THE VILLAGE AT VALLEY FORGE
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

SITUATED IN:

UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

580 SOUTH GODDARD BOULEVARD
PART OF TAX MAP PARCEL NUMBER: 58-00-17494-007

DEVELOPER / OWNER:

WOODFIELD ACQUISITIONS, LLC

6900 WISCONSIN AVENUE, SUITE 303
CHEVY CHASE, MD 20814

LIST OF DRAWINGS

SHEET	DESCRIPTION	
C1	COVER SHEET	(RECORD PLAN SHEET 1 OF 3)
C2	SITE PLAN	(RECORD PLAN SHEET 2 OF 3)
C3	PROJECT NOTES	(RECORD PLAN SHEET 3 OF 3)
C4	EXISTING CONDITIONS & DEMOLITION PLAN	
C5	GRADING PLAN	
C6	UTILITY PLAN	
C7–C8	STORM SEWER PROFILES	
C9	SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN	
C10	SOIL EROSION & SEDIMENT POLLUTION CONTROL NOTES	
C11	SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS	
C12	DETAILS	
C13	LIGHTING PLAN	
C14	INLET DRAINAGE AREA PLAN	

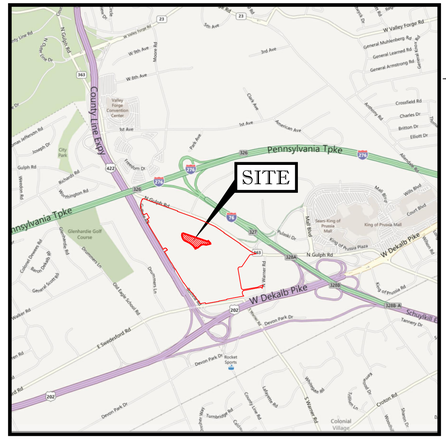
LIST OF DRAWINGS (TO BE RECORDED BY OTHERS)

SHEET	DESCRIPTION
1	SUBDIVISION PLAN

SHEETS 1 THROUGH 3 OF THIS PLAN SET WILL BE CONSIDERED A COMPLETE RECORD PLAN SET FOR FILING PURPOSES IN THE MONTGOMERY COUNTY RECORDER OF DEEDS OFFICE.

USGS MAP
(VALLEY FORGE QUAD)
1"=1,200'
600' 0 1,200'

LOCATION MAP
1"=800'
1,000' 0 2,000'



VICINITY MAP
1"=2,000'
1,000' 0 2,000'

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

OWNER/CORPORATE CERTIFICATION

I DO HEREBY CERTIFY THAT _____
IS THE REGISTERED OWNER OF THE LAND HEREIN SUBDIVIDED, PROPOSED TO BE DEVELOPED AND THAT IT DOES ADOPT THIS PLAN AND DESIRE THE SAME TO BE RECORDED.

BY: _____
(NAME)

_____
(TITLE)

T.M.P. No. _____

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA:
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____, A.D. 20__, BEFORE ME THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF/HERSELF TO BE _____ OF _____, AND HE/SHE AS SUCH OFFICER BEING AUTHORIZED TO DO SO, HAS EXECUTED THE FOREGOING PLAN BY SIGNING HER NAME AS SUCH OFFICER.

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

NOTARY PUBLIC_____

MY COMMISSION EXPIRES_____

UPPER MERION TOWNSHIP BOARD OF SUPERVISORS

APPROVED BY THE BOARD OF SUPERVISORS OF UPPER MERION TOWNSHIP ON THE _____DAY OF _____, A.D. 20__.

_____
CHAIRPERSON

_____
SECRETARY

_____
TOWNSHIP ENGINEER (REVIEWED BY)

COUNTY RECORDER OF DEEDS

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN NORRISTOWN, PENNSYLVANIA, IN PLAN

BOOK NO._____, PAGE NO. _____ ON THE _____DAY OF _____, 201__.

COUNTY RECORDER OF DEEDS

SURVEYOR'S CERTIFICATION, BOUNDARY & TOPOGRAPHY

THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY CORNERS ARE SET AS SHOWN HERON, THAT ALL GEOMETRIC AND GEODETIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS OR TRACTS HAVE A BOUNDARY CLOSURE OF 1:10,000 OR BETTER.

_____ _____
NAME DATE

PENNSYLVANIA PROFESSIONAL LAND SURVEYOR No. _____

J:\V R:\16PP160618_CADILAND\DEVREV\6 WORKING\PP160618DETAILS-6_---3.LAYOUT: 01-COVER

BOHLER ENGINEERING
SITE CIVIL/LAND CONSULTING/ENGINEERING · LANDSCAPE ARCHITECTURE · LAND SURVEYING · PROGRAM MANAGEMENT · TRANSPORTATION SERVICES · SUSTAINABLE DESIGN · PERMITTING SERVICES
UPSTATE NEW YORK · PHILADELPHIA, PA · NORTHERN VIRGINIA
WASHINGTON, DC · LEHIGH VALLEY, PA · RICHMOND, VIRGINIA
BOSTON, MA · SOUTHEASTERN, PA · RALEIGH, NC
PITTSBURGH, PA · CENTRAL PENNSYLVANIA · CHARLOTTE, NC
NEW YORK, NY · BALTIMORE, MD/DE · TAMPA, FLTE, NC
NEW JERSEY · METRO DC · ATLANTA, GA
SOUTHERN MARYLAND · SOUTH FLORIDA

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM, INC. 1-800-242-1776

POCS SERIAL NUMBER
20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618DETAILS-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

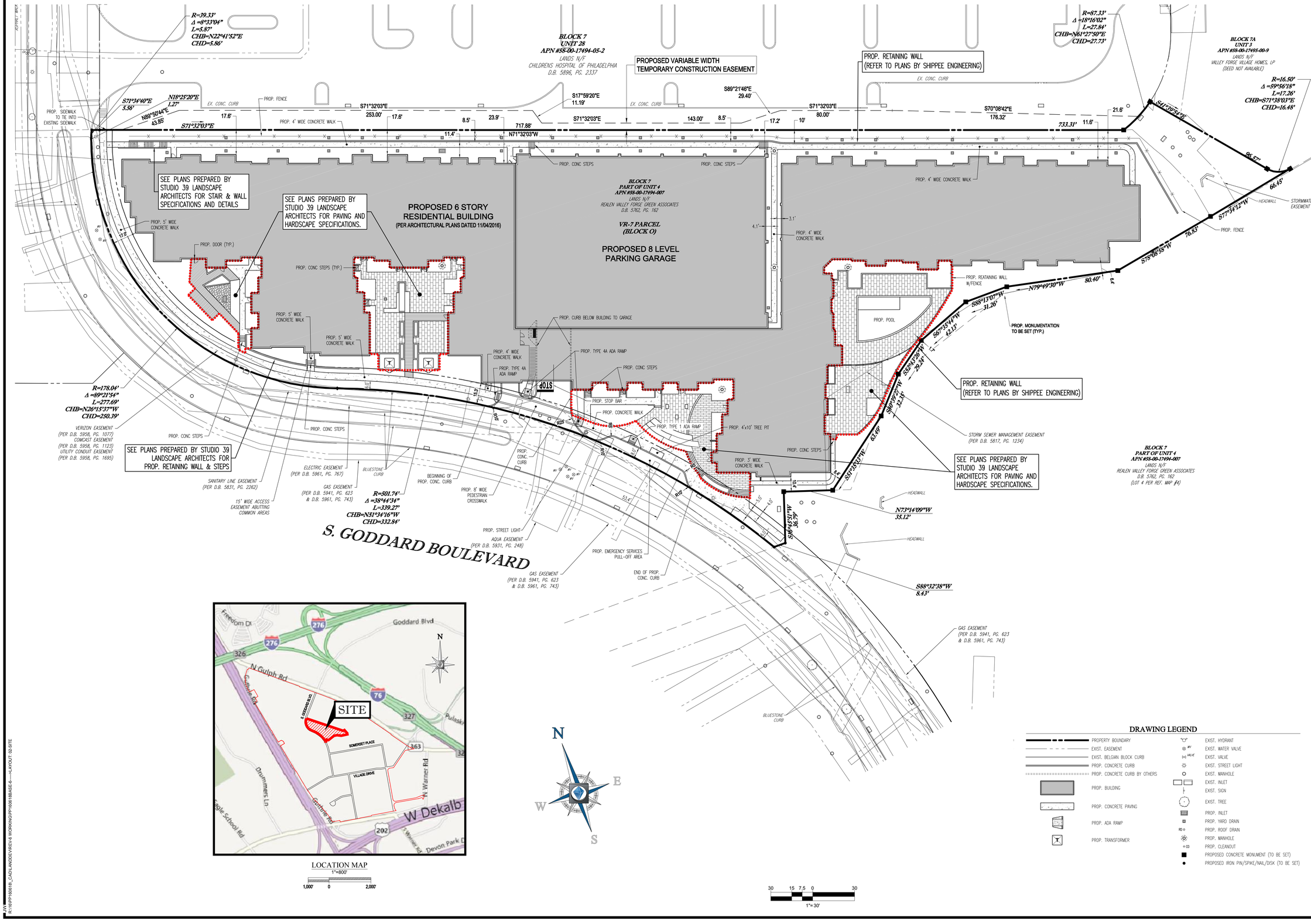
SHEET TITLE:

COVER SHEET
(RECORD PLAN 1 OF 3)

SHEET NUMBER:

C1
OF 14

REVISION 6



LOCATION MAP
1"=800'
1,000' 0 2,000'

30 15 7.5 0 30
1"= 30'

DRAWING LEGEND

PROPERTY BOUNDARY	EXIST. HYDRANT
EXIST. EASEMENT	EXIST. WATER VALVE
EXIST. BELGIAN BLOCK CURB	EXIST. VALVE
PROP. CONCRETE CURB	EXIST. STREET LIGHT
PROP. CONCRETE CURB BY OTHERS	EXIST. MANHOLE
PROP. BUILDING	EXIST. INLET
	EXIST. SIGN
PROP. CONCRETE PAVING	EXIST. TREE
	PROP. INLET
PROP. ADA RAMP	PROP. YARD DRAIN
	PROP. ROOF DRAIN
PROP. TRANSFORMER	PROP. MANHOLE
	PROP. CLEANOUT
	PROPOSED CONCRETE MONUMENT (TO BE SET)
	PROPOSED IRON PIN/SPIKE/NAIL/DISK (TO BE SET)

BOHLER ENGINEERING
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES
UPSTATE NEW YORK: ALBANY, BOSTON MA, NEW YORK, NY, NEW JERSEY
NORTHERN VIRGINIA: LEESBURG, SOUTHEASTERN PA, LUZERNE COUNTY, BALTIMORE, MD
RALEIGH, NC: RALEIGH, CARY, MORRISVILLE
TAMPA, FL, TIC: TAMPA
SOUTH FLORIDA: SOUTHERN MARYLAND: LEONARDTOWN

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
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PA1 SYSTEM INC. 1-800-242-1776

POCS SERIAL NUMBER 20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: 1"=30'
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

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1515 MARKET STREET, SUITE 920
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Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

SITE PLAN
(RECORD PLAN 2 OF 3)

SHEET NUMBER:

C2
OF 14

REVISION 6

J:\W R:\16\PP160618_CAD\LANDDEVREV6 WORKING\PP160618BASE6-----3\LAYOUT: 02-SITE

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

- CONTROL POINT ASSOCIATES, INC.
  1600 MANOR DRIVE, SUITE 210
  CHALFONT, PA 18914
  ENTITLED: ALTA/NSPS LAND TITLE SURVEY
  PREPARED FOR: WOODFIELD
  FILE NO.: CP11165.01(.18)
  SHEET: 1 OF 1
  DATED: 7-22-2016; LAST REVISED 09-19-2016
- HOUSING STUDIO
  333 WEST TRADE STREET, SUITE 300
  CHARLOTTE, NC 28202
  ENTITLED: WOODFIELD VILLAGE AT VALLEY FORGE APARTMENTS
  PROJECT No.: 1608
  DATED: 11-04-2016
- HOUSING STUDIO
  333 WEST TRADE STREET, SUITE 300
  CHARLOTTE, NC 28202
  ENTITLED: VILLAGE AT VALLEY FORGE GARAGE
  PROJECT No.: 1608
  DATED: 11-04-2016
- STUDIO39 LANDSCAPE ARCHITECTURE, P.C.
  6416 GROVEDALE DRIVE, SUITE 100-A
  ALEXANDRIA, VA 22310
  ENTITLED: VILLAGE AT VALLEY FORGE
  DATED: 12-15-2016; LAST REVISED 01-17-2017
- SHIPPEE ENGINEERING, INC.
  4050 SKYRON DRIVE, SUITE A2
  DOYLESTOWN, PA. 18902
  ENTITLED: PROPOSED SEGMENTAL RETAINING WALLS
  VR7 - VILLAGE AT VALLEY FORGE - ANCHOR "VERTICA"
  DATED: 12-13-2016; LAST REVISED 01-18-2017

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.

2. ELEVATIONS ARE REPUTED TO BE NAV88 DATUM, BASED ON MAG NAIL IN TURNPIKE PARKING AREA NORTH OF NORTH GULPH ROAD AT TOLL BOOTH INTERCHANGE, WITH COORDNATES N283539.9474 E2624698.8837 AND ELEVATION 192.60.
   ON-SITE BENCHMARKS (FIVE) HAVE BEEN ESTABLISHED AS FOLLOWS:
   #1 - A DRILL HOLE ON HEADWALL AT COORDINATES N282780.2027, E2623845.7346, ELEV. 158.39
   #2 - AN X-CUT ON FIRE HYDRANT NUT AT COORDINATES N282708.7452, E2625231.2745, ELEV. 191.22
   #3 - PECO MH COVER AT COORDINATES N281846.53, E2623515.60, ELEV. 169.17
   #4 - AN X-CUT ON FIRE HYDRANT NUT AT COORDINATES N:282731.16 E:2624688.6440, Elev. 173.56
   #5 - AN X-CUT ON FIRE HYDRANT NUT AT COORDINATES N:283333.7620 E:2623462.4520, Elev. 184.16

3. ALL ACCESSIBLE ADA PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF 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.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.

4. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

5. OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

6. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS,. SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.

7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, 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 REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THERAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.

9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.

10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE LATEST CIVIL PLANS AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND BOHLER ENGINEERING, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.

11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.

12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN 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.

13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE 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. 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.

14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY 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 SHALL 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. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

15. THE ENGINEER IS 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/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

16. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.

17. BOHLER ENGINEERING 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 CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR 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 RESPONSBILITY OR LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

18. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING 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, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE FOR JOB SITE SAFETY.

19. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH THESE NOTES HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.

20. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.

21. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.

22. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

23. 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 ENGINEER IS 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 ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

24. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.

25. ALL CONSTRUCTION AND MATERIALS TO BE PER PENNDOT PUBLICATION 408 AND MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.

26. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

27. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

28. THIS PROJECT IS SUBJECT TO TERMS OF A SETTLEMENT BETWEEN OWNER AND TOWNSHIP, ANY CONFLICTS WITH OTHER RULES, ORDINANCES, ETC. SHALL BE RESOLVED IN THE FAVOR OF THE SETTLEMENT AGREEMENT.

29. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT OF DAMAGED STREET TREES AND ENSURING THAT THE TREE SPACING REQUIREMENTS OF THE SETTLEMENT AGREEMENT ARE MET.

30. TRASH STORAGE TO BE INSIDE THE GARAGE UNTIL PICK UP BY A PRIVATE COLLECTION AND DISPOSAL COMPANY.

31. ALL FREESTANDING OR BUILDING MOUNTED SIGNAGE SHALL COMPLY WITH SECTION 4.06 OF THE SETTLEMENT AGREEMENT.

SITE DESIGN REQUIREMENTS

REQUIREMENTS TAKEN FROM:
MANUAL OF SITE DEVELOPMENT STANDARDS, DATED 3/21/06

REQUIREMENTS:

PROPOSED USE: RESIDENTIAL (PERMITTED BY RIGHT)

	REQUIRED	PROVIDED
MIN. LOT AREA:	N/A	142,872 S.F. / 3.28 AC.
TOTAL GROSS FLOOR AREA:	N/A	550,447 S.F. (INCLUDES BALCONY AREA)
FIRST FLOOR:	N/A	81,256 S.F.
SECOND FLOOR:	N/A	85,227 S.F.
THIRD FLOOR:	N/A	83,507 S.F.
FOURTH FLOOR:	N/A	85,588 S.F.
FIFTH FLOOR:	N/A	85,589 S.F.
SIXTH FLOOR:	N/A	85,498 S.F.
SEVENTH FLOOR:	N/A	21,891 S.F.
EIGHTH FLOOR:	N/A	21,891 S.F.
MIN. FRONT YARD SETBACK:	N/A	0.0' TO LEGAL R.O.W.
MAX. LOT COVERAGE (IMPERVIOUS):	75%	75.2% (107,392 SF)
MAX. BUILDING HEIGHT:	320 FT. ABOVE SEA LEVEL***	<320 FT ABOVE SEA LEVEL
REQUIRED MIN. COMMON OPEN SPACE:	20% (ENTIRE 124 Ac)*	36.6% (52,270 SF)

* NOTE: THERE ARE NO LOT COVERAGE AND OPEN SPACE REQUIREMENTS FOR INDIVIDUAL PARCELS; THE REQUIREMENTS APPLY TO THE ENTIRE 124 ACRE PROPERTY.

*** FOR EACH ADDITIONAL LINEAR FOOT OF BUILDING HEIGHT OVER 85 FEET ABOVE GRADE AN ADDITIONAL 400 SQUARE FEET OF COMMON OPEN SPACE OVER THE REQUIRED 20% SHALL BE PROVIDED. THE HEIGHTS OF BUILDINGS TO BE CONSTRUCTED IN THE TOWN CENTER DEVELOPMENT SHALL BE MEASURED BASED UPON THE MEAN ELEVATION AT THE BASE OF THE BUILDING TO THE MEAN ELEVATION OF THE ROOF OF THE BUILDING, EXCLUDING ANY PARAPET WALL AND ANY ELECTRICAL, MECHANICAL, OR ELEVATOR PENTHOUSE.

PARKING:

(REQUIREMENTS PER MANUAL OF SITE DEVELOPMENT STANDARDS SECTION 4.03.1.a.1)

RECOMMENDED:
22 - STUDIOS: (22 x 1.5 = 33 SPACES)
193 - ONE BEDROOM: (193 x 1.5 = 289.5 SPACES)
100 - TWO BEDROOM: (100 x 2.0 = 200 SPACES)
5 - THREE BEDROOM: (5 x 2.5 = 12.5 SPACES)

TOTAL RECOMMENDED = 535 SPACES

PROVIDED = 493 SPACES ****

**** PURSUANT TO SETTLEMENT AGREEMENT SECTION 4.03.1(A)(2), 480 PARKING SPACES (BASED ON A RATIO OF 1.5 SPACES PER UNIT) ARE PROPOSED BASED UPON THE SHARED PARKING ANALYSIS DATED 12/7/16 PREPARED BY GLACKIN THOMAS PANZAK".
(320 UNITS x 1.5 SPACES = 480 SPACES)

GENERAL DEMOLITION NOTES

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:
   - CONTROL POINT ASSOCIATES, INC.
     1600 MANOR DRIVE, SUITE 210
     CHALFONT, PA 18914
     ENTITLED: ALTA/NSPS LAND TITLE SURVEY
     PREPARED FOR: WOODFIELD
     FILE No.: CP11165.01(.18)
     SHEET: 1 OF 1
     DATED: 7-22-2016; LAST REVISED 09-19-2016
2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE 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.
3. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME.
4. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION, ONLY, REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
5. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. 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.
6. CONTRACTOR TO REPLACE EXISTING SIDEWALK AND CURB AS NECESSARY.
7. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:

   A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK AND DEMOLITION WORK.

GENERAL GRADING & UTILITY NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL EXISTING UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, 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 THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
3. 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. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
4. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
5. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION 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 AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/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 WITH JURISDICTION AND/OR CONTROL OF THE SITE, 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 PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.
8. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIE D BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS, TESTING AND APPURT NANCES REQUIRED BY THE UTILITY COMPANY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE UTILITY COMPANY TO CONFIRM THE SIZE AND TYPE OF WATER METER AND/OR VAULT, PRIOR TO COMMENCING CONSTRUCTION.
9. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
10. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. 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, VERIFYING 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 ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. 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 IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE OWNER .EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE OWNER REQUIREMENTS AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
11. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THEOWNER REQUIREMENTS AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL.
12. THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATON AND TRENCHING PROCEDURES.
13. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
14. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, UTILITY VALVES, AND SANITARY CLEANOUTS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
15. DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, 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 FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THESE PLANS, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.
16. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4 STAKE, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THESE PLANS, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.
17. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, THIS SHALL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
18. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 7" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.
19. REFER TO SITE PLAN FOR ADDITIONAL NOTES.
20. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.
21. CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK.
22. STORM DRAINAGE PIPE:
    a.) UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR WATERTIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.
    b.) ALL STORM PIPES SHALL BE A MINIMUM OF 12" DIAMETER - EXCLUDES RAIN LEADERS AND YARD DRAINS.
    c.) WATER-TIGHT GASKET JOINTS SHALL BE REQUIRED FOR ALL STORM PIPES PER ASTM D3212, ASTM D3312, AND AASHTO M294-13.
23. SANITARY SEWER MAIN MUST BE POLYVINYL CHLORIDE (PVC) SDR-26 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERALS MUST BE PVC SCHEDULE 40 OR PVC SDR 26 UNLESS INDICATED, IN WRITING, OTHERWISE.
24. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL.
25. SEWERS CONVEYING SANITARY FLOW, COMBINED SANITARY, AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.
26. WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED.
27. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER AUTHORITY ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION.
28. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR DOT DETAILS AND ASTM AND AASHTO SPECIFICATIONS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
29. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
30. CONTRACTOR TO PROTECT STREET LIGHTS DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR/REPLACE DAMAGED STREET LIGHTS, SITE LIGHTING CONDUIT, STREET TREES AND IRRIGATION.
31. CONTRACTOR TO ENSURE THAT SLOPES FOR PROPOSED CONCRETE SIDEWALKS SHALL HAVE A MINIMUM CROSS SLOPE OF 1/4 INCH PER FOOT.

JW
R:\16\PP160618_CAD\LANDDEV\REV-6 WORKING\PP160618BASE-6---->LAYOUT: 03-NOTES

BOHLER ENGINEERING™
SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM, INC.
1-800-242-1776

POCS SERIAL NUMBER
20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

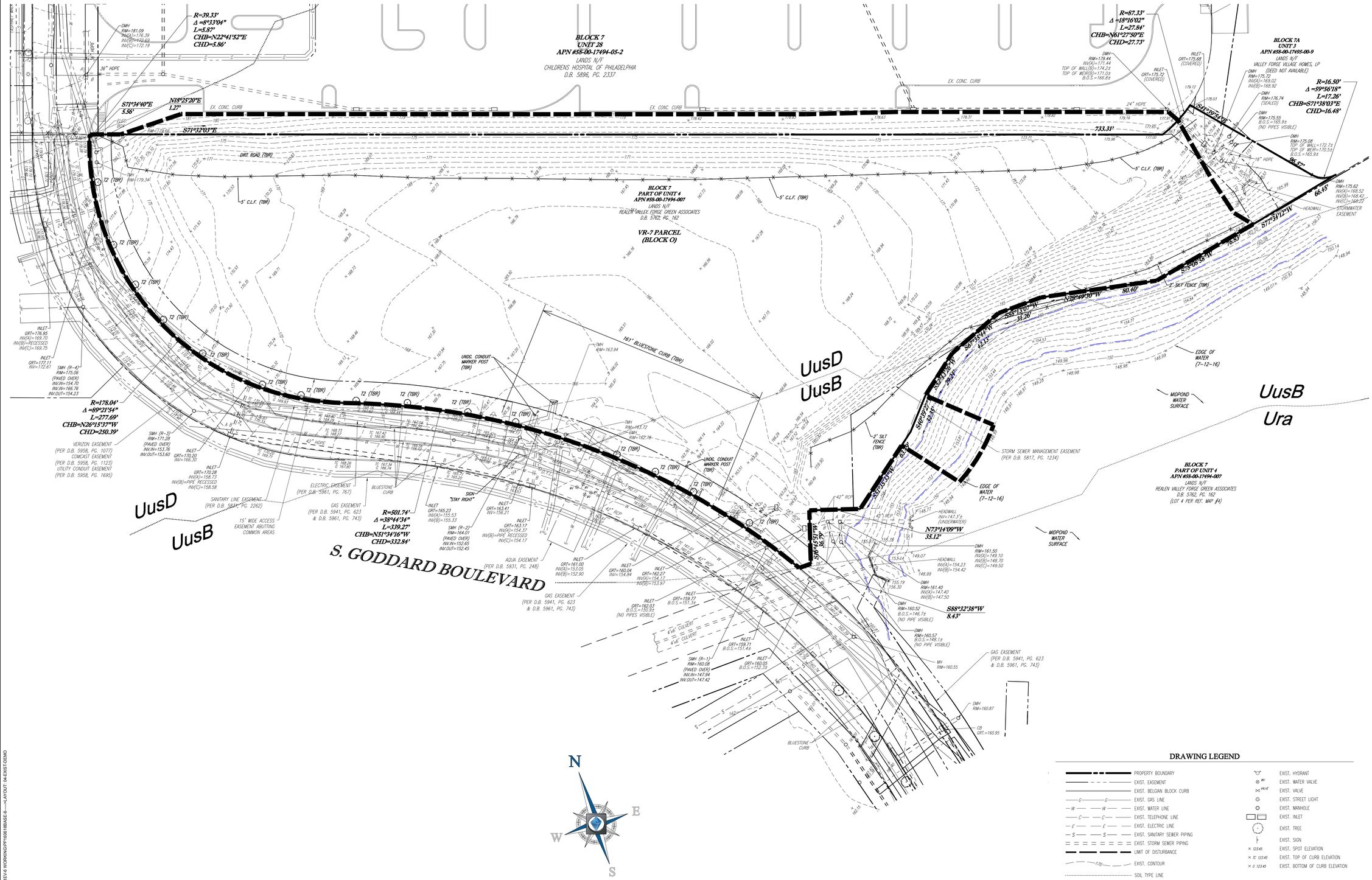
SHEET TITLE:

PROJECT NOTES
(RECORD PLAN 3 OF 3)

SHEET NUMBER:

C3
OF 14

REVISION 6



DRAWING LEGEND

- PROPERTY BOUNDARY
- EXIST. EASEMENT
- EXIST. BELGIAN BLOCK CURB
- EXIST. GAS LINE
- EXIST. WATER LINE
- EXIST. TELEPHONE LINE
- EXIST. ELECTRIC LINE
- EXIST. SANITARY SEWER PIPING
- EXIST. STORM SEWER PIPING
- LIMIT OF DISTURBANCE
- EXIST. CONTOUR
- SOIL TYPE LINE
- UdB SOIL TYPE LABEL
- EXIST. HYDRANT
- EXIST. WATER VALVE
- EXIST. VALVE
- EXIST. STREET LIGHT
- EXIST. MANHOLE
- EXIST. INLET
- EXIST. TREE
- EXIST. SIGN
- × 123.45 EXIST. SPOT ELEVATION
- × TC 123.45 EXIST. TOP OF CURB ELEVATION
- × EC 123.45 EXIST. BOTTOM OF CURB ELEVATION

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RALEIGH, NC
CHARLOTTE, NC
TAMPA, FLTE, NC
ATLANTA, GA
SOUTH FLORIDA

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM INC. 1-800-242-1776

POCS SERIAL NUMBER 20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: 1"=30'
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
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C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:
EXISTING CONDITIONS & DEMOLITION PLAN

SHEET NUMBER:
C4
OF 14

REVISION 6

J:\W R:\16\PP160618_CAD\LAND\DEV\REV.6 WORKING\[PP160618BASE6-----LAYOUT: 04 EXIST DEMO

STORM SEWER RUN TABLE

RUN	LENGTH (LF)	SLOPE (%)	SIZE (IN)	MATERIAL
COURT-01 - MH02	30	0.50	8	CORRUGATED HDPE
IN01 - YD16	42	0.50	18	CORRUGATED HDPE
IN02 - YD50	114	0.50	8	CORRUGATED HDPE
J01 - OUTFALL 01	26	0.50	24	CORRUGATED HDPE
J02 - MH04	43	0.50	24	CORRUGATED HDPE
MH02 - J01	90	0.50	8	CORRUGATED HDPE
MH04 - MH05	53	0.50	24	RCP
MH05 - J01	87	0.50	24	CORRUGATED HDPE
MH06 - J02	41	0.50	24	CORRUGATED HDPE
MH07 - IN01	82	0.50	18	CORRUGATED HDPE
RD01 - MH07	30	0.50	18	CORRUGATED HDPE
RD02 - MH04	43	1.00	12	CORRUGATED HDPE
RD03 - MH07	79	1.00	12	CORRUGATED HDPE
RD04 - MH06	39	1.00	18	CORRUGATED HDPE
YD01 - MH04	29	0.50	6	CORRUGATED HDPE
YD02 - J02	3	0.50	6	CORRUGATED HDPE
YD03 - MH06	23	0.50	8	CORRUGATED HDPE
YD04 - YD03	25	0.50	8	CORRUGATED HDPE
YD-05 - YD04	24	0.50	8	CORRUGATED HDPE
YD-06 - YD-05	55	0.50	8	CORRUGATED HDPE
YD07 - YD-06	31	0.50	8	CORRUGATED HDPE
YD08 - YD07	55	0.50	8	CORRUGATED HDPE
YD09 - YD08	31	0.50	8	CORRUGATED HDPE
YD10 - MH06	28	0.50	18	CORRUGATED HDPE
YD11 - YD10	37	0.50	18	CORRUGATED HDPE
YD12 - YD11	30	0.50	18	CORRUGATED HDPE
YD13 - YD12	30	0.50	18	CORRUGATED HDPE
YD14 - YD13	32	0.50	18	CORRUGATED HDPE
YD15 - YD14	23	0.50	18	CORRUGATED HDPE
YD16 - YD15	14	0.50	18	CORRUGATED HDPE
YD17 - IN01	32	0.50	8	CORRUGATED HDPE
YD18 - YD17	25	0.50	8	CORRUGATED HDPE
YD19 - YD18	24	0.50	8	CORRUGATED HDPE
YD20 - YD19	36	0.50	8	CORRUGATED HDPE
YD21 - YD20	37	0.50	8	CORRUGATED HDPE
YD22 - YD21	42	0.50	8	CORRUGATED HDPE
YD23 - YD21	9	2.00	6	CORRUGATED HDPE
YD24 - YD19	9	2.00	6	CORRUGATED HDPE
YD25 - YD18	9	2.00	6	CORRUGATED HDPE
YD26 - YD17	9	2.00	6	CORRUGATED HDPE
YD27 - IN01	9	2.00	6	CORRUGATED HDPE
YD28 - YD16	9	2.00	6	CORRUGATED HDPE
YD29 - YD14	9	2.00	6	CORRUGATED HDPE
YD30 - YD13	9	2.00	6	CORRUGATED HDPE
YD31 - YD12	9	2.00	6	CORRUGATED HDPE
YD32 - YD11	9	2.00	6	CORRUGATED HDPE
YD33 - YD10	9	2.00	6	CORRUGATED HDPE
YD34 - YD03	9	2.00	6	CORRUGATED HDPE
YD35 - YD04	9	2.00	6	CORRUGATED HDPE
YD36 - YD-05	9	2.00	6	CORRUGATED HDPE
YD37 - YD-06	9	2.00	6	CORRUGATED HDPE
YD38 - YD07	9	2.00	6	CORRUGATED HDPE
YD39 - YD08	9	2.00	6	CORRUGATED HDPE
YD40 - YD09	9	2.00	6	CORRUGATED HDPE
YD50 - MH07	47	0.50	8	CORRUGATED HDPE

STORM SEWER STRUCTURE TABLE

STRUCTURE	RIM/GRATE	INVERT(S) IN	INVERT OUT
COURT-01	165.00	-	161.64 (8") (MH02)
IN01	166.40	163.54 (8") (YD17) 162.91 (18") (MH07) 163.16 (6") (YD27)	162.71 (18") (YD16)
IN02	167.75	-	164.95 (8") (YD50)
J01	164.30	159.51 (24") (MH05) 160.84 (8") (MH02)	159.31 (24") (OUTFALL 01)
J02	164.18	161.82 (6") (YD02) 160.82 (24") (MH06)	160.82 (24") (MH04)
MH02	163.70	161.49 (8") (COURT-01)	161.29 (8") (J01)
MH04	164.28	160.61 (6") (YD01) 160.61 (12") (RD03) 160.61 (12") (RD02) 160.61 (24") (J02)	160.41 (24") (MH05)
MH05	164.56	160.14 (24") (MH04)	159.94 (24") (J01)
MH06	165.28	161.53 (18") (YD10) 161.23 (18") (RD04) 162.36 (8") (YD03)	161.03 (24") (J02)
MH07	167.50	164.15 (8") (YD50) 163.52 (18") (RD01)	163.32 (18") (IN01)
OUTFALL 01	-	-	159.18 (24") (J01)
RD01	168.00	-	163.67 (18") (MH07)
RD02	166.00	-	161.04 (12") (MH04)
RD03	166.00	-	161.40 (12") (MH04)
RD04	165.00	-	161.82 (18") (MH06)
YD01	162.50	-	160.75 (6") (MH04)
YD02	163.65	-	161.84 (6") (J02)
YD03	164.25	162.47 (6") (YD34) 162.47 (8") (YD04)	162.47 (8") (MH06)
YD04	164.50	162.60 (6") (YD35) 162.60 (8") (YD-05)	162.60 (8") (YD03)
YD-05	164.50	162.72 (6") (YD36) 162.72 (8") (YD-06)	162.72 (8") (YD04)
YD-06	164.78	162.99 (8") (YD07) 162.99 (6") (YD37)	162.99 (8") (YD-05)
YD07	164.94	163.15 (8") (YD08) 163.15 (6") (YD38)	163.15 (8") (YD-06)
YD08	165.10	163.42 (8") (YD09) 163.42 (6") (YD39)	163.42 (8") (YD07)
YD09	165.75	163.58 (6") (YD40)	163.58 (8") (YD08)
YD10	168.30	161.67 (18") (YD11) 161.67 (6") (YD33)	161.67 (18") (MH06)
YD11	168.40	161.85 (18") (YD12) 161.85 (6") (YD32)	161.85 (18") (YD10)
YD12	168.40	162.00 (18") (YD13) 162.00 (6") (YD31)	162.00 (18") (YD11)
YD13	168.40	162.15 (18") (YD14) 162.15 (6") (YD30)	162.15 (18") (YD12)
YD14	168.40	162.31 (18") (YD15) 162.31 (6") (YD29)	162.31 (18") (YD13)
YD15	165.75	162.43 (18") (YD16)	162.43 (18") (YD14)
YD16	165.75	162.50 (18") (IN01) 162.50 (6") (YD28)	162.50 (18") (YD15)
YD17	166.70	163.70 (8") (YD18) 163.70 (6") (YD26)	163.70 (8") (IN01)
YD18	166.70	163.82 (8") (YD19) 163.82 (6") (YD25)	163.82 (8") (YD17)
YD19	166.70	163.94 (8") (YD20) 163.94 (6") (YD24)	163.94 (8") (YD18)
YD20	167.30	164.12 (8") (YD21)	164.12 (8") (YD19)
YD21	167.30	164.31 (8") (YD22) 164.31 (6") (YD23)	164.31 (8") (YD20)
YD22	168.50	-	164.52 (8") (YD21)
YD23	174.72	-	164.49 (6") (YD21)
YD24	174.00	-	164.12 (6") (YD19)
YD25	173.83	-	164.00 (6") (YD18)
YD26	173.75	-	163.88 (6") (YD17)
YD27	173.69	-	163.34 (6") (IN01)
YD28	173.69	-	162.68 (6") (YD16)
YD29	173.76	-	162.49 (6") (YD14)
YD30	173.76	-	162.33 (6") (YD13)
YD31	173.76	-	162.18 (6") (YD12)
YD32	173.76	-	162.03 (6") (YD11)
YD33	173.88	-	161.85 (6") (YD10)
YD34	173.70	-	162.65 (6") (YD03)
YD35	173.70	-	162.78 (6") (YD04)
YD36	173.55	-	162.90 (6") (YD-05)
YD37	173.05	-	163.17 (6") (YD-06)
YD38	172.88	-	163.33 (6") (YD07)
YD39	173.92	-	163.60 (6") (YD08)
YD40	174.55	-	163.76 (6") (YD09)
YD50	166.68	164.38 (8") (IN02)	164.38 (8") (MH07)

DRAWING LEGEND

- PROPERTY BOUNDARY
- EXIST. BELGIAN BLOCK CURB
- PROP. CONCRETE CURB
- PROP. CONCRETE CURB BY OTHERS
- EXIST. CONTOUR (170)
- PROP. CONTOUR (170)
- EXIST. STORM SEWER PIPING
- PROP. STORM SEWER PIPING
- EXIST. SPOT ELEVATION (123.45)
- EXIST. TOP OF CURB ELEVATION (TC 123.45)
- EXIST. BOTTOM OF CURB ELEVATION (C 123.45)
- PROP. SPOT ELEVATION (222.99)
- PROP. TOP/BOTTOM OF THE CURB ELEVATIONS (TC 220.70 / BC 220.20)
- EXIST. HYDRANT
- EXIST. WATER VALVE (WV)
- EXIST. VALVE (VALVE)
- EXIST. STREET LIGHT
- EXIST. MANHOLE
- EXIST. INLET
- EXIST. SIGN
- EXIST. TREE
- PROP. INLET
- PROP. YARD DRAIN
- PROP. ROOF DRAIN
- PROP. MANHOLE
- PROP. CLEANOUT

N W E S

30 15 7.5 0 30
1"= 30'

BOHLER ENGINEERING
SITE CIVIL AND CONSULTING ENGINEERING
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NEW YORK, NY
CHARLOTTE, NC
TAMPA, FLTE, NC
NEW JERSEY
SOUTH FLORIDA
SOUTHERN MARYLAND
BALTIMORE, MD/DE

THE CONTRACTOR SHALL NOT SCALE PLANS, BUT SHALL REFER TO DIMENSIONS AND NOTES. ONLY APPROVED, SIGNED AND DATED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.
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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM INC. 1-800-242-1776

POCS SERIAL NUMBER 20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: 1"=30'
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
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Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

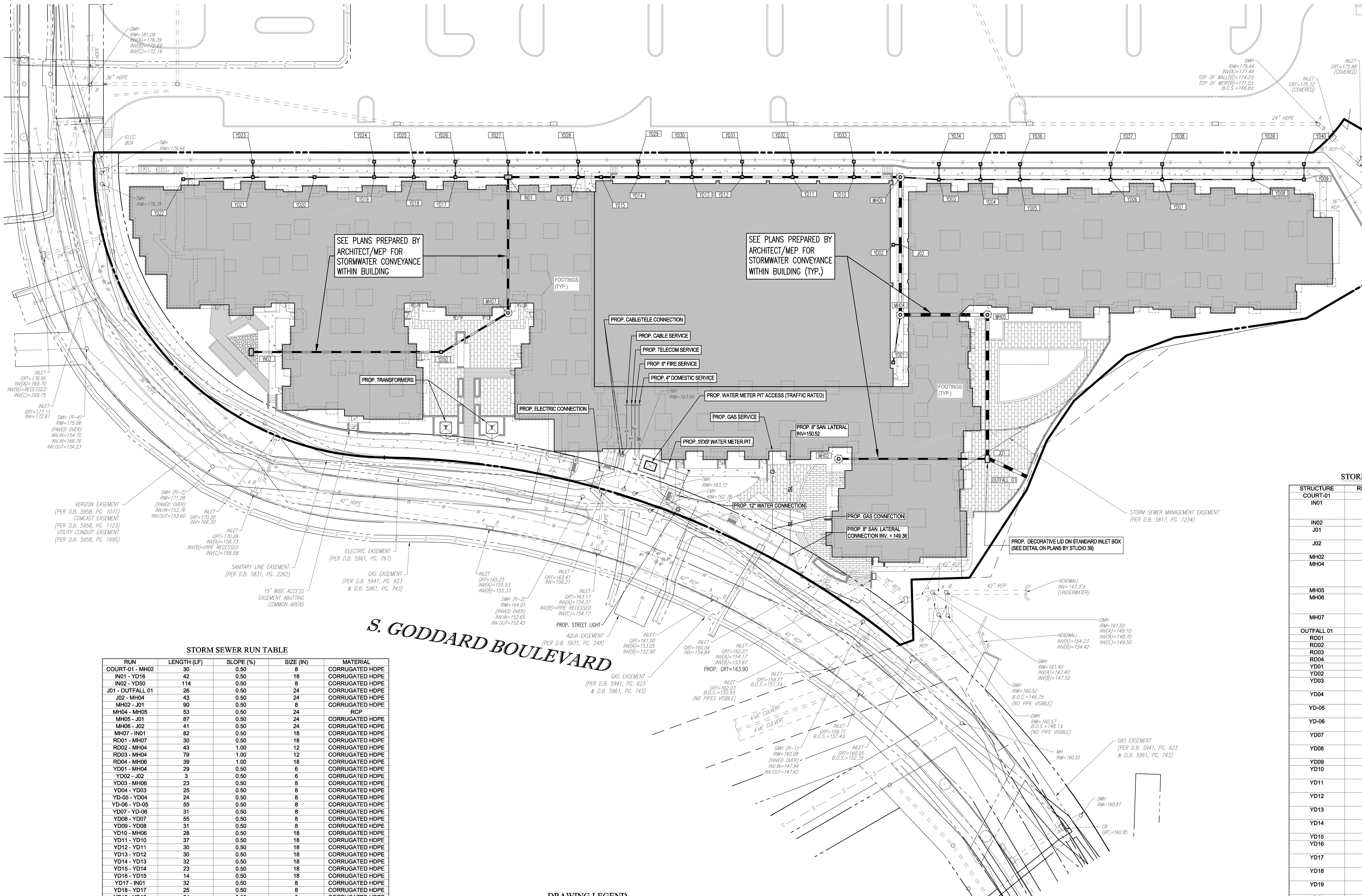
GRADING PLAN

SHEET NUMBER:

C5
OF 14

REVISION 6

J:\JW\PP160618_CAD\LANDDEVREV4\8 WORKING\PP160618BASE-6.dwg—>3LAYOUT: 05-GRADING
R:\16\PP\160618_CAD\LANDDEVREV4\8 WORKING\PP160618BASE-6.dwg—>3LAYOUT: 05-GRADING



STORM SEWER RUN TABLE

RUN	LENGTH (LF)	SLOPE (%)	SIZE (IN)	MATERIAL
COURT-01 - MH02	30	0.50	8	CORRUGATED HDPE
IN01 - YD16	42	0.50	18	CORRUGATED HDPE
IN02 - YD50	114	0.50	8	CORRUGATED HDPE
J01 - OUTFALL 01	26	0.50	24	CORRUGATED HDPE
J02 - MH04	43	0.50	24	CORRUGATED HDPE
MH02 - J01	90	0.50	8	CORRUGATED HDPE
MH04 - MH05	53	0.50	24	RCP
MH05 - J01	87	0.50	24	CORRUGATED HDPE
MH06 - J02	41	0.50	24	CORRUGATED HDPE
MH07 - IN01	82	0.50	18	CORRUGATED HDPE
RD01 - MH07	30	0.50	18	CORRUGATED HDPE
RD02 - MH04	43	1.00	12	CORRUGATED HDPE
RD03 - MH04	79	1.00	12	CORRUGATED HDPE
RD04 - MH06	39	1.00	18	CORRUGATED HDPE
YD01 - MH04	29	0.50	6	CORRUGATED HDPE
YD02 - J02	3	0.50	6	CORRUGATED HDPE
YD03 - MH06	23	0.50	8	CORRUGATED HDPE
YD04 - YD03	25	0.50	8	CORRUGATED HDPE
YD-05 - YD04	24	0.50	8	CORRUGATED HDPE
YD-06 - YD-05	55	0.50	8	CORRUGATED HDPE
YD07 - YD-06	31	0.50	8	CORRUGATED HDPE
YD08 - YD07	55	0.50	8	CORRUGATED HDPE
YD09 - YD08	31	0.50	8	CORRUGATED HDPE
YD10 - MH06	28	0.50	18	CORRUGATED HDPE
YD11 - YD10	37	0.50	18	CORRUGATED HDPE
YD12 - YD11	30	0.50	18	CORRUGATED HDPE
YD13 - YD12	30	0.50	18	CORRUGATED HDPE
YD14 - YD13	32	0.50	18	CORRUGATED HDPE
YD15 - YD14	23	0.50	18	CORRUGATED HDPE
YD16 - YD15	14	0.50	18	CORRUGATED HDPE
YD17 - IN01	32	0.50	8	CORRUGATED HDPE
YD18 - YD17	25	0.50	8	CORRUGATED HDPE
YD19 - YD18	24	0.50	8	CORRUGATED HDPE
YD20 - YD19	36	0.50	8	CORRUGATED HDPE
YD21 - YD20	37	0.50	8	CORRUGATED HDPE
YD22 - YD21	42	0.50	8	CORRUGATED HDPE
YD23 - YD21	9	2.00	6	CORRUGATED HDPE
YD24 - YD19	9	2.00	6	CORRUGATED HDPE
YD25 - YD18	9	2.00	6	CORRUGATED HDPE
YD26 - YD17	9	2.00	6	CORRUGATED HDPE
YD27 - IN01	9	2.00	6	CORRUGATED HDPE
YD28 - YD16	9	2.00	6	CORRUGATED HDPE
YD29 - YD14	9	2.00	6	CORRUGATED HDPE
YD30 - YD13	9	2.00	6	CORRUGATED HDPE
YD31 - YD12	9	2.00	6	CORRUGATED HDPE
YD32 - YD11	9	2.00	6	CORRUGATED HDPE
YD33 - YD10	9	2.00	6	CORRUGATED HDPE
YD34 - YD03	9	2.00	6	CORRUGATED HDPE
YD35 - YD04	9	2.00	6	CORRUGATED HDPE
YD36 - YD-05	9	2.00	6	CORRUGATED HDPE
YD37 - YD-06	9	2.00	6	CORRUGATED HDPE
YD38 - YD07	9	2.00	6	CORRUGATED HDPE
YD39 - YD08	9	2.00	6	CORRUGATED HDPE
YD40 - YD09	9	2.00	6	CORRUGATED HDPE
YD50 - MH07	47	0.50	8	CORRUGATED HDPE

DRAWING LEGEND

- PROPERTY BOUNDARY
- EXIST. EASEMENT
- EXIST. GAS LINE
- EXIST. WATER LINE
- EXIST. CABLE LINE
- EXIST. ELECTRIC LINE
- EXIST. SANITARY SEWER PIPING
- EXIST. STORM SEWER PIPING
- PROP. GAS SERVICE
- PROP. WATER SERVICE
- PROP. FIRE SERVICE
- PROP. CABLE LINE
- PROP. TELEPHONE LINE
- PROP. ELECTRIC LINE
- PROP. SANITARY LATERAL
- PROP. STORM SEWER PIPING
- EXIST. HYDRANT
- EXIST. WATER VALVE
- EXIST. VALVE
- EXIST. STREET LIGHT
- EXIST. MANHOLE
- EXIST. INLET
- EXIST. SIGN
- EXIST. TREE
- PROP. INLET
- PROP. YARD DRAIN
- PROP. ROOF DRAIN
- PROP. MANHOLE
- PROP. CLEANOUT

30 15 7.5 0 30
1"= 30'

STORM SEWER STRUCTURE TABLE

STRUCTURE	RIM/GRATE	INVERT(S) IN	INVERT OUT
COURT-01	165.00	-	161.64 (8") (MH02)
IN01	166.40	163.54 (8") (YD17) 162.91 (18") (MH07) 163.16 (6") (YD27)	162.71 (18") (YD16)
IN02	167.75	-	164.95 (8") (YD50)
J01	164.30	159.51 (24") (MH05) 160.84 (8") (MH02)	159.31 (24") (OUTFALL 01)
J02	164.18	161.82 (6") (YD02) 160.82 (24") (MH06)	160.82 (24") (MH04)
MH02	163.70	161.49 (8") (COURT-01)	161.29 (8") (J01)
MH04	164.28	160.61 (6") (YD01) 160.61 (12") (RD03) 160.61 (12") (RD02) 160.61 (24") (J02)	160.41 (24") (MH05)
MH05	164.56	160.14 (24") (MH04)	159.94 (24") (J01)
MH06	165.28	161.53 (18") (YD10) 161.23 (18") (RD04) 162.36 (8") (YD03)	161.03 (24") (J02)
MH07	167.50	164.15 (8") (YD50) 163.52 (18") (RD01)	163.32 (18") (IN01)
OUTFALL 01	-	-	159.18 (24") (J01)
RD01	168.00	-	163.67 (18") (MH07)
RD02	166.00	-	161.04 (12") (MH04)
RD03	166.00	-	161.40 (12") (MH04)
RD04	165.00	-	161.62 (18") (MH06)
YD01	162.50	-	160.75 (6") (MH04)
YD02	163.65	-	161.84 (6") (J02)
YD03	164.25	162.47 (6") (YD34) 162.47 (8") (YD04)	162.47 (8") (MH06)
YD04	164.50	162.60 (6") (YD35) 162.60 (8") (YD-05)	162.60 (8") (YD03)
YD-05	164.50	162.72 (6") (YD36) 162.72 (8") (YD-06)	162.72 (8") (YD04)
YD-06	164.78	162.99 (8") (YD07) 162.99 (6") (YD37)	162.99 (8") (YD-05)
YD07	164.94	163.15 (8") (YD08) 163.15 (6") (YD38)	163.15 (8") (YD-06)
YD08	165.10	163.42 (8") (YD09) 163.42 (6") (YD39)	163.42 (8") (YD07)
YD09	165.75	163.58 (6") (YD40)	163.58 (8") (YD08)
YD10	168.30	161.67 (18") (YD11) 161.67 (6") (YD33)	161.67 (18") (MH06)
YD11	168.40	161.85 (18") (YD12) 161.85 (6") (YD32)	161.85 (18") (YD10)
YD12	168.40	162.00 (18") (YD13) 162.00 (6") (YD31)	162.00 (18") (YD11)
YD13	168.40	162.15 (18") (YD14) 162.15 (6") (YD30)	162.15 (18") (YD12)
YD14	168.40	162.31 (18") (YD15) 162.31 (6") (YD29)	162.31 (18") (YD13)
YD15	165.75	162.43 (18") (YD16)	162.43 (18") (YD14)
YD16	165.75	162.50 (18") (IN01) 162.50 (6") (YD28)	162.50 (18") (YD15)
YD17	166.70	163.70 (8") (YD18) 163.70 (6") (YD26)	163.70 (8") (IN01)
YD18	166.70	163.82 (8") (YD19) 163.82 (6") (YD25)	163.82 (8") (YD17)
YD19	166.70	163.94 (8") (YD20) 163.94 (6") (YD24)	163.94 (8") (YD18)
YD20	167.30	164.12 (8") (YD21)	164.12 (8") (YD19)
YD21	167.30	164.31 (8") (YD22) 164.31 (6") (YD23)	164.31 (8") (YD20)
YD22	168.50	-	164.52 (8") (YD21)
YD23	174.72	-	164.49 (6") (YD21)
YD24	174.00	-	164.12 (6") (YD19)
YD25	173.83	-	164.00 (6") (YD18)
YD26	173.75	-	163.88 (6") (YD17)
YD27	173.69	-	163.34 (6") (IN01)
YD28	173.69	-	162.68 (6") (YD16)
YD29	173.76	-	162.49 (6") (YD14)
YD30	173.76	-	162.33 (6") (YD13)
YD31	173.76	-	162.18 (6") (YD12)
YD32	173.76	-	162.03 (6") (YD11)
YD33	173.88	-	161.85 (6") (YD10)
YD34	173.70	-	162.65 (6") (YD03)
YD35	173.70	-	162.78 (6") (YD04)
YD36	173.55	-	162.90 (6") (YD-05)
YD37	173.05	-	163.17 (6") (YD-06)
YD38	172.88	-	163.33 (6") (YD07)
YD39	173.92	-	163.60 (6") (YD08)
YD40	174.55	-	163.76 (6") (YD09)
YD50	166.68	164.38 (8") (IN02)	164.38 (8") (MH07)

JW
R:\16\PP160618_CAD\LANDDEV\REV-6 WORKING\PP160618BASE-6---->LAYOUT: 06-UTILITY

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3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
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PA1 SYSTEM, INC.
1-800-242-1776
POCS SERIAL NUMBER
20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: 1'=30'
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

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1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

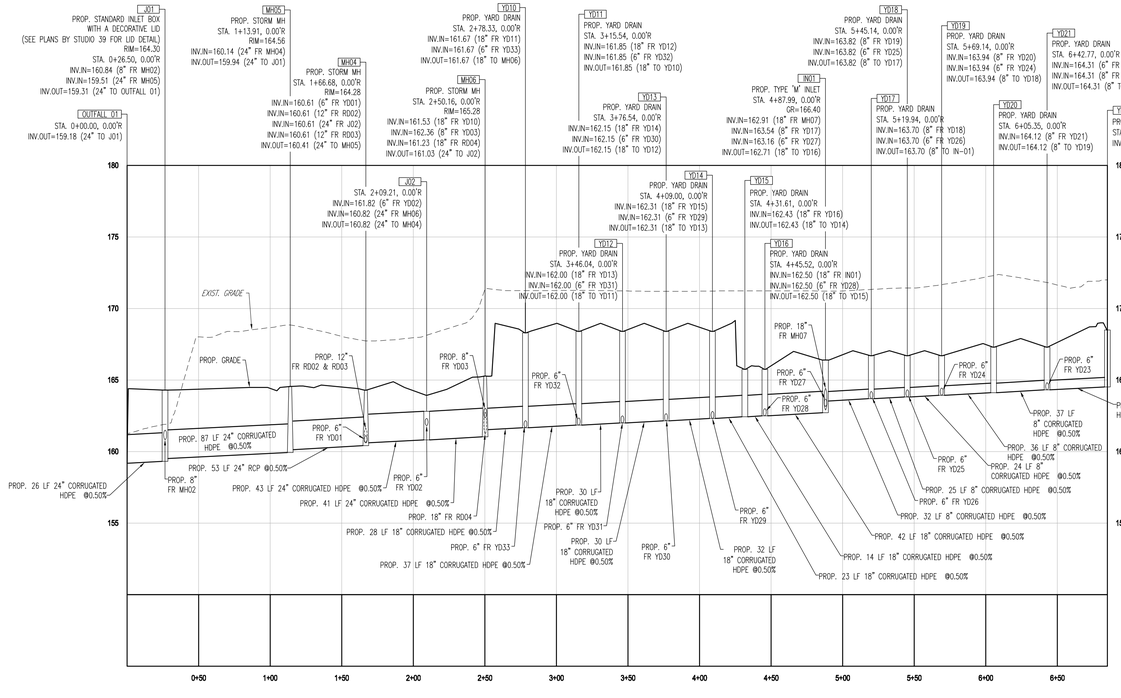
C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

UTILITY PLAN

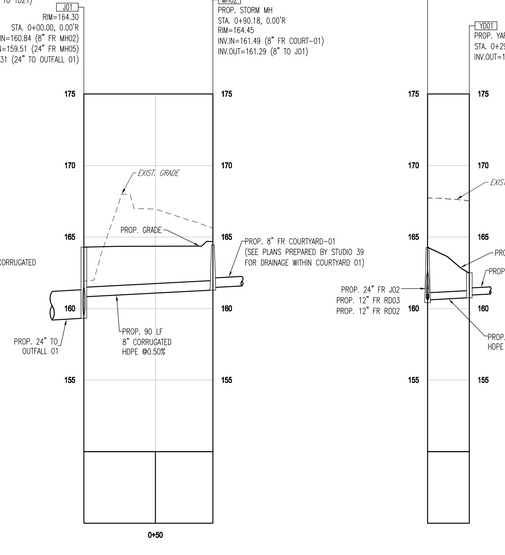
SHEET NUMBER:

REVISION 6



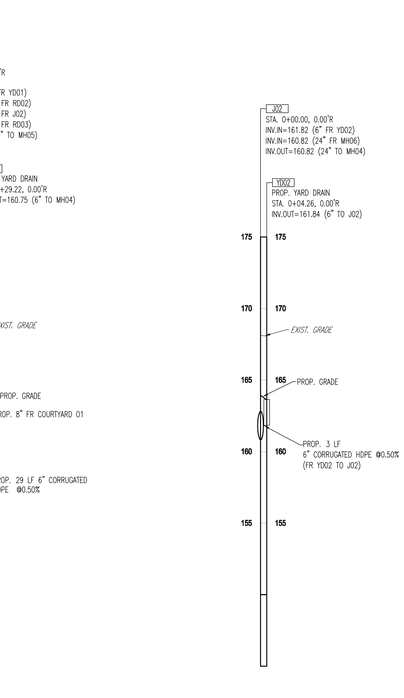
STORM PROFILE: OUTFALL 01 TO YD23

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



STORM PROFILE: J01 TO MH02

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

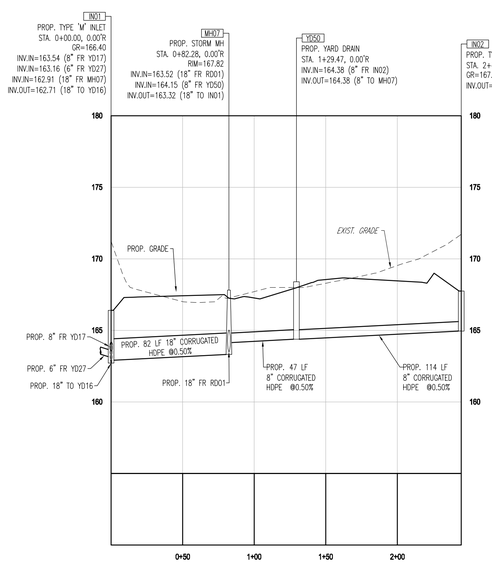


STORM PROFILE: MH04 TO YD01

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

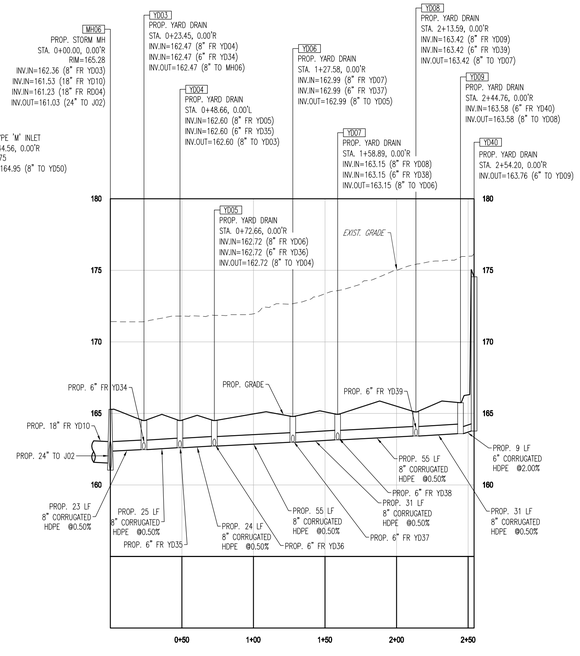
STORM PROFILE: J02 TO YD02

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



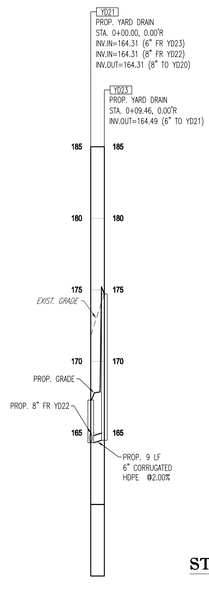
STORM PROFILE: IN01 TO IN02

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

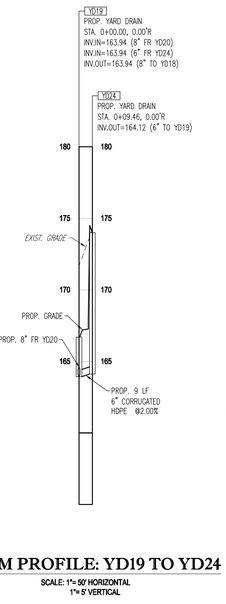


STORM PROFILE: MH06 TO YD40

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

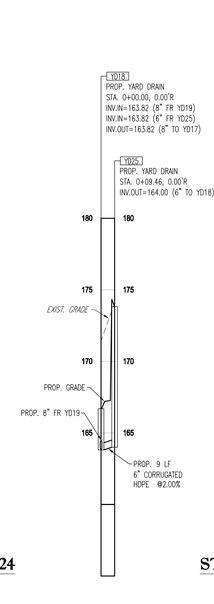


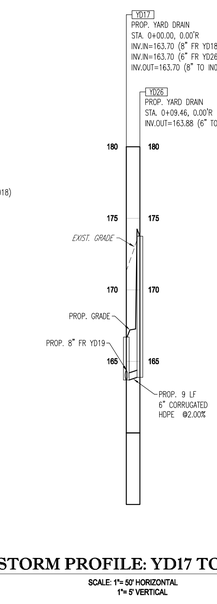
STORM PROFILE: YD21 TO YD23



STORM PROFILE: YD19 TO YD24

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





STORM PROFILE: YD17 TO YD26

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

STORM PROFILE: YD18 TO YD25

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

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POCS SERIAL NUMBER 20130731155

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CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618BASE-6

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Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

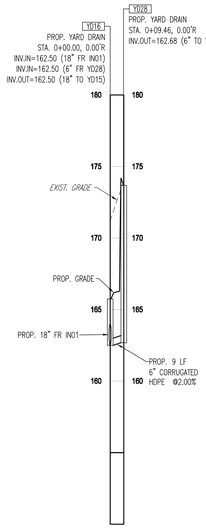
STORM SEWER PROFILES

SHEET NUMBER:

C7
OF 14

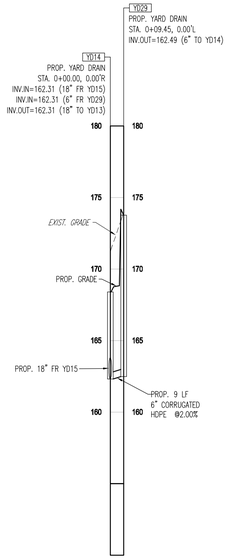
REVISION 6

J:\JW R:\16PP160618_CAD\LAND\DEVREV-6 WORKING\PP160618BASE-6-----3-LAYOUT- 07-STORM PROFILES



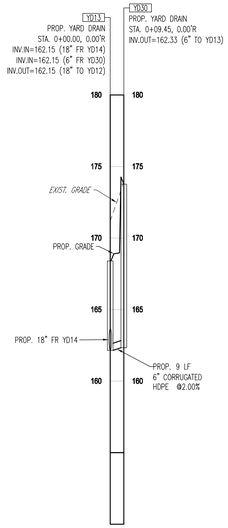
STORM PROFILE: YD16 TO YD28

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



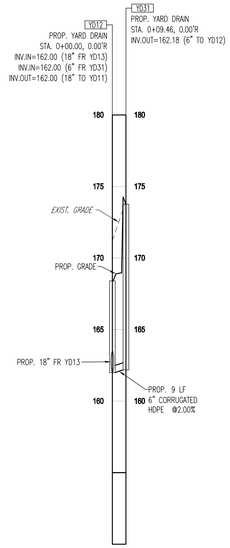
STORM PROFILE: YD14 TO YD29

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



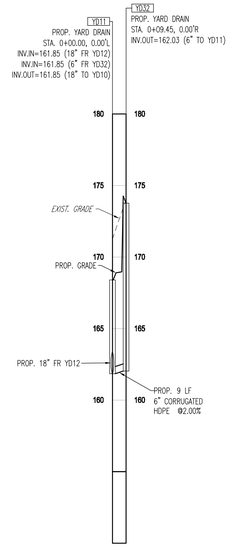
STORM PROFILE: YD13 TO YD30

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



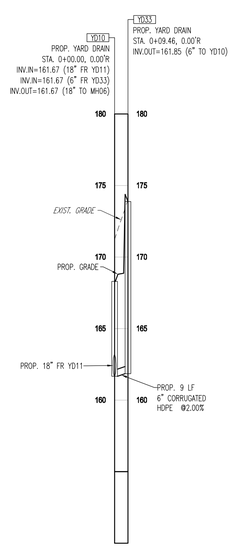
STORM PROFILE: YD12 TO YD31

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



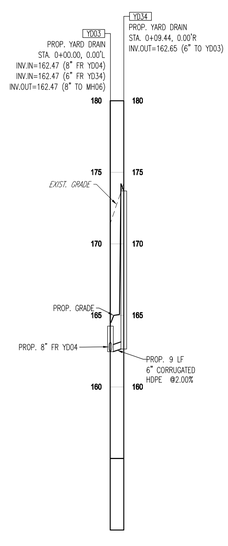
STORM PROFILE: YD11 TO YD32

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



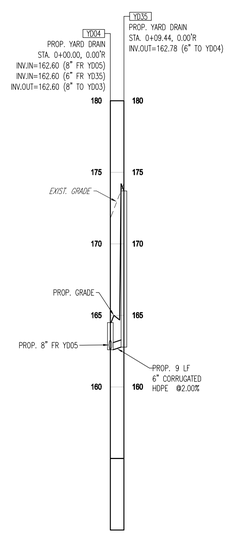
STORM PROFILE: YD10 TO YD33

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



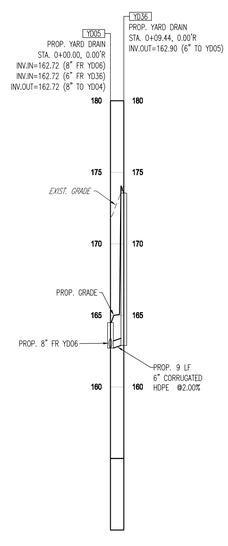
STORM PROFILE: YD03 TO YD34

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



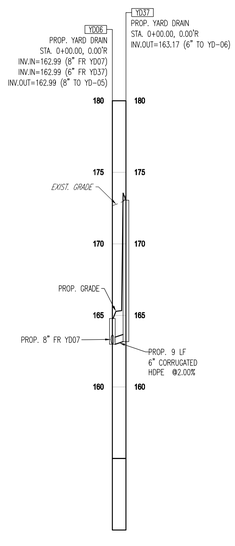
STORM PROFILE: YD04 TO YD35

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



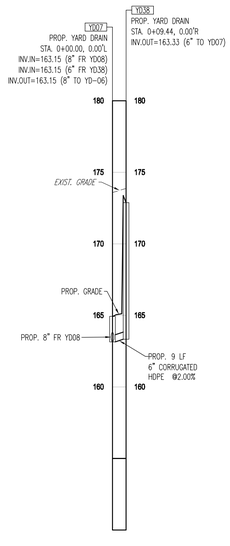
STORM PROFILE: YD05 TO YD36

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



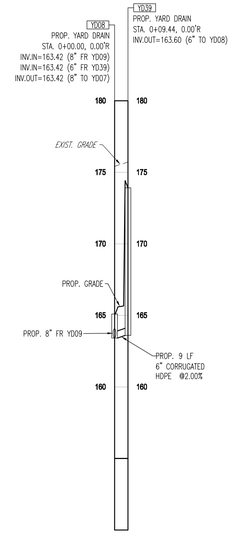
STORM PROFILE: YD06 TO YD37

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



STORM PROFILE: YD07 TO YD38

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



STORM PROFILE: YD08 TO YD39

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

J:\W R:\16\PP160618_CAD\LAND\DEVREV-6 WORKING\PP160618BASE-6.----->LAYOUT: 08-STORM PROFILES

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STAGE - STOP CALL

PA1 SYSTEM, INC.
1-800-242-1776

POCS SERIAL NUMBER
20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

STORM SEWER PROFILES

SHEET NUMBER:

C8
OF 14

REVISION 6

LIMIT OF DISTURBANCE 151,625 SF (3.48 Ac.)

PROP. NAG SC150 STABILIZATION

PROP. INLET PROTECTION (TYP.)

VR-7 PARCEL (BLOCK O)

PROP. NAG SC150 STABILIZATION

PROP. INLET PROTECTION (TYP.)

UusD

UusB

UusB

Ura

UusD

UusB

PROP. SUPER SILT FENCE

PROP. FILTER SOXX

PROP. ROCK CONSTRUCTION ENTRANCE

PROP. SUPER SILT FENCE

S. GODDARD BOULEVARD

N

E

W

S

THIS PLAN IS FOR SOIL EROSION & SEDIMENT POLLUTION CONTROL PURPOSES ONLY

30 15 7.5 0 30

1"= 30'

DRAWING LEGEND

PROPERTY BOUNDARY	EXIST. HYDRANT
RIGHT OF WAY LINE	EXIST. WATER VALVE
EXIST. BELGIAN BLOCK CURB	EXIST. VALVE
PROP. CONCRETE CURB	EXIST. STREET LIGHT
PROP. CONCRETE CURB BY OTHERS	EXIST. MANHOLE
EXIST. CONTOUR	EXIST. INLET
PROP. CONTOUR	EXIST. SIGN
EXIST. GAS LINE	EXIST. TREE
EXIST. WATER LINE	PROP. INLET
EXIST. CABLE LINE	PROP. YARD DRAIN
EXIST. ELECTRIC LINE	PROP. ROOF DRAIN
EXIST. SANITARY SEWER PIPING	PROP. MANHOLE
EXIST. STORM SEWER PIPING	PROP. CLEANOUT
PROP. GAS SERVICE	SOIL TYPE
PROP. WATER SERVICE	SOIL TYPE LABEL
PROP. FIRE SERVICE	PROP. INLET PROTECTION
PROP. CABLE LINE	TEMPORARY CONSTRUCTION ENTRANCE
PROP. ELECTRIC LINE	PROPOSED NAG SC150
PROP. SANITARY LATERAL	
PROP. STORM SEWER PIPING	
LIMIT OF DISTURBANCE	
SUPER SILT FENCE	
12"FS 12"FS 12" FILTER SOXX	

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NEW YORK, NY
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580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING

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SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN

SHEET NUMBER:

C9

OF 14

REVISION 6

PLOT DATE: 1/19/2017 10:38:41 AM
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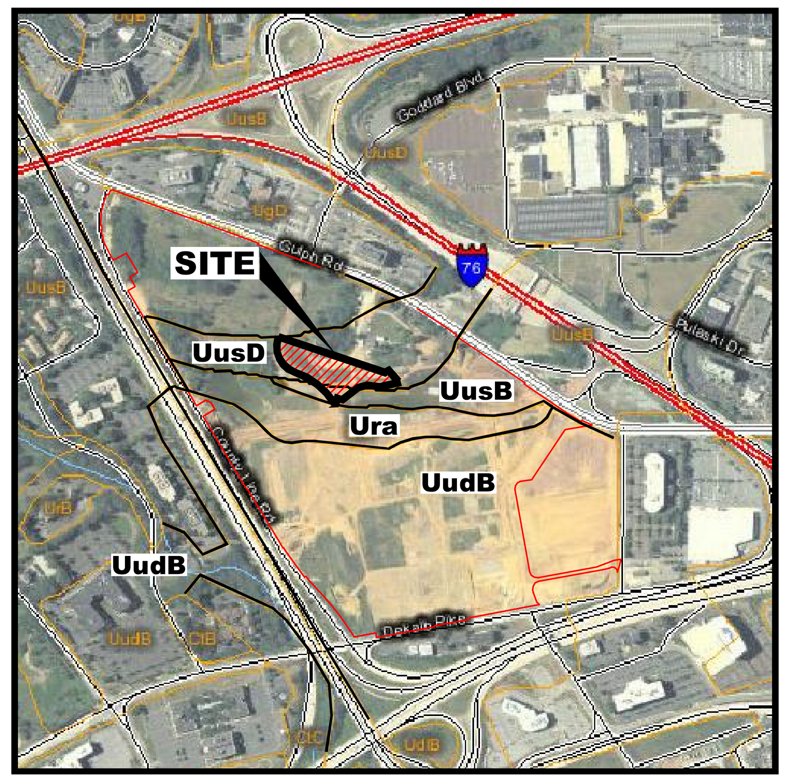

SOILS MAP

1"=1,000'

500' 0 1,000'

LIMITATIONS AND RESOLUTIONS:

1. SHOULD GROUNDWATER BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATIONS, WATER SHALL BE PUMPED FROM TRENCH INTO FILTER BAG.
2. DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
3. SHOULD BEDROCK BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATION, ROCK SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
4. 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.
5. THE SUBJECT SITE DRAINS TO TROUT CREEK, WHICH HAS A WWF,MF, CHAPTER 93 CLASSIFICATION.

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 SEIDEMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
     - II. PERMANENT SEED MIX:

       TALL FESCUES (64 POUNDS / ACRE PLS)
       OR 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 SEIDEMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2)
3. PURE LIVE 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. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   - B. 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)
   - C. 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.
   - D. 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).

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

MAP UNIT SETTING
NATIONAL MAP UNIT SYMBOL: 2DTZ9
ELEVATION: 250 TO 950 FEET
MEAN ANNUAL PRECIPITATION: 38 TO 48 INCHES
MEAN ANNUAL AIR TEMPERATURE: 48 TO 57 DEGREES F
FROST-FREE PERIOD: 161 TO 215 DAYS
FARMLAND CLASSIFICATION: NOT PRIME FARMLAND
MAP UNIT COMPOSITION
URBAN LAND: 80 PERCENT
UDORTHENTS, SHALE AND SANDSTONE, AND SIMILAR SOILS: 15 PERCENT
MINOR COMPONENTS: 5 PERCENT
ESTIMATES ARE BASED ON OBSERVATIONS, DESCRIPTIONS, AND TRANSECTS OF THE MAPUNIT.

DESCRIPTION OF URBAN LAND

SETTING
LANDFORM: HILLS
PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICALLY COVERED AREAS

TYPICAL PROFILE
C – 0 TO 6 INCHES: VARIABLE

PROPERTIES AND QUALITIES
SLOPE: 0 TO 8 PERCENT
DEPTH TO RESTRICTIVE FEATURE: 10 TO 99 INCHES TO LITHIC BEDROCK
AVAILABLE WATER STORAGE IN PROFILE: VERY LOW (ABOUT 0.0 INCHES)

INTERPRETIVE GROUPS
LAND CAPABILITY CLASSIFICATION (IRRIGATED): NONE SPECIFIED
LAND CAPABILITY CLASSIFICATION (NONIRRIGATED): 8S
HYDRIC SOIL RATING: NO

DESCRIPTION OF UDORTHENTS, SHALE AND SANDSTONE

SETTING
LANDFORM: RIDGES
LANDFORM POSITION (TWO-DIMENSIONAL): BACKSLOPE, SHOULDER, SUMMIT LANDFORM POSITION (THREE-DIMENSIONAL): SIDE SLOPE, NOSE SLOPE, INTERFLUVE DOWN-SLOPE SHAPE: LINEAR, CONVEX
ACROSS-SLOPE SHAPE: LINEAR, CONVEX
PARENT MATERIAL: GRADED AREAS OF SANDSTONE AND SHALE

TYPICAL PROFILE
A – 0 TO 6 INCHES: VERY CHANNERY LOAM
C – 6 TO 60 INCHES: VERY CHANNERY SILT LOAM

UusD - URBAN LAND-UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 8 TO 25 PERCENT SLOPES

MAP UNIT SETTING
NATIONAL MAP UNIT SYMBOL: 2DTZB
ELEVATION: 250 TO 950 FEET
MEAN ANNUAL PRECIPITATION: 38 TO 48 INCHES
MEAN ANNUAL AIR TEMPERATURE: 50 TO 57 DEGREES F
FROST-FREE PERIOD: 160 TO 200 DAYS
FARMLAND CLASSIFICATION: NOT PRIME FARMLAND
MAP UNIT COMPOSITION
URBAN LAND: 80 PERCENT
UDORTHENTS, SHALE AND SANDSTONE, AND SIMILAR SOILS: 15 PERCENT
MINOR COMPONENTS: 5 PERCENT
ESTIMATES ARE BASED ON OBSERVATIONS, DESCRIPTIONS, AND TRANSECTS OF THE MAPUNIT.

DESCRIPTION OF URBAN LAND

SETTING
LANDFORM: HILLS
LANDFORM POSITION (TWO-DIMENSIONAL): SUMMIT, SHOULDER, BACKSLOPE LANDFORM POSITION (THREE-DIMENSIONAL): INTERFLUVE, SIDE SLOPE, NOSE SLOPE DOWN-SLOPE SHAPE: LINEAR, CONVEX
ACROSS-SLOPE SHAPE: CONVEX, LINEAR
PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICALLY COVERED AREAS

TYPICAL PROFILE
C – 0 TO 6 INCHES: VARIABLE

PROPERTIES AND QUALITIES
SLOPE: 8 TO 25 PERCENT
DEPTH TO RESTRICTIVE FEATURE: 10 TO 99 INCHES TO LITHIC BEDROCK
AVAILABLE WATER STORAGE IN PROFILE: VERY LOW (ABOUT 0.0 INCHES)

INTERPRETIVE GROUPS
LAND CAPABILITY CLASSIFICATION (IRRIGATED): NONE SPECIFIED
LAND CAPABILITY CLASSIFICATION (NONIRRIGATED): 8S
HYDRIC SOIL RATING: NO

DESCRIPTION OF UDORTHENTS, SHALE AND SANDSTONE

SETTING
LANDFORM: HILLS
LANDFORM POSITION (TWO-DIMENSIONAL): SUMMIT, SHOULDER, BACKSLOPE LANDFORM POSITION (THREE-DIMENSIONAL): INTERFLUVE, SIDE SLOPE, NOSE SLOPE DOWN-SLOPE SHAPE: LINEAR, CONVEX
ACROSS-SLOPE SHAPE: CONVEX, LINEAR
PARENT MATERIAL: GRADED AREAS OF SANDSTONE AND SHALE

TYPICAL PROFILE
AP – 0 TO 6 INCHES: VERY CHANNERY LOAM
C – 6 TO 60 INCHES: VERY CHANNERY SILTY CLAY LOAM

MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS

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

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

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

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

NOTE: 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.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

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 FILTRED.
- 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.
- I. 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.
- J. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
- K. STANDARD FOR DISPOSAL OF MATERIALS 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.
- L. 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 HALL 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.

II. STANDARD FOR LAND GRADING

- A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
  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.
  2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
- B. INSTALLATION REQUIREMENTS
  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.
  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.
  3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
  4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
  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.
- M. 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
  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.
  2. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.
  3. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.
  4. PROTECTIVE MATERIALS TO BE USED:
     - 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.
     - 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 IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
- B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED
  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.
  2. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.
  3. SEEDBED PREPARATION FOR TEMPORARY SEEDING
     - A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
     - B. APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
     - C. APPLY 10-10-10 FERTILIZER A RATE OF 500 POUNDS PER ACRE
     - 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
  1. SITE PREPARATION
     - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
     - 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.
     - 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.
  2. APPLYING TOPSOIL
     - A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
     - B. ALL DISTURBED TOPSOIL ON-SITE IS TO BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE TOWNSHIP. UNIFORM APPLICATION TO A DEPTH OF 4-8 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.
  3. SEEDBED PREPARATION
     - A. A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS.
     - B. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
     - C. SOIL MODIFICATIONS:
       1. APPLY 10-10-40 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
       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.
     - 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.
     - E. REMOVE FROM THE SURFACE ALL STONES ONE INCHE (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.
     - F. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
  4. SEEDING: SEE SEEDING SPECIFICATIONS
- B. STANDARD FOR PERMANENT STABILIZATION WITH SOD
  1. METHODS AND MATERIALS
     - A. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
     - B. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
     - C. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
     - 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.
     - E. A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED.
     - F. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
  2. SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE)
  3. SOD PLACEMENT
     - 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. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.
     - 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.
     - D. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.
     - 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.
     - 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.
  4. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.

SEQUENCE OF CONSTRUCTION

1. THIS SEQUENCE OF CONSTRUCTION REFERS TO THE "ON-SITE" LIMIT OF DISTURBANCE. FOR EROSION AND SEDIMENT POLLUTION CONTROLS RELATING TO "OFF-SITE" CONSTRUCTION FOR S. GODDARD BOULEVARD THE CONTRACTOR MUST REFER TO THE PLANS PREPARED BY GILMORE & ASSOCIATES, INC.
2. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
3. AT LEAST SEVEN (7) DAYS BEFORE COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
4. ALL STRUCTURES ASSOCIATED WITH CONSTRUCTION OF SEDIMENT AND EROSION CONTROL MEASURES MUST BE AVAILABLE ON-SITE PRIOR TO ANY EARTH MOVING/DISTURBANCE.
5. INSTALL CONSTRUCTION ENTRANCE OFF OF S. GODDARD BOULEVARD.
6. INSTALL SILT FENCE ON DOWNHILL SIDE OF EARTH MOVING ACTIVITIES AS INDICATED ON THE PLANS. PERIMETER SILT FENCE ALSO TO BE INSTALLED AT THIS TIME.
7. CLEAR AND GRUB WITHIN LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS.
8. PERFORM DEMOLITION ACTIVITIES IN ACCORDANCE WITH THE EXISTING CONDITIONS/DEMOLITION PLAN.
9. INITIATE THE NECESSARY EARTHWORK TO REACH GRADES INDICATED ON THE PLANS. THIS WORK SHALL INCLUDE ROUGH GRADING OF THE PROPOSED BUILDING PAD.
10. BEGIN CONSTRUCTION OF BUILDING.
11. CONTINUE CONSTRUCTION OF UTILITIES AND INSTALL SITE LIGHTING FOUNDATIONS AND LIGHT STANDARDS.
12. INSTALL PROPOSED CURBING.
13. INSTALL STONE BASE COURSE, BINDER COURSE, AND WEARING COURSE FOR THE DRIVEWAYS TO PARKING GARAGE AND LOADING AREA.
14. REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS CUT MATERIAL FROM THE SITE IN A LAWFUL MANNER.
15. INLET PROTECTION AND SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE ADEQUATELY STABILIZED.
16. FINAL GRADE LANDSCAPING AREAS, PLANT TREES AND SHRUBS, AND SPREAD TOPSOIL AS SHOWN ON THE LANDSCAPE PLAN.
17. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE MCCD, REMOVE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCING AND INLET PROTECTION. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE STABILIZED IMMEDIATELY.
18. INSTALL SITE DRAINAGE AND STRIPING.
19. DEMOBILIZE.

MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S 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.) 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.

9.) 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.

10.) 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.

11.) 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.

12.) ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.

13.) VEHICLES AND EQUIPMENT TRAFFIC SHALL BE COORDINATED WITH REALAN VALLEY FORGE GREENES ASSOCIATES.

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 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.

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.) FILL 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 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.

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 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.

OPTIONAL NOTES

1.) 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.

2.) ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.

3.) UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.

4.) CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.

5.) SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.

6.) SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.

7.) ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.

8.) UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

9.) EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

10.) FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM NINE (9) INCH LOOSE LIFTS AT 95% DENSITY.

THIS PLAN IS FOR SOIL EROSION & SEDIMENT POLLUTION CONTROL PURPOSES ONLY

BOHLER ENGINEERING
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES
UPSTATE NEW YORK ◆ NEW ENGLAND ◆ BOSTON, MA ◆ NEW YORK METRO ◆ NEW YORK, NY ◆ NEW JERSEY
PHILADELPHIA, PA ◆ LEHIGH VALLEY, PA ◆ SOUTHEASTERN, PA ◆ REHOBOTH BEACH, DE ◆ BALTIMORE, MD ◆ SOUTHERN MARYLAND
NORTHERN VIRGINIA ◆ CENTRAL VIRGINIA ◆ RALEIGH, NC ◆ CHARLOTTE, NC ◆ TAMPA, FL ◆ SOUTH FLORIDA
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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

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POCS SERIAL NUMBER
20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618DETAILS-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
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C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL NOTES

SHEET NUMBER:

C10

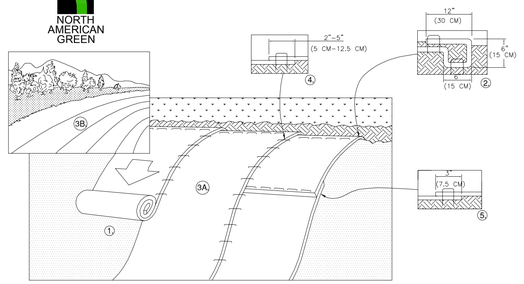
OF 14

REVISION 6

JW
R:\16\PP160618_CAD\LANDDEV\REV-6 WORKING\PP160618DETAILS-6---->LAYOUT: 10-E&S NOTES

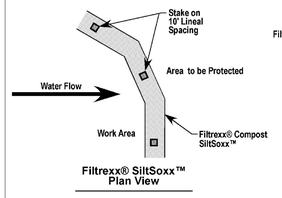
SLOPE INSTALLATION

NORTH AMERICAN GREEN

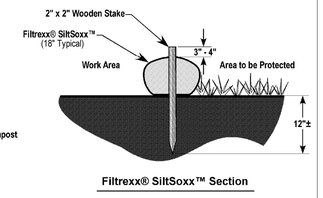


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™ STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

Filtrexx® SiltSoxx™ Details



Filtrexx® SiltSoxx™ Plan View



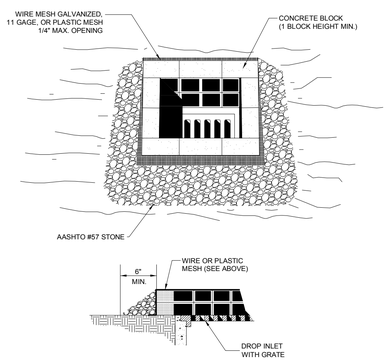
Filtrexx® SiltSoxx™ Section

IN THE EVENT STAKING IS NOT POSSIBLE, I.E., WHEN SEDIMENT CONTROL IS USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SEDIMENT CONTROL TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.

Notes:

1. **All material to meet Filtrexx® specifications.**
2. **SiltSoxx™ compost/soil/rock/seed fill to meet application requirements.**
3. **SiltSoxx™ depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.**
4. **Compost material to be dispersed on site, as determined by Engineer.**

STANDARD CONSTRUCTION DETAIL #29
Stone & Concrete Block Inlet Protection
Channel or Roadside Swale

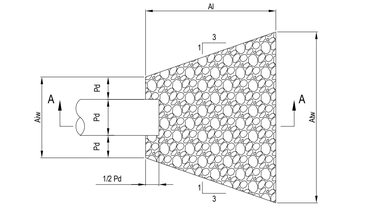


Maximum Drainage Area = 1 acre.

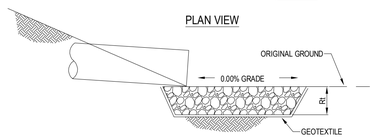
Inlet protection is not required for inlet tributary to sediment basin or trap. Berms required for all installations.

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 to remain permanently.

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



PLAN VIEW



SECTION A-A

OUTLET NO.	PIPE DIA. Pd (IN)	RIPRAP SIZE R_	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aw (FT)	APRON TERMINAL WIDTH Atw (FT)
OUTFALL-01	24	3	9	50	6	10

NOTES:

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

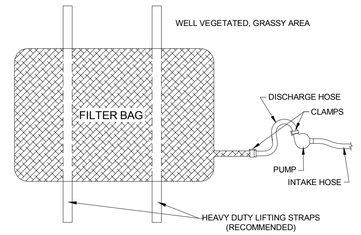
ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

STANDARD CONSTRUCTION DETAIL #9-2
RIPRAP APRON AT PIPE OUTLET
NO FLARED ENDWALL

NOT TO SCALE

STANDARD CONSTRUCTION DETAIL #3-16
Pumped Water Filter Bag



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	110lb
Mullen Burst	ASTM D-3786	350psi
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.

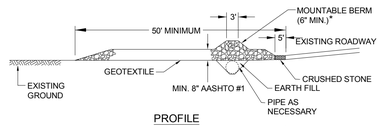
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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.

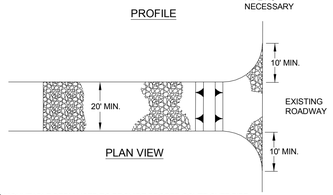
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

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 #3-1
Rock Construction Entrance



PROFILE



PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER OVER PIPE

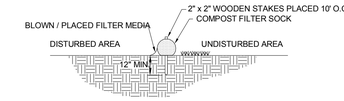
NOTES:
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

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

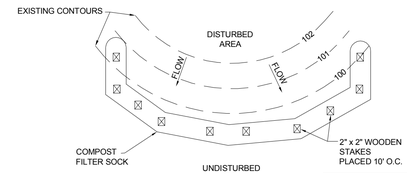
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

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 #4-1
Compost Filter Sock



SECTION VIEW



PLAN VIEW

IN THE EVENT STAKING IS NOT POSSIBLE, I.E., WHEN SEDIMENT CONTROL IS USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SEDIMENT CONTROL TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.

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.

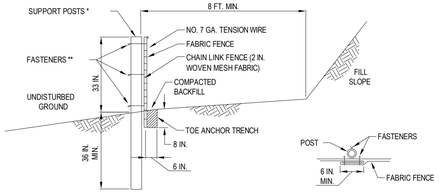
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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.



SECTION VIEW — JOINING FENCE SECTIONS

* POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

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

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2-1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

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.

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

STANDARD CONSTRUCTION DETAIL #4-10
SUPER SILT FENCE

NOT TO SCALE

THIS PLAN IS FOR SOIL EROSION & SEDIMENT POLLUTION CONTROL PURPOSES ONLY

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	**PER CLIENT COMMENTS**	DM
2	10/28/16	**PER CLIENT COMMENTS**	DM
3	12/16/16	**PER SELLER COMMENTS**	JW
4	12/28/16	**PER CLIENT COMMENTS**	DM
5	01/13/17	**PER SELLER COMMENTS**	JW
6	01/18/17	**PER CLIENT COMMENTS**	JW

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618DETAILS-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
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PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
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C. BROWN

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

SHEET NUMBER:

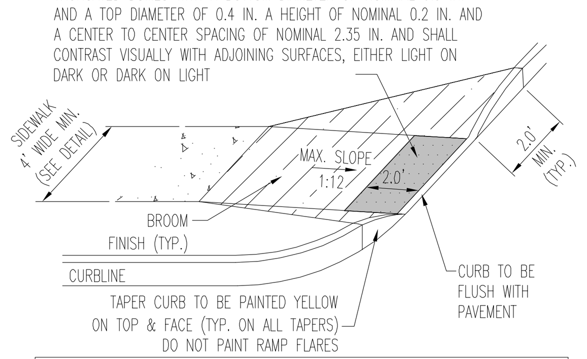
C11
OF 14

REVISION 6

R:\PP\P160618_CAD\LAND\DEVREV.6 WORKING\PP160618DETAILS-6.dwg —> LAYOUT: 11-E&S DETAILS
JW

CONTRACTOR TO CONSTRUCT DETECTABLE WARNINGS ONLY WHEN SIDEWALK INTERSECTS A VEHICULAR TRAVELED WAY

DETECTABLE WARNING SURFACES SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A BOTTOM DIAMETER OF NOMINAL 0.9 IN. AND A TOP DIAMETER OF 0.4 IN. A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK OR DARK ON LIGHT

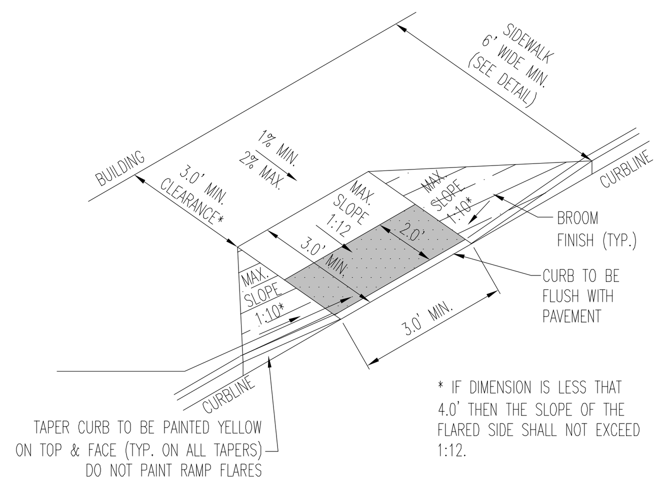


NOTES:
1.) CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND.

2.) CURB RAMPS, PAVEMENT MARKINGS, & APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

3.) A LEVEL LANDING AREA 5.0' (60 INCHES) IN LENGTH SHALL BE PROVIDED BEHIND THE RAMP.

A.D.A. CURB RAMP TYPE 4A
NTS



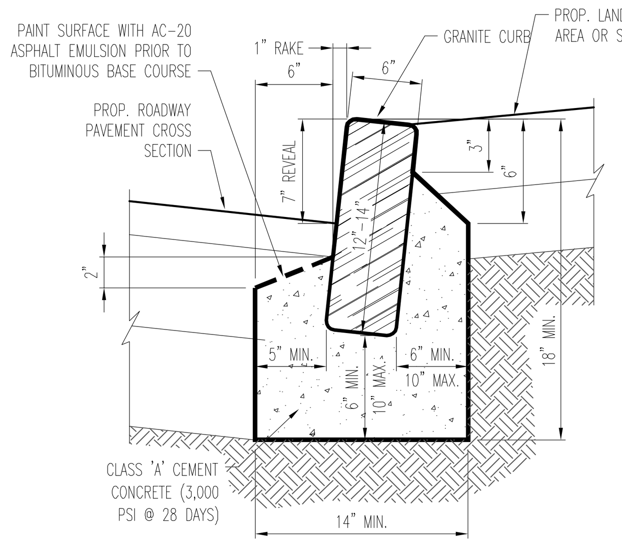
* IF DIMENSION IS LESS THAT 4.0' THEN THE SLOPE OF THE FLARED SIDE SHALL NOT EXCEED 1:12.

DETECTABLE WARNING SURFACES SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A BOTTOM DIAMETER OF NOMINAL 0.9 IN. AND A TOP DIAMETER OF 0.4 IN. A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK OR DARK ON LIGHT

CONTRACTOR TO CONSTRUCT DETECTABLE WARNINGS ONLY WHEN SIDEWALK INTERSECTS A VEHICULAR TRAVELED WAY

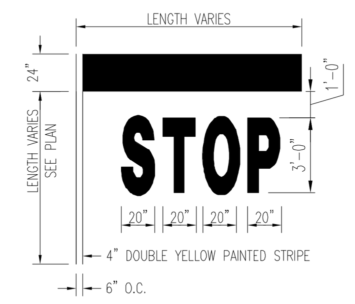
A.D.A. CURB RAMP TYPE 1
NTS

*** CONTRACTOR TO CONSTRUCT ADA RAMPS IN COMPLIANCE WITH PADOT STANDARDS**

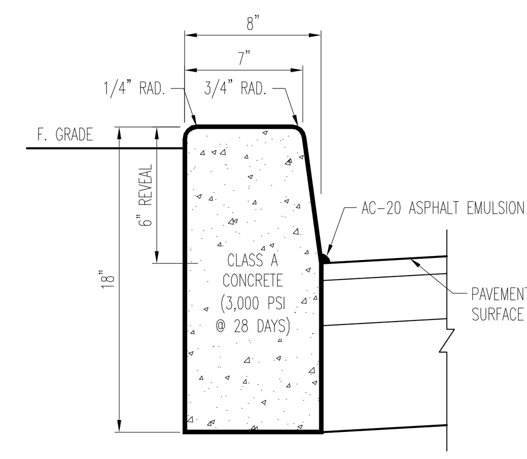


TYPICAL CURB SECTION

BELGIAN BLOCK CURB DETAIL
P / S11 SCALE: N.T.S. REV.: 2015.03.09

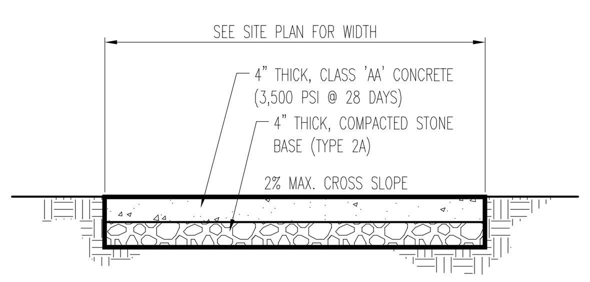


WHITE PAINTED STOP BAR & "STOP" LETTERING DETAIL
T / S3 SCALE: N.T.S. REV.: 2016.09.29



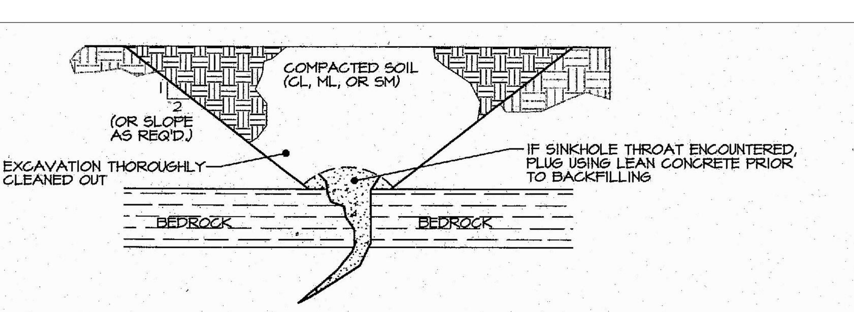
TRANSVERSE JOINTS 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

TYPICAL CONCRETE CURB DETAIL
P / S5 SCALE: N.T.S. REV.: 2015.03.09



EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 4' MAXIMUM LENGTH.

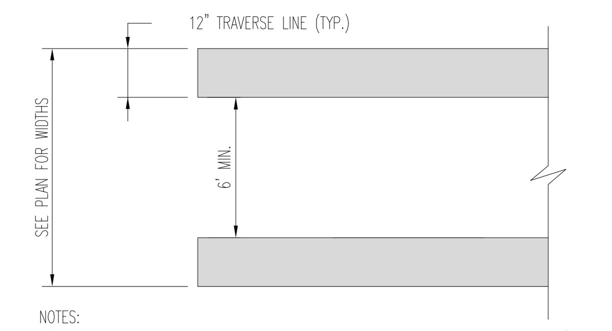
CONCRETE SIDEWALK DETAIL
P / S6 SCALE: N.T.S. REV.: 2015.03.09



SINKHOLE REPAIR NOTES

1. EXCAVATE SINKHOLE OPENING AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER. REMOVE DEBRIS AND SOFT, LOOSE, WET MATERIAL IN AN ATTEMPT TO EXPOSE THE SINKHOLE THROAT. IF THROAT CANNOT BE EXPOSED, CONTINUE EXCAVATION UNTIL BEDROCK OR STABLE SOILS IS ENCOUNTERED; OR THE EXTENT OF THE EXCAVATION EQUIPMENT. SEE ALTERNATIVE REPAIR AND BACKFILL PROCEDURES BELOW.
2. SLOPE, BENCH, SHORE, OR OTHERWISE PROTECT EXCAVATION AND SURROUNDING STRUCTURES IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND OTHER APPLICABLE STATE OR LOCAL REGULATIONS.
3. DEPENDING ON THE RESULT OF THE EXCAVATION, PROCEED WITH SINKHOLE REPAIR IN ACCORDANCE WITH THE FOLLOWING ALTERNATIVE PROCEDURES:
   A. IF A THROAT CAN BE EXPOSED, PLUG THE THROAT (FREE OF LOOSE DEBRIS) WITH LEAN CONCRETE OR FLOWABLE FILL TO ABOUT 2 FEET OVER TOP OF THE THROAT LOCATION. CONTINUE BACKFILL AND REPAIR PROCEDURES AS OUTLINED IN NOTES 4 THROUGH 6.
   B. IF BEDROCK ANR/OR STABLE SOIL IS REACHED, BUT A THROAT CANNOT BE EXPOSED, POUR A CAP (MINIMUM 2 FEET THICK) OF LEAN CONCRETE OR FLOWABLE FILL OVER THE BASE OF THE EXCAVATION (ROCK SURFACE). THE BEDROCK SURFACE SHOULD BE FREE OF LOOSE DEBRIS PRIOR TO POURING THE CAP. CONTINUE BACKFILL AND REPAIR PROCEDURES AS OUTLINED IN NOTES 4 THROUGH 6.
   C. IN LARGE SINKHOLES WHERE STABLE BEDROCK CANNOT BE ENCOUNTERED PRIOR TO EXCEEDING THE REACH OF THE EXCAVATION EQUIPMENT (OR IN THOSE SINKHOLES DESIGNATED BY THE GEOTECHNICAL ENGINEER), BACKFILL THE EXCAVATION AS OUTLINED IN NOTES 4 THROUGH 6. ONCE COMPLETED, COMPACTION GROUT THE SINKHOLE LOCATION AND SURROUNDING AREA AS SPECIFIED ELSEWHERE.
4. BACKFILL EXCAVATION WITH SOILS MEETING USCS DESIGNATION OF CL, ML, OR SM. PLACE IN LIFTS OF 10 - 12 INCHES AND COMPACT TO AT LEAST 92% OF MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR METHOD (ASTM 698).
5. GRADE SURFACE TO DRAIN AWAY FROM SINKHOLE UNTIL FINAL GRADING IS PERFORMED.
6. STABILIZE DISTURBED SURFACE AREAS AS SPECIFIED.

TYPICAL SINKHOLE REPAIR DETAIL
Not To Scale



NOTES:
1.) ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS AMENDED.
2.) TRAVERSE LINES SHALL EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
3.) ALL CROSSWALK TRAVERSE LINES SHALL BE BE WHITE THERMOPLAST AND SHALL BE OF EQUAL WIDTHS.

STANDARD CROSSWALK DETAIL
T / S22 SCALE: N.T.S. REV.: 2015.03.09

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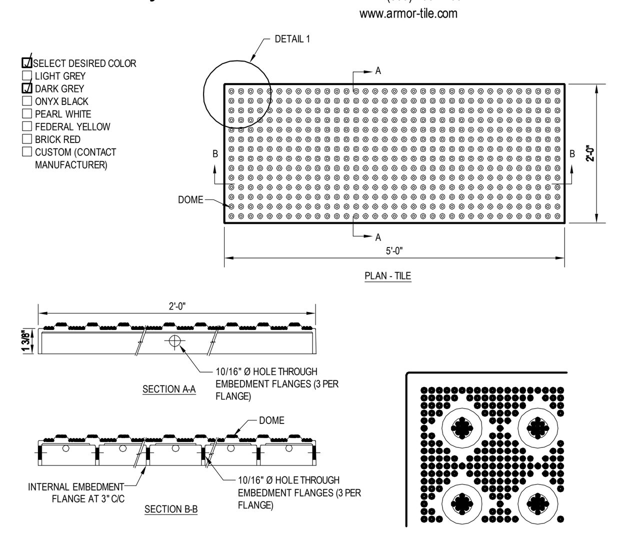
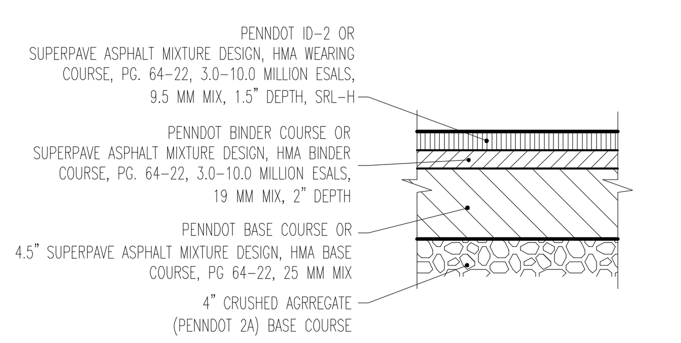
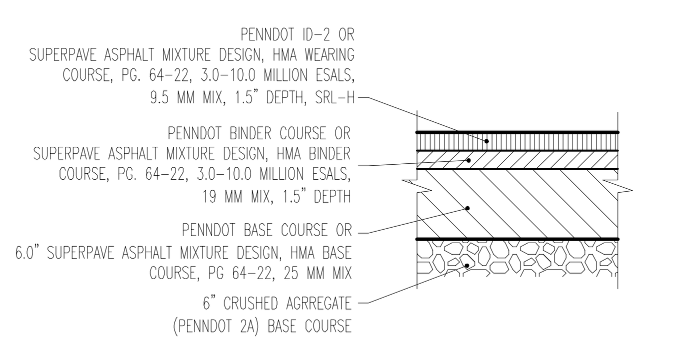


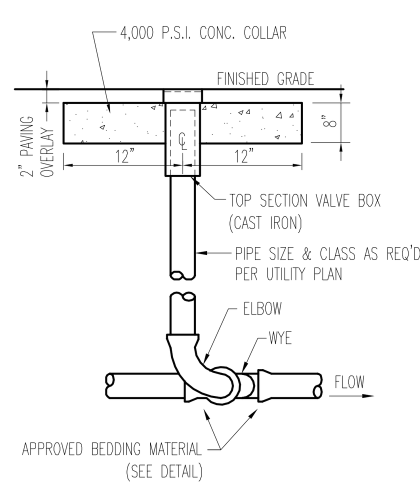
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. FOR CUSTOM SIZING CONTACT MANUFACTURER.
4. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 681-001E.



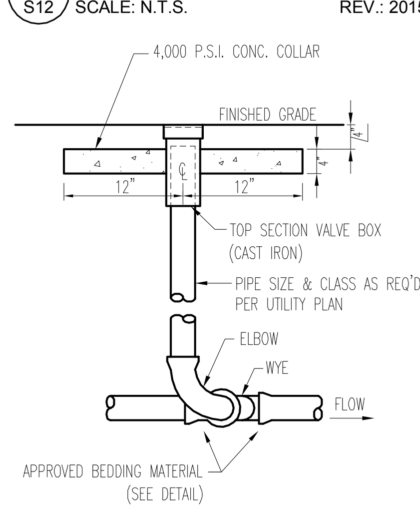
STANDARD ASPHALT PAVEMENT DETAIL
P / S14 SCALE: N.T.S. REV.: 2015.03.09



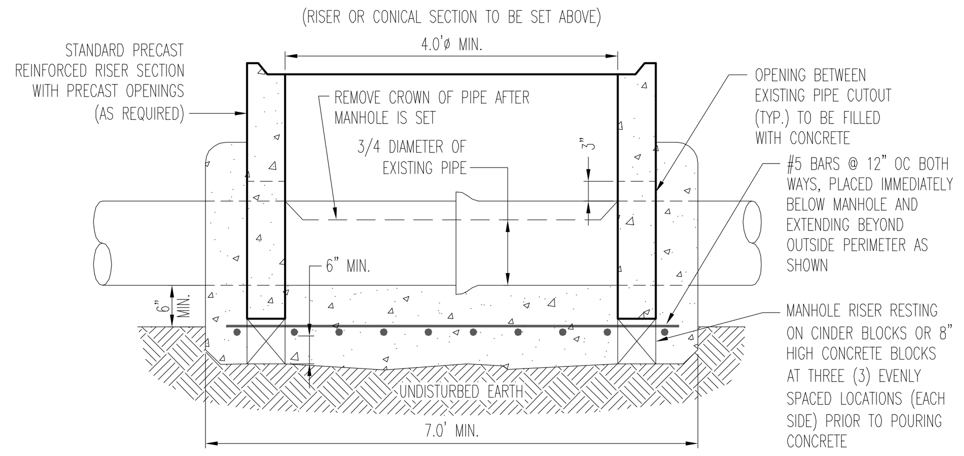
HEAVY DUTY ASPHALT PAVEMENT DETAIL
P / S15 SCALE: N.T.S. REV.: 2016.12.14



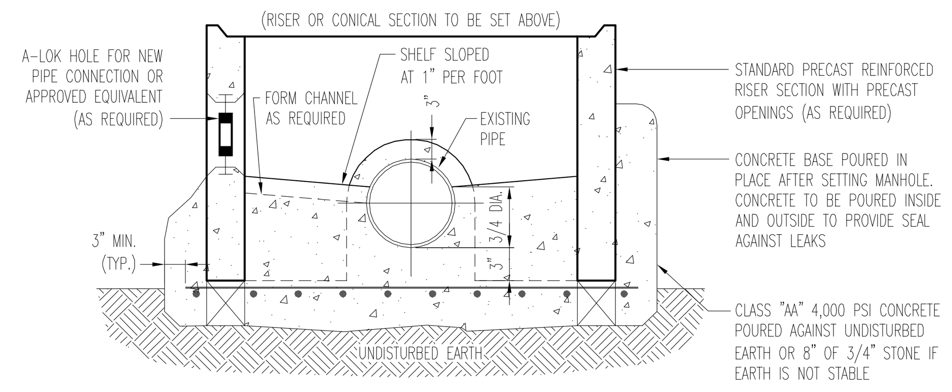
TYPICAL CLEANOUT DETAIL (PAVED AREAS)
S / S12 SCALE: N.T.S. REV.: 2015.03.09



TYPICAL CLEANOUT DETAIL (LANDSCAPED AREAS)
S / S13 SCALE: N.T.S. REV.: 2015.03.09



SIDE VIEW

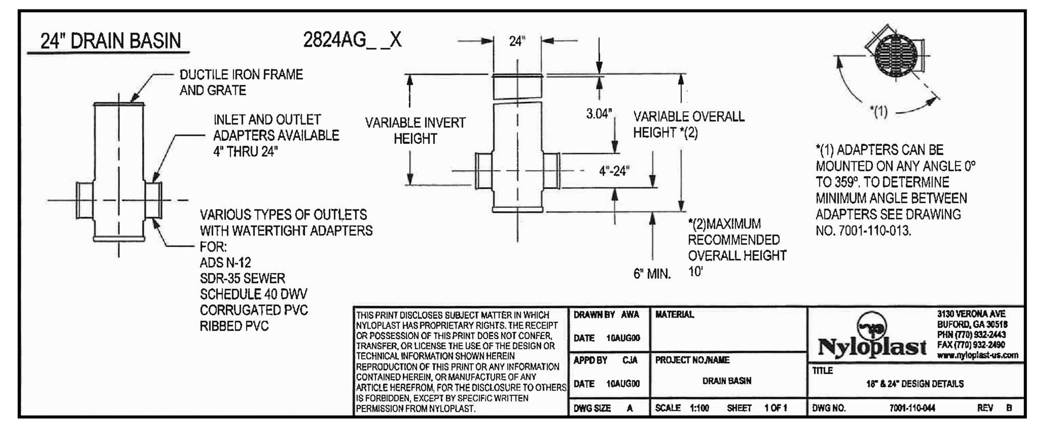


FRONT VIEW

NOTES:
1.) EXISTING PIPE TO REMAIN UNTIL EXFILTRATION OR VACUUM TEST ON MANHOLE IS ACCEPTABLE TO AUTHORITY.

2.) REMOVE CROWN OF EXISTING PIPE FLUSH WITH CONCRETE SHELF.

DOGHOUSE MANHOLE DETAIL
R / S2 SCALE: N.T.S. REV.: 2015.03.09


24" DRAIN BASIN 2824AG__X

DUCTILE IRON FRAME AND GRATE

INLET AND OUTLET ADAPTERS AVAILABLE 4" THRU 24"

VARIOUS TYPES OF OUTLETS WITH WATERTIGHT ADAPTERS FOR:
ADS N-12
SDR-35 SEWER
SCHEDULE 40 DWV
CORRUGATED PVC
RIBBED PVC

VARIABLE INVERT HEIGHT — 24" — 3.04" — VARIABLE OVERALL HEIGHT *(2) — 4"-24" — 6" MIN.

*(2)MAXIMUM RECOMMENDED OVERALL HEIGHT 10'

*(1) ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 359°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-013.

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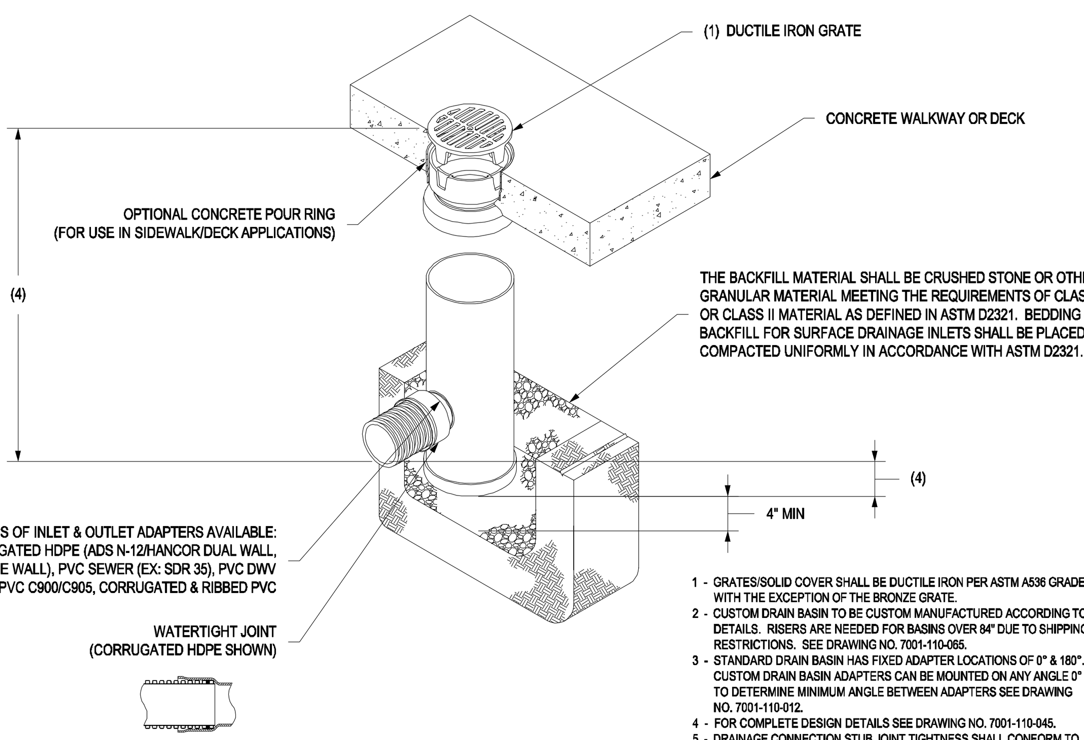
DRAWN BY AWA — DATE 10AUG00 — APP'D BY CJA — DATE 10AUG00 — DWG SIZE A — MATERIAL — PROJECT NO./NAME DRAIN BASIN — SCALE 1:100 — SHEET 1 OF 1

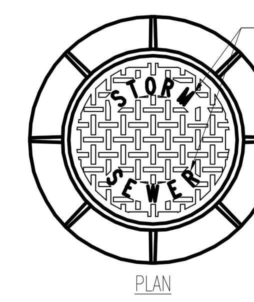
Nyloplast — 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE 18" & 24" DESIGN DETAILS — DWG NO. 7001-110-044 — REV B

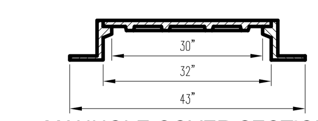


1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - CUSTOM DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
3 - STANDARD DRAIN BASIN HAS FIXED ADAPTER LOCATIONS OF 0° & 180°. CUSTOM DRAIN BASIN ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
4 - FOR COMPLETE DESIGN DETAILS SEE DRAWING NO. 7001-110-045.
5 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL) & PVC SEWER (4" - 24").

YARD DRAIN DETAIL
N.T.S.



PLAN



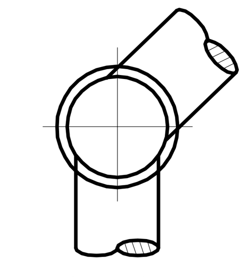
MANHOLE COVER SECTION

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.

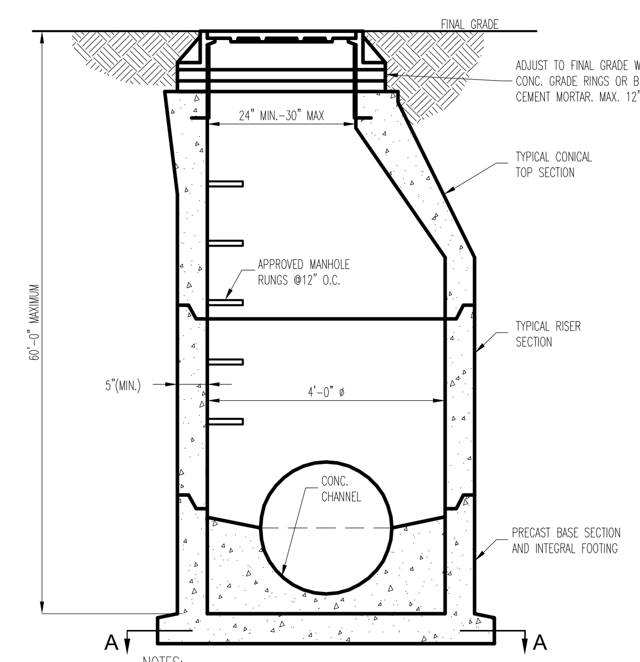
4.) ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.



PLAN VIEW

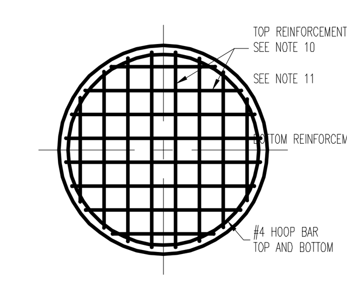
TABLE A
BASE SLAB DIMENSIONS

MAX. DEPTH FROM TOP OF MANHOLE TO TOP OF FOOTING	AS 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"

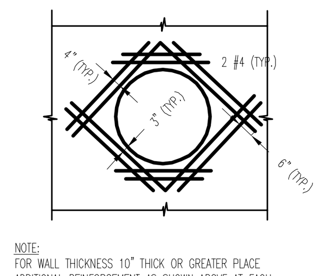


NOTES:
1. FOR PIPES 30 INCHES INSIDE DIAMETER OR LESS
2. FOR BASE SLAB DIMENSIONS SEE TABLE "A"

SECTION



SECTION A-A



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

REINFORCEMENT DETAIL AT OPENINGS

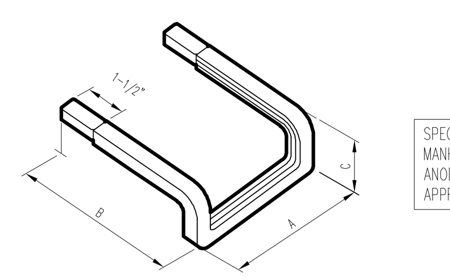
NOTES:
1. PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 714, MAY BE SUBSTITUTED FOR THE STANDARD CAST-IN-PLACE MANHOLE.
2. CONSTRUCTION NOTES:
   A. CONSTRUCT IN ACCORDANCE WITH: PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 605, 606, 714 AND ASTM C-478-90, 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

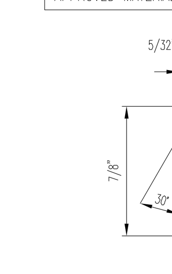
   RISERS OR BASE SECTIONS WITH HOLES TO BE CLEARLY MARKED WITH MAXIMUM ALLOWABLE DEPTH.
6. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS
7. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C). ALTERNATE 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.

PRECAST STORM MANHOLE DETAILS
R / S1 SCALE: N.T.S. REV.: 2015.03.09

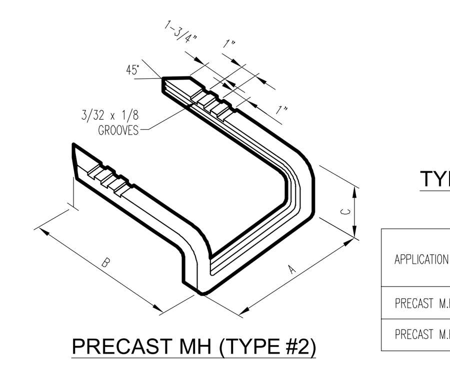


PRECAST MH (TYPE #1)

SPECIFICATIONS:
MANHOLE STEPS SHALL BE ANODIZED ALUMINUM OR APPROVED MATERIAL



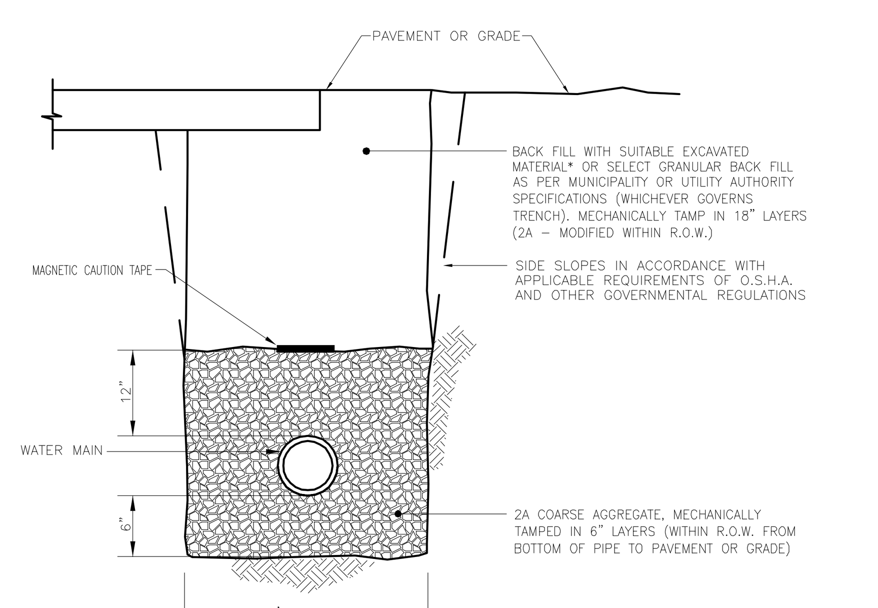
TYP. CROSS-SECTION ON ALL STEPS



PRECAST MH (TYPE #2)

APPLICATION	DIMENSION (IN.) A	B	C
PRECAST M.H. (TYPE #1)	13-3/4	10	3-3/4
PRECAST M.H. (TYPE #2)	13-3/4	11	3-3/4

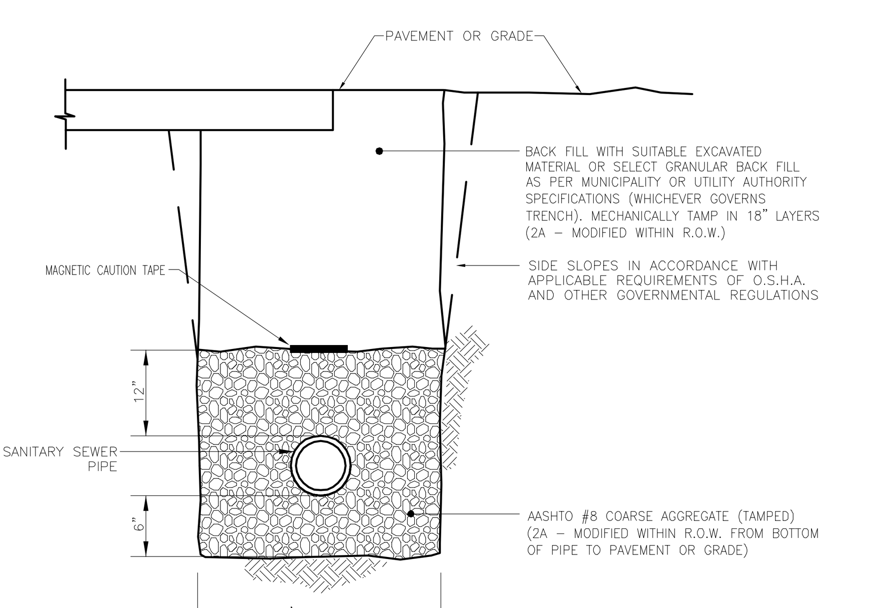
DROP FRONT MANHOLE STEP
S / S5 SCALE: N.T.S. REV.: 2015.03.09



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.

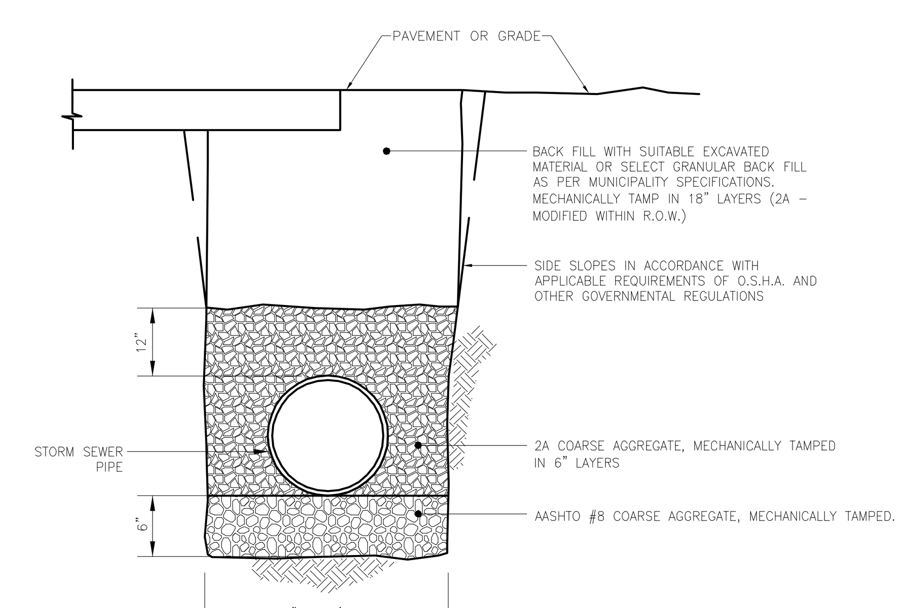
TRENCH BEDDING CLASSIFICATION (WATER MAIN)
W / S4 SCALE: N.T.S. REV.: 2015.03.09



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)
S / S8 SCALE: N.T.S. REV.: 2015.03.09



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 (STORM)
R / S8 SCALE: N.T.S. REV.: 2015.03.09

LIST OF APPLICABLE PADOT DETAILS

SIGNAGE: PA.D.O.T. PUBLICATION 236

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

STANDARD DRAWING NUMBER	DRAWING DATE
RC - 30M	JUNE 10, 2013
RC - 39M	JUNE 10, 2013
RC - 45M	JUNE 10, 2013
RC - 46M	JUNE 10, 2013
RC - 64M	JUNE 10, 2013
RC - 67M	JUNE 10, 2013

JW
R:\16\PP160618_CAD\LANDDEV\REV-6 WORKING\PP160618DETAILS-6---->LAYOUT: 12-DETAILS

BOHLER ENGINEERING™
SITE CIVIL AND CONSULTING ENGINEERING — LAND SURVEYING — PROGRAM MANAGEMENT — LANDSCAPE ARCHITECTURE — SUSTAINABLE DESIGN — PERMITTING SERVICES — TRANSPORTATION SERVICES
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NORTHERN VIRGINIA ◆ CENTRAL VIRGINIA ◆ RALEIGH, NC ◆ CHARLOTTE, NC ◆ TAMPA, FL ◆ SOUTH FLORIDA

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM, INC. 1-800-242-1776

POCS SERIAL NUMBER 20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: AS NOTED
CAD I.D.: PP160618DETAILS-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS
FOR
WOODFIELD ACQUISITIONS, LLC
THE VILLAGE AT VALLEY FORGE
580 SOUTH GODDARD BLVD. UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

DETAILS

SHEET NUMBER:
C12
OF 14

REVISION 6

GENERAL LIGHTING NOTES

1. THIS PLAN IS TO BE UTILIZED FOR LIGHTING PURPOSES ONLY. REFER TO ELECTRICAL ENGINEERING PLANS FOR CIRCUITRY DESIGN AND SPECIFICATIONS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE PROJECT ENGINEER (BOHLER) FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE FIXTURE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
3. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINARES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
4. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
5. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING ACCORDING TO MANUFACTURER RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINARIES FUNCTION IMPROPERLY.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO THE DESIGNERS ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
9. 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, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

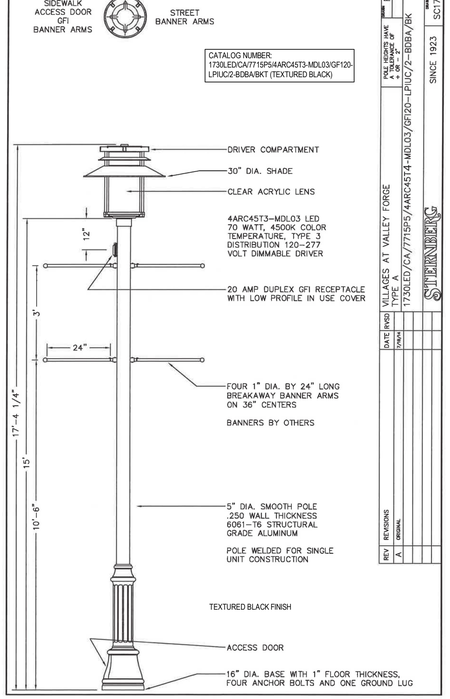
LUMINAIRE SCHEDULE

LABEL	Qty	MOUNTING HEIGHT	ARRANGEMENT	TOTAL LUMENS	LLF	DESCRIPTION
WFT	4	10'-0" AFF	SINGLE	2198	0.900	LITHONIA LIGHTING, D-SERIES SIZE 1 LED WALL LUMINAIRE, 10 LEDS, 530mA, 4000K, ZERO UPLIGHT (DSXW1 LED-10C-530-40K-TFTM-x)
W3	24	10'-0" AFF	SINGLE	2159	0.900	LITHONIA LIGHTING, D-SERIES SIZE 1 LED WALL LUMINAIRE, 10 LEDS, 530mA, 4000K, ZERO UPLIGHT (DSXW1 LED-10C-530-40K-TSM-x)
EX	10	------	SINGLE	------	------	EXISTING STERNBERG VILLA TO REMAIN. MODELED FOR ILLISTRATIVE PURPOSES ONLY.
A	1	17'-0" AFG	SINGLE	6780	0.900	STERNBERG VILLA SERIES LED STREET LUMINAIRE (1730LED/CA/7715P5/4ARC45T4-MDL03/GF120-LPIUC/2-BDBA/BKT)

30 15 7.5 0 30

1"= 30'

Updated sketch inserted by WT



REV	REVISIONS	DATE	PROJ	DRAWN
A	ADDITIONAL			

PALMYRA, NEW JERSEY
A TRUSTEE OF
VILLAGES AT VALLEY FORGE
TYPE A
1730LED/CA/7715P5/4ARC45T4-MDL03/GF120-LPIUC/2-BDBA/BK
STERNBERG
SINCE 1923
SC17124-6

BOHLER ENGINEERING

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

- UPSTATE NEW YORK
- BOSTON, MA
- NEW YORK, NY
- NEW JERSEY
- PHILADELPHIA, PA
- SOUTHEASTERN, PA
- LEHIGH VALLEY, PA
- BALTIMORE, MD
- SOUTHERN MARYLAND
- NORTHERN VIRGINIA
- RICHMOND, VIRGINIA
- RALEIGH, NC
- CHARLOTTE, NC
- TAMPA, FL
- SOUTH FLORIDA

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REVISIONS

REV	DATE	COMMENT	BY
1	10/17/16	PER CLIENT COMMENTS	DM
2	10/28/16	PER CLIENT COMMENTS	DM
3	12/16/16	PER SELLER COMMENTS	JW
4	12/28/16	PER SELLER COMMENTS	DM
5	01/13/17	PER SELLER COMMENTS	JW
6	01/18/17	PER CLIENT COMMENTS	JW

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA1 SYSTEM INC. 1-800-242-1776

POCS SERIAL NUMBER 20130731155

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: PP160618
DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE:
CAD I.D.: PP160618 LIGHT-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

580 SOUTH GODDARD BLVD.
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY, PA

BOHLER ENGINEERING
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

D.T. NORTH

REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002729

SHEET TITLE:

LIGHTING PLAN

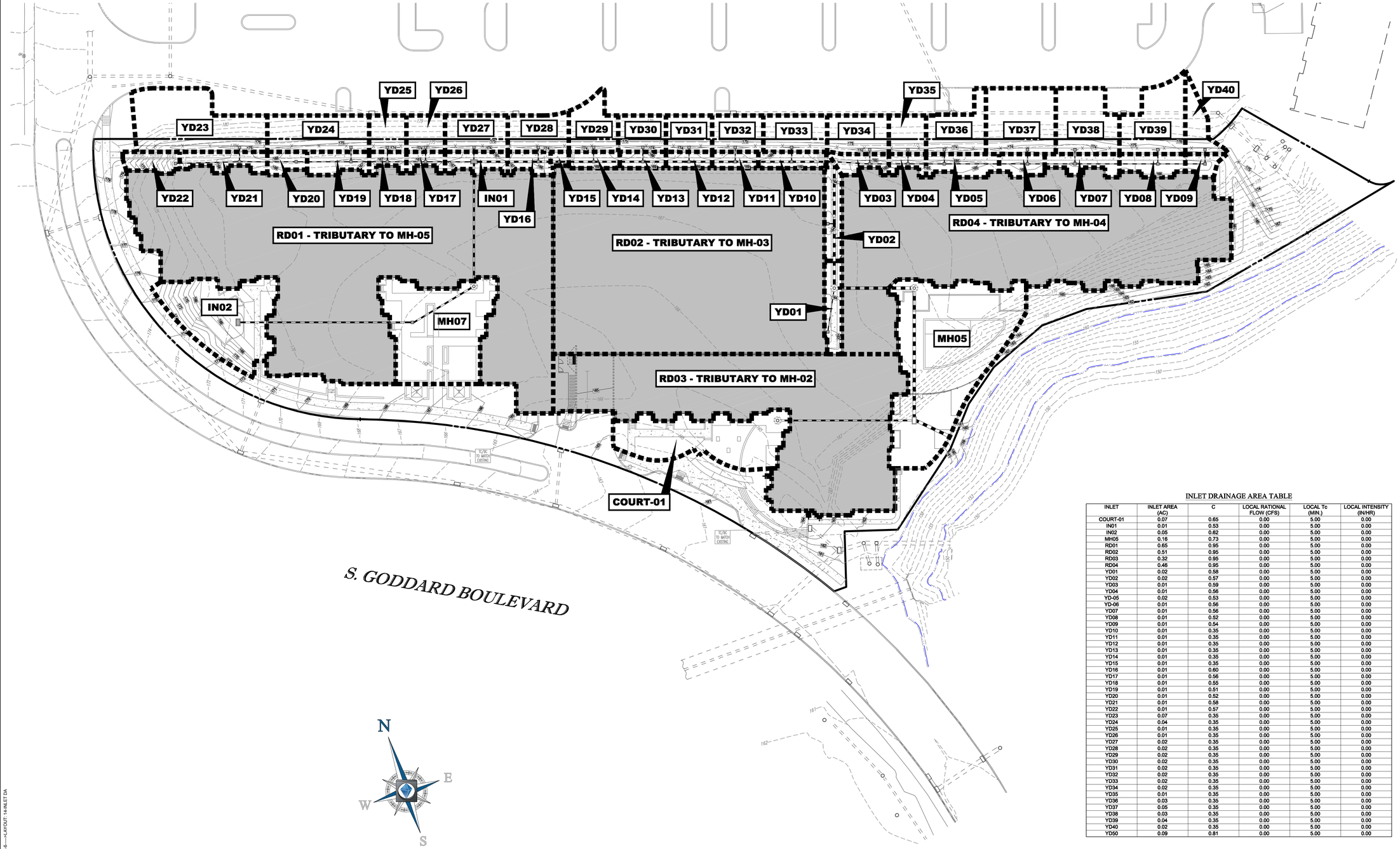
SHEET NUMBER:

C13

OF 14

REVISION 6

J:\W R:\16\PP160618_CAD\LANDDEVREV6 WORKING\[PP160618 LIGHT-6----LAYOUT: 13-LIGHTING



INLET DRAINAGE AREA TABLE

INLET	INLET AREA (AC)	C	LOCAL RATIONAL FLOW (CFS)	LOCAL Tc (MIN.)	LOCAL INTENSITY (IN/HR)
COURT-01	0.07	0.65	0.00	5.00	0.00
IN01	0.01	0.53	0.00	5.00	0.00
IN02	0.05	0.62	0.00	5.00	0.00
MH05	0.16	0.73	0.00	5.00	0.00
RD01	0.65	0.95	0.00	5.00	0.00
RD02	0.51	0.95	0.00	5.00	0.00
RD03	0.32	0.95	0.00	5.00	0.00
RD04	0.45	0.95	0.00	5.00	0.00
YD01	0.02	0.58	0.00	5.00	0.00
YD02	0.02	0.57	0.00	5.00	0.00
YD03	0.01	0.59	0.00	5.00	0.00
YD04	0.01	0.56	0.00	5.00	0.00
YD-05	0.02	0.53	0.00	5.00	0.00
YD-06	0.01	0.56	0.00	5.00	0.00
YD07	0.01	0.56	0.00	5.00	0.00
YD08	0.01	0.52	0.00	5.00	0.00
YD09	0.01	0.54	0.00	5.00	0.00
YD10	0.01	0.35	0.00	5.00	0.00
YD11	0.01	0.35	0.00	5.00	0.00
YD12	0.01	0.35	0.00	5.00	0.00
YD13	0.01	0.35	0.00	5.00	0.00
YD14	0.01	0.35	0.00	5.00	0.00
YD15	0.01	0.35	0.00	5.00	0.00
YD16	0.01	0.60	0.00	5.00	0.00
YD17	0.01	0.56	0.00	5.00	0.00
YD18	0.01	0.55	0.00	5.00	0.00
YD19	0.01	0.51	0.00	5.00	0.00
YD20	0.01	0.52	0.00	5.00	0.00
YD21	0.01	0.58	0.00	5.00	0.00
YD22	0.01	0.57	0.00	5.00	0.00
YD23	0.07	0.35	0.00	5.00	0.00
YD24	0.04	0.35	0.00	5.00	0.00
YD25	0.01	0.35	0.00	5.00	0.00
YD26	0.01	0.35	0.00	5.00	0.00
YD27	0.02	0.35	0.00	5.00	0.00
YD28	0.02	0.35	0.00	5.00	0.00
YD29	0.02	0.35	0.00	5.00	0.00
YD30	0.02	0.35	0.00	5.00	0.00
YD31	0.02	0.35	0.00	5.00	0.00
YD32	0.02	0.35	0.00	5.00	0.00
YD33	0.02	0.35	0.00	5.00	0.00
YD34	0.02	0.35	0.00	5.00	0.00
YD35	0.01	0.35	0.00	5.00	0.00
YD36	0.03	0.35	0.00	5.00	0.00
YD37	0.05	0.35	0.00	5.00	0.00
YD38	0.03	0.35	0.00	5.00	0.00
YD39	0.04	0.35	0.00	5.00	0.00
YD40	0.02	0.35	0.00	5.00	0.00
YD50	0.09	0.81	0.00	5.00	0.00

DRAWING LEGEND

PROP. INLET DRAINAGE AREA

YD05 — PROP. INLET DRAINAGE AREA NUMBER

BOHLER ENGINEERING
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
SUSTAINABLE DESIGN
LANDSCAPE ARCHITECTURE
PROGRAM MANAGEMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES
PHILADELPHIA, PA
BOSTON, MA
PITTSBURGH, PA
NEW YORK, NY
NEW JERSEY
NORTHERN VIRGINIA
RICHMOND, VIRGINIA
RALEIGH, NC
CHARLOTTE, NC
TAMPA, FLTE, NC
DENVER
SOUTH FLORIDA
SOUTHEASTERN PA
BALTIMORE, MD
WILMINGTON, DE
SOUTHERN MARYLAND
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DRAWN BY: JPW
CHECKED BY: CB
DATE: 2016-09-23
SCALE: 1"=30'
CAD I.D.: PP160618BASE-6

PROJECT:

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

FOR

WOODFIELD ACQUISITIONS, LLC

THE VILLAGE AT VALLEY FORGE

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UPPER MERION TOWNSHIP
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PHILADELPHIA, PENNSYLVANIA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317

SHEET TITLE:

INLET DRAINAGE AREA PLAN

SHEET NUMBER:

C14
OF 14

REVISION 6

PLOT DATE: 3/1/2017 3:14:36 PM
R:\16\PP160618_CAD\LAND\DEV\REV6 WORKING\SP\PP160618BASE6-----LAYOUT: 14-INLET DA