# PRELIMINARY MAJOR LAND DEVELOPMENT PLANS WATER GAP WELLNESS RECREATION CENTER

WATER GAP ACQUISITIONS PARTNERS, LLC SMITHFIELD TOWNSHIP MONROE COUNTY, PA

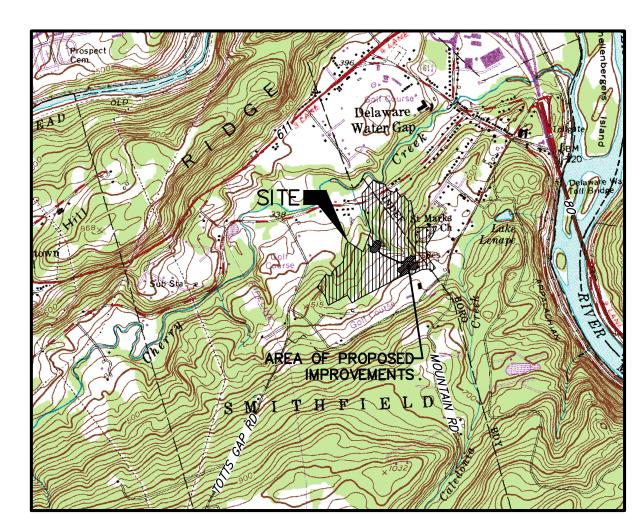
AUGUST 26, 2024

#### **Plans Prepared by:**



- **2**72.200.2050
- barryisett.com

525 Main Street, Suite 200 Stroudsburg, PA 18360



Location Map JSGS: STROUDSBURG QUADRANGL SCALE: 1"=2000'

PLAN DESIGNATION	PLAN TITLE	PLAN NO.	LAST R
* CS-1	COVER SHEET	1 of 24	8/26/2
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EF-2	EXISTING FEATURES & DEMOLITION PLAN	6 of 24	8/26/2
ER-1	EXISTING RESOURCES & SITE ANALYSIS PLAN	7 of 24	8/26/2
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DE-1	CONSTRUCTION DETAILS	20 of 24	8/26/2
* PC-1	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	21 of 24	8/26/2
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* PCD-2	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS	24 of 24	8/26/2

USERS (OWNERS, CONTRACTORS) OF THIS PLAN ARE ADVISED THAT ALL PLANS SHOWN IN THE ABOVE REFERENCED PLAN INDEX SHALL BE UTILIZED WHEN PREPARING ESTIMATES, MANUFACTURING STRUCTURES, AND PERFORMING CONSTRUCTION. CERTAIN PLANS MAY HAVE FEATURES (EXISTING OR PROPOSED) WHICH MAY BE HIDDEN FROM VIEW TO PROVIDE CLARITY FOR THAT PARTICULAR PLAN. ALL DRAWINGS WITHIN THIS PLAN SET SHALL BE REVIEWED AND UTILIZED.

## **NOTIFICATION**

THE DEVELOPER SHALL, AT LEAST FIFTEEN (15) CALENDAR DAYS PRIOR TO THE INITIATION OF CONSTRUCTION OF ANY REQUIRED IMPROVEMENTS. SUBMIT TO THI TOWNSHIP A SCHEDULE OF CONSTRUCTION FOR ALL REQUIRED IMPROVEMENTS. INCLUDING THE TIMING OF THE DEVELOPMENT OF ANY PROPOSED SECTIONS. TH SCHEDULE MAY BE REVISED FROM TIME TO TIME UPON MUTUAL AGREEMENT OF THE APPLICANT ENGINEER AND THE TOWNSHIP ENGINEER.

T SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE APPROPRIATE INSPECTION CONSULTANT FOR THE TOWNSHIP OR DESIGNED AUTHORITY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO COMMENCING A

#### AMERICANS WITH DISABILITIES ACT (ADA)

THIS PERMIT AND/OR PLAN HAS NOT BEEN REVIEWED TO DETERMINE ITS COMPLIANCE WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA) WHICH PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY IN PUBLIC CCOMMODATIONS AND COMMERCIAL FACILITIES. COMPLIANCE WITH TITLE III OF THIS ACT WITH REGARD TO PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/OWNER.

THE LAND DEVELOPMENT AS SUBMITTED AND AS BUILT ACCORDING TO THE INFORMATION INCLUDED IN THE CURRENT DESIGN WILL MEET THE ACCESSIBILITY REQUIREMENTS AS EXISTING UNDER THE CURRENT BUILDING CODES ESTABLISHED N SMITHFIELD TOWNSHIP.

#### TOWNSHIP LIMITED REVIEW STATEMENT

THIS PLAN HAS BEEN REVIEWED BY THE TOWNSHIP STAFF AND TOWNSHIP ENGINEER FOR CONSISTENCY WITH MUNICIPAL REGULATIONS AND ORDINANCES RELATING TO LAND USAGE AND DIMENSIONAL REQUIREMENTS OF ZONING. INVESTIGATIONS REGARDING PERIPHERAL LAND AND PLAN ISSUES WHICH ARE NOT REQUIRED AS PART OF A REVIEW PROCESS SUCH AS CLARITY OF TITL SUBSURFACE CONDITIONS INCLUDING BUT NOT LIMITED TO. SOIL AND WATER QUALITY, AND HISTORIC AND ARCHEOLOGICAL ISSUES, OR SUCH OTHER ISSUES (AS APPROPRIATE) THAT MAY AFFECT THE MERCHANTABILITY OF THE LAND, HAVE NOT BEEN INVESTIGATED OR REVIEWED BY THE TOWNSHIP ENGINEER MAKE NO REPRESENTATION OR WARRANTY CONCERNING THESE ISSUES, WHICH SHOULD BE ADDRESSED BY QUALIFIED PROFESSIONALS, COMMISSIONED BY THE DEVELOPER AND/OR LAND OWNER(S) AS APPROPRIATE, AND ENGAGED IN THE APPROPRIATE FIELD OF PRACTICE.

> BARRY ISETT & ASSOCIATES, INC. 1444 E. LACKAWANNA AVE., SUITE 214 OLYPHANT, PA 18447 (570) 285-8183

<u>SMITHFIELD TOWNSHIP PLANNING COMMISSION CERTIFICATE OF REVIEW AND RECOMMENDATION</u> AT A PUBLIC MEETING HELD ON THE PLANNING COMMISSION OF SMITHFIELD TOWNSHIP REVIEWED AND BY A MOTION, DULY CARRIED, DOES HEREBY RECOMMEND APPROVAL OF THIS LAND DEVELOPMENT PLAN FOR THE PROPERTY AS SHOWN HEREON CHAIRMAN

<u>SMITHFIELD TOWNSHIP BOARD OF SUPERVISORS CERTIFICATE OF REVIEW AND APPROVAL</u> THE BOARD OF SUPERVISORS OF SMITHFIELD TOWNSHIP REVIEWED AND BY A MOTION, DULY CARRIED, DOES HEREBY APPROVE THIS LAND DEVELOPMENT PLAN FOR THE PROPERTY AS SHOWN HEREON. SUPERVISOR

CORRECT TO THE ACCURACY AND COMPLETENESS REQUIRED BY THE SMITHFIELD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND/OR THE SMITHFIELD TOWNSHIP ZONING ORDINANCE AND WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND FOR WHICH I ACCEPT FULL AND COMPLET

CERTIFICATION OF OWNERSHIP AND ACKNOWLEDGMENT OF PLAN COMMONWEALTH OF PENNSYLVANIA

S THE \_\_\_\_\_\_ DAY OF \_\_\_\_\_,
\_\_\_\_, BEFORE ME, THE UNDERSIGNED OFFICERS, PERSONALLY APPEARED

WHO BEING DULY SWORN, ACCORDING TO LAW, DOTH DEPOSE AND SAY THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN AND DEPICTED ON THIS PLAN THAT THIS LAND DEVELOPMENT PLAN WAS MADE AT THEIR DIRECTION, AND THAT ACCORDING TO LAW.

SIGNATURE OF SECRETARY SIGNATURE OF PRESIDENT

SIGNATURE OF NOTARY PUBLIC

MY COMMISSION EXPIRES: \_

MONROE COUNTY PLANNING COMMISSION REVIEW

REVIEWED BY THE SMITHFIELD TOWNSHIP ENGINEER

RECORDER OF DEEDS CERTIFICATION

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, IN MONROE COUNTY, PENNSYLVANIA, IN SUBDIVISION BOOK DLUME \_\_\_\_\_, PAGE \_\_\_\_. WITNESS MY HAND AND SEAL OF THE OFFICE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_\_.

RECORDER OF DEEDS

SITE DATA OWNER/DEVELOPER: WATER GAP ACQUISITIONS PARTNERS, LLC

> P.O. BOX 244 DELAWARE WATER GAP, PA 18327 PHONE: 203-524-3039

SITE ADDRESS: WATER GAP WELLNESS 296 MOUNTAIN ROAD

STROUDSBURG, PA 18360 DEED BOOK: D.B.V. 2418, PG. 6739 TAX MAP: 16-9-1-26 16731000755147 NUMBER OF LOTS: ONE (1) TOTAL AREA: 105.71 AC.

SEWER: ON-SITE

#### BENCHMARK ( BM)

IRON PIN LOCATED APPROXIMATELY 53.4 FEET FROM THE SOUTHEAST CORNER OF THE EXISTING GARAGE AND APPROXIMATELY 20.6 FEET FROM THE LIGHT STANDARD LOCATED ALONG THE SOUTHERN PORTION OF THE PROPERTY WHERE THE PRIVATE DRIVEWAY ENDS AND THE GRAVEL LANE BEGINS. ELEVATION: 555.39 NAD83 DATUM.

#### <u>ZONING DATA</u>

ZONING DISTRICT: R-1: LOW DENSITY RESIDENTIAL ON-SITE SEWER AND WATER

PROPOSED USE: PROPOSED BUILDING FOR PRIVATE RECREATION FACILITY MINIMUM LOT AREA: 50,000 SF MINIMUM LOT WIDTH: 150 FEET MINIMUM LOT DEPTH: 150 FEET MINIMUM YARDS (BUILDING SETBACKS): FRONT: 40 FEET REAR: 20 FEET SIDE: 20 FEET LOT COVERAGE (BUILDING): 50%

BUILDING HEIGHT: 35 FEET OR 2½ STORIES ZONING NOTE: ZONING DATA PROVIDED IS BASED ON AN INTERPRETATION OF THE ZONING ORDINANCE BY THE PLAN PREPARER AND IS SUBJECT TO CONFIRMATION BY THE

APPROPRIATE MUNICIPAL OFFICIAL.

**GENERAL NOTES** 

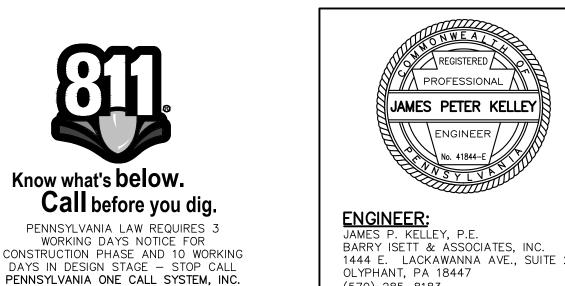
- 1. CONTRACTOR SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM NO LESS THAN THREE DAYS AND NO GREATER THAN TEN DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 2. CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AND
- 3. THE CONTRACTOR SHALL CONDUCT EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS IF NECESSARY. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES IN UTILITY LINE LOCATIONS ARE FOUND.
- 4. CONTRACTOR SHALL COORDINATE ALL WORK PERFORMED WITH THE APPROPRIATE UTILITY COMPANY OR AUTHORITY AND WITH ALL UTILITIES TO ENSURE ALL UTILITY SERVICES SERVE ALL UTILITY CUSTOMERS FOR CONTINUOUS FACILITY OPERATIONS OF ALL UTILITY CUSTOMERS. CONTRACTOR SHALL REWORK ALL UTILITY SERVICES INCLUDING PROVIDING TEMPORARY UTILITY SERVICES UNTIL PERMANENT UTILITY SERVICES ARE PROVIDED.
- 5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO PUBLIC/PRIVATE PROPERTY AS A RESULT OF CONSTRUCTION ACTIVITIES.
- 6. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. 7. CONTRACTOR SHALL ENSURE THE SAFETY OF THE GENERAL PUBLIC, EXISTING STRUCTURES, AND
- OTHER PUBLIC AND PRIVATE PROPERTY 8. SITE SAFETY AND MAINTENANCE IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING ROADWAYS. PARKING AREAS AND LOCAL ROADS FREE OF CONSTRUCTION MATERIALS. ANY DIRT OR DEBRIS TRACKED ON TO SUCH AREAS WILL BE
- 10. THE CONTRACTOR IS RESPONSIBLE FOR BACKFILLING ALL TRENCHES, FENCING OFF CONSTRUCTION AREAS AND REMOVING UNSUITABLE MATERIAL AND DEBRIS FROM THE CONSTRUCTION SITE.
- 11. CONSTRUCTION CREWS, VEHICLES AND ACTIVITIES SHALL NOT INTERFERE WITH NORMAL OPERATIONS OF THE FACILITY. DESIGNATED PARKING AREAS SHALL BE ESTABLISHED AND USED FOR ALL CONSTRUCTION PERSONNEL.
- 12. CONSTRUCTION VEHICLES, MATERIALS OR ACTIVITIES SHALL NOT INTERFERE WITH PUBLIC ACCESS EXCEPT WHERE SHOWN ON THE PLANS. CONTROL VEHICULAR PARKING TO PREVENT INTERFERENCE WITH PUBLIC TRAFFIC AND PARKING, ACCESS BY EMERGENCY VEHICLES, AND OWNER'S
- 13. PREVENT PARKING ON OR ADJACENT TO ACCESS ROADS OR IN NON-DESIGNATED AREAS. 14. THE CONTRACTOR SHALL REMOVE ALL DEBRIS AND FLUSH OUT EXISTING AND PROPOSED STORM SEWER SYSTEMS WITHIN THE PROJECT AREA UPON COMPLETION OF CONSTRUCTION.
- 15. TRANSPORT, HANDLE, STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S
- 16. PROTECT TREES, PLANT GROWTH, AND FEATURES DESIGNATED TO REMAIN, AS FINAL
- 17. PROTECT BENCH MARKS, (SURVEY CONTROL POINTS, AND EXISTING STRUCTURES) FROM DAMAGE OR DISPLACEMENT. CONTRACTOR TO REPLACE BENCHMARKS DISTURBED. 18. STAGING AND STOCKPILE AREAS WILL BE LIMITED TO ONLY THE AREAS NOTED ON THE PLANS.

STOCKPILING OF MATERIALS ON RIVERSIDE OF LEVEE OR SHEETPILING SHALL BE AT THE

- CONTRACTORS RISK. ANY LOSS OF MATERIAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. STOCKPILE IN SUFFICIENT QUANTITIES TO MEET PROJECT SCHEDULE AND REQUIREMENTS. 19. SEPARATE DIFFERING MATERIALS WITH DIVIDERS OR STOCKPILE APART TO PREVENT MIXING.
- 20. DIRECT SURFACE WATER AWAY FROM STOCKPILE SITE SO AS TO PREVENT EROSION OR DETERIORATION OF MATERIALS. 21. ALL ACTIVITIES SHALL REMAIN WITH THE AREA DESIGNATED THE "LIMIT OF DISTURBANCE" AS
- SHOWN ON THE EROSION AND SEDIMENT POLLUTION CONTROL PLANS. 22. THE CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL
- 23. IN ALL CASES, WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL NOT USE SCALED DIMENSIONS FOR CONSTRUCTION WITHOUT CONFIRMATION BY ENGINEER. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS ON THE PROJECT SITE. ENGINEER MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.

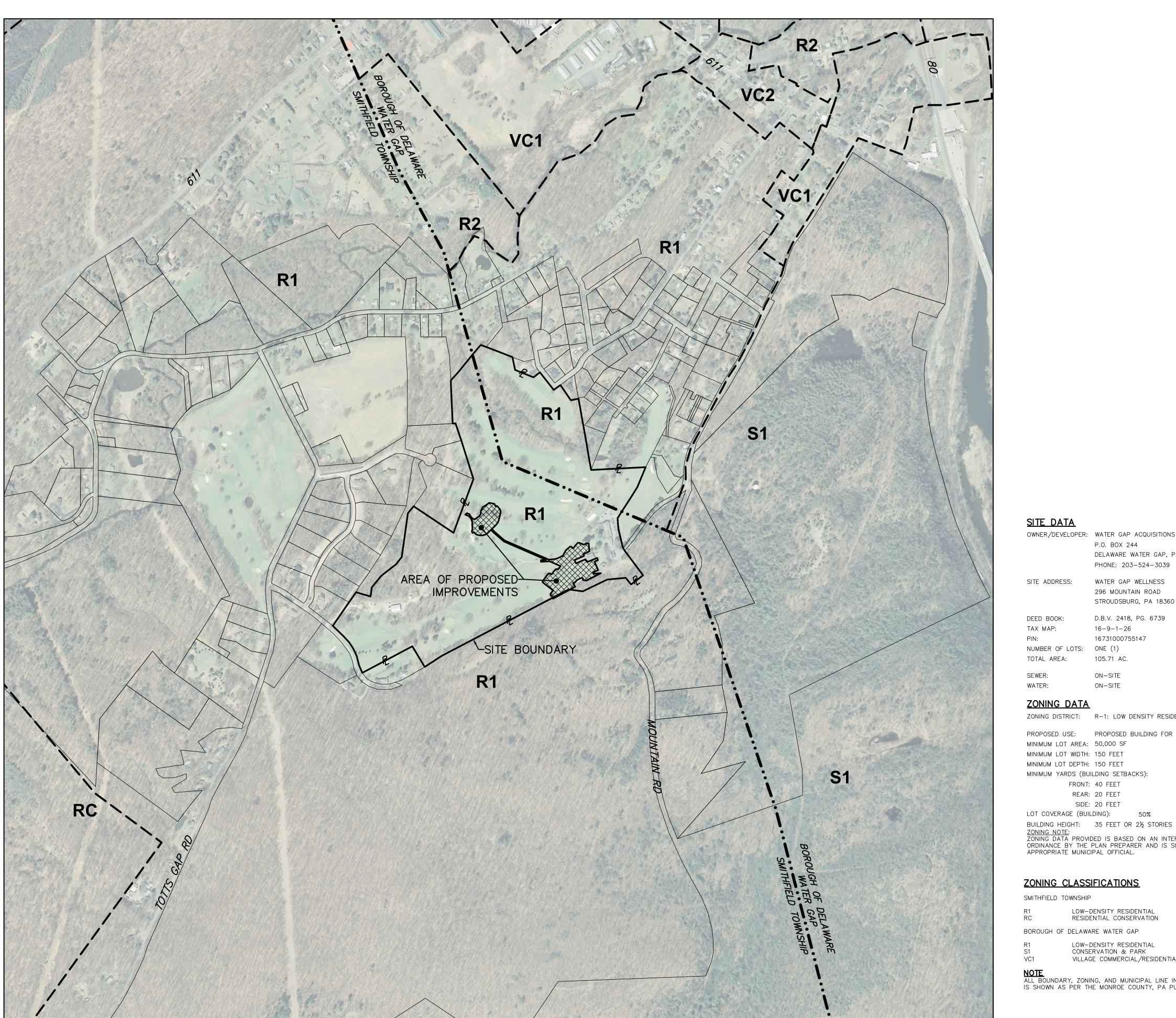
O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS AND REQUIREMENTS.

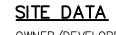
24. AS-BUILT PLANS SHALL BE PROVIDED TO THE TOWNSHIP AFTER CONSTRUCTION IS COMPLETE.



1-800-242-1776

THE SITE SERIAL NUMBER IS 20240651009





OWNER/DEVELOPER: WATER GAP ACQUISITIONS PARTNERS, LLC

DELAWARE WATER GAP, PA 18327

PHONE: 203-524-3039

WATER GAP WELLNESS

296 MOUNTAIN ROAD STROUDSBURG, PA 18360

D.B.V. 2418, PG. 6739 DEED BOOK:

TAX MAP: 16-9-1-26 PIN: 16731000755147 NUMBER OF LOTS: ONE (1) TOTAL AREA: 105.71 AC.

ON-SITE SEWER: WATER: ON-SITE

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ZONING NOTE:
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ORDINANCE BY THE PLAN PREPARER AND IS SUBJECT TO CONFIRMATION BY THE
APPROPRIATE MUNICIPAL OFFICIAL.

#### ZONING CLASSIFICATIONS

SMITHFIELD TOWNSHIP LOW-DENSITY RESIDENTIAL RESIDENTIAL CONSERVATION BOROUGH OF DELAWARE WATER GAP

LOW-DENSITY RESIDENTIAL CONSERVATION & PARK VILLAGE COMMERCIAL/RESIDENTIAL

NOTE
ALL BOUNDARY, ZONING, AND MUNICIPAL LINE INFORMATION
IS SHOWN AS PER THE MONROE COUNTY, PA PUBLIC GIS DATA.

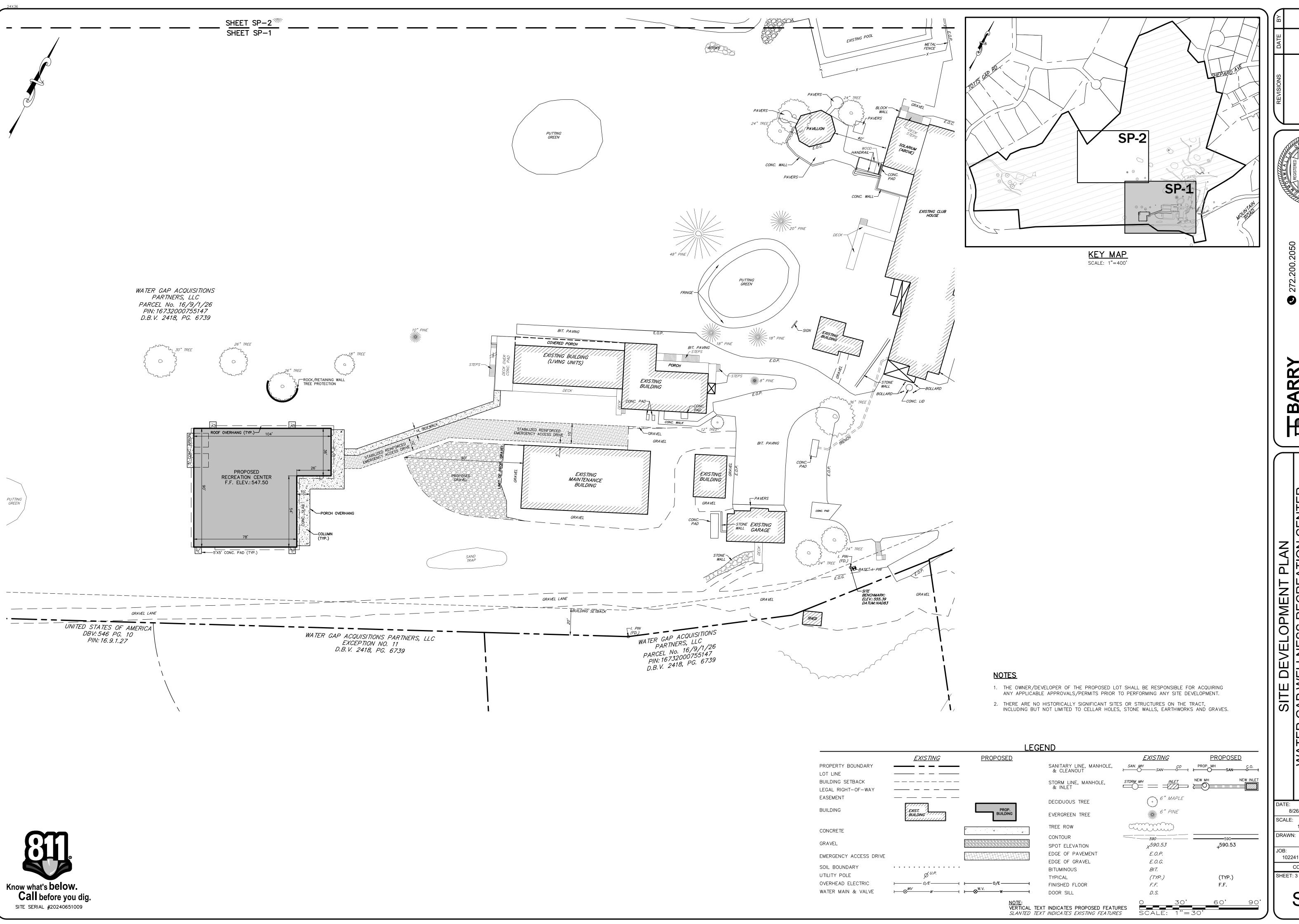
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<u>LEGENI</u>	<u>)</u>	
PROPERTY BOUNDARY	<del></del>	
LOT LINE —		
MUNICIPAL BOUNDARY		• • •
ZONING BOUNDARY -		
0 400'	800'	1200
SCALE: 1"=40	0'	

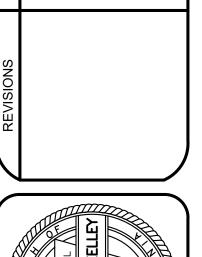
8/26/2024 TAL/DFG SCALE: 1"=400' DRAWN: 1022419.004

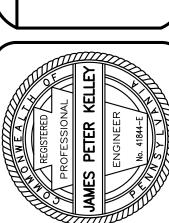
SHEET: 2 OF 24

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Know what's below.
Call before you dig.
SITE SERIAL #20240651009





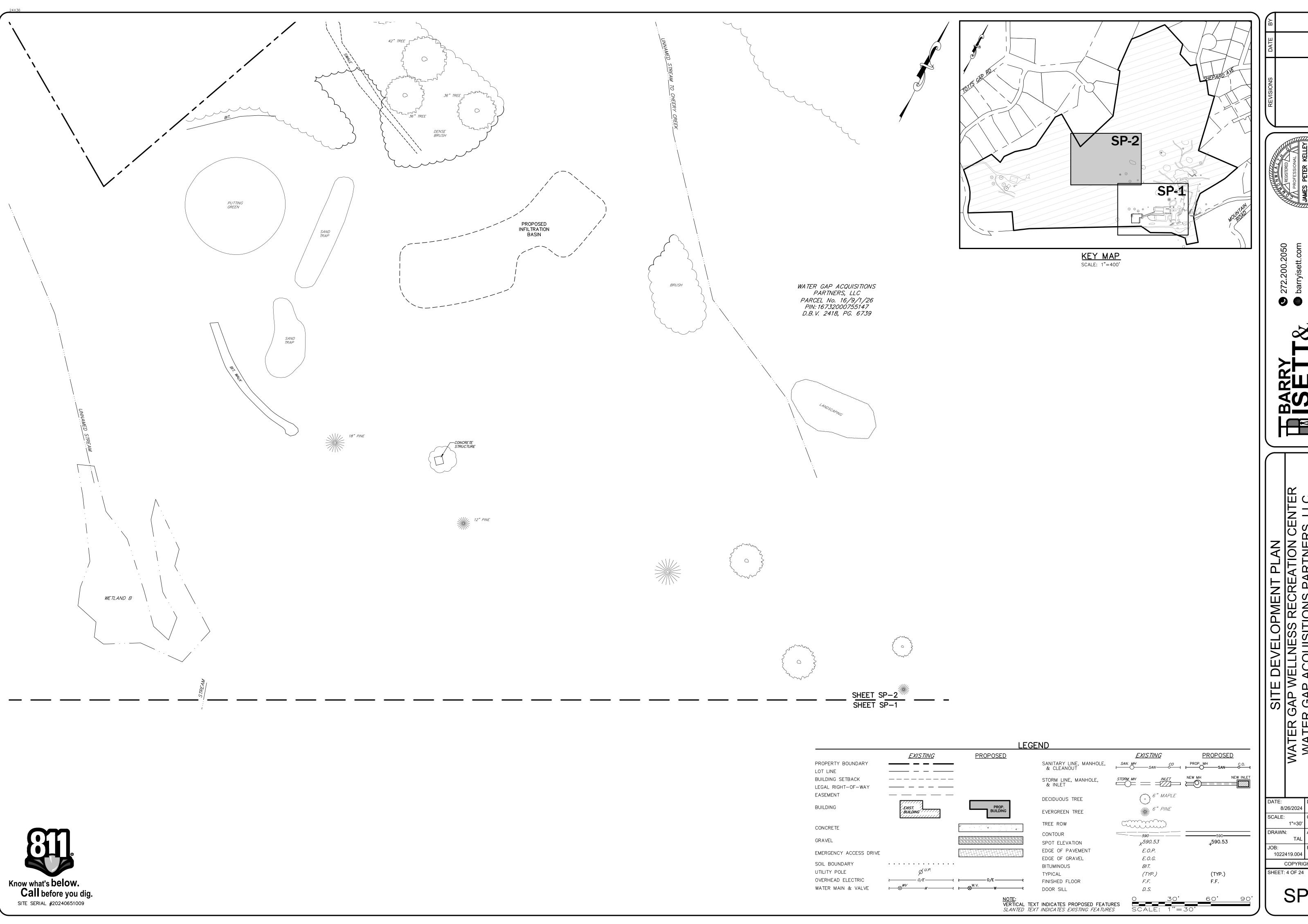


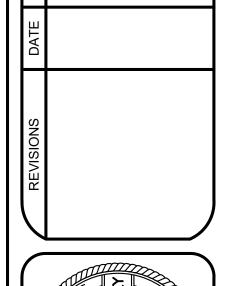


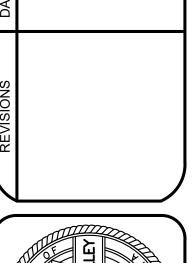


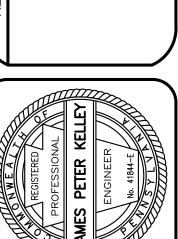
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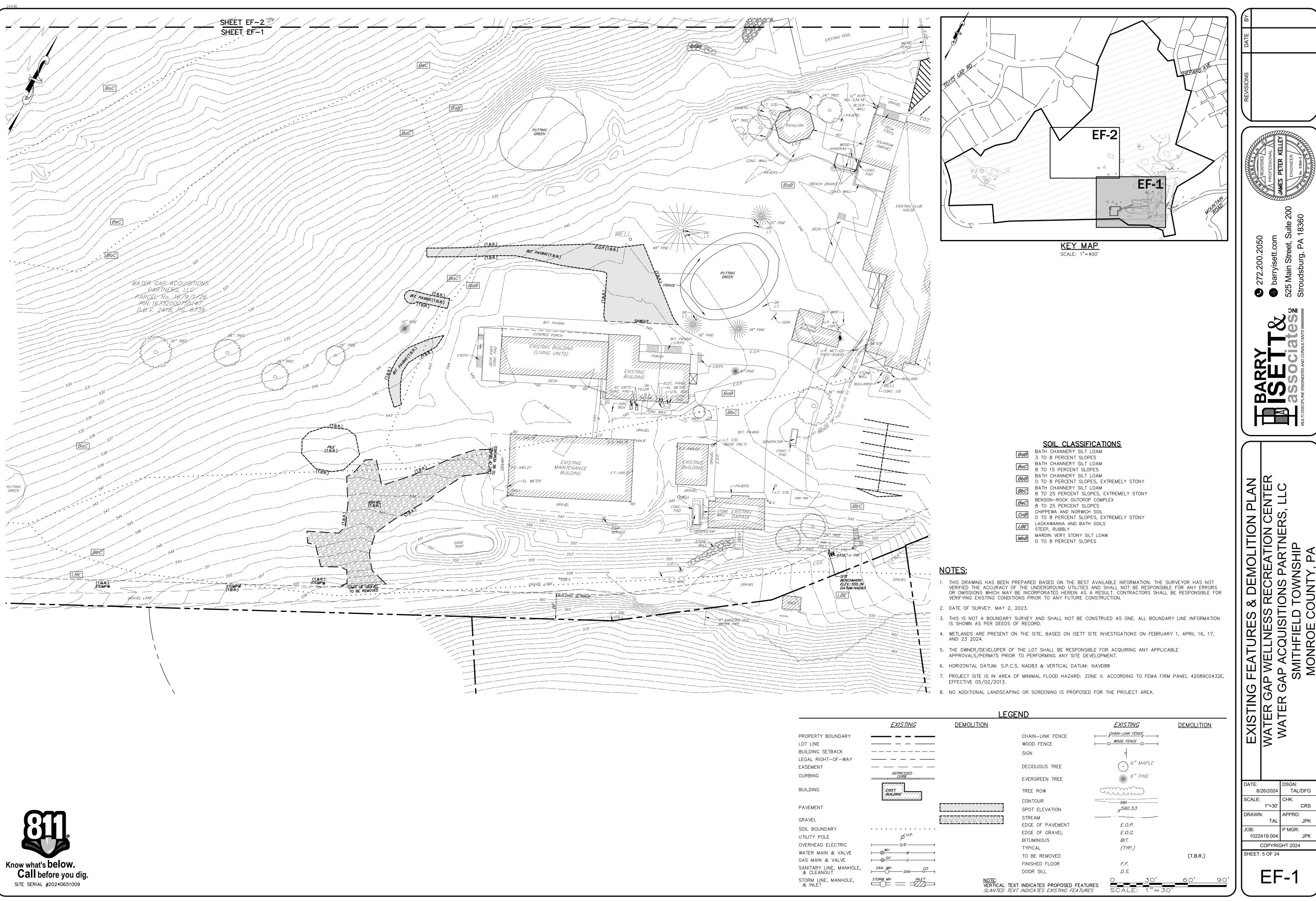


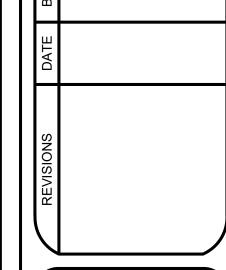


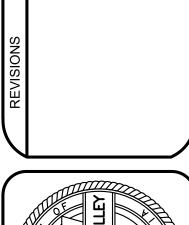


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SP-2







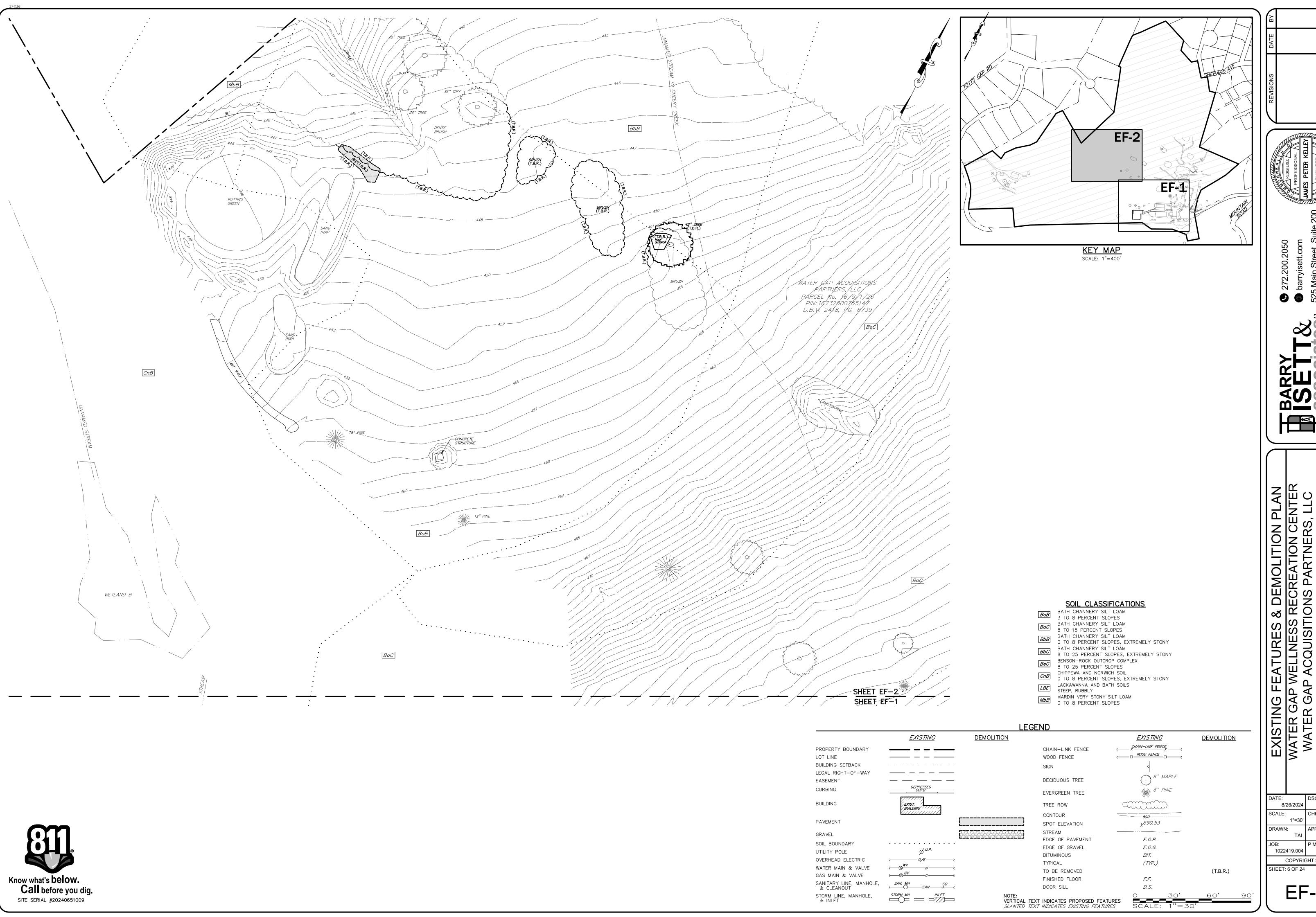


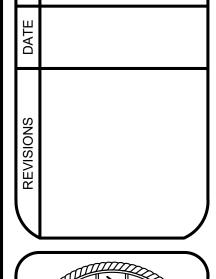


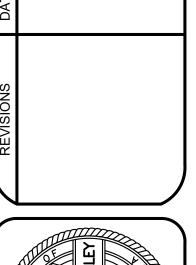
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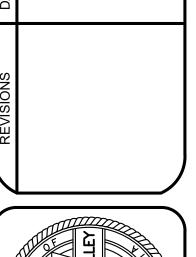
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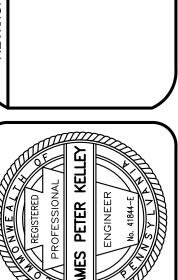
1"=30'



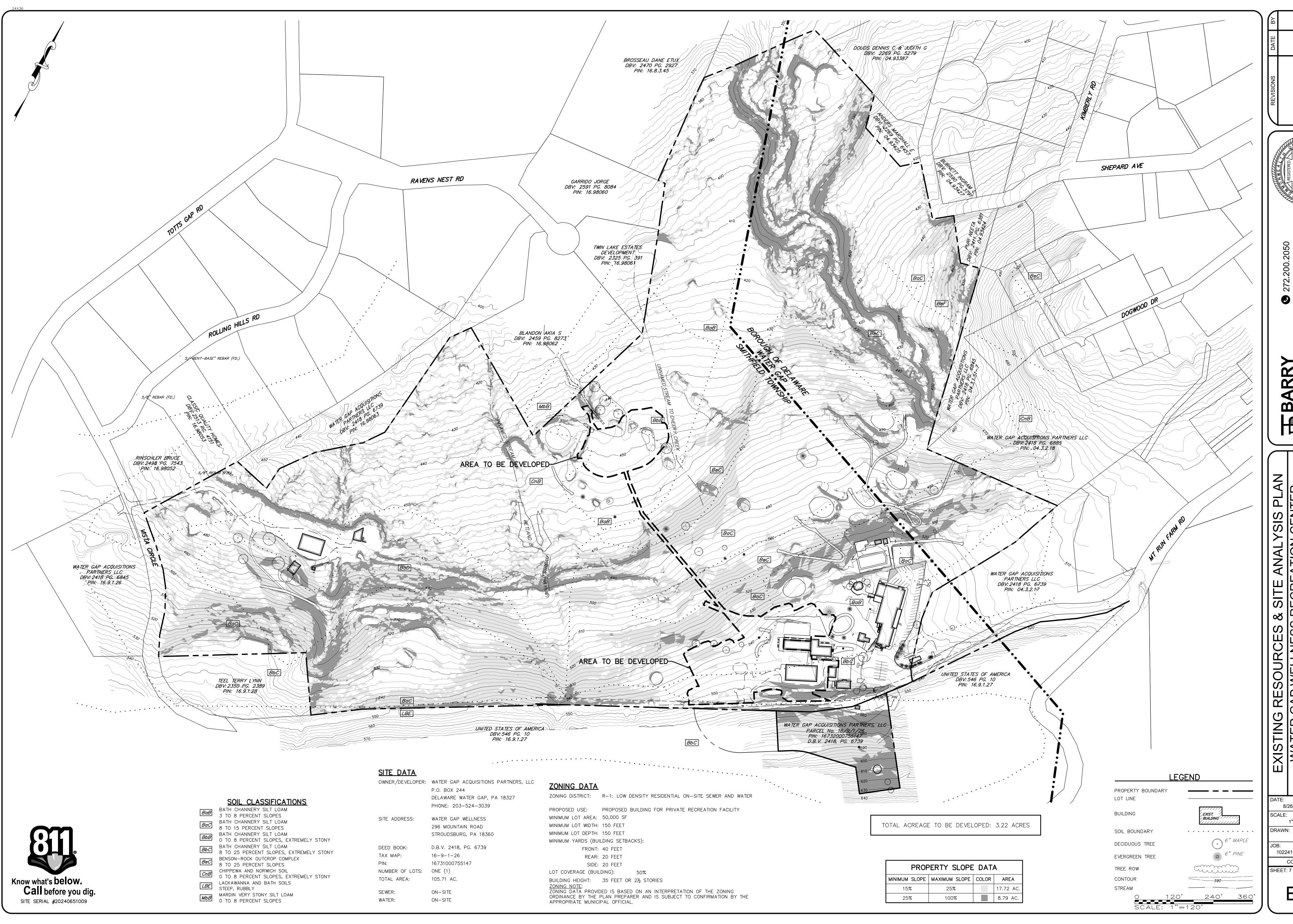


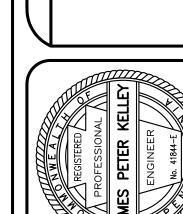






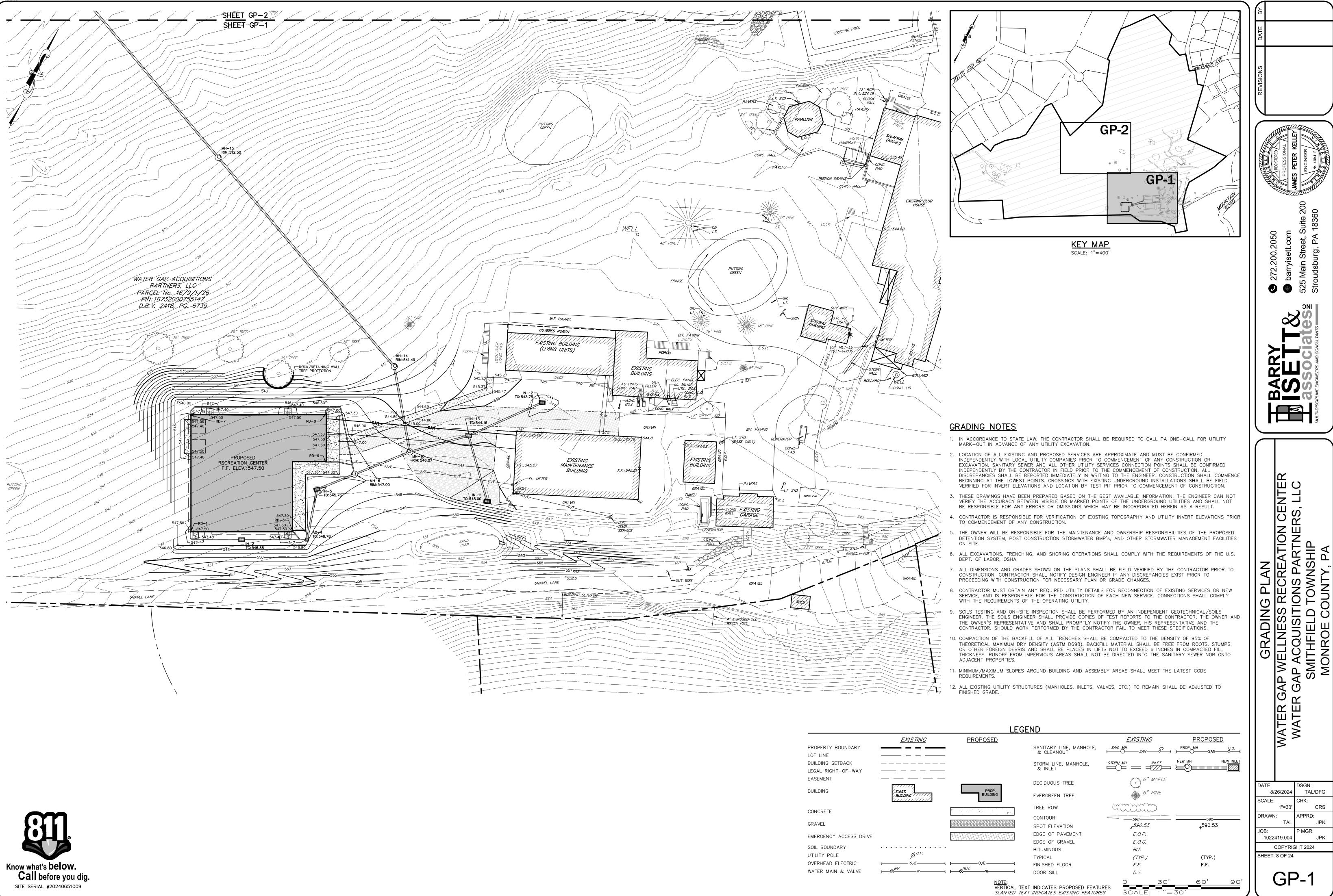
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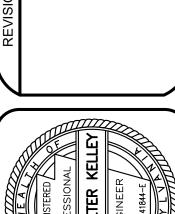






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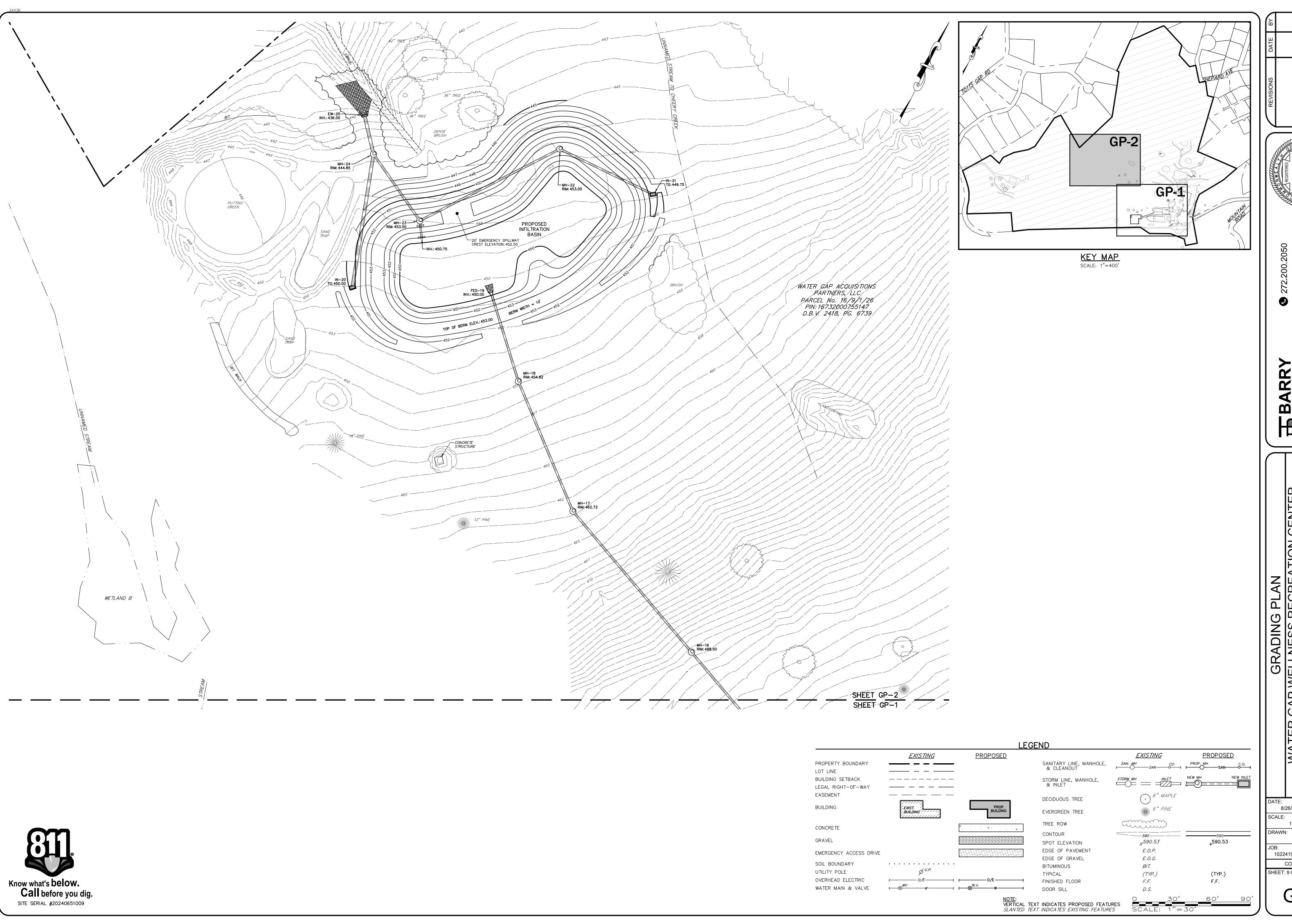


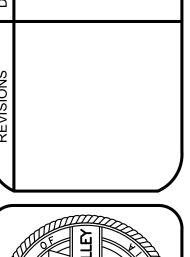


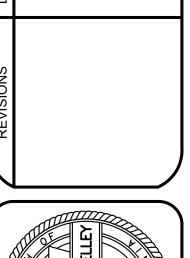


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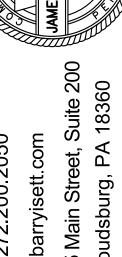
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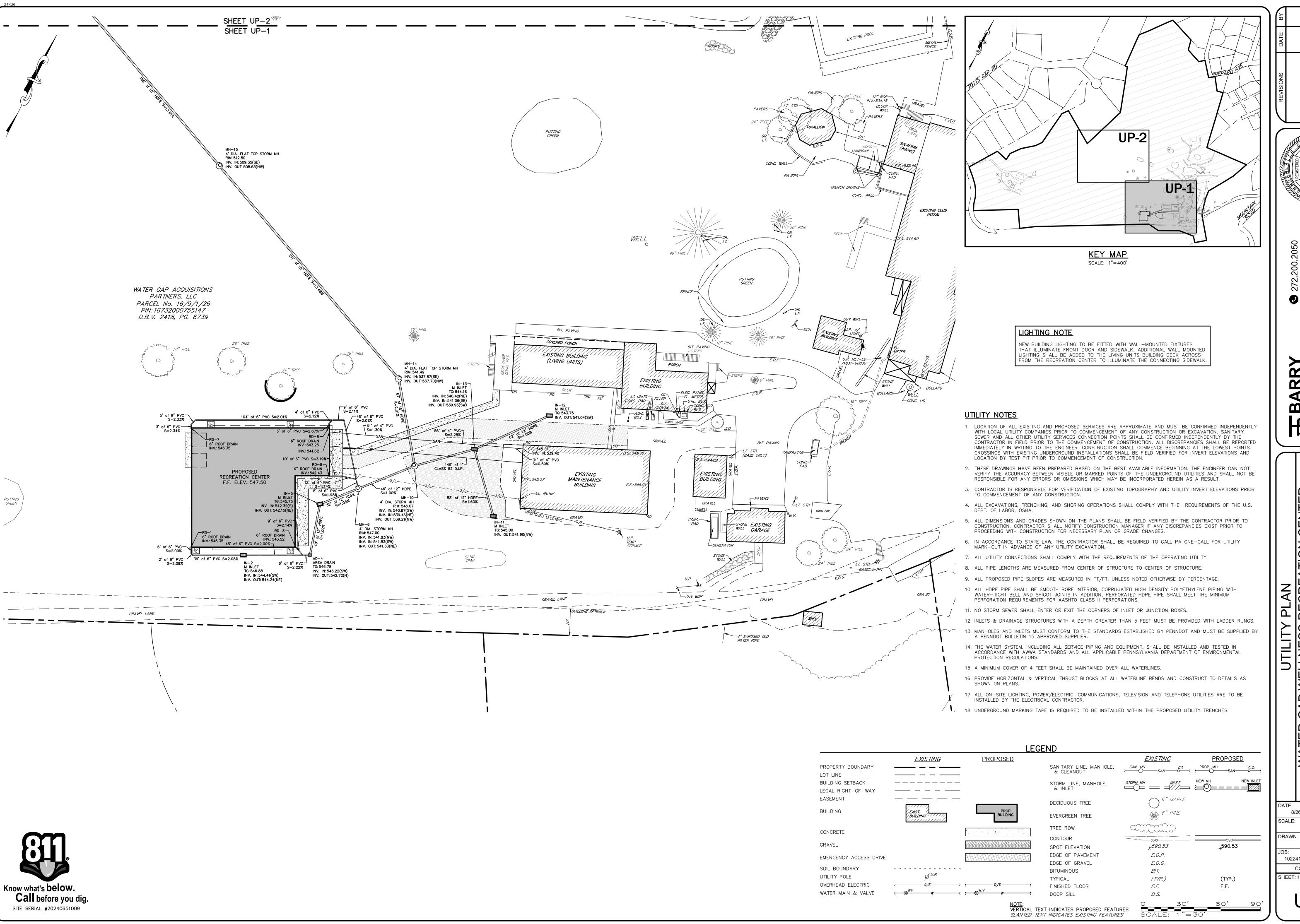


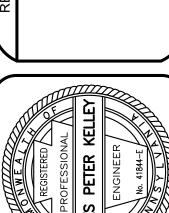




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GP-2

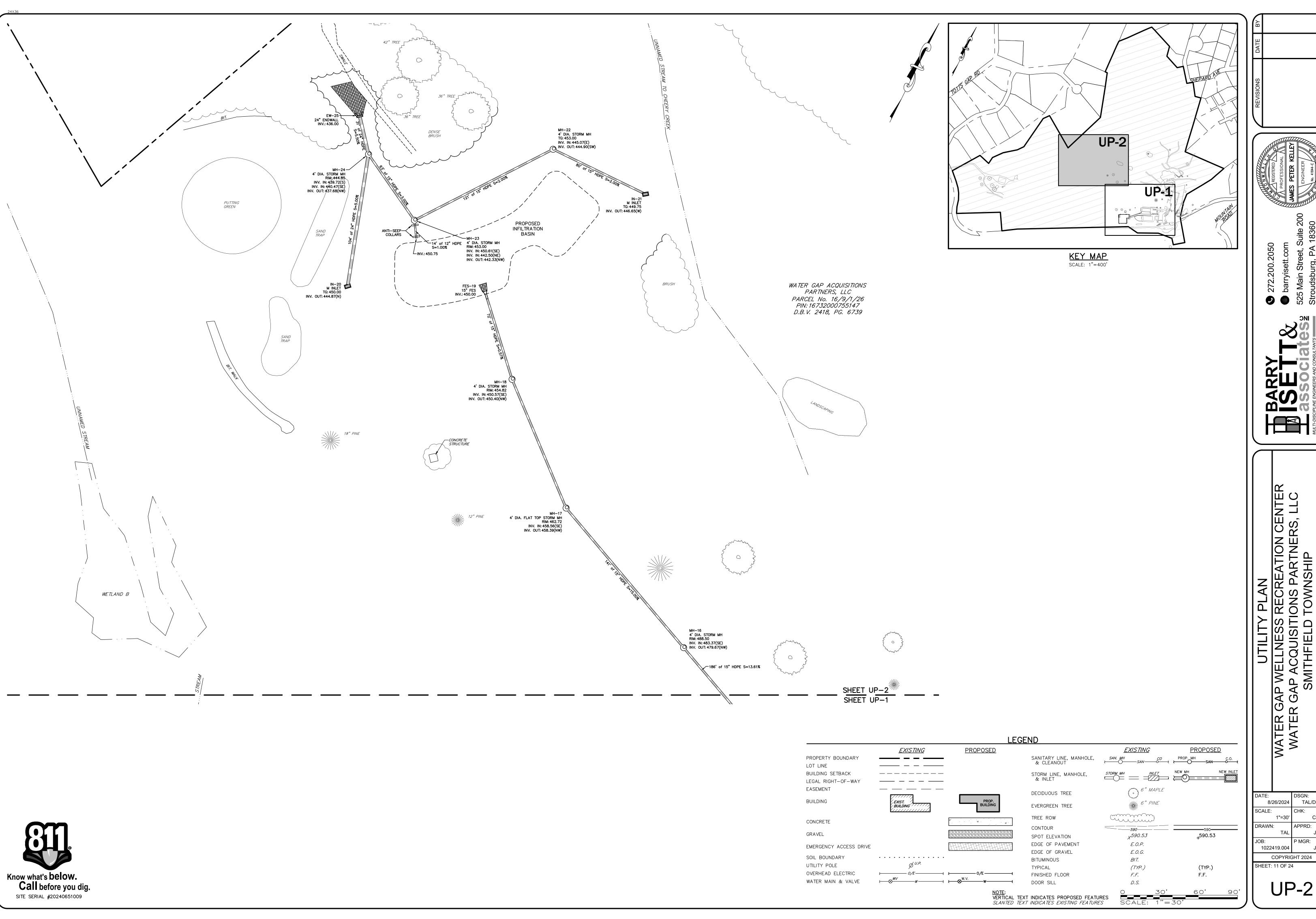


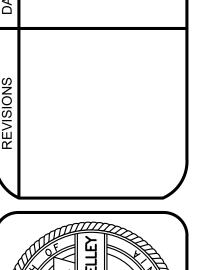


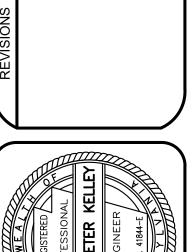
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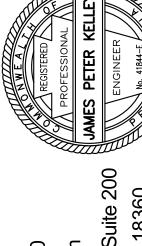
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SHEET: 10 OF 24

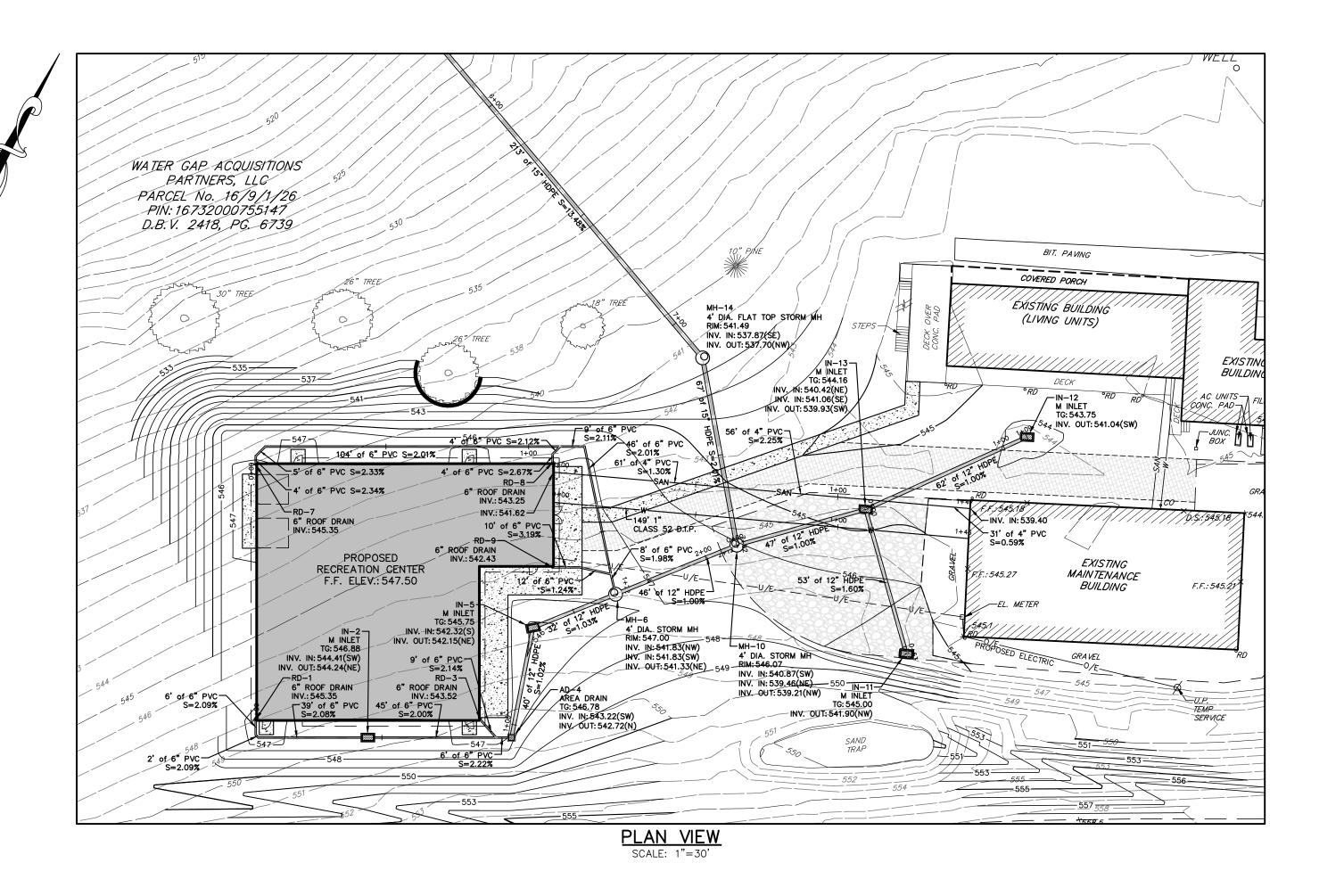


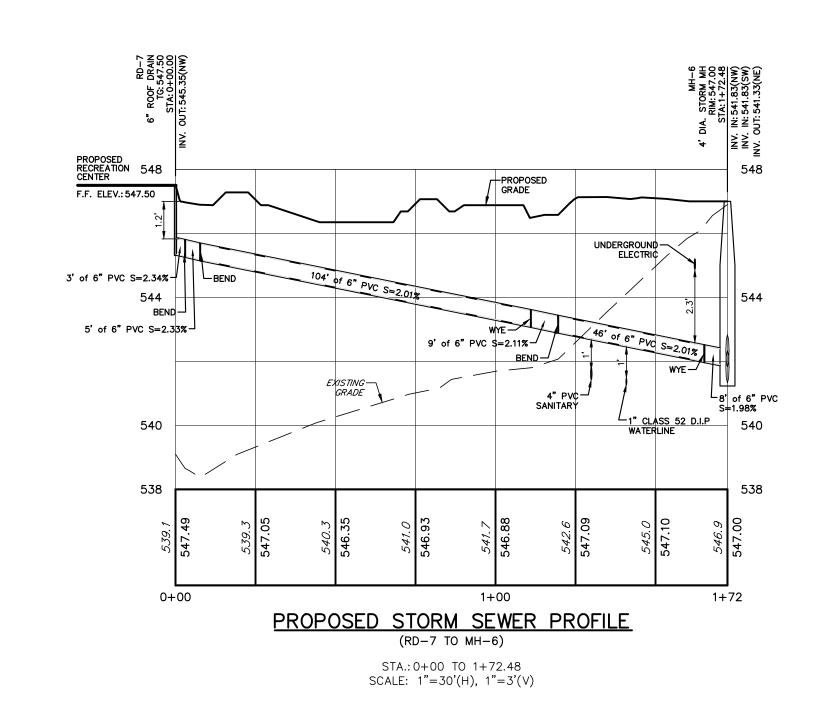


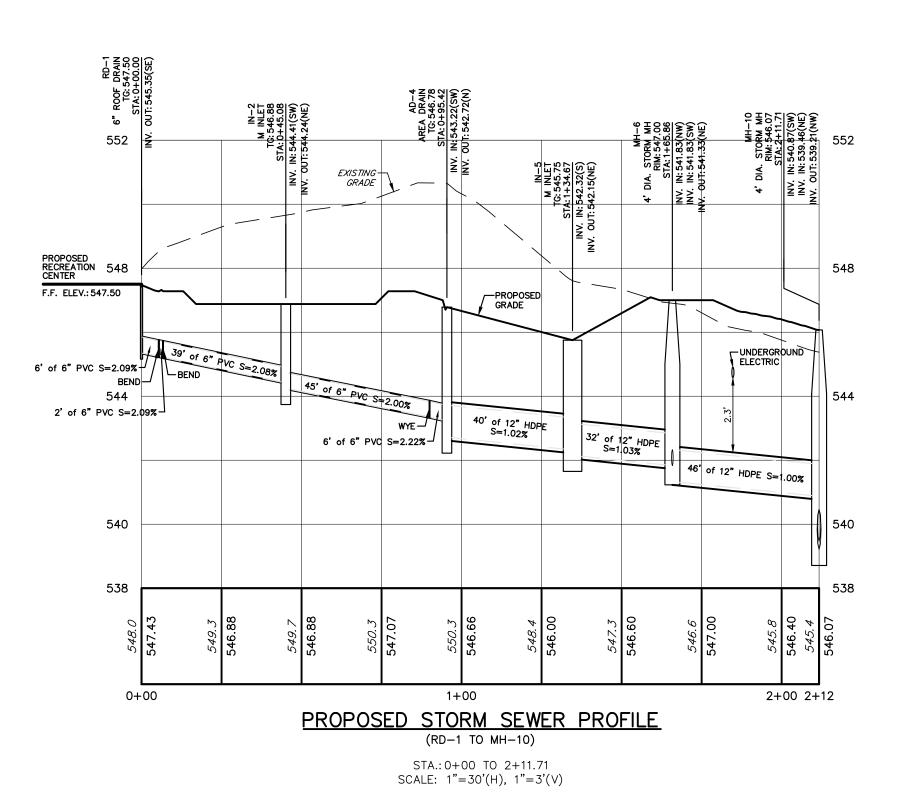


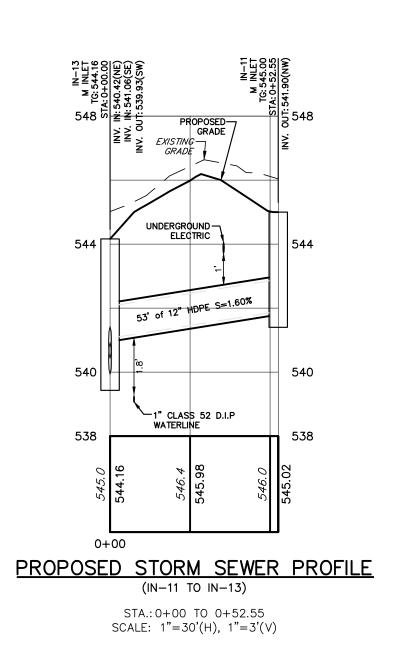


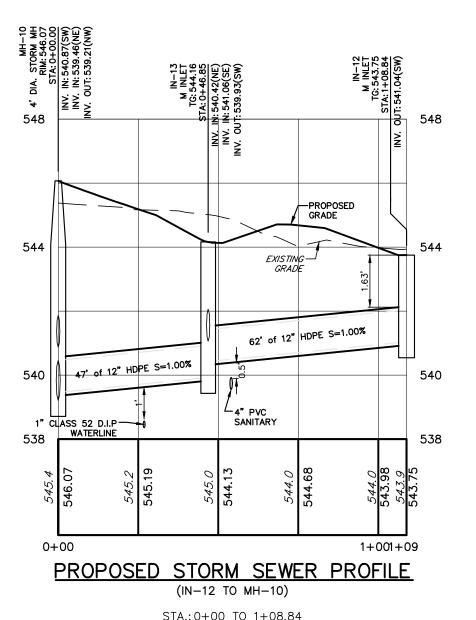
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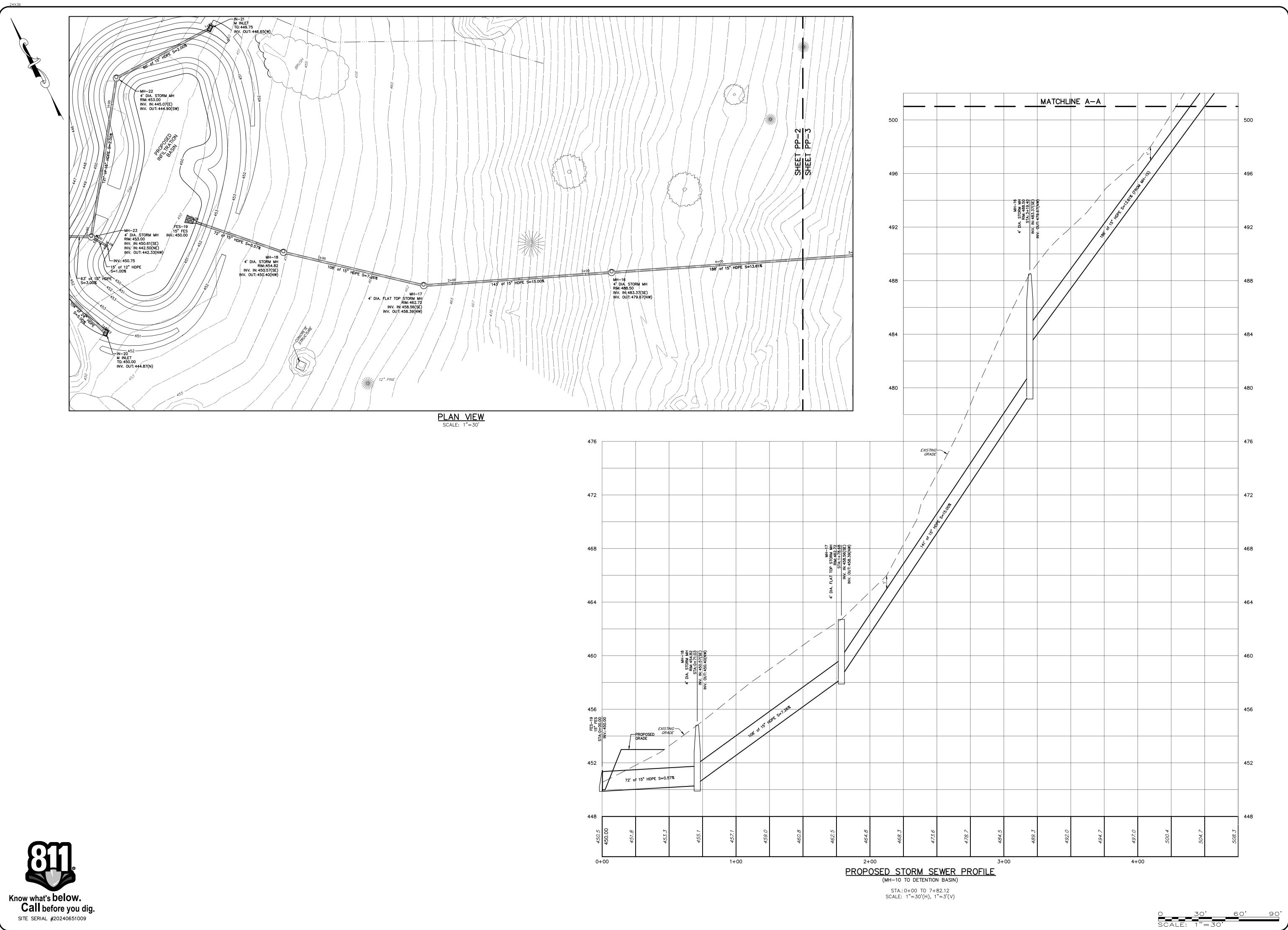
MH-10 4 4' DIA. STORM MH CO RIN:546.07 STA:0+00.00	INV. IN: 540.87(SW) INV. IN: 539.46(NE) INV. OUT: 539.21(NW)	IN-13 M INET TG: 544.16 \$TA: 0+46.85	INV. IN: 540.42(NE) INV. NI: 541.06(SE) INV. OUT: 539.93(SW)	IN-12 M INLET 16:543.75	STA: 1+08.84 INV. OUT: 541.04(SW)
544			EXISTIN GRAD	PROPOSED GRADE	544
540 1" CL	47' of 12" HI ASS 52 D.I.P WATERLINE	PE S=1.00%	62' of 12"	HDPE S=1.00%	540
545.4	546.07	545.19	544.13	544.68 544.0	543.98 543.9 543.75
0+ <u>[</u>	oo PROPOS		RM SEWE 2 TO MH-10)		001+09 FILE
		STA.: 0+	00 TO 1+08.84 =30'(H), 1"=3'	1 (V)	

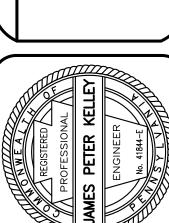


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8/26/2024 TAL/DFG SCALE: 1"=30' CRS DRAWN: 1022419.004 COPYRIGHT 2024

SHEET: 12 OF 24 PP-1







272.200.2050

MULTI-DISC

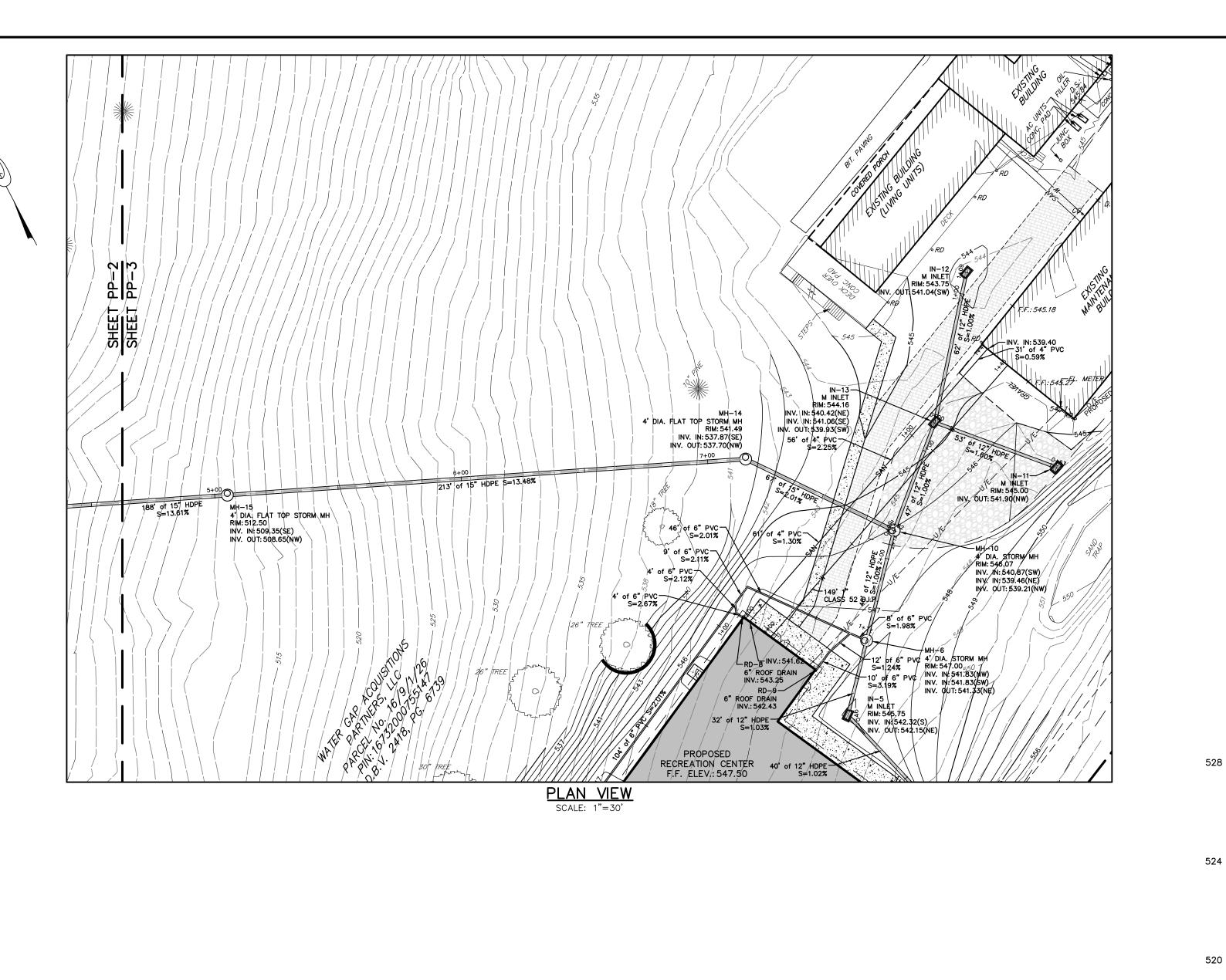
STORM SEWER PLAN & PROFILES

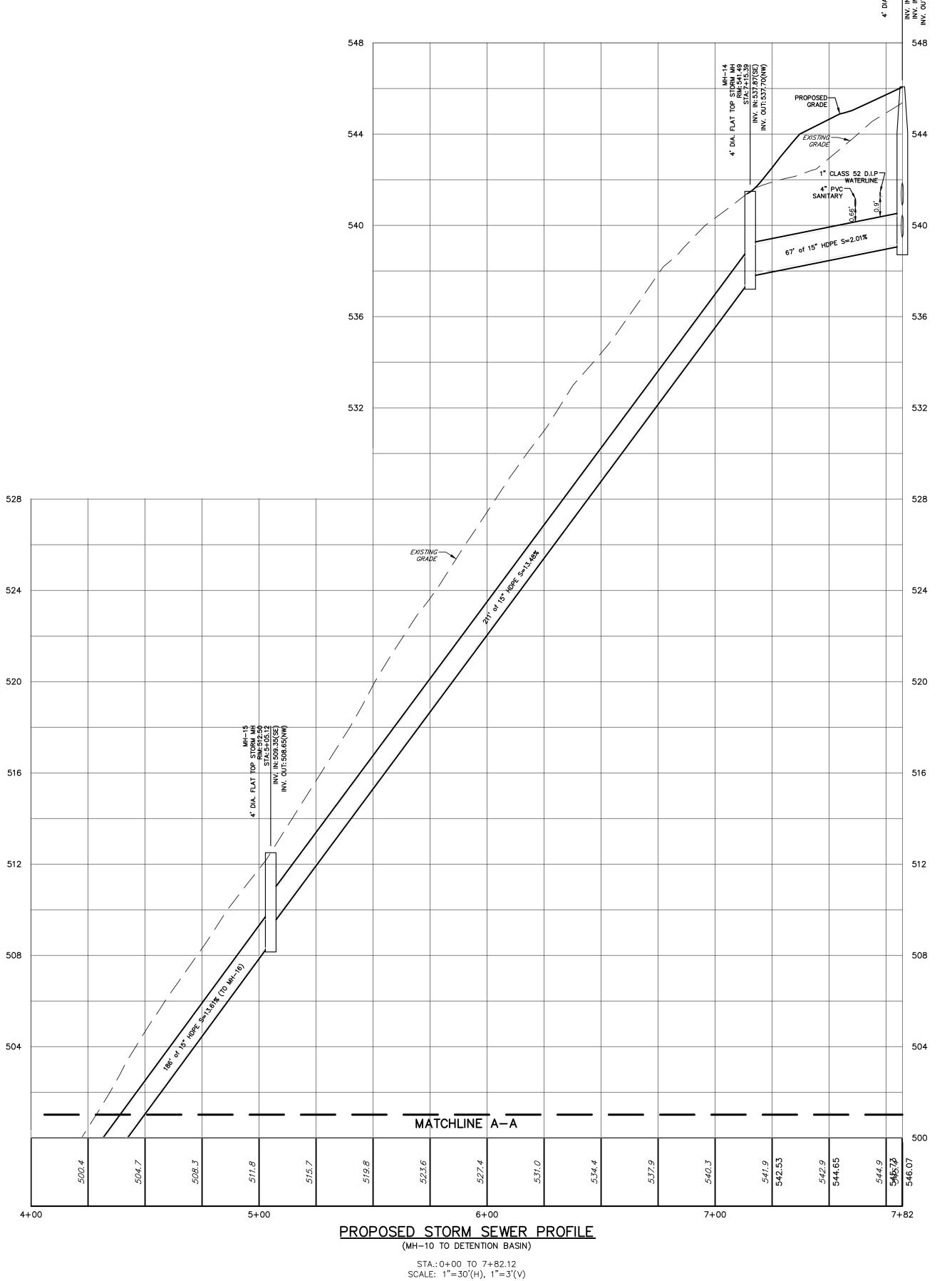
WATER GAP WELLNESS RECREATION CENTER
WATER GAP ACQUISITIONS PARTNERS, LLC
SMITHFIELD TOWNSHIP
MONROE COUNTY, PA

DATE: DSGN: TAL/DFG 8/26/2024 SCALE: CRS 1"=30' DRAWN: APPRD: JPK P MGR: 1022419.004 COPYRIGHT 2024

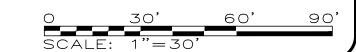
SHEET: 13 OF 24

PP-2









STORM SEWER PLAN & PROFILES
WATER GAP WELLNESS RECREATION CENTER
WATER GAP ACQUISITIONS PARTNERS, LLC
SMITHFIELD TOWNSHIP
MONROE COUNTY, PA

272.200.2050

DATE: B/26/2024 DSGN: TAL/DFG

SCALE: CHK: CRS

DRAWN: APPRD: JPK

JOB: 1022419.004 P MGR: JPK

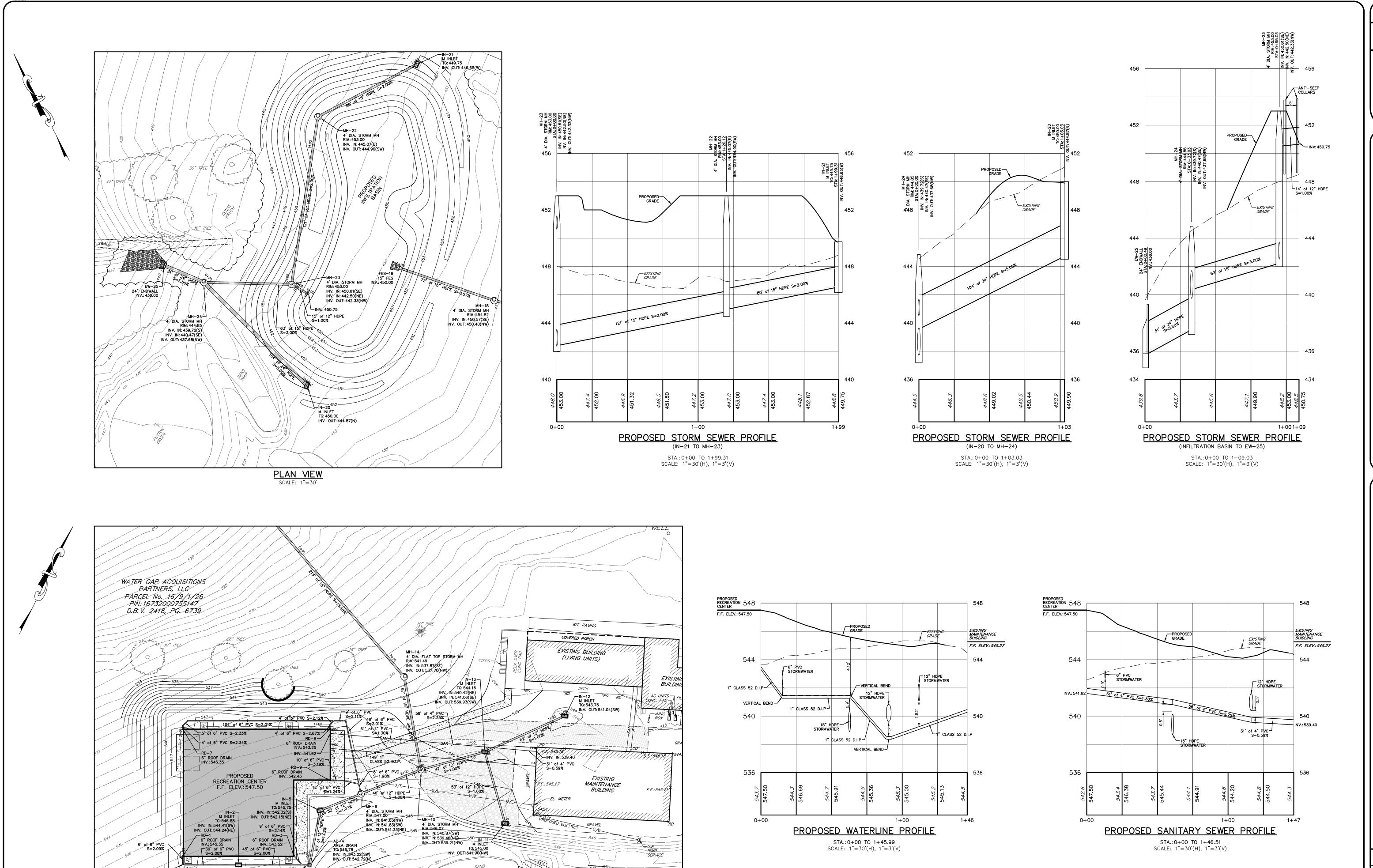
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SHEET: 14 OF 24

PP-3



AREA DRAIN TG: 546.78 INV. IN: 543.22(SW) INV. OUT: 542.72(N)

Know what's below.

Call before you dig.

SITE SERIAL #20240651009

PLAN VIEW
SCALE: 1"=30'

PROPOSED WATERLINE PROFILE

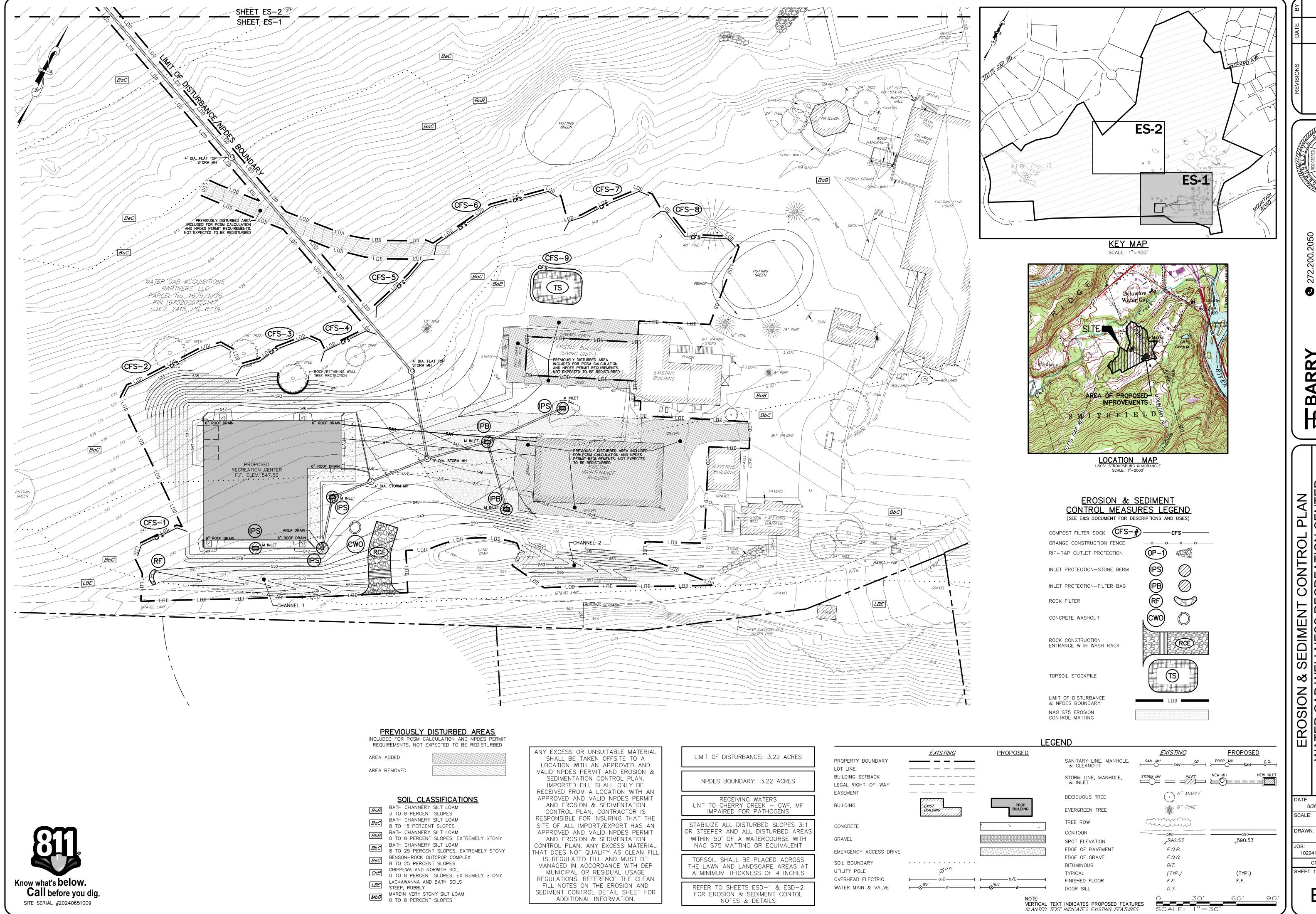
STA.:0+00 TO 1+45.99 SCALE: 1"=30'(H), 1"=3'(V)

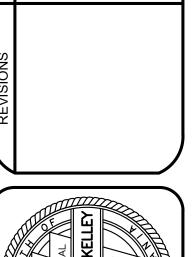
TAL/DFG 8/26/2024 SCALE: CRS 1"=30' DRAWN: 1022419.004 COPYRIGHT 2024 SHEET: 15 OF 24

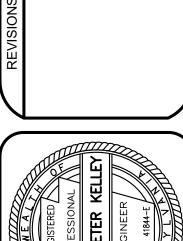
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PROPOSED SANITARY SEWER PROFILE

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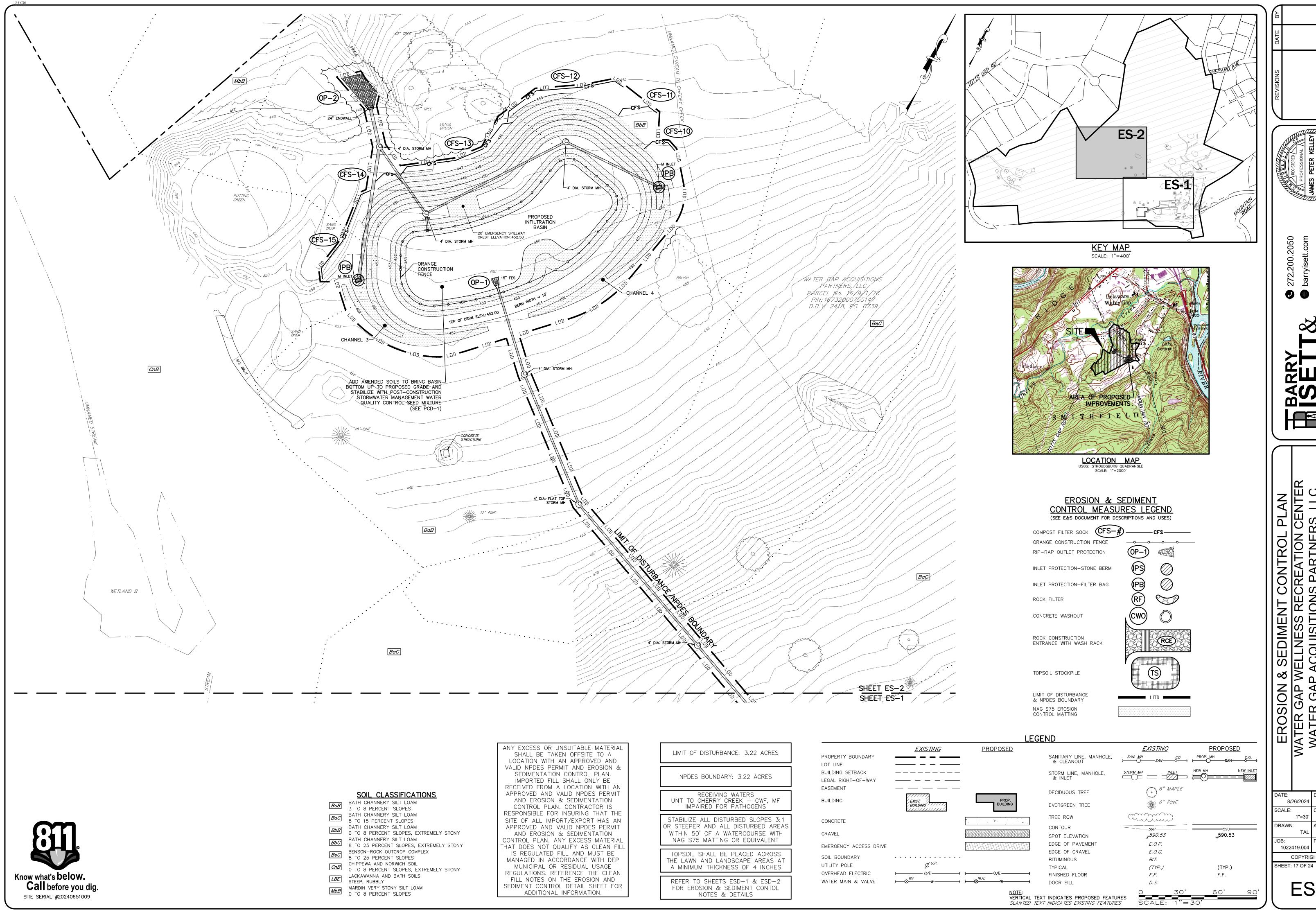


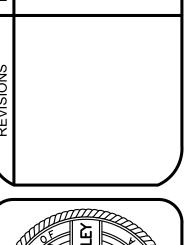


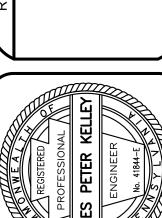


TAL/DFG 8/26/2024 CRS 1"=30' P MGR:

1022419.004 COPYRIGHT 2024 SHEET: 16 OF 24









TAL/DFG 8/26/2024 CRS 1"=30' P MGR: 1022419.004 COPYRIGHT 2024

NOTES:

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

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

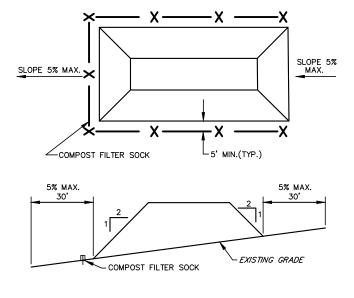
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND

PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE

\* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

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

# STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE NOT TO SCALE



NOTES:

1. PLACE STOCKPILES AT LOCATIONS SHOWN ON PLAN.
2. STOCKPILE TO BE IMMEDIATELY SEEDED WITH A TEMPORARY SEED MIXTURE.
3. SIDE SLOPES SHALL NOT EXCEED 1' VERTICAL TO 2' HORIZONTAL.
4. MAXIMUM TOPSOIL STOCKPILE HEIGHT NOT TO EXCEED 35'.

TOPSOIL STOCKPILE

N.T.S.

#### SEEDING SCHEDULE

SPECIFICATION: THE FOLLOWING SPECIFICATION SHALL BE USED FOR THIS PROJECT UNLESS OTHERWISE NOTED. Penn State College of Agriculture Sciences, EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND by Peter Landschoot. 1997 or as revised.

# PRIOR TO STARTING EARTH DISTURBANCE, CONTRACTOR SHALL SAMPLE THE SITE TOPSOIL AND OBTAIN A SOIL TEST FROM A REPUTABLE LABORATORY. AT A MINIMUM, THE TEST SHALL INCLUDE SOIL pH, COMPOSITION, AND % ORGANICS ALONG WITH RECOMMENDATIONS FOR pH BALANCE, FERTILIZATION, AND LIMING.

BEFORE PLACING TOPSOIL, PREPARE SUBGRADE TO A DEPTH 6" BELOW FINAL GRADE. SCARIFY SUBGRADE WITH DEEP TINE PLOW. SCREEN TOPSOIL AND UNIFORMLY BLEND IN 20-25% BY VOLUME LEAF MOULD OR PROCESSED MUSHROOM SUBSTRATE. SPREAD AMENDED/SCREENED TOPSOIL OVER SUBGRADE TO OBTAIN FINISHED GRADE. COMPACT SURFACE TO 80-85% COMPACTION. DO NOT OVER COMPACT.

TEMPORARY COVER FOR EROSION CONTROL

INITIAL PROTECTION: APPLY TEMPORARY SEEDING WHEN PERMANENT SEEDING IS DELAYED OR OUT OF PLANTING SEASON.

SITE PREPARATION: INCORPORATE LIME AND FERTILIZER (RATE BASED ON SOIL TEST) INTO THE TOP 4-6" OF TOPSOIL. IF SOIL TESTS ARE NOT AVAILABLE, APPLY ONE TON PER ACRE OF AGRICULTURAL LIMESTONE AND 10-10-10 FERTILIZER AT 500 LB PER ACRE.

METHOD: APPLY SEED USING SURFACE BROADCASTING OR HYDROSEEDING

SEASO	<u>DN</u>	<u>SPECIES</u>	RATE (LB./ACF
SPRING (MARCH 15 T	O JUNE 15)	ANNUAL RYEGRASS or SPRING OATS	40 96
SUMMER (JUNE 16 TO	AUGUST 15)	ANNUAL RYEGRASS	40
FALL (AUGUST 16	TO NOVEMBER 1)	ANNUAL RYEGRASS or WINTER RYE	40 168
MULCHING:	CELLULOSE FIBER TACKI	R 3/4—1" DEEP. USE THAN STRAW ON STEEP SLOPES. FIER OVER STRAW MULCH AT A ACRE. HYDROMULCHING IS ACCE	RATE

PERMANENT COVER FOR STABILIZATION

PERMANENT:

ALL DISTURBED AREAS TO BE PREPARED AND SEEDED

WITH THE FOLLOWING SPECIES AT THE NOTED SEEDING
RATE FOLLOWING FINAL GRADING:

SEEDING DATES: MARCH 15 - MAY 15 AUGUST 15 - OCTOBER 15

SITE PREPARATION: INCORPORATE LIME AND FERTILIZER (RATE BASED ON SOIL TEST) INTO THE TOP 6" OF TOPSOIL. IF SOIL TESTS ARE NOT AVAILABLE, APPLY SIX TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 10-20-20 FERTILIZER AT 1,000 LB PER ACRE.

MULCHING: APPLY THREE TONS PER ACRE OF STRAW TO
ACHIEVE A LOOSE LAYER 3/4-1" DEEP. USE
JUTE MATTING RATHER THAN STRAW ON STEEP SLOPES. APPLY
CELLULOSE FIBER TACKIFIER OVER STRAW MULCH AT A RATE
OF 800-1000 LBS. PER ACRE. HYDROMULCHING IS ACCEPTABLE WHEN

BLOWING OF STRAW IS A CONCERN.

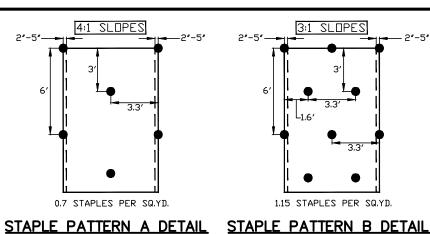
METHOD: APPLY SEED USING DRILL FITTED WITH A DEPTH BAND AND PACKER WHEEL. PLANT GRASS SEEDS AT 0.25 TO 0.5 INCHES DEEP. WHEAT, RYE AND OATS MAYBE PLANTED 1 TO 1.5 INCHES DEEP. BROADCAST SEEDING PERMITTED WITH IMMEDIATE MULCH COVER. HYDROSEEDING OF PERMANENT SEEDING IS NOT PERMITTED.

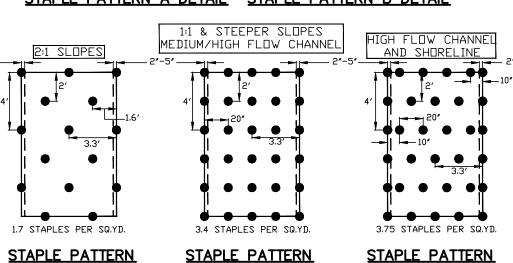
HYDROSEEDING OF PERMANENT SEEDING IS NOT PERMITTED.	
SEED SPECIES BY SITE	RATE (LB./1000 SF)
LAWNS  KENTUCKY BLUEGRASS (POA PRATENSIS) and TURF-TYPE PERENNIAL RYEGRASS (LOLIUM PERENNE) and FINE (RED or CHEWING) FESCUE (FESTUCA RUBA RUBA/COMMUTATA)	4 1.5 2.5
SLOPES AND BANKS CHEWINGS FESCUE (FESTUCA RUBRA COMMUTATA) and BLUE FESCUE (FESTUCA OVINA GLAUCA) and HARD FESCUE (FESTUCA OVINA DURIUSCULA) and CREEPING RED FESCUE (FESTUCA RUBRA RUBRA) and SLENDER FESCUE (FESTUCA RUBRA TRICHOPHYLLA) and DAWSON RED FESCUE (FESTUCA RUBRA DAWSON) and ANNUAL RYEGRASS (FESTUCA MULTIFLORUM)	2 2 1 1 1 1 1 0.5
DRAINAGE DITCHES, DETENTION BASIN (MOWED)  ANNUAL RYEGRASS and REDTOP (AGROSTIS ALBA) and TALL FESCUE (FESTUCA ARUNDINACEA) and SWITCHGRASS (PANICUM VIRGATUM)	2 0.5 2 2

\* ALL SEED TO BE MIN. 98% PURE LIVE SEED.

SUGGESTED VARIETIES

FINE FESCUE - RELIANT II, SR3100, DISCOVERY, OSPREY
TALL FESCUE - Houndog V, Montauk, Marksman, and Apache II
WINTER RYE - ARCOOSTOOK OR BALBO TYPE
KENTUCKY BLUEGRASS - SR 2109, NORTH STAR, BLACKSBURG, BRILLIANT

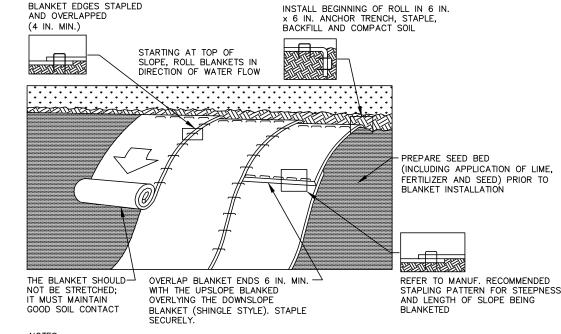




**D DETAIL** 

C DETAIL

E DETAIL



ALL EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN PHOTODEGRADABLE BLANKET S75 UNLESS OTHERWISE NOTED FOR SPILLWAYS OR BERM STABILIZATION.

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

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

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

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

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

# MODIFIED CONSTRUCTION DETAIL #11-1 EROSION

CONTROL BLANKET INSTALLATION

N.T.S.

#### PLAN PREPARER CONTACT INFORMATION

JAMES P. KELLEY, P.E.
BARRY ISETT & ASSOCIATES, INC.
1444 E. LACKAWANNA AVE., SUITE 214
OLYPHANT, PA 18447
PHONE: (570) 285-8183

PHONE: (570) 285-8183 EMAIL: JKELLEY@BARRYISETT.COM

#### PLANNING AND DESIGN

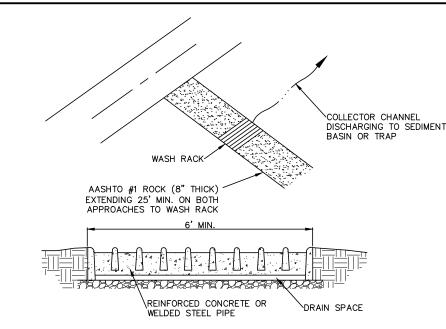
THE EARTH CONSTRUCTION ACTIVITIES, PROPOSED BY THIS PLAN, HAVE BEEN PLANNED AND IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE, IN ACCORDANCE WITH THE FOLLOWING:

- 1. MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE.
- 2. MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
- 3. MINIMIZE SOIL COMPACTION.
- 4. UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER RUNOFF.

#### FLOODPLAIN MAPPING

THE PROJECT AREA WAS REVIEWED USING THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) NATIONAL FLOOD HAZARD LAYER (NFHL). THE NFHL IS A COMPILATION OF GIS DATA THAT COMPRISES A NATIONWIDE DIGITAL FLOOD INSURANCE RATE MAP. THE GIS DATA AND SERVICES ARE DESIGNED TO PROVIDE THE USER WITH THE ABILITY TO DETERMINE THE FLOOD ZONE, BASE FLOOD ELEVATION, AND FLOODWAY STATUS FOR A PARTICULAR LOCATION.

THE PROJECT AREA IS NOT LOCATED WITHIN A MAPPED FLOODPLAIN. THE PANEL FOR THE PROJECT AREA IS 42089C0432E, HAVING AN EFFECTIVE DATE OF 05/2/2013.



NOTES:

WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED

A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK

#### SOILS RESOURCES

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ВаВ	Bath channery silt loam, 3 to 8 percent slopes	9.4	11.6%
BaC	Bath channery silt loam, 8 to 15 percent slopes	20.9	25.6%
BaD	Bath channery silt loam, 15 to 25 percent slopes	3.2	3.9%
BbB	Bath channery silt loam, 0 to 8 percent slopes, extremely stony	2.5	3.0%
BbC	Bath channery silt loam, 8 to 25 percent slopes, extremely stony	2.7	3.3%
BeC	Benson-Rock outcrop complex, 8 to 25 percent slopes	14.6	17.8%
BeF	Benson-Rock outcrop complex, 25 to 70 percent slopes	1.6	2.0%
CnB	Chippewa and Norwich soils, 0 to 8 percent slopes, extremely stony	12.4	15.1%
LBE	Lackawanna and Bath soils, steep, rubbly	4.8	5.9%
MbB	Mardin very stony silt loam, 0 to 8 percent slopes	6.4	7.9%
ReA	Rexford gravelly silt loam, 0 to 3 percent slopes	3.2	3.9%
Totals for Area of Interest	'	81.7	100.0%

J	Job #: 1022419.004	SOILS LIMITA	ATIONS & RESOLUTIONS SHEET	
Project Nar	<b>me</b> : Water Gap We	ellness Accessory Buildin	nas	
-	TION: Smithfield Township			COUNTY: Monroe
CHARAG	CTERISTICS	LIMITATIONS	RESOLUTIONS	COMMENTS
HYDRIC	WETLANDS	NO DISTURBANCE (UNLESS ALLOWED BY DEP PERMIT)	DELINEATE WETLANDS PROTECT WETLANDS OBTAIN PERMIT(S)	SEE SOIL EROSION PLAN SHEET COPIES OF PERMITS
DEPTH TO BEDROCK		RESERVOIR AREAS DIVERSIONS - WATERWAYS TERRACES UTILITIES BUILDING SITES	REVISE DESIGN - RELOCATE	NOT ALWAYS POSSIBLE
TOPSOIL	POOR	VEGETATIVE STABILIZATION EMBANKMENTS HIGH ACIDITY LOW FERTILITY EXCESSIVE DRYNESS EXCESSIVE WETNESS	SOIL TESTS ADJUST SOILS IMPLEMENTS AS NEEDED	SEE SEEDING WORKSHEETS AND DETAIL SHEET NOTES
WET	HIGH WATER TABLE FLOODING HYDRIC PIPING SEEPAGE	RESERVOIR AREAS UTILITIES EMBANKMENTS DIKES LEVEES BUILDING SITES LANDSCAPING	SELECT FILL MATERIAL FROM OTHER AREA OF SITE SELECT APPROPRIATE PLANT MIXTURE PROVIDE PUMPED WATER SEDIMENT REMOVAL FACILITY DRAINAGE CHANNELS - UNDERDRAINS IMPORT BORROW MATERIAL FROM OFFSITE	SEE SEEDING WORKSHEETS AND DETAIL SHEET NOTES SEE DETAIL SHEET
WINTER GRADING FROST ACTION	POOR COMPACTION	RESERVOIR AREAS EMBANKMENTS	LIMIT DATES OF EARTH MOVING SELECT FILL MATERIAL FROM OTHER AREA OF SITE IMPORT BORROW MATERIAL FROM OFFSITE	SEE CONSTRUCTION SCHEDULE

#### CONSTRUCTION SCHEDULE

ANTICIPATED START OF CONSTRUCTION: START DATE: MARCH 2025
ANTICIPATED END OF CONSTRUCTION: END DATE: AUGUST 2025

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 MONROE COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE MONROE COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

IMMEDIATELY STABILIZE ALL DISTURBED AREAS UPON TEMPORARY CESSATION OF WORK (4 DAYS OR LONGER) OR AS SOON AS ANY GRADED AREA REACHES FINAL GRADE.

NO AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, SHOULD REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.

ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.

REFER TO THE SPECIFIC BMP SEQUENCES OF CONSTRUCTION ON THE PCSM PLANS FOR THE INSTALLATION OF PCSM BMP'S ON STEPS 5 AND 7 OF THE CONSTURCTION SEQUENCE BELOW:

- DELINEATE THE LIMIT OF DISTURBANCE, INSTALL RCE, CFS-1 TO CFS-15, ORANGE CONSTRUCTION FENCING, AND THE CONCRETE WASHOUT.
- 2. REMOVE SITE FEATURES DESIGNATED AS TBR. STRIP TOPSOIL AND STOCKPILE AT THE LOCATION SPECIFIED ON THE PLANS BEFORE BEGINNING EXCAVATION OR GRADING.
- BEGIN ROUGH GRADING. INSTALL SLOPE PROTECTION MATTING ON AREAS OF STEEP SLOPES.
   INSTALL PROPOSED ROCK/RETAINING WALL TREE PROTECTION BEFORE GRADING UPSLOPE AREAS.
   CRITICAL STAGE: BEGIN CONSTRUCTION OF PROPOSED INFILTRATION BASIN. REFER TO PCSM PLAN SET FOR CONSTRUCTION SEQUENCE AND FURTHER DETAILS AND INFORMATION. AT NO
- POINT SHALL EQUIPMENT TRAVERSE WITHIN THE ORANGE CONSTRUCTION FENCING OR OVERTOP THE PROPOSED BASIN BOTTOM.

  6. BEGIN INSTALLATION OF THE PROPOSED STORM SEWER RUN FROM EW-25 TO IN-21, FROM MH-24 TO IN-20, AND THE BASIN OUTLET PIPE. INSTALL PROPOSED STORM SEWER RUNS FROM DOWNSTREAM TO UPSTREAM. IMMEDIATELY INSTALL INLET PROTECTION ON INSTALLED INLETS.
- INSTALL RIPRAP PROTECTION AT OUTLET OF STORM PIPING.

  7. CRITICAL STAGE: INSTALL AMENDED SOILS IN INFILTRATION BASIN TO BRING BOTTOM UP TO GRADE. INFILTRATION TESTING SHALL BE PERFORMED DURING AND AFTER CONSTRUCTION TO VERIFY INFILTRATION RATES OF AMENDED SOILS.
- 8. BEGIN INSTALLATION OF THE PROPOSED STORM SEWER RUN FROM FES—19 TO MH—10. INSTALL PROPOSED STORM SEWER RUNS FROM DOWNSTREAM TO UPSTREAM. INSTALL RIPRAP PROTECTION AT OUTLET OF STORM PIPING.
- 9. BEGIN INSTALLATION OF THE PROPOSED STORM SEWER RUN FROM MH-10 TO IN-12 AND FROM IN-13 TO IN-11. IMMEDIATELY INSTALL INLET PROTECTION ON INSTALLED INLETS.
- 10. BEGIN INSTALLATION OF THE PROPOSED STORM SEWER RUN FROM MH-10 TO RD-1 AND FROM MH-6 TO RD-7. IMMEDIATELY INSTALL INLET PROTECTION ON INSTALLED INLETS.
- 11. BEGIN CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- 12. INSTALL SITE LIGHTING.
- 13. FINAL GRADE, SPREAD TOPSOIL, RAKE, AND SEED ALL DISTURBED AREAS. TOPSOIL SHALL BE REPLACED ACROSS LAWN AREAS AT A MINIMUM THICKNESS OF 4 INCHES.
- 14. AFTER ALL DISTURBED AREAS ACHIEVE FINAL STABILIZATION, REMOVE ALL E&S CONTROLS.
  REPAIR, SEED, AND STABILIZE ANY AREAS DISTURBED DURING THE REMOVAL OF THE EROSION
  CONTROLS
- 15. <u>CRITICAL STAGE</u>: FIELD VERIFY TRIBUTARY AREAS TO PCSM BMPS.
- 16. AFTER THE PROJECT IS COMPLETED, THE NPDES NOTICE OF TERMINATION PAPERWORK AND AS-BUILT PLANS SHALL BE COMPLETED AND SUBMITTED TO MONROE COUNTY CONSERVATION DISTRICT.

#### NOTES:

- 1. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70 PERCENT PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- TEMPORARY EROSION CONTROL MEASURES MAY ONLY BE REMOVED AFTER APPROVAL BY THE MONROE COUNTY CONSERVATION DISTRICT, AFTER THE CONSTRUCTION AREA AND RETAINED SILT ARE STABILIZED AND AFTER LAWN AREAS ARE ESTABLISHED.

#### OPERATION AND MAINTENANCE PROGRAM

THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL EROSION AND SEDIMENT POLLUTION CONTROL (E&S) BEST MANAGEMENT PRACTICES (BMPS) IDENTIFIED HEREIN. E&S BMPS SHALL BE MAINTAINED IN ACCORDANCE WITH THIS E&S PLAN AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (E&S MANUAL), MARCH 2012.

E&S BMPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF, UNLESS OTHERWISE INDICATED. THE CONTRACTOR SHALL KEEP RECORD OF ALL INSPECTIONS USING THE VISUAL SITE INSPECTION REPORT FORM (FORM 3150-FM-BWEW0083). E&S BMPS WHICH NEED REPAIR OR REPLACEMENT, SHALL BE REMEDIED IMMEDIATELY. DISPOSAL OF MATERIALS REMOVED FROM THE BMPS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECYCLING OR DISPOSAL OF MATERIALS NOTES HEREIN.

#### RECYCLING OR DISPOSAL OF MATERIALS

CONSTRUCTION WASTES FROM LAND DISTURBANCE AND DEVELOPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS SUITABLE FOR SUCH WASTES IN ACCORDANCE WITH PA DEP REGULATIONS. EXCESS SOIL/ROCK SHALL BE UTILIZED ON SITE TO IMPROVE FINAL GRADING OF LOW AREA LOTS. THESE WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED. RATHER THAN DISPOSAL.

THE OPERATOR SHALL ASSURE THAT AN E&S CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE GOVERNING CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

UNDERTAKEN IN ACCORDANCE WITH PA DEP RULES AND REGULATIONS.

SEDIMENT REMOVED FROM ESPCP CONTROLS AND FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND

RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THIS PROJECT SITE WILL BE

IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES.

ANTICIPATED CONSTRUCTION WASTES INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING:

• SEDIMENT

- TRASH/DEBRISVEGETATION CLIPPINGS AS MAY RESULT FROM MAINTENANCE
- PACKAGING MATERIALFORMWORK ASSOCIATED WITH CONCRETE FOUNDATIONS.
- <u>CLEAN FILL NOTES</u>

THE OPERATOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT ALL FILL MATERIAL ASSOCIATED WITH THE PROJECT QUALIFIES AS CLEAN FILL.

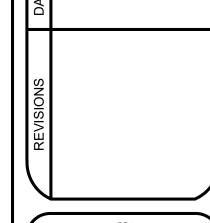
CLEAN FILL IS DEFINED AS UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPERATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH.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

ENVIRONMENTAL DUE DILLIGENCE TO ENSURE ALL FILL IS "CLEAN", AS DEFINED ABOVE, SHALL INCLUDE, BUT NOT BE LIMITED TO, INVESTIGATIVE TECHNIQUES SUCH AS VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. ALL TESTING SHALL BE PREFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY OF "MANAGEMENT OF FILL."

#### STANDARD E&S PLAN NOTES

DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST 7 DAYS PRIOR TO EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LAND OWNER, 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
- 3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- 4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE E&S PLAN.
- 7. AT NO TIMES SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- 8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- 9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- 10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET. SEQ., 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER OF ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BY QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER DISTURBED VEGETATED AREAS.
- 14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE SITE ONTO THE ADJACENT ROADWAY UNLESS USING THE CONSTRUCTION ENTRANCE.
- 15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES 6 TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN
- 22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHLL NOT BE INCORPORATED INTO FILLS.
- 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN AN AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- 29. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS
- 31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATION SEASON.
- 32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 33. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.





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SEDIMENT CONTROL DETA WELLNESS RECREATION CEN PACQUISITIONS PARTNERS, L MITHFIELD TOWNSHIP AONROE COUNTY, PA

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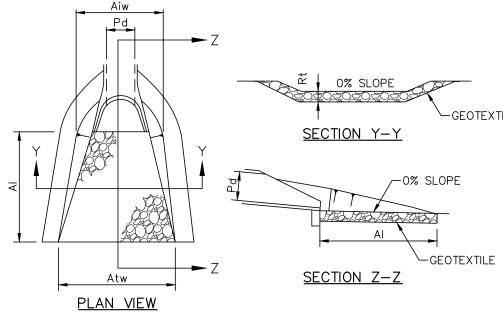
NOTES:

1. OVER EXCAVATE SINKHOLE THROAT TO REMOVE ALL SOIL AND LOOSE ROCK.

THROAT BOOKS SHALL BE SIZED SO PLACE ROCK(S) TO PLUG SINKHOLE THROAT. ROCKS SHALL BE SIZED SO THEY CANNOT GO THROUGH THE THROAT. FILL SMALL VOIDS WITH SMALLER ROCK TO LEVEL THE PLUG. PLACE A THIN LIFT OF BENTONITE CLAY TO LEVEL THE ROCK PLUG. PLACE GEOTEXTILE DRAINAGE FABRIC OVER THE DISTURBED AREA, EMBEDDING 6" ON ALL EDGES. FABRIC TO HAVE TENSILE STRENGTH OF 90 LBS. AND AN

- EQUIVALENT OPENING SIZE OF SIEVE #200 MINIMUM. LARGER OPENINGS MAY REQUIRE A CONCRETE PLUG. 18"-24" THICK PLAC E BENTONITE CLAY/SOIL (1 TO 2 LBS./S.F., 8" LIFT, 95% MOD. PROCTOR). PLACE COMPACTED FINE-GRAINED NATIVE CLAY FILL (8" LIFTS, 95% MOD. PROCTOR) EVERY OTHER LIFT TO 12" BELOW FINAL GRADE. INSTALL BENTONITE CLAY/SOIL CAP 10' BEYOND THE EXCAVATION AS SHOWN. GRADE NATIVE CLAY TO DRAIN AWAY FROM THE AREA. PLACE 4" OF TOPSOIL, RESEED OR SOD TO STABILIZE.
- ALL STABILIZATION WORK SHOULD BE DONE UNDER SUPERVISION OF A GEOLOGIST OR ENGINEER FAMILIAR WITH SITE AND FOUNDATION CONDITIONS.

#### SINKHOLE MITIGATION DETAIL

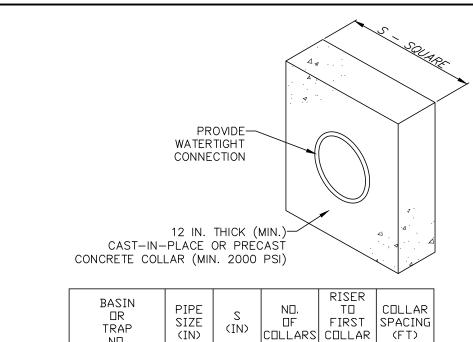


		RIPRAP		APRON		
DUTLE T ND.	PIPE DIA Pd (IN)	SIZE R	THICK. Rt (IN)	LENGT H Al (FT)	INITIA L WIDTH Aiw (FT)	TERMINA L WIDTH Atw (FT)
□P-1	15	3	9	6	3.8	6.15
□P-2	24	7	45	27	6.0	33

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

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

#### STANDARD CONSTRUCTION DETAIL #9-1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL NOT TO SCALE



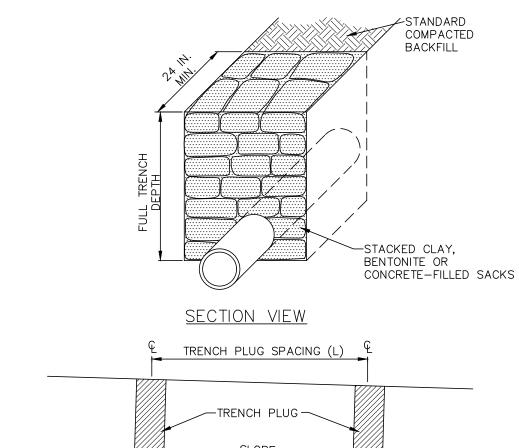
NFILTRATION 12 63 2 5 BASIN

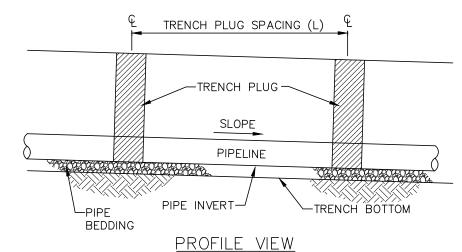
NOTES:

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT. COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

> STANDARD CONSTRUCTION DETAIL #7-16 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS

> > NOT TO SCALE





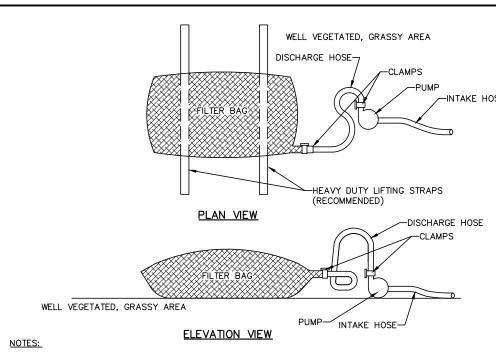
PA DEP EROSION CONTROL MANUAL TABLE 13.1 MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

TRENCH SLOPE (%)	SPACING L (FT)	PLUG MATERIAL
< 5	1000	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
5 - 15	500	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
15 - 25	300	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
25 - 35	200	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
35 - 100	100	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
> 100	50	CEMENT BAGS (WETTED) OR MORTARED STONE
* TOPSOIL MAY NOT BE U	JSED TO FIL	L SACKS

IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSINGS.

#### STANDARD CONSTRUCTION DETAIL #13-4 TRENCH PLUG INSTALLATION

NOT TO SCALE

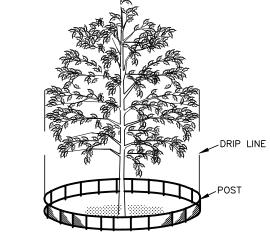


LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER HAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS: PROPERTY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

T TOT LIVE	1 101 11100	MINITAL STATES	
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN	
GRAB TENSILE	ASTM D-4632	205 LB	
PUNCTURE	ASTM D-4833	110 LB	
MULLEN BURST	ASTM D-3786	350 PSI	
UV RESISTANCE	ASTM D-4355	70%	
AOS % RETAINED	ASTM D-4751	80 SIEVE	
A SUITABLE MEANS OF ACCESSI	NG THE BAG WITH MACH	HINERY REQUIRED FOR DI	SPC

OSAL 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

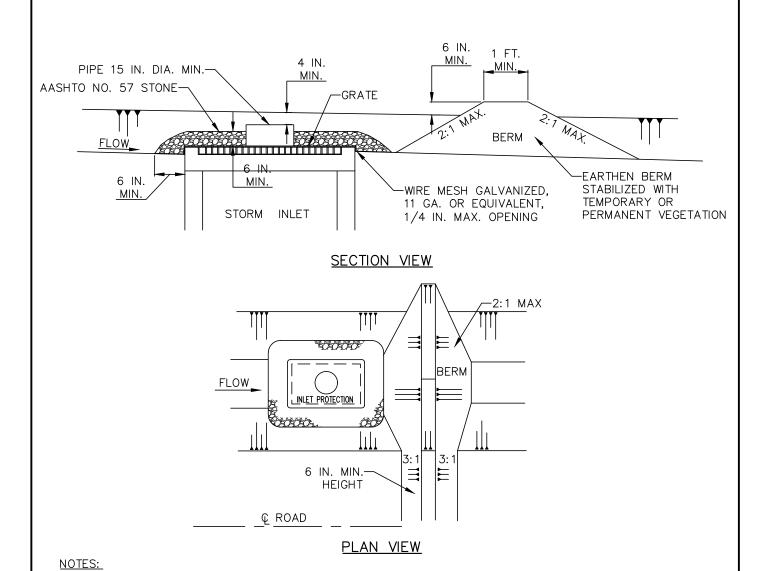


1. FENCING SHALL BE INSTALLED AT THE DRIP LINE (MIN. 5 FEET FROM TREE TRUNK). BOARDS SHALL NOT BE NAILED TO TREES DURING CONSTRUCTION. FEEDER ROOTS SHALL NOT BE CUT IN AREA INSIDE THE DRIP LINE.

THE CONTRACTOR SHALL NOT ENCROACH ONTO AREAS DELINEATED AS TREE PROTECTION.
THE STORAGE OF EQUIPMENT OR MATERIALS IN THIS AREA IS STRICTLY FORBIDDEN.
THE SILT FENCE ERECTED AT THE TREE PROTECTION LINE SHALL BE MAINTAINED AT ALL
TIMES DURING THE CONSTRUCTION PROCESS AND SHALL NOT BE CROSSED. 5. REFER TO PLAN SHEETS FOR LOCATION OF WOODS AND TREES TO REMAIN. AL TREES TO REMAIN WHICH ARE ADJACENT TO CONSTRUCTION AREAS SHALL BE PROTECTED IN ACCORDANCE WITH THIS DETAIL. 6. NO CLEARING, EARTHMOVING, OR CONSTRUCTION SHALL COMMENCE PRIOR TO INSTALLATION OF TREE PROTECTION FENCES AROUND ALL EXISTING TREES.

7. A 48 INCH HIGH WOODEN OR PLASTIC FENCE WITH POSTS ON 8 FOOT CENTER TO CENTER (MAXIMUM) SHALL BE INSTALLED AROUND EACH EXISTING TREE PRIOR TO START OF CONSTRUCTION (TYPICAL FOR ALL TREES).

TREE PROTECTION/CONSTRUCTION FENCE DETAIL



INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.

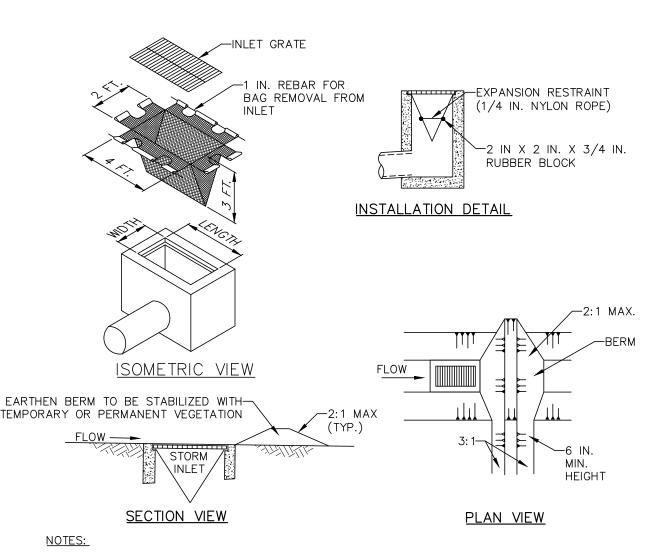
ROLLED EARTHEN BERM IN ROADWAY SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

STONE INLET PROTECTION AND BERM FOR A TYPE M INLET CAN BE USED IN ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN. OVERFLOW PIPE AND 4 IN. HEAD. A PERFORATED PLATE WELDED TO A METAL RISER MAY NOT BE SUBSTITUTED FOR THE WIRE MESH. A SLOTTED PLATE WELDED TO THE RISER MAY BE USED IN CONJUNCTION WITH THE WIRE MESH IF CALCULATIONS ARE PROVIDED TO SHOW SUFFICIENT CAPACITY OF THE INLET TO ACCEPT THE PEAK RUNOFF FOR A 2-YEAR STORM EVENT FROM THE TRIBUTARY DRAINAGE AREA. TOP OF PIPE SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADWAY IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC. EARTHEN BERM SHALL BE

SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 IN. THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. STANDARD CONSTRUCTION DETAIL #4-20 STONE INLET PROTECTION AND BERM - TYPE M INLET NOT TO SCALE



MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

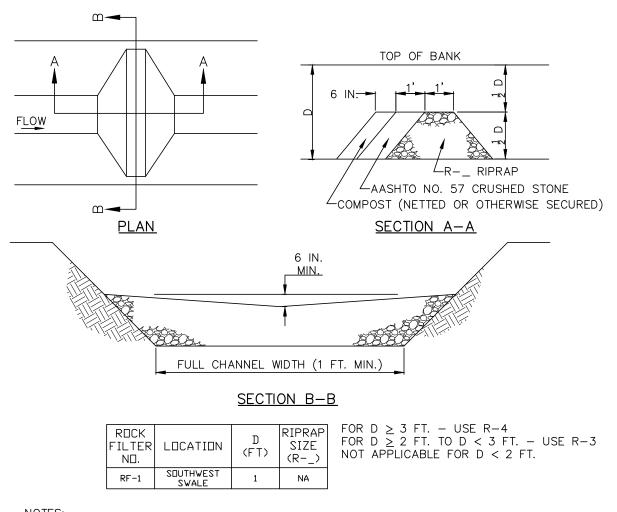
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR

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

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

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. STANDARD CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION - TYPE M INLET

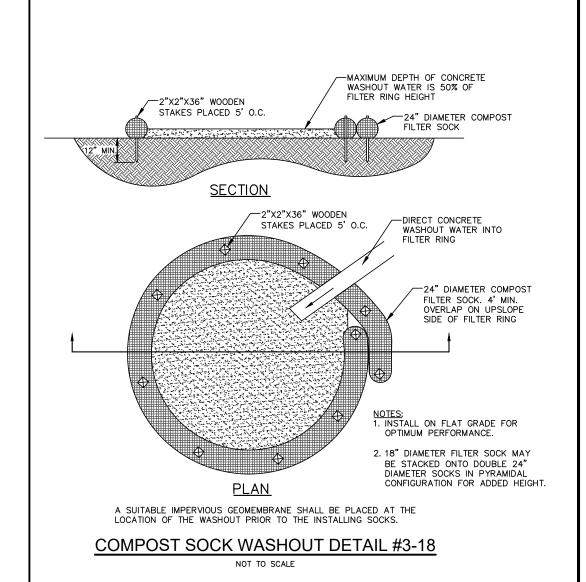
NOT TO SCALE



NOTES:

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS. IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

#### STANDARD CONSTRUCTION DETAIL #4-14 **ROCK FILTER** NOT TO SCALE



—2 IN. x 2 IN. WOODEN STAKES PLACED 10 FT ON CENTER COMPOST FILTER SOCK-FILTÉR MEDIA UNDISTURBED AREA DISTURBED AREA UNDISTURBED AREA PLAN VIEW

BARRIER NO.	LOCATION	SLOPE %	SLOPE LENGTH ABOVE BARRIER (FT)	SIZE (IN)
CFS-1	SW OF RECREATION CENTER	6	165	12
CFS-2	NW OF RECREATION CENTER	12	205	18
CFS-3	N OF RECREATION CENTER	11	189	18
CFS-4	NE OF RECREATION CENTER	10	150	18
CFS-5	NW OF PROJECT SITE	7	189	12
CFS-6	NW OF SOIL STOCKPILE	9	103	12
CFS-7	N OF PROJECT SITE	7	89	12
CFS-8	NE OF MAIN PROJECT SITE	4	77	18
CFS-9	DOWNSLOPE OF SOIL STOCKPILE	30	20	18
CFS-10	N OF CHANNEL 4	20	31	12
CFS-11	NE OF BASIN	20	36	12
CFS-12	N OF BASIN	5	166	12
CFS-13	N OF BASIN SPILLWAY	5	147	12
CFS-14	N OF CHANNEL 3	6	116	12
CFS-15	W OF CHANNEL 3	8	80	12

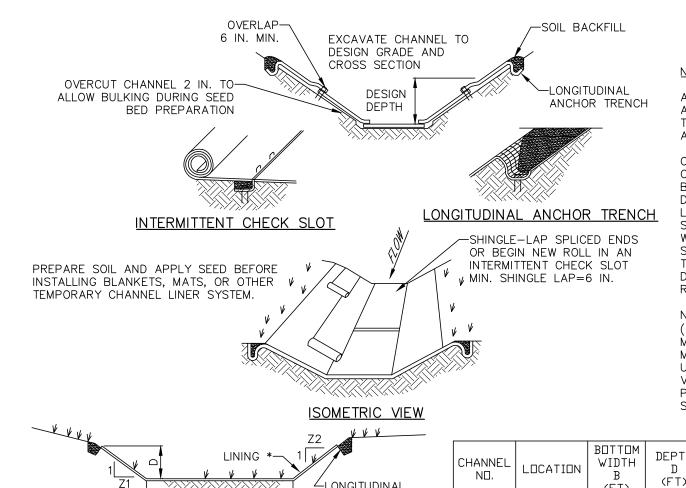
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULT-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULT-FILAMEN' POLYPROPYLEN (HDMFPP)		
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE		
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"		
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"		
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI		
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.		
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS		
	,	TWO-PL	SYSTEMS				
			HDPE BIAXIAL NET				
INNER CO	ONTAINMENT N	ETTING		CONTINUOUSLY WOUND FUSION-WELDED JUNCTURES			
			3/4" X 3/4" MAX. APERTURE SIZE				
OUTER FILTRATION MESH			COMPOSITE POLYPROPYLENE FABRIC				
			(WOVEN LAYER AND NO-WOVEN FLEECE				
			MECHANICALLY FUSED VIA NEEDLE PUNCH)				
SOCK FARRICS COMPOSED OF RURLAP MAY BE I			3/16"APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LES							

E 4.2 STANDARDS
25% - 100% (DRY WEIGHT BASIS)
FIBROUS AND ELONGATED
5.5 - 8.5
30% - 60%
30% - 50% PASS THROUGH 3/8" SIEVE
5.0 dS/m (mmhos/cm) MAXIMUM

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1, AS INDICATED. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2. 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.

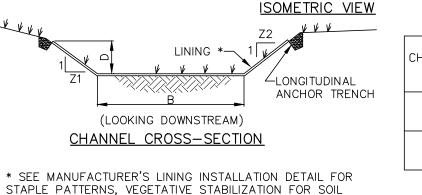
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. COMPOST FILTER SOCKS SHALL BE REPLACED AFTER THE MINIMUM FUNCTIONAL LONGEVITY, AS INDICATED IN TABLE 4.1, HAS PASSED. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STATES SHALL BE REMOVED. THE MESH SHALL BE CUT OPEN AND REMOVED. THE MULCH CAN BE SPREAD AS A SOIL SUPPLEMENT IN VEGETATED AREAS.

#### MODIFIED CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK



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

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.



AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

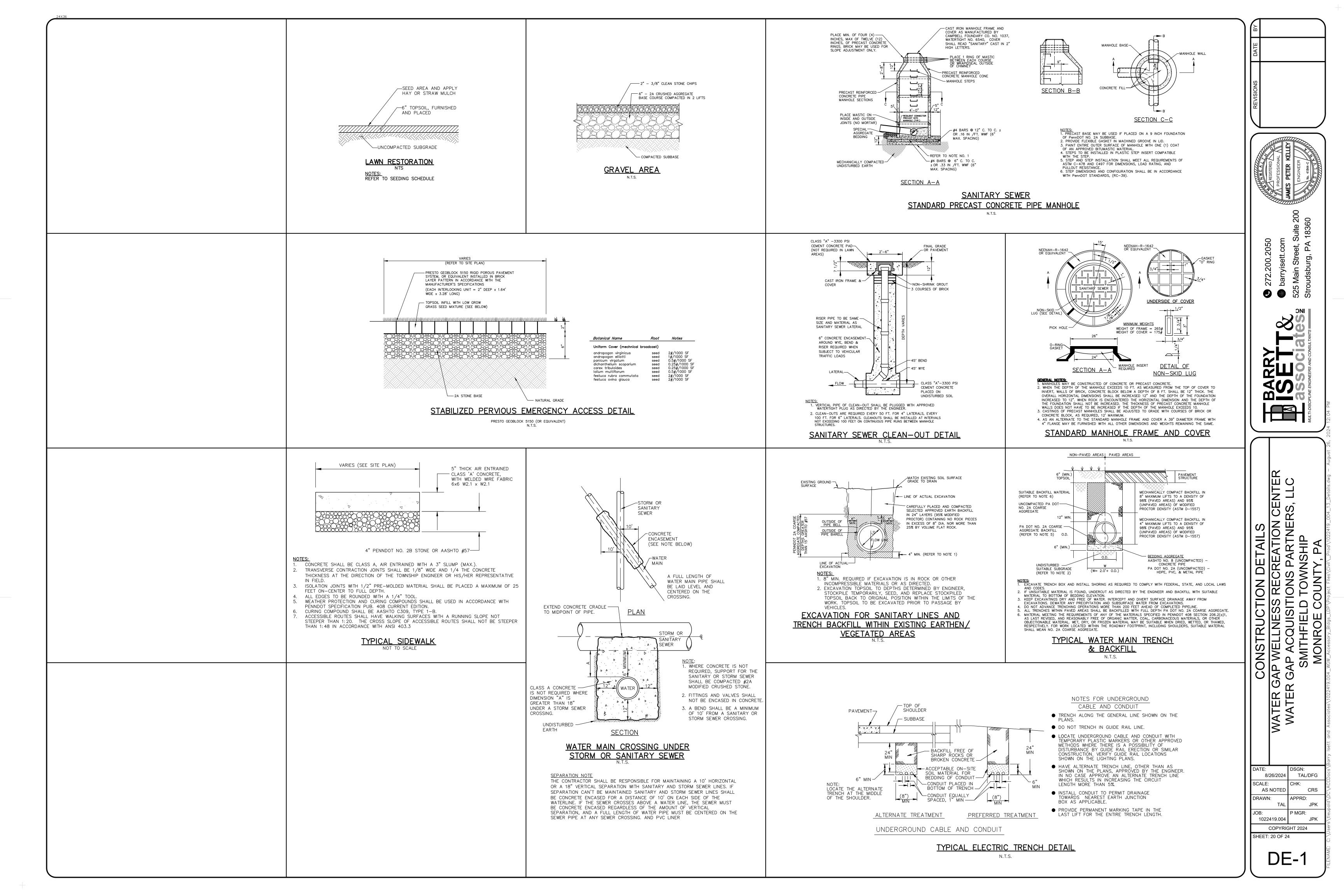
ANNEL ND.	LOCATION	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT )	Z2 (FT )	LINING *	STAPLE PATTER N
1	WEST OF BASIN	3	2	19	4	4	NAG-S75/ VEGETATE D	D
2	EAST DF BASIN	3	1.25	11	4	4	NAG-S75/ VEGETATE D	D

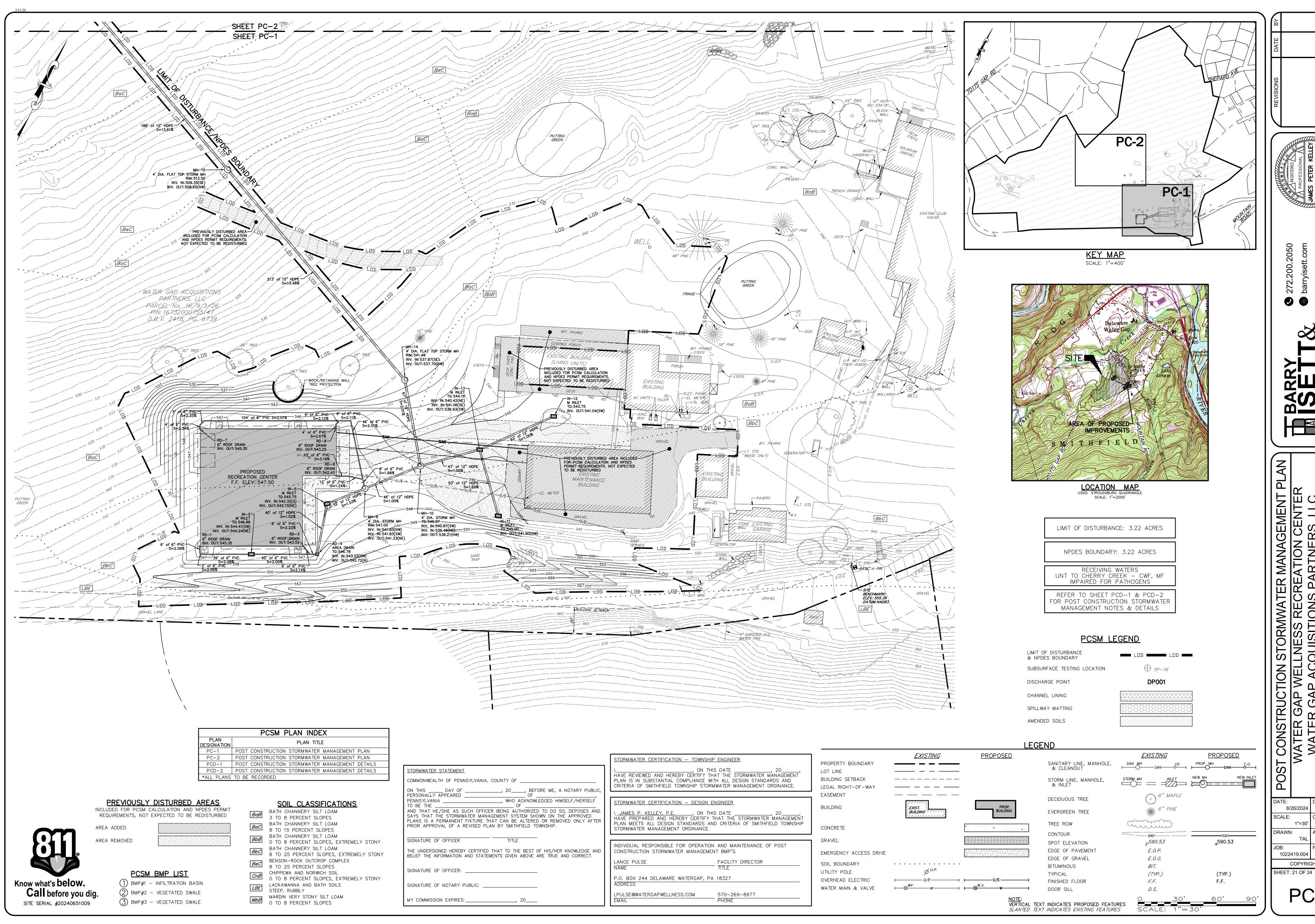
NOTE: PUMP ANY PONDING WATER ON SITE TO A PUMPED WATER FILTER BAG.

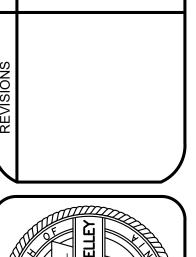
MODIFIED STANDARD CONSTRUCTION DETAIL #6-1 VEGETATED CHANNEL NOT TO SCALE

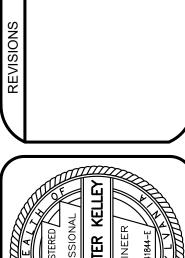
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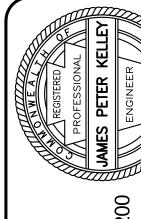
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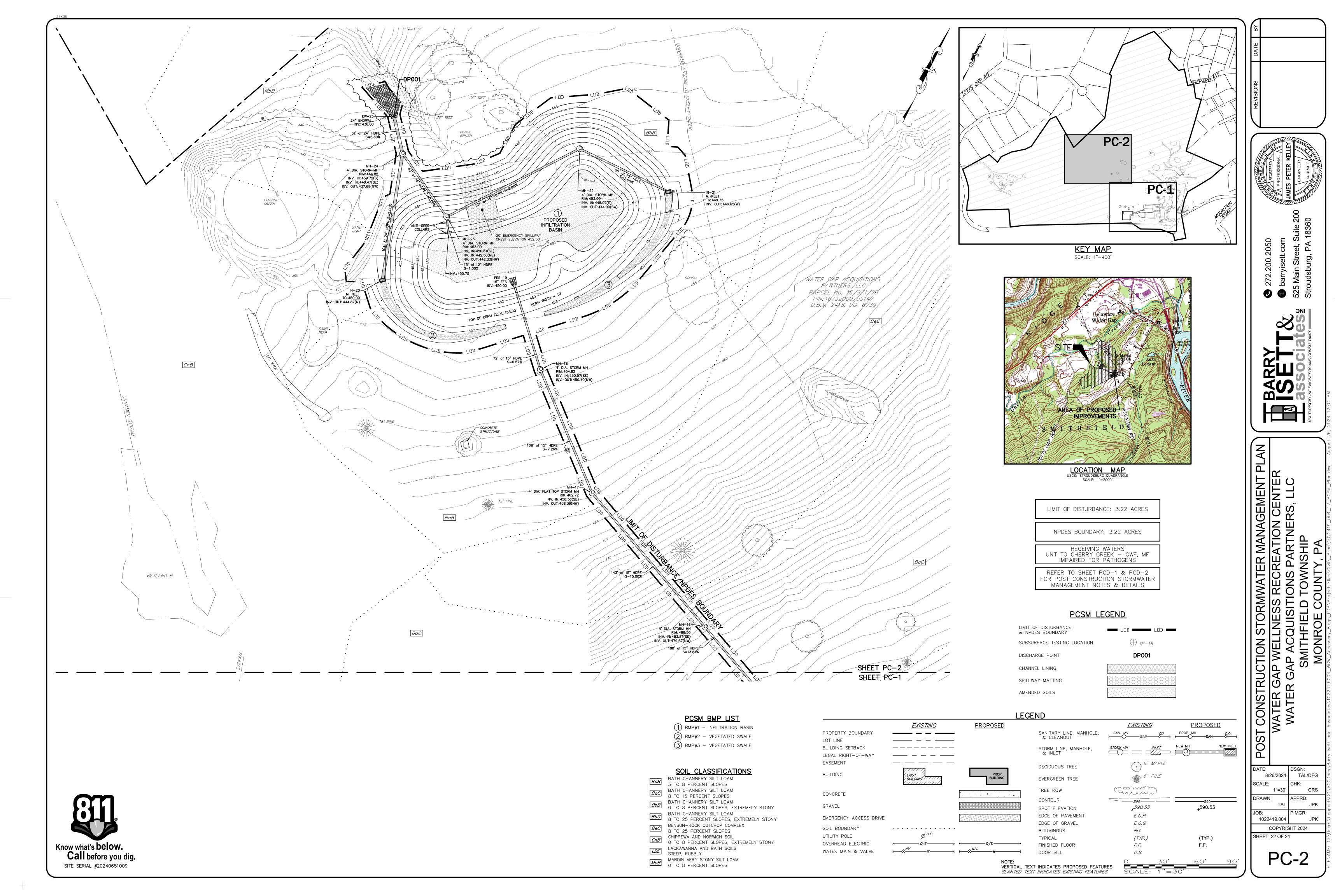




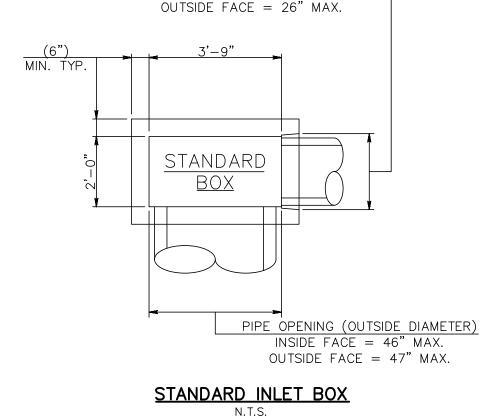




TAL/DFG 8/26/2024 1"=30' P MGR: 1022419.004 COPYRIGHT 2024



## TYPICAL STORM PIPE TRENCH & BACKFILL



PIPE OPENING (OUTSIDE DIAMETER)

INSIDE FACE = 25" MAX.

REFER TO PENNDOT RC-46M, LATEST EDITION FOR ADDITIONAL NOTES & REQUIREMENTS

# SRATE (STRUCTURAL STEEL SHOWN) SEE RC-45M) -TYPE M FRAME GRADE ADJUSTMENT RING.

D. CLEAR COVER FOR STEEL:

-TYPE M FRAME (CAST IRON SHOWN) (SEE RC-45M) -GRADE ADJUSTMENT RING. (SEE RC-45M) NOTES:
1. CONSTRUCTION REQUIREMENTS:

WALLS: PRE CAST 1'-1/2"

5/8" MIN.-

└-5/8″ MIN.

└1 1/4" MIN.

1 1/4" MIN¬

- A. CONSTRUCT IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 605, 606 AND 714; AND AS MODIFIED HEREIN. B. MINIMUM CONCRETE CLASS:
- PRE CAST CLASS AA C. PROVIDE STEEL REINFORCEMENT IN ACCORDANCE WITH PUBLICATION 408, SECTION 709, PROVIDE MINIMUM YIELD STRENGTH OF 400 MPa (60,000 PSI).

1'-1/2" BOTTOM BARS

TYPE 'C' INLET IS DESIGNATED FOR INSTALLATION WITH NON-MOUNTABLE CURBS.

1'-1/2" SIDE COVER

2. FLUSHING SHALL BE PERFORMED IF SEDIMENT FILLS THE LESSER OF 6" OR 15% OF THE SYSTEM HEIGHT

THE EDGE OF THE BED.

INSPECTION & MAINTENANCE NOTES

REPRESENTS THE RECOMMENDED MAINTENANCE EFFORTS:

EVENTS TO ENSURE PROPER FUNCTION.

SUBSURFACE INFILTRATION BED

BOTTOMS SHALL BE AT LEVEL GRADE.

GIVEN THE LIMITED ACCESS TO SUBSURFACE INFILTRATION BEDS, IT IS NEARLY IMPOSSIBLE TO

THEREFORE, PREVENTIVE MAINTENANCE IS EXTREMELY IMPORTANT. ALL RUNOFF CONVEYED TO

SEDIMENT, POLLUTANTS, AND/OR OTHER DEBRIS, ENTERS BED THEREBY MAXIMIZING THE BMP'S

ACCORDANCE WITH THIS PLAN. DOING SO SHOULD ENSURE ONLY CLEAN WATER, FREE OF

1. DUE TO THE NATURE OF CONSTRUCTION SITES, SUBSURFACE INFILTRATION SHALL BE

INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD

THE INFILTRATION FACILITIES SHALL BE FILTERED. FILTERS SHALL BE PROVIDED & MAINTAINED IN

INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER

THE PENNSYLVANIA EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL) DURING

THE EXISTING SUBGRADE UNDER THE BED AREAS SHALL NOT BE COMPACTED OR SUBJECT

SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE

UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR

EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHALL BE DONE BY HAND. ALL BED

4. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR

5. EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHALL BE LEFT IN PLACE DURING

EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVEN STABLE DURING

GEOTEXTILES AND BED AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF

SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILES SHALL BE

SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR

ADJACENT STRIPS OF GEOTEXTILE SHALL OVERLAP A MINIMUM OF 16 INCHES. IT SHALL BE

SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHALL REMAIN IN PLACE

SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO

MAXIMUM 8-INCH LIFTS. EACH LAYER SHALL BE LIGHTLY COMPACTED, WITH CONSTRUCTION

UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE

CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHALL BE PLACED IN THE BED IN

MAINTENANCE ACTIVITIES REQUIRED FOR THE SUBSURFACE BED ARE SIMILAR TO THOSE OF ANY

1. SYSTEM SHALL BE INSPECTED AT LEAST QUARTERLY DURING THE FIRST YEAR IN SERVICE

AND YEARLY AFTER THAT. INSPECTIONS SHALL ALSO BE PERFORMED AFTER MAJOR STORM

INFILTRATION SYSTEM AND FOCUS ON REGULAR SEDIMENT AND DEBRIS REMOVAL. THE FOLLOWING

8. DO NOT REMOVE EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY

EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.

PLACED IN ACCORDANCE WITH MANUFACTURERS STANDARDS AND RECOMMENDATIONS.

TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED

MAINTAIN OR REPAIR THE BMP AFTER CONSTRUCTION AND IN THE EVENT OF FAILURE.

GENERAL CONSTRUCTION NOTE:

CONSTRUCTION SEQUENCE:

CONSTRUCTION.

- FLUSHING SHALL BE PERFORMED BY PUMPING WATER INTO THE TANKS AND VACUUMING SEDIMENT LADEN WATER OUT OF THE SYSTEM EITHER THROUGH THE OUTLET STRUCTURE OR THROUGH THE FLUSH PORT
- 4. ALL CATCH BASINS AND INLETS SHALL BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.
- 5. THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHALL BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHALL BE PROHIBITED, AND CARE SHALL BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHALL BE CONSIDERED.
- 7. IN THE EVENT THAT THE INFILTRATION BEDS DO NOT INFILTRATE WITHIN 72 HOURS. THE OWNER SHALL CONTACT THE DESIGN ENGINEER AND THE BERKS COUNTY CONSERVATION DISTRICT TO DETERMINE THE APPROPRIATE COURSE OF ACTION.

#### POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM)

#### PERMIT TERMINATION

- UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER \ 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION
- THE NOTICE OF TERMINATION MUST INCLUDE:
- (1) THE FACILITY NAME, ADDRESS AND LOCATION.
- (2) THE OPERATOR NAME AND ADDRESS.
- (3) THE PERMIT NUMBER.
- (4) THE REASON FOR PERMIT TERMINATION.
- (5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH § 102.8(M) AND PROOF OF COMPLIANCE WITH § 102.8(M)(2).

PCSM REPORTING AND RECORDKEEPING. THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT

LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES. A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. THE CRITICAL STAGES MAY INCLUDE THE INSTALLATION OF UNDERGROUND TREATMENT OR STORAGE BMPS, STRUCTURALLY ENGINEERED BMPS, OR OTHER BMPS AS DEEMED APPROPRIATE BY THE DEPARTMENT OR THE

#### CONSERVATION DISTRICT.

FINAL CERTIFICATION. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL. WHICH READS AS FOLLOWS: II (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION

- (1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.
- (2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.

#### SOIL RESTORATION NOTES

- 1 REFORE THE TIME THE COMPOST IS PLACED AND PREFERABLY WHEN EXCAVATION IS COMPLETE. THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH. 2. TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL WILL BE REQUIRED
- WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED, AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED. SUB-SOILING SHALL BE PERFORMED B' THE PRIME OR EXCAVATING CONTRACTOR AND SHALL OCCUR BEFORE COMPOST PLACEMENT 3. SPREAD 2-3 INCHES OF APPROVED COMPOST ON EXISTING SOIL. TILL ADDED SOIL INTO EXISTING SOIL WITH ROTARY
- TILLER THAT IS SET TO A DEPTH OF 6 INCHES. ADD AN ADDITIONAL 4 INCHES OF APPROVED COMPOST TO BRING 4. AFTER PERMANENT PLANTING/SEEDING, 2-3 INCHES OF COMPOST BLANKET WILL BE APPLIED TO ALL AREAS NOT PROTECTED BY GRASS OR OTHER PLANTS.

MIX OF 75% TOPSOIL 25% COMPOST/LEAF MULCH/

SHREDDED WOOD MULCH BY VOLUME

FINISHED GRADE

- IN-SITU SOILS

SHALL BE SPACED A MAXIMUM OF 3 FEET APART.

NOT COMPACTED

BOTTOM WILL REQUIRE SOILS RESTORATION, AS FOLLOWS:

COMPACTED TOPSOIL/IN-SITU SOIL WITHIN THE BOTTOM OF THE BMP

SOILS RESTORATION SHALL TAKE PLACE ONLY WHEN THE SOIL IS DRY

SCARIFIED IN A 2-DIRECTIONAL GRID PATTERN. THE SCARIFIED GRID

THEN THE DISTURBED AREAS SHALL BE SEEDED AND MULCHED.

AMENDED SOILS DETAIL

IMMEDIATELY AFTER SCARIFYING IS COMPLETE, ADD AMENDED SOILS AND

THE SOIL SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES. SOIL SHALL BE

#### STORMWATER BMP CONSTRUCTION NOTES

- SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS, OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 2. TRASH THAT IS REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT AN APPROVED MUNICIPAL DISPOSAL AREA.
- ALL CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES

#### CRITICAL STAGES OF PCSM IMPLEMENTATION

CRITICAL STAGES OF POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN (PCSM) IMPLEMENTATION SHOULD BE OBSERVED AND/OR INSPECTED BY A LICENSED PROFESSIONAL OR DESIGNEE. THESE CRITICAL STAGES INCLUDE THE CONSTRUCTION OF CRITICAL BMPS AND ANY OTHER ACTIVITIES AS MAY BE REQUIRED BY THE DEP OR CONSERVATION DISTRICT. THESE CRITICAL BMPS INCLUDE:

- CONSTRUCTION OF INFILTRATION BASIN
- INSTALLATION OF AMENDED SOILS VERIFY TRIBUTARY AREAS
- A LICENSED PROFESSIONAL QUALIFIED TO OBSERVE AND INSPECT THE ABOVE SHOULD BE CONTACTED AT LEAST THREE (3) DAYS PRIOR TO EXECUTION OF ANY CRITICAL STAGES.

#### CONSTRUCTION, OWNERSHIP, OPERATIONS, & MAINTENANCE **PROCEDURES**

POST CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) AS PROPOSED HEREON, SHALL BE OWNED, OPERATED, AND MAINTAINED AS FOLLOWS:

LANCE PULSE, FACILITY DIRECTOR P.O. BOX 244 DELAWARE WATERGAP, PA. 18327

LPULSE@WATERGAPWELLNESS.COM 570-269-8977

OPERATIONS AND MAINTENANCE RESPONSIBILITIES SHALL BE TRANSFERRED TO ANY SUBSEQUENT OWNER(S). UPON TRANSFERENCE, PARTY CURRENTLY RESPONSIBLE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS PART OF THIS APPROVED PCSM PLAN TO

BMPS, AS PROPOSED, SHALL BE OPERATED & MAINTAINED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

#### PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPS ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. THE DEPARTMENT OR CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM

FOR ANY PROPERTY CONTAINING A PCSM BMP. THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP. PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(B)(5) (RELATING TO PERMIT TERMINATION

THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRIC NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.

A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY.

#### **CLEAN FILL NOTES**

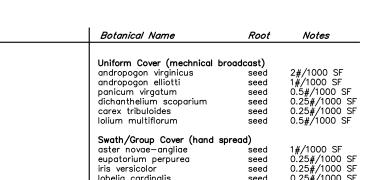
- 1. IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE. THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DÉTERMINATION OF CLEAN FILL WILL REST WITH (CONTRACTOR).
- 2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED
- S. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
- 4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
- 5. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
- 6. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

#### RECYCLING OR DISPOSAL OF MATERIALS

RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THIS PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH PA DEP RULES AND REGULATIONS. SEDIMENT REMOVED FROM BMPS AND STORMWATER FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES. ON-GOING PROJECT WASTES INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING:

SEDIMENT

VEGETATION CLIPPINGS AS MAY RESULT FROM MAINTENANCE



TASK	FREQUENCY
1. Inspect for sediment accumulation	Annually
2. Remove accumulated sediment	Every 5-10 years
3. Inspect for debris (dead vegetation and trash)	Early spring, fall and after major st
4. Inspect for bank erosion	Early spring, fall and after major st
5. Clear debris/repair erosion areas	As needed
6. Rake out dead vegetation	Annually, early spring
7. Inspect and remove invasive plants	Annually — July
8. Mow to a height of 6"	Annually — late fall
9. Inspect during wet weather and compare to as—built plans (by prof. engineer)	Annually
<ol> <li>Adjust/correct as determined by wet weather inspection</li> </ol>	As needed
11. Maintain records on all activities	Annually
12. Conduct emergency inspections by prof. engineer	As needed

MAINTENANCE: THE OWNER WILL MOW THE SWALES AND BASIN AREAS TO WITHIN 6 INCHES HIGH, ONCE A YEAR, IN THE FALL WHEN CONDITIONS PERMIT. THE OWNER SHALL MAINTAIN AND THAT MAY BE DEVELOPING. ANY DAMAGED AREAS SHALL BE REPAIRED IMMEDIATELY. ANY TRASH/DEBRIS SHALL BE REMOVED FROM PLANTINGS. ANNUALLY CHECK FOR INVASIVE PLANT SPECIES AND REMOVE TO ENCOURAGE A NATIVE PLANT SPECIES HABITA'

POST-CONSTRUCTION STORMWATER MANAGEMENT WATER QUALITY CONTROL SEED MIXTURE

1					
Botanical Name	Root	Notes			
Uniform Cover (mechnical	broadcast)				
andropogon virginicus	seed	2#/1000 SF			
andropogon elliotti	seed	1#/1000 SF			
panicum virgatum	seed	0.5#/1000 SF			
dichanthelium scoparium	seed	0.25#/1000 SF			
carex tribuloides	seed	0.25#/1000 SF			
lolium multiflorum	seed	0.5# <sup>/</sup> /1000 SF			
Swath/Group Cover (hand spread)					
aster novae-angliae	seed	1#/1000 SF			
eupatorium perpurea	seed	0.25#/1000 SF			
iris versicolor	seed	0.25#/1000 SF			
lobelia cardinalis	seed	0.25#/1000 SF			

TASK	FREQUENCY
1. Inspect for sediment accumulation	Annually
2. Remove accumulated sediment	Every 5-10 years
3. Inspect for debris (dead vegetation and trash)	Early spring, fall and after major storms
4. Inspect for bank erosion	Early spring, fall and after major storms
5. Clear debris/repair erosion areas	As needed
6. Rake out dead vegetation	Annually, early spring
7. Inspect and remove invasive plants	Annually — July
8. Mow to a height of 6"	Annually — late fall
9. Inspect during wet weather and compare to as-built plans (by prof. engineer)	Annually
<ol> <li>Adjust/correct as determined by wet weather inspection</li> </ol>	As needed
11. Maintain records on all activities	Annually
12. Conduct emergency inspections by prof. engineer	As needed

# TION STORMWATER MANAGEMENT D WELLNESS RECREATION CENTE AP ACQUISITIONS PARTNERS, LLC SMITHFIELD TOWNSHIP MONROE COUNTY, PA

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CONSTRUCTION S WATER GAP WEL WATER GAP AC

TAL/DFG 8/26/2024 CALE: AS NOTE DRAWN: JPK P MGR:

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#### FOOTINGS: PRE CAST 2' TOP BARS GRATE (STRUCTURAL STEEL SHOWN) (SEE RC-45M) 2. EACH TYPE OF INLET SHOWN IS SUITED FOR A PARTICULAR SITUATION AS FOLLOWS: TYPE 'M' INLET IS DESIGNATED FOR INSTALLATION IN MEDIAN AREAS AND MOUNTABLE CURBS. 3. THE SELECTION OF COMPONENTS TO ACHIEVE A SPECIFIED INLET ASSEMBLY IS THE CONTRACTORS RESPONSIBILITY. 4. USE PRE CAST CONCRETE OR STEEL GRADE ADJUSTMENT RINGS WHEN REQUIRED. (REHABILITATION PROJECTS) 5. FOR WALL REINFORCEMENT, BOTH DIRECTIONS, USE 10"MINIMUM EACH WAY, EACH FACE 6" MAXIMUM SPACING. 6. FOR FOOTING REINFORCEMENT, TOP AND BOTTOM, USE #4 BARS AT 12" CENTER EACH WAY OR 17"/M2 WWF 6" 7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN PARENTHESIS. 8. PROVIDE WEEP HOLE ON INLET BOXES WHEN REQUIRED. 9. PIPES MAY BE CONNECTED TO DRAINAGE STRUCTURES (PRE CAST INLETS. ETC.) WITH MORTAR OR WATERTIGHT SECTION A-A 1 3/4" o.c. (TYP.) 1/2" x 2 1/2" x 25" BAR

В —

TRANSVERSE RODS @

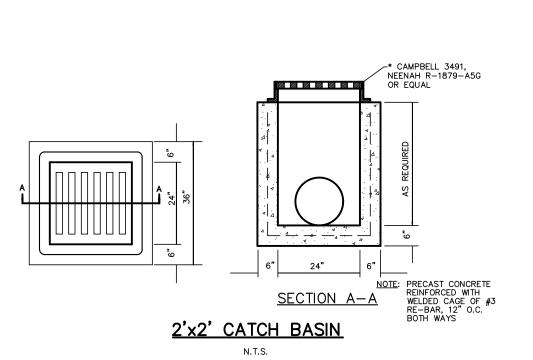
3/8" DIA x 46 1/4" ROD

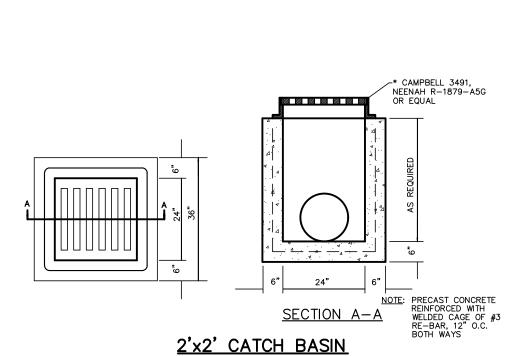
3 5/8" o.c. (TYP.)

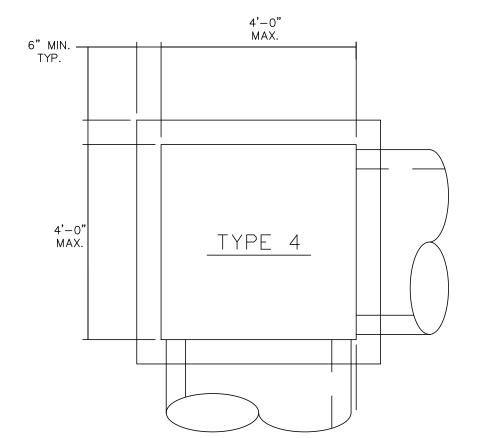
# SECTION B-B

#### STRUCTURAL STEEL GRATE BICYCLE SAFE

REFER TO PENNDOT RC-45M & RC-46M, LATEST EDITION







TYPE 4 (4'x4') INLET BOX

INSIDE DIRECTION

SECTION D-D

(STRUCTURAL STEEL)

# REFER TO PENNDOT RC-46M, LATEST EDITION

#### 53 3/4" MIN. 4" MIN. — <del>| □</del> 1 1/4" MIN<del>. = |=</del> <del>|=!</del> 5/8″ MIN. \_1 1/4″ MIN. <del>< →</del> 5/8" MIN. <del>|- -| 1</del>/2″ MIN.

INSIDE DIRECTION R=1/4" -

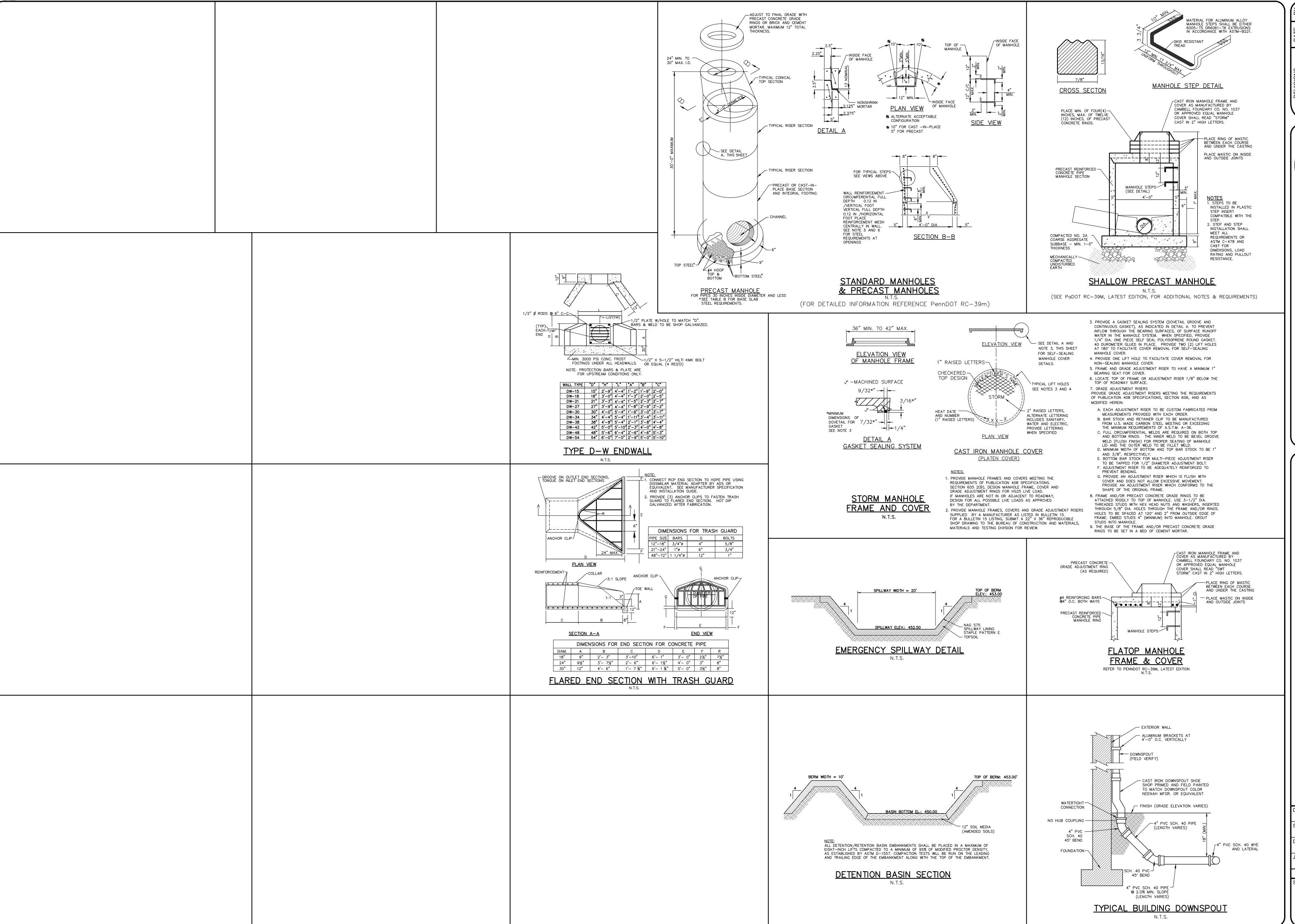
> SYMMETRICAL AB□UT € └-1/2″ MIN. \*CORNER CONFIGURATION DETAILS ARE THE FABRICATOR'S RESPONSIBILITY AND ARE APPROVED BY THE INSPECTOR. TYPE M FRAME TYPE M INLET FRAME

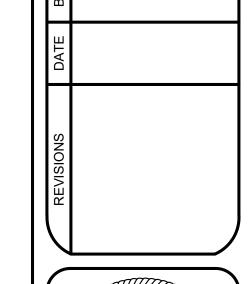
SECTION C-C

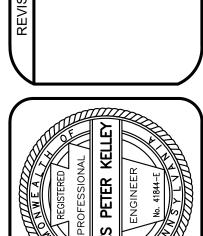
(FERROUS CAST MATERIAL)

REFER TO PENNDOT RC-45M, LATEST EDITION

└ 1 1/4" MIN.









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ME. CONSTRUCTION STORMWATER MANAGEMENT DE WATER GAP WELLNESS RECREATION CENTER WATER GAP ACQUISITIONS PARTNERS, LLC SMITHFIELD TOWNSHIP MONROE COUNTY, PA

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