENTS TO PROPOSED PLANTINGS. FINAL PLANT SPECIES SELECTIONS MAY BE MODIFIED AS NECESSARY BASED UPON ACTUAL FIELD-CONDITION INFILTRATION RATES.
 - PLUGS SHALL ONLY BE INSTALLED WHEN THEY ARE IN ACTIVE GROWTH. PROPER INSTALLATION PERIODS VARY BY SPECIES. CONSULT PLANT SUPPLIER FOR GUIDANCE ON PLANTING PERIODS AND TIMING. INSTALLATION OUTSIDE OPTIMAL PLANTING PERIODS COULD RESULT IN PLANT LOSS.
 - PROCEED WITH WORK ONLY WHEN PRESENT AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING WITHOUT EXCESSIVE SOIL COMPACTION AND/OR UNNECESSARY PLANT DAMAGE. AVOID PLANTING IN EXCESSIVELY MOIST CONDITIONS UNLESS PLANTING IN HYDRIC SOILS.
 - CONTRACTOR TO LAYOUT AND INSTALL PLUGS AS SOON AS POSSIBLE FOLLOWING PLANT DELIVERY TO SITE.
 - IF PLANTING MUST BE DELAYED DUE TO WEATHER OR CONSTRUCTION DELAYS, MOVE PLUGS TO A PROTECTED AND SHADED AREA. IRRIGATE AS NEEDED.
 - THOROUGHLY WATER PLUG TRAYS PRIOR TO PLUG REMOVAL AND PLANTING.
 - PLUG SPECIES ARE TO BE DISTRIBUTED ACROSS THE FACILITY AT THE SPECIFIED SPACING, AND SHALL BE COMBINED WITH OTHER SPECIES (IF SO NOTED) IN A RANDOM FASHION.
 - FOR PLANTING AREAS TO BE MULCHED, APPLY MULCH PRIOR TO INSTALLATION OF THE PLUGS.
 - WHERE APPLICABLE, SECURE EROSION CONTROL MATTING PRIOR TO PLANTING. PLANT PLUGS DIRECTLY THROUGH THE EROSION CONTROL MATTING.
 - CONTRACTOR SHALL ONLY REMOVE PLUGS FROM TRAYS BY PUSHING PLANTS UP THROUGH THE BOTTOM OF THE LINER. DO NOT PULL THE PLANTS BY THEIR FOLIAGE.
 - CONTRACTOR SHALL NOT "TEASE" THE PLUG ROOT SYSTEMS APART AS IS CUSTOMARY WITH OTHER CONTAINERIZED PLANTS WITH DENSE ROOT SYSTEMS.
 - PLUGS SHALL BE PLANTED SO THAT THE TOP OF THE PLUG SOIL MEDIA IS FLUSH WITH THE FINISHED GRADE. LIGHTLY TAMP SURROUNDING SOIL TO INCREASE SOIL-ROOT CONTACT AND TO MINIMIZE FROST HEAVING POTENTIAL.
 - PLUGS SHALL BE WATERED IMMEDIATELY FOLLOWING PLANTING TO REDUCE AIR POCKETS AND TO MAXIMIZE CONTACT BETWEEN THE PLUG ROOTS AND PREPARED SOIL.
 - MONITOR NEW PLANTINGS FOR SIGNS OF DISEASES, PESTS AND WATER STRESS.
 - CONTRACTOR SHALL REMOVE ALL CUT VEGETATION TO ENSURE STORMWATER MANAGEMENT CONTROL STRUCTURES ARE KEPT CLEAR AND FREE OF DEBRIS.

PLANT SCHEDULE

PLANT SCHEDULE

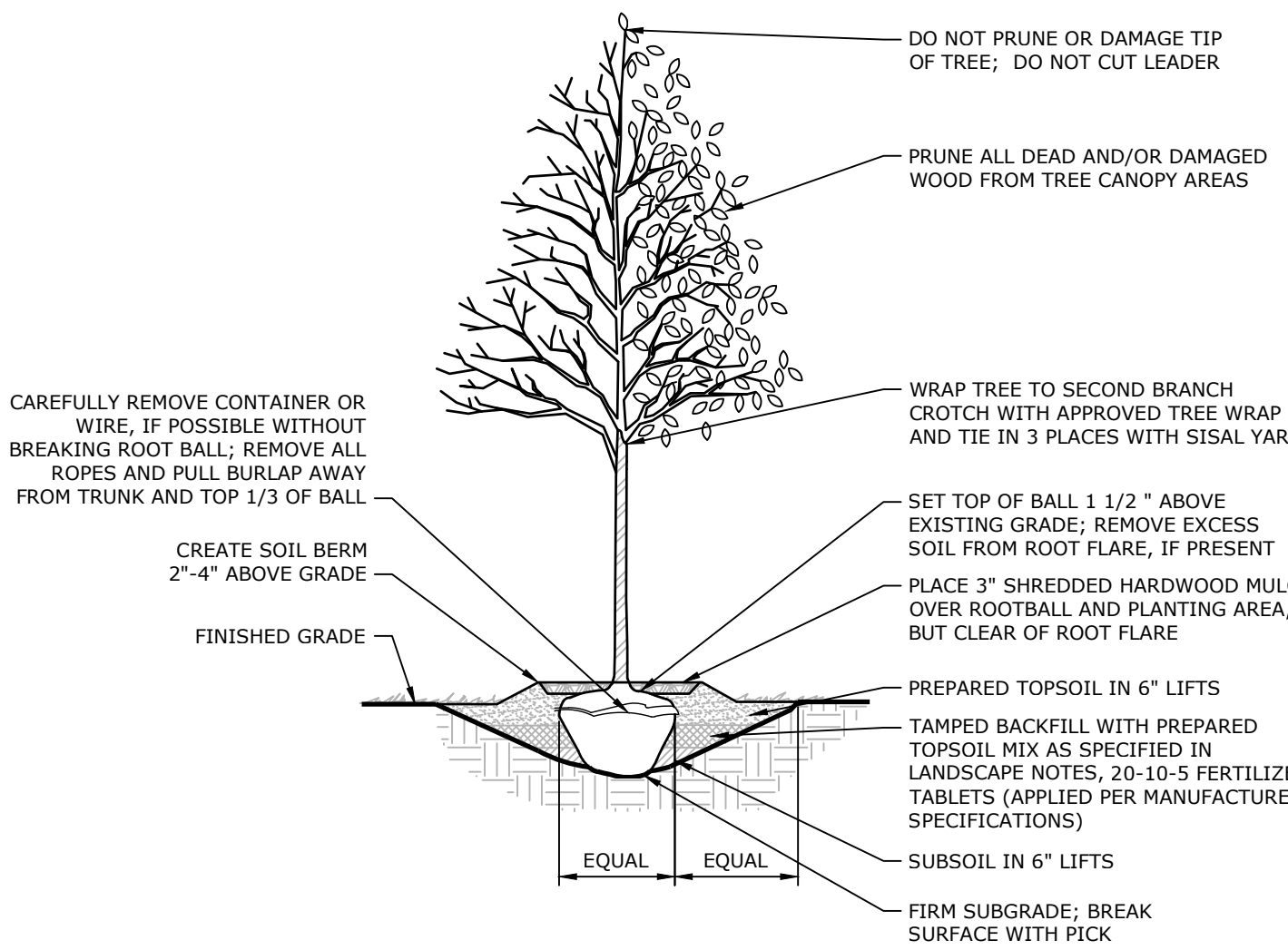
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTA
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STREET TREES

GT	7	Gleditsia triacanthos inermis	Thornless Honey Locust	2" - 2.5" Cal.	B&B
ZS	6	Zelkova serrata	Japanese Zelkova	2" - 2.5" Cal.	B&B

SHRUBS

BM	6	Buxus microphylla 'Little Missy'	Little Missy Littleleaf Boxwood	1 gal.	Cont.
LMV	20	Liriope muscari 'Variegata'	Variegated Lilyturf	3.5"	Pot
NF	10	Nepeta x 'Walker's Low'	Walker's Low Catmint	12" - 18"	Pot
PL	7	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3 gal.	Cont.

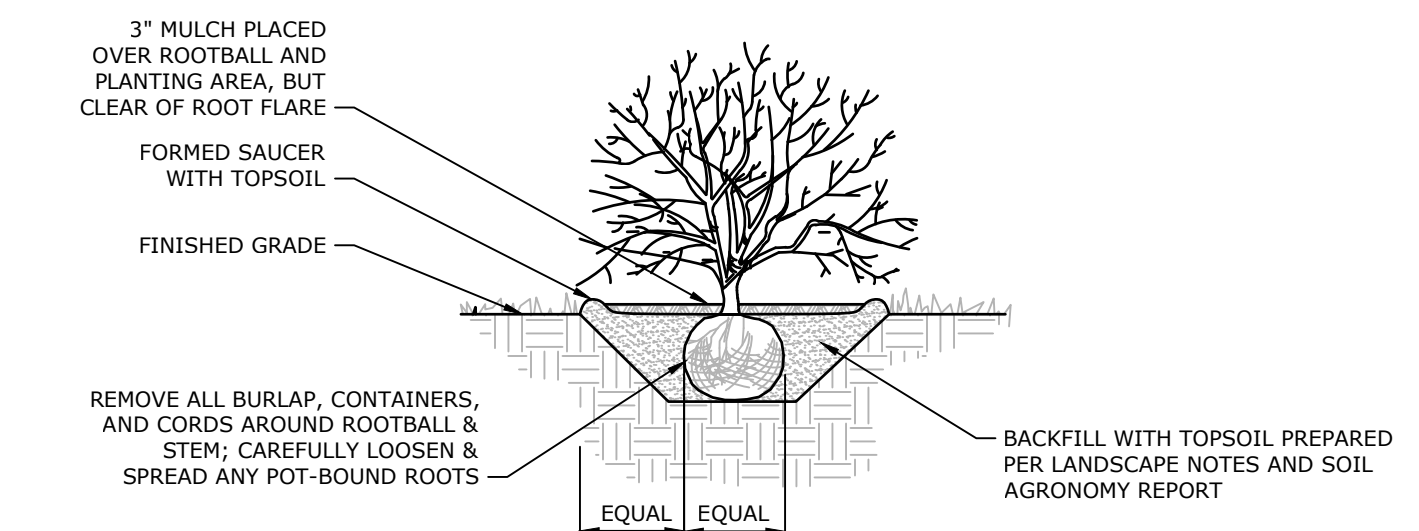


PLANT SPECIFICATION NOTES:

- ALL TREES SHALL HAVE BEEN NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE FINAL PLANTING SITE.
- ALL TREES SHALL HAVE A NORMAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS; THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
- ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
- REQUIREMENTS FOR TREE MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND BURLAPPING SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED.
- SEE LANDSCAPE NOTES FOR REQUIRED SOIL TESTING, PREPARATION AND AMENDMENT.

TYPICAL DECIDUOUS TREE PLANTING

NOT TO SCALE



PLANT SPECIFICATION NOTES:

- SET PLANTS AT SAME FINISHED GRADE AS GROWN IN THE NURSERY.
- ALL SHRUBS SHALL HAVE BEEN NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE FINAL PLANTING SITE.
- ALL SHRUBS SHALL HAVE A NORMAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS; THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
- ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
- REQUIREMENTS FOR SHRUB MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND BURLAPPING OF SHRUBS SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED.
- SEE LANDSCAPE NOTES FOR REQUIRED SOIL TESTING, PREPARATION AND AMENDMENT.

TYPICAL SHRUB PLANTING

NOT TO SCALE



NOT TO SCALE

PLUG PLANTING LIST

PERENNIALS (BOTANICAL NAME - COMMON NAME)

- AGASTACHE FOENICULUM - BLUE GIANT HYSSOP
- ASCLEPIAS INCARNATA - SWAMP MILKWEED
- ASTER NOVAE-ANGLIAE - NEW ENGLAND ASTER
- ASTER NOVI-BELGII - NEW YORK ASTER
- COROPHIS TRIPTERIS - TALL TICKSEED
- EUPATORIUM FISTULOSUM - TRUMPETWEED
- EUPATORIUM PEROLIATUM - BONESET
- EUPATORIUM PURPUREUM - JOE PYE WEED
- HELENIUM AUTUMNALE - COMMON SNEEZEWEED
- HELIOPSIS HELIANTHOIDES - OYEYE SUNFLOWER
- IRIS VERSICOLOR - HARLEQUIN BLUEFLAG
- IRIS VIRGINICA - VIRGINIA IRIS
- LOBELIA CARDINALIS - CARDINAL FLOWER
- LOBELIA SIPHILLITICA - BLUE LOBELIA
- MONARDA BRADBURIANA - EASTERN BEEBALM
- MONARDA DIDYMA 'JACOB CLINE' - SCARLET BEEBALM
- PYCNANTHEMUM MUTICUM - CLUSTERED MOUNTAINMINT
- SENECIO AUREUS - GOLDEN RAGWORT
- VERBANA HASTATA - BLUE VERVAIN
- VERNONIA NOVEBORACENSIS - NEW YORK IRONWEED

GRASSES AND SEDGES (BOTANICAL NAME - COMMON NAME)

- CAREX BICKNELLII - BICKNELL'S SEDGE
- CAREX EBURNEA - BRISTLELEAF SEDGE
- CAREX CHEROKEENSIS - CHEROKEE SEDGE
- CAREX EMORYI - EMORY'S SEDGE
- CAREX SCOPARIUM - BLUNT BROOD SEDGE
- CAREX VULPINODEA - FOX SEDGE
- CHASMANTHIUM LATIFOLIUM - INDIAN WOOD OATS
- ELYMUS HYSTRIX - BOTTLEBRUSH GRASS
- JUNCUS EFFUSUS - COMMON RUSH
- JUNCUS TENUIIS - POVERTY RUSH
- PANICUM VIRGATUM - SWITCHGRASS
- SCHIZACHYRIUM SCOPARIUM - LITTLE BLUESTEM

PLUG INSTALLATION NOTES

- THE REQUIRED PLUG COUNT IS BASED ON PLUGS BEING PLANTED IN A GRID PATTERN AT 24" ON-CENTER WITHIN THE BASIN BOTTOM.
- 30% OF BASIN PLUG PLANTINGS SHALL BE COMPRISED OF A MINIMUM OF 10 PERENNIAL SPECIES FROM THE PROVIDED SPECIES LIST. THE REMAINING 70% OF BASIN PLUG PLANTINGS SHALL BE COMPRISED OF 5 GRASS AND SEDGE SPECIES FROM THE PROVIDED SPECIES LIST.
- CONTRACTOR SHALL CONTACT RGS LANDSCAPE ARCHITECT FOR ALTERNATE PLUG SPECIES SHOULD PROVIDED SPECIES NOT BE AVAILABLE.
- CONSULT PLANT SUPPLIER FOR GUIDANCE ON THE PLANTING PERIODS AND TIMING. INSTALLATION OUTSIDE OPTIMAL PLANTING PERIODS COULD RESULT IN PLANT LOSS.
- PROCEED WITH WORK ONLY WHEN PRESENT AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING WITHOUT EXCESSIVE SOIL COMPACTION AND/OR UNNECESSARY PLANT DAMAGE. AVOID PLANTING IN EXCESSIVELY MOIST CONDITIONS UNLESS PLANTING IN HYDRIC SOILS.
- CONTRACTOR TO LAYOUT AND INSTALL PLUGS AS SOON AS POSSIBLE FOLLOWING PLANT DELIVERY TO SITE.
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- PLUG SPECIES ARE TO BE DISTRIBUTED ACROSS THE FACILITY AT THE SPECIFIED SPACING IN A RANDOM FASHION.
- CONTRACTOR SHALL ONLY REMOVE PLUGS FROM TRAYS BY PUSHING PLANTS UP THROUGH THE BOTTOM OF THE LINER. DO NOT PULL THE PLANTS BY THEIR FOLIAGE.
- CONTRACTOR SHALL NOT "TEASE" THE PLUG ROOTS SYSTEMS APART AS IS CUSTOMARY WITH OTHER CONTAINERIZED PLANTS WITH DENSE ROOT SYSTEMS.
- PLUGS SHALL BE PLANTED SO THAT THE TOP OF THE PLUG SOIL MEDIA IS FLUSH WITH THE FINISHED GRADE. LIGHTLY TAMP THE SURROUNDING SOIL TO INCREASE SOIL-ROOT CONTACT AND TO MINIMIZE FROST HEAVING POTENTIAL.
- PLUGS SHALL BE WATERED IMMEDIATELY FOLLOWING PLANTING TO REDUCE AIR POCKETS AND TO MAXIMIZE CONTACT BETWEEN THE PLUG ROOTS AND PREPARED SOIL.
- MONITOR NEW PLANTINGS FOR SIGNS OF DISEASES, PESTS AND WATER STRESS.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE TO KEEP NEW PLANTINGS FREE OF UNDESIRABLE AND INVASIVE SPECIES.
- CONTRACTOR SHALL REMOVE ALL CUT VEGETATION TO ENSURE STORMWATER MANAGEMENT CONTROL STRUCTURES ARE KEPT CLEAR AND FREE OF DEBRIS.
- ONCE PLUGS ARE INSTALLED, THE BASIN BOTTOM SHALL BE OVERSEEDDED WITH ERNMX-126 (ERNST BASIN FLOOR LOW MAINTENANCE GRASS MIX).
- INTERIOR SIDE SLOPES OF BASIN SHALL BE PLANTED WITH ERNMX-260-1 (PA PIEDMONT PROVINCE UPL MEADOW MIX).

BMP-002 PLUG CALCULATION			
BASIN BOTTOM (SF.)	PLUG SPACING (IN.)	REQUIRED PLUGS	
1,960	24	668	
BMP-003 PLUG CALCULATION			
BASIN BOTTOM (SF.)	PLUG SPACING (IN.)	REQUIRED PLUGS	
2,870	24	668	

AREA OF PLUG PLANTING

NOT TO SCALE

BMP FACILITY PLUG PLANTING DETAIL

NOT FOR BID / NOT FOR CONSTRUCTION

NO.	DATE	REVISION

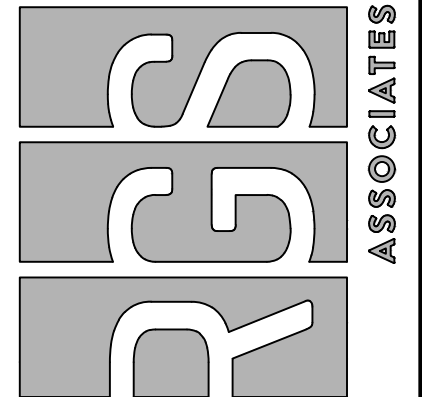
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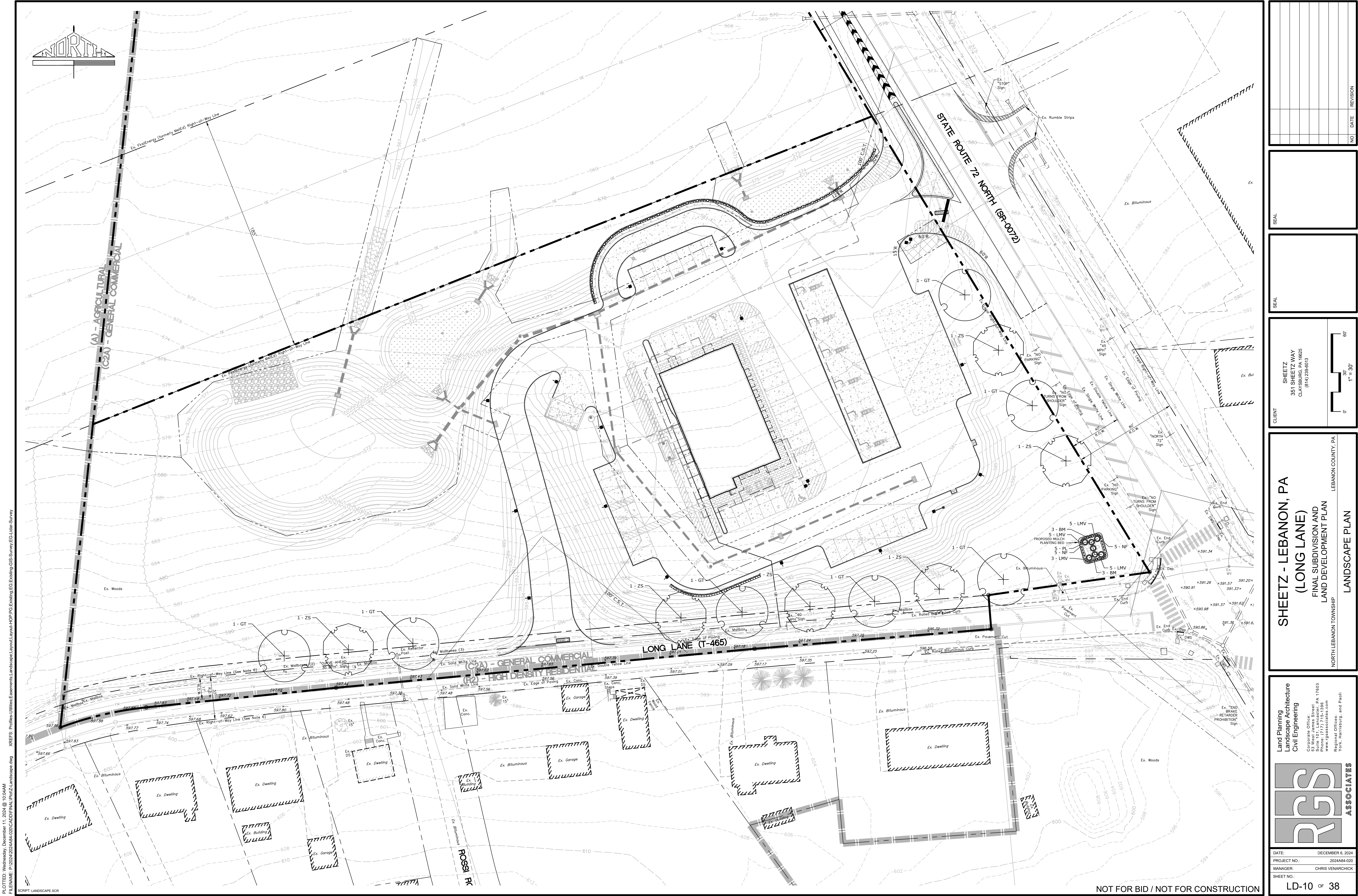
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CLIENT	SHEETZ 351 SHEETZ WAY CLAYSBURG, PA 16625 (814) 239-6013	AS NOTED
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SHEETZ - LEBANON, PA (LONG LANE) FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN NORTH LEBANON TOWNSHIP	LEBANON COUNTY, PA	LANDSCAPE NOTES
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Land Planning Landscape Architecture Civil Engineering	Corporate Office: 53 West James Street P.O. Box 17603 Clayburg, PA 17036 Phone: (717) 715-1396 www.gssassociates.com	Regional Offices: York, Harrisburg, and PAuli
DATE:	DECEMBER 6, 2024	
PROJECT NO.:	2024A484-020	
MANAGER:	CHRIS VERNARCHICK	
SHEET NO.:	LD-9	OF 38





PLOTTED: Wednesday, December 11, 2024 @ 10:04AM
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SCRIPT: LANDSCAPE SCR

NO	DATE	REVISION

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CLIENT

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351 SHEETZ WAY
CLAYSBURG, PA 16625
(814) 238-6013

0' 30' 60'
1" = 30'

SHEETZ - LEBANON, PA
(LONG LANE)
FINAL SUBDIVISION AND
LAND DEVELOPMENT PLAN
NORTH LEBANON TOWNSHIP LEBANON COUNTY, PA

LANDSCAPE PLAN

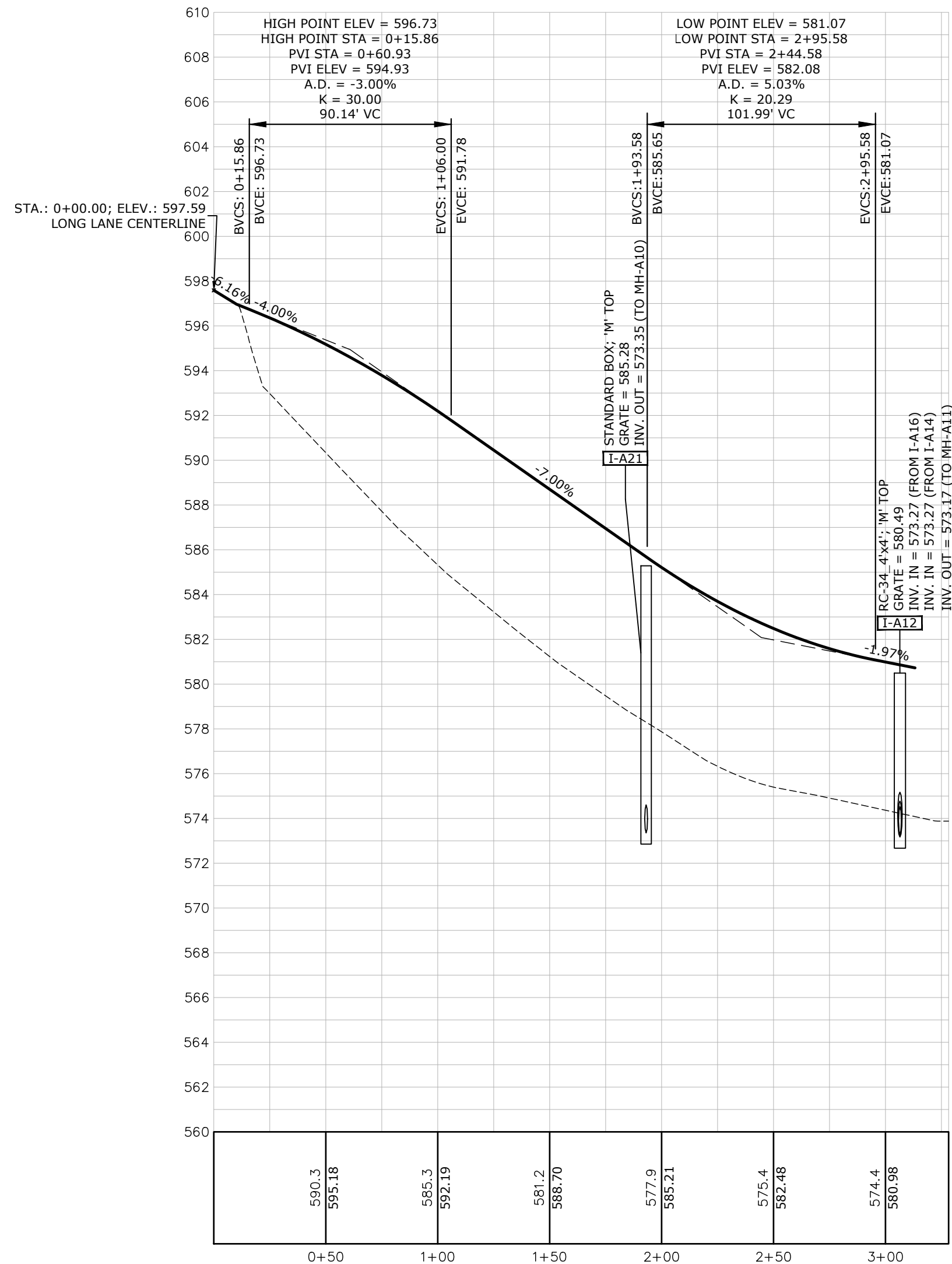
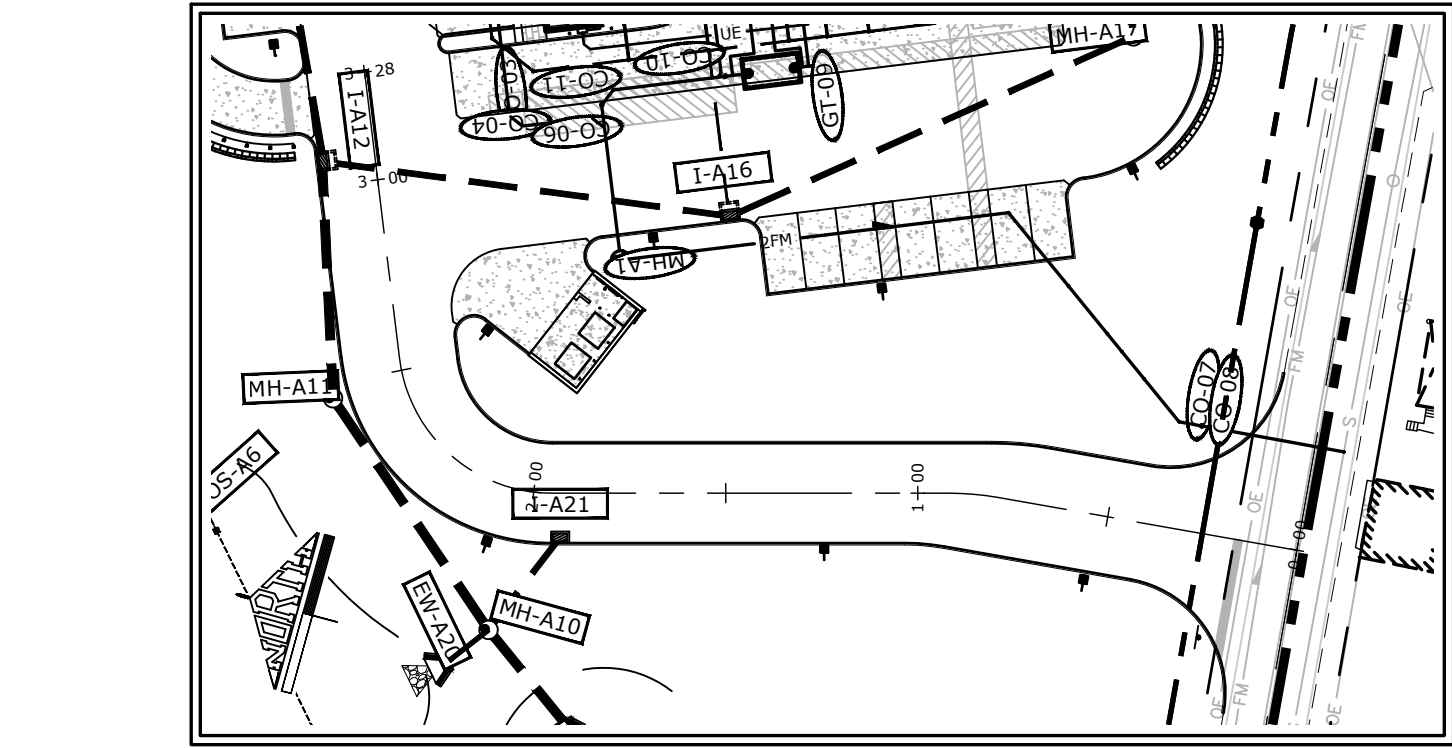
Land Planning
Landscape Architecture
Civil Engineering

RG ASSOCIATES

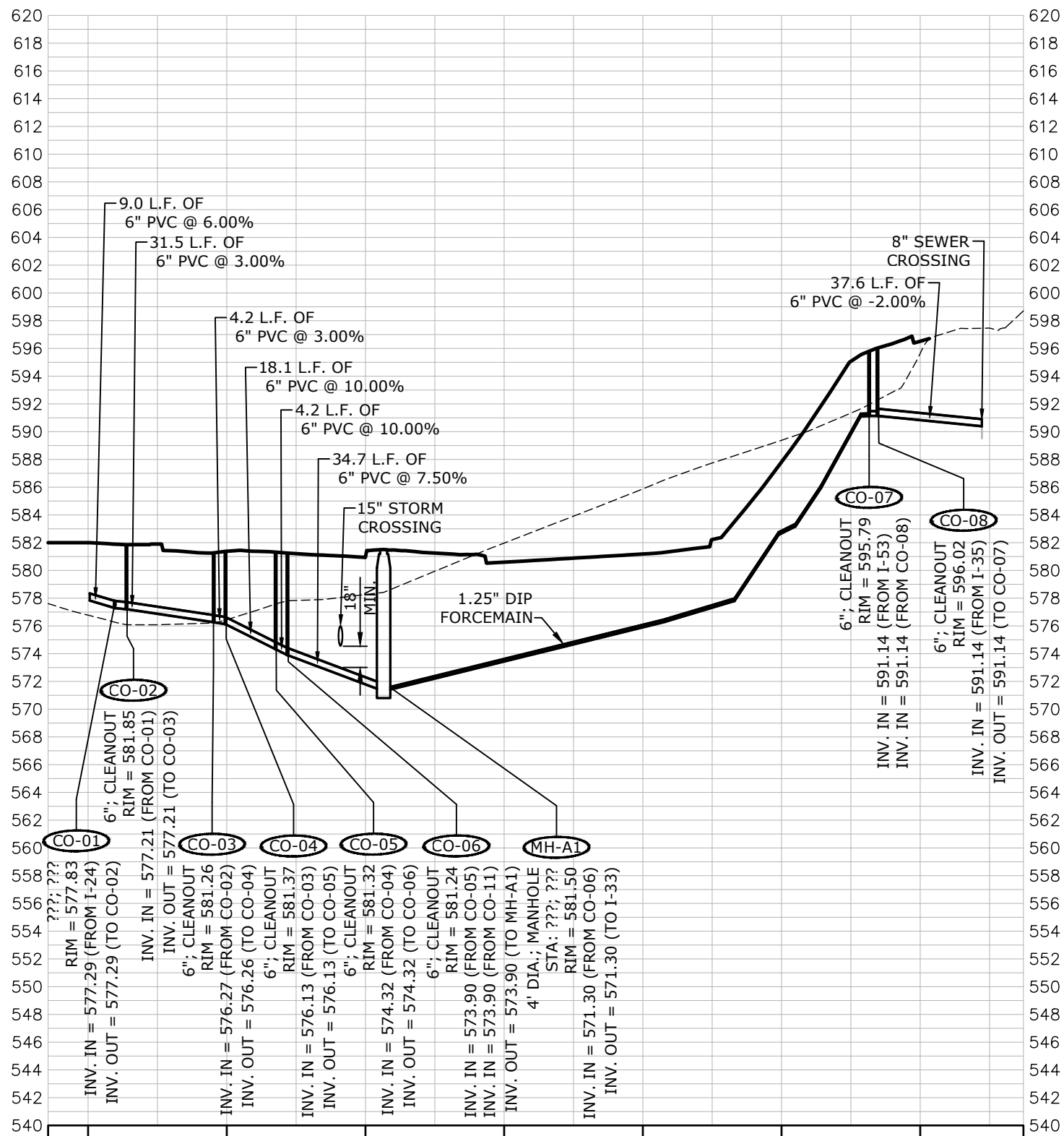
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53 West James Street, PA 17603
Phone: (717) 745-1386
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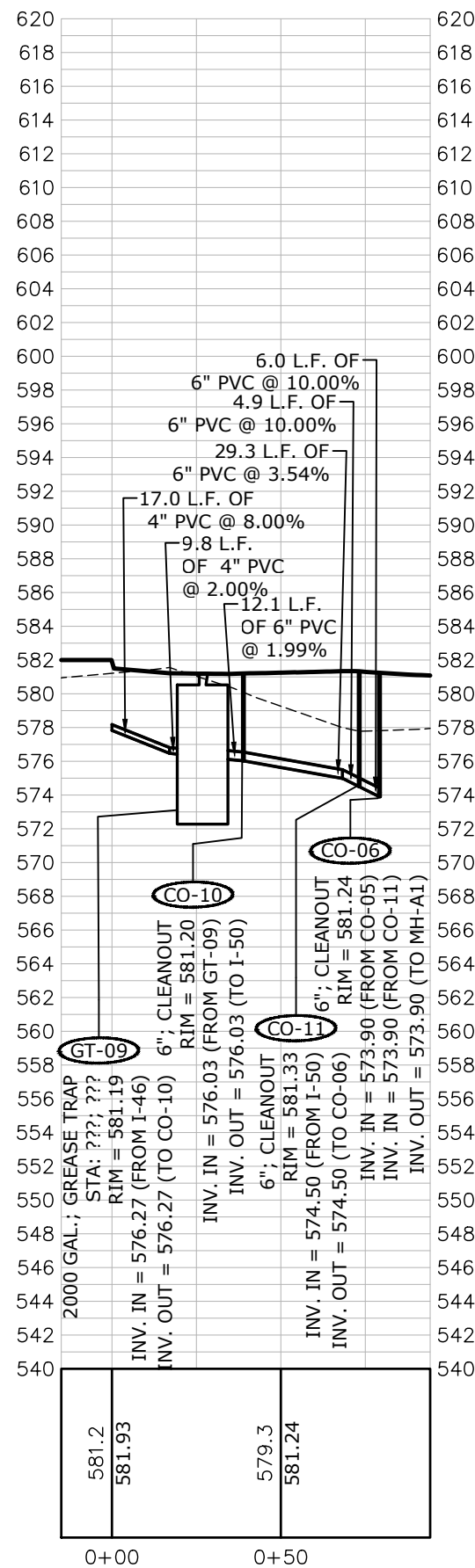
DATE: DECEMBER 6, 2024
PROJECT NO.: 2024A84-020
MANAGER: CHRIS VENARCHICK
SHEET NO.: LD-10 OF 38



ACCESS DRIVE - LONG LANE
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 5'



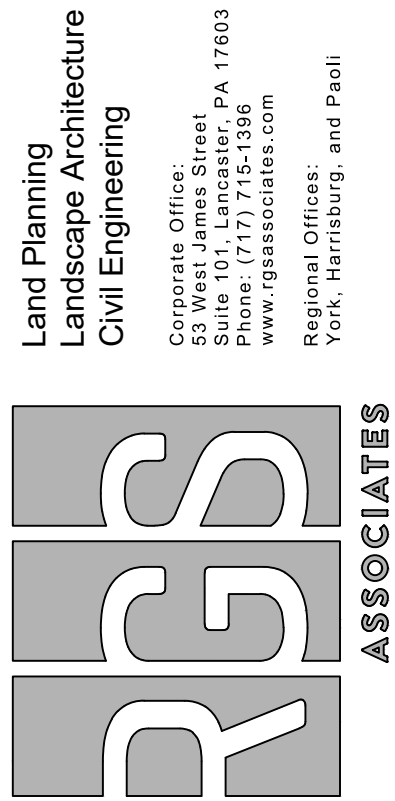
BUILDING TO EXISTING CONNECTION IN LONG LANE
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'



GREASE TRAP
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 10'

LEGEND

----- EXISTING GRADE ————— PROPOSED GRADE
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DATE: DECEMBER 6, 2024
PROJECT NO.: 2024A84-020
MANAGER: CHRIS VENARCHICK
SHEET NO.: LD-11 OF 38

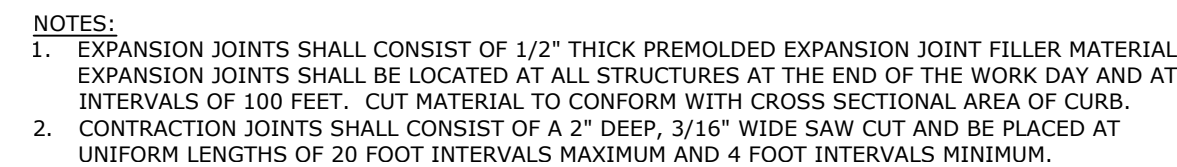
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(LONG LANE)
FINAL SUBDIVISION AND
LAND DEVELOPMENT PLAN
NORTH LEBANON TOWNSHIP
STREET & SEWER PROFILES

CLIENT
SHEETZ
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CLAYSBURG, PA 16625
(814) 238-6013
AS NOTED

SEAL

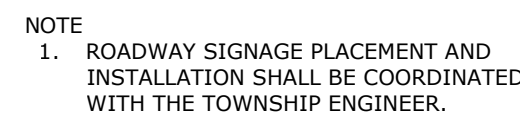
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NO DATE REVISION



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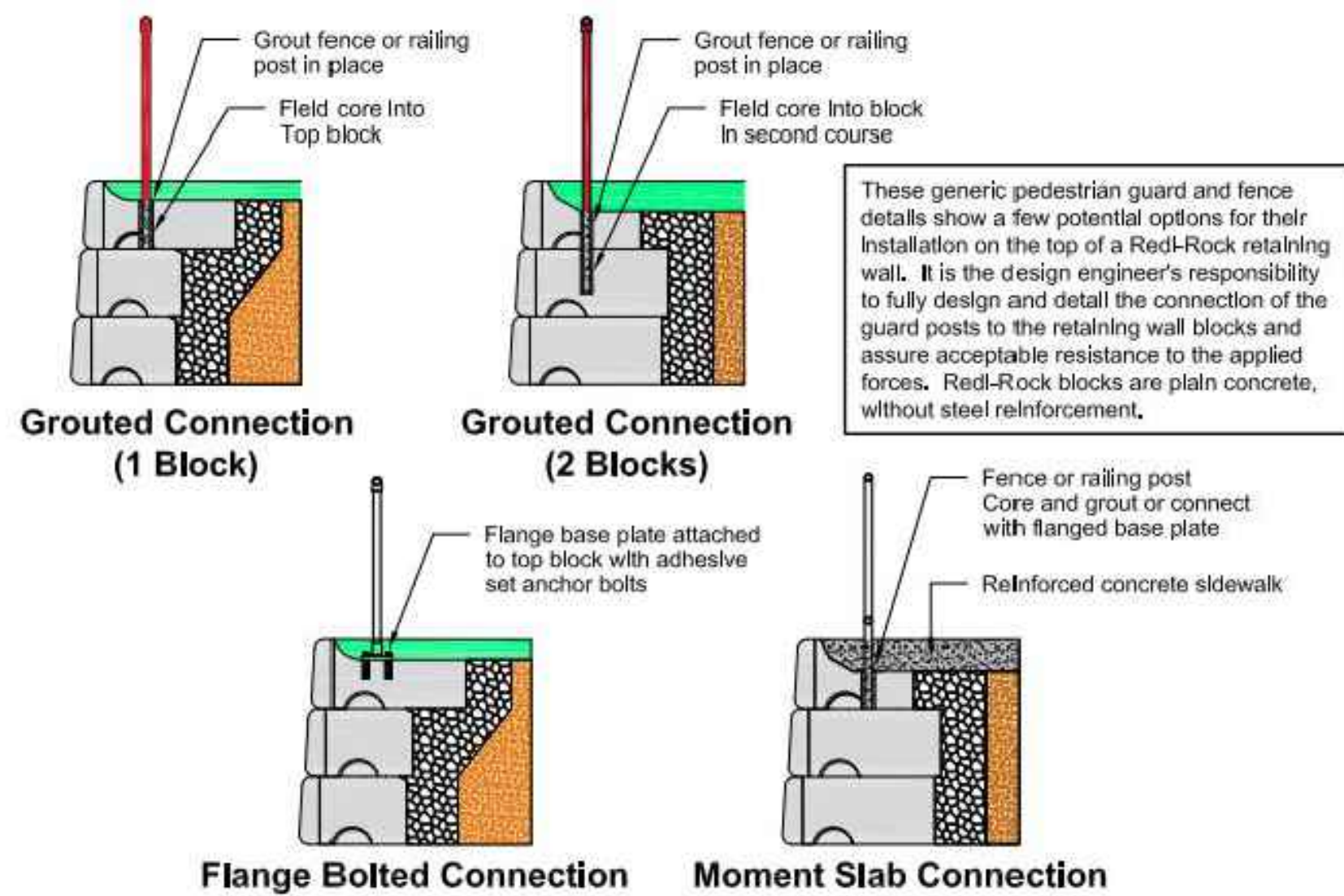


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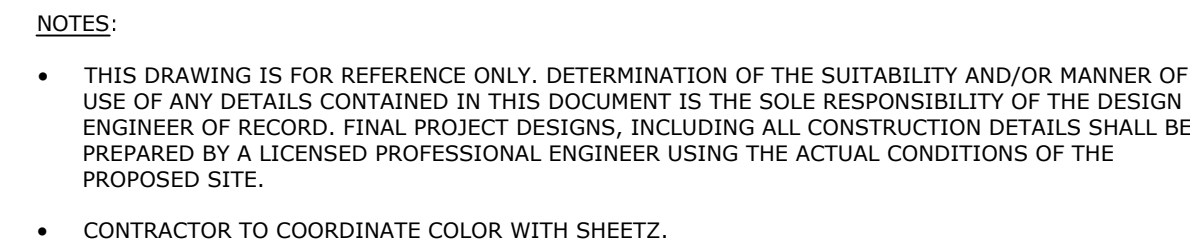


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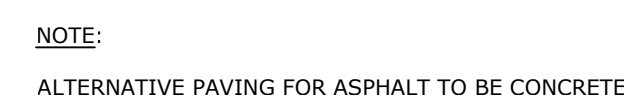
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5

NOT TO SCALE



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SEAL

SEAL

CLIENT	<p>SHEETZ 351 SHEETZ WAY CLAYSBURG, PA 16625 (814) 239-6013</p>
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**SHEETZ - LEBANON, PA
(LONG LANE)
FINAL SUBDIVISION AND
LAND DEVELOPMENT PLAN**

SHEET 7 DETAILS

and Planning
Landscape Architecture
Civil Engineering

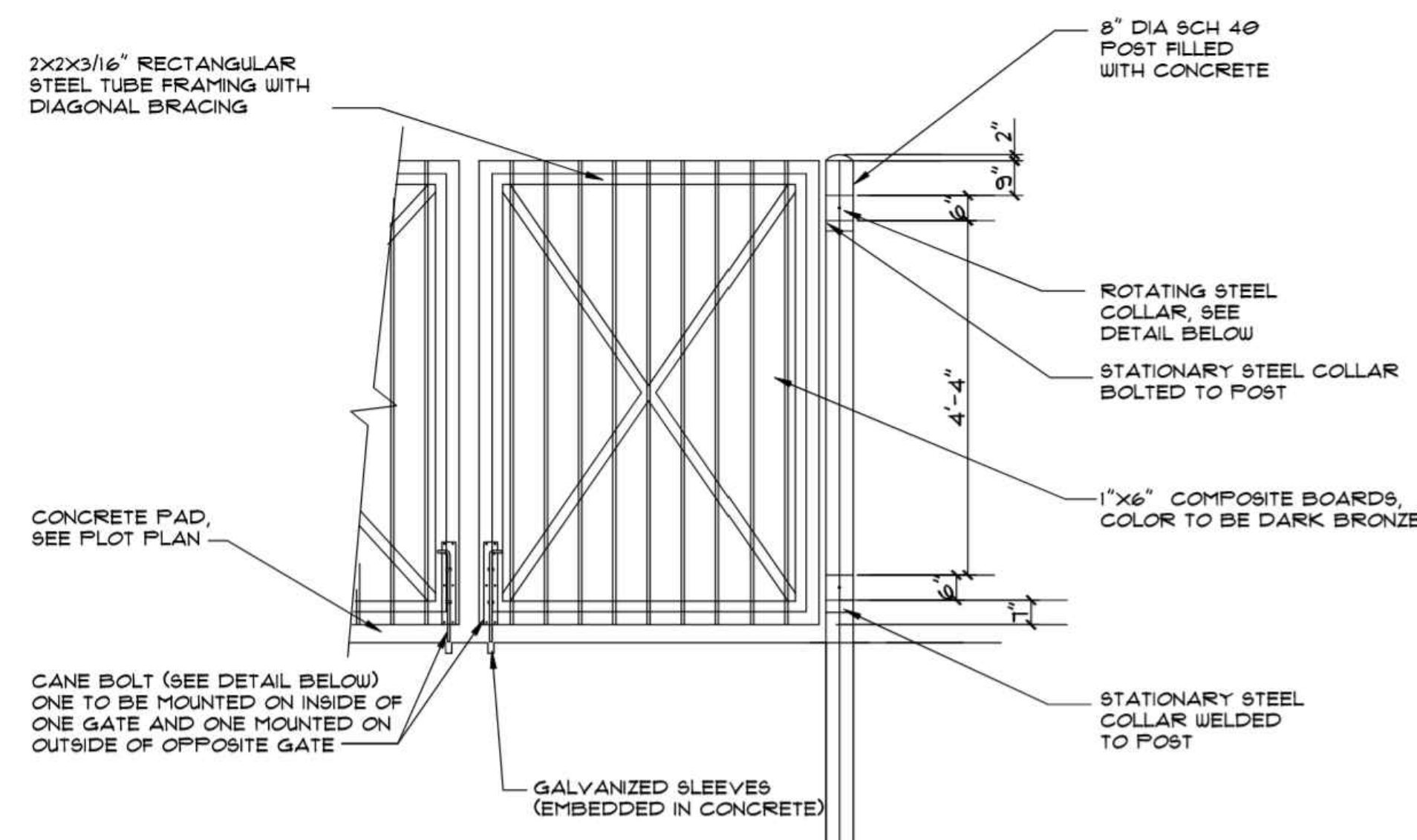
Corporate Offices:
133 West James Street
Suite 101, Lancaster, PA 17603
Phone: (717) 715-1396
www.fgsassociates.com

Regional Offices:
York, Harrisburg, and Paoli

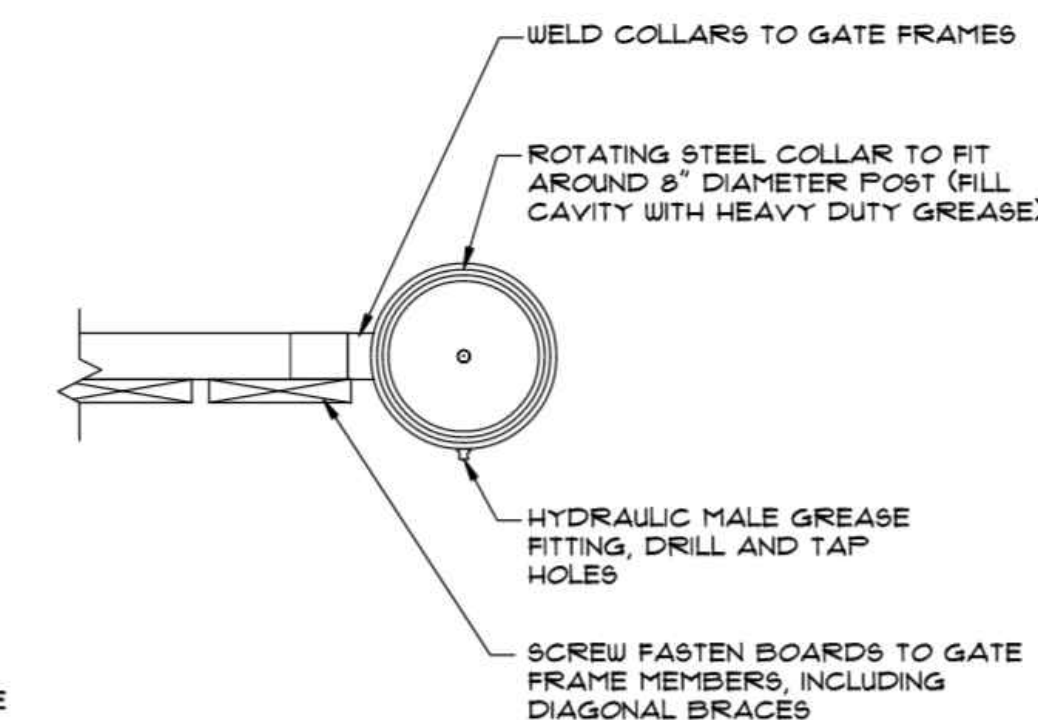
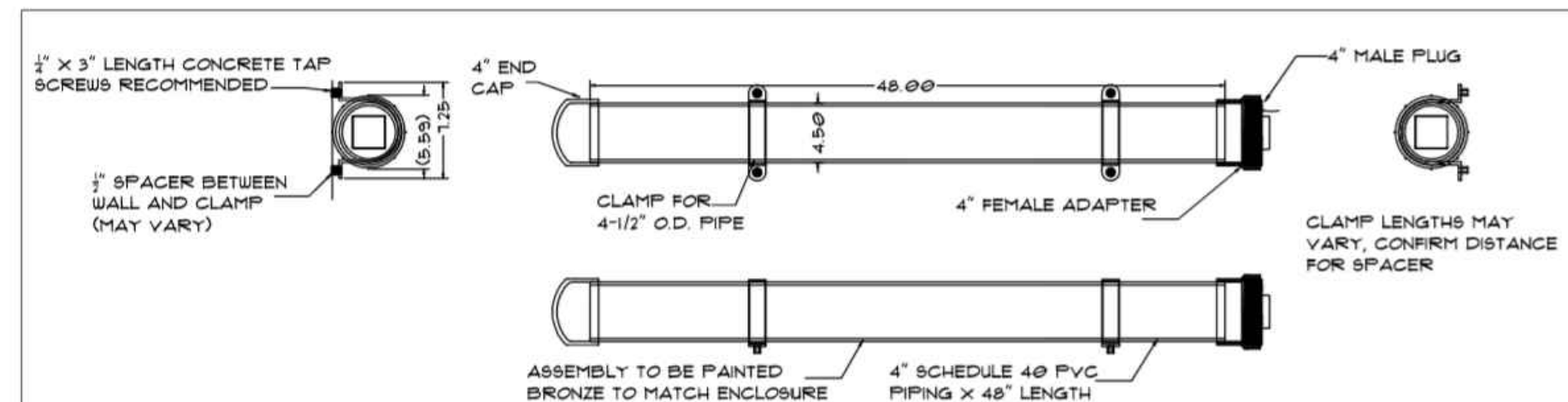
ASSOCIATES

DATE:	DECEMBER 6, 2024
PROJECT NO.:	2024A84-020
MANAGER:	CHRIS VENARCHICK
SHEET NO.:	

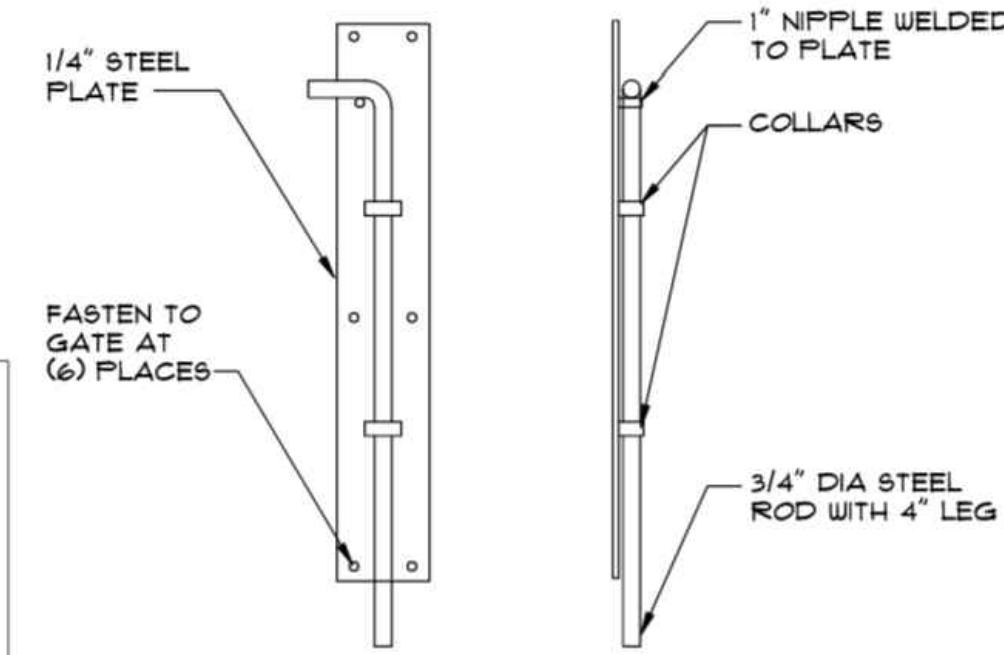
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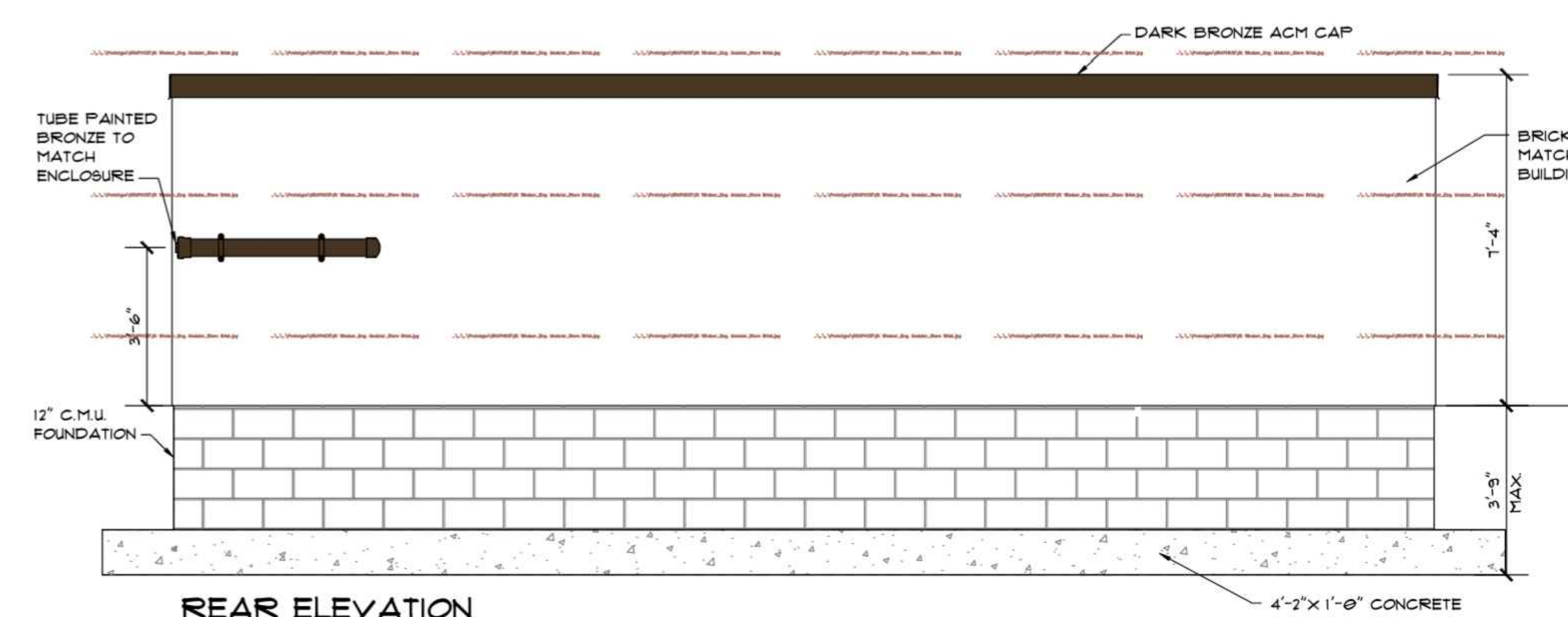
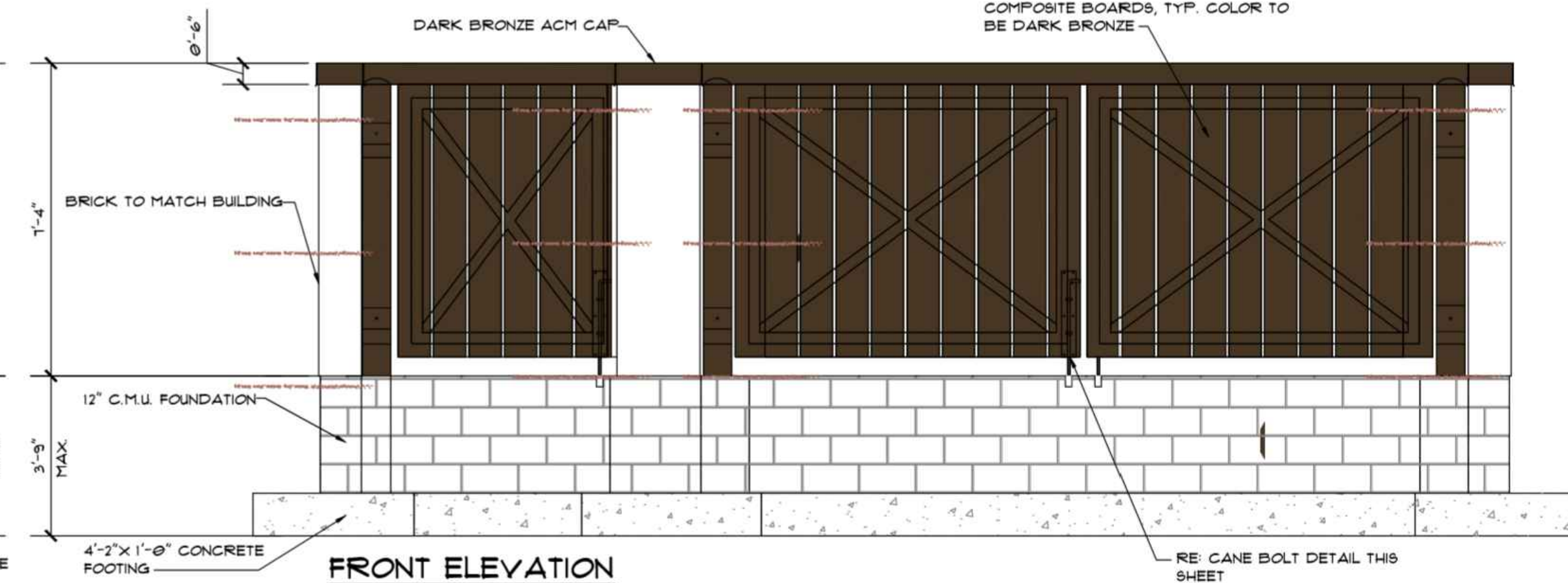
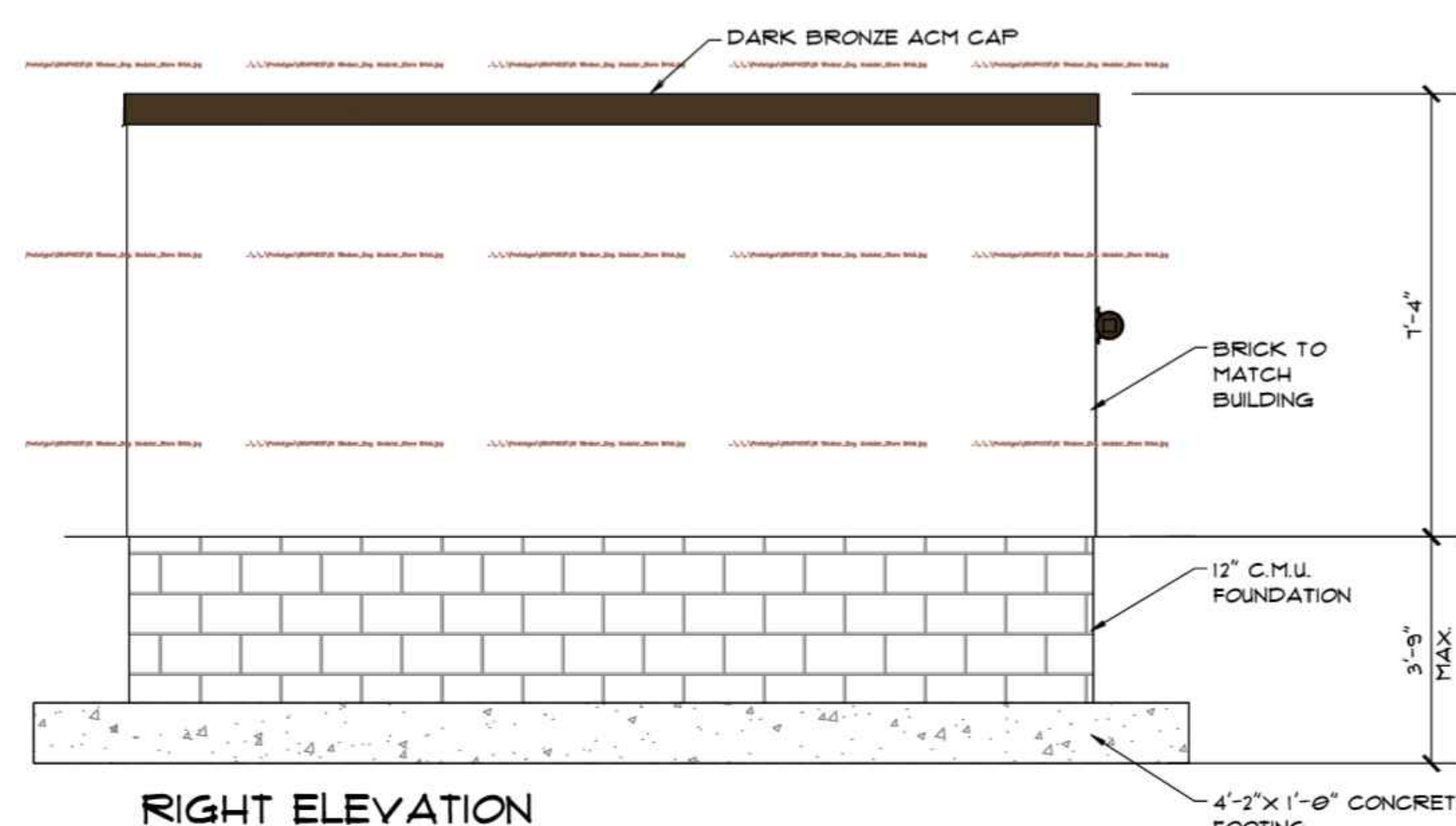
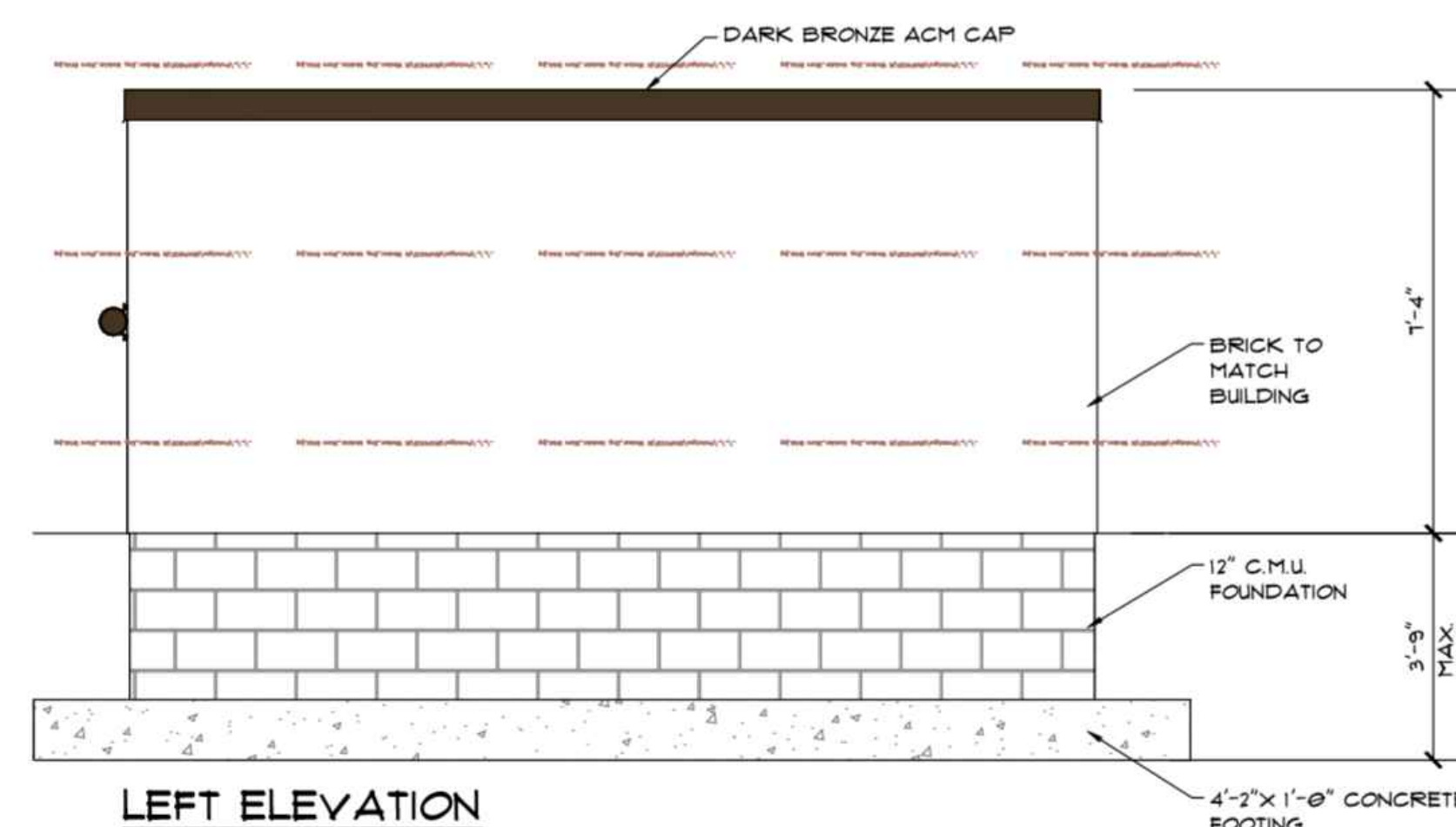
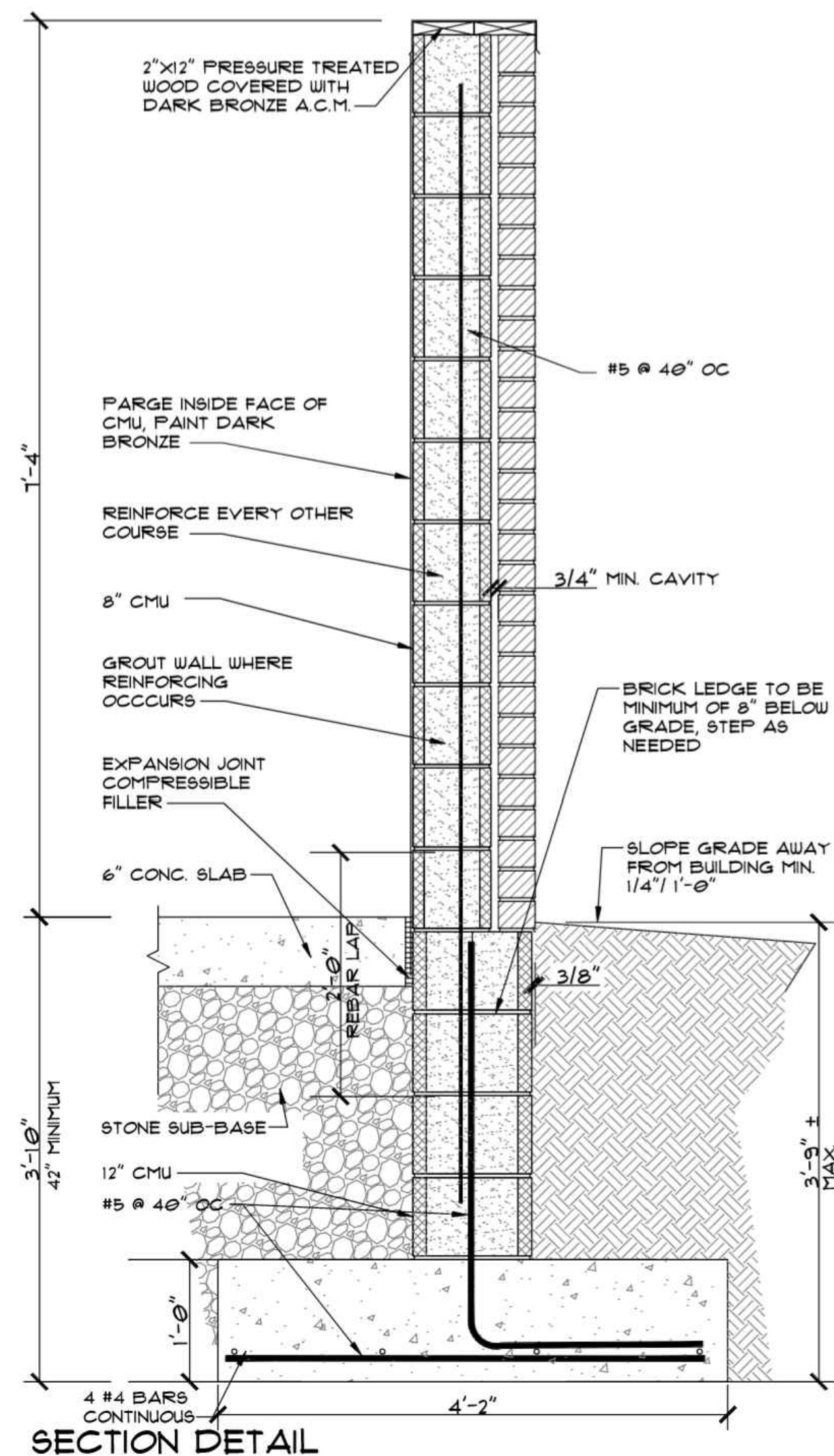
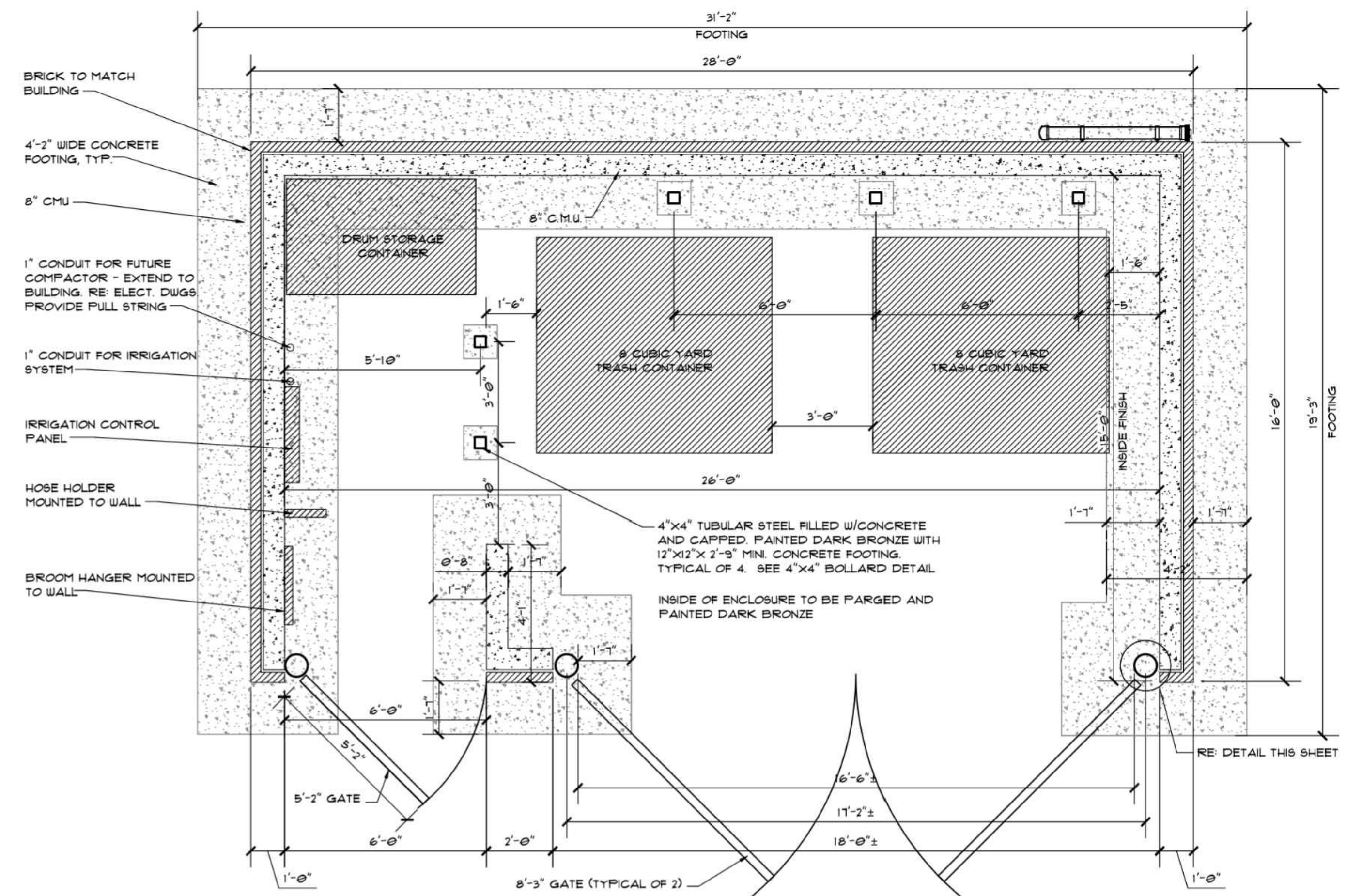
GATE AND POST DETAIL
FOR QUANTITIES OF GATES AND POSTS SEE PLOT PLAN



HINGE/COLLAR DETAIL
SCALE: NOT TO SCALE



CANE BOLT DETAIL

[illegible]

1 SHEETZ WAY
AYSBURG, PA 1662
(814) 239-6013

AS NOTED


**SHEETZ - LEBANON, PA
(LONG LANE)
FINAL SUBDIVISION AND
LAND DEVELOPMENT PLAN**

SHEET 12 DETAILS

**Land Planning
Landscape Architecture
Civil Engineering**

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Suite 101, Lancaster, PA 17603
Phone: (717) 715-1396
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Regional Offices:
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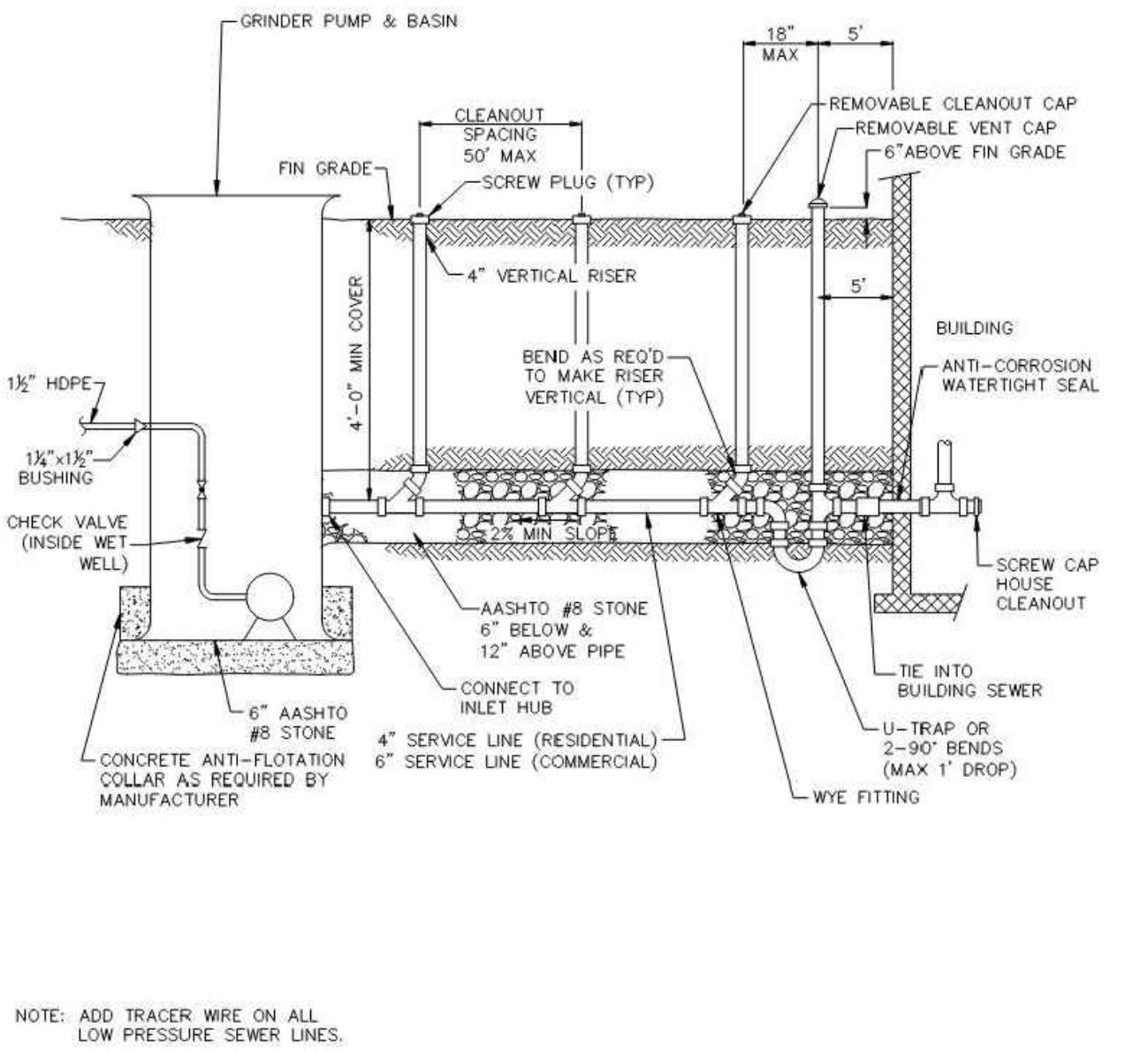


RSG
ASSOCIATES

DATE:	DECEMBER 6, 2024
PROJECT NO.:	2024A84-020
MANAGER:	CHRIS VENARCHICK
SHEET NO.:	

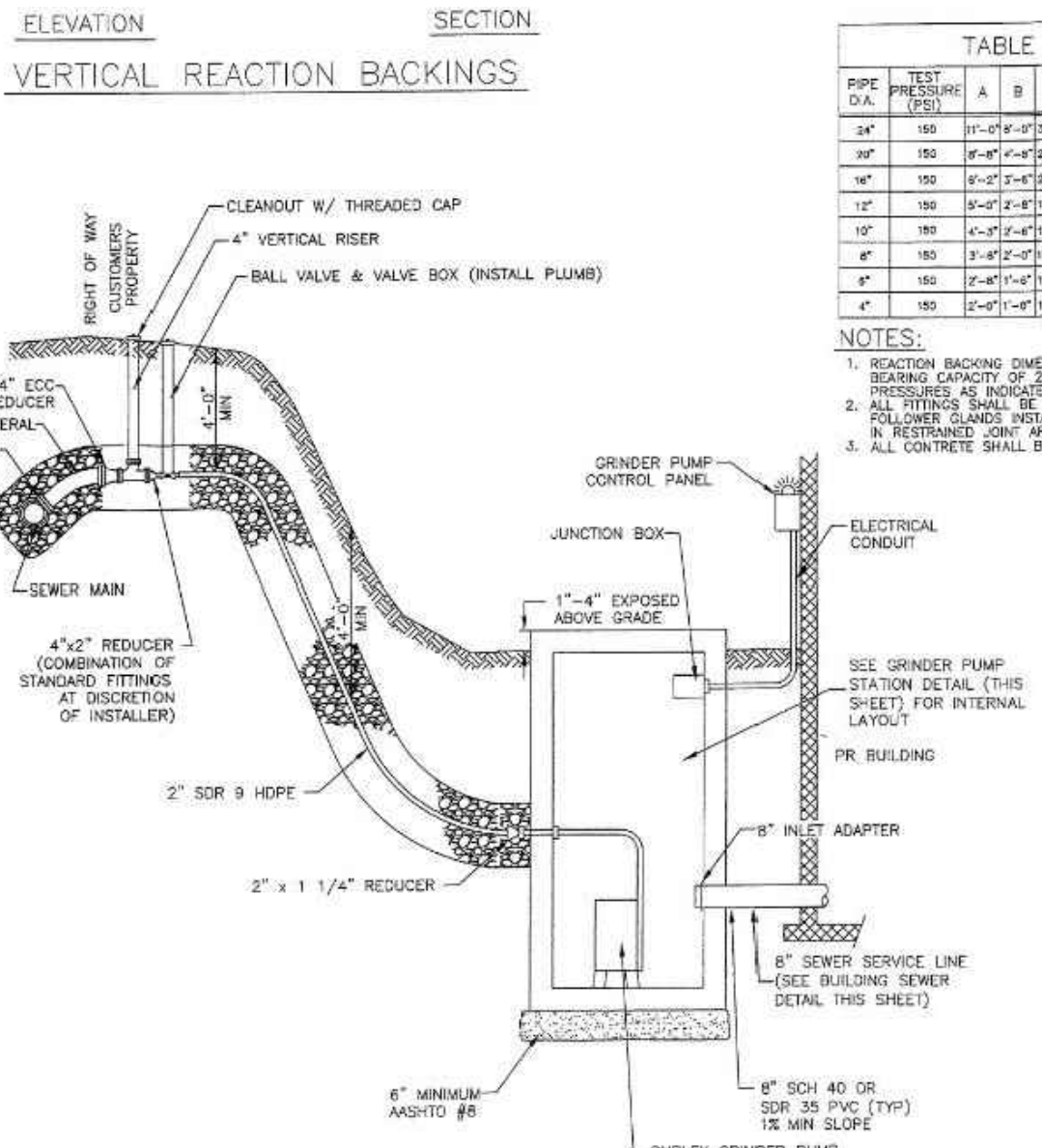
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LD-15 OF 38



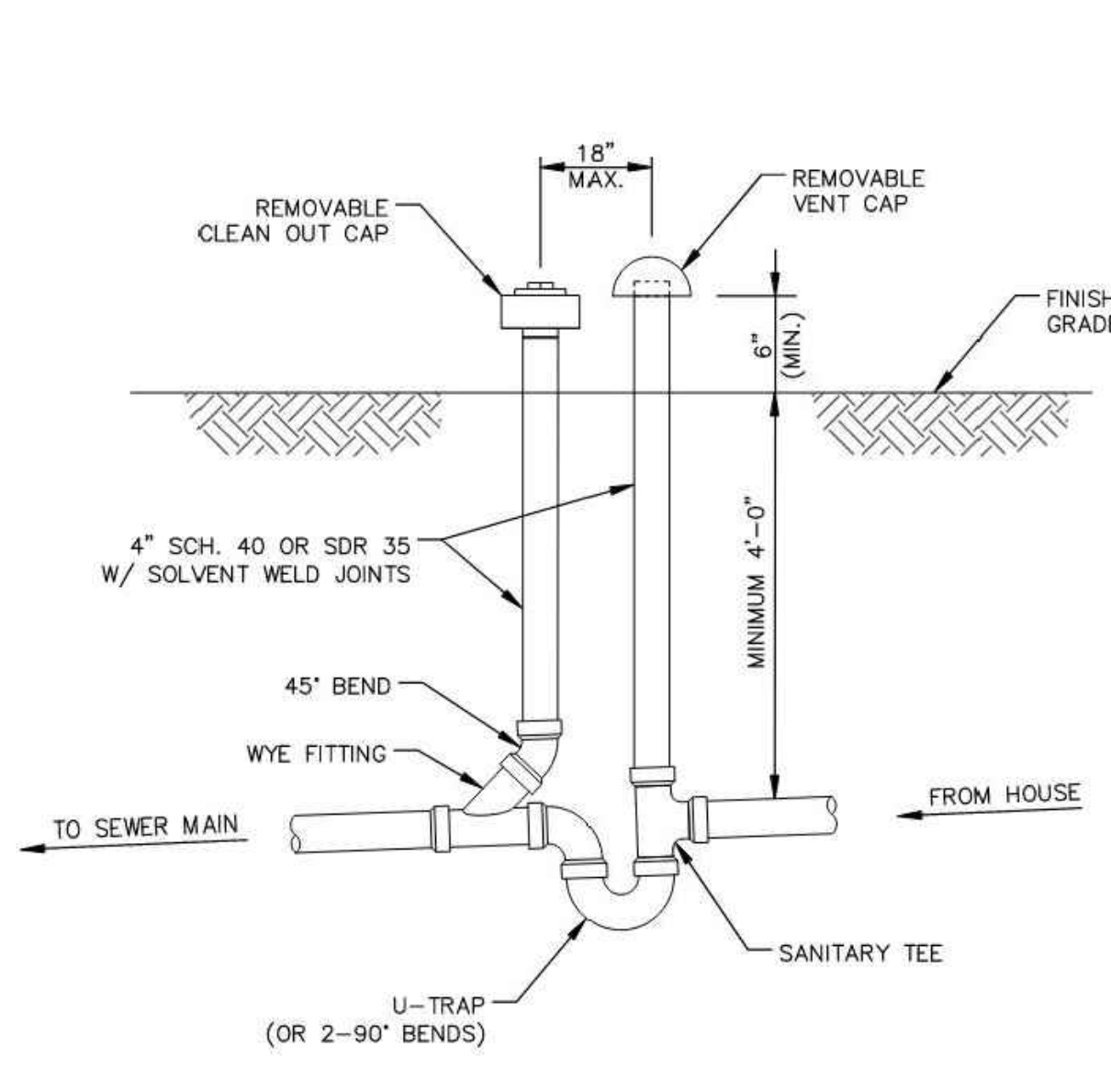
GRINDER PUMP SERVICE LATERAL

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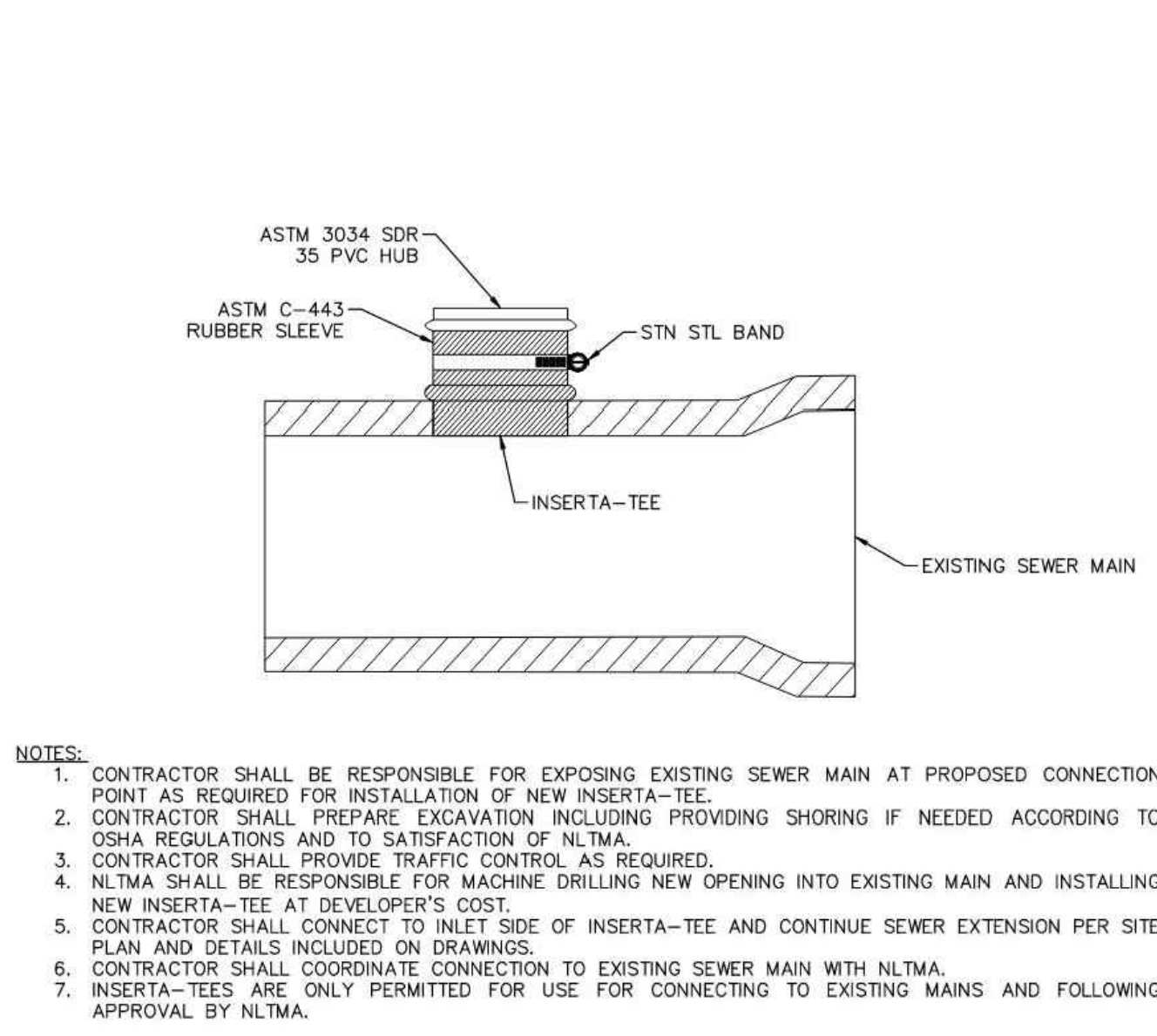
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TRAP AND VENT ASSEMBLY (TYP.)

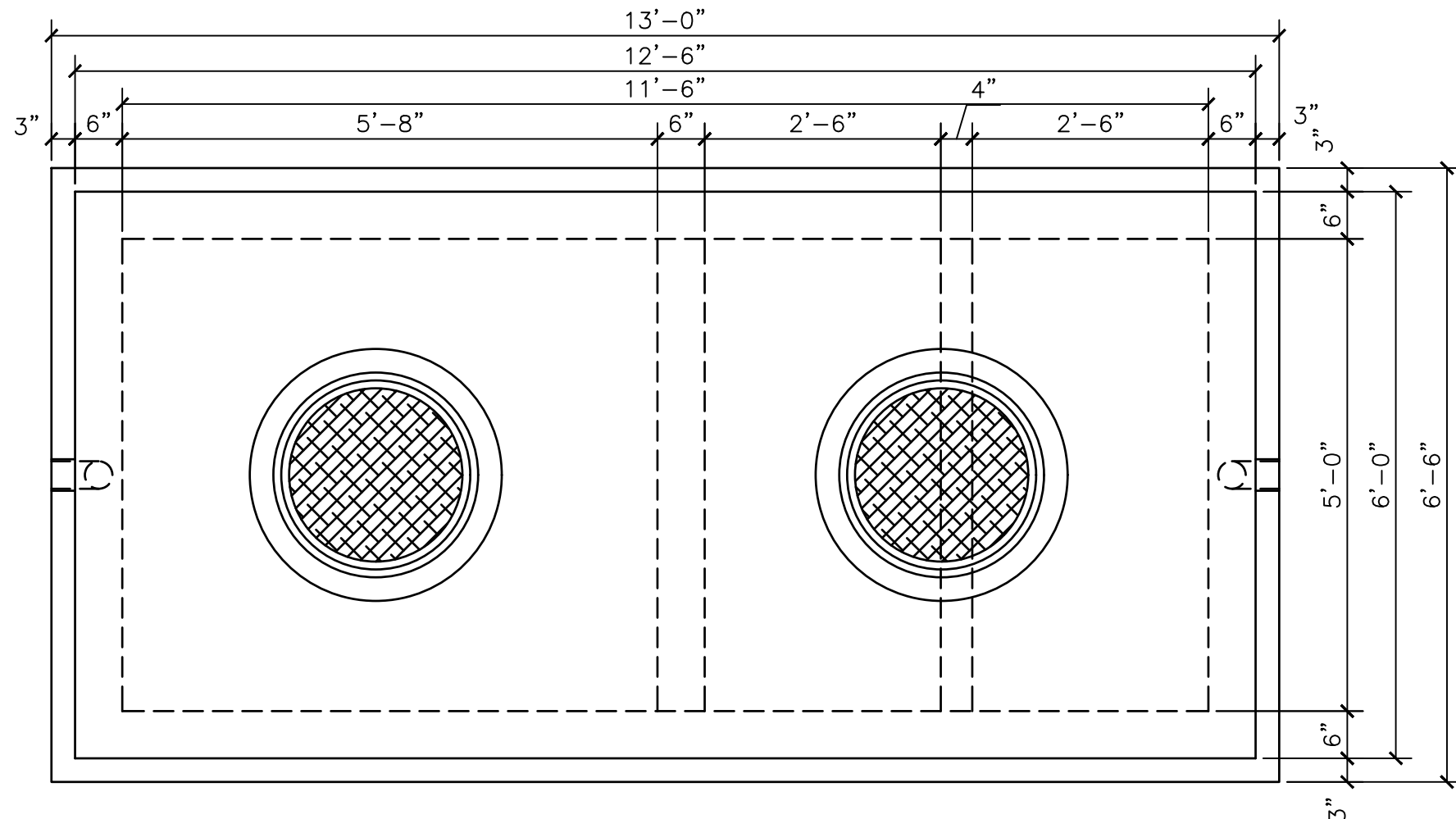
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INSERTA-TEE CONNECTION TO EXISTING SEWER MAINS

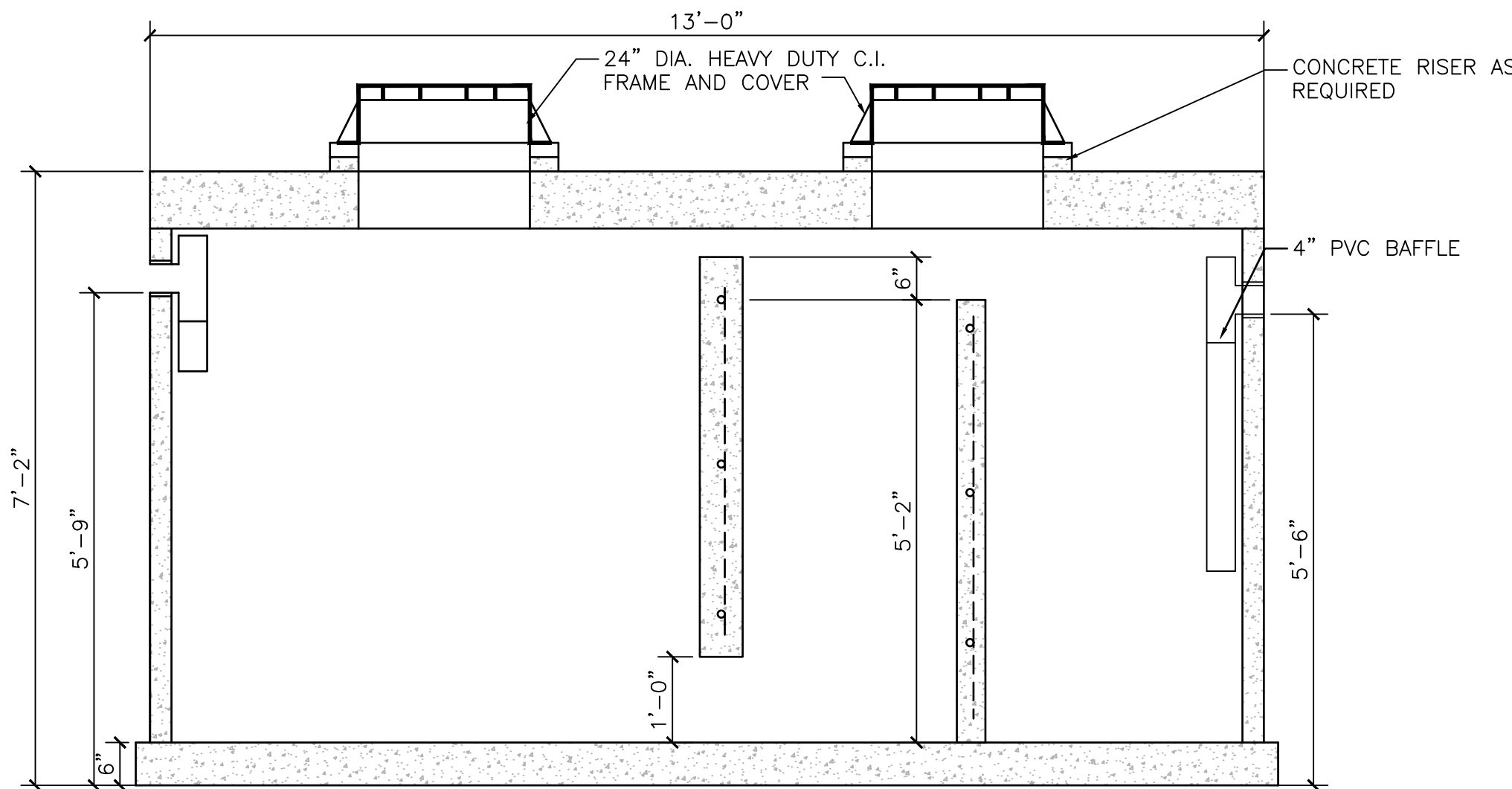
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- NOTES:
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING EXISTING SEWER MAIN AT PROPOSED CONNECTION POINT AS REQUIRED FOR INSTALLATION OF NEW INSERTA-TEE.
 - CONTRACTOR SHALL PREPARE EXCAVATION INCLUDING PROVIDING SHORING IF NEEDED ACCORDING TO OSHA REGULATIONS AND TO SATISFACTION OF NLMA.
 - CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED.
 - NLMA SHALL BE RESPONSIBLE FOR MACHINE DRILLING NEW OPENING INTO EXISTING MAIN AND INSTALLING NEW INSERTA-TEE AT DEVELOPER'S COST.
 - CONTRACTOR SHALL CONNECT TO INLET SIDE OF INSERTA-TEE AND CONTINUE SEWER EXTENSION PER SITE PLAN AND DETAILS INCLUDED ON DRAWINGS.
 - CONTRACTOR SHALL COORDINATE CONNECTION TO EXISTING SEWER MAIN WITH NLMA.
 - INSERTA-TEES ARE ONLY PERMITTED FOR USE FOR CONNECTING TO EXISTING MAINS AND FOLLOWING APPROVAL BY NLMA.



PRECAST CONCRETE 2,000 GALLON GREASE TRAP

NOT TO SCALE



NO.	DATE	REVISION

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SEAL

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SHEETZ - LEBANON, PA (LONG LANE) FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN NORTH LEBANON TOWNSHIP	LEBANON COUNTY, PA	SEWER DETAILS
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Land Planning Landscape Architecture Civil Engineering	Corporate Office: 53 West James Street PA 17003 Phone: (717) 745-1396 www.gsaassociates.com	Regional Offices: York, Harrisburg, and PAuli
DATE:	DECEMBER 6, 2024	
PROJECT NO.:	2024A84-020	
MANAGER:	CHRIS VENARCHICK	
SHEET NO.:	LD-16	OF 38

PLOTTED: Wednesday, December 11, 2024 @ 10:50AM
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SCRIPT:

XREFS: Details

STORMWATER MANAGEMENT CONSTRUCTION SPECIFICATIONS

- A. SITE PREPARATION

 - AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORK SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED.
 - CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1. ALL TREES SHALL BE CLEARED AND GRUBBED WITHIN 15 FEET OF THE TOE OF THE EMBANKMENT.
 - AREAS TO BE COVERED BY THE RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS.
 - TREES, BRUSH, AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 25-FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.
 - ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE AND BELOW THE LIMITS OF THE EMBANKMENT AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE.
 - WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.
- B. EARTH FILL - MATERIAL

 - THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIALS.
 - FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUTOFF TRENCH SHALL BE IN ACCORDANCE WITH THE MATERIAL SPECIFICATIONS INCLUDED ON THIS PLAN. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGNED BY A GEOTECHNICAL ENGINEER. SUCH SPECIAL DESIGNS MUST HAVE CONSTRUCTION SUPERVISED BY A GEOTECHNICAL ENGINEER.
 - MATERIALS USED IN THE OUTER SHELL OF THE EMBANKMENT MUST HAVE THE CAPABILITY TO SUPPORT VEGETATION OF THE QUALITY REQUIRED TO PREVENT EROSION OF THE EMBANKMENT.
- C. EARTH FILL - PLACEMENT

 - AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL.
 - FILL MATERIALS SHALL BE PLACED IN MAXIMUM 8 INCH THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL.
 - THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT.
 - THE PRINCIPAL SPILLWAY (I.E. OUTLET STRUCTURE AND DISCHARGE PIPE) SHALL BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.
- D. COMPACTION

 - THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF HEAVY EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A SHEEPSFOOT OR VIBRATORY ROLLER.
 - THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED.
 - THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE, YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.
 - WHEN REQUIRED BY THE REVIEWING AGENCY, THE MINIMUM REQUIRED DENSITY SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99 (STANDARD PROCTOR).
- E. CUT OFF TRENCH

 - THE CUTOFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS.
 - THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION, WITH THE MINIMUM WIDTH BEING FOUR FEET.
 - THE DEPTH SHALL BE AT LEAST TWO FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS.
 - THE DEPTH SLOPE SHALL BE 1 TO 1 OR FLATTER.
 - THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.
- F. EMBANKMENT CORE

 - THE CORE SHALL BE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS.
 - THE TOP WIDTH OF THE CORE SHALL BE A MINIMUM OF FOUR FEET.
 - THE HEIGHT SHALL EXTEND UP TO AT LEAST THE 10 YEAR WATER ELEVATION OR AS SHOWN ON THE PLANS.
 - THE SIDE SLOPES SHALL BE 1 TO 1 OR FLATTER.
 - THE CORE SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY. IN ADDITION, THE CORE SHALL BE PLACED CONCURRENTLY WITH THE OUTER SHELL OF EMBANKMENT.
- G. STRUCTURE BACKFILL WITH FLOWABLE FILL

 - BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL.
 - THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE.
 - AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE.
 - UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.
 - THE MIXTURE SHALL HAVE A 100-200 PSI; 28 DAY UNCONFINED COMPRESSIVE STRENGTH. THE FLOWABLE FILL SHALL HAVE A MINIMUM PH OF 4.0 AND A MINIMUM RESISTIVITY OF 2,000 OHM-CM.
 - MATERIAL SHALL BE PLACED SUCH THAT A MINIMUM OF 6" (MEASURED PERPENDICULAR TO THE OUTSIDE OF THE PIPE) OF FLOWABLE FILL SHALL BE UNDER (BEDDING), OVER AND, ON THE SIDES OF THE PIPE.
 - FLOWABLE FILL ONLY NEEDS TO EXTEND UP TO THE SPRING LINE FOR RIGID CONDITIONS.
 - AVERAGE SLURGE OF THE FILL SHALL BE 7" TO ASSURE FLOWABILITY OF THE MATERIAL.
 - ADEQUATE MEASURES SHALL BE TAKEN (SAND BAGS, ETC.) TO PREVENT FLOATING THE PIPE.
 - THE MATERIAL SHALL COMPLETELY FILL ALL VOIDS ADJACENT TO THE FLOWABLE FILL ZONE.
 - BACKFILL MATERIAL OUTSIDE THE STRUCTURAL BACKFILL (FLOWABLE FILL) ZONE SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE CORE OF THE EMBANKMENT OR OTHER EMBANKMENT MATERIALS.
- H. PIPE CONDUITS

 - ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.
- I. REINFORCED CONCRETE PIPE - MATERIALS

 - REINFORCED CONCRETE PIPE SHALL HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS AND SHALL EQUAL OR EXCEED ASTM C-361.
- J. REINFORCED CONCRETE PIPE - BEDDING

 - REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING/CRADLE FOR THEIR ENTIRE LENGTH. THIS BEDDING/CRADLE SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 50% OF ITS OUTSIDE DIAMETER WITH A MINIMUM THICKNESS OF 6 INCHES.
 - WHERE A CONCRETE CRADLE IS NOT NEEDED FOR STRUCTURAL REASONS, FLOWABLE FILL MAY BE USED AS DESCRIBED IN THE "STRUCTURE BACKFILL" SECTION OF THIS STANDARD.
 - GRAVEL BEDDING IS NOT PERMITTED.
- K. REINFORCED CONCRETE PIPE - LAYING PIPE

 - BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM.
 - JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL.
 - AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LINE, THE BEDDING SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE AND UP THE SIDES OF THE PIPE ARE FILLED.
 - CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE.
 - THE FIRST JOINT MUST BE LOCATED WITHIN 4 FEET FROM THE RISER.
- L. REINFORCED CONCRETE PIPE - BACKFILLING

 - FILL CONFORM TO "STRUCTURE BACKFILL".
- M. CONCRETE STRUCTURES

 - CONCRETE SHALL MEET THE REQUIREMENTS OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTIONS 605, 606 AND 714; AND AS MODIFIED HEREON.
 - REINFORCEMENT SHALL MEET THE MINIMUM REQUIREMENTS OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTION 709.
- N. ROCK RIPRAP

 - ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408.

STABILIZATION SPECIFICATIONS

1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
2. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN DRAWINGS IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER.
4. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
5. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHENEVER POSSIBLE PRIOR TO SEEDING.
6. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
7. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES 3:1 OR STEEPER. ALL AREAS OF CONCENTRATED FLOWS, AND DISTURBED AREAS WITHIN 50' OF A SURFACE WATER.
8. STRAW AND HAY MULCH SHOULD BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3:1. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED). A WOOD CELLULOSE FIBER MAY BE SPREAD OVER THE STRAW MULCH AT A RATE OF 1,500 LB./ACRE.
9. TRACKING SLOPES IS REQUIRED BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR. (NOTE: IF A BULLDOZER IS USED, THE BLADE SHALL BE UP.) CARE SHOULD BE EXERCISED ON SOILS HAVING A HIGH CLAY CONTENT TO AVOID OVER-COMPACTION.

TEMPORARY SEEDING SPECIFICATIONS

1. IN ORDER TO ESTABLISH A QUICK GRASS COVER OVER DISTURBED AREAS, A TEMPORARY SEED MIXTURE SHALL BE USED AS FOLLOWS:

SPECIES: PENNDOT FORMULA E

% PURE LIVE SEED: 86%
 APPLICATION RATE: 48 LB./ACRE
 FERTILIZER TYPE: 5-5-5
 FERTILIZE RATE: 1,000 LB./ACRE
 LIMING RATE: 1 T./ACRE
 MULCH TYPE: STRAW
 MULCHING RATE: 3 T./ACRE
2. STABILIZATION EFFORTS DURING THE NON-GERMINATING PERIOD, OCT. 15 TO MARCH 15, SHOULD BE MULCHED WITH CLEAN STRAW. (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN DURING APPLICATION.
3. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR.
4. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
5. ALL AREAS SHALL BE TEMPORARILY STABILIZED UPON CESSATION OF WORK FOR 4 DAYS OR MORE, OR AS SOON AS ANY DISTURBED AREA REACHES ITS FINAL GRADE.

PERMANENT SEEDING SPECIFICATIONS

1. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER AS FOLLOWS:

TOPSOIL PLACEMENT DEPTH: 6 IN.
 SPECIES: PENNDOT FORMULA B
 % PURE LIVE SEED: 83%
 APPLICATION RATE: 203 LB./ACRE
 FERTILIZER TYPE: 38-0-0
 FERTILIZE RATE: 242 LB./ACRE
 LIMING RATE: 2 T./ACRE
 MULCH TYPE: STRAW
 MULCHING RATE: 3 T./ACRE
 ANCHOR MATERIAL: WOOD FIBER
 ANCHOR METHOD: HYDRAULICALLY
 RATE OF ANCHOR MATERIAL APPL.: 774 LB./ACRE
 SEEDING SEASON DATE: MARCH 15 - JUNE 1/AUGUST 1 - OCTOBER 15
2. ALL DISTURBED AREAS WITH STEEP SLOPES SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER AS FOLLOWS:

TOPSOIL PLACEMENT DEPTH: 6 IN.
 SPECIES: PENNDOT FORMULA D
 % PURE LIVE SEED: 82%
 APPLICATION RATE: 242 LB./ACRE
 FERTILIZER TYPE: 38-0-0
 FERTILIZE RATE: 242 LB./ACRE
 LIMING RATE: 2 T./ACRE
 MULCH TYPE: STRAW
 MULCHING RATE: 3 T./ACRE
 ANCHOR MATERIAL: WOOD FIBER
 ANCHOR METHOD: HYDRAULICALLY
 RATE OF ANCHOR MATERIAL APPL.: 774 LB./ACRE
 SEEDING SEASON DATE: MARCH 15 - JUNE 1/AUGUST 1 - OCTOBER 15
3. MULCHING SHALL BE USED TO PROTECT SEEDING AND HELP IN PREVENTING RUNOFF.

A. CLEAN STRAW MULCH SHALL BE REQUIRED IN ALL DISTURBED AREAS (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN DURING APPLICATION.
 B. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR.
 C. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH.
 D. SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.
 E. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 F. SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED.
4. FOR FURTHER INFORMATION ON SEED MIXES, SEE THE E & S WORKSHEETS IN THE CHAPTER 102 REGULATIONS.
5. WELL IN ADVANCE OF THE NEED TO PERMANENTLY SEED ANY DISTURBED AREA, THE CONTRACTOR SHALL OBTAIN AND FORWARD A SOIL AGRONOMY TESTING REPORT FROM AN APPROVED SOILS LABORATORY SUCH AS THE PENNSYLVANIA STATE UNIVERSITY'S AGRICULTURAL ANALYTICAL SERVICE LABORATORY. THE REPORT SHALL DETERMINE THE ACTUAL LINE AND FERTILIZER RATES FOR THE ON-SITE TOPSOIL. THE CONTRACTOR SHALL FORWARD THE FINAL REPORT TO THE LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE UPON RECEIPT.
6. ALL SOIL AMENDMENTS SHALL BE INSTALLED PER THE SOIL AGRONOMY REPORT, AND SHALL BE PROVIDED BY THE CONTRACTOR.
7. APPLY AMENDMENTS ON-SITE, AND MIX SOIL TO FULLY ADDRESS ALL EXISTING SOIL DEFICIENCIES. DO NOT APPLY AMENDMENTS NOR TILL IF EXISTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.

BMP TYPE	FACILITY NOS.	CONSTRUCTION NOTES	CRITICAL STAGES OF PROFESSIONAL OVERSIGHT	OPERATION AND MAINTENANCE
CONVEYANCE FACILITIES (NOT A PCSM BMP)		1. ALL STORM DRAIN AND CONVEYANCE SWALES SHALL BE INSTALLED AT THE LOCATION AND IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS INCLUDED ON THIS PLAN, UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY.	1. VERIFICATION OF INLET STRUCTURE LOCATION, SIZE, DEPTH, AND CONNECTING PIPE INVERTS OR CHANNEL GEOMETRY	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. REGULAR MAINTENANCE <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
OUTLET PROTECTION (NOT A PCSM BMP)		1. RIP-RAP APRONS/PLUNGE POOLS SHALL BE INSTALLED AT THE LOCATION AND IN ACCORDANCE WITH THE DETAILS INCLUDED ON THIS PLAN.	1. VISUAL INSPECTION OF THE RIP-RAP APRONS/PLUNGE POOLS TO ENSURE INSTALLATION IS IN GENERAL CONFORMANCE WITH THE PLAN.	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. REGULAR MAINTENANCE <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
WATER QUALITY FILTER (NOT A PCSM BMP)	MH-A10 (30R) MH-A14(R) J-A14(18F)	1. THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE FACILITY HAS RECEIVED FINAL STABILIZATION. 2. SNOUT HOOD INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.	1. VERIFICATION OF MATERIAL OR WRITTEN CERTIFICATION BY THE MANUFACTURER 2. INSPECTION OF INSTALLATION PER THE PLAN DETAIL.	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE FACILITY SHALL ALSO BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES (BUT NOT LIMITED TO THE PA DEP AND THE TOWNSHIP) IN THE EVENT OF A SPILL AND CLEANUP OPERATION. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. REGULAR MAINTENANCE <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY. CLEAN OUT AND DISPOSE OF ACCUMULATED OIL, GREASE, AND SEDIMENTS. REMOVE ACCUMULATED TRASH AND DEBRIS. THE CLEAN OUT AND DISPOSAL TECHNIQUES SHOULD BE ENVIRONMENTALLY ACCEPTABLE AND IN ACCORDANCE WITH LOCAL REGULATIONS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND SWM FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL DISPOSE OF REMOVED SEDIMENT AND DEBRIS IN ACCORDANCE WITH THE RECYCLING AND DISPOSAL NOTES. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
BEST MANAGEMENT PRODUCTS, INC. SNOUT WITH BIO-SKIRT		1. AT ALL TIMES DURING CONSTRUCTION THE FACILITY SHALL BE PROTECTED FROM COMPACTION (WITHIN TWO FEET OF THE SUBGRADE OF THE FACILITY). 2. THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO FACILITY HAS RECEIVED FINAL STABILIZATION. 3. UPLAND TRIBUTARY CONVEYANCE FACILITIES SHALL BE FLUSHED AND SEDIMENT REMOVED. 4. CONTRACTOR SHALL PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE FACILITY. 5. CONTRACTOR SHALL USE LOW-PRESSURE EQUIPMENT AND UTILIZE NON-INFILTRATION AREAS FOR EQUIPMENT STAGING TO PERFORM EXCAVATION AND INSTALLATION. 6. SEDIMENT LADEN OVERBURDEN AND DEPOSITION SHALL BE REMOVED FROM THE FACILITY TO PROVIDE A FREE DRAINING SUBGRADE. 7. CONTRACTOR TO TEST PIT FACILITY PRIOR TO INSTALLATION TO DETERMINE DEPTH TO LIMITING ZONE (WATER TABLE). 8. PLACEMENT OF THE SOIL MEDIA SHALL BE DONE IN TWO (2) LIFTS TO THE DEPTH SHOWN ON THE DETAIL. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. 9. PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT. 10. EROSION CONTROL BLANKET OR HYDROSEED TO BE APPLIED TO THE BOTTOM OF THE FACILITY TO PROMOTE EARLY STABILIZATION AND ESTABLISHMENT. 11. PLANT VEGETATION ACCORDING WITH THE APPROVED LANDSCAPE PLAN AND DETAILS.	1. REVIEW MATERIAL COMPONENTS OF THE FACILITY (SEE MATERIAL SPECIFICATIONS): <div> A. SOIL MEDIA (MATERIAL RECEIPT AND TESTING RESULTS OR PRE-CERTIFIED MEDIA RECEIPT) </div> 2. FIELD MEASURE EXCAVATED BOTTOM FOR GENERAL CONFORMANCE WITH THE REQUIRED SURFACE AREA OF BED. 3. PROBE THE BOTTOM OF FACILITY WITH A SOIL PROBE TO VERIFY DEPTH TO LIMITING ZONE. 4. REVIEW OF FACILITY BOTTOM TO CONFIRM A FREE-DRAINING (UN-COMPACTED), SEDIMENT FREE SUBGRADE. 5. PLACEMENT OF SOIL MEDIA TO DEPTH SPECIFIED ON PLAN. 6. VISUAL INSPECTION OF RISER STRUCTURE, TRASH RACK, EMERGENCY SPILLWAY, AND REMAINING APPURTENANCES.	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE AREAS OF VEGETATION WHICH FAIL TO SUSTAIN YEARLY GROWTH ARE TO BE REPLANTED OR RESEEDED ON A YEARLY BASIS OR UNTIL CONSISTENT GERMINATION CAN BE SUSTAINED. SHRUBS, FORBS OR GRASSES WHICH ARE DEAD ARE TO BE REPLACED DURING GERMINATION PERIODS. VEGETATION ON THE EMBANKMENT AND SIDESLOPES SHALL BE MOWED ANYTIME THE VEGETATION IS GREATER THAN 6" IN HEIGHT OR AS REQUIRED BY THE MUNICIPALITY MATERIALS THAT ARE REMOVED MUST BE DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS. CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURES/PIPING WITHIN THE FACILITY, DURING THE MAINTENANCE OPERATIONS. REGULAR MAINTENANCE: <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY REFER TO THE BMP SEEDING SPECIFICATIONS AND OPERATION AND MAINTENANCE NOTES INCLUDED AS PART OF THE PROJECT'S LANDSCAPE PLAN FOR ANNUAL MAINTENANCE REQUIREMENTS; REMOVE CLIPPINGS AND INVASIVE PLANTS IF 72 HOURS AFTER A RAINFALL EVENT, PONDING WATER IS FOUND WITHIN THE PRINCIPAL SPILLWAY OR ON THE SURFACE ABOVE THE FACILITY, THE FACILITY IS NOT OPERATING PROPERLY. IF THE FACILITY IS NOT DRAINING PROPERLY, UTILIZE THE UNDERDRAIN SYSTEM (IF APPLICABLE) OR PUMP FOR DEWATERING. <ul style="list-style-type: none"> REMOVE AND REPLACE AREAS OF SOIL MEDIA WHICH APPEAR TO HAVE SEDIMENT ACCUMULATION, CLOGGED, OR HOLDING WATER. INSPECT THE FACILITY FOR KILLS ON THE EMERGENCY SPILLWAY, INTERIOR, AND EXTERIOR EMBANKMENT SLOPES. REPAIR RILL AREAS WITH CLEAN FILL AND TOPSOIL WITH LIGHT TAMPING; RESEED DISTURBED AREAS. INSPECTION PRINCIPAL SPILLWAY OUTLET STRUCTURE, OUTFALL BARREL, VELOCITY DISSIPATER, AND REMAINING APPURTENANCES. CONTACT PROJECT ENGINEER FOR REPAIR SOLUTIONS IF THESE COMPONENTS ARE DAMAGED. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
RAIN GARDEN / BIO-RETENTION PA DEP BMP 6.4,5	BMP NO. 2 BMP NO. 3	1. AT ALL TIMES DURING CONSTRUCTION THE FACILITY SHALL BE PROTECTED FROM COMPACTION (WITHIN TWO FEET OF THE SUBGRADE OF THE FACILITY). 2. THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO FACILITY HAS RECEIVED FINAL STABILIZATION. 3. UPLAND TRIBUTARY CONVEYANCE FACILITIES SHALL BE FLUSHED AND SEDIMENT REMOVED. 4. CONTRACTOR SHALL PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE FACILITY. 5. CONTRACTOR SHALL USE LOW-PRESSURE EQUIPMENT AND UTILIZE NON-INFILTRATION AREAS FOR EQUIPMENT STAGING TO PERFORM EXCAVATION AND INSTALLATION. 6. SEDIMENT LADEN OVERBURDEN AND DEPOSITION SHALL BE REMOVED FROM THE FACILITY TO PROVIDE A FREE DRAINING SUBGRADE. 7. CONTRACTOR TO TEST PIT FACILITY PRIOR TO INSTALLATION TO DETERMINE DEPTH TO LIMITING ZONE (WATER TABLE). 8. PLACEMENT OF THE SOIL MEDIA SHALL BE DONE IN TWO (2) LIFTS TO THE DEPTH SHOWN ON THE DETAIL. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. 9. PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT. 10. EROSION CONTROL BLANKET OR HYDROSEED TO BE APPLIED TO THE BOTTOM OF THE FACILITY TO PROMOTE EARLY STABILIZATION AND ESTABLISHMENT. 11. PLANT VEGETATION ACCORDING WITH THE APPROVED LANDSCAPE PLAN AND DETAILS.	1. REVIEW MATERIAL COMPONENTS OF THE FACILITY (SEE MATERIAL SPECIFICATIONS): <div> A. OUTFALL BARREL PIPE B. ANTI-SEEP COLLAR C. CORE MATERIAL </div> 2. CUTOFF TRENCH AND CLAY CORE. 3. INSTALLATION OF OUTFALL BARREL, CONCRETE CRADLE, AND ANTI-SEEP COLLAR. 4. FIELD MEASURE EXCAVATED BOTTOM FOR GENERAL CONFORMANCE WITH THE REQUIRED SURFACE AREA OF BED. 5. VISUAL INSPECTION OF RISER STRUCTURE, TRASH RACK, EMERGENCY SPILLWAY, AND REMAINING APPURTENANCES.	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE AREAS OF VEGETATION WHICH FAIL TO SUSTAIN YEARLY GROWTH ARE TO BE REPLANTED OR RESEEDED ON A YEARLY BASIS OR UNTIL CONSISTENT GERMINATION CAN BE SUSTAINED. SHRUBS, FORBS OR GRASSES WHICH ARE DEAD ARE TO BE REPLACED DURING GERMINATION PERIODS. VEGETATION ON THE EMBANKMENT AND SIDESLOPES SHALL BE MOWED ANYTIME THE VEGETATION IS GREATER THAN 6" IN HEIGHT OR AS REQUIRED BY THE MUNICIPALITY MATERIALS THAT ARE REMOVED MUST BE DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS. CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURES/PIPING WITHIN THE FACILITY, DURING THE MAINTENANCE OPERATIONS. REGULAR MAINTENANCE: <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY REFER TO THE BMP SEEDING SPECIFICATIONS AND OPERATION AND MAINTENANCE NOTES INCLUDED AS PART OF THE PROJECT'S LANDSCAPE PLAN FOR ANNUAL MAINTENANCE REQUIREMENTS; REMOVE CLIPPINGS AND INVASIVE PLANTS IF 72 HOURS AFTER A RAINFALL EVENT, PONDING WATER IS FOUND WITHIN THE PRINCIPAL SPILLWAY OR ON THE SURFACE ABOVE THE FACILITY, THE FACILITY IS NOT OPERATING PROPERLY. IF THE FACILITY IS NOT DRAINING PROPERLY, UTILIZE THE UNDERDRAIN SYSTEM (IF APPLICABLE) OR PUMP FOR DEWATERING. <ul style="list-style-type: none"> REMOVE AND REPLACE AREAS OF SOIL MEDIA WHICH APPEAR TO HAVE SEDIMENT ACCUMULATION, CLOGGED, OR HOLDING WATER. INSPECT THE FACILITY FOR KILLS ON THE EMERGENCY SPILLWAY, INTERIOR, AND EXTERIOR EMBANKMENT SLOPES. REPAIR RILL AREAS WITH CLEAN FILL AND TOPSOIL WITH LIGHT TAMPING; RESEED DISTURBED AREAS. INSPECTION PRINCIPAL SPILLWAY OUTLET STRUCTURE, OUTFALL BARREL, VELOCITY DISSIPATER, AND REMAINING APPURTENANCES. CONTACT PROJECT ENGINEER FOR REPAIR SOLUTIONS IF THESE COMPONENTS ARE DAMAGED. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.
DRY EXTENDED DETENTION FACILITY PA DEP BMP 6.6,3	BMP NO. 1	1. AT ALL TIMES DURING CONSTRUCTION THE FACILITY SHALL BE PROTECTED FROM COMPACTION (WITHIN TWO FEET OF THE SUBGRADE OF THE FACILITY). 2. THE FACILITY MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO FACILITY HAS RECEIVED FINAL STABILIZATION. 3. UPLAND TRIBUTARY CONVEYANCE FACILITIES SHALL BE FLUSHED AND SEDIMENT REMOVED. 4. CONTRACTOR SHALL PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE FACILITY. 5. CONTRACTOR SHALL USE LOW-PRESSURE EQUIPMENT AND UTILIZE NON-INFILTRATION AREAS FOR EQUIPMENT STAGING TO PERFORM EXCAVATION AND INSTALLATION. 6. SEDIMENT LADEN OVERBURDEN AND DEPOSITION SHALL BE REMOVED FROM THE FACILITY TO PROVIDE A FREE DRAINING SUBGRADE. 7. CONTRACTOR TO TEST PIT FACILITY PRIOR TO INSTALLATION TO DETERMINE DEPTH TO LIMITING ZONE (WATER TABLE). 8. PLACEMENT OF THE SOIL MEDIA SHALL BE DONE IN TWO (2) LIFTS TO THE DEPTH SHOWN ON THE DETAIL. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. 9. PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT. 10. EROSION CONTROL BLANKET OR HYDROSEED TO BE APPLIED TO THE BOTTOM OF THE FACILITY TO PROMOTE EARLY STABILIZATION AND ESTABLISHMENT. 11. PLANT VEGETATION ACCORDING WITH THE APPROVED LANDSCAPE PLAN AND DETAILS.	1. REVIEW MATERIAL COMPONENTS OF THE FACILITY (SEE MATERIAL SPECIFICATIONS): <div> A. OUTFALL BARREL PIPE B. ANTI-SEEP COLLAR C. CORE MATERIAL </div> 2. CUTOFF TRENCH AND CLAY CORE. 3. INSTALLATION OF OUTFALL BARREL, CONCRETE CRADLE, AND ANTI-SEEP COLLAR. 4. FIELD MEASURE EXCAVATED BOTTOM FOR GENERAL CONFORMANCE WITH THE REQUIRED SURFACE AREA OF BED. 5. VISUAL INSPECTION OF RISER STRUCTURE, TRASH RACK, EMERGENCY SPILLWAY, AND REMAINING APPURTENANCES.	GENERAL REQUIREMENTS: <ul style="list-style-type: none"> THE AREAS OF VEGETATION WHICH FAIL TO SUSTAIN YEARLY GROWTH ARE TO BE REPLANTED OR RESEEDED ON A YEARLY BASIS OR UNTIL CONSISTENT GERMINATION CAN BE SUSTAINED. SHRUBS, FORBS OR GRASSES WHICH ARE DEAD ARE TO BE REPLACED DURING GERMINATION PERIODS. VEGETATION ON THE EMBANKMENT AND SIDESLOPES SHALL BE MOWED ANYTIME THE VEGETATION IS GREATER THAN 6" IN HEIGHT OR AS REQUIRED BY THE MUNICIPALITY MATERIALS THAT ARE REMOVED MUST BE DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS. CARE SHALL BE TAKEN NOT TO DAMAGE THE REMAINING STRUCTURES/PIPING WITHIN THE FACILITY, DURING THE MAINTENANCE OPERATIONS. REGULAR MAINTENANCE: <ul style="list-style-type: none"> AFTER EACH MEASURABLE STORM EVENT (0.25 INCH OR GREATER) OR A MINIMUM OF TWICE PER YEAR): <ul style="list-style-type: none"> REMOVE ACCUMULATED SEDIMENT, TRASH, AND DEBRIS FROM THE FACILITY REFER TO THE BMP SEEDING SPECIFICATIONS AND OPERATION AND MAINTENANCE NOTES INCLUDED AS PART OF THE PROJECT'S LANDSCAPE PLAN FOR ANNUAL MAINTENANCE REQUIREMENTS; REMOVE CLIPPINGS AND INVASIVE PLANTS IF 72 HOURS AFTER A RAINFALL EVENT, PONDING WATER IS FOUND WITHIN THE PRINCIPAL SPILLWAY OR ON THE SURFACE ABOVE THE FACILITY, THE FACILITY IS NOT OPERATING PROPERLY. IF THE FACILITY IS NOT DRAINING PROPERLY, UTILIZE THE UNDERDRAIN SYSTEM (IF APPLICABLE) OR PUMP FOR DEWATERING. <ul style="list-style-type: none"> REMOVE AND REPLACE AREAS OF SOIL MEDIA WHICH APPEAR TO HAVE SEDIMENT ACCUMULATION, CLOGGED, OR HOLDING WATER. INSPECT THE FACILITY FOR KILLS ON THE EMERGENCY SPILLWAY, INTERIOR, AND EXTERIOR EMBANKMENT SLOPES. REPAIR RILL AREAS WITH CLEAN FILL AND TOPSOIL WITH LIGHT TAMPING; RESEED DISTURBED AREAS. INSPECTION PRINCIPAL SPILLWAY OUTLET STRUCTURE, OUTFALL BARREL, VELOCITY DISSIPATER, AND REMAINING APPURTENANCES. CONTACT PROJECT ENGINEER FOR REPAIR SOLUTIONS IF THESE COMPONENTS ARE DAMAGED. DOCUMENTATION REQUIREMENTS: <ul style="list-style-type: none"> PREPARE ANNUAL INSPECTION REPORTS AS REQUIRED BY THE MUNICIPAL ORDINANCE AND STORMWATER AGREEMENT. PREPARE AND MAINTAIN INSPECTION, REPAIR, AND REPLACEMENT LOGS/REPORTS IN ACCORDANCE WITH PA DEP CHAPTER 102 REGULATIONS AND THE CONDITIONS OF THE NPDES PERMIT.

OPERATION & MAINTENANCE NOTES

NOT TO SCALE

NOT FOR BID / NOT FOR CONSTRUCTION