PROPOSED EMS / STORAGE DEVELOPMENT PRELIMINARY/FINAL LAND DEVELOPMENT PLANS

SITUATED IN:

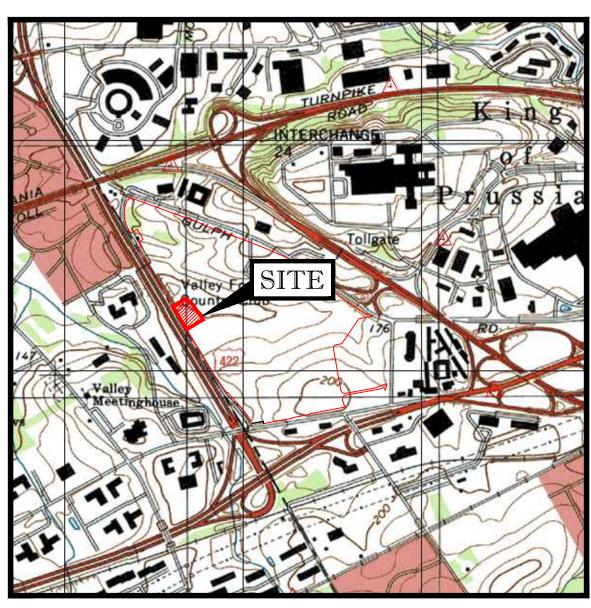
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA

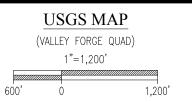
400 GUTHRIE ROAD TAX MAP PARCEL NUMBER: 58-00-17494-86-3 (new)

DEVELOPER / OWNER:

VALLEY FORGE STORAGE VENTURE, L.L.C.

1550 VINE STREET, PHILADELPHIA, PA 19102









	REVISIONS						
REV	DATE	COMMENT	DRAWN BY				
1	4/1/19	PER SELLER COMMENTS	CO				
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW				
3							
4							
5							
6							
7							
8							
9			-				



CONSTRUCTION

AS NOTED

PP180258DETAILS-2 PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP** MONTGOMERY COUNTY, PA



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

C. BROWN

: PROFESSIONAL ENGINEER . PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093 NEW JERSEY LICENSE No. 24GE05041400

COVER SHEET (RECORD PLAN 1 OF 3

SHEET NUMBER:

C-001

REVISION 2

NO Review Required
CERTIFIED FOR RECORDING ______

DATE

Montgomery County Planning Commision

SURVEYOR'S CERTIFICATION, BOUNDARY & TOPOGRAPHY

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

THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY

SHEET INDEX

SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN C-008

SOIL EROSION & SEDIMENT POLLUTION CONTROL NOTES C-009

SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS | C-010

For the Director

C-001

C-002

C-003

C-004

C-005

C-006

C-007

C-014

C-015

C-016

C-017

COVER SHEET (RECORD PLAN SHEET 1 OF 3)

PROJECT NOTES (RECORD PLAN SHEET 3 OF 3)

SITE PLAN (RECORD PLAN SHEET 2 OF 3)

EXISTING CONDITIONS & DEMOLITION PLAN

GRADING PLAN

UTILITY PLAN

LIGHTING PLAN

LANDSCAPE PLAN

INLET DRAINAGE AREA PLAN

VEHICLE CIRCULATION PLAN

PROFILES

OWNER/CORPORATE CERTIFICATION

COUNTY OF MONTGOMERY

COMMONWEALTH OF PENNSYLVANIA

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.

I DO HEREBY CERTIFY THAT VALLEY FORGE STORAGE VENTURE, L.L.C., A DELAWARE LIMITED LIABILITY COMPANY, 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.

OWNER: VALLEY FORGE STORAGE VENTURES, L.L.C.

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____, A.D. 20_, BEFORE ME THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED ____, WHO

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 TOWNSHIP SUPERVISORS OF THE TOWNSHIP OF UPPER MERION THIS _____DAY OF _____, 20__.

CHAIRPERSON TOWNSHIP MANAGER

TOWNSHIP ENGINEER (REVIEWED BY)

COUNTY RECORDER OF DEEDS

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

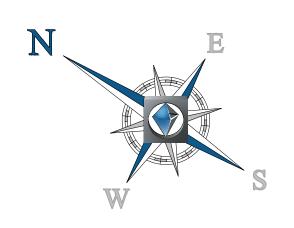
BOOK NO._____, PAGE NO. _____ ON THE ____DAY OF ______, 201__.

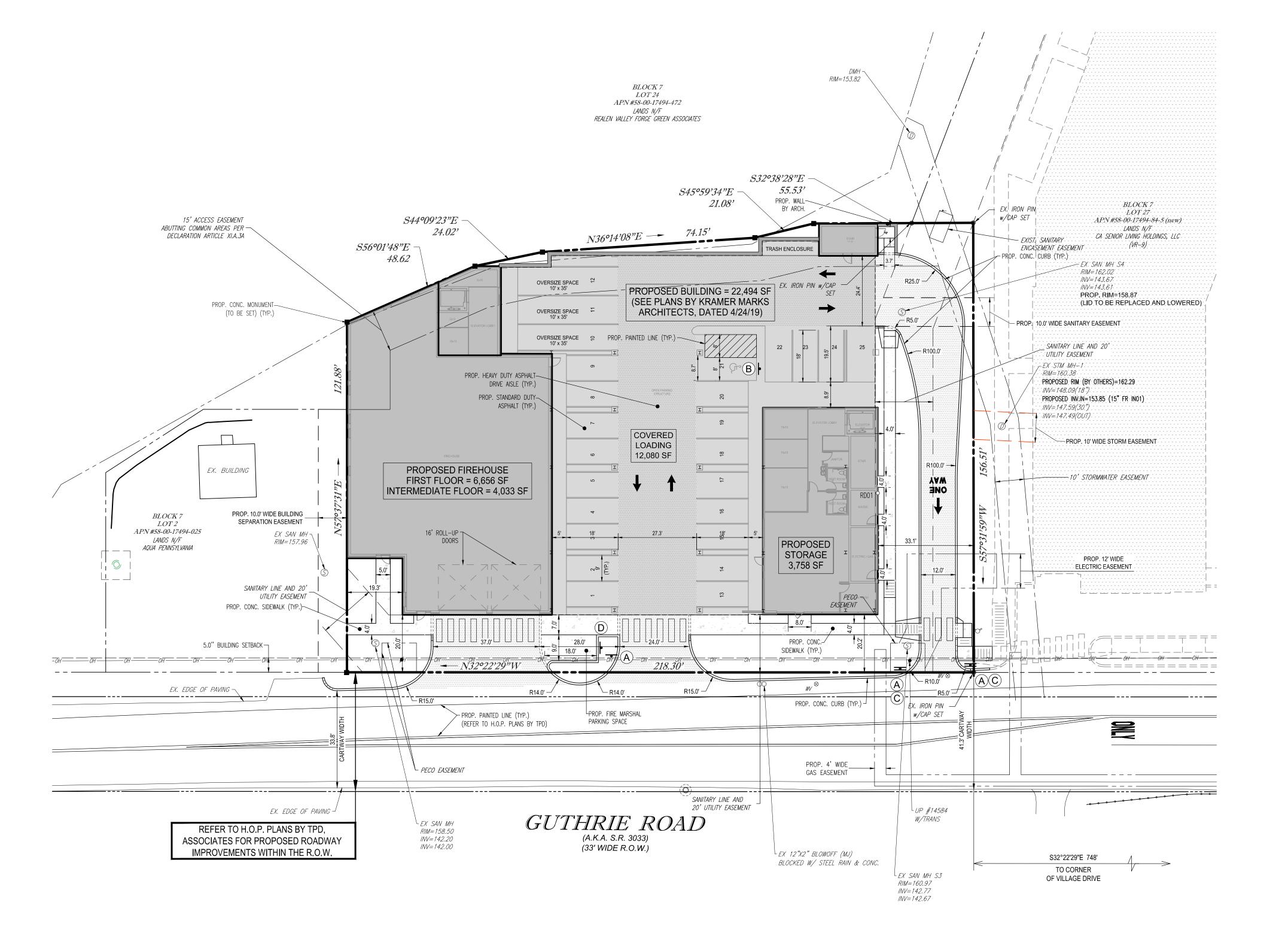
COUNTY RECORDER OF DEEDS

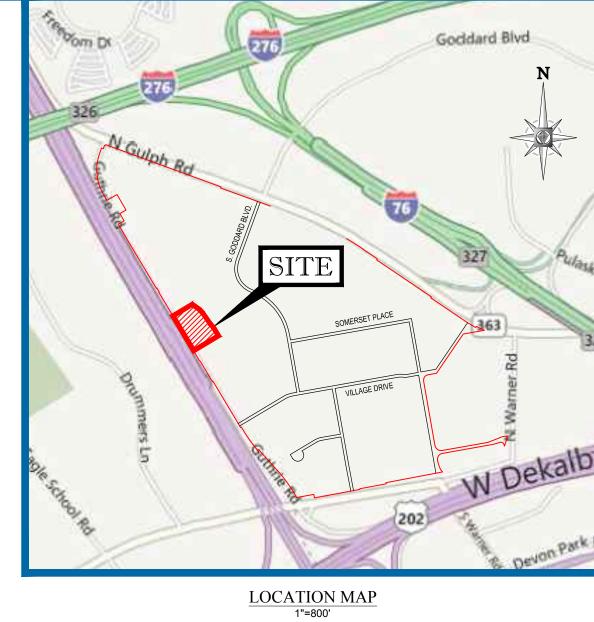
JAMES C. WEED

TRACTS HAVE A BOUNDARY CLOSURE OF 1:10,000 OR BETTER.

PENNSYLAVANIA PROFESSIONAL LAND SURVEYOR No. SU075250



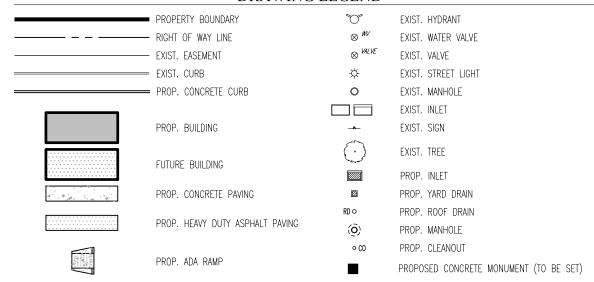


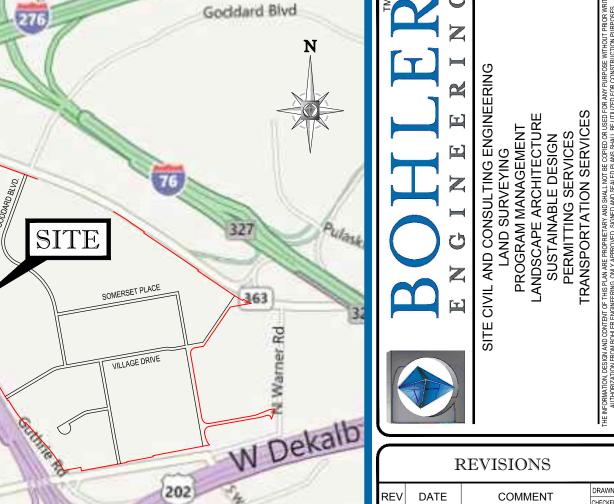


PROPOSED SIGNAGE SYMBOL LEGEND

- ♠
 A
 PROPOSED 'STOP' SIGN (R1-1)
- PROPOSED 'RESERVED PARKING' SIGN (R7-8) & RESERVED PARKING PENALTIES SIGN (R7-8F) & PROPOSED 'VAN ACCESSIBLE' SIGN (R7-8B)
- PROPOSED 'DO NOT ENTER' SIGN (R5-1)
- PROPOSED 'RESERVED FOR FIRE MARSHAL' SIGN

DRAWING LEGEND





1				_				
		REVISIONS						
	REV	DATE	COMMENT	DRAWN BY				
ek I				CHECKED BY				
	1 1	4/1/19	PER SELLER	CO				
	'	4/1/13	COMMENTS	JW				
	2	4/26/19	PER TOWNSHIP & SELLER	GB				
		4/20/13	COMMENTS	JW				
	3							
		•	•					
	4							
	"	•	•					
	5							
	5	•	•					
	6							
		•	•					
	7							
	_ ′	•	•					
	8							
	0	•	•					
	9							
	C	•	•					
			•					



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWIS DRAWN BY: 03/25/2019 SCALE: CAD I.D.: PP180258BASE-2

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP** MONTGOMERY COUNTY, PA



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

C. BROWN

: PROFESSIONAL ENGINEER: PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093 NEW JERSEY LICENSE No. 24GE05041400

SITE PLAN (RECORD PLAN 2 OF 3)

SHEET NUMBER:

C-002OF 17

GENERAL NOTES

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:

 GILMORE ASSOCIATES, INC. 119 EAST LINDEN STREET KENNETT SQUARE, PA 19348 CAD FILE: VC-1 EX.CONDITIONS DATED: 08-03-2018

DATED 12/28/2018

27 S. MAIN STREET AMBLER, PA. 19002

• GILMORE ASSOCIATES, INC KENNETT SQUARE, PA 19348 ENTITLED: EXHIBIT N-1 SITE UTILITY PLAN PREPARED FOR: VVF FIRE / EMS / STORAGE LOT DATED: 06-25-2018

 WHITESTONE ASSOCIATES, INC NEW BRITAIN CORPORATE CENTER 1600 MANOR DRIVE CHALFONT, PA 18914 ENTITLED: REPORT OF GEOTECHNICAL INVESTIGATION PROJECT NO. GP11816012.000

KRAMER + MARKS ARCHITECTS

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL

DATED: 04/24/2019 BERNARDON ARCITECTS 10 NORTH HIGH STREET, SUITE 310 WEST CHESTER, PA 19380 CONCEPTUAL FLOOR PLANS DATED: 04/23/2019

 TRAFFIC PLANNING AND DESIGN, INC. 2500 E. HIGH STREET, SUITE 650 POTTSTOWN, PA 19464 GUNTHRIE ROAD HOP PLANS DATED: 03/28/2019

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.

DEVELOPER & APPLICANT INFORMATION: REALEN VALLEY FORGE GREENES ASSOCIATION PHILADELPHIA, PA 19102

RUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION

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 RDNATES N283539.9474 E2624698.8837 AND ELEVATION 192.60. ON-SITE BENCHMARKS (FIVE) HAVE BEEN ESTABLISHED AS FOLLOWS:

#1 - A DRILL HOLE ON HEADWALL AT THE EAST SIDE OF S. GODDARD BLVD. AT APPROX. STA 12+30 - COORDINATES N282780.2027, E2623845.7346, ELEV. 158.39 #2 - AN X-CUT ON FIRE HYDRANT NUT AT THE NORTH SIDE OF VILLAGE DRIVE AT APPROX. STA 1+75 - COORDINATES N282708.7452, E2625231.2745, ELEV. 191.22 #3 - PECO MH COVER AT SE CORNER OF VILLAGE DRIVE AND GUTHRIE ROAD - COORDINATES N281846.53, E2623515.60, ELEV. 169.17 #4 - AN X-CUT ON FIRE HYDRANT NUT AT THE SOUTH SIDE OF SOMERSET PLACE AT APPROX. STA 8+50 - COORDINATES N:282731.16 E:2624688.6440. ELEV. 173.56

#5 - AN X-CUT ON FIRE HYDRANT NUT AT THE EAST SIDE OF S. GODDARD BLVD. AT APPROX. STA 4+45 - COORDINATES N:283333.7620 E:2623462.4520. Elev. 184.16

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.

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.

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.

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 GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT

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.

9. 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 NGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER. THERAFTER. PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK

10. 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.

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.

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

13. 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

14. 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 HIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT

5. 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 O, REDESIGN, RE-SURVEY, REPERMITTING 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

16. 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.

. 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

3. 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.

19. 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

20. 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 HEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH 'HESE NOTES HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.

11. 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.

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

. 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.

4 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, WNER 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.

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

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.

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.

28. 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.

9. 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

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

TRASH COLLECTION TO BE INSIDE BUILDING AND REMOVED BY A PRIVATE COLLECTION AND DISPOSAL COMPANY.

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

33. CONTRACTOR TO PROVIDE SHOP DRAWINGS PER CONNECTION TO EXISTING STORM STRUCTURE TO SELLER FOR REVISION AND APPROVAL PRIOR TO CONSTRUCTION.

PROVIDED

32,107 S.F. / 0.74 AC.

3,758 S.F.

6,656 S.F.

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

REQUIREMENTS:

MIN LOT AREA

1ST FLOOR STORAGE:

1ST FLOOR FIREHOUSE:

PROPOSED USE: FIREHOUSE & STORAGE - MULTIPLE USES

			0,000 0
	COVERED LOADING:	N/A	12,080 S.F.
	INTERMEDIATE FIREHOUSE:	N/A	4,033 S.F.
:	2ND - 7TH FLOORS STORAGE	N/A	129,576 S.F.
	TOTAL GROSS FLOOR AREA:	N/A	156,103 S.F.
	MIN. FRONT YARD SETBACK:	5'	20' TO LEGAL R.O.W.
	MAX. LOT COVERAGE (IMPERVIOUS):	75% (ENTIRE 124 Ac)*	86.8%*
	MAX, BUILDING HEIGHT:	320 FT. ABOVE SEA LEVEL	< 320 FT. ABOVE SEA LEVEL
	REQUIRED MIN. COMMON OPEN SPACE:	20% (ENTIRE 124 Ac)*	15.6%*

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

(REQUIREMENTS PER MANUAL OF SITE DEVELOPMENT STANDARDS SECTION 4.03)

REQUIRED: = NOT APPLICABLE (REQUIREMENTS PER MANUAL OF SITE DEVELOPMENT

STANDARDS SECTION 4.03) *1

PROVIDED = 25 TOTAL SPACES (9' x 18' SPACES = 22; 10' x 35' SPACES = 3) (8' x 18' VAN ACCESSIBLE SPACE =1)

** 25 SPACES APPROVED BY THE ZONING HEARING BOARD

GENERAL DEMOLITION NOTES

THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY CONTROL POINT ASSOCIATES, INC

CHALFONT, PA 18914 ENTITLED: ALTA/NSPS LAND TITLE SURVEY PREPARED FOR: CA VENTURES, LLC FILE NO.: 02-110165-30 SHEET: 1 OF 1

1600 MANOR DRIVE, SUITE 210

DATED: 6-18-2018; LAST REVISED 07-06-2018

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 seg.), 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

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

6. CONTRACTOR TO REPLACE EXISTING SIDEWALK AND CURB AS NECESSARY.

REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES

INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.

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

LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL LITH ITY 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. 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

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

'. 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

9. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED N 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 LINSUITABLE 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.

d.) ALL FITTINGS AND AND CONNECTIONS ASSOCIATED WITH TRENCH DRAIN MUST BE WATER-TIGHT

23. SANITARY SEWER MAIN MUST BE POLYVINYL CHLORIDE (PVC) SDR-26 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERALS MUST BE PVC SCHEDULE 40 OR PVC

24. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL.

SDR 35 UNLESS INDICATED, IN WRITING, OTHERWISE,

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.

REVISIONS V DATE COMMENT PER SELLER 4/1/19 COMMENTS 4/26/19 PER TOWNSHIP & SELLER



WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

AGENCY REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS</u> ONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWI DRAWN BY: CHECKED BY 03/25/2019

AS NOTE

PP180258BASE-

CADID

SCALE

PRELIMINARY / FINAL LAND DEVELOPMENT

VALLEY FORGE STORAGI VENTURES, L.L.C.

PLANS

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP** MONTGOMERY COUNTY, PA



1515 MARKET STREET, SUITE 920 PHILADELPHIA, PA 19102 Phone: (267) 402-3400 Fax: (267) 402-3401

www.BohlerEngineering.com

C. BROWN

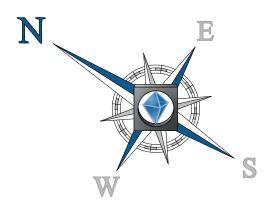
: PROFESSIONAL ENGINEER . PENNSYLVANIA LICENSE No. PE075317

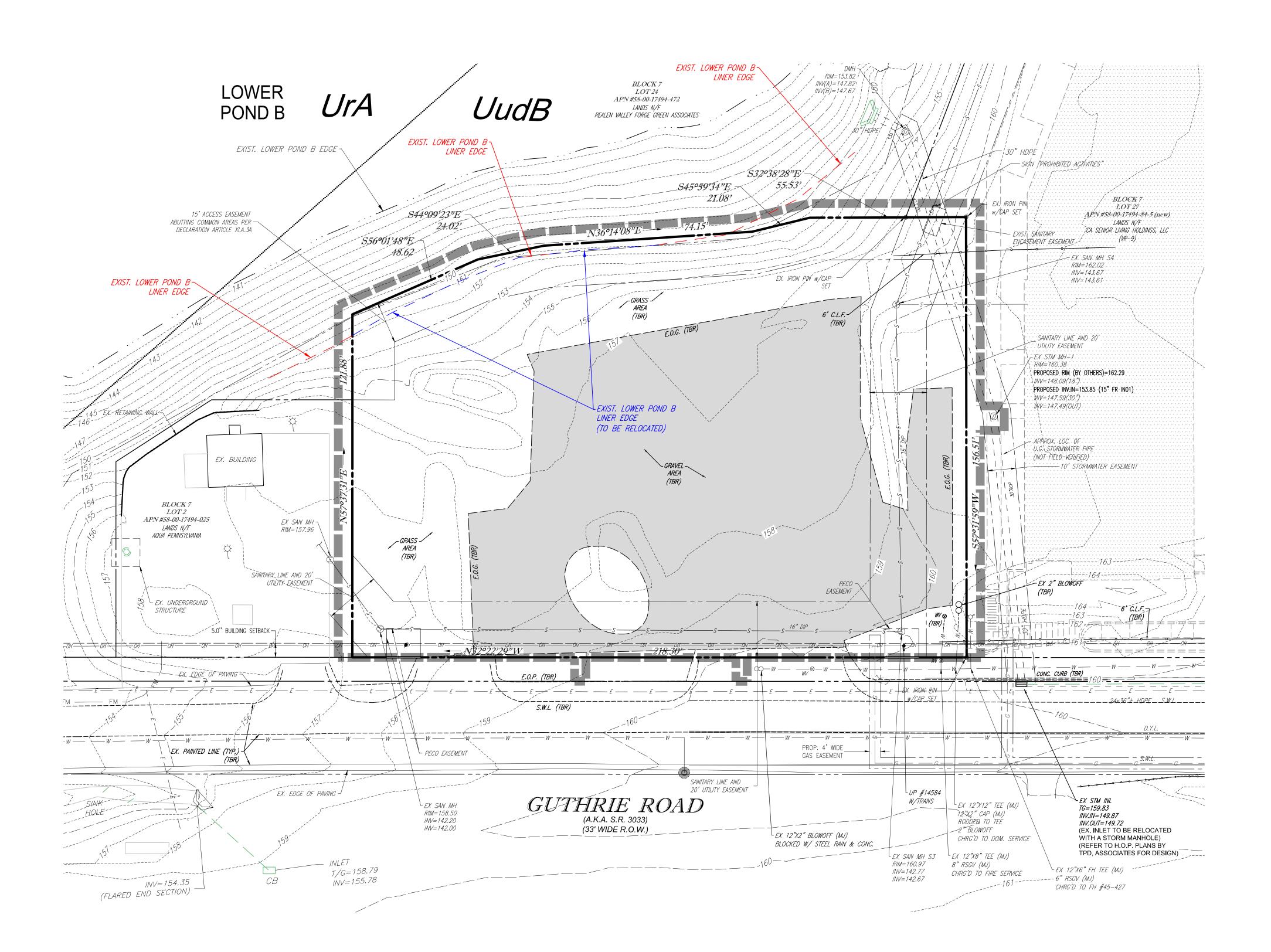
DELAWARE LICENSE No. 18093

NEW JERSEY LICENSE No. 24GE05041400

(RECORD PLAN 3 OF 3

SHEET NUMBER:





<u>UTILITIES:</u>

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

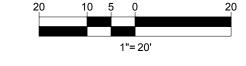
UTILITY COMPANY PHONE NUMBER AQUA PENNSYLVANIA, INC. 610-525-1400 COMCAST CABLEVISION 215-961-3800 FRONTIER COMMUNICATIONS 1-866-901-7386 UPPER MERION COLLECTION SYSTEM 610-275-1534 610-265-2600 UPPER MERION TOWNSHIP 720-888-0165 LEVEL 3 PECO 215-956-3220 (215) 657-9260 VERIZON 1-800-390-6094 ZAYO BANDWIDTH 800-222-0400 AT & T 800-888-0800 RCN CABLE(FORMERLY C-TECH) 484-461-6020 SUNÒCO PIPELINE 215-669-3232

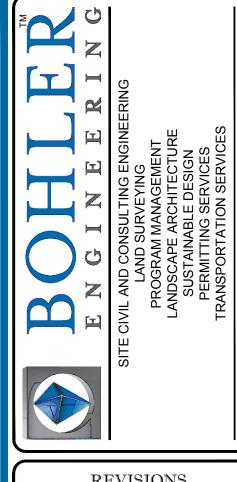
DRAWING LEGEND

PROPERTY BOUNDARY

EXIST. HYDRANT

		MOTH OF WATERING	⊗ WV	EXIST. WATER VALVE
		ADJACENT PROPERTY BOUNDARY EXIST. EASEMENT	⊗ VALVE	EXIST. VALVE EXIST. STREET LIGHT
		EXIST. CURB	0	EXIST. MANHOLE
-G	G	EXIST. GAS LINE		EXIST. INLET
-w	w	EXIST. WATER LINE	$\langle \cdot \rangle$	EXIST. TREE
—— C—	— C— —	EXIST. TELEPHONE LINE		EVICT CICNI
— E —— -	—— E —— —	EXIST. ELECTRIC LINE		EXIST. SIGN
—— <i>s</i> ——		EXIST. SANITARY SEWER PIPING	× 123.45	EXIST. SPOT ELEVATION
	FM	EXIST. SANITARY FORCE MAIN	× TC 123.45	EXIST. TOP OF CURB ELEVATION
OH	OH	EXIST. OVERHEAD LINE	× G 123.45	EXIST. BOTTOM OF CURB ELEVATION
= = =	= = = = =	EXIST. STORM SEWER PIPING	$lue{}_{B-29}$	TEST BORING
		LIMIT OF DISTURBANCE		ADAMEL ADEA TO DE DELIAMED
		EXIST. CONTOUR		GRAVEL AREA TO BE REMOVED
		SOIL TYPE LINE		FUTURE BUILDING (BY OTHERS)
		_		,





	REVISIONS					
REV	DATE	COMMENT	DRAWN E			
1	4/1/19	PER SELLER COMMENTS	CO			
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB			
3						
4						
5	-					
6	·					
7	·					
8						
9						
			٠.			



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

AGENCY REVIEW AND AP	ENDED FOR MUNICIPAL AND/OR PROVAL. <u>IT IS NOT INTENDED AS A</u> NT UNLESS INDICATED OTHERWISE.
PROJECT No.:	PP180258
DRAWN BY:	CRO
CHECKED BY:	JPW
DATE:	03/25/2019
SCALE:	1'=20'
CAD I.D.:	PP180258BASE-2

PROJECT:
PRELIMINARY / FINAL
LAND DEVELOPMENT

VALLEY FORGE STORAGE
VENTURES, L.L.C.

PLANS

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA

EMS/SELF STORAGE



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

C. BROWN

PROFESSIONAL ENGINEER :

PENNSYLVANIA LICENSE No. PE075317

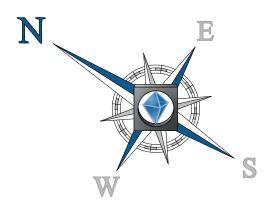
DELAWARE LICENSE No. 18093

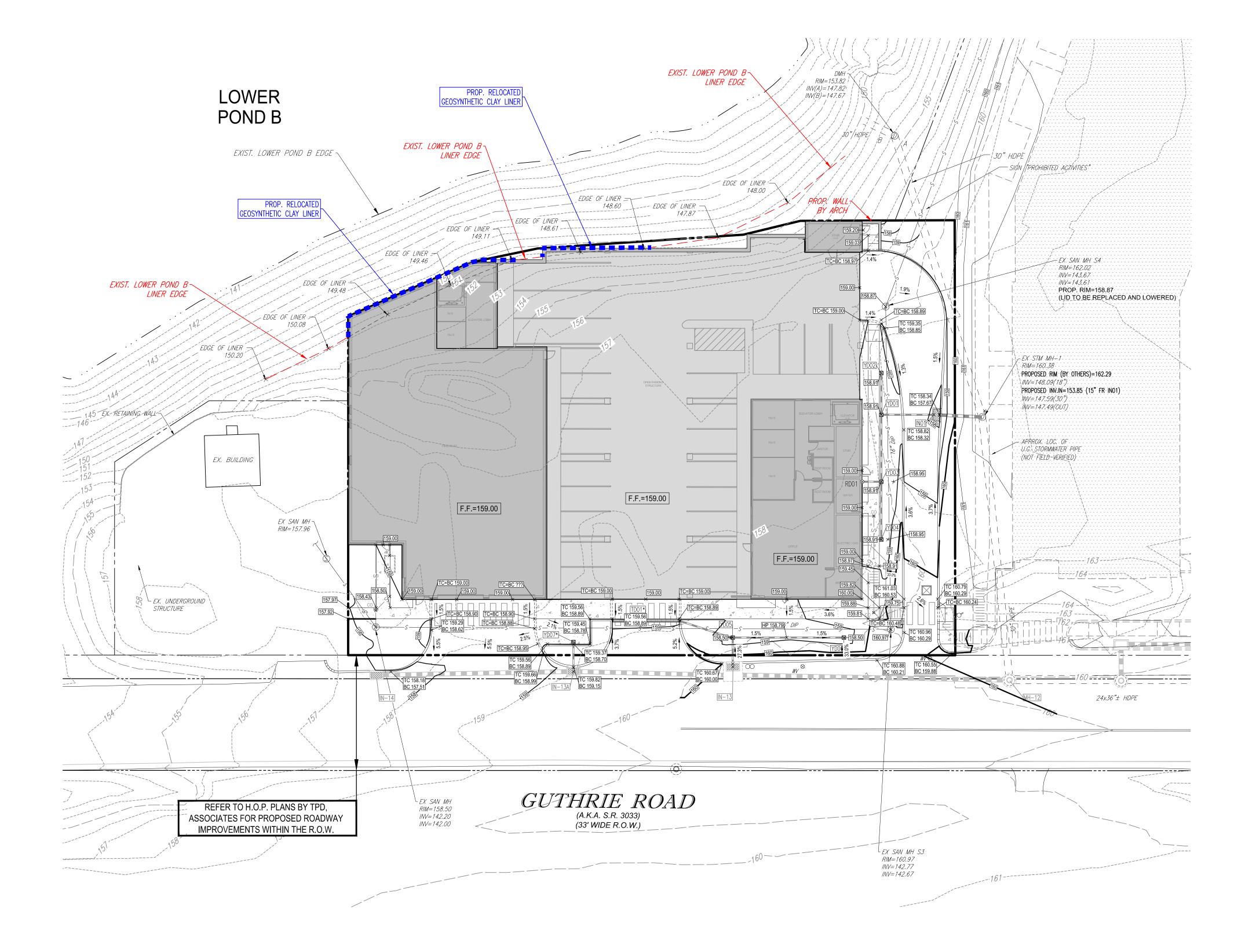
NEW JERSEY LICENSE No. 24GE05041400

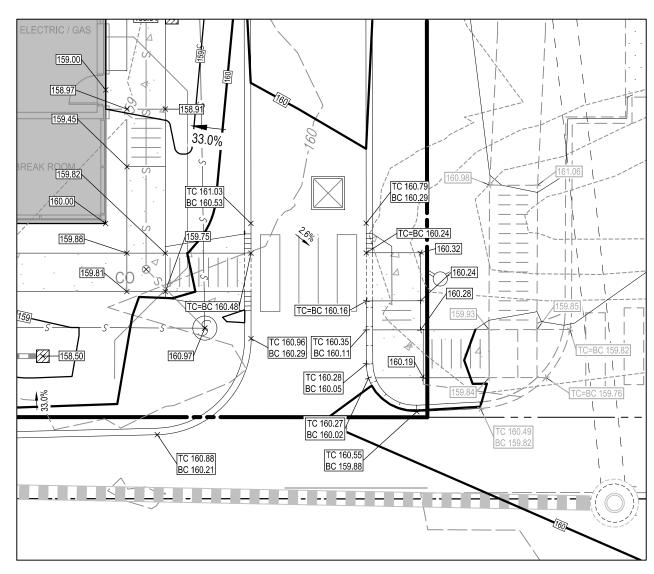
EXISTING
CONDITIONS &
DEMOLITION

PLAN
SHEET NUMBER:

C=004







ADA RAMP DETAIL

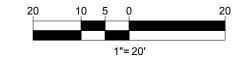
SCALE: 1"= 10'

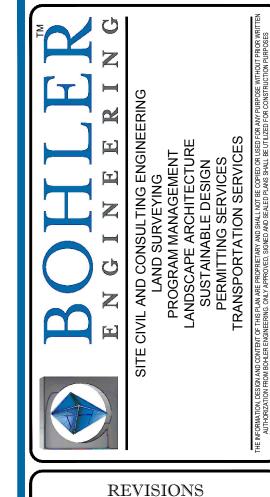
DRAWING LEGEND

	DICA WING LEGEND		
	PROPERTY BOUNDARY	♥ ⊗ W	EXIST. HYDRANT EXIST. WATER VALVE
	RIGHT OF WAY LINE EXIST. CURB	⊗ ^{VALVE}	EXIST. VALVE
	PROP. CONCRETE CURB	О	EXIST. STREET LIGHT EXIST. MANHOLE
			EXIST. INLET
	PROP. CONTOUR EXIST. STORM SEWER PIPING		EXIST. SIGN
	PROP. STORM SEWER PIPING		EXIST. TREE
123.45	EXIST. SPOT ELEVATION		PROP. INLET
TC 123.45	EXIST. TOP OF CURB ELEVATION		PROP. YARD DRAIN
G 123.45	EXIST. BOTTOM OF CURB ELEVATION	RD O	PROP. ROOF DRAIN
222.95	PROP. SPOT ELEVATION	(<u>o</u>)	PROP. MANHOLE
TC 220.70	PROP. TOP/BOTTOM OF	∘ CO	PROP. CLEANOUT

THE CURB ELEVATIONS

BC 220.20





	REVISIONS					
REV	DATE	COMMENT	DRAWN BY			
IXLV	DAIL	COMMINICIAL	CHECKED BY			
1	4/1/19	PER SELLER	CO			
'	4/1/19	COMMENTS	JW			
2	4/26/19	PER TOWNSHIP & SELLER	GB			
	4/20/19	COMMENTS	JW			
3						
J	•	•				
4						
	•	•				
5						
l L	•	•				
6						
l L	•	•				
7						
	•	•				
8						
	•	•				
9						
Ů		-	<u> </u>			



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

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

PROJECT No.: PP180258
DRAWN BY: CRO
CHECKED BY: JPW
DATE: 03/25/2019
SCALE: 1'=20'
CAD I.D.: PP180258BASE-2

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER:

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

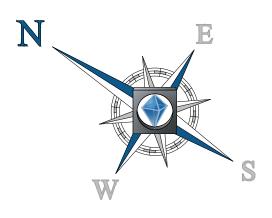
NEW JERSEY LICENSE No. 24GE05041400

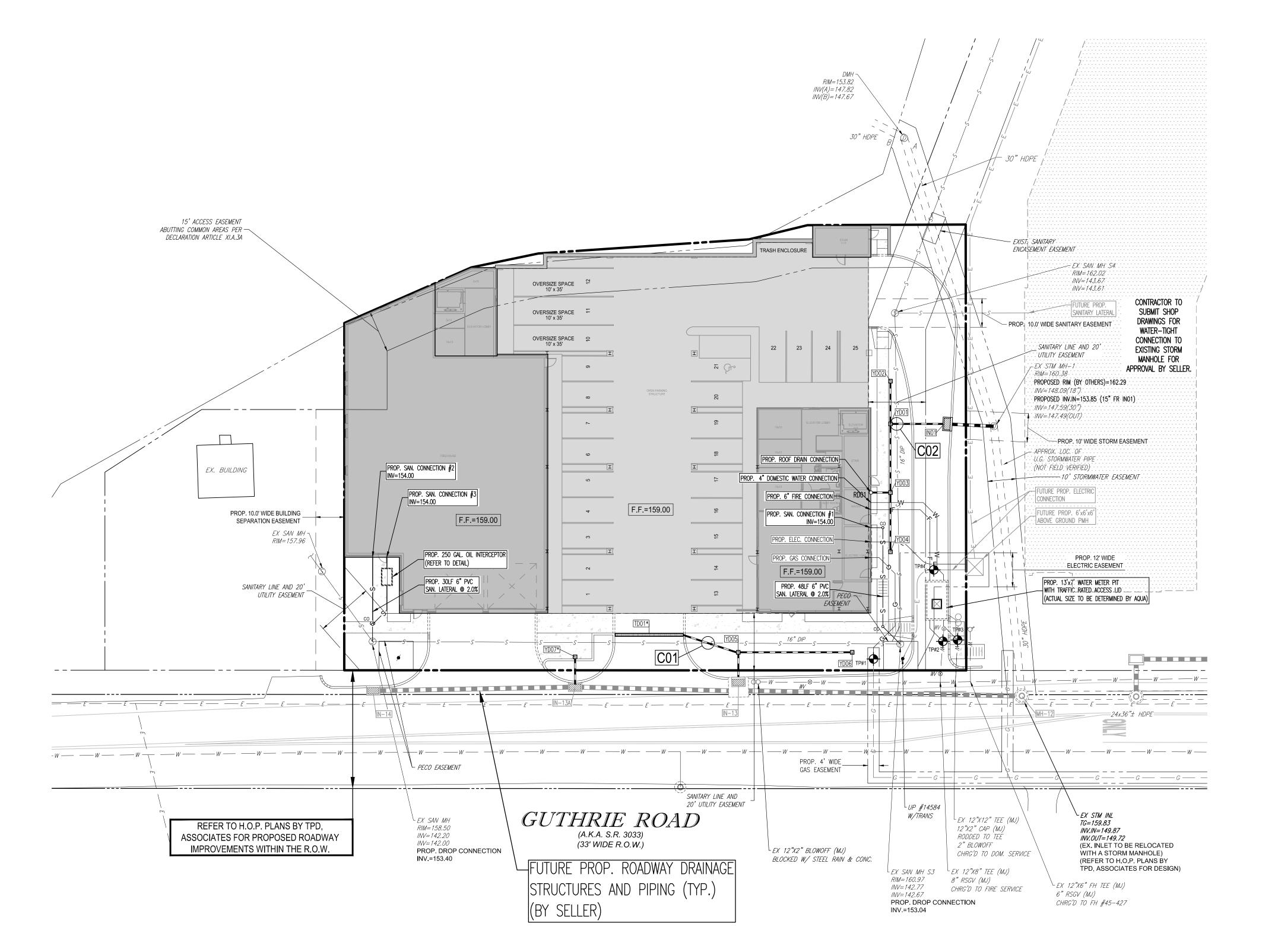
SHEET TITLE

GRADING PLAN

SHEET NUMBER:

C=005





	CROSSING TABLE						
Ī	* PIPES WITH LESS THAN 1.5' OF CLEARANCE NEED TO BE ENCASED IN CONC.						
	NUMBER	UMBER UPPER PIPE		LOWER PIPE		CLEARANCE (FT.)	
	C01	BOTTOM OF PROP. 6" HDPE STORM	155.48	TOP OF EXIST, 16" SANITARY	144.20	11.28	
	C02	BOTTOM OF PROP. 12" HDPE STORM	154.60	TOP OF EXIST. 16" SANITARY	145.12	9.48	

STORM SEWER STRUCTURE TABLE

	INVERT OUT	INVERT(S) IN	RIM/GRATE	STRUCTURE
	154.17 (15") (EX. STM MH 1)	154.42 (12") (YD01)	157.67	IN01
TYPE 'C'	151.78 (18") (IN-13A) 151.61 (18") (EX. CB 5) 154.94 (6") (YD05)		159.15	IN13
INLET	155.98 (6") (YD07) 152.32 (18") (IN13) 152.49 (18") (IN-14)		159.15	IN-13A
	153.16 (18") (IN-13A)	-	157.42	IN-14
	155.44 (12") (YD03)	-	159.00	RD01
	155.89 (6") (YD05)	-	158.89	TD01
	154.82 (12") (IN01)	155.07 (6") (YD02) 154.82 (12") (YD03)	158.91	YD01
	155.37 (6") (YD01)	-	158.91	YD02
12" YARD	155.30 (12") (YD01)	155.30 (12") (YD04) 155.30 (12") (RD01)	158.91	YD03
DRAIN	155.72 (12") (YD03)	-	158.91	YD04
	155.20 (6") (IN13)	155.20 (6") (YD06) 155.20 (6") (TD01)	158.50	YD05
	156.00 (6") (YD05)	-	158.50	YD06

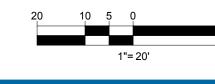
STORM SEWER RUN TABLE

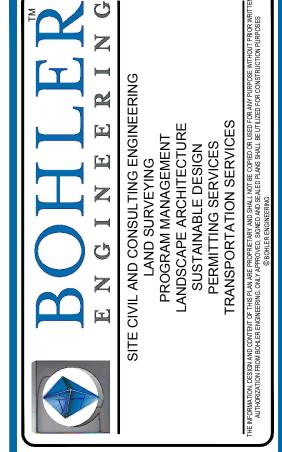
STORW SEWER ROW TREES						
RUN	LENGTH (LF)	SLOPE (%)	SIZE (IN)	MATERIAL		
IN01 - EX. STM MH 1	16	2.00	15	CORRUGATED HDPE		
IN13 - EX. CB 5	96	1.00	18	RCP		
IN-13A - IN13	54	1.00	18	RCP		
IN-14 - IN-13A	67	1.00	18	RCP		
RD01 - YD03	7	2.00	12	CORRUGATED HDPE		
TD01 - YD05	20	3.45	6	CORRUGATED HDPE		
YD01 - IN01	20	2.00	12	CORRUGATED HDPE		
YD02 - YD01	15	2.00	6	CORRUGATED HDPE		
YD03 - YD01	24	2.00	12	CORRUGATED HDPE		
YD04 - YD03	21	2.00	12	CORRUGATED HDPE		
YD05 - IN13	13	2.00	6	CORRUGATED HDPE		
YD06 - YD05	40	2.00	6	CORRUGATED HDPE		
YD07 - IN-13A	11	2.00	6	CORRUGATED HDPE		

NOTE: ALL HDPE STORM PIPE TO BE SMOOTH INTERIOR WITH ANGULAR COORUGATIONS

DRAWING LEGEND

		PROPERTY BOUNDARY	~	EXIST. HYDRANT
		- RIGHT OF WAY LINE	\otimes WV	EXIST. WATER VALVE
		- EXIST. EASEMENT	\otimes VALVE	EXIST. VALVE
-G	— G — —	- EXIST. GAS LINE	\$	EXIST. STREET LIGHT
-W	w	- EXIST. WATER LINE	0	EXIST. MANHOLE
—— C— -	— c— —	- EXIST. CABLE LINE		EXIST. INLET
- E	— E — —	- EXIST. ELECTRIC LINE		EXIST. SIGN
—— <i>5</i> ——	S	- EXIST. SANITARY SEWER PIPING		EXIST. TRFF
= = = =	= = = =	EXIST. STORM SEWER PIPING	Land of the second	LAIST. TIVLE
——G—	G	- PROP. GAS SERVICE		PROP. INLET
W	W	- PROP. WATER SERVICE	Ø	PROP. YARD DRAIN
——F—	F	- PROP. FIRE SERVICE	RD O	PROP. ROOF DRAIN
C	C	- PROP. CABLE LINE	©	PROP. MANHOLE
——т—	тт	- PROP. TELECOM LINE	o C0	PROP. CLEANOUT
——E—	——-E——	- PROP. ELECTRIC LINE	YD00*	DENOTES PROP. TRAFFIC RATED
SL	SL	- PROP. SANITARY LATERAL		YARD DRAIN OR TRENCH DRAIN
		PROP. STORM SEWER PIPING	[C01]	PROP. PIPE CROSSING
				PROP. TEST PIT
			1	





_					
	REVISIONS				
REV	DATE	COMMENT	DRAWN BY		
IXLV	DAIL	COMMENT	CHECKED BY		
1	4/1/19	PER SELLER	CO		
l '	4/1/19	COMMENTS	JW		
2	4/26/19	PER TOWNSHIP & SELLER	GB		
	4/20/19	COMMENTS	JW		
3					
٦	•	•			
4					
†	•	•			
5					
	•	•			
6					
Ľ	٠	•			
7					
Ľ	•	•			
8					
لتًا	•	•			
9					
C	-	•			



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

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

PROJECT No.:
PP180258
DRAWN BY:
CRO
CHECKED BY:
JPW
DATE:
03/25/2019
SCALE:
1'=20'
CAD I.D.:
PP180258BASE-2

PROJECT:
PRELIMINARY / FINAL
LAND DEVELOPMENT
PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER:

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

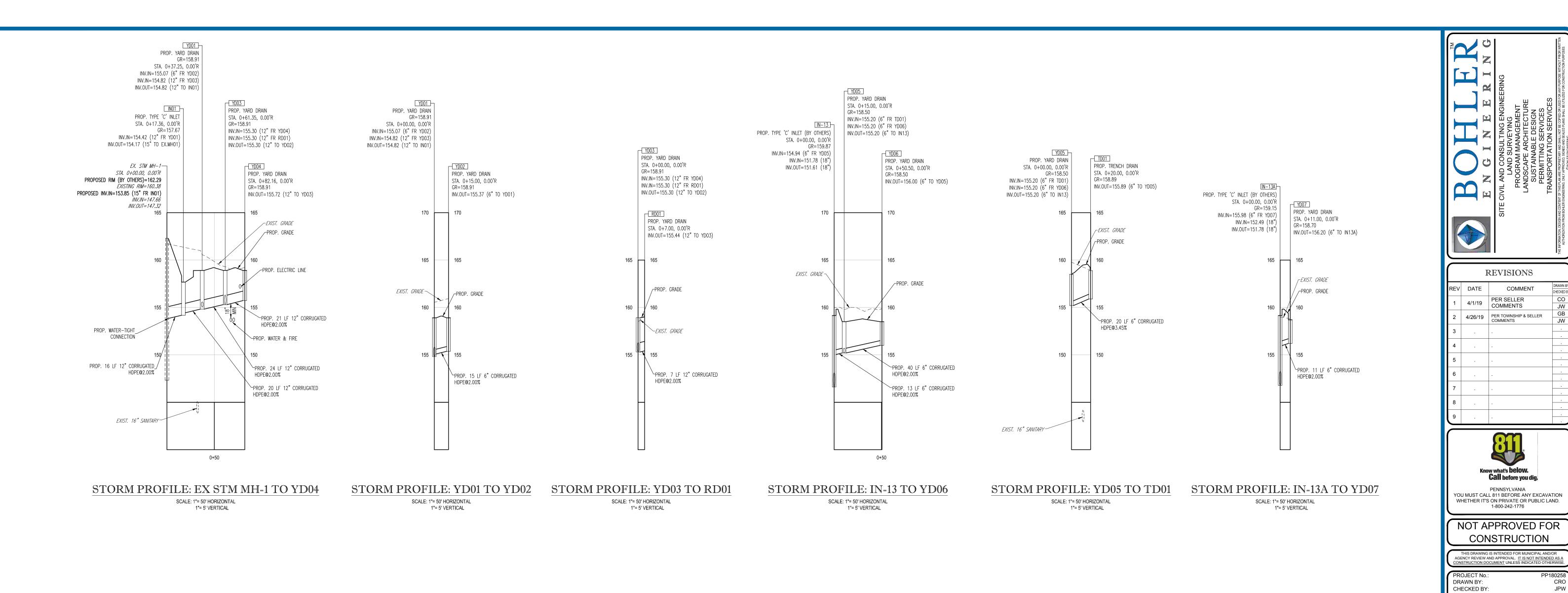
NEW JERSEY LICENSE No. 24GE05041400

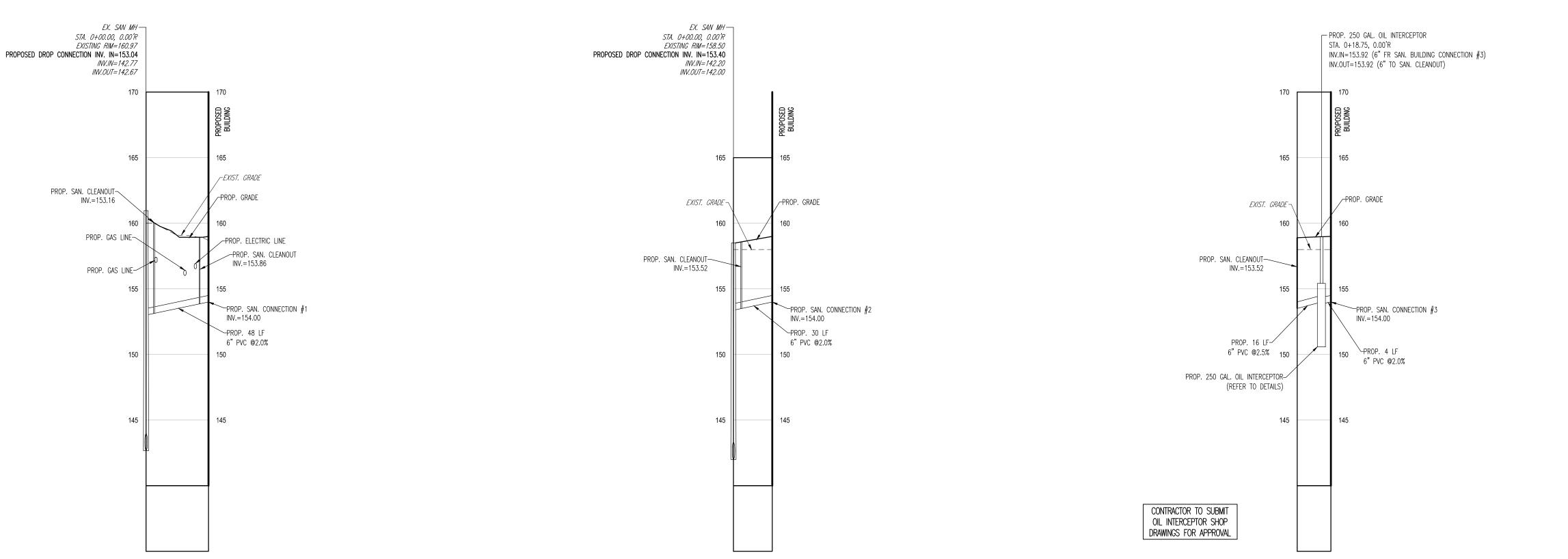
SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

C=006





SANITARY PROFILE: EX SAN MH TO PROP. SAN. CONNECTION #2

SCALE: 1"= 50' HORIZONTAL

SANITARY PROFILE: EX SAN MH TO PROP. SAN. CONNECTION #1

SCALE: 1"= 50' HORIZONTAL

SANITARY PROFILE: EX SAN. MH TO PROP. SAN. CONNECTION #3 SCALE: 1"= 50' HORIZONTAL 1"= 5' VERTICAL

REVISIONS

PER SELLER

Call before you dig.

1-800-242-1776

PRELIMINARY / FINAL

LAND DEVELOPMENT

PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD

KING OF PRUSSIA

UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA

BOHLER ENGINEERING

1515 MARKET STREET, SUITE 920 PHILADELPHIA, PA 19102

Phone: (267) 402-3400

Fax: (267) 402-3401

www.BohlerEngineering.com

C. BROWN

: PROFESSIONAL ENGINEER: PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093 NEW JERSEY LICENSE No. 24GE05041400

STORM &

SANITARY

SEWER

PROFILES

C-007

OF 17

REVISION 2

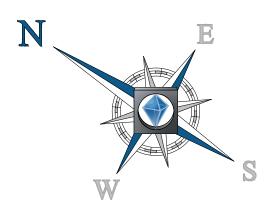
SCALE:

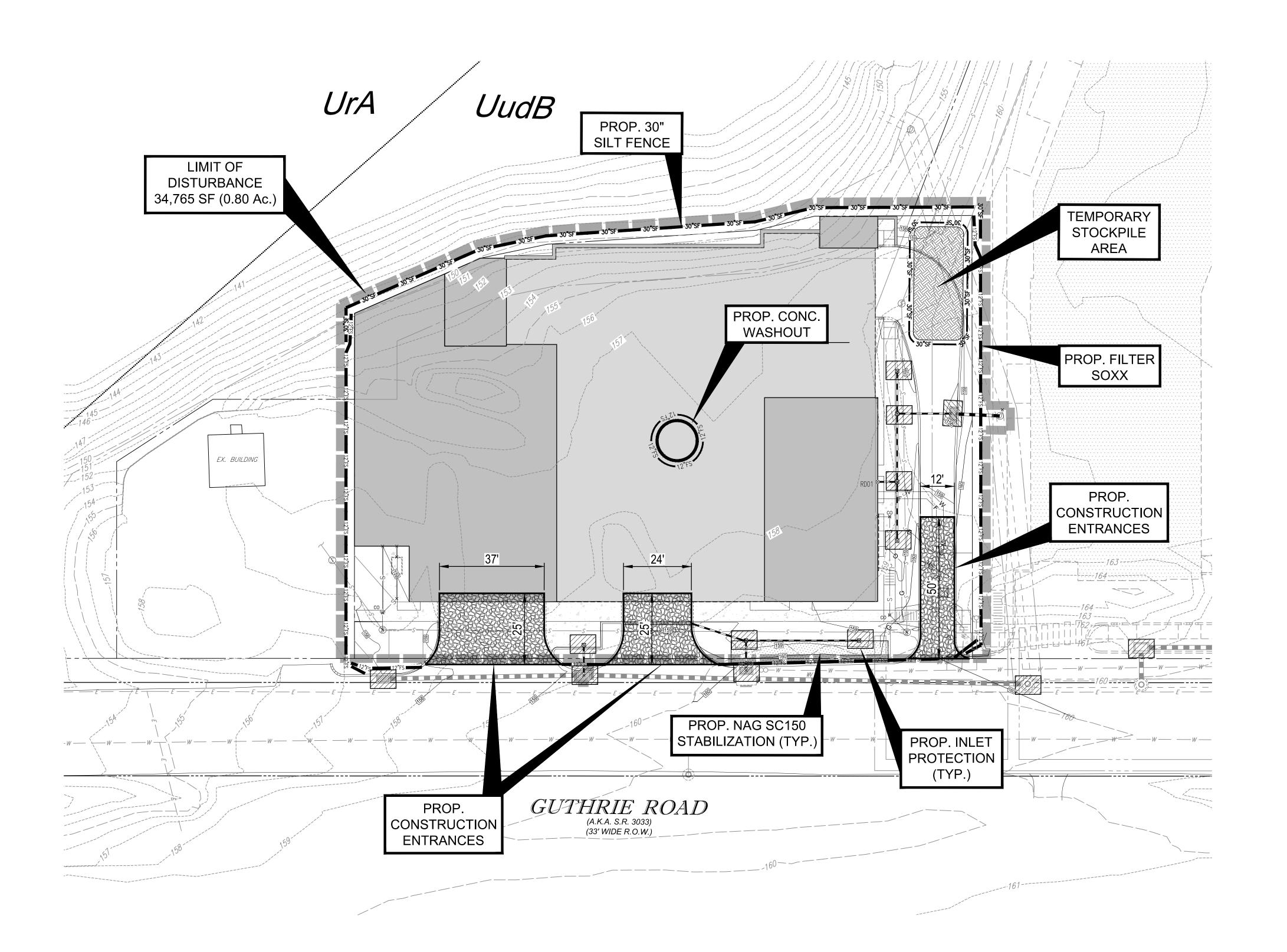
CAD I.D.:

03/25/2019

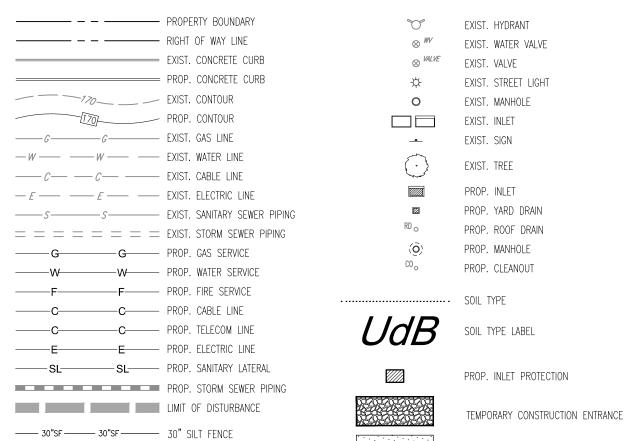
AS NOTED

PP180258BASE-2

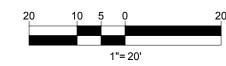




DRAWING LEGEND



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



PROPOSED NAG SC150



REVISIONS				
REV	DATE	COMMENT	DRAWN B	
1	4/1/19	PER SELLER COMMENTS	CO	
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW	
3				
4				
5				
6	-			
7	-			
8				
9				



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

	UNLESS INDICATED OTHERWISE
PROJECT No.:	PP18025
DRAWN BY:	CR
CHECKED BY:	JP\
DATE:	03/25/201
SCALE:	1'=20
CAD I.D.:	PP180258BASE-

PROJECT:
PRELIMINARY / FINAL
LAND DEVELOPMENT
PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER:

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

NEW JERSEY LICENSE No. 24GE05041400

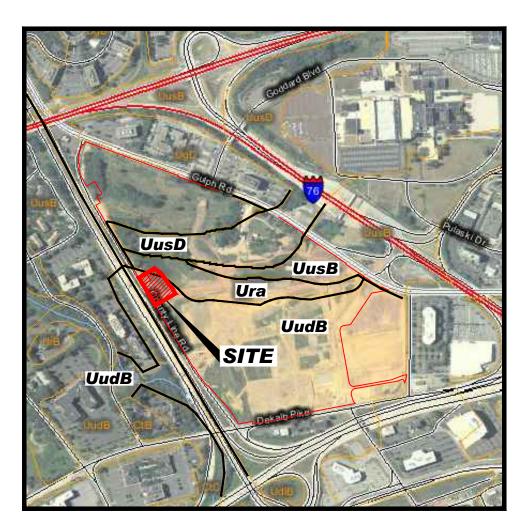
SHEET TITLE:
SOIL EROSION &
SEDIMENT
POLLUTION

SHEET NUMBER:

C=008

REVISION 2

CONTROL PLAN



1"=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

- A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN
- 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.
- SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED FARMLAND CLASSIFICATION: NOT PRIME FARMLAND 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: 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)
- 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
- 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) /
- 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: 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 FROSION 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 1/4" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

UudB - URBAN LAND-UDORTHENTS, LIMESTONE COMPLEX, 0 TO 8 PERCENT SLOPES

- MEAN ANNUAL PRECIPITATION: 40 TO 48 INCHES MEAN ANNUAL AIR TEMPERATURE: 48 TO 57 DEGREES E FROST-FREE PERIOD: 161 TO 215 DAYS
- URBAN LAND: 80 PERCENT UDORTHENTS, SHALE AND SANDSTONE, AND SIMILAR SOILS: 15 PERCENT
- DESCRIPTION OF URBAN LAND
- SETTING LANDFORM: HILLS PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICALLY COVERED AREAS
- SLOPE: 0 TO 8 PERCENT DEPTH TO RESTRICTIVE FEATURE: 10 TO 99 INCHES TO LITHIC BEDROCK AVAILABLE WATER CAPACITY: VERY LOW (ABOUT 0.0 INCHES)
- INTERPRETIVE GROUPS LAND CAPABILITY (NONIRRIGATED): 8S
- TYPICAL PROFILE 0 TO 6 INCHES: VARIABLE
- DESCRIPTION OF UDORTHENTS, SHALE AND SANDSTONE
- LANDFORM: RIDGES LANDFORM POSITION (TWO-DIMENSIONAL): BACKSLOPE, SHOULDER, SUMMIT LANDFORM POSITION (THREE-DIMENSIONAL): INTERFLUVE, SIDE SLOPE, NOSE SLOPE DOWN-SLOPE SHAPE: CONVEX, LINEAR ACROSS-SLOPE SHAPE: CONVEX. LINEAR
- PARENT MATERIAL: GRADED AREAS OF SANDSTONE AND SHALE PROPERTIES AND QUALITIES SLOPE: 0 TO 8 PERCENT
- DRAINAGE CLASS: WELL DRAINED CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER (KSAT): MODERATELY LOW TO HIGH (0.06 TO 6.00 IN/HR) DEPTH TO WATER TABLE: MORE THAN 80 INCHES

DEPTH TO RESTRICTIVE FEATURE: 20 TO 99 INCHES TO LITHIC BEDROCK

- FREQUENCY OF FLOODING: NONE FREQUENCY OF PONDING: NONE AVAILABLE WATER CAPACITY: VERY LOW (ABOUT 2.9 INCHES)
- LAND CAPABILITY (NONIRRIGATED): 7S
- O TO 6 INCHES: VERY CHANNERY LOAM 6 TO 60 INCHES: VERY CHANNERY SILT LOAM
- <u>Ura</u>- URBAN LAND, OCCASIONALLY FLOODED
- MEAN ANNUAL PRECIPITATION: 40 TO 46 INCHES MEAN ANNUAL AIR TEMPERATURE: 48 TO 57 DEGREES F FROST-FREE PERIOD: 161 TO 215 DAYS
- MAP UNIT COMPOSITION URBAN LAND: OCCASIONALLY FLOODED.
- DESCRIPTION OF URBAN LAND
- LANDFORM: FLOOD PLAINS PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICALLY COVERED AREAS
- PROPERTIES AND QUALITIES SLOPE: 0 TO 3 PERCENT
- DEPTH TO RESTRICTIVE FEATURE: 10 TO 98 INCHES TO LITHIC BEDROCK DRAINAGE CLASS: EXCESSIVELY DRAINED CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER (KSAT): VERY LOW (0.00 IN/HR.) FREQUENCY OF FLOODING: OCCASIONAL
- AVAILABLE WATER CAPACITY: VERY LOW (ABOUT 0.8 INCHES) INTERPRETIVE GROUPS LAND CAPABILITY (NONIRRIGATED): 8S
- TYPICAL PROFILE 0 TO 6 INCHES: VARIABLE

HYDROLOGIC SOIL GROUP: D

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
- ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY. 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
- AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED. 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. 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
- J. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS
- 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. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONA 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

II. STANDARD FOR LAND GRADING

(IF ANY) TO BE REMOVED FROM SITE.

- 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

BE NECESSARY; IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.

- 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. 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 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
- 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 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 M. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

IV. <u>STANDARD FOR TEMPORARY STABILIZATION</u>

- 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.
- 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 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 <u>SEEDING SPECIFICATIONS</u>

V. <u>STANDARD FOR PERMANENT STABILIZATION</u>

- 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.

- A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL
- 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.
- SFEDBED 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 <u>SEEDING SPECIFICATIONS</u>
- B. STANDARD FOR PERMANENT STABILIZATION WITH SOD 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)
- 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 FROSION 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 BIODEGRADARI E 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.

- 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 GUTHRIE ROAD THE CONTRACTOR MUST REFER TO THE PLANS PREPARED BY GILMORE & ASSOCIATES, INC.
- 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.
- 5. INSTALL CONSTRUCTION ENTRANCE OFF GUTHRIE ROAD.
- FENCE ALSO TO BE INSTALLED AT THIS TIME.
- 7. CLEAR AND GRUB WITHIN LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS.
- 9. ADJUST BASIN LINER IN ACCORDANCE WITH THE EXISTING CONDITIONS/DEMOLITION & GRADING PLANS AND LINER
- ADJUSTMENT DETAILS AND/OR PLANS. 10. INITIATE THE NECESSARY EARTHWORK TO REACH GRADES INDICATED ON THE PLANS. THIS WORK SHALL INCLUDE ROUGH
- 11. BEGIN CONSTRUCTION OF BUILDING, UTILITIES AND INSTALL GUTHRIE ROAD PERMANENT ACCESS AND DRAINAGE IMPROVEMENTS. THE REQUIRED HIGHWAY OCCUPANCY PERMIT FOR GUTHRIE ROAD MUST BE APPROVED BY PENNDOT PRIOR TO ANY WORK WITH GUTHRIE ROAD RIGHT OF WAY.
- 12. INSTALL PROPOSED CURBING.
- 13. INSTALL STONE BASE COURSE, BINDER COURSE, AND WEARING COURSE FOR THE DRIVEWAYS TO THE COVERED PARKING AREA AND THE FIREHOUSE.
- 14. REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS CUT MATERIAL FROM THE SITE IN A LAWFUL MANNER.
- 17. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF
- 18. INSTALL SITE SIGNAGE AND STRIPING.
- DEMOBILIZE

MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S NOTES

- .) ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR 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
- 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.
- 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. .

5.) AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

- 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,
- 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
- 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.

NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

- 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 DAILY 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
- 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.
- 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.

20.) ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.

- 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
- 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. EEDED 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 TABILIZED 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
- 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

ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

- CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS. 30.) AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED. TEMPORARY FROSION 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
- 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 LIP TO

THIS PLAN IS FOR SOIL EROSION &

SEDIMENT POLLUTION CONTROL

PURPOSES ONLY

31.) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL

\$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.

REVISIONS EV DATE COMMENT 4/1/19 | COMMENTS 4/26/19 PER TOWNSHIP & SELLER COMMENTS



WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

YOU MUST CALL 811 BEFORE ANY EXCAVATION

NOT APPROVED FOR

03/25/2019

AS NOTE

CONSTRUCTION

AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED A ONSTRUCTION DOCUMENT UNLESS INDICATED OTHERW DRAWN BY:

SCALE

PP180258DETAILS-2 CADID PRELIMINARY / FINAL

LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE

VENTURES, L.L.C.

EMS/SELF STORAGE 400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP**

MONTGOMERY COUNTY, PA

ENGINEERIN 1515 MARKET STREET, SUITE 920 PHILADELPHIA, PA 19102 Phone: (267) 402-3400 Fax: (267) 402-3401

. BROWN

www.BohlerEngineering.com

: PROFESSIONAL ENGINEER . PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093

NEW JERSEY LICENSE No. 24GE05041400

CONTROL NOTES

SOIL EROSION & SEDIMENT POLLUTION

SHEET NUMBER:

OF 17

REVISION 2

(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.

(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;

THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS OF E&S ITEMS ARE CONDUCTED AT END-OF-DAY, 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

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

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 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

MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

(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.

REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

COMPLETION CERTIFICATE AND FINAL PLANS

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. LINTIL 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.

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

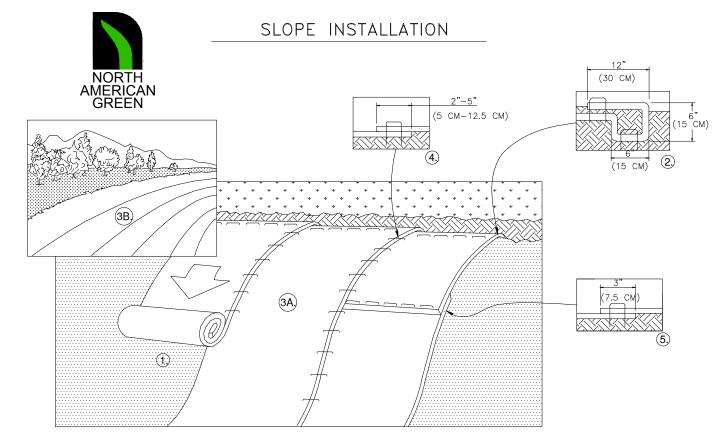
ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY

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.

SEQUENCE OF CONSTRUCTION

- 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
- 4. ALL STRUCTURES ASSOCIATED WITH CONSTRUCTION OF SEDIMENT AND EROSION CONTROL MEASURES MUST BE AVAILABLE ON-SITE PRIOR TO ANY EARTH MOVING/DISTURBANCE.
- 6. INSTALL SILT FENCE ON DOWNHILL SIDE OF EARTH MOVING ACTIVITIES AS INDICATED ON THE PLANS. PERIMETER SILT
- 8. PERFORM DEMOLITION ACTIVITIES IN ACCORDANCE WITH THE EXISTING CONDITIONS/DEMOLITION PLAN.
- GRADING OF THE PROPOSED BUILDING PAD.

- 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.
- 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.



- 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.
 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

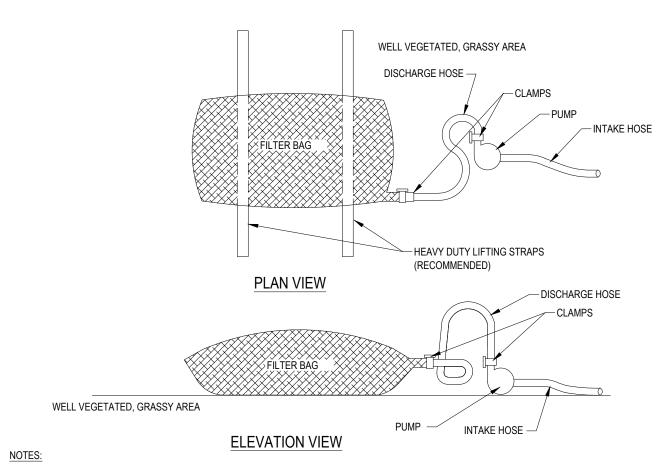
ON BLANKET TYPE.

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



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

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

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

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

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

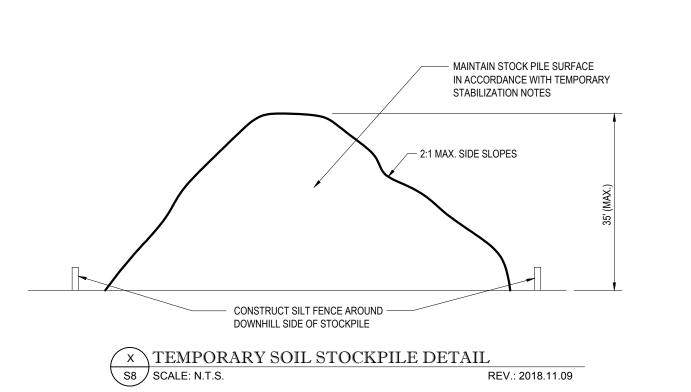
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

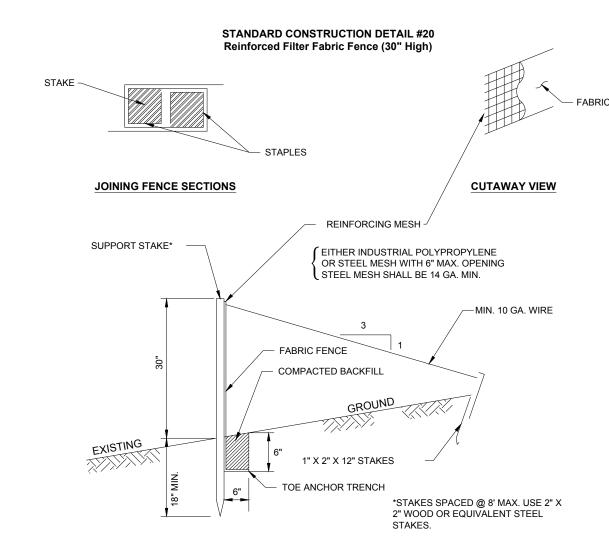
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

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

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

NOT TO SCALE





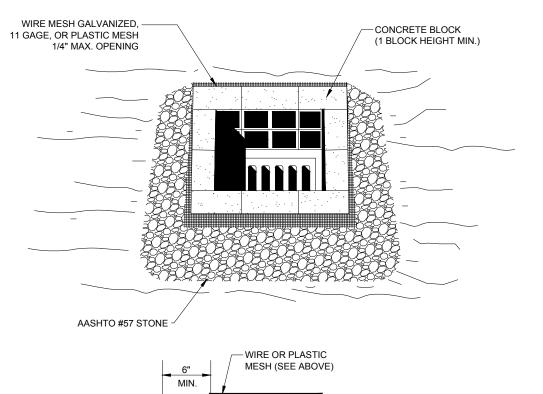
NOTE: SHOW ALL DETAILS AND CONSTRUCTION DIMENSIONS ON PLAN DRAWINGS.

Filter Fabric Fence must be installed at existing level grade. Both ends of each fence section must be extended at least 8 feet upslope at 45 degrees to the main fence alignment.

Sediment must be removed where accumulations reach 1/2 the above ground height of the fence.

Any fence section which has been undermined or topped must be immediately replaced with a Rock Filter Outlet. See Standard Construction Detail #18.

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



DROP INL WITH GR

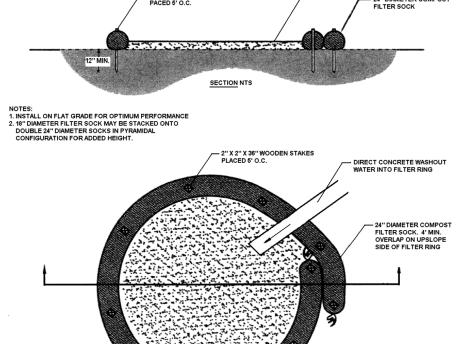
Maximum Drainage Area = 1 acre.

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.

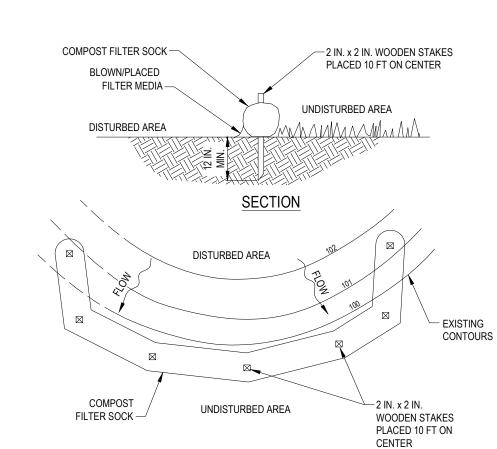
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS

FIGURE 3.18 Typical Compost Sock Washout Installation



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

Adapted from Filtrexx



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.

PLAN VIEW

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

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

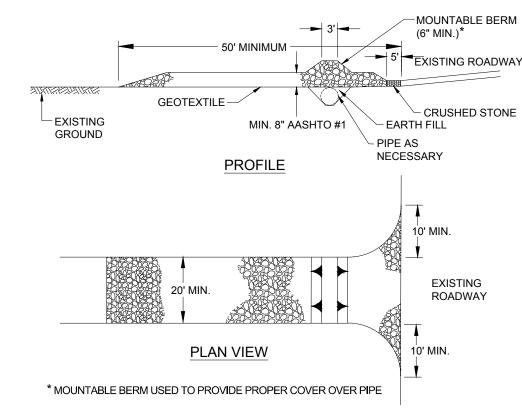
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

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

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

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

STANDARD CONSTRUCTION DETAIL #3-1 Rock Construction Entrance



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

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.

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



	REVISIONS				
REV	DATE	COMMENT	DRAWN BY		
1	4/1/19	PER SELLER COMMENTS	CO		
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW		
3					
4					
5					
6					
7					
8					
9	-				



YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

	AGENCY REVIEW AND A	ENDED FOR MUNICIPAL AND/OR PPROVAL. <u>IT IS NOT INTENDED AS A</u> ENT UNLESS INDICATED OTHERWISE.
1	PROJECT No.:	PP180258
1	DRAWN BY:	CRO
ı	CHECKED BY:	JPW
ı	DATE:	03/25/2019
ı	SCALE:	AS NOTED
1	CAD I.D.:	PP180258DETAILS-2

ROJECT:
PRELIMINARY / FINAL
LAND DEVELOPMENT
PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER:

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

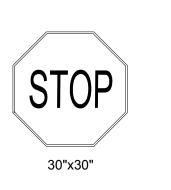
NEW JERSEY LICENSE No. 24GE05041400

SHEET TITLE

SOIL EROSION &
SEDIMENT
POLLUTION
CONTROL DETAILS

SHEET NUMBER:

C=010



STOP SIGN (A)

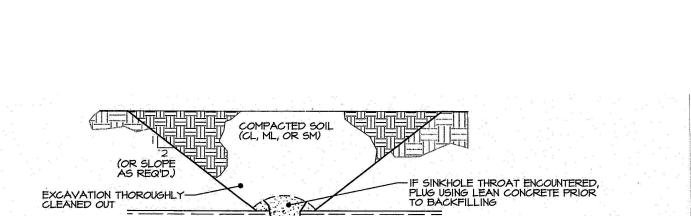
DO NOT **ENTER** 30"x30"



DO NOT ENTER SIGN (C)

RESERVED FOR FIRE

MARSHAL SIGN (D)



BEDROCK

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.

__BEDROCK___

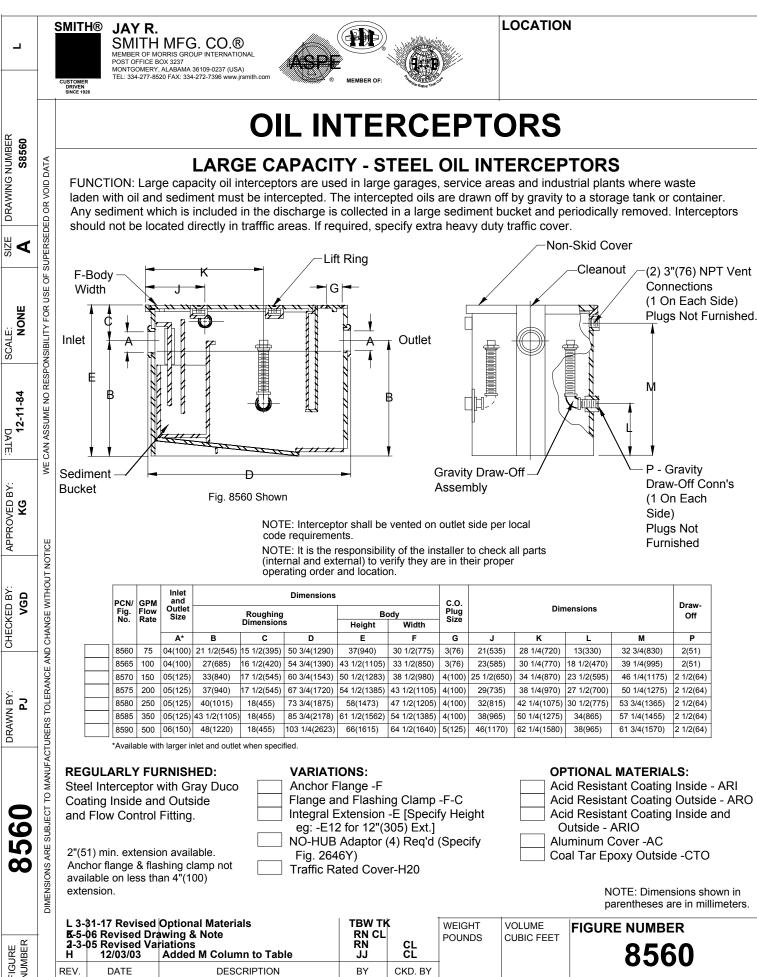
A. IF A THROAT CAN BE EXPOSED, PLUG THE THROAT (FREE OF LOOSE DEBRIS) WITH LEAN CONCRETE OR FLOWABLE FILL TO ABOUT 2 FEET OVER TOP OF THE THROAT LOCATION. CONTINUE BACKFILL AND REPAIR PROCEDURES AS OUTLINED IN NOTES 4 THROUGH 6.

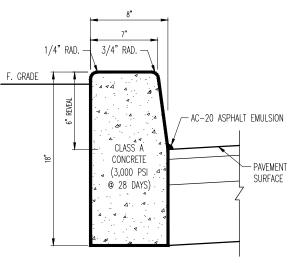
B. IF BEDROCK ANR/OR STABLE SOIL IS REACHED, BUT A THROAT CANNOT BE EXPOSED, POUR A CAP (MINIMUM 2 FEET THICK) OF LEAN CONCRETE OR FLOWABLE FILL OVER THE BASE OF THE EXCAVATION (ROCK SURFACE). THE BEDROCK SURFACE SHOULD BE FREE OF LOOSE DEBRIS PRIOR TO POURING THE CAP. CONTINUE BACKFILL AND REPAIR PROCEDURES 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.

BACKFILL EXCAVATION WITH SOILS MEETING USCS DESIGNATION OF CL, ML, OR SM. PLACE IN LIFTS OF 10 - 12 INCHES AND COMPACT TO AT LEAST 42% OF MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR METHOD (ASTM 648).
 GRADE SURFACE TO DRAIN AWAY FROM SINKHOLE UNTIL FINAL GRADING IS PERFORMED.
 STABILIZE DISTURBED SURFACE AREAS AS SPECIFIED.

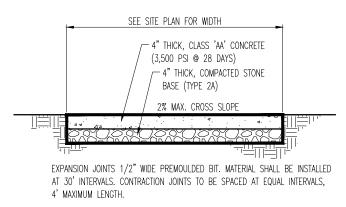
TYPICAL SINKHOLE REPAIR DETAIL



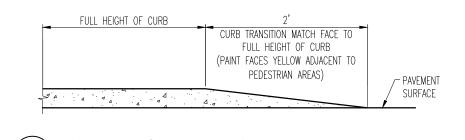


TRANSVERSE JOINTS 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

S5 SCALE: N.T.S. REV.: 2015.03.09



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



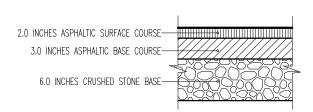
REV.: 2015.03.09

P TAPERED CURB DETAIL S8 SCALE: N.T.S.

> 1.5 INCHES ASPHALTIC SURFACE COURSE 3.0 INCHES ASPHALTIC BASE COURSE 6.0 INCHES CRUSHED STONE BASE

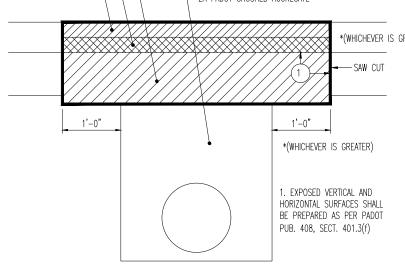
PAVEMENT SECTION SHALL BE VERIFIED AND APPROVED F GEOTECHNICAL ENGINEER OR QUALITY CONTROL AGENCY. P STANDARD ASPHALT PAVEMENT DETAIL S14 SCALE: N.T.S.

NOTES:

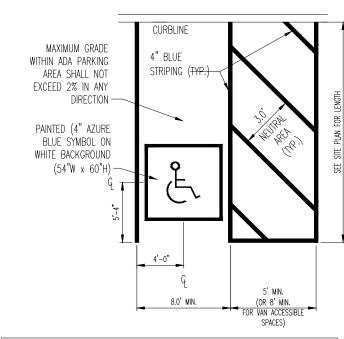


PAVEMENT SECTION SHALL BE VERIFIED AND APPROVED BY GEOTECHNICAL ENGINEER OR QUALITY CONTROL AGENCY. P HEAVY DUTY ASPHALT PAVEMENT DETAIL S15 SCALE: N.T.S.

> - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG. 64-22, 9.5 MM MIX, SRL-G, 1.5" DEPTH OR TO A DEPTH EXISTING* - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG. 64-22, 19MM MIX, SRL-G, 2.0" DEPTH OR TO A DEPTH EXISTING* SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 25.0 MM MIX, 4.5" DEPTH OR TO A DEPTH EXISTING* _ 2A PADOT CRUSHED AGGREGATE *(WHICHEVER IS GREATER) — SAW CUT

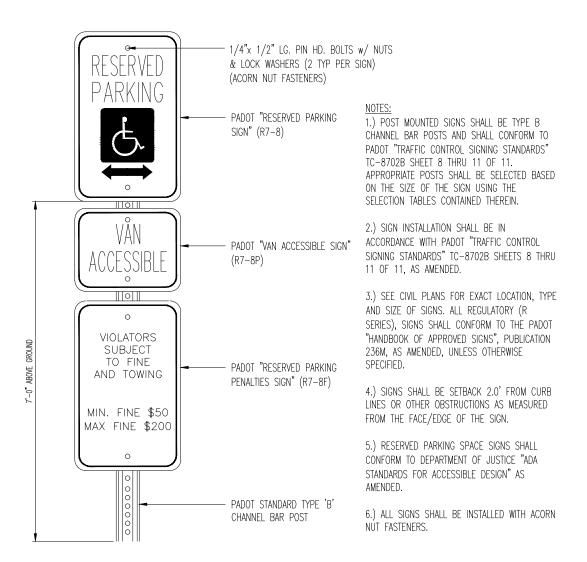


P FLEXIBLE PAVEMENT RESTORATION S21 SCALE: N.T.S. REV : 2015.03.09

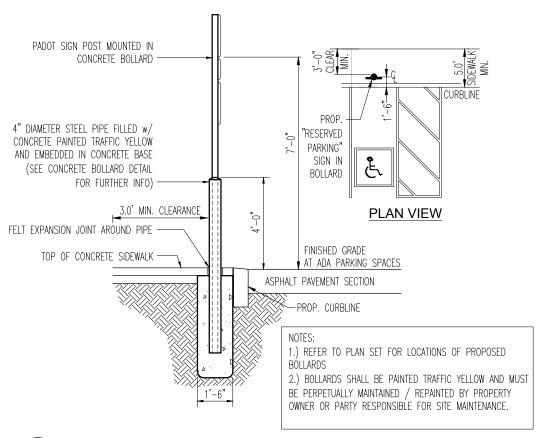


1.) CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND. 2.) CURB RAMPS, PAVEMENT MARKINGS, & APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

ADA ACCESSIBLE PARKING SPACE STRIPING (1 SPACE) S11 SCALE: N.T.S. REV.: 2016.05.31

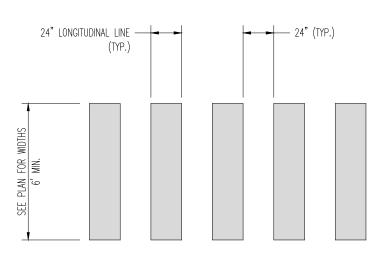


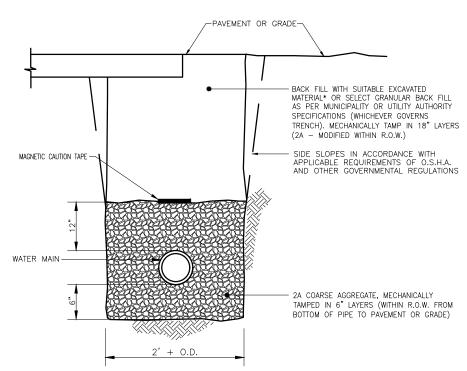
RESERVE PARKING SPACE w/ T PENALTIES & VAN ACCESSIBLE SIGNS (B) S12 SCALE: N.T.S. REV.: 2016.01.05



T "RESERVED PARKING" SIGN WITHIN BOLLARD DETAIL S16 SCALE: N.T.S. REV.: 2016.01.05

REV.: 2019.03.27

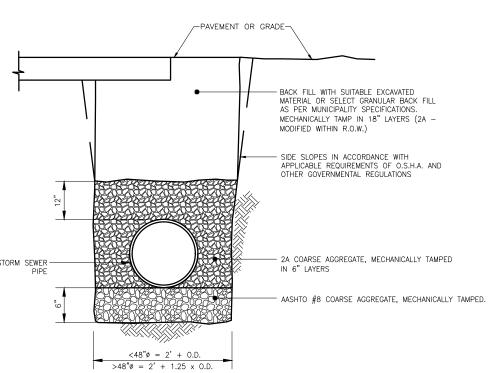




EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

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.

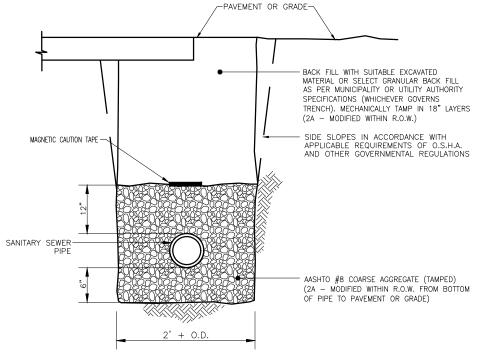
W TRENCH BEDDING CLASSIFICATION (WATER MAIN) S4 SCALE: N.T.S. REV.: 2015.03.09



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.

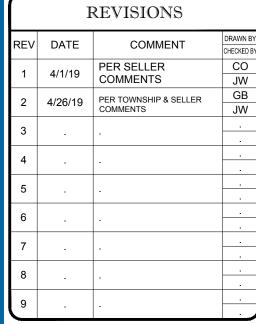
R TRENCH BEDDING CLASSIFICATION (STORM) S8 SCALE: N.T.S. REV.: 2015.03.09



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 (SANITARY MAIN) S8 SCALE: N.T.S. REV.: 2015.03.09







NOT APPROVED FOR CONSTRUCTION

AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS

DRAWN BY: CHECKED BY: 03/25/2019 SCALE: AS NOTED PP180258DETAILS-2 CAD I.D.:

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE 400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP** MONTGOMERY COUNTY, PA



1515 MARKET STREET, SUITE 920 PHILADELPHIA, PA 19102 Phone: (267) 402-3400 Fax: (267) 402-3401

www.BohlerEngineering.com

C. BROWN

: PROFESSIONAL ENGINEER . PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093 NEW JERSEY LICENSE No. 24GE05041400

DETAILS

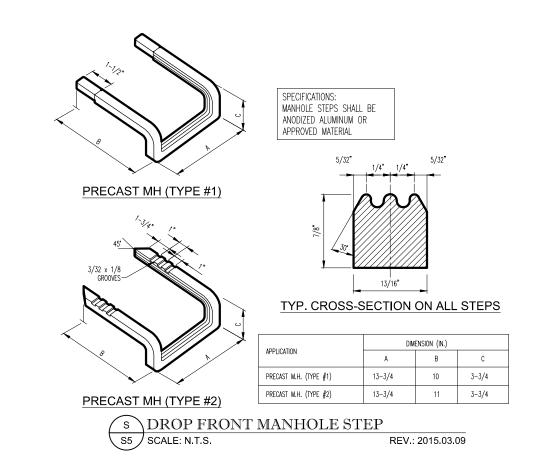
SHEET NUMBER:

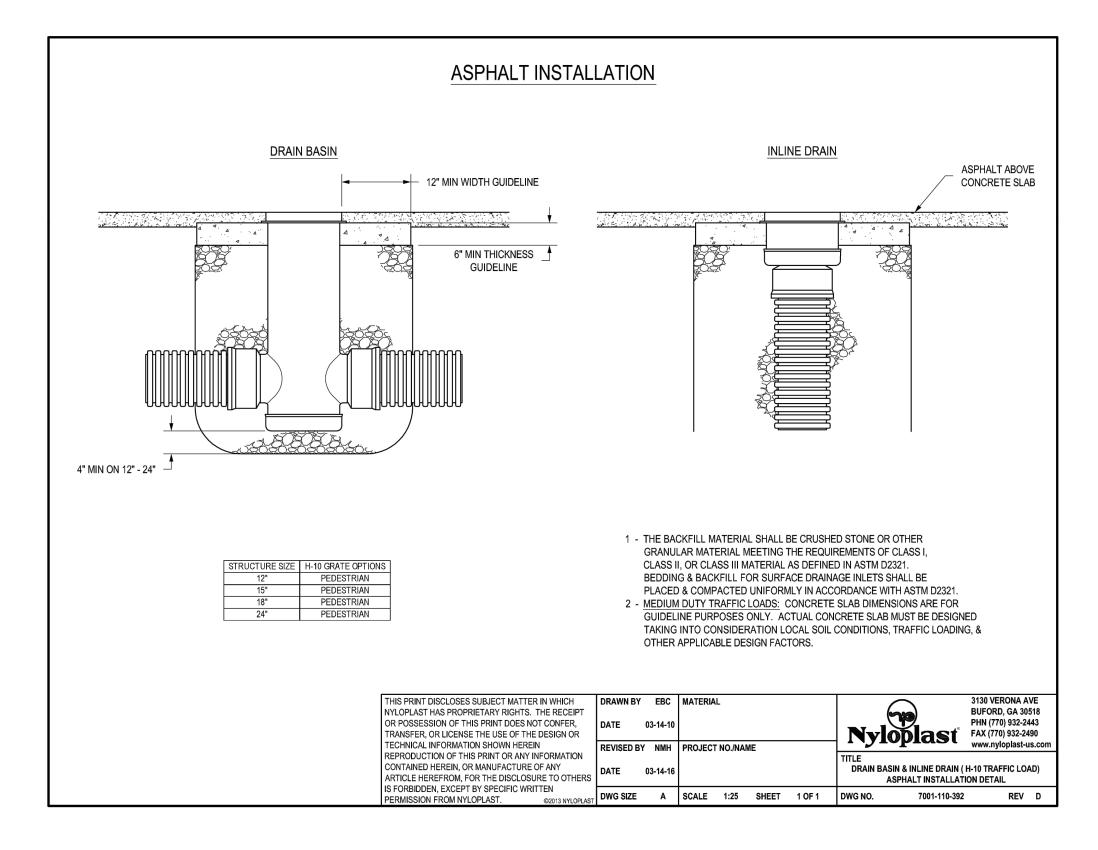
C = 011

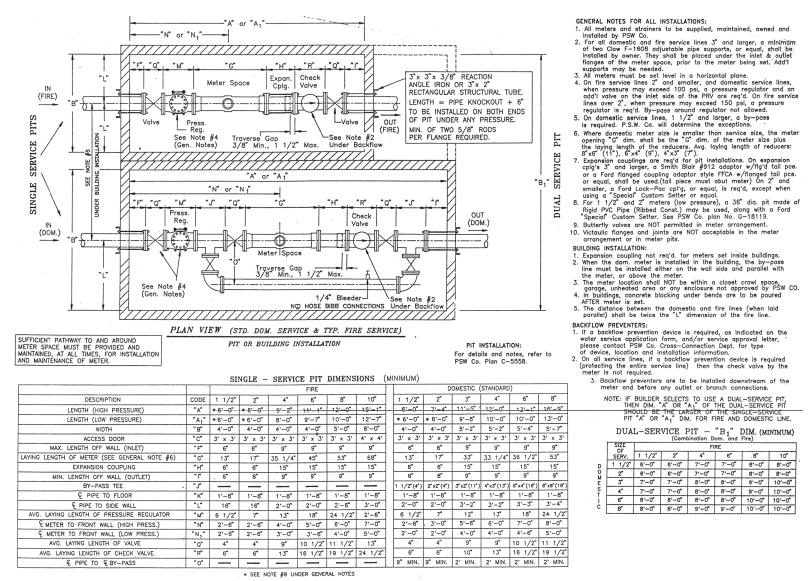
REVISION 2

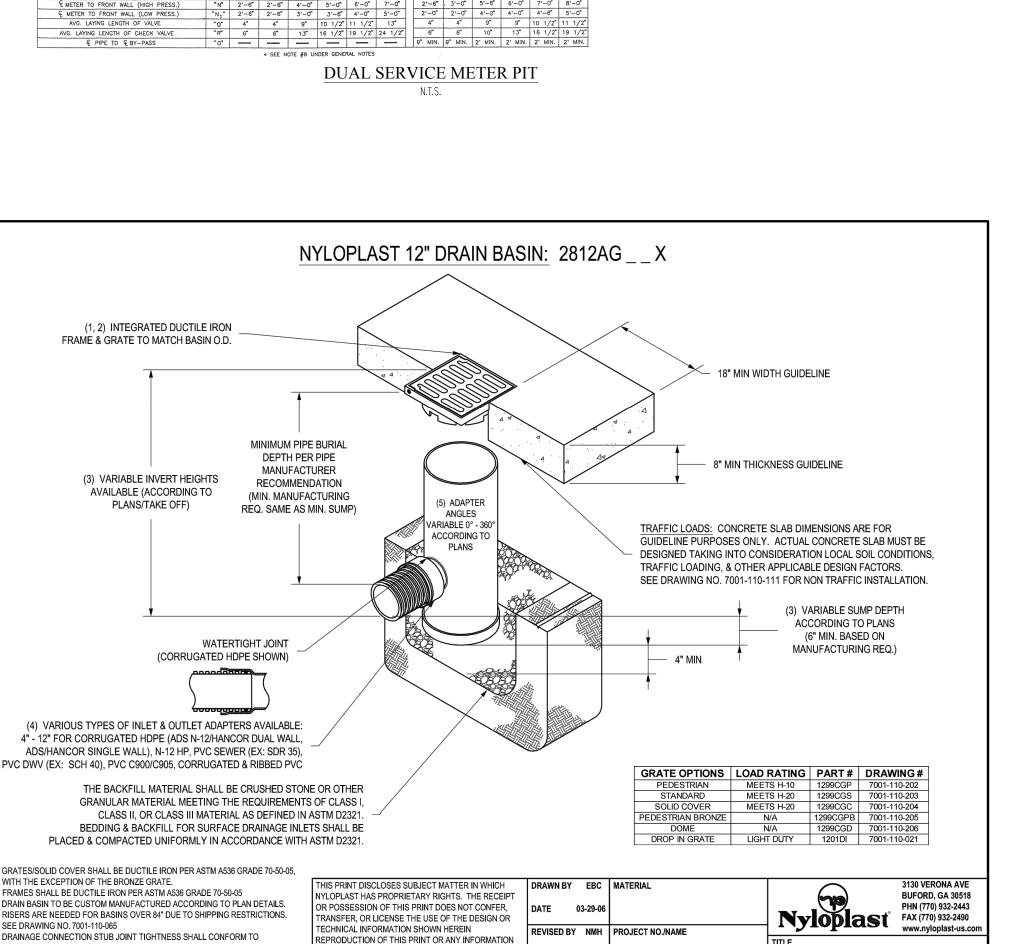
OF 17

BY CKD. BY T PEDESTRIAN CROSSWALK DETAIL S22 SCALE: N.T.S. WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov









12 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

T DWG SIZE A SCALE 1:20 SHEET 1 OF 1 DWG NO. 7001-110-189 REV E

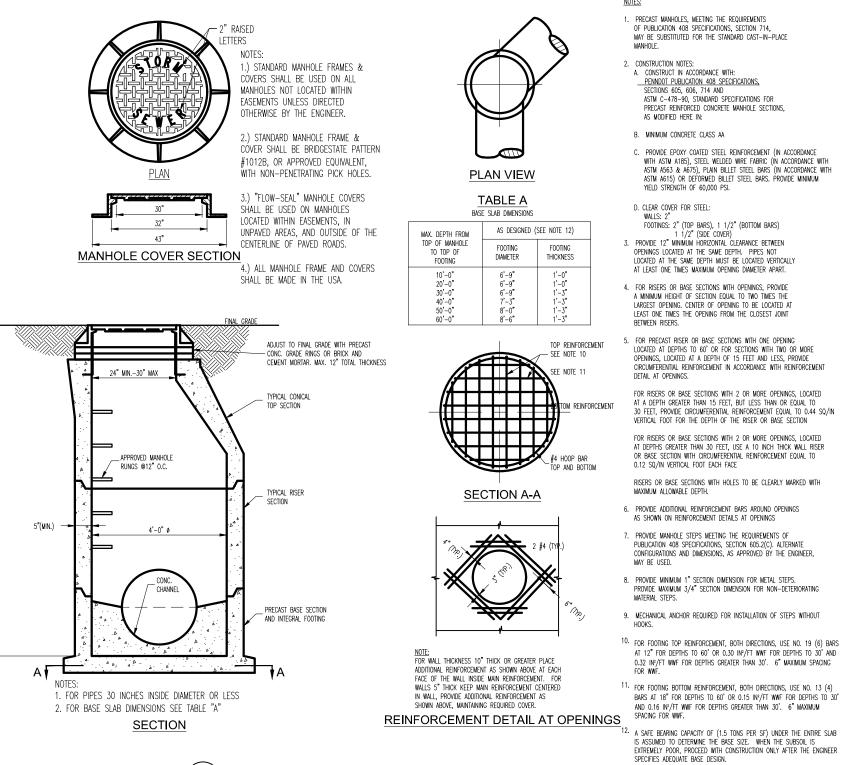
CONTAINED HEREIN, OR MANUFACTURE OF ANY

ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS

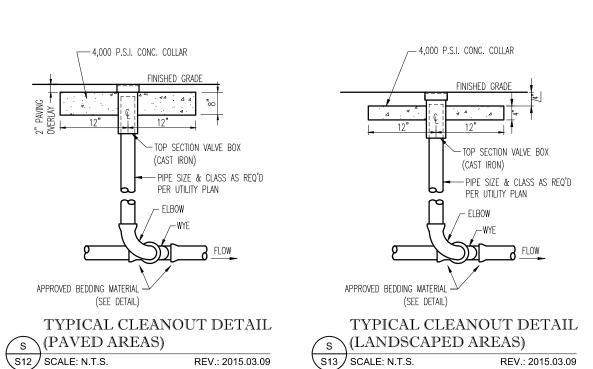
ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL),

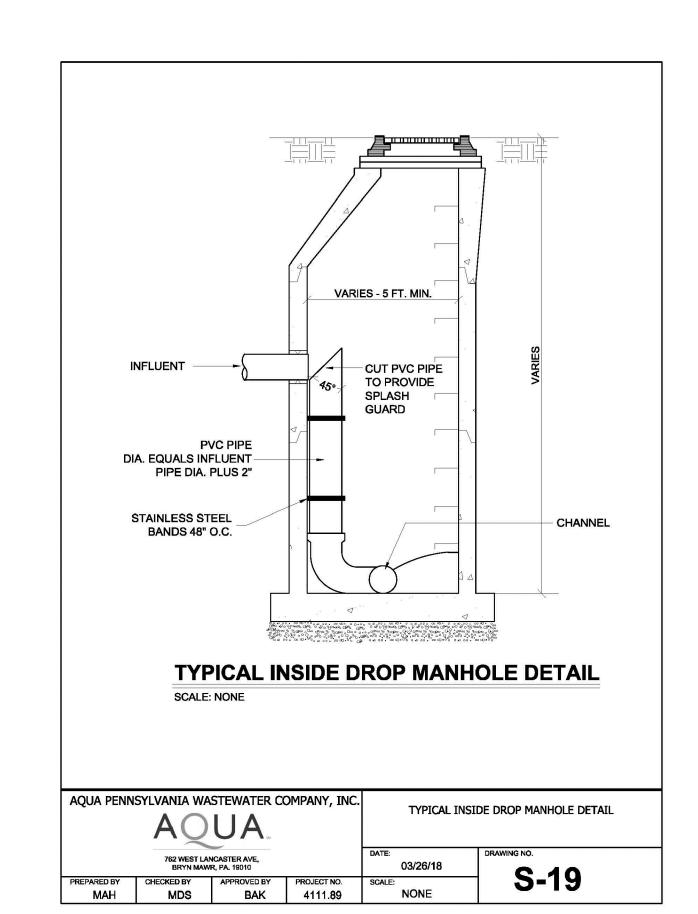
- ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN

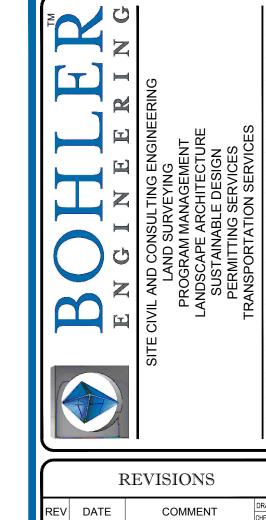
N-12 HP. & PVC SEWER.











PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 605, 606, 714 AND

ASTM A563 & A675), PLAIN BILLET STEEL BARS (IN ACCORDANCE WITH

ASTM A615) OR DEFORMED BILLET STEEL BARS. PROVIDE MINIMUM

A DEPTH GREATER THAN 15 FEET, BUT LESS THAN OR EQUAL TO

FOOTINGS: 2" (TOP BARS), 1 1/2" (BOTTOM BARS)

	I	REVISIONS	
REV	DATE	COMMENT	DRAWN BY
1	4/1/19	PER SELLER COMMENTS	CO
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW
3			
4			-
5			-
6			
7			
8			
9			



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

AGENCY REVIEW AND APP	NDED FOR MUNICIPAL AND/OR PROVAL. <u>IT IS NOT INTENDED AS A</u> IT UNLESS INDICATED OTHERWISE.
PROJECT No.: DRAWN BY:	PP180258 CRO
CHECKED BY:	JPW 03/25/2019
SCALE: CAD I.D.:	AS NOTED PP180258DETAILS-2

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA **UPPER MERION TOWNSHIP** MONTGOMERY COUNTY, PA



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

C. BROWN

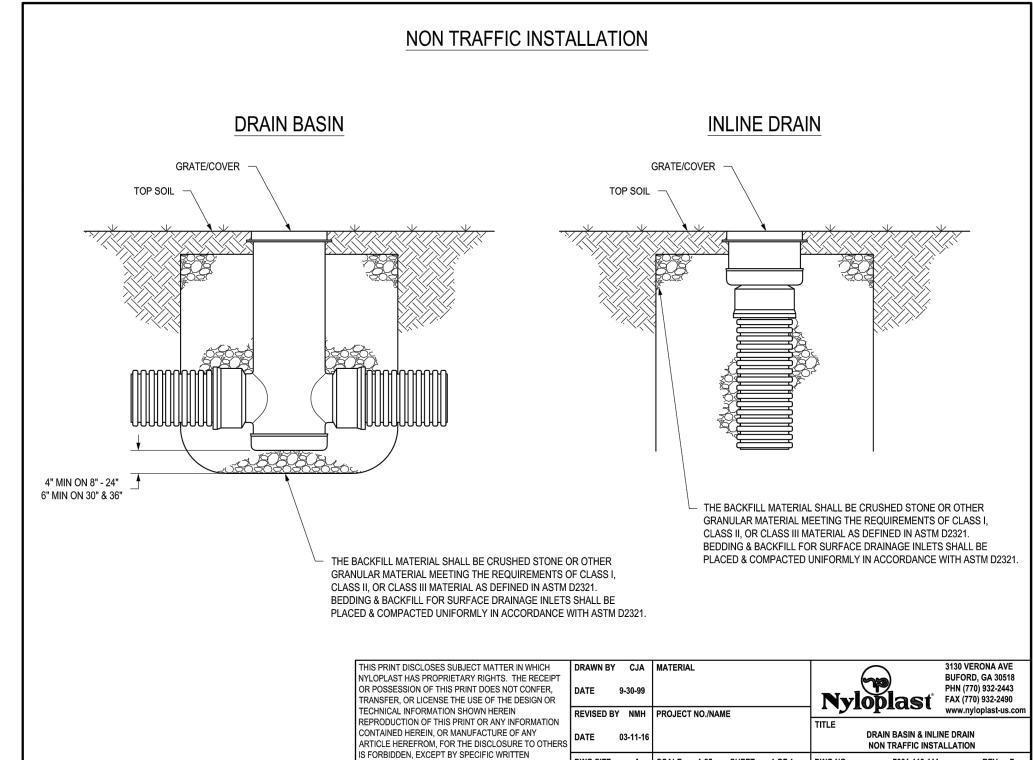
: PROFESSIONAL ENGINEER . PENNSYLVANIA LICENSE No. PE075317 DELAWARE LICENSE No. 18093 NEW JERSEY LICENSE No. 24GE05041400

DETAILS

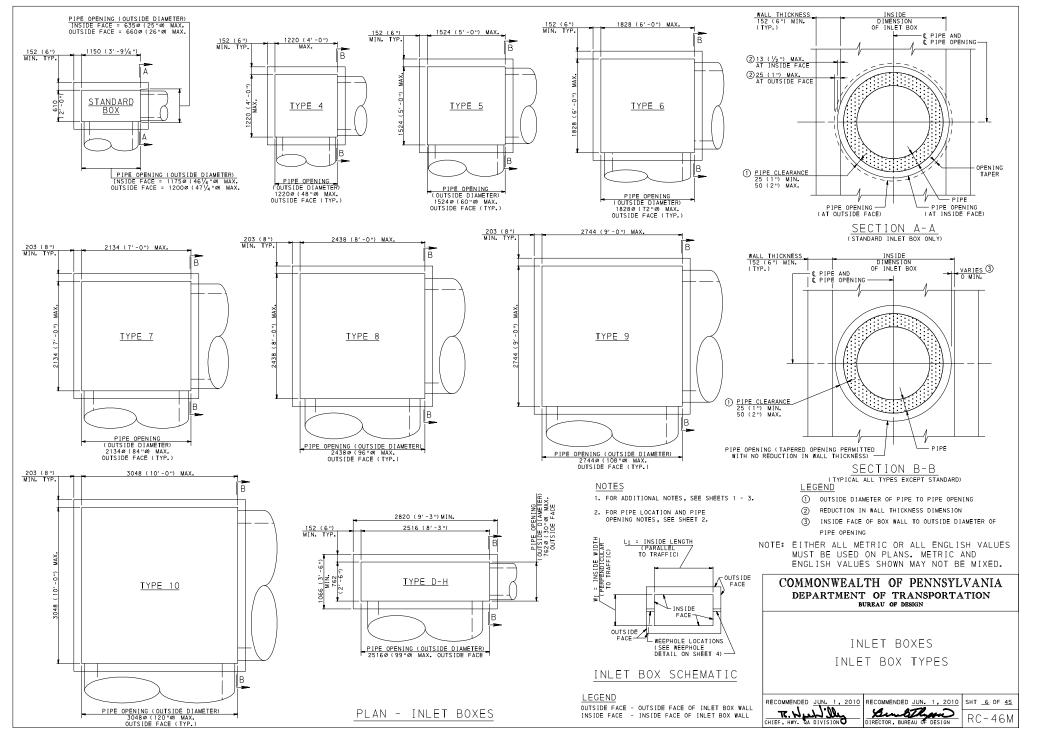
SHEET NUMBER:

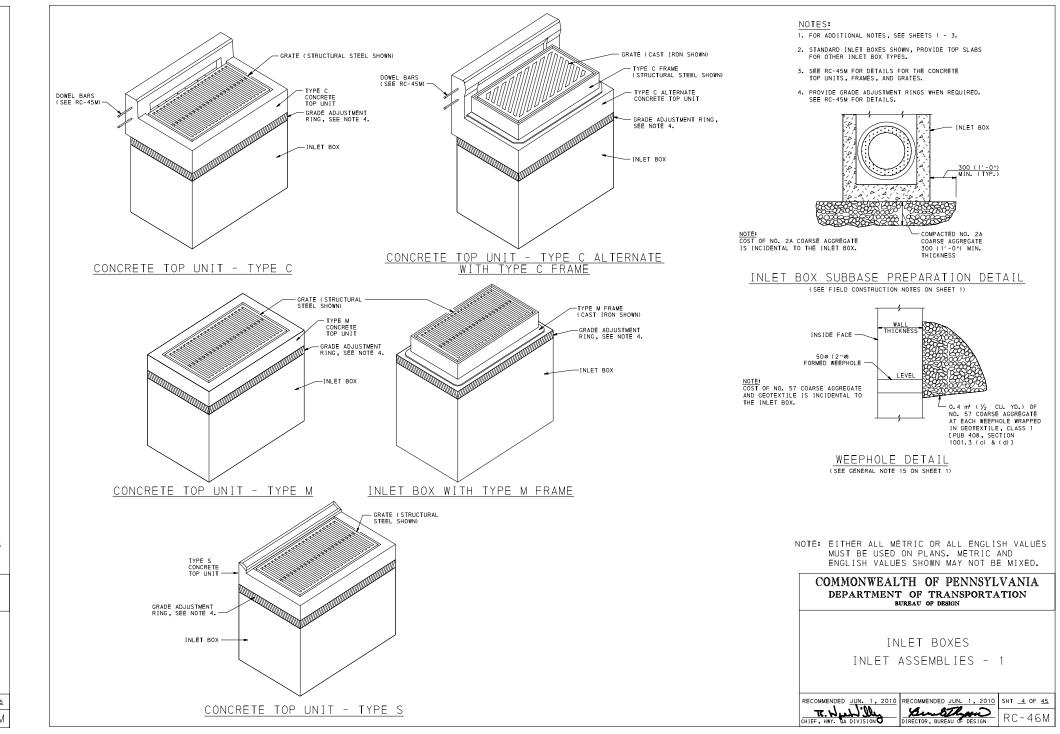
C = 012OF 17

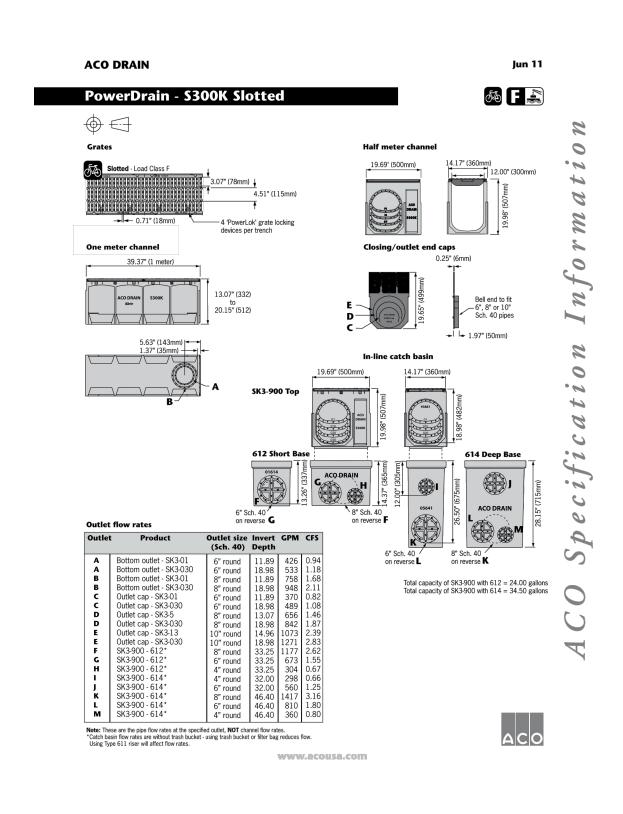
REVISION 2

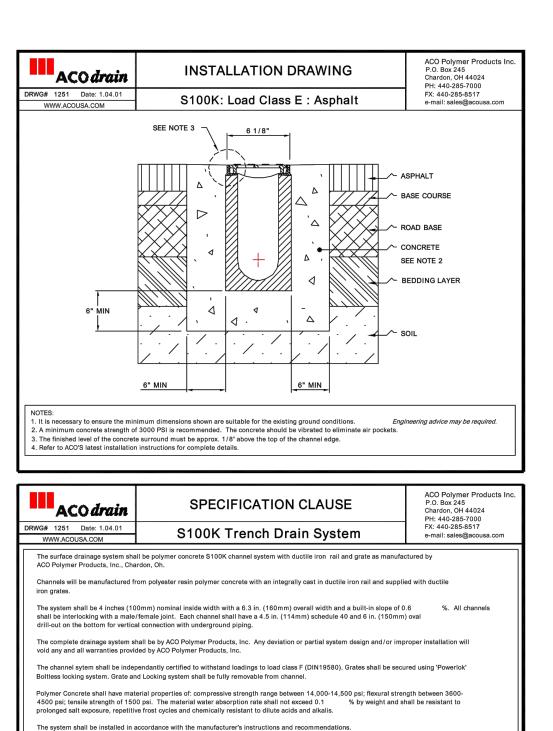


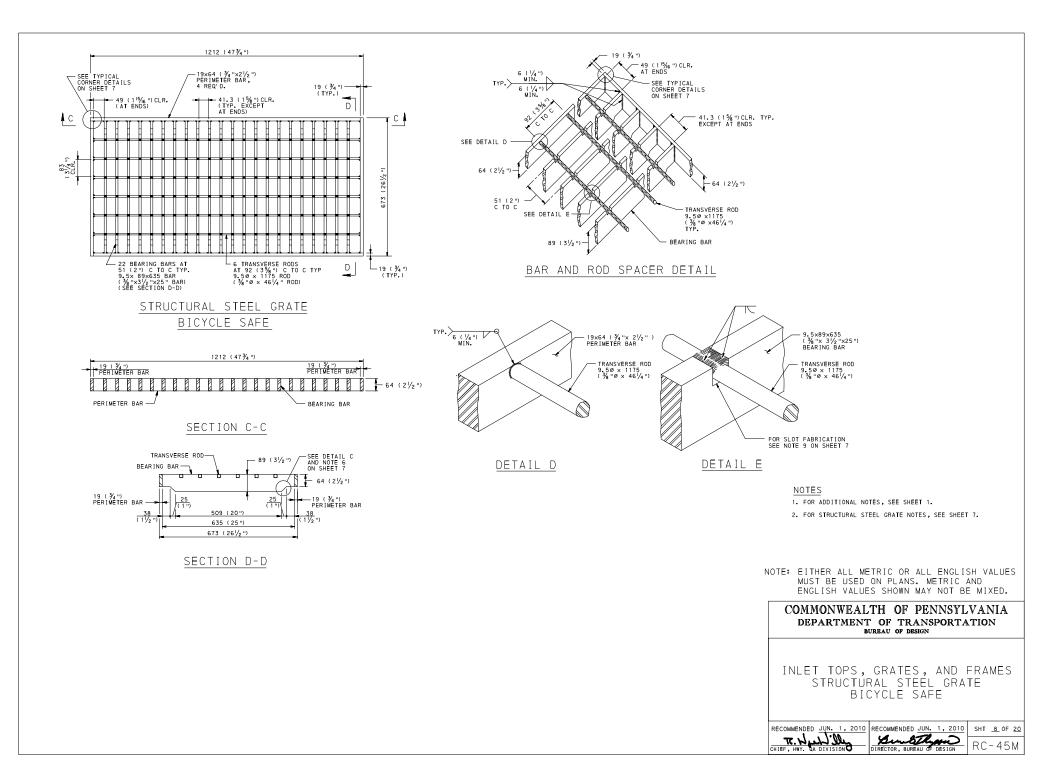
ST DWG SIZE A SCALE 1:25 SHEET 1 OF 1 DWG NO. 7001-110-111 REV F











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	ITEM	DRAWING DATE
RC - 30M	SUBSURFACE DRAINS	JUNE 1, 2010
RC - 39M	STORM WATER MANHOLES	SEPT 15, 2016
RC - 45M	INLET TOPS, GRATES, AND FRAMES	SEPT 15, 2016
RC - 46M	INLET BOXES	SEPT. 15, 2016
RC - 64M	CURBS AND GUTTERS	JUNE 1, 2010
RC - 67M	CURB RAMPS AND SIDEWALKS	JUNE 10, 2013



	REVISIONS			
REV	DATE	COMMENT	DRAWN BY	
1	4/1/19	PER SELLER COMMENTS	CO	
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW	
3				
4				
5				
6				
7				
8				
9				
Ů	•	•	<u> </u>	



PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION
WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

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

PROJECT No.:
PP180258
DRAWN BY:
CRO
CHECKED BY:
JPW
DATE:
03/25/2019
SCALE:
AS NOTED
CAD I.D.:
PP180258DETAILS-2

PROJECT:
PRELIMINARY / FINAL
LAND DEVELOPMENT

PLANS

FOR ——VALLEY FORGE STORAGE

VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER :

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

NEW JERSEY LICENSE No. 24GE05041400

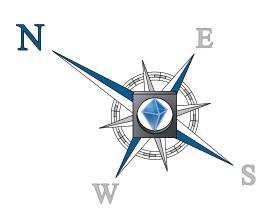
. JCCT TITI C:

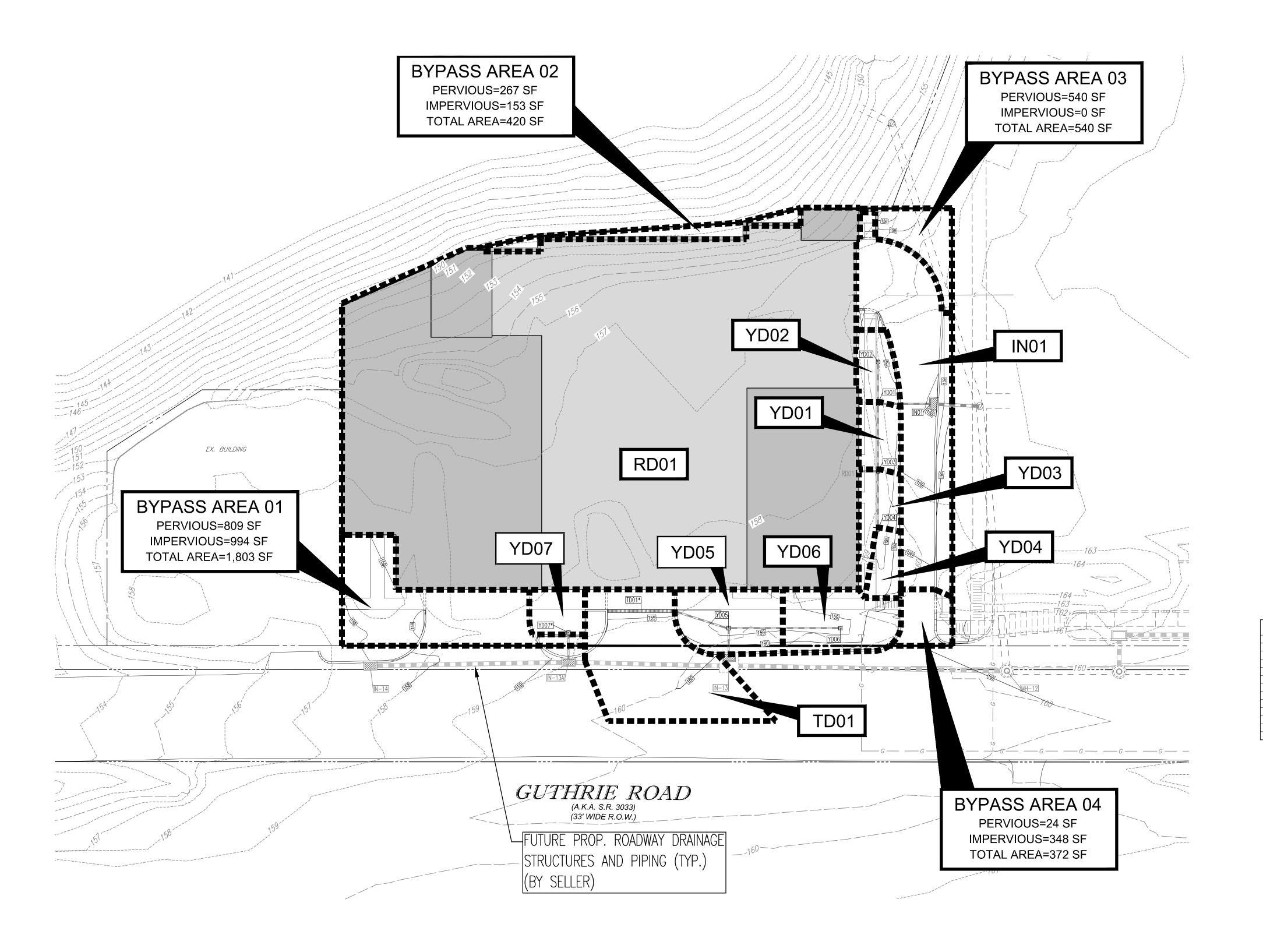
DETAILS

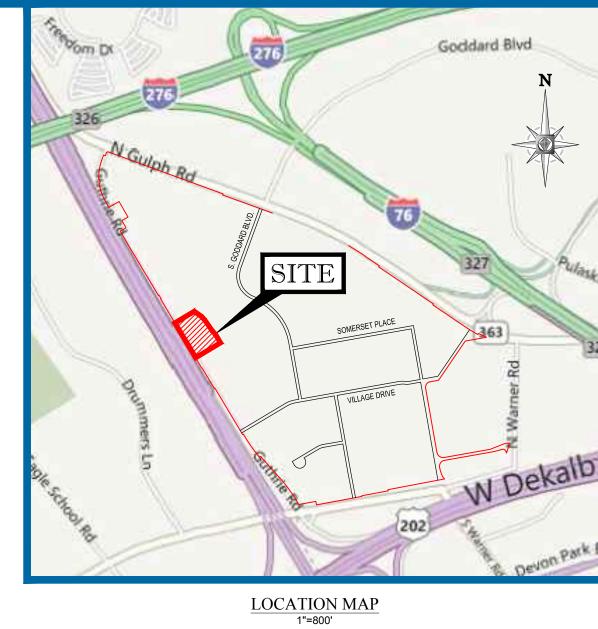
SHEET NUMBER:

C-013

OF 17







THE INFOR
AWN BY
CO
GB JW
-
•
<u>. </u>

Know what's below.
Call before you dig.

PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION
WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

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

PROJECT No.:
PP180258
DRAWN BY:
CRO
CHECKED BY:
JPW

DATE: 03/25/2019
SCALE: 1'=20'
CAD I.D.: PP180258BASE-2

PROJECT:
PRELIMINARY / FINAL

LAND DEVELOPMENT

PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA

BOHLER ENGINEERING

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

C. BROWN

PROFESSIONAL ENGINEER :
PENNSYLVANIA LICENSE No. PE075317
DELAWARE LICENSE No. 18093
NEW JERSEY LICENSE No. 24GE05041400

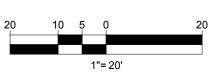
SHEET TITLE:

INLET DRAINAGE AREA PLAN

SHEET NUMBER:

C=014

REVISION 2



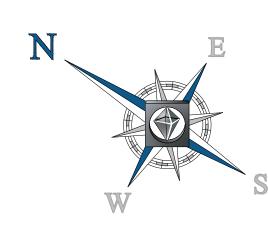
DRAWING LEGEND

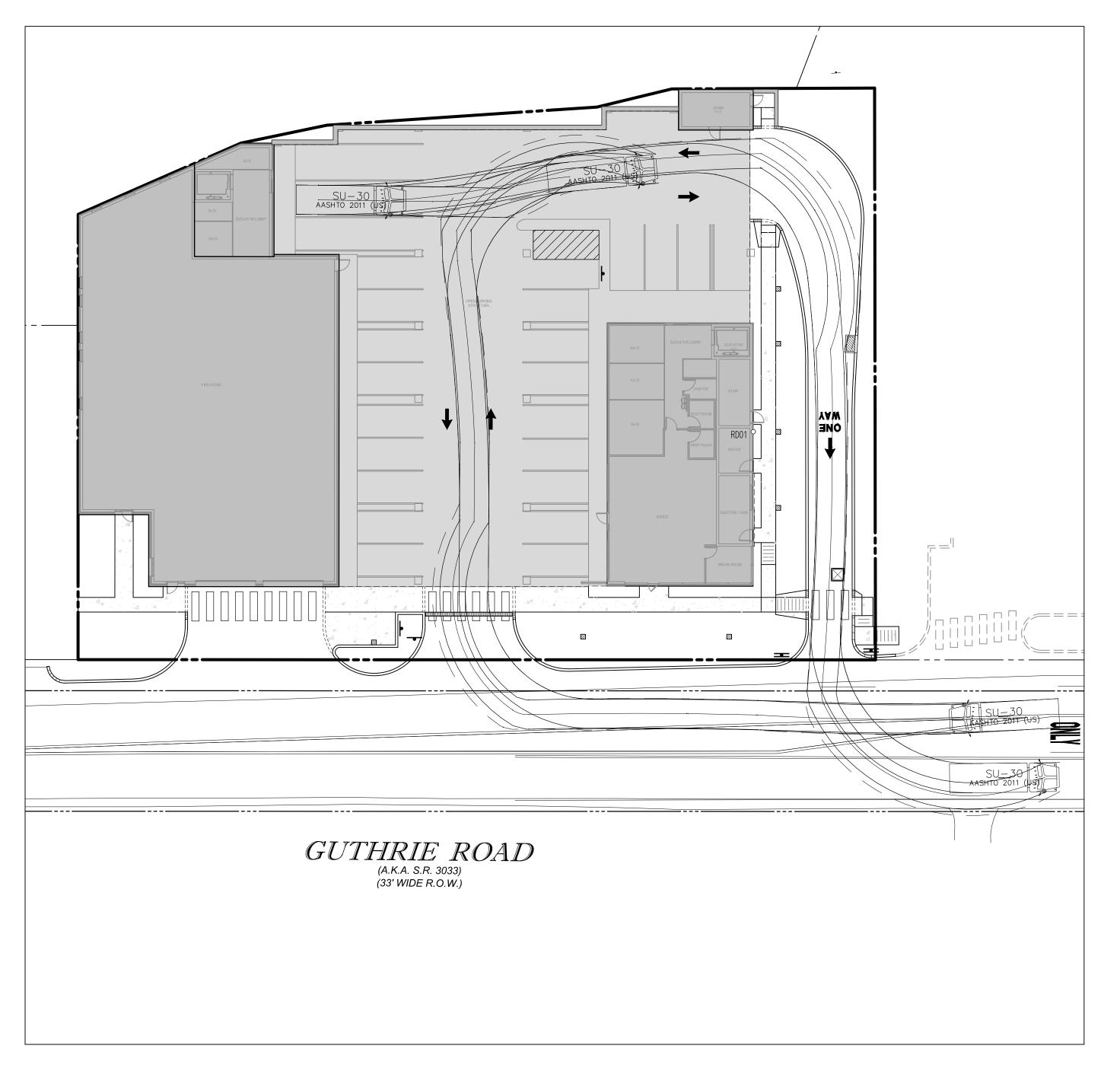
PROP. INLET DRAINAGE AREA NUMBER

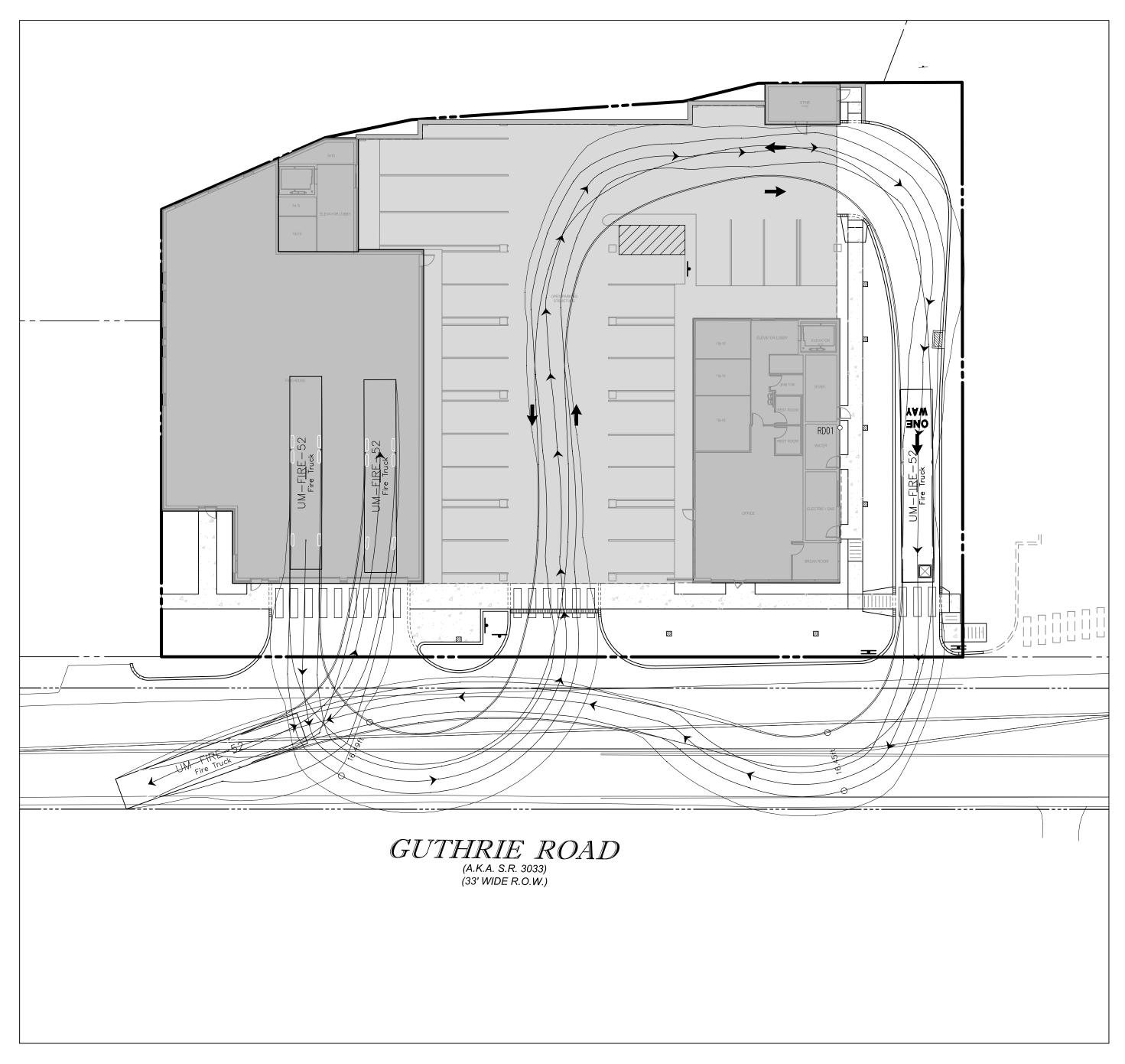
PROP. INLET DRAINAGE AREA

INLET DRAINAGE AREA TABLE

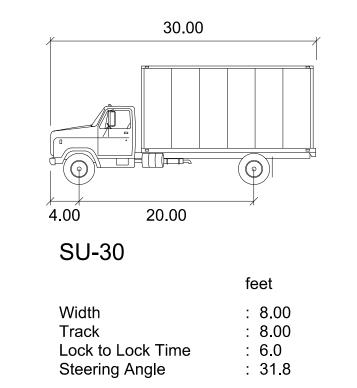
LOCAL RATIONAL LOCAL TC LOCAL INTENSITY FLOW (CFS) (MIN.) (IN/HR)



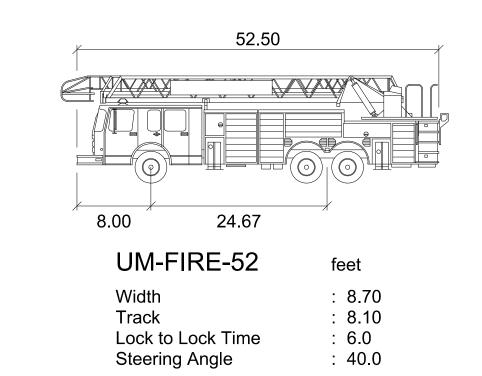


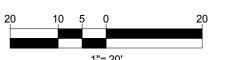


30-FOOT BOX TRUCK CIRCULATION



FIRE TRUCK CIRCULATION







	I	REVISIONS	`
REV	DATE	COMMENT	DRAWN BY
1	4/1/19	PER SELLER COMMENTS	CO
2	4/26/19	PER TOWNSHIP & SELLER COMMENTS	GB JW
3			
4			
5			-
6			
7			
8	•		
9			



PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

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

PROJECT No.:

PP18025

 PROJECT No.:
 PP180258

 DRAWN BY:
 CRO

 CHECKED BY:
 JPW

 DATE:
 03/25/2019

 SCALE:
 1'=20'

 CAD I.D.:
 PP180258BASE-2

PROJECT:

PRELIMINARY / FINAL

LAND DEVELOPMENT

PLANS

VALLEY FORGE STORAGE VENTURES, L.L.C.

EMS/SELF STORAGE

400 GUTHRIE ROAD KING OF PRUSSIA UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA



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

C. BROWN

PROFESSIONAL ENGINEER :

PENNSYLVANIA LICENSE No. PE075317

DELAWARE LICENSE No. 18093

NEW JERSEY LICENSE No. 24GE05041400

SHEET TITLE:

VEHICLE CIRCULATION PLAN

SHEET NUMBER:

C=015 OF 17

LUMINAIRE SCHEDULE

LA	ABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	TOTAL LUMENS	LLF	DESCRIPTION
P2	2-S	1	24'-6" AFG	SINGLE	6904	0.900	SIGNIFY GARDCO PUREFORM LED AREA LUMINAIRE, TYPE 2, WITH HOUSE-SIDE-SHIELD, ZERO UP-LIGHT (P26-48L-400-NW-G2-AR-2-x-
W	3	4	14'-0" AFF	SINGLE	6298	0.900	SIGNIFY GARDCO PUREFORM LED WALL SCONCE, TYPE 3, ZERO UP-LIGHT (PWS-48L-300-NW-G2-3-x-x)
W:	2	1	14'-0" AFF	SINGLE	6394	0.900	SIGNIFY GARDCO PUREFORM LED WALL SCONCE, TYPE 2, ZERO UP-LIGHT (PWS-48L-300-NW-G2-2-x-x)

CALCULATION SUMMARY							
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ALL POINTS	ILLUMINANCE	Fc	0.73	6.5	0.0	N.A.	N.A.
FIREHOUSE DRIVEWAY	ILLUMINANCE	Fc	2.99	4.4	1.8	1.66	2.44
ONE WAY DRIVE	ILLUMINANCE	Fc	2.16	4.6	1.2	1.80	3.83
PARKING LOT DRIVEWAY	ILLUMINANCE	Fc	3.30	4.7	2.0	1.65	2.35
SIDEWALK	ILLUMINANCE	Fc	2.38	6.5	0.7	3.40	9.29

LIGHTING COMPLIANCE

SECTION 4.05 LIGHTING: B. LIGHTING PARAMETERS.

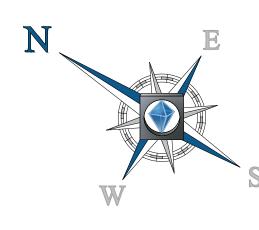
(1) ALL LIGHTING SHALL BE EFFECTIVELY DESIGNED AND INSTALLED SO AS NOT TO PRODUCE ANY GLARE THAT MAY CREATE A SAFETY HAZARD. (2) LIGHTING AT THE PERIMETER BOUNDARIES OF THE TOWN CENTER DEVELOPMENT SHALL NOT EXCEED 2.0 FOOT CANDLE TEN FEET OUTSIDE THE PROPERTY LINES, EXCLUSIVE OF THE ENTRANCES.

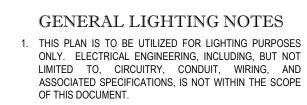
(3) LIGHTING WILL BE INTEGRATED INTO ARCHITECTURAL AND LANDSCAPE DETAILS USING IESNA

FULLCUTOFF FIXTURES WHEREVER AND WHENEVER POSSIBLE. (4) THE SCALE OF THE LIGHTING POLES AND THE LUMINARIES SHALL VARY IN RESPONSE TO THE DIFFERENT SCALES OF ARCHITECTURE AND VOLUMES WITHIN THE AREA OF THE TOWN CENTER DEVELOPMENT. THE HEIGHT OF FREESTANDING LIGHT POLES USED FOR LIGHTING OFF-STREET PARKING SHALL BE 30 FEET OR LOWER.

(5) LARGER LIGHT POLES THAT CAN EITHER PROJECT LIGHT A GREATER DISTANCE OR THAT WILL APPEAR APPROPRIATE IN SCALE TO THE SURROUNDING ARCHITECTURE ARE PERMISSIBLE FOR AREAS THAT HAVE MULTIPLE LANES OF TRAFFIC (LARGE-SCALE STREETS) OR MULTI-STORY STRUCTURES.

(7) PEDESTRIAN, STREET AND SIDEWALK LIGHTING POLES MAY VARY IN HEIGHT PROVIDED A MINIMUM LIGHTING INTENSITY OF 0.70 FOOT CANDLES IS MAINTAINED.





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 LUMINAIRES 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.

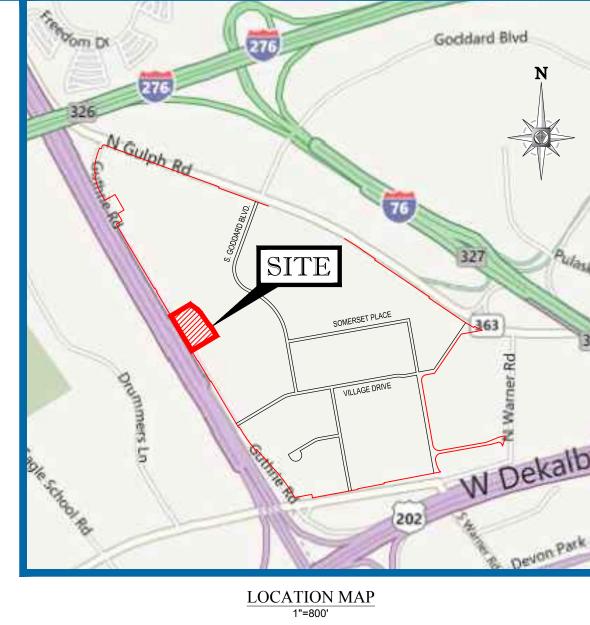
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST 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.

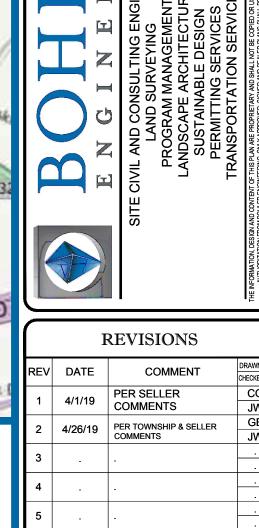
7. CONTRACTOR MUST BRING TO THE DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.

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.

10. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON THE DATA PROVIDED BY THE MANUFACTURER FOR 100,000 HOUR PROJECTED LUMEN MAINTENANCE BASED ON TEST DATA FOLLOWING IES LM-80-08 TESTING METHODS. LIGHT LEVELS DEPICTED ON THIS PLAN ARE REFLECTIVE OF THE





Call before you dig.

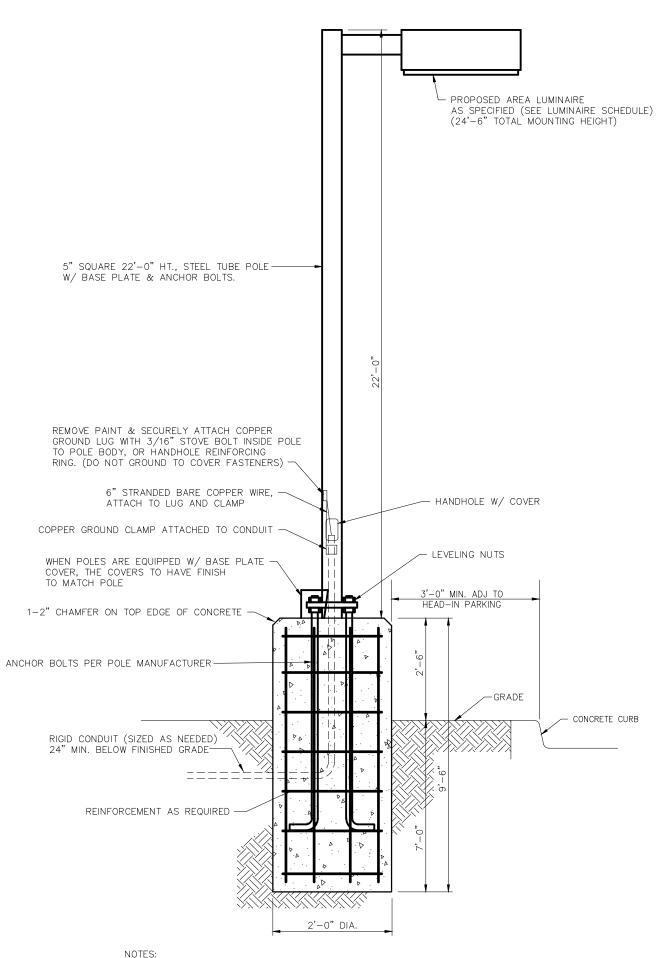
PENNSYLVANIA YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.

1-800-242-1776

NOT APPROVED FOR

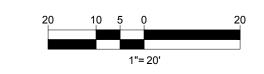
CONSTRUCTION

AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISI



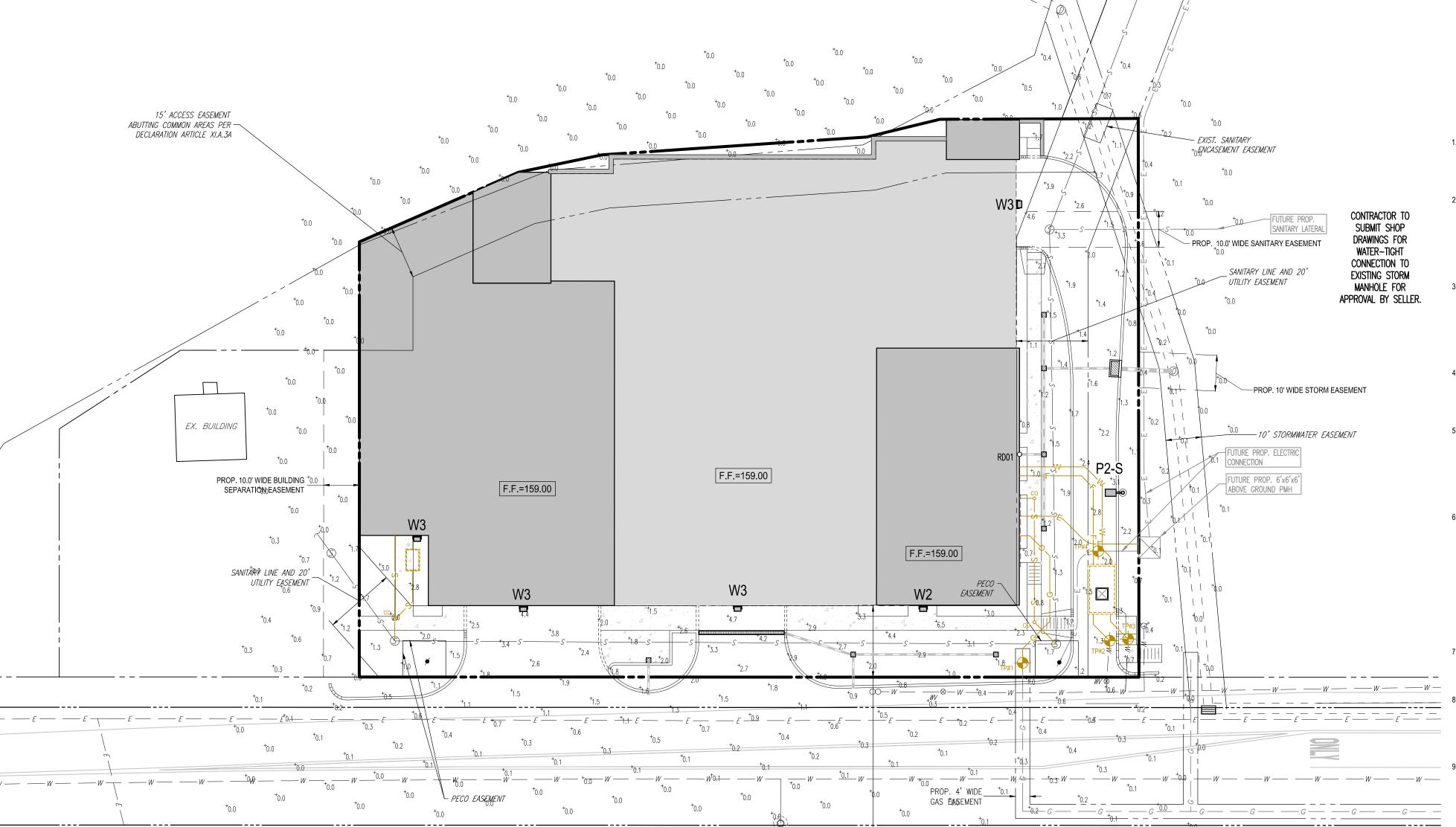
 THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL ENSURE DESIGN IS PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS, SITE SPECIFIC SOIL PARAMETERS. A. SOME SITE LOCATIONS AND/OR CONDITIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER. B. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING ASIDE FROM THE LIGHT FIXTURE INCLUDING (BUT NOT LIMITED TO) CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN. 2. ALL REBAR SHALL HAVE A YIELD STRENGTH OF 60ksi, AND MAINTAIN A 3" MIN. CLEARANCE FROM SURFACES.

LIGHT POLE DETAIL S1 SCALE: N.T.S. REV.: 2017.05.30





REVISION 2

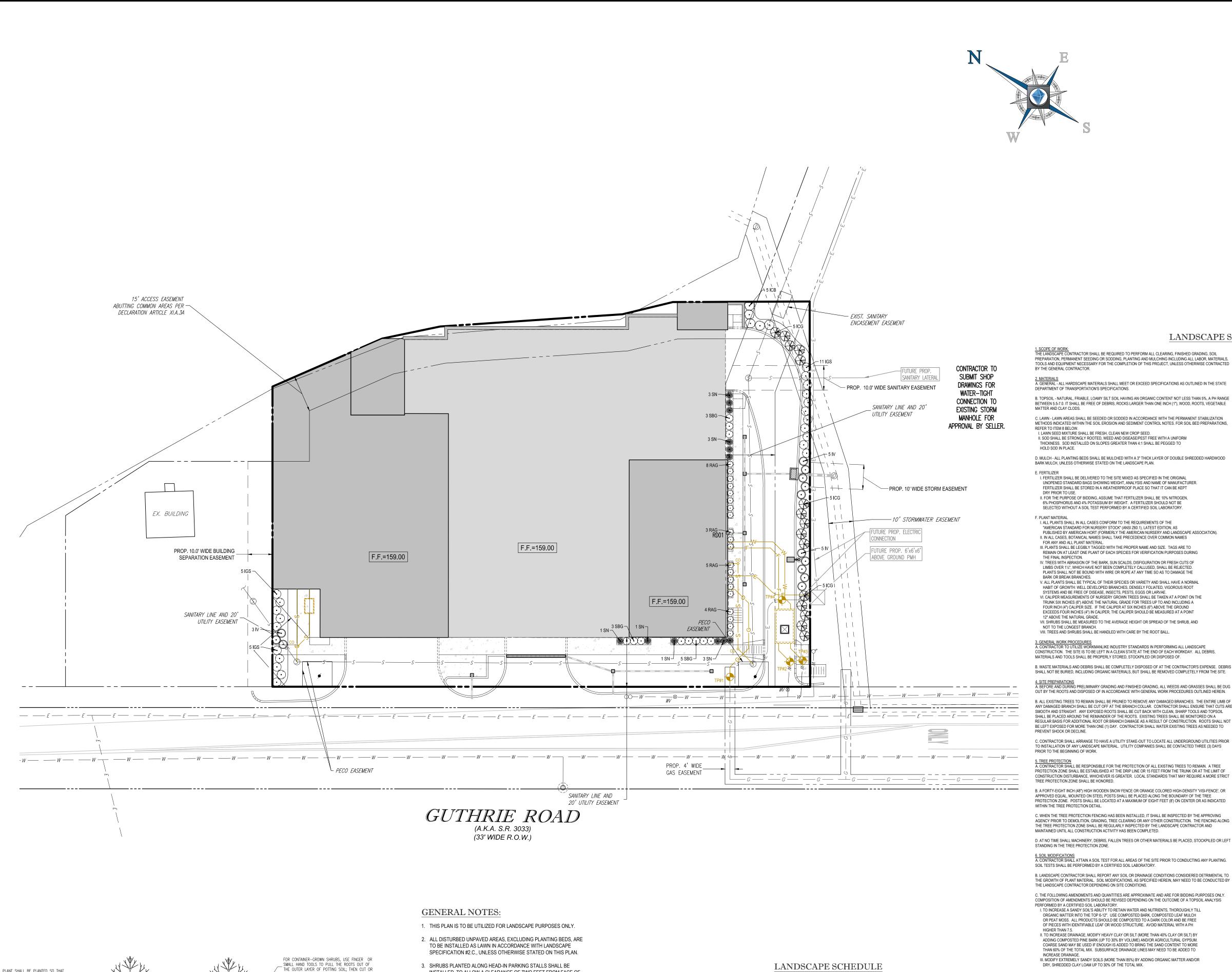


GUTHRIE ROAD

(A.K.A. S.R. 3033)

(33' WIDE R.O.W.)

20' UTILITY EASEMENT



INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.

PERIMETER OF THE CONTAINER

SOIL SURFACE ROUGHENED TO

L DECIDUOUS & EVERGREEN SHRUB PLANTING DETAIL

-MULCH AS SPECIFIED (DO NOT PUT MULCH

FINISHED GRADE

— UNDISTURBED SUBGRADE

PLACE SHRUB ON FIRM SOIL IN

AGAINST THE BASE OF THE PLANT).

BEGINS IS SET LEVEL WITH GRADE.

ONE-THIRD OF ROOT BALL AS SHOWN.

BEFORE PLANTING, PLANTING SOIL TO

BE AMENDED AS SPECIFIED IN THE

LANDSCAPE SPECIFICATIONS.

- 4. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM
- 5. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
- 6. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

LANDSCAPE SCHEDULE

<u>KEY</u>	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	<u>HEIGHT</u>	SPREAD	REMARKS		
EVERGREE	N SHRUB	(S)						
ICB	5	ILEX X MESERVEAE 'CHINA BOY'	CHINA BOY HOLLY	30-36"	24-30"	CONTAINER		
ICG	15	ILEX X MESERVEAE 'CHINA GIRL'	CHINA GIRL HOLLY	30-36"	24-30"	B+B		
IGS	$\frac{21}{41}$	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24-30"	18-24"	CONTAINER		
DECIDUOUS SHRUB(S)								
IV	13	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24-30"	18-24"	CONTAINER		
SBG	$\frac{11}{24}$	SPIRAEA X BUMALDA 'GOLDFLAME'	GOLD FLAME SPIRAEA	24" MIN.	18" MIN.	CONTAINER		
GROUND COVER								
RAG	20	RHUS AROMATICA 'GRO-LOW'	LOW GROW SUMAC		15-18"	CONTAINER		
ORNAMENTAL GRASS(ES)								
SN	12	SORGHASTRUM NUTANS	INDIAN GRASS		1	GAL. CONTAINE		

NOTE: IF ANY DISCREPENCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.



1. SCOPE OF WORK:
THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 5.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE

C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 8 BELOW. I, LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD

I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT

SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATOR I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION) II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES

FOR ANY AND ALL PLANT MATERIAL.

III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION. IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE

V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROO SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE. VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER. THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE. VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN. B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL

SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS

PRIOR TO THE REGINNING OF WORK 5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF

CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED. B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS

. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.

III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT. D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS.



LANDSCAPE SPECIFICATIONS:

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM D. ALL DAWN AREA SALE TO BE OUT INVALIDED TO A DEFIT OF STATEMENT OF S QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY (SEE SPECIFICATION 6.A.)): I. 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER II. 20 POUNDS 'NITRO-FORM' (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

MULCH TO HELP PRESERVE ROOT MOISTURE.

A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL T BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED. D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED. F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THI APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING

I. PLANTS: MARCH 15 TO DECEMBER 15 II. LAWN AND SEED MIXES: MARCH 15 TO JUNE 15 OR SEPT. 1 TO NOVEMBER 1 PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE

SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS. G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH RANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY. THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

BETULA VARIETIES POPULUS VARIETIES
CARPINUS VARIETIES PRUNUS VARIETIES CRATAFGUS VARIETIES PYRUS VARIETIE KOELREUTERIA QUERCUS VARIETIES LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOS

ACER RUBRUM PLATANUS X ACERIFOLIA

LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

II. 1 PART COMPOSTED COW MANURE BY VOLUME III. 3 PARTS TOPSOIL BY VOLUME

IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS: A) 2 TABLETS PER 1 GALLON PLANT B) 3 TABLETS PER 5 GALLON PLANT

C) 4 TABLETS PER 15 GALLON PLANT D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE

BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF

K ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED. O A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.

I GROUND COVER AREAS SHALL RECEIVE A 1/11 LAYER OF HUMUS RAKED INTO THE TOP 11 OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION. M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB. O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE

<u>). TRANSPLANTING (WHEN REQUIRED)</u> . ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE) B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING. THEY SHALL BE HEALED IN WITH MULCH OR SOIL.

ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND. C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN. F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT

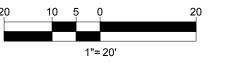
MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH. A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE

RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY

DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" F MORE THAN 30% OF ITS BRANCHES ARE DEAD.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND LINTIL TURNOVER TO THE OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED $\hbox{\bf B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER}\\$



REVISIONS DATE COMMENT 4/22/19 PER BCCD COMMENTS PER TOWNSHIP COMMENTS

CALL BEFORE YOU DIG!

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

POCS SERIAL NUMBER 20160701961 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

DRAWN BY: CRO CHECKED BY: KFM 2019.01.25

SCALE: PP180258LSCP-2 CADID:

PROJECT

AMENDED FINAL

LAND DEVELOPMENT PLANS

LIDL US OPERATIONS, LLC

WARMINSTER (P400 - STORE # 1179)

700 YORK ROAD WARMINSTER TOWNSHIP BUCKS COUNTY, PA



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

D.T. NORTH

REGISTERED LANDSCAPE ARCHITEC PENNSYLVANIA LICENSE No. LA002729

LANDSCAPE PLAN

SHEET NUMBER:

C = 017