# LAND DEVELOPMENT PLANS FOR FOR

# MOORE, SNEAR, & RUGGIERO FUNERAL HOME

BOROUGH OF TRAPPE, MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA

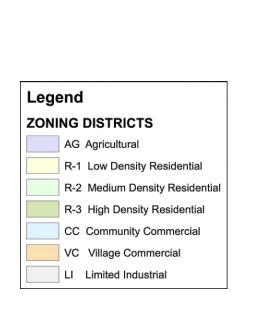
PROJECT: 2271-1E

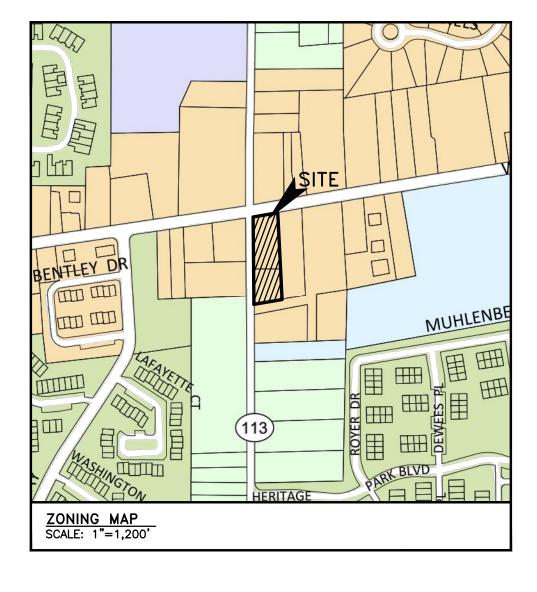
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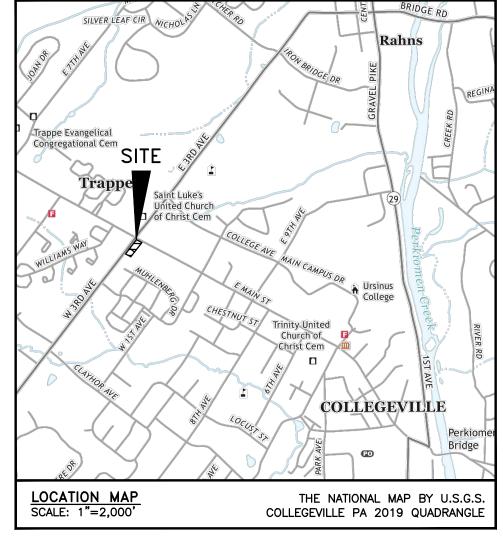
DONALD E JR & CINDY MOORE

224 W MAIN ST COLLEGEVILLE PA 19426

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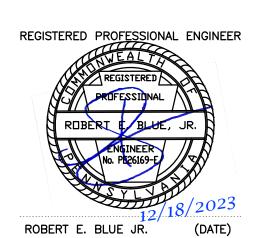






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PROVIDED PER
PA ACT 287 OF 1974
AS AMENDED BY
ACT 50 OF 2017
SERIAL #20220901398 Date:MARCH 31, 2022

ADDRESS: 360 GEES MILL, BUSINESS PKWY NE ADDRESS: 100 EAST HIGH STREET

COMPANY: POTTSTOWN WATER AUTHORITY

EMAIL: UTILITIES@POTTSTOWN.ORG

COMPANY: VERIZON PENNSYLVANIA LLC

EMAIL: deborah.d.delia@verizon.com

EMAIL: EWAGNER@POTTSTOWN.ORG

COMPANY: XO COMMUNICATIONS INC.

EMAIL: SCOTT.J.DREILING@XO.COM

ADDRESS: 1220 BROADCASTING ROAD

COMPANY: LOWER POTTSGROVE TOWNSHIP

POTTSTOWN, PA 19464

WYOMISSING, PA. 19610

CONTACT: DEBORAH BARUM

ADDRESS: 2199 BUCHERT RD

CONTACT: SCOTT DREILING

CONTACT: ED WAGNER

POTTSTOWNE, PA 19464

ADDRESS: 15 MONTGOMERY AVENUE, FLOOR 2

PITTSBURGH, PA. 15212

COMPANY: AT&T LOCAL SERVICES

CONTACT: NANCY SPENCE

ADDRESS 4400 WAYNE AVE...

CONTACT ROBERT HARVEY

ADDRESS: 1 APOLLO ROAD

CONTACT: NIKKIA SIMPKINS

CONTACT: TOM DEMSEY

COMPANY: COMCAST CABLEVISION

COMPANY: PECO ENERGY C/O USIC

ADDRESS 450 S HENDERSON RD

EMAIL: NIKKIASIMPKINS@USICLLC.COM

COMPANY: COMCAST

CONYERS, GA. 30013

PHILADELPHIA, PA. 19140

PLYMOUTH MEETING, PA. 19462

KING OF PRUSSIA, PA. 19406

EMAIL: bob\_harvey@cable.comcast.com

DRAWN BY:
DJG

DATE:
2023-12-18

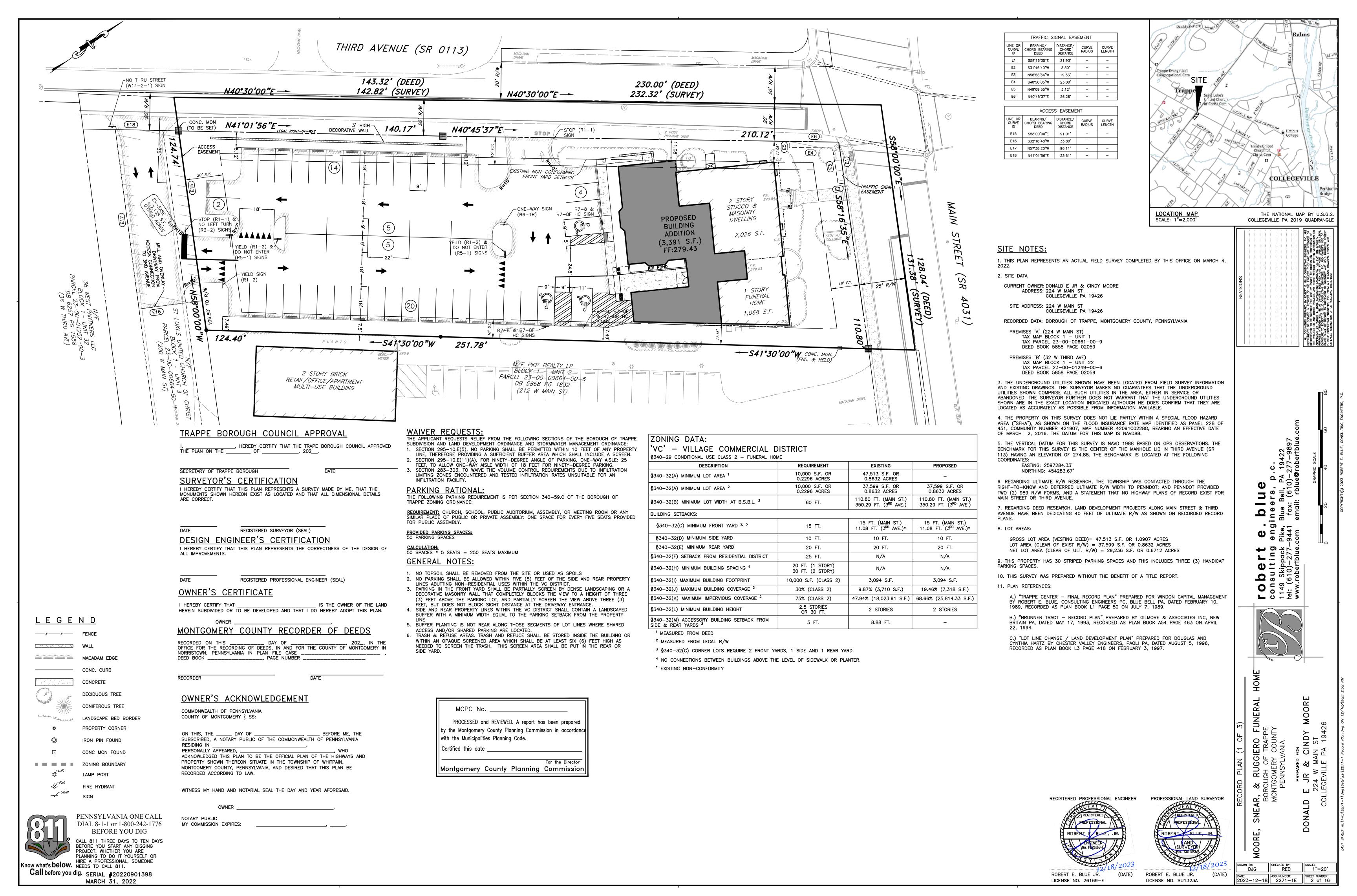
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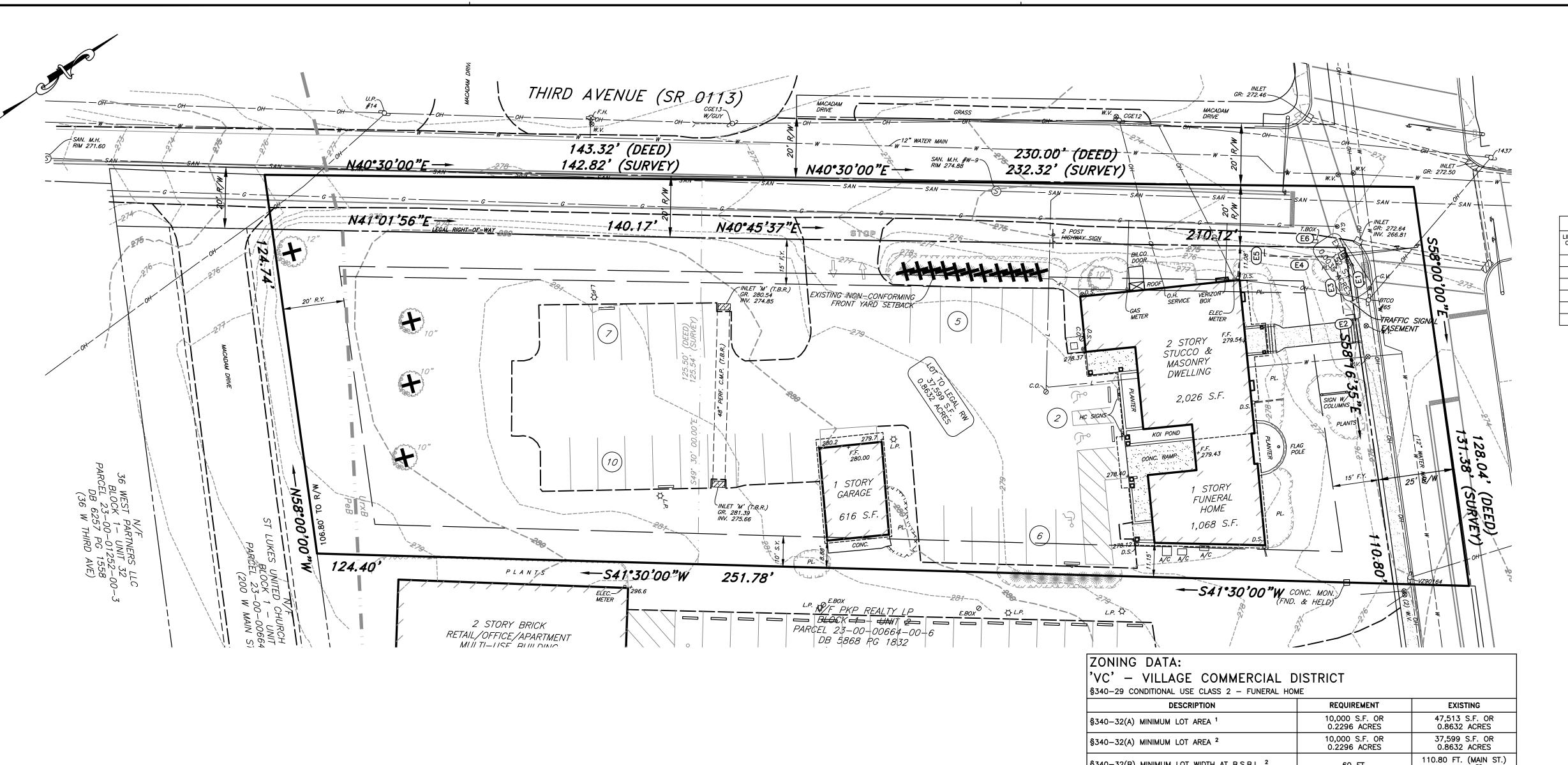
CHECKED BY:
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SCALE:
AS NOTED

SHEET NUMBER:
1 of 16

ALL DOCUMENTS PREPARED BY ROBERT E. BLUE CONSULTING ENGINEERS, P.C. ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR USE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ROBERT E. BLUE CONSULTING ENGINEERS, P.C. FOR THE SECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ROBERT E. BLUE CONSULTING ENGINEERS, P.C. AND OWNER'S USE OF PLANS SHALL BE DEEMED AN AGREEMENT TO INDEMNIFY AND HOLD HARMLESS ROBERT E. BLUE CONSULTING ENGINEERS, D.C. STORM ALL CLAIMS, DAMAGES, LOSSES, AND





DESCRIPTION	REQUIREMENT	EXISTING
§340-32(A) MINIMUM LOT AREA <sup>1</sup>	10,000 S.F. OR 0.2296 ACRES	47,513 S.F. OR 0.8632 ACRES
§340-32(A) MINIMUM LOT AREA <sup>2</sup>	10,000 S.F. OR 0.2296 ACRES	37,599 S.F. OR 0.8632 ACRES
§340-32(B) MINIMUM LOT WIDTH AT B.S.B.L. <sup>2</sup>	60 FT.	110.80 FT. (MAIN ST.) 350.29 FT. (3 <sup>RD</sup> AVE.)
BUILDING SETBACKS:		
§340-32(C) MINIMUM FRONT YARD <sup>2, 3</sup>	15 FT.	15 FT. (MAIN ST.) 11.08 FT. (3 <sup>RD</sup> AVE.)*
§340-32(D) MINIMUM SIDE YARD	10 FT.	10 FT.
\$340-32(E) MINIMUM REAR YARD	20 FT.	20 FT.
\$340-32(F) SETBACK FROM RESIDENTIAL DISTRICT	25 FT.	N/A
§340-32(H) MINIMUM BUILDING SPACING 4	20 FT. (1 STORY) 30 FT. (2 STORY)	N/A
\$340-32(I) MAXIMUM BUILDING FOOTPRINT	10,000 S.F. (CLASS 2)	3,094 S.F.
§340-32(J) MAXIMUM BUILDING COVERAGE <sup>2</sup>	30% (CLASS 2)	9.87% (3,710 S.F.)
§340-32(K) MAXIMUM IMPERVIOUS COVERAGE <sup>2</sup>	75% (CLASS 2)	47.94% (18,023.91 S.F.)
§340-32(L) MINIMUM BUILDING HEIGHT	2.5 STORIES OR 30 FT.	2 STORIES
§340-32(M) ACCESSORY BUILDING SETBACK FROM SIDE & REAR YARDS	5 FT.	8.88 FT.

MEASURED FROM DEED

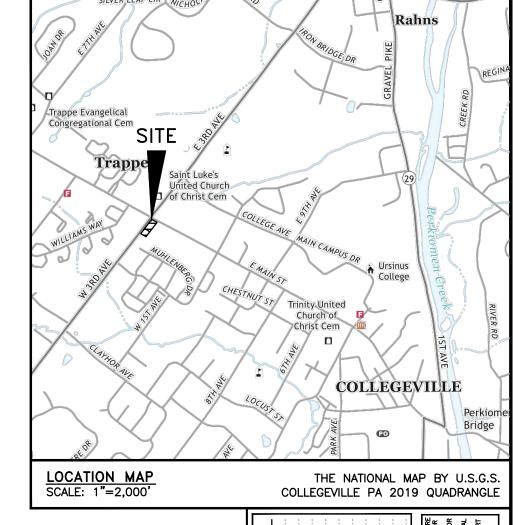
<sup>2</sup> MEASURED FROM LEGAL R/W

<sup>3</sup> §340–32(G) CORNER LOTS REQUIRE 2 FRONT YARDS, 1 SIDE AND 1 REAR YARD.

4 NO CONNECTIONS BETWEEN BUILDINGS ABOVE THE LEVEL OF SIDEWALK OR PLANTER.

\* EXISTING NON-CONFORMITY

TRAFFIC SIGNAL EASEMENT						
LINE OR CURVE ID	BEARING/ CHORD BEARING DEED	DISTANCE/ CHORD DISTANCE	CURVE RADIUS	CURVE LENGTH		
E1	S58°16'35"E	21.93'	-	-		
E2	S31*46'40"W	3.50'	-	-		
E3	N58*56'54"W	19.33'	-	-		
E4	S40*50'05"W	23.00'	_	-		
E5	N49°09'55"W	3.12'	_	_		
E6	N40°45'37"E	26.26'	_	_		



# **SURVEY NOTES:**

1. THIS PLAN REPRESENTS AN ACTUAL FIELD SURVEY COMPLETED BY THIS OFFICE ON MARCH 4, 2022.

2. SITE DATA

CURRENT OWNER: DONALD E JR & CINDY MOORE ADDRESS: 224 W MAIN ST COLLEGEVILLE PA 19426

SITE ADDRESS: 224 W MAIN ST COLLEGEVILLE PA 19426

RECORDED DATA: BOROUGH OF TRAPPE, MONTGOMERY COUNTY,

PREMISES 'A' (224 W MAIN ST)
TAX MAP BLOCK 1 - UNIT 1 TAX PARCEL 23-00-00661-00-9 DEED BOOK 5858 PAGE 02059

PREMISES 'B' (32 W THIRD AVE) TAX MAP BLOCK 1 - UNIT 22 TAX PARCEL 23-00-01249-00-6 DEED BOOK 5858 PAGE 02059

3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CONFIRM THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

4. THE PROPERTY ON THIS SURVEY DOES NOT LIE PARTLY WITHIN A SPECIAL FLOOD HAZARD AREA ("SFHA"), AS SHOWN ON THE FLOOD INSURANCE RATE MAP IDENTIFIED AS PANEL 228 OF 451, COMMUNITY NUMBER 421907, MAP NUMBER 42091C0228G, BEARING AN EFFECTIVE DATE OF MARCH 2, 2016. THE DATUM FOR THIS MAP IS NAVD88.

5. THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 1988 BASED ON GPS OBSERVATIONS. THE BENCHMARK FOR THIS SURVEY IS THE CENTER OF THE MANHOLE LID IN THIRD AVENUE (SR 113) HAVING AN ELEVATION OF 274.88.

6. REGARDING ULTIMATE R/W RESEARCH, THE TOWNSHIP WAS CONTACTED THROUGH THE RIGHT-TO-KNOW AND DEFERRED ULTIMATE R/W WIDTH TO PENNDOT; AND PENNDOT PROVIDED TWO (2) 989 R/W FORMS, AND A STATEMENT THAT NO HIGHWAY PLANS OF RÉCORD EXIST FOR MAIN STREET OR

7. REGARDING DEED RESEARCH, LAND DEVELOPMENT PROJECTS ALONG MAIN STREET & THIRD AVENUE HAVE BEEN DEDICATING 40 FEET OF ULTIMATE R/W AS SHOWN ON RECORDED RECORD PLANS.

# 8. LOT AREAS:

THREE (3) HANDICAP PARKING SPACES.

ROBERT E. BLUE JR.

LICENSE NO. 26169-E

GROSS LOT AREA (VESTING DEED)= 47,513 S.F. OR 1.0907 ACRES LOT AREA (CLEAR OF EXIST R/W) = 37.599 S.F. OR 0.8632 ACRES NET LOT AREA (CLEAR OF ULT. R/W) = 29,236 S.F. OR 0.6712 ACRES 9. THIS PROPERTY HAS 30 STRIPED PARKING SPACES AND THIS INCLUDES

10. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. 11. PLAN REFERENCES:

A.) "TRAPPE CENTER — FINAL RECORD PLAN" PREPARED FOR WINDON CAPITAL MANAGEMENT BY ROBERT E. BLUE, CONSULTING ENGINEERS PC, BLUE BELL PA, DATED FEBRUARY 10, 1989, RECORDED AS PLAN BOOK L1

B.) "BRUNNER TRACT - RECORD PLAN" PREPARED BY GILMORE & ASSOCIATES INC, NEW BRITAIN PA, DATED MAY 17, 1993, RECORDED AS PLAN BOOK A54 PAGE 463 ON APRIL 22, 1994.

C.) "LOT LINE CHANGE / LAND DEVELOPMENT PLAN" PREPARED FOR DÓUGLAS AND CYNTHIA HARTZ BY CHESTER VALLEY ENGINEERS, PAOLI PA, DATED AUGUST 5, 1996, RECORDED AS PLAN BOOK L3 PAGE 418 ON FEBRUARY 3, 1997.

FEATURES	RIIGGIFRO
NG	<u>ہ</u>

PROFESSIONAL LAND SURVEYOR

LICENSE NO. SU1323A

REGISTERED PROFESSIONAL ENGINEER ROBERT E. BLUE JR.

DRAWN BY:

DJG

CHECKED BY:

REB

SCALE:

1"=20' DATE: 2023-12-18 JOB NUMBER: SHEET NUMBER: 3 of 16

 $\Box$ 

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**2** n s

PENNSYLVANIA ONE CALL DIAL 8-1-1 or 1-800-242-1776 BEFORE YOU DIG CALL 811 THREE DAYS TO TEN DAYS

<u>L E G E N D</u>

—— — ∠ — — SANITARY LATERAL

————— ELECTRIC LINE

————————————OVERHEAD LINE

MACADAM EDGE

—————— CONC. CURB

CONCRETE

CONTOUR

DECIDUOUS TREE

CONIFEROUS TREE

CONTOUR INTERVAL

SPOT ELEVATION

PROPERTY CORNER

IRON PIN FOUND

CONC MON FOUND

ZONING BOUNDARY

LANDSCAPE BED BORDER

——*x*——*x*—— FENCE

WALL

STORM INLET TYPE 'C'

STORM INLET TYPE 'M'

STORM MANHOLE

SANITARY MANHOLE

WATER MANHOLE

ELECTRIC MANHOLE

TELEPHONE MANHOLE

GAS MANHOLE

CLEAN OUT

UTILITY POLE

LAMP POST

FIRE HYDRANT

WATER VALVE

GAS VALVE

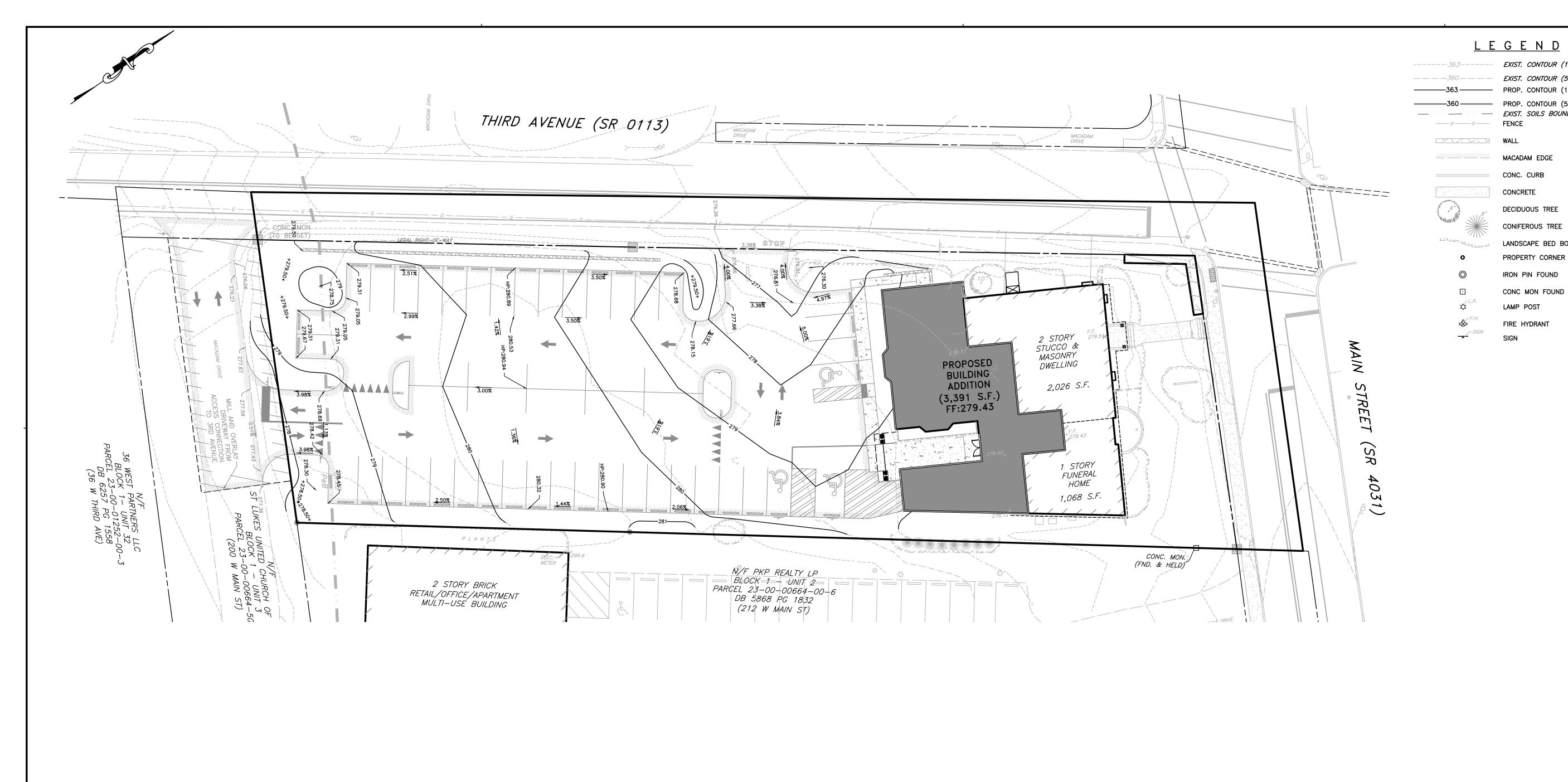
— — w — — WATER LINE

————— GAS LINE

BEFORE YOU START ANY DIGGING PROJECT. WHETHER YOU ARE PLANNING TO DO IT YOURSELF OR HIRE A PROFESSIONAL, SOMEONE Know what's below. NEEDS TO CALL 811. Call before you dig. SERIAL #20220901398

MARCH 31, 2022

SOILS TABLE PER USDA NRCS HYDROLOGIC | DEPTH TO WATER DRAINAGE SOIL NAME SLOPES HYDRIC SOIL SYMBOL GROUP CHARACTERISTICS PENN SILT LOAM >80" WELL DRAINED NO 3 – 8 URBAN LAND — PENN WELL DRAINED COMPLEX



EXIST. CONTOUR (1 FT. INTERVAL) EXIST. CONTOUR (5 FT. INTERVAL) PROP. CONTOUR (1 FT. INTERVAL) PROP. CONTOUR (5 FT. INTERVAL) EXIST. SOILS BOUNDARY LANDSCAPE BED BORDER COLLEGEVILI THE NATIONAL MAP BY U.S.G.S

COLLEGEVILLE PA 2019 QUADRANGL

**9** P (0) F. Bell, (6. **—** 0 **n e** Blue fa: 

**GENERAL NOTES** 

1. CONTRACTOR TO COORDINATE WITH UTILITY SERVICE PROVIDERS TO ENSURE PROPER COVERAGE OVER EXISTING AND PROPOSED UNDERGROUND UTILITIES, AND PROPER CLEARANCE PROVIDED UNDER EXISTING OVERHEAD UTILITIES. 2. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE UNDERGROUND UTILITIES SHOWN ARE PLOTTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. CONTRACTOR SHALL RELOCATE ANY EXISTING UTILITIES FOUND TO BE IN CONFLICT WITH PROPOSED IMPROVEMENTS.

3. ALL IMPROVEMENTS IN STATE RIGHTS OF WAYS NOT LIMITED TO DRIVEWAY ACCESS, CROSSWALKS, CURBING, AND ADA RAMPS ARE SHOWN SCHEMATICALLY. ALL CONSTRUCTION WORK AND MATERIALS SHALL COMPLY WITH PADOT SPECIFICATIONS (PUB. 408/2016 LATEST REVISION) AS AMENDED AND STANDARD DETAILS, WITH APPLICABLE FEDERAL, STATE AND MUNICIPAL CODES AND WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS. IN THE CASE OF CONFLICTING CONSTRUCTION STANDARDS THE GREATER OR MORE STRINGENT STANDARD SHALL APPLY.

4. ALL IMPROVEMENTS OUTSIDE STATE RIGHTS OF WAYS NOT LIMITED TO DRIVEWAY ACCESS, CROSSWALKS, CURBING, AND ADA RAMPS ARE SHOWN SCHEMATICALLY. ALL IMPROVEMENTS, CONSTRUCTION WORKS, AND MATERIALS SHALL BE ACCORDANCE TO MUNICIPAL SPECIFICATIONS AND DESIGN STANDARDS AND/OR PADOT SPECIFICATIONS (PUB. 408/2016 LATEST REVISION) AS AMENDED AND STANDARD DETAILS, WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS. IN THE CASE OF CONFLICTING CONSTRUCTION STANDARDS THE

GREATER OR MORE STRINGENT STANDARD SHALL APPLY. 5. CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES AND THAT A PRE-CONSTRUCTION MEETING HAS BEEN HELD.

6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, INVERTS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK. VARIATIONS BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK. 7. IN ALL CASES, WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL NOT USE SCALED DIMENSION

FOR CONSTRUCTION WITHOUT CONFIRMATION BY THE DESIGN ENGINEER. 8. ALL ENDWALLS, STORM SEWER MANHOLES AND STORM SEWER INLETS SHALL CONFORM TO PADOT SPECIFICATIONS (PUB. 408 - SECTION 605) AND STANDARD DETAILS.

9. ALL STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE, CLASS 3 (R.C.P.) OR HIGH-DENSITY CORRUGATED POLYETHYLENE

(H.D.P.E.) TYPE-S (SMOOTH INTERIOR) AND CONFORM TO PADOT SPECIFICATIONS (PUB. 408 - SECTION 601) AND STANDARD DETAILS. ALL PENNSYLVANIA ONE CALL UNDERGROUND ROOF DRAINS SHALL BE HIGH-DENSITY CORRUGATED POLYETHYLENE (H.D.P.E.) OR S.D.R. 35 PVC WITH A MINIMUM SLOPE OF DIAL 8-1-1 or 1-800-242-1776 0.005 FT/FT, A MINIMUM DIAMETER OF 6 INCHES AND INSTALLED WITH A MINIMUM OF 18 INCHES OF COVER. WATER TIGHT JOINTS SHALL BE PROVIDED ON ALL STORM SEWER RUNS. 10. THE TOP OF GRATE ELEVATION FOR ALL STORM SEWER INLETS IS FOR THE CENTER OF THE INLET AT THE FACE OF CURB. THE CONTRACTOR CALL 811 THREE DAYS TO TEN DAYS IS RESPONSIBLE FOR PROJECTING THE ROADWAY GRADE ALONG THE LENGTH OF THE INLET.

11. ALL INLETS, HEADWALLS AND ENDWALLS SHALL BE STAMPED TO INDICATE "NO DUMPING". 12. ANY SPRING ENCOUNTERED DURING ROADWAY CONSTRUCTION SHALL BE MANAGED BY U-DRAIN TO NEAREST STORM SEWER FACILITY OR WATERCOURSE. U-DRAIN PLACEMENT TO BE BY THE DIRECTION OF THE TOWNSHIP ENGINEER. U-DRAINS WITHIN THE PENNDOT RIGHT-OF-WAY WILL BE AT THE DISCRETION OF PENNDOT.

13. ALL MATERIALS AND DETAILS OF CONSTRUCTION, INSTALLATION PROCEDURES AND REQUIREMENTS WITH RESPECT TO SANITARY SEWER FACILITIES SHALL BE IN ACCORDANCE WITH THE "CONSTRUCTION REQUIREMENTS AND DETAIL DRAWINGS FOR SANITARY SEWERS AND APPURTENANCES FOR THE MUNICIPALITY. ALL SANITARY SEWER MAIN/LATERAL CROSSINGS WITH THE WATER LINES SHALL BE INSTALLED WITH

A MINIMUM 18 INCHES VERTICAL CLEARANCE OR, IF THE CLEARANCE CANNOT BE OBTAINED, A CONCRETE ENCASEMENT SHALL BE INSTALLED ON THE SANITARY SEWER MAIN/LATERAL. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAIN/LATERALS, WATER LINES AND PROPOSED/EXISTING TREES.

14. ALL SANITARY SEWER LATERALS SHALL BE SDR-26 P.V.C., A MINIMUM OF 6" IN DIAMETER AND LAID ON A SLOPE OF NOT LESS THAN 1/4 INCH PER FOOT. FORCEMAIN PIPING SHALL BE SDR-11. SUBJECT TO THE REVIEW AND APPROVAL BY THE MUNICIPAL CODE ENFORCEMENT 15. THE BURYING OF TREES, STUMPS AND CONSTRUCTION DEBRIS IS PROHIBITED. TREES AND STUMPS MAY BE GROUND UP AND USED AS

MULCH, WHERE APPLICABLE. ALL CONSTRUCTION DEBRIS MUST BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF. 16. ACCESSIBLE PARKING SPACES AND CURB RAMPS SHALL BE CONSTRUCTED TO COMPLY WITH THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, ICC/ANSI ACCESSIBLE AND USABLE BUILDING AND FACILITIES STANDARDS AND PADOT CONSTRUCTION STANDARDS RC-67M. 17. PROPOSED SPOT ELEVATIONS ALONG THE CURB ARE BOTTOM FACE OF CURB ELEVATIONS UNLESS OTHERWISE NOTED. REFER TO CURB

DETAILS FOR CURB REVEAL HEIGHTS TO CALCULATE TOP OF CURB ELEVATIONS. CURB RADII 5' UNLESS OTHERWISE NOTED. PROPOSED FIRST FLOOR ELEVATIONS ARE TOP OF SLAB ELEVATIONS AND SHALL BE VERIFIED AND ADJUSTED IN THE FIELD AT THE TIME OF CONSTRUCTION TO PROVIDE POSITIVE SLOPE AWAY FROM THE ALL BUILDINGS. 18. ALL AREAS SHALL BE PROPERLY GRADED TO ENSURE PROPER DRAINAGE FLOW TO NEAREST INLET OR WATERCOURSE WITHOUT PONDING OR

OBSTRUCTION. 19. THE LOCATION OF THE CLEANOUTS/ACCESS POINTS OF THE UNDERGROUND STORMWATER FACILITIES NEEDS TO BE VERIFIED IN THE FIELD BY THE APPLICANT'S SURVEY CREW. 20. SOIL COMPACTION TESTING DURING CONSTRUCTION IS REQUIRED BY APPROVED GEOTECHNICAL ENGINEER. TESTING RESULTS SHALL BE

PROVIDED TO THE MUNICIPAL ENGINEER FOR REVIEW AND APPROVAL DURING CONSTRUCTION. . STORM SEWER FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH MUNICIPAL SPECIFICATIONS. 22. MUNICIPAL INSPECTION OF THE MATERIALS AND CONSTRUCTION PRACTICES FOR ALL UTILITIES IS REQUIRED DURING CONSTRUCTION, IF

23. CABLE TELEVISION LINES SHALL BE INSTALLED UNDERGROUND PARALLEL WITH UNDERGROUND TELEPHONE AND ELECTRIC LINE. CABLE TELEVISION LINES HAVE NOT BEEN SHOWN FOR CLARITY. 24. RELOCATED OVERHEAD SERVICE CONDUCTORS MUST MAINTAIN A VERTICAL CLEARANCE TO FINAL GRADE OF 18 FEET OVER PUBLIC STREETS, ALLEYS, ROADS, PARKING AREAS SUBJECT TO TRUCK TRAFFIC, DRIVEWAYS ON OTHER THAN RESIDENTIAL PROPERTIES, AND OTHER AREAS TRAVERSED BY VEHICLES. (IN ACCORDANCE WITH NEC ARTICLE 230.24(B)(4)).

FUNCTIONALITY OF THE SYSTEM. 26. HORIZONTAL SEPARATION - WHENEVER POSSIBLE, SANITARY SEWERS SHOULD BE LAID AT LEAST 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAINS. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, A SANITARY SEWER MAY BE LAID CLOSER THAN 10 FEET TO A WATER MAIN IF:

26.1. IT IS LAID IN A SEPARATE TRENCH; OR IF 26.2. IT IS LAID IN THE SAME TRENCH, WITH THE WATER MAIN LOCATED AT ONE SIDE OF A BENCH OF UNDISTURBED EARTH; AND IF 26.3. IN EITHER CASE THE ELEVATION OF THE TOP (CROWN) OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM (INVERT) OF THE

ELEVATION OF THE SEWER CANNOT BE VERIFIED TO MEET THE ABOVE REQUIREMENTS, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION, FOR A DISTANCE OF 10 FEET EXTENDING ON EACH SIDE OF THE SANITARY SEWER, THIS PORTION OF SANITARY SEWER SHALL BE DUCTILE IRON PIPE. IF POSSIBLE, ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SANITARY SEWER AS POSSIBLE. THE WATER MAIN SHOULD BE CONSTRUCTED OF SLIP-ON OR MECHANICAL-JOINT DUCTILE IRON PIPE, PVC PIPE, OR PRE-STRESSED CONCRETE CYLINDER PIPE AND THE SANITARY SEWER CONSTRUCTED OF MECHANICAL-JOINT DUCTILE IRON PIPE FOR ANY PORTION WITHIN 10 FEET OF THE WATER MAIN. BOTH SERVICES SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING. WHERE LESS THAN AN 18" VERTICAL SEPARATION EXISTS BETWEEN THE WATER AND SANITARY SEWER LINE, THE SANITARY SEWER LINE MAY BE CONCRETE ENCASED 10 FEET ON EITHER SIDE OF THE WATER MAIN. IF POSSIBLE, SEWERS CROSSING WATER MAINS SHALL BE CONSTRUCTED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SANITARY SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.



ROBERT E. BLUE JR. LICENSE NO. 26169-E 0

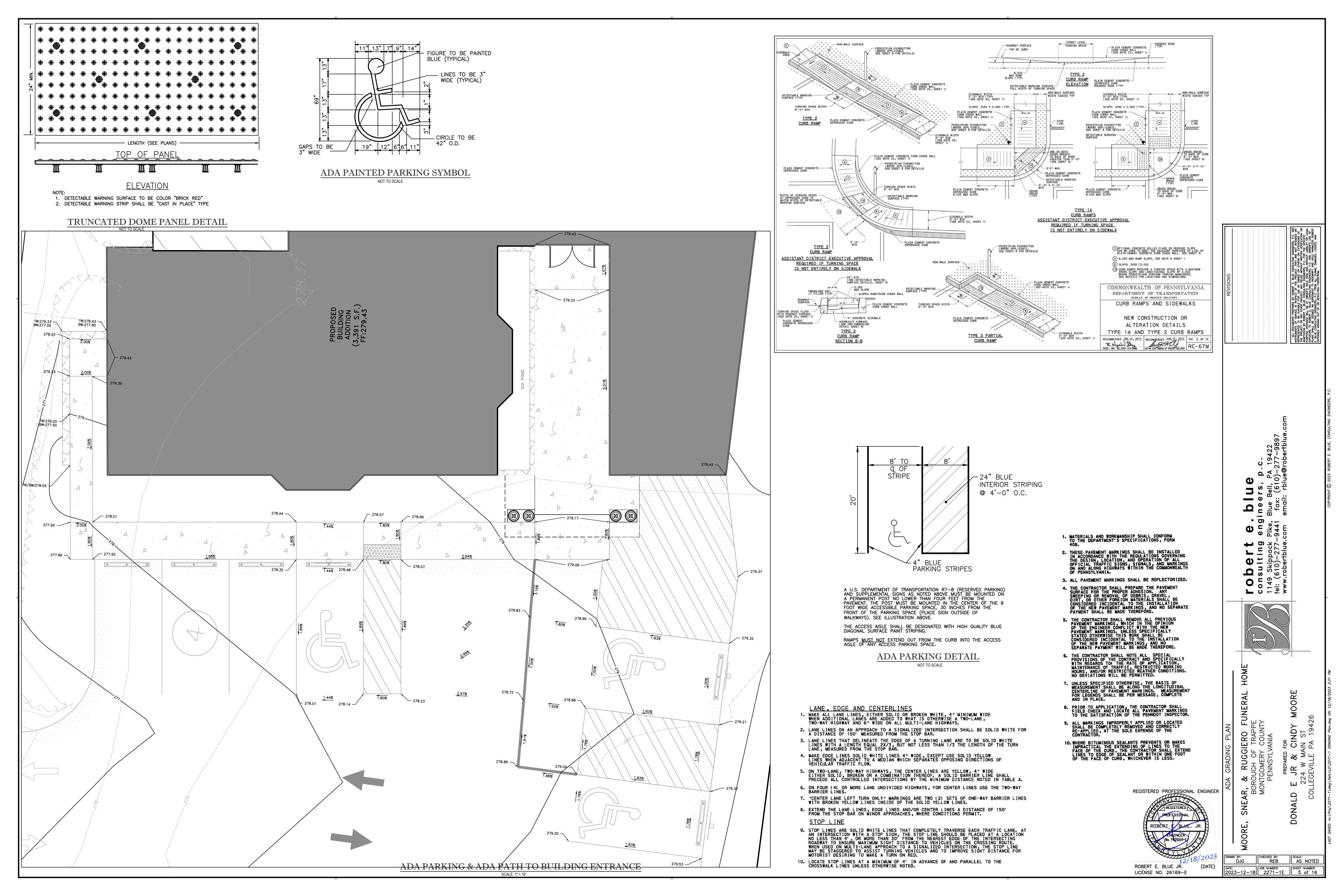
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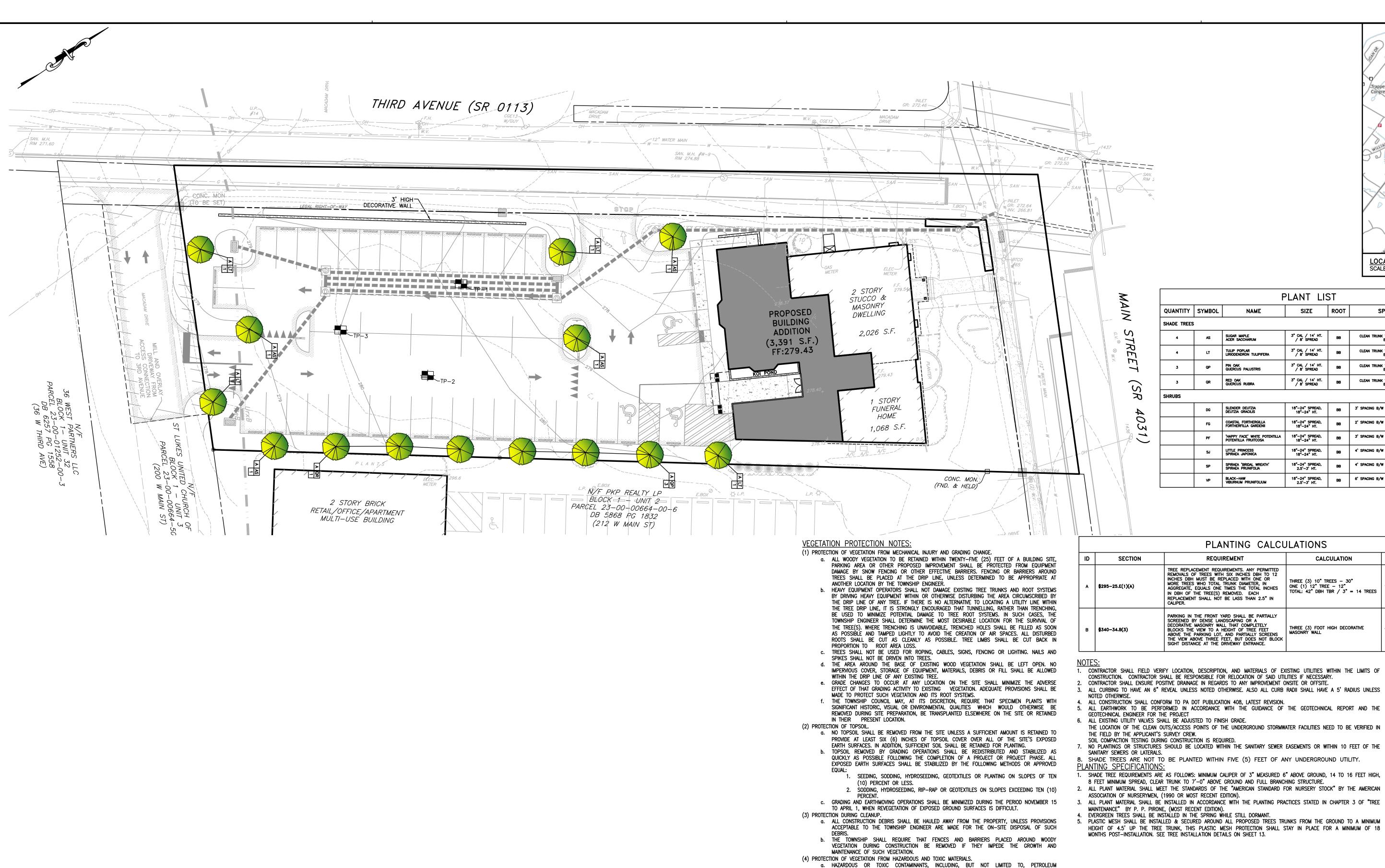
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BEFORE YOU DIG

MARCH 31, 2022

25. CONTRACTOR TO VERIFY FUNCTIONALITY OF EXISTING STORM SEWER FACILITIES, AND CLEAN OUT AND/OR REPAIR AS NECESSARY TO RESTORE 27. VERTICAL SEPARATION - WHENEVER SANITARY SEWERS MUST CROSS UNDER WATER MAINS, THE SANITARY SEWER SHALL BE INSTALLED AT SUCH AN ELEVATION THAT THE TOP OF THE SANITARY SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE





COLLEGEVIL THE NATIONAL MAP BY U.S.G.S COLLEGEVILLE PA 2019 QUADRANGL

		F	PLANT LIS	ST	
QUANTITY	SYMBOL	NAME	SIZE	ROOT	SPECIAL REMARKS
SHADE TREES	·				
4	AS	SUGAR MAPLE ACER SACCHARUM	3" CAL / 14' HT. / 8' SPREAD	88	CLEAN TRUNK TO 7'-0" ABOVE GROUND AND FULL BRANCHING STRUCTURE.
4	LT	TULIP POPLAR LIRIODENDRON TULIPIFERA	3" CAL / 14' HT. / 8' SPREAD	88	CLEAN TRUNK TO 7'-0" ABOVE GROUND AND FULL BRANCHING STRUCTURE.
3	QP	PIN OAK QUERCUS PALUSTRIS	3" CAL / 14' HT. / 8' SPREAD	88	CLEAN TRUNK TO 7'-0" ABOVE GROUND AND FULL BRANCHING STRUCTURE.
3	QR	RED OAK QUERCUS RUBRA	3" CAL / 14' HT. / 8' SPREAD	88	CLEAN TRUNK TO 7'-0" ABOVE GROUND AND FULL BRANCHING STRUCTURE.
SHRUBS	•				
	DG	SLENDER DEUTZIA DEUTZIA GRACILIS	18"-24" SPREAD, 18"-24" HT.	88	3' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULC BED
	FG	COASTAL FORTHERGILLA FORTHERFILLA GARDENII	18"-24" SPREAD, 18"-24" HT.	88	2' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULC BED
	PF	'HAPPY FACE' WHITE POTENTILLA POTENTILLA FRUITCOSA	18"-24" SPREAD, 18"-24" HT.	88	3' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULI BED
	SJ	LITTLE PRINCESS SPIRAEA JAPONICA	18"-24" SPREAD, 18"-24" HT.	88	4' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULI BED

18"-24" SPREAD 2.5'-3' HT.

' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULCH

6' SPACING B/W PLANTS; PLANT IN CONTINUOUS MULCH

PLANTING CALCULATIONS REQUIRED | PROPOSED REQUIREMENT CALCULATION TREE REPLACEMENT REQUIREMENTS. ANY PERMITTED REMOVALS OF TREES WITH SIX INCHES DBH TO 12 INCHES DBH MUST BE REPLACED WITH ONE OR MORE TREES WHO TOTAL TRUNK DIAMETER, IN AGGREGATE, EQUALS ONE TIMES THE TOTAL INCHES IN DBH OF THE TREE(S) REMOVED. EACH

THREE (3) 10" TREES — 30"
ONE (1) 12" TREE — 12"
TOTAL: 42" DBH TBR / 3" = 14 TREES 14 TREES 14 TREES REPLACEMENT SHALL NOT BE LASS THAN 2.5" IN PARKING IN THE FRONT YARD SHALL BE PARTIALLY SCREENED BY DENSE LANDSCAPING OR A DECORATIVE MASONRY WALL THAT COMPLETELY BLOCKS THE VIEW TO A HEIGHT OF TREE FEET ABOVE THE PARKING LOT, AND PARTIALLY SCREENS THE VIEW ABOVE THREE FEET, BUT DOES NOT BLOCK SIGHT DISTANCE AT THE DRIVEWAY ENTRANCE. THREE (3) FOOT HIGH DECORATIVE MASONRY WALL

1. CONTRACTOR SHALL FIELD VERIFY LOCATION, DESCRIPTION, AND MATERIALS OF EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OF SAID UTILITIES IF NECESSARY. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IN REGARDS TO ANY IMPROVEMENT ONSITE OR OFFSITE.

SP SPIRAEA 'BRIDAL WREATH SPIRAEA PRUNIFOLIA

VP BLACK-HAW VIBURNUM PRUNIFOLIUM

ALL CONSTRUCTION SHALL CONFORM TO PA DOT PUBLICATION 408, LATEST REVISION. 5. ALL EARTHWORK TO BE PERFORMED IN ACCORDANCE WITH THE GUIDANCE OF THE GEOTECHNICAL REPORT AND THE

6. ALL EXISTING UTILITY VALVES SHALL BE ADJUSTED TO FINISH GRADE.

SOIL COMPACTION TESTING DURING CONSTRUCTION IS REQUIRED.

8. SHADE TREES ARE NOT TO BE PLANTED WITHIN FIVE (5) FEET OF ANY UNDERGROUND UTILITY.

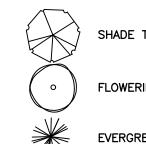
1. SHADE TREE REQUIREMENTS ARE AS FOLLOWS: MINIMUM CALIPER OF 3" MEASURED 6" ABOVE GROUND, 14 TO 16 FEET HIGH,

8 FEET MINIMUM SPREAD, CLEAR TRUNK TO 7'-0" ABOVE GROUND AND FULL BRANCHING STRUCTURE. 2. ALL PLANT MATERIAL SHALL MEET THE STANDARDS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN

ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANTING PRACTICES STATED IN CHAPTER 3 OF "TREE

EVERGREEN TREES SHALL BE INSTALLED IN THE SPRING WHILE STILL DORMANT. 5. PLASTIC MESH SHALL BE INSTALLED & SECURED AROUND ALL PROPOSED TREES TRUNKS FROM THE GROUND TO A MINIMUM

# LANDSCAPE LEGEND



HYDROCARBONS, OILS, PESTICIDES, HERBICIDES, THINNERS, SOLVENTS, CLEANERS, ABRASIVES, ACIDS AND BASES, ARE STRICTLY PROHIBITED WITHIN OR AROUND WOODY VEGETATION OR WITHIN

ONE HUNDRED (100) FEET OF THE DRIP LINE OF ANY EXISTING TREE.

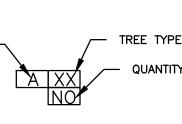
DO NOT REMOVE MORE THAN 20% OF THE TREE'S HEALTHY BRANCHES AT ONE TIME.

ALL DEAD, DYING, DISEASED AND HAZARDOUS BRANCHES SHALL BE REMOVED. PRUNE TREES AWAY FROM BUILDINGS, STREET LIGHTS, AND UTILITY POLES.

**SPECIAL REMARKS FOR TREES:** 

4. CHECK TREES FOR ANY STRUCTURAL PROBLEMS.

FLOWERING TREE STANDARD



ROBERT E BLUE

REGISTERED PROFESSIONAL ENGINEER ROBERT E. BLUE JR. (DATE)

 $\Box$ 

PENNSYLVANIA ONE CALL DIAL 8-1-1 or 1-800-242-1776 BEFORE YOU DIG CALL 811 THREE DAYS TO TEN DAYS BEFORE YOU START ANY DIGGING PROJECT. WHETHER YOU ARE PLANNING TO DO IT YOURSELF OR HIRE A PROFESSIONAL, SOMEONE Know what's below. NEEDS TO CALL 811.

MARCH 31, 2022

Call before you dig. SERIAL #20220901398

SHADE TREE

SHRUB

EVERGREEN TREE

LICENSE NO. 26169-E

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### <u>PLANTING PROCEDURES</u> THE LANDSCAPE CONTRACTOR SHALL FURNISH, DELIVER, MAINTAIN, AND INSTALL THE PLANT MATERIAL AND LAWN AS SHOWN ON THE PLANS IN A MANNER WHICH PRODUCES A PROFESSIONAL FINISHED PRODUCT ACCORDING TO THE BEST INDUSTRY STANDARDS AND PROCEDURES.

- . PLANTS FURNISHED SHALL BE NURSERY-GROWN STOCK AND COMPLY WITH THE AMERICAN ASSOCIATION OF NURSERYMEN "STANDARDS FOR NURSERY STOCK" FOR SIZES AND SPECIES SHOWN. PLANT MATERIAL MUST BE SELECTED FROM NURSERY(S) THAT HAVE BEEN INSPECTED BY STATE OR FEDERAL AGENCIES.
- SOURCE OF PLANT MATERIALS SHALL BE WITHIN THE SAME PLANT HARDINESS ZONE AND HAVING SIMILAR CLIMATE CONDITIONS AS THE PROJECT AREA. ZONE SHALL BE AS DEFINED ON THE U. S. DEPARTMENT OF AGRICULTURE PLANT HARDINESS ZONE MAP. ALL PLANTS SHALL BE NURSERY-GROWN MATERIAL UNLESS OTHERWISE
- MEASURE PLANT MATERIAL WHEN THE BRANCHES ARE IN THEIR NORMAL POSITION. NO PRUNING SHALL BE DONE BEFORE THE PLANT MATERIALS ARE DELIVERED TO THE SITE. PLANT MATERIAL SHALL BE NATURAL IN HABIT OF GROWTH AND BE FULL BODIED. PLANT MATERIAL SHALL POSSESS A NORMAL BALANCE BETWEEN HEIGHT AND SPREAD TYPICAL OF THE SPECIES.
- 5. THE ACCURACY OF SPECIES VARIETIES AND QUANTITIES SPECIFIED FOR PLANT MATERIAL SHALL BE CONTRACTOR'S RESPONSIBILITY. QUANTITIES ARE SHOWN ON THE PLANS. PLANT LISTS (IF ANY) ARE FOR CONTRACTOR'S CONVENIENCE.
- 3. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL AT

THE SITE THAT DOES NOT MEET SPECIFICATIONS.

- 7. ALL WORK SHALL BE IN ACCORDANCE WITH STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR REPRESENTATIVE SPECIES.
- . VERIFY THAT SITE IS READY FOR PLANTING PRIOR TO DELIVERY OF MATERIALS. INSTALL PLANTS AS PROMPTLY AS POSSIBLE, PREFERABLY THE SAME DAY AS DELIVERED. UNLESS PLANTED THE DAY OF DELIVERY, PILE EARTH OR MULCH AROUND THE EARTH BALL. KEEP THE PLANT BALL MOIST. PLANT MATERIALS WILL BE SUBJECT TO RE-INSPECTION BEFORE THEY ARE PLANTED.
- 9. PREVENT INJURY TO PLANT MATERIAL WHEN DIGGING, MOVING, UNLOADING AND TRANSPORTING. HANDLE ALL BALLED AND BURLAPPED PLANTS FROM ROOT BALL
- 10. INSPECT PITS AND BEDS TO ASSURE THAT ADEQUATE DRAINAGE EXISTS. THE PERMEABILITY OF EACH PLANTING PIT AND BED SHALL BE TESTED. MINIMUM ACCEPTABLE PERCOLATION RATE SHALL BE TWO AND ONE-HALF INCHES (2 1/2") PER HOUR IN DRY CONDITIONS AND ONE AND ONE-HALF INCHES (1 1/2") PER HOUR IN WET CONDITIONS. THE OWNER SHALL BE IMMEDIATELY NOTIFIED IF THE PLANTING PITS FAIL TO PASS THE PERCOLATION TEST.
- 11. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY PLANT MATERIAL WHICH IS NOT IN VIGOROUS CONDITION BECAUSE OF POOR OR INADEQUATE DRAINAGE.
- 12. THE CONTRACTOR SHALL OBTAIN THE LANDSCAPE ARCHITECT'S APPROVAL FOR LAYOUT OF PLANT MATERIAL PRIOR TO INSTALLATION OF PLANTS. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, OR ANY OBSTACLES TO THE WORK ENCOUNTERED BY
- 13. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL MUNICIPAL ORDINANCES AND PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR ALL APPLICABLE FEES, PERMITS, INSPECTIONS, AND NOTIFICATION OF LOCAL OFFICIALS AS REQUIRED.
- 14. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES BEFORE ANY EXCAVATION OCCURS ACCORDING TO ACT 38
- 15. PLANTING MIXTURE FOR ALL TREE AND SHRUB BACKFILL SHALL BE A MIXTURE BY VOLUME OF THE FOLLOWING MATERIALS IN QUANTITIES SPECIFIED: 1/4 PEAT MOSS, 1/2 TOPSOIL, 1/4 COARSE SAND. ADD FIVE POUNDS OF 0-20-20 FERTILIZER PER CUBIC YARD OF PLANTING MIXTURE. PLANTING MIXTURE SHALL NOT BE USED IN A FROZEN OR MUDDY CONDITION.
- 16. PLANT PITS SHALL BE OF THE FOLLOWING SIZE:
  - TREES LESS THAN FIVE (5) INCHES CALIPER 2 FEET 0 INCHES WIDER THAN BALL WIDTH AND SIX (6) INCHES DEEPER THAN BALL DEPTH.
  - SHRUBS SMALLER THAN FIVE (5) FEET HIGH 1 FOOT 6 INCHES WIDER AND SIX (6) INCHES DEEPER THAN BALL DEPTH.
- 17. BEFORE PLACING PLANT MATERIAL INTO PITS, SCARIFY BOTTOM AND SIDES AND PLACE A SIX INCH DEPTH LAYER OF PLANTING MIXTURE. TAMP TO PREVENT SETTLEMENT. SET PLANT PLUMB AND STRAIGHT IN THE CENTER OF THE PIT. PLANTS SHALL HAVE THE SAME RELATIONSHIP TO FINISHED GRADE AS THEY HAD TO EXISTING GRADE IN THE NURSERY. REMOVE BURLAP FROM SIDES AND TOP OF TREES OR SHRUBS. REMOVE CONTAINER PLANTS FROM THEIR PLASTIC OR METAL CONTAINERS AND PROPERLY DISPOSE OF THE CONTAINERS.
- 18. USE PLANTING MIXTURE FOR BACKFILL AROUND TREE OR SHRUB BALL. WHEN PLANT PITS ARE APPROXIMATELY 2/3 FULL, THOROUGHLY WATER AND LEAVE TO SOAK BEFORE PROCEEDING. COMPLETE BACKFILLING SIDES OF PLANTING PIT, TAMP FIRMLY AND WATER THOROUGHLY. SHOULD SETTLEMENT OCCUR, ADD MORE PLANTING
- 19. GUY AND STAKE TREES USING STAKES AND WIRE. PASS WIRE THROUGH HOSE SO THAT WIRE DOES NOT COME IN CONTACT WITH TREE. PLACE HOSE AROUND THE TRUNK AT THE HEIGHT SHOWN ON PLANTING DETAILS. TWIST WIRE AT HOSE TO KEEP FIRMLY IN PLACE. SPACE STAKES EVENLY AROUND THE OUTSIDE OF TREE PIT AND DRIVE EACH FIRMLY INTO GROUND.
- 20. PLANTS SHALL BE PLUMB, STRAIGHT, AND STABLE AFTER GUYING. PROVIDE SOIL SAUCER AROUND PLANTING PITS AS SHOWN ON PLANTING DETAILS. ALL PRUNING SHALL BE IN ACCORDANCE WITH THE NATIONAL ARBORIST ASSOCIATION STANDARDS FOR PRUNING OF SHADE TREES AND SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE WORK BEGINS.
- 21. MULCH TREE, SHRUB AND MASS SHRUB PLANTING AREAS. MINIMUM DEPTH OF MULCH SHALL BE TWO (2) INCHES. MULCH AREAS WITHIN 48 HOURS AFTER
- 22. THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL IMMEDIATELY AFTER PLANTING AND UNTIL ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL INCLUDE WATERING, CULTIVATING. WEEDING, MULCHING, CONTROL OF INSECTS AND DISEASES. PRUNING, AND OTHER HORTICULTURAL OPERATIONS FOR PROPER GROWTH AND APPEARANCE OF PLANT MATERIALS AND BEDS, INCLUDING FERTILIZING IF REQUIRED.
- 23. GUARANTEE PLANTING WORK FOR ONE (1) CALENDAR YEAR FROM DATE OF ACCEPTANCE.
- 24. INSPECTION OF THE WORK TO DETERMINE ITS COMPLETION FOR BEGINNING THE GUARANTEE PERIOD WILL BE MADE BY THE OWNER AND LANDSCAPE ARCHITECT UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION SUBMITTED BY THE CONTRACTOR AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED DATE.
- 25. THE CONTRACTOR SHALL REPLACE, IN ACCORDANCE WITH LANDSCAPE PLANS, ANY PLANTINGS THAT DIE OR, IN THE OPINION OF A LANDSCAPE ARCHITECT, ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION AND/OR HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING. INADEQUATE OR IMPROPER MAINTENANCE, OR ANY OTHER CAUSES DUE TO NEGLIGENCE. THE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR ACTS OF VANDALISM OCCURRING AFTER THE COMMENCEMENT OF THE GUARANTEE PERIOD.

REMOVE RUTS, MOUNDS, AND RIDGES ON SURFACE OF TOPSOIL. REMOVE ALL STONES, ROOTS, OR OTHER DEBRIS GREATER THAN ONE (1) INCH VISIBLE ON THE SURFACE. RESULTING HOLES SHALL BE FILLED WITH TOPSOIL. GRADE UNIFORMLY SO SOIL SURFACE DOES NOT HAVE LOW SPOTS WHICH MAY COLLECT WATER.

INCORPORATE THE FOLLOWING MATERIALS UNIFORMLY THROUGHOUT THE ENTIRE DEPTH OF TOPSOIL BY DISCING, ROTOTILLING, OR OTHER APPROVED METHOD.

### GRANULAR LIMESTONE - 50 POUNDS PER 1,000 SQ. FT. STARTER FERTILIZER - 10 POUNDS PER 1,000 SQ. FT.

SEED DURING FAVORABLE WEATHER CONDITIONS. PREPARED BED SHALL BE IN A SLIGHTLY MOIST CONDITION DURING SEEDING. SEED WHEN SOIL HAS A MINIMUM TEMPERATURE OF 50°F. RAKE OR DRAG SMOOTH TO FINAL GRADE ELEVATIONS, ROLL IF NECESSARY TO STABILIZE IN ORDER TO COMMENCE SEEDING. SEEDING OPERATION WILL TAKE PLACE WHILE TOPSOIL IS IN FRIABLE, LOOSE CONDITION WITH NO CRUSTING OF THE SURFACE.

# 4. SEED MIXTURE SHALL BE:

- 40% TURF TYPE TALL FESCUE 40% FINE BLADED PERENNIAL RYEGRASS
- 10% PENNLAWN CREEPING RED FESCUE 10% KENTUCKY BLUEGRASS.

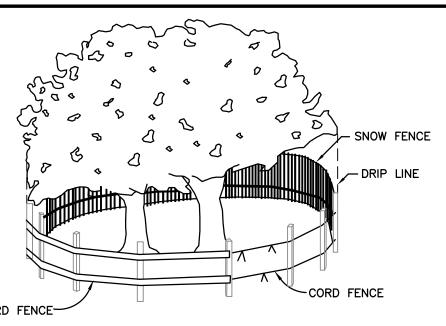
TO PROTECT THE WORK FROM DAMAGE.

- SPREAD SEED MIXTURE EVENLY AND COVER WITH MAXIMUM 1/4 INCH
- KEEP NEWLY SEEDED AND SODDED AREAS MOISTENED UNTIL THE GRASS BECOMES WELL ESTABLISHED. PROVIDE MATERIALS AND WORK NECESSARY

STRAW OR SALT HAY AT THE RATE OF ONE BALE PER 1,000 SQ. FT.

TOPSOIL. LAWN AREA SHALL BE LIGHTLY ROLLED AND MULCHED WITH

LAWN AREAS SHALL BE MAINTAINED UNTIL ACCEPTANCE BY OWNER AND GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE AS PER INSTRUCTIONS UNDER PLANTING PROCEDURES.



# CORRECT METHODS OF TREE FENCING

# **FENCING AND ARMORING:**

(PLATE 1.85B): ANY DEVICE MAY BE USED WHICH WILL EFFECTIVELY PROTECT THE ROOTS, TRUNK AND TOPS OF TREES RETAINED ON THE SITE. HOWEVER, TREES TO BE RETAINED WITHIN 40 FEET OF A PROPOSED BUILDING OR EXCAVATION SHALL BE PROTECTED BY FENCING. PERSONNEL MUST BE INSTRUCTED TO HONOR PROTECTIVE DEVICES. THE DEVICES DESCRIBED ARE SUGGESTED ONLY, AND ARE NOT INTENDED TO EXCLUDE THE USE OF OTHER DEVICES WHICH WILL PROTECT THE TREES TO BE RETAINED.

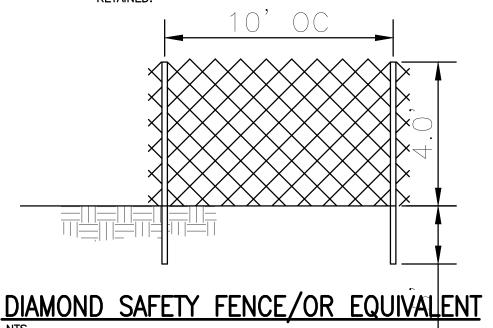
### A. SNOW FENCE - STANDARD 40 INCH HIGH SNOW FENCE SHALL BE PLACED AT THE DRIPLINE OF TREES TO REMAIN ON STANDARD STEEL POSTS SET 6 FEET APART.

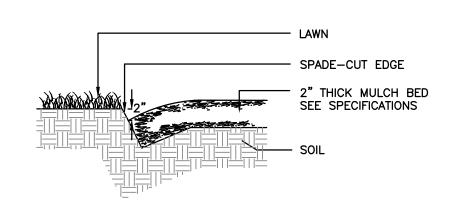
B. BOARD FENCE - BOARD FENCING CONSISTING OF 4-INCH SQUARE POSTS SET SECURELY IN THE GROUND AND PROTRUDING AT LEAST 4 FEET ABOVE THE GROUND SHALL BE PLACED AT THE LIMITS OF CLEARING WITH A MINIMUM OF TWO HORIZONTAL BOARDS BETWEEN POSTS. IF IT IS NOT PRACTICAL TO ERECT A FENCE AT THE DRIP LINE, CONSTRUCT A TRIANGULAR FENCE NEARER THE TRUNK. THE LIMITS OF CLEARING WILL STILL BE LOCATED AT THE DRIP LINE. SINCE THE ROOT ZONE WITHIN THE DRIP LINE WILL STILL REQUIRE

C. CORD FENCE - POSTS WITH A MINIMUM SIZE OF 2 INCHES SQUARE OR 2 INCHES IN DIAMETER SET SECURELY IN THE GROUND AND PROTRUDING AT LEAST 4 FEET ABOVE THE GROUND SHALL BE PLACED AT THE LIMITS OF CLEARING WITH TWO ROWS OF CORD 1/4 INCH OR THICKER AT LEAST 2 FEET APART RUNNING BETWEEN POSTS WITH STRIPS OF COLORED SURVEYOR'S FLAGGING TIED SECURELY TO THE STRING AT INTERVALS NO GREATER THAN 3 FEET.

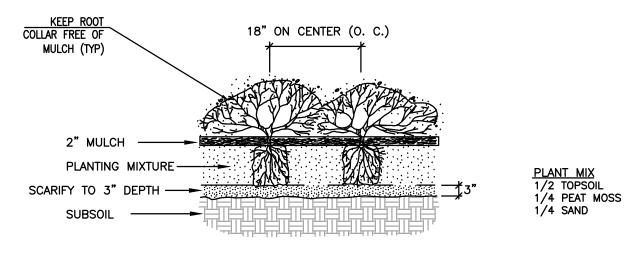
# **EQUIPMENT OPERATION AND STORAGE:**

HEAVY EQUIPMENT, VEHICULAR TRAFFIC, OR STOCKPILES OF ANY CONSTRUCTION MATERIALS INCLUDING TOPSOIL SHALL NOT BE PERMITTED WITHIN THE DRIP LINE OF ANY TREE TO BE RETAINED. TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREES BEING RETAINED. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING IT AGAINST THE TRUNKS OF TREES TO BE



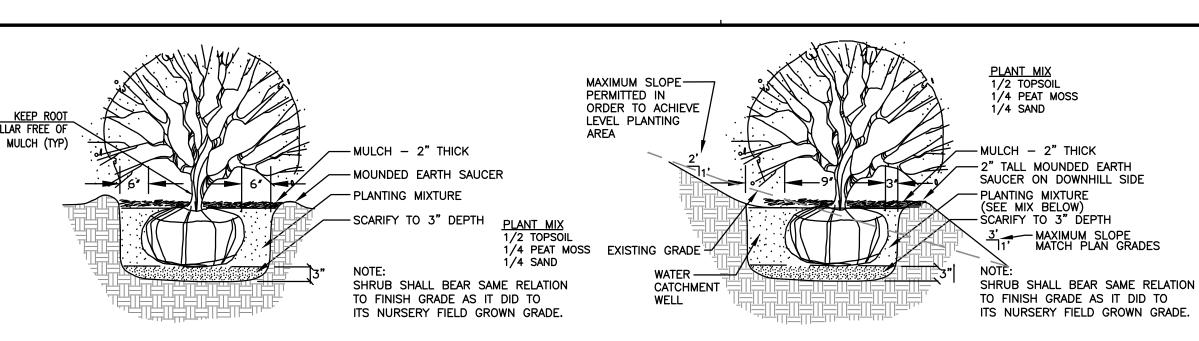


# EDGING AT MULCH BED DETAIL



# **GROUND COVER PLANTING DETAIL**

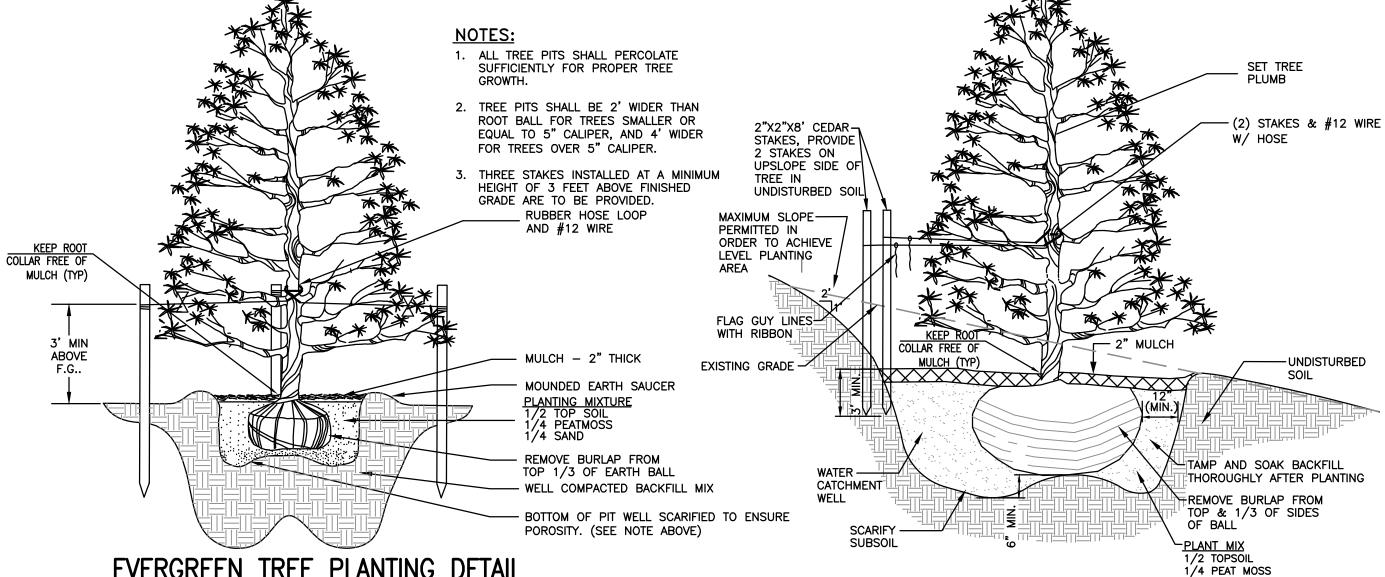
NOTES: MULCH SHALL BE DOUBLE GROUND HARDWOOD BARK MULCH OR APPROVED EQUAL.



# SHRUB PLANTING DETAIL

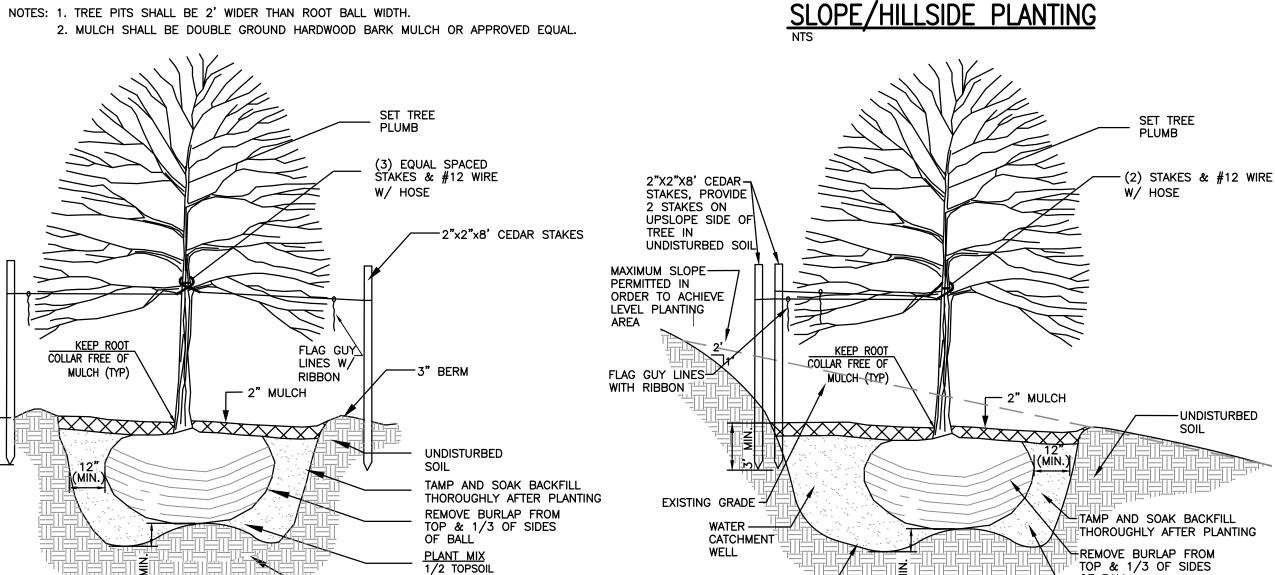
# HILLSIDE SHRUB PLANTING DETAIL

NOTES: MULCH SHALL BE DOUBLE GROUND HARDWOOD BARK MULCH OR APPROVED EQUAL. NOTES: MULCH SHALL BE DOUBLE GROUND HARDWOOD BARK MULCH OR APPROVED EQUAL. 1. ALL TREE PITS SHALL PERCOLATE SET TREE SUFFICIENTLY FOR PROPER TREE



# EVERGREEN TREE PLANTING DETAIL

NOTES: 1. TREE PITS SHALL BE 2' WIDER THAN ROOT BALL WIDTH.



TRADITIONAL/LEVEL PLANTING

PLANTING SPECIFICATIONS 1. SHADE TREE REQUIREMENTS ARE AS FOLLOWS: MINIMUM CALIPER OF 3" INCHES, MEASURED TWELVE (12) INCHES ABOVE GROUND MINIMUM, 14 TO 18 FEET HIGH, 8 FEET MINIMUM SPREAD, CLEAR TRUNK TO 7'-0" ABOVE GROUND AND FULL

SCARIFY

**SUBSOIL** 

2. ALL PLANT MATERIAL SHALL MEET THE STANDARDS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN, (1990 OR MOST RECENT EDITION).

1/4 PEAT MOSS

1/4 SAND

SUBSOIL

SCARIFY

4. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANTING PRACTICES STATED IN CHAPTER 3 OF "TREE MAINTENANCE" BY P. P. PIRONE, (MOST RECENT EDITION).

5. ALL PLANT MATERIALS SHALL BE GUARANTEED BY THE DEVELOPER FOR ONE (1) YEAR FOLLOWING FINAL APPROVAL BY THE TOWNSHIP AND / OR BOROUGH ENGINEER. AN INSPECTION SHALL BE MADE BY THE TOWNSHIP AND / OR BOROUGH AT THE END OF THE ONE (1) YEAR PERIOD; ANY PLANT MATERIALS UNACCEPTABLE AT THE TIME OF INSPECTION SHALL BE REPLACED IN ORDER TO SATISFY THE LANDSCAPING REQUIREMENTS OF THE TOWNSHIP/BOROUGH/CITY

6. REFER TO THE LANDSCAPING ORDINANCE FOR MORE SPECIFIC INFORMATION REGARDING TOWNSHIP/BOROUGH/CITY LANDSCAPING REGULATIONS.

7. MULCH SHALL BE DOUBLE GROUND HARDWOOD BARK MULCH OR APPROVED EQUAL.

8. PRIOR TO INSTALLATION OF ALL PLANT MATERIAL A LANDSCAPE ARCHITECT OF UNDER THE DELEGATION OF THE OWNER / DEVELOPER SHALL INSPECT AND APPROVE ALL MATERIALS. ANY MATERIALS THAT ARE FOUND TO BE INSUFFICIENT OR OF LESSER QUALITY SHALL BE REJECTED AND WILL NEED TO BE REPLACED.



1/2 TOPSOIL

SLOPE/HILLSIDE PLANTING

1/4 PEAT MOSS

ROBERT E. BLUE JR. LICENSE NO. 26169-E

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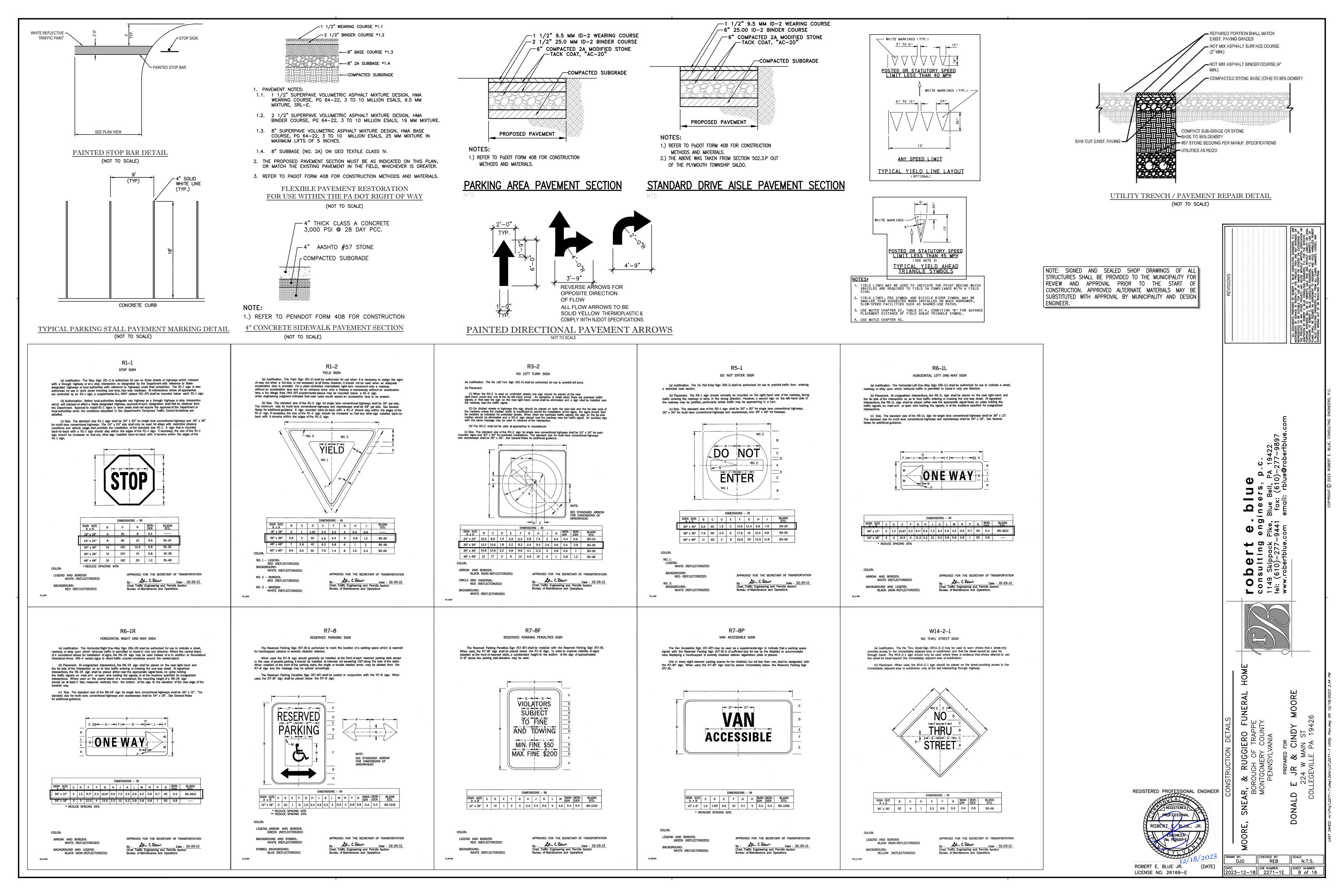
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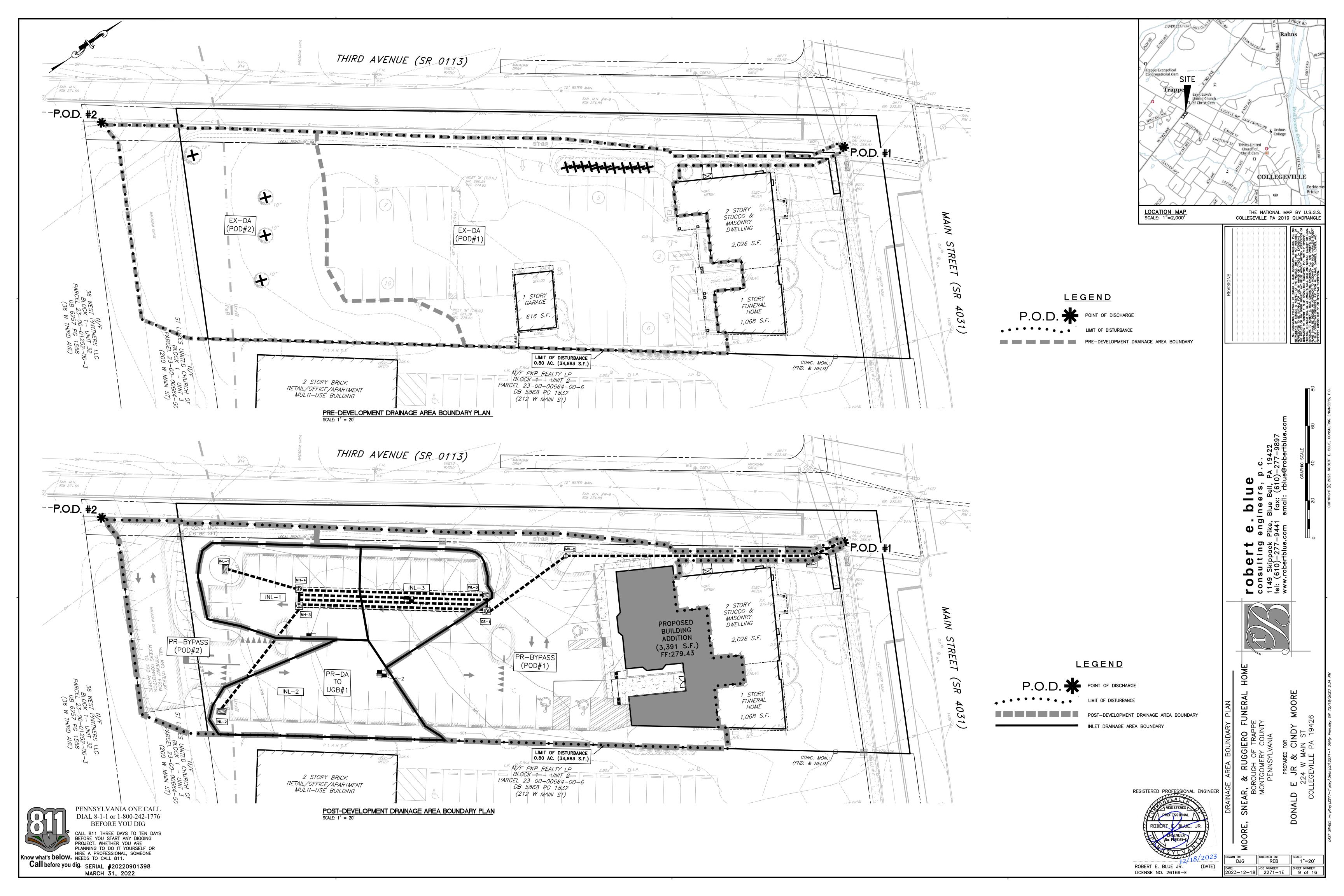
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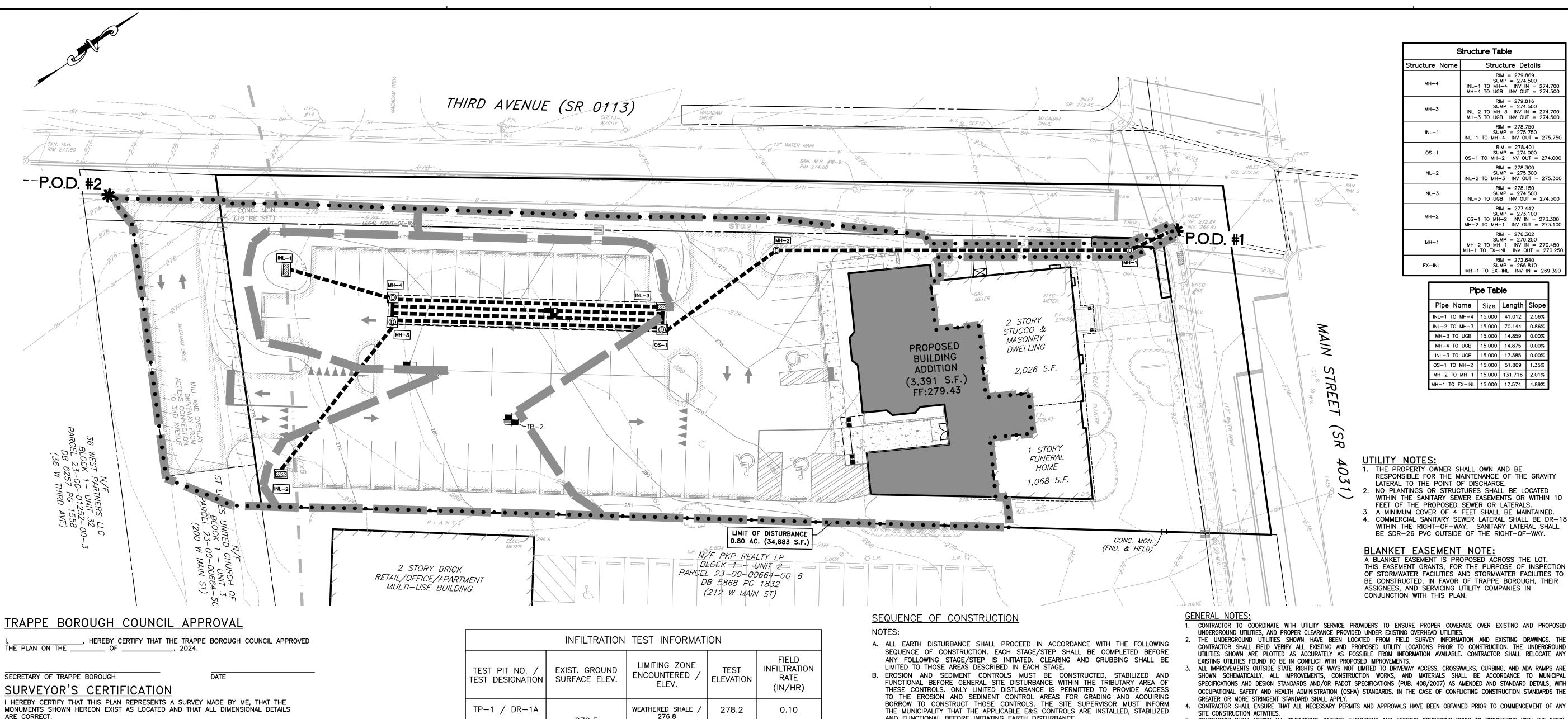
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AND FUNCTIONAL BEFORE INITIATING EARTH DISTURBANCE. C. WORK AREAS SHALL BE DELINEATED AND SURVEY CONTROL POINTS SHALL BE

D. ALL EARTH DISTURBANCES SHALL BE WITHIN THE DELINEATED LIMITS OF DISTURBANCE. NO FILL SHALL BE TAKEN OR PLACED OUTSIDE THE DESIGNATED

LIMITS OF DISTURBANCE E. <u>CRITICAL</u> <u>STAGES:</u> A PROFESSIONAL ENGINEER OR DESIGNATED REPRESENTATIVE SHALL BE ON-SITE TO OBSERVE AND CERTIFY THE INSTALLATION/CONSTRUCTION OF CRITICAL SITE FACILITIES AND/OR CONTROLS. THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF 3 DAYS IN ADVANCE OF CRITICAL STAGE ACTIVITIES.

E.A. THE CONTRACTOR MUST CONTACT THE TRAPPE BOROUGH INSPECTOR A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION ON ANY STORMWATER MANAGEMENT FACILITY IN ORDER TO SCHEDULE ALL NECESSARY SITE INSPECTIONS.

F. 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 OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. G. TOPSOIL (MINIMUM 6 INCHES) SHALL BE PLACED OVER THE FILL AND SEEDING,

LIMING, FERTILIZING AND MULCHING DONE IN ACCORDANCE WITH SEEDING SPECIFICATIONS OR APPROVED EQUAL

# SEQUENCE:

- 1. CONTRACTOR SHALL PHYSICALLY MARK THE LIMIT OF DISTURBANCE. INSTALL THE CONSTRUCTION ENTRANCE.
- INSTALL COMPOST FILTER SOCKS AS DEPICTED ON THE PLANS. REMOVE EXISTING SITE FEATURES INCLUDING PAVEMENT, GARAGE, CONCRETE PADS,

STORM PIPES, AND EXISTING TREES PER DEMOLITION PLAN; AND CLEAR AND GRUB WITHIN THE LIMIT OF DISTURBANCE. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION DEPICTED ON THE PLANS. 5. ROUGH GRADE THE SITE.

6. (CRITICAL STAGE) INSTALL STORM STRUCTURES AND PIPES INCLUDING UNDERGROUND BASIN #1 (UGB#1). STORMWATER PIPING TO BE INSTALLED STARTING AT THE FARTHEST DOWNSTREAM STRUCTURE AND WORKING UPSTREAM. INSTALLATION OF UGB#1 SHALL PROCEED IN ACCORDANCE WITH THE BMP-SPECIFIC INSTALLATION INSTRUCTIONS ON THE FOLLOWING STORMWATER DETAILS PLANS AND IN ACCORDANCE WITH ALL MANUFACTURER INSTRUCTIONS AND SPECIFICATIONS.

6.1. NOTE: STORM INLETS TRIBUTARY TO UGB#1 SHALL BE COVERED WITH A TEMPORARY WATER-TIGHT SEAL IMMEDIATELY UPON INSTALLATION. THE TEMPORARY SEALS SHALL REMAIN IN PLACE UNTIL THE AREA TRIBUTARY TO UGB#1 REACHES A MINIMUM 70% UNIFORM STABILIZATION TO PREVENT SEDIMENT OR OTHER DEBRIS FROM ENTERING THE SYSTEM.

8. RECONNECT EXISTING UTILITY SERVICES, SUCH AS THE SANITARY SEWER LATERAL, TO THE NEW ADDITION.

7. CONSTRUCT THE BUILDING ADDITION.

MUST BE STABILIZED IMMEDIATELY.

9. INSTALL STONE BASE FOR PAVED AREAS AND ANY PROPOSED OR RELOCATED SITE

10. INSTALL ASPHALT BASE COURSE AND CONCRETE WALKWAYS. 11. INSTALL PROPOSED LANDSCAPING AND APPLY STOCKPILED TOPSOIL TO AREAS THAT WILL BE PERMANENTLY VEGETATED. SEED VEGETATED AREAS.

12. (CRITICAL STAGE) UPON 70% UNIFORM STABILIZATION OF AREA TRIBUTARY TO UGB#1, THE TEMPORARY INLET SEALS MAY BE REMOVED.

13. INSTALL ASPHALT WEARING COURSE. MILL & OVERLAY AREAS OF EXISTING PAVEMENT INDICATED ON THE PLANS. APPLY PARKING LOT PAINT STRIPING AND INSTALL 14. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED (70% UNIFORM STABILIZATION OF DISTURBED SOIL ON SITE WILL BE COVERED WITH VEGETATION), TEMPORARY EROSION CONTROLS. INCLUDING COMPOST FILTER SOCK MUST BE REMOVED.

SHOULD ANY AREAS BECOME DISTURBED DURING REMOVAL OF THE CONTROLS, THEY

CONTRACTOR TO COORDINATE WITH UTILITY SERVICE PROVIDERS TO ENSURE PROPER COVERAGE OVER EXISTING AND PROPOSE UNDERGROUND UTILITIES, AND PROPER CLEARANCE PROVIDED UNDER EXISTING OVERHEAD UTILITIES. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. TH CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE UNDERGROUND UTILITIES SHOWN ARE PLOTTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. CONTRACTOR SHALL RELOCATE

Structure Table

Structure Details

MH-4 TO UGB INV OUT = 274.50

INL-2 TO MH-3 INV IN = 274.700 MH-3 TO UGB INV OUT = 274.500

RIM = 278.750SUMP = 275.750NL-1 TO MH-4 INV OUT = 275.75RIM = 278.401SUMP = 274.0000S-1 TO MH-2 INV OUT = 274.000

INL-2 TO MH-3 INV OUT = 275.300

RIM = 278.150SUMP = 274.500INL-3 TO UGB INV OUT = 274.500 RIM = 277.442OS-1 TO MH-2 INV IN = 273.300 MH-2 TO MH-1 INV OUT = 273.100

RIM = 276.302SUMP = 270.250

MH-2 TO MH-1 INV IN = 270.45

RIM = 272.640 SUMP = 266.810 MH-1 TO EX-INL INV IN = 269.390

Pipe Table

Pipe Name | Size | Length | Slope INL-1 TO MH-4 15.000 41.012 2.56

NL-2 TO MH-3 | 15.000 | 70.144 | 0.86

MH-3 TO UGB | 15.000 | 14.859 | 0.00

MH-4 TO UGB | 15,000 | 14,875 | 0.00

S-1 TO MH-2 | 15.000 | 51.809 | 1.

MH-2 TO MH-1 | 15.000 | 131.716 | 2.01

H-1 TO EX-INL | 15.000 | 17.574 | 4.89

tructure Name

ALL IMPROVEMENTS OUTSIDE STATE RIGHTS OF WAYS NOT LIMITED TO DRIVEWAY ACCESS, CROSSWALKS, CURBING, AND ADA RAMPS ARE SHOWN SCHEMATICALLY. ALL IMPROVEMENTS, CONSTRUCTION WORKS, AND MATERIALS SHALL BE ACCORDANCE TO MUNICIPAL SPECIFICATIONS AND DESIGN STANDARDS AND/OR PADOT SPECIFICATIONS (PUB. 408/2007) AS AMENDED AND STANDARD DETAILS, WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS. IN THE CASE OF CONFLICTING CONSTRUCTION STANDARDS THE

CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY CONTRACTOR SHALL VERIFY ALL DIMENSIONS, INVERTS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK

VARIATIONS BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK. IN ALL CASES, WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL NOT USE SCALED DIMENSION FOR CONSTRUCTION WITHOUT CONFIRMATION BY THE DESIGN ENGINEER. ALL ENDWALLS, STORM SEWER MANHOLES AND STORM SEWER INLETS SHALL CONFORM TO PADOT SPECIFICATIONS (PUB. 408 - SECTION

605) AND STANDARD DETAILS. 8. ALL STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE, CLASS 3 (R.C.P.) OR HIGH-DENSITY CORRUGATED POLYETHYLENE (H.D.P.E.) TYPE-S (SMOOTH INTERIOR) AND CONFORM TO PADOT SPECIFICATIONS (PUB. 408 - SECTION 601) AND STANDARD DETAILS. WATER TIGHT JOINTS SHALL BE PROVIDED ON ALL STORM SEWER RUNS. THE TOP OF GRATE ELEVATION FOR ALL STORM SEWER INLETS IS FOR THE CENTER OF THE INLET AT THE FACE OF CURB. THE CONTRACTOR IS RESPONSIBLE FOR PROJECTING THE ROADWAY GRADE ALONG THE LENGTH OF THE INLET.

10. ALL STORMWATER INLETS. MANHOLES, HEADWALLS AND ENDWALLS SHALL BE STAMPED TO INDICATE "NO DUMPING" ANY SPRING ENCOUNTERED DURING ROADWAY CONSTRUCTION SHALL BE MANAGED BY U-DRAIN TO NEAREST STORM SEWER FACILITY OR WATERCOURSE. U-DRAIN PLACEMENT TO BE BY THE DIRECTION OF THE MUNICIPAL ENGINEER. U-DRAINS WITHIN THE PENNDOT RIGHT-OF-WAY SHALL BE AT THE DISCRETION OF PENNDOT.

12. ALL SANITARY SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH MUNICIPAL WATER & SEWER AUTHORITY SPECIFICATIONS. ALL SANITARY SEWER MAIN/LATERAL CROSSINGS WITH THE WATER LINES SHALL BE INSTALLED WITH A MINIMUM 18 INCHES VERTICAL CLEARANCE OR, IF THE CLEARANCE CANNOT BE OBTAINED, A CONCRETE ENCASEMENT SHALL BE INSTALLED ON THE SANITARY SEWER MAIN/LATERAL. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAIN/LATERALS, WATER LINES AND PROPOSED/EXISTING TREES.

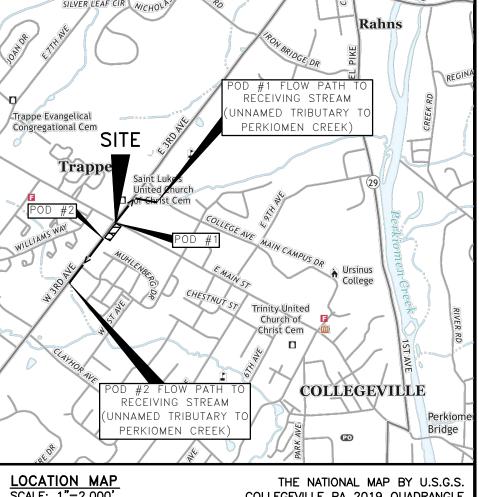
13. ALL SANITARY SEWER LATERALS SHALL BE S.D.R. 26 P.V.C., A MINIMUM OF 6" IN DIAMETER AND LAID ON A SLOPE OF NOT LESS THAN 1/4 INCH PER FOOT. SANITARY SEWER LATERALS SHALL BE DR-18 IF LOCATED WITHIN THE RIGHT-OF-WAY.SUBJECT TO THE REVIEW AND APPROVAL BY THE BOROUGH CODE ENFORCEMENT OFFICER. 14. ALL EXISTING UTILITY VALVES, CLEANOUTS, AND RIMS SHALL BE ADJUSTED TO FINISH GRADE.

15. STORM SEWER FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH MUNICIPAL'S SPECIFICATIONS 16. MUNICIPAL INSPECTION OF THE MATERIALS AND CONSTRUCTION PRACTICES FOR ALL UTILITIES IS REQUIRED DURING CONSTRUCTION. 7. CONTRACTOR TO VERIFY FUNCTIONALITY OF EXISTING STORM SEWER FACILITIES TO REMAIN, AND CLEAN OUT AND/OR REPAIR AS

NECESSARY TO RESTORE FUNCTIONALITY OF THE SYSTEM. . Horizontal Separation — Whenever Possible, Sewers Should be Laid at Least 10 Feet, Horizontally, From any existing or PROPOSED WATER MAINS. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, A SEWER MAY BE LAID CLOSER Than 10 feet to a water main if: IT IS LAID IN A SEPARATE TRENCH; OR IF

IT IS LAID IN THE SAME TRENCH, WITH THE WATER MAIN LOCATED AT ONE SIDE OF A BENCH OF UNDISTURBED EARTH: AND IF 18.1.1.1.3. IN EITHER CASE THE ELEVATION OF THE TOP (CROWN) OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM (INVERT) OF THE WATER MAIN.

19. VERTICAL SEPARATION - WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE ELEVATION OF THE SEWER CANNOT BE VERIFIED TO MEET THE ABOVE REQUIREMENTS, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION, FOR A DISTANCE OF 10 FEET EXTENDING ON EACH SIDE OF THE SEWER. IF POSSIBLE, ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. THE WATER MAIN SHOULD BE CONSTRUCTED OF SLIP—ON OR MECHANICAL—JOINT CAST IRON PIPE, PVC PIPE, OR PRE—STRESSED CONCRETE CYLINDER PIPE AND TH SEWER CONSTRUCTED OF MECHANICAL-JOINT CAST-IRON PIPE FOR ANY PORTION WITHIN 10 FEET OF THE WATER MAIN. BOTH SERVICES SHALL BE PRESSURE TESTED TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING. WHERE LESS THAN AN 18" VERTICAL SEPARATION EXISTS BETWEEN THE WATER AND SEWER LINE, THE SEWER LINE MAY BE CONCRETE ENCASED 10 FEET ON EITHER SIDE OF THE WATER MAIN. IF POSSIBLE, SEWERS CROSSING WATER MAINS SHALL BE CONSTRUCTED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.



COLLEGEVILLE PA 2019 QUADRANGL

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ROBERT E BLU (DATE) ROBERT E. BLUE JR. LICENSE NO. 26169-E

REGISTERED PROFESSIONAL ENGINEER

RAWN BY: CHECKED BY: SCALE: 1"=20" JOB NUMBER: SHEET NUMBER: 2023-12-18 2271-1E 10 of 16

----- 363---- EXIST. CONTOUR (1 FT. INTERVAL) PROP. CONTOUR (1 FT. INTERVAL) <del>-----363 -----</del> PROP. CONTOUR (5 FT. INTERVAL)

, HEREBY CERTIFY THAT THE

\_ IS THE OWNER OF THE LAND

PROP. SANITARY MANHOLE PROP. SANITARY SEWER LATERAL w/ CLEANOUT PROP. ELECTRIC LINE \_\_\_\_\_ E \_\_\_\_

DIAL 8-1-1 or 1-800-242-1776 **BEFORE YOU DIG** CALL 811 THREE DAYS TO TEN DAYS BEFORE YOU START ANY DIGGING PROP. GAS SERVICE PROJECT. WHETHER YOU ARE PLANNING TO DO IT YOURSELF OF PROP. WATER SERVICE HIRE A PROFESSIONAL, SOMEONE Know what's below. NEEDS TO CALL 811. PROP. CONCRETE Call before you dig. SERIAL #20220901398 TEST PIT LOCATION

REGISTERED SURVEYOR (SEAL)

STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE

HEREIN SUBDIVIDED OR TO BE DEVELOPED AND THAT I DO HEREBY ADOPT THIS PLAN.

MONTGOMERY COUNTY RECORDER OF DEEDS

PENNSYLVANIA ONE CALL

MARCH 31, 2022

DAY OF

OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF MONTGOMERY IN

\_\_, PAGE NUMBER

REGISTERED PROFESSIONAL ENGINEER (SEAL)

DESIGN ENGINEER'S CERTIFICATION

ON THIS DATE

TRAPPE BOROUGH STORMWATER MANAGEMENT ORDINANCE

OWNER'S CERTIFICATE

NORRISTOWN, PENNSYLVANIA IN PLAN FILE CASE

I HEREBY CERTIFY THAT

DEED BOOK

RECORDER

LEGEND PROP. STORMWATER PIPE W/ INLET

UrxB

---360--- EXIST. CONTOUR (5 FT. INTERVAL) \_\_\_\_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

URBAN LAND - PENN

COMPLEX

0 - 8

TP-1 / DR-1B

EXIST. SAN. MANHOLE EXIST. GAS SERVICE EXIST. OVERHEAD WIRE EXIST. WATER LINE

— EXIST. SOILS BOUNDARY EXIST. ZONING DISTRICT BOUNDARY

WEATHERED SHALE TP-2 / DR-2A278.5 0.00 276.8 -----TP-2 / DR-2B278.5 ROCK / 275.5 0.00 WEATHERED SHALE 276.8 TP-3280.0 N/A -----ROCK / 275.2

\_\_\_\_\_

ROCK / 275.2

278.2

WELL DRAINED

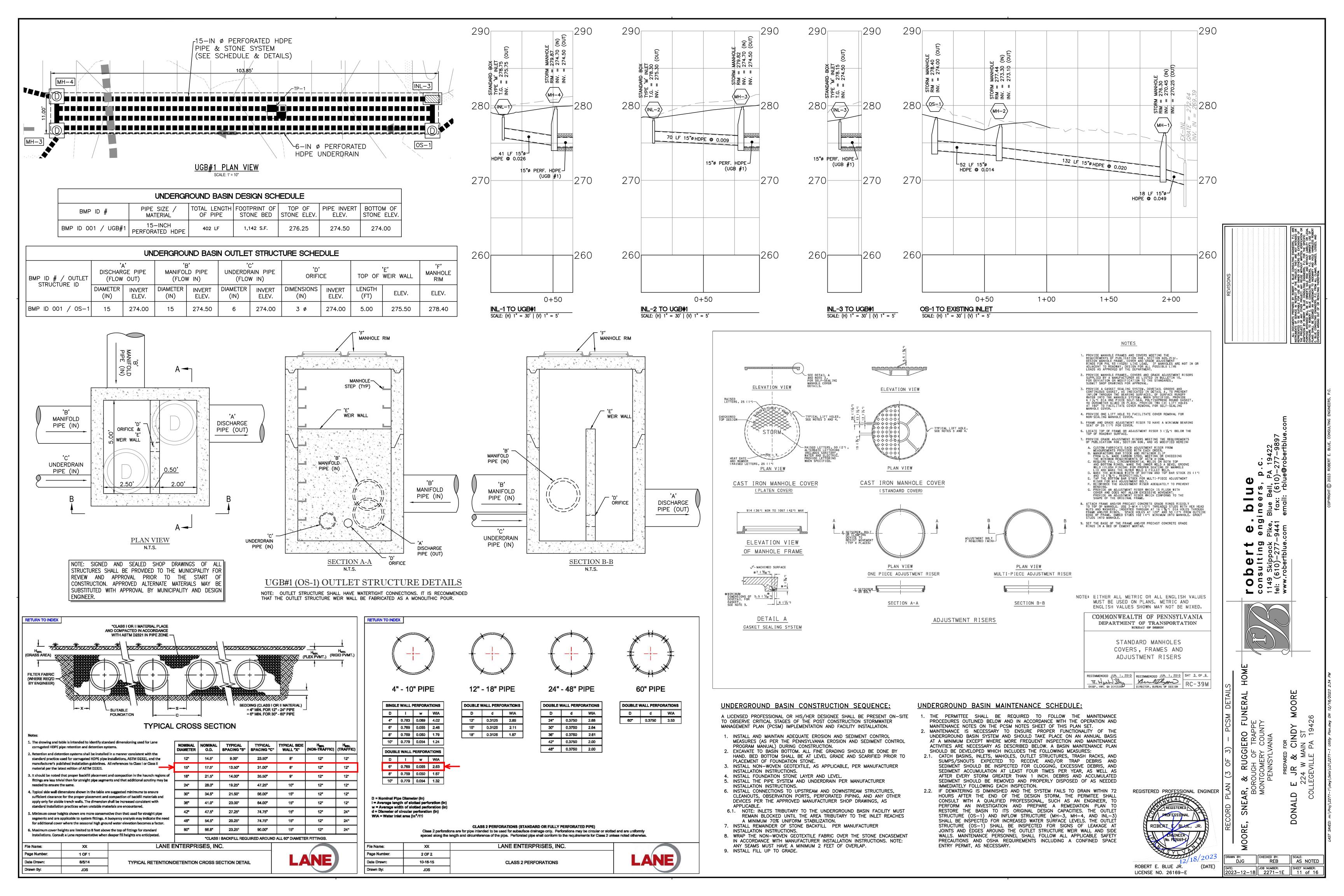
0.10

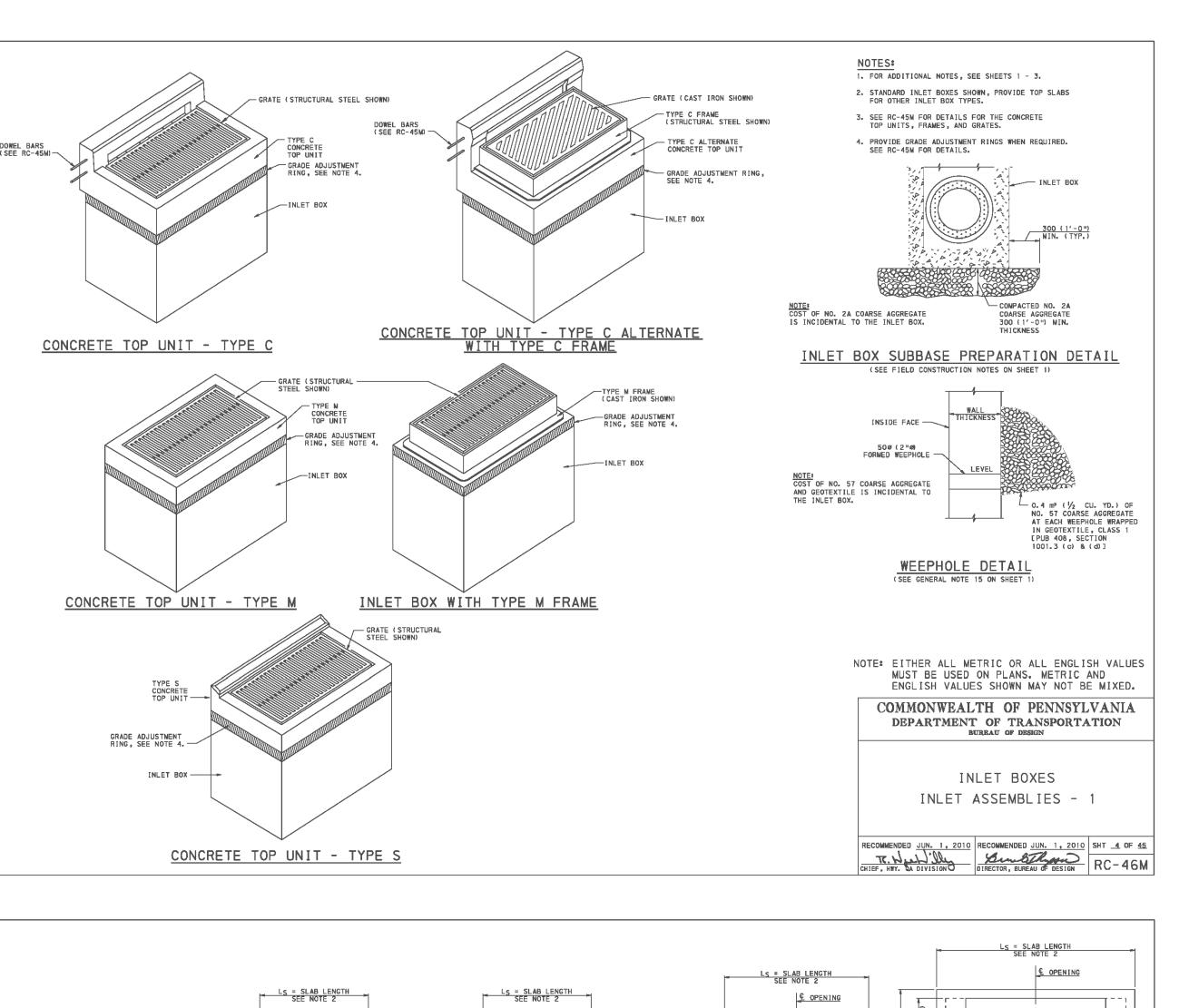
NO

INFILTRATION NOTE:
THE PROPOSED BASIN (UGB#1) HAS BEEN DESIGNED TO PROMOTE INFILTRATION TO THE GREATEST
EXTENT POSSIBLE. HOWEVER, NOW VOLUME CREDIT IS CLAIMED FOR INFILTRATION OF RUNOFF DUE
TO THE PRESENCE OF LIMITING ZONES AND THE LACK OF WATER MOVEMENT OBSERVED DURING
FIELD INFILTRATION TESTING. THEREFORE, THE UGB#1 HAS BEEN DESIGNED TO INCLUDE AN
UNDERDRAIN SYSTEM TO ALLOW FULL DEWATERING. REFER TO THE STORMWATER DETAILS ON THE
FOLLOWING SHEETS FOR ADDITIONAL DESIGN INFORMATION RELATED TO UGB#1.

	SOILS TABLE PER USDA NRCS						
MAP SYMBOL	SOIL NAME	SLOPES	HYDROLOGIC GROUP	DEPTH TO WATER TABLE	DRAINAGE CHARACTERISTICS	HYDRIC SOIL	
PeB	PENN SILT LOAM	3 – 8	В	>80"	WELL DRAINED	NO	

>80"





1150 (451/4")

TYPE 5 INLET BOX

TOP SLAB
CAST-IN-PLACE CONCRETE
U.S. CUSTOMARY UNITS

TOP SLAB PRECAST CONCRETE

CUSTOMARY UNITS

- INSIDE FACE OF INLET BOX

1150 (451/4")

OTHER INLET BOXES

TOP SLAB
CAST-IN-PLACE CONCRETE
METRIC UNITS

PRECAST CONCRETE

2368 (93¼")

1. FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.

2. OUT TO OUT DIMENSIONS OF TOP SLABS TO MATCH SIZE OF INLET BOX.

 SET EDGE OF OPENING AT INSIDE FACE OF INLET BOX FOR ACCESS, IF POSSIBLE. 4. FOR ADDITIONAL REINFORCEMENT AROUND OPENINGS, SEE SHEETS 9 & 10.

5. FOR JOINT DETAILS, SEE SHEETS 13 OR 23. 6. ANY REINFORCEMENT BARS LESS THAN 152 mm (6") IN LENGTH, DUE TO THE LOCATION OF THE OPENING, ARE NOT REQUIRED.

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

INLET BOXES

TOP SLABS - 2

RECOMMENDED JUN. 1, 2010 RECOMMENDED JUN. 1, 2010 SHT B OF 45

CHIEF, HWY. & DIVISION DIRECTOR, BUREAU OF DESIGN RC-46M

<u>♀ OPENING</u>

CIRCULAR OPENING FOR MANHOLE COVER

OTHER INLET BOXES

STANDARD INLET BOX

CIRCULAR OPENINGS:

#13 @ 300 (#4 @ 12") —

"S1" BARS @ /

#13 @ 300 (#4 @ 12")-

"S1" BARS @/

38 (1½") MIN. | "S1" BARS © 150 (6")

1. THE FOLLOWING CIRCULAR OPENINGS ARE PERMITTED: 610 mm (24") Ø 686 mm (27") Ø 762 mm (30") Ø

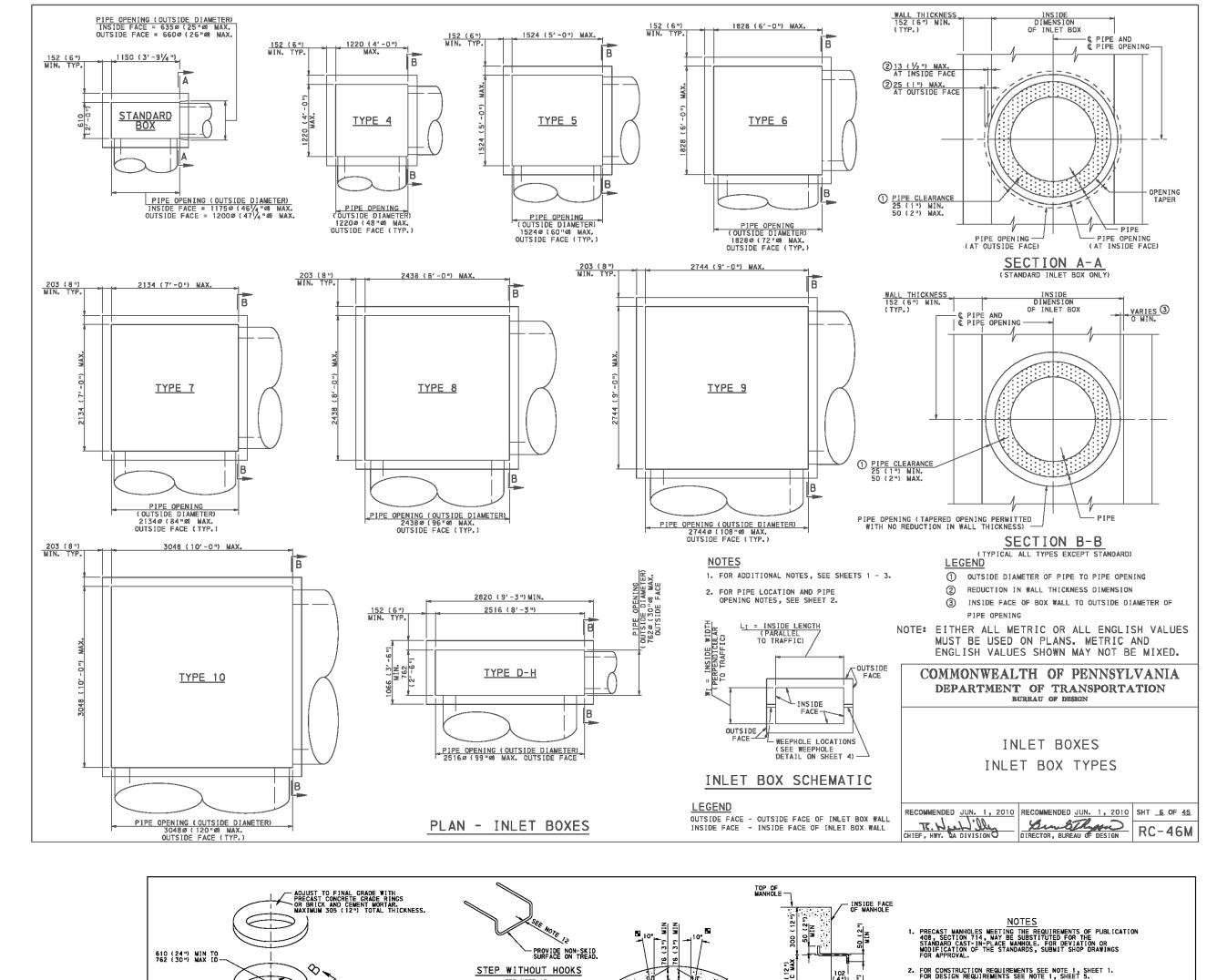
FOR A STANDARD BOX, ONLY A 610 mm (24") Ø OPENING IS PERMITTED.

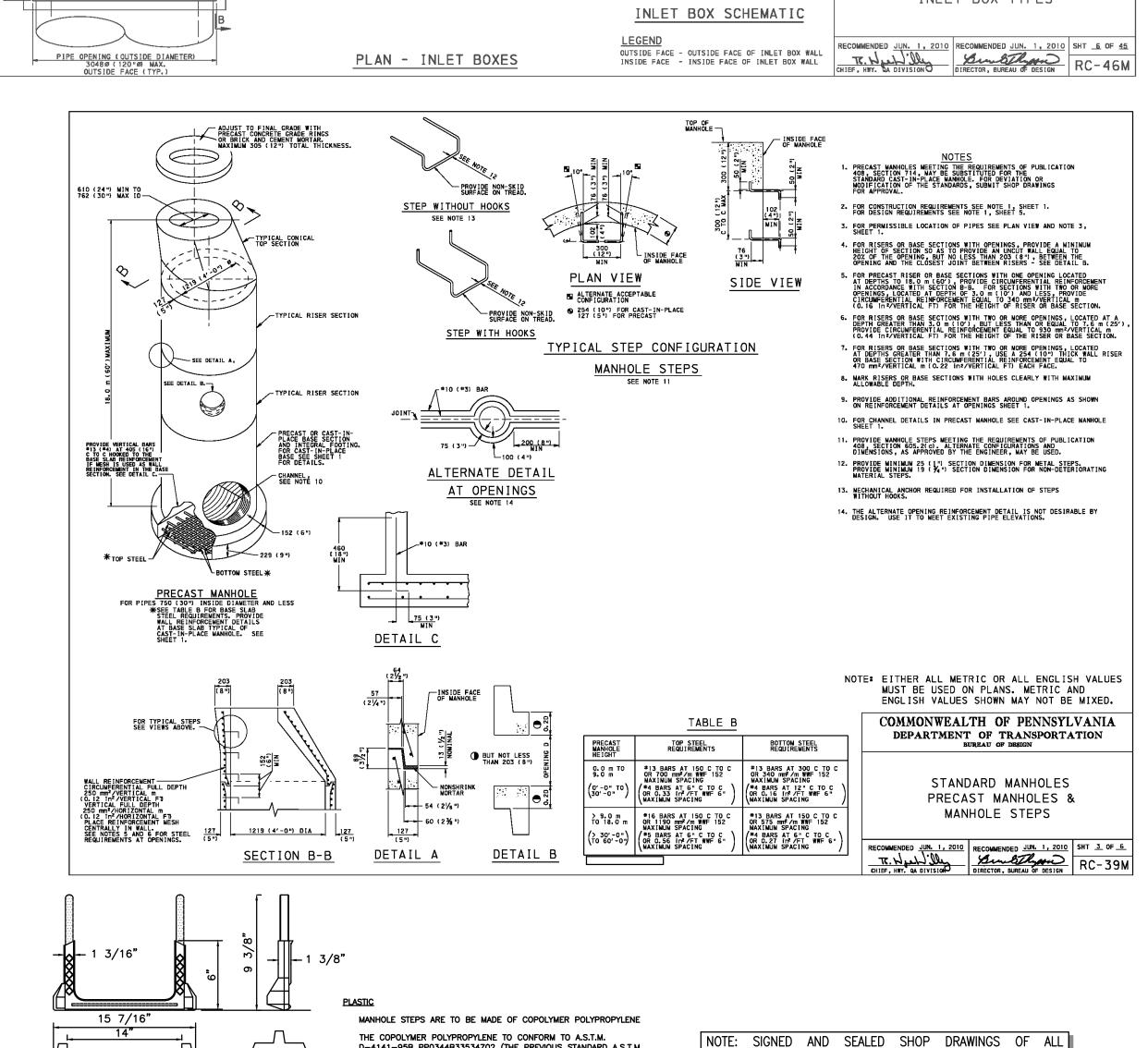
"S1" BARS @ 150 (6")

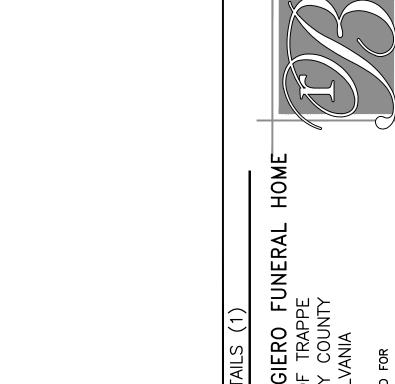
TOP SLAB WITH KEYED JOINT

TOP SLAB WITH SHIPLAP JOINT (PRECAST ONLY)

SECTION D-D (ADDITIONAL REINFORCEMENT NOT SHOWN)







REGISTERED PROFESSIONAL ENGINEER

ROBERT E. BLUE JR. LICENSE NO. 26169-E

OORE

COPOLYMER POLYPROPYLENE PLASTIC MANHOLE STEP (ASTM C-478)

D-4141-95B PP0344B33534Z02 (THE PREVIOUS STANDARD A.S.T.M.

THE STEEL TO BE USED IN MANUFACTURING OF THIS PRODUCT TO BE DEFORMED 1/2" REINFORCING ROD. THIS MATERIAL TO BE GRADE 60 AND CONFORM TO ALL THE REQUIREMENTS OF ASTM A-615.

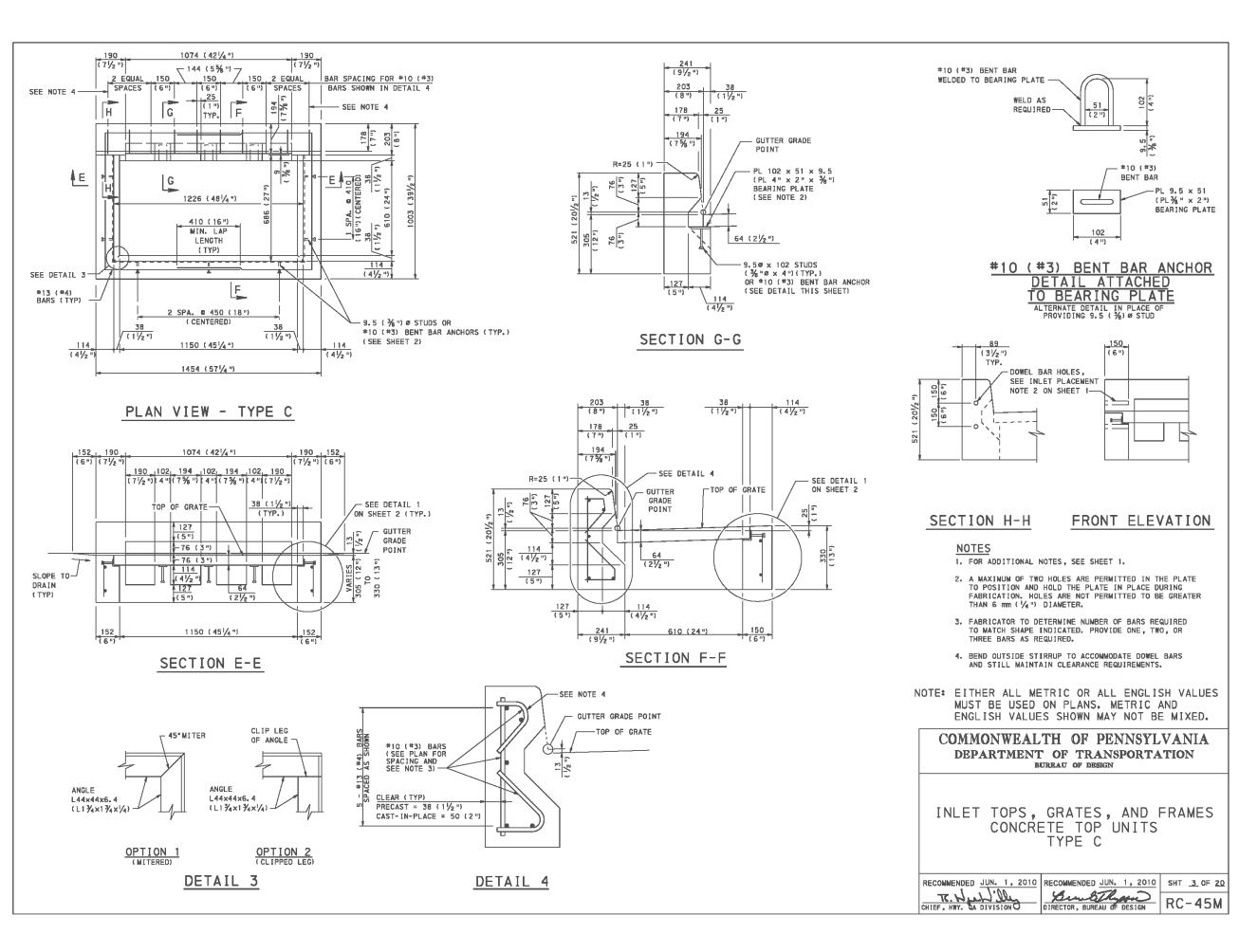
D-4101-92B, WAS REPLACED BY D-4101-95B)

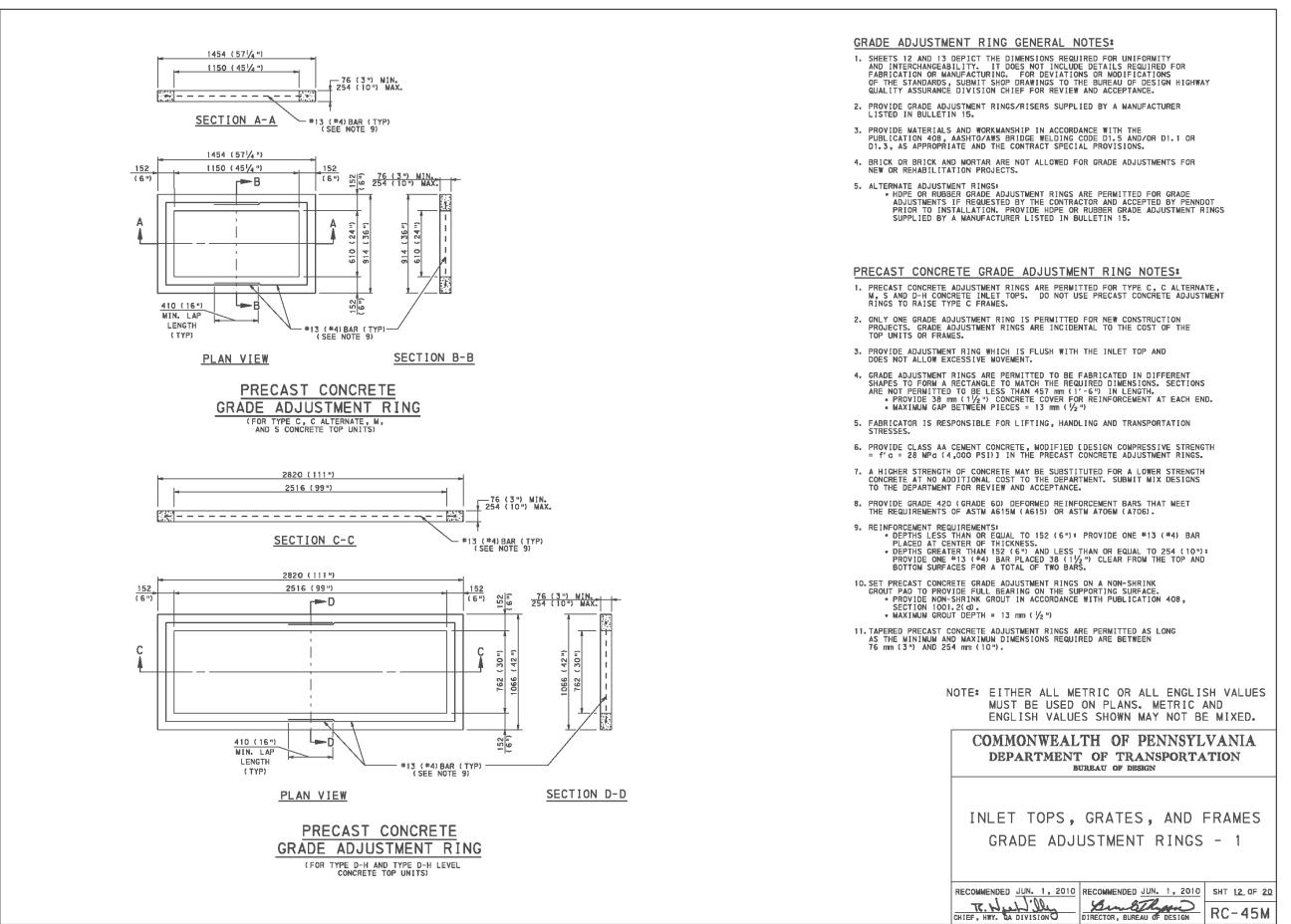
STRUCTURES SHALL BE PROVIDED TO THE MUNICIPALITY FOR

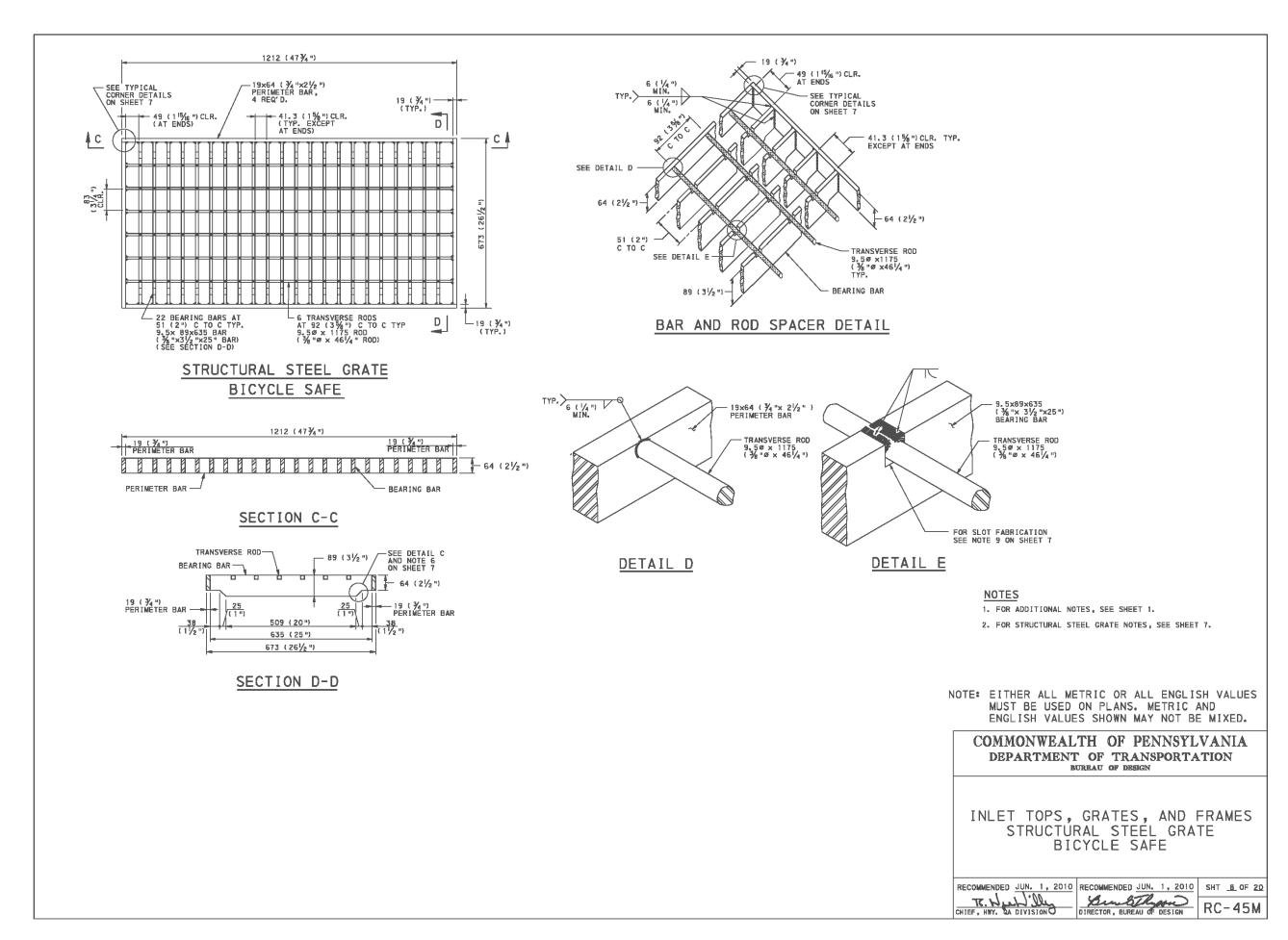
REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION. APPROVED ALTERNATE MATERIALS MAY BE

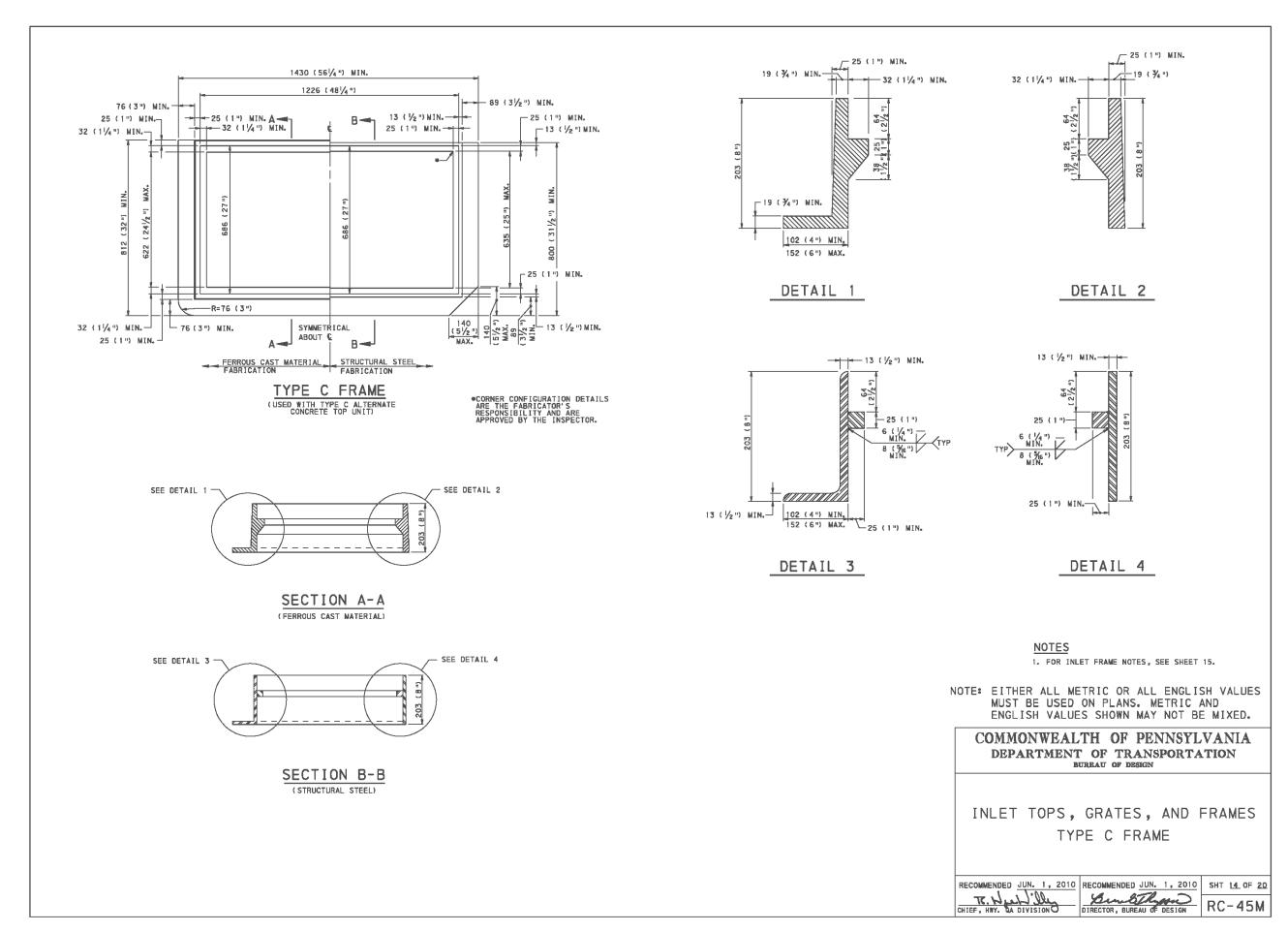
SUBSTITUTED WITH APPROVAL BY MUNICIPALITY AND DESIGN

ENGINEER.

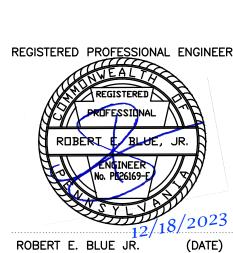








NOTE: SIGNED AND SEALED SHOP DRAWINGS OF ALL STRUCTURES SHALL BE PROVIDED TO THE MUNICIPALITY FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION. APPROVED ALTERNATE MATERIALS MAY BE SUBSTITUTED WITH APPROVAL BY MUNICIPALITY AND DESIGN ENGINEER.



LICENSE NO. 26169-E

OORI

ONALD

(DATE)

# REGULATORY NOTES:

- 1. THIS EROSION AND SEDIMENT CONTROL PLAN AND ASSOCIATED REPORT WERE PREPARED BY THE STAFF OF ROBERT E. BLUE CONSULTING ENGINEERS, P.C. (REBPC) UNDER THE DIRECTION OF ROBERT E. BLUE JR., P.E. THE MEASURES SHOWN HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE COUNTY CONSERVATION DISTRICT. REBPC DOES NOT TAKE RESPONSIBILITY IN OBSERVING AND/OR CERTIFYING THE CONSTRUCTION OF THESE FACILITIES UNLESS REQUESTED SPECIFICALLY BY THE OWNER AND/OR CONTRACTOR. THEREFORE, REBPC DOES NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF IMPROPER CONSTRUCTION AND/OR MAINTENANCE OF FACILITIES DURING CONSTRUCTION.
- . THE OPERATOR/RESPONSIBLE PARTY (O/RP) SHALL BE DEFINED AS FOLLOWS: 2.1. THE CONTRACTOR FOR THE TIME PÉRIOD OF INITIAL SITE DISTURBANCE UP TO THE POINT THE SITE
- ACHIEVES FINAL STABILIZATION AS DEFINED HEREIN 2.2. ALL OTHER TIMES: THE PERMITTEE/CO-PERMITTEE (PERMITTEE) SHALL BE THOSE INDIVIDUALS OR ORGANIZATIONS AS DEFINED ON THE APPROVED ERÒSION CONTROL PERMIT APPLICATION, THE APPROVED NPDES PERMIT APPLICATION AND/OR THE PROPERTY OWNER.
- 3. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER

# STANDARD E&S PLAN NOTES:

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. . ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) 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. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- D. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSEI OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 11. ALL OFF—SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FIL FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- 14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE SITE ONTO MAIN STREET (A.K.A. SUMNEYTOWN PIKE, A.K.A. SR 0063).
- 15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS 22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- . UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
- . AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT—LADEN RUNOFF FROM LEAVIN THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 33. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS. 34. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- LUNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS—SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
- 36. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 37. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

### CONSTRUCTION NOTES

- 1. VEHICLES AND EQUIPMENT MUST NEITHER ENTER DIRECTLY, NOR EXIT DIRECTLY FROM THE SITE ONTO ROADWAYS WITHOUT PASSING OVER THE CONSTRUCTION ENTRANCE AND REMOVING MUD AND SILT FROM TIRES. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY, OR AS NEEDED, OR AS DIRECTED BY THE COUNTY CONSERVATION DISTRICT OR THE MUNICIPALITY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER OR SURFACE
- 2. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER. STOCKPILE TOPSOIL WHERE INDICATED ON THE PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER SILT PROTECTION AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING.
- 3. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY, OR AS NEEDED, OR DIRECTED BY THE CONSERVATION DISTRICT OR THE MUNICIPALITY AND DISPOSED OF IN A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 4. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- 5. ALL SEDIMENT SHALL BE FLUSHED FROM THE ADJACENT STATE, TOWNSHIP AND COUNTY STORM SEWERS AT THE COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL NOT FLUSH SEDIMENT INTO WATERWAYS. TO FLUSH STORM SEWERS, CONTRACTOR SHALL BLOCK THE LOWEST INVERT OF THE SYSTEM AND PUMP SEDIMENT LADEN WATER THROUGH A FILTER BAG OR OTHER APPROVED DEVICE AND DISCHARGE IN AN APPROPRIATE MANNER (I.E. TO STABILIZED GRADE, OR TANKER TRUCK AND DISPOSED OF PROPERLY)
- 6. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN
- AREAS WHICH ARE TO BE TOP-SOILED 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 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. YARDS.
- 8. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED 4 DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION. (PLEASE NOTE THAT HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES)
- 9. ALL SOILS RELATED WORK (COMPACTION, INSPECTION, ETC.) SHOULD BE PERFORMED UNDER THE SUPERVISION OF, AND CERTIFIED BY, A QUALIFIED GEOTECHNICAL ENGINEER.
- 10. TOPSOIL (MINIMUM 6 INCHES) SHALL BE PLACED OVER THE FILL AND SEEDING, LIMING, FERTILIZING AND MULCHING DONE IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS OR APPROVED EQUAL.
- 11. <u>UTILITY LINE TRENCH EXCAVATION NOTES</u>
  11.1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY. 11.2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE
- RESTORATION AND STABILIZATION OPERATIONS. 11.3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH 11.4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND
- BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. 11.5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
- 11.6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED. 11.7. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.
- 14.1. THE FILL MATERIAL SHALL BE TAKEN FROM SELECT BORROW AREAS. IT SHALL BE FREE OF ROOTS STONES, WOODY VEGETATION, BOULDERS, AND OTHER EXTRANEOUS MATERIAL. AREAS ON WHICH FILL IS TO BE PLACED SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, THE SOIL IS TOO WET FOR
- 14.2. FILL MATERIAL SHALL BE PLACED IN 6 TO 8 INCH LAYERS AND SHALL BE CONTINUOUS OVER THE ENTIRE LENGTH OF FILL.
- 14.3. COMPACTION SHALL BE OBTAINED BY ROUTING THE EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF THE FILL IS TRAVERSED BY AT LEAST ONE TREAD TRACT OF THE EQUIPMENT, OR COMPACTION SHALL BE ACHIEVED BY A COMPACTOR.
- 14.4. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION 10% HIGHER THAN THE DESIGN HEIGHT IF COMPACTION IS OBTAINED WITH HAULING EQUIPMENT. IF COMPACTORS ARE USED, THE OVERBUILD MAY
- 14.5. EMBANKMENT SHALL BE COMPACTED TO NO LESS THAN 98% OF THE DETERMINED DRY WEIGHT DENSITY (STANDARD PROCTOR). SEE SOIL SPECIFICATIONS FOR IMPERVIOUS CLAY CORE MATERIAL.

### CHAPTER 93 RECEIVING WATERCOURSE NOTE: THE PROJECT SITE IS DIVIDED BETWEEN TWO RECEIVING WATERCOURSES - BOTH OF WHICH ARE UNNAMED

TRIBUTARIES THAT DRAIN TO THE PERKIOMEN CREEK. POD #1 DRAINS TO THE NORTHEAST TO AN UNNAMED TRIBUTARY OF PERIOMEN CREEK THAT IS CLASSIFIED AS TROUT STOCKING (TSF) AND MIGRATORY FISH (MF). POD #2 DRAINS TO THE SOUTHWEST TO AN UNNAMED TRIBUTARY OF PERKIOMEN CREEK THAT IS CLASSIFIED AS TROUT STOCKING (TSF) AND MIGRATORY FISH (MF).

# RIPARIAN FOREST BUFFER MANAGEMENT PLAN:

THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS LOCATED WITHIN THE LIMIT OF DISTURBANCE FOR WITH THIS PROJECT NOR WITHIN THE DEVELOPMENT PROPERTY BOUNDARY.

# DISPOSAL AND RECYCLING OF CONSTRUCTION WASTES

THE CONTRACTOR / DEVELOPER SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OR RECYCLING OF ALL WASTE PRODUCED BY CONSTRUCTION ACTIVITIES. ANTICIPATED MATERIALS INCLUDE BUILDING DEBRIS, ASPHALT AND CONCRETE, PIPES, AND E&S BMP'S SUCH AS COMPOST FILTER SOCKS, TEMPORARY FENCING, SAND BAGS, AND PUMPED WATER FILTER BAGS.

THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES FROM THE CONSTRUCTION AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS

# RESPONSIBILITIES FOR FILL MATERIAL:

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH LANDOWNER.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THI OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM .

# SITE MAINTENANCE:

THE BELOW PROCEDURES SHALL BE REPEATED AFTER EACH SIZEABLE STORM UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT WEEKLY INTERVALS THEREAFTER, INSPECTION AND NECESSARY CLEANING WILL BE DONE. PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE DONE IMMEDIATELY.

THE PERMITTEE IS ULTIMATELY RESPONSIBLE FOR ALL EROSION AND SEDIMENT POLLUTION CONTROL AND SITE STABILIZATION. ALTHOUGHT THE PERMITTEE MAY DELEGATE AUTHORITY FOR IMPLEMENTING AND MAINTAINING THE CONTROLS TO THE INDIVIDUAL LANDOWNERS OR CONTRACTORS, THE ULTIMATE RESPONSIBILITY FOR PROPER INSTALLATION AND MAINTENANCE IS THE PERMITTEE'S.

- ROCK CONSTRUCTION ENTRANCE: ROCK CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE ADJACENT ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND / OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO ROADWAYS (PUBLIC OR PRIVATE) OR OTHER IMPERVIOUS SURFACES MUST BE REMOVED IMMEDIATELY. WHERE ACCUMULATION OF DUST OR SEDIMENT IS INADEQUATELY CLEANED OR REMOVED BY CONVENTIONAL METHODS, A POWER BROOM OR STREET SWEEPER WILL BE REQUIRED TO CLEAN PAVED OR

·**Pumped water filter bags**: filter bags shall be inspected each day that they are in use. If any PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS

- CONCRETE WASHOUT: CONCRETE WASHOUTS SHALL BE INSPECTED WEEKLY WHILE IN USE AND REQUIRED MAINTENANCE PERFORMED IMMEDIATELY. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 75% CAPACITY OF THE WASHOUT FACILITY. IF A PROPRIETARY WASHOUT DEVICE IS UTILIZED, MAINTENANCE ACTIVITIES SHOULD BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

- COMPOST FILTER SOCK: FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. DEGRADABLE FILTER SOCKS SHALL BE REPLACED AT THE PROPER TIME INTERVALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED OF.

# **GENERAL MAINTENANCE ACTIVITIES:**

- DUST LEVELS MUST BE ADEQUATELY CONTROLLED DURING CONSTRUCTION. WATER STORED IN SEDIMENT BASINS/TRAPS OR A WATER TRUCK SHALL BE USED AS NECESSARY TO REDUCE THE AMOUNT OF DUST GENERATED FROM THE SITE.
- 2. VEGETATION SHALL BE MOWED WHENEVER NECESSARY TO MAINTAIN A PLEASING APPEARANCE AND DISCOURAGE WEED GROWTH. ALL LOCAL REGULATIONS WILL BE COMPLIED WITH. 3. AREAS THAT CONTAIN SOD SHALL BE CHECKED VERY CAREFULLY TO ENSURE THAT JOINTS BETWEEN THE SOD STRIPS ARE TIGHT AND SECURE. WHERE JOINT SEPARATION IS IN EVIDENCE, A CAREFUL INSPECTION OF EACH STRIP SHALL BE MADE TO DETERMINE WHETHER UNDERMINING OF THE STRIPS IS OCCURRING. IF
- IT IS, THE STRIPS SHALL BE ROLLED UP, THE SUBSURFACE SHALL BE FILLED AND GRADED AS REQUIRED AND THE SOD STRIPS SHALL BE RE-LAID WITH TIGHT JOINTS AND PEGGING. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEEDED. A BURLAP OR STRAW COVER WILL BE APPLIED AT A RATE OF 3 TONS/ACRE TO RETAIN THE
- SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY. 5. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AT COMPLETION OF THE PROJECT AFTER ALL EXPOSED SOIL SURFACES ARE FINISH-GRADED AND STABILIZED.

# MONITORING, INSPECTION, AND REPORTING REQUIREMENTS:

### VISUAL INSPECTIONS

THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPS AND PCSM BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:

(1) A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND

# (2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

# WHERE E&S, PCSM OR PPC BMPS ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR

ANY OTHER TIME, THE PERMITTEE AND CO-PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE

(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ÈNVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION; (2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN

THE ACTIVITY WILL RETURN TO COMPLIANCE; (3) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND (4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE

## CONDITIONS. REDUCTION, LOSS, OR FAILURE OF THE BMPS

UPON REDUCTION, LOSS, OR FAILURE OF THE BMPS, THE PERMITTEE AND CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPS OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPS OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPS. COMPLETION CERTIFICATE AND FINAL PLANS

### WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE N.O.T. IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

	SOILS TABLE PER USDA NRCS						
MAP SYMBOL	SOIL NAME	SLOPES	HYDROLOGIC GROUP	DEPTH TO WATER TABLE	DRAINAGE CHARACTERISTICS	HYDRIC SOIL	
PeB	PENN SILT LOAM	3 - 8	В	>80"	WELL DRAINED	NO	
UrxB	URBAN LAND - PENN	0 - 8	В	>80"	WELL DRAINED	NO	

# SOIL LIMITATION RESOLUTIONS:

AREAS AS NECESSARY.

- 1.SHOULD SOIL LIMITATIONS BE ENCOUNTERED, A QUALIFIED GEOTECHNICAL ENGINEER WILL BE CONSULTED PRIOR TO PROCEEDING WITH CONSTRUCTION IN THE AREA WITH THE LIMITATIONS. APPROPRIATE EARTHWORK CONSTRUCTION TECHNIQUES, INCLUDING IMPORTING SUITABLE SOILS AND UTILIZING LOCAL SUMPS AND PUMPS (TO APPROVED SEDIMENT REMOVAL FACILITIES) TO KEEP EXCAVATIONS DRY, AS RECOMMENDED BY A
- QUALIFIED GEOTECHNICAL ENGINEER, SHOULD BE IMPLEMENTED IF SOIL LIMITATIONS ARE ENCOUNTERED. 2.CUTBANKS CAVE - AREAS OF CUT SHALL BE STABILIZED AS SOON AS POSSIBLE DURING EARTH MOVING OPERATIONS IN ACCORDANCE WITH THE NOTES FOUND ON THE E&S PLANS. AT NO POINT SHOULD SLOPES EXCEED 2H:1V EXCEPT WHERE PROPER SHORING MEASURES ARE UTILIZED TO PREVENT CAVE IN.
- 3.CORROSIVE TO CONCRETE/STEEL A MAJORITY OF STORM DRAINAGE PIPING ARE PROPOSED TO BE HDPE TO MINIMIZE RISK OF CORROSION. 4.DROUGHTY - DURING CONSTRUCTION, A WATER SOURCE SUCH AS A HOSE CONNECTION TO PUBLIC WATER SUPPLY OR A WATER TANKER TRUCK MAY BE UTILIZED AS NEEDED TO MAINTAIN SUFFICIENT SOIL MOISTURE
- 5.EASILY ERODIBLE EARTH DISTURBANCE AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE DURING EARTH MOVING OPERATIONS IN ACCORDANCE WITH THE NOTES FOUND ON THE E&S PLANS.
- 6.DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE ANY GROUNDWATER ENCOUNTERED DURING CONSTRUCTION SHALL BE DIRECTED TOWARDS AN APPROPRIATE E&S BMP SUCH AS COMPOST FILTER SOCK OR A SEDIMENT TRAP OR PUMPED THROUGH A FILTER BAG PRIOR TO DISCHARGING FROM THE SITE.
- 8.LOW STRENGTH/LANDSLIDE PRONE EARTH DISTURBANCE AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE DURING EARTH MOVING OPERATIONS IN ACCORDANCE WITH THE NOTES FOUND ON THE E&S PLANS. AT NO POINT SHOULD SLOPES EXCEED 2H:1V EXCEPT WHERE PROPER SHORING MEASURES ARE

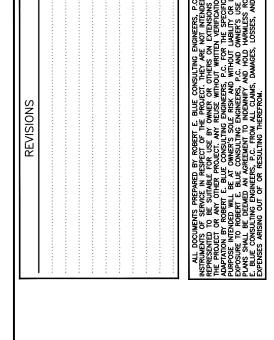
7.HYDRIC/HYDRIC INCLUSIONS - NO WETLANDS ARE PRESENT ON THE DEVELOPMENT PROPERTY.

- 9.SLOW PERCOLATION AREAS OF PONDED WATER SHALL BE DIRECTED TOWARDS AN APPROPRIATE E&S BMP SUCH AS COMPOST FILTER SOCK OR A SEDIMENT TRAP OR PUMPED THROUGH A FILTER BAG PRIOR TO
- DISCHARGING FROM THE SITE. 10. PIPING - AREAS OF PONDED WATER SHALL BE DIRECTED TOWARDS AN APPROPRIATE E&S BMP SUCH AS COMPOST FILTER SOCK OR A SEDIMENT TRAP OR PUMPED THROUGH A FILTER BAG, AS APPLICABLE. BASIN OUTLET PIPES WILL BE INSTALLED WITH ANTI-SEEP COLLARS. UTILITY PIPES AND CONDUITS SHALL BE
- INSTALLED WITH APPROPRIATE BEDDING MATERIALS. 11.POOR SOURCE OF TOPSOIL - SOIL TESTS SHOULD BE PERFORMED BY A QUALIFIED INDIVIDUAL SUCH AS A GEOTECHNICAL ENGINEER OR SOIL SCIENTIST TO DETERMINE SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED AMONGST LANDSCAPE
- 12.FROST ACTION DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS. 13. WETNESS - AREAS OF PONDED WATER SHALL BE DIRECTED TOWARDS AN APPROPRIATE E&S BMP SUCH

THE DIRECTION OF A QUALIFIED INDIVIDUAL SUCH AS A GEOTECHNICAL ENGINEER OR SOIL SCIENTIST.

AS COMPOST FILTER SOCK OR A SEDIMENT TRAP OR PUMPED THROUGH A FILTER BAG PRIOR TO

DISCHARGING FROM THE SITE. LIME APPLICATION MAY BE UTILIZED AS A LAST RESORT AND ONLY UNDER



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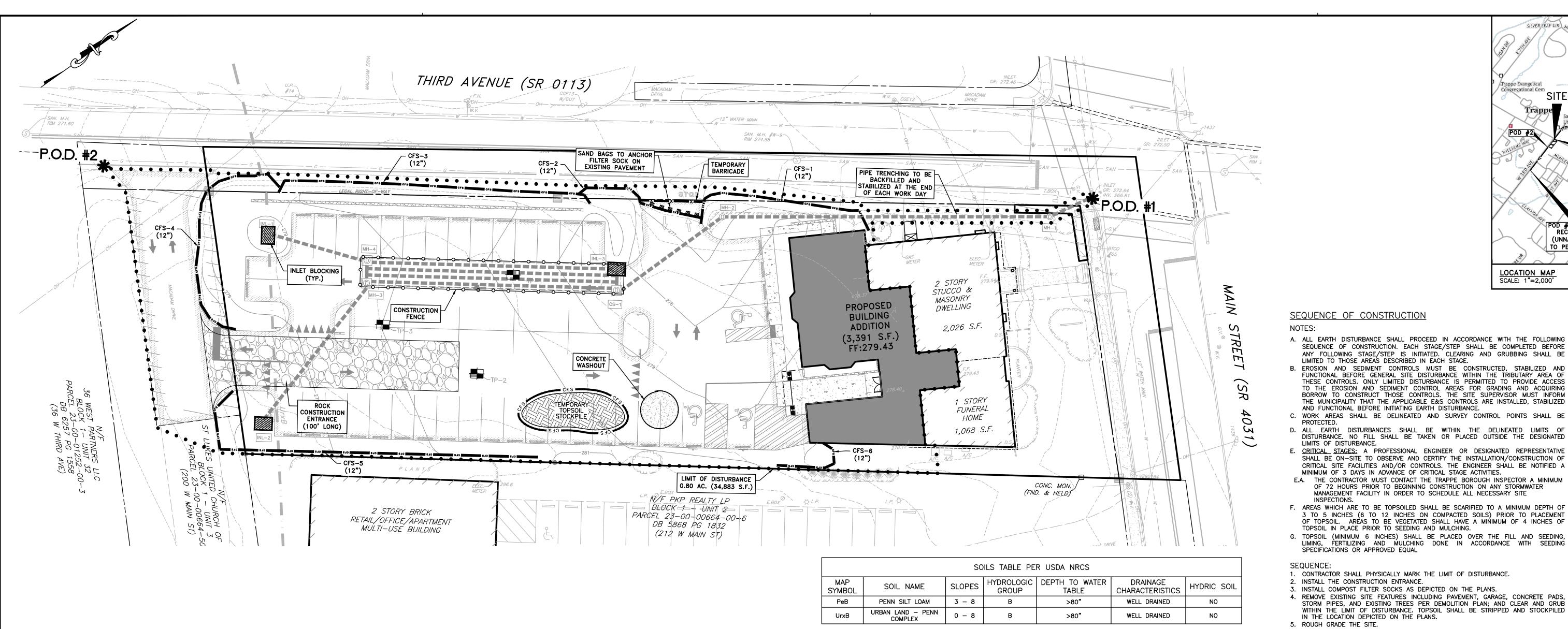
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL

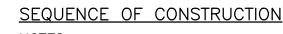
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A. ALL EARTH DISTURBANCE SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE OF CONSTRUCTION. EACH STAGE/STEP SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE/STEP IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE.

THESE CONTROLS. ONLY LIMITED DISTURBANCE IS PERMITTED TO PROVIDE ACCESS TO THE EROSION AND SEDIMENT CONTROL AREAS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS. THE SITE SUPERVISOR MUST INFORM THE MUNICIPALITY THAT THE APPLICABLE E&S CONTROLS ARE INSTALLED, STABILIZED AND FUNCTIONAL BEFORE INITIATING EARTH DISTURBANCE. C. WORK AREAS SHALL BE DELINEATED AND SURVEY CONTROL POINTS SHALL BE

FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREA OF

D. ALL EARTH DISTURBANCES SHALL BE WITHIN THE DELINEATED LIMITS OF DISTURBANCE. NO FILL SHALL BE TAKEN OR PLACED OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE.

E. <u>CRITICAL</u> <u>STAGES:</u> A PROFESSIONAL ENGINEER OR DESIGNATED REPRESENTATIVE SHALL BE ON-SITE TO OBSERVE AND CERTIFY THE INSTALLATION/CONSTRUCTION OF CRITICAL SITE FACILITIES AND/OR CONTROLS. THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF 3 DAYS IN ADVANCE OF CRITICAL STAGE ACTIVITIES. E.A. THE CONTRACTOR MUST CONTACT THE TRAPPE BOROUGH INSPECTOR A MINIMUM

OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION ON ANY STORMWATER MANAGEMENT FACILITY IN ORDER TO SCHEDULE ALL NECESSARY SITE F. 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. ARÈAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.

G. TOPSOIL (MINIMUM 6 INCHES) SHALL BE PLACED OVER THE FILL AND SEEDING, LIMING, FERTILIZING AND MULCHING DONE IN ACCORDANCE WITH SEEDING SPECIFICATIONS OR APPROVED EQUAL

# SEQUENCE:

1. CONTRACTOR SHALL PHYSICALLY MARK THE LIMIT OF DISTURBANCE.

2. INSTALL THE CONSTRUCTION ENTRANCE. 3. INSTALL COMPOST FILTER SOCKS AS DEPICTED ON THE PLANS.

4. REMOVE EXISTING SITE FEATURES INCLUDING PAVEMENT, GARAGE, CONCRETE PADS STORM PIPES, AND EXISTING TREES PER DEMOLITION PLAN; AND CLEAR AND GRUB WITHIN THE LIMIT OF DISTURBANCE. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION DEPICTED ON THE PLANS. 5. ROUGH GRADE THE SITE.

6. (CRITICAL STAGE) INSTALL STORM STRUCTURES AND PIPES INCLUDING UNDERGROUND BASIN #1 (UGB#1). STORMWATER PIPING TO BE INSTALLED STARTING AT THE FARTHEST DOWNSTREAM STRUCTURE AND WORKING UPSTREAM. INSTALLATION OF UGB#1 SHALL PROCEED IN ACCORDANCE WITH THE BMP-SPECIFIC INSTALLATION INSTRUCTIONS ON THE FOLLOWING STORMWATER DETAILS PLANS AND IN ACCORDANCE WITH ALL MANUFACTURER INSTRUCTIONS AND SPECIFICATIONS.

6.1. NOTE: STORM INLETS TRIBUTARY TO UGB#1 SHALL BE COVERED WITH A TEMPORARY WATER-TIGHT SEAL IMMEDIATELY UPON INSTALLATION. THE TEMPORARY SEALS SHALL REMAIN IN PLACE UNTIL THE AREA TRIBUTARY TO UGB#1 REACHES A MINIMUM 70% UNIFORM STABILIZATION TO PREVENT SEDIMENT OR OTHER DEBRIS FROM ENTERING THE SYSTEM.

7. CONSTRUCT THE BUILDING ADDITION. 8. RECONNECT EXISTING UTILITY SERVICES, SUCH AS THE SANITARY SEWER LATERAL, TO THE NEW ADDITION.

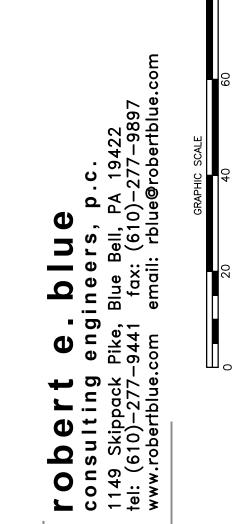
9. INSTALL STONE BASE FOR PAVED AREAS AND ANY PROPOSED OR RELOCATED SITE

10. INSTALL ASPHALT BASE COURSE AND CONCRETE WALKWAYS. 11. INSTALL PROPOSED LANDSCAPING AND APPLY STOCKPILED TOPSOIL TO AREAS THAT

WILL BE PERMANENTLY VEGETATED. SEED VEGETATED AREAS. 12. (CRITICAL STAGE) UPON 70% UNIFORM STABILIZATION OF AREA TRIBUTARY TO UGB#1, THE TEMPORARY INLET SEALS MAY BE REMOVED.

13. INSTALL ASPHALT WEARING COURSE. MILL & OVERLAY AREAS OF EXISTING PAVEMENT INDICATED ON THE PLANS. APPLY PARKING LOT PAINT STRIPING AND INSTALL

14. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED (70% UNIFORM STABILIZATION OF DISTURBED SOIL ON SITE WILL BE COVERED WITH VEGETATION), TEMPORARY EROSION CONTROLS, INCLUDING COMPOST FILTER SOCK MUST BE REMOVED. SHOULD ANY AREAS BECOME DISTURBED DURING REMOVAL OF THE CONTROLS, THEY MUST BE STABILIZED IMMEDIATELY.



OD #1 FLOW PATH TO RECEIVING STREAM

COLLEGEVILL

THE NATIONAL MAP BY U.S.G.S

COLLEGEVILLE PA 2019 QUADRANGLI

(UNNAMED TRIBUTARY TO PERKIOMEN CREEK)

POD #2 FLOW PATH TO

RECEIVING STREAM

(UNNAMED TRIBUTARY TO PERKIOMEN CREEK)

0

DRAWN BY:

DJG

CHECKED BY:

REB

SCALE:

1"=20' DATE: 2023-12-18 JOB NUMBER: SHEET NUMBER: 15 of 16

REGISTERED PROFESSIONAL ENGINEER

ROBERT E. BLUE JR. LICENSE NO. 26169-E

PENNSYLVANIA ONE CALL DIAL 8-1-1 or 1-800-242-1776 BEFORE YOU DIG CALL 811 THREE DAYS TO TEN DAYS

BEFORE YOU START ANY DIGGING PROJECT. WHETHER YOU ARE PLANNING TO DO IT YOURSELF OR HIRE A PROFESSIONAL, SOMEONE Know what's below. NEEDS TO CALL 811. Call before you dig. SERIAL #20220901398

MARCH 31, 2022

● ● ● ● ■ LIMIT OF DISTURBANCE

EROSION AND SEDIMENT CONTROL LEGEND

COMPOST FILTER SOCK ROCK CONSTRUCTION ENTRANCE

—o—o—o—o— SAFETY / CONSTRUCTION FENCE

TEMPORARY BARRICADE TOP SOIL STOCKPILE

# SEEDING SPECIFICATIONS:

- SEEDING (TEMPORARY AND PERMANENT) 1.1. SEE TABLE 11.2 FOR THE SOIL AMENDMENT APPLICATION RATE EQUIVALENTS.
- 1.2. TEMPORARY SEEDING AS APPROVED BY THE MUNICIPALITY AND THE CONSERVATION DISTRICT SHALL BE PERFORMED ON ALL DISTURBED SOIL AREAS THAT ARE AT FINISHED GRADE, AND ALL DISTURBED SOIL AREAS THAT WILL NOT BE DISTURBED WITHIN ONE YEAR. MINIMUM SPECIFICATIONS ARE AS FOLLOWS:
  - SPRING AND SUMMER SEEDING: 100% ANNUAL RYEGRASS (LOLIUM MULTIFORUM) [98% PURITY, 90% GERMINATION, APPLIED AT 48 LBS/ACRE]
  - FALL SEEDING: WINTER RYE (TETRA PETKUS) [98% PURITY, 90% GERMINATION, APPLIED AT 168 LBS/ACRE]
- PERMANENT SEEDING AS APPROVED BY THE MUNICIPALITY AND THE COUNTY CONSERVATION DISTRICT SHALL BE PERFORMED ON ALL DISTURBED AREAS THAT ARE AT FINISHED GRADE, AND ALL DISTURBED SOIL AREAS THAT WILL NOT BE DISTURBED WITHIN ONE YEAR. MINIMUM SPECIFICATIONS ARE AS FOLLOWS (OR APPROVED EQUIVALENT):
- \* 20% ANNUAL RYEGRASS (LOLIUM MULTIFORUM) [A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL, 98% PURITY, 90% GERMINATION, APPLIED AT 20 LBS/ACRE
- \* 30% PENNLAWN RED FESCUE [98% PURITY, 85% GERMINATION, APPLIED AT 30 \* 50% KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS) [A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE
- 1.4. VARIETY EXCEEDING 25% OF THE TOTAL, 98% PURITY, 80% GERMINATION, APPLIED AT 55 LBS/ACRE]
- BASIN AREAS: ERNST CONSERVATION SEEDS RETENTION BASIN FLOOR SEEDING LOW MAINTENANCE (ERNMX-126) [98% PURITY, 85% GERMINATION, APPLIED AT 20-40 LBS/ACRE OR 0.5-1 LB/1,000SF]
- 1.6. PRIOR TO PERMANENT SEEDING, SOILS TESTING SHALL BE PERFORMED TO DETERMINE THE APPROPRIATE FERTILIZER AND LIMESTONE APPLICATIONS. FERTILIZER AND LIMESTONE SHALL BE APPLIED PER THE RECOMMENDATIONS OF A LICENSED LANDSCAPE PROFESSIONAL. PERMANENT VEGETATION SHOULD BE ESTABLISHED AT THE EARLIEST POSSIBLE DATE. WATERING. MOWING AND FERTILIZING PROGRAMS SHALL BE CONTINUED UNTIL VEGETATIVE COVER IS ADEQUATELY ESTABLISHED.

### TEMPORARY / PERMANENT STABILIZATION 2.1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.

PROVIDED A TACKIFIER IS USED.

# 2.2. MULCH APPLICATION RATES:

- STRAW: 3 TONS PER ACRE: 140 LB PER 1.000 SQ.FT.: 1.240 LB. PER 1.000 SQ.YD.; NOTE: EITHER WHEAT OR OAT STRAW FREE OF WEEDS, NOT CHOPPED OR
- 2.2.2. HAY: 3 TONS PER ACRE; 140 LB PER 1,000 SQ.FT.; 1,240 LB. PER 1,000 SQ.YD.; NOTE: TIMOTHY, MIXED CLOVER & TIMOTHY OR OTHER NATIVE FORAGE GRASSES.
- WOOD CHIPS: 4-6 TONS PER ACRE; 185-275 LB. PER 1,000 SQ.FT.; 1,650-2,500
- LB. PER 1,000 SQ.YD.; NOTE: MAY PREVENT GERMINATION OF GRASSES & LEGUMES. 2.2.4. HYDROMULCH: 1 TONS PER ACRE: 47 LB PER 1.000 SQ.FT.: 415 LB. PER 1.000 SQ.YD.; NOTE: SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%; WOOD FIBER HYDOMULCH MAY BE APPLIED ON STEEPER SLOPES
- 2.3. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
- STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- 2.5. AN E&S PLAN SHALL BE SUBMITTED TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT AND IMPLEMENTED FOR ALL SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATION.
- 2.6. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (E&S MANUAL), COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION (TECHNICAL GUIDANCE NUMBER 363-2134-008) LAST REVISED MARCH 2012. EROSION AND SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED AND PCSM BMPS ARE OPERATIONAL.

# SODDING SPECIFICATIONS

# SOIL PREPARATION

- PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN. SOIL TESTS SHOULD BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. SOIL TEST MAY BE CONDUCTED BY THE STATE LABORATORY OR A REPUTABLE COMMERCIAL LABORATORY. INFORMATION ON FREE STATE SOIL TESTS IS AVAILABLE FROM
- COUNTY OR AGRICULTURAL EXTENSION AGENT. PRIOR TO LAYING SOD, THE SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS, ROOTS, BRANCHES, STONES AND CLODS IN EXCESS OF 2 INCHES IN LENGTH OR DIAMETER. SOD
- SHALL NOT BE APPLIED TO GRAVEL OR OTHER NON-SOIL SURFACES. ANY IRREGULARITIES IN THE SOIL SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE FILLED OR LEVELED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. AREAS TO BE TOPSOILED AND TOPSOIL USED SHALL FULFILL THE REQUIREMENTS OF
- STANDARD SOIL CLASSIFICATION OF THE AP OR A HORIZON, NO SOD SHALL BE SPREAD ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS UNTIL ENOUGH TIME HAS ELAPSED TO PERMIT DISSIPATION OF TOXIC MATERIALS.

# CHOOSING APPROPRIATE TYPES OF SOD

ONE END OF THE SECTION.

- THE TYPE OF SOD USED MUST BE COMPOSED OF PLANTS ADAPTED TO THE LOCALITY.
- QUALITY OF SOD

  1. SOD USED SHALL BE STATE CERTIFIED OR STATE APPROVED. CERTIFIED TURFGRASS SOD IS GROWN FROM CERTIFIED SEED, INSPECTED AND CERTIFIED. THIS INSURES GENETIC PURITY, HIGH QUALITY, FREEDOM FROM NOXIOUS WEEDS AND EXCESSIVE INSECT OR DISEASE PROBLEMS. THE SOD MUST MEET PUBLISHED STATE STANDARDS AND BEAR AN OFFICIAL LABEL ON THE BILL OF LADING.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. THIS THICKNESS SHALL EXCLUDE SHOOT GROWTH AND THATCH PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH WITH A
- MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5 PERCENT. TORN OR UNEVEN PADS WILL NOT BE ACCEPTABLE. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN
- SOD SHALL NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

# SOD INSTALLATION

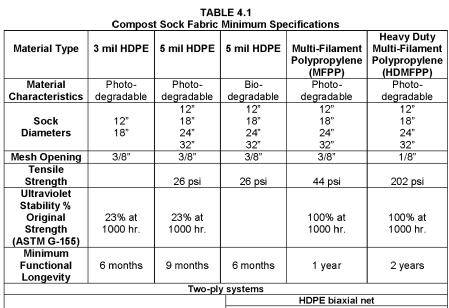
SOD SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHALL BE LIGHTLY IRRIGATED

WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON

- IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIFBACK THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHALL BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL
- JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHALL BE LAID WITH STAGGERED JOINTS AND SECURED BY PEGGING OR OTHER APPROVED METHODS. SOD SHALL BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE
- (ON THE CONTOUR). AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHALL BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.
- AFTER ROLLING, SOD SHALL BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET. DURING THE FIRST WEEK, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST
- THE FIRST MOWING SHALL NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2 - 3 WEEKS. NOT MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED AT ANY ONE CUTTING.

# MAINTENANCE OF ESTABLISHED SOD

- AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.
- NO MORE THAN 1/3 OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE
- AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS WHEN POSSIBLE.



rwo-piy systems					
	HDPE biaxial net				
	Continuously wound				
Inner Containment Netting	Fusion-welded junctures				
	3/4" X 3/4" Max. aperture size				
	Composite Polypropylene Fabric				
	(Woven layer and non-woven fleece				
Outer Filtration Mesh	mechanically fused via needle punch)				
	3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					
Filtrexx & JMD					

TABLE 4.2 Compost Standards					
Organic Matter Content	25%-100% (dry weight basis)				
Organic Portion	Fibrous and elongated				
рН	5.5-8.5				
Moisture Content	30%-60%				
Particle Size	30%-50% PASS THROUGH 3/8" SIEVE				

Soluble Salt Concentratio

SOCK	Dia.		SLOPE	SLOPE LENGTH ABOVE BARRIER
NO.	ln.	LOCATION	PERCENT	(FT)
000 1	12	NORTHERN PROPERTY LINE	4.7	110
CFS-1	12	NORTHERN PROPERTY LINE	4.3	116
CFS-2	12	NORTHERN PROPERTY LINE	3.8	106
CFS-3	12	NORTHERN PROPERTY LINE	4.4	91
CFS-4	12	NORTHWESTERN CORNER	3.5	114
<u> </u>			0.0	
CFS-5	12	SOUTHWESTERN CORNER	3.3	108
CFS-6	12	SOUTHEASTERN CORNER	3.0	66
013-0	12	SOUTHEASTERN CORNER	3.0	00

**STANDARD E&S WORKSHEET #1** 

Compost Filter Socks

PROJECT NAME:

BLOWN/PLACED FILTER MEDIA

DISTURBED AREA

LOCATION: PREPARED BY:

CHECKED BY:

MOORE FUNERAL HOME

2" X 2"WOODEN STAKES PLACED 10' O.C.

COMPOST FILTER SOCK

UNDISTURBED AREA

224 W MAIN STREET, TRAPPE, PA 19426 (TRAPPE BOROUGH)

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### TABLE 11.6 - MULCH APPLICATION RATES APPLICATION RATE (MIN.) PER 1,000 SQ.FT. | PER 1,000 SQ.YD. PER ACRE MULCH TYPE NOTES EITHER WHEAT OR OAT STRAW STRAW 1,240 LB 3 TONS 140 LB FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE 1,240 LB HAY 3 TONS 140 LB FORAGE GRASSES MAY PREVENT GERMINATION OF 1,650-2,500 LB WOOD CHIPS 4-6 TONS 185-275 LB GRASSES AND LEGUMES **HYDROMULCH** 1 TON 47 LB 415 LB SEE LIMITATIONS ABOVE

LB/ACRE AT A MINIMUM.

- 1. 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. 2. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS
- 3. 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. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE 2,000

# SOIL AMENDMENT AND RESTORATION: SOIL AMENDMENT AND RESTORATION SHALL BE DONE BY MIXING THE STOCKPILED EXISTING ON-SITE TOPSOIL WITH COMPOST BEFORE REDISTRIBUTING THE TOPSOIL. THE RATIO SHALL BE 2 PARTS TOPSOIL AND 1 PART COMPOST. THE COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 — BELOW. ADD STRAW TO TOPSOIL WITHIN 72 HOURS OF GRADING OUTSIDE OF GROWING SEASON. USE TACKIFIER OR CRIMP TO PREVENT STRAW FROM BEING WIND BLOWN.

### **TABLE 11.2 Soil Amendment Application Rate Equivalents**

	Perma				
Soil Amendment	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	Notes	
Agricultural lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields	
10–20–20 fertilizer	1,000 lb.	25 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields	
Agricultural lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles	
10-10-10 fertilizer	500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles	
Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncropland"					

NOTE: A compost blanket which meets the standards of this chapter may be substituted for the soil amendments shown in Table 11.2.

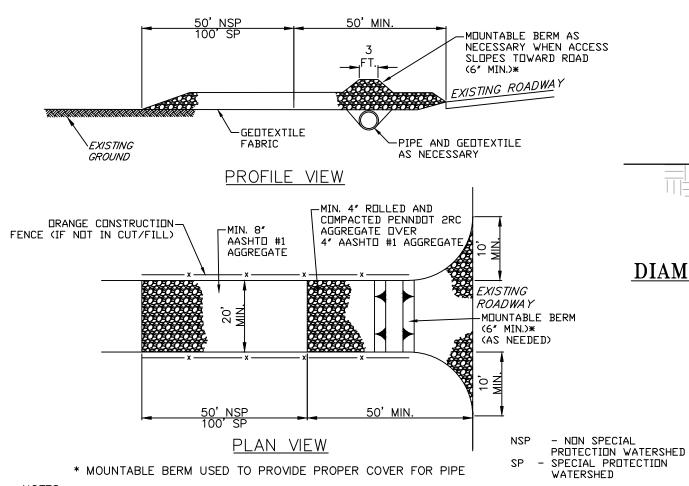
Graded areas should be scarified or otherwise loosened to a depth of 3 to 5 inches to permit bonding of the topsoil to the surface areas and to provide a roughened surface to prevent topsoil from sliding down

Topsoil should be uniformly distributed across the disturbed area to a depth of 4 to 8 inches minimum — 2 inches on fill outslopes. Spreading should be done in such a manner that sodding or seeding can proceed with a minimum of additional preparation or tillage. Irregularities in the surface resulting from topsoil placement should be corrected in order to prevent formation of depressions unless such

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 wherever

	TABLE 11.1			
Cubic Yards of Topsoil Required for Application to Various Depths				
Depth (in)	Per 1,000 Square Feet	Per Acre		
1	3.1	134		
2	6.2	268		
3	9.3	403		
4	12.4	537		
5	15.5	672		
6	18.6	806		
7	21.7	940		
8	24.8	1,074		

<u>SEEDING</u> - Seed mixtures appropriate for site conditions (e.g. soil pH and fertility, slope, available sunlight, anticipated use, etc.) should be specified. Tables 11.3, 11.4 and 11.5, adapted from the Penn State Erosion Control and Conservation Plantings on Noncropland Manual, should be used for selection of species, seed specifications, mixtures, liming and fertilizing, time of seeding, and seeding methods. Specifications for these items may also be obtained from PennDOT's Publication # 408, Section 804 or from the local conservation district. Other sources can be approved on a case-by-case basis. Upon selection of a reference, that reference should be used to provide all specifications for seeding, mulching, and soil amendments unless otherwise approved. Indicate the reference being used in the plan submittal. Seed mixtures that contain potentially invasive species or species that may be harmful to native plant communities should be avoided. Standard E&S Worksheet #21 should be used to provide seeding, mulching and soil amendment specifications in the E&S plan. This information should be placed on one of the plan drawings.



REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

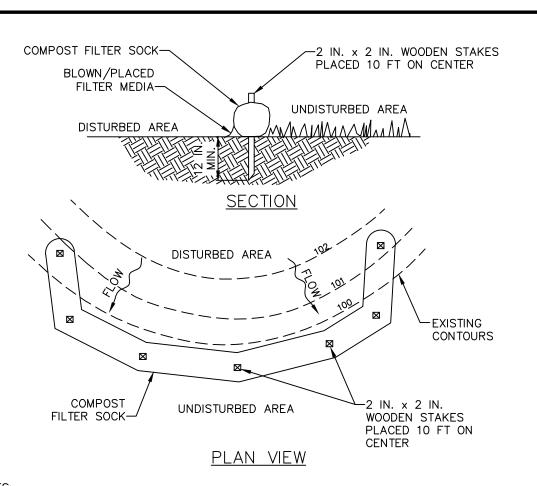
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR

TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

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

# STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE (ABACT)

NOT TO SCALE



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBÉD ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

# STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK NOT TO SCALE

DIAMOND SAFETY FENCE/OR EQUILALENT

A suitable impervious geomembrane shall be placed at the location of the washout prior to

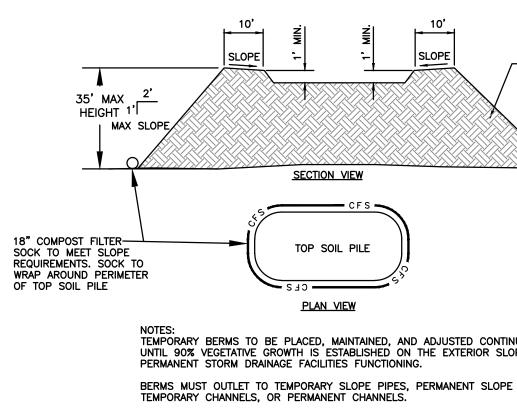
COMPOST SOCK CONCRETE WASHOUT

(NOT TO SCALE)

installing the socks. Adapted from Filtrexx

MAXIMUM DEPTH OF CONCRETE
WASHOUT WATER IS 50% OF FILTER
RING HEIGHT

(NOT TO SCALE)



TEMPORARY BERMS TO BE PLACED, MAINTAINED, AND ADJUSTED CONTINUOUSLY UNTIL 90% VEGETATIVE GROWTH IS ESTABLISHED ON THE EXTERIOR SLOPES WITH PERMANENT STORM DRAINAGE FACILITIES FUNCTIONING. BERMS MUST OUTLET TO TEMPORARY SLOPE PIPES, PERMANENT SLOPE PIPES,

FILL SLOPE TRACKED

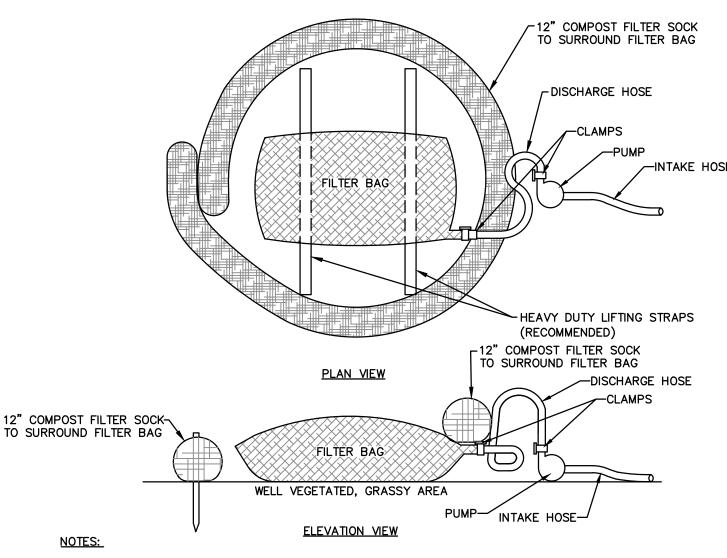
SEEDED & MULCHED

VERTICAL

INCREMENTS.

BLANKETED IN

CRITICAL AREAS



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

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

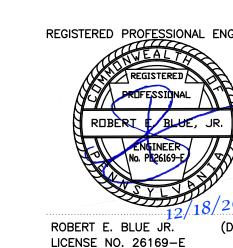
A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED, FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT, SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION

RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEÓTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

> PUMPED WATER FILTER BAG (NOT TO SCALE)



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DJG REB 1"=20' JOB NUMBER: SHEET NUMBER: 2023-12-18 2271-1E 16 of 16

REGISTERED PROFESSIONAL ENGINEER