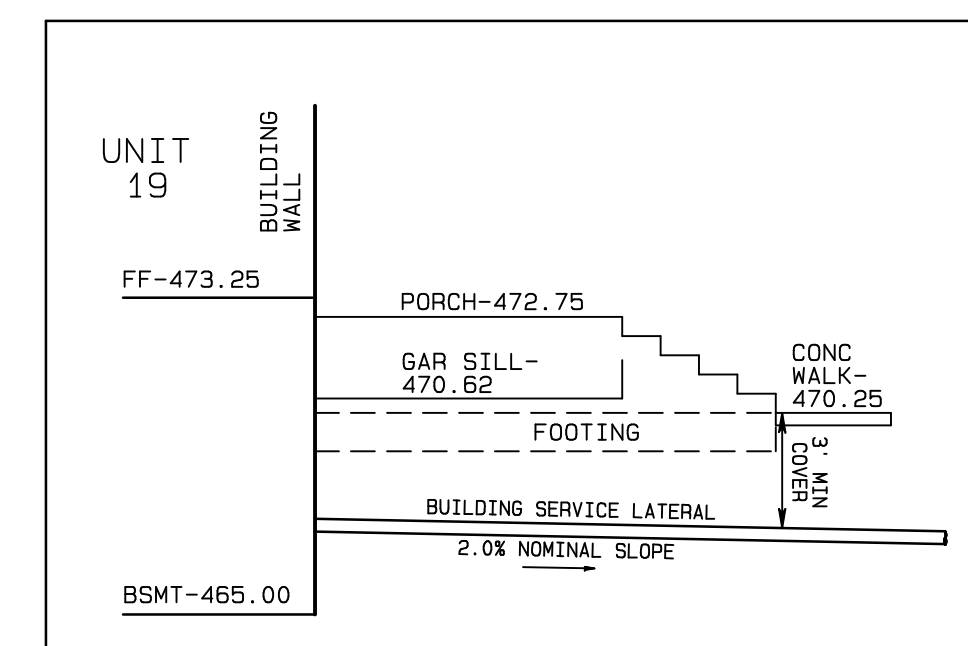


TYPICAL HOUSE UTILITY LOCATION DETAIL
SCALE: 1" = 10'



TYPICAL HOUSE SAN LATERAL SECTION
SCALE: 1" = 5'

LEGEND

---	CENTERLINE
---	TRACT BOUNDARY
---	PROPERTY LINE
---	LEGAL R.O.W., EASEMENTS
---	REQUIRED R.O.W.
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	EXISTING WATER LINE
---	EXISTING SAN. SEWER LINE
---	EXISTING TELEPHONE LINE
---	EXISTING GAS LINE
---	EXISTING ELECTRIC LINE
---	EXISTING STORM SEWER/INLET
---	PROPOSED STORM SEWER/INLET
---	PROPOSED WATER LINE
---	PROPOSED SAN. SEWER LINE
---	PROPOSED ELECTRIC LINE
---	PROPOSED GAS LINE
---	EXISTING MANHOLE
---	PROPOSED MANHOLE
---	EXISTING CURBLINE
---	PROPOSED CURBLINE
---	UTILITY POLE
---	EXISTING VALVE, VENT., CO.
---	EXISTING FIRE HYDRANT
---	PROPOSED FIRE HYDRANT
---	PROPOSED STREET LIGHT

---	PROPOSED DWELLING
---	PROPOSED PAVED DRIVEWAY
---	PROPOSED CONCRETE PADS/SIDEWALKS

LIST OF UNDERGROUND UTILITY USERS:

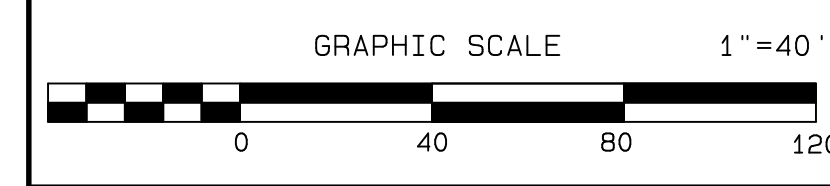
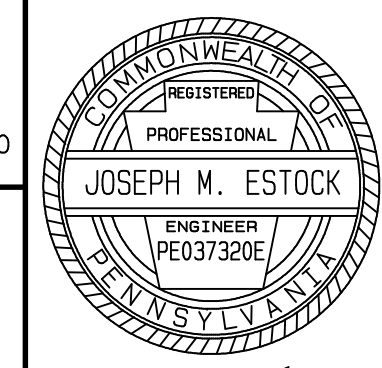
WATER:	PENNSYLVANIA AMERICAN WATER CO. 190 WEST JOHNSON HIGHWAY NORRISTOWN, PA 19401 (610) 292-3577
SANITARY SEWER:	LOWER PROVIDENCE TOWNSHIP SEWER AUTHORITY 20 PARKLANE DRIVE EAGLEVILLE, PA 19403 (610) 539-6161
STORM SEWER:	LOWER PROVIDENCE TOWNSHIP PLYMOUTH MEETING, PA 19403 (610) 539-8020
GAS:	PECO ENERGY CO. 680 RIDGE PIKE PLYMOUTH MEETING, PA 19462-1945 (610) 941-1768
ELECTRIC:	PECO ENERGY CO. 2301 MARKET STREET P.O. BOX 8699 PHILADELPHIA, PA 19101-8699 (215) 841-4000
TELEPHONE:	VERIZON PENNSYLVANIA, INC. SUITE 401, BUILDING B WAYNE, PA 19087 (610) 964-6132

DATE	REVISIONS
05-27-22	REV PER TOWNSHIP REPORTS
05-06-22	REV PER 'THE CROSSROADS GROUP' PLANS - TWP REVIEW
04-21-22	REV PER 'THE CROSSROADS GROUP' ESC/SWM PLANS
02-15-22	REV PER TOWNSHIP REVIEW
11-10-21	REV PER 'THE CROSSROADS GROUP' ESC/SWM PLANS

PROJECT TITLE :
CHURCH RD SUBDIVISION
PREPARED FOR
BRANCA CONSTRUCTION COMPANY, INC
LOWER PROVIDENCE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

DRAWING TITLE :
IMPROVEMENT CONSTRUCTION GRADING-UTILITY PLAN

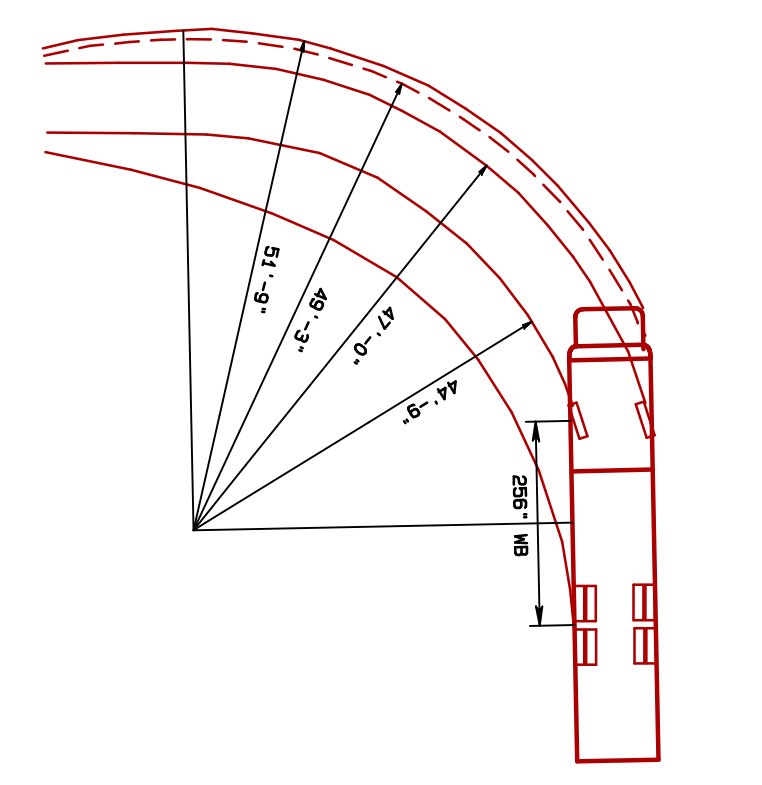
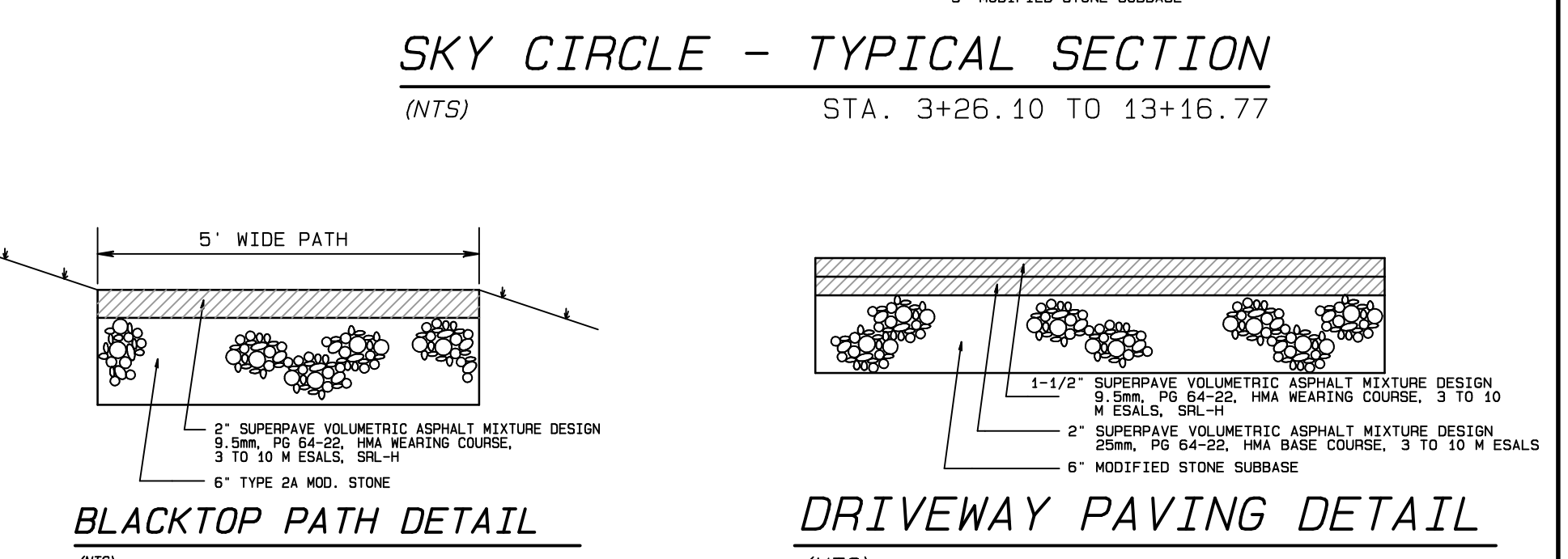
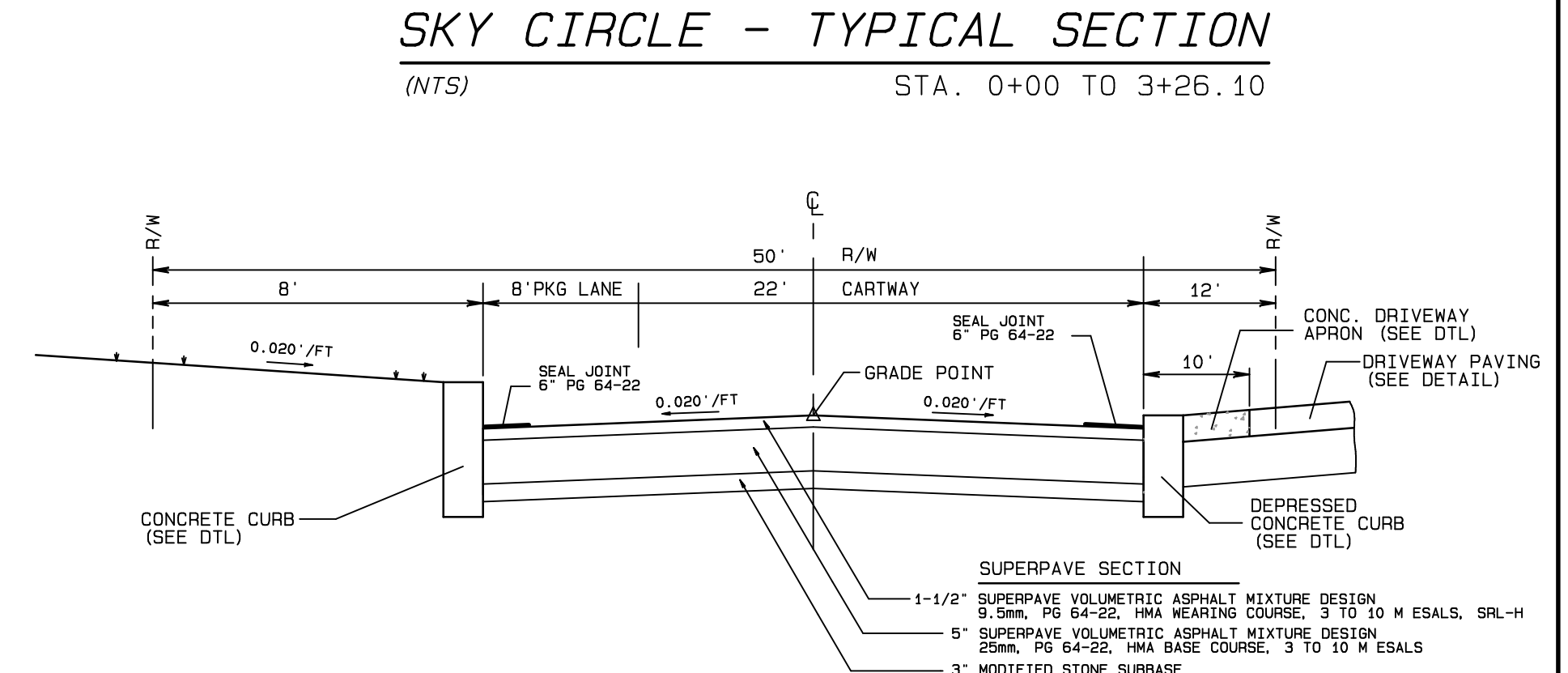
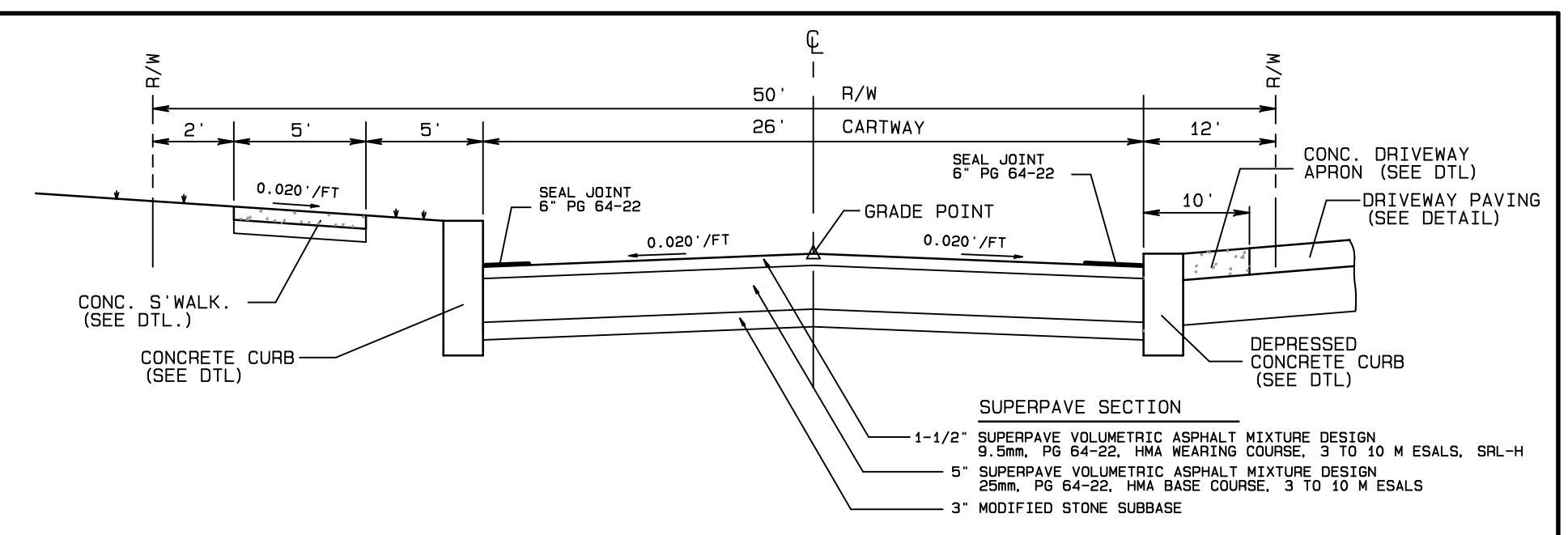
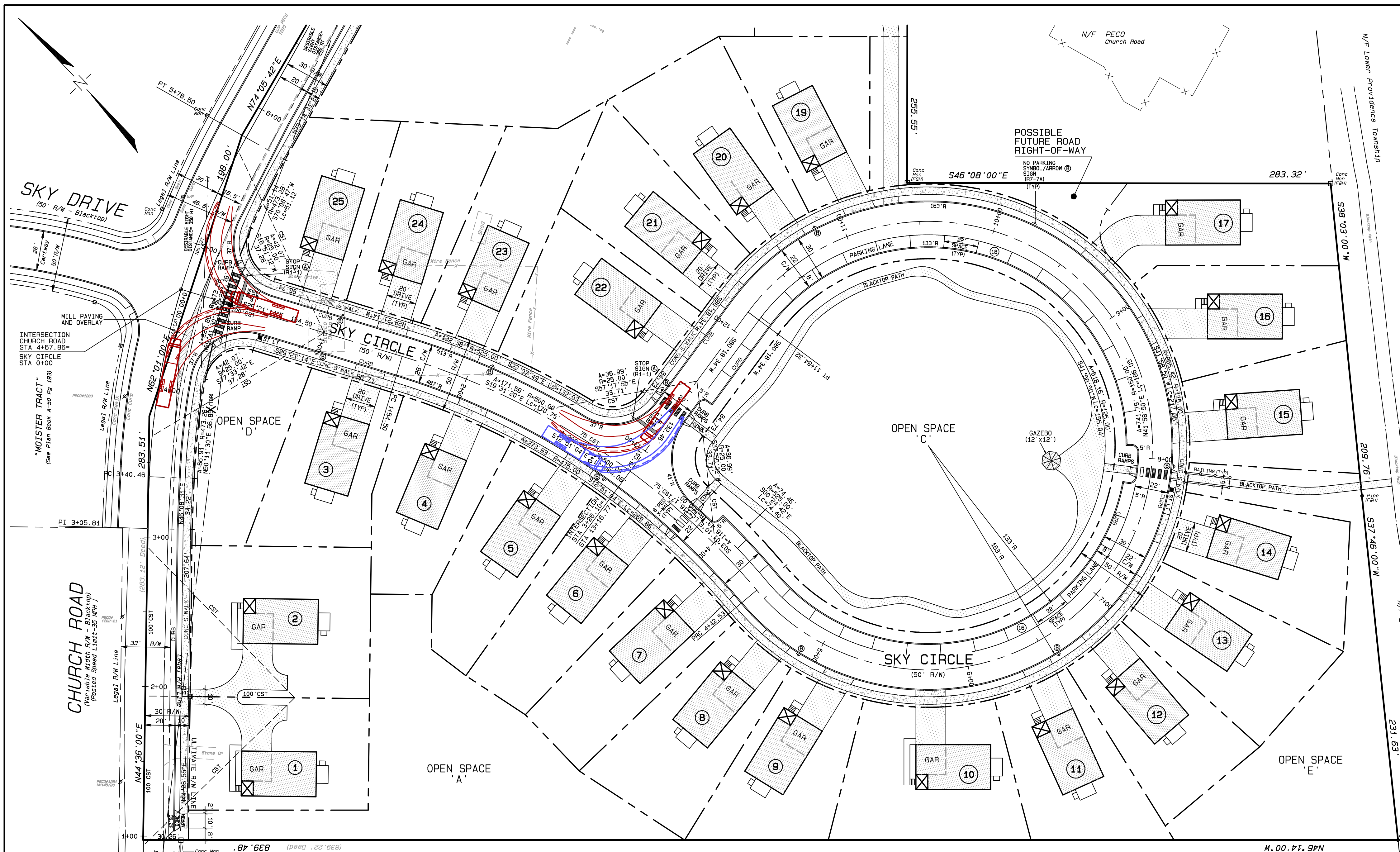
PREPARED BY :
JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors



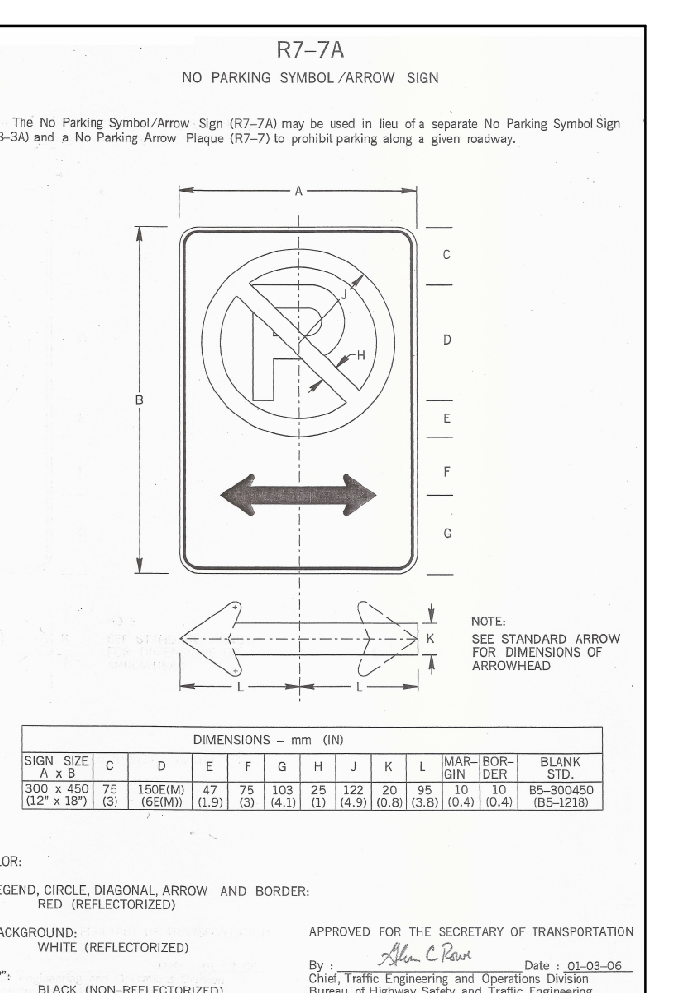
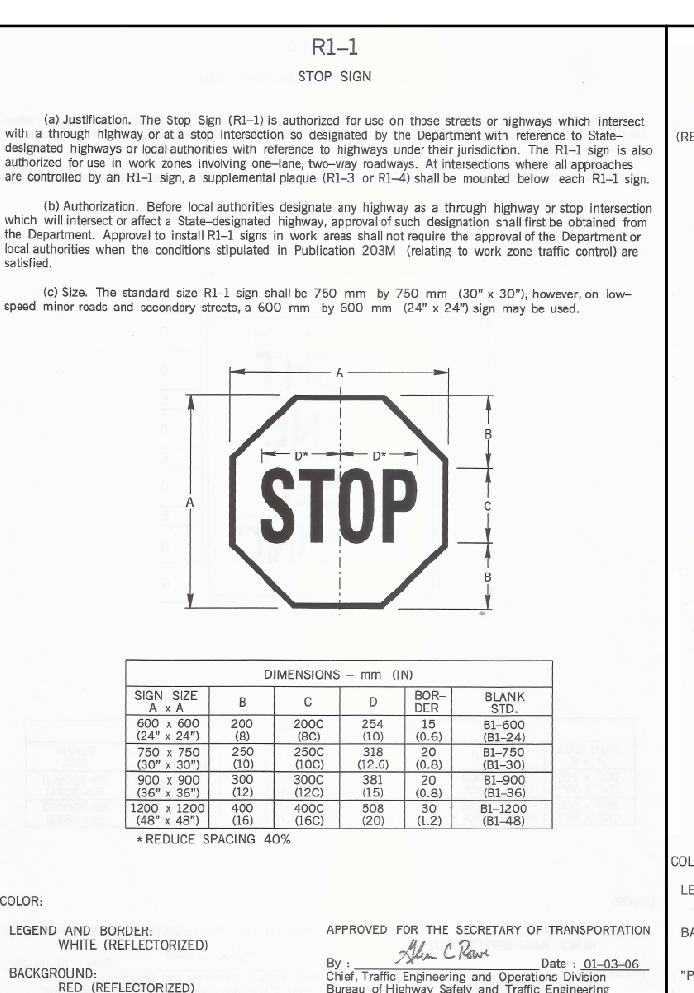
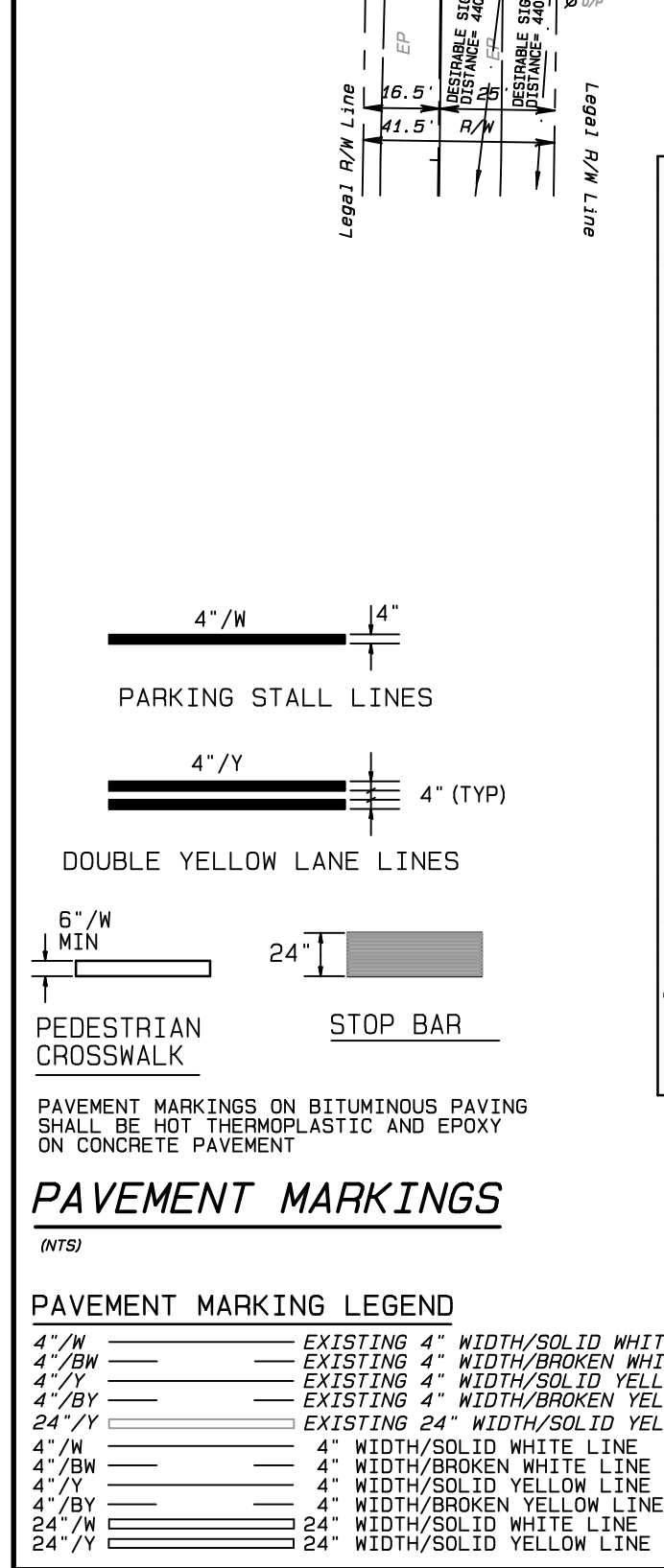
UNDERGROUND UTILITIES
PA. ACT 187 OF 1996-ONE CALL NOTIFICATION (1-800-242-1776)
DATE: 11-09-2019 SERIAL NO.: 20193090729

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITIES RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE UTILITIES OR STRUCTURES IS NOT GUARANTEED NOR IS IT GUARANTEED THAT ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE OF UTILITIES AND FOR NOTIFYING THE UTILITY COMPANIES AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF SAME.

SCALE	DATE	FILE NO.	FIELD BOOK	SHT. NO.
1" = 40'	31 MARCH 2021	05078	314	3 of 20



PROPOSED GUEST ON-STREET PARKING:
34 SPACES (8'x22')



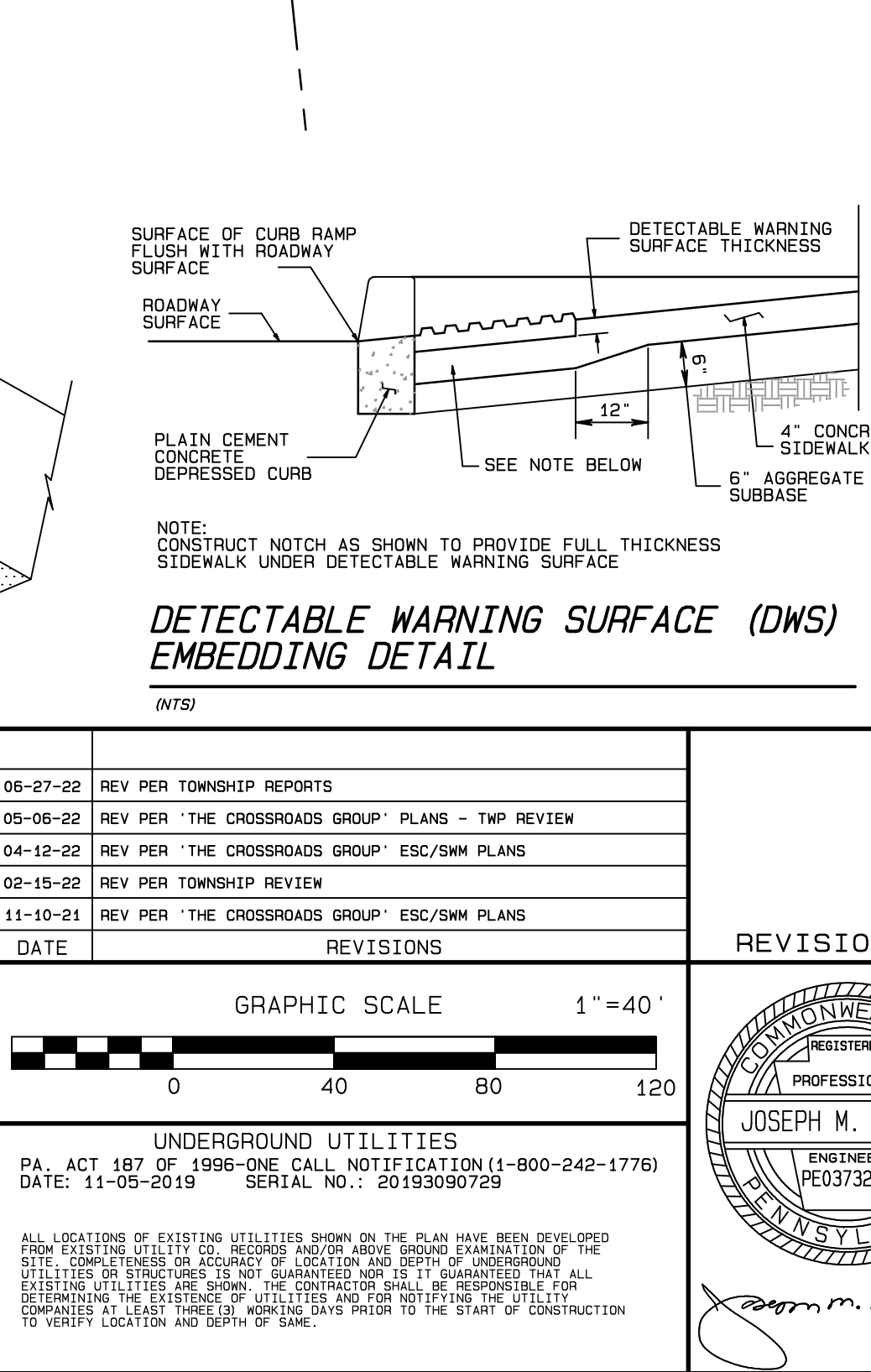
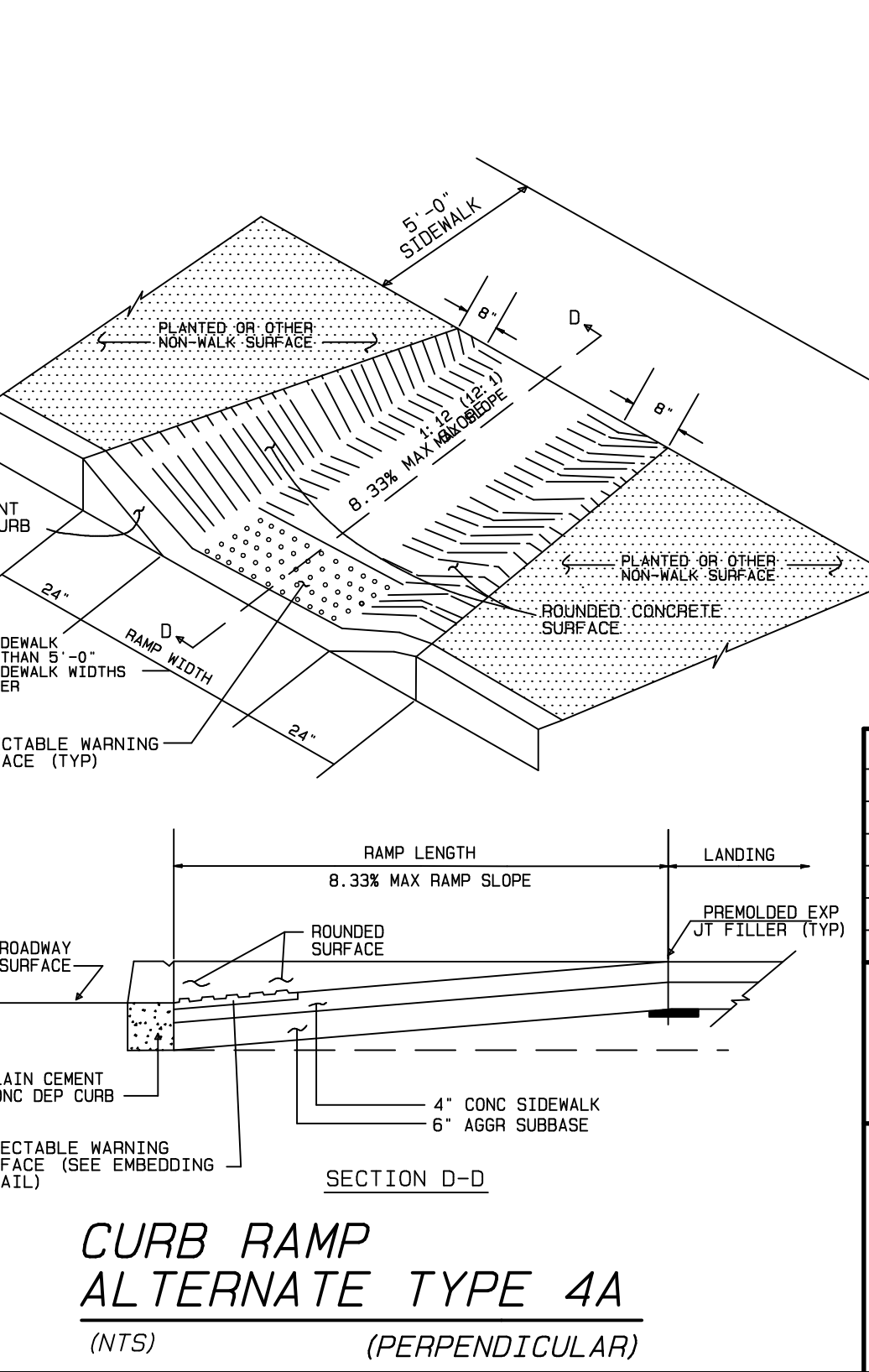
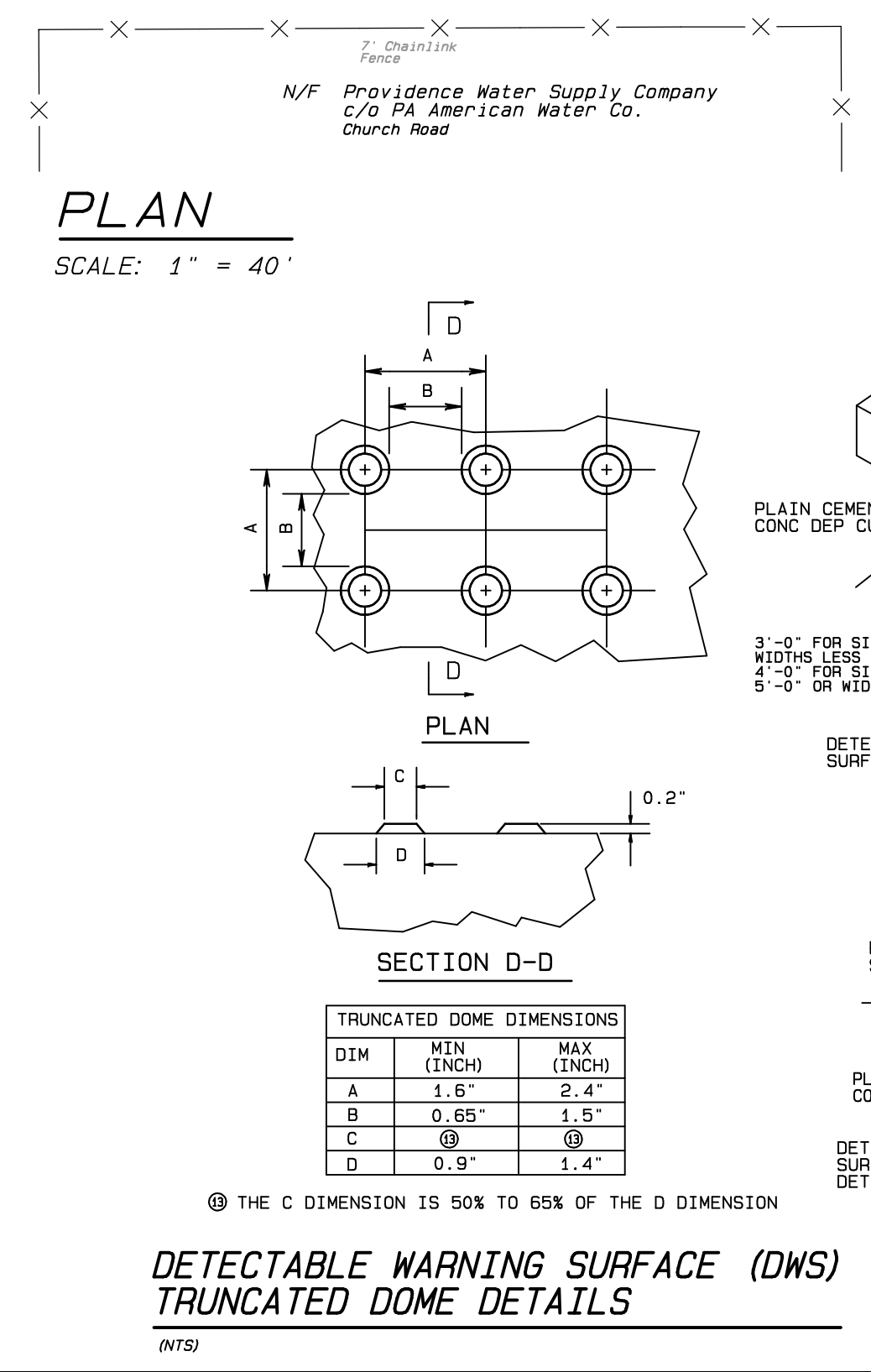
PennDOT SIGN DETAILS
(NTS)

NOTE: ALL PROPOSED SIGNS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS. (IDENTIFIED BY DESIGNATION CODE AND SIZE)

SYMBOL	NOMENCLATURE	DESCRIPTION	SIZE	QTY.
A	R1-1	STOP SIGN	30" x 30"	2
B	R7-7A	NO PARKING SYMBOL/ARROW SIGN	12" x 18"	10

NOTE: SEE DETAILS THIS SHEET FOR COLOR OF SIGNS

4 EXISTING SIGN
4 NEW SIGN



DATE	REVISIONS
06-27-22	REV PER TOWNSHIP REPORTS
05-06-22	REV PER 'THE CROSSROADS GROUP' PLANS - TWP REVIEW
04-12-22	REV PER 'THE CROSSROADS GROUP' ESC/SWM PLANS
02-12-22	REV PER TOWNSHIP REVIEW
11-10-21	REV PER 'THE CROSSROADS GROUP' ESC/SWM PLANS

REVISION NO.

PROJECT TITLE :
CHURCH RD SUBDIVISION
PREPARED FOR:
BRANCA CONSTRUCTION COMPANY, INC
LOWER PROVIDENCE TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

DRAWING TITLE :
**SKY CIRCLE
DETAILS AND LAYOUT PLAN**

PREPARED BY :
JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors

933 Mystic Lane
Eagleville, PA 19403-3614
(610) 666-0257
joe@josephmestock.com

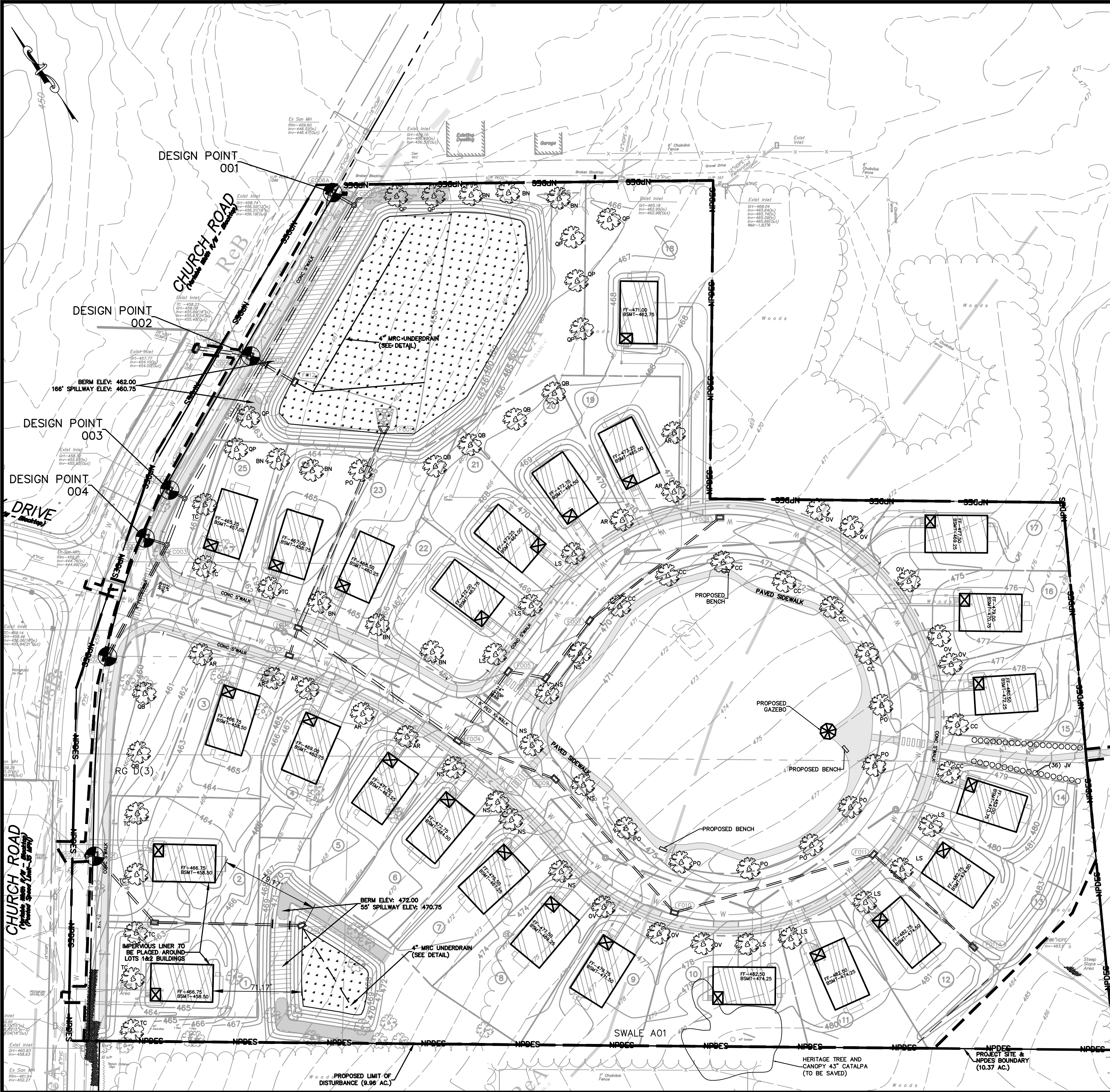
SCALE: 1" = 40'
OR AS NOTED

DATE: 31 MARCH 2021

FILE NO.: 05078

FIELD BOOK: 314

SHT. NO.: 4 of 20



LANDSCAPING NOTES:

PLANTING SCHEDULE -- ALL PLANT MATERIAL IS TO BE PLANTED NO EARLIER THAN 15 AND MAY CONTINUE THROUGH JUNE 15 OR BEGIN SEPTEMBER 1 BUT CONTINUE NO LATER THAN OCTOBER 15. DO NOT INSTALL PLANT MATERIALS WHEN TEMPERATURES ARE BELOW 35 DEGREES FAHRENHEIT OR ABOVE 80 DEGREES FAHRENHEIT.

GROUND COVER AND PLANTS -- DELIVERY IS TO BE SCHEDULED TO AVOID ON SITE STORAGE. IF PLANTING DOES NOT OCCUR ON SAME DAY AS DELIVERY, STORE PLANTS IN LOCATION PROTECTED FROM SUN AND WEATHER. ALL TREES AND SHRUBS SHALL NOT BE PLANTED UNTIL ORDER TO PREVENT SHOCK. STOCK MUST BE COVERED FOR PROTECTION DURING TRANSPORTATION. STOCK SHALL BE BUNDLED TO PROTECT BRANCHES, BARK, AND ROOTS FROM DAMAGE. ALL PLANT MATERIALS MUST BE FRESHLY DUG UNLESS OTHERWISE APPROVED. STOCK MUST NOT BE DROPPED. STOCK MUST BE DELIVERED ONLY AFTER SOIL HAS BEEN PREPARED. HARVEST SCHEDULING WITH DELIVERY IN QUANTITIES SUITABLE FOR IMMEDIATE PLANTING. ANNUAL PLANTING CANNOT BE ACCOMPLISHED IMMEDIATELY. PROVIDE SHADE FROM WIND, PROTECT BALLS OR ROOTS FROM DRYING BY COVERING ALL TREES WITH MIST SAW DUST, WOOD CHIPS, SHREDED BARK OR OTHER SIMILAR MULCHING MATERIAL. PLANT MATERIAL SHALL BE SUITABLY WATERED DURING ON SITE STORAGE.

EXCAVATIONS FOR TREES AND SHRUBS -- PITS, BEDS, AND TRENCHES: EXCAVATE WITH SIDES VERTICAL, BOTTOM FLAT BUT WITH HIGH CENTER FOR DRAINAGE. DEGLAZE SIDES AND LOOSEN BOTTOM. MINIMUM DIMENSIONS FOR INDIVIDUAL PITS:

DIAMETER:
 -BALL OR ROOT SPREADS UP TO 2 FEET: 1-1/2 TIME ROOT SPREAD.
 -BALL OR ROOT SPREADS 2 TO 4 FEET: 1-1/2 TIME ROOTSPREAD.
 -BALL OR ROOT SPREADS OVER 4 FEET: ROOT BALL DIA. PLUS EIGHTEEN (18") INCHES.

PLANTING TREES AND SHRUBS:
 -BALLED OR BURLAPPED STOCK -- SET PLANTS IN EXCAVATION WITH TOP OF BALL OR ROOT SPREADS TO 2 TO 4 FEET. 1-1/2 TIME ROOTSPREAD.
 -ACHIEVE PLUMB: REMOVE BURLAP FROM TOP AND TOP 1/3 OF BALL. RETAIN BURLAP ON BOTTOM OF BALL. PLACE BACKFILL IN 3 TO 4 INCH THICK LAYERS. WORK EACH LAYER BY HAND TO COMPACT BACKFILL, AND ELIMINATE VOIDS. MAINTAIN PLUMB DURING BACKFILLING. BACKFILLING IS APPROXIMATELY 2/3 COMPLETE. SATURATE BACKFILL WITH WATER AND REPEAT UNTIL SUITABLE FILLED AND COMPACT. BACKFILLER MUST BE APPROXIMATELY 2/3 COMPLETE. PROVIDE EARTH WATERING BASIN SAUCERS, AS INDICATED ON THE PLANS, AND WATER STOCK CONTAINER. REMOVE BURLAP IMMEDIATELY BEFORE PLACING. REMOVE CONTAINER OR CAN SET AND PLUMB PLANTS. PLACE INITIAL BACKFILL AND REMOVE SIDES OF CONTAINER, TAKING CARE TO AVOID DAMAGE TO ROOT SYSTEM.

MAINTAIN PROPER SEPARATION BETWEEN TREES AND UTILITIES. TREES MUST BE PLANTED AT A MINIMUM DISTANCE OF 2' (THREE FEET) FROM CURBS AND SIDEWALKS, 15' (FIFTEEN FEET) FROM OVERHEAD UTILITIES, AND 10' (TEN FEET) FROM UNDERGROUND UTILITIES. SHRUBS MUST BE PLANTED A MINIMUM DISTANCE OF 5' (FIVE FEET) FROM CURBS.

THE PROFESSIONAL SERVICES OF THE DESIGN PROFESSIONAL, DO NOT EXTEND TO OR INCLUDE THE REVIEW OR SITE OBSERVATION OF THE CONTRACTOR'S WORK OR REPAIRS, UNLESS OTHERWISE SPECIFIED AND AGREED. IT IS FURTHER AGREED THAT THE OWNER WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE DESIGN PROFESSIONAL FROM ANY CLAIM OR SUIT WHATSOEVER ARISING FROM THE CONTRACTOR'S PERFORMANCE OR THE FAILURE OF THE CONTRACTOR'S WORK TO CONFORM TO THE DESIGN INTENT AND THE CONTRACT DOCUMENTS.

SEDEL PLANNING & DESIGN, LTD. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATION OF THE EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLANS. NOR DOES SEDEL PLANNING & DESIGN, LTD. GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION & PERFORM A PENNSYLVANIA ONE CALL IN ACCORDANCE WITH THE PA ACT 199.

LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES IN ACCORDANCE WITH PENNSYLVANIA ACT 287 OF 1974 AS AMENDED BY PENNSYLVANIA ACT 187 OF 1994. ONE CALL SYSTEM. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. SANITARY SEWER, WATER, ELECTRIC, GAS AND ALL OTHER UTILITY SERVICES CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING CROSSINGS WITH EXISTING UNDERGROUND INSTALLATION SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

ACT 121 NOTIFICATION

THE UNDERGROUND UTILITY LINE PROTECTION LAW (ACT 121 AMENDS ACT 287 OF 1974) (SITE SERIAL NO. 20193090729)

LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT 121 OF 2004, ACT 187 OF 1994, ACT 172 OF 1986 AND ACT 287 OF 1974, CONTRACTORS MUST VERIFY LOCATIONS OF UNDERGROUND UTILITIES BY NOTIFYING FACILITY OWNERS THROUGH THE ONE-CALL SYSTEM, 1-800-242-1776, NO LESS THAN 3, NOR MORE THAN 10 DAYS PRIOR TO EXCAVATION OR DEMOLITION WORK.

TREE SAMPLING DATA

SAMPLING DATE: NOVEMBER 16, 2019
 ATTENDEES: DANIEL MALLACH, JOSEPH M. ESTOCK, ANTHONY C. BRANCA

STATEMENT OF WOODLAND CONDITION: REMARKABLY POOR QUALITY WOODLAND, WITH A HIGH PERCENTAGE OF INVASIVE PEAR AND NORWAY MAPLE TREES, AND ASH TREES WITH EMERALD ASH BORER INFESTATION. THE SITE IS RIFE WITH INVASIVE UNDERSTORY AND WINING PLANTS AS WELL -- MULTIFLORA ROSE, HONKYDORIE, PORCELAINBERRY (WILD GRAPE), WINNIBERRY (ASIAN RASPBERRY).

WOODLAND RECOMMENDATION: FOR THE OPEN SPACE TO BE SAFE AND USEFUL TO FUTURE RESIDENTS, SOME TARGETED CLEARING OF AT LEAST THE INVASIVE UNDERSTORY AND THE INVASIVE TREES WOULD BE APPROPRIATE.

REPLACEMENT TREES PROVIDED: 14 TREES @ 2.5" CALIPER

GENERAL NOTES

1. REFERENCE THE POST CONSTRUCTION STORMWATER MANAGEMENT NARRATIVE FOR ALL BMP CALCULATIONS, AS LAST REVISED.
2. ALL BMP CALCULATIONS, LAYOUT AND DESIGN ARE BASED ON CURRENT (PRE CONSTRUCTION) FIELD CONDITIONS, AS OBSERVED DURING THE FIELD TESTING. REFER TO THE PERMEABILITY TESTING REPORT PREPARED BY SEI BATHON, COPS, PWS, SO, FOR INFORMATION TESTING RESULTS.
3. AREAS(S) OF BMP(S) SHALL BE LIMITED TO LIGHT EQUIPMENT AND LOW IMPACT CONSTRUCTION ACCESS (OR AS EXPLICITLY DEFINED WITHIN THE POST CONSTRUCTION STORMWATER MANAGEMENT NARRATIVE), TO BE MONITORED BY THE SITE CONTRACTOR AT ALL TIMES. ANY CHANGES TO THESE CONDITIONS WILL IMPACT THE DESIGN OF THE BMP(S) AND SHOULD BE REPORTED TO THE OWNER/APPLICANT FOR FURTHER REVIEW. NO PROVISIONS WITHIN THESE PLANS (GEN. OR SPEC.) OR GUARANTEE SITE MONITORING DURING CONSTRUCTION AND/OR POST CONSTRUCTION. ALL MONITORING AND/OR TESTING DURING AND AFTER CONSTRUCTION WILL BE THE SOLE RESPONSIBILITY OF THE OWNER/APPLICANT, OR THEIR ASSIGNED REPRESENTATIVE.
4. ANY BMP ADJUSTMENTS OR MODIFICATIONS DURING CONSTRUCTION SHALL BE APPROVED BY THE OWNER/APPLICANT AND THOSE HAVING JURISDICTION, PRIOR TO MAKING FIELD CHANGES. PLAN REVISIONS WILL BE THE SOLE RESPONSIBILITY OF THE OWNER/APPLICANT, OR THEIR ASSIGNED REPRESENTATIVE.
5. ALL TREES OF AN INVASIVE SPECIES SHALL BE REMOVED FROM THE SITE PER DIRECTION OF THE TOWNSHIP LANDSCAPE ARCHITECT.

BASIN BOTTOM SEED MIX

THE FOLLOWING SEED MIX IS TO BE INSTALLED IN AREAS ON THE PLAN NOTED AS BASIN BOTTOM SEED MIX.

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
PANICUM CLANDESTINUM	30.0	ASCLEPIAS INCARNATA	0.2
ELYMIS VIRGINICUS	28.3	SCORPUS CPERNIUM	0.2
CAREX VULPINOIDEA	11.0	ASTER NOVAE-ANGIAE	0.1
CAREX LURIDA	2.0	ASTER PRENANTHODES	0.1
CAREX SCORPUS	3.5	ASTRagalus SP.	0.1
CAREX LUPULINA	3.0	EUPATORIUM FISTULOSUM	0.1
ELYMIS VIRGINICUS	3.0	EUPATORIUM PERFOROLIUM	0.1
AGROSTIS PENNSYLVANICA	1.0	HELENIUM AUTUMNALE	0.1
JUNCUS EFFUSUS	0.5	LOBELIA SP.	0.1
AGROSTIS PENNSYLVANICA	0.5	SCORPUS ATROVENSIS	0.1
CAREX INTUMESCENS	0.5		

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE.

TO REDUCE SOIL COMPACTION AND IMPROVE INFILTRATION OF SLOW DRAINAGE BASINS DRAIN TYPE FORAGE VARIETY RADISH SHALL BE PLANTED AT BASIN BOTTOM.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

BASIN SIDE SLOPE SEED MIX

THE FOLLOWING SEED MIX IS TO BE INSTALLED IN AREAS ON THE PLAN NOTED AS BASIN SIDE SLOPE SEED MIX.

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
PANICUM VIRGATUM	25.0		
PANICUM CLANDESTINUM	25.0		
CAREX VULPINOIDEA	22.0		
ELYMIS VIRGINICUS	22.0		
AGROSTIS PENNSYLVANICA	6.0		
JUNCUS EFFUSUS	1.0		
PANICUM VIRGATUM	1.0		

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE, OR 1/2 LBS TO 1/2 LBS PER 100 SQ. FT.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

RAIN GARDENS BEDS

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
SOEZHAGRYHUM SCOPARIUM	39.0	BAPTISIA AUSTRALIS	0.5
ELYMIS VIRGINICUS	15.0	CAREX SCOPARIA	0.5
CHAMAERIS LATIFOLIUM	8.0	EUPATORIUM COLEOSTEMUM	0.5
PANICUM VIRGATUM	6.4	PHYCANTHEM TENUEFOLIUM	0.5
CHAMAERIS FASCICULATA	4.0	SENNA HERCOPATA	0.5
COREOPSIS LANCEOLATA	4.0	TRICHAERIS	0.5
RUPEA CANADENSE	3.0	TRICHAERIS	0.5
CAREX VULPINOIDEA	2.0	TRICHAERIS	0.5
HELOPSIS HELIANTHODES	2.0	MONARDA FISTULOSA	0.4
VERBENA HASTATA	1.5	AGROSTIS PENNSYLVANICA	0.3
HELOPSIS HELIANTHODES	1.5	AGROSTIS PENNSYLVANICA	0.3
JUNCUS EFFUSUS	1.0	HELENIUM AUTUMNALE	0.3
TRICHAERIS	1.0	HELENIUM AUTUMNALE	0.3
PANICUM SPICATUM	1.0	ASTER LAMINATUS	0.2
PANICUM SPICATUM	1.0	SALICAGO PATULA	0.2
PANICUM SPICATUM	1.0	VERONICASTRUM VIRGINICUM	0.2

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE WITH A COVER CROP OF GRASS RYE AT 30 LBS. PER ACRE.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

MRC AMENDED SOILS

SOIL TYPE	PERCENT (%) OF MIX BY WEIGHT
CONSTRUCTION SAND (ASHSTO M-6 OR ASTM C-33)	50-60%
TOPSOIL W/ <5% CLAY & <5% COMPOST	20-30%
1B	20-30%

30 MIL IMPERMEABLE LINER AND 1" OF THE ABOVE SHALL BE INSTALLED IN THE BOTTOM OF EACH RAIN GARDEN WITH MRC. WHEN THE UNDERDRAIN AND GRAVEL ELEMENTS SHALL BE INSTALLED, THEN THE ABOVE SHALL BE INSTALLED TO 2" BELOW THE LEVEL OF THE LOWEST ORIFICE AND GRADE EDGES TO SIDE SLOPES OF THE BERM.

2" OF PLANTING SOIL MIX SHALL BE INSTALLED ON TOP.

SOILS DATA

SOILS DATA OBTAINED FROM A SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA, ISSUED JUNE 5, 2020.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

U0B (SOIL RATING N/A) -- URBAN LAND--WOODHURTS, HALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES -- N/A

RESOLUTIONS
 CORROSION OF CONCRETE/STEEL -- CONCRETE/STEEL MAY NEED TO BE WRAPPED IN CORROSION RESISTANT MATERIAL.
 DEPTH TO SATURATED ZONE/WATER TABLE -- U-DRAIN MAY BE REQUIRED FOR ANY SPRINGS ENCOUNTERED. PUMPED WATER FILTER BAG MAY BE NEEDED DURING EXCAVATIONS.
 DEPTH TO BEDROCK -- HEAVY EXCAVATION EQUIPMENT MAY BE REQUIRED.
 PONDING -- PROVIDE POSITIVE DRAINAGE.

PLANTING SCHEDULE

REQUIREMENTS FOR SHADE TREE PLANTINGS ARE PER SECTION 123-52 OF THE LOWER PROVIDENCE TOWNSHIP S.A.L.D.O. PER SAID ORDINANCE, (1) SHADE TREES SHALL BE PLANTED ALONG BOTH SIDES OF EXISTING AND NEW STREETS AT INTERVALS NO LESS THAN 40 FEET AND NO MORE THAN 50 FEET.

PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
AR -- RED MAPLE	ACER RUBRUM	2-1/2" INCH CALIPER	B & B	8
PO -- AMERICAN SYCAMORE	PLATANUS OCCIDENTALIS	2-1/2" INCH CALIPER	B & B	8
TC -- LITTLELEAF LINDEN	TILIA CORDATA	2-1/2" INCH CALIPER	B & B	8
LS -- FRUITLESS SMEETUNG	LIQUIDAMBAR STYRACIUM	2-1/2" INCH CALIPER	B & B	8
OV -- EASTERN HOPHORNBEAM	OSTRYA VIRGINIANA	2-1/2" INCH CALIPER	B & B	8
NS -- BLACK TURPLE	NYSSA SYLVATICA	2-1/2" INCH CALIPER	B & B	8
BN -- RIVER BIRCH	BETULA NIGRA	2-1/2" INCH CALIPER	B & B	8
CC -- AMERICAN HORNBARK	CARPINUS CAROLINIANA	2-1/2" INCH CALIPER	B & B	8

EVERGREEN TREES

PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
JV--EMERALD SENTINEL E RED CEDAR	JUNIPERUS VIRGINIANA 'CORCORCOR'	2-1/2" INCH CALIPER	B & B	36

TOTAL TREES PROPOSED: 100

REPLACEMENT TREES

PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
OB -- SWAMP WHITE OAK	QUERCUS BICOLOR	2-1/2" INCH CALIPER	B & B	6
QP -- PIN OAK	QUERCUS PALUSTRIS	2-1/2" INCH CALIPER	B & B	8

TOTAL TREES PROPOSED: 14

BASIN SEEDING NOTES

SEED SHALL BE INSTALLED AS SOON AS PERMANENT BASIN CONSTRUCTION IS COMPLETE.

SITE PREPARATION:
 ELIMINATE ANY WEED GROWTH PRIOR TO SEED INSTALLATION USING AN APPROPRIATE HERBICIDE TO CONTROL UNDESIRABLE VEGETATION. SUPPLEMENT TOPSOIL WITH COMPOST. MAKE THROUGHOUT INTO THE TOP 8 INCHES OF SOIL. FOR OPTIMAL SEED ESTABLISHMENT, SOIL PH SHALL BE BETWEEN 5.5 AND 6.5.

SEEDING APPLICATION:
 CAREFULLY PROPAGATION SEED FOR THE ENTIRE AREA, BROADCAST SEED IN TWO SEPARATE APPLICATIONS BY APPLYING SEED AT HALF THE SUGGESTED RATE FOR EACH APPLICATION TO ENSURE EVEN AND ADEQUATE COVERAGE. AFTER THE FULL RATE OF SEEDING HAS BEEN ACHIEVED, FOLLOW BY ROLLING OR TRAKING SEED INTO THE TOP 1/2 INCH OF SOIL TO ACHIEVE GOOD SEED TO SOIL CONTACT. DO NOT ROLL OR TRAK THE SEED IF SOIL IS WET. COVER WITH A LIGHT LAYER OF SALT WAT.

MAINTENANCE:
 DURING THE FIRST YEAR, WHENEVER THE VEGETATION REACHES 12 TO 18 INCHES TALL, IT SHOULD BE MOVED TO NO LESS THAN 8 INCHES BY ROTARY MOWER OR WEED EATER/LINE TRIMMER TO PREVENT WEEDS FROM GOING TO SEED. DO NOT MOW WITH A LAWN MOWER. THEREAFTER, THE SEED AREA SHOULD BE MOWN TO THE GROUND ONCE ANNUALLY IN EARLY SPRING.

INFILTRATION BASINS

BASIN BOTTOM SEED MIX

THE FOLLOWING SEED MIX IS TO BE INSTALLED IN AREAS ON THE PLAN NOTED AS BASIN BOTTOM SEED MIX.

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
PANICUM CLANDESTINUM	30.0	ASCLEPIAS INCARNATA	0.2
ELYMIS VIRGINICUS	28.3	SCORPUS CPERNIUM	0.2
CAREX VULPINOIDEA	11.0	ASTER NOVAE-ANGIAE	0.1
CAREX LURIDA	2.0	ASTER PRENANTHODES	0.1
CAREX SCORPUS	3.5	ASTRagalus SP.	0.1
CAREX LUPULINA	3.0	EUPATORIUM FISTULOSUM	0.1
ELYMIS VIRGINICUS	3.0	EUPATORIUM PERFOROLIUM	0.1
AGROSTIS PENNSYLVANICA	1.0	HELENIUM AUTUMNALE	0.1
JUNCUS EFFUSUS	0.5	LOBELIA SP.	0.1
AGROSTIS PENNSYLVANICA	0.5	SCORPUS ATROVENSIS	0.1
CAREX INTUMESCENS	0.5		

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE.

TO REDUCE SOIL COMPACTION AND IMPROVE INFILTRATION OF SLOW DRAINAGE BASINS DRAIN TYPE FORAGE VARIETY RADISH SHALL BE PLANTED AT BASIN BOTTOM.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

BASIN SIDE SLOPE SEED MIX

THE FOLLOWING SEED MIX IS TO BE INSTALLED IN AREAS ON THE PLAN NOTED AS BASIN SIDE SLOPE SEED MIX.

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
PANICUM VIRGATUM	25.0		
PANICUM CLANDESTINUM	25.0		
CAREX VULPINOIDEA	22.0		
ELYMIS VIRGINICUS	22.0		
AGROSTIS PENNSYLVANICA	6.0		
JUNCUS EFFUSUS	1.0		
PANICUM VIRGATUM	1.0		

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE, OR 1/2 LBS TO 1/2 LBS PER 100 SQ. FT.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

RAIN GARDENS BEDS

BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT	BOTANICAL NAME	PERCENT (%) OF MIX BY WEIGHT
SOEZHAGRYHUM SCOPARIUM	39.0	BAPTISIA AUSTRALIS	0.5
ELYMIS VIRGINICUS	15.0	CAREX SCOPARIA	0.5
CHAMAERIS LATIFOLIUM	8.0	EUPATORIUM COLEOSTEMUM	0.5
PANICUM VIRGATUM	6.4	PHYCANTHEM TENUEFOLIUM	0.5
CHAMAERIS FASCICULATA	4.0	SENNA HERCOPATA	0.5
COREOPSIS LANCEOLATA	4.0	TRICHAERIS	0.5
RUPEA CANADENSE	3.0	TRICHAERIS	0.5
CAREX VULPINOIDEA	2.0	TRICHAERIS	0.5
HELOPSIS HELIANTHODES	2.0	MONARDA FISTULOSA	0.4
VERBENA HASTATA	1.5	AGROSTIS PENNSYLVANICA	0.3
HELOPSIS HELIANTHODES	1.5	AGROSTIS PENNSYLVANICA	0.3
JUNCUS EFFUSUS	1.0	HELENIUM AUTUMNALE	0.3
TRICHAERIS	1.0	HELENIUM AUTUMNALE	0.3
PANICUM SPICATUM	1.0	ASTER LAMINATUS	0.2
PANICUM SPICATUM	1.0	SALICAGO PATULA	0.2
PANICUM SPICATUM	1.0	VERONICASTRUM VIRGINICUM	0.2

THE ABOVE SEED MIX SHALL BE INSTALLED AT THE RATE OF 20 LBS./ACRE WITH A COVER CROP OF GRASS RYE AT 30 LBS. PER ACRE.

SEED MIX IS AVAILABLE FROM ERNST CONSERVATION SEEDS, MEADVILLE, PA, 1-800-373-3321, WWW.ERNSTSEED.COM.

MRC AMENDED SOILS

SOIL TYPE	PERCENT (%) OF MIX BY WEIGHT
CONSTRUCTION SAND (ASHSTO M-6 OR ASTM C-33)	50-60%
TOPSOIL W/ <5% CLAY & <5% COMPOST	20-30%
1B	20-30%

30 MIL IMPERMEABLE LINER AND 1" OF THE ABOVE SHALL BE INSTALLED IN THE BOTTOM OF EACH RAIN GARDEN WITH MRC. WHEN THE UNDERDRAIN AND GRAVEL ELEMENTS SHALL BE INSTALLED, THEN THE ABOVE SHALL BE INSTALLED TO 2" BELOW THE LEVEL OF THE LOWEST ORIFICE AND GRADE EDGES TO SIDE SLOPES OF THE BERM.

2" OF PLANTING SOIL MIX SHALL BE INSTALLED ON TOP.

SOILS DATA

SOILS DATA OBTAINED FROM A SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA, ISSUED JUNE 5, 2020.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

U0B (SOIL RATING N/A) -- URBAN LAND--WOODHURTS, HALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES -- N/A

RESOLUTIONS
 CORROSION OF CONCRETE/STEEL -- CONCRETE/STEEL MAY NEED TO BE WRAPPED IN CORROSION RESISTANT MATERIAL.
 DEPTH TO SATURATED ZONE/WATER TABLE -- U-DRAIN MAY BE REQUIRED FOR ANY SPRINGS ENCOUNTERED. PUMPED WATER FILTER BAG MAY BE NEEDED DURING EXCAVATIONS.
 DEPTH TO BEDROCK -- HEAVY EXCAVATION EQUIPMENT MAY BE REQUIRED.
 PONDING -- PROVIDE POSITIVE DRAINAGE.

SOILS DATA

SOILS DATA OBTAINED FROM A SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA, ISSUED JUNE 5, 2020.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

RA (SOIL RATING C) -- READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES
 LIMITATIONS -- MODERATE CORROSION OF CONCRETE, HIGH CORROSION OF STEEL, DEPTH TO SATURATED ZONE, DEPTH TO BEDROCK, PONDING.

U0B (SOIL RATING N/A) -- URBAN LAND--WOODHURTS, HALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES -- N/A

RESOLUTIONS
 CORROSION OF CONCRETE/STEEL -- CONCRETE/STEEL MAY NEED TO BE WRAPPED IN CORROSION RESISTANT MATERIAL.
 DEPTH TO SATURATED ZONE/WATER TABLE -- U-DRAIN MAY BE REQUIRED FOR ANY SPRINGS ENCOUNTERED. PUMPED WATER FILTER BAG MAY BE NEEDED DURING EXCAVATIONS.
 DEPTH TO BEDROCK -- HEAVY EXCAVATION EQUIPMENT MAY BE REQUIRED.
 PONDING -- PROVIDE POSITIVE DRAINAGE.

PLANTING SCHEDULE

REQUIREMENTS FOR SHADE TREE PLANTINGS ARE PER SECTION 123-52 OF THE LOWER PROVIDENCE TOWNSHIP S.A.L.D.O. PER SAID ORDINANCE, (1) SHADE TREES SHALL BE PLANTED ALONG BOTH SIDES OF EXISTING AND NEW STREETS AT INTERVALS NO LESS THAN 40 FEET AND NO MORE THAN 50 FEET.

PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
AR -- RED MAPLE	ACER RUBRUM	2-1/2" INCH CALIPER	B & B	8
PO -- AMERICAN SYCAMORE	PLATANUS OCCIDENTALIS	2-1/2" INCH CALIPER	B & B	8
TC -- LITTLELEAF LINDEN	TILIA CORDATA	2-1/2" INCH CALIPER	B & B	8
LS -- FRUITLESS SMEETUNG	LIQUIDAMBAR STYRACIUM	2-1/2" INCH CALIPER	B & B	8
OV -- EASTERN HOPHORNBEAM	OSTRYA VIRGINIANA	2-1/2" INCH CALIPER	B & B	8
NS -- BLACK TURPLE	NYSSA SYLVATICA	2-1/2" INCH CALIPER	B & B	8
BN -- RIVER BIRCH	BETULA NIGRA	2-1/2" INCH CALIPER	B & B	8
CC -- AMERICAN HORNBARK	CARPINUS CAROLINIANA	2-1/2" INCH CALIPER	B & B	8

EVERGREEN TREES

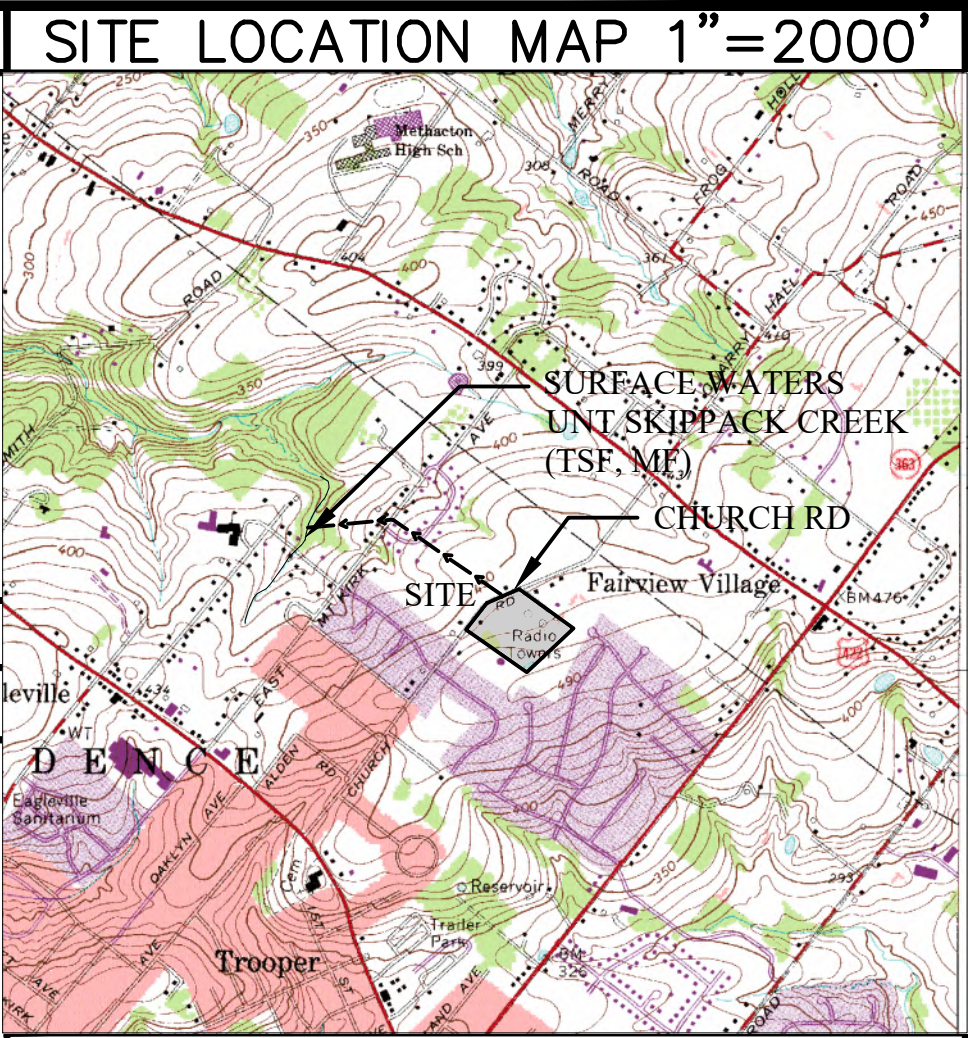
PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
JV--EMERALD SENTINEL E RED CEDAR	JUNIPERUS VIRGINIANA 'CORCORCOR'	2-1/2" INCH CALIPER	B & B	36

TOTAL TREES PROPOSED: 100

REPLACEMENT TREES

PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	NOTES	PROPOSED PLANTINGS
OB -- SWAMP WHITE OAK	QUERCUS BICOLOR	2-1/2" INCH CALIPER	B & B	6
QP -- PIN OAK	QUERCUS PALUSTRIS	2-1/2" INCH CALIPER	B & B	8

TOTAL TREES PROPOSED: 14



MAINTENANCE NOTES

POST CONSTRUCTION STORMWATER MANAGEMENT:

A. BEST MANAGEMENT PRACTICES (BMP)
 THE BMP'S SHALL BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION (HOA) IN PERPETUITY. THE MAINTENANCE WILL BE CONDUCTED ON A SHORT TERM AND LONG TERM SCHEDULE BY THE OWNER.

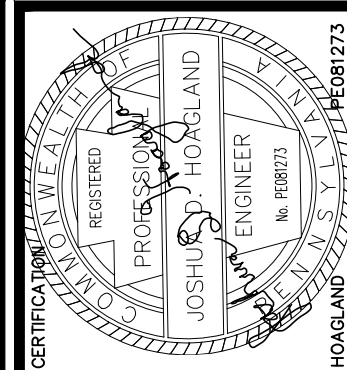
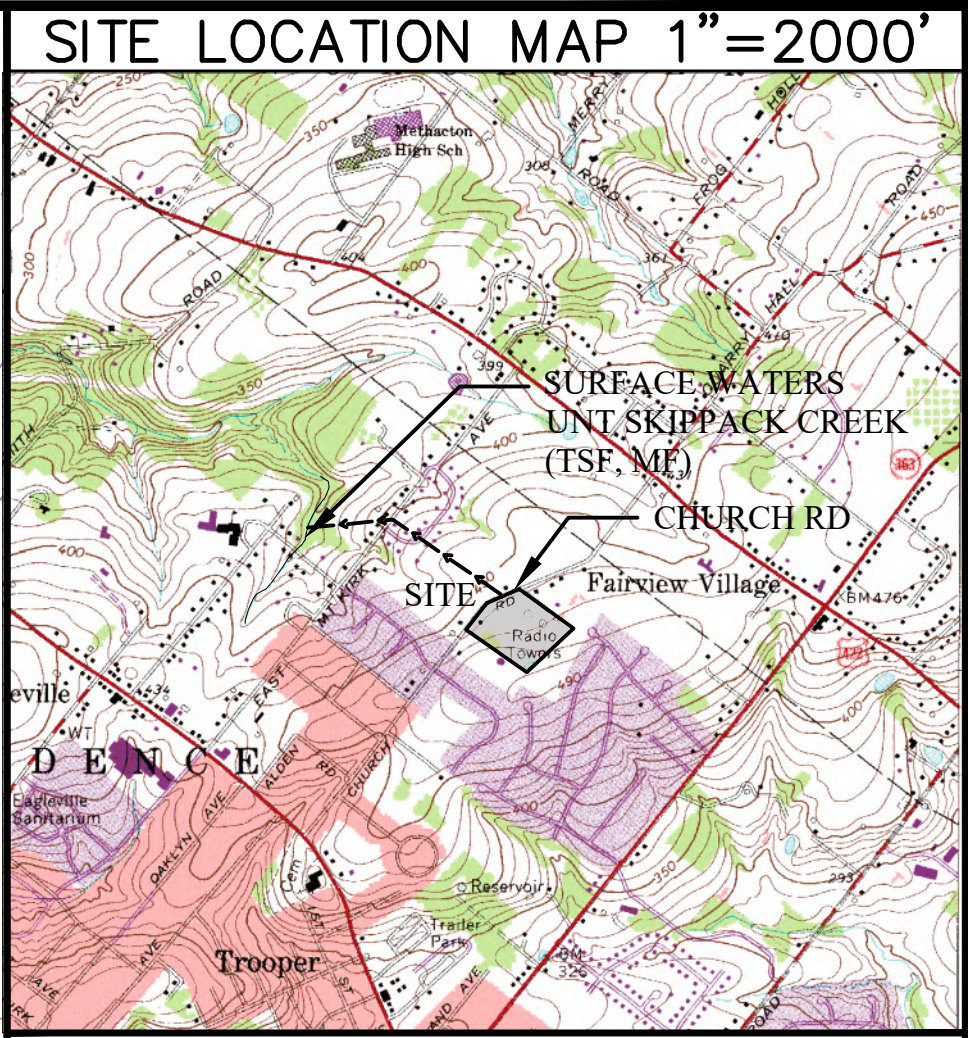
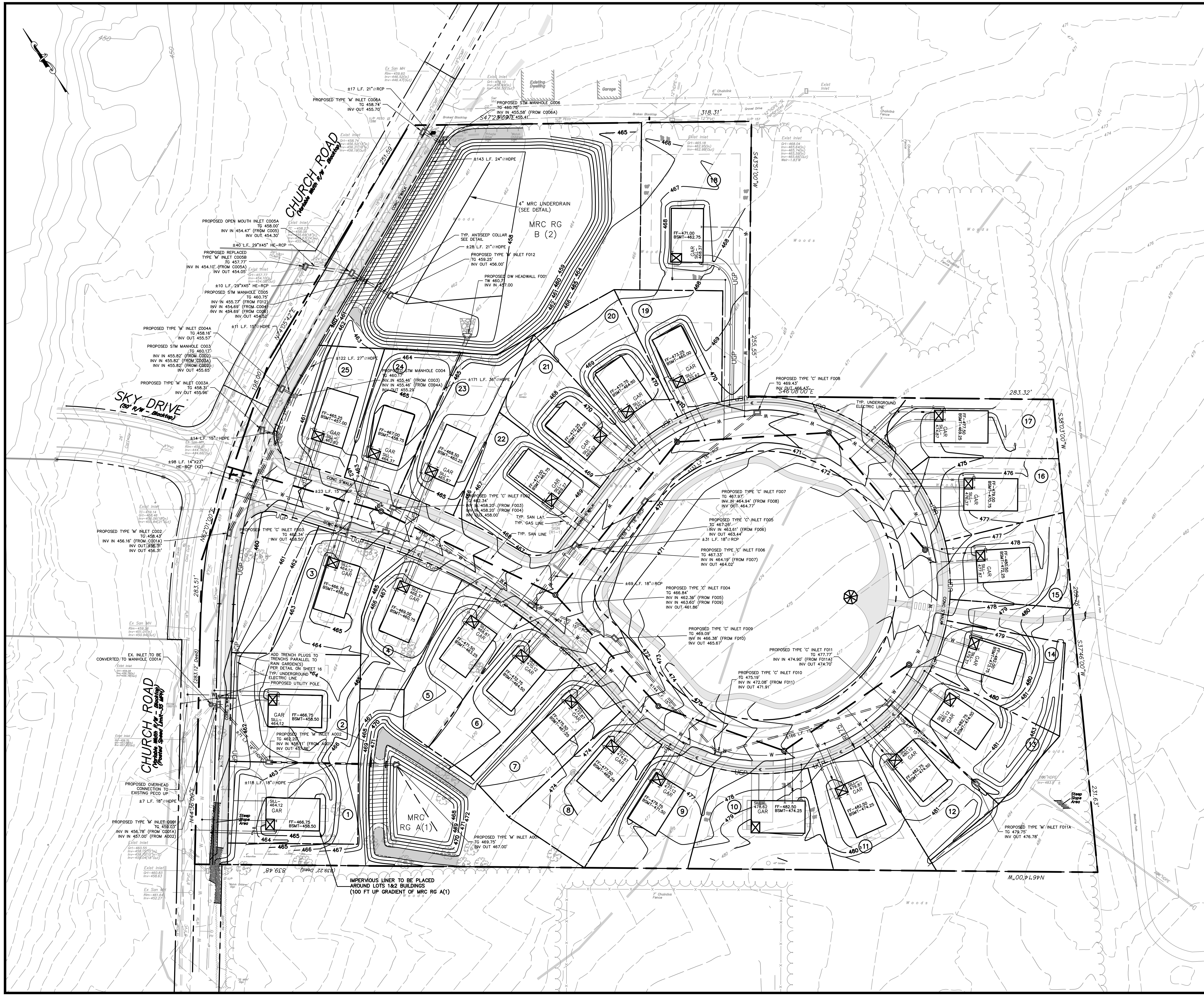
STORMWATER QUALITY HAS BEEN ADDRESSED WITH SEVERAL DEVICES. NATURALIZED SWALES, CONTAINING HIGH GRASSES, ARE UTILIZED TO CONVEY RUN-OFF TO THE STORMWATER MANAGEMENT AREA TO HELP IMPROVE WATER QUALITY PRIOR TO REACHING THE RAIN GARDEN. RAIN GARDENS HAVE BEEN UTILIZED TO HELP TRAP THE COLLECTED RUN-OFF PRIOR TO DISCHARGING TO THE EXISTING WETLANDS.

B. ALTHOUGH THERE ARE NO KNOWN PROJECT WASTES FOR THIS SITE, INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, WATER MANAGEMENT, AND LITTER CONTROL. WHENEVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED RATHER THAN DISPOSAL.

ALL BUILDING MATERIALS AND WASTES MUST BE PROPERLY STORED ON SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE TOWNSHIP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE CHAPTER 260, §2601 ET SEQ., 2711, AND 2871 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, BURIED, OR DISCHARGED ON THE SITE.

ALL OFF SITE WASTE AND BORROW AREAS MUST HAVE AN EAS PLAN APPROVED BY THE CONSERVATION DISTRICT OR DEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

C. MAINTENANCE
RAIN GARDENS WITH MRCS:
SHORT TERM MAINTENANCE:



CONSTRUCTION NOTES

- STORM SEWER**
- UNLESS OTHERWISE NOTED, ALL STORM SEWER INLETS SHALL BE EITHER PENNDOT TYPE "C" OR TYPE "M" AND SHALL CONFORM TO PENNDOT PUBLICATION 408 (LATEST EDITION).
 - UNLESS OTHERWISE NOTED, ALL STORM SEWER PIPING SHALL BE HDPE PIPE AND SHALL CONFORM TO PENNDOT PUBLICATION 408 (LATEST EDITION).
 - UNLESS OTHERWISE NOTED, ALL CONCRETE "TOW" ENDWALLS SHALL CONFORM TO PENNDOT PUBLICATION 408 (LATEST EDITION). THE TOP OF WALL ELEVATION FOR ALL ENDWALLS SHALL CONFORM TO THESE STANDARDS FOR THE ASSOCIATED PIPE SIZE. IN THE EVENT THAT A HIGHER TOP OF WALL ELEVATION IS NECESSARY FOR GRADING, THE "SPECIAL" TOP OF WALL ELEVATION SHALL BE NOTED ON THE PLANS.
 - THE TOP OF GRATE ELEVATION FOR ALL CURBSIDE STORM SEWER INLETS IS FOR THE CENTER OF THE INLET AT THE FACE OF CURB. THE CONTRACTOR SHALL PROJECT THE ROADWAY GRADE ALONG THE LENGTH OF THE INLET.
 - ALL STORM SEWER LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE SLOPES ARE CALCULATED BASED ON THIS LENGTH.
 - ALL LOTS SHALL BE PROPERLY GRADED TO ENSURE PROPER DRAINAGE AWAY FROM HOUSES TO THE NEAREST INLET OR WATERCOURSE WITHOUT PONDING OR OBSTRUCTION. A MINIMUM OF 2% SLOPE SHALL BE PROVIDED ON ALL GRASSED AREAS.

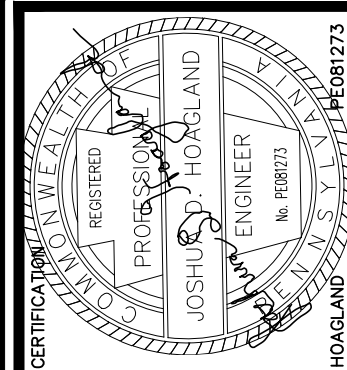
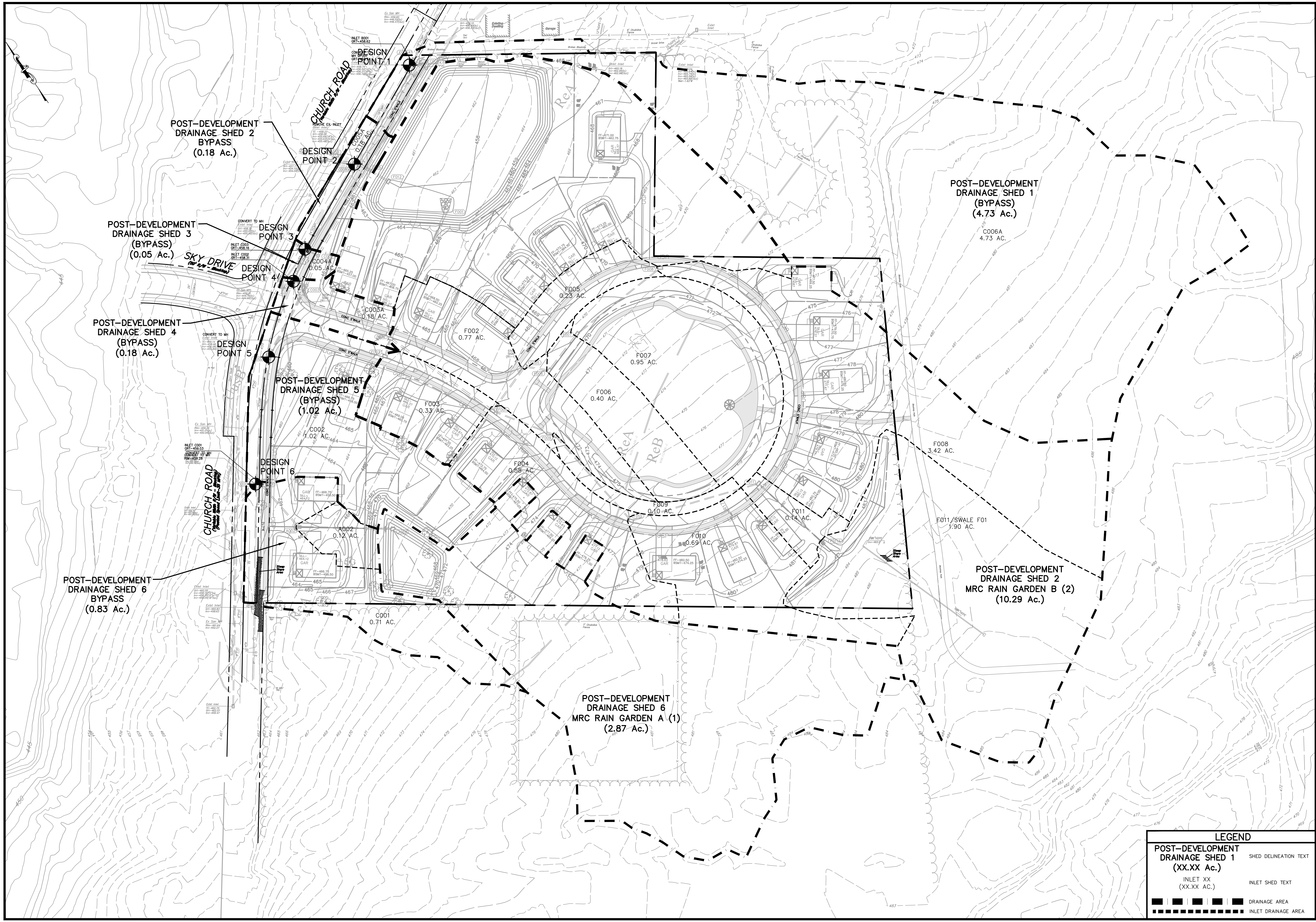
LEGEND

	BOUNDARY LINE
	EXISTING RIGHT-OF-WAY
	ADDING PROPERTY LINE
	EXISTING WATER LINE/SERVICE
	EXISTING STORM SEWER LINE/INLET
	EXISTING GAS LINE
	EXISTING ELECTRIC LINE (UNDERGROUND)
	EXISTING ELECTRIC LINE (OVERHEAD)
	EXISTING SANITARY SEWER LINE/MANHOLE
	EXISTING SANITARY LATERAL
	EXISTING CURB
	EXISTING EDGE OF ROAD (PAVED)
	EXISTING DRIVEWAY
	EXISTING CONTOUR
	EXISTING INDEX CONTOUR
	SOILS DELINEATION LINE
	EXISTING WOODLINE
	EXISTING BUILDINGS
	EXISTING UTILITY-POLE
	PROPOSED BUILDING
	PROPOSED BUILDING - SETBACK LINE
	PROPOSED ROAD CENTERLINE
	PROPOSED SEWER LATERAL
	PROPOSED STORM SEWER - PIPING
	PROPOSED WATER LINE
	PROPOSED CURBLINE
	PROPOSED DRIVEWAY
	PROPOSED GAS LINE
	PROPOSED GARAGE
	PROPOSED CONCRETE
	PROPOSED OVERHEAD ELECTRIC
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED RIP-RAP
	PROPOSED TRAFFIC SIGN
	PROPOSED UTILITY POLE
	PROPOSED INLET
	PROPOSED STORM MANHOLE
	PROPOSED ALTERED TREE LINE
	PROPOSED SPILLWAY - HATCH
	PROPOSED BERM - HATCH
	PROPOSED CONTOUR
	PROPOSED INDEX
	PROPOSED LOT - PARCEL LINE

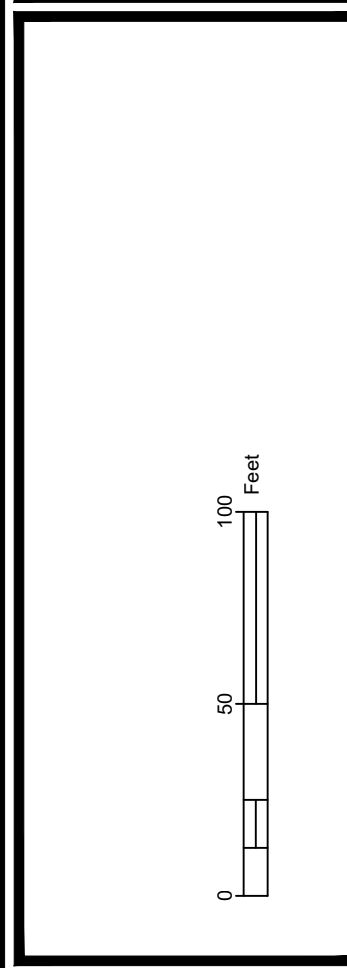
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 Fax: 717-633-2217
 CIVIL ENGINEERING & LAND DEVELOPMENT & SITE SURVEY & E-TELECON

E&S-PCSM UTILITY PLAN
 PREPARED AS PART OF THE
CHURCH RD SUBDIVISION
 PREPARED FOR
 BRANCA CONSTRUCTION COMPANY, INC.
 LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY,
 PENNSYLVANIA

PROJECT MANAGER	JH
DRAWING FILE NAME	ZCI-STORM
PLAN ORIGINATION DATE	10-27-21
PLAN LAST REVISED	6-27-22
PLAN SCALE	1" = 40'
PROJECT NUMBER	4162
SHEET NUMBER	14 OF 20



ENGINEERS CERTIFICATION
 REGISTERED PROFESSIONAL ENGINEER
 JOSHUA D. HOULIHAN
 No. 11474
 STATE OF PENNSYLVANIA



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 E-mail: info@crossroads.com
 CIVIL ENGINEERING & LAND DEVELOPMENT & SITE SURVEY & A/E TELECOM

INLET SHED PLAN
 PREPARED AS PART OF THE
CHURCH RD SUBDIVISION
 PREPARED FOR
 BRANCA CONSTRUCTION COMPANY, INC.
 LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY,
 PENNSYLVANIA

PROJECT MANAGER	JH
DRAWING FILE NAME	ZSHEDS
PLAN ORIGIN DATE	10-27-21
PLAN LAST REVISED	6-27-22
PLAN SCALE	1" = 50'
PROJECT NUMBER	4162
SHEET NUMBER	20 OF 20

LEGEND	
POST-DEVELOPMENT DRAINAGE SHED 1 (XX.XX Ac.)	SHED DELINEATION TEXT
INLET XX (XX.XX AC.)	INLET SHED TEXT
■	DRAINAGE AREA
---	INLET DRAINAGE AREA