PRELIMINARY/FINAL
LAND DEVELOPMENT PLANS
SPRING HOUSE COURT

LOCATED IN
LOWER GWYNEDD TOWNSHIP, MONTGOMERY COUNTY

PENNSYLVANIA ONE CALL SYSTEM, INC. — PA ACT 287 OF 1974 — 1-800-242-1776 — CALL BEFORE YOU DIG

ACT 50 USER LIST

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER-GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 30, 2017 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.

BOROUGH OF AMBLER
31 E. BUTLER AVENUE, AMBLER, PA. 19002
215-461-1000

BELL TELEPHONE CO. OF PA.
104 WITMER ROAD, HORSHAM, PA. 19044
215-956-2623

BELL TELEPHONE CO. OF PA.
MANAGER-DESIGN CENTER
1260 VIRGINIA DR., FORT WASHINGTON, PA. 19034
1-800-242-1776

TRANSCONTINENTAL GAS PIPELINE CORP.
60 BACTON HILL ROAD RD#3, FRAZER, PA. 19355
215-644-7373

CABLEVISION OF PA.
237 W. GERMANTOWN PIKE
NORRISTOWN, PA. 19401
215-279-7200

UPPER GWYNEDD TOWNSHIP SEWER AUTHORITY
P.O. BOX 203, NORTH WALES, PA. 19454
215-699-5824

PENNSYLVANIA DEPT. OF TRANSPORTATION
P.O. BOX 350, NORRISTOWN, PA. 19401
215-275-2368

LOWER GWYNEDD TOWNSHIP
BETHLEHEM PIKE, P.O. BOX 293
SPRINGHOUSE, PA. 19477
215-646-5302

AMERICAN TELEPHONE & TELEGRAPH COMPANY
125 PORTER ROAD, POTTSTOWN, PA. 19464
215-326-6604 OR 215-687-7512

PHILADELPHIA ELECTRIC COMPANY
400 PARK AVE., WARMINSTER, PA. 18974
412-323-7100

NORTH WALES WATER AUTHORITY
200 W. WALNUT STREET, NORTH WALES, PA. 19454
215-699-4836

SITE STATISTICS

1. SUBJECT TRACT MAY BE IDENTIFIED BY MONTGOMERY COUNTY TAX ASSESSMENT INFORMATION AS FOLLOWS:

   LOWER GWYNEDD TOWNSHIP
   PARID: 39-00-00412-00-8

2. RECORDED DEED DATA IS AS FOLLOWS:

   AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY AT NORRISTON, PENNSYLVANIA IN DEED BOOK 4940, PAGE 2031.

3. NAME AND ADDRESS OF THE OWNER OF THE SUBJECT TRACT:

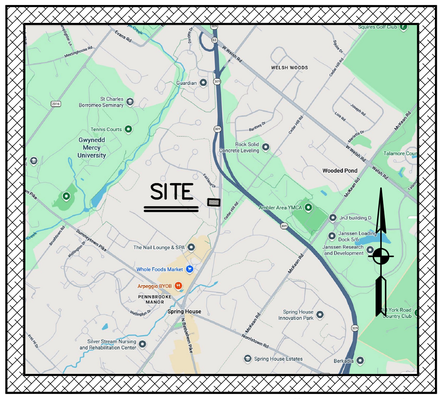
   PAT SPARANGO
   506 S. BETHLEHEM PIKE
   FORT WASHINGTON, PA 19034

4. NAME AND ADDRESS OF THE EQUITABLE OWNER OF THE SUBJECT TRACT:

   HALLMARK HOMES - SPRING HOUSE COURT LLC
   865 EASTON RD, SUITE 320
   WARRINGTON, PA 18976

5. AREA STATISTICS:

   GROSS TRACT AREA = 57,689 S.F.
   NET TRACT AREA = 55,233 S.F.



SITE LOCATION MAP 1" = 2000'

PLAN SHEET INDEX

SHEET NO.	PLAN TITLE	ISSUE DATE	LAST REV'D
	COVER SHEET		
1 OF 13	LAND DEVELOPMENT PLAN	OCT. 1, 2019	MAY 15, 2026
2 OF 13	EXISTING FEATURES/DEMOLITION PLAN	OCT. 1, 2019	MAY 15, 2026
3 OF 13	AERIAL PHOTO PLAN	OCT. 1, 2019	MAY 15, 2026
4 OF 13	CONSTRUCTION IMPROVEMENT PLAN & DETAIL SHEET	OCT. 1, 2019	MAY 15, 2026
5 OF 13	EROSION AND SEDIMENT CONTROL PLAN	OCT. 1, 2019	MAY 15, 2026
6 OF 13	EROSION AND SEDIMENT CONTROL DETAIL SHEET	OCT. 1, 2019	MAY 15, 2026
7 OF 13	PCSM PLAN	OCT. 1, 2019	MAY 15, 2026
8 OF 13	LANDSCAPE PLAN	OCT. 1, 2019	MAY 15, 2026
9 OF 13	CONSTRUCTION DETAIL SHEET	OCT. 1, 2019	MAY 15, 2026
10 OF 13	PLAN AND PROFILE BETHLEHEM PIKE, S.R. 0309	OCT. 1, 2019	MAY 15, 2026
11 OF 13	PENNDOT DETAIL SHEET	OCT. 1, 2019	MAY 15, 2026
12 OF 13	PLAN AND PROFILE SANITARY SEWER	OCT. 1, 2019	MAY 15, 2026
13 OF 13	MAINTENANCE AND PROTECTION OF TRAFFIC PLAN	OCT. 1, 2019	MAY 15, 2026

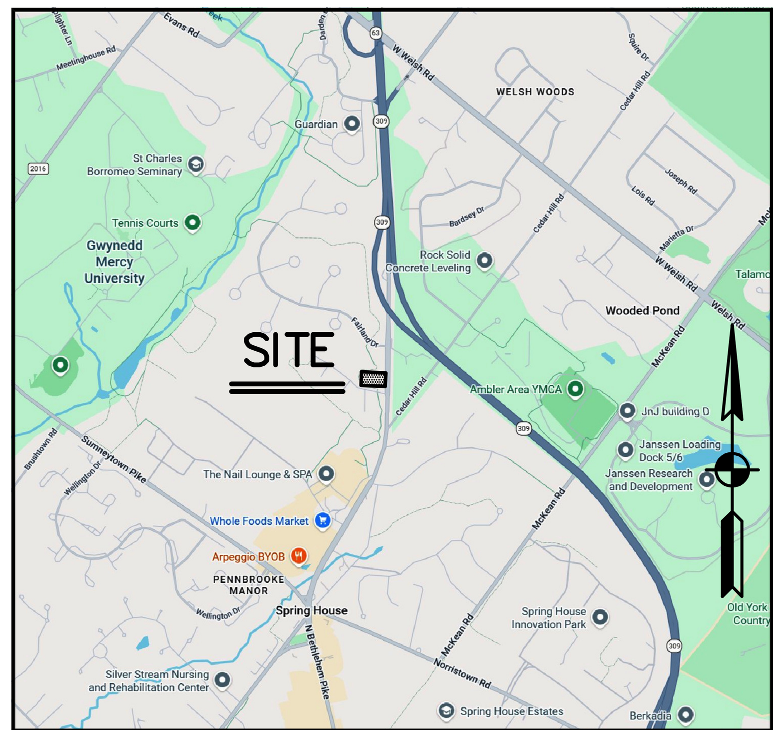
SUPPORTING DOCUMENTS:	DATE
1. POST-CONSTRUCTION STORMWATER PLAN NARRATIVE REPORT	MAY 15, 2026
2. STORMWATER INFILTRATION REPORT PREPARED BY PENN'S TRAIL ENVIRONMENTAL, LLC	MAY 7, 2019
3. EROSION AND SEDIMENT CONTROL PLAN NARRATIVE	MAY 15, 2026
4. TRAFFIC ACCESS STUDY PREPARED BY HEINRICH & KLEIN ASSOCIATES, INC.	JUNE 14, 2018

PREPARED FOR

HALLMARK HOMES - SPRING HOUSE COURT LLC

865 EASTON ROAD, SUITE 320
WARRINGTON, PA 18976

STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679-0200; www.stotac.com



SITE LOCATION MAP 1"=2000'

ZONING DATA

DATA OBTAINED FROM LOWER GWYNEDD TOWNSHIP ZONING ORDINANCE, REFERENCE TITLE 6, CHAPTER 1269A.
DISTRICT CLASSIFICATION – "E-2" – RESIDENTIAL DISTRICT
PROPOSED USE: CARRIAGE HOMES

	REQUIRED	PROVIDED
MINIMUM LOT AREA:	20 Ac.	1.27 Ac. *
MINIMUM LOT WIDTH @ STREET LINE:	200 FT.	200.03 FT.
MAXIMUM BUILDING COVERAGE:	20 %	12.3 % **
MAXIMUM IMPERVIOUS SURFACE COVERAGE::	40 %	22.3 % **
MAXIMUM BUILDING HEIGHT:	35 FT.	< 35 FT.
MAXIMUM BUILDING LENGTH:	110 FT.	107 FT.
MINIMUM PARKING SPACES EXCLUSIVE OF GARAGES (2.5 SPACES/UNIT):	7.5 SP.	8 SP.
MAXIMUM DENSITY (2.6 UNITS/Ac.):	3 UNITS	3 UNITS
MINIMUM INTERIOR SETBACKS:		
1. SHORT SIDE TO SHORT SIDE:	30 FT.	N/A
2. LONG SIDE TO ANY CONDITION:	60 FT.	N/A
MINIMUM OPEN SPACE:	50 % (0.63 AC.)	84.3 % (1.07 AC.)

* EXISTING NON-CONFORMANCE-VARIANCE GRANTED
** BASED ON 1.27 AC.

ZONING VARIANCE

AT AN MAY 14, 2026 ZONING HEARING, THE LOWER GWYNEDD TOWNSHIP ZONING HEARING BOARD GRANTED A VARIANCE FROM SECTION 1269A.03(a) REQUIRING A LOT AREA OF 20 ACRES FOR DEVELOPMENT.

NOTES

1. EXISTING TOPOGRAPHY AND TITLE LINE INFORMATION TAKEN FROM EXISTING DEEDS, PLANS OF RECORD, THE RESERVE AT TREWELLYN AS-BUILT PLAN, AND A FIELD SURVEY PERFORMED BY THIS OFFICE FEBRUARY 2005 AND UPDATED IN 2019.
2. CONTOUR DATA AS SHOWN HEREON IS BASED ON U.S.G.S. VERTICAL DATUM.

   BENCHMARK ELEVATION: 291.37 USGS/SEWER AUTHORITY DATUM

   BENCHMARK DESCRIPTION: EXISTING MANHOLE #13 ALONG TREWELLYN CREEK. (TAKEN FROM A SURVEY PLAN PREPARED FOR THE CUTLER GROUP, INC., BY URWILER & WALTER, INC. JOB No. 94166)
3. NO PART OF THIS PROPERTY LIES WITHIN A FLOODPLAIN AREA AS DESCRIBED ON PANEL 278 OF 451 OF THE FEMA FLOOD INSURANCE RATE MAP NUMBER 42091C0278G, EFFECTIVE MARCH 2, 2016.
4. ANY SCALED DIMENSIONS FROM THE PLAN SHALL NOT BE USED FOR CONSTRUCTION WITHOUT CONFIRMATION BY STA ENGINEERING, INC.
5. THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND THE BUILDING INSPECTOR 72 HOURS IN ADVANCE OF ANY AND ALL CONSTRUCTION.
6. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. PROPOSED UNITS TO BE SERVICED WITH PUBLIC WATER PROVIDED BY NORTH WALES WATER AUTHORITY AND PUBLIC SEWER COLLECTION AND CONVEYANCE PROVIDED BY LOWER GWYNEDD TOWNSHIP AND TREATMENT BY AMBLER BOROUGH. EXISTING ON-LOT WATER AND SEWER FACILITIES SHALL BE REMOVED IN ACCORDANCE WITH ALL APPLICABLE PA. D.E.P., LOCAL AND STATE GUIDELINES IF FOUND TO BE PRESENT DURING CONSTRUCTION OF THE CARRIAGE HOMES.
7. CONSTRUCTION OF THE IMPROVEMENTS MUST BE IN ACCORDANCE WITH LOWER GWYNEDD TOWNSHIP AND PADOT PUBLICATION 408 SPECIFICATIONS, THE PENNSYLVANIA DEPARTMENT OF HEALTH OR OTHER APPROPRIATE AGENCIES.
8. CONSTRUCTION OF ALL SANITARY SEWERS AND APPURTENANCES SHALL BE PERFORMED IN ACCORDANCE WITH LOWER GWYNEDD TOWNSHIP STANDARDS. THE PROPOSED SANITARY SEWER CONVEYANCE SYSTEM WILL BE DEDICATED TO, AND OWNED AND MAINTAINED BY, LOWER GWYNEDD TOWNSHIP.
9. NO BURNING OF DEBRIS IS ALLOWED ON THE SITE. ALL WASTE MUST BE DISPOSED OF PROPERLY.
10. THERE SHALL BE NO DISTURBANCE OF OPEN SPACE AREAS BEYOND THE LIMITS OF DISTURBANCE DEPICTED ON THE PLANS AND NO SITE WORK SHALL COMMENCE UNTIL THE APPROPRIATE PROTECTIVE MEASURES ARE INSTALLED.
11. THE BUILDING FOOTPRINTS DEPICTED HEREON HAVE BEEN SHOWN FOR PLANNING AND GRADING PURPOSES ONLY. EXACT CONFIGURATION OF STRUCTURES (i.e. LENGTH, WIDTH, EXTENT) SHALL BE DEPENDENT ON FINAL ARCHITECTURAL DRAWINGS.
12. NO DWELLING CONSTRUCTION ON ANY LOT SHALL BEGIN UNLESS THE LOT IS CLEARLY MARKED WITH A PERMANENT NUMBER AND SIGN FOR IDENTIFICATION.
13. INDIVIDUAL SITE PLANS WITH NECESSARY GRADING INFORMATION SHALL BE SUBMITTED TO THE TOWNSHIP ALONG WITH ANY REQUEST FOR BUILDING PERMITS.
14. AN AS-BUILT FOUNDATION LOCATION PLAN IS TO BE FILED WITH THE TOWNSHIP PRIOR TO PROCEEDING PAST CONSTRUCTION OF THE FIRST FLOOR DECK.
15. ALL SUMP PUMPS AND ROOF DRAINS WILL DISCHARGE TO A VEGETATED SURFACE OR PROPOSED BMP.
16. THE DEVELOPER, IT'S SUCCESSORS AND ASSIGNS, HEREBY RESERVES THE RIGHT TO ENTER UPON EACH AND EVERY LOT AREA OF THE SUBDIVISION/DEVELOPMENT DEPICTED HERON, WHETHER PRIOR OR SUBSEQUENT TO CONVEYANCE OF ANY LOT, UNTIL EXPIRATION OF THE STATUTORY MAINTENANCE PERIOD FOLLOWING DEDICATION OF PUBLIC IMPROVEMENTS AS SET FORTH IN SECTION 509 OF THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, AS AMENDED, 53 P.C. 10509, FOR THE PURPOSE OF COMPLETING ANY LANDSCAPING AS REQUIRED BY THE MUNICIPALITY AND, FURTHER, TO MAKE SUCH MODIFICATIONS IN GRADING AND/OR DRAINAGE IMPROVEMENTS ON ANY LOT AS MAY BE NECESSARY IN THE DISCRETION OF THE DEVELOPER, IT'S SUCCESSORS AND ASSIGNS AND/OR THE MUNICIPAL ENGINEER FOR SATISFACTORY STORMWATER MANAGEMENT.
17. PRECAST CONCRETE MONUMENTS SHALL BE SET SHOWN HEREON. MONUMENTS TO BE THIRTY INCHES BY FOUR INCHES BY FOUR INCHES, WITH FORTY-FIVE DEGREE BEVELED EDGES. ■ INDICATES MONUMENTS TO BE SET.
18. ALL LOT CORNERS SHALL BE PINNED AT THE COMPLETION OF FINAL GRADING.
19. COMMON OPEN SPACE SHALL NOT BE SEPARATELY SOLD OR FURTHER DEVELOPED OR SUBDIVIDED.
20. WITHIN OPEN SPACES DEPICTED HEREON (A) CLEARING OF TREES, EXCEPT AS NOTED, IS NOT PERMITTED; (B) DUMPING OF DEBRIS IS NOT PERMITTED; (C) NOXIOUS WEEDS MAY BE REMOVED WITH PERMISSION FROM THE TOWNSHIP; (D) DEBRIS EXISTING PRIOR TO CONSTRUCTION MUST BE REMOVED AND PROPERLY DISPOSED OF.
21. ANY LIGHTING FIXTURES ARE TO BE APPROVED BY LOWER GWYNEDD TOWNSHIP PRIOR TO INSTALLATION.
22. THE AREA BETWEEN THE TITLE LINE AND THE ULTIMATE RIGHT OF WAY OF BETHLEHEM PIKE IS HEREBY OFFERED FOR DEDICATION TO THE AGENCY HAVING JURISDICTION.
23. PROPOSED UNITS TO BE SPRINKLERED PER THE DIRECTION OF THE FIRE MARSHAL.
24. SEWAGE PLANNING APPROVAL WAS GRANTED FOR 3 NEW CARRIAGE HOMES BY LETTER FROM DEP DATED OCTOBER 3, 2006.
25. ANY DAMAGE INCURRED WITHIN THE PUBLIC RIGHT-OF-WAY AS A RESULT OF CONSTRUCTION IS TO BE REPAIRED AT THE OWNER'S SOLE EXPENSE.
26. A HOMEOWNERS ASSOCIATION WILL BE ESTABLISHED FOR OWNERSHIP AND MAINTENANCE RESPONSIBILITIES FOR THE OPEN SPACE AREA, THE STORMWATER MANAGEMENT FACILITIES, THE PAVED TRAIL AND THE SHARED ACCESS DRIVEWAY.
27. DRIVEWAY POST LAMPS WILL BE PROVIDED FOR EACH UNIT AS SHOWN ON THE PLANS.

WAIVERS GRANTED

THE FOLLOWING WAIVERS WERE GRANTED ON MARCH 10, 2020 PER RESOLUTION NO. 2020-07:

1. §1230.16: WHICH REQUIRES A SEPARATE APPLICATION FOR A PRELIMINARY AND FINAL SUBMISSION.
2. §1230.16(c)(2)(3)&(4): WHICH REQUIRES THAT ALL EXISTING FEATURES WITHIN 200 FEET OF THE PROPERTY BOUNDARY BE DEPICTED ON THE PLAN.
3. §1230.37(c) & §1230.61(a): WHICH REQUIRES CURB ALONG ALL EXISTING ROADS ABUTTING A LAND DEVELOPMENT.
4. §1230.38: WHICH REQUIRES THE MAXIMUM CURB CUT OR DRIVEWAY WIDTH AT THE STREET LINE TO BE A MAXIMUM OF 20 FEET.
5. §1230.45 (a): WHICH REQUIRES SIDEWALK ALONG EXISTING STREETS AND PEDESTRIAN TRAILS IN ALL SUBDIVISIONS AND LAND DEVELOPMENTS IN LOCATIONS AS DETERMINED BY THE BOARD OF SUPERVISORS.
6. §1241.401(n): WHICH REQUIRES A MINIMUM PIPE SIZE OF 18-INCH DIAMETER FOR STORM SEWER PIPES.

SITE STATISTICS

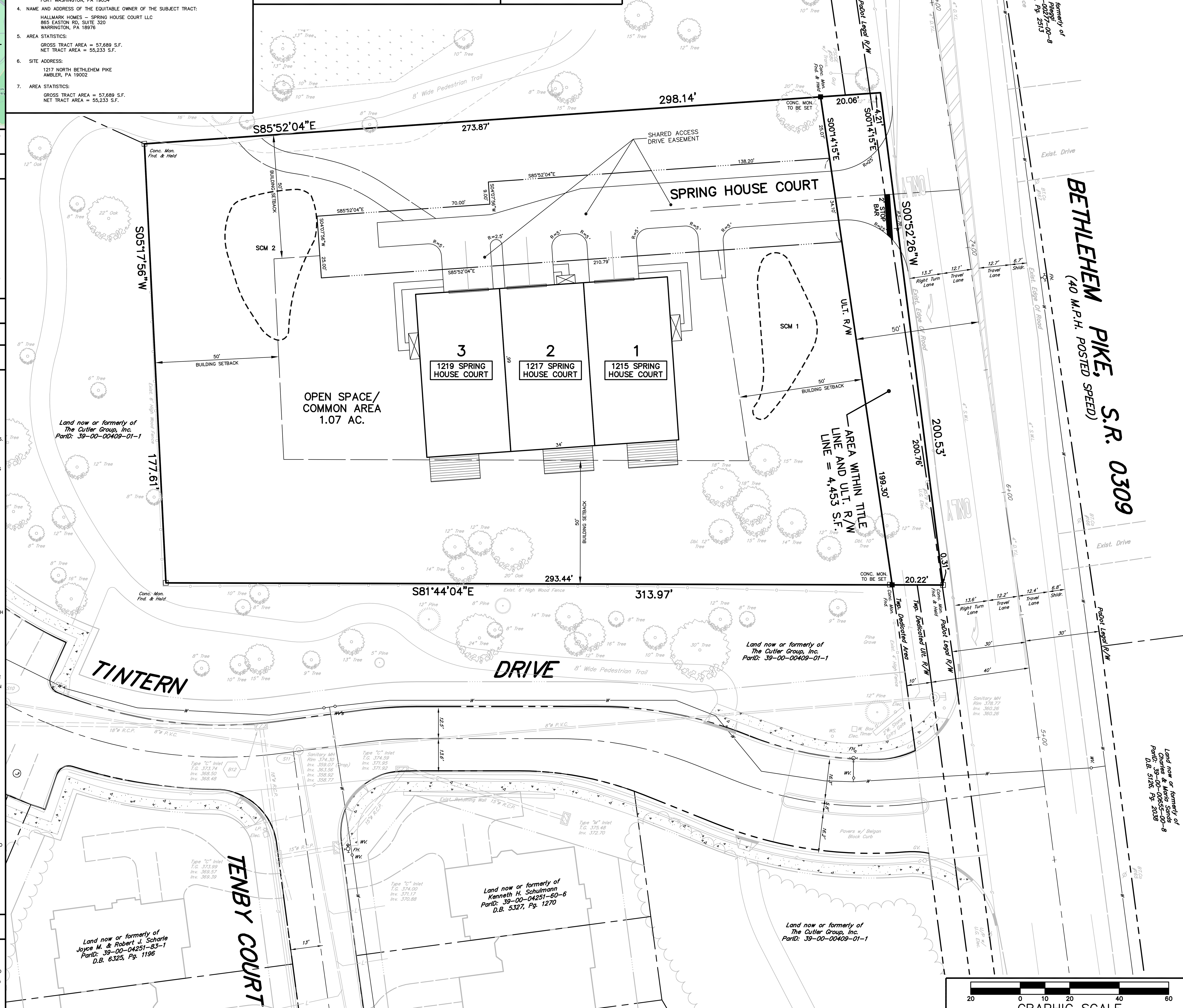
1. SUBJECT TRACT MAY BE IDENTIFIED BY MONTGOMERY COUNTY TAX ASSESSMENT INFORMATION AS FOLLOWS:
   LOWER GWYNEDD TOWNSHIP
   PARID: 39-00-00412-00-8
2. RECORDED DEED DATA IS AS FOLLOWS:
   AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY AT NORRISTON, PENNSYLVANIA IN DEED BOOK 4940, PAGE 2031.
3. NAME AND ADDRESS OF THE OWNER OF THE SUBJECT TRACT:
   PAT SPARANGO
   506 S. BETHLEHEM PIKE
   FORT WASHINGTON, PA 19034
4. NAME AND ADDRESS OF THE EQUITABLE OWNER OF THE SUBJECT TRACT:
   HALLMARK HOMES – SPRING HOUSE COURT LLC
   865 EASTON RD, SUITE 320
   WARRINGTON, PA 18976
5. AREA STATISTICS:
   GROSS TRACT AREA = 57,689 S.F.
   NET TRACT AREA = 55,233 S.F.
6. SITE ADDRESS:
   1217 NORTH BETHLEHEM PIKE
   AMBLER, PA 19002
7. AREA STATISTICS:
   GROSS TRACT AREA = 57,689 S.F.
   NET TRACT AREA = 55,233 S.F.

STORMWATER MANAGEMENT NOTES

1. THE RETENTION/DETENTION BASINS AND STORMWATER FACILITIES (AS SHOWN ON THIS PLAN) ARE A BASIC AND PERPETUAL PLAN OF THE STORM DRAINAGE SYSTEM OF THE TOWNSHIP OF LOWER GWYNEDD, AND AS SUCH ARE TO BE PROTECTED AND PRESERVED, IN ACCORDANCE WITH THE APPROVED FINAL PLAN BY THE OWNER(S) ON WHOSE LANDS THE STRUCTURE(S) IS (ARE) LOCATED. THE TOWNSHIP OF LOWER GWYNEDD AND/OR ITS AGENTS RESERVES THE RIGHT AND PRIVILEGE TO ENTER UPON SUCH LANDS FROM TIME TO HOME FOR THE PURPOSE OF INSPECTION OF SAID RETENTION/DETENTION BASIN(S) IN ORDER TO DETERMINE THAT THE STRUCTURAL AND DESIGN INTEGRITY ARE BEING MAINTAINED BY THE OWNER(S).
2. IN THE EVENT THAT MAINTENANCE AND STRUCTURAL INTEGRITY ARE NOT MAINTAINED BY THE OWNER AS REQUIRED BY THE TOWNSHIP, THE OWNER HEREBY GRANTS TO THE TOWNSHIP THE RIGHT TO ENTER UPON SUCH PROPERTY AND TO PERFORM ANY AND ALL IMPROVEMENTS, REVISIONS OR MAINTENANCE AS MAY BE DETERMINED NECESSARY BY THE TOWNSHIP AND TO RECOVER THE COSTS THEREOF FROM THE PROPERTY OWNER BY ALL LAWFUL MEANS INCLUDING, BUT NOT LIMITED TO, THE IMPOSITION OF A MUNICIPAL LIEN ON THE SUBJECT PROPERTY."

LEGEND

DECK OR PATIO
OPEN SPACE



GRAPHIC SCALE (20 0 10 20 40 60)

RECORDING ACKNOWLEDGEMENTS

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONTGOMERY) SS:

ON THIS, THE ________ DAY OF ________, 20__, BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED RICHARD R. CARROLL, III, BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THAT HE IS THE PRESIDENT OF HALLMARK HOMES – SPRING HOUSE COURT LLC, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, AND THAT HE BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING AS PRESIDENT.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

____
NOTARY PUBLIC

I, RICHARD R. CARROLL, III
, ACKNOWLEDGE MYSELF TO BE THE PRESIDENT OF HALLMARK HOMES – SPRING HOUSE COURT LLC, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, AND THAT AS SUCH BEING AUTHORIZED TO DO SO, CERTIFY THAT THE CORPORATION IS THE SOLE REGISTERED OWNER OF THE LAND HEREIN SUBDIVIDED AND THAT THERE ARE NO SUITS PENDING AFFECTING THE TITLE OF THE SAME AND THAT I DO HEREBY ADOPT THIS PLAN AND DESIRE THE SAME TO BE RECORDED. I DO FURTHER SAVE THE TOWNSHIP HARMLESS AND IDEMNIFY THE TOWNSHIP OF LOWER GWYNEDD AGAINST ANY LIABILITY OR LOSS RESULTING FROM THE SUBDIVISION OR DEVELOPMENT OF THIS PLAT FOR WHATEVER REASON PRESENT OR FUTURE.

HALLMARK HOMES – SPRING HOUSE COURT LLC,
PENNSYLVANIA LIMITED LIABILITY COMPANY
BY: HALLMARK PARTNERS II, LP, A PENNSYLVANIA LIMITED PARTNERSHIP, ITS SOLE MEMBER
BY: HM PARTNERS II, INC., A PENNSYLVANIA CORPORATION, ITS GENERAL PARTNER

BY: ________________
RICHARD R. CARROLL, III, PRESIDENT

APPROVED BY THE PLANNING COMMISSION OF THE TOWNSHIP OF LOWER GWYNEDD THIS ________ DAY OF ____________, 2026.

____
CHAIRMAN

____
SECRETARY

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF LOWER GWYNEDD THIS ________ DAY OF __________, 2026.

____
CHAIRMAN

____
SECRETARY

____
TOWNSHIP ENGINEER

MCPC No.

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE ________________

____
FOR THE DIRECTOR

MONTGOMERY COUNTY PLANNING COMMISSION

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY, AT NORRISTOWN, PENNSYLVANIA IN PLAN BOOK ______, PAGE ______, ON ________________ 2026.

____
RECORDER OF DEEDS

ENGINEER'S CERTIFICATION

I, SUSAN A. RICE, P.E., HEREBY CERTIFY THAT THIS PLAN IS IN CONFORMANCE WITH THE ZONING, BUILDING, SANITATION, AND ALL OTHER APPLICABLE TOWNSHIP ORDINANCES AND REGULATIONS AND THAT THIS PLAN IS ACCURATE TO WITHIN ONE (1) PART IN THREE HUNDRED (300).

____
SUSAN A. RICE, P.E.

SURVEYOR'S CERTIFICATION

I, CLIFFORD T. STOUT, P.L.S., HEREBY CERTIFY THAT THIS PLAN REPRESENTS A SURVEY MADE BY STA ENGINEERING, INC., THAT THE MONUMENTATION SHOWN HEREON EXISTS AS LOCATED, AND THAT ALL DIMENSIONAL AND GEODETIC DETAILS ARE CORRECT.

____
CLIFFORD T. STOUT, P.L.S.

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

LAND DEVELOPMENT PLAN
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679-0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
1"=20'	J.A..C	S.A.R.	1 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646LD	

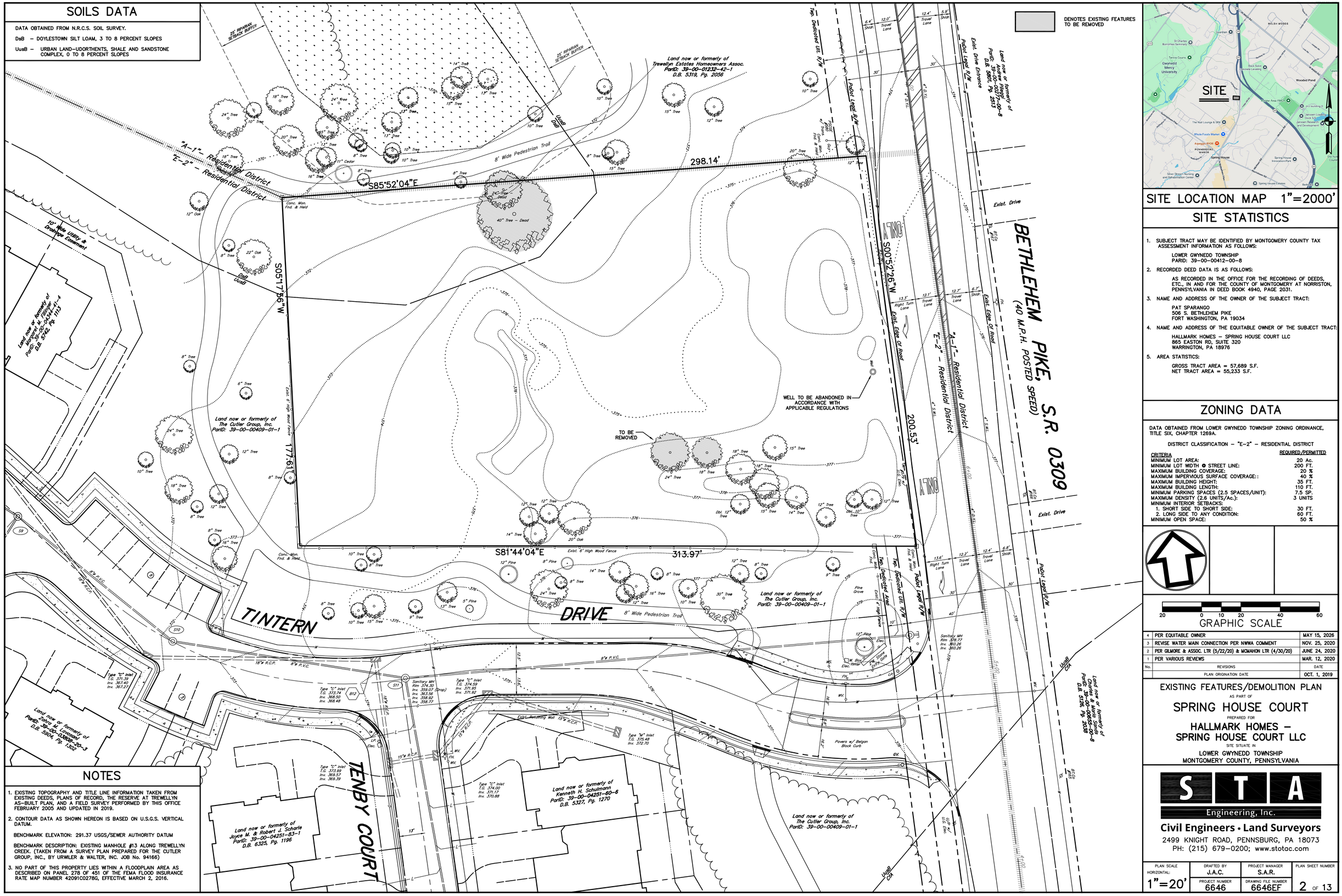
SOILS DATA

DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.

DsB – DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES

UusB – URBAN LAND–UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES

DENOTES EXISTING FEATURES TO BE REMOVED



NOTES

1. EXISTING TOPOGRAPHY AND TITLE LINE INFORMATION TAKEN FROM EXISTING DEEDS, PLANS OF RECORD, THE RESERVE AT TREWELLYN AS–BUILT PLAN, AND A FIELD SURVEY PERFORMED BY THIS OFFICE FEBRUARY 2005 AND UPDATED IN 2019.
2. CONTOUR DATA AS SHOWN HEREON IS BASED ON U.S.G.S. VERTICAL DATUM.

   BENCHMARK ELEVATION: 291.37 USGS/SEWER AUTHORITY DATUM

   BENCHMARK DESCRIPTION: EXISTING MANHOLE #13 ALONG TREWELLYN CREEK. (TAKEN FROM A SURVEY PLAN PREPARED FOR THE CUTLER GROUP, INC., BY URWILER & WALTER, INC. JOB No. 94166)
3. NO PART OF THIS PROPERTY LIES WITHIN A FLOODPLAIN AREA AS DESCRIBED ON PANEL 278 OF 451 OF THE FEMA FLOOD INSURANCE RATE MAP NUMBER 42091C0278G, EFFECTIVE MARCH 2, 2016.

SITE LOCATION MAP 1"=2000'

SITE STATISTICS

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   PARID: 39–00–00412–00–8
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   506 S. BETHLEHEM PIKE
   FORT WASHINGTON, PA 19034
4. NAME AND ADDRESS OF THE EQUITABLE OWNER OF THE SUBJECT TRACT:

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   NET TRACT AREA = 55,233 S.F.

ZONING DATA

DATA OBTAINED FROM LOWER GWYNEDD TOWNSHIP ZONING ORDINANCE, TITLE SIX, CHAPTER 1269A.

DISTRICT CLASSIFICATION – "E–2" – RESIDENTIAL DISTRICT

CRITERIA	REQUIRED/PERMITTED
MINIMUM LOT AREA:	20 Ac.
MINIMUM LOT WIDTH @ STREET LINE:	200 FT.
MAXIMUM BUILDING COVERAGE:	20 %
MAXIMUM IMPERVIOUS SURFACE COVERAGE::	40 %
MAXIMUM BUILDING HEIGHT:	35 FT.
MAXIMUM BUILDING LENGTH:	110 FT.
MINIMUM PARKING SPACES (2.5 SPACES/UNIT):	7.5 SP.
MAXIMUM DENSITY (2.6 UNITS/Ac.):	3 UNITS
MINIMUM INTERIOR SETBACKS:	
1. SHORT SIDE TO SHORT SIDE:	30 FT.
2. LONG SIDE TO ANY CONDITION:	60 FT.
MINIMUM OPEN SPACE:	50 %

20 0 10 20 40 60

GRAPHIC SCALE

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

EXISTING FEATURES/DEMOLITION PLAN

AS PART OF

SPRING HOUSE COURT

PREPARED FOR

HALLMARK HOMES – SPRING HOUSE COURT LLC

SITE SITUATE IN

LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

STA Engineering, Inc.

Civil Engineers • Land Surveyors

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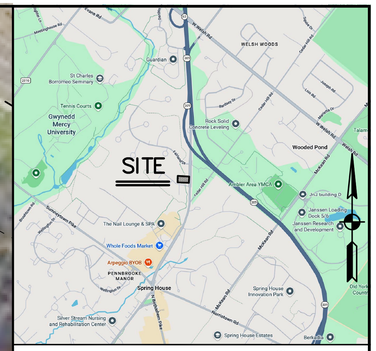
PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
1"=20'	J.A.C.	S.A.R.	2 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646EF	



SITE LOCATION MAP 1"=2000'

20 0 10 20 40 60

GRAPHIC SCALE

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

AERIAL PLAN

AS PART OF

SPRING HOUSE COURT

PREPARED FOR

HALLMARK HOMES – SPRING HOUSE COURT LLC

SITE SITUATE IN

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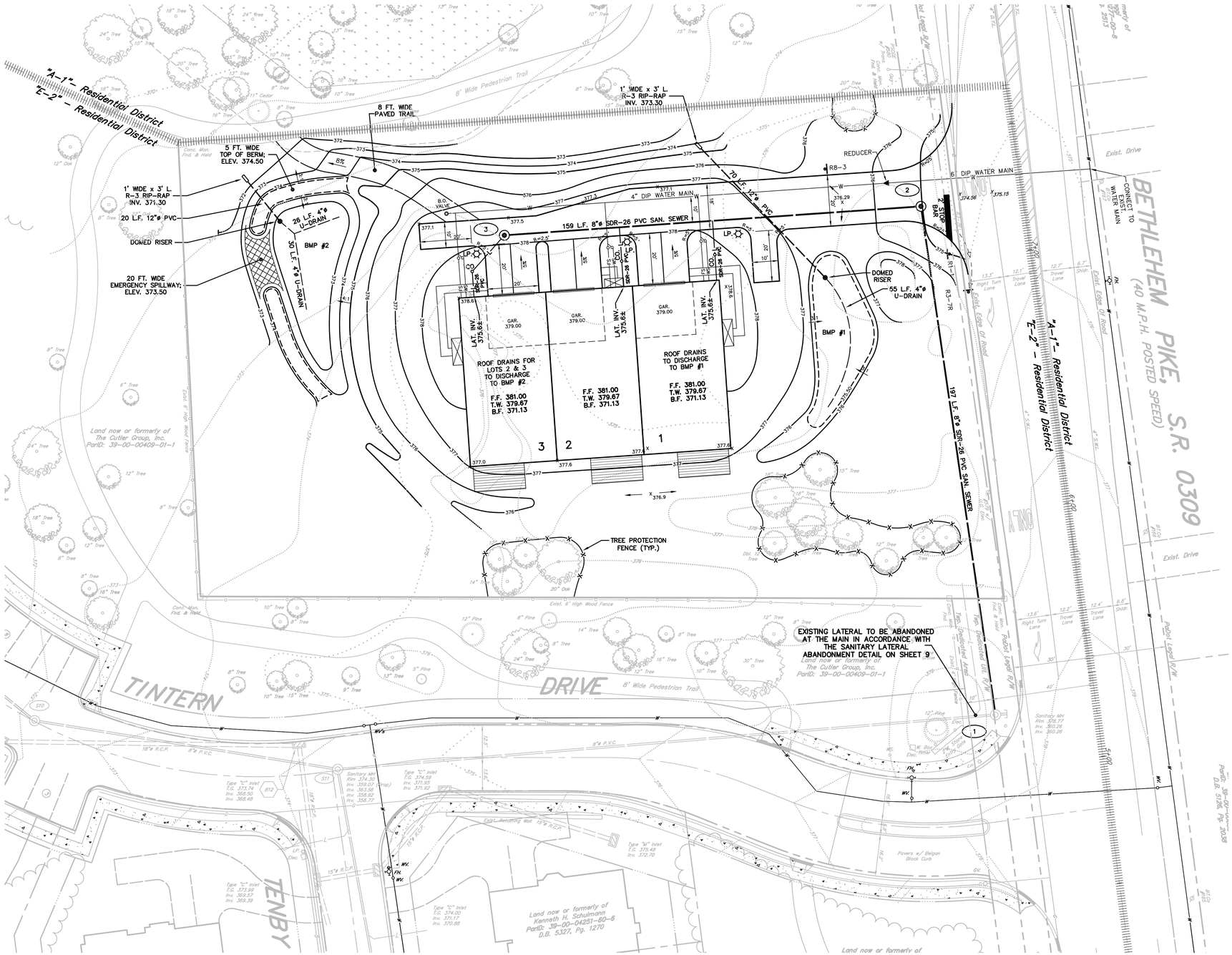
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646AERIAL	



CONSTRUCTION NOTES

1. ALL LAWN AREAS SHALL BE DESIGNED AT A MINIMUM SLOPE OF 2%.
2. ALL PAVED SLOPES TO HAVE A MINIMUM SLOPE OF 1%.
3. ALL STORM SEWER SHALL HAVE A MINIMUM OF 2' OF COVER OVER THE TOP OF THE PIPES.
4. SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOWER GWYNEDD TOWNSHIP. SANITARY SEWER MAINS AND LATERALS TO BE CONSTRUCTED WITH SDR-26 PVC.
5. A HORIZONTAL SEPARATION OF 10 FEET AND/OR A VERTICAL CLEARANCE OF 18 INCHES (MEASURED BETWEEN THE OUTER WALLS) SHALL BE MAINTAINED BETWEEN THE SANITARY SEWER AND ANY OTHER UTILITY PIPELINES. WHERE PIPELINES MUST CROSS UNDER A SEWER, THE INSTALLATION MUST ALSO PROVIDE ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER TO PREVENT DEFLECTION AND BREAKING OF THE SEWER. WHERE PROPER CLEARANCES CAN NOT BE PROVIDED, THE SEWER SHALL BE CONCRETE ENCASED FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CONFLICT.
6. A MINIMUM COVER OF 4 FEET SHOULD BE MAINTAINED OVER SANITARY SEWERS. LATERAL SHALL MAINTAIN A MINIMUM SLOPE OF 1/4-INCH PER FOOT (2%).
7. ALL CONSTRUCTION MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
8. PUBLIC WATER TO BE PROVIDED BY NORTH WALES WATER AUTHORITY (NWWA). CONNECTION AND CONSTRUCTION TO BE IN ACCORDANCE WITH NWWA STANDARDS AND SPECIFICATIONS WHERE REQUIRED. NWWA TO OBTAIN HOP FOR WATER MAIN EXTENSION.
9. NO PLANTINGS OR STRUCTURES SHOULD BE LOCATED WITHIN THE SANITARY SEWER EASEMENTS OR WITHIN 10 FEET OF THE SEWER OR LATERALS.
10. PRIOR TO GRADING OF THE SITE, TOPSOIL SHOULD BE STRIPPED FROM THE SURFACE AND STOCKPILED IN THE PROPOSED AREAS. AFTER COMPLETION OF ROUGH GRADING, A MINIMUM OF SIX (6) INCHES OF TOPSOIL SHALL BE RETURNED TO REMAINING DISTURBED AREAS PRIOR TO FINISH GRADE AND SEEDING. NO TOPSOIL IS TO BE REMOVED FROM THE SITE WITHOUT TOWNSHIP APPROVAL.
11. A MINIMUM OF 4 FT. OF COVER SHALL BE PROVIDED OVER WATER SERVICES AND LATERALS.

10' x 20' DECK OR PATIO

GRAPHIC SCALE
20 0 10 20 40 60

No.	REVISIONS	DATE
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1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

CONSTRUCTION IMPROVEMENT PLAN & DETAIL SHEET
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

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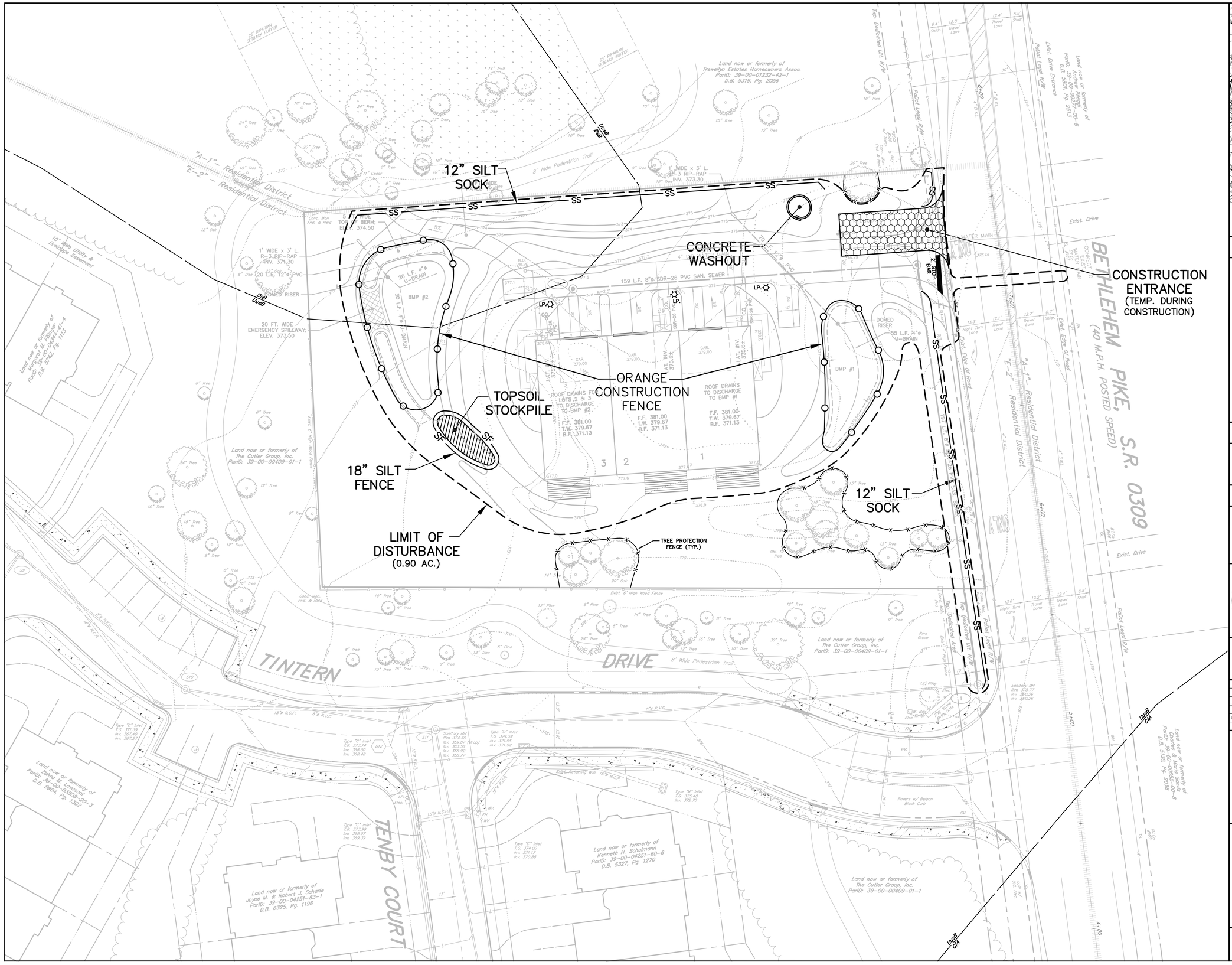
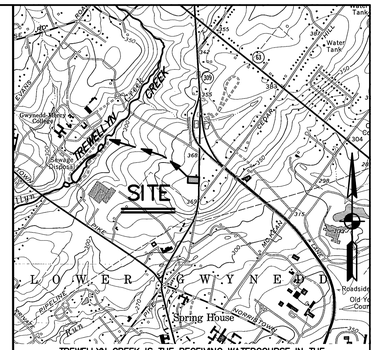
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646CI	





TREWELLYN CREEK IS THE RECEIVING WATERCOURSE IN THE WISSAHICKON WATERSHED. THE CHAPTER 93 CLASSIFICATION FOR TREWELLYN CREEK IS TSF, MF.

SCALE: 1"=2000'

E & S LEGEND

- TREE PROTECTION FENCE
- SS — 12" SILT SOCK
- 18" SILT FENCE
- TIRE CLEANER
- TOPSOIL STOCKPILE
- LIMIT OF DISTURBANCE
- SOIL LINE
- ORANGE CONSTRUCTION FENCE

SOILS DATA

DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.

DsB – DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES

UusB – URBAN LAND–UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES

RECYCLING STATEMENT

INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.

20 0 10 20 40 60

GRAPHIC SCALE

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1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

EROSION & SEDIMENT CONTROL PLAN

AS PART OF

SPRING HOUSE COURT

PREPARED FOR

HALLMARK HOMES – SPRING HOUSE COURT LLC

SITE SITUATE IN

LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

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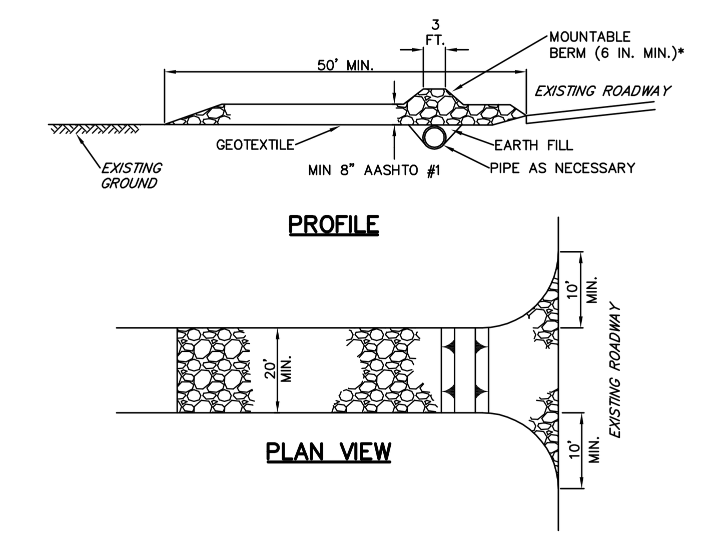
1"=20'	J.A.C.	S.A.R.	5 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646ES	

LIMITATIONS OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS (Absence of an X does not mean "No Potential Limitation")
NOTE: THIS IS NOT NECESSARILY AN ALL-INCLUSIVE LIST.

SOIL NAME	SOIL SYMBOL	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	REACTION (pH)	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK – SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Doylestown	DsB	0–1/2	5.0–6.0	6.1	X	C/S	X	X		X	X	X	X	X	X	X				X
Urban Land Udorthents	UusB	>6.6	1.67–8.25	–	X	C/S	X	X				X	X		X	X				

RESOLUTION OF SOIL TYPE LIMITATIONS

1. APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO SAFEGUARD WORKERS DURING ALL TRENCHING AND EXCAVATION OPERATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES.
2. SUITABLE PRECAUTIONS, SUCH AS COATING WITH NON–CORROSIVE MATERIALS, SHOULD BE TAKEN TO PROTECT UNDERGROUND PIPES, CONDUITS AND STORAGE TANKS FROM SOILS WITH THE POTENTIAL TO CAUSE CORROSION.
3. SEASONAL HIGH WATER TABLES WILL BE MANAGED BY EFFECTIVE SITE GRADING, DRAINAGE FACILITIES WITHIN ROADWAYS, AND BASEMENT DRAINS COUPLED WITH INDIVIDUAL UNIT SUMP PUMPS, IF REQUIRED.
4. WHERE SHALLOW DEPTH TO BEDROCK IS PRESENT, LIMIT EXCAVATION DEPTHS. IF THIS IS NOT POSSIBLE, BEDROCK MAY REQUIRE BLASTING IN AREAS WHERE RIPPER TEETH ON EXCAVATING EQUIPMENT CANNOT REMOVE MATERIAL BY MECHANICAL MEANS.
5. NO GRADING SHALL BE PERFORMED IN FROZEN SOILS FOR SOIL TYPES DETERMINED TO HAVE LIMITATIONS DUE TO FROST AND/OR LISTED AS POOR UNDER WINTER GRADING.
6. DISTURBANCE IS LIMITED WITHIN AREAS PRONE TO FLOODING.
7. WHEN UNSUITABLE MATERIAL IS ENCOUNTERED IN EMBANKMENT AND WATERWAY AREAS, SUITABLE MATERIAL THAT COMPLIES WITH COMPACTION DETAIL SPECIFICATIONS MUST BE IMPORTED. MATERIAL MUST BE SUITABLE FOR STABILIZATION AND THE MINIMIZATION OF EROSION. SETBACKS SHOULD COMPLY WITH THE STANDARDS CONTAINED IN CHAPTER 16 OF THE E&S MANUAL UNLESS IT CAN BE SHOWN THAT CUTS AND FILLS DO NOT POSE A HAZARD TO PUBLIC SAFETY OR TO SURFACE WATERS. ROAD FILL MATERIAL MAY NEED TO BE IMPORTED IF SOILS HAVE LOW STRENGTH.
8. INFILTRATION TESTS SHOULD BE PERFORMED ON SITE TO DETERMINE SUITABLE AREAS FOR INFILTRATION FACILITIES.
9. FOR SOILS HAVING LIMITATIONS DUE TO PIPING, SPECIAL CARE SHOULD BE TAKEN WHEN USING THESE SOILS FOR BACKFILL AROUND BASIN OUTFALL PIPES. THE USE OF A FILTER DIAPHRAGM, ANTI–DEEP COLLAR OR OTHER ACCEPTABLE DEVICE MUST BE SPECIFIED.
10. POOR TOPSOIL SHALL BE AMENDED BEFORE RE–SPREADING OVER LAWN AREAS. SOIL TESTING MAY BE REQUIRED TO DETERMINE THE PROPER APPLICATION OF SOIL AMENDMENTS TO PROMOTE GROWTH OF DESIRED VEGETATION.
11. EASILY ERODIBLE SOILS SHALL DISCHARGE TO AN EROSION AND SEDIMENT CONTROL BMP DURING CONSTRUCTION AND STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING AND VEGETATION FOR THE PERMANENT CONDITION. SEDIMENT THAT ACCUMULATES WITHIN THESE BMP'S CAN BE DISPOSED OF WITHIN LANDSCAPED AREAS ON–SITE. DISTURBED AREAS THAT DO NOT DRAIN TO A BMP MUST BE STABILIZED IMMEDIATELY.



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

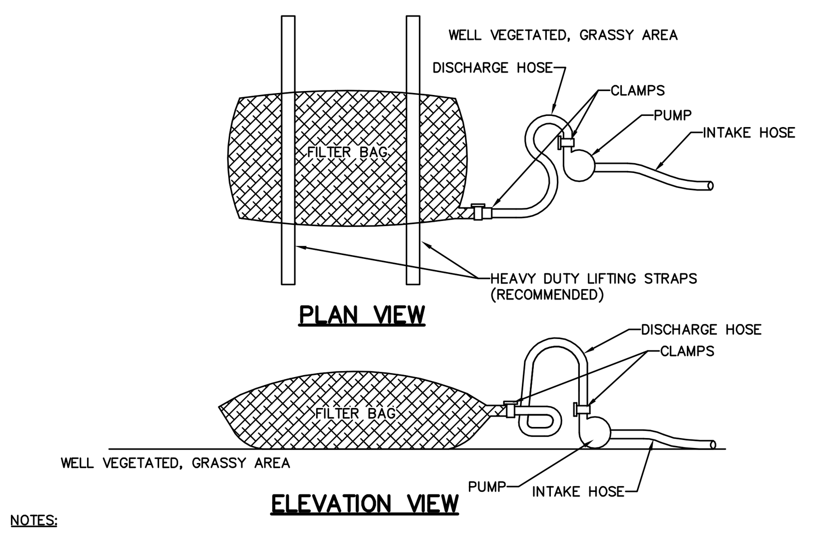
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

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



NOTES:

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

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

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

BAGS SHALL BE LOCATED IN WELL–VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON–ERODIBLE AND NON–POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

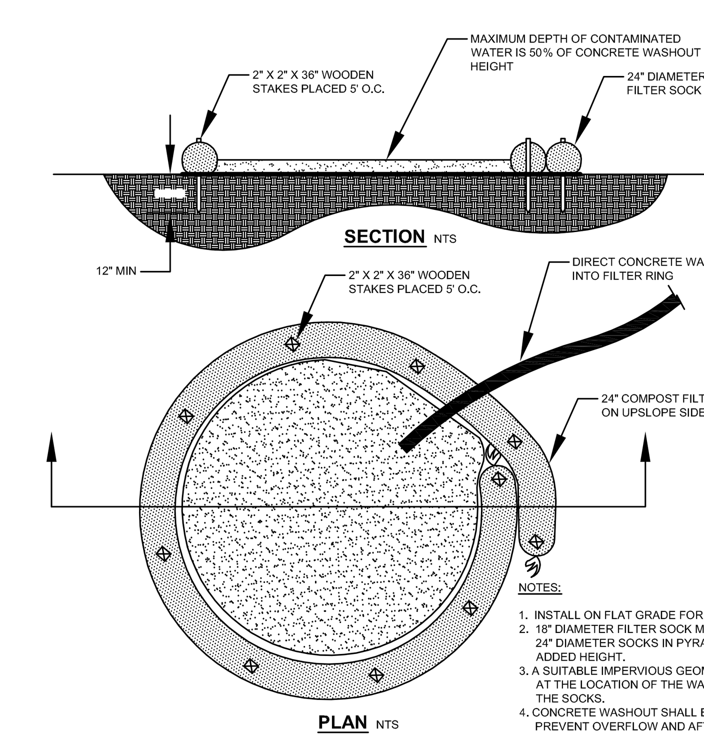
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

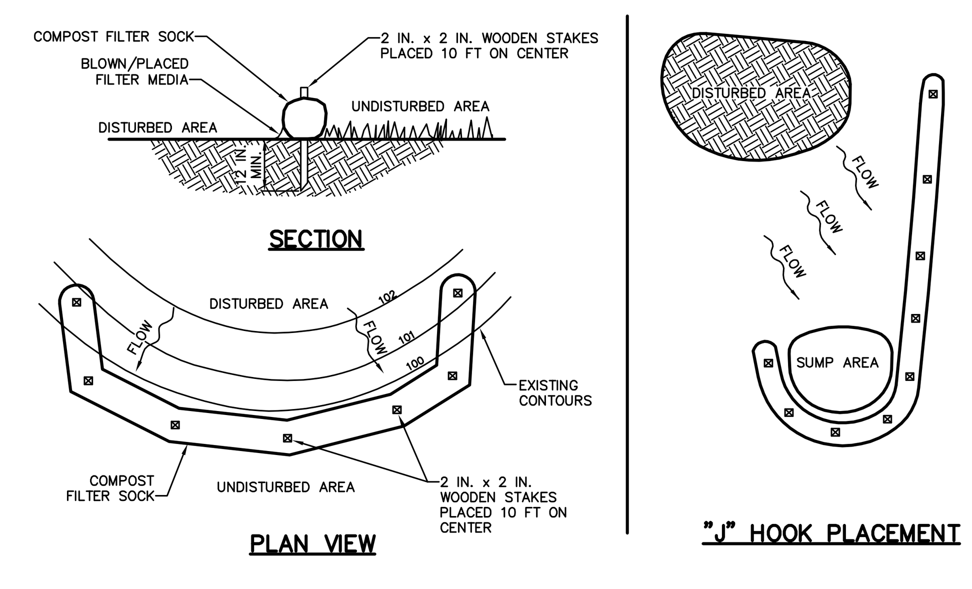
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE



NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMID CONFIGURATION FOR ADDED HEIGHT.
3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.
4. CONCRETE WASHOUT SHALL BE INSPECTED DURING USE TO PREVENT OVERFLOW AND AFTER EACH USE.

SILTSOCK CONCRETE WASHOUT
NTS



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

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

SEEDING SPECIFICATIONS

TEMPORARY SEEDING (DURING CONSTRUCTION)

MIXTURE NUMBER	SPECIES	SEEDING RATE–PURE LIVE SEED (PLS)* MOST SITES	ADVERSE SITES
1 (OR APPROVED EQUAL)	SPRING OATS (SPRING) OR ANNUAL RYEGRASS (SPRING OR FALL) OR WINTER WHEAT (FALL) OR WINTER RYE (FALL)	64 10 90 56	96 15 120 112

PERMANENT SEEDING FOR LAWN AREAS OUTSIDE OF BMP AREAS

MIXTURE NUMBER	SPECIES	SEEDING RATE–PURE LIVE SEED (PLS)* MOST SITES	ADVERSE SITES
2 (OR APPROVED EQUAL)	FINE FESCUE OR KENTUCKY BLUEGRASS PLUS REDTOP OR PERENNIAL RYEGRASS SUITABLE FOR FREQUENT MOWING. DO NOT CUT SHORTER THAN 4 INCHES.	60 35 25 3 15	75 40 30 3 20

* PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR SWITCHGRASS, DIVIDE 12 POUNDS PLS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEED LOT IS 35%, DIVIDE 12 PLS BY 0.35 TO OBTAIN 34.3 POUNDS OF SEED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS.

NOTE: WHEN A DISTURBED AREA IS TO BE STABILIZED BY VEGETATION, NO MORE THAN 15,000 S.F. SHALL REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING ACTIVITIES ARE COMPLETED BEFORE SEEDING AND MULCHING OPERATIONS ARE COMPLETED IS NOT RECOMENDED.

TABLE 11.2 SOIL AMENDMENT APPLICATION RATE EQUIVALENT

SOIL AMENDMENT	PERMANENT SEEDING APPLICATION RATE PER ACRE	PER 1,000 S.F.	PER 1,000 S.Y.	NOTES
AGRICULTURAL LIME	6 TONS	240 lb.	2,480 lb.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS
10–10–20 FERTILIZER	1,000 lb.	25 lb.	210 lb.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS
	TEMPORARY SEEDING APPLICATION RATE			
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"

NOTES: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF THIS CHAPTER MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN THIS TABLE.

SOIL TESTING IS RECOMMENDED IN ORDER TO DETERMINE APPROPRIATE LIME AND FERTILIZATION RATES.

TABLE 11.6 MULCH APPLICATION RATES

MULCH TYPE	APPLICATION RATE (MIN.) PER ACRE	PER 1,000 S.F.	PER 1,000 S.Y.	NOTES
STRAW	3 TONS	140 lb.	1,240 lb.	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN
HAY	3 TONS	140 lb.	1,240 lb.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CHIPS	4–6 TONS	185–275 lb.	1,650–2,500 lb.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES
HYDROMULCH	1 TON	47 lb.	415 lb.	SEE LIMITATIONS ABOVE

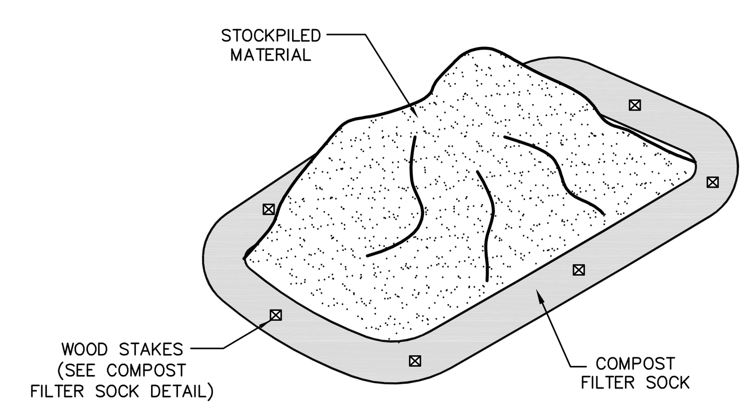
1. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR–DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL – ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.

2. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24–HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45 DEGREES ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.

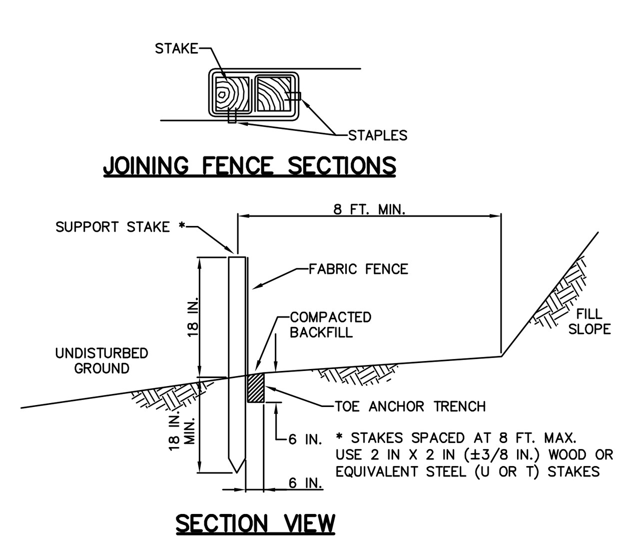
3. SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON–TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.

4. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

5. 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 LB/ACRE AT A MINIMUM.



STOCKPILE CONTROL



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4–6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)
NOT TO SCALE

E & S STANDARD NOTES

1. 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.
2. 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.
3. 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.
4. 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.
6. 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.
7. 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.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN 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.
9. 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.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
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 FILL. FORM FP–001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OR UNDISTURBED VEGETATED AREAS.
14. 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.
15. 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.
16. 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.
17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM 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. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. 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.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. 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.
22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILLS SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT 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.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREA. 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.
27. 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.
28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. 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.
30. 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 THE 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.
31. 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 TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT–LADEN RUNOFF FROM LEAVING 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. GEOLOGICAL FORMATION: TO THE BEST OF OUR KNOWLEDGE, NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS HAVING THE POTENTIAL TO CAUSE POLLUTION TO SURFACE WATERS EXIST AT THE SITE.
35. THERMAL IMPACT STATEMENT: DURING CONSTRUCTION STORMWATER RUNOFF IS FILTERED THROUGH ON–SITE BMP'S TO THE MAXIMUM EXTENT POSSIBLE TO AVOID THERMAL IMPACTS. RUNOFF IS FILTERED THROUGH COMPOST FILTER SOCKS PROVIDING AN OPPORTUNITY FOR WATER TO COOL BEFORE REACHING THE EXISTING DRAINAGE CHANNELS.
36. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN.
    A. THE EROSION & SEDIMENT CONTROL PLAN MINIMIZES EXTENT AND DURATION OF EARTH DISTURBANCE. DISTURBANCE IS LIMITED TO ONLY WHAT IS NECESSARY TO CONSTRUCT THE REQUIRED IMPROVEMENTS. THE LIMIT OF DISTURBANCE IS DELINEATED ON THE EROSION AND SEDIMENT CONTROL PLAN. NO EARTH DISTURBANCE SHALL OCCUR OUTSIDE OF THIS DELINEATION AREA.
    B. THE EROSION & SEDIMENT CONTROL PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION. DISTURBANCE IS LIMITED TO ONLY WHAT IS NECESSARY TO CONSTRUCT THE REQUIRED IMPROVEMENTS AND EXISTING VEGETATION IS PROTECTED TO THE MAXIMUM EXTENT POSSIBLE.
    C. THE EROSION & SEDIMENT CONTROL PLAN MINIMIZES SOIL COMPACTION. DISTURBANCE IS LIMITED TO ONLY WHAT IS NECESSARY TO CONSTRUCT THE REQUIRED IMPROVEMENTS. NO EARTH DISTURBANCE IS TO OCCUR OUTSIDE THE LIMIT OF DISTURBANCE.
    D. THE EROSION & SEDIMENT CONTROL PLAN UTILIZES OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF. ALL SEDIMENT–LADEN WATER ULTIMATELY FLOWS TO SEDIMENT FILTER FENCE WHERE SEDIMENT LADEN STORMWATER RUNOFF IS FILTERED BEFORE BEING DISCHARGED OFF–SITE.

CONSTRUCTION SEQUENCE

1. CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND FACILITIES PRIOR TO START OF WORK BY CONTACTING THE PA ONE CALL SYSTEM AT 1–800–242–1776.
2. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE THE FOLLOWING STAGE IS INITIATED (UNLESS OTHERWISE NOTED). CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS AS DESCRIBED IN EACH STAGE.
3. THE LIMIT OF DISTURBANCE MUST BE CLEARLY MARKED IN THE FIELD (I.E. SURVEY STAKES, POSTS & ROPE, CONSTRUCTION FENCE OR APPROVED EQUAL) BEFORE ANY EARTH DISTURBANCE ACTIVITIES BEGIN.
4. INSTALL CONSTRUCTION ENTRANCE IN ACCORDANCE WITH DETAIL.
5. INSTALL ALL TREE PROTECTION, SILT FENCE AND ORANGE CONSTRUCTION FENCE AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
6. TOPSOIL SHOULD THEN BE STRIPPED FROM THE REMAINING AREAS TO BE DISTURBED AND STOCKPILED AWAY FROM DRAINAGEWAYS. SEED AND PROTECT STOCKPILE AREA WITH SILT FENCE.
7. BEGIN HOME CONSTRUCTION, INCLUDING UNDERGROUND UTILITIES, SERVICE WALK AND DRIVEWAY.
8. REPLACE TOPSOIL TO A MINIMUM DEPTH OF 6–IN. AND FINISH GRADE, WHEREVER AND WHENEVER POSSIBLE. SEED AND MULCH EACH AREA OF DISTURBANCE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED. NO MORE THAN 15,000 S.F. OF DISTURBED AREA SHALL REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3– TO 5–INCHES PRIOR TO TOPSOIL PLACEMENT.
9. WHEN UPSTREAM TRIBUTARY AREA IS PERMANENTLY STABILIZED, INSTALL RAIN GARDEN IN ACCORDANCE WITH THE FOLLOWING SEQUENCE:
    A. EXCAVATE RAIN GARDEN TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN–SITU SOILS. IF THE AREA HAS BEEN SUBJECT TO COMPACTION OR SEDIMENTATION DURING CONSTRUCTION, INFILTRATION TESTING MAY BE REQUIRED DURING/PRIOR TO THE CONSTRUCTION OF THE BMP TO VERIFY THE VOLUME CREDITS TAKEN BY DESIGN.
    B. INSTALL SURROUNDING EMBANKMENTS AND OUTLET CONTROL STRUCTURES. INSTALL U–DRAIN IN ACCORDANCE WITH THE DETAIL AND PROVIDE CAP ON THE U–DRAIN.
    C. INSTALL SOIL MIX TO REQUIRED DESIGN DEPTH AND FINE GRADE, BEING CAREFUL NOT TO COMPACT. OVERFILL IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
    D. PREPARE FOR SEEDING BY ELIMINATING ANY WEED GROWTH PRIOR TO SEED INSTALLATION USING AN APPROPRIATE HERBICIDE TO CONTROL UNDESIRABLE VEGETATION. FOR OPTIMAL SEED ESTABLISHMENT, SOIL PH SHALL BE BETWEEN 5.5 AND 6.5.
    E. APPLY SEED BY CAREFULLY PROPORTIONING SEED FOR THE ENTIRE AREA. BROADCAST SEED IN TWO SEPARATE APPLICATIONS BY APPLYING SEED AT HALF THE SUGGESTED RATE FOR EACH APPLICATION TO ENSURE EVEN AND ADEQUATE COVERAGE. AFTER THE FULL RATE OF SEEDING HAS BEEN ACHIEVED, FOLLOW BY ROLLING OR TRACKING SEED INTO THE TOP 1/4 INCH OF SOIL TO ACHIEVE GOOD SEED TO SOIL CONTACT – DO NOT ROLL OR TRACK THE SEED WHEN SOIL IS WET.
    F. COVER SEEDED AREA WITH A LIGHT LAYER OF SALT HAY, THRESHED STRAW OR PINE NEEDLES.
    G. PLANT AND MULCH ACCORDING TO SPECIFICATIONS ON THE LANDSCAPE PLAN. INSTALL ANY ANTI–GRAZING MEASURES, IF NECESSARY.
10. PERFORM ALL OTHER FINAL LANDSCAPING OPERATIONS.
11. AFTER ALL CONSTRUCTION WORK IS COMPLETED, INSTALL FINAL PAVING, PERMANENT STRIPING AND SIGNAGE.
12. UPON FINAL STABILIZATION, REMOVE ALL OTHER TEMPORARY SEDIMENT CONTROLS. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

EROSION & SEDIMENT CONTROL DETAIL SHEET
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

S T A
Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679–0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
N.T.S.	J.A.C.	S.A.R.	6 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646ES	

PCSM NOTES

At such time that the site is stabilized and the temporary during construction erosion and sediment controls are removed, the permanent structural BMP will be installed and functioning. The structural BMP is intended to be a permanent facility that mitigates peak flows and addresses volume control in addition to promoting water quality.

The stormwater management BMP shall be owned and maintained by an HOA in perpetuity. The HOA shall conduct maintenance on a short-term and long-term schedule in accordance with the maintenance procedures outlined in this narrative and on the PCSM plans. The Municipality shall have the right, but not the duty, to inspect the stormwater management facilities, and if the property owner fails to do so, perform necessary maintenance.

Short Term:

Inspect BMP after major storm events for damage and/or erosion activity, paying close attention to the embankments, spillway, and berm. Repair erosion with appropriate measures immediately.

Inspect BMP plantings installed from containers on a monthly basis during the growing season for the first two years to evaluate plant establishment and mortality - replace dead plants with same or like plants able to establish in the cultural conditions present. If necessary, replace plants with a different species suitable to any microclimatic effects that might develop.

Specific BMP Construction Sequence and Long-Term Maintenance Notes:

RAIN GARDEN:

Construction Sequence:

1. Complete site grading and stabilize all areas upstream of the rain garden area.

2. Excavate rain garden to proposed invert depth and scarify the existing soil surfaces. Do not compact in-situ soils. If the area has been subject to compaction or sedimentation during construction, infiltration testing may be required during/prior to the construction of the BMP to verify the volume credits taken by design.

3. Install surrounding embankments and inlet and outlet control structures. Install u-drain in accordance with the detail and provide cap on the u-drain.

4. Install soil mix to required design depth and fine grade, being careful not to compact. Overfill is recommended to account for settlement. Light hand tamping is acceptable if necessary.

5. Prepare for seeding by eliminating any weed growth prior to seed installation using an appropriate herbicide to control undesirable vegetation. For optimal seed establishment, soil ph shall be between 5.5 and 6.5.

6. Apply seed by carefully proportioning seed for the entire area. Broadcast seed in two separate applications by applying seed at half the suggested rate for each application to ensure even and adequate coverage. After the full rate of seeding has been achieved, follow by rolling or tracking seed into the top 1/4 inch of soil to achievc good seed to soil contact - do not roll or track the seed when soil is wet.

7. Cover seeded area with a light layer of salt hay, threshed straw or pine needles.

8. Plant and mulch according to specifications on the landscape plan. Install any anti-grazing measures, if necessary.

Maintenance:

1. While vegetation is being established, pruning and weeding may be required. Weeds should be removed thereafter by hand.

2. Detritus may also need to be removed approximately twice per year. Perennial plantings may be cut down at the end of the growing season.

3. Mulch should be re-spread when erosion is evident and be replenished annually. Once every 2 to 3 years the entire area may require mulch replacement.

4. Rain gardens should be inspected at least four times per year, as well as after every storm greater than 1 inch for sediment build-up, erosion, vegetative conditions, etc.

5. During periods of extended drought, rain gardens may require watering.

6. Rain gardens should not be mowed on a regular basis.

7. Trees and shrubs should be inspected twice per year to evaluate health.

8. Evaluate the drain-down time of the rain garden to ensure the maximum time of 72 hours is not being exceeded. If drain-down time is exceeding the maximum, drain the rain garden via pumping and clean out perforated piping, if included. If slow drainage persists, evaluation by a professional engineer may be required to determine appropriate course of action. This includes but is not limited to replacement of the facility.

LANDSCAPE RESTORATION:

Construction Sequence:

1. All plant material to be installed in accordance with the planting practices stated in Chapter 3 of "Tree Maintenance" by P.P. Pirone (fifth or most recent edition).

2. Take extreme care in handling and installing all plants to prevent damage to bark, branches, and root balls.

3. All planting areas shall be free from weeds prior to the beginning of planting operation. Contact herbicide sprays should only be used as required and all manufactures specifications followed.

4. Prepare tree and shrub planting pits with proper size excavations and backfill during planting with prepared backfill mixture. Backfill in layers, water thoroughly to allow settlement and remove air pockets.

5. Plant root balls at the same relation to grade as previously grown at the nursery. High or low root balls shall not be accepted.

6. Backfill planting soil of 50% topsoil and 50% peat moss shall be mixed with existing soil at a rate of 1/3 planting soil and 2/3 existing soil.

7. Fertilize all plants with appropriate starter fertilizer at time of planting.

8. All plantings must be thoroughly watered within the first 12 hours of installation. The contractor is responsible for providing water for this operation.

9. Mulch all plantings immediately after planting operations are completed with a three-inch (3") layer of finely shredded bark mulch or licorice root. The mulch shall be aged a minimum of 6 months. A granular pre-emergent weed control shall be spread prior to mulching. The limit of this mulch for deciduous trees and single evergreen trees shall be the area of the pit excavation. For all evergreen tree and shrub clusters, a fully mulched bed shall be created. Mulch planting beds entirely around and between all plants for a fully mulched bed. Depth shall be cleanly cut and tapered to match surrounding lawn grades.

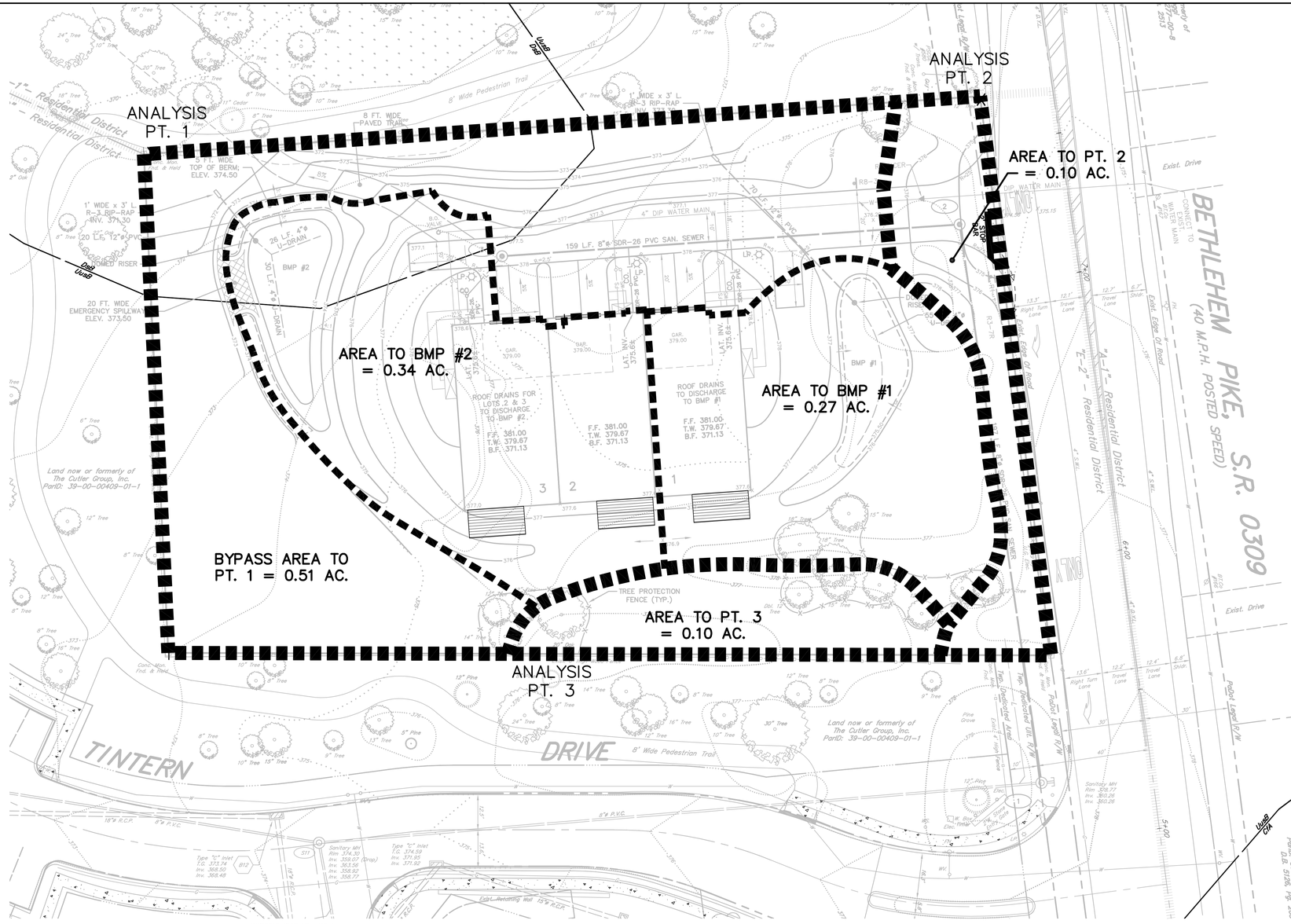
10. All shrubs are to be mulched in groups. No singularly mulched shrubs will be accepted, unless a singular specimen shrub in lawn has been shown on the drawings. A continuous mulch bed shall be provided for each grouping or cluster of shrubs to the extent of their collective branch drip line.

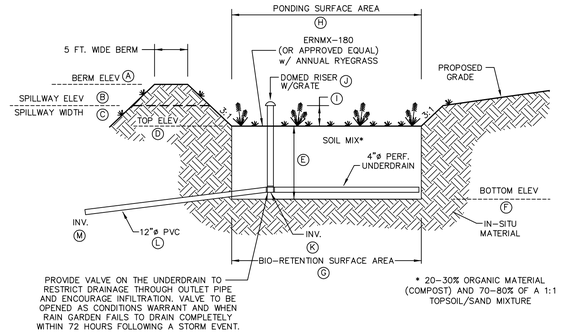
Maintenance:

1. Application of a carefully selected herbicide around the protective tree shelters/tubes may be necessary, and reinforced by selective cutting/manual removal, if necessary for the initial 2 to 3 years of growth and may be necessary for up to 5 years until tree growth and tree canopy begins to form, naturally inhibiting weed growth (once shading is adequate, growth of invasive and other weeds will be naturally prevented, and the trees becomes self-maintaining).

2. Review of the new trees should be undertaken intermittently to determine if replacement trees should be provided (some modest rate of planting failure is usual).

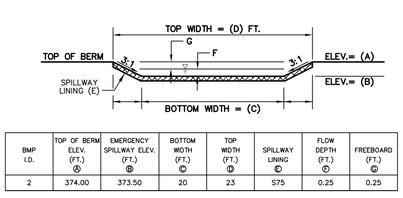
3. Landscape restoration areas planted with a proper cover crop can be expected to require annual mowing to control invasive species.





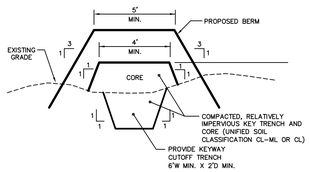
BMP NO.	BERM ELEV. (A)	SPILLWAY ELEV. (B)	SPILLWAY WIDTH (C)	TOP ELEV. (D)	SOIL MIX DEPTH (E)	BOTTOM ELEV. (F)	SURFACE AREA (G)	PONDING SURFACE AREA (H)	SURFACE STORAGE DEPTH (I)	T.G. (J)	U-DRAIN INV. (K)	PIPE LENGTH/ SLOPE (L)	INV. (M)
1	N/A	N/A	N/A	375.50	1.5 FT.	374.00	1,065 S.F.	1,280 S.F.	0.75 FT.	375.75	374.00	70 L.F./0.0100	373.30
2	374.00	373.50	20 FT.	373.00	1.5 FT.	371.50	1,120 S.F.	1,275 S.F.	0.25 FT.	373.25	371.50	20 L.F./0.0100	371.30

INFILTRATION BMP DETAIL

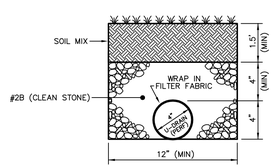


BMP I.D.	TOP OF BERM ELEV. (FT.) (A)	EMERGENCY SPILLWAY ELEV. (FT.) (B)	BOTTOM WIDTH (FT.) (C)	TOP WIDTH (FT.) (D)	SPILLWAY LINING (E)	FLOW DEPTH (FT.) (F)	FREEBOARD (FT.) (G)
2	374.00	373.50	20	23	S75	0.25	0.25

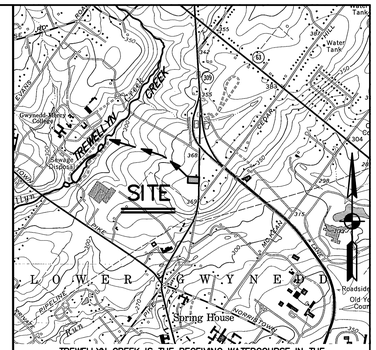
BMP EMERGENCY SPILLWAY CROSS-SECTION



BERM CONSTRUCTION DETAIL



U-DRAIN DETAIL



TREWELLYN CREEK IS THE RECEIVING WATERCOURSE IN THE WISSAHICKON WATERSHED. THE CHAPTER 93 CLASSIFICATION FOR TREWELLYN CREEK IS TSF, MF.

SCALE: 1"=2000'

UNIT NO.	BUILDING FOOTPRINT (S.F.)	DRIVE & PARKING (S.F.)	PATIO/DECK (S.F.)	PORCH & SERVICE WALK (S.F.)	8' WIDE TRAIL (S.F.)	ADDITIONAL IMP. (S.F.)	TOTAL DESIGN IMP. COV* (S.F.)
1	2,224	400	250	160	0	150	3,034
2	2,224	400	250	50	0	150	2,924
3	2,224	400	250	160	175	0	3,209
OPEN SPACE	0	3215	0	0	390	565	3,605
WITHIN R/W	0	690	0	0	0	0	690
TOTAL TRACT	6,672	5105	750	370	565	865	14,327

* This chart is used to document the impervious surface used in the design calculations for stormwater management. Actual building footprint, drive and parking, patio/deck and porch & service walk submitted as part of the building permit plan may deviate from the chart. However, the total impervious coverage column should dictate the maximum impervious coverage allowed on the property without the need for additional stormwater management facilities. Any property owner seeking to increase impervious cover beyond that which is anticipated by this plan will be required to provide additional stormwater management and treatment.

SOILS DATA

DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.

DsB – DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES

UusB – URBAN LAND–UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES

RECYCLING STATEMENT

INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.

20 0 10 20 40 60

GRAPHIC SCALE

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

PCSM PLAN

AS PART OF

SPRING HOUSE COURT

PREPARED FOR

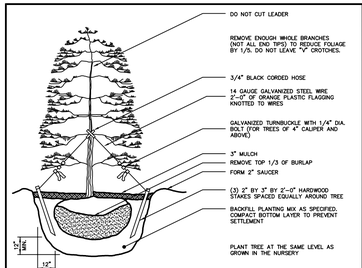
HALLMARK HOMES – SPRING HOUSE COURT LLC

SITE SITUATE IN

LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

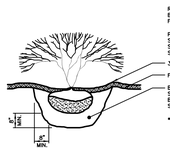
STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679-0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
1"=20'	J.A.C.	S.A.R.	7 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646PCSM	



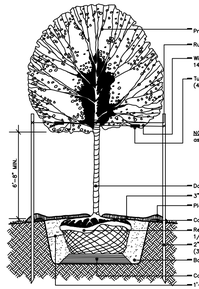
EVERGREEN TREE PLANTING & STAKING

not to scale



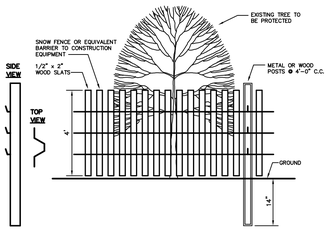
SHRUB PLANTING

not to scale



DECIDUOUS TREE PLANTING & STAKING

not to scale



TREE PROTECTION FENCE DETAIL

not to scale

REQUIREMENTS / SYMBOLS

1230.42(a)(1) STREET TREES
REQUIRED: 2 SHADE TREES PER 40 LIN. FT. STREET FRONTAGE
200 LINEAR FEET / 40 = 5 TREES = 10
2 EXISTING TREES: 8 TREES TOTAL

1123O.41(I) REPLACEMENT TREES
REQUIRED: 2" CALIPER REPLACEMENT PER 2 INCH CALIPER OF TREES REMOVED
(1) 24" AND (1) 12" TREE REMOVED = 36" TOTAL TREE CALIPER REMOVED
REPLACEMENT TREES ARE 3" CALIPER = 12 REPLACEMENT TREES

1230.42(d)(1) BUFFER PLANTING
REQUIRED: 1 TREE, 1 EVERGREEN, 1 SHRUB PER 30 FEET OF PROPERTY
SOUTH 314' = 11 EACH, 8 EXISTING TREES: 3 TREES, 11 EVERGREENS, 11 SHRUBS
WEST 176' = 6 EACH, 0 EXISTING TREES: 6 TREES, 6 EVERGREENS, 6 SHRUBS
NORTH 298' = 10 EACH, 3 EXISTING TREES: 7 TREES, 10 EVERGREENS, 10 SHRUBS

1230.42(d)(2) INTERIOR LANDSCAPING
REQUIRED: 2 SHADE TREES PER UNIT = 6

LEGEND

BMP FLOOR MIX: ERNMX-180 (OR APPROVED EQUAL)

AMENDED SOILS

TREE PROTECTION FENCE

L.P. LAMP POST

PLANT SCHEDULE

KEY	STREET	USE/QUANTITY REPLACEMENT (3")	BUFFERS SOUTH	BUFFERS WEST	BUFFERS NORTH	INTERIOR	TOTAL PLANTS	NATIVE	ADAPTED	1230.42 REQUIRED PLANTINGS / BOTANICAL NAME / COMMON NAME
										SHADE TREES 2" CALIPER PER 1230.49 A. 3" CALIPER REPLACEMENT TREES
AR		5	1	4		1	11			ACER RUBRUM / RED MAPLE
AS			1			3	4			ACER SACCHARUM / SUGAR MAPLE
LS		3			1		4			LIQIDAMBAR STYRACIFLUA / SWEETGUM
LT	4	3		1	4		12			LIRIODENDRON TULIPIFERA / TULIPTREE
QR	4	1	1	1	2	2	11			QUERCUS RUBRA / RED OAK
	8	12	3	6	7	6	TOTALS PER USE			
										EVERGREENS 4' HEIGHT PER 1230.49 C.
IO			3	2	3		8			ILEX OPACA / AMERICAN HOLLY
PA			3	1	2		6			PICEA ABIES / NORWAY SPRUCE
PV			5	3	5		13			PINUS VIRGINIANA / VIRGINIA PINE
			11	6	10		TOTALS PER USE			
										SHRUBS 3' HEIGHT PER 1230.49 F.
CR			3	2	4		9			CORNUS RACEMOSA / GRAY DOGWOOD
IG			5	2	3		10			ILEX GLABRA / INKBERRY
VP			3	2	3		8			VIBURNUM PRUNIFOLIUM / BLACKHAW VIBURNUM
			11	6	10		TOTALS PER USE			
								6		TOTAL ADAPTED PLANTS
								96		TOTAL NATIVE PLANTS
								94%		NATIVE PLANTS 1230.43(b)

20 0 10 20 40 60

GRAPHIC SCALE

4	PER EQUITABLE OWNER	MAY 15, 2026
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1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

LANDSCAPE PLAN

AS PART OF

SPRING HOUSE COURT

PREPARED FOR

HALLMARK HOMES – SPRING HOUSE COURT LLC

SITE SITUATE IN

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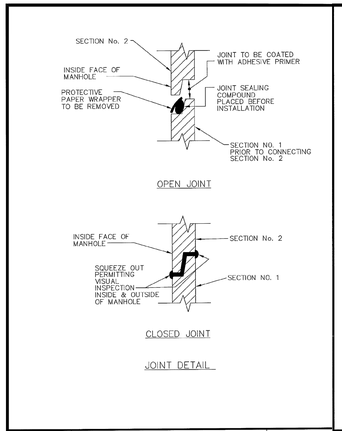
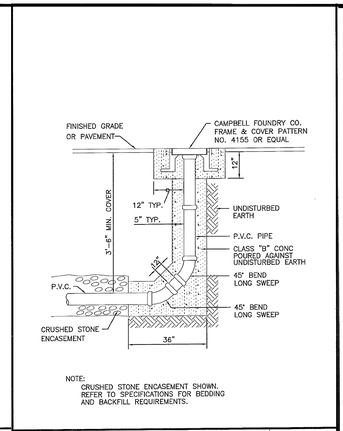
PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
1"=20'	J.A.C.	S.A.R.	8 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646LA	

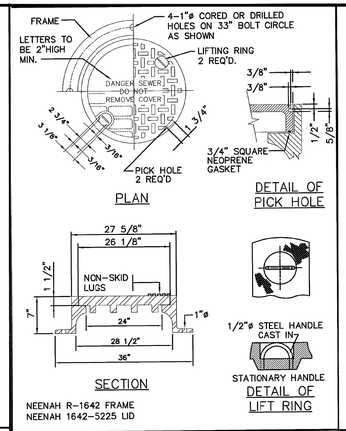


		DRAWN:
JAN. 2, 2001	PRE-CAST MANHOLE JOINTS AND TRANSITION DETAILS	SCALE: NONE
REVISIONS		PLATE NO. S-3



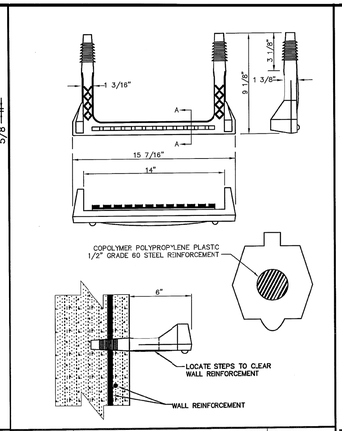
NOTE:
CRUSHED STONE ENCASEMENT SHOWN. REFER TO SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.

BCM Engineers	TYPE 2 CLEANOUT-- P.V.C. PIPE	DRAWN: JHD
REVISIONS		SCALE: NONE
		PLATE NO. S-7

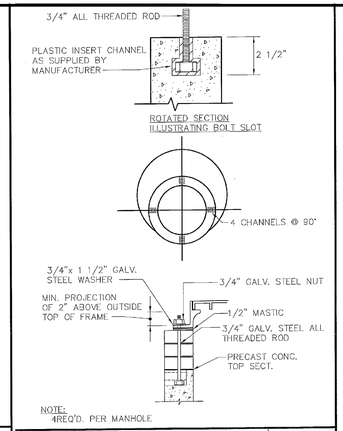


NEENAH R-1642 FRAME
NEENAH 1642-5225 LID

		DRAWN:
JAN. 2, 2001	CAST IRON MANHOLE FRAME & COVER	SCALE: NONE
REVISIONS		PLATE NO. S-8

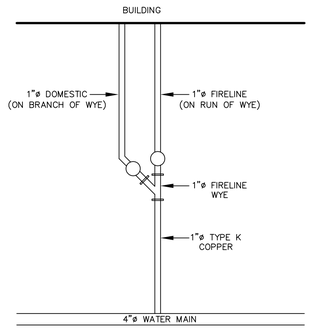


BCM Engineers	COPOLYMER POLYPROPYLENE MANHOLE STEP (CPP)	DRAWN:
REVISIONS		SCALE: NONE
		PLATE NO. S-12

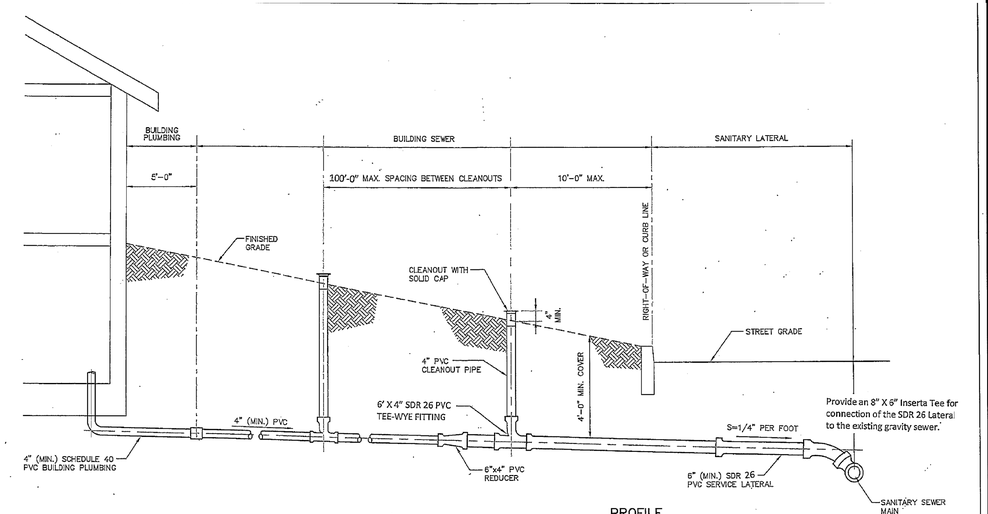


NOTE:
4REQ'D. PER MANHOLE

		DRAWN:
JAN. 2, 2001	ANCHOR BOLT DETAIL	SCALE: NONE
REVISIONS		PLATE NO. S-13



FIRE/WATER SERVICE DETAIL

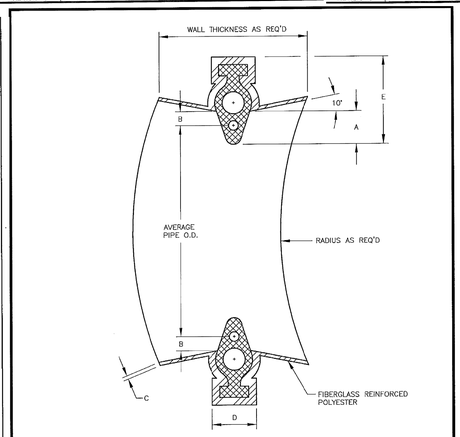


PROFILE

TYPICAL BUILDING SEWER INSTALLATION

NO SCALE

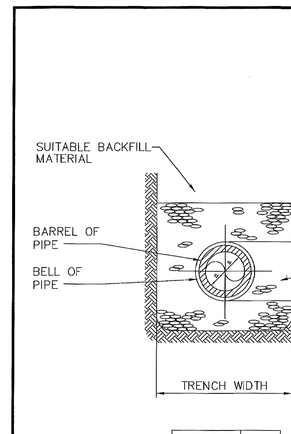
Lower Gwynedd Township
Sewer Lateral Profile



PIPE DIA.	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
4.00 (101.6) – 6.00 (152.4)	.875 (22.23)	.375 (9.53)	.250 (6.35)	1.250 (31.75)	1.975 (50.17)
8.00 (203.2) – 24.0 (609.6)	1.375 (34.93)	.625 (15.88)	.250 (6.35)	1.500 (38.10)	2.725 (69.22)
30.0 (762.0) – 59.5 (1511.3)	1.750 (44.45)	.750 (19.05)	.250 (6.35)	1.750 (44.45)	3.375 (85.73)
60.0 (1524) – UP	2.125 (53.98)	.875 (22.23)	.250 (6.35)	2.000 (50.80)	4.000 (101.6)

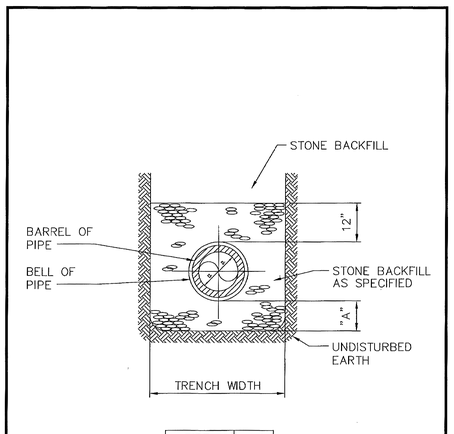
FLATWALL FIELD SLEEVE CAN BE MADE UPON REQUEST.
NOTE: TO DETERMINE OVERALL HEIGHT OF FIELD SLEEVE USE THE FOLLOWING FORMULA:
DIM. E x 2 + A LOK I.D. = HEIGHT

	BCM Engineers	DRAWN: GBT
		SCALE: NONE
REVISIONS	FIELD SLEEVE DETAIL	PLATE NO. S-35



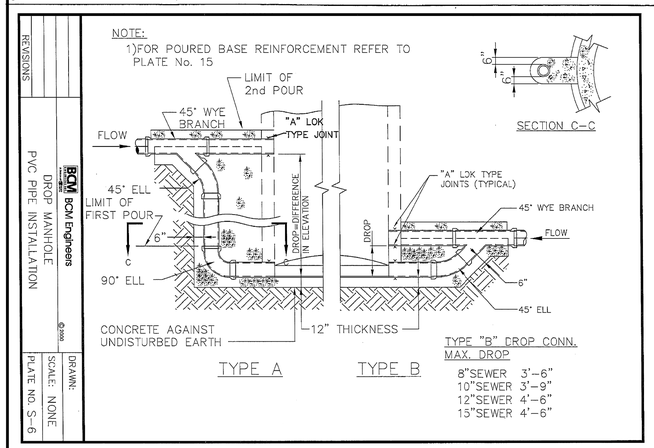
PIPE DIA.	A
4"–16"	4"

		DRAWN:
JAN. 2, 2001	STONE BACKFILL IN NON TRAFFIC AREAS	SCALE: NONE
REVISIONS		PLATE NO. S-29

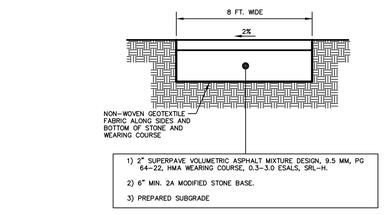


PIPE DIA.	A
4"–16"	4"

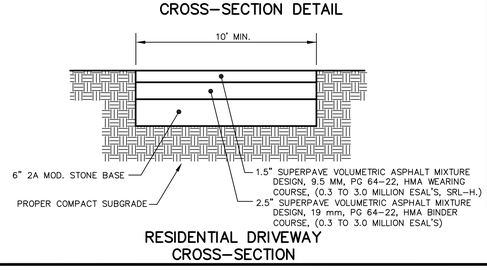
		DRAWN:
JAN. 2, 2001	STONE BACKFILL IN TRAFFIC AREA	SCALE: NONE
REVISIONS		PLATE NO. S-29A



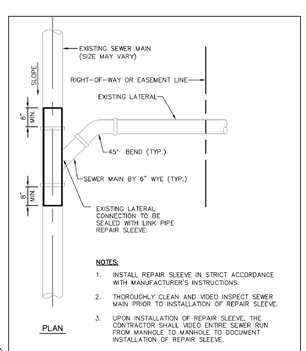
REVISIONS	BCM Engineers	DRAWN:
	DROP MANHOLE PVC PIPE INSTALLATION	SCALE: NONE
		PLATE NO. S-6



8 FT. WIDE PAVED TRAIL
CROSS-SECTION DETAIL



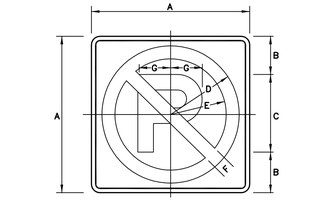
RESIDENTIAL DRIVEWAY
CROSS-SECTION



PLAN

NOTES:
1. INSTALL REPAIR SLEEVE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. THOROUGHLY CLEAN AND VIDEO INSPECT SEWER MAIN PRIOR TO INSTALLATION OF REPAIR SLEEVE.
3. UPON INSTALLATION OF REPAIR SLEEVE, THE CONTRACTOR SHALL VIDEO ENTIRE SEWER RUN FROM MANHOLE TO MANHOLE TO DOCUMENT INSTALLATION OF REPAIR SLEEVE.
4. ALL VIDEO INSPECTION TAPES SHALL BE FORWARDED TO OWNER UPON COMPLETION OF WORK.

SANITARY LATERAL
ABANDONMENT DETAIL



COLOR: SYMBOL AND BORDER — BLACK (NON-REFLECTORIZED)
CIRCLE AND DIAGONAL — RED (REFLECTORIZED)*
BACKGROUND — WHITE (REFLECTORIZED)*

SIGN SIZE A x A	DIMENSIONS – IN. B	C	D	E	F	G	MARGIN	BORDER	BLANK STD.
12" x 12"	3	6E(M)	4.9	3.9	1	2.4	0.4	0.4	–
24" x 24"	6	12E(M)	10.5	8.5	2	4.8	0.4	0.6	B3-24
36" x 36"	9	18E(M)	15.8	12.8	3	7.2	0.6	0.8	B3-36
48" x 48"	12	24E(M)	21	17	4	9.6	0.8	1.2	B3-48

R8-3

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
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CONSTRUCTION DETAIL SHEET
AS PART OF
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PREPARED FOR
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SITE SITUATE IN
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PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
N.T.S.	J.A.C.	S.A.R.	9 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646DET	

445 FT. DESIRABLE STOPPING SIGHT DISTANCE
445 FT. REQUIRED STOPPING SIGHT DISTANCE
800+ FT. AVAILABLE STOPPING SIGHT DISTANCE

540 FT. DESIRABLE STOPPING SIGHT DISTANCE
540 FT. REQUIRED STOPPING SIGHT DISTANCE
800+ FT. AVAILABLE STOPPING SIGHT DISTANCE

DISTANCE TO FAIRLAND DRIVE INTERSECTION = 398'
DISTANCE TO NEAREST DRIVEWAY = NONE

DISTANCE TO TINTERN DRIVE INTERSECTION = 242'
DISTANCE TO NEAREST DRIVEWAY = NONE

C/L PROPOSED DRIVEWAY
SEGMENT: 0180
OFFSET: 723.6

CONNECT TO EXIST. WATER MAIN

C/L TINTERN DRIVE
SEGMENT: 0180
OFFSET: 0480

460 FT. DESIRABLE STOPPING SIGHT DISTANCE
460 FT. REQUIRED STOPPING SIGHT DISTANCE
700 FT. AVAILABLE STOPPING SIGHT DISTANCE

BETHLEHEM PIKE, S.R. 0309
(40 M.P.H. POSTED SPEED)

Land now or formerly of Andrew Pillegi ParID: 39-00-00277-00-8 D.B. 5801, Pg. 2513

Land now or formerly of Charles & Maria Sands ParID: 39-00-00655-00-8 D.B. 5126, Pg. 2038

Exist. Drive Entrance

PaDot Legal R/W

Exist. Edge Of Road

DIP WATER MAIN

STOP

R1-1

R3-7R

197 L.F. 8"ø SDR-26 PVC SAN. SEWER

Twp. Dedicated Ult. R/W

Twp. Dedicated Area

PROPERTY LINE/ TOWNSHIP ULT. R/W SEGMENT: 0180 OFFSET: 768.1 (50 FT. FROM C/L)

PROPERTY LINE/ TOWNSHIP ULT. R/W SEGMENT: 0180 OFFSET: 568.1 (50 FT. FROM C/L)

55 L.F. 4"ø U-DRAIN

DOMED RISER

REDUCER

RB-3

BMP #1

TINTERN DRIVE

LOOKING AHEAD–BASED ON 40 M.P.H.
445 FT. DESIRABLE STOPPING SIGHT DISTANCE
445 FT. REQUIRED STOPPING SIGHT DISTANCE
800+ FT. AVAILABLE STOPPING SIGHT DISTANCE

LOOKING LEFT–BASED ON 40 M.P.H.
540 FT. DESIRABLE STOPPING SIGHT DISTANCE
540 FT. REQUIRED STOPPING SIGHT DISTANCE
800+ FT. AVAILABLE STOPPING SIGHT DISTANCE

LOOKING RIGHT–BASED ON 40 M.P.H.
460 FT. DESIRABLE STOPPING SIGHT DISTANCE
460 FT. REQUIRED STOPPING SIGHT DISTANCE
700 FT. AVAILABLE STOPPING SIGHT DISTANCE

PROPERTY CORNER SEGMENT: 0180 OFFSET: 768.1

C/L PROP. DRIVEWAY STA. 7+23.60

SEGMENT: 0180 OFFSET: 723.6

3.5' DRIVER CUTTING

3.5' DRIVER TURNING LEFT

Exist. C/L Profile

PROPERTY CORNER SEGMENT: 0180 OFFSET: 568.1

C/L TINTERN DRIVE STA. 4+80

Penndot Legal R/W

C/L Bethlehem Pike S.R. 0309 Sta. 7+23.60 SEGMENT: 0180 OFFSET: 723.6

TWP. ULT. R/W

Exist. Grade

PROPOSED DRIVEWAY
BETHLEHEM PIKE ACCESS PROFILE

ACT 50 UTILITY NOTE

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER-GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 30, 2017 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.

FULL–DEPTH CONSTRUCTION

PERMIT NO. 06102989
EPS NO. 206070

GRAPHIC SCALE
20 0 10 20 40 60

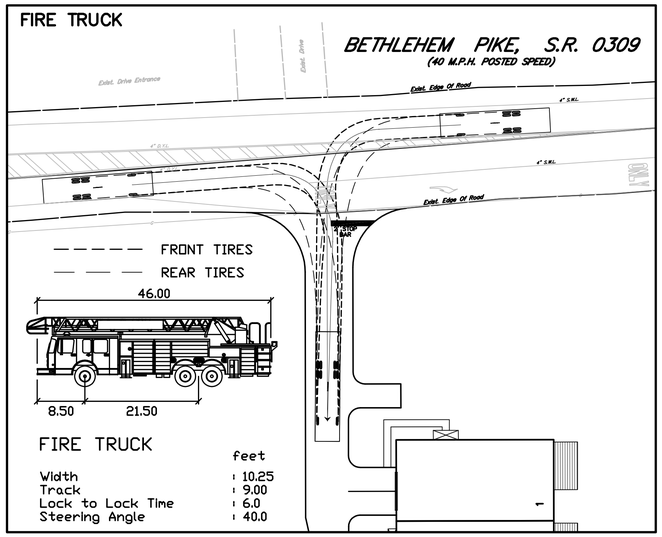
No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

PLAN AND PROFILE
OF
BETHLEHEM PIKE, S.R. 0309
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679–0200; www.stotac.com

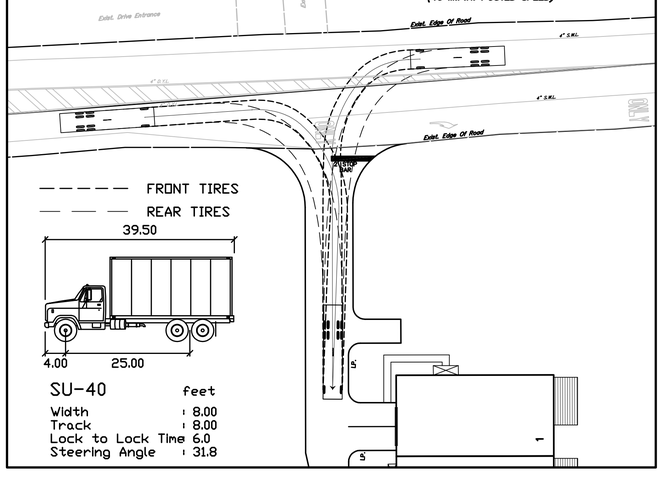
PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
HORIZONTAL: 1" = 20' VERTICAL: 1" = 2'	A.C.H.	S.A.R.	10 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646P309	

FIRE TRUCK



FIRE TRUCK	feet
Width	10.25
Track	9.00
Lock to Lock Time	6.0
Steering Angle	40.0

SU-40 BOX TRUCK



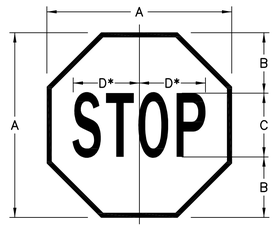
SU-40	feet
Width	8.00
Track	8.00
Lock to Lock Time	6.0
Steering Angle	31.8

SIGN TABULATION – BETHLEHEM PIKE, S.R. 0309

PLAN SYMBOL	OWNER (P – Permittee, M – Municipality, S – State)	SERIES	SIZE	DESCRIPTION	STATION	STATE ROUTE	SEGMENT	OFFSET	ACTION
(1)	M	R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT	7+11 LT	0309	0180	687	RELOCATE
(2)	P	R1-1	24"x24"	STOP SIGN	7+08 LT	0309	0180	690	NEW

SIGN LEGEND

- (B) EXISTING SIGN TO REMAIN
- [B] EXISTING SIGN TO BE REMOVED
- (B) EXISTING SIGN TO BE RELOCATED
- [B] PROPOSED SIGN



COLOR: LEGEND AND BORDER — WHITE (REFLECTORIZED)
BACKGROUND — RED (REFLECTORIZED)

DIMENSIONS – IN					
SIGN SIZE A x A	B	C	D	BORDER	BLANK STD.
24" x 24"	8	8C	10	0.6	B1-24

* REDUCE SPACING 40%

R1-1

CONSTRUCTION NOTES

1. THE EXISTING PAVEMENT SECTION FOR S.R. 0309 WAS DETERMINED FROM PENNDOT PAVEMENT HISTORY RMS DATA.
2. THE PROPOSED PAVEMENT SECTION MUST BE AS INDICATED ON THE PLAN, OR MATCH THE EXISTING AS FOUND IN THE FIELD, WHICHEVER IS GREATER. THE PROPOSED PAVEMENT SECTION IS TO BE USED WITH THE PENNDOT LEGAL RIGHT-OF-WAY.
3. SAWCUT ALONG THE EXISTING WHITE LINE AND INSTALL THE FULL DEPTH PAVEMENT SECTIONS, UNLESS OTHERWISE SHOWN ON THE CROSS-SECTIONS.
4. SAWLINE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS NECESSARY BY A PENNDOT FIELD REPRESENTATIVE.
5. NO UNSUITABLE MATERIAL IS TO BE USED IN ANY PORTION OF THE ROADWAY CONSTRUCTION. REMOVE ANY SUBGRADE THAT CANNOT BE PROPERLY COMPACTED AND TREAT AS UNSUITABLE MATERIAL. UNDERCUTTING AND/OR STABILIZATION MAY BE REQUIRED. THE SUBGRADE MUST BE APPROVED BY A PENNDOT REPRESENTATIVE PRIOR TO REPLACEMENT OF THE SUBBASE.
6. SUPERPAVE WEARING LEVELING COURSE WILL BE PLACED IN MAXIMUM LIFTS OF 2.5 INCHES THICK.
7. ALL LONGITUDINAL JOINTS WILL BE SEALED WITH PG 64-22.

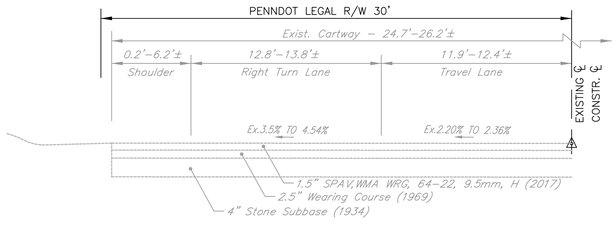
(1) SUPERPAVE ASPHALT MIXTURE DESIGN, WMA WEARING COURSE, PG 64-22, 0.3 TO 3 MILLION DESIGN ESALS, 9.5 MM MIXTURE, 1.5" DEPTH, SRL-H

(2) SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BINDER COURSE, PG 64-22, 0.3 TO 3 MILLION DESIGN ESALS, 19.0 MM MIXTURE, 2.5" DEPTH.

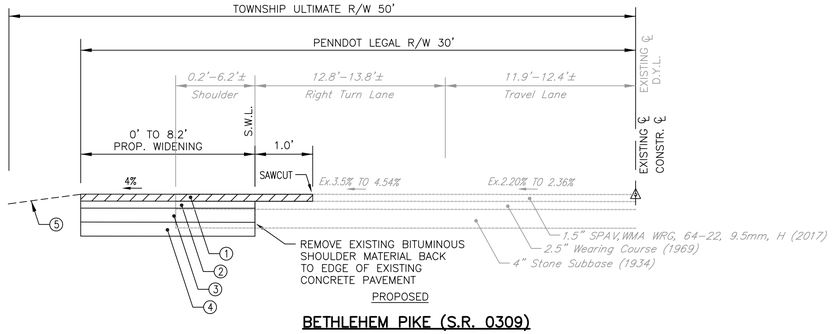
(3) SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BASE COURSE, PG 64-22, 0.3 TO 3 MILLION DESIGN ESALS, 25.0 MM MIXTURE, 6" DEPTH

(4) SUBBASE, 8" DEPTH (NO. 2A)

(5) TOP SOIL, SEEDING AND MULCH. 4:1 MAX. SLOPE.



EXISTING



PROPOSED

BETHLEHEM PIKE (S.R. 0309)

NOT TO SCALE
STA. 6+92 TO STA. 7+61

PADOT NOTES

1. ALL WORK IN PENNDOT RIGHT-OF-WAY IS TO BE BUILT IN ACCORDANCE WITH:
   1. PENNDOT PUBLICATION 408 SPECIFICATIONS
   2. PENNDOT PUBLICATION 34, 35, 41, AND 42
   3. PENNDOT PUBLICATION 72M
   4. PENNDOT PUBLICATIONS 148 AND 149
   5. PENNDOT PUBLICATION 282
   6. PENNDOT PUBLICATION 213 (67 PA CODE, CHAPTER 212)
   7. PENNDOT PUBLICATION 70M
   8. PENNDOT PUBLICATION 111
   9. PENNDOT PUBLICATION 13M
   10. PENNDOT PUBLICATION 236
   11. PENNSYLVANIA CODE TITLE 67, CHAPTERS 441 AND 459
   12. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – LATEST PENNDOT ADOPTED EDITION
2. THIS PERMIT MAY BE RESTRICTED ON WORKING HOURS AND TIMES FOR HOLIDAYS, WEEKENDS, AND SPECIAL OR UNFORESEEN EVENTS AND WILL REQUIRE APPROVAL FROM THE DISTRICT TRAFFIC ENGINEER PRIOR TO WORKING DURING THESE PERIODS. REFER TO MPT PLAN FOR RESTRICTIONS.
3. FOR PERMITS REQUIRING A STATE INSPECTOR, FOLLOWING THE PERMITTEE'S REQUEST TO BEGIN CONSTRUCTION, ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE COMPLETED WITHOUT TIME INTERRUPTIONS.
4. WHERE ROADWAY IMPROVEMENTS OCCUR IN FRONT OF ANOTHER PERSON OR PERSON'S PROPERTY/FRONTAGE, THE PERMITTEE WILL BE REQUIRED TO PROVIDE EVIDENCE OF THEIR BEING NOTIFIED OF THE PROPOSED WORK.
5. MATERIAL CERTIFICATIONS MUST BE PROVIDED, BY AN APPROVED MANUFACTURER LISTED IN THE DEPARTMENT'S PUBLICATION 35 BULLETIN 15, FOR ALL MATERIALS AND STRUCTURES WITHIN PENNDOT R/W.
6. FINAL APPROVAL OF THE PROPOSED SAWCUT LOCATIONS WILL BE AT THE DISCRETION OF THE INSPECTOR-IN-CHARGE AND WILL BE CONFIRMED AT THE PRE-CONSTRUCTION MEETING. IF THE SAWCUT MUST BE LOCATED WITHIN A TRAVEL LANE, IT WILL BE NECESSARY TO MILL AND OVERLAY THE TRAVEL LANE TO PREVENT A JOINT IN THE WHEEL PATH.
7. MODIFICATIONS TO EXISTING DRAINAGE STRUCTURES MAY RESULT IN THE NEED TO REPLACE THE STRUCTURE. REPLACEMENT WILL BE AT THE DISCRETION OF THE INSPECTOR IN CHARGE.
8. CONTRACTOR WILL NOTIFY THE PENNDOT PRESS OFFICE AT 610-205-6800 A MINIMUM OF TWO WEEKS PRIOR TO RESTRICTING OR CLOSING A TRAVEL LANE.
9. IF THE PROPOSED IMPROVEMENTS REQUIRE THE RELOCATION OF PennDOT FIBER OPTIC CABLE(S), THE PERMITTEE IS RESPONSIBLE FOR THE FULL EXPENSE OF RELOCATING THESE FACILITIES. ANY FIBER OPTIC CABLE THAT REQUIRES RELOCATION MUST BE MOVED BY A CONTRACTOR CERTIFIED BY PennDOT TO PERFORM THIS TYPE OF WORK. CONTRACTOR MUST CONTACT PENNDOT AT 610-205-6934 TO VERIFY LOCATION OF FIBER OPTIC CABLE.
10. SURVEY AND RECORD THE LOCATION OF EVERY SIGN WITHIN LIMITS OF WORK PRIOR TO REMOVING OR RELOCATING ANY SIGN.
11. A COPY OF THE MOST RECENT PENNDOT RC DETAILS WILL BE PROVIDED TO THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
12. PA ONE CALL: ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER-GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974, AS AMENDED, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
13. THE EXISTING SPEED LIMIT ON S.R. 0309 IS 40 M.P.H. THE RIGHT-OF-WAY IS FREE ACCESS.
14. THE DRIVEWAY HAS BEEN DESIGNED (AND WILL BE CONSTRUCTED AND MAINTAINED) CONSISTENT WITH TITLE 67, CHAPTER 441 REGULATIONS.
15. CONTACT PENNSYLVANIA ONE-CALL (1-800-242-1776) THREE WORKING DAYS BEFORE EXCAVATION OR DEMOLITION WORK.
16. THE PERMITTEE SHALL ENSURE THAT THE SIGHT DISTANCE AT THE DRIVEWAYS SERVICING OTHER PROPERTIES OR AT OTHER INTERSECTIONS IS NOT REDUCED [UNLESS EXISTING AND PROPOSED VALUES EXCEED THE DESIRABLE VALUES SPECIFIED IN THE PENNSYLVANIA CODE, TITLE 67, TRANSPORTATION, CHAPTER 441.8.h.1] AS A RESULT OF THE WORK PERFORMED IN ACCORDANCE WITH THE STATE HIGHWAY OCCUPANCY PERMIT. ALL SIGHT DISTANCE OBSTRUCTIONS (INCLUDING BUT NOT LIMITED TO EMBANKMENTS AND VEGETATION) SHALL BE REMOVED BY THE PERMITTEE TO PROVIDE A MINIMUM OF 540 FEET OF SIGHT DISTANCE TO THE LEFT AND 460 FEET OF SIGHT DISTANCE TO THE RIGHT FOR A DRIVER EXITING THE PROPOSED INTERSECTION ONTO ALLENTOWN ROAD. THE DRIVER MUST BE CONSIDERED TO BE POSITIONED TEN (10) FEET FROM THE NEAR EDGE OF THE CLOSEST HIGHWAY THROUGH TRAVEL LANE (FROM THE CURBLINE IF CURBING IS PRESENT AT AN EYE HEIGHT OF THREE FEET SIX INCHES (3'-6") ABOVE THE PAVEMENT SURFACE. THE POINT SIGHTED BY THE EXITING DRIVER SHALL BE THREE FEET SIX INCHES (3'-6") ABOVE THE PAVEMENT SURFACE LOCATED IN THE CENTER OF THE CLOSEST HIGHWAY TRAVEL LANE DESIGNATED FOR USE BY APPROACHING TRAFFIC. THIS SIGHT DISTANCE SHALL BE MAINTAINED BY THE PERMITTEE.
17. A SEPARATE HIGHWAY OCCUPANCY PERMIT APPLICATION MUST BE SUBMITTED TO THE DEPARTMENT FOR THE RELOCATION OF ANY UTILITIES. THE APPLICANT IS RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY FACILITY AND THE DISTRICT UTILITY UNIT. THE RESPONSIBILITY FOR ENSURING THAT ALL UTILITY POLES WITHIN THE PROPOSED PAVING ARE RELOCATED OUTSIDE OF PAVED AREAS AND SHOULDERS SHALL BE THAT OF THE PERMITTEE. THE UTILITY POLES MUST BE RELOCATED BEFORE THE START OF ANY PAVING OPERATIONS. IF POSSIBLE, THE UTILITY POLES WITHIN THE LIMITS OF WORK SHOULD BE RELOCATED OUTSIDE THE CLEAR ZONE FOR STATE HIGHWAY TRAFFIC. OTHERWISE, THEY MUST BE RELOCATED TO THE EDGE OF THE LEGAL RIGHT-OF-WAY. UTILITY RELOCATIONS MUST BE IN ACCORDANCE WITH P.A.D.O.T. DESIGN MANUAL PART 5. ALL UTILITY RELOCATION PERMITS TAKE PRECEDENCE OVER UTILITY RELOCATION POSITIONS SHOWN ON THESE H.O.P. PLANS.
18. PADOT LEGAL RIGHT OF WAY INFORMATION FOR BETHLEHEM PIKE (S.R. 0309):
   (a) 60 FEET: DRAWINGS FOR CONSTRUCTION OF LEG. ROUTE 153 SECTION M01 IN MONTGOMERY COUNTY, 11 SHEETS, APPROVED MARCH 12, 1984 BY PENNDOT.
   (b) TO THE BEST OF OUR KNOWLEDGE, NO ADDITIONAL RECORDED PLANS ARE AVAILABLE.
19. ACCESS TO ALL DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.
20. ACCESS SIGNING AND PAVEMENT MARKINGS AUTHORIZED BY THE PERMIT MUST BE MAINTAINED BY THE PERMITTEE.
21. ALL TRENCH OPERATIONS WITHIN THE LEGAL RIGHT-OF-WAY OF THE STATE HIGHWAY MUST BE CONDUCTED IN ACCORDANCE WITH OSHA'S EXCAVATION STANDARD 29 cfr PART 1926, SUBPART p.

PERMIT NO. 06102989
EPS NO. 206070

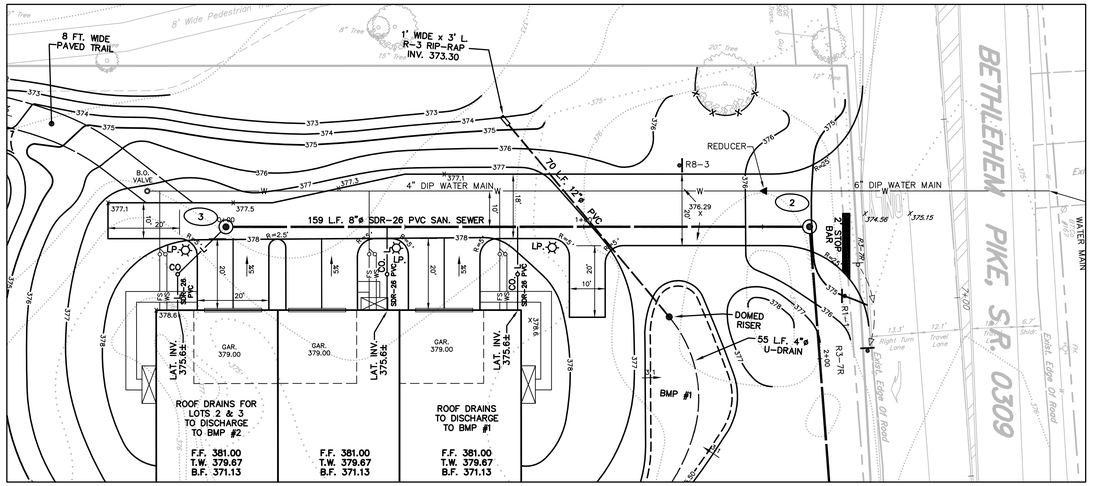
GRAPHIC SCALE

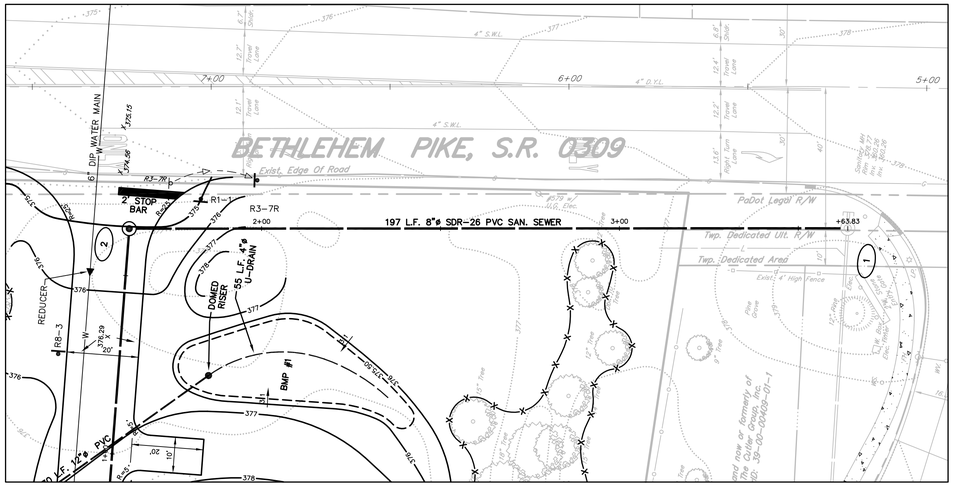
No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

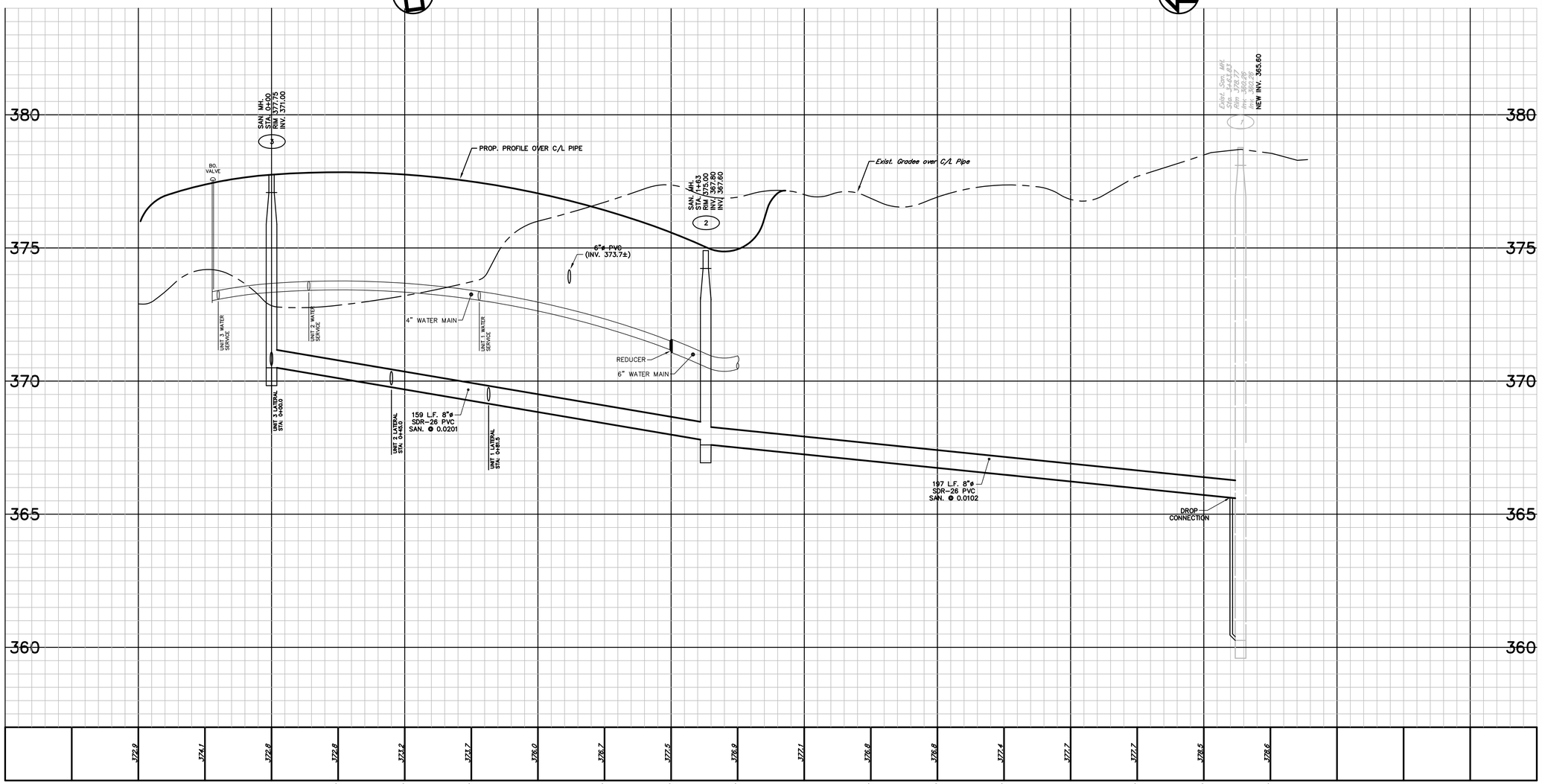
PENNDOT DETAIL SHEET
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679-0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
N.T.S.	J.A.C.	S.A.R.	11 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646P309	







20 0 10 20 40 60

GRAPHIC SCALE

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWMA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

PLAN AND PROFILE
OF
SANITARY SEWER
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES – SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

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PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
HORIZONTAL: 1" = 20' VERTICAL: 1" = 2'	J.A..C	S.A.R.	12 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646PSAN	

PATA 101 (Old PATA 5) - Notes

1. The shadow vehicle and traffic control devices are not required if the work space is outside the highway right-of-way, behind barrier, more than 2' behind curb, or 15' or more from the edge of any roadway.

2. For operations of 60 minutes or less, all traffic control devices may be eliminated if a shadow vehicle is present.

3. For divided highways and one-way highways where it is physically possible, advance warning signs should also be placed on the left-hand side of the roadway.

4. When a shadow vehicle is not used, distance A is measured from the Road Work (W20-1) sign location to beginning of work space.

Signs

W20-1

Sign Spacing Chart

Condition	Distance A Feet	B Feet	C Feet	F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed MPH	W Feet	L Feet	1/2L Feet	1/3L Feet	Min. Channelizing Devices: Per Taper Type (Length) L	1/2L	1/3L	50'	D Feet	E Feet	H Feet
25	10	105	55	35							
	11	115	60	40	6	6	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	6	6	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	6	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

PATA 107 (Old PATA 10a) - Notes

1. Each flagger shall be clearly visible to traffic for a minimum distance of E and shall be in constant communication with all other flaggers.

2. For operations of 15 minutes or less:
   a. The Road Work (W20-1), One Lane Road (W20-4), and Flagger Symbol (W20-7) signs are not required.
   b. All channelizing devices may be eliminated if a shadow vehicle is present.

3. The buffer space shall be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.

4. When a shadow vehicle is not used, distance E is measured from end of taper to beginning of work space.

Signs

W20-1 W20-4 W20-7

Sign Spacing Chart

Condition	Distance A Feet	B Feet	C Feet	F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed MPH	W Feet	L Feet	1/2L Feet	1/3L Feet	Min. Channelizing Devices: Per Taper Type (Length) L	1/2L	1/3L	50'	D Feet	E Feet	H Feet
25	10	105	55	35							
	11	115	60	40	6	6	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	6	6	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	6	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

PATA 201 (Old PATA 24) - Notes

1. Traffic control devices are not required if the work space is outside the highway right-of-way, behind barrier, more than 2'-0" behind curb, or 15' or more from the edge of the roadway.

2. For divided highways and one-way highways where it is physically possible, advance warning signs should also be placed on the left-hand side of the roadway.

3. When a shadow vehicle is not used, distance A is measured from sign to beginning of work space.

Signs

W20-1 G20-2

Sign Spacing Chart

Condition	Distance A Feet	B Feet	C Feet	F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed MPH	W Feet	L Feet	1/2L Feet	1/3L Feet	Min. Channelizing Devices: Per Taper Type (Length) L	1/2L	1/3L	50'	D Feet	E Feet	H Feet
25	10	105	55	35							
	11	115	60	40	6	6	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	6	6	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	6	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

PATA 102 (Old PATA 7) - Notes

1. If the work space is completely within a parking lane and parking is present, the taper or shadow vehicls is not required.

2. For operations of 15 minutes or less:
   a. The Road Work (W20-1) sign is not required.
   b. All channelizing devices may be eliminated if a shadow vehicle is present.

3. For divided highways and one-way highways where it is physically possible, advance warning signs should also be placed on the left-hand side of the roadway.

4. When a shadow vehicle is not used, distance E is measured from end of taper to beginning of work space.

Signs

W20-1

Sign Spacing Chart

Condition	Distance A Feet	B Feet	C Feet	F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed MPH	W Feet	L Feet	1/2L Feet	1/3L Feet	Min. Channelizing Devices: Per Taper Type (Length) L	1/2L	1/3L	50'	D Feet	E Feet	H Feet
25	10	105	55	35							
	11	115	60	40	6	6	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	6	6	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	6	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

MPT NOTES

1. THIS WORK CONSISTS OF THE MAINTENANCE AND PROTECTION OF TRAFFIC AND THE PROTECTION OF THE PUBLIC WHEN APPROACHING AND DEPARTING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

2. FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES. MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES CONSISTENT WITH THE METHODS INDICATED ON THESE DRAWINGS AND THE FOLLOWING:
   1. PENNDOT PUBLICATION 35;
   2. PENNDOT PUBLICATION 46;
   3. PENNDOT PUBLICATION 72M;
   4. PENNDOT PUBLICATION 111;
   5. PENNDOT PUBLICATION 212;
   6. PENNDOT PUBLICATION 213;
   7. PENNDOT PUBLICATION 236;
   8. PENNDOT PUBLICATION 408; AND
   9. MUTCD, CURRENT EDITION.

3. REMOVE THESE DEVICES IMMEDIATELY UPON COMPLETION OF THE WORK. PENNDOT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY DEPARTMENT FORCES.

4. PERMITTEE MUST ARRANGE FOR INSPECTION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO START OF WORK.

5. COVER OR REMOVE ALL CONFLICTING SIGNS AND ERADICATE ALL CONFLICTING PAVEMENT MARKINGS.

6. MOUNT ALL LONG-TERM ADVANCE WARNING SIGNS ON TYPE III BARRICADES UNLESS OTHERWISE NOTED OR INSTRUCTED BY DISTRICT OFFICE.

7. ALL SIGNS AND DEVICES TO BE MAINTAINED IN NEW OR LIKE NEW CONDITION.

8. DRIVEWAYS WILL BE KEPT ACCESSIBLE AT ALL TIMES. LOCATE ALL SIGNS SO THAT SIGN DISTANCES WILL NOT BE OBSTRUCTED AT DRIVEWAYS AND LOCAL ROADS.

9. ALL CHANNELIZATION DEVICES, BARRICADES, AND SIGNS SHALL HAVE TYPE III OR BETTER PRISMATIC RETROREFLECTIVE SHEETING. SHEETING SHALL BE APPROVED AND LISTED IN PENNDOT PUBLICATION 35 (BULLETIN 15).

10. NO TRAFFIC RESTRICTIONS OR LANE CLOSURES ARE PERMITTED BETWEEN 6:00 AM AND 9:00 AM AND BETWEEN 3:00 PM AND 6:00 PM MONDAYS THROUGH FRIDAYS OR ON LEGAL HOLIDAYS AND WEEKENDS ASSOCIATED WITH LEGAL HOLIDAYS. ALL RESTRICTIONS AND CLOSURES ARE TO BE REMOVED BY NOON ON THE DAY PRIOR TO THE LEGAL HOLIDAY.

11. PERMITTEE SHALL NOTIFY EMERGENCY AUTHORITIES (E.G. POLICE, FIRE, MEDICAL), AFFECTED BUSINESSES, SCHOOL DISTRICT(S), THE GENERAL PUBLIC, THE DISTRICT PERMIT MANAGER AND THE DISTRICT APRAS COORDINATOR AT LEAST FOURTEEN DAYS PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G. LATERAL WIDTH RESTRICTIONS LESS THAN 16 FEET, DETOURS).

12. MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE PATA DRAWINGS 101, 102, 107, AND 201 IN THE CURRENT PENNDOT PUBLICATION 213, "TEMPORARY TRAFFIC CONTROL GUIDELINES."

13. DROPOFFS CREATED BY CONSTRUCTION OPERATIONS SHALL BE TREATED CONSISTENT WITH PUBLICATION 408, SECTION 901.3(J).

14. REMOVE ALL SHORT-TERM WORK ZONE TRAFFIC CONTROL SIGNING UPON COMPLETION OF THAT DAY'S WORK PERIOD.

15. RESTRICTING TRAFFIC FLOW WITHIN THE WORK AREA SHALL BE MINIMIZED TO PREVENT TRAFFIC CONGESTION AND UNSAFE TRAFFIC CONDITIONS.

16. NOTIFY THE LOCAL MUNICIPALITY WHERE SIGNALIZED INTERSECTIONS FALL WITHIN THE WORK ZONE. DO NOT FLAG A SIGNALIZED INTERSECTION WITHOUT THE MUNICIPALITY PLACING THE SIGNAL ON FLASH.

17. MPT PATA DRAWING 102 MAY ONLY BE UTILIZED IF THERE IS ADEQUATE PAVEMENT WIDTH AND/OR SITE FRONTAGE AVAILABLE TO MAINTAIN THE MINIMUM TRAVEL LANE WIDTHS (10'/11'). USE OF MPT PATA DRAWING 102 IS AT THE DISCRETION OF A PENNDOT FIELD REPRESENTATIVE.

18. ALL DISTANCES MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

19. USE TYPE VII REFLECTIVE SHEETING MATERIAL FOR ALL LONG-TERM ADVANCE WARNING SIGNS. TYPE I SHEETING MAY BE USED ON "THIS ROADWAY TO BE UNDER CONSTRUCTION" SIGNS.

20. PROTECT ANY EXCAVATING OBSTRUCTIONS OR CONSTRUCTION WORK, SO AS NOT TO EXPOSE PEDESTRIANS TO HAZARDS.

21. THE CONTRACTOR MUST NOTIFY THE DISTRICT 6-0 PRESS OFFICE AT (610) 205-6800 TWO (2) WEEKS IN ADVANCE OF ANY LANE CLOSURES, RESTRICTIONS OR DETOURS.

22. BARRICADES, LIGHTING DEVICES, AND OTHER TRAFFIC CONTROL MEASURES SHALL BE PLACED IN ACCORDANCE WITH AND SHALL CONFORM TO PENNDOT SPECIFICATIONS PUBLICATION 408/2011, MUTCD STANDARDS, ADN PENNDOT PUBLICATION 213, "TEMPORARY TRAFFIC CONTROL GUIDELINES", DATED JUNE 2014 AND 67 PA CODE, CHAPTER 212, LAST REVISED FEBRUARY 2008, OR MOST RECENT EDITION.

23. ERADICATE EXISTING PAVEMENT MARKINGS AND TEMPORARILY COVER OR REMOVE ANY SIGNS (INCLUDING OVERHEAD SIGNS) THAT ARE IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL MEASURES. DO NOT ATTACH TAPE OR ADHESIVE TO THE FACE OF ANY SIGNS THAT ARE TEMPORARILY COVERED DURING CONSTRUCTION OPERATIONS. ENSURE DURING THE REMOVAL AND STORAGE OF ALL SIGNS THAT THE SHEETING FACE IS NOT DAMAGED OR SCRATCHED. REPLACE IN KIND ALL SIGNS AND/OR POSTS DAMAGED DURING REMOVAL, STORAGE OR REINSTALLATION.

24. ALL SIGNS ARE TO BE MOUNTED ON TYPE III BARRICADES UNLESS OTHERWISE NOTED.

25. TRAFFIC FLOW WITHIN THE WORK AREA MUST NOT BE STOPPED FOR GREATER THAN A 5 MINUTE PERIOD AT ANY ONE TIME.

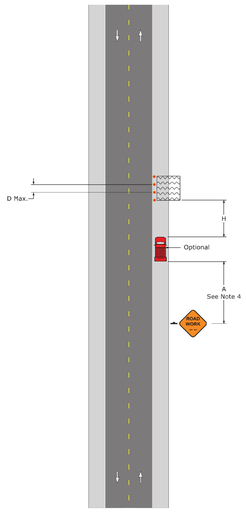
26. THE PROPOSED SITE ACCESS AND ASSOCIATED AUXILIARY LANES MUST REMAIN CLOSED WITH "ROAD CLOSED" SIGNS ON TYPE III BARRICADES AND BARRELS UNTIL THE SITE ACCESS/AUXILIARY LANES ARE READY TO BE OPENED.

27. ALL WORKERS SHALL FOLLOW THE REGULATIONS SET FORTH IN TITLE 23 OF THE CODE OF FEDERAL REGULATIONS (CFR) PART 634, EFFECTIVE NOVEMBER 24, 2008 IN REGARD TO THE WORKER'S SAFETY APPAREL.

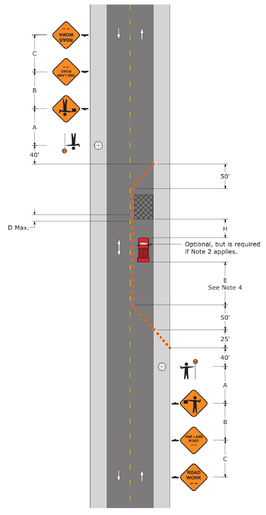
28. THE CONTRACTOR MUST NOTIFY THE DISTRICT 6-0 TRAFFIC MANAGEMENT CENTER (TMC) TWO (2) DAYS IN ADVANCE OF ANY PROPOSED LANE OR SHOULDER RESTRICTIONS OR ROAD CLOSURES AND AND FIFTEEN (15) MINUTES PRIOR TO THE START OF WORK.

PERMIT NO. 06102989
EPS NO. 206070

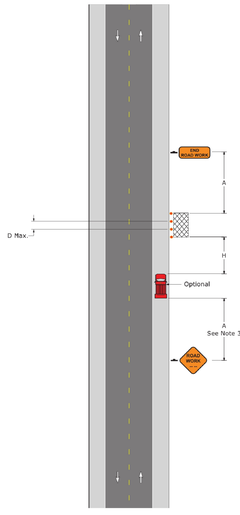
PATA 101 (Old PATA 5)
Work Space On Or Beyond The Shoulder (No Roadway Encroachment)



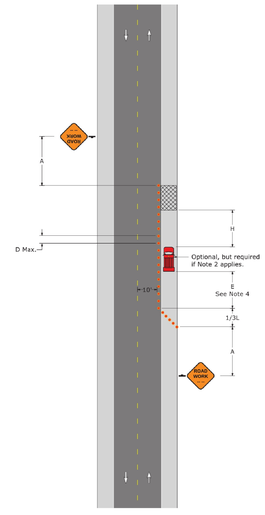
PATA 107 (Old PATA 10a)
Work In One Lane; Two Flaggers

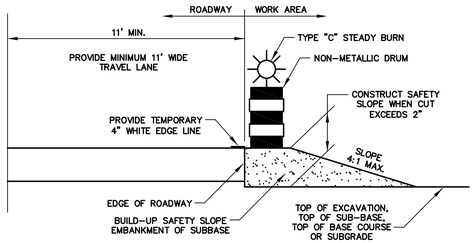


PATA 201 (Old PATA 24)
Work Space Beyond Shoulder



PATA 102 (Old PATA 7)
Work Space On Or Beyond The Shoulder (Minor Roadway Encroachment)





NOTES:

SAFETY BUILD-UP MUST BE USED ANY PLACE WHERE OPEN EXCAVATION ALONG ACTIVE ROADWAYS RESULTS IN A DROPOFF GREATER THAN 2".

A TEMPORARY 4" WHITE EDGE LINE SHALL BE PROVIDED IF THE EXISTING EDGE LINE IS TO BE REMOVED. MINIMUM EFFECTIVE LANE WIDTHS OF 11' SHALL BE PROVIDED. PROVIDE TEMPORARY PAVING AS REQUIRED TO MAINTAIN EFFECTIVE LANE WIDTH.

DROP-OFF DETAIL
(NOT TO SCALE)

No.	REVISIONS	DATE
4	PER EQUITABLE OWNER	MAY 15, 2026
3	REVISE WATER MAIN CONNECTION PER NWWA COMMENT	NOV. 25, 2020
2	PER GILMORE & ASSOC. LTR (5/22/20) & MCMAHON LTR (4/30/20)	JUNE 24, 2020
1	PER VARIOUS REVIEWS	MAR. 12, 2020
	PLAN ORIGINATION DATE	OCT. 1, 2019

MAINTENANCE AND PROTECTION OF TRAFFIC PLAN
AS PART OF
SPRING HOUSE COURT
PREPARED FOR
HALLMARK HOMES - SPRING HOUSE COURT LLC
SITE SITUATE IN
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

STA Engineering, Inc.
Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
PH: (215) 679-0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
N.T.S.	J.A.C.	S.A.R.	13 OF 13
	PROJECT NUMBER 6646	DRAWING FILE NUMBER 6646DET	

PRELIMINARY DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED

RESIDENTIAL DEVELOPMENT

LOCATION OF SITE

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP, MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47, PARID: 39-00-04054-00-2

WAIVERS REQUESTED FROM THE LOWER GWYNEDD TOWNSHIP BOARD OF SUPERVISORS:

1. A WAIVER FROM §1230.37(C) AND 1230.61 OF THE LOWER GWYNEDD TOWNSHIP SUBDIVISION & LAND DEVELOPMENT ORDINANCE TO EXEMPT THE DEVELOPMENT FROM NEEDING TO PROVIDE CURB, ROADWAY WIDENING, AND ULTIMATE RIGHT-OF-WAY DEDICATION ALONG EVANS ROAD.
2. A WAIVER FROM §1230.45(A) OF THE LOWER GWYNEDD TOWNSHIP SUBDIVISION & LAND DEVELOPMENT ORDINANCE TO EXEMPT THE DEVELOPMENT FROM NEEDING TO PROVIDE SIDEWALK ALONG EVANS ROAD.
3. A WAIVER FROM §1230.48(C) OF THE LOWER GWYNEDD TOWNSHIP SUBDIVISION & LAND DEVELOPMENT ORDINANCE TO PERMIT LIMITED ALTERATION OF WETLAND AREAS FOR ESSENTIAL ROADWAY AND DRIVEWAY CROSSINGS AND SITE IMPROVEMENTS.
4. A WAIVER FROM §1241.401(N) OF THE LOWER GWYNEDD TOWNSHIP STORMWATER MANAGEMENT ORDINANCE TO ALLOW ROOF DRAINAGE PIPING AND STORMWATER PIPING ASSOCIATED WITH YARD DRAINS TO BE LESS THAN 18" IN DIAMETER.

REFERENCES AND CONTACTS

REFERENCES

♦BOUNDARY & TOPOGRAPHIC SURVEY:
R.L SHOWALTER & ASSOCIATES
116 EAST BUTLER AVENUE
CHALFONT, PA 18914
(215) 822-2990
DATED:08/30/2023
JOB #: 327-803
ELEVATIONS: THE VERTICAL DATUM IS NAVD 88

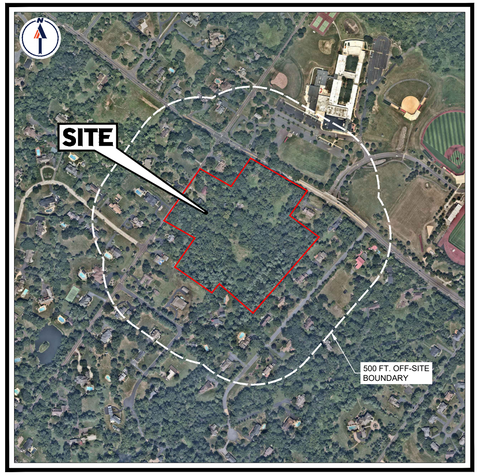
♦GEOTECHNICAL INVESTIGATION REPORT:
INGRAM ENGINEERING SERVICES, INC.
16 HAGERTY BLVD, SUITE 400
WEST CHESTER PA 19382
(484)-947-5549
DATED: 12/08/2025
JOB #: 1348 SUMNEYTOWN PIKE - AMBLER, PA

GOVERNING AGENCIES

♦PLANNING, ZONING COMMITTEE
LOWER GWYNEDD TOWNSHIP

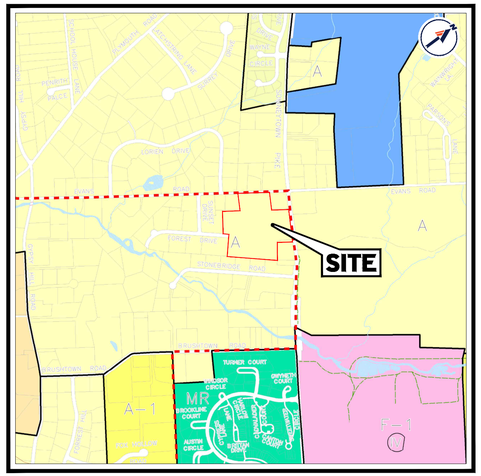
♦FIRE DEPARTMENT
LOWER GWYNEDD FIRE CO.

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.



AERIAL MAP
SCALE: 1" = 500'
SOURCE: NEARMAP.COM

LOCATION MAP
SCALE: 1" = 1,500'
SOURCE: NEARMAP.COM



ZONING MAP
SCALE: 1" = 1,000'
SOURCE: LOWER GWYNEDD TOWNSHIP
SITE ZONED: A - RESIDENTIAL DISTRICT

OWNER OF RECORD
WHITEFIELD HOMES, LLC
70 LANCASTER AVENUE, MALVERN, PA 19355
BLOCK 9, UNIT 47, PARID: 39-00-04054-00-2
D.B. 6402, PG. 1105

DEVELOPER
WHITEFIELD HOMES, LLC
70 LANCASTER AVENUE, MALVERN, PA 19355
TEL: (610) 563-0209

CIVIL ENGINEER
CHRISTOPHER D. PUZINAS
BOHLER, LLC
1600 MANOR DRIVE, SUITE 200,
CHALFONT, PA 18914

ENGINEER'S CERTIFICATION

I, CHRISTOPHER D. PUZINAS, ON THIS DATE _____, HEREBY CERTIFY THAT THIS DRAINAGE PLAN MEETS ALL REQUIREMENTS OF THE THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (DEP) CHAPTER 102.8 REGULATIONS AND THIS ORDINANCE.

_____
CHRISTOPHER D. PUZINAS, P.E.
PROFESSIONAL ENGINEER LICENSE No. PE083200

CERTIFICATION OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON, AS WELL AS ALL DRAWINGS BEARING MY SEAL, ARE TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LOWER GWYNEDD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND WERE PREPARED BY ME OR UNDER MY DIRECTION AND FOR WHICH I ACCEPT FULL RESPONSIBILITY. THE PERIMETER MONUMENTS SHALL BE ACCURATELY PLACED AS REQUIRED BY THE TOWNSHIP.

_____ _____, 2026 _____
CHRISTOPHER D. PUZINAS, PA #PE083200

SEAL

GENERAL NOTE
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

PREPARED BY

BOHLER

CONTACT: CHRISTOPHER D. PUZINAS

DRAWING SHEET INDEX

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NATURAL FEATURES PROTECTION PLAN	C-202	5 OF 29
* SITE PLAN	C-301	6 OF 29
SITE AERIAL PLAN	C-302	7 OF 29
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* POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C-402	9 OF 29
* POST CONSTRUCTION STORMWATER MANAGEMENT NOTES	C-403	10 OF 29
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* SHEETS 1 THROUGH 3, 6 AND 9 THROUGH 12 OF THIS PLAN SET ARE CONSIDERED A COMPLETE RECORD PLAN SET FOR FILING PURPOSES WITH THE MONTGOMERY COUNTY RECORDER OF DEEDS OFFICE.

MCPC No.:

PROCESSED and REVIEWED. Report prepared by Montgomery County Planning Commission in accordance with the Municipalities Planning Code.

Certified this date _____

_____
Montgomery County Planning Commission

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE COPYRIGHT AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PAT.CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C. D. PUZINAS
COMMONWEALTH OF PENNSYLVANIA
CHRISTOPHER D. PUZINAS
PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER LICENSE No. PE083200

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101
1 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-CNDS-PAA250079.00-0A-----LAYOUT: C-101 COVR
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GENERAL NOTES

(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER , IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BY BOHLER, IN WRITING. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
   A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.
   B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK.
   C. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED
   D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.
   E. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
   F. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES.
   G. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE NOT THE PROFESSIONAL OF RECORD'S OR BOHLER RESPONSIBILITY. IN THE EVENT OF ABANDONMENT, THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
   H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES. WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
   I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER, PROFESSIONAL OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME.
11. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
12. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.
13. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT ALL NEW IMPROVEMENTS AND MUST BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE PROFESSIONAL OF RECORD AND THE OWNER.
14. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES, THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE.
15. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE, THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST.
16. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO, THE PUBLIC RIGHT-OF-WAY.
17. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST.
18. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS, IF ENCOUNTERED, IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING CONSTRUCTION IN THE AREA AROUND THE TANK WHICH EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST.

SOIL EROSION & SEDIMENT CONTROL PLAN NOTES

(Rev. 12/2024)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN AND CONTRACTOR MUST REFER TO THEM. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER OR JURISDICTIONAL AGENCY SO REQUIRES, TO PREVENT THE DISCHARGE OF SEDIMENT LADEN RUNOFF FROM EXITING THE SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT STABILIZATION IS ESTABLISHED UNLESS INDICATED OTHERWISE IN LOCAL, STATE AND/OR FEDERAL PROJECT APPROVALS. THE COST OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS.

SITE LAYOUT NOTES

(Rev. 1/2020)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY.
3. ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS, GUIDELINES, RULES, REGULATIONS, STANDARDS AND THE LIKE.
4. THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH THE ENTITY WITH JURISDICTION OVER THE PROJECT.
5. ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

GRADING NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT.
3. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE PROFESSIONAL OF RECORD, BOHLER AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK.
4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING.
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
6. IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S).
7. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

ACCESSIBILITY DESIGN GUIDELINES

(Rev. 1/2023)

1. ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED.
2. THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRY GUIDELINES.
3. THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   A. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
   B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE GOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%), AN ACCESSIBLE RAMP MUST BE PROVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL, OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED.
   C. ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.
   D. ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDING MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%).
   E. DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER REFERENCES INCORPORATED BY CODE).
   F. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES.
   G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND/OR REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES.
4. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

DRAINAGE AND UTILITY NOTES

(Rev. 3/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION. THE CONTRACTOR MUST REPORT ALL DISCREPANCIES, ERRORS AND OMISSIONS IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER.
3. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION.
4. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS, SIZE, AND MATERIAL OF SAME BASED UPON FINAL ARCHITECTURAL PLANS.
6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS; GREASE TRAP REQUIREMENTS; AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME.
7. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH BACKFILL OR FOR COMPACTION REQUIREMENTS
8. DURING THE INSTALLATION OF SANITARY, STORM, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE, IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S), WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK.
9. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY, WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS.
11. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
12. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

OUTSIDE SOURCE NOTES

(Rev. 11/2023)

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STANDARD ABBREVIATIONS

FOR ENTIRE PLAN SET

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRE / ACRES
AD	AREA DRAIN
ADA	ACCESSIBLE / AMERICANS WITH DISABILITIES ACT
AG	ABOVE GROUND
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ASSF	AREA SUBJECT TO STORMWATER FLOWAGE
ASSOC	ASSOCIATION
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BIO	BIOGARDEN
BIT	BITUMINOUS
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BENCH MARK
BRL	BUILDING RESTRICTION LINE
BVW	BORDERING VEGETATIVE WETLAND
CB	CATCH BASIN
CF	CUBIC FEET
CI	CURB INLET
CIT	CHANGE IN TYPE
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
C/O	CLEAN OUT
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DEC	DECORATIVE
DEP	DEPARTMENT OF ENVIRONMENTAL PROTECTION
DET	DETENTION
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DOM	DOMESTIC
DOT	DEPARTMENT OF TRANSPORTATION
DP	DESIGN POINT
DWL	DASHED WHITE LINE
DYL	DOUBLE YELLOW LINE
EG	EXISTING GRADE
ELEC	ELECTRIC
ELEV	ELEVATION
EOR	ENGINEER OF RECORD
EP / EOP	EDGE OF PAVEMENT
ES / EOS	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FES	FLARED END SECTION
FF	FINISH / FIRST FLOOR
FFE	FINISH / FIRST FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FM	FORCE MAIN
FO	FIBER OPTIC
G	GRADE
GC	GENERAL CONTRACTOR
GEO	GEOTECH/GEOTECHNICAL
GF / GFE	GARAGE FLOOR ELEVATION (AT DOOR)
GFA	GROSS FLOOR AREA
GH	GRADE HIGH (WALL)
GL	GRADE LOW (WALL)
GRT	GRATE
GT	GREASE TRAP
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HP	HIGH POINT
HW	HEADWALL
ICS	INLET CONTROL STRUCTURE
INF	INFILTRATION
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMIT OF CLEARING
LOD	LIMIT OF DISTURBANCE
LOS	LINE OF SIGHT
LOW	LIMIT OF WORK
LP	LOW POINT
LS	LANDSCAPE

LSA	LANDSCAPE AREA
MAX	MAXIMUM
ME	MATCH EXISTING
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NRCS	NATIONAL RESOURCE CONSERVATION SERVICE
O&M	OPERATIONS AND MAINTENANCE
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OGS	OIL AND GRIT SEPARATOR
ORD	ORDINANCE
PA / POA	POINT OF ANALYSIS
PC	POINT OF CURVATURE
PCCR	POINT OF CURVATURE, CURB RETURN
PERF	PERFORATED
PG	PROPOSED GRADE
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PP	POLYPROPYLENE PIPE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS / RADII
R/W	RIGHT-OF-WAY / RIGHTS-OF-WAY
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REGS	REGULATIONS
RELO	TO BE RELOCATED
REQ	REQUIRED
RET	RETENTION
RET WALL	RETAINING WALL
RETO	TO BE RETURNED TO OWNER
RG	RAIN GARDEN
S	SLOPE
SAN	SANITARY SEWER
SESC	SOIL EROSION AND SEDIMENT CONTROL
SF	SQUARE FEET
SHLO	STATE HIGHWAY LAYOUT
SMH	SANITARY MANHOLE
STA	STATION
STM	STORM WATER / STORM SEWER
SWL	SINGLE/SOLID WHITE LINE
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
TBV	TO BE VACATED
TC	TOP OF CURB
Tc	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TELE	TELECOMMUNICATIONS / TELEDATA
TPF	TREE PROTECTION FENCE
TR	TO REMAIN
TRANS	TRANSITION
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
USGS	UNITED STATES GEOLOGICAL SURVEY
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WIDE / WIDTH
W/L	WATER LINE
WM	WATER METER
WQU	WATER QUALITY UNIT
YD	YARD DRAIN
#	NUMBER
#:#	SLOPE EXPRESSED IN HORIZONTAL:VERTICAL IN FEET
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
'	FEET/FOOT
"	INCHES

PROP LINE LEGEND

PROPERTY LINE	
RIGHT-OF-WAY LINE	
INTERIOR PROPERTY LINE	
LEASE LINE	
EASEMENT LINE	
SETBACK LINE	
LIMIT OF WORK	LOW
LIMIT OF DISTURBANCE	LOD
SAWCUT LINE	
OVERHEAD WIRE	OH
ELECTRIC LINE	E
TELEPHONE LINE	T
CABLE LINE	C
GAS LINE	G
STORM SEWER	
SANITARY MAIN 12" OR GREATER	
SANITARY MAIN	S
SANITARY LATERAL	SL
SANITARY FORCE MAIN	FM
WATER MAIN 12" OR GREATER	
WATER MAIN	W
WATER LATERAL	WL
WATER FIRE LINE	F

PROP SYMBOL LEGEND

TYPICAL SIGN	
TYPICAL BOLLARD	
UTILITY POLE WITH LIGHT	
UTILITY POLE	
TYPICAL LIGHT	
FIRE HYDRANT	
CLEANOUT	°C/O
SANITARY MANHOLE	S
STORM MANHOLE	D
WATER METER	WM
WATER VALVE	
GAS VALVE	GV
TEST PIT	T-#
BORING	B-#

EXISTING LEGEND

CONTOUR	123
SPOT ELEVATION	X 123.45
HYDRANT	
FIRE DEPARTMENT CONNECTION	
WATER VALVE	WV
GAS VALVE	GV
OVERHEAD WIRES	OH
APPROX LOC UNDERGROUND CABLE LINE	C
APPROX LOC UNDERGROUND ELEC LINE	E
APPROX LOC UNDERGROUND FIBER OPTIC LINE	FO
APPROX LOC UNDERGROUND GAS LINE	G
APPROX LOC UNDERGROUND SEWER LINE	
APPROX LOC UNDERGROUND TEL LINE	T
APPROX LOC UNDERGROUND WATER LINE	W
APPROX LOC UNDERGROUND STORM SEWER LINE	
LIMITS OF FLOODPLAIN	FP
FLARED END SECTION	
UTILITY POLE	
TRAFFIC SIGNAL	
MONITORING WELL	
ELECTRIC METER	EM
ELECTRIC BOX	EB
TRANSFORMER	TF
SANITARY MANHOLE	S
TELEPHONE MANHOLE	T
ELECTRIC MANHOLE	E
WATER MANHOLE	W
STORM DRAIN MANHOLE	D
WATER METER	WM
GAS METER	GM
ROOF DRAIN	RD
SIGN	
MAIL BOX	
BOLLARD	
U-BOLLARD	
METAL GUARDRAIL	
FENCE	X
LANDSCAPED AREA	LSA
AREA LIGHT	
CLEAN OUT	C/O
PAINTED ARROWS	
TITLE REPORT EXCEPTION	
DENOTES PARKING SPACE COUNT	10
BENCHMARK	
UTILITY POLE/LIGHT POLE	
STREET LIGHT	
GUY WIRE	
TRAFFIC SIGNAL POLE	
TREE LINE	
TREE (SIZE AS NOTED)	
PROP CORNERS TO BE SET	
BORING LOCATION	P-29 ELEV=28.50
WETLANDS	WF-29 WF-28

TM

BOHLER //

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER DANIEL PUZINAS
PENNSYLVANIA LICENSE No. PE082200

SHEET TITLE:

GENERAL NOTES AND LEGEND

SHEET NUMBER:

C-102

2 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A----->LAYOUT: C-102 NOTE
SL

ZONING TABLE

ZONE: A - RESIDENTIAL DISTRICT (LOWER GWYNEDD TOWNSHIP)
USE: SINGLE-FAMILY DETACHED DWELLINGS (PERMITTED)

APPLICANT / OWNER INFORMATION

APPLICANT:	WHITEFIELD HOMES, LLC 70 LANCASTER AVENUE, MALVERN, PA 19355 TEL: (610) 563-0209
PROPERTY OWNER:	WHITEFIELD HOMES, LLC 70 LANCASTER AVENUE, MALVERN, PA 19355 BLOCK 9, UNIT 47, PARID: 39-00-04054-00-2 D.B. 6402, PG. 1105

BULK REQUIREMENTS

ITEM	CODE	REQUIRED	PROPOSED
MINIMUM TRACT AREA (NET EXCLUDING ULTIMATE R.O.W. AREAS)			15.599 Ac. (GROSS) 14.903 Ac. (NET)
MINIMUM LOT AREA (W/ PUBLIC SEWER AND WATER SERVICES)	§ 1057.03.(a)(3)	40,000 SF	47,364 SF (LOT 7)
MINIMUM LOT WIDTH (@ BUILDING SETBACK LINE)	§ 1057.03.(b)	200 FT	200 FT (LOT 2 & LOT 3)
MINIMUM YARD SETBACKS			
FRONT YARD	§ 1057.04.(a)	75 FT	75.7 FT
SIDE YARD	§ 1057.04.(b)(1)	50 FT	50.8 FT
REAR YARD	§ 1057.04.(c)	75 FT	77.9 FT
MAXIMUM BUILDING COVERAGE (W/ PUBLIC SEWER AND WATER SERVICES)	§ 1057.05.(a)(3)	20%	< 20%
MAXIMUM IMPERVIOUS COVERAGE	§ 1057.05.(b)(1)	25%	< 25%
MAXIMUM BUILDING HEIGHT	§ 1057.06.(a)	45 FT / 2½ STORIES	< 45 FT / 2½ STORIES
OFF-STREET PARKING			
RESIDENTIAL DWELLING UNIT	§ 1057.07.(a)	2 SPACES / D.U.	> 2 SPACES / D.U.
OFF-STREET PARKING / DRIVEWAY SETBACK	§ 1057.07.(c)	5 FT FR. ANY PROPERTY LINE	> 5 FT

§ 1257.08. SPECIAL REQUIREMENT:

DETENTION BASINS. DETENTION BASINS SHALL BE ALLOWED IN YARD AREAS ONLY IN ACCORDANCE WITH § 1298.14.

INDIVIDUAL LOT ZONING TABLE

ZONE: A - RESIDENTIAL DISTRICT (LOWER GWYNEDD TOWNSHIP)
USE: SINGLE-FAMILY DETACHED DWELLINGS (PERMITTED)

BULK REQUIREMENTS

ITEM	CODE	REQUIRED	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8
MINIMUM LOT AREA	§ 1257.03.(a)(3)	40,000 SF	-	64,603 SF	86,018 SF 83,785 SF (NET)	-	61,544 SF	-	47,364 SF	47,738 SF
	§ 1298.09.(b) CORNER LOT	48,000 SF	125,491	-	-	-	-	91,850 SF	-	-
	§ 1298.21.(g) FLAG LOT	60,000 SF	-	-	-	86,495 SF	-	-	-	-
MINIMUM LOT WIDTH (@ BUILDING SETBACK LINE)	§ 1257.03.(b)	200 FT	410 FT	200 FT	200 FT	212 FT	214 FT	415 FT	217 FT	225 FT
MINIMUM YARD SETBACKS										
HIGHWAY SETBACK (SUMNEYTOWN PIKE)	§ 1298.12	150 FT (DOUBLED FRONT YARD)	183.1 FT	-	-	-	-	175.4 FT	-	-
FRONT YARD	§ 1257.04.(a)	75 FT	-	140.0 FT	139.0 FT	-	114.5 FT	-	76.8 FT	75.7 FT
	§ 1298.12 CORNER LOT	75 FT	77.4 FT	-	-	-	-	77.6 FT	-	-
	§ 1298.21.(g) FLAG LOT	112.5 FT	-	-	-	164.0 FT	-	-	-	-
SIDE YARD	§ 1257.04.(b)(1)	50 FT	-	62.6 FT	51.2 FT	50.9 FT	50.8 FT	-	65.5 FT	71.0 FT
	§ 1298.09.(b) CORNER LOT	75 FT	81.4 FT	-	-	-	-	100.0 FT	-	-
REAR YARD	§ 1257.04.(c)	75 FT	-	99.7 FT	87.5 FT	114.2 FT	89.3 FT	-	79.6 FT	84.9 FT
	§ 1298.09.(b) CORNER LOT	75 FT	84.3 FT	-	-	-	-	77.9 FT	-	-
MAXIMUM BUILDING COVERAGE	§ 1257.05.(a)(3)	20%	3,678 SF (2.9%)	2,804 SF (4.3%)	2,804 SF (3.3%)	3,150 SF (3.6%)	3,150 SF (5.1%)	3,823 SF (4.2%)	3,150 SF (6.7%)	2,804 SF (5.9%)
MAXIMUM IMPERVIOUS COVERAGE	§ 1257.05.(b)(1) (REQUIRED)	25% (ALLOWABLE)	31,373 SF	16,151 SF	20,946 SF	21,624 SF	15,386 SF	22,963 SF	11,841 SF	11,935 SF
	PROPOSED DESIGNED	PROPOSED SITE LAYOUT	8,499 SF (6.8%)	6,872 SF (10.6%)	6,712 SF (8.0%)	9,203 SF (10.6%)	7,026 SF (11.4%)	8,599 SF (9.4%)	7,230 SF (15.3%)	6,647 SF (13.9%)
		ALLOWABLE PER STORMWATER MANAGEMENT DESIGN	12,000 SF	10,000 SF	10,000 SF	12,000 SF	10,000 SF	12,000 SF	12,000 SF	12,000 SF
MAXIMUM BUILDING HEIGHT	§ 1257.06.(a)	45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES	< 45 FT / 2½ STORIES

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. GE082300

SHEET TITLE:

JURISDICTIONAL NOTES

SHEET NUMBER:

C-103
3 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
I:\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A-----LAYOUT: C-103 JURS

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

LIST OF REGISTERED UTILITY USERS FOR LOWER GWYNEDD TOWNSHIP:

COMPANY: LOWER GWYNEDD TOWNSHIP
ADDRESS: 1130 N. BETHLEHEM
SPRING HOUSE, PA. 19477
CONTACT: FRED ZOLLERS
EMAIL: FZOLLERS@LOWERGWYNEDD
PHONE: 215-646-5302

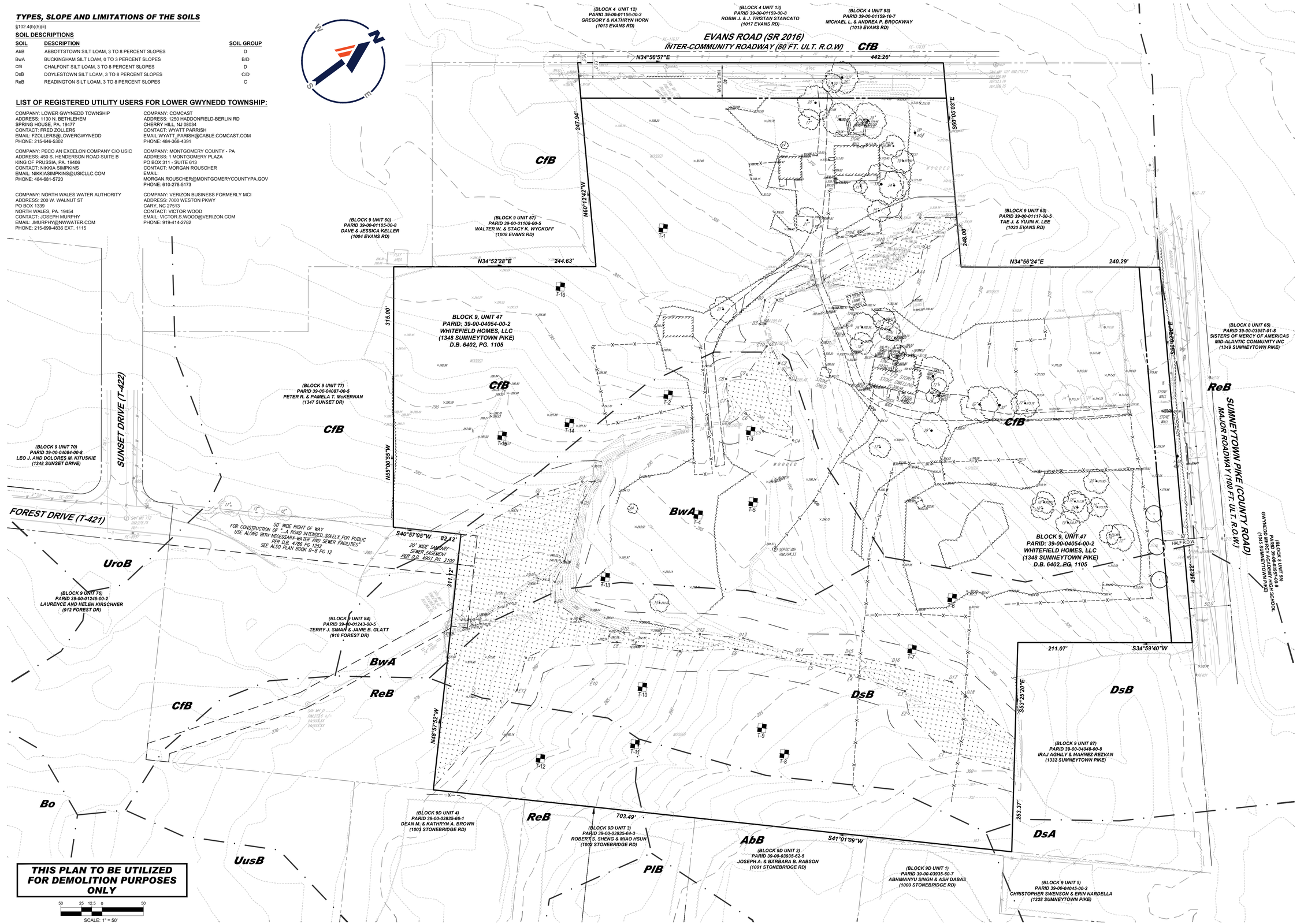
COMPANY: PECO AN EXCELON COMPANY C/O USIC
ADDRESS: 450 S. HENDERSON ROAD SUITE B
KING OF PRUSSIA, PA. 19406
CONTACT: NIKKIA SIMPKINS
EMAIL: NIKKIASIMPKINS@USICLLC.COM
PHONE: 484-681-5720

COMPANY: NORTH WALES WATER AUTHORITY
ADDRESS: 200 W. WALNUT ST
PO BOX 1339
NORTH WALES, PA. 19454
CONTACT: JOSEPH MURPHY
EMAIL: JMURPHY@NWWATER.COM
PHONE: 215-699-4836 EXT. 1115

COMPANY: COMCAST
ADDRESS: 1250 HADDONFIELD-BERLIN RD
CHERRY HILL, NJ 08034
CONTACT: WYATT PARRISH
EMAIL:WYATT_PARISH@CABLE.COMCAST.COM
PHONE: 484-368-4391

COMPANY: MONTGOMERY COUNTY - PA
ADDRESS: 1 MONTGOMERY PLAZA
PO BOX 311 - SUITE 613
CONTACT: MORGAN ROUSCHER
EMAIL:
MORGAN.ROUSCHER@MONTGOMERYCOUNTYPA.GOV
PHONE: 610-278-5173

COMPANY: VERIZON BUSINESS FORMERLY MCI
ADDRESS: 7000 WESTON PKWY
CARY, NC 27513
CONTACT: VICTOR WOOD
EMAIL: VICTOR.S.WOOD@VERIZON.COM
PHONE: 919-414-2782



THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

50 25 12.5 0 50
SCALE: 1" = 50'

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----LAYOUT: C-201 EXOM
ISL

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SITE CIVIL AND CONSULTING ENGINEERING
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PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

**1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2**

BOHLER™
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.J. CUZINAS
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE090000

SHEET TITLE:

EXISTING CONDITIONS/ DEMOLITION PLAN

SHEET NUMBER:

C-201
4 OF 29

ORG. DATE - 05/15/2026

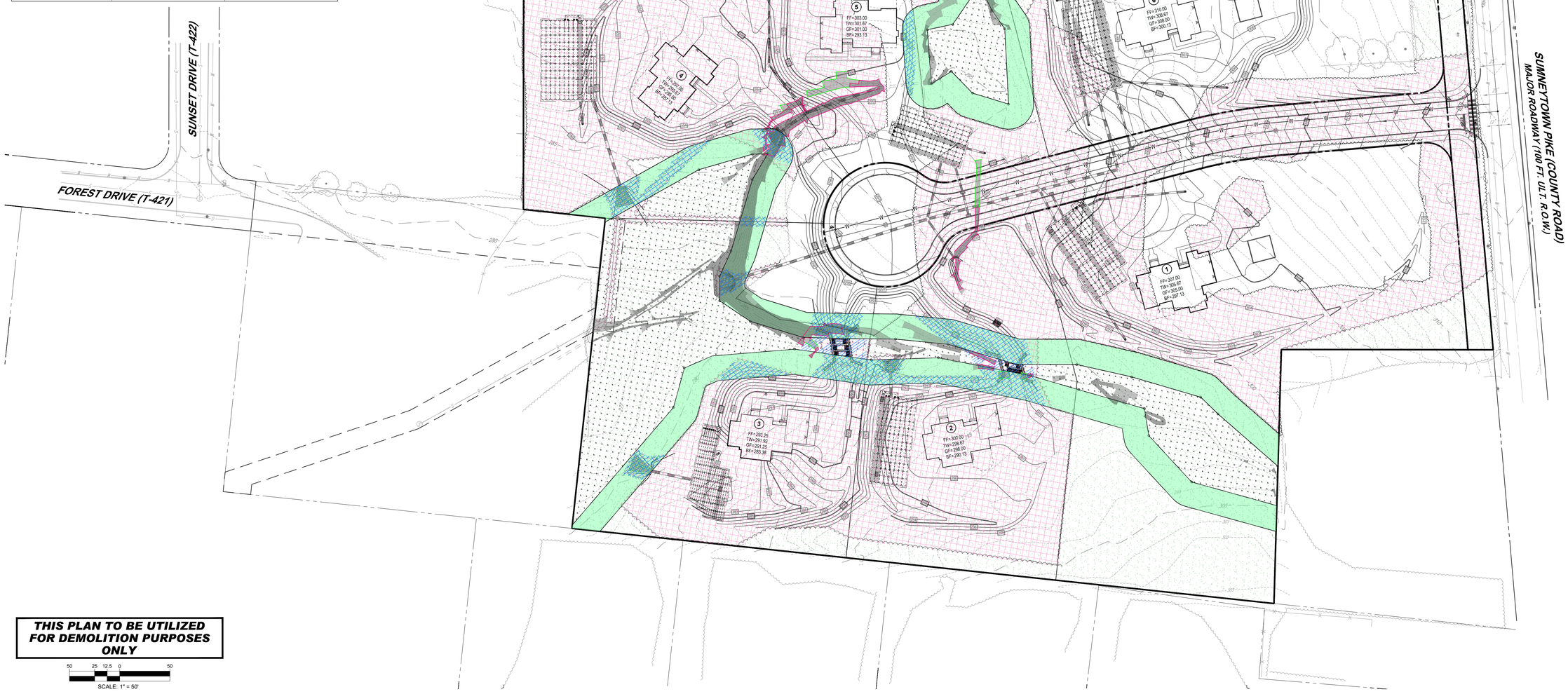
§ 1230.48. NATURAL RESOURCE PROTECTION STANDARDS (WITHIN OVERALL TRACT)

NATURAL RESOURCE ID	(A) TOTAL AREA OF THE NATURAL RESOURCE	(B) AREA OVERLAP IN MORE RESTRICTIVE RESOURCE	(C) RESOURCE LAND EXCUSIVE OF MORE RESTRICTIVE RESOURCE (A) - (B)	(D) PERMITTED DISTURBANCE	(E) MAX. ALLOWABLE DISTURBED AREA (C) x (D)	PROPOSED DISTURBANCE
(a) STEEP SLOPES (1) 15% TO 25% (2) > 25%	5,527 SF 11,900 SF	4,131 SF 10,021 SF	1,396 SF 1,879 SF	30% 20%	419 SF 376 SF	*** 130 SF (9.3%) 210 SF (11.2%)
(b) WOODLANDS	11.78 Ac	0.00 Ac *	11.78 Ac	75%	8.84 Ac	7.59 Ac (64.4%)
(c) STREAMS, WATERCOURSES, WETLANDS, PONDS, LAKES, & AREAS W/IN 100-Yr FLOODPLAIN OR FLOODPLAIN SOILS	1.42 Ac	1.42 Ac **	0.00 Ac	CROSSINGS BY CONDITIONAL USE	-	0.04 Ac (2.8% OF TOTAL THIS RESOURCE)
(d) WETLAND RIPARIAN BUFFER	1.60 Ac	1.24 Ac **	0.36 Ac	CROSSINGS BY CONDITIONAL USE	-	0.33 Ac (20.6% OF TOTAL THIS RESOURCE)

* = MOST RESTRICTIVE RESOURCE
** = ALL NATURAL RESOURCE LOCATED W/IN WOODLANDS AREAS
*** = PROPOSED DISTURBED AREAS LOCATED OUTSIDE WOODLANDS DISTURBED AREAS

NATURAL RESOURCE AREA HATCH LEGEND

NATURAL RESOURCE ID	EXISTING NATURAL RESOURCE AREAS	RESOURCE AREA TO BE DISTURBED
(a) STEEP SLOPES		
(1) 15% TO 25%		
(2) > 25%		
(b) WOODLANDS		
(c) STREAMS, WATERCOURSES, WETLANDS, PONDS, LAKES, & AREAS W/IN 100-Yr FLOODPLAIN OR FLOODPLAIN SOILS		
(d) WETLAND RIPARIAN BUFFER		



THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

50 25 12.5 0 50
SCALE: 1" = 50'

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----3-LAYOUT: C-202 NRPP
SL

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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:
PRELIMINARY LAND DEVELOPMENT PLANS
FOR
WHITEFIELD HOMES, LLC
PROPOSED RESIDENTIAL DEVELOPMENT
1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

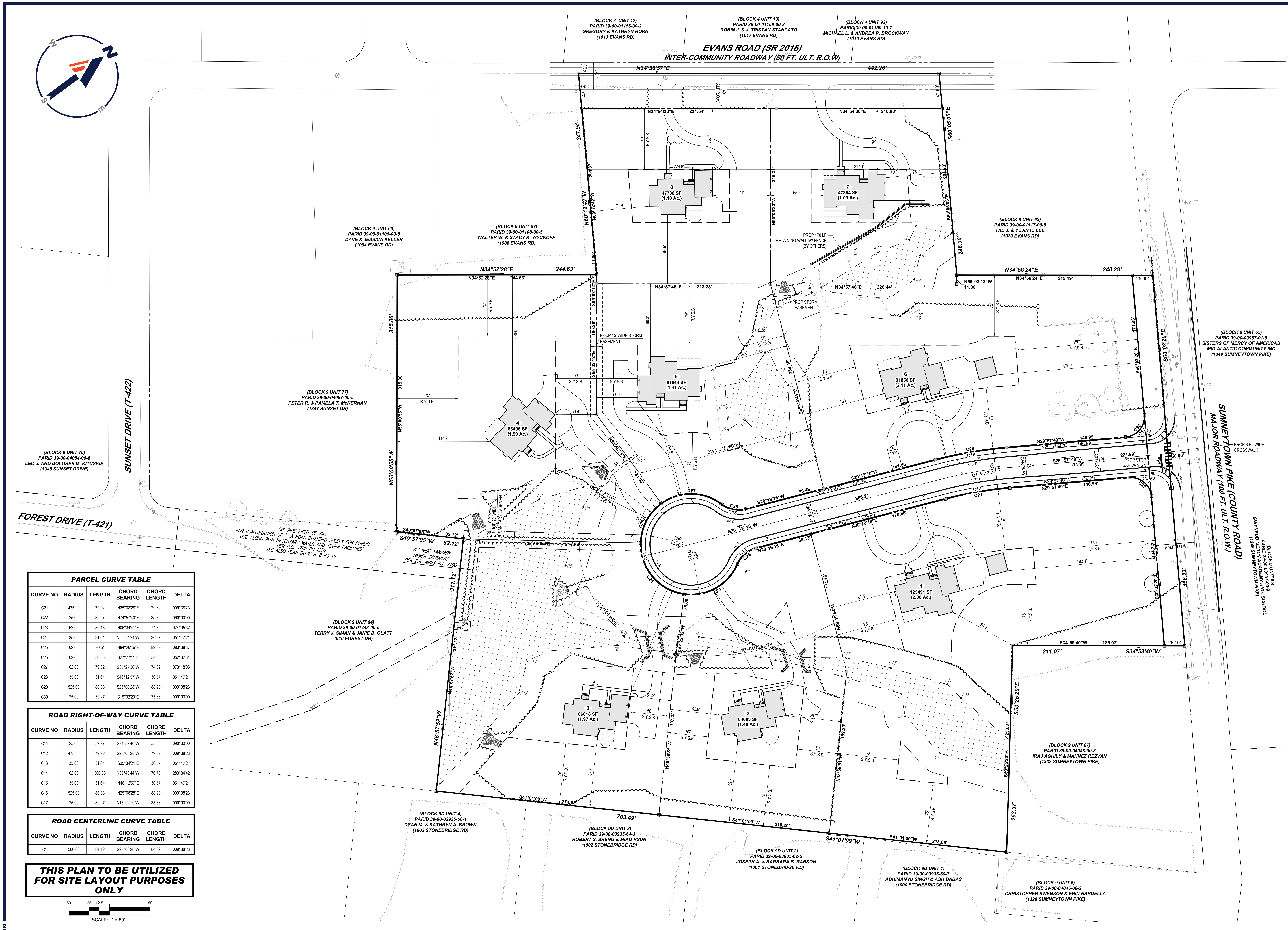
BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. GE-079200

SHEET TITLE:
NATURAL RESOURCES PROTECTION PLAN

SHEET NUMBER:
C-202
5 OF 29

ORG. DATE - 05/15/2026



PARCEL CURVE TABLE

CURVE NO	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH	DELTA
C21	475.00	79.92	N25°08'28"E	79.82'	009°38'23"
C22	25.00	39.27	N74°57'40"E	35.36'	090°00'00"
C23	62.00	80.18	N05°34'41"E	74.70'	074°05'32"
C24	35.00	31.64	N05°34'24"W	30.57'	051°47'21"
C25	62.00	90.51	N84°26'46"E	82.69'	083°38'37"
C26	62.00	56.86	S27°27'41"E	54.88'	052°32'31"
C27	62.00	79.32	S35°27'36"W	74.02'	073°18'03"
C28	35.00	31.64	S46°12'57"W	30.57'	051°47'21"
C29	525.00	88.33	S25°08'28"W	88.23'	009°38'23"
C30	25.00	39.27	S15°02'20"E	35.36'	090°00'00"

ROAD RIGHT-OF-WAY CURVE TABLE

CURVE NO	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH	DELTA
C11	25.00	39.27	S74°57'40"W	35.36'	090°00'00"
C12	475.00	79.92	S25°08'28"W	79.82'	009°38'23"
C13	35.00	31.64	S05°34'24"E	30.57'	051°47'21"
C14	62.00	306.86	N69°40'44"W	76.70'	283°34'42"
C15	35.00	31.64	N46°12'57"E	30.57'	051°47'21"
C16	525.00	88.33	N25°08'28"E	88.23'	009°38'23"
C17	25.00	39.27	N15°02'20"W	35.36'	090°00'00"

ROAD CENTERLINE CURVE TABLE

CURVE NO	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH	DELTA
C1	500.00	84.12	S25°08'28"W	84.02'	009°38'23"

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

May 15, 2026
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SL

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE082200

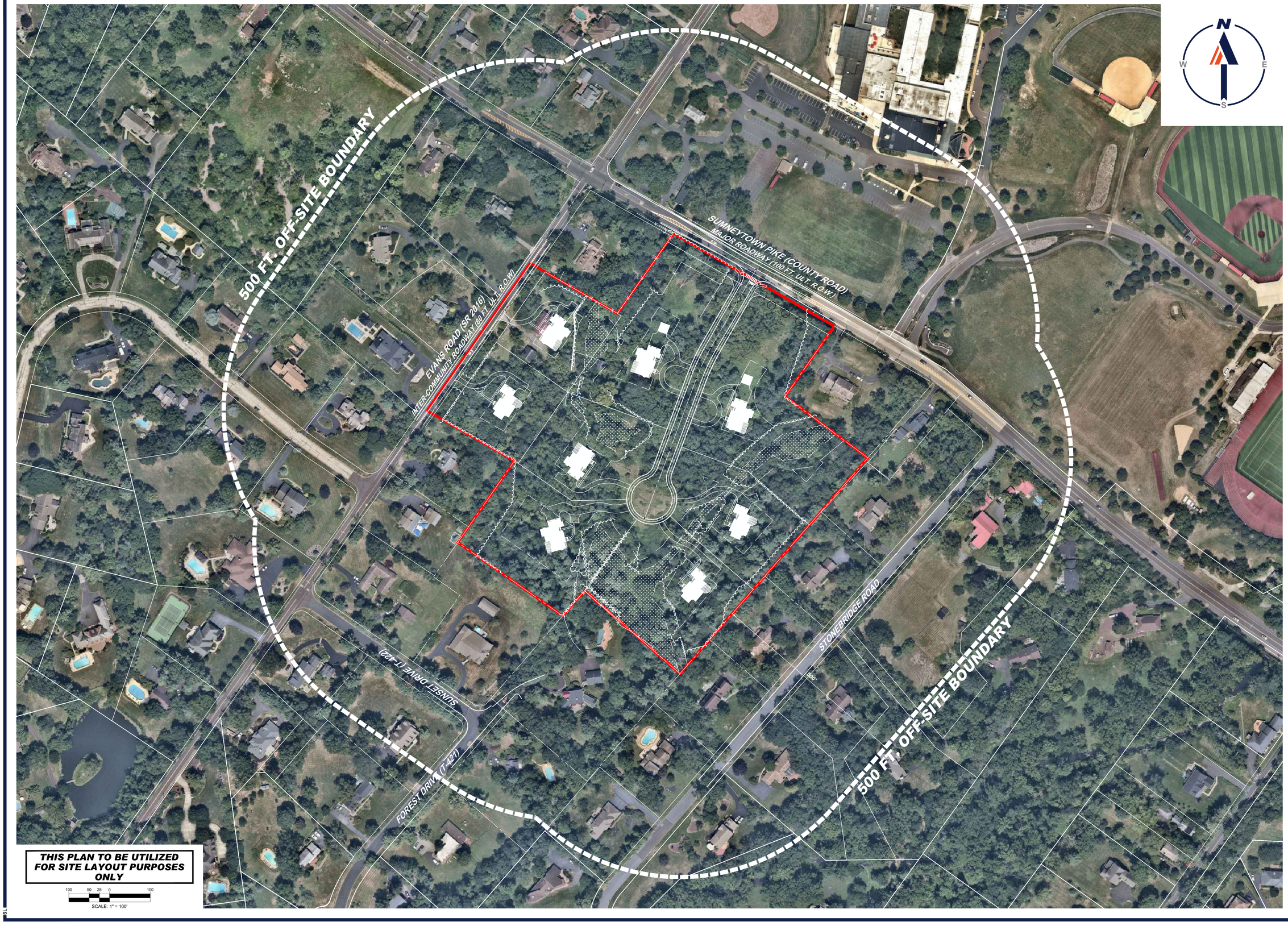
SHEET TITLE:

SITE PLAN

SHEET NUMBER:

C-301
6 OF 29

ORG. DATE - 05/15/2026



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100 50 25 0 100

SCALE: 1" = 100'

May 15, 2026
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BSL

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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

**1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2**

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PENNSYLVANIA LICENSE NO. PE090200

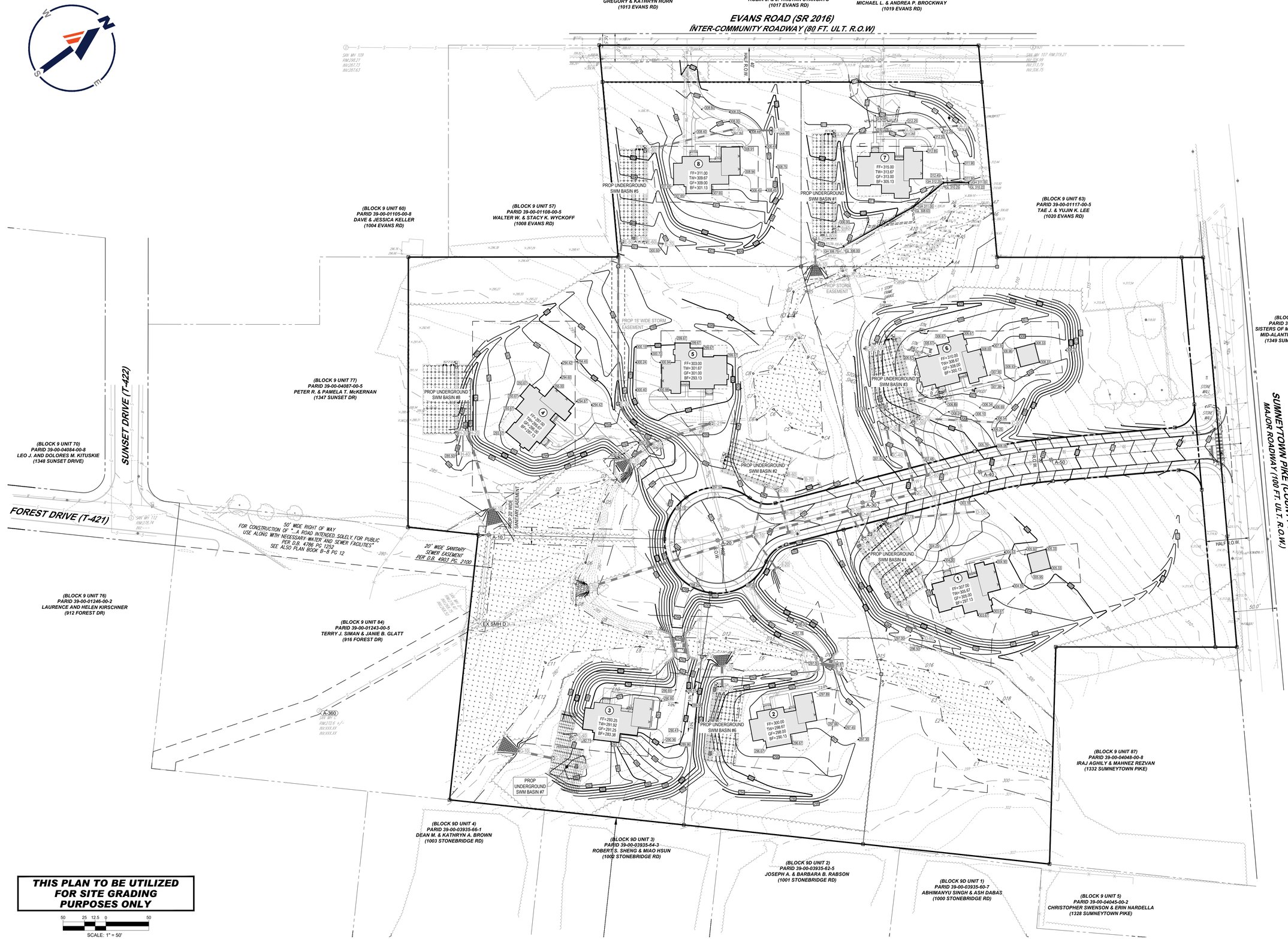
SHEET TITLE:

SITE AERIAL PLAN

SHEET NUMBER:

C-302
7 OF 29

ORG. DATE - 05/15/2026



May 15, 2026
I:\BOHLER\NJ\ETSHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00.DA------LAYOUT C-401 (GRAD

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XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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Phone: (215) 996-9100
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www.BohlerEngineering.com

C.D. PERRINAS
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
CHRISTOPHER D. PERRINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE090000
Certified 05/15/2026

SHEET TITLE:

GRADING PLAN

SHEET NUMBER:

C-401
8 OF 29

ORG. DATE - 05/15/2026

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

PROP PCSM LEGEND

LIMIT OF DISTURBANCE	LOD
PROJECT SITE BOUNDARY	PSB
OVERALL DRAINAGE AREA	
SUB-DRAINAGE AREA	
SOIL DELINEATION BOUNDARY	
SOIL TYPE LABEL	UssB
SANITARY MAIN / LATERAL	SL / S
STORM SEWER	
WATER LINE	W
ELECTRIC LINE	E
GAS LINE	G
TELEPHONE LINE	T
CABLE LINE	C
OVERHEAD WIRE	OH
CONTOUR LINE	180 / 187
TREE LINE	
SANITARY MANHOLE	S
STORM SEWER MANHOLE	D
RIPRAP APRON	
TEST PIT LOCATION	
DISCHARGE POINT	DP 001
LANDSCAPING	
SOIL AMENDMENTS	

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

50 25 12.5 0 50

SCALE: 1" = 50'

EVANS ROAD (SR 2016)
INTER-COMMUNITY ROADWAY (80 FT. ULT. R.O.W)

SUMNEYTOWN PIKE (COUNTY ROAD)
MAJOR ROADWAY (100 FT. ULT. R.O.W.)

FOREST DRIVE (T-421)

LINE OF DISCHARGE 1
LINE OF DISCHARGE 2
LINE OF DISCHARGE 3
LINE OF DISCHARGE 4

AREA OF NO DISTURBANCE

SCM 1 SUBSURFACE DRY EXTENDED BASIN WITH MRC AND LINEAR
SCM 2 SUBSURFACE DRY EXTENDED BASIN WITH MRC
SCM 3 SUBSURFACE DRY EXTENDED BASIN WITH LINEAR
SCM 4 SUBSURFACE DRY EXTENDED BASIN WITH MRC AND LINEAR
SCM 5 SUBSURFACE DRY EXTENDED BASIN WITH MRC AND LINEAR
SCM 6 SUBSURFACE DRY EXTENDED BASIN WITH MRC
SCM 7 SUBSURFACE DRY EXTENDED BASIN WITH LINEAR
SCM 8 SUBSURFACE DRY EXTENDED BASIN WITH LINEAR

(BLOCK 4 UNIT 12)
PARID 39-00-01156-00-2
GREGORY & KATHRYN HORN
(1013 EVANS RD)

(BLOCK 4 UNIT 13)
PARID 39-00-01159-00-8
ROBIN J. & J. TRISTAN STANCATO
(1017 EVANS RD)

(BLOCK 4 UNIT 93)
PARID 39-00-01159-10-7
MICHAEL L. & ANDREA P. BROCKWAY
(1019 EVANS RD)

(BLOCK 9 UNIT 60)
PARID 39-00-01105-00-8
DAVE & JESSICA KELLER
(1004 EVANS RD)

(BLOCK 9 UNIT 57)
PARID 39-00-01108-00-5
WALTER W. & STACY K. WYCKOFF
(1008 EVANS RD)

(BLOCK 9 UNIT 63)
PARID 39-00-01117-00-5
TAE J. & YUJIN K. LEE
(1020 EVANS RD)

(BLOCK 9 UNIT 77)
PARID 39-00-04087-00-5
PETER R. & PAMELA T. McKERNAN
(1347 SUNSET DR)

BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2
WHITEFIELD HOMES, LLC
(1348 SUMNEYTOWN PIKE)
D.B. 6402, PG. 1105

(BLOCK 8 UNIT 65)
PARID 39-00-03957-01-8
SISTERS OF MERCY OF AMERICAS
MID-ALANTIC COMMUNITY INC
(1349 SUMNEYTOWN PIKE)

(BLOCK 9 UNIT 70)
PARID 39-00-04084-00-8
LEO J. AND DOLORES M. KITUSKIE
(1348 SUNSET DRIVE)

(BLOCK 9 UNIT 76)
PARID 39-00-01246-00-2
LAURENCE AND HELEN KIRSCHNER
(912 FOREST DR)

(BLOCK 9 UNIT 84)
PARID 39-00-01243-00-5
TERRY J. SIMAN & JANIE B. GLATT
(916 FOREST DR)

(BLOCK 9 UNIT 87)
PARID 39-00-04048-00-3
IRAJ AGHILY & MAHNEZ REZVAN
(1332 SUMNEYTOWN PIKE)

(BLOCK 9D UNIT 4)
PARID 39-00-03935-66-1
DEAN M. & KATHRYN A. BROWN
(1003 STONEBRIDGE RD)

(BLOCK 9D UNIT 3)
PARID 39-00-03935-64-3
ROBERT S. SHENG & MIAO HSUN
(1002 STONEBRIDGE RD)

(BLOCK 9D UNIT 2)
PARID 39-00-03935-62-5
JOSEPH A. & BARBARA B. RABSO
(1001 STONEBRIDGE RD)

(BLOCK 9D UNIT 1)
PARID 39-00-03935-60-7
ABHIMANYU SINGH & ASH DABAS
(1000 STONEBRIDGE RD)

(BLOCK 9 UNIT 5)
PARID 39-00-04045-00-2
CHRISTOPHER SWENSON & ERIN NARDELLA
(1328 SUMNEYTOWN PIKE)

(BLOCK 6 UNIT 65)
PARID 39-00-03957-00-9
SISTERS OF MERCY ACADEMY HIGH SCHOOL
(1345 SUMNEYTOWN PIKE)

FOR CONSTRUCTION OF "--A ROAD INTENDED SOLELY FOR PUBLIC USE ALONG WITH NECESSARY WATER AND SEWER FACILITIES" PER D.B. 4786 PG. 1252
SEE ALSO PLAN BOOK B–8 PG 12

50' WIDE RIGHT OF WAY

20' WIDE SANITARY SEWER EASEMENT PER D.B. 4901 PG. 2100

PROP STORM EASEMENT

EXISTING TREE TO REMAIN (TYP)

CfB UroB ReB BwA DsB DsA AbB PlB Bo UusB

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE WORKING DAY, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE DISCLOSED OR USED FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER, EXCEPT AS REQUIRED BY LAW OR BY AGENCY REVIEW. ANY UNAUTHORIZED USE SHALL BE AT USER'S OWN RISK AND WITHOUT LIABILITY TO BOHLER.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C. D. PUZINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA

SHEET TITLE:

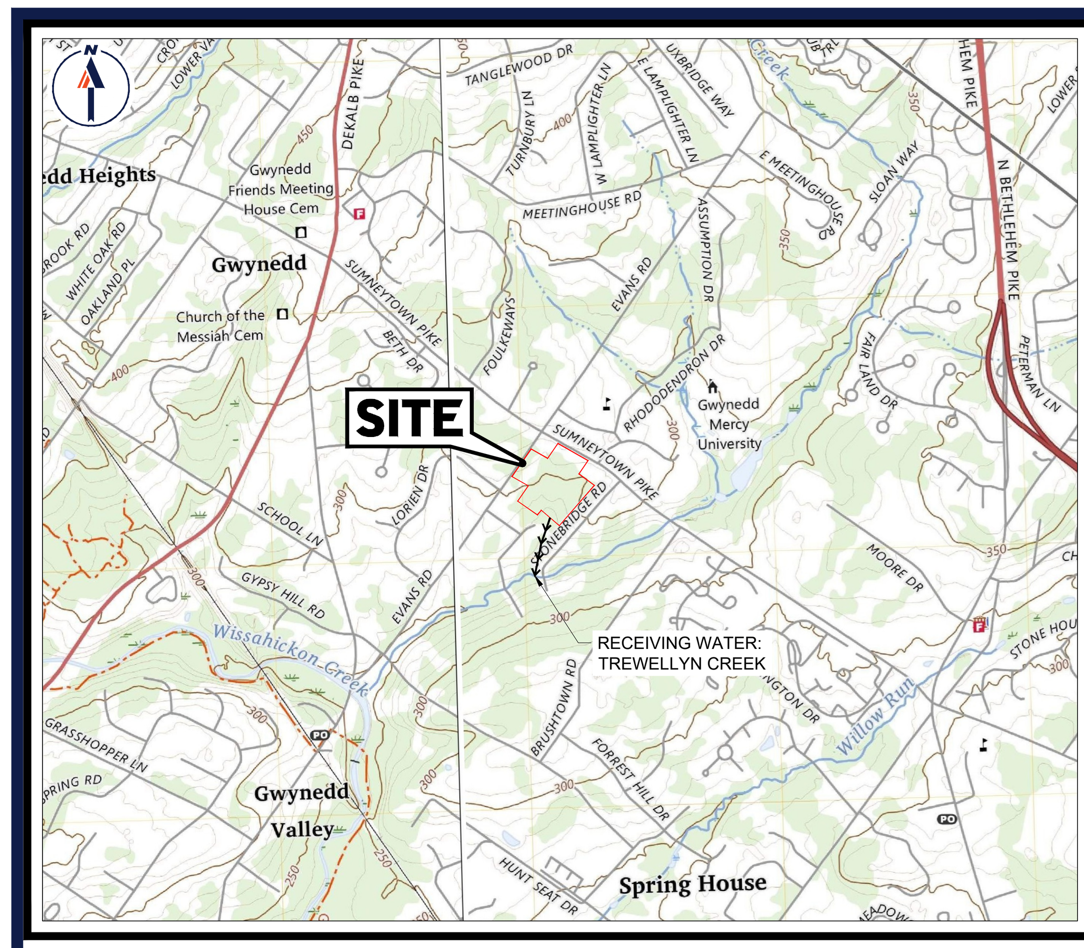
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SHEET NUMBER:

C-402
9 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----LAYOUT C-402 PCSM
SL



USGS MAP

SCALE: 1" = 2,000'
SOURCE: USGS.GOV/TOPOVIEW

SOIL SURVEY MAP

SCALE: 1" = 500'
SOURCE: USDA.GOV/WEBSOILSURVEY

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

SCM	QUANTITY	SCHEDULE	INSPECTION TASK	MAINTENANCE	FAILURE INDICATORS
SCM 6.6.3 DRY EXTENDED DETENTION BASIN	3	AFTER EACH STORM >1"	- INSPECT WATER DRAWDOWN TIME TO BE WITHIN 72 HOURS	ACCUMULATED DEBRIS AND SEDIMENT IN INLETS OR YARD DRAINS SHOULD BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.	IF ANY DRY EXTENDED DETENTION BASIN IS OBSERVED TO FAIL TO DEWATER WITHIN THE ALLOWABLE 72 HOURS THE OWNER SHALL NOTIFY THE ENGINEER OF RECORD OR QUALIFIED GEOTECHNICAL ENGINEER TO DEVELOP A PLAN TO ADDRESS THE DEFICIENCY
		4 TIMES PER YEAR	- INSPECT FOR ANY PONDING WATER		
		2 TIMES PER YEAR	- INSPECT STRUCTURES - INSPECT FOR SEDIMENT ACCUMULATION - INSPECT VEGETATIVE COVER CONDITION		
		ANNUALLY	- INSPECT FOR INVASIVE PLANT SPECIES		
UNDERGROUND MRC DRY EXTENDED DETENTION BASIN	5	2 TIMES PER YEAR (OR MORE IF HISTORICAL MAINTENANCE INDICATES IT IS NECESSARY)	- REMOVE LEAF LITTER - INSPECT AND CLEAN UP GRADIENT CATCH BASINS, INLETS, MANHOLES, AND OUTLET STRUCTURE - AFTER RUNOFF EVENTS GREATER THAN 0.8 INCH, MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 7 DAYS - INSPECT FOR DAMAGE TO OUTLET STRUCTURES, EROSION, SIGNS OF WATER CONTAMINATION/SPILLS, AND INSTABILITY - INSPECT FOR ACCUMULATION OF SEDIMENT	NEEDED MAINTENANCE SHOULD BE CONDUCTED IMMEDIATELY AFTER EACH INSPECTION. ACCUMULATED LITTER AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE SEDIMENT AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. ANY AREA DISTURBED DURING MAINTENANCE SHALL BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. INLETS NEED TO HAVE THE GRATES REMOVED AND MANHOLE LIDS NEED TO BE OPENED FOR INSPECTIONS. IF NEEDED, OBTAIN CONFINED SPACE ENTRY PERMIT, CONTACT LOCAL AUTHORITY FOR REQUIREMENTS, AND TEST FOR AIR QUALITY PRIOR TO ENTERING THE STRUCTURE. CRACKS IN THE STRUCTURE THAT ALLOW WATER TO SEEP INTO THE STRUCTURE SHOULD BE REPAIRED OR STRUCTURE SHOULD BE REPLACED.	FAILURE INDICATORS INCLUDE IF THE BASIN DOES NOT DEWATER WITHIN 7 DAYS. EXCESSIVE PONDING AROUND THE INLET GRATES COULD INDICATE THAT THERE MAY BE SEDIMENT/DEBRIS BUILDUP. UPON OBSERVING A FAILURE INDICATOR, A QUALIFIED INDIVIDUAL SUCH AS AN ENGINEER OR SOIL SCIENTIST/ENGINEER SHALL BE CONSULTED TO DETERMINE THE EXACT CAUSE OF FAILURE. UPON FURTHER INVESTIGATION PERFORMED BY THE QUALIFIED INDIVIDUAL, A REMEDIATION PLAN SHALL BE IMPLEMENTED TO RESTORE THE BASIN TO ITS ORIGINAL DESIGN CAPACITIES.
		AS NEEDED	- REMOVE ACCUMULATED SEDIMENT AS REQUIRED. RESTORE ORIGINAL CROSS SECTION. PROPERLY DISPOSE OF SEDIMENT.		

PCSM - GENERAL SCM NOTES

(Rev. 01/2025)

1. A SITE INSPECTION AND APPROVAL BY THE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.
2. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND SCM CONSTRUCTION SCHEDULE.
3. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED SCM BOTTOMS.
4. REFER TO THE SCM CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT SCMs.
5. REFER TO THE PCSM PLAN AND DETAILS FOR SPECIFIC SCM CONSTRUCTION GUIDELINES.
6. AS-BUILT PLANS OF THE STORMWATER SCMs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN FOURTEEN DAYS FOLLOWING THE COMPLETION OF EACH PHASE. THIS IS TO ENSURE THAT THE CERTIFICATION FORM CAN BE COMPLETED WITHIN THIRTY DAYS OF CONSTRUCTION COMPLETION. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL SURVEYOR.
7. A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER SCMs.

RECEIVING SURFACE WATERS

(Rev. 5/2024)

§102.8(f)(5)

1. THE SUBJECT SITE DRAINS TO TREWELLYN CREEK, WHICH HAS A TSF, MF (TROUT STOCKING FISHES) CHAPTER 93 CLASSIFICATION
2. THE DEVELOPMENT IS IN NEITHER AN HQ NOR AN EV WATERSHED AND THEREFORE, NO BOUNDARIES ARE SHOWN.
3. THERE ARE WETLANDS LOCATED ON THE PROJECT SITE.

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

(Rev. 5/2024)

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 THE APPLICANT.

1. 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).
2. 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 FILL".
3. 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 THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
4. 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 "MANAGEMENT OF FILL".

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. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

(Rev. 01/2025)

§102.8(f)(10)

1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL SCMs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL SCMs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER SCM FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. INSPECT INFILTRATION FACILITIES AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SIGNS OF EROSION.
6. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED. FOR ABOVE-GROUND INFILTRATION FACILITIES, REMOVE AND REPLACE SAND/STONE LAYER AS NECESSARY IF FACILITY DEWATERING TIME EXCEEDS 72 HOURS.

RECYCLING OR DISPOSAL OF MATERIALS

(Rev. 01/2025)

§102.8(f)(11)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EX ON-SITE:
- TRASH (CANS, BOTTLES, ETC.)
- YARD WASTE (LEAVES, GRASS CLIPPINGS, ETC.)
- DEBRIS COLLECTED IN INLETS
- SEDIMENT CAPTURED IN ANY PCSM SCM

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH LOCAL REQUIREMENTS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

(Rev. 5/2024)

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

CRITICAL STAGES

(Rev. 5/2024)

- INSTALLATION OF UNDERGROUND DRY EXTENDED DETENTION BASINS W/ MRC
- INSTALLATION OF UNDERGROUND DRY EXTENDED DETENTION BASINS

OVERALL SITE CONSTRUCTION SEQUENCE

(Rev. 06/2025)

§102.8(f)(7)

A. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
B. REFERENCES TO 'CONSERVATION DISTRICT' USED THROUGHOUT THIS SEQUENCE ARE MEANT TO REFER TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT.
C. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.
D. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
E. THE TERM 'PERMANENT STABILIZATION' USED THROUGHOUT THIS SEQUENCE IS MEANT TO DESCRIBE THE PROPER PLACING, GRADING, CONSTRUCTING, REINFORCING, LINING, AND COVERING OF SOIL, ROCK OR EARTH TO ENSURE THEIR PERMANENT RESISTANCE TO EROSION, SLIDING OR OTHER MOVEMENT. FOR AN EARTH DISTURBANCE TO BE PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED WITH ONE OF THE FOLLOWING: A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION; OR AN ACCEPTABLE BMP THAT PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.
F. FOR EACH OF THE 'CRITICAL STAGES' SPECIFIED BELOW, THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SAID BMP, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
G. SEDIMENT CONTROL FACILITIES, SUCH AS BASINS AND TRAPS, MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER ALSO TO THE MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED HEREIN FOR ADDITIONAL REQUIREMENTS DURING CONSTRUCTION.
H. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

1. STAKE OUT LIMIT OF DISTURBANCE.
2. INSTALL CONSTRUCTION ENTRANCE AS DESIGNATED ON THE PLANS.
3. INSTALL ALL PERIMETER TREE PROTECTION FENCING AND FILTER SOCK WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
4. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING PAD CONSTRUCTION CAN COMMENCE CONCURRENTLY WITH ON-SITE IMPROVEMENTS. NOTE THAT BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER.
   a. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE.
   b. THE CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE.
   c. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.
   d. INSTALL CULVERTS TO ACCESS LOTS 7 - 9.
7. INITIATE SANITARY SEWER INSTALLATION, BEGINNING WITH THE CONNECTION AT THE EXISTING MANHOLE (EXSMHD) AND CONNECTIONS INTO EVANS ROAD AND WORKING UP-SLOPE.
   a. PRIOR TO INSTALLATION WITHIN THE ROADWAY, ENSURE THAT THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE IN PLACE.
8. CRITICAL STAGE - INSTALLATION OF THE SUBSURFACE BASINS

INITIATE INSTALLATION OF THE SUBSURFACE BASINS
   a. INSTALLATION OF THE SUBSURFACE BASINS SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM
   b. INLETS DISCHARGING TO SUBSURFACE BASINS MUST BE BLOCKED IMMEDIATELY AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING FACILITIES.
   c. UPON INSTALLATION, THE CONTRACT SHALL REFER TO THE MANUFACTURERS SPECIFICATIONS REGARDING APPROPRIATE AMOUNT AND TYPE OF OF COVER THAT SHALL BE PLACE OVER TOP OF THE BASIN DURING CONSTRUCTION AND PRIOR TO AREA RECEIVING PERMANENT COVER.
9. CONTINUE WITH THE BALANCE OF EARTHWORK.
10. INSTALL UTILITIES (ELECTRIC, GAS, TELEPHONE, CABLE, ETC.) PRIOR TO CONNECTIONS IN EVANS ROAD, THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE TO BE IN PLACE.
11. INSTALL THE STONE SUBBASE FOR CURB AND INSTALL CURBING AND CRUSHED AGGREGATE BASE COURSE FOR PAVING.
12. BUILDING CONSTRUCTION MAY COMMENCE.
13. FINAL GRADE AND PLACE TOPSOIL IN ALL LANDSCAPE AREAS.
14. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
15. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
16. UPON PERMANENT STABILIZATION AND NOTIFICATION TO THE CONSERVATION DISTRICT, REMOVE ANY REMAINING EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
17. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ, 271.1 ET SEQ THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
18. DEMOBILIZE.
19. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

LIMITATIONS FOR PENNSYLVANIA SOILS PERTAINING TO EARTH DISTURBANCE PROJECTS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/ STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
ABBOTSTOWN	X	C/S		X		X	X	X	X	X	X	X				X
BUCKINGHAM	X	C/S		X		X	X	X	X	X	X	X				X
CHALFONT	X	C/S		X		X	X	X	X	X	X	X				X
DOYLESTOWN	X	C/S	X	X		X	X	X	X	X	X	X				X
READINGTON	X	C/S		X		X	X	X	X	X	X	X				X

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. CUTBANKS CAVE RESOLUTIONS: CUT SLOPES SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. FINISHED SLOPES WILL NOT EXCEED 3:1. EXCAVATIONS SHALL BE PROPERLY SUPPORTED TO PREVENT CAVES.
2. CORROSIVE TO CONCRETE/STEEL RESOLUTIONS: MOST STORM DRAIN PIPES FOR THE SITE WILL BE HDPE.
3. DROUGHTY RESOLUTIONS: SELECT VEGETATIVE SPECIES THAT ARE TOLERANT TO DRY CONDITIONS. VEGETATED AREAS SHALL BE IRRIGATED. EXISTING TOPSOIL WILL BE UTILIZED.
4. EASILY ERODIBLE RESOLUTIONS: STABILIZATION SHALL TAKE PLACE UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES THAT WILL EXCEED FOUR DAYS, OR ANY STAGE THEREOF. STABILIZATION SHALL BE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. E&S CONTROLS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
5. DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE: ANY WATER DURING CONSTRUCTION SHALL BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN.
6. HYDRIC/HYDRIC INCLUSIONS RESOLUTIONS: NO WETLANDS ARE LOCATED ON THE PROJECT SITE.
7. LOW STRENGTH/LANDSLIDE PRONE RESOLUTIONS: FINISHED SLOPES WILL NOT EXCEED 3:1. PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT SLOPE FAILURES.
8. SLOW PERCOLATION RESOLUTIONS: PROVIDE DEWATERING DURING CONSTRUCTION ACTIVITIES. PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN. LANDSCAPING IS PROPOSED ON THE SITE TO ALLOW FOR INCREASED INFILTRATION AND EVAPO-TRANSPIRATION.
9. PIPING: PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN. THE MAJORITY OF THE PIPES USED ON SITE ARE HDPE REDUCING THE AMOUNT OF GROUNDWATER THAT WILL ENTER STORM PIPES.
10. POOR SOURCE OF TOPSOIL RESOLUTIONS: SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED THROUGHOUT THE SITE AS REQUIRED.
11. FROST ACTION RESOLUTIONS: DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
12. WETNESS: PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN.

SEEDING SPECIFICATIONS

1. SEEDING DATES
   A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
   B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
   A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
      ANNUAL RYE (40 POUNDS / ACRE PLS)
      OR SPRING OATS (96 POUNDS / ACRE PLS)
      OR WINTER RYE (168 POUNDS / ACRE PLS)
      (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5)
   B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
      I. NURSE CROP (SELECT ONE):
      ANNUAL RYE (10 POUNDS / ACRE PLS)
      OR SPRING OATS (64 POUNDS / ACRE PLS)
      OR WINTER RYE (56 POUNDS / ACRE PLS)
      (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
      II. PERMANENT SEED MIX:
      FINE FESCUE (35 POUNDS / ACRE PLS)
      OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
      OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
      (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2)
      PER PADEP: TALL FESCUES ARE NOT TO BE USED DUE TO THEIR INVASIVE STATUS, DESPITE THE MENTION OF TALL FESCUES WITHIN THE E&S MANUAL.
3. PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
   A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE.
   B. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED: MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 ((%PURE X %GERMINATION) / 100)
   C. DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
4. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
   A. SEEDING SHALL TAKE PLACE DURING TIMEFRAME NOTED IN THE SEEDING DATES SECTION ABOVE.
   B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
      I. DRILL SEEDING
      II. BROADCAST SEEDING (TWO DIRECTIONS)
      III. HYDROSEEDING (TWO DIRECTIONS)
   D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED:
      I. TEMPORARY STABILIZATION WITH STRAW:
         1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
         2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
      II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED):
         1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
         2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
         3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
   E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED
5. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF ¼" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

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ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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Fax: (215) 996-9102
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C.D. PUZINAS
PROFESSIONAL ENGINEER

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

SHEET NUMBER:

C-403
10 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A---->LAYOUT: C-403 PCSMN
SL

SC-160LP STANDARD DETAILS (ADS – Advanced Drainage Systems, Inc.)

ADS SiteAssist® FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR WEBSITE

SC-160LP STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-160LP.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 325 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

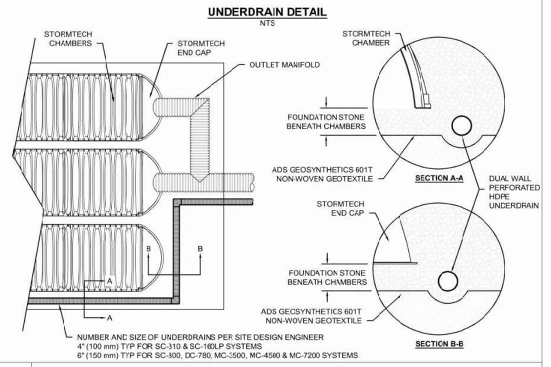
IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-160LP SYSTEM

1. STORMTECH SC-160LP CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-160LP CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-160LP".
3. FOUNDATION STONE AND EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE; AASHTO M43 #3,357, 4, 467, 5, 56, OR 57.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. THE DEPTH OF FOUNDATION STONE SHALL BE DETERMINED BASED ON THE SUBGRADE BEARING CAPACITY PROVIDED BY THE SITE DESIGN ENGINEER.
6. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
7. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
8. CHAMBERS SHALL BE INSTALLED "TOE TO TOE". NO ADDITIONAL SPACING BETWEEN ROWS IS REQUIRED.
9. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
10. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

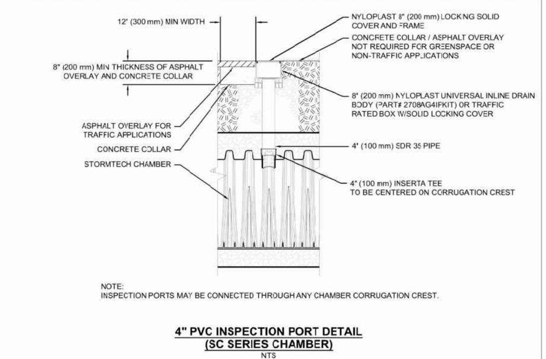
NOTES FOR CONSTRUCTION EQUIPMENT

1. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-160LP CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-160LP".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH INSTALLATION GUIDE SC-160LP".
2. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

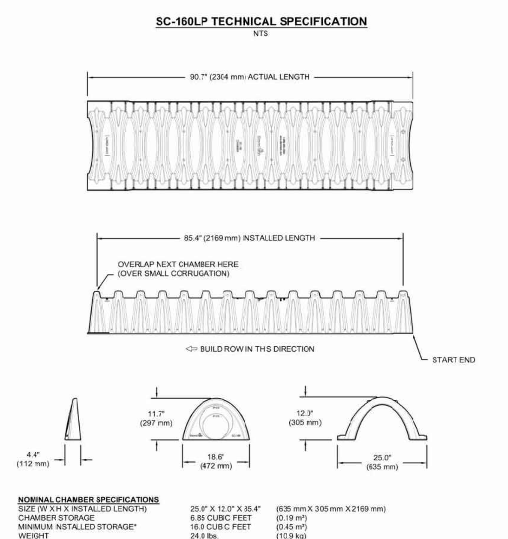
CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 UNDERDRAIN DETAIL



4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	25.0" X 12.0" X 85.4"	(635 mm X 305 mm X 2169 mm)
CHAMBER STORAGE	6.85 CUBIC FEET	(0.19 m³)
MINIMUM INSTALLED STORAGE*	15.0 CUBIC FEET	(0.45 m³)
WEIGHT	24.0 lbs.	(10.9 kg)

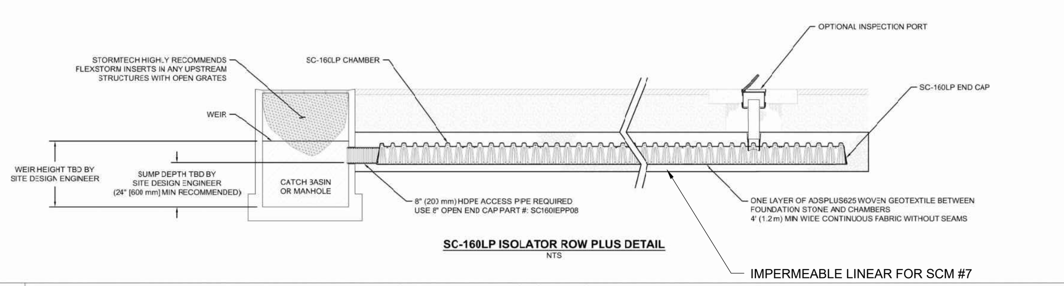
*ASSUMES 6" (152 mm) ABOVE, 6" (152 mm) BELOW, AND STONE BETWEEN CHAMBERS WITH 40% STONE POROSITY.

PART #	STUB	A
SC160EPP	6" (150 mm)	0.66" (16 mm)
	8" (200 mm)	0.80" (20 mm)
SC160IEPP08	8" (200 mm)	0.96" (24 mm)

ALL STUBS ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL

2 SC-160LP TECHNICAL SPECIFICATIONS

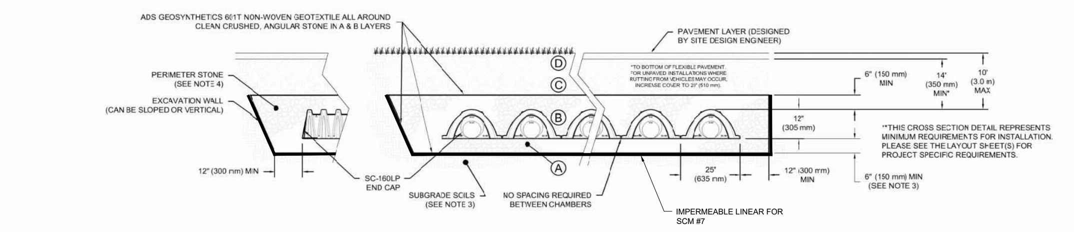


3 SC-160LP ISOLATOR ROW PLUS DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

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2. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5" (38 mm).
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 325 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-160LP CROSS SECTION DETAIL

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

DRAWN: SMW | DATE: 08/05/2025
REVIEWED: JLM | PROJECT NO: 721-190
REV: | NOT TO SCALE

SC-160LP STANDARD DETAILS

StormTech® Chamber System

4640 TRUEMAN BLVD
HILLIARD, OH 43026

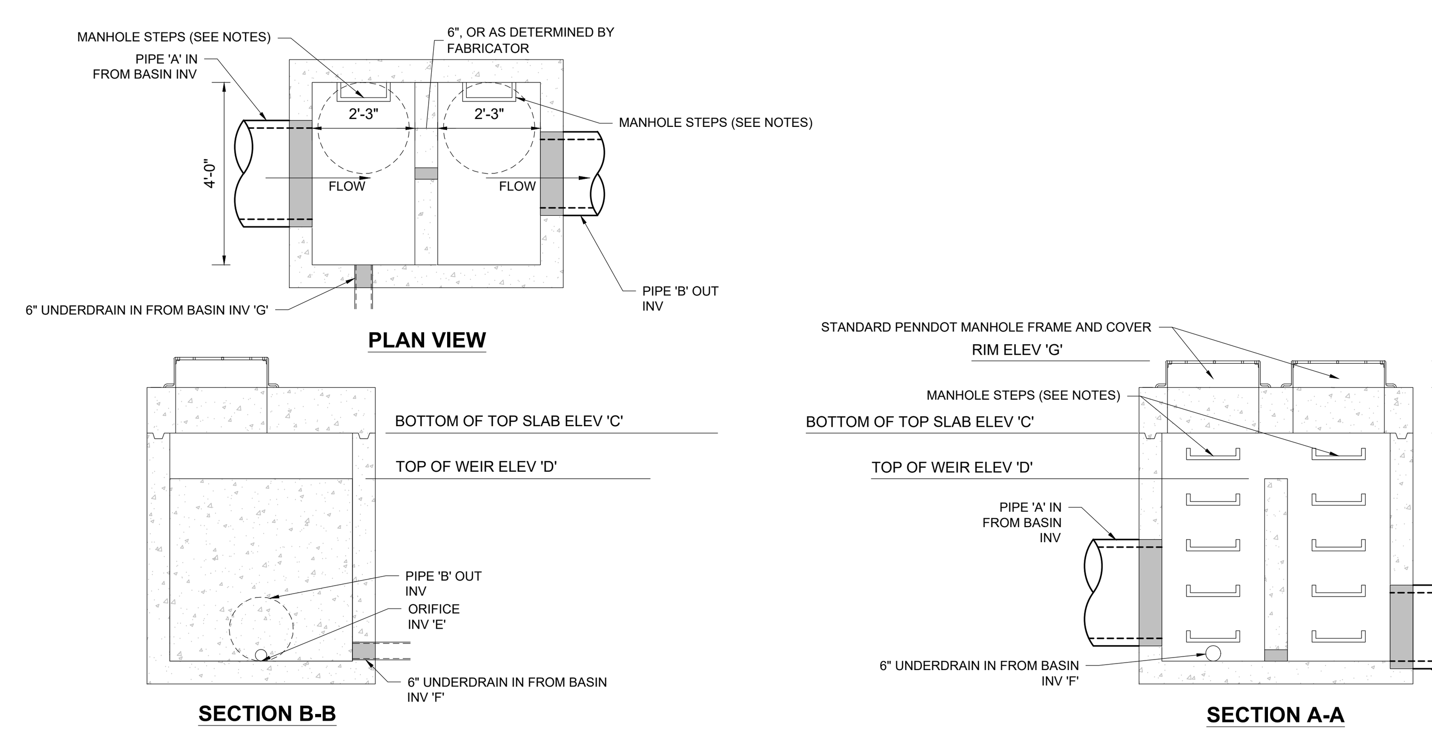
ADS Advanced Drainage Systems, Inc.

SHEET 1

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER, THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Test Location	Ex'g Surface Elev.	BTM of TP Elev.	Test Depth (in)	Test Elev. (approx.)	Limiting Zone Type	Limiting Zone Depth (in)	Limiting Zone Elev.	Reading Intervals	Final Reading (inches)	Stabilized Field Rate (in/hr)
TP #1	303.37	297.62	28	301.04	None Encountered			30	0.063	0.13
TP #2	295.13	290.13	36	292.13	BR	60	290.13	30	0.000	0.00
TP #3	295.56	288.48	43	291.98	None Encountered			30	0.063	0.13
TP #4	295.17	284.50	74	289.00	PW	106	286.34	30	0.000	0.00
TP #5	295.68	287.43	70	289.85	BR	94	287.85	30	0.000	0.00
TP #6	301.54	294.96	32	298.87	BR	79	294.96	30	0.063	0.13
TP #7	297.28	290.78	27	295.03	None Encountered			30	0.000	0.00
TP #8	296.36	291.53	30	293.86	BR	58	291.53	30	0.125	0.25
TP #9	295.43	290.35	34	292.60	BR	61	290.35	30	0.063	0.13
TP #10	286.99	281.24	22	285.16	GW	48	282.99	30	0.000	0.00
TP #11	289.46	284.21	30	286.96	GW	62	284.29	30	0.000	0.00
TP #12	284.50	279.75	24	282.50	BR	57	279.75	30	0.000	0.00
TP #13	290.57	282.74	33	287.82	None Encountered			30	0.063	0.13
TP #14	291.56	283.81	62	286.39	GW	90	284.06	30	0.063	0.13
TP #15	288.92	283.67	30	286.42	GW	58	284.09	30	0.063	0.13
TP #16	297.25	291.42	40	293.92	None Encountered			30	0.063	0.13

BR = Bedrock
PW = Perched Water
GW = Ground Water



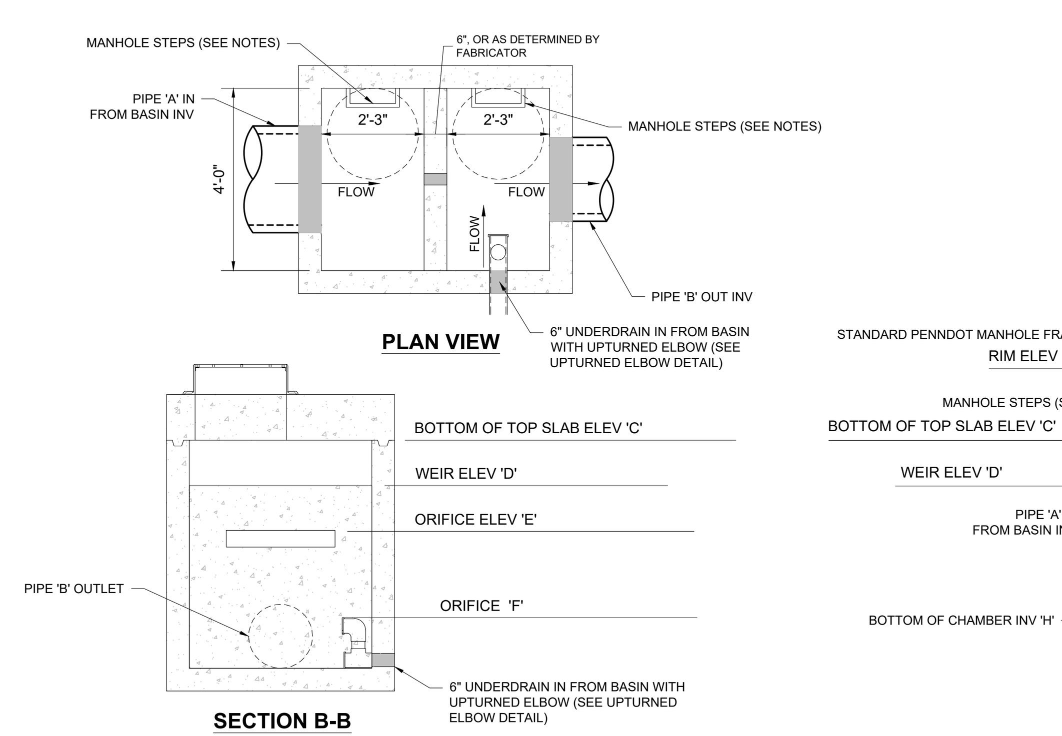
NOTES:
1. PRECAST BOX SHALL COMPLY WITH LATEST PENNDOT PUBLICATION 72M & PUBLICATION 408 STANDARDS.
2. BUTYL RESIN MASTIC SEAL SHALL BE PLACED WITHIN ALL JOINTS OF THE OUTLET STRUCTURE WHEN ASSEMBLED AND BETWEEN THE MANHOLE FRAME AND TOP OF STRUCTURE TO ENSURE A WATER TIGHT SEAL.
3. FURNISH OUTLET BOX WITH STEPS MEETING PADOT PUB 408 SECTION 605.2(c).
4. ANY DRILLED ORIFICE INTO THE OUTLET STRUCTURE SHALL BE SANDED, FREE OF BURRS AND IRREGULARITIES.
5. DIMENSIONS AND CONFIGURATION SHOWN ARE SUBJECT TO CHANGE BASED ON FINAL DESIGNS AS PREPARED BY THE FABRICATOR.
6. SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW TO BOHLER ENGINEERING PA, LLC PRIOR TO FABRICATION.
7. UNDERDRAIN SHALL BE PERFORATED PIPE WITHIN BASIN SURROUNDING STONE LIMITS. UNDERDRAIN SHALL SWITCH TO SOLID PIPE ONCE THE UNDERDRAIN IS OUTSIDE OF BASIN SURROUNDING STONE LIMITS.

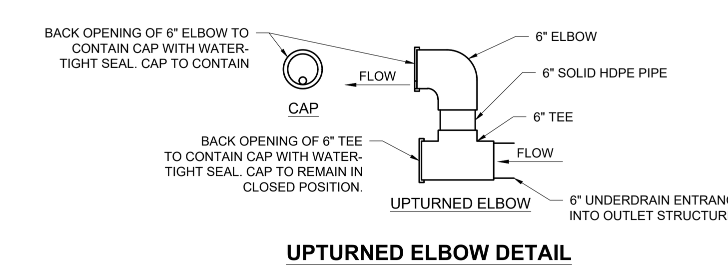
STRUCTURE	INLET PIPE 'A' SIZE	INLET PIPE 'A' INVERT	OUTLET PIPE 'B' SIZE	OUTLET PIPE 'B' INVERT	OUTLET PIPE 'B' MATERIAL	BOTTOM OF TOP SLAB 'C'	TOP OF WEIR 'D' LENGTH (FT)	TOP OF WEIR 'D' ELEV.	ORIFICE 'E' ELEV.	ORIFICE 'E' SIZE	UNDERDRAIN 'F' ELEV.	UNDERDRAIN 'F' DIAMETER (IN.)	RIM ELEV. 'G'	CHAMBER INV 'H'
C-20 (SCM 3)	24"	297.00	24"	296.50	RCP	301.29	4.00	299.00	296.50	18" X 4"	296.50	6.00	302.87	297.00
G-20 (SCM 7)	24"	279.50	24"	279.00	RCP	281.01	4.00	280.65	279.00	6"	279.00	6.00	282.59	279.50
H-20 (SCM 8)	24"	282.00	24"	281.50	RCP	286.18	4.00	284.00	281.50	6"	281.50	6.00	287.76	282.00

UNDERGROUND DETENTION BASIN OUTLET CONTROL STRUCTURE

NOT TO SCALE

(PA-U010403 - 04/2024)





NOTES:
1. PRECAST BOX SHALL COMPLY WITH LATEST PENNDOT PUBLICATION 72M & PUBLICATION 408 STANDARDS.
2. BUTYL RESIN MASTIC SEAL SHALL BE PLACED WITHIN ALL JOINTS OF THE OUTLET STRUCTURE WHEN ASSEMBLED AND BETWEEN THE MANHOLE FRAME AND TOP OF STRUCTURE TO ENSURE A WATER TIGHT SEAL.
3. FURNISH OUTLET BOX WITH STEPS MEETING PADOT PUB 408 SECTION 605.2(c).
4. ANY DRILLED ORIFICE INTO THE OUTLET STRUCTURE SHALL BE SANDED, FREE OF BURRS AND IRREGULARITIES.
5. DIMENSIONS AND CONFIGURATION SHOWN ARE SUBJECT TO CHANGE BASED ON FINAL DESIGNS AS PREPARED BY THE FABRICATOR.
6. SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW TO BOHLER ENGINEERING PA, LLC PRIOR TO FABRICATION.
7. UNDERDRAIN SHALL BE PERFORATED PIPE WITHIN BASIN SURROUNDING STONE LIMITS. UNDERDRAIN SHALL SWITCH TO SOLID PIPE ONCE THE UNDERDRAIN IS OUTSIDE OF BASIN SURROUNDING STONE LIMITS.

STRUCTURE	INLET PIPE 'A' SIZE	INLET PIPE 'A' INVERT	OUTLET PIPE 'B' SIZE	OUTLET PIPE 'B' INVERT	OUTLET PIPE 'B' MATERIAL	BOTTOM OF TOP SLAB 'C'	TOP OF WEIR 'D' LENGTH (FT)	TOP OF WEIR 'D' ELEV.	ORIFICE 'E' ELEV.	ORIFICE 'E' WIDTH X HEIGHT (IN.)	ORIFICE 'F' ELEV.	ORIFICE 'F' DIAMETER (IN.)	RIM ELEV. 'G'	CHAMBER INV 'H'	1.2" / 24 HT WATER SURFACE ELEVATION	2-YR / 24 HR WATER SURFACE ELEVATION
A-20 (SCM 1)	24"	302.00	18"	302.00	RCP	304.49	4.00	304.75	302.35	18" X 4"	302.00	0.80	306.07	302.00	302.31	302.78
B-20 (SCM 2)	24"	290.00	18"	290.00	RCP	293.67	4.00	292.00	-	-	290.00	0.90	295.25	290.00	290.90	292.31
D-20 (SCM 4)	24"	293.25	18"	293.25	RCP	296.87	4.00	295.25	293.90	20" X 6"	293.25	1.00	298.45	293.25	293.89	294.67
E-50 (SCM 5)	24"	296.50	18"	296.50	RCP	299.43	4.00	298.75	296.98	16" X 6"	296.50	0.75	301.01	296.50	296.97	297.61
F-20 (SCM 6)	24"	289.50	24"	289.50	RCP	291.41	4.00	291.90	289.90	18" X 3"	289.50	0.85	292.99	289.50	289.79	290.24

UNDERGROUND MRC BASIN OUTLET CONTROL STRUCTURE

NOT TO SCALE

(PA-U010402 - 04/2024)

BOHLER//™

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES. © BOHLER

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250561429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

— FOR —

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER//
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS
PROFESSIONAL ENGINEER

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SHEET NUMBER:

C-404
11 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A----->LAYOUT: C-404 PCSMD
SL

ADS Advanced Drainage Systems, Inc.

ADS SiteAssist
FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR WEBSITE

SC-800 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-800.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WAL.. STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS *OR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THA" THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRIGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK, LIVE LOAD ON MINIMUM COVER 2) MAXIMUMPERMANENT (75+ FT) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1 WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH S HAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 720 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR LONG-DURATION DEAD LOADS AND 1.75 FOR SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS ANC END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MAN FOLD SIZE TO BE DETERMINED BY* SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL "PIPE" TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE ,INER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTECX"ILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

1. STORM"ECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORM"ECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-78/SC-600".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZIR OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORM"ECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOO"ER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN 'EXCAVATOR ON "HE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED *RIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAN MINIMUM - 3" (15 mm SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M4(#3, 3(7, 4, #67, 5, 56, OR 57.
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLXSTORM CATCH- IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

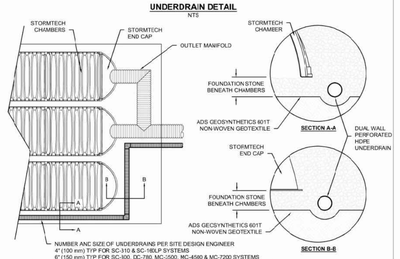
NOTES FOR CONSTRUCTION EQUIPMENT

1. STORM"ECH SC-80O CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-78/SC-600".
2. THE USE OF CONSTRUCTION EQUIPENT OVER SC-800 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOVED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-780/SC-800".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH INSTALLATION GUIDE SC-310/DC-78/SC-600".
3. FLLL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

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

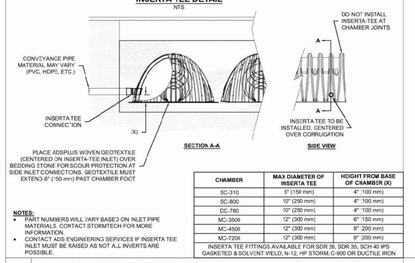
CONTACT STORMTECH AT 1-800-821-6710 WITH ANY' QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

UNDERDRAIN DETAIL
NTS



5 UNDERDRAIN DETAIL

INSERTA TEE DETAIL
NTS



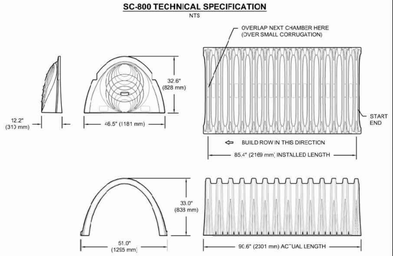
CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	8" (158 mm)	4" 100 mm)
SC-800	10" (250 mm)	4" 100 mm)
DC-780	10" (250 mm)	4" 100 mm)
MC-3500	12" (300 mm)	6" 150 mm)
MC-4500	12" (300 mm)	8" 200 mm)
MC-7200	12" (300 mm)	8" 200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 35, SCH 35, SCH 40 IPS GASKETED & SOLVLNT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

NOTES:
- PART NUMBERS WILL /ARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AB NOT ALL INVERTS ARE POSSIBLE.

6 INSERTA-TEE SIDE INLET DETAIL

SC-800 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 33.0" X 85.4"	(1295 mm X 838 mm X 2169 mm)
CHAMBER STORAGE	50.6 CUBIC FEET	(1.43 m³)
MINIMUM INSTALLED STORAGE*	78.4 CUBIC FEET	(2.22 m³)
WEIGHT	81.8 lbs.	(37.1 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	46.0" X 32'6" X 10.5"	(1161 mm X 828 mm X 267 mm)
END CAP STORAGE	3.4 CUBIC FEET	(0.09 m³)
MINIMUM INSTALLED STORAGE**	14.7 CUBIC FEET	(0.42 m³)
WEIGHT	15.7 lbs.	(7.1 kg)

* ASSUMES 6" (150 mm) STONE ABOVE AND BELOW CHAMBER, 3" (75 mm) BETWEEN CHAMBERS.
**ASSUMES 6" (150 mm) STONE ABOVE AND BELOW END CAPS, 3" (75 mm) BETWEEN ROWS, 12" (300 mm) BEYOND END CAPS

PRE-CORE3 HOLES AT BOTTOM OF END CAP FOR *ART NUMBERS ENDING WITH "BPC"
PRE-CORE3 HOLES AT TOP OF END CAP FOR *ART NUMBERS ENDING WITH "TPC"

PART #	STUB	B	C
SC800EPE06TPC	6" (150 mm)	21.4" (544 mm)	—
SC800EPE06BPC		—	0.9" (23 mm)
SC800EPE08TPC	8" (200 mm)	19.2" (488 mm)	—
SC800EPE08BPC		—	1.0" (25 mm)
SC800EPE12TPC	10" (250 mm)	17.9" (632 mm)	—
SC800EPE12BPC		—	1.2" (30 mm)
SC800EPE12TPC	12" (300 mm)	14.4" (366 mm)	—
SC800EPE12BPC		—	1.6" (41 mm)
SC800EPE15TPC	15" (375 mm)	11.3" (287 mm)	—
SC800EPE15BPC		—	1.7" (43 mm)
SC800EPE18TPC	18" (450 mm)	8.0" (203 mm)	—
SC800EPE18BPC		—	2.0" (51 mm)
SC800CEZ	24" (600 mm)	—	2.3" (58 mm)

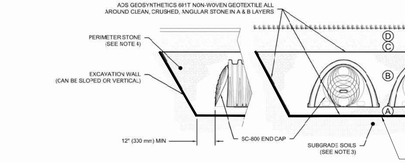
NOTE: ALL DIMENSIONS ARE NOMINAL

2 SC-800 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

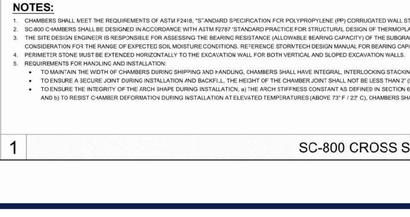
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
C	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TC THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY' BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, 'ATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATEHALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M'145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 61, 68, 1 78, 8, 89, 9, 10	BEGIN COMPACTIONS AF"ER 12" (300 mm) 0F MATERIAL OVER THE CHAMBERS IS REACHED. COMPLET OF MATIAL LAYERS TO ACHIEVE 95% OF THE 95% MODIFIED PROCTOR DENSITY FOR WELL GRADES MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATIRIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMC FORCE NOT TO EXCEED 2C,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[3]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FIL, BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[3]	AASHTO M43[1] 3, 357, 4 467, 1, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTC DESIGNAT ONS ARE FOR GRADA"IONS ONLY. THE STONE MUST ALJO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE' A SP,CIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY' BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR 'DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS P,ACED, ANY BOILMATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE ,IED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE *AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD A..SO MEET THE ACCEP' ABILITY CRITERA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



SC-800 ISOLATOR ROW PLUS DETAIL
NTS

3 SC-800 ISOLATOR ROW PLUS DETAIL



NOTE:
INSPECTION PORTS MA' BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)
NTS

4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1 REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2 REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3 USING A FLASHLIGHT AND STA3A ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4 LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5 IF SEDIMENT IS AT, OR ABOVE, 3" (80mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1 REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2 USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REQULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3 IF SEDIMENT IS AT, OR ABOVE, 3" (80mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZ.E WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPS"REAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE 'IRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACC,MULATION AND HIGH WATER ELEVATIONS
2. CONDLCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "S"ANDARD S'ECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 C-HAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. RE"ERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAIN"AIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2" (50 mm).
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 700 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-800 CROSS SECTION DETAIL

SC-800 STANDARD DETAILS

SHEET 1

StormTech® Chamber System

4640 TRUEMAN BLVD HILLIARD, OH 43026

ADS Advanced Drainage Systems, Inc.

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DRAWN: SMW
REVIEWED: JLM
DATE: 08/05/2025
PROJECT NO.: 721-890
REV:
NOT TO SCALE

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PROJECT No.: PAA250079.00-0A
DRAWN BY: LSI/JSL
CHECKED BY: CDP/NCR
DATE: 05/15/2026
CAD I.D.: P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.J. CUZMAS — 25 YEARS — COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — PENNSYLVANIA

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SHEET NUMBER:

C-405
12 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
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COMPANY: LOWER GWYNEDD TOWNSHIP
ADDRESS: 1130 N. BETHLEHEM
SPRING HOUSE, PA. 19477
CONTACT: FRED ZOLLERS
EMAIL: FZOLLERS@LOWERGWYNEDD
PHONE: 215-646-5302

COMPANY: PECO AN EXCELON COMPANY C/O USIC
ADDRESS: 450 S. HENDERSON ROAD SUITE B
KING OF PRUSSIA, PA. 19406
CONTACT: NIKKIA SIMPKINS
EMAIL: NIKKIASIMPKINS@USICLLC.COM
PHONE: 484-681-5720

COMPANY: NORTH WALES WATER AUTHORITY
ADDRESS: 200 W. WALNUT ST
PO BOX 1339
NORTH WALES, PA. 19454
CONTACT: JOSEPH MURPHY
EMAIL: JMURPHY@NWWATER.COM
PHONE: 215-699-4836 EXT. 1115

COMPANY: COMCAST
ADDRESS: 1250 HADDONFIELD-BERLIN RD
CHERRY HILL, NJ 08034
CONTACT: WYATT PARRISH
EMAIL:WYATT_PARISH@CABLE.COMCAST.COM
PHONE: 484-368-4391

COMPANY: MONTGOMERY COUNTY - PA
ADDRESS: 1 MONTGOMERY PLAZA
PO BOX 311 - SUITE 613
CONTACT: MORGAN ROUSCHER
EMAIL:
MORGAN.ROUSCHER@MONTGOMERYCOUNTYPA.GOV
PHONE: 610-278-5173

COMPANY: VERIZON BUSINESS FORMERLY MCI
ADDRESS: 7000 WESTON PKWY
CARY, NC 27513
CONTACT: VICTOR WOOD
EMAIL: VICTOR.S.WOOD@VERIZON.COM
PHONE: 919-414-2782

May 15, 2026
I:\BOHLER\NJ\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00.DA------LAYOUT: C-501 UTIL

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

**1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2**

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CHRISTOPHER DAVID PISANAS
PROFESSIONAL ENGINEER
PROFESSIONAL LICENSE NO. PE090000
PENNSYLVANIA

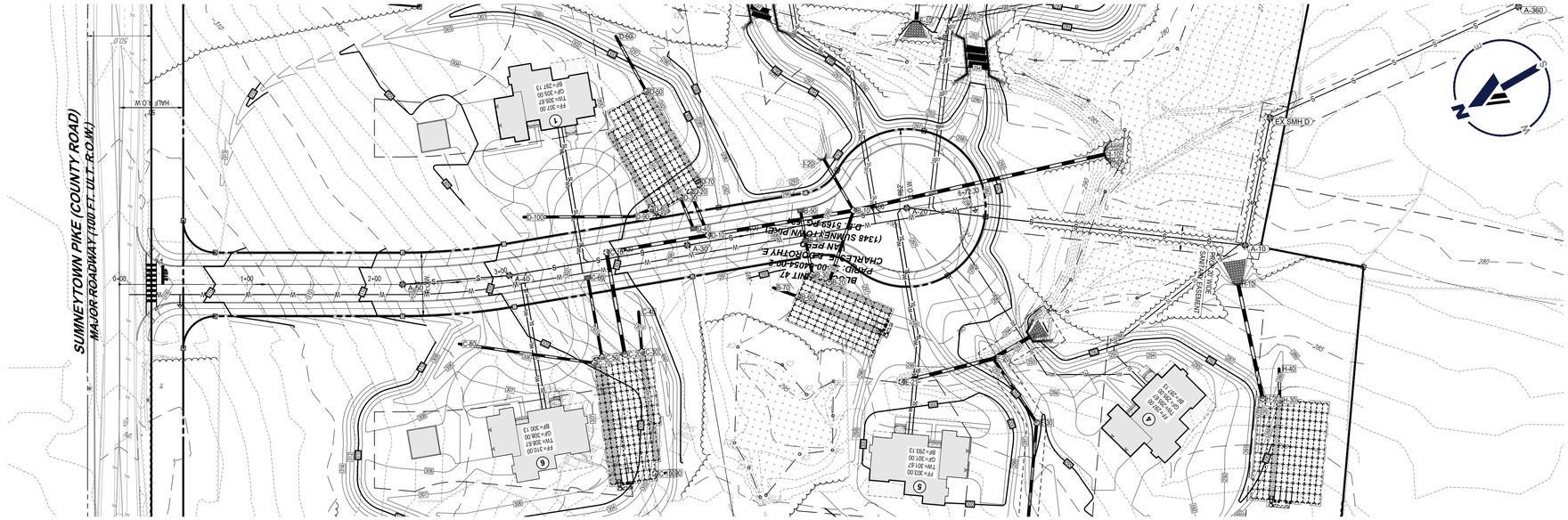
SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

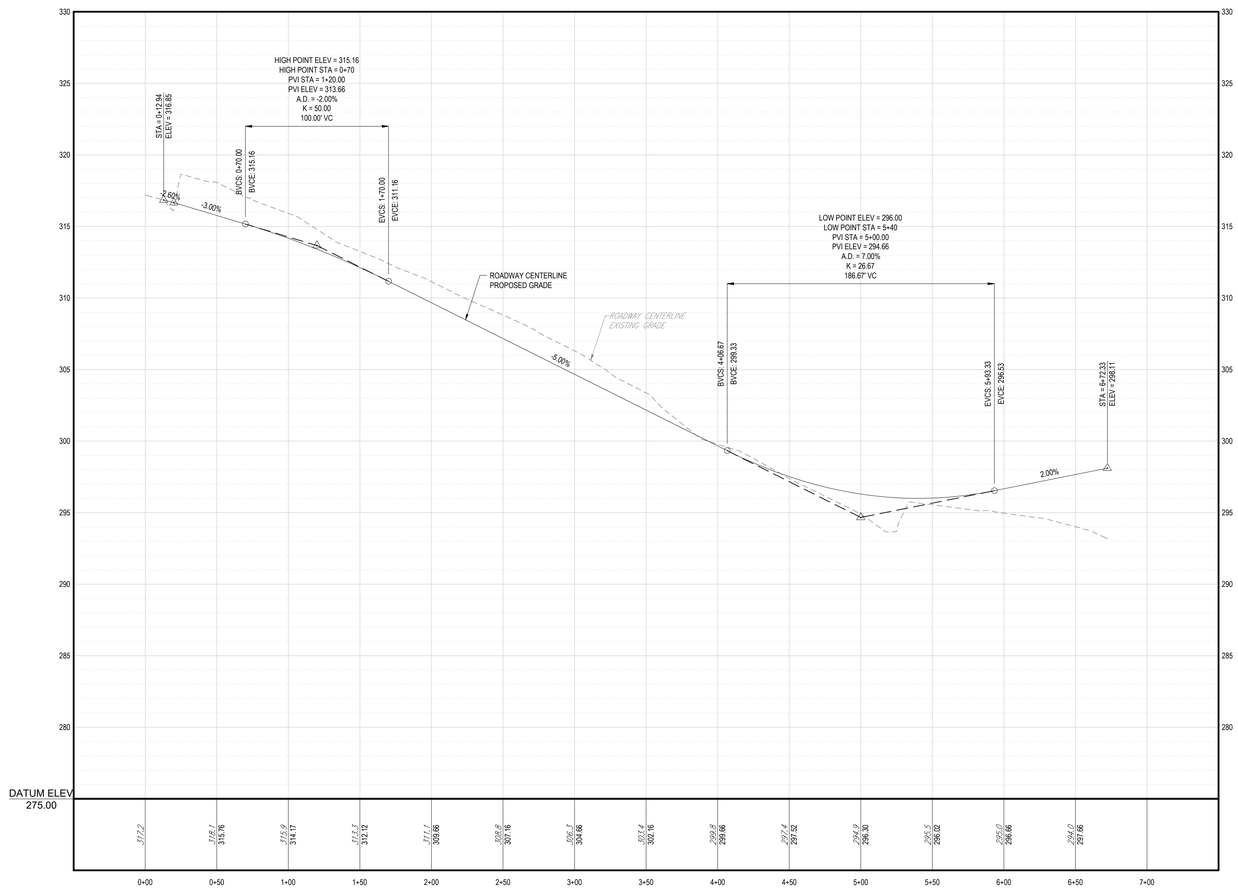
C-501
13 OF 29

ORG. DATE - 05/15/2026



PROPOSED ROADWAY PLAN VIEW

SCALE: 1"=50'



PROPOSED ROADWAY PROFILE

SCALE: 1"= 50 ' HORIZONTAL
1"= 5 ' VERTICAL

PROFILE	
EXISTING GRADE	
PROPOSED GRADE	

50 25 12.5 0 50
SCALE: 1" = 50'

May 15, 2026
\\BOHLERENGR.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-PROF-PAA250079.00-0A-----LAYOUT C-701 PROD
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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-PROF

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

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COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:

PROPOSED ROADWAY PLAN & PROFILE

SHEET NUMBER:

C-701
14 OF 29

ORG. DATE - 05/15/2026

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

LIST OF REGISTERED UTILITY USERS FOR LOWER GWYNEDD TOWNSHIP:

COMPANY: LOWER GWYNEDD TOWNSHIP
ADDRESS: 1130 N. BETHLEHEM
SPRING HOUSE, PA. 19477
CONTACT: FRED ZOLLERS
EMAIL: FZOLLERS@LOWERGWYNEDD
PHONE: 215-646-5302

COMPANY: PECO AN EXCELON COMPANY C/O USIC
ADDRESS: 450 S. HENDERSON ROAD SUITE B
KING OF PRUSSIA, PA. 19406
CONTACT: NIKKIA SIMPKINS
EMAIL: NIKKIASIMPKINS@USICLLC.COM
PHONE: 484-681-5720

COMPANY: NORTH WALES WATER AUTHORITY
ADDRESS: 200 W. WALNUT ST
PO BOX 1339
NORTH WALES, PA. 19454
CONTACT: JOSEPH MURPHY
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MORGAN.ROUSCHER@MONTGOMERYCOUNTYPA.GOV
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ADDRESS: 7000 WESTON PKWY
CARY, NC 27513
CONTACT: VICTOR WOOD
EMAIL: VICTOR.S.WOOD@VERIZON.COM
PHONE: 919-414-2782

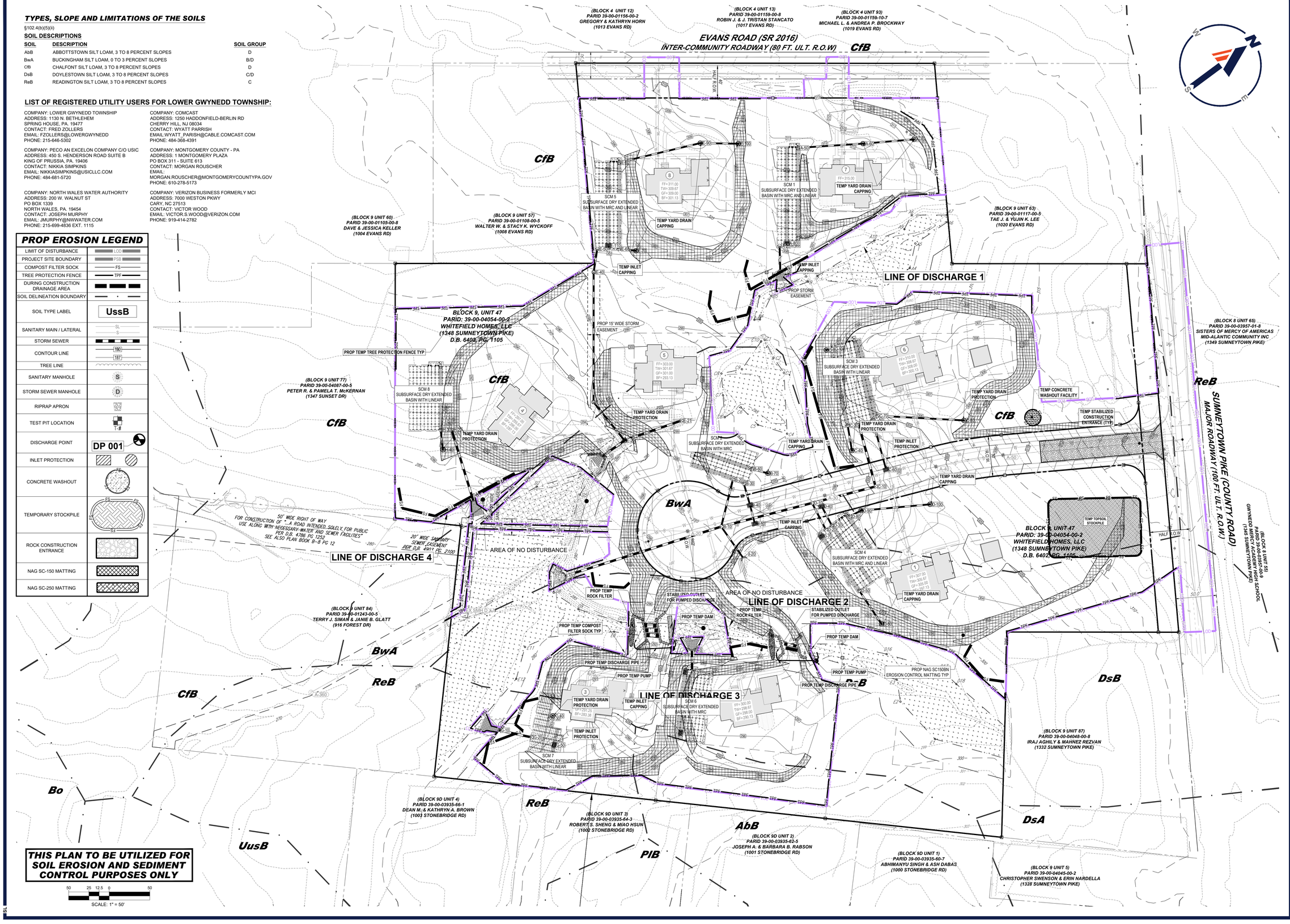
PROP EROSION LEGEND

LIMIT OF DISTURBANCE	LOD
PROJECT SITE BOUNDARY	PSB
COMPOST FILTER SOCK	FS
TREE PROTECTION FENCE	TPF
DURING CONSTRUCTION DRAINAGE AREA	
SOIL DELINEATION BOUNDARY	
SOIL TYPE LABEL	UssB
SANITARY MAIN / LATERAL	SL / S
STORM SEWER	
CONTOUR LINE	190 / 187
TREE LINE	
SANITARY MANHOLE	S
STORM SEWER MANHOLE	D
RIPRAP APRON	
TEST PIT LOCATION	T-#
DISCHARGE POINT	DP 001
INLET PROTECTION	
CONCRETE WASHOUT	CW
TEMPORARY STOCKPILE	SP
ROCK CONSTRUCTION ENTRANCE	
NAG SC-150 MATTING	
NAG SC-250 MATTING	

THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

50 25 12.5 0 50
SCALE: 1" = 50'

May 15, 2026
I:\BOHLER\ENG\NETSHARES\PA-PROJECTS\32029\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----LAYOUT C-801 EROS



BOHLER
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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGI/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA

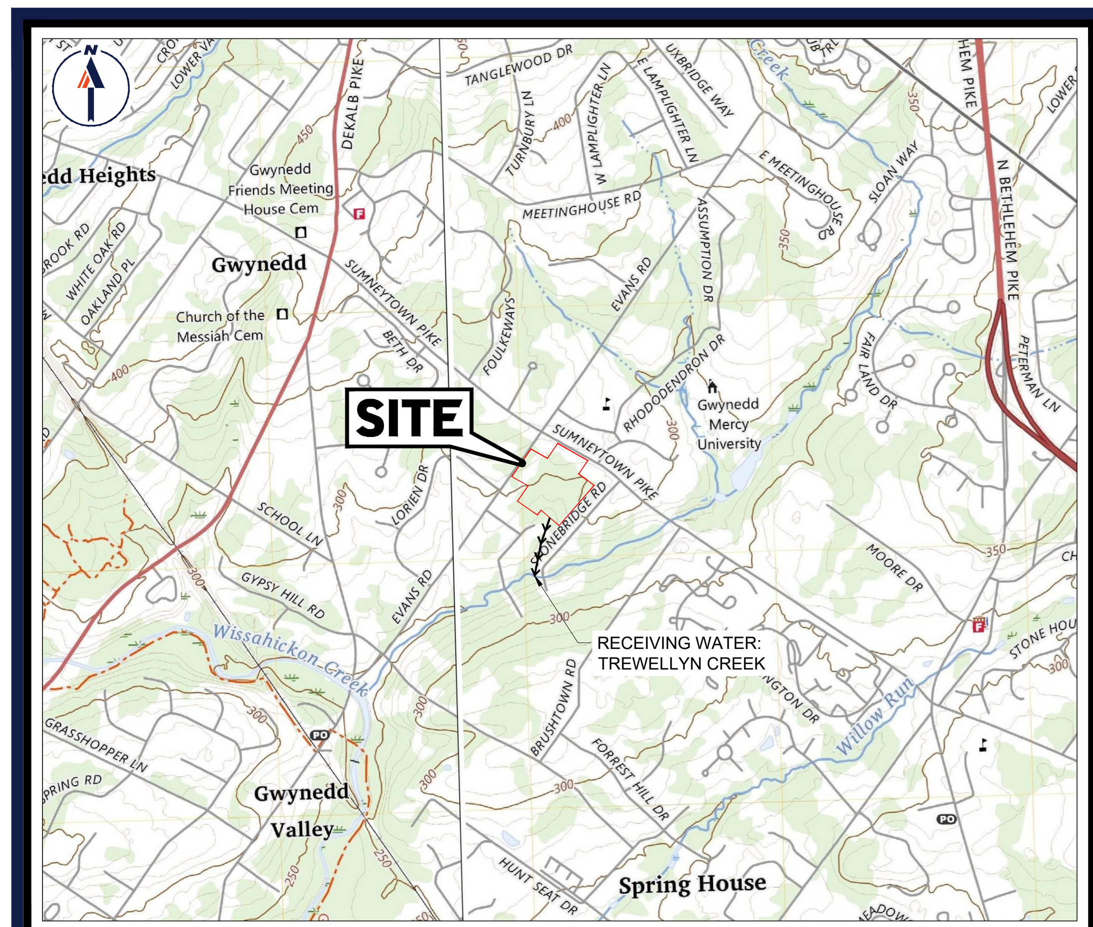
SHEET TITLE:

EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-801
15 OF 29

ORG. DATE - 05/15/2026



USGS MAP

SCALE: 1" = 2,000'
SOURCE: USGS.GOV/TOPOVIEW

SOIL SURVEY MAP

SCALE: 1" = 500'
SOURCE: USDA.GOV/WEBSOILSURVEY

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

(Rev. 10/2024)

I. GENERAL INFORMATION

A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED.
F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
H. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION.
I. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
J. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
K. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN AND ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO COST TO THE OWNER. IMMEDIATE NOTIFICATION SHALL BE GIVEN TO THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY; IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.
L. NPDES PERMIT REQUIRES THAT A VISUAL SITE INSPECTION REPORT USING THE CURRENT PADEP FORM BE COMPLETED BY A QUALIFIED SITE INSPECTOR AT THE FOLLOWING FREQUENCY:
   L.1. WEEKLY,
   L.2. AFTER RAINFALL EVENTS OF AT LEAST 0.25 INCH IN A 24-HOUR PERIOD, AND
   L.3. AS A FOLLOW-UP TO DEFICIENCIES FOUND.
M. THE PERMITTEE MUST TAKE COLOR PHOTOGRAPHS OF E&S BMPS AND PCSM SCMS ON THE PROJECT SITE AT LEAST MONTHLY, UNLESS OTHERWISE APPROVED IN WRITING BY DEP/CCD, AND WHEN DEFICIENCIES IN BMPS AND SCMS ARE IDENTIFIED. THE PHOTOGRAPHS MUST HAVE A DATE AND TIME STAMP AND BE MADE AVAILABLE FOR DEP/CCD REVIEW UPON REQUEST.
N. WITHIN 30 DAYS FOLLOWING COMPLETION OF A STRUCTURAL PCSM SCM, AS DEFINED IN THE REISSUED PAG-02 GENERAL PERMIT, THE PERMITTEE MUST SUBMIT THE SCM CONSTRUCTION CERTIFICATION FORM (3800-FM-BCW0271J) TO DEP/CCD, SIGNED BY THE PERMITTEE AND A LICENSED PROFESSIONAL.
O. BEGINNING DECEMBER 8, 2025, THE PERMITTEE MUST COMPLETE CONFIRMATION TESTING FOR INFILTRATION CAPACITY TO VERIFY THAT INFILTRATION SCMS WILL PERFORM AS DESIGNED. TESTING IS REQUIRED FOR BOTH THE SUBGRADE PREPARATION AND POST CONSTRUCTION CONDITION.
P. UPON THE REDUCTION, LOSS, OR FAILURE OF ANY BMP OR PCSM SCM, THE PERMITTEE AND CO-PERMITTEE(S) MUST INITIATE THE REPAIR OR REPLACEMENT OF THE BMP SCM AS FOLLOWS:
   P.1. IMMEDIATELY UPON DISCOVERY IF THE REDUCTION, LOSS, OR FAILURE OF A BMP OR SCM HAS RESULTED IN OR IS LIKELY TO RESULT IN SEDIMENT OR OTHER POLLUTANTS FLOWING OFF THE PROJECT SITE AND/OR DISCHARGING TO SURFACE WATERS. COMPLETION OF THE REPAIR OR REPLACEMENT OF THE BMP OR SCM MUST OCCUR WITHIN 24 HOURS UNLESS OTHERWISE REQUIRED BY DEP/CCD.
   P.2. WHEN FAILURE OF A BMP OR SCM IS NOT LIKELY TO CAUSE POLLUTION, THE PERMITTEE MUST INITIATE REPAIR OR REPLACEMENT WITHIN 24 HOURS OF DISCOVERY AND COMPLETE THE REPAIR OR REPLACEMENT WITHIN 7 DAYS, UNLESS OTHERWISE REQUIRED BY DEP/CCD.
Q. IF SOIL CONTAMINATION OR GROUNDWATER CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION THE PERMITTEE IS TO NOTIFY DEP AND CCD OF NEWLY DISCOVERED ON-SITE SOIL OR GROUNDWATER CONTAMINATION. NOTIFICATION IS TO BE PROVIDED WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULTS INDICATING THE CONTAMINATION.
R. BY DECEMBER 7 OF EACH YEAR, THE PERMITTEE MUST SUBMIT AN ANNUAL REPORT (3800-PM-BCW0405E) TO THE OFFICE OF DEP/CCD THAT APPROVED GENERAL PERMIT COVERAGE TO REPORT ON THE STATUS OF EARTH DISTURBANCE ACTIVITIES. THE FIRST ANNUAL REPORT FOR EXISTING PERMITTEES IS DUE DECEMBER 7, 2025.
S. RESIDENTIAL ONLY - WHENEVER A LOT OR PARCEL CONTAINING A PCSM SCM IS SOLD DURING THE TERM OF GENERAL PERMIT COVERAGE, THE PERMITTEE MUST PROVIDE THE NEW PROPERTY OWNER WITH 1) RECORD DRAWINGS OR OTHER PLANS IDENTIFYING THE SCM; 2) A LONG-TERM OPERATION AND MAINTENANCE (O&M) PLAN FOR THE SCM; AND 3) A COMPLETED NEW PROPERTY OWNER NOTIFICATION FORM (3800-FM-BCW00271I). THE PERMITTEE MUST SUBMIT COPIES OF COMPLETED NEW PROPERTY OWNER NOTIFICATION FORMS TO DEP/CCD AND TO THE MUNICIPALITY WHERE THE SCM IS LOCATED WITHIN 30 DAYS OF THE DATE OF TRANSFER OF THE PROPERTY.

II. STANDARD FOR LAND GRADING

A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
A.1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES.
A.2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
B. INSTALLATION REQUIREMENTS
B.1. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF MATERIALS.
B.2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.
B.3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
B.4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
B.5. (SEE I. D.)

III. STANDARD FOR UTILITY TRENCH EXCAVATION

A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
B. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE.
C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATELY.
E. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FORM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

IV. STANDARD FOR TEMPORARY STABILIZATION

A. STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH
A.1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING IN ADDITION, STABILIZATION WITH FIBER MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.
A.2. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.
A.3. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.
A.4. PROTECTIVE MATERIALS TO BE USED:
A.4.a. UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
A.4.b. HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED AT A RATE OF 1 TON PER ACRE (MINIMUM) OR PER MANUFACTURER'S SPECIFICATIONS.

B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED
B.1. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN TWELVE (12) MONTHS MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY COVER.
B.2. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.
B.3. SEEDBED PREPARATION FOR TEMPORARY SEEDING
B.3.A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
B.3.B. APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
B.3.C. APPLY 10-10-10 FERTILIZER A RATE OF 500 POUNDS PER ACRE
B.3.D. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.

C. SEEDING: SEE SEEDING SPECIFICATIONS

V. STANDARD FOR PERMANENT STABILIZATION

A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
A.1. SITE PREPARATION
A.1.a. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
A.1.b. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
A.1.c. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
A.2. APPLYING TOPSOIL
A.2.a. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
A.2.b. REMOVAL OF TOPSOIL IS NOT ALLOWED UNLESS APPROVED BY THE MUNICIPALITY OR UNLESS AS SPECIFIED BY THE SITE GEOTECHNICAL ENGINEER DUE TO THE SOIL'S UNSUITABILITY FOR PLACEMENT.
A.3. SEEDBED PREPARATION
A.3.a. A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS.
A.3.b. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
A.3.c. SOIL MODIFICATIONS:
A.3.c.1. APPLY 10-20-20 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
A.3.c.2. APPLY AGRICULTURAL LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
A.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED.
A.3.e. REMOVE FROM THE SURFACE ALL STONES ONE INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
A.3.f. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
A.4. SEEDING: SEE SEEDING SPECIFICATIONS
A.5. SEED BED AREAS SHALL ALSO BE STABILIZED USING AN APPROVED METHOD (EG: HYDROMULCHING) AS OUTLINED IN ITEM IV.A. HEREIN

B. STANDARD FOR PERMANENT STABILIZATION WITH SOD
B.1. METHODS AND MATERIALS
B.1.a. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
B.1.b. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
B.1.c. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
B.1.d. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 0% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
B.1.e. A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED.
B.1.f. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
B.2. SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE)
B.3. SOD PLACEMENT
B.3.a. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
B.3.b. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.
B.3.c. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS.
B.3.d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.
B.3.e. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
B.3.f. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.
B.4. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.

SOIL EROSION GENERAL NOTES

(Rev. 6/2024)

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.
2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.
3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY
5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.
6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.
7. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT TRACT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.
8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

OVERALL SITE CONSTRUCTION SEQUENCE

(Rev. 06/2025)

§102.8(f)(7)

A. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
B. REFERENCES TO 'CONSERVATION DISTRICT' USED THROUGHOUT THIS SEQUENCE ARE MEANT TO REFER TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT.
C. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.
D. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
E. THE TERM 'PERMANENT STABILIZATION' USED THROUGHOUT THIS SEQUENCE IS MEANT TO DESCRIBE THE PROPER PLACING, GRADING, CONSTRUCTING, REINFORCING, LINING, AND COVERING OF SOIL, ROCK OR EARTH TO ENSURE THEIR PERMANENT RESISTANCE TO EROSION, SLIDING OR OTHER MOVEMENT. FOR AN EARTH DISTURBANCE TO BE PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED WITH ONE OF THE FOLLOWING: A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION; OR AN ACCEPTABLE BMP THAT PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.
F. FOR EACH OF THE 'CRITICAL STAGES' SPECIFIED BELOW, THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SAID BMP, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
G. SEDIMENT CONTROL FACILITIES, SUCH AS BASINS AND TRAPS, MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER ALSO TO THE MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED HEREIN FOR ADDITIONAL REQUIREMENTS DURING CONSTRUCTION.
H. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
1. STAKE OUT LIMIT OF DISTURBANCE.
2. INSTALL CONSTRUCTION ENTRANCE AS DESIGNATED ON THE PLANS.
3. INSTALL ALL PERIMETER TREE PROTECTION FENCING AND FILTER SOCK WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
4. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING PAD CONSTRUCTION CAN COMMENCE CONCURRENTLY WITH ON-SITE IMPROVEMENTS. NOTE THAT BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER.
   a. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE.
   b. THE CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE.
   c. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.
   d. INSTALL CULVERTS TO ACCESS LOTS 7 - 9.
7. INITIATE SANITARY SEWER INSTALLATION, BEGINNING WITH THE CONNECTION AT THE EXISTING MANHOLE (EXSMHD) AND CONNECTIONS INTO EVANS ROAD AND WORKING UP-SLOPE.
   a. PRIOR TO INSTALLATION WITHIN THE ROADWAY, ENSURE THAT THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE IN PLACE.
8. CRITICAL STAGE - INSTALLATION OF THE SUBSURFACE BASINS

INITIATE INSTALLATION OF THE SUBSURFACE BASINS
   a. INSTALLATION OF THE SUBSURFACE BASINS SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM
   b. INLETS DISCHARGING TO SUBSURFACE BASINS MUST BE BLOCKED IMMEDIATELY AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING FACILITIES.
   c. UPON INSTALLATION, THE CONTRACT SHALL REFER TO THE MANUFACTURERS SPECIFICATIONS REGARDING APPROPRIATE AMOUNT AND TYPE OF OF COVER THAT SHALL BE PLACE OVER TOP OF THE BASIN DURING CONSTRUCTION AND PRIOR TO AREA RECEIVING PERMANENT COVER.
9. CONTINUE WITH THE BALANCE OF EARTHWORK.
10. INSTALL UTILITIES (ELECTRIC, GAS, TELEPHONE, CABLE, ETC.) PRIOR TO CONNECTIONS IN EVANS ROAD, THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE TO BE IN PLACE.
11. INSTALL THE STONE SUBBASE FOR CURB AND INSTALL CURBING AND CRUSHED AGGREGATE BASE COURSE FOR PAVING.
12. BUILDING CONSTRUCTION MAY COMMENCE.
13. FINAL GRADE AND PLACE TOPSOIL IN ALL LANDSCAPE AREAS.
14. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
15. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
16. UPON PERMANENT STABILIZATION AND NOTIFICATION TO THE CONSERVATION DISTRICT, REMOVE ANY REMAINING EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
17. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ, 271.1 ET SEQ THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
18. DEMOBILIZE.
19. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

(Rev. 5/2024)

§102.4(b)(5)(v)

1. THE SUBJECT SITE DRAINS TO TREWELLYN CREEK, WHICH HAS A TSF, MF (TROUT STOCKING FISHES) CHAPTER 93 CLASSIFICATION.
2. THERE ARE WETLANDS LOCATED ON THE PROJECT SITE.
3. THE DEVELOPMENT IS IN NEITHER AN HQ NOR AN EV WATERSHED AND THEREFORE, NO BOUNDARIES ARE SHOWN.

RECYCLING OR DISPOSAL OF MATERIALS

(Rev. 01/2025)

§102.8(f)(11)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EX ON-SITE:
- TRASH (CANS, BOTTLES, ETC.)
- YARD WASTE (LEAVES, GRASS CLIPPINGS, ETC.)
- DEBRIS COLLECTED IN INLETS
- SEDIMENT CAPTURED IN ANY PCSM SCM

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH LOCAL REQUIREMENTS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

(Rev. 5/2024)

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

CRITICAL STAGES

(Rev. 5/2024)

- INSTALLATION OF UNDERGROUND DRY EXTENDED DETENTION BASINS W/ MRC
- INSTALLATION OF UNDERGROUND DRY EXTENDED DETENTION BASINS

MAINTENANCE, MONITORING AND INSPECTION PROGRAM

(Rev. 5/2024)

§102.4(b)(5)(x)

UNTIL THE SITE IS STABILIZED AND DURING CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS TO ENSURE THEIR EFFECTIVE AND EFFICIENT OPERATION. SEE EROSION AND SEDIMENT DETAILS FOR ADDITIONAL INSPECTION AND MAINTENANCE REQUIREMENTS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

INSPECTIONS SHALL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM OR DISCHARGING FROM THE SITE. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVERS MUST BE REPAIRED OR SUPPLEMENTED. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IF STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.

GRASSED AREAS SHALL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70 PERCENT DENSITY OR GREATER IN ACCORDANCE WITH PERMIT REQUIREMENTS. THE VEGETATIVE DENSITY MUST BE MAINTAINED TO BE CONSIDERED STABILIZED. AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS REQUIREMENT.

ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE OR IMPACTS TO RECEIVING WATERS.

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.

NONCOMPLIANCE REPORTING

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 FOLLOWING INFORMATION:

1. ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, 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.

TERMINATION OF COVERAGE

NOT: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPs IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO_PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGEMENT OF THE NOT, THE PERMITTEE WILL REMAIN RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPs AND PCSM BMPs ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

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 NOT 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.

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

LIMITATIONS FOR PENNSYLVANIA SOILS PERTAINING TO EARTH DISTURBANCE PROJECTS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/ STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
ABBOTSTOWN	X	C/S		X		X	X	X	X	X	X	X				X
BUCKINGHAM	X	C/S		X		X	X	X	X	X	X	X				X
CHALFONT	X	C/S		X		X	X	X	X	X	X	X				X
DOYLESTOWN	X	C/S	X	X		X	X	X	X	X	X	X				X
READINGTON	X	C/S		X		X	X	X	X	X	X	X				X

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. CUTBANKS CAVE RESOLUTIONS: CUT SLOPES SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. FINISHED SLOPES WILL NOT EXCEED 3:1. EXCAVATIONS SHALL BE PROPERLY SUPPORTED TO PREVENT CAVES.
2. CORROSIVE TO CONCRETE/STEEL RESOLUTIONS: MOST STORM DRAIN PIPES FOR THE SITE WILL BE HDPE.
3. DROUGHTY RESOLUTIONS: SELECT VEGETATIVE SPECIES THAT ARE TOLERANT TO DRY CONDITIONS. VEGETATED AREAS SHALL BE IRRIGATED. EXISTING TOPSOIL WILL BE UTILIZED.
4. EASILY ERODIBLE RESOLUTIONS: STABILIZATION SHALL TAKE PLACE UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES THAT WILL EXCEED FOUR DAYS, OR ANY STAGE THEREOF. STABILIZATION SHALL BE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. E&S CONTROLS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
5. DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE: ANY WATER DURING CONSTRUCTION SHALL BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN.
6. HYDRIC/HYDRIC INCLUSIONS RESOLUTIONS: NO WETLANDS ARE LOCATED ON THE PROJECT SITE.
7. LOW STRENGTH/LANDSLIDE PRONE RESOLUTIONS: FINISHED SLOPES WILL NOT EXCEED 3:1. PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT SLOPE FAILURES.
8. SLOW PERCOLATION RESOLUTIONS: PROVIDE DEWATERING DURING CONSTRUCTION ACTIVITIES. PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN. LANDSCAPING IS PROPOSED ON THE SITE TO ALLOW FOR INCREASED INFILTRATION AND EVAPO-TRANSPIRATION.
9. PIPING: PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN. THE MAJORITY OF THE PIPES USED ON SITE ARE HDPE REDUCING THE AMOUNT OF GROUNDWATER THAT WILL ENTER STORM PIPES.
10. POOR SOURCE OF TOPSOIL RESOLUTIONS: SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED THROUGHOUT THE SITE AS REQUIRED.
11. FROST ACTION RESOLUTIONS: DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
12. WETNESS: PUMPED WATER FILTER BAGS SHALL BE USED FOR PONDED WATER DURING CONSTRUCTION. PONDED WATER SHOULD BE DIRECTED TOWARDS AN E&S CONTROL BMP, SUCH AS A COMPOST FILTER SOCK OR A SEDIMENT BASIN.

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TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250561429 (SURVEY)

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PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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CHALFONT, PA 18914
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Fax: (215) 996-9102
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C.D. PUZINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE082200

SHEET TITLE:

EROSION AND SEDIMENT CONTROL NOTES

SHEET NUMBER:

C-802
16 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A---->LAYOUT: C-802 ERON
SL

SEEDING SPECIFICATIONS

1. SEEDING DATES
   A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
   B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
   A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
      ANNUAL RYE (40 POUNDS / ACRE PLS)
      OR SPRING OATS (96 POUNDS / ACRE PLS)
      OR WINTER RYE (168 POUNDS / ACRE PLS)
      (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5)
   B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
      I. NURSE CROP (SELECT ONE):
      ANNUAL RYE (10 POUNDS / ACRE PLS)
      OR SPRING OATS (64 POUNDS / ACRE PLS)
      OR WINTER RYE (56 POUNDS / ACRE PLS)
      (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
      II. PERMANENT SEED MIX:
      FINE FESCUE (35 POUNDS / ACRE PLS)
      OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
      OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
      (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2) PER PADEP: TALL FESCUES ARE NOT TO BE USED DUE TO THEIR INVASIVE STATUS, DESPITE THE MENTION OF TALL FESCUES WITHIN THE E&S MANUAL.
3. PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
   A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE.
   B. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED: MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 ((%PURE X %GERMINATION) / 100)
   C. DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
4. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
   A. SEEDING SHALL TAKE PLACE DURING TIMEFRAME NOTED IN THE SEEDING DATES SECTION ABOVE.
   B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
      I. DRILL SEEDING
      II. BROADCAST SEEDING (TWO DIRECTIONS)
      III. HYDROSEEDING (TWO DIRECTIONS)
   D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED:
      I. TEMPORARY STABILIZATION WITH STRAW:
         1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
         2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
      II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED):
         1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
         2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
         3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
   E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED
5. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF ¼" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

(Rev. 5/2024)

§102.4(b)(5)(xiv)

REGARDING THE LOCATIONS OF EXISTING RIPARIAN BUFFERS RELATIVE TO THE LIMIT OF DISTURBANCE AND WHETHER PROPOSED INFILTRATION FACILITIES ARE OUTSIDE OF PROPOSED GRADING AREAS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS.
- THERE ARE NO PROPOSED INFILTRATION BMPs OUTSIDE OF PROPOSED GRADING AREAS.

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

(Rev. 5/2024)

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 THE APPLICANT.

1. 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).

2. 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 FILL".

3. 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 THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

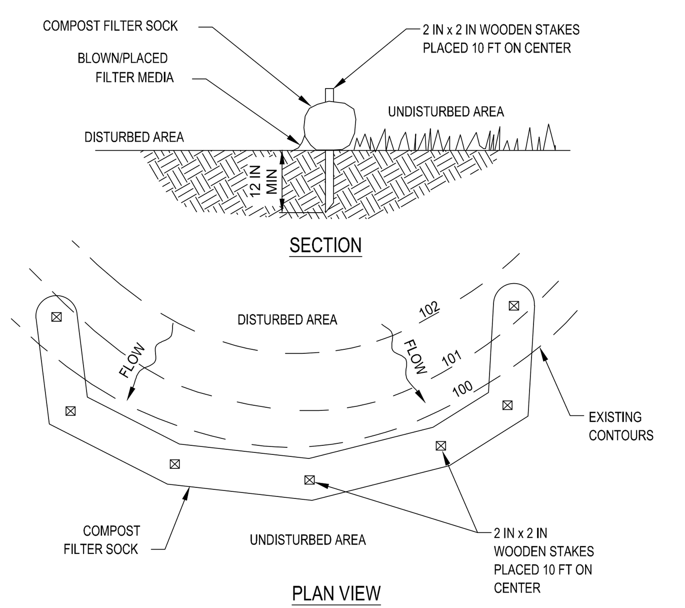
4. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, 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 "MANAGEMENT OF FILL".

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. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

STANDARD E&S PLAN NOTES

(Rev. 5/2024)

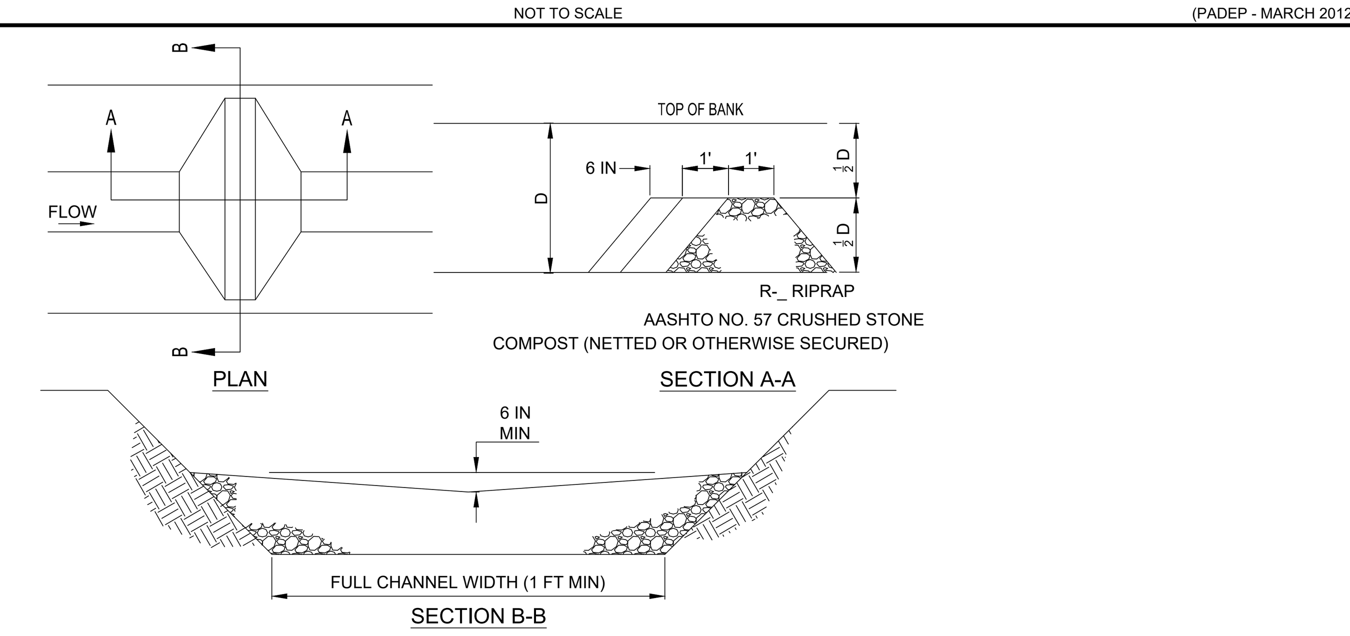
1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL 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.
2. 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.
3. 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.
4. 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.
6. 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.
7. 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
8. 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.
9. 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.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ, 271.1, AND 287.1 ET. SEQ NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
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 FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
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 SITE EXCEPT THROUGH EXISTING STABILIZED ACCESS POINTS & APPROVED ROCK CONSTRUCTION ENTRANCES SHOWN ON PLAN.
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 -- 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. 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. CUT 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.
29. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
30. 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.
31. 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. 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 TO SCHEDULE A FINAL INSPECTION.
33. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING 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.



FILTREXX
NOTES:
- SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.2
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- 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 FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS, PHOTODEGRADABLE SOCKS AFTER ONE (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 (PADEP - MARCH 2012)



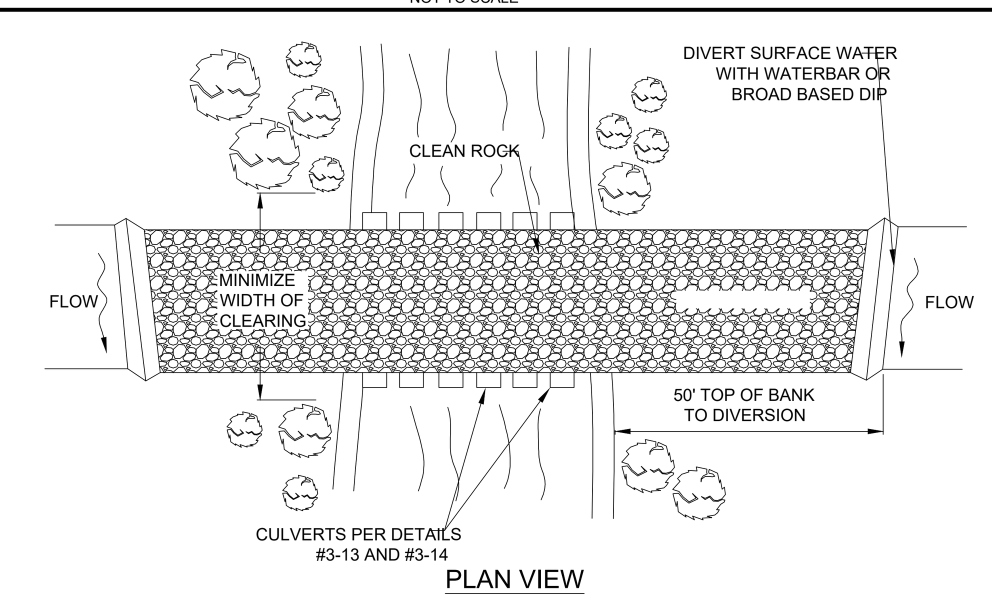
NOTES:

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS.

IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

STANDARD CONSTRUCTION DETAIL #4-14 ROCK FILTER

NOT TO SCALE (PADEP - MARCH 2012)



NOTES:

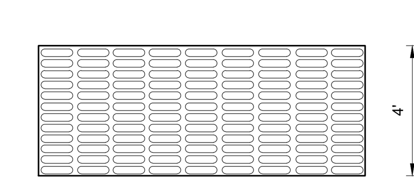
WATERBARS AND BROAD-BASED DIPS SHALL DISCHARGE TO SEDIMENT REMOVAL FACILITY.

CLEAN ROCK SHALL CONFORM TO CHAPTER 105 PERMITTING REQUIREMENTS.

FOLLOW PERMIT CONDITIONS REGARDING REMOVAL OF CROSSING.

STANDARD CONSTRUCTION DETAIL #3-12 TEMPORARY STREAM CROSSING - PLAN VIEW

NOT TO SCALE (BE-X010101 - 06/2023)



NOTES:
1. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME THE FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWN CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION.
2. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 3 OF THE HEIGHT OF THE POST. FOR EXAMPLE A 6 FOOT POST SHOULD BE AT LEAST 2 FEET IN THE GROUND.
3. SPACE POSTS EVERY 6 TO 8 FEET.
4. SECURE FENCING TO POSTS WITH NYLON CABLE TIES. WOOD STRIPS MAY ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

VISI PERIMETER FENCE (WOODLAND PROTECTION)

NOT TO SCALE (PA-O030201 - 09/2023)

TABLE 4.1
Compost Sock Fabric Minimum Specifications

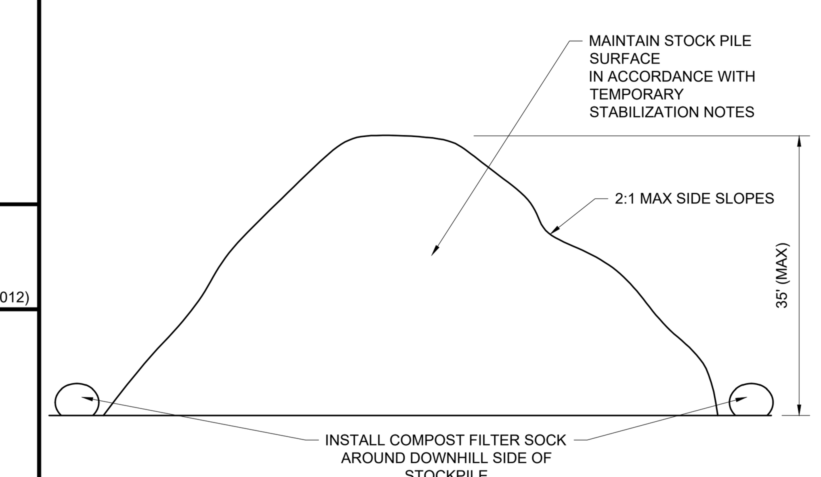
Material Type	3 mil HDPE	5 mil HDPE	3 mil HDPE	Multi-filament Polypropylene (MFPP)	Heavy Duty Multi-filament Polypropylene (MFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting	Two-ply systems				
	Continously wound				
	Fusion-welded junctures				
	3/4" x 3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (woven layer and non-woven fleece 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					

TABLE 4.2
Compost Standards

Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 60%% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

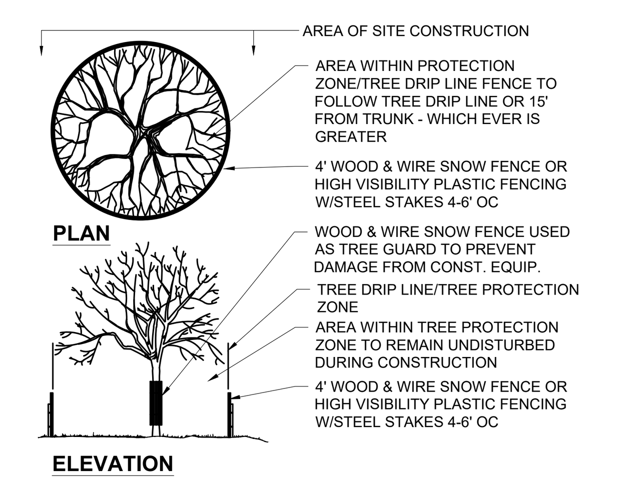
COMPOST SOCK TABLES

NOT TO SCALE (X0000000)



TEMPORARY SOIL STOCKPILE

NOT TO SCALE (PA-O060101 - 09/2023)



TREE PROTECTION DURING SITE CONSTRUCTION

NOT TO SCALE (PA-O030202 - 09/2023)

BOHLER//

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250561429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER//
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZINAS

SHEET TITLE:

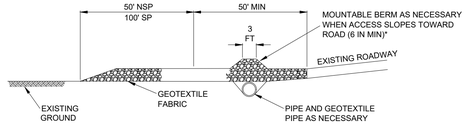
EROSION AND SEDIMENT CONTROL DETAILS

SHEET NUMBER:

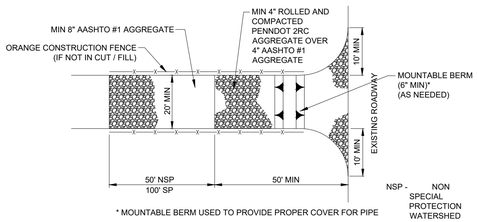
C-803

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A----->LAYOUT: C-803 EROD
SL



PROFILE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

PLAN VIEW

NOTES:

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

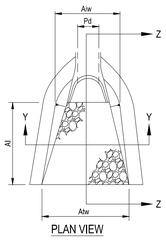
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH 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 (ABACT)
ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE (PADEP - MARCH 2012)



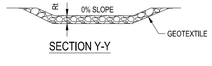
PLAN VIEW

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R-_	RIPRAP THICK Rt (IN)	APRON LENGTH Ai (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
A-10	18	3	9.0	8.0	4.5	12.5
E-10	24	3	9.0	12.0	6.0	18.0
F-10	24	3	9.0	12.0	6.0	18.0
G-10	24	3	9.0	12.0	6.0	18.0
H-10	24	3	9.0	12.0	6.0	18.0
I-10	24	3	9.0	12.0	6.0	18.0

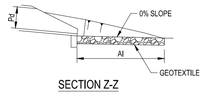
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.



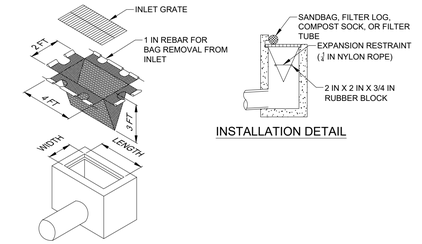
SECTION Y-Y



SECTION Z-Z

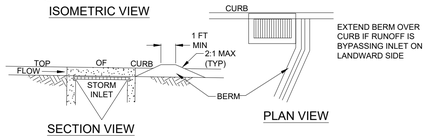
STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

NOT TO SCALE (PADEP - MARCH 2012)



ISOMETRIC VIEW

INSTALLATION DETAIL



SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

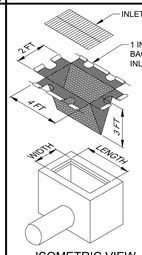
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

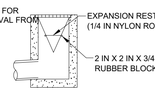
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET

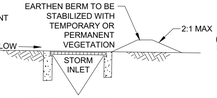
NOT TO SCALE (PADEP - MARCH 2012)



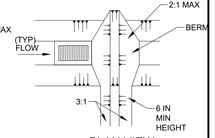
ISOMETRIC VIEW



INSTALLATION DETAIL



SECTION VIEW



PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

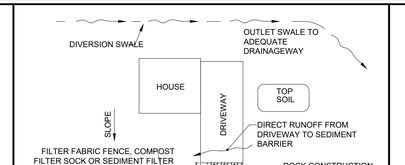
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

NOT TO SCALE (PADEP - MARCH 2012)



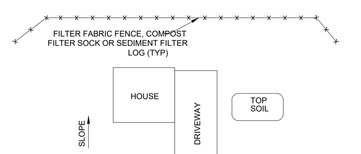
PLAN VIEW

NOTES:

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER THE LOT EXTENDS MORE THAN 150 FEET ABOVE THE ROADWAY OR WHERE RUNOFF FORM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER AND/OR CONTRACTOR MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING A DISCHARGE POINT FOR THIS CHANNEL.

STANDARD CONSTRUCTION DETAIL #10-1
TYPICAL ON-LOT BMPS FOR LOT ABOVE ROADWAY

NOT TO SCALE (PADEP - MARCH 2012)



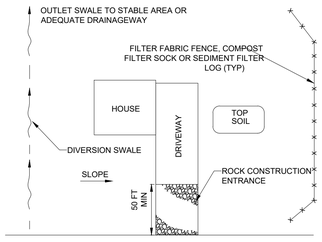
PLAN VIEW

NOTES:

THE AREA DOWNSLOPE OF THE FILTER FENCE/COMPOST SOCK BARRIER/SEDIMENT FILTER LOG MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

STANDARD CONSTRUCTION DETAIL #10-2
TYPICAL ON-LOT BMPS FOR LOT BELOW ROADWAY

NOT TO SCALE (PADEP - MARCH 2012)



PLAN VIEW

NOTES:

THE AREA DOWNSLOPE OF THE FILTER FENCE/COMPOST SOCK BARRIER/SEDIMENT FILTER LOG MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

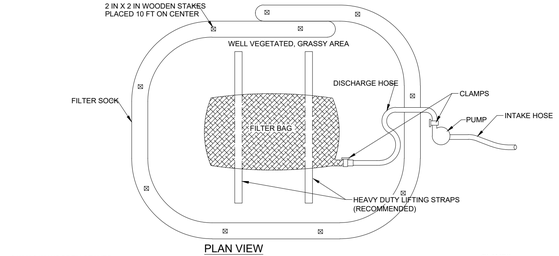
THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER RUNOFF FROM AREAS ABOVE THE LOT ARE NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER AND/OR CONTRACTOR MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING A DISCHARGE POINT FOR THIS CHANNEL.

IN AREAS WHERE SLOPE IS AT AN OBLIQUE ANGLE TO THE ROADWAY, BMPS SHALL BE ADJUSTED ACCORDINGLY.

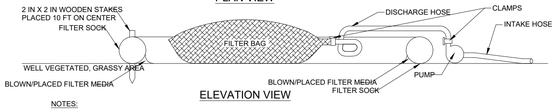
DIVERSION CHANNEL MAY OUTLET TO ROADSIDE DITCH OR STORM SEWER SYSTEM, BUT NOT ONTO STREET OR ROADWAY.

STANDARD CONSTRUCTION DETAIL #10-3
TYPICAL ON-LOT BMPS FOR LOT ALONG ASCENDING OR DESCENDING ROADWAY

NOT TO SCALE (PADEP - MARCH 2012)



PLAN VIEW



ELEVATION VIEW

NOTES:

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

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

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

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

AS THE PROPOSED DEVELOPMENT IS WITHIN AN IMPAIRED WATERSHED, ALL FILTER BAGS MUST BE SURROUNDED BY A COMPOST FILTER SOCK RING OR OPERATED IN CONJUNCTION WITH A SUMP PIT.

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.

STANDARD CONSTRUCTION DETAIL #3-16 (ABACT)
PUMPED WATER FILTER BAG

NOT TO SCALE (PADEP - MARCH 2012)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONCEPTS OF THIS PLAN IS NOT TO BE DISCLOSED OR USED FOR ANY PURPOSE WITHOUT THE PRIOR WRITTEN AUTHORIZATION FROM BOHLER, AND IF APPROVED, SHALL BE LIMITED TO THE PROJECT AS DESCRIBED IN THE AGREEMENT BETWEEN BOHLER AND CLIENT.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.D. PUZYNIAS
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. 082000

SHEET TITLE:

EROSION AND SEDIMENT CONTROL DETAILS

SHEET NUMBER:

C-804
18 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-CNDS-PAA250079.00-0A-----LAYOUT C-804 EROD
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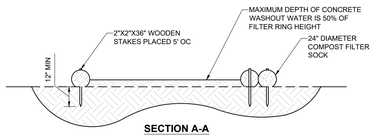
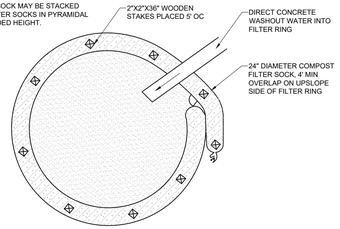


SECTION A-A

NOTES:

1.) INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2.) 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



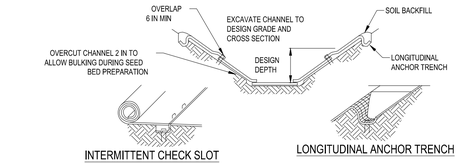
PLAN

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

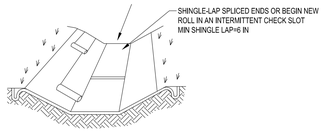
CONCRETE WASHOUT NOTES:
-UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.
-WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS.
-SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS. -THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND. -ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. -ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY. -PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION

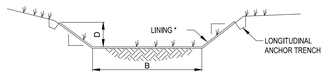
NOT TO SCALE (PA-O020201 - 09/2023)



PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM.



ISOMETRIC VIEW



CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

NOTES:

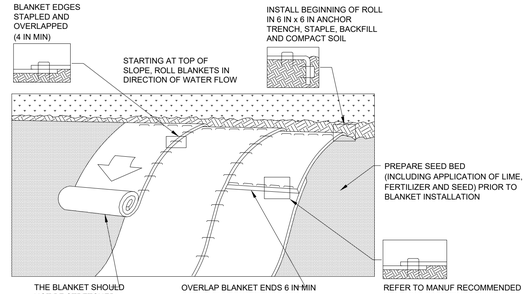
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL

NOT TO SCALE (PADEP - MARCH 2012)



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

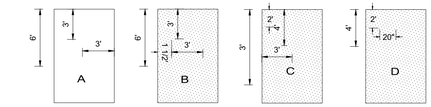
PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

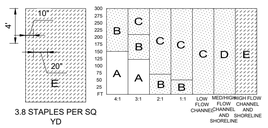
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



.7 STAPLES PER SQ YD 1.2 STAPLES PER SQ YD 1.75 STAPLES PER SQ YD 3.5 STAPLES PER SQ YD



3.8 STAPLES PER SQ YD

NOTE:
STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS WILL VARY DEPENDING UPON APPLICATION TYPE, SLOPE LENGTH, SLOPE GRADE, SOIL TYPE AND ANNUAL RAINFALL. THE FOLLOWING ARE GENERAL STAPLE RECOMMENDATIONS BASED ON SLOPE LENGTH, SLOPE GRADE, AND ESTIMATED RUNOFF. SPECIFIC STAPLE PLACEMENT PATTERNS ARE ILLUSTRATED IN DIAGRAMS A,B,C,D, AND E. INCREASED STAPLE RATES MAY BE NECESSARY DEPENDING UPON SITE CONDITIONS. FOR DETAILED SPECIFIC RECOMMENDATIONS, CONTACT YOUR NEAREST AUTHORIZED NORTH AMERICAN GREEN DISTRIBUTOR OR CALL NORTH AMERICAN GREEN TECHNICAL SERVICES.

EROSION CONTROL BLANKET STAPLE PATTERN GUIDE

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE (PADEP - MARCH 2012)

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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WWW.PA1CALL.ORG
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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
PERSONAL SEAL LICENSE NUMBER PE090200
COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:

EROSION AND SEDIMENT CONTROL DETAILS

SHEET NUMBER:

C-805
19 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLER\ENGX-NETSHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A-----1-LAYOUT C-805 EROD
SL

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

50 25 12.5 0 50

SCALE: 1" = 50'

(BLOCK 4 UNIT 12)
PARID 39-00-01156-00-2
GREGORY & KATHRYN HORN
(1013 EVANS RD)

(BLOCK 4 UNIT 13)
PARID 39-00-01159-00-8
ROBIN J. & J. TRISTAN STANCATO
(1017 EVANS RD)

(BLOCK 4 UNIT 93)
PARID 39-00-01159-10-7
MICHAEL L. & ANDREA P. BROCKWAY
(1019 EVANS RD)

EVANS ROAD (SR 2016)
INTER-COMMUNITY ROADWAY (80 FT. ULT. R.O.W)

(BLOCK 9 UNIT 60)
PARID 39-00-01105-00-8
DAVE & JESSICA KELLER
(1004 EVANS RD)

(BLOCK 9 UNIT 57)
PARID 39-00-01108-00-5
WALTER W. & STACY K. WYCKOFF
(1010 EVANS RD)

(BLOCK 9 UNIT 63)
PARID 39-00-01117-00-5
TAE J. & YUJIN K. LEE
(1020 EVANS RD)

BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2
WHITEFIELD HOMES, LLC
(1348 SUMNEYTOWN PIKE)
D.B. 6402, PG. 1105

LINE OF DISCHARGE 1

PROP STORM EASEMENT

PROP. 20' WIDE STORM EASEMENT

(BLOCK 8 UNIT 65)
PARID 39-00-03957-01-8
SISTERS OF MERCY OF AMERICAS
MID-ALANTIC COMMUNITY INC
(1349 SUMNEYTOWN PIKE)

SUMNEYTOWN PIKE (COUNTY ROAD)
MAJOR ROADWAY (100 FT. ULT. R.O.W.)

(BLOCK 9 UNIT 77)
PARID 39-00-04087-00-5
PETER R. & PAMELA T. McKERNAN
(1347 SUNSET DR)

SUNSET DRIVE (T-422)

(BLOCK 9 UNIT 70)
PARID 39-00-04084-00-8
LEO J. AND DOLORES M. KITUSKIE
(1348 SUNSET DRIVE)

FOREST DRIVE (T-421)

LINE OF DISCHARGE 4

AREA OF NO DISTURBANCE

(BLOCK 9 UNIT 76)
PARID 39-00-01246-00-2
LAURENCE AND HELEN KIRSCHNER
(912 FOREST DR)

(BLOCK 9 UNIT 84)
PARID 39-00-01243-00-5
TERRY J. SIMAN & JANIE B. GLATT
(916 FOREST DR)

AREA OF NO DISTURBANCE

LINE OF DISCHARGE 2

LINE OF DISCHARGE 3

BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2
WHITEFIELD HOMES, LLC
(1348 SUMNEYTOWN PIKE)
D.B. 6402, PG. 1105

(BLOCK 8 UNIT 65)
PARID 39-00-03957-01-8
SISTERS OF MERCY ACADEMY HIGH SCHOOL
(1345 SUMNEYTOWN PIKE)

(BLOCK 9 UNIT 87)
PARID 39-00-04048-00-8
IRAJ AGHILY & MAHNEZ REZVAN
(1332 SUMNEYTOWN PIKE)

(BLOCK 9D UNIT 4)
PARID 39-00-03935-66-1
DEAN M. & KATHRYN A. BROWN
(1003 STONEBRIDGE RD)

(BLOCK 9D UNIT 3)
PARID 39-00-03935-64-3
ROBERT S. SHENG & MIAO HSUN
(1002 STONEBRIDGE RD)

(BLOCK 9D UNIT 2)
PARID 39-00-03935-62-5
JOSEPH A. & BARBARA B. RABSO
(1001 STONEBRIDGE RD)

(BLOCK 9D UNIT 1)
PARID 39-00-03935-60-7
ABHIMANYU SINGH & ASH DABAS
(1000 STONEBRIDGE RD)

(BLOCK 9 UNIT 5)
PARID 39-00-04045-00-2
CHRISTOPHER SWENSON & ERIN NARDELLA
(1328 SUMNEYTOWN PIKE)

DA-1E(b)
DA-1E(a)
DA-2E(b)
DA-4E(a)
DA-2E(a)
DA-3E(a)

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGI/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

**1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2**

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CHRISTOPHER D. PUZINAS
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE088000

SHEET TITLE:

PRE DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:

C-806
20 OF 29

ORG. DATE - 05/15/2026

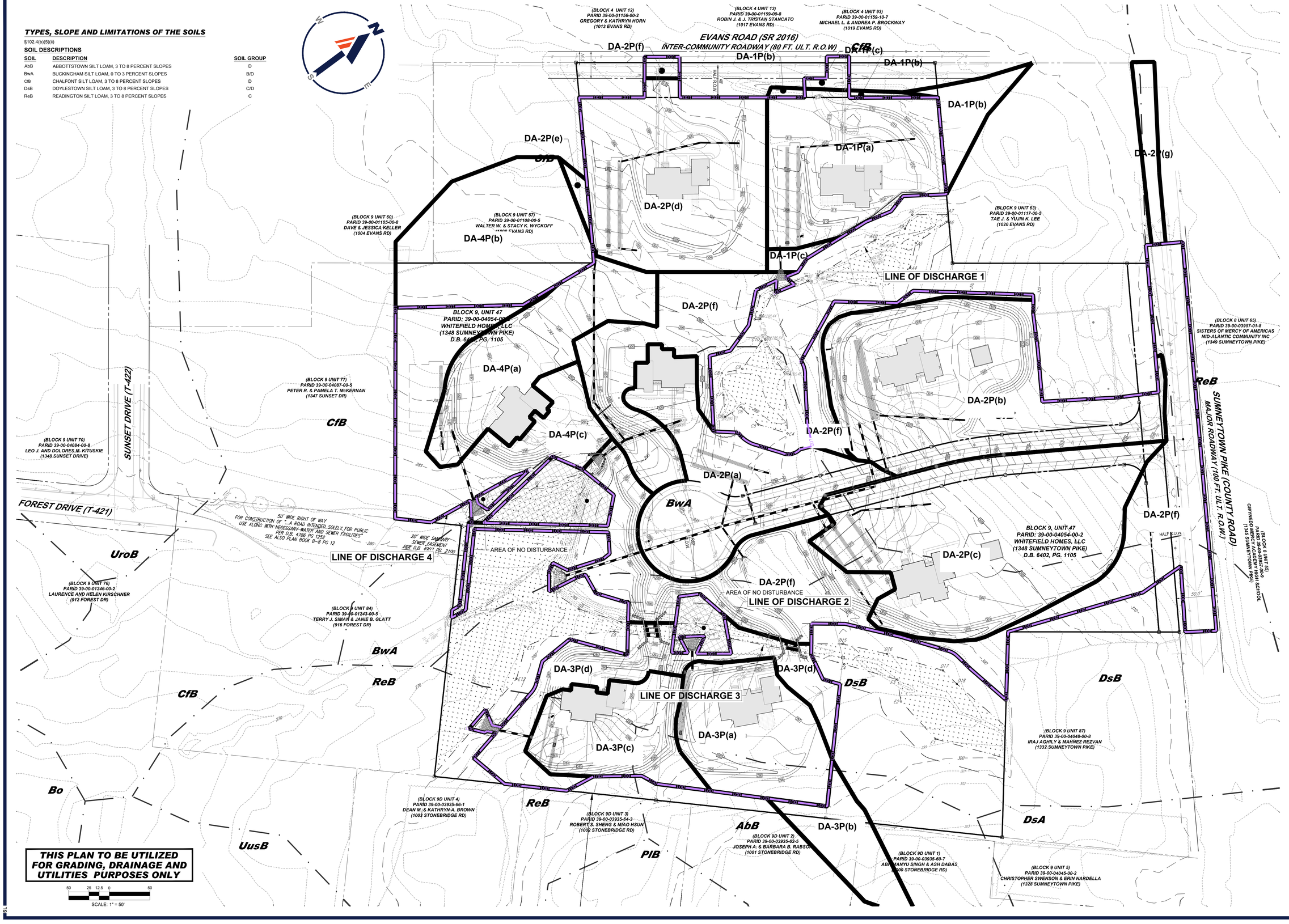
May 15, 2026
I:\BOHLER\ENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----LAYOUT C-806 PRED

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
BwA	BUCKINGHAM SILT LOAM, 0 TO 3 PERCENT SLOPES	B/D
CfB	CHALFONT SILT LOAM, 3 TO 8 PERCENT SLOPES	D
DsB	DOYLESTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	C/D
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	C



THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

50 25 12.5 0 50

SCALE: 1" = 50'

May 15, 2026
I:\BOHLER\ENG\-NET\SHARE\SPA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-0A-----1A LAYOUT: C-807 PSTD
SL

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CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
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PRIMAS
PENNSYLVANIA

SHEET TITLE:

POST DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:

C-807
21 OF 29

ORG. DATE - 05/15/2026

TYPES, SLOPE AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
AbB	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	D
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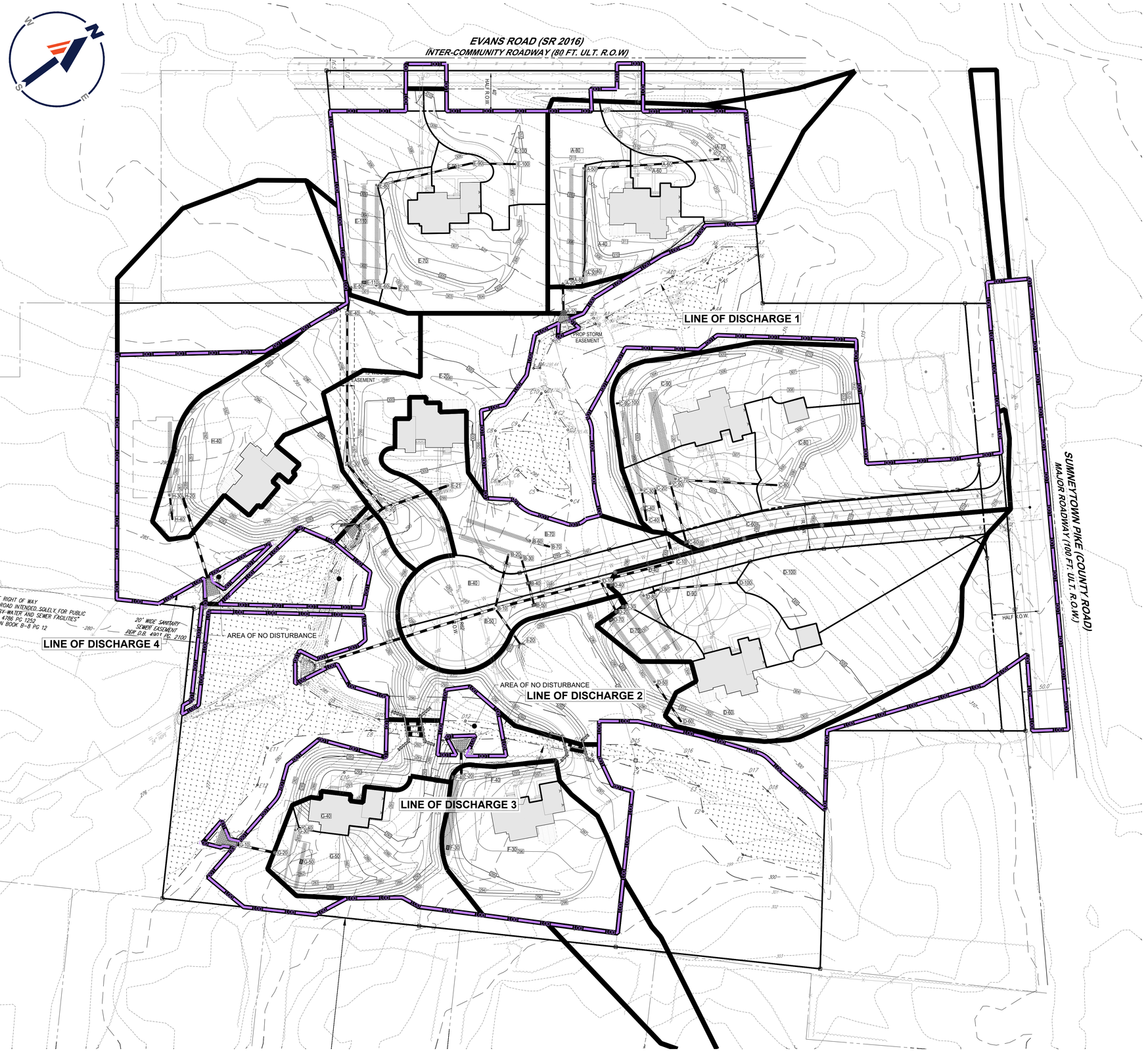

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50 25 12.5 0 50

SCALE: 1" = 50'

May 15, 2026
I:\BOHLER\NG-NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAA250079.00-DA----\LAYOUT: C-808 INTD
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DRAWN BY:	LGI/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

**1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE090300

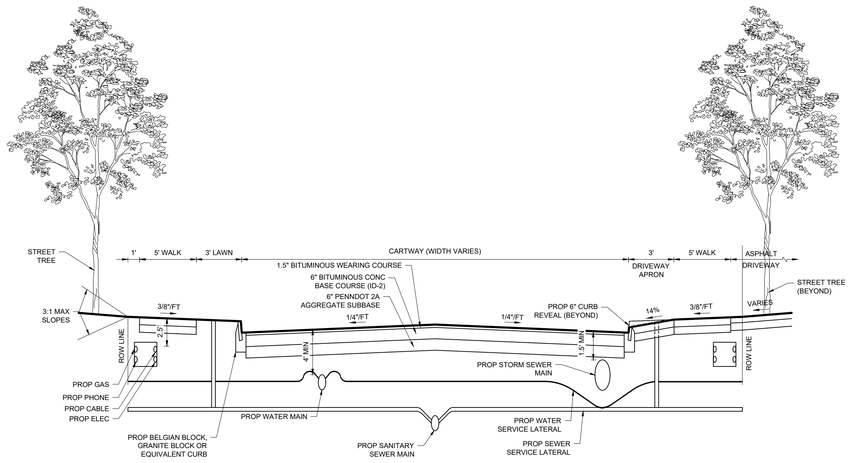
SHEET TITLE:

INLET DRAINAGE AREA PLAN

SHEET NUMBER:

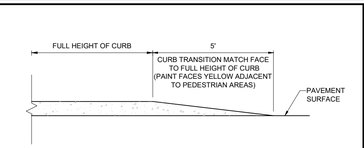
C-808
22 OF 29

ORG. DATE - 05/15/2026



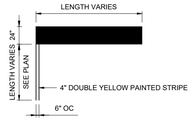
TYPICAL ROADWAY CROSS SECTION AND PAVING

NOT TO SCALE (PA-S040301 - 09/2023)



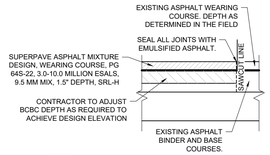
TAPERED CURB

NOT TO SCALE (PA-S020203 - 09/2023)



WHITE PAINTED STOP BAR

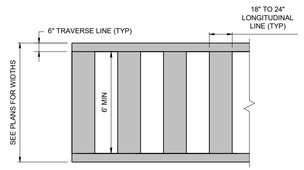
NOT TO SCALE (PA-S059903 - 09/2023)



NOTES:
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND PUBLICATION 242 (PAVEMENT POLICY MANUAL)
2. THE PROPOSED OVERLAY THICKNESS MUST BE AS INDICATED, OR MATCH THE EXISTING AS FOUND IN THE FIELD, WHICHEVER IS GREATER. A LESSER WEARING COURSE THICKNESS IS NOT PERMITTED, UNLESS OTHERWISE DEEMED ACCEPTABLE BY STATE OR LOCAL AUTHORITIES.

MILL AND OVERLAY

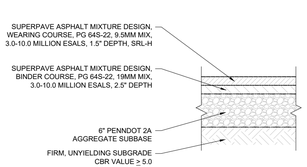
NOT TO SCALE (PA-S010401 - 09/2023)



NOTES:
1. THIS TYPE OF MARKING SHOULD BE USED AT LOCATIONS WHERE SUBSTANTIAL NUMBERS OF PEDESTRIANS CROSS WITHOUT ANY OTHER TRAFFIC CONTROL DEVICE. AT LOCATIONS WHERE PHYSICAL CONDITIONS ARE SUCH THAT ADDED VISIBILITY OF THE CROSSWALK IS NECESSARY, OR AT PLACES WHERE PEDESTRIANS MIGHT NOT BE EXPECTED.
2. ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS AMENDED.
3. TRAVERSE AND LONGITUDINAL LINES SHALL EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
4. ALL CROSSWALK TRAVERSE LINES SHALL BE WHITE THERMOPLASTIC, LONGITUDINAL LINES SHALL BE PAINTED WHITE. ALL LINES AND NEUTRAL AREAS SHALL BE OF EQUAL WIDTHS.
5. WARNING SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MUTCD, AS AMENDED.

HIGH VISIBILITY CROSSWALK WITH BORDER (PERPENDICULAR TO INTERSECTION)

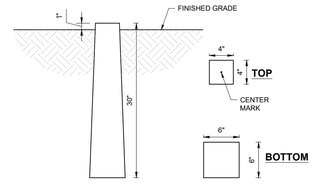
NOT TO SCALE (PA-S050401 - 09/2023)



NOTES:
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).
2. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PAVEMENT DESIGN RECOMMENDATIONS. IN CASE OF ANY DISCREPANCIES, THE GEOTECHNICAL REPORT RECOMMENDATIONS SHALL SUPERSEDE.

STANDARD ASPHALT PAVEMENT

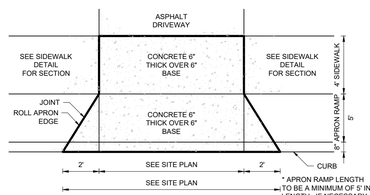
NOT TO SCALE (PA-S010101 - 06/2025)



1.) SPECIFICATIONS:
- CLASS 'A' CONCRETE- MINIMUM STRENGTH (3,000 P.S.I. @ 28 DAYS)
- STEEL REINFORCEMENT (#4 REBAR)

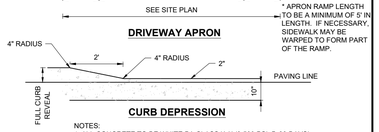
SURVEYOR'S MONUMENT

NOT TO SCALE (PA-S130102 - 07/2024)



* APRON RAMP LENGTH TO BE A MINIMUM OF 5' IN LENGTH. IF NECESSARY, SIDEWALK MAY BE WARPED TO FORM PART OF THE RAMP.

DRIVEWAY APRON

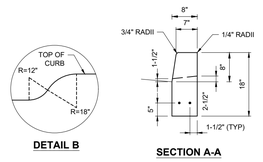


CURB DEPRESSION

NOTES:
1. ALL CONCRETE TO BE WHITE PA CLASS 'AA' (3,500 PSI @ 28 DAYS)
2. BASE TO BE PENNDOT 2A AGGREGATE, MECHANICALLY TAMPED.
3. ALL JOINTS TO BE FILLED WITH 1/4" PREMOULDED EXPANSION JOINT MATERIAL.

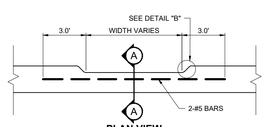
CONCRETE DRIVEWAY APRON

NOT TO SCALE (PA-S040101 - 09/2023)



DETAIL B

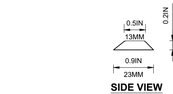
SECTION A-A



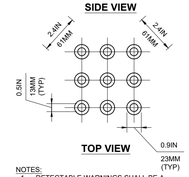
PLAN VIEW

DEPRESSED CURB

NOT TO SCALE (PA-S020204 - 09/2023)



SIDE VIEW

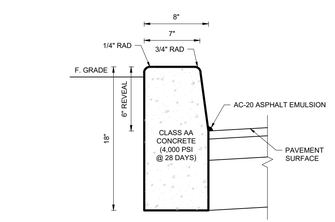


TOP VIEW

NOTES:
1. DETECTABLE WARNINGS SHALL BE A PRE-MANUFACTURED ARMOUR-TILE TACTILE SYSTEM OR APPROVED EQUIVALENT.
2. CONTRACTOR TO COORDINATE SPECIFIC SYSTEM AND MATERIALS TO BE UTILIZED WITH THE ENGINEER TO ENSURE LOCAL, STATE AND A.D.A. COMPLIANCE PRIOR TO CONSTRUCTION.

TRUNCATED DOME PATTERN FOR ADA DETECTABLE WARNING SURFACES (FOR USE IN DOT ROADWAYS)

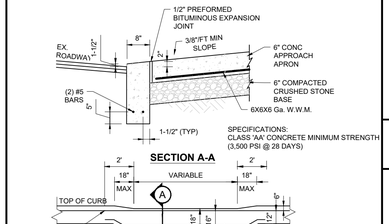
NOT TO SCALE (PA-S030501 - 09/2023)



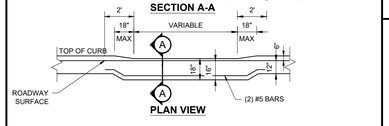
NOTES:
1. EXPANSION JOINTS, USING 3/4" PREMOLDED EXPANSION JOINT FILLER, SHALL BE PLACED WHERE CURB IS COMPLETED AT THE END OF EACH WORKDAY OR MEETS STRUCTURES, WHICHEVER IS SHORTER.
2. CONTRACTION JOINTS SHALL BE SPACED IN UNIFORM LENGTHS AND NO MORE THAN 20' APART. CONTRACTION JOINTS SHALL BE RECESSED 2" FROM THE TOP AND FRONT OF THE CURB.

TYPICAL CONCRETE CURB

NOT TO SCALE (PA-S020201 - 10/2024)



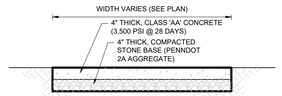
SECTION A-A



PLAN VIEW

DEPRESSED CURB WITH CONCRETE APPROACH APRON

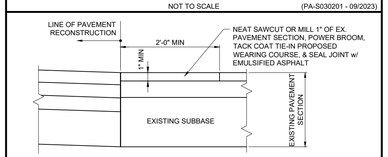
NOT TO SCALE (PA-S020205 - 09/2023)



EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.

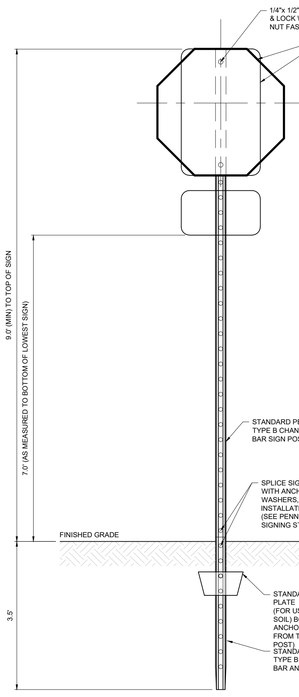
CONCRETE SIDEWALK

NOT TO SCALE (PA-S030201 - 09/2023)



PAVEMENT TIE-IN

NOT TO SCALE (PA-S019901 - 09/2023)



NOTES:
1.) POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN

2.) SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B, AS AMENDED.

3.) SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R SERIES), WARNING (W SERIES) OR OTHER APPROVED SIGNS SHALL CONFORM TO THE PENNDOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED, UNLESS OTHERWISE SPECIFIED.

4.) SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES, GUIDE RAILS OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.

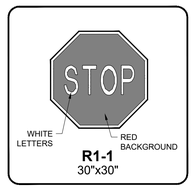
5.) ALONG NON-CURBED LOCAL ROADWAYS SIGNS SHALL BE SETBACK 6.0' FROM THE SHOULDER/PAVING EDGE AND SHALL BE AT A HEIGHT 5.0' ABOVE THE EDGE OF PAVEMENT SURFACE.

6.) ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.

7.) FOR "RESERVED PARKING SIGN" (R7-8) REFER TO DETAILS AND SPECIFIED MOUNTING HEIGHTS WHICH ARE LOWER FOR INCREASED VISIBILITY PER ADA REGULATIONS.

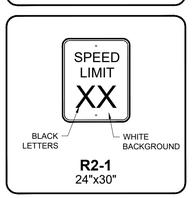
STANDARD POLE MOUNTED SIGN INSTALLATION

NOT TO SCALE (PA-S060201 - 09/2023)

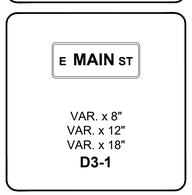


R1-1
30"x30"

W11-02
30"x30"



R2-1
24"x30"



VAR. x 8"
VAR. x 12"
VAR. x 18"
D3-1

TRAFFIC SIGN DETAILS

NOT TO SCALE

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C. PATRICK RIZZINAS — COMMONWEALTH OF PENNSYLVANIA — PROFESSIONAL ENGINEER — PENNSYLVANIA LICENSE NO. PE 090000

SHEET TITLE:

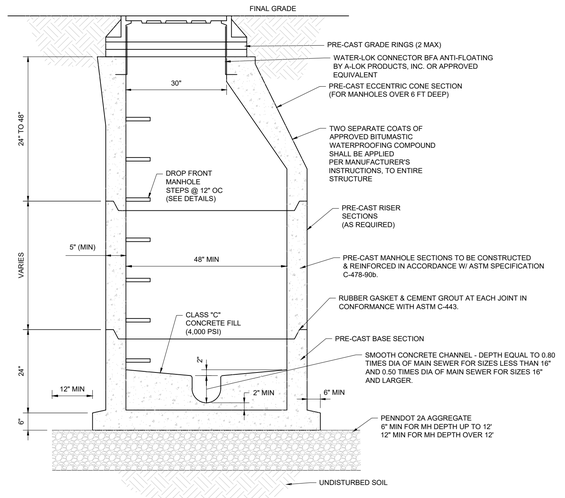
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901
23 OF 29

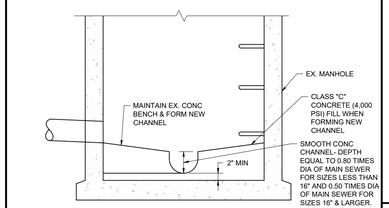
ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A-----LAYOUT: C-901 DETL

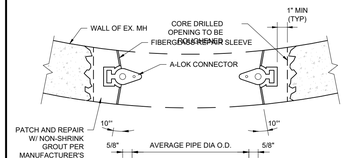


PRECAST SANITARY MANHOLE

NOT TO SCALE (PA-U020101 - 09/2023)



CROSS-SECTION

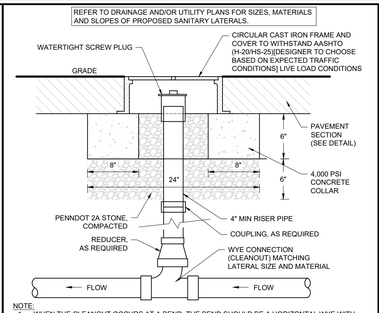


NOTE: CLEAN & LUBRICATE A-LOK CONNECTOR AND THE PIPE END WHICH WILL BE INSERTED INTO A-LOK PRIOR TO MAKING CONNECTION.

SECTION A-A

SANITARY PIPE CONNECTION TO EXISTING MANHOLE

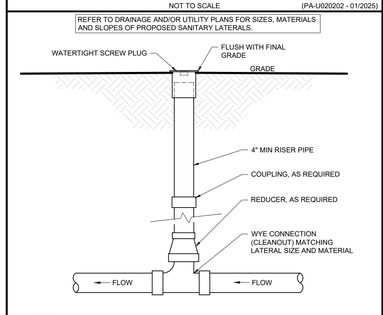
NOT TO SCALE (PA-U020401 - 09/2023)



NOTE:
1. WHEN THE CLEANOUT OCCURS AT A BEND, THE BEND SHOULD BE A HORIZONTAL WYE WITH CLEANOUT IN LINE WITH DOWNSTREAM PIPE. RISER IS CONNECTED TO THE WYE VIA 90 DEGREE ELBOW.

SANITARY CLEANOUT IMPERVIOUS SURFACES

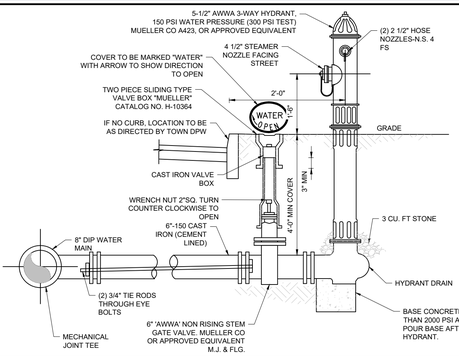
NOT TO SCALE (PA-U020202 - 01/2025)



NOTE:
1. WHEN THE CLEANOUT OCCURS AT A BEND, THE BEND SHOULD BE A HORIZONTAL WYE WITH CLEANOUT IN LINE WITH DOWNSTREAM PIPE. RISER IS CONNECTED TO THE WYE VIA 90 DEGREE ELBOW.

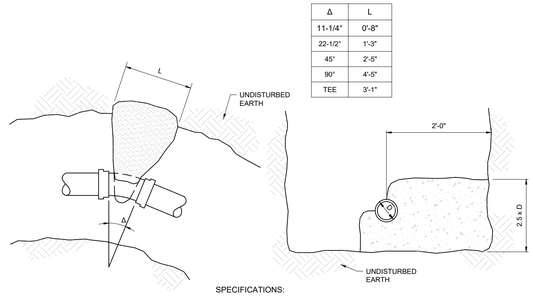
SANITARY CLEANOUT LANDSCAPE AREAS

NOT TO SCALE (PA-U020201 - 01/2025)



TYPICAL HYDRANT AND VALVE INSTALLATION

NOT TO SCALE (PA-U030101 - 09/2023)



Δ	L
11-1/4°	0'-8"
22-1/2°	1'-3"
45°	2'-5"
90°	4'-5"
TEE	3'-1"

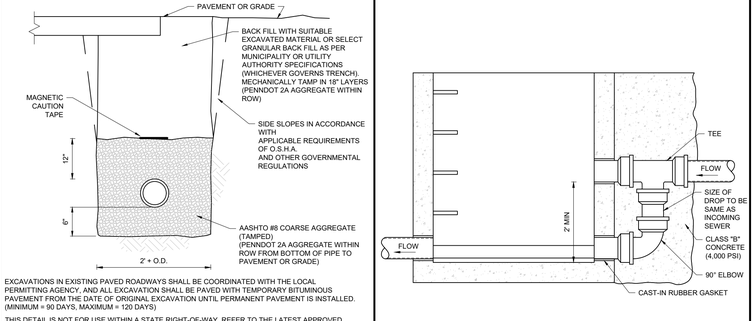
SPECIFICATIONS:
CONCRETE MINIMUM STRENGTH (4,000 PSI @ 28 DAYS)

PLAN OF HORIZONTAL BEND

SECTION A-A

THRUST BLOCK

NOT TO SCALE (PA-U030501 - 09/2023)

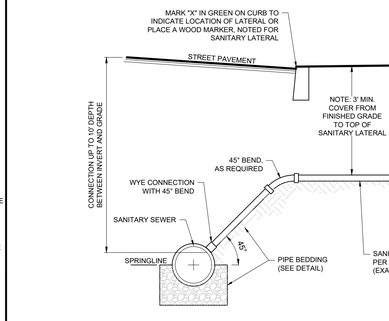


EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

THIS DETAIL IS NOT FOR USE WITHIN A STATE RIGHT-OF-WAY. REFER TO THE LATEST APPROVED DOT SPECIFICATIONS FOR TRENCH BEDDING WITHIN A STATE RIGHT-OF-WAY.

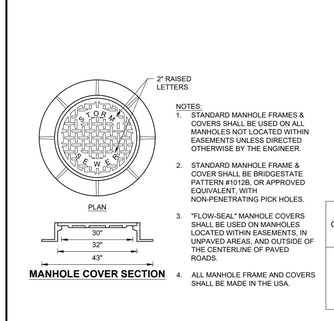
TRENCH BEDDING CLASSIFICATION (SANITARY MAIN)

NOT TO SCALE (PA-U050202 - 09/2023)



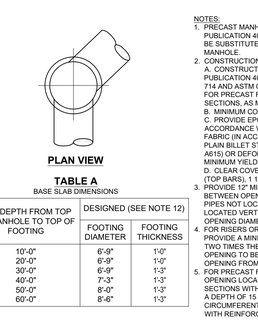
TYPICAL SANITARY SEWER LATERAL

NOT TO SCALE (PA-U020403 - 01/2025)



NOTES:
1. FOR PIPES 30 INCHES INSIDE DIAMETER OR LESS
2. FOR BASE SLAB DIMENSIONS SEE TABLE "A"

SECTION



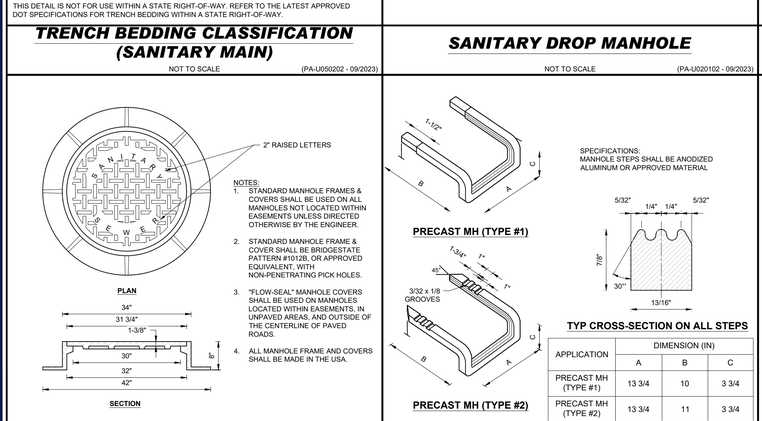
SECTION A-A

NOTES:
1. FOR WALL THICKNESS 10" THICK OR GREATER PLACE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE AT EACH FACE OF THE WALL INSIDE MAIN REINFORCEMENT.
2. FOR WALLS 5" THICK KEEP MAIN REINFORCEMENT CENTERED IN WALL. PROVIDE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE, MAINTAINING REQUIRED COVER.

REINFORCEMENT DETAIL AT OPENINGS

PRECAST STORM MANHOLE

NOT TO SCALE (PA-U010101 - 09/2023)



NOTES:
1. STANDARD MANHOLE FRAMES & COVERS SHALL BE USED ON ALL MANHOLES NOT LOCATED WITHIN EASEMENTS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. STANDARD MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1012B, OR APPROVED EQUIVALENT, WITH NON-PENETRATING PICK HOLES.
3. "FLOW-SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.
4. ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

SANITARY MANHOLE FRAME

NOT TO SCALE (PA-U020104 - 09/2023)

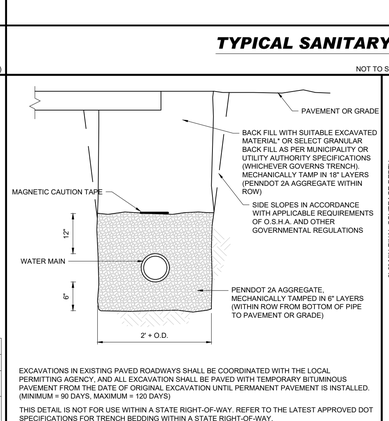
SPECIFICATIONS:
MANHOLE STEPS SHALL BE ANODIZED ALUMINUM OR APPROVED MATERIAL

TYP CROSS-SECTION ON ALL STEPS

APPLICATION	DIMENSION (IN)		
	A	B	C
PRECAST MH (TYPE #1)	13 3/4	10	3 3/4
PRECAST MH (TYPE #2)	13 3/4	11	3 3/4

SANITARY DROP FRONT MANHOLE STEPS

NOT TO SCALE (PA-U020103 - 09/2023)

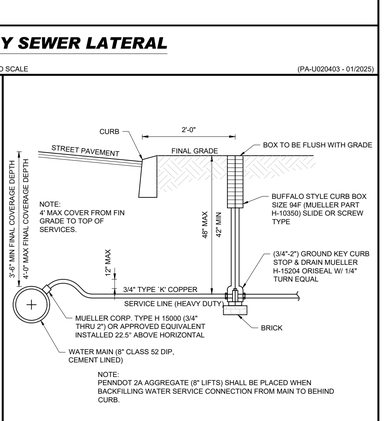


EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

THIS DETAIL IS NOT FOR USE WITHIN A STATE RIGHT-OF-WAY. REFER TO THE LATEST APPROVED DOT SPECIFICATIONS FOR TRENCH BEDDING WITHIN A STATE RIGHT-OF-WAY.

TRENCH BEDDING CLASSIFICATION (WATER MAIN)

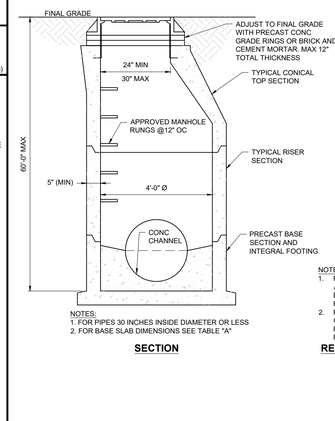
NOT TO SCALE (PA-U050201 - 09/2023)



NOTE:
PENNDOT 2A AGGREGATE (8" LIFTS) SHALL BE PLACED WHEN BACKFILLING WATER SERVICE CONNECTION FROM MAIN TO BEHIND CURB.

TYPICAL WATER SERVICES CONNECTION

NOT TO SCALE (PA-U030401 - 07/2025)



MANHOLE COVER SECTION

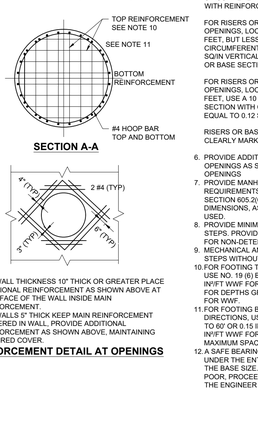


TABLE A
BASE SLAB DIMENSIONS

MAX DEPTH FROM TOP OF MANHOLE TO TOP OF FOOTING	DESIGNED (SEE NOTE 12)	
	FOOTING DIAMETER	FOOTING THICKNESS
10'-0"	6'-9"	1'-0"
20'-0"	6'-9"	1'-0"
30'-0"	6'-9"	1'-3"
40'-0"	7'-3"	1'-3"
50'-0"	8'-0"	1'-3"
60'-0"	8'-6"	1'-3"

NOTES:
1. PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 714, MAY BE SUBSTITUTED FOR THE STANDARD CAST-IN-PLACE MANHOLE.
2. CONSTRUCTION NOTES:
   A. CONSTRUCT IN ACCORDANCE WITH, PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 605, 606, 714 AND ASTM C-478-90, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AS MODIFIED HERE IN:
   B. MINIMUM CONCRETE CLASS AA
   C. PROVIDE EPOXY COATED STEEL REINFORCEMENT (IN ACCORDANCE WITH ASTM A185), STEEL WELDED WIRE FABRIC (IN ACCORDANCE WITH ASTM A563 & A675), PLAIN BILLET STEEL BARS (IN ACCORDANCE WITH ASTM A615) OR DEFORMED BILLET STEEL BARS. PROVIDE MINIMUM YIELD STRENGTH OF 60,000 PSI
   D. CLEAR COVER FOR STEEL: WALLS: 2" FOOTINGS: 2" (TOP BARS), 1 1/2" (BOTTOM BARS) 1 1/2" (SIDE COVER)
3. PROVIDE 12" MINIMUM HORIZONTAL CLEARANCE BETWEEN OPENINGS LOCATED AT THE SAME DEPTH. PIPES NOT LOCATED AT THE SAME DEPTH MUST BE LOCATED VERTICALLY AT LEAST ONE TIMES MAXIMUM OPENING DIAMETER APART.
4. FOR RISERS OR BASE SECTIONS WITH OPENINGS, PROVIDE A MINIMUM HEIGHT OF SECTION EQUAL TO TWO TIMES THE LARGEST OPENING. CENTER OF OPENING TO BE LOCATED AT LEAST ONE TIMES THE OPENING FROM THE CLOSEST JOINT BETWEEN RISERS.
5. FOR PRECAST RISER OR BASE SECTIONS WITH ONE OPENING LOCATED AT DEPTHS TO 60' OR FOR SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT A DEPTH OF 15 FEET AND LESS, PROVIDE CIRCUMFERENTIAL REINFORCEMENT IN ACCORDANCE WITH REINFORCEMENT DETAIL AT OPENINGS.

   FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT A DEPTH GREATER THAN 15 FEET, BUT LESS THAN OR EQUAL TO 30 FEET, PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.44 SQ/IN VERTICAL FOOT FOR THE DEPTH OF THE RISER OR BASE SECTION

   FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 30 FEET, USE A 10 INCH THICK WALL RISER OR BASE SECTION WITH CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ/IN VERTICAL FOOT EACH FACE

   RISERS OR BASE SECTIONS WITH HOLES TO BE CLEARLY MARKED WITH MAXIMUM ALLOWABLE DEPTH.
6. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS.
7. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C), ALTERNATE CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.
8. PROVIDE MINIMUM 1" SECTION DIMENSION FOR METAL STEPS. PROVIDE MAXIMUM 3/4" SECTION DIMENSION FOR NON-DETERIORATING MATERIAL STEPS.
9. MECHANICAL ANCHOR REQUIRED FOR INSTALLATION OF STEPS WITHOUT HOOKS.
10. FOR FOOTING TOP REINFORCEMENT, BOTH DIRECTIONS, USE NO. 19 (6) BARS AT 12" FOR DEPTHS TO 60' OR 0.30 IN²/FT WWF FOR DEPTHS TO 30' AND 0.32 IN²/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
11. FOR FOOTING BOTTOM REINFORCEMENT, BOTH DIRECTIONS, USE NO. 13 (4) BARS AT 18" FOR DEPTHS TO 60' OR 0.15 IN²/FT WWF FOR DEPTHS TO 30' AND 0.16 IN²/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
12. A SAFE BEARING CAPACITY OF (1.5 TONS PER SF) UNDER THE ENTIRE SLAB IS ASSUMED TO DETERMINE THE BASE SIZE. WHEN THE SUBSOIL IS EXTREMELY POOR, PROCEED WITH CONSTRUCTION ONLY AFTER THE ENGINEER SPECIFIES ADEQUATE BASE DESIGN.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAA250079.00-0A
DRAWN BY: LGU/SL
CHECKED BY: CDP/NCR
DATE: 05/15/2026
CAD I.D.: P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA — CHRISTOPHER D. PASS — PROFESSIONAL ENGINEER — C.D. PASS — PROFESSIONAL ENGINEER — PENNSYLVANIA

SHEET TITLE:

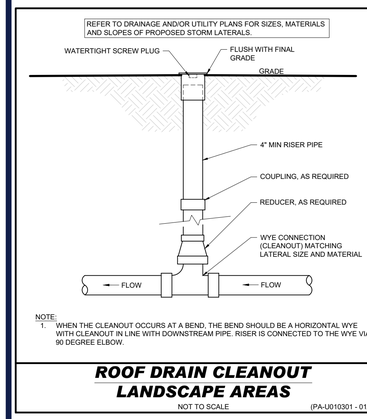
CONSTRUCTION DETAILS

SHEET NUMBER:

C-902
24 OF 29

ORG. DATE - 05/15/2026

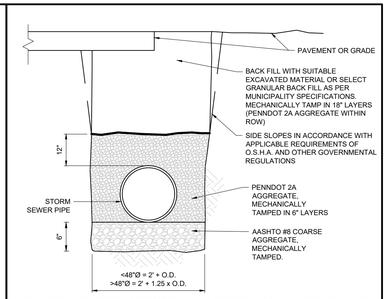
May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A-----1-LAYOUT C-902 DETL



NOTE:
1. WHEN THE CLEANOUT OCCURS AT A BEND, THE BEND SHOULD BE A HORIZONTAL WYE WITH CLEANOUT IN LINE WITH DOWNSTREAM PIPE. RISER IS CONNECTED TO THE WYE VIA 90 DEGREE ELBOW.

ROOF DRAIN CLEANOUT LANDSCAPE AREAS

NOT TO SCALE (PA-U010301 - 01/2025)



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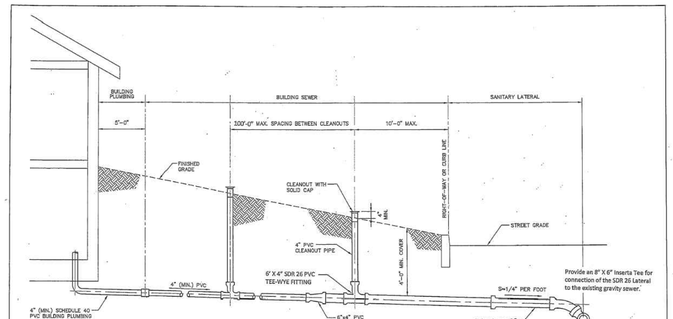
TRENCH BEDDING CLASSIFICATION (STORM)

NOT TO SCALE (PA-U050203 - 09/2023)



PROFILE

TYPICAL BUILDING SEWER INSTALLATION

NO SCALE

Lower Gwynedd Township
Sewer Lateral Profile

S-17

LIST OF APPLICABLE PENNDOT DETAILS & STANDARDS

ALL PAVEMENT MARKINGS SHOULD BE IN ACCORDANCE WITH PENNDOT PUBLICATION 111, TC-8600 & TC-8700 STANDARDS, LATEST EDITION.

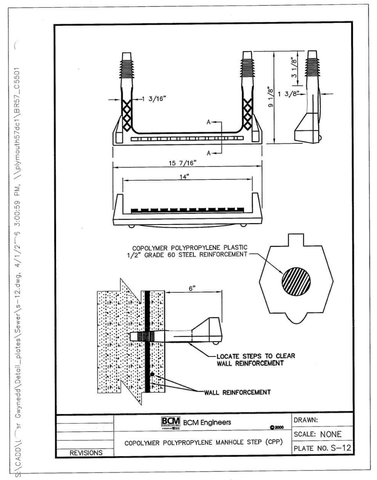
SIGNAGE: PENNDOT PUBLICATION 236
"STOP" SIGN - R1-1 (24" x 24")
"NO LEFT TURN" SIGN - R3-2 (24" x 24")
"CENTER LANE - LEFT TURN - ONLY" SIGN - R3-9B (24" x 36")
"BEGIN" SIGN - R3-9CP (24" x 12")
"KEEP RIGHT" SIGN - R4-7 (12" x 18")
"DO NOT ENTER" SIGN - R5-1 (30" x 30")
VERTICAL "ONE WAY" LEFT SIGN - R6-2L (18" x 24")
VERTICAL "ONE WAY" RIGHT SIGN - R6-2R (18" x 24")
NO PARKING SYMBOL SIGN - R8-3 (24" x 24")
PEDESTRIAN SIGN - W11-2 (30" x 30" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)
DOWNWARD POINTING ARROW SIGN - W16-7P (24" x 12" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)
OBJECT MARKER - OM1-3 (18" x 18")

ADDITIONAL DETAILS ASSOCIATED WITH PENNDOT ROAD IMPROVEMENTS ARE ON THE FOLLOWING STANDARD DETAILS FROM THE LATEST EDITION OF PENNDOT PUBLICATION 72M:
(THE PERMITTEE IS REQUIRED TO PROVIDE THE CONTRACTOR WITH COPIES OF THE MOST CURRENT APPLICABLE RC DRAWINGS)

STANDARD DRAWING NUMBER	DRAWING NAME
RC - 26M	CONCRETE PAVEMENT REHABILITATION
RC - 28M	OVERLAY TRANSITIONS AND PAVING NOTCHES
RC - 30M	SUBSURFACE DRAINS
RC - 33M	END SECTIONS FOR PIPE CULVERTS
RC - 38M	SANITARY SEWER MANHOLES
RC - 39M	STORMWATER MANHOLES
RC - 45M	INLET TOPS, GRATES AND FRAMES
RC - 46M	INLET BOXES
RC - 64M	CURBS AND GUTTERS
RC - 65M	CONCRETE MOUNTABLE CURBS
RC - 67M	CURB RAMPS AND SIDEWALKS

LIST OF APPLICABLE PENNDOT DETAILS & STANDARDS

NOT TO SCALE



BCM Engineers — DRAWN:
REVISIONS — COPOLYMER POLYPROPYLENE MANHOLE STEP (CPP) — SCALE: NONE — PLATE NO. S-12

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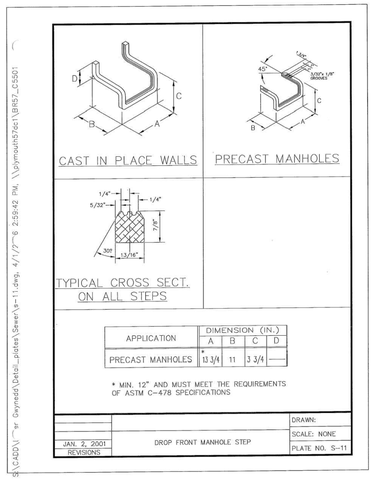

APPLICATION	DIMENSION (IN.) A	B	C	D
PRECAST MANHOLES	13 3/4	11	3 3/4	—

* MIN. 12" AND MUST MEET THE REQUIREMENTS OF ASTM C-478 SPECIFICATIONS

DROP FRONT MANHOLE STEP — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-11

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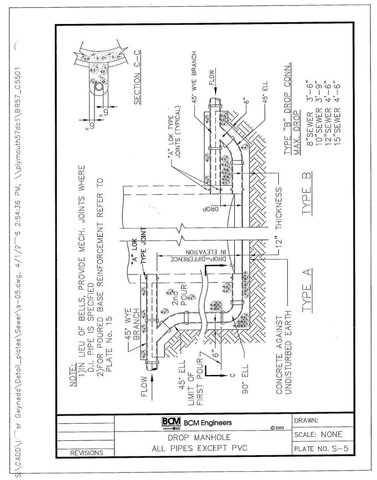

BCM Engineers — DRAWN:
REVISIONS — DROP MANHOLE ALL PIPES EXCEPT PVC — SCALE: NONE — PLATE NO. S-5

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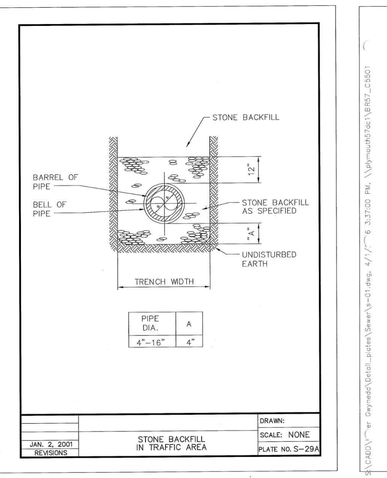

PIPE DIA.	A
4"–16"	4"

STONE BACKFILL IN TRAFFIC AREA — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-29A

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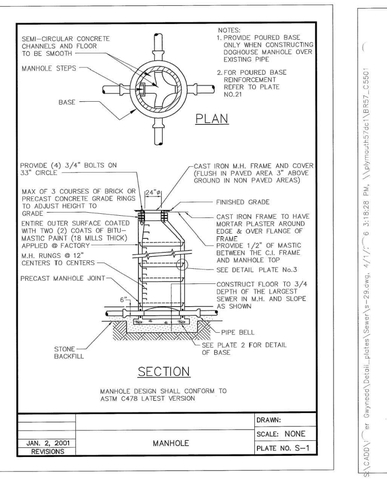

MANHOLE — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-1

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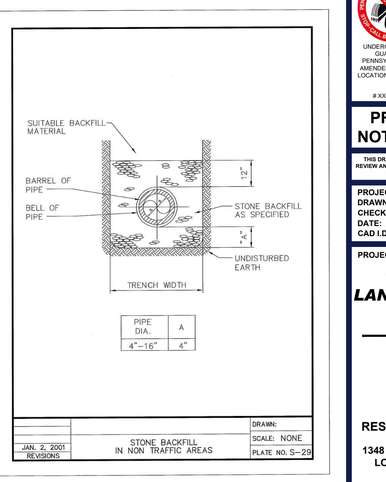

PIPE DIA.	A
4"–16"	4"

STONE BACKFILL IN NON TRAFFIC AREAS — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-29

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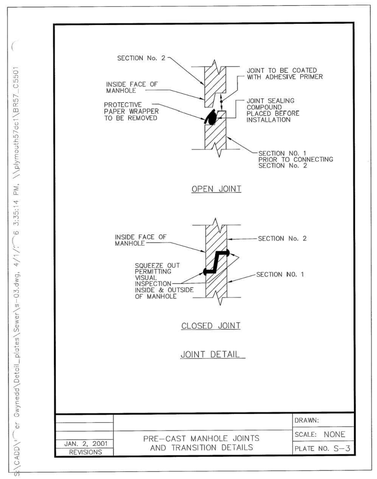

PRE-CAST MANHOLE JOINTS AND TRANSITION DETAILS — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-3

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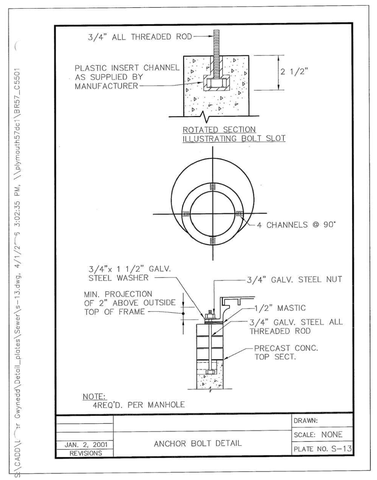

ANCHOR BOLT DETAIL — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-13

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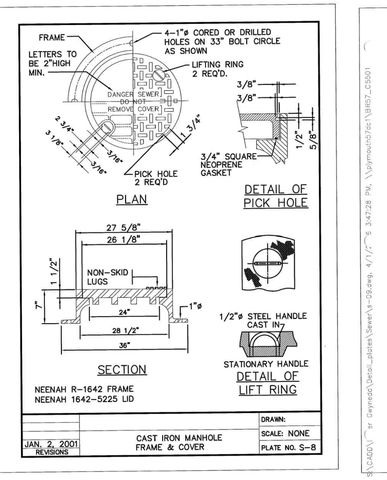

NEENAH R-1642 FRAME
NEENAH 1642-5225 LID

CAST IRON MANHOLE FRAME & COVER — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-8

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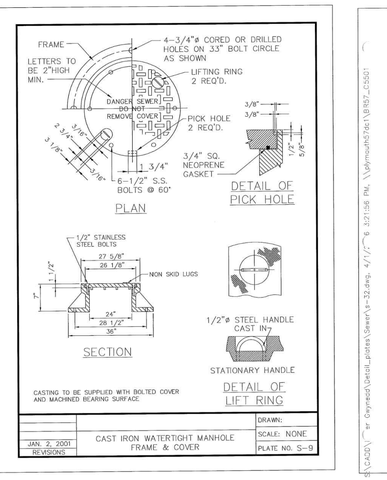

CASTING TO BE SUPPLIED WITH BOLTED COVER AND MACHINED BEARING SURFACE.

CAST IRON WATERTIGHT MANHOLE FRAME & COVER — DRAWN: — JAN. 2, 2001 REVISIONS — SCALE: NONE — PLATE NO. S-9

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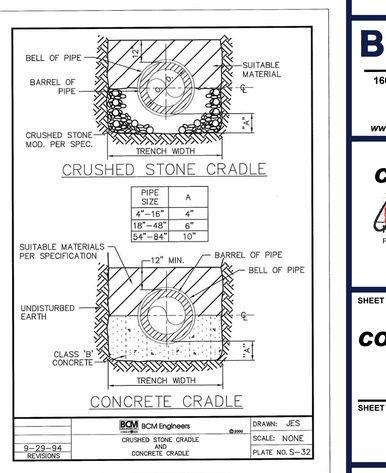

BCM Engineers — DRAWN: JES
9-29-94 REVISIONS — CRUSHED STONE CRADLE AND CONCRETE CRADLE — SCALE: NONE — PLATE NO. S-32

S:\CADD\~ er Gwynedd\Detail_plates\Sewer\s-32.dwg, 4/1/2~9 8:17:56 PM, \\plymouth57ac1\BR57_C5501

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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XXXXXXXXXX (BOHLER) / # 20250581429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.: PAA250079.00-0A
DRAWN BY: LGU/SL
CHECKED BY: CDP/NCR
DATE: 05/15/2026
CAD I.D.: P-CIVL-CNDS

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C. P. CIZIKAS — No. PE059000 — COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — DATE: 5/15/2026

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER:

C-903
25 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAA250079.00-0A ----> LAYOUT: C-903 DETL
SL

LANDSCAPE COMPLIANCE CHART

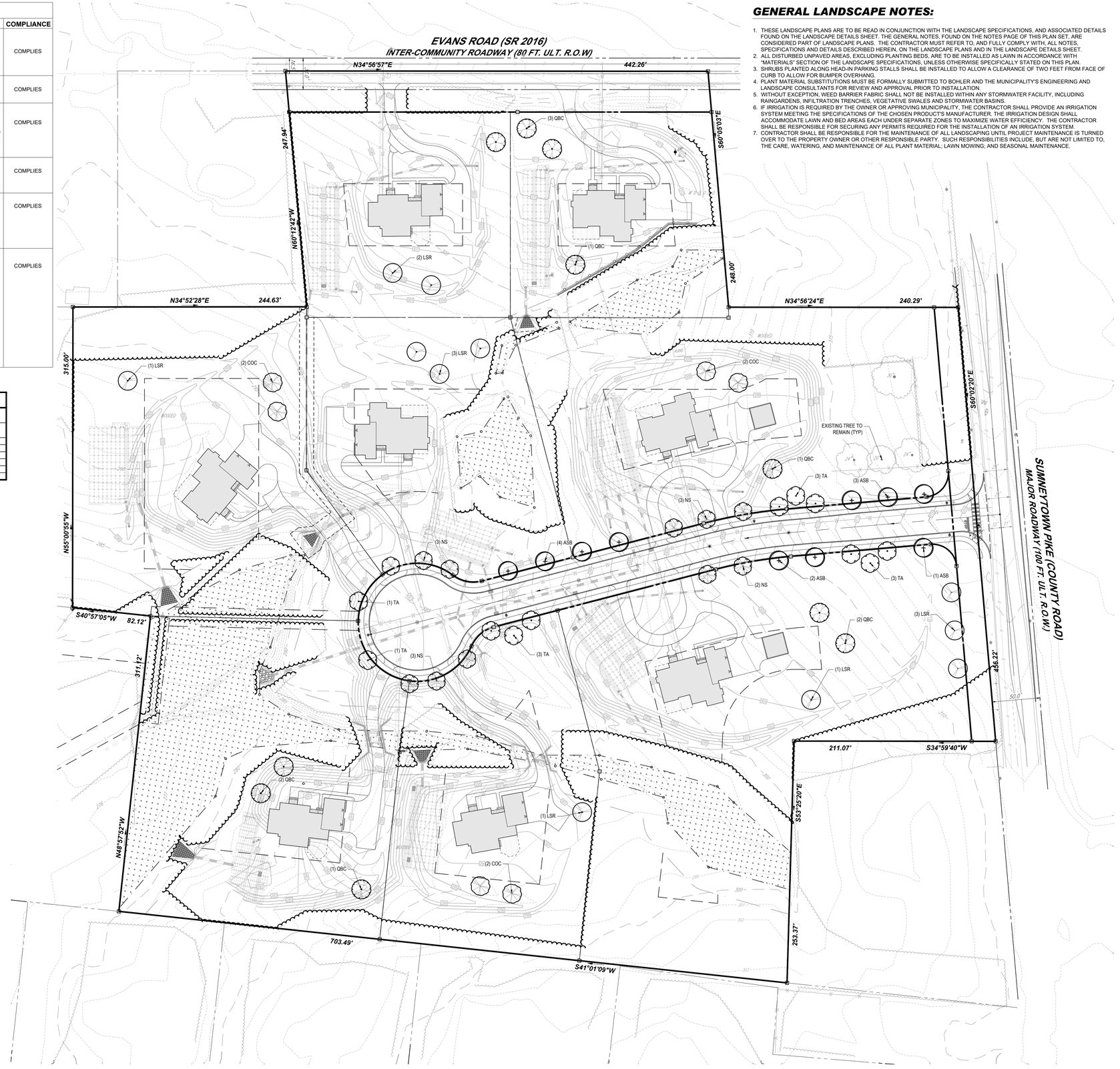
SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
SALDO: 1230.42. REQUIRED PLANTINGS	a.(1) STREET TREES, WHICH SHALL BE PLANTED AT THE FREQUENCY OF AT LEAST TWO SHADE TREES PER 40 FEET OF STREET LENGTH.	LENGTH ALONG EVANS ROAD = 442± LF REQUIRED: (442 / 40) x 2 = 22.1 OR 23 STREET TREES REQUIRED ON BOTH SIDES PLANTING ONLY ON PROJECT IMPROVEMENT SIDE: 11.1 OR 12 STREET TREES REQUIRED PROVIDED: EXISTING VEGETATION TO REMAIN TO MEET THE INTENT.	COMPLIES
		LENGTH ALONG PROPOSED ROAD = 622± LF REQUIRED: (622 / 40) x 2 = 31.1 OR 32 STREET TREES REQUIRED ON BOTH SIDES PROVIDED: 10 ASB, 11 NS, 11 TA (32 TREES)	COMPLIES
		LENGTH ALONG SUMNEYTOWN PIKE = 427± LF (EXCLUDING PROPOSED ROAD WIDTH) REQUIRED: (427 / 40) x 2 = 21.4 OR 22 STREET TREES REQUIRED ON BOTH SIDES PLANTING ONLY ON PROJECT IMPROVEMENT SIDE: 10.7 OR 11 STREET TREES REQUIRED PROVIDED: EXISTING VEGETATION TO REMAIN SUPPLEMENTED WITH 3 LSR TO MEET THE INTENT.	COMPLIES
	(b) IN ADDITION TO THE REQUIREMENTS OF SUBSECTION (A) HEREOF, INTERIOR LANDSCAPING, WHICH SHALL INCLUDE AT LEAST THREE SHADE TREES PER DWELLING, SHALL BE REQUIRED FOR SUBDIVISIONS AND LAND DEVELOPMENT IN THE A AND B RESIDENTIAL DISTRICTS	REQUIRED: MINIMUM 3 SHADE TREES PER DWELLING. PROVIDED: 3 SHADE TREES HAVE BEEN PROPOSED PER DWELLING TO MEET THE INTENT OF THIS REQUIREMENT.	COMPLIES
1230.43 NATIVE PLANTING STANDARDS	(b)(1) NATIVE PLANTING REQUIREMENTS. TO PROMOTE THE RESTORATION OF NATIVE PLANTS, NO LESS THAN 75% OF THE TREES, SHRUBS, AND PERENNIALS SELECTED FOR A NEW SUBDIVISION OR LAND DEVELOPMENT SHALL BE NATIVE TO THE LOWER DELAWARE VALLEY, PIEDMONT-COASTAL PLAIN AREAS, AS INDICATED BY THE PENNSYLVANIA DEPARTMENT OF NATURAL RESOURCES ("DCNR LIST").	TOTAL TREES PROVIDED = 59 REQUIRED: 75% NATIVE (44.25 OR 45 TREES) PROVIDED: 59 NATIVE TREES (100%)	COMPLIES
	(b)(3) PLANTING DIVERSITY REQUIREMENT. THE TOTAL NUMBER OF DIFFERENT SPECIES OF TREES, SHRUBS, AND PERENNIALS TO BE INSTALLED SHALL BE A FUNCTION OF THE TOTAL NUMBER OF SPECIMENS IN A LANDSCAPE PLAN ACCORDING TO THE FOLLOWING CHART. FOR PARKING LOTS OF GREATER THAN 80 TOTAL SPACES, NO ONE SPECIES OF TREE, SHRUBS, OR PERENNIAL SHALL COMPROMISE MORE THAN 25% OF THE TOTAL INDIVIDUALS OF THAT PLANT TYPE.	TOTAL TREES PROVIDED = 59 REQUIRED: MINIMUM 5 PLANT SPECIES, MAXIMUM 20% ONE SPECIES PROVIDED: 6 PLANT SPECIES, 18.6% ONE SPECIES	COMPLIES

NUMBER OF PLANT TYPES	MINIMUM NUMBER OF PLANT SPECIES	MAXIMUM NUMBER OF ANY 1 PLANT TYPE (TREES, SHRUBS, PERENNIALS)
1 TO 5	1	100%
6 TO 15	2	50%
16 TO 30	3	40%
31 TO 50	4	30%
51 AND OVER	5	20%

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
* ASB	10	ACER SACCHARUM 'BONFIRE'	BONFIRE SUGAR MAPLE	2.5" CAL.	B&B
* COC	6	CELTIS OCCIDENTALIS	COMMON HACKBERRY	2.5" CAL.	B&B
* LSR	11	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	ROUND-LOBED SEEDLESS SWEET GUM	2.5" CAL.	B&B
* NS	11	NYSSA SYLVATICA	SOUR GUM	2.5" CAL.	B&B
* QBC	10	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
* TA	11	TILIA AMERICANA	AMERICAN LINDEN	2.5" CAL.	B&B

* DENOTES NATIVE SPECIES



THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

50 25 12.5 0 50
SCALE: 1" = 50'

GENERAL LANDSCAPE NOTES:

1. THESE LANDSCAPE PLANS ARE TO BE READ IN CONJUNCTION WITH THE LANDSCAPE SPECIFICATIONS, AND ASSOCIATED DETAILS FOUND ON THE LANDSCAPE DETAILS SHEET. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, ARE CONSIDERED PART OF LANDSCAPE PLANS. THE CONTRACTOR MUST REFER TO, AND FULLY COMPLY WITH, ALL NOTES, SPECIFICATIONS AND DETAILS DESCRIBED HEREIN, ON THE LANDSCAPE PLANS AND IN THE LANDSCAPE DETAILS SHEET.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH "MATERIALS" SECTION OF THE LANDSCAPE SPECIFICATIONS, UNLESS OTHERWISE SPECIFICALLY STATED ON THIS PLAN.
3. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
4. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER AND THE MUNICIPALITY'S ENGINEERING AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
5. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY STORMWATER FACILITY, INCLUDING RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.
6. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING UNTIL PROJECT MAINTENANCE IS TURNED OVER TO THE PROPERTY OWNER OR OTHER RESPONSIBLE PARTY. SUCH RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE CARE, WATERING, AND MAINTENANCE OF ALL PLANT MATERIAL; LAWN MOWING; AND SEASONAL MAINTENANCE.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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XXXXXXXXXX (BOHLER) / # 20250561429 (SURVEY)

PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGI/JSL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LLGT

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA — A.M. ILLIGASH — REGISTERED LANDSCAPE ARCHITECT

REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L-101
26 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
M:\PA\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAA250079.00-0A-----LAYOUT L-101 LSCP

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 5.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 8 BELOW.
- LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
E. FERTILIZER
- FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
- FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
F. PLANT MATERIAL
- ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.2), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
- IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
- PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
- TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
- CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
- SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
- TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.
C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
- TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
- MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
- 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER
- 20 POUNDS 'NITRO-FORM' (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER
E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
- PLANTS: MARCH 15TH TO DECEMBER 15TH
- LAWN AND MEADOW SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH
PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
-- 2 TABLETS PER 1 GALLON PLANT
-- 3 TABLETS PER 5 GALLON PLANT
-- 4 TABLETS PER 15 GALLON PLANT
-- LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK
I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.
L. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

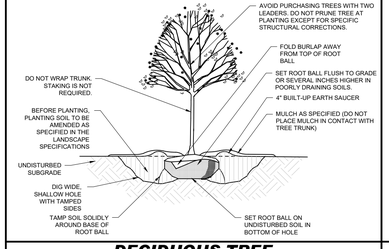
10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE)
B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10TH AND JUNE 30TH.
D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

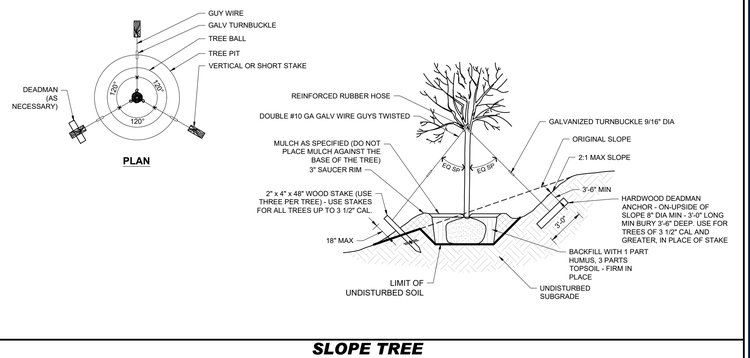
12. GUARANTEE
A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 30% OF ITS BRANCHES ARE DEAD.
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD OR CUT BURLAP BACK FROM TOP 1/3 OF ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE SCARIFIED TO AVOID MATTING OF SOIL.
6. THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.



DECIDUOUS TREE PLANTING
NOT TO SCALE (PA-L040101 - 11/2023)



SLOPE TREE PLANTING
NOT TO SCALE (PA-L040105 - 12/2023)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PRELIMINARY PLAN NOT TO BE RECORDED

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LGU/SL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LLGT

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.M. ILLIGASH — COMMONWEALTH OF PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE NOTES AND DETAILS

SHEET NUMBER:

L-102
27 OF 29

ORG. DATE - 05/15/2026

May 15, 2026
M:\PA\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAA250079.00-0A---\LAYOUT L-102 LSCD
ABH

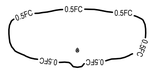
GENERAL LIGHTING NOTES:

1. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR MUST BECOME FAMILIAR WITH, REFER TO AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY.
2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THIS LIGHTING PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL APPLICABLE AGENCY AND GOVERNMENTAL REGULATIONS. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY DIFFER FROM THE VALUES DEPICTED ON THIS PLAN DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, MAINTENANCE, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, EXISTING AMBIENT LIGHT SOURCE ON AND OFF SITE, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOTCANDLES (FC).
4. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONDUITS, WIRING, CONTROLS, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, ELECTRICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND ALL APPLICABLE BUILDING AND LOCAL ELECTRICAL CODES.
5. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL LIGHTING IS INSTALLED PER THIS LIGHTING PLAN, INCLUDING THE LOCATION, ORIENTATION, SHIELDING, AND/OR ROTATED OPTICS IN ORDER TO ACHIEVE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. EXISTING POLES AND FOUNDATIONS ARE NOT TO BE REUSED.
7. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND OTHER MAINTENANCE SPECIFIED BY THE MANUFACTURER. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN.
8. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-21 TESTING (OR MOST RECENT EDITION). THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
10. LIGHT POLE FOUNDATIONS ARE SHOWN ON THE PLAN IN THE INTENDED LOCATION BASED ON THE LIGHTING CALCULATIONS, UNLESS OTHERWISE NOTED. LIGHT SYMBOLS ARE SHOWN LARGER THAN ACTUAL SIZE, HOWEVER FOUNDATION SIZE IS SHOWN AT ACTUAL SIZE.

LIGHTING COMPLIANCE CHART

SECTION	REQUIREMENT	COMPLIANCE
SALDO: 1230.58 STREETLIGHTS	(a) THE DEVELOPER SHALL INSTALL STREETLIGHTS IN ACCORDANCE WITH THE METHODS FOR STREETLIGHT INSTALLATION APPROVED BY THE BOARD OF SUPERVISORS. THE LOCATION OF STREETLIGHTS SHALL BE IN ACCORDANCE WITH A PLAN APPROVED BY THE DEVELOPER AND APPROVED BY THE BOARD OF SUPERVISORS. ALL STREETLIGHTS SHALL BE SERVICED BY UNDERGROUND CONDUIT AND SHALL BE IN CONFORMITY WITH THE STANDARDS AND SPECIFICATIONS FOR STREETLIGHTING ESTABLISHED BY THE BOARD OF SUPERVISORS. THE INSTALLATION OF NEW POLES MAY BE WAIVED BY THE BOARD OF SUPERVISORS IN SUCH INSTANCES AS APPROVED BY THE BOARD OF SUPERVISORS DUE TO THE EXISTENCE OF WOODEN POLES ALREADY IN PLACE.	COMPLIES

LEGEND



AMERICAN ELECTRIC LIGHTING AMERICAN REVOLUTION DELUXE LED POST-TOP LANTERN
QTY: 5
MOUNTING HEIGHT: 16'-0" AFG
ARDCL-P153-x-ZT-30K-R3-x-NTR-SCC-x-x + FHSSLEM10-15R3
POLE: FRTFDB-20-620-C03-MG3-x-x

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

50 25 12.5 0 50
SCALE: 1" = 50'

M:\PA\2025\PAA250079.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAA250079.00.DA------\LAYOUT: L-201 LIGHT
May 15, 2026

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PRELIMINARY PLAN NOT TO BE RECORDED

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PROJECT No.:	PAA250079.00-0A
DRAWN BY:	LG/JSL
CHECKED BY:	CDP/NCR
DATE:	05/15/2026
CAD I.D.:	P-CIVIL-LLGT

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

C.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING PLAN

SHEET NUMBER:

L-201
28 OF 29

ORG. DATE - 05/15/2026

American Revolution Deluxe Full Cutoff LED
Series ARDCL

PRODUCT OVERVIEW

Features:

OPTICAL

Producing between 3,300-14,800 lumens, the ARDCL family replaces up to 250W HID luminaires with optimal performance and visual comfort in a variety of applications.

Zero uplight to minimize light pollution and protect the night skies.

Silicone optics provide superior optical efficiency, thermal performance, and reduction in dirt accumulation, all of which can lead to long term lumen degradation and a shift in optical distribution.

IP66 proven workhorse LED light engine in 16 different output packages.

Available in color temperature choices of 2700K, 3000K and 4000K, all at a 70 CRI minimum

Silicon optics provide crisp, well defined lighting distributions in four (4) distinct light distribution options; Type II, Type III, Type IV, and Type V

ELECTRICAL

LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Saves an expected of 40-60% over comparable HID luminaires.

Two different surge protection options provide a minimum of ANSI C136.2 10kV/5kA (standard) or 20kV/10kA protection.

Luminaire available with either a 0-10v dimmable driver or DALI D4i driver. Luminaire is continuous and step dimming capable via AO option or other installed controls.

XVOLT tank driver option for protection against dropped neutrals and other power quality issues.

MECHANICAL

Die-cast aluminum housing, engineered for sturdy lifelong performance complete with die-cast aluminum hood featuring a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access.

Standard paint finish is smooth semi-gloss.

Housing is tenon pole-mounted and designed for use with a 3" tall by 2-3/8" to 3" diameter tenon, and secured by three set screws.

CONTROLS

The Acuity designed ANSI 7-pin receptacle is available, which supports traditional locking style photocontrols such as the Extreme long-life solid-state locking style photocontrol - PCLL (20 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

The DC Connect option is a factory embedded low voltage dusk to dawn photocontrol that increases longevity vs. line voltage controls and also eliminates the need to separately inventory controls.

The Local Connect option provides a simple means to collect luminaire attribute data, asset location information and execute point-to-point on/off/dim commands via secure Bluetooth link using smartphone platforms.

Cell Connect is an embedded network photocontrol with cellular communication. It provides digital switching, precise dimming, and revenue grade metrology. Cell Connect leverage D4i drivers to communicate real-time data to UbiVu, a cloud-based asset management system.

Additionally, it can be equipped with sensor-ready technology to support Zhaga standard sensors enabling smart city solutions utilizing long range network nodes to enable remote monitoring and control.

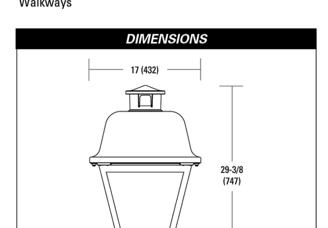
Variety of cupola options to accommodate nearly any node on the market in an aesthetic shroud.

Applications:

Roadways, Streetscapes, Walkways, Pathways, Parks

NIGHTTIME FRIENDLY — Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ARDCL is 1.35 sq. ft.
Fixture weight = 39lbs.
Shown with SCC cupola option. Reference page 3 for detail on cupola options

STANDARDS

Rated from -40°C up to 40°C ambient
CSA Certified to U.S. and Canadian standards
Complies with all applicable ANSI C136 standards

Government Procurement
BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Note: Specifications subject to change without notice.
American Revolution Deluxe Full Cutoff LED Series - ARDCL

AEL American Electric Lighting

American Revolution Deluxe Full Cutoff LED
Series ARDCL

ORDERING INFORMATION

Series
ARDCL American Revolution Full Cutoff Deluxe LED

Performance Package

Package	Input Watts	Lumens (nominal)	Package	Input Watts	Lumens (nominal)
P101	30	3,400	P300	61	7,400
P102	40	4,300	P301	70	8,300
P103	50	5,200	P302	80	9,400
P151	50	5,600	P303	90	10,300
P152	60	6,600	P304	100	11,100
P153	70	7,500	P451	100	12,200
P201	70	7,800	P452	110	13,300
P202	80	8,600			
P203	90	9,400			

Voltage
MVOLT 120-277V
HVOLT 347-480V
XVOLT 277-480V with enhanced power quality protection

Driver
ZT 0-10V dimmable driver
D4I D4I driver

Color Temperature (CCT)
27K 2700K
30K 3000K
40K 4000K

Distribution
R2 Type II
R3 Type III
R4 Type IV
R5 Type V

Paint (smooth semi-gloss)
BK Black
GY Gray
DDB Dark Bronze
WH White
BZ Bronze

Top Receptacle
NTR No Top receptacle
PR3 3 Pin NEMA receptacle
PR7 7 pin NEMA receptacle
ZRT Zhage receptacle top

Cupola
SCC Standard cupola
SNC Smart node cupola
XC No cupola

Twist-Lock Photocontrols
PCLL Solid State Long Life Photocontrol, 120-277V (fail off)
PCSS Solid State Photocontrol 120-277V (fail off) (Not CSA Listed)
P34 Solid State Long Life Photocontrol, 347V (fail off)
P48 Solid State Long Life Photocontrol, 480V (fail off)
SH Shorting cap
DZP DTL DZP DC Zhaga Photocontrol

Embedded Controls
ALCB Local Connect Basic
ALCC Local Connect Custom
ALCF Local Connect Full
DDC DC Connect Photocontrol
UBC Cell Connect

Miscellaneous Options
XL Not CSA Listed (no terminal block cover)
AO Field Adjustable Output module
SS Stainless Steel hardware
TL Tool-less trigger latch entry
NL1X1 1" x 1" NEMA label
NL2X2 2" x 2" NEMA label
LDR Ladder Rest
CR Epoxy Pre-Coat Finish
20kV 20kV/10kA surge protection device
BAA Buy America(n) Act and/or Build America Buy America Qualified
HSS Factory Installed Louvered HSS

Prewired leads
L1H 1.5 ft. prewire leads
L03 3 ft. prewire leads
L10 10 ft. prewire leads
L20 20 ft. prewire leads
L25 25 ft. prewire leads
L30 30 ft. prewire leads

Accessory
House Side Shield shipped separately and installed in the field
FHSSLEM10-15R2R5 P10x or P15x package, R2 or R5 optic
FHSSLEM10-15R3 P10x or P15x package, R3 optic
FHSSLEM20-30R2R5 P20x or P30x package, R2 or R5 optic
FHSSLEM20-30R3 P20x or P30x package, R3 optic
FHSSLEM45R2R5 P45x package, R2 or R5 optic
FHSSLEDLEM45R3 P45x package, R3 optic

Check the OPTIONS MATRIX on page 3 for compatibility and restrictions.

American Revolution Deluxe Full Cutoff LED
Series ARDCL

OPTIONS MATRIX

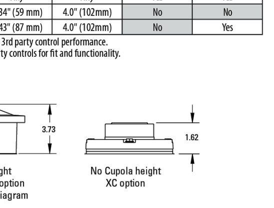
ARDCL		Voltage			Driver		Top Receptacle				Cupola			Twist-Lock Photocontrols						Embedded Controls					Other
		MVOLT	HVOLT	XVOLT	ZT	D4I	NTR	PR3	PR7	ZRT	SCC	SNC	XC	PCLL	PCSS	P34	P48	SH	DZP	ALCB	ALCC	ALCF	DDC	UBC	AO
Voltage	MVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y
	HVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	XVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Driver	ZT	Y	Y	Y			Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y
	D4I	Y	Y	Y			Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Top Receptacle	NTR	Y	Y	Y	Y	Y					Y	N	Y	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y
	PR3	Y	Y	Y	Y	N					Y	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y
	PR7	Y	Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y
	ZRT	Y	Y	Y	N	Y					Y	Y	Y	N	N	N	N	N	Y	N	N	N	N	N	N
Cupola	SCC	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	SNC	Y	Y	Y	Y	Y	N	N	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	XC	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Twist-Lock Photocontrols	PCLL	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y							N	N	N	N	N	Y
	PCSS	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y							N	N	N	N	N	Y
	P34	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y							N	N	N	N	N	Y
	P48	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y							N	N	N	N	N	Y
	SH	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y							N	N	N	N	N	Y
	DZP	Y	Y	Y	N	Y	N	N	N	Y	Y	Y	Y							N	N	N	N	N	N
Embedded Controls	ALCB	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N						N
	ALCC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N						N
	ALCF	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N						N
	DDC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N						N
	UBC	Y	Y	Y	N	Y	Y	N	N	N	N	N	Y	N	N	N	N	N	N						N
Other	AO	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	

Cupola Control Node Compatibility

Cupola Option	Control Dimensions		Acuity Brands Control	
	Max. Height	Max. Diameter	nLight rTLN	DTL DIN
XC	Any	Any	Yes	Yes
SCC	2.34" (59 mm)	4.0" (102mm)	No	No
SNC	3.43" (87 mm)	4.0" (102mm)	No	Yes

Cupolas may affect 3rd party control performance.
Always test 3rd party controls for fit and functionality.

ARDCL		Distribution				Driver/Voltage					
						MVOLT		HVOLT		XVOLT	
		R2	R3	R4	R5	ZT	D4I	ZT	D4I	ZT	D4I
Lumen Package	P101	Y	Y	Y	Y	Y	Y	N	Y	N	Y
	P102	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	P103	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	P104	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	P151	Y	Y	N	Y	Y	Y	Y	Y	N	Y
	P152	Y	Y	N	Y	Y	Y	Y	Y	N	Y
	P153	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	P154	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	P155	Y	Y	N	Y	Y	Y	Y	Y	N	Y
	P201	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P202	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P300	Y	Y	N	Y	Y	Y	Y	Y	N	Y
	P301	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	P302	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	P303	Y	Y	N	Y	Y	Y	Y	Y	Y	Y



*See Cupola Control Node Compatibility chart to ensure compatibility with smart controls

All dimensions are inches (millimeters) unless otherwise noted.

American Revolution Deluxe Full Cutoff LED
Series ARDCL

OPERATING CHARACTERISTICS

Performance Package	Wattage	CCT	ARDCL Optic R2 Lumens	R2 LPW	R3 Lumens	R3 LPW	R4 Lumens	R4 LPW	R5 Lumens	R5 LPW
P101	30	2700K	3,369	112	3,343	111	3,330	111	3,479	116
		3000K	3,424	114	3,398	113	3,386	113	3,537	118
		4000K	3,658	122	3,630	121	3,617	121	3,779	126
P102	40	2700K	4,255	106	4,223	106	4,208	105	4,396	110
		3000K	4,327	108	4,293	107	4,277	107	4,469	112
		4000K	4,621	116	4,587	115	4,570	114	4,774	119
P103	50	2700K	5,155	103	5,115	102	5,097	102	5,324	106
		3000K	5,240	105	5,200	104	5,181	104	5,413	108
		4000K	5,597	112	5,555	111	5,534	111	5,783	116
P151	50	2700K	5,508	110	5,466	109	--	--	5,690	114
		3000K	5,599	112	5,556	111	--	--	5,784	116
		4000K	5,982	120	5,936	119	--	--	6,179	124
P152	60	2700K	6,591	110	6,542	109	--	--	6,809	113
		3000K	6,701	112	6,650	111	--	--	6,922	115
		4000K	7,158	119	7,104	118	--	--	7,395	123
P153	70	2700K	7,386	106	7,331	105	--	--	7,630	109
		3000K	7,509	107	7,452	106	--	--	7,757	111
		4000K	8,022	115	7,961	114	--	--	8,286	118
P201	70	2700K	7,757	111	7,698	110	7,670	110	8,014	114
		3000K	7,886	113	7,826	112	7,797	111	8,147	116
		4000K	8,425	120	8,360	119	8,329	119	8,702	124
P202	80	2700K	8,562	107	8,498	106	8,465	106	8,846	111
		3000K	8,704	109	8,638	108	8,606	108	8,992	112
		4000K	9,299	116	9,228	115	9,194	115	9,605	120
P203	90	2700K	9,313	103	9,242	103	9,208	102	9,620	107
		3000K	9,467	105	9,396	104	9,361	104	9,780	109
		4000K	10,114	112	10,037	112	10,000	111	10,449	116
P300	61	2700K	7,375	121	7,319	120	7,292	120	7,619	125
		3000K	7,498	123	7,440	122	7,413	122	7,745	127
		4000K	8,009	131	7,948	130	7,919	130	8,274	136
P301	70	2700K	8,273	118	8,210	117	8,179	117	8,546	122
		3000K	8,410	120	8,346	119	8,315	119	8,688	124
		4000K	8,984	128	8,916	127	8,883	127	9,281	133
P302	80	2700K	9,326	117	9,255	116	9,221	115	9,634	120
		3000K	9,481	119	9,409	118	9,374	117	9,794	122
		4000K	10,127	127	10,051	126	10,014	125	10,463	131
P303	90	2700K	10,230	114	10,152	113	10,115	112	10,568	117
		3000K	10,400	116	10,320	115	10,283	114	10,743	119
		4000K	11,110	123	11,025	123	10,984	122	11,476	128
P304	100	2700K	11,028	110	10,944	109	10,903	109	11,392	114
		3000K	11,211	112	11,126	111	11,084	111	11,581	116
		4000K	11,976	120	11,885	119	11,841	118	12,372	124
P451	100	2700K	12,119	121	12,026	120	--	--	12,520	125
		3000K	12,320	123	12,226	122	--	--	12,727	127
		4000K	13,160	132	13,061	131	--	--	13,595	136
P452	110	2700K	13,162	120	13,062	119	--	--	13,597	124
		3000K	13,381	122	13,279	121	--	--	13,823	126
		4000K	14,294	130	14,186	129	--	--	14,766	134

American Revolution Deluxe Full Cutoff LED
Series ARDCL

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Performance Package	Lumen Maintenance (LLD) Initial	25k hours	36k hours	50k hours	60k hours	75k hours	100k hours
P101	1.00	0.96	0.94	0.92	0.90	0.88	0.85
P102, P300	1.00	0.95	0.93	0.91	0.90	0.87	0.84
P151, P201, P301	1.00	0.95	0.93	0.91	0.89	0.87	0.83
P103, P152, P202, P302, P303, P451	1.00	0.95	0.93	0.90	0.89	0.86	0.82
P304, P452	1.00	0.94	0.92	0.90	0.88	0.85	0.81
P155, P202	1.00	0.94	0.92	0.89	0.88	0.85	0.80

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient Temperature Lumen Multipliers								
0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C
1.04	1.03	1.02	1.02	1.01	1.00	0.99	0.98	0.97

D4i Driver Option Defaults

Setting	Top Receptacle / Photocontrol	Default Value	Alternate Values
DALI Power Bus	NTR	ON	Off
	ALCB / ALCF / ALCC	ON	none
	DDC	ON	none
	PR7	OFF	On
	ZRT	ON	Off
	DZP	ON	Off
Dimming Type	Any	LINEAR	Logarithmic
24V AUX	Any	ON (Not Connected)	none
Scenes Data	Any	0 (blank)	01-255

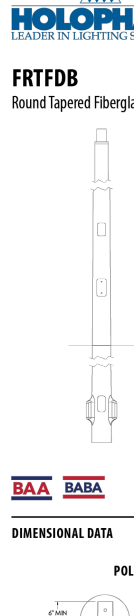
*To program different settings, consult factory; RFD is required

DETAIL REFERENCE:
DETAIL PROVIDED/PREPARED BY OTHERS AND IS FROM ACUITY BRANDS LIGHTING, DATED 02/28/2025. REFER TO NOTES THIS SHEET.

HOLOPHANE® LEADER IN LIGHTING SOLUTIONS

Catalog Number	
Notes	Type

FRTFDB
Round Tapered Fiberglass Direct Burial



Construction
- Poles are made from fiberglass reinforced composite with a minimum of 65% E type fiberglass by weight.
- Pole resin is ultraviolet resistant and pigmented approximately the same color as the final coating.
- Poles are flame resistant per ASTM D635
- Anti-rotation flare is structurally integrated into the pole base
- Hand hole is 2-1/2" x 5", cover and fastener (1/4" socket head screw) are included.
- Two 2-1/2 x 6" wire access holes are located 24" below grade
- Plain top versions (PLN) have internal support structure to allow for luminaire attachment via set screws

Finish
- Poles shall be painted with a smooth weather resistant, polyurethane coating with a minimum thickness of 1.5 mils.
- Poles meet a minimum 5000 hours of accelerated aging in accordance with ASTM G154 without fiber exposure, crazing or chalking.

Government Procurement
BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

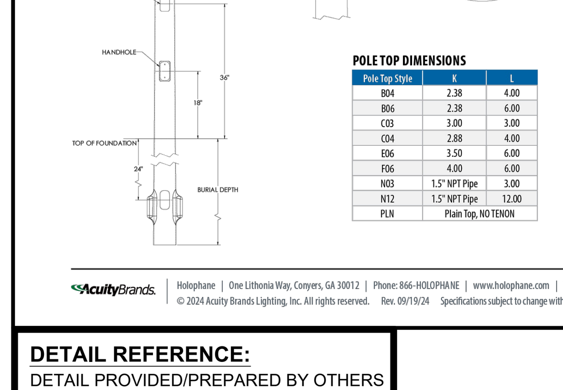
Warranty
Contact Factory for warranty information on this pole product. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Other Acuity warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

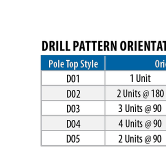
BAA BABA

DIMENSIONAL DATA

POLE TOP STYLE



DRILL PATTERN ORIENTATION



POLE TOP DIMENSIONS

Pole Top Style	K	L
B04	2.38	4.00
B06	2.38	6.00
C03	3.00	3.00
C04	2.88	4.00
E06	3.50	6.00
F06	4.00	6.00
N03	1.5" NPT Pipe	3.00
N12	1.5" NPT Pipe	12.00
PLN	Plain Top, NO TENON	

DRILL PATTERN ORIENTATION

Pole Top Style	Orientation	
D01	1 Unit	C
D02	2 Units @ 180	B, D
D03	3 Units @ 90	B, C, D
D04	4 Units @ 90	A, B, C, D
D05	2 Units @ 90	B, C

FRTFDB
Round Tapered Fiberglass Direct Burial

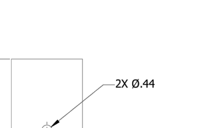
HOLOPHANE®

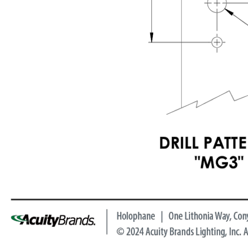
ORDERING INFORMATION

Example: FRTFDB 18 52S PLN NDR BK

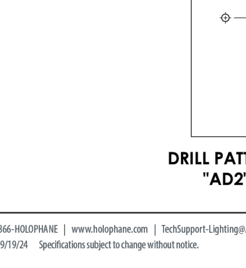
Series	Pole Top Style	Pole Top Drill Pattern	Finish	Options
FRTFDB Round Tapered Fiberglass Direct Burial Poles	B04 Tenon, 2.38 O.D. x 4" LG.	NDR No Drill Pattern	BK Black Paint	FST Festoon Box
	B06 Tenon, 2.38 O.D. x 6" LG.	MG3 Drill Pattern, 2 hole, 3" from top	BZ Bronze Paint	TRF Tamper resistant fasteners
	C03 Tenon, 3.00 O.D. x 3" LG.	AD2 Drill Pattern, 2 hole, 2.25" from top (for Autobahn and AutoConnect decorative arms)	GN Green Paint	BAA Buy America(n) Act Compliant
	C04 Tenon, 2.88 O.D. x 4" LG.		GR Gray Paint	
	E06 Tenon, 3.50 O.D. x 6" LG.		WH White Paint	
	F06 Tenon, 4.00 O.D. x 6" LG.		DDB Dark Bronze	
	N03 Tenon, 1.5 NPT Pipe x 3" LG.			
	N12 Tenon, 1.5 NPT Pipe x 12" LG.			
	PLN Plain pole cap, no tenon			
	D01 Drilling for 1 unit			
	D02 Drilling for 2 units @ 180			
Note	D03 Drilling for 3 units @ 90			
Select Base Pole Number from table on page 3	D04 Drilling for 4 units @ 90			
	D05 Drilling for 2 units @ 90			

BASE DETAIL





DRILL PATTERN "MG3"



DRILL PATTERN "AD2"

FRTFDB
Round Tapered Fiberglass Direct Burial

HOLOPHANE®

Non-AASHTO (ANSI C136.20, 1.14 Gust)

Base Pole Number	Mounting Height (ft)	Nominal Shaft Size (in x in x ft)	Total Pole Height (ft)	Embedded Depth (ft)	Groundline Diameter (in)	Fixture Mounting	Max Wt. (lbs)	90 MPH Max EPA	100 MPH Max EPA	110 MPH Max EPA	Pole Weight (lbs)
FRTFDB 13 46S	10	2.9 x 4.6 x 14	13	3.0	4.6	TENON or PLN	75	5.5	4.1	3.2	25
FRTFDB 15 49S	12	2.9 x 4.9 x 14	15	3.0	4.9	TENON or PLN	75	6.0	4.5	3.4	29
FRTFDB 18 52S	14	2.9 x 5.2 x 14	18	4.0	5.2	TENON or PLN	75	6.3	4.7	3.5	33
FRTFDB 20 55S	16	2.9 x 5.5 x 16	20	4.0	5.5	TENON or PLN	75	6.3	4.6	3.4	40
FRTFDB 22 57S	18	2.9 x 5.7 x 18	22	4.0	5.7	TENON or PLN	100	5.7	4.1	3.0	47
FRTFDB 24 60S	20	2.9 x 6.0 x 20	24	4.0	6.0	TENON or PLN	100	5.6	3.9	3.0	54
FRTFDB 20 620	16	4.1 x 6.2 x 16	20	4.0	6.2	TENON, PLN or DRILL	100	9.3	7.3	5.9	42
FRTFDB 22 650	18	4.1 x 6.5 x 18	22	4.0	6.5	TENON, PLN or DRILL	100	7.9	6.1	4.9	49
FRTFDB 24 670	20	4.1 x 6.7 x 20	24	4.0	6.7	TENON, PLN or DRILL	100	6.6	5.1	4.0	52
FRTFDB 26 76H	22	4.7 x 7.6 x 22	26	4.0	7.6	TENON, PLN or DRILL	200	13.3	10.5	8.5	106
FRTFDB 30 80H	25	4.7 x 8.0 x 25	30	5.0	8.0	TENON, PLN or DRILL	200	10.9	8.6	6.9	117
FRTFDB 35 84H	30	4.7 x 8.4 x 30	35	5.0	8.4	TENON, PLN or DRILL	200	7.9	6.1	4.8	136

AASHTO 2015 (1.14 Gust)

Base Pole Number	Mounting Height (ft)	Nominal Shaft Size (in x in x ft)	Total Pole Height (ft)	Embedded Depth (ft)	Groundline Diameter (in)	Fixture Mounting	Max Wt. (lbs)	90 MPH Max EPA	100 MPH Max EPA	110 MPH Max EPA	Pole Weight (lbs)
FRTFDB 13 46S	10	2.9 x 4.6 x 14	13	3.0	4.6	TENON or PLN	150	7.8	6.0	4.6	25
FRTFDB 15 49S	12	2.9 x 4.9 x 14	15	3.0	4.9	TENON or PLN	150	7.2	5.4	4.1	29
FRTFDB 18 52S	14	2.9 x 5.2 x 14	18	4.0	5.2	TENON or PLN	150	6.5	4.8	3.5	33
FRTFDB 20 55S	16	2.9 x 5.5 x 16	20	4.0	5.5	TENON or PLN	100	5.8	4.1	2.9	40
FRTFDB 22 57S	18	2.9 x 5.7 x 18	22	4.0	5.7	TENON or PLN	100	5.0	3.4	2.2	47
FRTFDB 24 60S	20	2.9 x 6.0 x 20	24	4.0	6.0	TENON or PLN	100	4.1	2.7	1.5	54
FRTFDB 20 620	16	4.1 x 6.2 x 16	20	4.0	6.2	TENON, PLN or DRILL	100	7.8	6.0	3.9	42
FRTFDB 22 650	18	4.1 x 6.5 x 18	22	4.0	6.5	TENON, PLN or DRILL	100	6.4	4.9	2.8	49
FRTFDB 24 670	20	4.1 x 6.7 x 20	24	4.0	6.7	TENON, PLN or DRILL	100	5.3	4.0	1.9	52
FRTFDB 26 76H	22	4.7 x 7.6 x 22	26	4.0	7.6	TENON, PLN or DRILL	150	11.3	8.9	5.9	106
FRTFDB 30 80H	25	4.7 x 8.0 x 25	30	5.0	8.0	TENON, PLN or DRILL	150	10.5	8.2	5.1	117
FRTFDB 35 84H	30	4.7 x 8.4 x 30	35	5.0	8.4	TENON, PLN or DRILL	150	6.6	5.0	2.1	136

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May 15, 2026
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AB

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DATE:	05/15/2026
CAD I.D.:	P-CIVL-LLGT

PROJECT:

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

WHITEFIELD HOMES, LLC

PROPOSED RESIDENTIAL DEVELOPMENT

1348 SUMNEYTOWN PIKE, AMBLER
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA, 19002
BLOCK 9, UNIT 47
PARID: 39-00-04054-00-2

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING NOTES AND DETAILS

SHEET NUMBER:
L-202
29 OF 29

ORG. DATE - 05/15/2026