PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 141 INDEPENDENCE LANE NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

GENERAL NOTES

BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY RETTEW ASSOCIATES INC. IN DECEMBER 2021

BENCHMARK: MAG NAIL SET IN MACADAM CUL-DE-SAC.

📭 a.DATUM: NAVD 88

- b.ELEV.: 292.69 BASIS OF BEARINGS IS PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, PA SOUTH ZONE, NAD 83-2011
- UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND WERE DETERMINED FROM VISIBLE LOCATION, PA ONE CALL UTILITY RESPONSES AND/OR BEST AVAILABLE PLAN INFORMATION. PA ONE CALL NOTIFICATION SERIAL NUMBER IS 20213472396, DATED DECEMBER 13, 2021. (RETTEW CANNOT GUARANTEE THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES. AN EXACT LOCATION CAN ONLY BE OBTAINED BY SUBSURFACE EXPLORATION, WHICH IS NOT A PART OF THIS CONTRACT PERFORMANCE)
- EASEMENT.
- NOTHING EXCEPT EROSION CONTROL AND/OR STORM WATER MANAGEMENT FACILITIES SHALL BE PLACED, PLANTED, OR PUT WITHIN THE AREA OF A
- THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITIES AT LEAST 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION. ALL UTILITIES HAVE BEEN IDENTIFIED BASED ON THE BEST AVAILABLE INFORMATION AND LISTED ON THESE PLANS IN ACCORDANCE WITH ACT 187 REQUIREMENTS THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND ALL EFFORTS SHALL BE UNDERTAKEN TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. RESTORATION OF ALL EXISTING SURFACE IMPROVEMENTS DAMAGED OR ALTERED DURING CONSTRUCTION, INCLUDING LANDSCAPING, SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR. (RETTEW CANNOT GUARANTEE THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES. AN EXACT LOCATION CAN ONLY BE OBTAINED BY SUBSURFACE EXPLORATION, WHICH IS NOT A PART OF THIS CONTRACT
- THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING THE SAFE FLOW OF TRAFFIC DURING CONSTRUCTION WITHIN THE SITE AND THE EXISTING ROAD RIGHT-OF-WAY WHILE ENTERING AND LEAVING THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS
- ALL STORM SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND TO THE STANDARDS OF THE
- THERE SHALL BE NO CHANGES OR DEVIATION FROM THESE PLANS UNLESS APPROVED BY THE TOWNSHIP ENGINEER. SUCH PLAN CHANGES, SHOULD THEY BECOME NECESSARY, ARE SUBJECT TO MUNICIPAL ORDINANCES.
-). THE CONTRACTOR SHALL INSPECT EXISTING SITE/PROJECT AREA CONDITIONS AND VERIFY ALL DIMENSIONS, QUANTITIES AND MATERIALS PRIOR TO
- THE DEVELOPER OR THE SUCCESSIVE LAND OWNER. NEW BRITAIN TOWNSHIP SHALL HAVE THE RIGHT TO INSPECT THE FACILITIES AT ANY TIME; REQUIRE THE OWNER TO TAKE CORRECTIVE MEASURES AND ASSIGN THE OWNER REASONABLE TIME PERIODS FOR ANY NECESSARY ACTION; AUTHORIZE MAINTENANCE TO BE DONE; AND LIEN ALL COST OF THE WORK AGAINST THE PROPERTIES OF THE OWNER RESPONSIBLE FOR
- . THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ALL PAVEMENT MARKINGS, STREET SIGNS, TRAFFIC DIRECTIONAL AND CONTROL SIGNS SHOWN ON THIS PLAN IN ACCORDANCE WITH APPLICABLE STATE OR MUNICIPAL REGULATIONS AND SPECIFICATIONS. ALL SIGNAGE SHALL BE CONSISTENT WITH EXISTING SIGNAGE WITHIN NEW BRITAIN TOWNSHIP.
- 3. NEW BRITAIN TOWNSHIP SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OR MAINTENANCE OF ANY AREA NOT DEDICATED FOR THE PUBLIC
- 4. ANY FURTHER EXPANSION OF THE SITE WOULD REQUIRE THE FILING OF A REVISED LAND DEVELOPMENT PLAN.
- 5. CONSTRUCTION OVERSIGHT OF THE INSTALLATION OF THE STORMWATER MANAGEMENT FACILITY IS REQUIRED BY A QUALIFIED PROFESSIONAL GEOLOGIST REGISTERED IN THE COMMONWEALTH PENNSYLVANIA.
- S. AFTER CONSTRUCTION, THE OWNER SHALL MONITOR THE SITE FOR POTENTIAL SINKHOLE ACTIVITY. IN THE EVENT THAT A SINKHOLE OCCURS, THE OWNER SHALL IMMEDIATELY CONTACT THE TOWNSHIP AND ARRANGE FOR A QUALIFIED PROFESSIONAL GEOLOGIST REGISTERED IN THE COMMONWEALTH PENNSYLVANIA TO MAKE THE APPROPRIATE REMEDIATION.
- . A "SITE EVALUATION FOR STORMWATER INFILTRATION" REPORT DATED 01/07/2022, WAS PREPARED BY RETTEW ASSOCIATES
- B. THE STORMWATER MANAGEMENT AGREEMENT RECORDED AS PART OF THIS PLAN, FURTHER INDICATES THE REQUIRED RESPONSIBILITIES OF OWNERSHIF AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES.
- 9. THE DEVELOPER SHALL BE RESPONSIBLE FOR COMPLETING A RECORD SURVEY OF ALL STORMWATER MANAGEMENT FACILITIES INCLUDED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE RECORD SURVEY AND EXPLANATION OF ANY DISCREPANCIES WITH THE DESIGN PLANS SHALL BE SUBMITTED TO THE TOWNSHIP OR ITS DESIGNEE FOR FINAL APPROVAL.
- O. THIS PLAN WAS DESIGNED UNDER THE NEW BRITAIN TOWNSHIP ZONING ORDINANCE OF 1995, THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF 2002 AND THE NEW BRITAIN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE, ADOPTED MAY 7, 2014, ORDINANCE
- 21. ANY/ALL SIGNAGE WILL ULTIMATELY NEED TO BE APPROVED BY THE NEW BRITAIN TOWNSHIP ZONING OFFICER.
- 22. DEVELOPER SHALL CONTACT THE INSPECTING ENGINEER TO COORDINATE THE CONSTRUCTION OBSERVATION SCHEDULE AND RELATED DETAILS. 23. THE APPLICANT MUST SCHEDULE CONSTRUCTION INSPECTIONS FOR ALL STORMWATER MANAGEMENT FACILITIES WITH THE TOWNSHIP.
- 24. AT THE COMPLETION OF THE PROJECT, AND AS PREREQUISITE FOR THE RELEASE OF THE FINANCIAL SECURITY. THE APPLICANT SHALL PROVIDE CERTIFICATION OF COMPLETION FROM AN ENGINEER, LANDSCAPE ARCHITECT, SURVEYOR OR OTHER QUALIFIED PERSON VERIFYING THAT ALL PERMANENT SWM FACILITIES HAVE BEEN CONSTRUCTED ACCORDING TO THE PLANS AND SPECIFICATIONS AND APPROVED REVISIONS THERETO.
- 25. UPON RECEIPT OF THE CERTIFICATE OF COMPLETION, AND PRIOR TO RELEASE OF THE REMAINING FINANCIAL SECURITY THE TOWNSHIP SHALL CONDUCT A FINAL INSPECTION TO CERTIFY COMPLIANCE WITH THIS ORDINANCE.
- 26. A WETLANDS INVESTIGATION WAS COMPLETED ON 9/14/2021, NO STREAMS WERE FOUND, BUT ONE WETLAND WAS PRESENT ON SITE.
- 27. A BLANKET EASEMENT IS HEREBY GRANTED TO THE TOWNSHIP AND THEIR REPRESENTATIVES TO PERFORM REQUIRED INSPECTIONS AND MAINTENANCE OF STORMWATER CONVEYANCE, DETENTION/RETENTION, AND ALL OTHER ASSOCIATED STORMWATER IMPROVEMENTS.
- 28. THE ACCESS DRIVEWAY WILL NEED TO BE MODIFIED IN ORDER TO ACCOMMODATE THE INSTALLATION OF THE NEW STREET IF AND WHEN
- CONSTRUCTED THROUGH THE EXISTING 50' WIDE ROAD RIGHT-OF-WAY EASEMENT. 29. RETAINING WALL DESIGN PLANS, SPECIFICATIONS, AND DETAILS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER SHALL BE PROVIDED WITH THE

BUILDING PERMIT APPLICATION.

- HE FOLLOWING NOTES PERTAIN TO ALL PROPOSED CONSTRUCTION METHODS, MATERIALS, STRUCTURES AND FACILITIES WITHIN NEW BRITAIN TOWNSHIP. HESE CONSTRUCTION NOTES, IN A SIMILAR FORMAT, MUST BE PROVIDED ON THE RECORD PLAN. THE APPLICANT SHOULD MODIFY THE CONSTRUCTION NOTES OR PROVIDE ADDITIONAL NOTES, AS NECESSARY, WHEN THE DESIGN METHODS AND STANDARDS ARE NOT SPECIFICALLY STATED. IN NEW BRITAIN TOWNSHIP'S ZONING OR SUBDIVISION AND LAND DEVELOPMENT ORDINANCES, THE FOLLOWING SHALL APPLY TO ALL CONSTRUCTION ACTIVITIES.
- 1. ALL CONSTRUCTION METHODS AND MATERIALS MUST COMPLY WITH THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408,
- 2. ALL PROPOSED STRUCTURES AND FACILITIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 72, "ROAD CONSTRUCTION STANDARDS", LATEST REVISION.
- ALL PROPOSED STREETS, ACCESS DRIVES, DRIVEWAYS AND UTILITIES SHALL COMPLY WITH THE PENNSYLVANIA CODE, TITLE 67, CHAPTER 441, "ACCESS TO AND OCCUPANCY OF HIGHWAYS BY DRIVEWAYS AND LOCAL ROADS", AND CHAPTER 459, "OCCUPANCY OF HIGHWAYS BY UTILITIES",
- 4. ALL PROPOSED STRUCTURES AND FACILITIES MUST COMPLY WITH THE AMERICANS WITH DISABILITY ACT, "ACCESSIBILITY GUIDELINES FOR BUILDINGS 5. ALL PROPOSED WATER AND SEWER FACILITIES MUST COMPLY WITH THE STANDARDS AND POLICIES OF THE APPLICABLE WATER AUTHORITY, SEWER
- AUTHORITY, SEWER AUTHORITY, BUCKS COUNTY HEALTH DEPARTMENT, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND NEW
- ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION ACTIVITIES ARE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND POLICIES OF THE BUCKS COUNTY CONSERVATION DISTRICT.
- 7. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION ACTIVITIES ARE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND POLICIES OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- 8. ALL CONTRACTS SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL UTILITIES AND COMPLYING WITH THE PENNSYLVANIA ACT 38 AND ACT
- 9. ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND. 10. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, No. 287, 12/10/72, AS AMENDED 12/12/86,
- P.L. 1574, No. 172. CONTRACTOR MUST NOTIFY PA-1 CALL SYSTEM, INC. 3 DAYS PRIOR TO CONSTRUCTION. 11. CONTRACTOR SHALL NOT ENCROACH ONTO ABUTTING PROPERTIES UNLESS A TEMPORARY CONSTRUCTION EASEMENT HAS BEEN GRANTED BY ADJOINING PROPERTY OWNER. CONTRACTOR SHALL HAVE PROPERTY LINES CLEARLY MARKED IN AREAS WHERE GRADING WILL ENCROACH WITHIN 5 FEET OF THE PROPERTY LINE AND SHALL CONSTRUCT SUCH BARRIERS WHICH ARE NECESSARY TO PREVENT ENCROACHMENT ONTO ADJACENT
- 12. NO EXCAVATION OR FILL SHALL BE MADE WITH A FACE STEEPER THAN 2.5 HORIZONTAL TO 1 VERTICAL

NEW BRITAIN TOWNSHIP ENGINEER REVIEW CERTIFICATION

REVIEWED BY THE NEW BRITAIN TOWNSHIP ENGINEER

TOWNSHIP ENGINEER

BCPC NO. <u>12694</u> PROCESSED AND REVIEWED. REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISS ACCORDANCE WITH THE PA MUNICIPALITIES PLANNING CODE.	SIC
CERTIFIED THIS DATE:	

CERTIFICATIONS

CERTIFICATION OF SURVEY ACCURACY I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

CERTIFICATION OF PLAN ACCURACY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

STORM WATER MANAGEMENT PLAN CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE STORM DRAINAGE FACILITIES SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH THE NEW BRITAIN TOWNSHIP STORM WATER MANAGEMENT ORDINANCE

WETLAND DELINEATION CERTIFICATION

MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE WETLAND RELATED INFORMATION CONTAINED ON THIS PLAN IS TRUE AND CORRECT AND HAS BEEN DELINEATED IN ACCORDANCE WITH ACCEPTED WETLAND DELINEATION PRACTICES BASED ON THE 2087 WETLAND DELINEATION MANUAL AND IS IN CONFORMANCE WITH CHAPTER 105 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES.

(NAME) CERTIFIED PROFESSIONAL WETLAND SCIENTIST

CORPORATION

COMMONWEALTH OF PENNSYLVANIA COUNTY OF BUCKS

__ DAY OF ____. __, 20__ BEFORE ME, THE UNDERSIGNED OFFICER. PERSONALLY APPEARED BEING A MEMBER OF 180 NEW BRITAIN BLVD MANAGER, LLC, THE MANAGER OF 180 NEW BRITAIN BLVD ASSOCIATES, LLC, A PENNSYLVANIA LIMITED LIABILITY COMPANY, WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THAT THE CORPORATION IS THE

LIMITED LIABILITY COMPANY IS THE FEE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT HE/SHE IS AUTHORIZED TO EXECUTE SAID PLAN ON BEHALF OF THE LIMITED LIABILITY COMPANY, THAT THE PLAN IS THE ACT AND DEED OF THE LIMITED LIABILITY COMPANY, THAT THE LIMITED LIABILITY COMPANY DESIRES THE SAME TO BE RECORDED, AND ON BEHALF OF THE LIMITED LIABILITY COMPANY FURTHER ACKNOWLEDGES THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION") ARE HEREBY DEDICATED TO THE PUBLIC USE.

(TITLE) (SIGNATURE)

(NOTARY PUBLIC)

STORM WATER MANAGEMENT FACILITIES CERTIFICATION

A STATEMENT, SIGNED BY THE FACILITY OWNER, ACKNOWLEDGING THAT THE STORMWATER FACILITIES AND BMP'S ARE FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY THE MUNICIPALITY.

RECORDER OF DEEDS CERTIFICATE

RECORDED IN THE OFFICE FOR RECORDING OF DEEDS, IN AND FOR BUCKS COUNTY, PENNSYLVANIA, IN SUBDIVISION PLAN BOOK _____, VOLUME _____ ______ WITNESS MY HAND AND SEAL OF OFFICE THIS _____ DAY OF

NEW BRITAIN TOWNSHIP'S BOARD OF SUPERVISORS FINAL PLAN APPROVAL CERTIFICATE

THIS PLAN WAS APPROVED BY THE NEW BRITAIN BOARD OF SUPERVISORS THIS ____ DAY

EQUITABLE OWNER/DEVELOPER

101 INDEPENDENCE LANE ASSOCIATES, LLC GABE CLARK, PARTNER ONE TOWER BRIDGE 100 FRONT STREET, SUITE 560

141 REALTY, LP PARCEL ID 26-001-100-011 INST. 2014066017 P.B. 256, PG. 28, LOT 15

SOURCE OF TITLE

SITE DATA

WEST CONSHOHOCKEN, PA 19428

LOT AREA 5.731 ACRES EXISTING USE VACANT K3 WAREHOUSE (PERMITTED BY RIGHT) PROPOSED USE TOTAL NO. OF LOTS 1 (EXISTING) PROPOSED WATER SUPPLY PUBLIC SANITARY SEWER SERVICE **PUBLIC**

SITE CAPACITY CALCULATIONS

	AREA (AC)
GROSS SITE AREA DETERMINED BY ACTUAL ON-SITE SURVEY	7.071
EXISTING STREETS ULTIMATE RIGHTS-OF-WAY	0
EXISTING UTILITY ULTIMATE RIGHTS-OF-WAY OR EASEMENT	1.30*
EXISTING PRESERVATION EASEMENTS	0
LAND NOT CONTIGUOUS	0
LAND SHOWN ON PREVIOUS SUBDIVISION RESERVED FOR OPEN SPACE, PROTECTION, ECT	0
LAND IN A DIFFERENT ZONING DISTRICT FROM PRIMARY USE	0
100% PROTECTED NATURAL RESOURCES	0.04
BASE SITE AREA	5.731
*PORTIONS OF THE STORMWATER MANAGEMENT, DRIVEWAY AND ROAD RIGHT-OF-WAY EASEMENT OVERLAP THER TOTAL EXISTING EASEMENT CALCULATION, DIFFERS FROM THE INDIVIDUAL TOTALS TO ACCOUNT FOR THE OVERLAP	•

ZONING DATA 10 - INDUSTRIAL OFFICE	REQUIRED	PROPOSED
MINIMUM LOT AREA	3 ACRES	5.731 ACRES
MINIMUM LOT WIDTH	200 FT.	556 FT.
MINIMUM LOT DEPTH	200 FT.	356 FT.
FRONT BUILDING SETBACK	50 FT.	131 FT.
SIDE BUILDING SETBACK	25 FT.	100 FT.
REAR BUILDING SETBACK	50 FT.	62 FT.
MAXIMUM BUILDING HEIGHT	35 FT.	42 FT.*
MAXIMUM BUILDING COVERAGE	50%	35.41%
MAXIMUM IMPERVIOUS COVERAGE REQUIRED PARKING	65%	63.82%

- VARIANCE GRANTED 04/21/22 ALLOWING PARKING AT LESS THAN ONE SPACE PER 500 SF *** VARIANCE GRANTED 04/21/22 ALLOWING PAVED AREAS WITHIN 20' FROM EXTERIOR STRUCTURAL
- WALL OF AN INDUSTRIAL BUILDING.

BASE SITE CALCULATIONS

- 1. GROSS SITE AREA AS DETERMINED BY AN ON-SITE BOUNDARY SURVEY 7.071 ACRES 2. SUBTRACT LAND WITHIN THE ULTIMATE RIGHT-OF-WAY OF EXISTING ROADS; - 1.300 ACRES WITHIN EXISTING UTILITY RIGHTS-OF-WAY OR EASEMENTS; AND/OR WHICH HAS BEEN PRESERVED THROUGH EASEMENT OR OTHER MEANS. 3. SUBTRACT LAND WHICH IS NOT CONTIGUOUS, I.E.:
- (A) A SEPARATE PARCEL WHICH DOES NOT ABUT OR ADJOIN, NOR SHARE - 0.000 ACRES COMMON BOUNDARIES WITH, THE REST OF THE DEVELOPMENT; AND/OR
- (B) LAND WHICH IS CUT OFF FROM THE MAIN PARCEL BY A ROAD, RAILROAD, 0.000 ACRES EXISTING LAND USE, AND/OR MAJOR STREAM, SO AS TO SERVE AS A MAJOR BARRIER TO COMMON USE AND/OR SO THAT IT IS ISOLATED AND
- UNAVAILABLE FOR BUILDING PURPOSES. 4. SUBTRACT LAND WHICH, IN A PREVIOUSLY APPROVED SUBDIVISION, WAS SET - 0.000 ACRES

REQUIRED

PROVIDED

- ASIDE, RESERVED, AND/OR RESTRICTED FOR OPEN SPACE, NATURAL RESOURCE PROTECTION, AND/OR RECREATION PURPOSES. 5. SUBTRACT LAND USED FOR ANOTHER USE (I.E. LAND WHICH IS USED OR TO BE - 0.000 ACRES
- USED, FOR COMMERCIAL OR INDUSTRIAL USES IN A RESIDENTIAL DEVELOPMENT) OR LOCATED IN A DIFFERENT ZONING DISTRICT THAN THE REST OF THE DEVELOPMENT BASE SITE AREA 5.771 ACRES

NATURAL RESOURCE CALCULATIONS

NATURAL RESOURCES	PROTECTION RATIO	IN RESOURCES (AC)	RESOURCE PROTECTION LAND (AC)	RESOURCE PROTECTION LAND (AC)
WATERCOURSES	1.0	0.00	0.00	0.00
RIPARIAN BUFFER	1.0	0.00	0.00	0.00
FLOODPLAIN	1.0	0.00	0.00	0.00
FLOODPLAIN (ALLUVIAL) SOILS	1.0	0.00	0.00	0.00
WETLANDS	1.0	0.04	0.04	0.04
LAKES OR PONDS	1.0	0.00	0.00	0.00
WETLANDS MARGINS	0.80	0.16	0.13	0.13
WOODLANDS	0.50	1.31	0.655	0.675
STEEP SLOPES 8-15%	0.60	0.00*	0.00*	0.00*
STEEP SLOPES 15-25%	0.70	0.00*	0.00*	0.00*
STEEP SLOPES 25% OR MORE	0.85	0.00*	0.00*	0.00*

TOTAL LAND WITH RESOURCE RESTRICTIONS 1.51 TOTAL LAND WITH 1.00 PROTECTION RATIO 0.04 TOTAL RESOURCE PROTECTION LAND REQUIRED 0.825 TOTAL RESOURCE PROTECTION LAND PROVIDED 0.845 TOTAL DISTURBED RESOURCES

- OPEN SPACE = THE TOTAL OF RESOURCE PROTECTION LAND WITH A 1.00 PROTECTION RATIO = 0.04
- NET BUILDABLE SITE AREA = BASE AREA REQUIRED OPEN SPACE = 5.771 0.04 = 5.731 AC
- * THERE ARE MANMADE SLOPES GREATER THAN 8% ON SITE BUT DUE TO THE SLOPES BEING MANMADE THEY ARE NOT INCLUDED IN THE NATURAL RESOURCE CALCULATIONS.

ZONING – VARIANCE

1. SECTION 27-1802.a. - TO PERMIT THE PROPOSED BUILDING TO BE 42 FEET

GRANTED: PUBLIC HEARING ON APRIL 21, 2022; SEE CONDITIONS BELOW.

2. SECTION 27-2901.K. - TO PERMIT NO LESS THAN 53 OFF-STREET PARKING SPACES ON THE PROPERTY IN CONNECTION WITH A WAREHOUSE USE (K3) ONT

GRANTED: PUBLIC HEARING ON APRIL 21, 2022; SEE CONDITIONS BELOW. 3. SECTION 27-2904.q.5. - TO PERMIT THE PAVED AREAS OF THE FRONT PARKING LOT TO BE 9.3 FEET FROM EXTERIOR FRONT STRUCTURAL WALL OF THE

GRANTED: PUBLIC HEARING ON APRIL 21, 2022; SEE CONDITIONS BELOW.

1. THE PROPERTY'S AND THE PROPOSED BUILDING'S DIMENSIONS, SIZE, LOCATION AND APPEARANCE SHALL BE IN ACCORDANCE WITH AMENDED DEFINITIVE PLANS (EXHIBITS A-5 AND A-6), REPRESENTATIONS, EXHIBITS AND CREDIBLE TESTIMON MADE AND SUBMITTED AT THE HEARING.

THE RELIEF GRANTED ABOVE IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 2. THE APPLICANT SHALL PROVIDE A MINIMUM OF 53 OFF-STREET PARKING SPACE
- 3. THE PLAN FOR THE PROPOSED NON-RESIDENTIAL BUILDING SHALL BE DESIGNED SO AS TO COMPLY WITH ALL THE REASONABLE REQUIREMENTS OF THE NEW BRITAIN TOWNSHIP FIRE MARSHAL
- 4. THIS DECISION DOES NOT WAIVE ANY REQUIREMENTS OF ANY OTHER APPLICABLE NEW BRITAIN TOWNSHIP ORDINANCE(S); AND THE PROPOSED USE(S) AN/OR IMPROVEMENT(S) MUST MEET ALL OTHER APPLICABLE FEDERAL, STATE, COUNTY AND NEW BRITAIN TOWNSHIP REGULATIONS AND CODES.

IMPERVIOUS SURFACE CALCULATION

BASE SITE AREA 5.731 ACRES

MULTIPLY BY MAXIMUM IMPERVIOUS SURFACE RATIO X 0.65

MAXIMUM PERMITTED IMPERVIOUS SURFACE = 3.725 ACRES (162,267 S.F.) PROPOSED IMPERVIOUS SURFACE=3.658 ACRES (159,379 S.F.)

BUILDING = 88,250 S.FSIDEWALK = 1,663 S.F.

LOADING DOCK AND DUMPSTER AREA = 15,890 S.F. PAVING = 53,576 S.F.TOTAL= 159,379 S.F.

REQUESTED WAIVERS

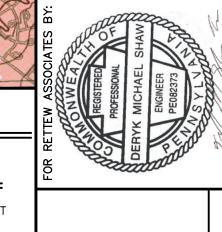
AVERAGE: MINIMUM RATIO.

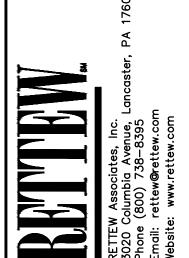
- 1. SECTION 22-403 PRELIMINARY PLAN SUBMISSION AND REVIEW PROCEDURE a. RELIEF REQUESTED: WE REQUEST A WAIVER OF THIS SECTION TO ALLOW THE
- PROJECT TO BE REVIEWED AS A COMBINED PRELIMINARY/FINAL PLAN. 2. SECTION 22-502.1.D.10.A - CONTOUR LINES MEASURED AT VERTICAL INTERVALS OF TWO FEET. AS DETERMINED BY AN ON—SITE FIELD SURVEY. NOT INTERPRETATION OF UNITED STATES GEOLOGIC SERVICE (USGS) MAPS. THE PLANS SHALL INDICATE THE BENCHMARK ELEVATION AND THE LOCATION AND SHALL BE BASED ON THE CHALFONT—NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY VERTICAL DATUM.
- a. RELIEF REQUESTED: WAIVER FROM THE REQUIREMENT TO USE THE CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY VERTICAL DATUM. 3. SECTION 22-705.3.G - WHERE A LAND DEVELOPMENT ABUTS OR CONTAINS AN EXISTING
- STREET, THE APPLICANT SHALL BE REQUIRED TO MILL AND OVERLAY THE ENTIRE WIDTH OF THE ROADWAY A DEPTH OF 1 1/2 INCHES. a. RELIEF REQUESTED: WAIVER FROM THE REQUIREMENT TO MILL AND OVERLAY THE ENTIRE WIDTH OF THE ROADWAY TO A DEPTH OF 1 1/2 INCHES.
- 4. SECTION 22-505. COMMUNITY IMPACT ASSESSMENT REPORT. a. RELIEF REQUESTED: WAIVER FROM PROVIDING A COMMUNITY IMPACT ASSESSMENT
- 5. SECTION 22-716.2.D REQUIRING CONCRETE MONUMENTS PLACED AT THE BEGINNING AND END OF ALL EASEMENTS, INCLUDING CHANGES IN DIRECTION OF EASEMENT. a. RELIEF REQUESTED: WAIVER TO PROVIDE CONCRETE MONUMENTS AT ALL EASEMENTS. 6. SECTION 22-705.3.A- REQUIRING GRASS STRIP BETWEEN CURB AND SIDEWALK.
- a. RELIEF REQUESTED: WAIVER FROM PROVIDING 3-6-FOOT GRASS STRIP BETWEEN THE CURB AND SIDEWALK. 7. SECTION 22-714.7 - ILLUMINATION LEVELS SHALL HAVE INTENSITIES AND UNIFORMITY RATIOS IN ACCORDANCE WITH CURRENT RECOMMENDED IESNA STANDARDS. NONRESIDENTIAL PARKING, LOADING FACILITIES AND DRIVES ASSOCIATED WITH INDUSTRIAL USES SHALL DEMONSTRATE MAINTAINED FOOTCANDLES OF 0.4 MINIMUM AND A 4:1
- a. RELIEF REQUESTED: PARTIAL WAIVER TO ALLOW AN AVERAGE: MINIMUM RATIO EXCEEDING 4:1 IN THE TRUCK LOADING DOCK AREA

25 OF 25. PCSM DETAILS

LIST OF DRAWINGS	ALL SHEETS TO BE RECORDE
1 OF 25 COVER SHEET	
2 OF 25 EXISTING CONDITIONS/DE	EMOLITION PLAN
3 OF 25 AERIAL MAP	
4 OF 25 LAYOUT PLAN	
5 OF 25 TRUCK TURNING MOVEM	
6 OF 25 FIRE TRUCK TURNING M	OVEMENTS
7 OF 25 GRADING PLAN	
8 OF 25 GRADING ENLARGEMENT	PLAN
9 OF 25 UTILITY PLAN	
10 OF 25 LANDSCAPE & LIGHTING	PLAN
11 OF 25 UTILITY PROFILES	
12 OF 25 EASEMENT PLAN	
13 OF 25 SITE/UTILITY DETAILS	
14 OF 25 SITE/UTILITY DETAILS	
15 OF 25 SITE/UTILITY DETAILS	
16 OF 25 SITE/UTILITY DETAILS	
17 OF 25 SITE/UTILITY DETAILS	
18 OF 25 SITE/UTILITY DETAILS	CONTROL DI ANI
19 OF 25 EROSION & SEDIMENT C	
20 OF 25 EROSION & SEDIMENT C	
21 OF 25 EROSION & SEDIMENT C	
22 OF 25 EROSION & SEDIMENT C	ONTROL DETAILS
23 OF 25 PCSM PLAN	
24 OF 25 PCSM NOTES & DETAILS	•

LOCATION MAP

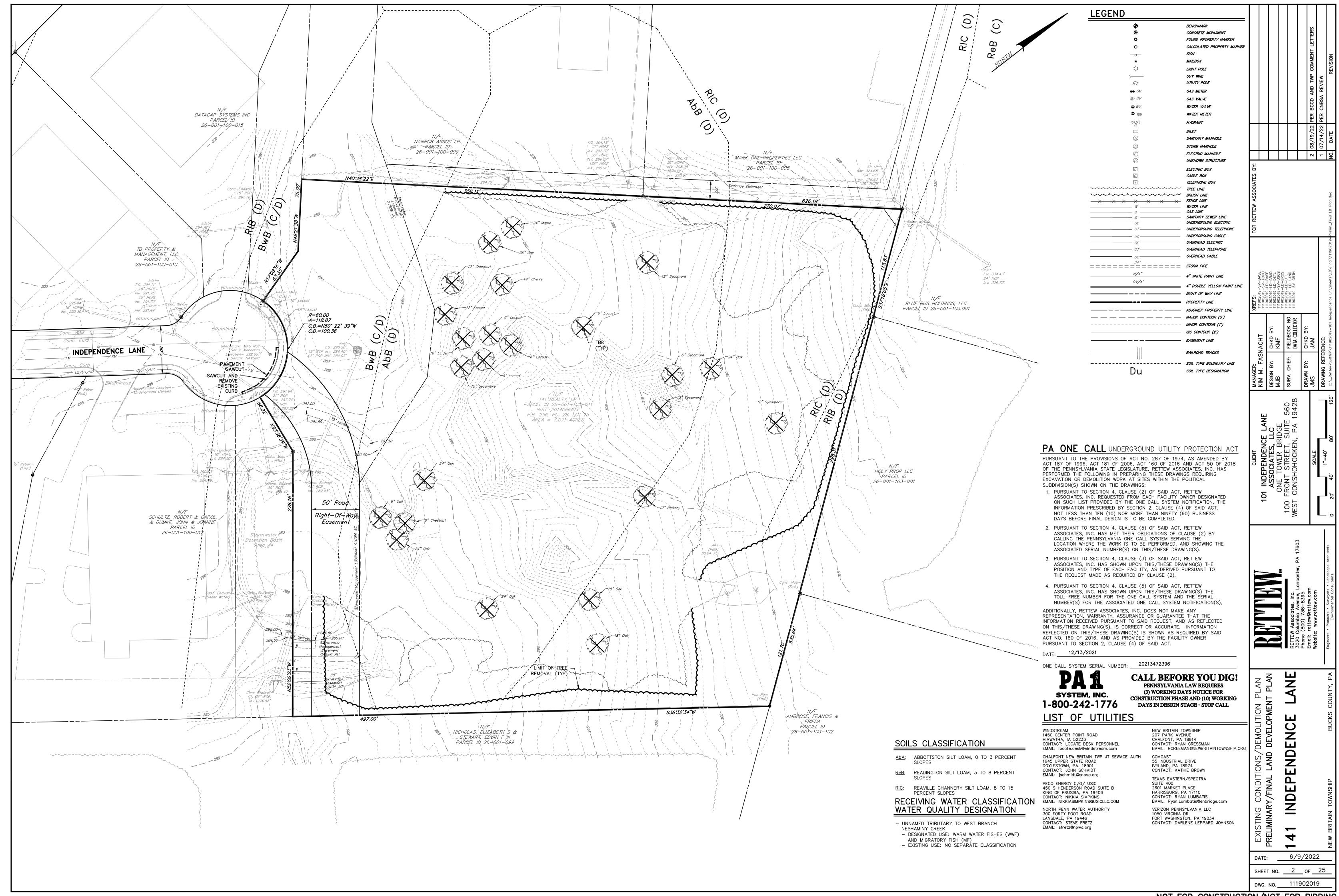




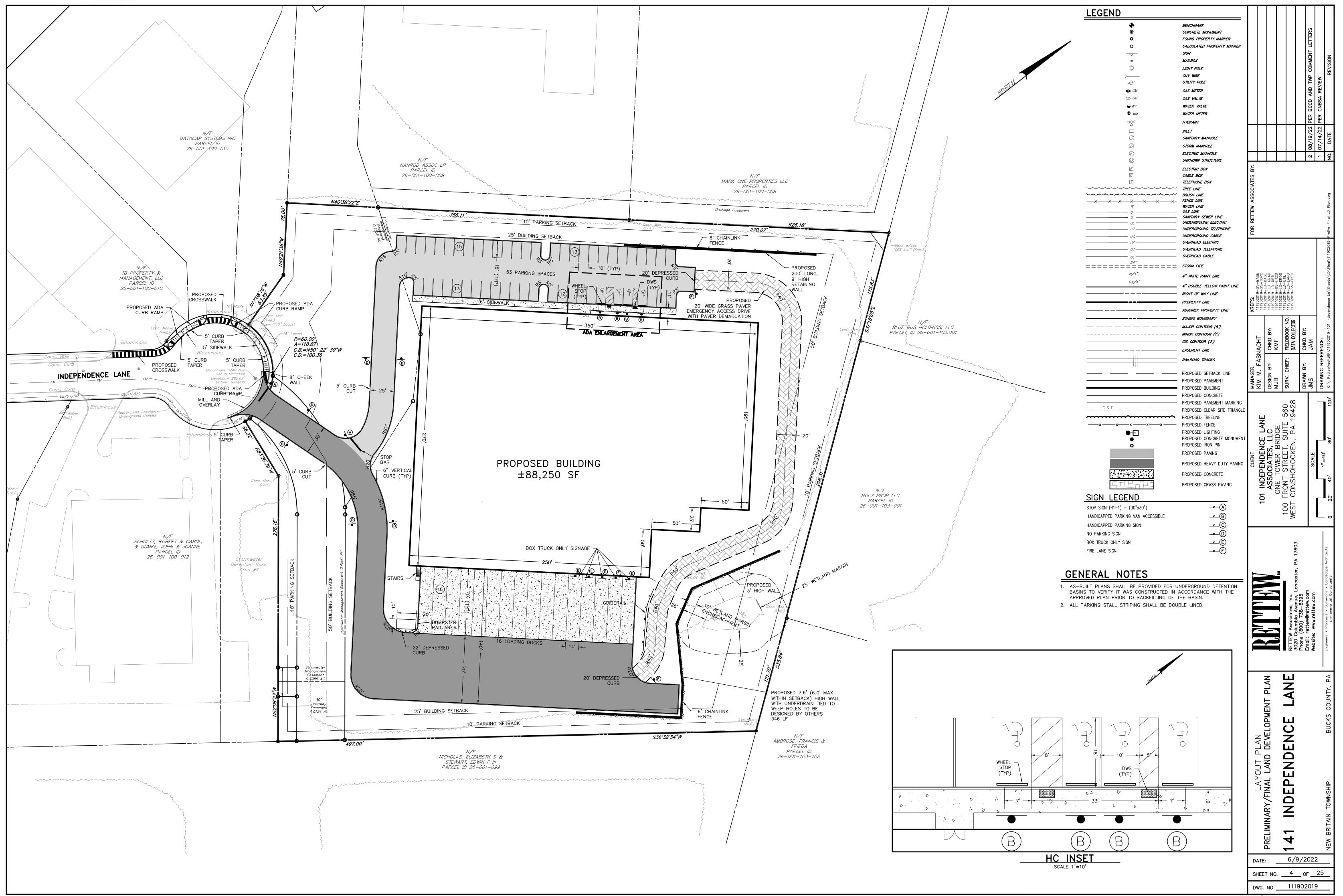
x **9**

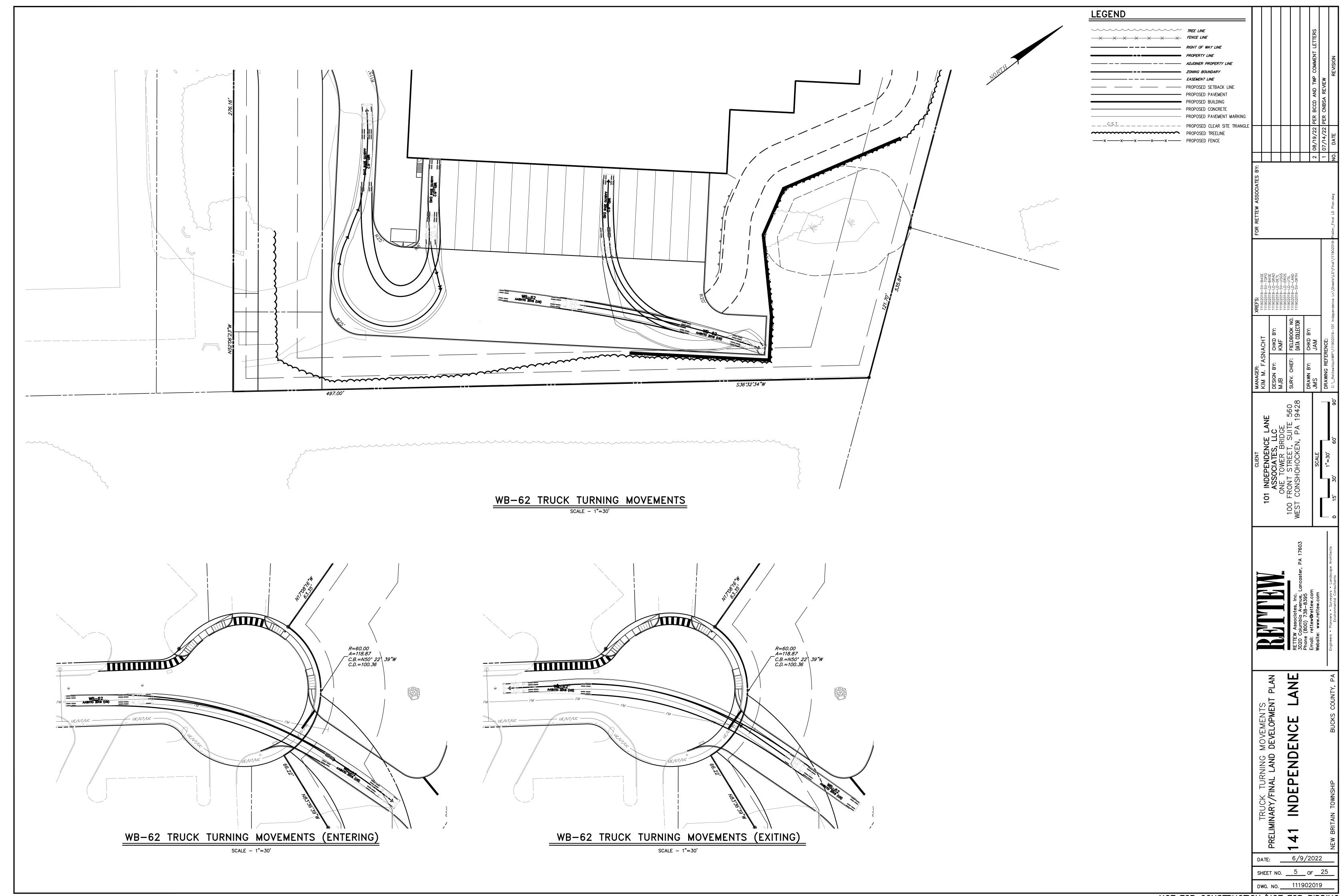
6/9/2022 SHEET NO. ___1__ of __25_ DWG. NO. ____11902019

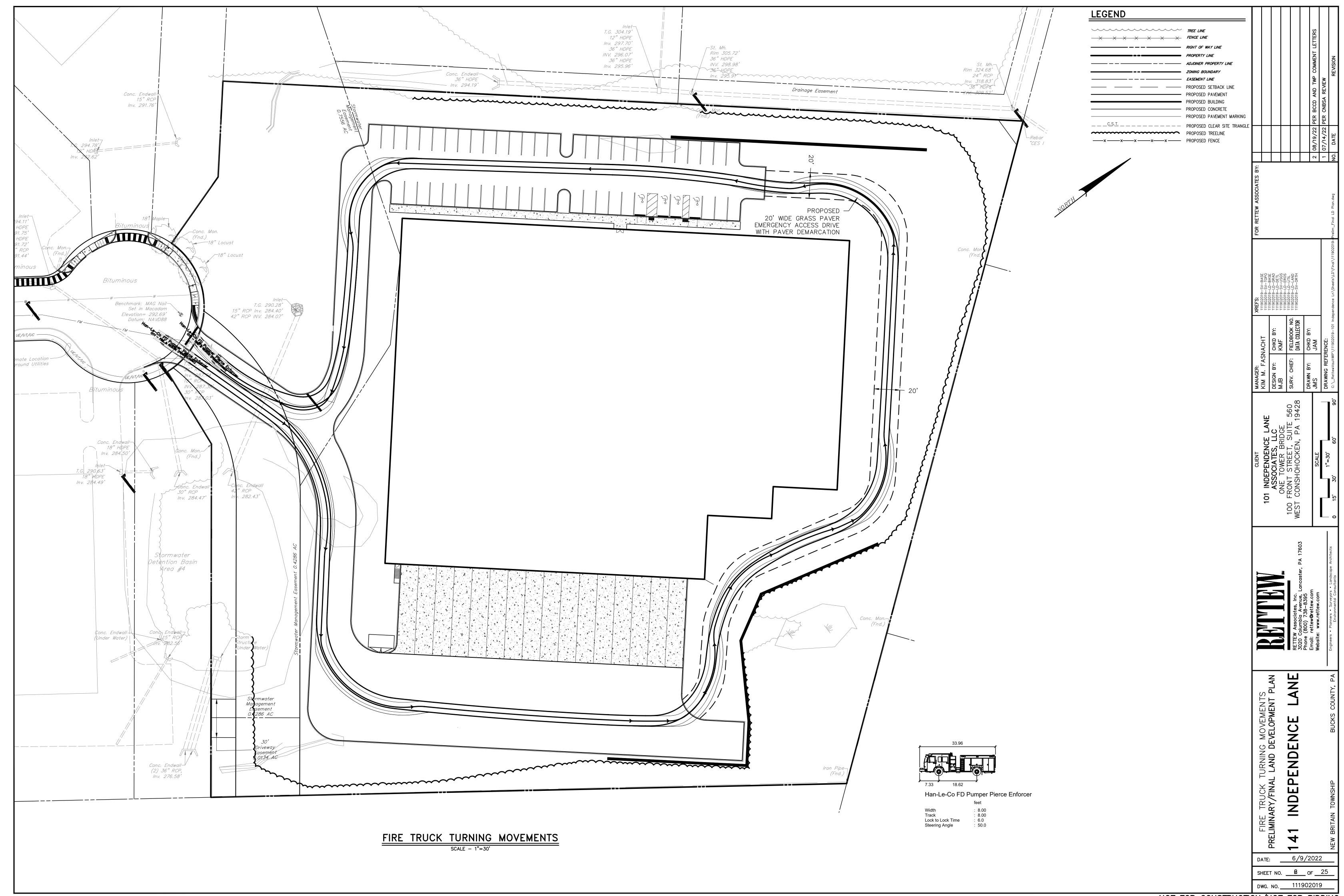
NOT FOR CONSTRUCTION/NOT FOR BIDDING

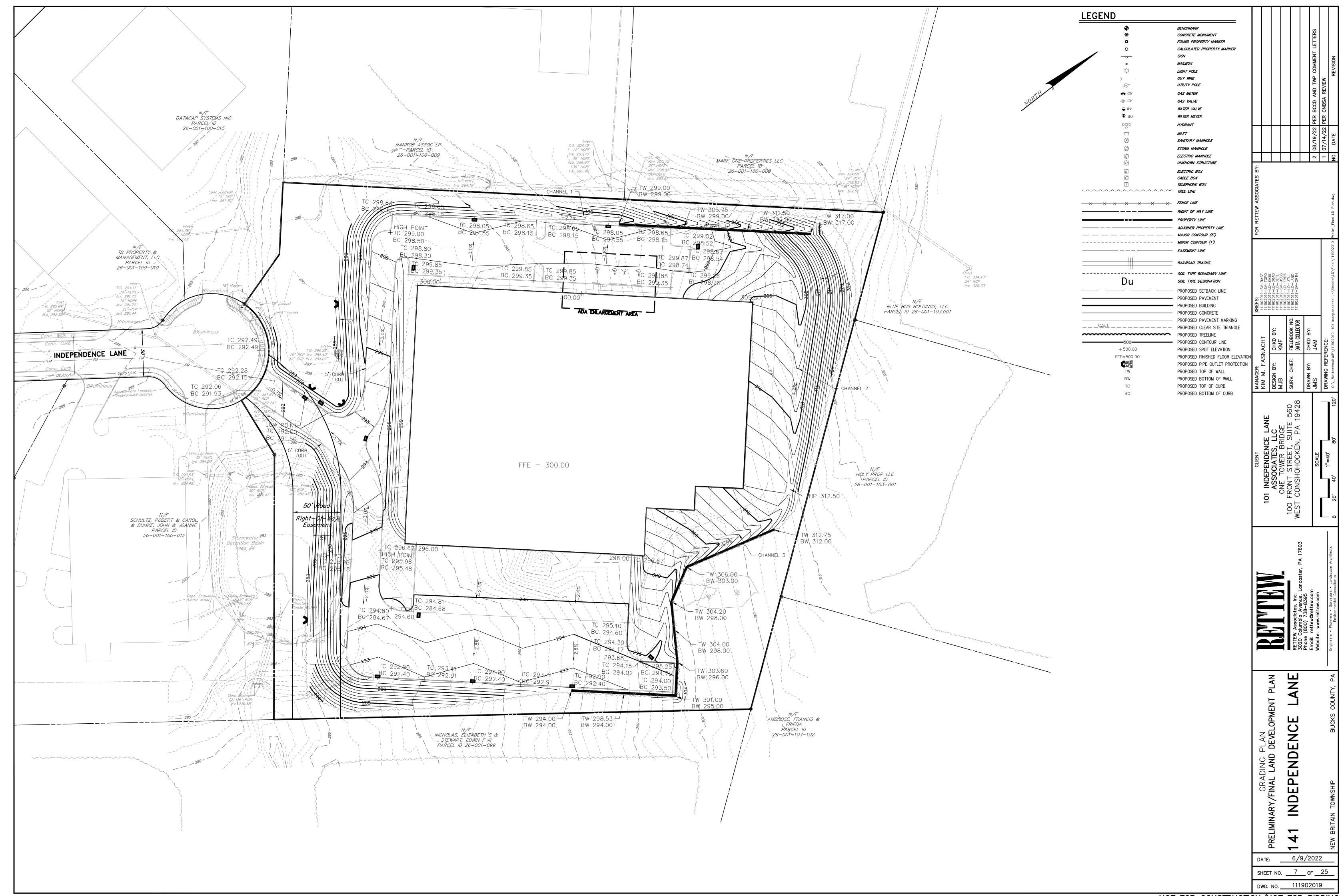


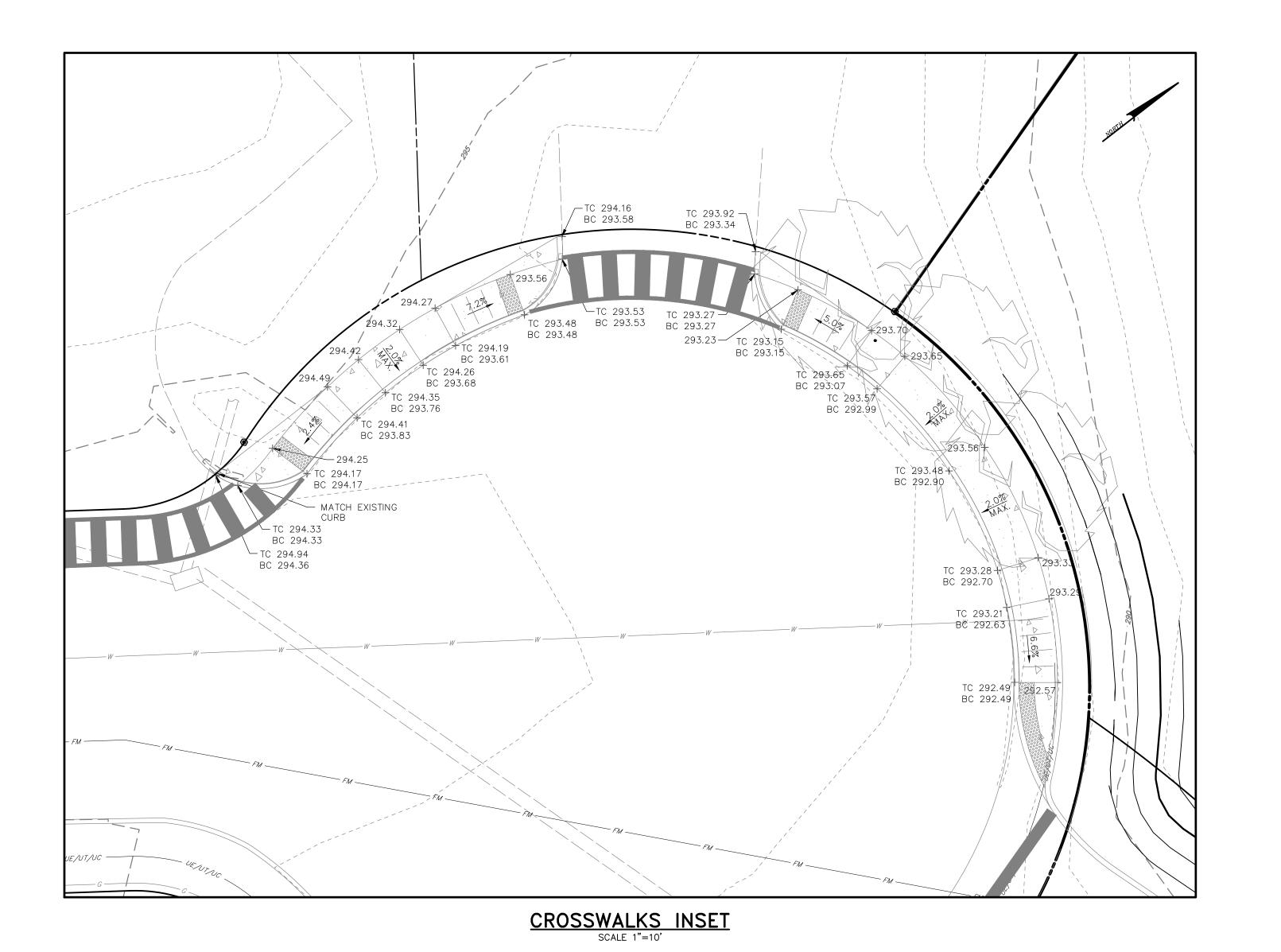


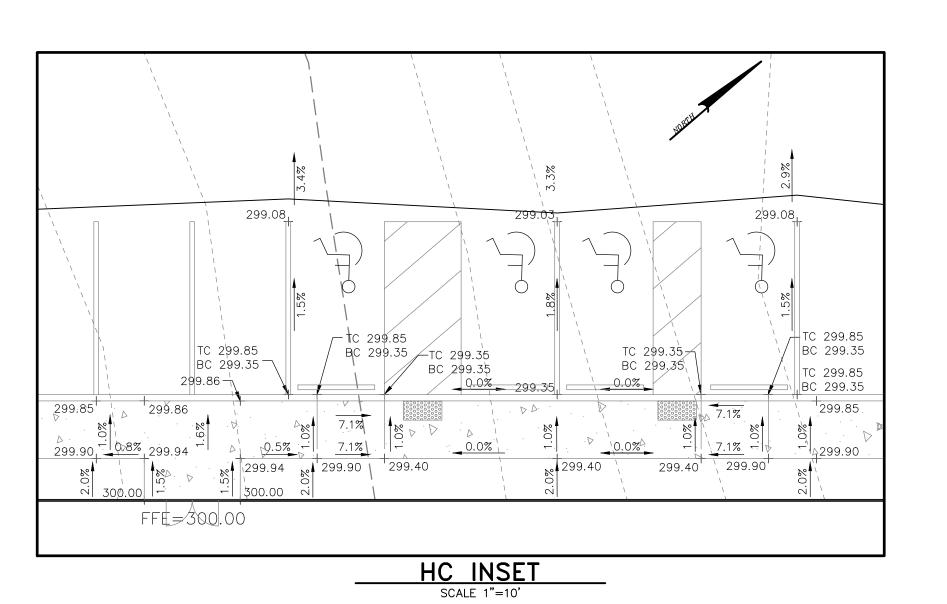








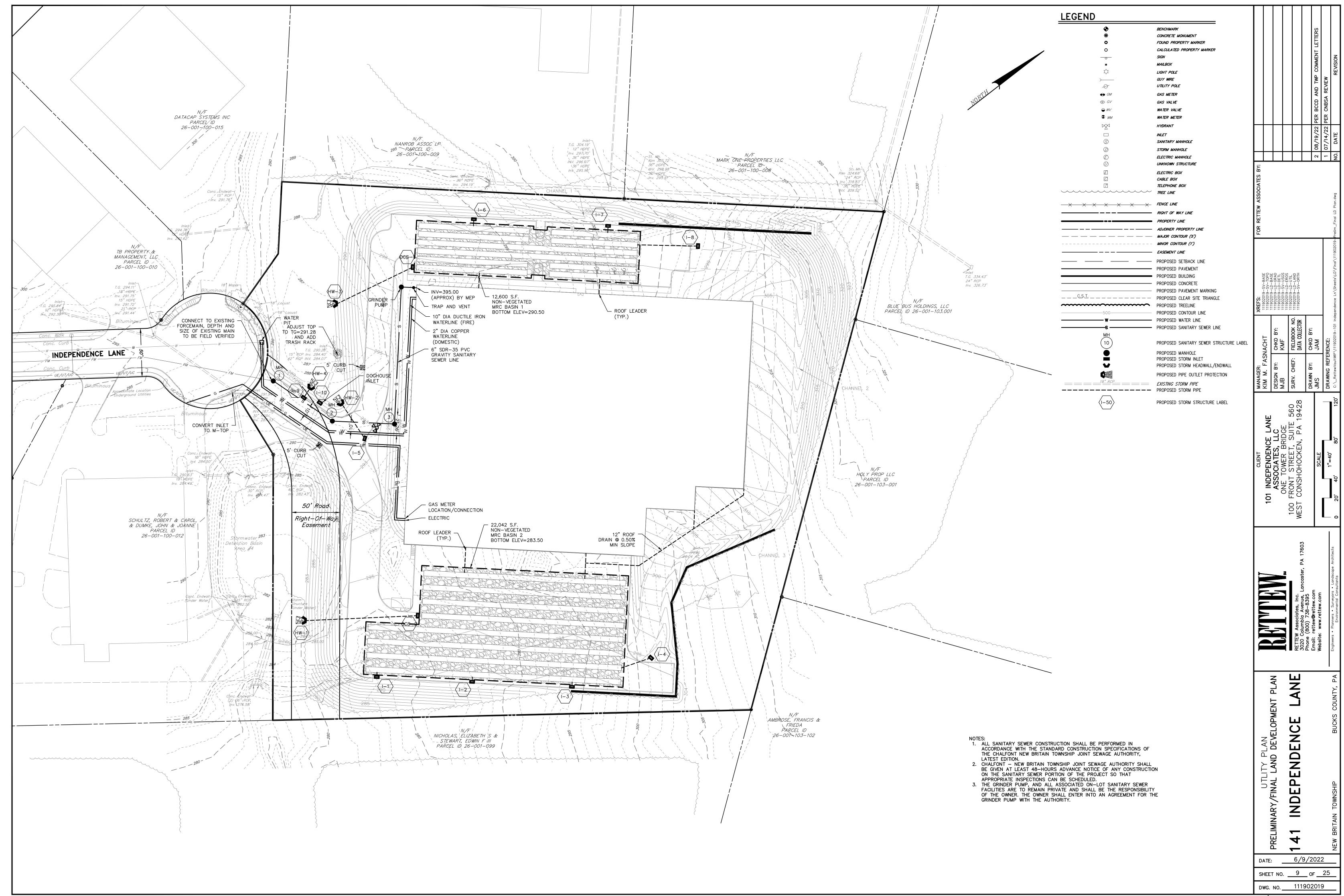


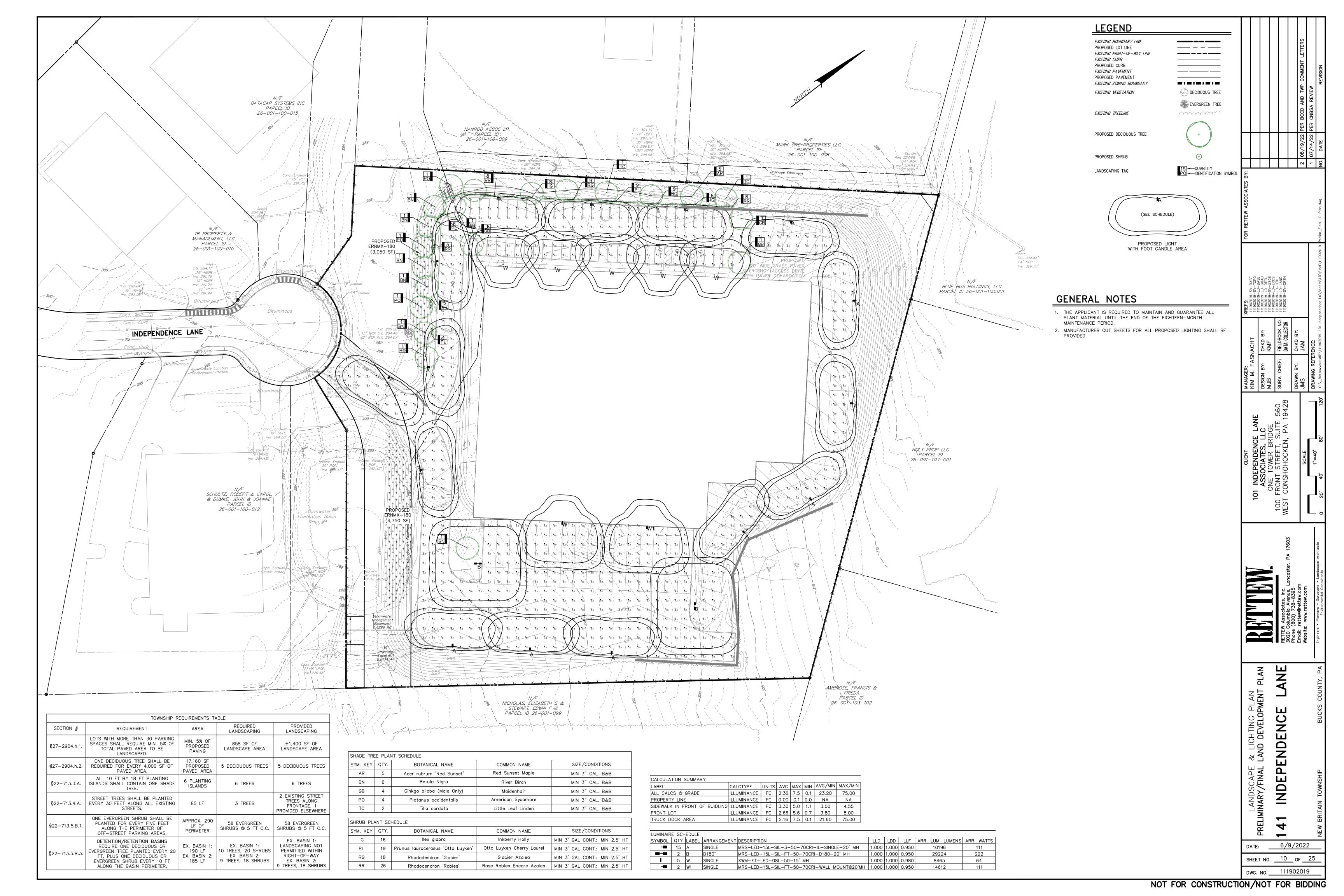


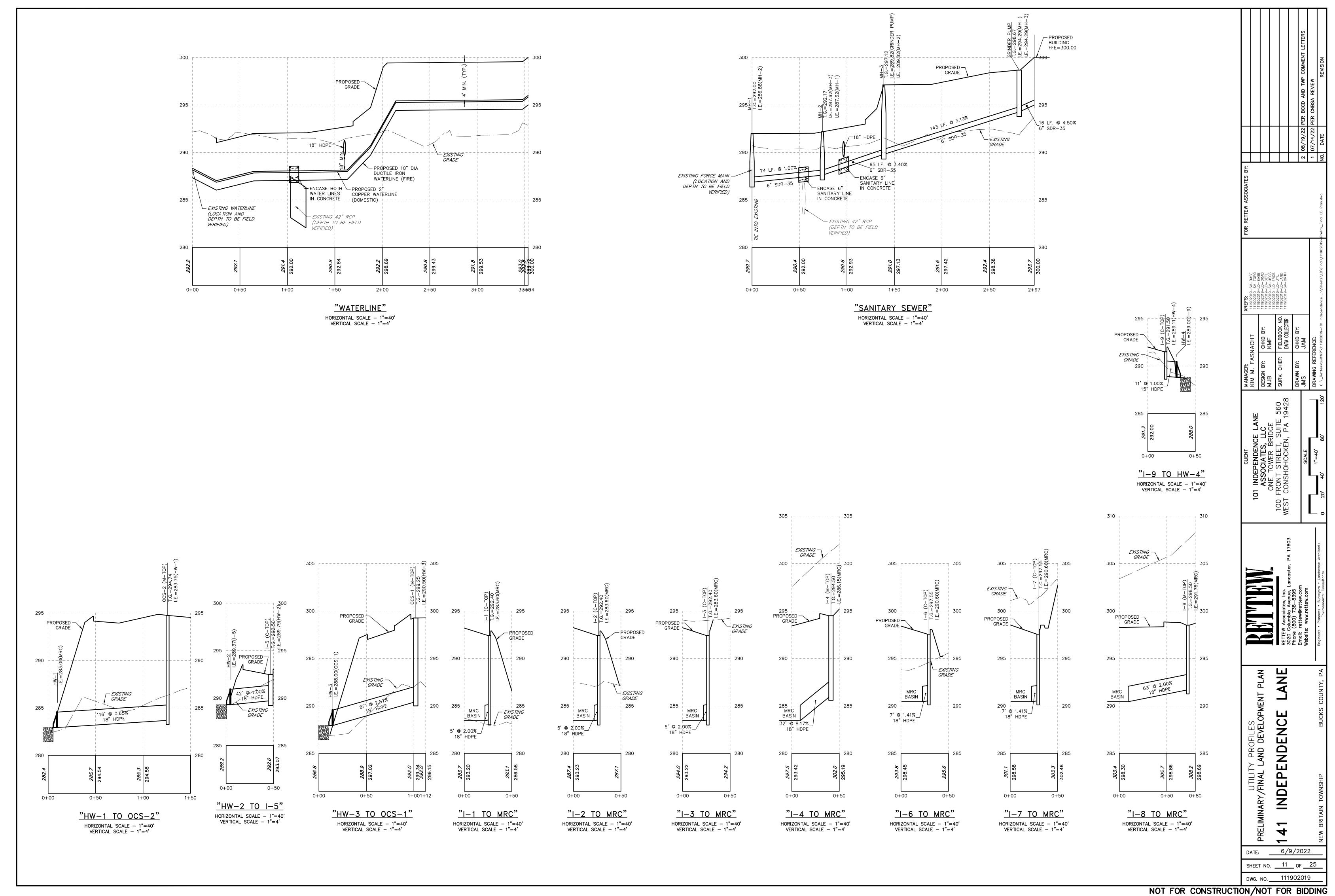
LEGEND CONCRETE MONUMENT FOUND PROPERTY MARKER CALCULATED PROPERTY MARKER LIGHT POLE GUY WIRE UTILITY POLE GAS METER GAS VALVE WATER VALVE WATER METER HYDRANT SANITARY MANHOLE STORM MANHOLE ELECTRIC MANHOLE UNKNOWN STRUCTURE ELECTRIC BOX TELEPHONE BOX TREE LINE ---- MINOR CONTOUR (1') ----- EASEMENT LINE ----- SOIL TYPE BOUNDARY LINE SOIL TYPE DESIGNATION ------ PROPOSED SETBACK LINE PROPOSED PAVEMENT PROPOSED BUILDING ---- PROPOSED CONCRETE - PROPOSED PAVEMENT MARKING _____C.S.T. ____ PROPOSED CLEAR SITE TRIANGLE PROPOSED TREELINE PROPOSED CONTOUR LINE + 500.00 PROPOSED SPOT ELEVATION PROPOSED FINISHED FLOOR ELEVATION FFE=500.00 PROPOSED PIPE OUTLET PROTECTION PROPOSED TOP OF WALL PROPOSED BOTTOM OF WALL PROPOSED TOP OF CURB PROPOSED BOTTOM OF CURB 1. TOP CURB ELEVATIONS TO BE FIELD VERIFIED. 2. WHERE EXISTING CURB IS TO REMAIN, MATCH PROPOSED SIDEWALK WITH TOP OF CURB ELEVATION. GRADING ENLARGMENT PLAN Inary/final Land Development INDEPENDENCE 6/9/2022

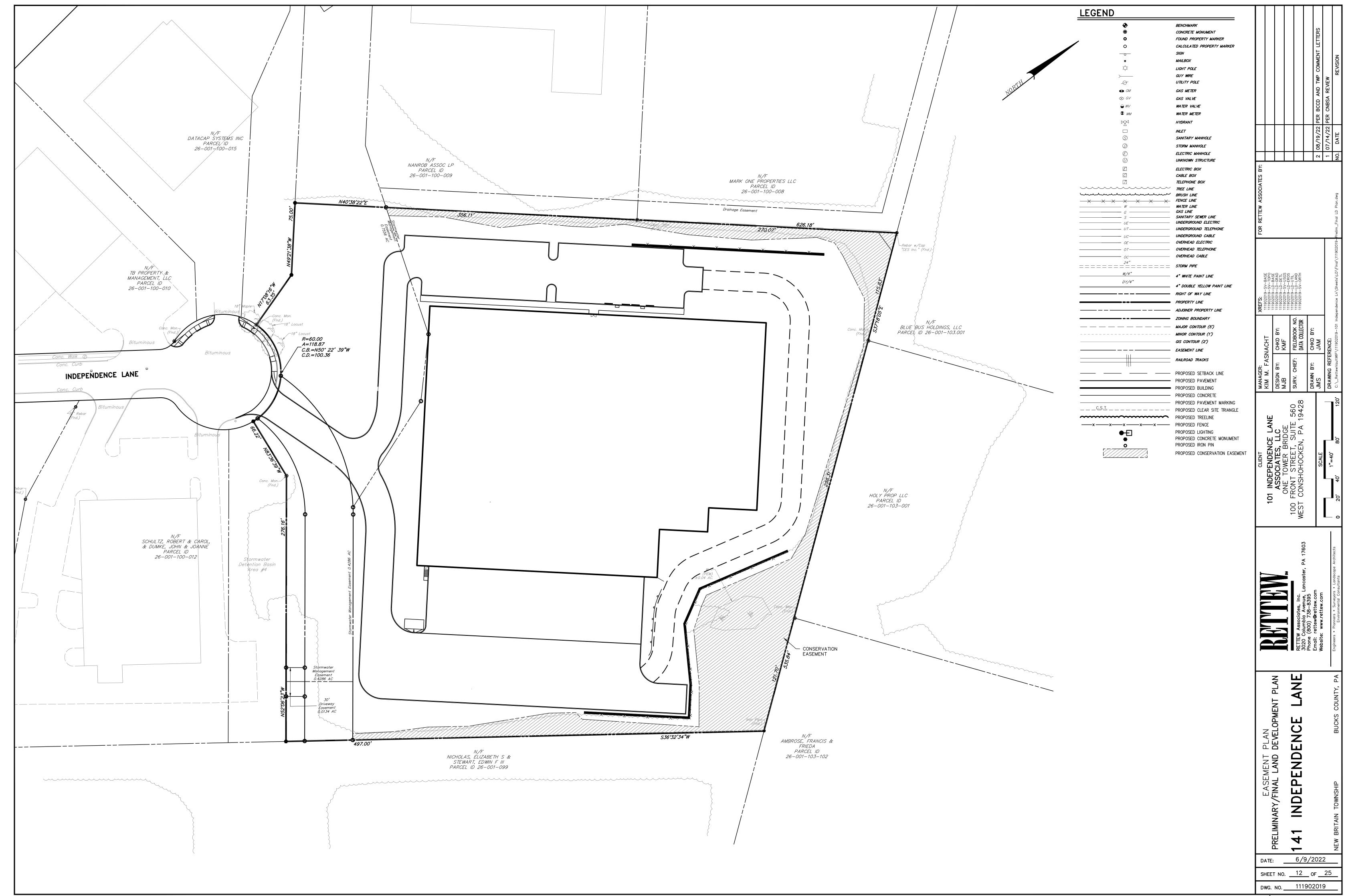
NOTES

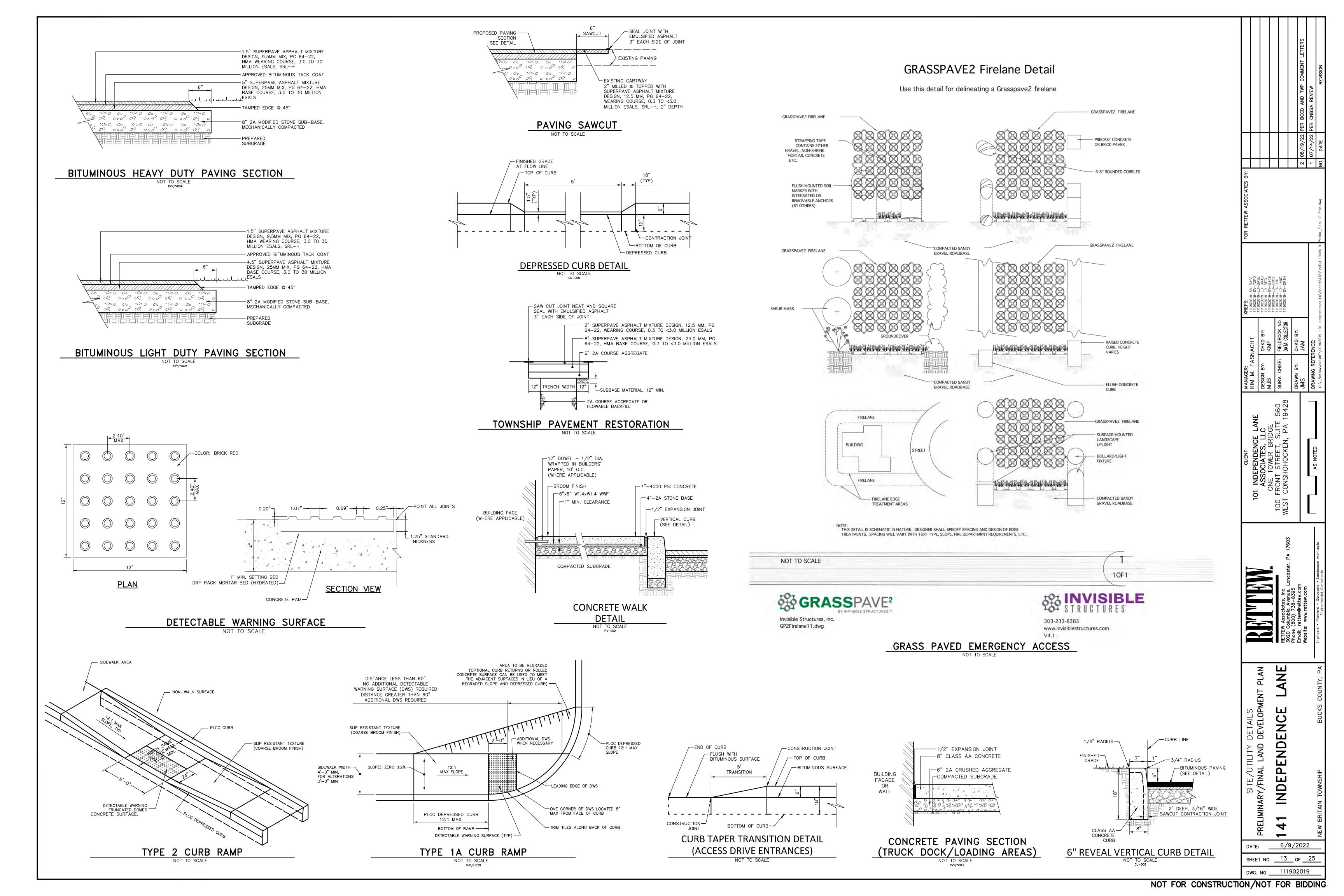
SHEET NO. ___8__ OF __25__

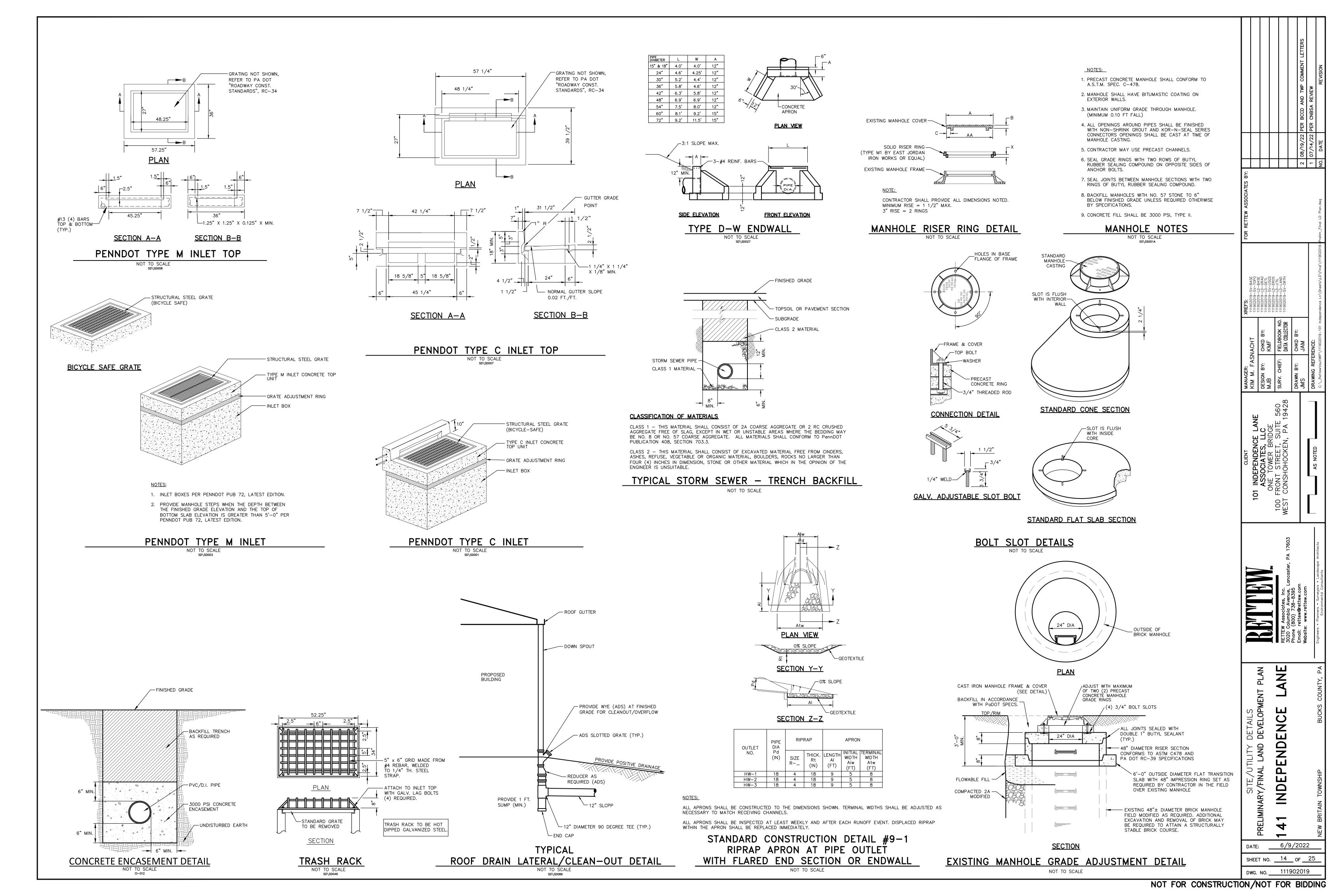


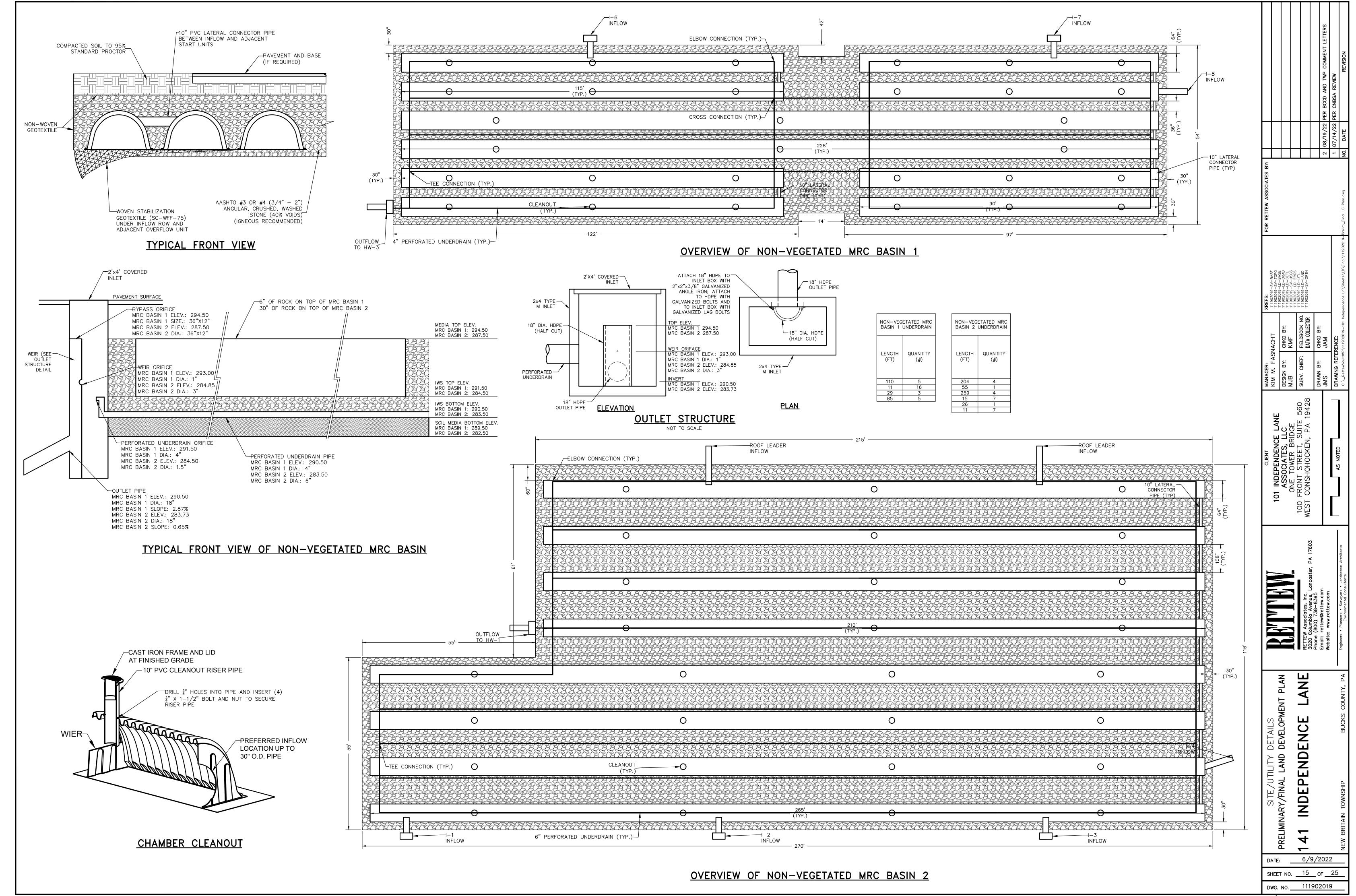


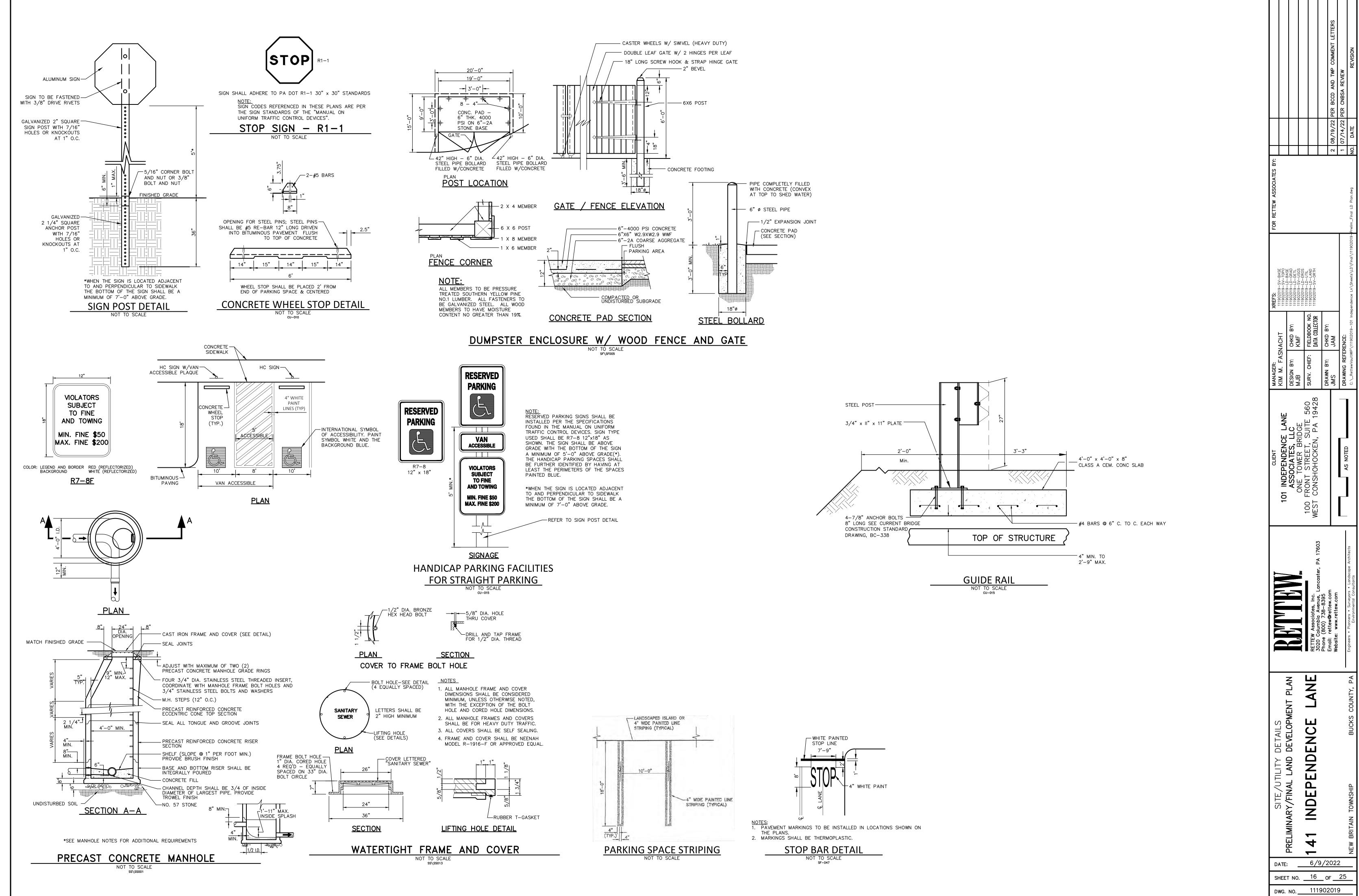


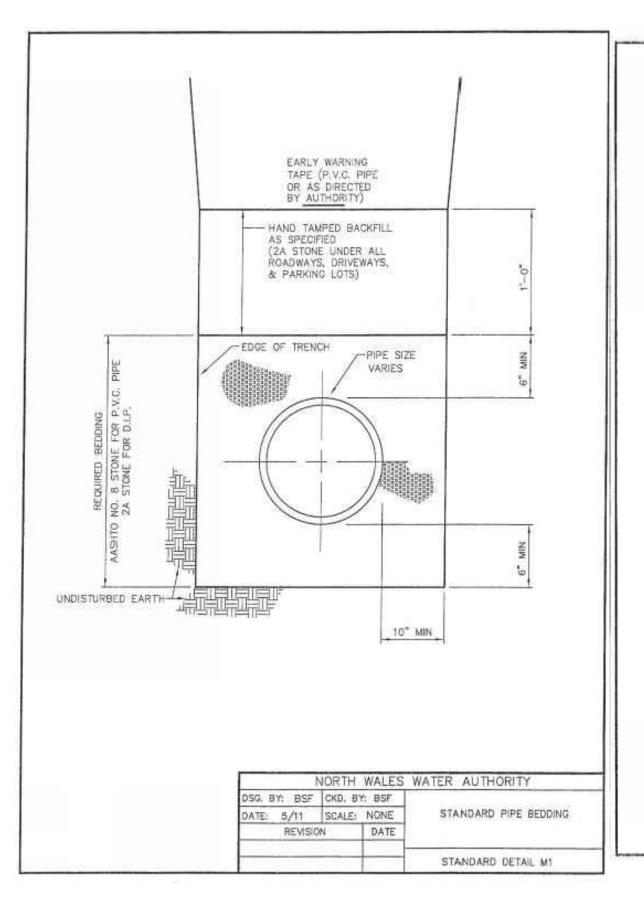


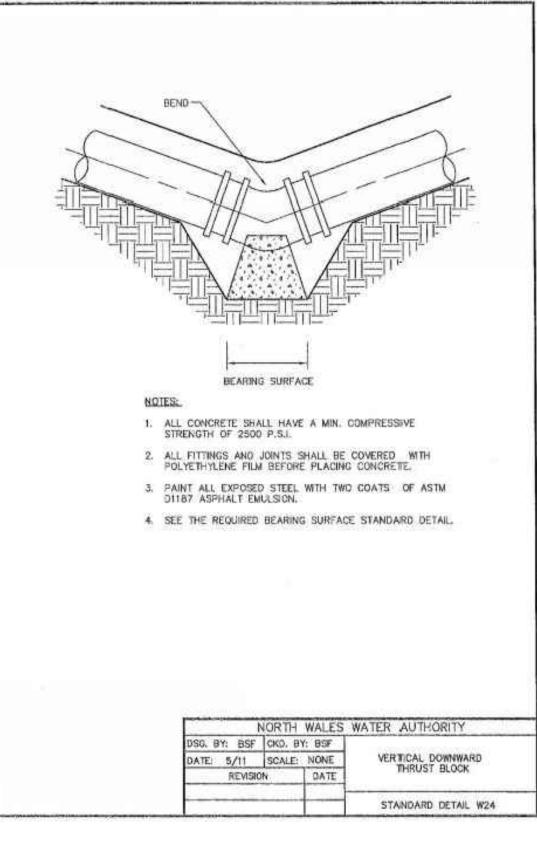


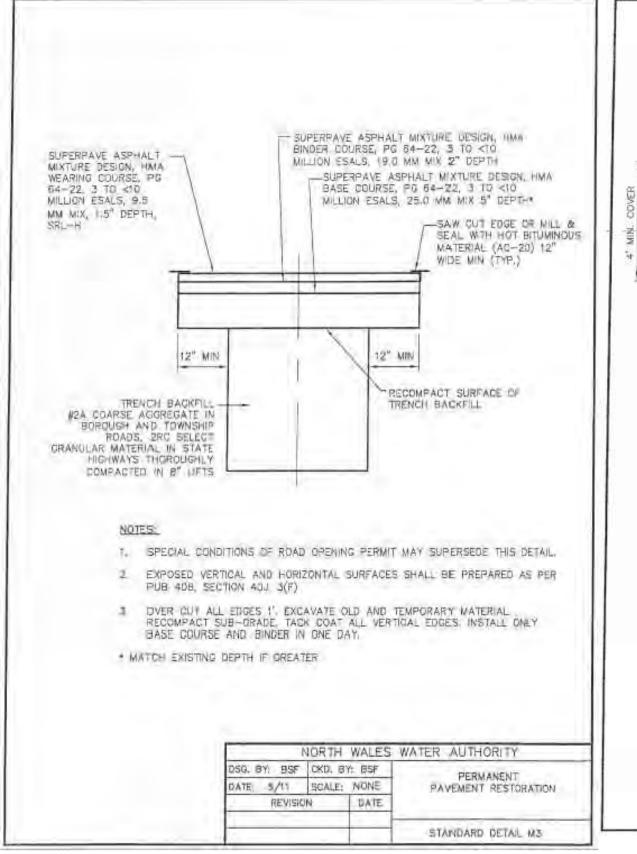


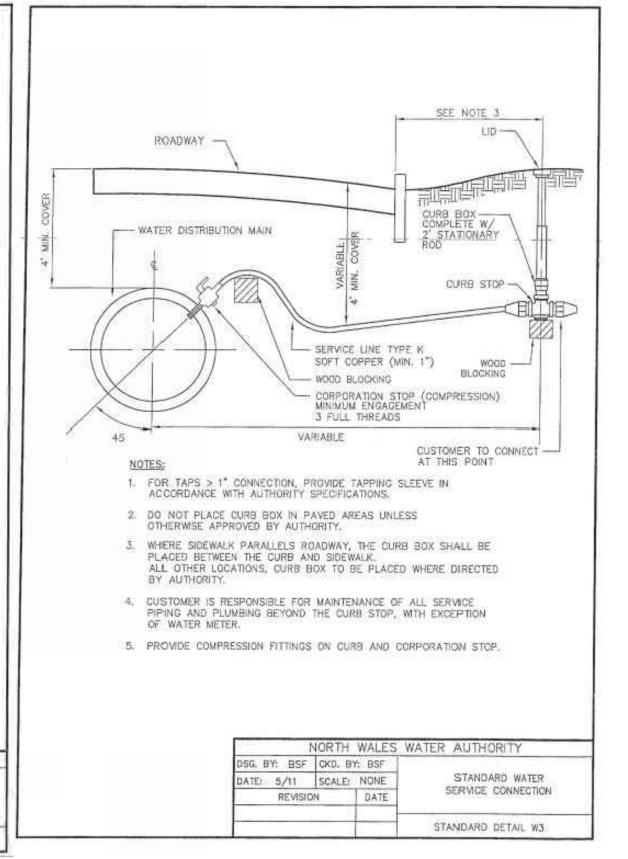


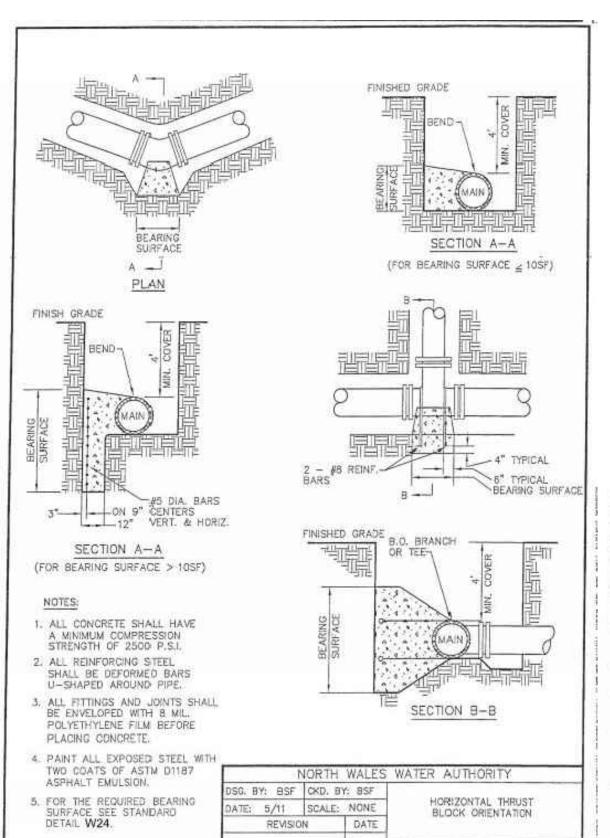




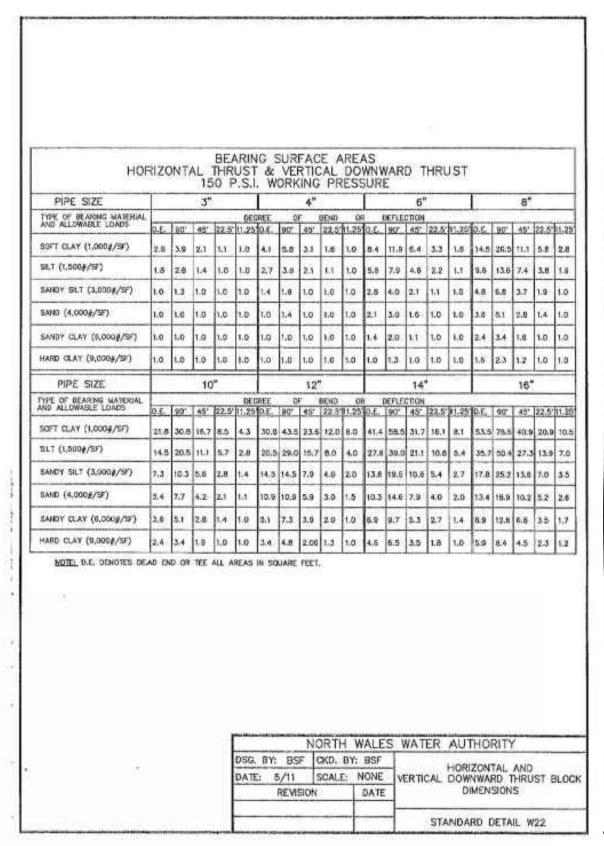


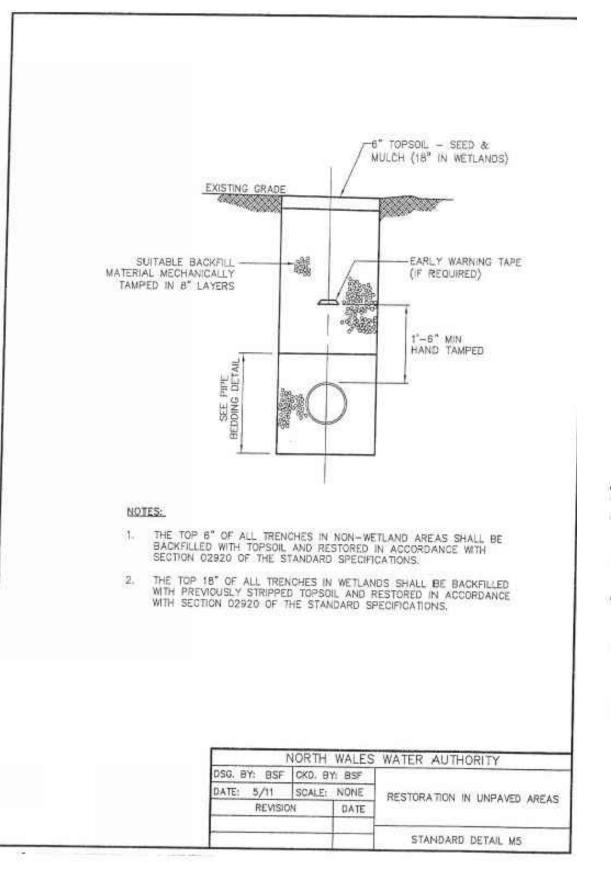


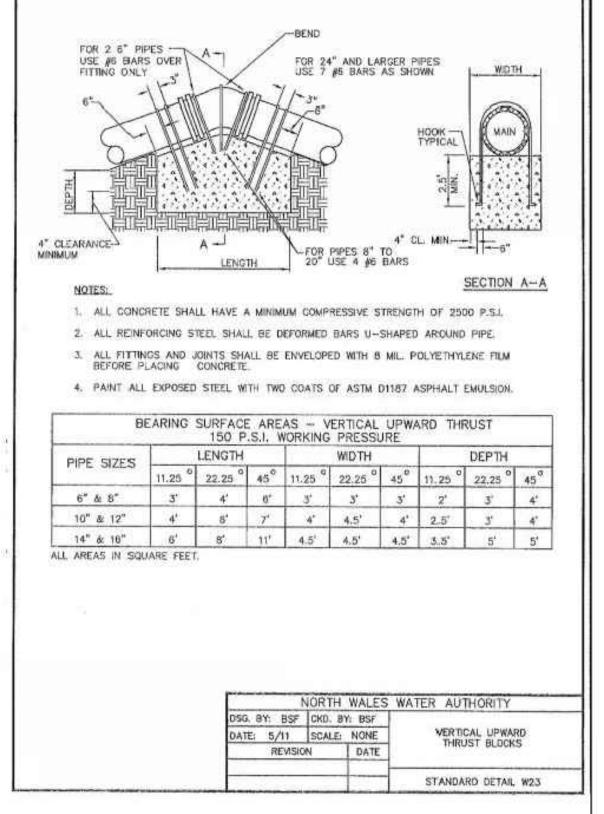


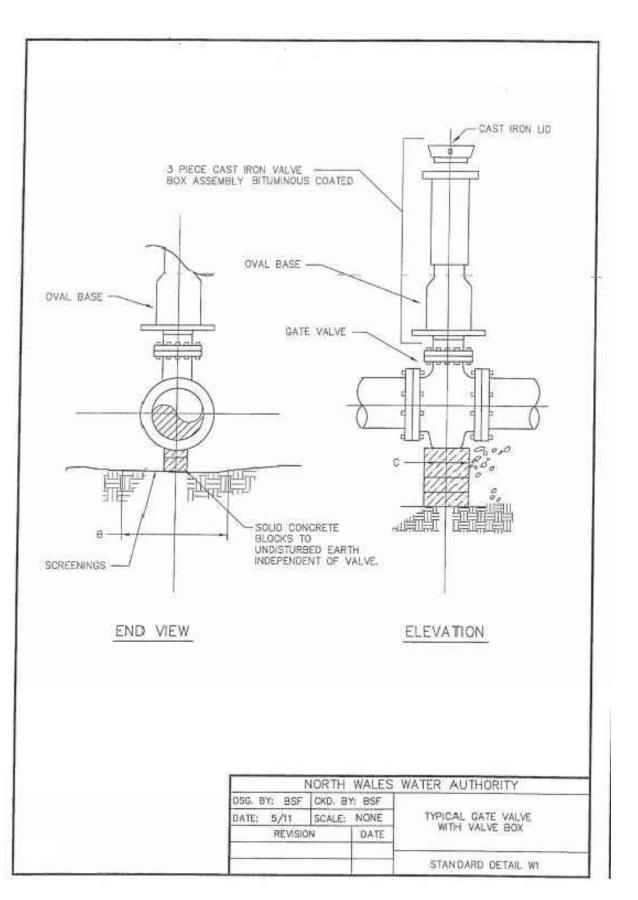


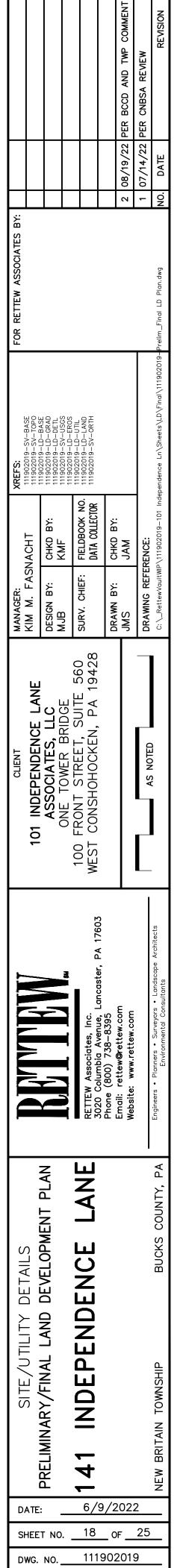
STANDARD DETAIL W21

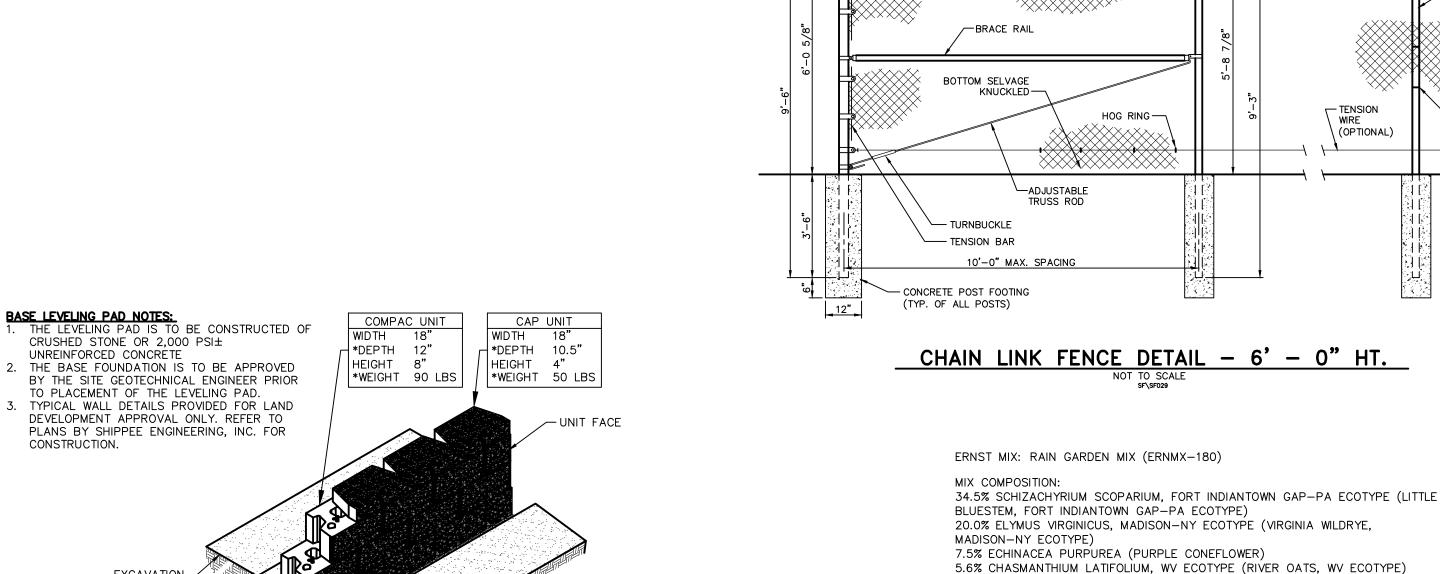












-POST TOP (DOME TYPE)

CORNER POST

(TOP SELVAGE KNUCKLED)

5.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)

2.0% VERBENA HASTATA, PA ECOTYPE (BLUE VERVAIN, PA ECOTYPE)

3.0% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)

2.0% PANICUM CLANDESTINUM, TIOGA (DEERTONGUE, TIOGA)

3.0% RUDBECKIA HIRTA (BLACKEYED SUSAN)

0.4% ASTER LATERIFLORUS (CALICO ASTER)

FORT INDIANTOWN GAP-PA ECOTYPE)

0.2% JUNCUS EFFUSUS (SOFT RUSH)

ECOTYPE)

SOUTHERN WV ECOTYPE)

NORTHERN VA ECOTYPE)

3.0% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA, PA ECOTYPE)

2.0% HELIOPSIS HELIANTHOIDES, PA ECOTYPE (OXEYE SUNFLOWER, PA ECOTYPE)

1.0% SENNA HEBECARPA, VA & WV ECOTYPE (WILD SENNA, VA & WV ECOTYPE)

0.4% MONARDA FISTULOSA, FORT INDIANTOWN GAP-PA ECOTYPE (WILD BERGAMOT,

0.3% ASTER NOVAE-ANGLIAE, PA ECOTYPE (NEW ENGLAND ASTER, PA ECOTYPE)

3.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)

1.7% ASCLEPIAS INCARNATA, PA ECOTYPE (SWAMP MILKWEED, PA ECOTYPE)

1.0% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)

0.9% PENSTEMON DIGITALIS, PA ECOTYPE (TALL WHITE BEARDTONGUE, PA

0.8% ZIZIA AUREA, PA ECOTYPE (GOLDEN ALEXANDERS, PA ECOTYPE)

0.5% BAPTISIA AUSTRALIS, SOUTHERN WV ECOTYPE (BLUE FALSE INDIGO,

0.3% ASTER PRENANTHOIDES, PA ECOTYPE (ZIGZAG ASTER, PA ECOTYPE)

0.2% HELENIUM AUTUMNALE, NORTHERN VA ECOTYPE (COMMON SNEEZEWEED,

0.2% SOLIDAGO NEMORALIS, PA ECOTYPE (GRAY GOLDENROD, PA ECOTYPE)

10 LBS/ACRE), OR GRAIN RYE (1 AUG TO 31 DEC; 30 LBS/ACRE)

0.1% SOLIDAGO RUGOSA, PA ECOTYPE (WRINKLELEAF GOLDENROD, PA ECOTYPE)

SEEDING RATE: 20 LB PER ACRE WITH A COVER CROP. FOR SITES THAT DRAIN

WITHIN 24 HOURS OF A RAIN EVENT USE ONE OF THE FOLLOWING COVER CROPS:

OATS (1 JAN TO 31 JUL; 30 LBS/ACRE), JAPANESE MILLET (1 MAY TO 31 AUG;

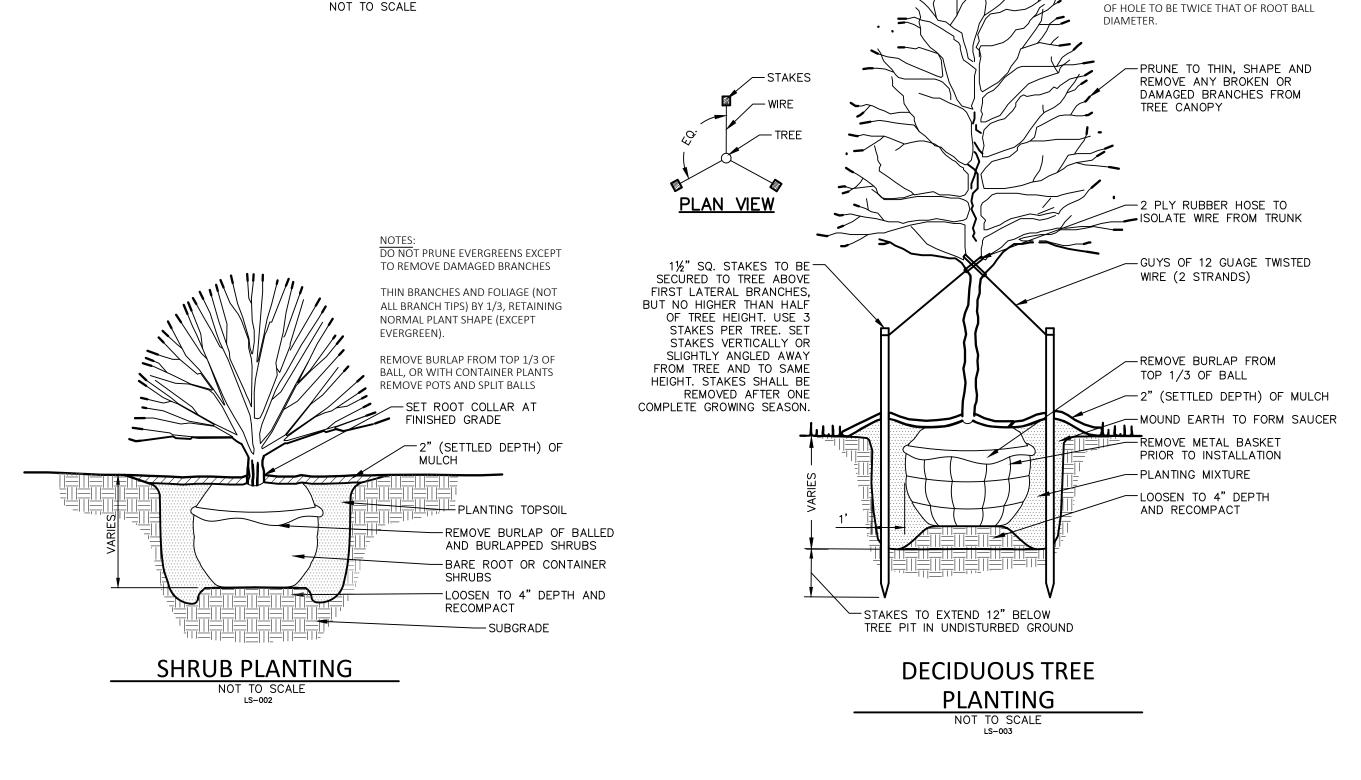
BASIN SEED MIX

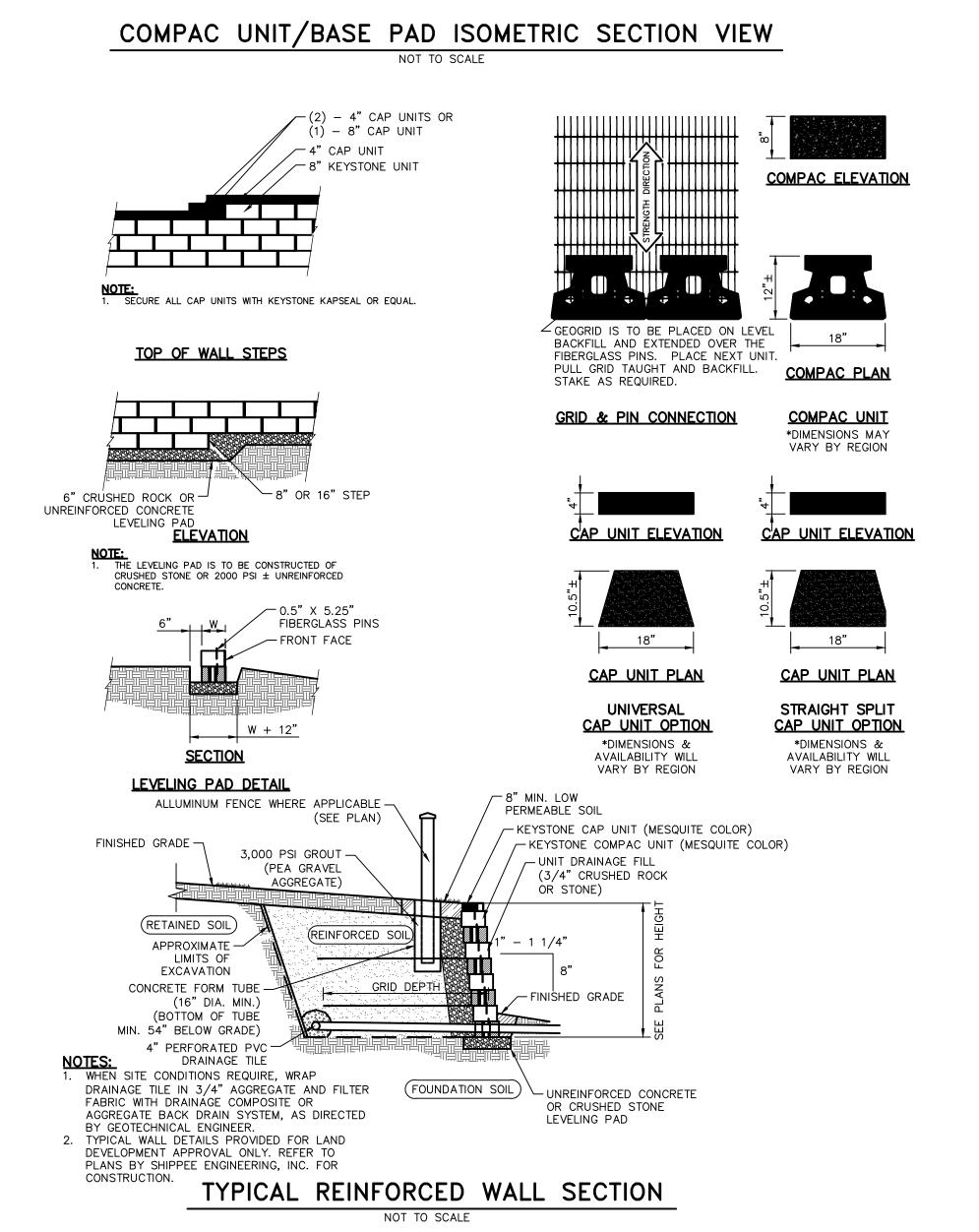
0.2% EUPATORIUM PERFOLIATUM, PA ECOTYPE (BONESET, PA ECOTYPE)

0.7% PYCNANTHEMUM TENUIFOLIUM (NARROWLEAF MOUNTAINMINT)

0.3% JUNCUS TENUIS. PA ECOTYPE (PATH RUSH, PA ECOTYPE)

0.2% OENOTHERA FRUTICOSA VAR. FRUTICOSA (SUNDROPS)





CRUSHED STONE OR 2,000 PSI±

EXCAVATION —

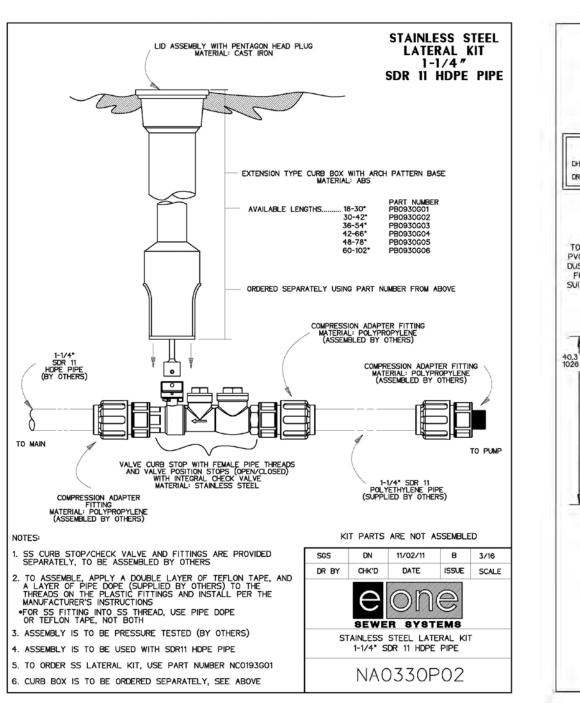
6" CRUSHED ROCK OR -

LEVELING PAD

UNREINFORCED CONCRETE

UNREINFORCED CONCRETE

CONSTRUCTION.



20' LIGHTING

#3 TIE REBAR -ON 8" CENTERS

2" CONDUIT-

LIGHT FOUNDATION

1/2" X 5' COPPER-

GROUND ROD

LIGHTING UNIT TO BE POLE TOP MOUNTING ON SQUARE POSTS WITH 4" MOUNTING ARM.

VERTICAL REBAR

30" MIN. ABOVE GROUND

- POLE FOUNDATION CLASS A CONCRETE

- FIN. GRADE

FOUNDATION TO BE PLACED 3 MIN FROM FACE OF CURB.

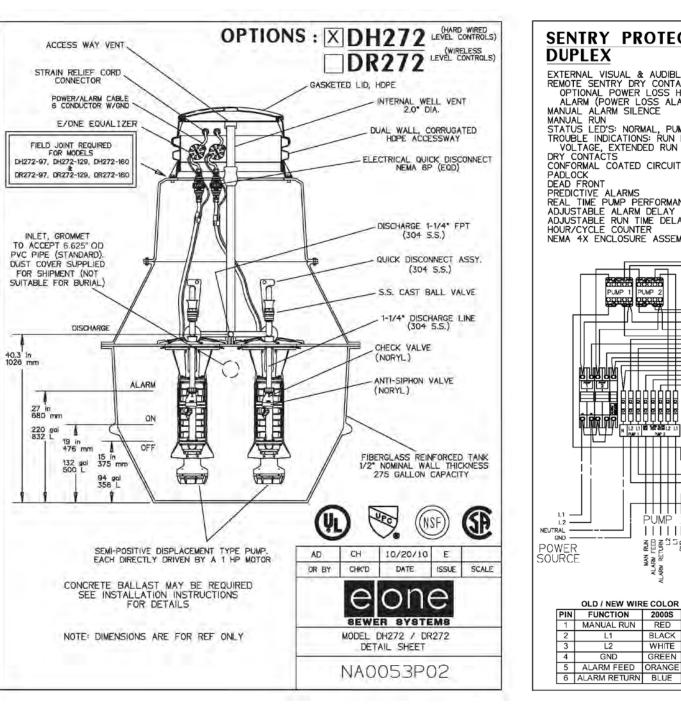
FIXTURE POLE

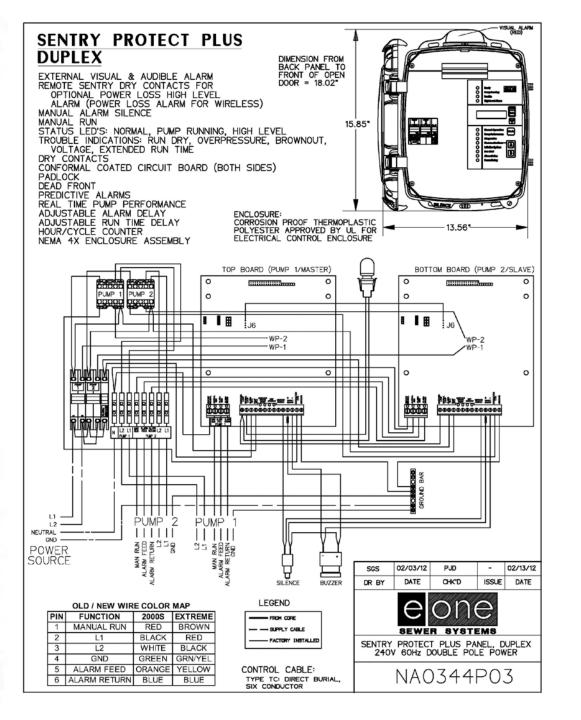
LOOP CAP

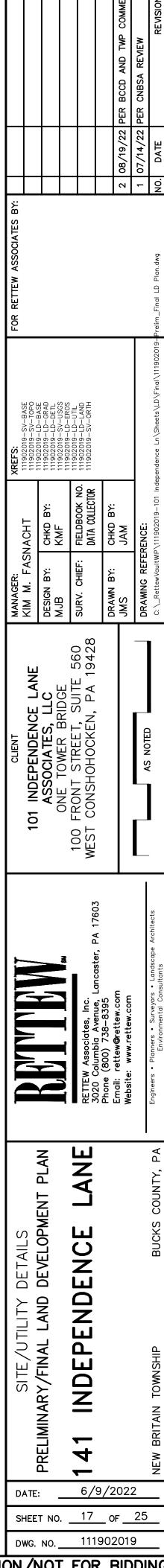
TOP RAIL

-LINE POST (ROUND OR "C")

LINE POST TIE

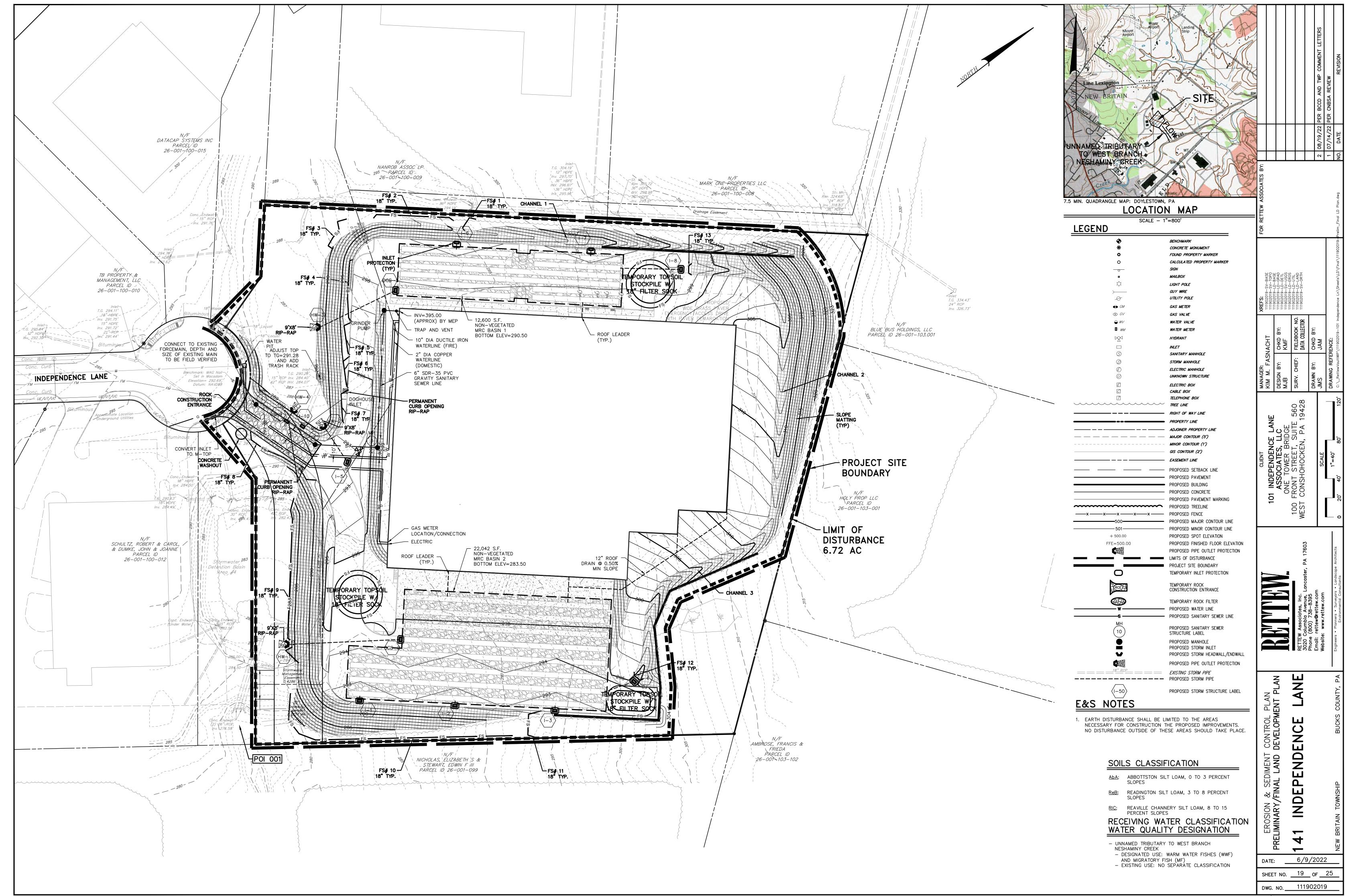






SET ROOT BALL IN CENTER OF HOLE AND TOP OF

BALL LEVEL WITH PROPOSED GRADE. DIAMETER



EROSION AND SEDIMENT CONTROL (ESC) NOTES

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHAL 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 TH APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MA REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION O THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
- 3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT
- . ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO
- 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED I EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT
- 10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. 11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL
- 13. 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
- 14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY ONTO ANY ROADS.

DISCHARGING OVER NON-DISTURBED AREAS.

- 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. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LANCASTER COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. 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 IMMEDIATELY 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
- 18. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. 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.
- 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
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE
- INCORPORATED INTO FILLS.
- 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH
- THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDEL AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE. WHICH WILL BE REACTIVATED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIS 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 FROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 33. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR
- 34. IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE LANCASTER COUNTY CONSERVATION DISTRICT AND THE NEW BRITAIN TOWNSHIP GEOTECHNICAL CONSULTANT WILL BE MADE AWARE OF
- 35. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- 36. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT O ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
- 37. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIP SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF
- 38. ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO ANY
- 39. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS. NOT CHOPPED OR FINELY BROKEN.
- 40. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

- 41. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER, WITHIN 50 FEET OF A SURFACE WATER, AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- 42. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8"LAYERED LIFTS AT 95% DENSITY.

MAINTENANCE EROSION AND SEDIMENT CONTROL

- ALL FROSION AND SEDIMENT CONTROL FACILITIES MUST BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER PERFORM AS DESIGNED, SHALL BE REPLACED. REFER TO DETAILS ON THE PLANS FOR SPECIFIC MAINTENANCE METHODS FOR EACH SEDIMENT-TRAPPING DEVICE.
- 2. ALL SEDIMENT REMOVED FROM SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE EROSION OR SEDIMENTATION AND SHALL BE PLACED IN AN
- ANY PERMANENT SEEDED AREAS THAT BECOME ERODED OR DISTURBED SHALL HAVE THE TOPSOIL REPLACED, THE GRASS RESOWN, AND THE MULCH REAPPLIED, OR, AT THE DISCRETION OF THE OWNER, SOD MAY BE INSTALLED.
- 4. THE NPDES PERMIT HOLDER SHALL BE RESPONSIBLE FOR MAINTENANCE OF EROSION AND SEDIMENT CONTROLS UNTIL THE SITE IS STABILIZED. PERMANENT STABILIZATION IS DEFINED, AS "A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED," OR THE DISTURBED AREA IS COVERED WITH AN ACCEPTABLE BMP, WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION. UNTIL SUCH TIME AS THIS STANDARD IS ACHIEVED INTERIM STARILIZATION MEASURES AND TEMPORARY FROSION AND SEDIMENT CONTROL BMPs THAT ARE USED TO TREAT PROJECT RUNOFF MAY NOT BE REMOVED.

RECYCLING AND DISPOSAL

PROCEDURES, WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE, WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT THE CONTRACTOR SHALL PLAN AND IMPLEMENT MEASURES FOR HOUSEKEEPING MATERIALS MANAGEMENT, AND LITTER CONTROL DURING CONSTRUCTION. WHEREVER POSSIBLE RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

- 1. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SIT LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT. IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE OCCURRED ON THE SITE.
- 2. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH PA DEP'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773.
- . CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON—WATER SOLUBLE, NON—DECOMPOSABLE INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT (NOT INCLUDING MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE), 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
- 4. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, FLECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTA QUESTIONAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTIONS AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BÉEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE.
- 5. FILL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH PA DEP'S MUNICIPAL OR RESIDENTAIL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

<u>ENGINEERED SOIL SPECIFICATIONS</u>

- FNGINFERED SOIL SHALL CONSIST OF SUITABLE TOPSOIL FROM ON-SITE (IF AVAILABLE) AND 20-30% COMPOST AMENDMENT OR MANUFACTURED SILT LOAM, LOAM, OR SANDY LOAM SOIL CONTAINING 20-30% COMPOST. THE MINERAL COMPONENT OF THE ENGINEERED SOIL SHOULD NOT CONTAIN GREATER THAN 20% CLAY AND SHOULD HAVE A MINIMUM OF 40% AND A MAXIMUM OF 70% SAND. THE COMPOST PORTION OF THE ENGINEERED SOIL SHOULD NOT CONTAIN WOODY DEBRIS OR RESEMBLE MULCH.
- 2. COMPOST SHALL BE WELL-COMPOSTED, STABLE, AND WEE-FREE ORGANIC MATTER PRODUCED BY COMPOSTING FEEDSTOCK AND AS FOLLOWS:
 - FEED STOCK LIMITED TO LEAVES
 - SOLUBLE-SALE CONCENTRATION LEASS THAN 4dS/M MOISTURE CONTENT 35-55% BY WEIGHT
 - ORGANIC-MATTER CONTENT: 30-40% OF DRY WEIGHT

DURING A TIME IN WHICH NO RAIN IS PREDICTED TO AIDE IN GERMINATION.

- 3. THE ENGINEERED SOIL IS TO BE INSTALLED WITH LIGHT MACHINERY TO AVOID COMPACTION WHILE BEING INSTALLED. A SOIL SAMPLE ANALYSIS SHOULD BE PERFORMED ON THE TOPSOIL PRIOR TO MIXING TO INSURE PROPER SOIL COMPOSTION. THE SEEDING SHALL BE INSTALLED
- PARTICLE SIZE MINIMUM OF 98 PERCENT PASSING THROUGH A 3/4 INCH SIEVE

SOIL CONDITIONS

THE SOIL SURVEY OF LANCASTER COUNTY INDICATES THAT THE SOILS WITHIN THE PROJECT AREA ARE COMPRISED OF THE FOLLOWING:

AbA - ABBOTTSTON SILT LOAM, 0 TO 3% SLOPES ReB - READINGTON SILT LOAM, 3 TO 8% SLOPES RIC - REAVILLE CHANNERY SILT LOAM, 8 TO 15% SLOPES

THE FOLLOWING ADDRESSES POTENTIAL SOILS USE LIMITATIONS AND PROPOSED RESOLUTIONS:

- CUTBANKS CAVE: 1.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 1.B. RESOLUTIONS: THE SITE IMPROVEMENTS WILL REQUIRE BULK EXCAVATION. ADEQUATE SHORING IS TO BE USED FOR DEEP EXCAVATION AND TRENCH WORK.
- 2. CORROSIVE TO CONCRETE/STEEL: 2.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 2.B. RESOLUTIONS: ALL PROPOSED PIPING WILL BE PLASTIC-BASED MATERIAL
- EASILY ERODIBLE
- 3.A. LIMITED SOILS: BEDINGTON AND DUFFIELD 3.B. RESOLUTIONS: CONTROL RUNOFF THROUGH IMPLEMENTATION OF E&SC BMPs BEFORE IT DEVELOPS INTO
- AN EROSIVE FORCE AND USE LAND ACCORDING TO ITS CAPABILITY. 4. HYDRIC/HYDRIC INCLUSIONS 4.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 4.B. RESOLUTIONS: NO DISTURBANCE TO HYDRIC SOILS IS PROPOSED. A WETLAND STUDY WAS PERFORMED AND NO WETLANDS ARE PRESENT WITHIN THE PROJECT BOUNDARY.
- LOW STRENGTH/LANSLIDE PRONE 5.A. LIMITED SOILS: DUFFIELD
- 5.B. RESOLUTIONS: SOIL AMENDMENTS AND PROPER COMPACTION TECHNIQUES MAY BE NECESSARY DURING CONSTRUCTION. DO NOT COMPACT SOILS WHEN SATURATED..
- 6.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 6.B. RESOLUTIONS: SOIL COMPACTION SHOULD BE LIMITED AS MUCH AS POSSIBLE IN THE PROPOSED INFILTRATION PCSM BMPs.
- 7.A. LIMITED SOILS: DUFFIELD
- 7.B. RESOLUTIONS: TRENCH BACKFILL SHALL BE PROPERLY COMPACTED WHEN CONSTRUCTING THE UNDERGROUND UTILITY LINES.
- 8. POOR SOURCE OF TOPSOIL 8.A. LIMITED SOILS: BEDINGTON AND DUFFIELD
- 8.B. RESOLUTIONS: PRESENCE OF GRAVEL OR ROCK FRAGMENTS IN THE TOPSOIL MAY MAKE VEGETATION ESTABLISHMENT DIFFICULT. PROPER PREPARATION (RAKING, LIME, AND FERTILIZER APPLICATION, ETC.) OF THE TOPSOIL WILL AID IN VEGETATION ESTABLISHMÈNT.

9.A. LIMITED SOILS: BEDINGTON

- 9.B. RESOLUTIONS: FROZEN FILL MATERIAL MUST NOT BE USED IN CONSTRUCTION. PLACE ASIDE AND ALLOW TO THAW AND DRY OUT PRIOR TO USE. DO NOT PLACE FILL ON FROZEN GROUND. ONLY EXCAVATE DURING FREEZING TEMPERATURES WHEN FILL CAN BE IMMEDIATELY PLACED AND COMPACTED.
- 10. SHRINK/SWELL LIMITED SOILS: DUFFIELD
- 10.A. RESOLUTIONS: DO NOT COMPACT FILL MATERIAL THAT IS SATURATED BEYOND OPTIMUM MOISTURE CONTENT. INCORPORATION OF LIME AS A DRYING AGENT MAY BE NECESSARY.
- 11.A. LIMITED SOILS: DUFFIELD
- 11.B. RESOLUTIONS: SHOULD A SINKHOLE BE UNCOVERED OR DEVELOP, NOTIFY THE ENGINEER AND UTILIZE THE SINKHOLE REMEDIATION DETAIL ON THE PLANS.
- 12.A. LIMITED SOILS: DUFFIELD
- 12.B. RESOLUTIONS: USE WET TOLERANT VEGETATION WITHIN THESE AREAS. INCORPORATION OF SAND INTO THE TOPSOIL MAY BE NECESSARY TO AID IN DRAINAGE. IT IS RECOMMENDED THAT A QUALIFIED GEOTECHNICAL ENGINEER BE PRESENT ON SITE DURING ALL PHASES OF CONSTRUCTION TO EVALUATE, MAKE RECOMMENDATIONS, AND PROVIDE SOLUTIONS FOR ALL SOIL USE

LIMITATIONS, CONSTRUCTION TECHNIQUES, AND OTHER SOILS AND GEOLOGICAL-RELATED ITEMS.

CONSTRUCTION SEQUENCE

- 1. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR ACCELERATED EROSION AND SEDIMENTATION. THE SEQUENCE OF EARTHMOVING ACTIVITIES SHALL BE APPROXIMATED AS FOLLOWS.
- 2. CHANGES OR ALTERATIONS TO THIS CONSTRUCTION SEQUENCE DUE TO FIELD CONDITIONS, CONSTRUCTION SCHEDULING, SEASONAL CONDITIONS OR OTHER INFLUENCES MUST BE APPROVED BY THE CONSERVATION DISTRICT.
- 3. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY
- 4. FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE CORRECTIVE ACTIONS TO IMMEDIATELY RESOLVE FAILURES OF SEDIMENT CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. 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.
- 5. AT LEAST (7) DAYS PRIOR TO BEGINNING PROPOSED CONSTRUCTION, THOSE INDIVIDUALS RESPONSIBLE FOR THE IMPLEMENTATION OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (AND ASSOCIATED PERMITS) SHALL ARRANGE FOR A PRE-CONSTRUCTION MEETING WITH THE OWNER AND HIS CONTRACTOR/EXCAVATOR, NEW BRITAIN TOWNSHIP, RETTEW ASSOCIATES INC. (PLAN PREPARER), AND THE BUCKS COUNTY CONSERVATION DISTRICT.
- 6. PRIOR TO BEGINNING ANY PROPOSED CONSTRUCTION, AND IN ACCORDANCE WITH ALL APPLICABLE PENNSYLVANIA STATE LAW AND REQUIREMENTS, PA 1-CALL SHALL BE CONTACTED AT 1-800-242-1776 WITH A REQUEST FOR CONSTRUCTION.
- 7. THE PROPOSED LIMITS OF DISTURBANCE SHALL BE FIELD DELINEATED AS PART OF THE GRADE STAKING PROCESS. LIMITS OF DISTURBANCE SHALL BE DEFINED BY THE LIMITS OF PROPOSED GRADING AND AS INDICATED ON THE PLANS. CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE AREAS WITHIN THE LIMITS OF DISTURBANCE.
- 8. ALL ITEMS NEEDING INSPECTION SHALL BE COORDINATED BY THE OWNER AND/OR CONTRACTOR. ALL REQUESTS FOR REQUIRED INSPECTIONS BY THE CONTRACTOR ARE TO BE DEEMED AS APPROVED REQUESTS ON BEHALF OF THE OWNER.

- 9. INSTALL THE ROCK CONSTRUCTION ENTRANCE. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL PROVIDED ON THE PLAN AND SHALL BE UTILIZED BY ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE.
- 10. INSTALL PERIMETER FILTER SOCKS AS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE DETAILS. FILTER SOCKS SHALL BE INSTALLED PARALLEL TO THE CONTOURS OR CONSTRUCTED AT LEVEL ALIGNMENTS. ANY SOCK SECTION THAT HAS BEEN UNDERMINED OR TOPPED MUST IMMEDIATELY BE REPLACED OR REPAIRED.
- 11. STRIP TOPSOIL ACROSS REMAINDER OF THE SITE. THE TOPSOIL SHALL BE STOCKPILED AT A LOCATION WITHIN THE LIMITS OF DISTURBANCE AT THE CONTRACTOR'S DISCRETION UPON APPROVAL OF THE COUNTY CONSERVATION DISTRICT. PROVIDE FILTER SOCKS DOWNSLOPE OF EACH STOCKPILE TO CONTAIN SEDIMENT AT THE STOCKPILE LOCATION. THE STOCKPILE SHALL BE SEEDED WITH A TEMPORARY SEED MIXTURE AND MULCHED IF IT WILL REMAIN IN PLACE FOR
- 12. ROUGH GRADE SITE, MOVING CUT FROM ONE SIDE OF THE SITE TO FILL AREAS OF THE SITE THAT ARE UPSLOPE OF PERIMETER CONTROLS. GRADE ENTRANCE AND PARKING AREAS IN SUCH A WAY AS TO ALLOW FOR INSTALLATION OF THE STORM DRAINAGE SYSTEM TO BE INSTALLED. FOR UNDERGROUND STORMWATER BASIN. IMMEDIATELY STABILIZE AREAS TRIBUTARY TO UNDER GROUND INFILTRATION BASIN UPON REACHING FINAL GRADE. INSTALL INLET FILTER BAGS AND COMPOST FILTER SOCK AROUND INLETS TRIBUTARY TO THE UNDERGROUND STORMWATER BASIN.
- 13. AS THE SITE IS BROUGHT TO FINAL GRADE, STABILIZE THESE AREAS IMMEDIATELY.
- 14. INSTALL ALL RETAINING WALLS AND ALL CHANNELS PER PLAN SPECIFICATIONS AND DETAILS.
- 15. INSTALL WATER UTILITIES. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP TRUCKS DURING INSTALLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN STREET
- 16. CONSTRUCT UNDERGROUND BASINS. CARE SHOULD BE TAKEN TO PREVENT COMPACTION OF BED BOTTOM (SEE PCSM PLAN FOR ADDITIONAL INFORMATION). INSTALL INLET FILTER BAGS AND COMPOST`FILTER SOCK AROUND INLETS AND CATCH BÁSINS. AS—BUILT PLANS SHALL BE PROVIDED FOR UNDERGROUND DETENTION BASINS TO VERIFY IT WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLAN PRIOR TO BACKFILLING OF THE BASIN.
- 17. UPON COMPLETION OF UNDERGROUND BASINS AND INSTALL SUBBASE STONE CONSTRUCTION,
- 18. UPON COMPLETION OF INSTALLATION OF STORM DRAINAGE SYSTEM TO UNDER GROUND BASINS, INSTALL INLET FILTER BAGS AND COMPOST FILTER SOCK AROUND INLETS. THE CONTRACTOR IS REQUIRED TO CLEAN OUT AND ACCUMULATED SILT AND SEDIMENT WITH THE EXISTING AND/OR PROPOSED BASINS AND TO PERMANENTLY STABILIZE AS NECESSARY.
- 20. INSTALL UTILITIES AND ROOF DRAINS. WATER AND SEWER SERVICE CONNECTION IN IINDEPENDENCE LANE ARE TO BE OPEN CUT. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP TRUCKS DURING INSTLLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN STREET RIGHT-OF-WAYS

19. BEGIN BUILDING CONSTRUCTION.

- 21. INSTALL CURBS, WALKS, AND PAVEMENT ON SITE.
- 22. INSTALL LANDSCAPE RESTORATION AREA AND LANDSCAPING (TREES AND SHRUBS). 23. AS SOON AS A PORTION OF THE SITE REACHES FINAL GRADE, APPLY TOPSOIL, AMENDMENTS,
- 24. UPON CONCLUSION OF SITE IMPROVEMENT CONSTRUCTION ACTIVITIES, REMOVE ROCK CONSTRUCTION ENTRANCE AND FINISH CONSTRUCTING NORTH ENTRANCE. 25. ANY AREAS THAT HAVE BECOME ERODED SHALL BE REGRADED, RESEEDED, REMULCHED, AND
- RENETTED (WHERE REQUIRED) BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AREAS OF THE SITE ARE STABILIZED IN ACCORDANCE WITH CHAPTER 26. ONCE COMPLETE STABILIZATION HAS BEEN ACHIEVED (UNIFORM 70% VEGETATIVE COVER), THE

CONTRACTOR MAY BEGIN REMOVING TEMPORARY CONTROL FACILITIES. ANY REMAINING

TEMPORARY EROSION AND SEDIMENT CONTROLS, SUCH AS FILTER SOCK, SILT FENCE, AND/OR

ROCK FILTERS SHALL BE REMOVED AT THIS TIME. ANY DISTURBANCE CREATED DURING THIS

PROCEDURE SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.

CRITICAL STAGES OF CONSTRUCTION THE FOLLOWING IDENTIFIES THE CRITICAL STAGES OF PCSM BMP CONSTRUCTION FOR WHICH A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON SITE:

- SUBSURFACE INFILTRATION BED STAKEOUT AND SITE PREPARATION
- EXCAVATION AND BOTTOM PREPARATION INSTALLATION OF CATCH BASINS, PIPING, STONE, GEOTEXTILE, CLEANOUTS, DRAIN BASINS,
- AND STILLING WELLS. 4. PLACEMENT OF STONE BASE COURSE OVER TOP OF BED.

THE CONTRACTOR SHALL SCHEDULE WITH THE LICENSED PROFESSIONAL AND OWNER A TIME FOR INSPECTION DURING CONSTRUCTION OF THESE CRITICAL STAGES.

ALL ITEMS NEEDING INSPECTION SHALL BE COORDINATED BY THE OWNER AND/OR CONTRACTOR. ALL REQUESTS FOR INSPECTIONS BY THE CONTRACTOR ARE TO BE DEEMED AS APPROVED REQUESTS ON BEHALF OF THE OWNER.

SEEDING SPECIFICATIONS

		TABLE 11. 4 Recommended Seed Mixtures e Seeding Rate -Pure Live Seed ¹		
	Mixture	Trecommended occurrent		Pure Live Seed 1
	Number	Species	Most Sites	Adverse Sites
		Spring oats (spring), or	64	96
		Annual ryegrass (spring or fall), or	10	15
	1 ²	Winter wheat (fall), or	90	120
		Winter rye (fall)	56	112
		Tall fescue, or	60	75
		Fine fescue, or	35	40
	2 ³	Kentucky bluegrass, plus	25	30
		Redtop⁴, or	3	3
		Perennial ryegrass	15	20
		Birdsfoot trefoil, plus	6	10
	3	Tall fescue	30	35
		Birdsfoot trefoil, plus	6	10
	4	Reed canarygrass	10	15
		Crownvetch, plus	10	15
	58	Tall fescue, or	20	25
		Perennial ryegrass	20	25
		Crownvetch, plus	10	15
	6 5, 8	Annual ryegrass	20	25
		Birdsfoot trefoil, plus	6	10
	7 8	Crownvetch, plus	10	15
		Tall fescue	20	30
		Flatpea, plus	20	30
	8	Tall fescue, or	20	30
		Perennial ryegrass	20	25
		Serecia lespedeza, plus	10	20
	9 6	Tall fescue, plus	20	25
		Redtop⁴	3	3
		Tall fescue, plus	40	60
	10	Fine fescue	10	15
		Deertongue, plus	15	20
	11	Birdsfoot trefoil	6	10
		Switchgrass , or	15	20
	12 ⁷	Big Bluestem, plus	15	20
		Birdsfoot trefoil	6	10
	1			

PENN STATE, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND' 1. PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATIONS DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR SWITCHGRASS, DIVIDE 12 POUNDS PLS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEED LOT IS 35%, DIVIDE 12 PLS BY 0.35 TO OBTAIN 34.3 POUNDS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS.

Orchard grass, c

Birdsfoot trefoil

CROWN VETCH

Smooth bromegrass , plus

- 2. IF HIGH-QUALITY SEED IS USED, FOR MOST SITES SEED SPRING OATS AT A RATE OF 2 BUSHELS PER ACRE, WINTER WHEAT AT 1.5 BUSHELS PER ACRE, AND WINTER RYE AT 1 BUSHEL PER ACRE. IF GERMINATION IS BELOW 90%, INCREASE THESE SUGGESTED SEEDING RATES BY 0.5 BUSHEL PER ACRE. THIS MIXTURE IS SUITABLE FOR FREQUENT MOWING. DO NOT CUT SHORTER THAN 4 INCHES. 4. KEEP SEEDING RATE TO THAT RECOMMENDED IN TABLE. THESE SPECIES HAVE MANY SEEDS PER POIND AND ARE VERY COMPETITIVE. TO SEED SMALL QUANTITIES OF SMALL SEEDS SUCH AS WEEPING LOVEGRASS AND REDTOP, DILUTE WITH DRY SAWDUST, SAND, RICE HULLS, BUCKWHEAT HULLS, ETC.
- 6. USE ONLY IN EXTREME SOUTHEASTERN OR EXTREME SOUTHWESTERN PENNSYLVANIA. SERECIA LESPEDEZA IS NOT WELL ADAPTED TO MOST OF PA. 7. DO NOT MOW SHORTER THAN 9 TO 10 INCHES. 8. SEED MIXTURES CONTAINING CROWN VETCH SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS

OR STREAM CHANNELS DUE TO THE INVASIVE NATURE OF THE SPECIES.

5. USE FOR HIGHWAY SLOPES AND SIMILAR SITES WHERE THE DESIRED SPECIES AFTER ESTABLISHED IS

TABLE 11. 5 Recommended Seed Mixtures for Stabilizing Disturbed Areas

	Nurse	Seed Mixture
Site Condition	Crop	(Select one mixture)
Slopes and Banks (not mowed)		
Well-drained	1 plus	3, 5, 8 , or12 ¹
Variable drainage	1 plus	3 or7
Slopes and Banks (mowed)		
Well-drained	1 plus	2 or10
Slopes and Banks (grazed/hay)		
Well-drained	1 plus	2, 3, or13
Gullies and Eroded Areas	1 plus	3, 5, 7, or12 ¹
Frosion Control Facilities (B M Ps)		
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or4
Drainage ditches		
Shallow, less than 3 feet deep	1 plus	2, 3, or4
Deep, not mowed	1 plus	5 or 7
Pond banks, dikes, levees, dams, diversion channels,		
And occasional water flow areas		
Mowed areas	1 plus	2 or3
Non-mowed areas	1 plus	5 or7
For hay or silage on diversion channels and		
Occasional water flow areas	1 plus	3 or13
lighways 2		
Non-mowed areas		
Pure crownvetch ³	1	5 or6
Well-drained	plus	5, 7, 8, 9, or10
Variable drained	1	3 or 7
Poorly drained	plus	3 or4
Areas mowed several times per year	1	2, 3, or10
Itility Right-of-way		
Well-drained	1 plus	5, 8 , or12 ¹
Variable drained	1 plus	3 or 7
Well-drained areas for grazing/hay	1 plus	2, 3, or13
ffluent Disposal Areas	1 plus	3 or4
Sanitary Landfills	1 plus	3, 5, 7, 11 ¹ , or12 ¹
Surface mines		
Spoils, mine wastes, fly ash, slag, settling basin		
Residues and other severely disturbed areas	1 plus	3, 4, 5, 7, 8, 9, 11 ⁻¹ , or12 ¹
(lime to soil test)	' -	

PENN STATE. "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND" 1. FOR SEED MIXTURES 11 AND 12, ONLY USE SPRING OATS OR WEEPING LOVEGRASS (INCLUDED IN MIX) AS NURSE

2. CONTACT THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DISTRICT ROADSIDE SPECIALIST FOR

SPECIFIC SUGGESTIONS ON TREATMENT TECHNIQUES AND MANAGEMENT PRACTICES.

3. SEED MIXTURES CONTAINING CROWN VETCH SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS DUE TO THE INVASIVE OF THIS SPECIES. DEP Recommended Temporary Seed Mixtures to be utilized

		2 = 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1			
N	lixture		Seeding Rate - Pure Live Seed ¹		
N	Number	Species	Most Sites	Adverse Sites	
1	2	Spring oats (spring), or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 10 90 56	96 15 120 112	
3		Birdsfoot trefoil, plus Tall fescue	6	10	

MULCH APPLICATION RATES					
	Į.	APPLICATION RAT	E (MIN.)		
MULCH TYPE	PER ACRE	PER 1,000 S.F.	PER 1,000 S.Y.	NOTES	
STRAW	3 TONS	I I I		EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN	
НАҮ	3 TONS	140 LBS.	1,240 LBS.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES	
WOOD CHIPS	4 - 6 TONS	185 - 275 LBS.	1,650 - 2,500 LBS.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES	
HYDROMULCH	1 TON	47 LBS.	415 LBS.	SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%	

SOIL AMENDMENT APPLICATION RATE EQUIVALENTS								
PERMANENT SEEDING APPLICATION RATE								
SOIL AMENDMENT PER ACRE PER 1,000 S.F. PER 1,000 S.Y. NOTES								
AGRICULTURAL LIME	6 TONS	OR AS PER SOIL TEST, MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS						
10-20-20 FERTILIZER	1,000 LBS.	OR AS PER SOIL TES 210 LBS. MAY NOT BE REQUIRE IN AGRICULTURAL FIE						
	TEMPORAR	Y SEEDING AP	PLICATION RAT	E				
SOIL AMENDMENT	PER ACRE	PER 1,000 S.F.	PER 1,000 S.Y.	NOTES				
AGRICULTURAL LIME	1 TON	410 LBS.	TYPICALLY NOT REQUIRED FOR TOP SOIL					
10-10-10 FERTILIZER 500 LBS. 12.5 LBS. 100 LBS. TYPICALLY NOT REQUIRE FOR TOP SOIL								
NOTE: A COMPOST BL	ANKET WHICH ME	ETS THE STAND	ARDS OF CHAPT	ER 11 OF THE PADEP E & S				

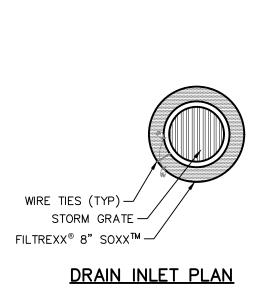
10052 T

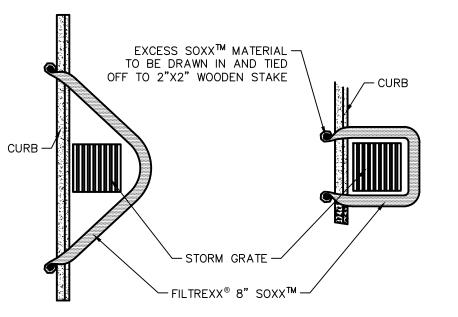
2 **½**

SHEET NO. 20 OF 25 111902019

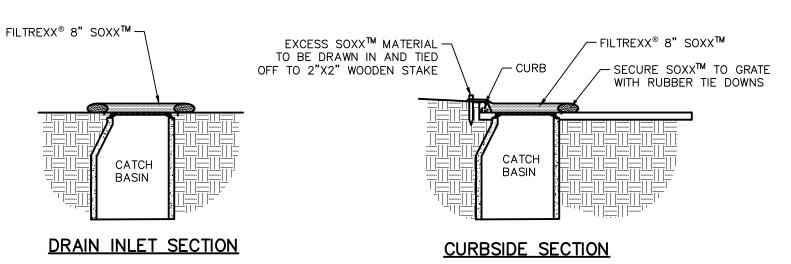
6/9/2022 DATF:

MANUAL MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN THE TABLE ABOVE. NOT FOR CONSTRUCTION / NOT FOR BIDDING



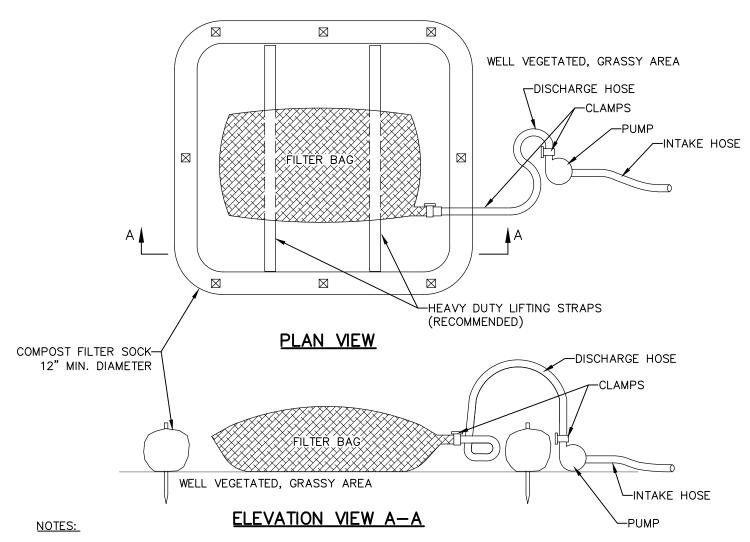


CURBSIDE OPTION "A" PLAN CURBSIDE OPTION "B" PLAN





FILTREXX INLET PROTECTION DETAIL



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

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

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

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

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

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

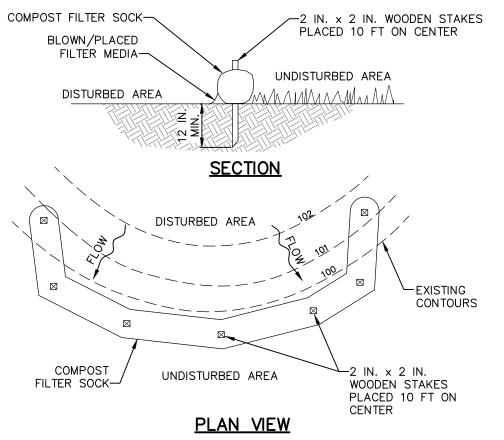
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. MODIFIED CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY

NOTE: MINIMUM SPECIFICATIONS FOR FILTER SOCK FABRIC SHALL MEET THE FOLLOWING PER TABLE 4.1: MATERIAL TYPE: 5 MIL HDPE MATERIAL CHARACTERISTICS: PHOTO-DEGRADABLE MESH OPENING: 26 PSI TENSILE STRENGTH: MINIMUM FUNCTIONAL LONGEVITY: 9 MONTHS

TABLE 4.2 COMPOST STANDARDS ORGANIC MATTER CONTENT 25% - 100% (DRY WEIGHT BASIS) FIBROUS AND ELONGATED ORGANIC PORTION 5.5 - 8.5 30% - 60% MOISTURE CONTENT PARTICLE SIZE 30% - 50% PASS THROUGH ₹ SIEVE SOLUBLE SALT CONCENTRATION 5.0 dS/m (mmhos/cm) MAXIMUM



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

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

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

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

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

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

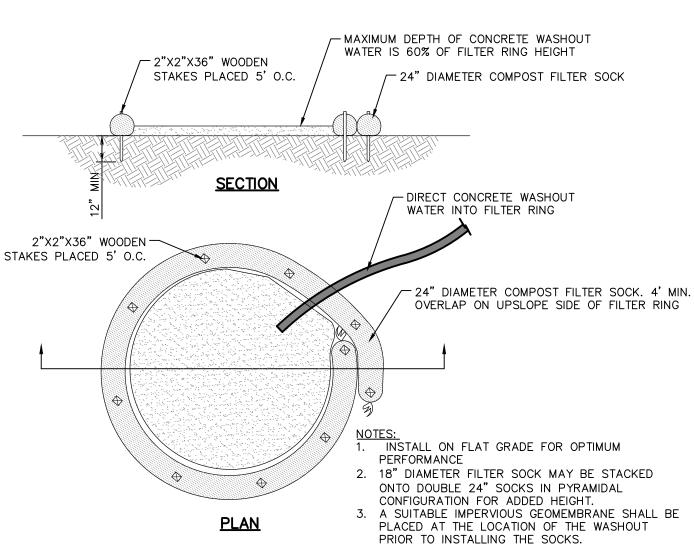


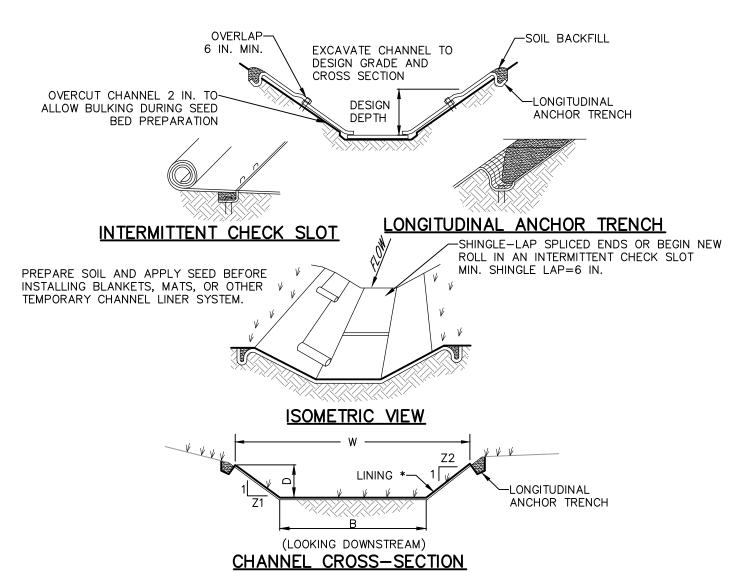
FIGURE #3.18 TYPICAL COMPOST SOCK WASHOUT INSTALLATION

 \mathbf{C}

6/9/2022

SHEET NO. 21 OF 25

DWG. NO. 111902019



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

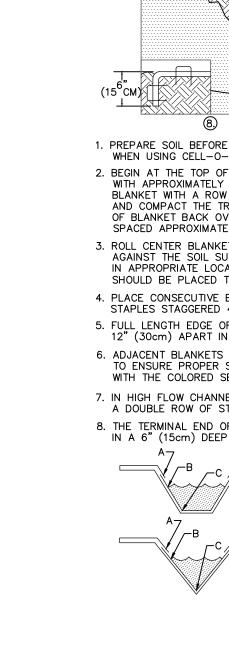
CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING * (OR EQUIVALENT)	STAPLE PATTERN
1	ALL	2	1	8	3	3	NAG SC150	D
2	ALL	2	1	8	3	3	NAG S75	D
3	ALL	2	1	8	3	3	NAG SC150	D

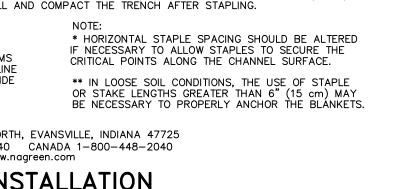
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

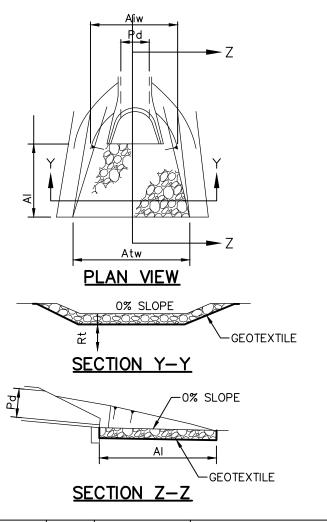
CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL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

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

STANDARD CONSTRUCTION DETAIL #6-1 VEGETATED CHANNEL





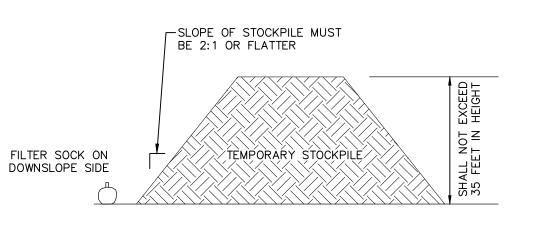


	OUTLET NO.	PIPE DIA	RIPRAP		APRON		
		Pd (IN)	SIZE R	THICK. Rt (IN)	LENGTH AI (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
	HW-1	18	4	18	9	5	8
	HW-2	18	4	18	9	5	8
[HW-3	18	4	18	9	5	8

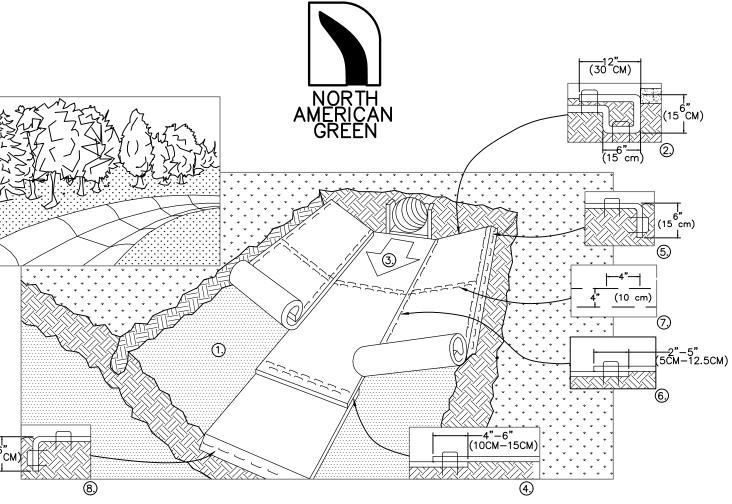
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

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



TEMPORARY STOCKPILE DETAIL



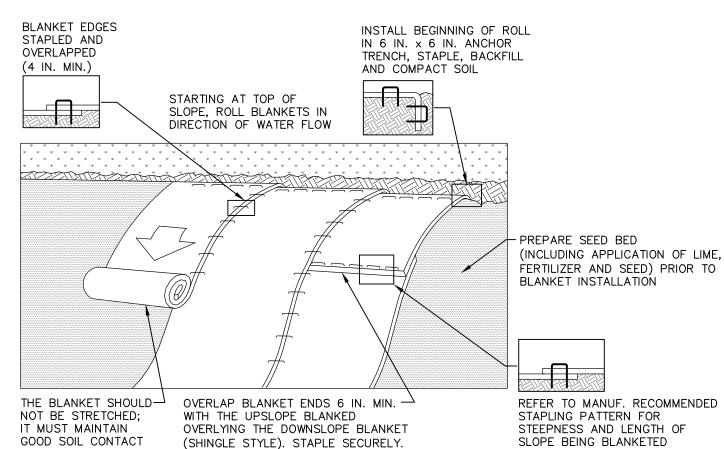
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET

- SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET. 3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SULFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS. 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH™ON THE BLANKET BEING OVERLAPPED.
- 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- 8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CRITICAL POINTS A. OVERLAPS AND SEAMS B. PROJECTED WATER LINE C. CHANNEL BOTTOM/SIDE SLOPE VERTICES





(SHINGLE STYLE). STAPLE SECURELY.

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.

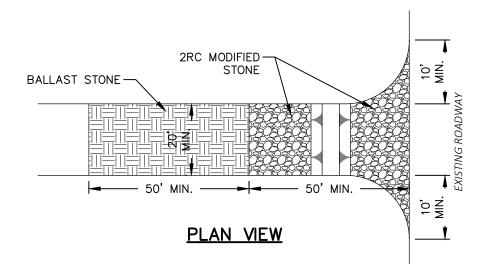
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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

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. STANDARD CONSTRUCTION DETAIL #11-1

EROSION CONTROL BLANKET INSTALLATION



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

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

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

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

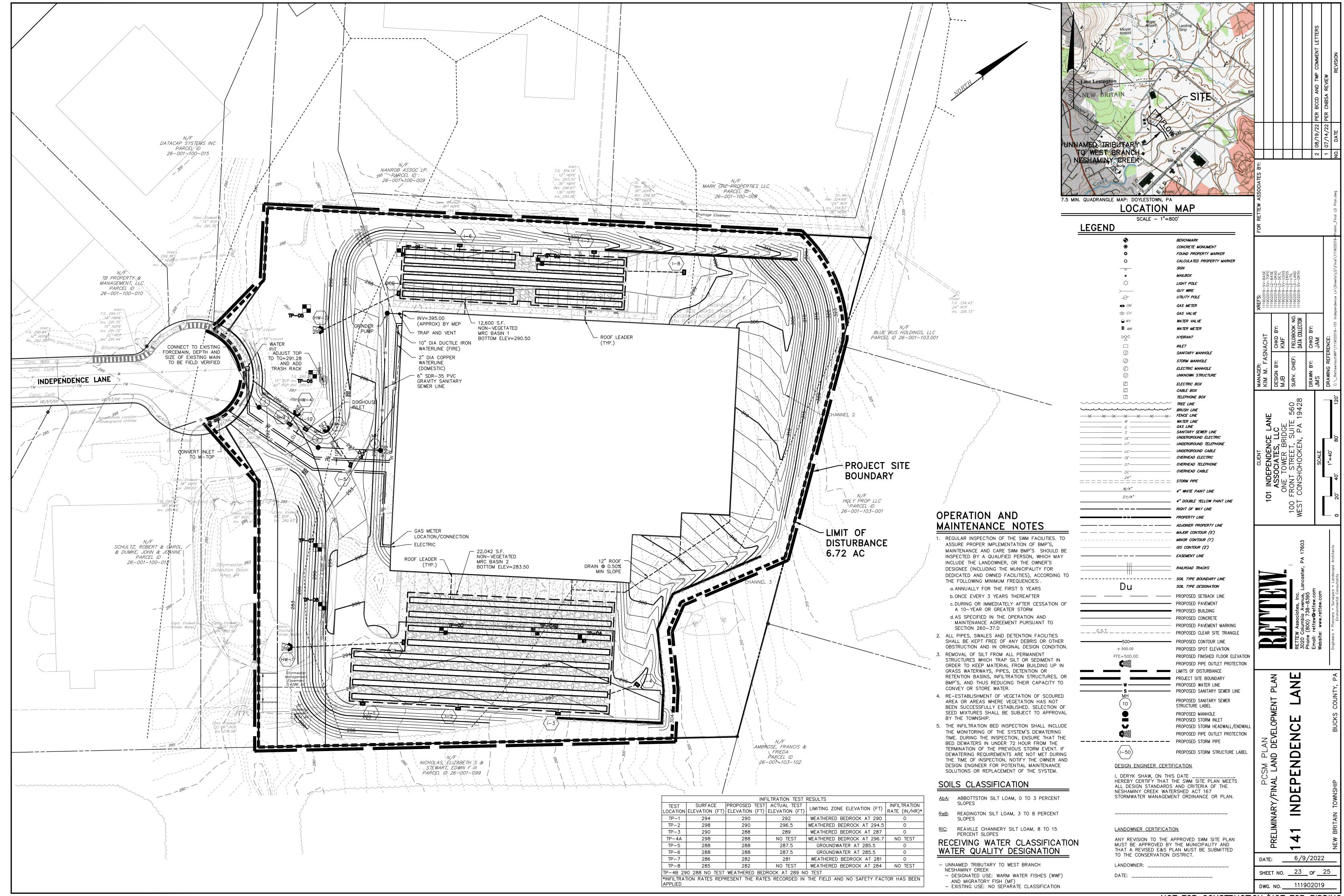
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE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

STANDARD CONSTRUCTION DETAIL #3-1 ABACT ALTERNATIVE ROCK CONSTRUCTION ENTRANCE

 \mathbf{C} MENT.

6/9/2022 SHEET NO. 22 OF 25

DWG. NO. 111902019



POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) NOTES

PCSM REQUIREMENTS

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 DISTRIC

LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES: 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 STRUCTURALLY NGINEERED BMPs, OR OTHER BMPs AS DEEMED APPROPRIATE BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS: "I (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 TH PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN. THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWNGS 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 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 BMPs.

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 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 DISTRICT, 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.

THE OWNER SHALL CONDUCT A VISUAL INSPECTION OF ALL STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT LEAST ONCE EVERY THREE MONTHS AND IMMEDIATELY AFTER STORM EVENTS. SUCH VISUAL EXAMINATION SHALL AT LEAST INVOLVE AN EXAMINATION OF THE STORMWATER COLLECTION AND CONVEYANCE FOR DEBRIS DEPOSITION (SUCH DEBRIS MAY INCLUDE, BUT SHALL NOT BE LIMITED TO AGGREGATE MATERIAL, LEAVES, GRASS CLIPPINGS, SOIL AND TRASH), AND AN EXAMINATION OF THE STORMWATER BMP FACILITY FOR SOIL AND STRUCTURAL SETTLEMENT, DEPRESSIONS, SINKHOLES, SEEPS, STRUCTURAL CRACKING, ANIMAL BURROWS, EXCESSIVE VEGETATION, CLOGGING, EROSION AND FOUNDATION MOVEMENT

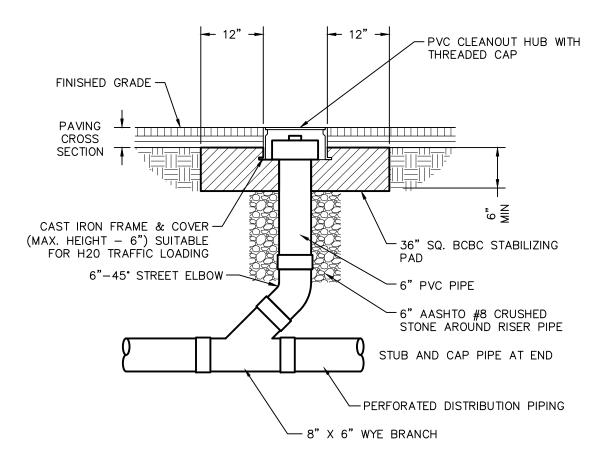
THE OWNER SHALL REMOVE ANY ACCUMULATION OF DEBRIS AND REPAIR ANY DAMAGE TO THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES. REPAIRS SHALL BE MADE USING MATERIAL THAT MEETS OR EXCEEDS THE

IN ACCORDANCE WITH THE NPDES PERMIT THE OWNER IS REQUIRED TO MAINTAIN A RECORD OF ALL INSPECTIONS REPAIRS AND MAINTENANCE ACTIVITIES ASSOCIATED WITH THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT THIS PROJECT SITE. THE OWNER SHALL IMMEDIATELY NOTIFY THE MUNICIPALITY AND THE CONSERVATION DISTRICT PRIOR TO INITIATING ANY MAJOR REPAIR ACTIVITIES (SUCH AS REPAIRS THAT MAY BE REQUIRED AS A RESULT OF SETTLEMENT. SINKHOLES. SEEPS, STRUCTURAL CRACKING OR FOUNDATION MOVEMENT). THE OWNER SHALL ALSO COMPLY WITH ANY OTHER MAINTENANCE NOTES THAT MAY BE ON THESE PLANS.

THE TOWNSHIP AND THE SITE ENGINEER SHALL BE NOTIFIED IN THE EVENT SINKHOLES OR OTHER UNSUITABLE SUB-SURFACE CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION. IN ADDITION, THE SERVICES OF A REGISTERED GEOLOGIST SHOULD BE OBTAINED TO ASSIST IN RECOMMENDING CONSTRUCTION TECHNIQUES AND PERMANENT FACILITIES NECESSARY TO AVOID FURTHER SINKHOLE CREATION, REPAIR ANY EXISTING SINKHOLES, AND MAKE RECOMMENDATION ON ANY ENCOUNTERED UNSUITABLE SUB-SURFACE CONDITIONS.

WEST CONSHOHOCKEN, PA 19428

DOWNER/PERMITEE/RESPONSIBLE PARTY: 101 INDEPENDENCE LANE ASSOCIATES, LLC ONE TOWER BRIDGE 100 FRONT STREET. SUITE 560



PIPING CLEANOUT DETAIL (PAVED AREAS)

SOIL CONDITIONS

THE SOIL SURVEY OF LANCASTER COUNTY INDICATES THAT THE SOILS WITHIN THE PROJECT AREA ARE COMPRISED OF THE FOLLOWING: AbA - ABBOTTSTON SILT LOAM, 0 TO 3% SLOPES

ReB - READINGTON SILT LOAM, 3 TO 8% SLOPES RIC - REAVILLE CHANNERY SILT LOAM, 8 TO 15% SLOPES

THE FOLLOWING ADDRESSES POTENTIAL SOILS USE LIMITATIONS AND PROPOSED RESOLUTIONS:

1. CUTBANKS CAVE: 1.A. LIMITED SOILS: BEDINGTON AND DUFFIELD

1.B. RESOLUTIONS: THE SITE IMPROVEMENTS WILL REQUIRE BULK EXCAVATION. ADEQUATE SHORING IS TO BE USED FOR DEEP EXCAVATION AND TRENCH WORK.

. CORROSIVE TO CONCRETE/STEEL:

2.A. LIMITED SOILS: BEDINGTON AND DUFFIELD 2.B. RESOLUTIONS: ALL PROPOSED PIPING WILL BE PLASTIC-BASED MATERIAL.

3. EASILY ERODIBLE 3.A. LIMITED SOILS: BEDINGTON AND DUFFIELD

3.B. RESOLUTIONS: CONTROL RUNOFF THROUGH IMPLEMENTATION OF E&SC BMPs BEFORE IT DEVELOPS INTO AN EROSIVE FORCE AND USE LAND ACCORDING TO ITS CAPABILITY

4. HYDRIC/HYDRIC INCLUSIONS

4.A. LIMITED SOILS: BEDINGTON AND DUFFIELD 4.B. RESOLUTIONS: NO DISTURBANCE TO HYDRIC SOILS IS PROPOSED. A WETLAND STUDY WAS PERFORMED

AND NO WETLANDS ARE PRESENT WITHIN THE PROJECT BOUNDARY. LOW STRENGTH /LANSLIDE PRONE

5.A. LIMITED SOILS: DUFFIELD 5.B. RESOLUTIONS: SOIL AMENDMENTS AND PROPER COMPACTION TECHNIQUES MAY BE NECESSARY DURING

CONSTRUCTION. DO NOT COMPACT SOILS WHEN SATURATED..

6.A. LIMITED SOILS: BEDINGTON AND DUFFIELD

6.B. RESOLUTIONS: SOIL COMPACTION SHOULD BE LIMITED AS MUCH AS POSSIBLE IN THE PROPOSED INFILTRATION PCSM BMPs.

7.A. LIMITED SOILS: DUFFIELD

7.B. RESOLUTIONS: TRENCH BACKFILL SHALL BE PROPERLY COMPACTED WHEN CONSTRUCTING THE UNDERGROUND UTILITY LINES.

8. POOR SOURCE OF TOPSOIL 8.A. LIMITED SOILS: BEDINGTON AND DUFFIELD

8.B. RESOLUTIONS: PRESENCE OF GRAVEL OR ROCK FRAGMENTS IN THE TOPSOIL MAY MAKE VEGETATION ESTABLISHMENT DIFFICULT. PROPER PREPARATION (RAKING, LIME, AND FERTILIZER APPLICATION, ETC.) OF THE TOPSOIL WILL AID IN VEGETATION ESTABLISHMÈNT.

9. FROST ACTION 9.A. LIMITED SOILS: BEDINGTON

9.B. RESOLUTIONS: FROZEN FILL MATERIAL MUST NOT BE USED IN CONSTRUCTION. PLACE ASIDE AND ALLOW TO THAW AND DRY OUT PRIOR TO USE. DO NOT PLACE FILL ON FROZEN GROUND. ONLY EXCAVATE DURING FREEZING TEMPERATURES WHEN FILL CAN BE IMMEDIATELY PLACED AND COMPACTED.

10. SHRINK /SWELL

LIMITED SOILS: DUFFIELD 10.A. RESOLUTIONS: DO NOT COMPACT FILL MATERIAL THAT IS SATURATED BEYOND OPTIMUM MOISTURE

CONTENT. INCORPORATION OF LIME AS A DRYING AGENT MAY BE NECESSARY

11. POTENTIAL SINKHOLE 11.A. LIMITED SOILS: DUFFIELD

11.B. RESOLUTIONS: SHOULD A SINKHOLE BE UNCOVERED OR DEVELOP, NOTIFY THE ENGINEER AND UTILIZE THE SINKHOLE REMEDIATION DETAIL ON THE PLANS.

12.A. LIMITED SOILS: DUFFIELD

12.B. RESOLUTIONS: USE WET TOLERANT VEGETATION WITHIN THESE AREAS. INCORPORATION OF SAND INTO HE TOPSOIL MAY BE NECESSARY TO AID IN DRAINAGE

IT IS RECOMMENDED THAT A QUALIFIED GEOTECHNICAL ENGINEER BE PRESENT ON SITE DURING ALL PHASES OF CONSTRUCTION TO EVALUATE, MAKE RECOMMENDATIONS, AND PROVIDE SOLUTIONS FOR ALL SOIL USE LIMITATIONS, CONSTRUCTION TECHNIQUES, AND OTHER SOILS AND GEOLOGICAL-RELATED ITEMS.

SEDIMENT REMOVAL/DISPOSAL NOTE

ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY

CRITICAL STAGES OF CONSTRUCTION

THE FOLLOWING IDENTIFIES THE CRITICAL STAGES OF PCSM BMP CONSTRUCTION FOR WHICH A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON SITE:

SUBSURFACE INFILTRATION BED STAKEOUT AND SITE PREPARATION

EXCAVATION AND BOTTOM PREPARATION INSTALLATION OF CATCH BASINS, PIPING, STONE, GEOTEXTILE, CLEANOUTS, DRAIN BASINS, AND STILLING

4. PLACEMENT OF STONE BASE COURSE OVER TOP OF BED.

THE CONTRACTOR SHALL SCHEDULE WITH THE LICENSED PROFESSIONAL AND OWNER A TIME FOR INSPECTION DURING CONSTRUCTION OF THESE CRITICAL STAGES.

ALL ITEMS NEEDING INSPECTION SHALL BE COORDINATED BY THE OWNER AND/OR CONTRACTOR. ALL REQUESTS FOR INSPECTIONS BY THE CONTRACTOR ARE TO BE DEEMED AS APPROVED REQUESTS ON BEHALF OF THE

INDIVIDUAL PCSM BMP INFORMATION

PCSM BMP NAME: NON-VEGETATED MRC BASIN 1 PCSM BMP DESCRIPTION/TYPE: NON-VEGETATED MRC BASIN

BMP LENGTH (FT)(IF APPLICABLE): 233 BMP AREA (AC.): <u>0.29</u>

BMP DEPTH (FT): <u>4.5</u>

VOLUME OF STORMWATER TREATED (CF): 6,593

OWNER NAME: 101 INDEPENDENCE LANE ASSOCIATES, LLC

OWNER ADDRESS: <u>ONE TOWER BRIDGE, 100 FRONT ST., SUITE 560, WEST CONSHOHOCKEN, PA 19428</u>

OWNER PHONE #: 610-825-1653

INDIVIDUAL PCSM BMP INFORMATION

PCSM BMP NAME: NON-VEGETATED MRC BASIN 2 PCSM BMP DESCRIPTION/TYPE: NON-VEGETATED MRC BASIN

BMP LENGTH (FT)(IF APPLICABLE): 270

BMP AREA (AC.): <u>0.64</u>

BMP DEPTH (FT): <u>6.5</u>

VOLUME OF STORMWATER TREATED (CF): 27,937 OWNER NAME: 101 INDEPENDENCE LANE ASSOCIATES, LLC

OWNER ADDRESS: <u>ONE TOWER BRIDGE, 100 FRONT ST., SUITE 560, WEST CONSHOHOCKEN, PA 19428</u> OWNER PHONE #: 610-825-1653

PCSM BMP #: <u>1</u>

ACRES TREATED: 1.89

LIFECYCLE (YRS): 80

NPDES #: N/A

NESHAMINY CREEK

IMPERVIOUS AREA TREATED: 0.44

PCSM BMP #: <u>2</u> ACRES TREATED: 4.84 IMPERVIOUS AREA TREATED: 3.03

LIFECYCLE (YRS): 80 NPDES #: <u>N/A</u>

RECEIVING WATERBODY: UNNAMED TRIBUTARY TO WEST BRANCH NESHAMINY CREEK

RECEIVING WATERBODY: UNNAMED TRIBUTARY TO WEST BRANCH

RECYCLING AND DISPOSAL

PROCEDURES, WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE, WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. THE CONTRACTOR SHALL PLAN AND IMPLEMENT MEASURES FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL DURING CONSTRUCTION. WHEREVER POSSIBLE RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. DISPOSAL OF CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

1. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT. IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE

2. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH PA DEP'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773.

3. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL THE TERM INCLUDES SOIL ROCK, STONE, DREDGED MATERIAL, USED ASPHALT (NOT INCLUDING MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE), 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.

VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP. REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONAIRES, TRANSACTION SCREENS. ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PAR OF DUE DILIGENCE UNLESS VISUAL INSPECTIONS 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.

4. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING BUT NOT LIMITED TO,

5. FILL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH PA DEP'S MUNICIPAL OR RESIDENTAIL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS

CONSTRUCTION SEQUENCE

SHALL BE APPROXIMATED AS FOLLOWS.

CONSERVATION DISTRICT FOR A FINAL INSPECTION.

BY THE CONSERVATION DISTRICT.

1. CONSTRUCTION WILL PROCEED IN A TIMELY MANNER IN ORDER TO LIMIT THE POTENTIAL FOR

2. CHANGES OR ALTERATIONS TO THIS CONSTRUCTION SEQUENCE DUE TO FIELD CONDITIONS,

3. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF

4. FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT

UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

INC. (PLAN PREPARER), AND THE BUCKS COUNTY CONSERVATION DISTRICT.

AT 1-800-242-1776 WITH A REQUEST FOR CONSTRUCTION.

THE AREAS WITHIN THE LIMITS OF DISTURBANCE.

APPROVED REQUESTS ON BEHALF OF THE OWNER.

SITE IMPROVEMENTS

MORE THAN 4 DAYS.

18. BEGIN BUILDING CONSTRUCTION.

20. INSTALL CURBS, WALKS, AND PAVEMENT ON SITE.

SEED, AND MULCH OR EROSION CONTROL MATTING.

ACCELERATED EROSION AND SEDIMENTATION. THE SEQUENCE OF EARTHMOVING ACTIVITIES

CONSTRUCTION SCHEDULING, SEASONAL CONDITIONS OR OTHER INFLUENCES MUST BE APPROVED

ALL DISTURBED AREAS. THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY

SEDIMENT LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE

CORRECTIVE ACTIONS TO IMMEDIATELY RESOLVE FAILURES OF SEDIMENT CONTROL FACILITIES

MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF

THE CLEAN STREAMS LAW OF PENNSYLVANIA. THE CLEAN STREAMS LAW PROVIDES FOR UP TO

\$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND

RESPONSIBLE FOR THE IMPLEMENTATION OF THE APPROVED EROSION AND SEDIMENT CONTROL

PLAN (AND ASSOCIATED PERMITS) SHALL ARRANGE FOR A PRE-CONSTRUCTION MEETING WITH

THE OWNER AND HIS CONTRACTOR/EXCAVATOR, NEW BRITAIN TOWNSHIP, RETTEW ASSOCIATES

APPLICABLE PENNSYLVANIA STATE LAW AND REQUIREMENTS, PA 1-CALL SHALL BE CONTACTED

. THE PROPOSED LIMITS OF DISTURBANCE SHALL BE FIELD DELINEATED AS PART OF THE GRADE

8. ALL ITEMS NEEDING INSPECTION SHALL BE COORDINATED BY THE OWNER AND/OR CONTRACTOR.

9. INSTALL THE ROCK CONSTRUCTION ENTRANCE. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL PROVIDED ON THE PLAN AND

10. INSTALL PERIMETER FILTER SOCKS AS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE

11. STRIP TOPSOIL ACROSS REMAINDER OF THE SITE. THE TOPSOIL SHALL BE STOCKPILED AT A

12. ROUGH GRADE SITE, MOVING CUT FROM ONE SIDE OF THE SITE TO FILL AREAS OF THE SITE

14. INSTALL WATER UTILITIES. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP TRUCKS DURING

15. CONSTRUCT UNDERGROUND BASINS. CARE SHOULD BE TAKEN TO PREVENT COMPACTION OF BED

16. UPON COMPLETION OF UNDERGROUND BASINS AND INSTALL SUBBASE STONE CONSTRUCTION,

17. UPON COMPLETION OF INSTALLATION OF STORM DRAINAGE SYSTEM TO UNDER GROUND BASINS,

19. INSTALL UTILITIES AND ROOF DRAINS. WATER AND SEWER SERVICE CONNECTION IN INDEPENDENCE LANE ARE TO BE OPEN CUT. ALL TRENCH SPOIL SHALL BE CONTAINED IN DUMP

22. AS SOON AS A PORTION OF THE SITE REACHES FINAL GRADE, APPLY TOPSOIL, AMENDMENTS,

23. UPON CONCLUSION OF SITE IMPROVEMENT CONSTRUCTION ACTIVITIES, REMOVE ROCK

24. ANY AREAS THAT HAVE BECOME ERODED SHALL BE REGRADED, RESEEDED, REMULCHED, AND RENETTED (WHERE REQUIRED) BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE

25. ONCE COMPLETE STABILIZATION HAS BEEN ACHIEVED (UNIFORM 70% VEGETATIVE COVER), THE

PROCEDURE SHALL BE STABILIZED IMMEDIATELY THROUGH SEEDING AND MULCHING.

FOR INSURING THAT ALL ARÉAS OF THE SITE ARE STABILIZED IN ACCORDANCE WITH CHAPTER

CONTRACTOR MAY BEGIN REMOVING TEMPORARY CONTROL FACILITIES. ANY REMAINING

TEMPORARY EROSION AND SEDIMENT CONTROLS, SUCH AS FILTER SOCK, SILT FENCE, AND/OR

ROCK FILTERS SHALL BE REMOVED AT THIS TIME. ANY DISTURBANCE CREATED DURING THIS

TRUCKS DURING INSTLLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN

INSTALLATION OPERATIONS. THERE IS TO BE NO TRENCH SPOIL PLACED WITHIN STREET

BOTTOM (SEE PCSM PLAN FOR ADDITIONAL INFORMATION). INSTALL INLET FILTER BAGS AND COMPOST FILTER SOCK AROUND INLETS AND CATCH BASINS. AS-BUILT PLANS SHALL BE

PROVIDED FOR UNDERGROUND DETENTION BASINS TO VERIFY IT WAS CONSTRUCTED IN

13. AS THE SITE IS BROUGHT TO FINAL GRADE, STABILIZE THESE AREAS IMMEDIATELY.

ACCORDANCE WITH THE APPROVED PLAN PRIOR TO BACKFILLING OF THE BASIN.

INSTALL INLET FILTER BAGS AND COMPOST FILTER SOCK AROUND INLETS.

21. INSTALL LANDSCAPE RESTORATION AREA AND LANDSCAPING (TREES AND SHRUBS).

CONSTRUCTION ENTRANCE AND FINISH CONSTRUCTING NORTH ENTRANCE.

DETAILS. FILTER SOCKS SHALL BE INSTALLED PARALLEL TO THE CONTOURS OR CONSTRUCTED

AT LEVEL ALIGNMENTS. ANY SOCK SECTION THAT HAS BEEN UNDERMINED OR TOPPED MUST

LOCATION WITHIN THE LIMITS OF DISTURBANCE AT THE CONTRACTOR'S DISCRETION UPON

APPROVAL OF THE COUNTY CONSERVATION DISTRICT. PROVIDE FILTER SOCKS DOWNSLOPE OF EACH STOCKPILE TO CONTAIN SEDIMENT AT THE STOCKPILE LOCATION. THE STOCKPILE SHAL

BE SEEDED WITH A TEMPORARY SEED MIXTURE AND MULCHED IF IT WILL REMAIN IN PLACE FOR

THAT ARE UPSLOPE OF PERIMETER CONTROLS. GRADE ENTRANCE AND PARKING AREAS IN SUCH

A WAY AS TO ALLOW FOR INSTALLATION OF THE STORM DRAINAGE SYSTEM TO BE INSTALLED

FOR UNDERGROUND STORMWATER BASIN. IMMEDIATELY STABILIZE AREAS TRIBUTARY TO UNDER

GROUND INFILTRATION BASIN UPON REACHING FINAL GRADE. INSTALL INLET FILTER BAGS AND COMPOST FILTER SOCK AROUND INLETS TRIBUTARY TO THE UNDERGROUND STORMWATER BASIN.

SHALL BE UTILIZED BY ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE.

STAKING PROCESS. LIMITS OF DISTURBANCE SHALL BE DEFINED BY THE LIMITS OF PROPOSEI

GRADING AND AS INDICATED ON THE PLANS. CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO

ALL REQUESTS FOR REQUIRED INSPECTIONS BY THE CONTRACTOR ARE TO BE DEEMED AS

5. AT LEAST (7) DAYS PRIOR TO BEGINNING PROPOSED CONSTRUCTION, THOSE INDIVIDUALS

6. PRIOR TO BEGINNING ANY PROPOSED CONSTRUCTION, AND IN ACCORDANCE WITH ALL

ENGINEERED SOIL SPECIFICATIONS

ENGINEERED SOIL SHALL CONSIST OF SUITABLE TOPSOIL FROM ON-SITE (IF AVAILABLE) AND 20-30% COMPOST AMENDMENT OR MANUFACTURED SILT LOAM, LOAM, OR SANDY LOAM SOIL CONTAINING 20-30% COMPOST THE MINERAL COMPONENT OF TH ENGINEERED SOIL SHOULD NOT CONTAIN GREATER THAN 20% CLAY AND SHOULD HAVE A MINIMUM OF 40% AND A MAXIMUM OF 70% SAND. THE COMPOST PORTION OF THE ENGINEERED SOIL SHOULD NOT CONTAIN WOODY DEBRIS OR RESEMBLE MULCH.

COMPOST SHALL BE WELL-COMPOSTED, STABLE, AND WEE-FREE ORGANIC MATTER PRODUCED BY COMPOSTING FEEDSTOCK AND AS FOLLOWS: FEED STOCK LIMITED TO LEAVES

SOLUBLE-SALE CONCENTRATION LEASS THAN 4dS/M

 MOISTURE CONTENT 35-55% BY WEIGHT ORGANIC-MATTER CONTENT: 30-40% OF DRY WEIGHT • PARTICLE SIZE MINIMUM OF 98 PERCENT PASSING THROUGH A 3/4 INCH SIEVE THE ENGINEERED SOIL IS TO BE INSTALLED WITH LIGHT MACHINERY TO AVOID

COMPACTION WHILE BEING INSTALLED. A SOIL SAMPLE ANALYSIS SHOULD BE PERFORMED ON THE TOPSOIL PRIOR TO MIXING TO INSURE PROPER SOIL COMPOSTION THE SEEDING SHALL BE INSTALLED DURING A TIME IN WHICH NO RAIN IS PREDICTED TO AIDE IN GERMINATION.

SEEDING SPECIFICATIONS

Recommended Seed Mixtures Seeding Rate -Pure Live Seed 1 Adverse Sites Number Most Sites Spring oats (spring), or Annual ryegrass (spring or fall), or Winter wheat (fall), or 120 Winter rye (fall) Tall fescue. or Fine fescue, or Kentucky bluegrass, plus Redtop⁴, or Perennial ryegras: Birdsfoot trefoil, plus Tall fescue Birdsfoot trefoil, plus Reed canarygrass Crownvetch, plus Tall fescue, or Perennial ryegras: Crownvetch, plus 6 5, 8 Annual ryegrass Birdsfoot trefoil, plus Crownvetch, plus Tall fescue Flatpea, plus Tall fescue, or Perennial ryegrass Serecia lespedeza, plus Tall fescue, plus Tall fescue, plus 10 Fine fescue Deertongue, plus Birdsfoot trefoil Switchgrass , or Big Bluestem, plus

PENN STATE, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND" 1. PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATIONS DIVIDED BY 100, FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR SWITCHGRASS, DIVIDE 12 POUNDS PLS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEED LOT IS 35%, DIVIDE 12

PLS BY 0.35 TO OBTAIN 34.3 POUNDS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS

TABLE ARE SHOWN IN TERMS OF PLS. 2. IF HIGH-QUALITY SEED IS USED, FOR MOST SITES SEED SPRING OATS AT A RATE OF 2 BUSHELS PER ACRE, WINTER WHEAT AT 1.5 BUSHELS PER ACRE, AND WINTER RYE AT 1 BUSHEL PER ACRE. IF GERMINATION IS BELOW 90%, INCREASE THESE SUGGESTED SEEDING RATES BY 0.5 BUSHEL PER ACRE. 3. THIS MIXTURE IS SUITABLE FOR FREQUENT MOWING. DO NOT CUT SHORTER THAN 4 INCHES.

Birdsfoot trefoil Orchard grass, or

Birdsfoot trefoil

7. DO NOT MOW SHORTER THAN 9 TO 10 INCHES.

Smooth bromegrass, plus

13

LOVEGRASS AND REDTOP, DILUTE WITH DRY SAWDUST, SAND, RICE HULLS, BUCKWHEAT HULLS, ETC. 5. USE FOR HIGHWAY SLOPES AND SIMILAR SITES WHERE THE DESIRED SPECIES AFTER ESTABLISHED IS 6. USE ONLY IN EXTREME SOUTHEASTERN OR EXTREME SOUTHWESTERN PENNSYLVANIA. SERECIA LESPEDEZA IS NOT WELL ADAPTED TO MOST OF PA.

8. SEED MIXTURES CONTAINING CROWN VETCH SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS DUE TO THE INVASIVE NATURE OF THE SPECIES.

AND ARE VERY COMPETITIVE. TO SEED SMALL QUANTITIES OF SMALL SEEDS SUCH AS WEEPING

TABLE 11. 5

Recommended Seed Mixtures for Stabilizing Disturbed Areas

	Nurse	Seed Mixture
Site Condition	Crop	(Select one mixture)
Slopes and Banks (not mowed)		
Well-drained	1 plus	3, 5, 8 , or12 ¹
Variable drainage	1 plus	3 or7
Slopes and Banks (mowed)		
Well-drained	1 plus	2 or10
Slopes and Banks (grazed/hay)		
Well-drained	1 plus	2, 3, or13
Gullies and Eroded Areas	1 plus	3, 5, 7 , or12 ¹
Erosion Control Facilities (B M Ps)		
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or4
Drainage ditches		
Shallow, less than 3 feet deep	1 plus	2, 3, or4
Deep, not mowed	1 plus	5 or7
Pond banks, dikes, levees, dams, diversion channels,		
And occasional water flow areas		
Mowed areas	1 plus	2 or3
Non-mowed areas	1 plus	5 or7
For hay or silage on diversion channels and		
Occasional water flow areas	1 plus	3 or13
Highways 2		
Non-mowed areas		
Pure crownvetch ³	1	5 or6
Well-drained	plus	5, 7, 8, 9, or10
Variable drained	1	3 or7
Poorly drained	plus	3 or4
Areas mowed several times per year	1	2, 3, or10
Utility Right-of-way		
Well-drained	1 plus	5, 8 , or12 ¹
Variable drained	1 plus	3 or 7
Well-drained areas for grazing/hay	1 plus	2, 3, or13
Effluent Disposal Areas	1 plus	3 or4
Sanitary Landfills	1 plus	3, 5, 7 , 11 ¹ , or12 ¹
Surface mines		
Spoils, mine wastes, fly ash, slag, settling basin		
Residues and other severely disturbed areas	1 plus	3, 4, 5, 7 , 8 , 9, 11 ¹ , or12 ¹
(lime to soil test)		
Severely disturbed areas for grazing/hay	1 plus	3 or13

PENN STATE, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND" 1. FOR SEED MIXTURES 11 AND 12, ONLY USE SPRING OATS OR WEEPING LOVEGRASS (INCLUDED IN MIX) AS NURSE CROP 2. CONTACT THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DISTRICT ROADSIDE SPECIALIST

SPECIFIC SUGGESTIONS ON TREATMENT TECHNIQUES AND MANAGEMENT PRACTICES. 3. SEED MIXTURES CONTAINING CROWN VETCH SHOULD NOT BE USED IN AREAS ADJACENT TO

WETLANDS OR STREAM CHANNELS DUE TO THE INVASIVE OF THIS SPECIES. DEP Recommended Temporary Seed Mixtures to be utilized

DEP I	Recommended Temporary Seed	i mixtures to b	e utilized	
Mixture		Seeding Rate — Pure Live Seed ¹		
Number	Species	Most Sites	Adverse Sites	
1 2	Spring oats (spring), or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 10 90 56	96 15 120 112	
3	Birdsfoot trefoil, plus Tall fescue	6 30	10 35	

	MULCH			
	APPLICATION RATE (MIN.)			
MULCH TYPE	PER ACRE	PER 1,000 S.F.	PER 1,000 S.Y.	NOTES
STRAW	3 TONS	140 LBS.	1,240 LBS.	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINEL' BROKEN
НАҮ	3 TONS	140 LBS.	1,240 LBS.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CHIPS	4 - 6 TONS	185 – 275 LBS.	1,650 - 2,500 LBS.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES
HYDROMULCH	1 TON	47 LBS.	415 LBS.	SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%

					IHAN 5%			
	SOIL AMENDMENT APPLICATION RATE EQUIVALENTS PERMANENT SEEDING APPLICATION RATE							
	SOIL AMENDMENT	SOIL AMENDMENT PER ACRE		PER 1,000 S.Y.	NOTES			
	AGRICULTURAL LIME	6 TONS	240 LBS.	2,480 LBS.	OR AS PER SOIL TEST, MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS			
	0-20-20 FERTILIZER 1,000 LBS.		25 LBS.	210 LBS.	OR AS PER SOIL TEST, MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS			
	TEMPORARY SEEDING APPLICATION RATE							
	SOIL AMENDMENT PER ACRE		PER 1,000 S.F. PER 1,000 S.Y.		NOTES			
	AGRICULTURAL LIME	1 TON	40 LBS.	410 LBS.	TYPICALLY NOT REQUIRED FOR TOP SOIL			
	10-10-10 FERTILIZER	500 LBS.	12.5 LBS.	100 LBS.	TYPICALLY NOT REQUIRED FOR TOP SOIL			

NOTE: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF CHAPTER 11 OF THE PADEP E & S

4. KEEP SEEDING RATE TO THAT RECOMMENDED IN TABLE. THESE SPECIES HAVE MANY SEEDS PER POIND

6/9/2022 SHEET NO. <u>24</u> of <u>25</u>

111902019

MANUAL MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN THE TABLE ABOVE. NOT FOR CONSTRUCTION / NOT FOR BIDDING

DWG. NO. _

