			6	ENER
FIRSTENERGY CORP 76 S MAIN ST AKRON, OH 44308-1890 CONTACT - OFFICE PERSONNEL 800-633-4766	THAN ONE CALL STOREMING	CITY OF LEBANON AUTHORITY 2311 RIDGEVIEW ROAD LEBANON, PA 17042 717-272-1984		BENC ELEV VERI HORI MATI
WINDSTREAM COMMUNICATIONS 4909 LOUISE DR MECHANICSBURG, PA 17055 CONTACT - OFFICE PERSONNEL 717-462-7251	STORE YOU OF	VERIZON PENNSYLVANIA LLC 15 E MONTGOMERY AVE PITTSBURGH, PA 15212 CONTACT - OFFICE PERSONNEL 877-502-2876	3.	CONS APPF UNDE ENGI FEMA
	SERIAL NUMBER: 20241974060 (NORTH LEBANON TOWNSHIP) DATE: 7/15/2024		5.	JURIS THE ANAL DATE

CHRISLAND ENGINEERING, INC., HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974 AS AMENDED BY ACT 121 OF 2008 OF THE PENNSYLVANIA GENERAL ASSEMBLY. IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

NORTH LEBANON TOWNSHIP

722 KIMERLINGS ROAD

CONTACT - LORI BOOKS

MIDDI FTOWN PA 17057-5987

CONTACT - JOANNE ARCHFIELD

LEBANON PA 17046

717-273-7132

1301 AIP DR

717-255-1453

UGI UTILITIES INC

jarchfield@ugi.com

(1) PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, CHRISLAND ENGINEERING, INC. REQUESTED THE LINE AND FACILITY INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) FROM A ONE CALL SYSTEM NOT LESS THAN TEN NOR MORE THAN NINETY WORKING DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED

(2) PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, CHRISLAND ENGINEERING, INC. SHOWN UPON THE DRAWING(S) THE POSITION AND TYPE OF EACH FACILITY OWNERS LINE, DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY SECTION 4, CLAUSE (2), AND THE NAME OF THE FACILITY OWNER, AND THE FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND THE TELEPHONE NUMBER AS SHOWN ON THE LIST REFERRED TO IN SECTION 3.

(3) PURSUANT TO SECTION 4, CLAUSE (4) OF SAID ACT, CHRISLAND ENGINEERING, INC. MADE A REASONABLE EFFORT TO PREPARE THE CONSTRUCTION DRAWING(S) TO AVOID DAMAGE TO AND MINIMIZE INTERFERENCE WITH A FACILITY OWNERS FACILITIES IN THE CONSTRUCTION AREA BY MAINTAINING AN EIGHTEEN-INCH CLEARANCE OF THE FACILITY OWNERS FACILITIES WHERE POSSIBLE.

(4) PURSUANT TO SECTION 4. CLAUSE (5) OF SAID ACT, CHRISLAND ENGINEERING, INC., SHALL BE DEEMED TO HAVE MET THE OBLIGATIONS OF CLAUSE (2) BY CALLING A ONE CALL SYSTEM AND SHOWING AS PROOF THE SERIAL NUMBER OF THE ONE CALL NOTICE ON THE DRAWING(S)

AND CHRISLAND ENGINEERING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST AND AS REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE. BUT CHRISLAND ENGINEERING. INC. IS REFLECTING SAID INFORMATION ON THESE DRAWINGS ONLY DUE TO THE REQUIREMENTS OF THE SAID ACT 187. DECEMBER 19, 1996. EASEMENT NOTES:

A STORMWATER MANAGEMENT CONVEYANCE EASEMENT SHALL BE LOCATED AROUND EACH CONVEYANCE FACILITY (I.E. SWALES, PIPES, ETC.) AND SHALL BE TWENTY (20) FEET IN WIDTH. THE FASEMENT SHALL EXTEND TEN (10) FEET FROM THE CENTERLINE OF THE CONVEYANCE FACILITY A STORMWATER MANAGEMENT EASEMENTS SHALL BE LOCATED AROUND EACH STORMWATER MANAGEMENT FACILITY (I.E. DETENTION BASINS.

INFILTRATION TRENCHES, RAIN GARDENS, ETC.) AND SHALL ENCOMPASS ALL COMPONENTS OF THE FACILITY. AN EASEMENT SHALL ENCOMPASS ALL WETLANDS AND OPEN STREAM CHANNELS. FOR WETLANDS, THE EASEMENT SHALL INCLUDE A RIPARIAN BUFFER STRIP A MINIMUM TWENTY-FIVE (25) FEET IN WIDTH. FOR STREAMS, THE EASEMENT SHALL INCLUDE A RIPARIAN BUFFER STRIP, A MINIMUM OF TWENTY-FIVE (25) FEET OR THE WIDTH OF THE FLOODPLAIN, WHICHEVER IS GREATER.

THE GRANTOR, FOR ITSELF, ITS SUCCESSORS, AND ASSIGNS, AUTHORIZES THE TOWNSHIP AND ITS AUTHORIZED REPRESENTATIVES TO ENTER UPON THE PREMISES TO INSPECT THE FACILITIES LOCATED WITHIN THE EASEMENT. ALL FACILITIES LOCATED WITHIN THE ABOVE MENTIONS EASEMENTS SHALL BE SUBJECT TO THE PROVISIONS OF THE STORMWATER MAINTENANCE AND OWNERSHIP PROGRAM.

DRAINAGE EASEMENT CONFLICTS PROHIBITED: NOTHING SHALL BE PLACED, PLANTED, SET. OR PUT WITHIN THE AREA OF ANY DRAINAGE EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT. NO PERSON SHALL PLACE ANY STRUCTURE, FILL, LANDSCAPING, OR VEGETATION INTO A STORM WATER MANAGEMENT FACILITY OR WITHIN A DRAINAGE EASEMENT WHICH WILL LIMIT OR ALTER THE FUNCTIONALITY OF THE FACILITY OR EASEMENT IN ANY WAY.

WETLANDS NOTES WETLANDS ARE LOCATED ON THE PROJECT SITE. WETLANDS ARE STATE AND/OR FEDERALLY-REGULATED WATER RESOURCES. ENCROACHMENT INTO WETLANDS REQUIRES STATE AND/OR FEDERAL AUTHORIZATION. UNAUTHORIZED ENCROACHMENT INTO WETLANDS MAY RESULT IN ENFORCEMENT ACTION BY THE PA DEP AND/OR THE ARMY CORPS OF ENGINEERS.

REQUIRED INSPECTIONS DURING SITE CONSTRUCTION THE NORTH LEBANON TOWNSHIP ENGINEER SHALL INSPECT THE IMPROVEMENTS DURING CONSTRUCTION. THE DEVELOPERS OR SITE WORK CONTRACTOR SHALL PROVIDE AT LEAST 2 WORKING DAYS NOTICE PRIOR TO THE START OF ANY IMPROVEMENTS WHICH REQUIRE INSPECTION BY CALLING THE NORTH LEBANON TOWNSHIP ENGINEER AT 717-272-7110.

ALL INSPECTIONS OF COMPLETED ITEMS SHALL BE REQUESTED IN WRITING AT LEAST 48 HOURS IN ADVANCE OF THE FINAL INSPECTION DATE & TIME. INSPECTIONS ARE REQUIRED FOR THE FOLLOWING ACTIVITIES:

1. UPON COMPLETION OF PRELIMINARY SITE PREPARATION INCLUDING STRIPING OF VEGETATION, STOCKPILING OF TOPSOIL AND TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES 2. UPON COMPLETION OF ROUGH GRADING, BUT PRIOR TO PLACING TOPSOIL, PERMANENT DRAINAGE OR OTHER SITE IMPROVEMENTS AND GROUND

COVERS 3. DURING THE CONSTRUCTION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES. ALL STORM SEWERS. CULVERTS. ETC. PRIOR TO BACKFILL. 4 FOR MRC BASIN - SEE PCSM2

5. UPON FINAL COMPLETION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES AND THE ESTABLISHMENT OF GROUND COVERS AND PLANTINGS 6. AFTER REVIEW OF THE AS-BUILT DRAWINGS BUT PRIOR TO THE RELEASE OF THE FINAL FINANCIAL GUARANTEE FOR COMPLETION OF FINAL

GRADING, VEGETATIVE CONTROLS REQUIRED BY THE BMP STANDARDS OR OTHER SITE RESTORATION. 7. FINANCIAL SECURITY FOR THE IMPROVEMENTS WILL NOT BE CONSIDERED FOR RELEASE UNLESS THE TOWNSHIP ENGINEER IS PROPERLY NOTIFIED AND THE SUBSURFACE IMPROVEMENTS ARE INSPECTED PRIOR TO BACKFILLING.

		G.
	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 North Cornwall Township Subdivision and Land Development Ordinance.	H.
	, 20	
0/22/2024 2:20 PM	CERTIFICATE 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 Lebanon County and North Lebanon Township Ordinances.	I. J. K.
-	, 20 Joshua T. Weaber, P.E.	
	CARBONATE GEOLOGY CERTIFICATION I, Joshua T. Weaber, P.E., to the best of my knowledge, certify that the proposed stormwater management facilities (circle one) are/are not underlain by carbonate geology.	
_	, 20Joshua T. Weaber, P.E.	
	NORTH LEBANON TOWNSHIP PLANNING COMMISSION REVIEW CERTIFICATE	NORTH LEBANON TOWNSHIP ENGINEER REVIEW CERTIFICATE Reviewed by the North Lebanon Township Engineer this day of, 20
l.dwg	Reviewed CERTIFICATE OF OWNERSHIP, ACKNOWLEDGEMENT OF PLAN AND OFFER OF	Signature of the North Lebanon Township Engineer
rst Ebe Koad	DEDICATION COMMONWEALTH OF PENNSYLVANIA COUNTY OF LEBANON	LEBANON COUNTY PLANNING DEPARTMENT
.U Plan - Horst	On this, the day of, 20, before me, the undersigned officer, personally appeared, who being duly sworn according to law, deposes and says that they are the of <u>lona</u> Investment Group, LP, the Owner of the property shown on this plan, that the plan	, 20 Reviewed
2 - Old Ebenezer Rd\DWG\LD	thereof was made at their direction, that they acknowledge the same to be his act and plan, that they desire the same to be recorded, and 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. They also hereby acknowledges that this proposed subdivision or land development may be subject to the requirements of additional Township, State and Federal regulations.	NORTH LEBANON TOWNSHIP SUPERVISORS The North Lebanon Township Board of Supervisors has reviewed and accepted this plan as submitted or as revised to the date of signatures affixed hereto. No other plan or plans shall be recognized. Acceptance includes all documentation including the comments or requirements of official reviewing individuals or agencies. acceptance is based on compliance with applicable ordinances, rules and regulations, and shall not be construed as a guarantee to any person or organization that the design of any part of the plan will function as anticipated under any or all conditions or situations. Additionally, that by review and/or acceptance of the plan, the Township expressly declines the assumption of liability for errors, omissions or mistakes in judgement in the
- Jeff Horst/HO4.18.2 - Old	Iona Investment Group, LP	design, engineering, construction, or expected function of the matters reviewed and/or accepted.
t - Jett i	Notary	

AL NOTES: ATION: 520 02'

- TICAL DATUM: NAVD88 IZONTAL DATUM: NAD83
- SDICTIONS), MAP NUMBER 42075C0252E, EFFECTIVE DATE JULY 8, 2020.
- OF MARCH 29 2016
- CHRISLAND ENGINEERING NO ONE SHALL SCALE FROM THESE PLANS FOR CONSTRUCTION PURPOSES.
- ORIGINAL HARD COPY SEALED PLAN.
- FACILITIES WERE OBSERVED.
- THE TOWNSHIP
- EXPENSE
- CONSTRUCTION SHOWN ON THIS PLAN.
- . THE DEVELOPER SHALL BE FINANCI

N	NDITIONS PER NORTH LEBANON TO
	A DRIVEWAY PERMIT WILL BE REQUIRED FF
	WITHIN 10 DAYS OF RECEIPT OF THE BILL.
	APPROVAL BY THE BOARD OF SUPERVISOR

PON APPROVAL BY THE BOARD OF S	UPERVISC
IINI-WAREHOUSES SHALL BE A PERM	ITTED USE
ND PROVIDED THE FOLLOWING CON	DITIONS A

- TED ABOVE, ALL STO COMBUSTIBI F
- RFI YIN G. BECAL REMOVER, AND OTHER FLAMMABLE MATERIALS, THE REPAIR, CONSTRUCTION, OR RECONSTRUCTION OF ANY BOAT, ENGINE, MOTOR VEHICLE, OF
- FURNITURE IS PROHIBITED нν
- RESIDENTIAL OCC
- R SIMILAR EQUIPMENT. 5 THE ESTABLISHMENT OF A TRANSFER AND STORAGE BUSINESS
- PROPERTY
- AND THE ADJACENT NEIGHBORHOOD.
- BOARD OF SUPERVISORS

ALL SITE DEVELOPMENT SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND TOWNSHIP STANDARDS AND REQUIREMENTS. CHRISLAND ENGINEERING PERFORMED INFILTRATION TESTING AND CONFIRMED A 24" SEPARATION BETWEEN DETENTION BASIN BOTTOM AND LIMITING ZONE, ROCK OUTCROPPINGS AND LIMITED INFILTRATION WERE OBSERVED, WHICH IS PROPOSED TO BE MANGED BY A MANAGED RELEASE CONCEPT BASIN AS PROPOSED HEREIN. NO SINKHOLES, SOLUTION CHANNELS, ETC. WHICH WOULD AFFECT THE STORMWATER MANAGEMENT

- CAUSED BY CONSTRUCTION ON ANY PORTION OF THE SITE WHICH IS THE SUBJECT OF THIS PLAN.
- FRACTURES, OR FOR THE CONSTRUCTION, ENGINEERING, PERMITTING AND INSPECTION COST IMPACT WHICH ANY OF THESE GEOLOGICAL FEATURES MAY HAVE UPON THE LAND OWNER

- 18. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE.
- AUTHORITIES RELATIVE TO THE CONSTRUCTION SHOWN ON THESE PLANS.
- CONTROL REPORT ARE PART OF THIS PLAN AND ARE ENFORCEABLE AS IF THEY APPEARED IN TOTAL HEREIN

THE DEVELOPER SHALL BE FINANCIALLY RES
FOWNSHIP/AUTHORITY RELATING TO THE REV
FOWNSHIP/AUTHORITY. PAYMENT OF ALL INV
APPROVAL BY THE BOARD OF SUPERVISORS.
WITHIN 10 DAYS OF RECEIPT OF THE BILL.

ROM THE TOWNSHIP.

NDITIONS PER NORTH LEBANON T	owi
ON APPROVAL BY THE BOARD OF SUPERVIS I-WAREHOUSES SHALL BE A PERMITTED US O PROVIDED THE FOLLOWING CONDITIONS A	E, PF

SELF-SERVICE STORAGE FACILITIES (MIN	I-V
THAT THE PROPOSED USE MEETS ALL APP	٦L
SELF-STORAGE FACILITIES PROPOSED ON	I A
AN ACCESSORY USE TO THE EXISTING PR	RIN

N ACCESSORY USE TO THE EXISTING PRIN
HIS CHAPTER AND SHOWN AS PART OF THI
NE OFF-STREET PARKING SPACE SHALL B
LUS TWO PER ANY RESIDENTIAL USE ASSC
ARKING SHALL BE PROVIDED BY PARKING

US TWO TER ANT RESIDENTIAL USE ASS
RKING SHALL BE PROVIDED BY PARKING
JBICLES OPEN ONTO ONE SIDE OF THE LA
QUIRED PARKING SPACES MAY NOT BE F
CEPT AS NOTED ABOVE, ALL STORAGE

PT AS NOTED ABOVE, ALL STORAG
USTIBLE, EXPLOSIVE OR HAZARD
NG UPON SUCH FUELS SHALL BE S
JSE OF THE DANGER FROM FIRE
VER. AND OTHER FLAMMABLE MA

· – ·	
UF	RNITURE IS PROHIBITED.
NΑ	REHOUSES SHALL BE USED SOLELY F
RE	NTAL AND/OR USE CONTRACTS SHALL S
	AUCTIONS, COMMERCIAL WHOLESALE
2.	RESIDENTIAL OCCUPANCY.

AUCTIONS, COMMERCIAL WHOLESALE O
RESIDENTIAL OCCUPANCY.
THE SERVICING, REPAIR, OR FABRICA
EQUIPMENT.
THE OPERATION OF POWER TOOLS, SI
OTHER SIMILAR EQUIPMENT.

ANY USE THAT IS NOXIOUS OR OFFENSIVE BECAUSE OF ODORS, DUST, NOISE, FUMES, OR VIBRATIONS. THE SELF-STORAGE FACILITIES WILL BE SURROUNDED BY A SIX-FOOT- TO EIGHT-FOOT-HIGH FENCE, WITH THE CONSTRUCTION PLAN AND MATERIALS TO BE APPROVED BY THE BOARD OF SUPERVISORS ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO DIRECT LIGHT AND GLARE ONLY ONTO THE SITE AND MAY BE OF SUFFICIENT INTENSITY TO DISCOURAGE VANDALISM AND THEFT. SAID LIGHTING AND GLARE SHALL BE DEFLECTED, SHADED AND FOCUSED AWAY FROM ALL ADJOINING

DESIGN STANDARDS. DESIGN REVIEW SHALL BE REQUIRED FOR ALL NEW CONSTRUCTION AND EXPANSIONS OF SELF-SERVICE STORAGE BUILDINGS TO ENSURE THE DEVELOPMENT HAS A HIGH-QUALITY DESIGN AND IS APPROPRIATE TO THE DESIRED CHARACTER OF THE ZONE IT IS LOCATED IN

1. FENCES AND WALLS. FENCES AND WALLS, INCLUDING ENTRY GATES, SHALL BE CONSTRUCTED OF HIGH-QUALITY MATERIALS AND SHALL BE COMPATIBLE WITH THE DESIGN AND MATERIALS OF THE BUILDING(S) AND SITE. THE DESIGN GUIDELINES FOR FENCES AND WALLS AND THE FOLLOWING PROVISIONS SHALL APPLY TO SELF-SERVICE STORAGE FACILITIES: a. DECORATIVE METAL, WROUGHT IRON OR CHAIN-LINK FENCES ARE PREFERRED. b BARBED OR RAZOR WIRE FENCES AND WALLS MADE OF PRECAST CONCRETE BLOCKS ARE PROHIBITED c. STREET-FRONT LANDSCAPE AREAS REQUIRED BY THE DESIGN GUIDELINES OR ELSEWHERE IN THIS CODE SHALL NOT BE FENCED.

SELE-SERVICE STORAGE FACILITIES SHALL BE ONE STORY

4. ALL DRIVEWAY AND PARKING AREAS SHALL BE PAVED. 5. SELF-STORAGE FACILITIES AND WAREHOUSES SHALL BE CONSTRUCTED OF HIGH-QUALITY MATERIALS.

My Commission Expires

HMARK: EXISTING SEWER MANHOLE LOCATED ON EBENEZER ROAD, STATE ROUTE 72

HEW & HOCKLEY ASSOCIATES PERFORMED THE SURVEY AS SHOWN HEREON IN MAY 23 ,2023. ERGROUND UTILITIES ARE SHOWN ACCORDING TO INFORMATION PROVIDED BY OTHERS AND MUST BE FIELD VERIFIED PRIOR TO

STRUCTION, EXCAVATION OR BLASTING. THE ACTUAL LOCATIONS OF THESE UTILITIES HAVE NOT BEEN FIELD VERIFIED AND THE LOCATIONS ARE OXIMATE. CHRISLAND ENGINEERING DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE, OR GUARANTEE THAT THE ERGROUND UTILITY LOCATION PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS ARE CORRECT AND ACCURATE. CHRISLAND INEERING, ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. A FLOODPLAIN EXISTS ON-SITE IN ACCORDANCE WITH THE FLOOD INSURANCE RATE MAP FOR LEBANON COUNTY, PENNSYLVANIA (ALL 100-YR FLOODPLAIN (STUDIED) LABELED ON THE PLAN WITH THE ELEVATIONS HAS BEEN PROVIDED IN ACCORDANCE WITH THE DAM BREACH

LYSIS FOR EBENEZER LAKE DAM (D38-008) PREPARED BY STECKBECK ENGINEERING AND SURVEYING ON NOVEMBER 17, 2014 WITH A REVISION ANY CONSTRUCTION WITHIN THE FLOODPLAIN SHALL BE IN STRICT ACCORDANCE WITH THE TOWNSHIPS ZONING ORDINANCE

IN ACCORDANCE WITH THE U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY AND A FIELD INVESTIGATION COMPLETED IN JULY, 2025 BY VORTEX ENVIRONMENTAL IT IS CONFIRMED THAT THERE ARE WETLANDS ON THE SUBJECT PREMISES ANY REVISION TO THESE PLANS AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION DATE SHALL NOT BE THE RESPONSIBILITY OF

THE INFORMATION SHOWN ON THIS DRAWING MAY HAVE ALSO BEEN PROVIDED BY DIGITAL FILE. AFTER A DIGITAL FILE IS RELEASED FROM CHRISLAND ENGINEERING THE VIEWER IS THEREFORE CAUTIONED TO COMPARE ANY SUBSEQUENT REPRODUCTIONS OF THIS DATA WITH THE

13. CHRISLAND ENGINEERING HAS NOT PERFORMED ANY OTHER SUBSURFACE INVESTIGATIONS GEOLOGICAL STUDIES, SOUNDINGS OR EVALUATIONS OF THE SUBSURFACE CONDITIONS PRESENT THROUGHOUT THE SITE. NUMEROUS UNKNOWN GEOLOGICAL SITE CONDITIONS AND THE UTILIZATION OF NUMEROUS CONSTRUCTION PRACTICES MEAN THAT CHRISLAND ENGINEERING CANNOT CONSIDER EVERY POTENTIAL GEOLOGICAL IMPACT

IT IS THE RESPONSIBILITY OF THE LANDOWNER, LAND PURCHASER, OR PROSPECTIVE BUYER OF ANY PORTION OF THE SITE DEPICTED ON THIS PLAN TO PERFORM THEIR OWN INDIVIDUAL EVALUATION OF THE GEOLOGY OF THIS SITE TO ASCERTAIN THE GEOLOGICAL FORMATION(S) WHICH UNDERLAY IT, AND THE IMPACT WHICH THOSE FORMATION(S) MAY HAVE UPON THEIR LAND OR ANY CONSTRUCTION PROPOSED 15. CHRISLAND ENGINEERING SHALL NOT BE RESPONSIBLE FOR THE COST OF ANY ROCK REMOVAL. SINKHOLES, SOLUTION CHANNELS OR ROCK

16. MATERIALS AND DETAILS SPECIFIED ON THE APPROVED PLAN SHALL NOT BE ALTERED DURING CONSTRUCTION WITHOUT WRITTEN APPROVAL BY

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS ON SITE PRIOR TO THE START OF CONSTRUCTION. UNDERGROUND UTILITIES HAVE BEEN SHOWN ACCORDING TO INFORMATION PROVIDED BY OTHERS AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION. EXCAVATION OR BLASTING. THE ACTUAL LOCATIONS OF THESE UTILITIES HAVE NOT BEEN FIELD VERIFIED AND THE LOCATIONS ARE APPROXIMATE.CHRISLAND ENGINEERING DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE UNDERGROUND UTILITY LOCATION INFORMATION PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS IS CORRECT AND ACCURATE. CHRISLAND ENGINEERING ASSUMES NO LIABILITY FOR ANY DAMAGE INCURRED AS A RESULT OF UNDERGROUND UTILITIES OMITTED OR INACCURATELY SHOWN

DAMAGE TO ANY UTILITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, UTILITY COMPANY OR AUTHORITY, AT THE CONTRACTOR'S 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS FROM THE MUNICIPALITY, COUNTY, STATE OR AUTHORITY RELATIVE TO

. THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND RECORD DRAWINGS AS MAY BE REQUIRED BY THE MUNICIPALITY AND/OR THE VARIOUS

ALL PROPOSED SIGNS SHALL BE IN ACCORDANCE WITH THE NORTH LEBANON TOWNSHIP ZONING ORDINANCE. 22. ALL PLAN SHEETS. INCLUDING THE APPROVED POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT AND EROSION AND SEDIMENT POLLUTION

23. CLEAR SIGHT TRIANGLES SHALL BE KEPT CLEAR OF ANY OBSTRUCTIONS WITH A HEIGHT GREATER THAN 30 INCHES. SPONSIBLE FOR ANY ATTORNEY FEES WHEN THE ATTORNEY IS ENGAGED ON BEHALF OF THE EVIEW OF THE SUBDIVISION PLANS OR LAND DEVELOPMENT PLANS THAT ARE SUBMITTED TO THE

VOICES IS DUE AND PAYABLE WITHIN 30 DAYS OF RECEIPT BUT IN ALL CASES PRIOR TO PLAN RS. ANY QUESTIONS ON INVOICES MUST BE REPORTED TO THE TOWNSHIP/AUTHORITY IN WRITING

NSHIP ZONING ORDINANCE SECTION 27-802.20:

S OF NORTH LEBANON TOWNSHIP, MULTIPLE STORAGE RENTAL UNITS, SELF-STORAGE FACILITIES, AND PROVIDED THAT THE APPLICANT MEETS ALL CONDITIONS AS REQUIRED BY THE BOARD OF SUPERVISORS MET: [AMENDED BY ORD. NO. 2-2020, 4/20/2020]

WAREHOUSES) ARE PERMITTED, PROVIDED THAT THE APPLICANT HAS MET HIS/HER BURDEN OF PROOF ICABLE REGULATIONS AND ORDINANCES. A LOT WITH AN EXISTING PRINCIPAL USE SHALL BE CONSIDERED AN ADDITIONAL PRINCIPAL USE, AND NOT VCIPAL USE. THE ERECTION OF THE SECOND PRINCIPAL USE SHALL BE IN COMPLIANCE WITH § 27-1208 OF

REQUIRED LAND DEVELOPMENT PLAN BE PROVIDED FOR EACH 25 STORAGE UNITS, PLUS ONE PER EACH 250 SQUARE FEET OF OFFICE SPACE, CIATED WITH AN ON-SITE MANAGER.

G/DRIVING LANES ADJACENT TO THE BUILDINGS. THESE LANES SHALL BE AT LEAST 26 FEET WIDE WHEN ANE ONLY, AND AT LEAST 30 FEET WIDE WHEN CUBICLES OPEN ONTO BOTH SIDES OF THE LANE. RENTED AS, OR USED FOR, VEHICULAR STORAGE.

GE SHALL BE KEPT WITHIN AN ENCLOSED BUILDING EXCEPT THAT THE STORAGE OF FLAMMABLE, HIGHLY OUS CHEMICALS SHALL BE PROHIBITED. ANY FUEL TANKS AND/OR MACHINERY OR OTHER APPARATUSES STORED ONLY IN AN EXTERNAL STORAGE AREA AS DESCRIBED ABOVE ROM FIRE OR EXPLOSION CAUSED BY THE ACCUMULATION OF VAPORS FROM GASOLINE, DIESEL FUEL, PAINT, PAINT

FOR THE DEAD STORAGE OF PROPERTY. THE APPLICANT SHALL ADEQUATELY DEMONSTRATE THAT ALL SPECIFICALLY PROHIBIT THE FOLLOWING EXAMPLES OF USES EXPRESSLY PROHIBITED UPON THE SITE: OLESALE OR RETAIL SALES. OR GARAGE SALES.

ATION OR MOTOR VEHICLES, BOATS, TRAILERS, LAWN MOWERS, APPLIANCES, OR OTHER SIMILAR OOLS, SPRAY-PAINTING EQUIPMENT, TABLE SAWS, LATHES, COMPRESSORS, WELDING EQUIPMENT, KILNS, OR

MATERIALS. SELF-SERVICE STORAGE FACILITY BUILDINGS SHALL BE SURFACED IN HIGH-QUALITY MATERIALS THAT ARE APPROVED BY THE

STORMWATER MANAGEMENT NOTES:

- ALL STORMWATER MANAGEMENT FACILITIES LOCATED IN PUBLIC STREET RIGHTS-OF-WAYS SHALL BE OFFERED FOR DEDICATION TO THE MUNICIPALITY WITH JURISDICTION OVER THE RIGHT-OF-WAY. SPECIFICALLY, NORTH LEBANON TOWNSHIP WILL OWN AND MAINTAIN STORM WATER FACILITIES WITHIN THEIR RESPECTIVE STREET RIGHTS-OF-WAY.
- 2. MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES AND EASEMENTS NOT LOCATED WITHIN PUBLIC RIGHTS-OF-WAY, INCLUDING THE STORMWATER MANAGEMENT FACILITIES, SHALL BE THE RESPONSIBILITY OF THE CURRENT PROPERTY OWNER. OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WILL TRANSFER TO SUBSEQUENT OWNERS WITH THE TRANSFER OF PROPERTY OWNERSHIP. . DETENTION BASIN, SWALES AND OTHER STORMWATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN ACCORDANCE WITH THE DESIGN AND KEPT FREE OF FILL AND OBSTRUCTIONS
- 4. ALL YARD INLETS SHALL BE SUMPED AT LEAST SIX (6) INCHES BELOW SURROUNDING GRADE TO CAPTURE TRIBUTARY RUNOFF AND PREVENT BYPASS
- 5. NO ALTERATION TO ANY STORMWATER MANAGEMENT FACILITIES SHALL BE PERMITTED WITHIN EASEMENTS. . NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN ANY EASEMENT WHICH COULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT. NORTH LEBANON TOWNSHIP SHALL HAVE THE RIGHT TO: 6.1. ACCESS THE SITE TO INSPECT STORM WATER FACILITIES AT ANY TIME. 6.2. REQUIRE THE CURRENT LAND OWNER TAKE CORRECTIVE MEASURES AND ASSIGN THE LAND OWNER A REASONABLE PERIOD TO TAK
- CORRECTIVE ACTION 6.3. AUTHORIZE MAINTENANCE TO BE DONE AND LIEN ALL COSTS OF WORK AGAINST THE PROPERTIES OF THE PRIVATE ENTITY RESPONSIBLE FOR MAINTENANCE.
- THE MAINTENANCE OF ALL STORMWATER CONVEYANCE AND MANAGEMENT FACILITIES SHALL BE BY THE PROPERTY OWNER. MAINTENANCE SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: 7.1. REMOVAL OF SILT AND DEBRIS FROM ALL STORM WATER MANAGEMENT STRUCTURES.
- 7.2. PERIODIC REPLACEMENT OF SILT FENCE OR OTHER SIMILAR MEASURES. 7.3. ESTABLISHMENT OR RE-ESTABLISHMENT OF VEGETATION BY SEEDING AND MULCHING OR SODDING OF SCOURED AREAS OR AREAS WHERE VEGETATION HAS NOT BEEN SUCCESSFULLY ESTABLISHED. 7.4. INSTALLATION OF NECESSARY CONTROLS TO CORRECT UNFORESEEN PROBLEMS CAUSED BY STORM EVENTS.
- 7.5. REMOVAL OF ALL TEMPORARY STORMWATER MANAGEMENT CONTROL FACILITIES UPON THE INSTALLATION OF PERMANENT STORMWATER FACILITIES AT THE COMPLETION OF THE DEVELOPMENT. 7.6. REPAIR OF STRUCTURAL DAMAGE OR DETERIORATION OF ANY KIND, INCLUDING THAT CAUSED BY SINKHOLES OR OTHER EVENTS
- 7.7. MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER DETENTION BASIN OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION: DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY: MOW ONLY WHEN DETENTION BASIN IS DRY TO AVOID RUTTING ACCESS TO ALL STORMWATER MANAGEMENT FACILITIES, INCLUDING INLETS, MANHOLES, STORM PIPES, ENDWALLS, HEADWALLS, SWALES, AND
- BASINS SHALL BE PROVIDED VIA EASEMENTS TO REPRESENTATIVES OF NORTH LEBANON TOWNSHIP STORMWATER MANAGEMENT FACILITIES (DETENTION FACILITIES, STORM DRAINAGE PIPES, INLETS AND ENDWALLS) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NORTH LEBANON TOWNSHIP, LEBANON COUNTY CONSERVATION DISTRICT, LEBANON COUNTY, AND PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 10. ALL STORM SEWER JOINTS SHALL BE WATERTIGHT. 1.ALL STORM SEWERS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH PENNDOT PUB. 408 SPECIFICATIONS, PENNDOT PUB. 72, AND AS SHOWN ON THESE DRAWINGS
- 12. RUNOFF FROM THE PROPOSED IMPROVEMENTS SHALL BE DIRECTED TO THE STORM WATER MANAGEMENT FACILITIES. 3. TOWNSHIP AND COUNTY OFFICIALS, AND THEIR AGENTS OR EMPLOYEES, HAVE THE RIGHT OF ACCESS FOR INSPECTION AND, IN CASES OF CONSTRUCTION DEFAULT, CONSTRUCTION OF THE STORM WATER MANAGEMENT FACILITIES. THE DEVELOPER/OWNER GRANTS THE TOWNSHIP THE RIGHT TO ACCESS TO ALL STORMWATER MANAGEMENT EASEMENTS ON THE SUBJECT TRACT VIA THE ACCESS DRIVES, DRIVEWAYS, PARKING AREAS, AND SIMILAR FEATURES WITHIN THE SITE
- 14. ACCESSORY BUILDINGS, STRUCTURES, FENCES, WALLS, HEDGES, AND POOLS SHALL NOT BE LOCATED WITHIN OR OBSTRUCT ANY STORMWATER MANAGEMENT FACILITY AND ASSOCIATED CONVEYANCE SYSTEMS.
- 15. ALL DRAINAGE PIPES SHALL BE LAID TO A MINIMUM DEPTH OF EIGHTEEN (18) INCHES FROM FINISHED SUBGRADE TO THE CROWN OF THE PIPE IN PAVED OR STONE AREAS AND TWELVE (12) INCHES FROM FINISHED GRADE TO THE CROWN OF PIPE IN GRASSED AREAS. 16.NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, OR ALTER STORMWATER MANAGEMENT FACILITIES WHICH MAY WERE INSTALLED ON THE PROPERTY UNLESS A STORMWATER MANAGEMENT SITE PLAN HAS BEEN APPROVED BY NORTH LEBANON TOWNSHIP WHICH ALLOWS SUCH
- MODIFICATION. REMOVAL, FILL, LANDSCAPING OR ALTERATION. NO PERSON SHALL PLACE ANY STRUCTURE, FILL, LANDSCAPING OR VEGETATION INTO A STORMWATER MANAGEMENT FACILITY OR WITHIN A DRAINAGE EASEMENT WHICH COULD LIMIT OR ALTER THE FUNCTIONING OF THE FACILITY OR **FASEMENT IN ANY MANNER** 7. THE TOWNSHIP, TOWNSHIP ENGINEER AND DESIGN ENGINEER SHALL BE CONTACTED REGARDING INSPECTION OF THE STORMWATER MANAGEMENT
- FACILITIES. INSPECTIONS SHALL BE REQUIRED DURING CONSTRUCTION AND AT COMPLETION OF THE FACILITIES. NO OCCUPANCY PERMIT SHALL BE ISSUED UNTIL THE STORMWATER MANAGEMENT FACILITIES HAVE BEEN INSTALLED AND APPROVED THROUGH INSPECTION BY THE TOWNSHIP. 18. CONTRACTORS AND PROPERTY OWNERS SHALL NOT STORE CONSTRUCTION MATERIALS OR LOCATE TRASH RECEPTACLES (I.E. DUMPSTERS) ON THE PAVED CARTWAY OF STREETS
- 19. ALL MUD FROM CONSTRUCTION ACTIVITIES THAT IS TRACKED ONTO STREETS SHALL BE CLEANED BY THE RESPONSIBLE CONTRACTOR OR PROPERTY OWNER AT THE END OF EACH WORKDAY. 20.STORMWATER INLETS OR DRAINAGE PIPES WHICH BECOME FILLED WITH MUD OR DEBRIS FROM CONSTRUCTION ACTIVITIES SHALL BE CLEANED BY

NLT STANDARD STORMWATER MANAGEMENT NOTES:

THE RESPONSIBLE CONTRACTOR OR PROPERTY OWNER.

. ALL STORMWATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED BY THE DEVELOPER IN ACCORDANCE WITH THE DESIGN, CONDITIONS AND SPECIFICATIONS IDENTIFIED ON THIS PLAN. OWNERSHIP AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE LANDOWNER, HIS SUCCESSORS, AND ASSIGNS, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE HEREIN. 2. STORMWATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN GOOD WORKING CONDITION SO THAT THEY ARE PERFORMING THEIR DESIGN

- FUNCTION, IN A MANNER ACCEPTABLE TO NORTH LEBANON TOWNSHIP, AS REQUIRED BY NORTH LEBANON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE. MAINTENANCE SHALL INCLUDE PERFORMING ROUTINE MAINTENANCE AND REPAIR OR REPLACEMENT OF DAMAGED FACILITIES, VEGETATION, OR STORMWATER AREAS TO CONDITIONS AS SHOWN ON THE APPROVED PLAN AND IN ACCORDANCE WITH NORTH LEBANON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE . ANY DRAINAGE AND UTILITY EASEMENTS SHOWN ON THE PLAN SHALL BE CONSTRUCTED, OWNED, AND MAINTAINED IN ACCORDANCE WITH THE
- APPROVED PLAN AND SHALL BE REFERENCED WITHIN THE PROPERTY DEED. 4. RUNOFF FROM THE LOT IMPROVEMENTS SHALL BE DIRECTED TO THE STORMWATER MANAGEMENT FACILITIES. STORMWATER RUNOFF FROM EXISTING NATURAL SWALES AND/OR OTHER EXISTING DRAINAGE CONVEYORS SHALL NOT BE DIRECTED TOWARDS OR INTERCEPTED BY THE
- STORMWATER MANAGEMENT FACILITIES. TOWNSHIP OFFICIALS AND THEIR AGENTS OR EMPLOYEES HAVE THE RIGHT OF ACCESS FOR INSPECTION AND, IN CASES OF CONSTRUCTION DEFAULT. CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES.
- 6. CONTACT NORTH LEBANON TOWNSHIP AT (717) 273-7132 PRIOR TO CONSTRUCTION TO COORDINATE INSPECTIONS OF STORMWATER MANAGEMENT FACILITIES BY THE TOWNSHIP ENGINEER. NO OCCUPANCY IS PERMITTED UNTIL STORMWATER MANAGEMENT FACILITIES HAVE BEEN INSTALLED AND APPROVED THROUGH INSPECTION BY THE TOWNSHIP ENGINEER NOTE: WHERE FACILITIES SUCH AS NEW STREETS WITH STORM SEWERS AND RELATED STRUCTURES ARE INTENDED FOR OWNERSHIP AND
- MAINTENANCE BY THE TOWNSHIP, HOMEOWNER'S ASSOCIATION, OR SIMILAR ORGANIZATION, ADDITIONAL NOTES SHALL BE PROVIDED TO DOCUMENT OWNERSHIP AND MAINTENANCE RESPONSIBILITIES.

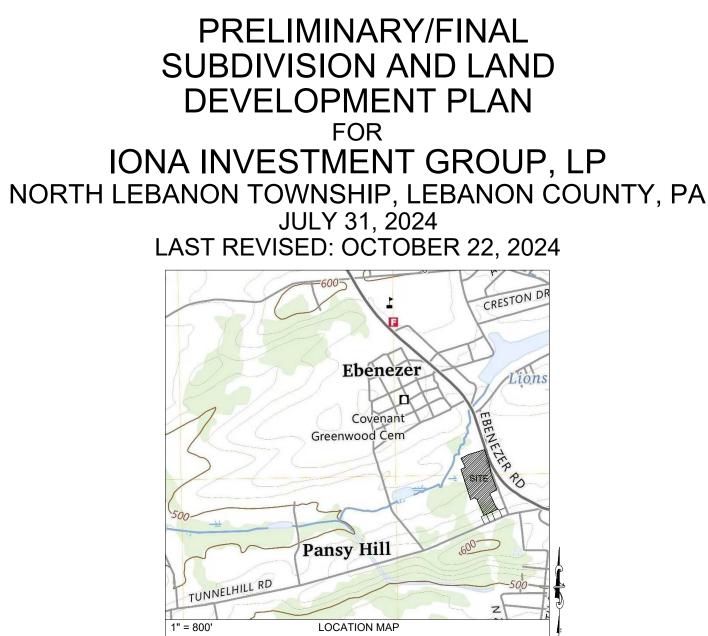
WAIVERS/MODIFICATIONS:

NORTH LEBANON TOWNSHIP, LEBANON COUNTY LEBANON COUNTY SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

1. §3.04: PRELIMINARY PLAN REVIEW PROCEDURE:

ALTERNATIVE: ALLOW THE PLAN TO BE APPROVED AND RECORDED WITHOUT UNDERGOING THE PRELIMINARY PLAN REVIEW PROCEDURE.

/ NOT APPROVED _____ APPROVED DATE:



WNER DATA ONA INVESTMENT GROUP, LP C/O - JEFFERY HORS 1 KRALL ROAD MYERSTOWN, PA 17067 JEFF@AHCM.NET (717) 269-3163

SITE DATA ADDRESS:

SITE AREA:

DEED BOOK/PAGE: 02121-7091 PARCEL NUMBER: 27-2329277-374492 GROSS 13.09 ACRES (570,181 SF) NET 12.00 ACRES (522,924 SF)

PUBLIC

PUBLIC

101 OLD EBENEZER ROAD

LEBANON, PA 17046

WATER: SEWER:

ZONING DATA ZONING DISTRICT: GENERAL COMMERCIAL (C-2A) PROPOSED USE: SELF-STORAGE FACILITY (MINI WAREHOUSE)

MIN. LOT AREA: MIN. LOT WIDTH: MAX. LOT COVERAGE:	REQUIRED 1 ACRE 200 FT. 50%	BUILDING #2: 50 STA BUILDING #3: 22 STA BUILDING #4: 48 STA BUILDING #5: 54 STA BUILDING #6: 7 STAN
MAX. BLDG HEIGHT: FRONT YARD: REAR YARD:	2 ¹ / ₂ STORIES OR 35' 60' 30'	PARKING PROVIDED
SIDE YARD EACH: SIDE YARD TOTAL:	30' 60'	NPDES PERMIT THE NPDES PERMIT LEBANON COUNTY C
*A 50' SIDE AND/OR REAR YARD SETBA	CK IS	DATED,

REQUIRED WHEN ADJACENT TO A RESIDENTIAL ZONING DISTRICT.*

CONSTRUCTION SCHEDULE START: FALL 2024 END: FALL 2025

SEWAGE DISPOSAL NOTE: NO SEWAGE DISPOSAL CONNECTION IS PROPOSED FOR THE SUBJECT PROPERTY AS PART OF THIS PROJECT.

WATER SUPPLY NOTE: NO WATER SUPPLY CONNECTION IS PROPOSED FOR THE SUBJECT PROPERTY AS PART OF THIS PROEJCT.

BUILDING CODE NOTE: ALL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE (UCC).

SHEET INDEX	
SHEET 1 of 19*	- COVERSHEET
SHEET 2 of 19*	– EXISTING CONDITIONS PLAN
SHEET 3 of 19*	– LAYOUT PLAN
SHEET 4 of 19*	– SUBDIVISION PLAN
SHEET 5 of 19*	– EASEMENT PLAN
SHEET 6 of 19*	– GRADING & UTILITY PLAN
SHEET 7 of 19*	– LANDSCAPING PLAN
SHEET 8 of 19*	– LIGHTING PLAN
SHEET 9 of 19*	– SITE DETAILS
SHEET PCSM1 of 19*	– PCSM PLAN (PCSM) OVERALL PLAN
SHEET PCSM2 of 19*	– PCSM NOTES & DETAILS
SHEET PCSM3 of 19*	- PCSM PROFILES
SHEET PCSM4 of 19*	– PRE-DEVELOPMENT DRAINAGE PLAN

SHEET PCSM6 of 19* -SHEET ES1 of 19 -SHEET ES2 of 19 -SHEET ES3 & ES4 of 19-

*TO BE RECORDED

SHEET PCSM5 of 19* -



THE PURPOSE OF THIS PLAN IS TO PROPOSE THE CONSTRUCTION OF SIX (6) STORAGE UNIT BUILDINGS, PAVING,

PURPOSE OF PLAN NOTE

PARKING AREAS AND ASSOCIATED STORMWATER MANAGEMENT FACILITIES FOR THE LANDS OF IONA INVESTMENT GROUP, LP PARCEL NO. 27-2329277-374492 DEED 02121-7091 CONTAINING 13.09 AC. THE PLAN ALSO PROPOSES THE SUBDIVISION OF 2.20 AC FROM LANDS OF IONA INVESTMENT GROUP, LP. RESULTING IN A 10.89 AC RESIDUE FOR IONA INVESTMENT GROUP, LP OFF-STREET PARKING

ONE OFF-STREET PARKING SPACE SHALL BE PROVIDED FOR EACH 25 STORAGE UNITS, PLUS ONE PER EACH 250 SQUARE FEET OF OFFICE SPACE, PLUS TWO PER ANY RESIDENTIAL USE ASSOCIATED WITH AN ON-SITE MANAGER.

PARKING SHALL BE PROVIDED BY PARKING/DRIVING LANES ADJACENT TO THE BUILDINGS. THESE LANES SHALL BE AT LEAST 26 FEET WIDE WHEN CUBICLES OPEN ONTO BOTH SIDES OF THE LANE.

PROPOSED UNITS: 305 (225 STANDARD/80 CLIMATE INTERNAL) **REQUIRED PARKING: 12 SPACES**

BUILDING #1: 44 STANDARD/38 CLIMATE INTERNAL UNITS TANDARD/42 CLIMATE INTERNAL UNITS ANDARD UNITS ANDARD UNITS ANDARD UNITS NDARD UNITS

D WITHIN ADJACENT LANES: 65 SPACES +/ COVERAGE WAS APPROVED BY THE

CONSERVATION DISTRICT VIA A LETTER . THE NPDES PERMIT NO. EXPIRES PRIVATE STREET NOTE

THE PRIVATE STREET SHALL BE EXTENDED AND FULLY COMPLETED THROUGH THE TURNAROUND UPON THE DEVELOPMENT OF LOT 2.

IMPERVIOUS COVERAGE NOTE A TOTAL OF 3.89 AC OF IMPERVIOUS HAVE BEEN DESIGNED FOR

WITH THE PROPOSED MRC BASIN DISTRIBUTED AS FOLLOWS: LOT 1 AND ASSOCIATED PRIVATE STREET (SHOWN ON THIS PLAN): 2.59 AC

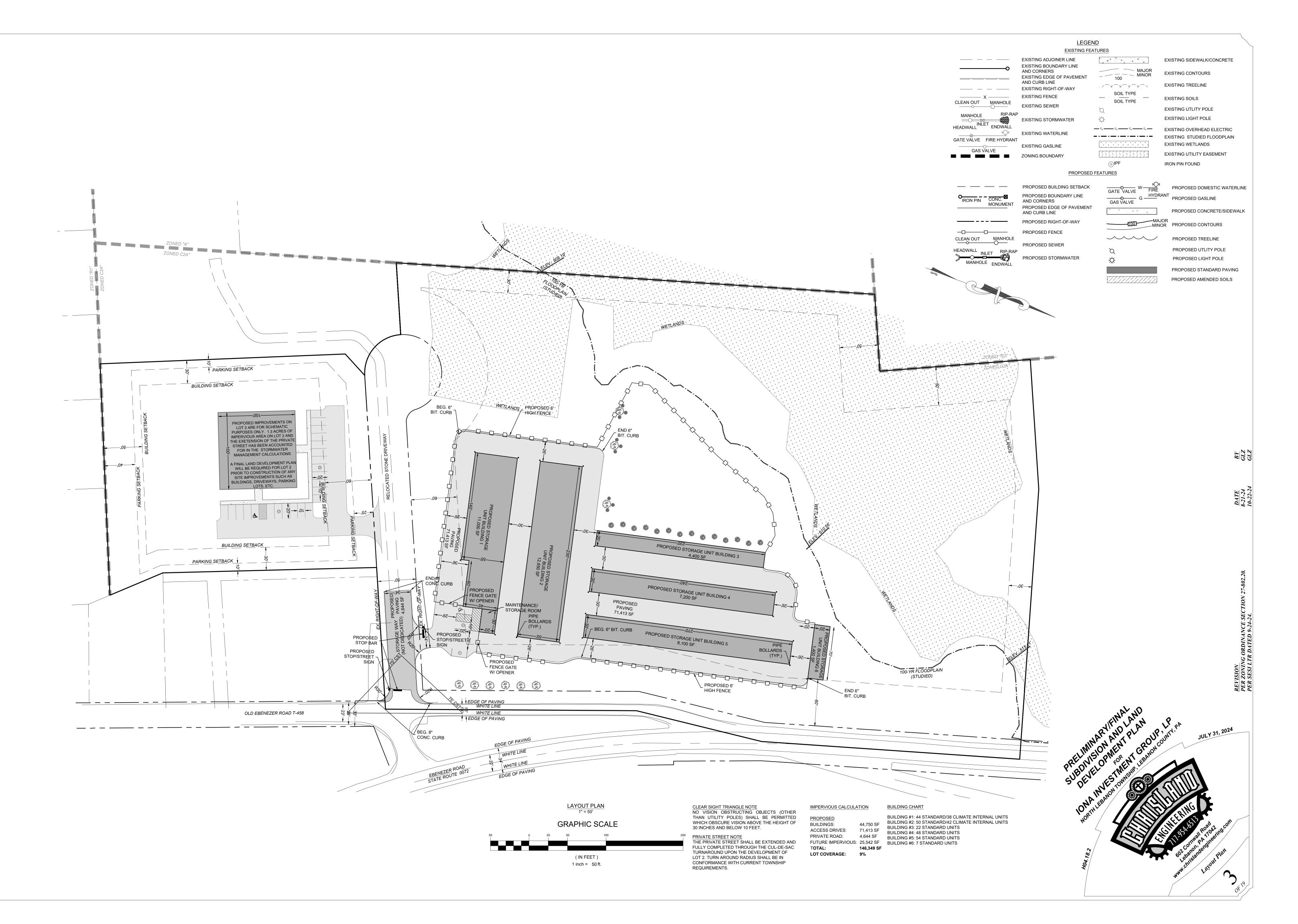
LOT 2 AND ASSOCIATED PRIVATE STREET EXTENSION (FUTURE): 1.30 AC

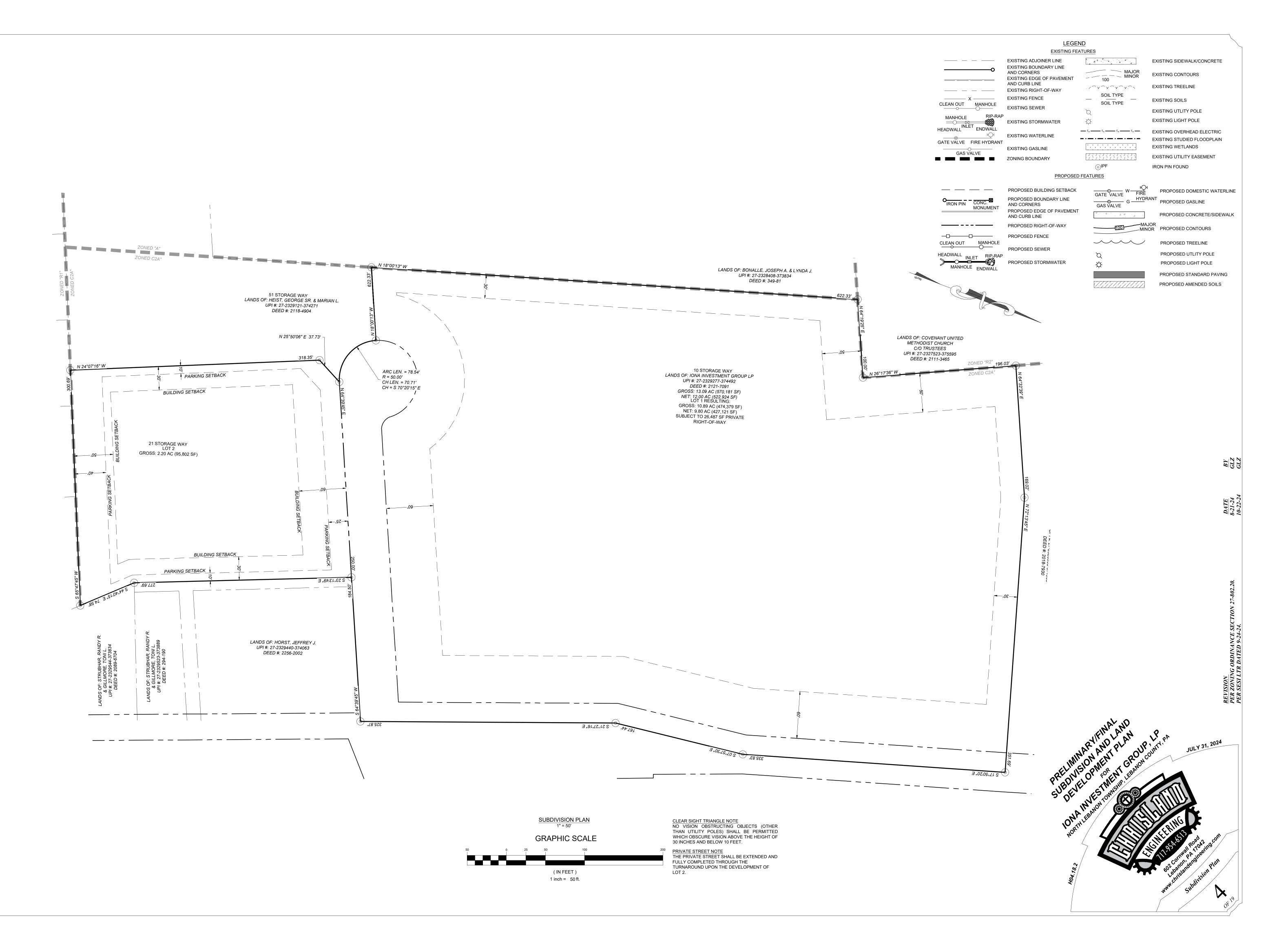
- POST-DEVELOPMENT DRAINAGE PLAN

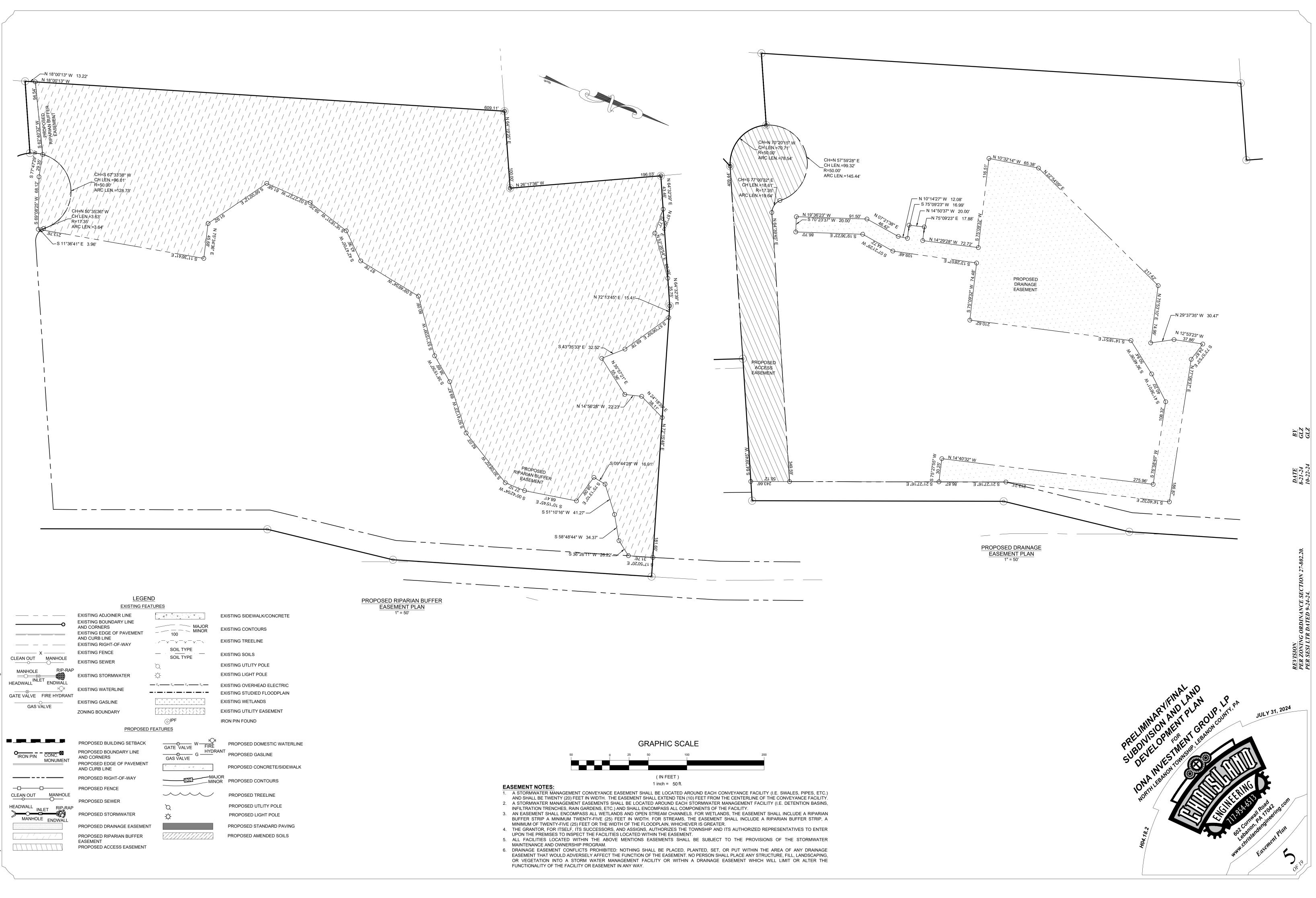


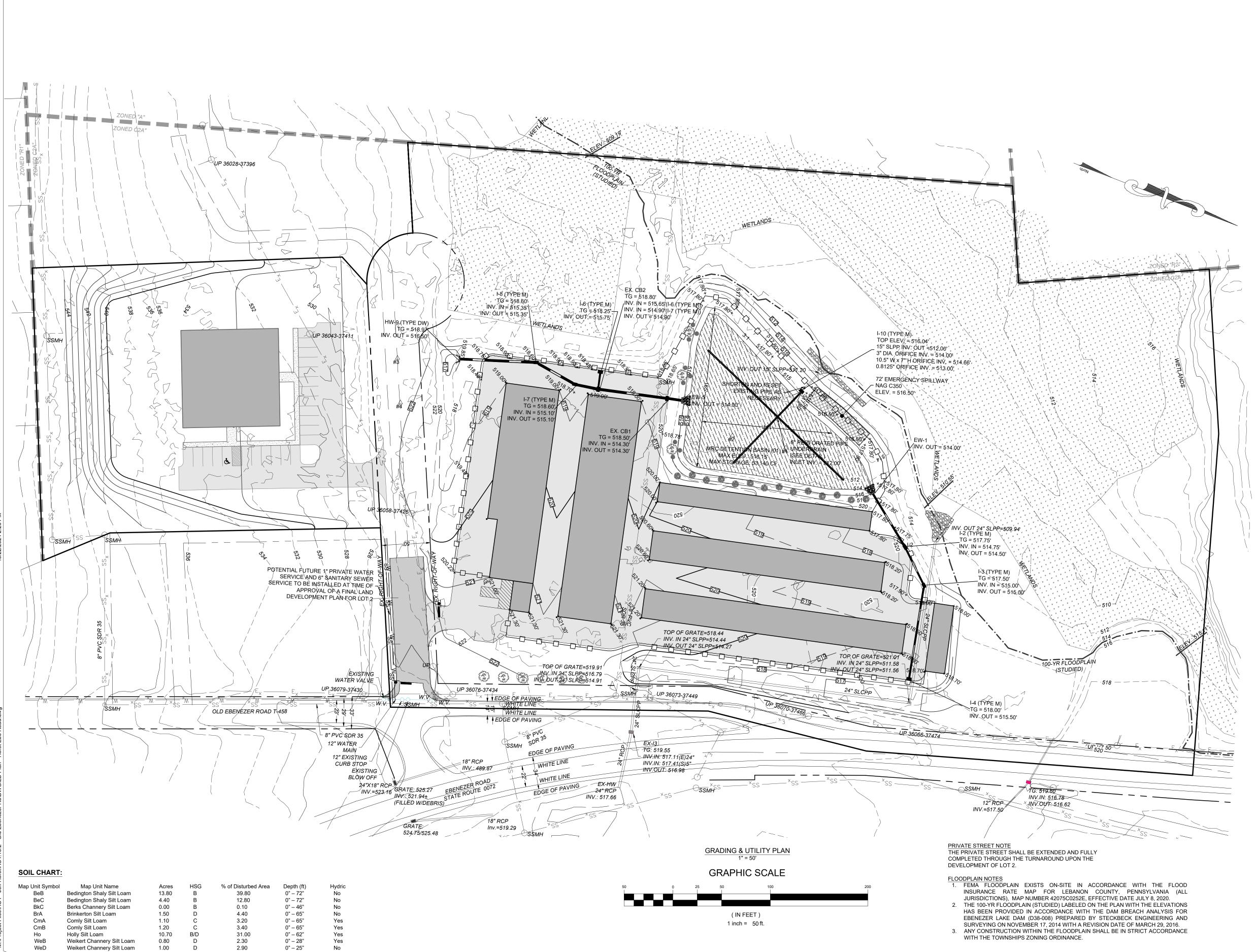
Project Files\HO4 - Jeff Horst\HO4.18.2 - Old Ebenezer Rd\DWG\LD Plan - Horst Ebe Road.dwg

10/22/2024 2:20 PM









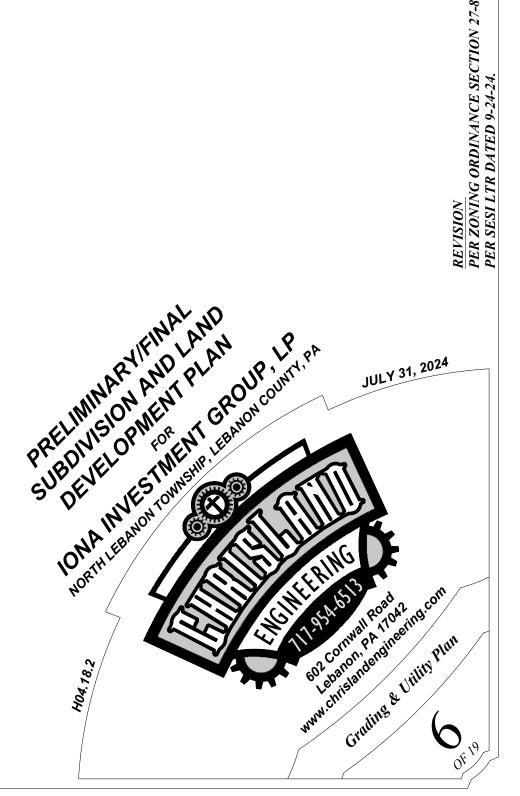
	LEGEN	П	
	EXISTING FEAT	_	
			EXISTING SIDEWALK/CONCRETE
o	EXISTING BOUNDARY LINE AND CORNERS EXISTING EDGE OF PAVEMENT	MAJOR MINOR	EXISTING CONTOURS
	AND CURB LINE EXISTING RIGHT-OF-WAY	. / T X T X T X T X T X	EXISTING TREELINE
CLEAN OUT MANHOLE	EXISTING FENCE		EXISTING SOILS
O	EXISTING SEWER	Ď	EXISTING UTLITY POLE
MANHOLE RIP-RAP	EXISTING STORMWATER	÷.	EXISTING LIGHT POLE
HEADWALL H GATE VALVE FIRE HYDRANT		E _x E _x E _x E _x E _x	EXISTING OVERHEAD ELECTRIC EXISTING STUDIED FLOODPLAIN EXISTING WETLANDS
GAS VALVE	EXISTING GASLINE		
	ZONING BOUNDARY		EXISTING UTILITY EASEMENT
		⊙IPF	IRON PIN FOUND
	PROPOSED F	EATURES	
	PROPOSED BUILDING SETBACK	GATE VALVE W-FIRE	PROPOSED DOMESTIC WATERLINE
	PROPOSED BOUNDARY LINE AND CORNERS	GAS VALVE G	PROPOSED GASLINE
	PROPOSED EDGE OF PAVEMENT AND CURB LINE	<i>₹</i> Δ. <i>₹</i>	PROPOSED CONCRETE/SIDEWALK
	PROPOSED RIGHT-OF-WAY	MAJO MINC	
CLEAN OUT MANHOLE	PROPOSED FENCE		PROPOSED TREELINE
HEADWALL RIP-RAP	PROPOSED SEWER	ň	PROPOSED UTLITY POLE
MANHOLE ENDWALL	PROPOSED STORMWATER	∑ ¢	PROPOSED LIGHT POLE
	PROPOSED DRAINAGE EASEMENT		PROPOSED STANDARD PAVING

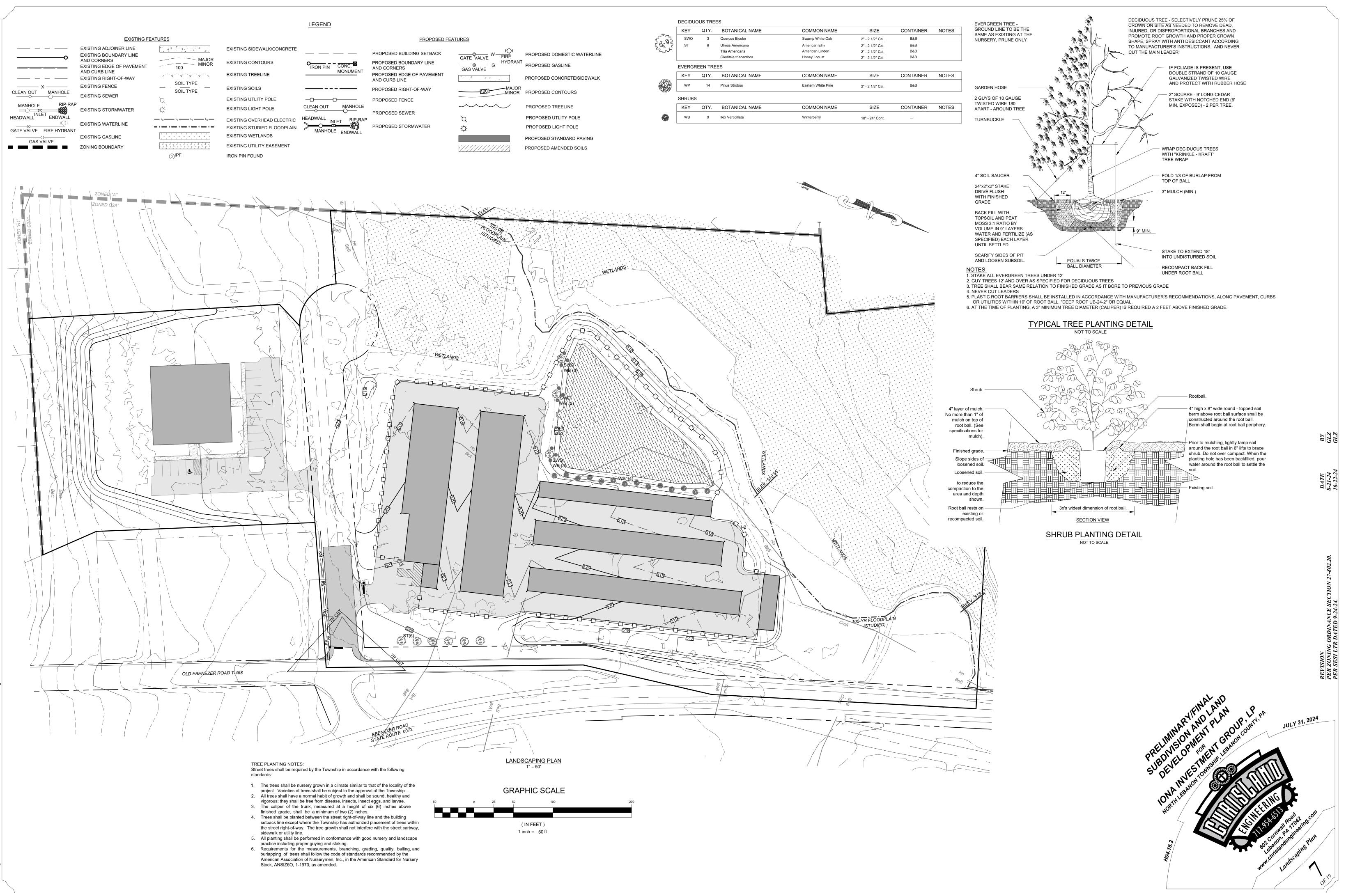
PROPOSED AMENDED SOILS

 $\frac{BY}{GLZ}$

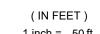
DATE 8-21-24 10-22-24

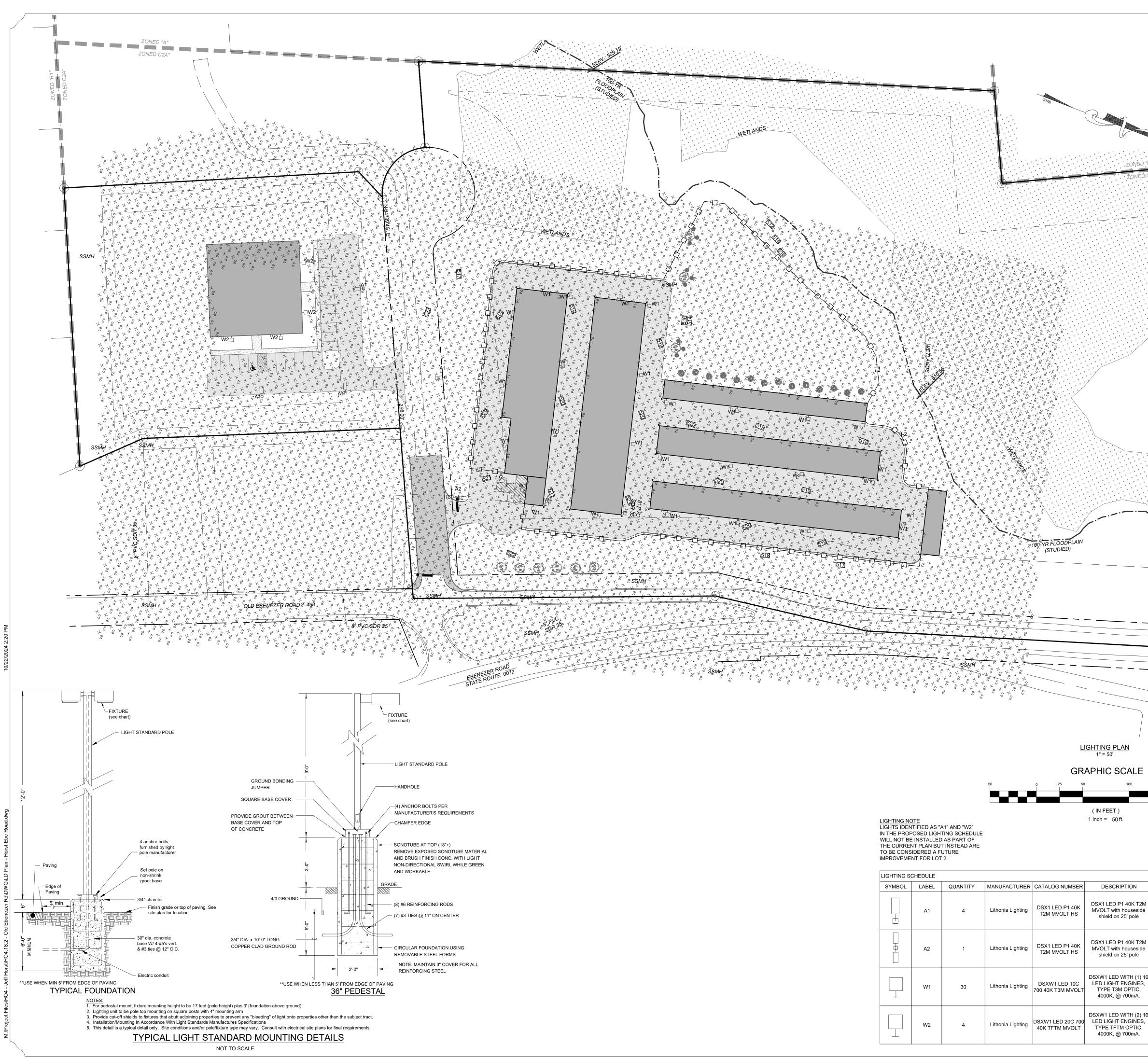
PROPOSED RIPARIAN BUFFER EASEMENT



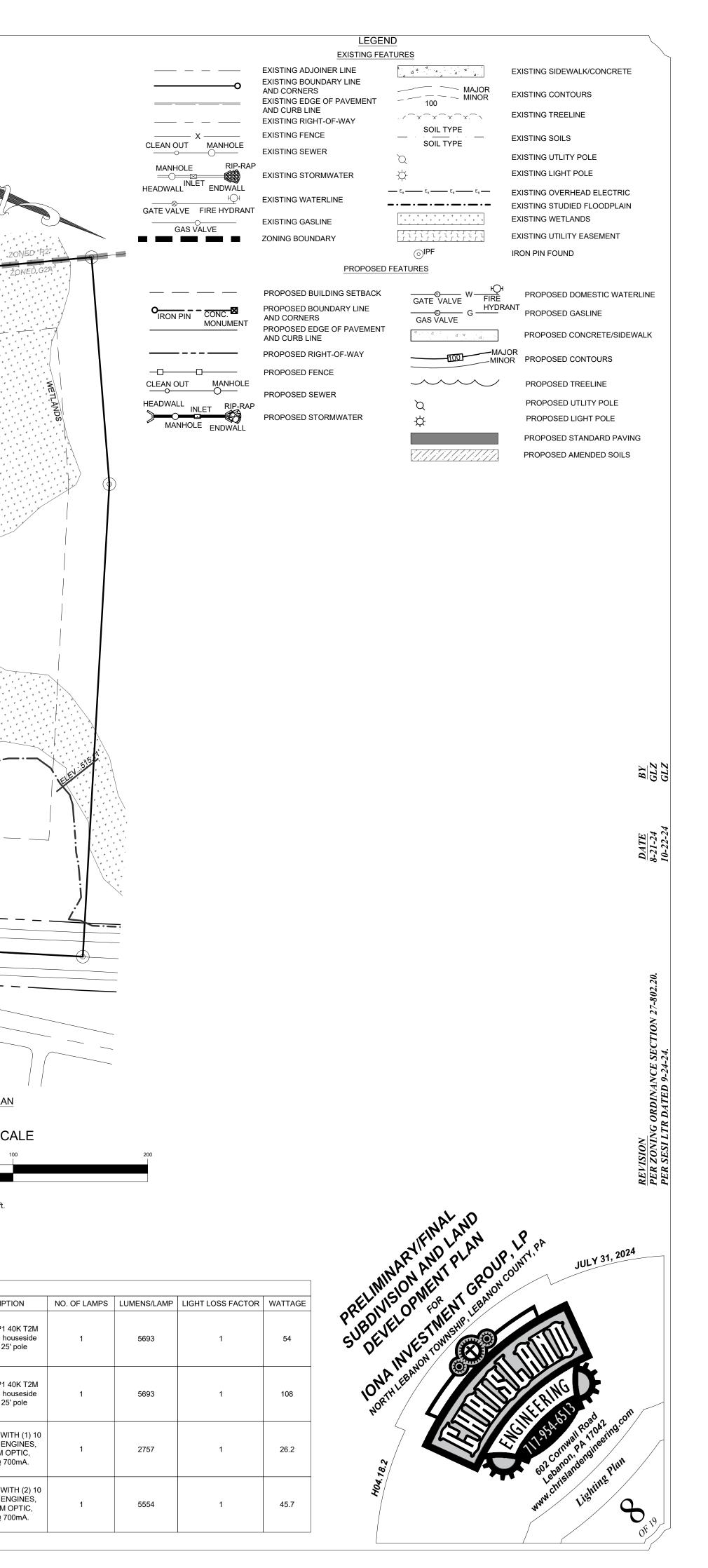


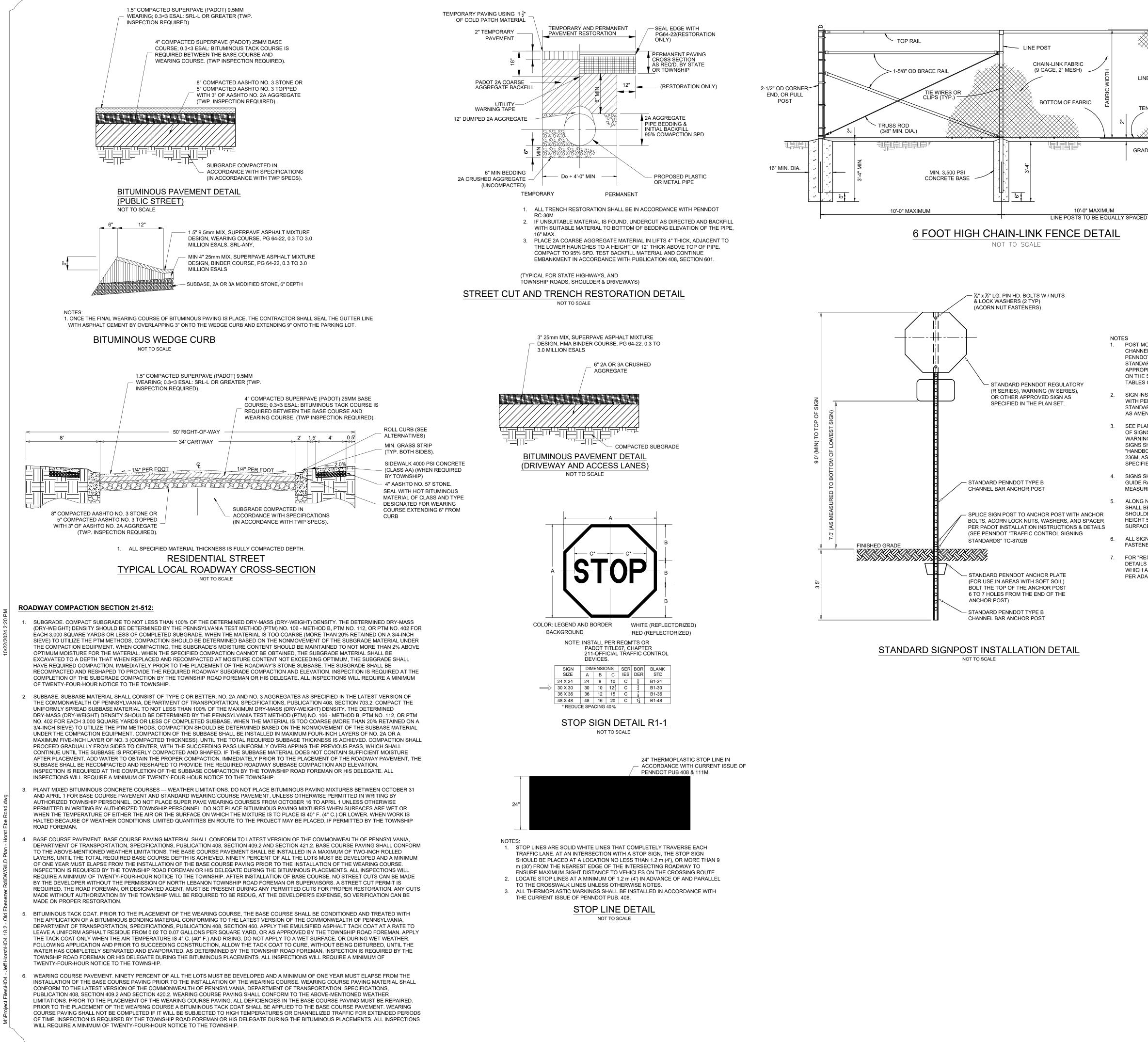


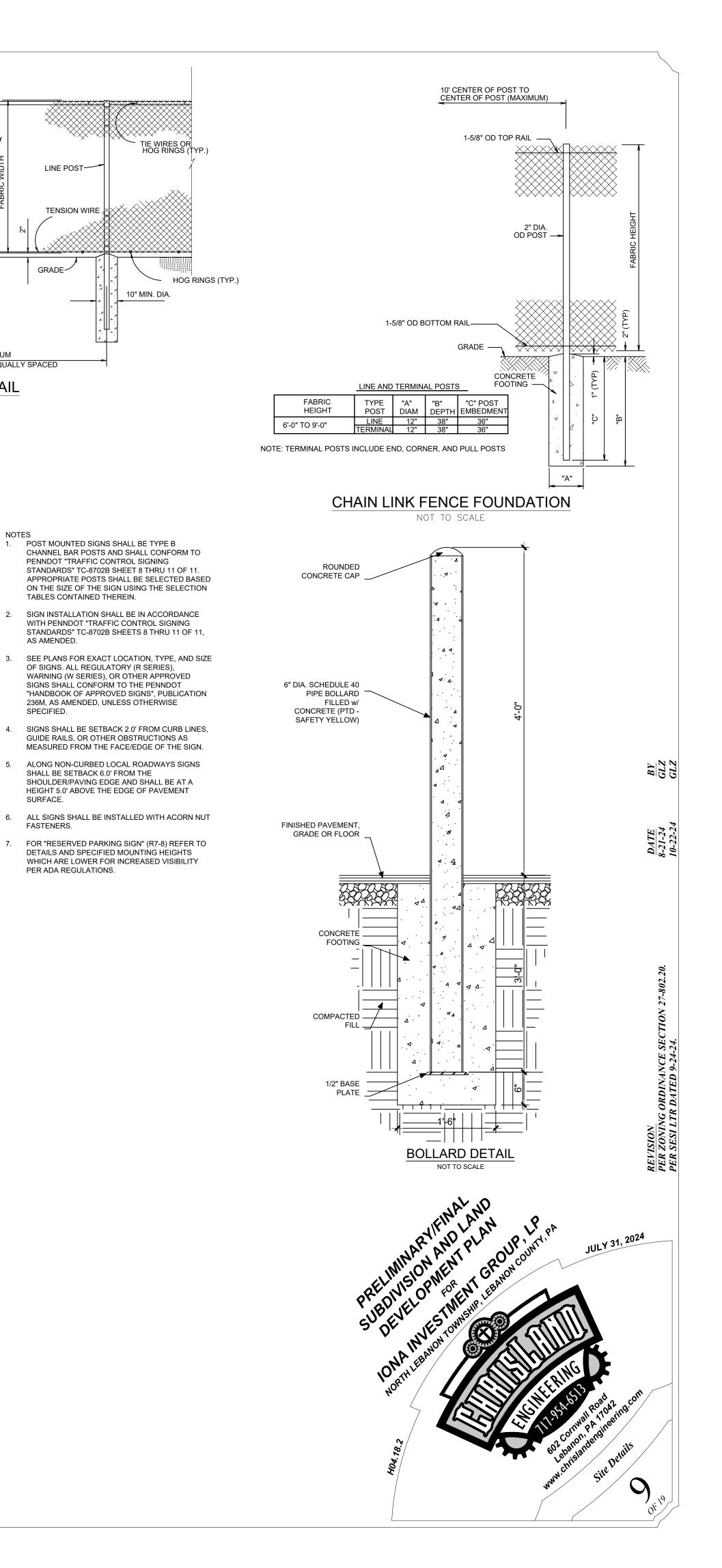




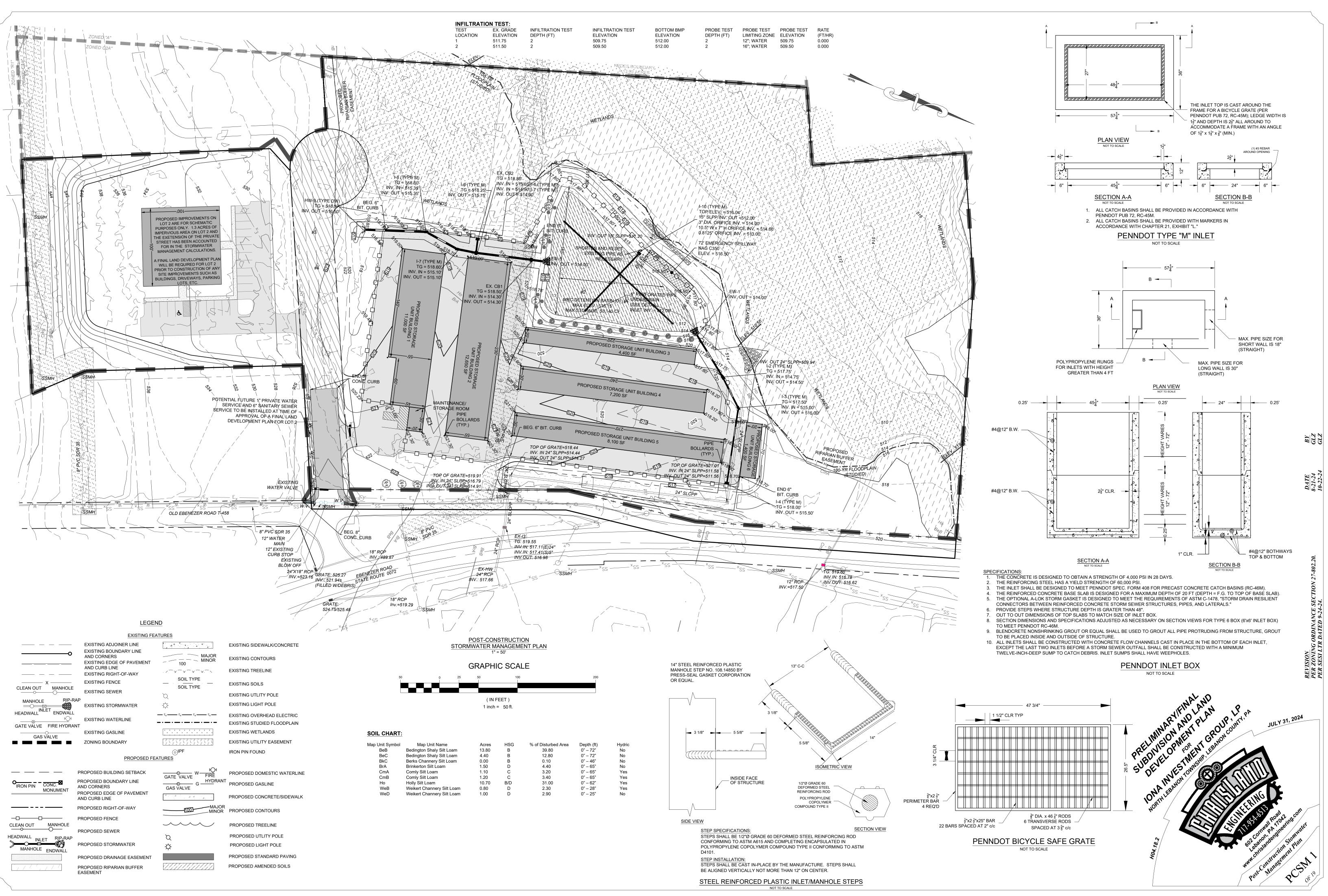
	SYMBOL	LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	DESCRIPT
		A1	4	Lithonia Lighting	DSX1 LED P1 40K T2M MVOLT HS	DSX1 LED P1 4 MVOLT with ho shield on 25'
		A2	1	Lithonia Lighting	DSX1 LED P1 40K T2M MVOLT HS	DSX1 LED P1 4 MVOLT with ho shield on 25'
		W1	30	Lithonia Lighting	DSXW1 LED 10C 700 40K T3M MVOLT	DSXW1 LED WI ⁻ LED LIGHT EN TYPE T3M O 4000K, @ 70
-		W2	4	Lithonia Lighting	DSXW1 LED 20C 700 40K TFTM MVOLT	DSXW1 LED WI LED LIGHT EN TYPE TFTM C 4000K, @ 70







NOTES



10/22/2024 2:20 PM

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) STANDARD NOTES

PCSM REQUIREMENTS

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

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

PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

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.

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.

PERMIT TERMINATION

UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN, THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT

THE NOTICE OF TERMINATION MUST INCLUDE:

- (1) THE FACILITY NAME, ADDRESS AND LOCATION
- (2) THE OPERATOR NAME AND ADDRESS
- (3) THE NPDES PERMIT NUMBER
- (4) THE REASON FOR PERMIT TERMINATION
- (5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM
- (6) COPY OF LEGAL INSTRUMENT: FOR ANY PROPERTY CONTAINING A PCSM BMP. THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION. (7) FINAL CERTIFICATION: THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS: "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 THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES.* (1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN. (2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.

REQUIRED INSPECTIONS DURING SITE CONSTRUCTION

THE NORTH LEBANON TOWNSHIP ENGINEER SHALL INSPECT THE IMPROVEMENTS DURING CONSTRUCTION. THE DEVELOPERS OR SITE WORK CONTRACTOR SHALL PROVIDE AT LEAST 2 WORKING DAYS NOTICE PRIOR TO THE START OF ANY IMPROVEMENTS WHICH REQUIRE INSPECTION BY CALLING THE NORTH LEBANON TOWNSHIP ENGINEER AT 717-272-7110.

ALL INSPECTIONS OF COMPLETED ITEMS SHALL BE REQUESTED IN WRITING AT LEAST 48 HOURS IN ADVANCE OF THE FINAL INSPECTION DATE & TIME.

INSPECTIONS ARE REQUIRED FOR THE FOLLOWING ACTIVITIES: 1. UPON COMPLETION OF PRELIMINARY SITE PREPARATION INCLUDING STRIPING OF VEGETATION, STOCKPILING OF TOPSOIL AND TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.

2. UPON COMPLETION OF ROUGH GRADING, BUT PRIOR TO PLACING TOPSOIL, PERMANENT DRAINAGE OR OTHER SITE IMPROVEMENTS AND GROUND COVERS 3. DURING THE CONSTRUCTION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES. ALL STORM SEWERS, CULVERTS, ETC. PRIOR TO

BACKFILL. 4. FOR MRC BASIN - SEE PCSM2

5. UPON FINAL COMPLETION OF PERMANENT STORM WATER MANAGEMENT AND BMP FACILITIES AND THE ESTABLISHMENT OF GROUND COVERS AND PLANTINGS.

6. AFTER REVIEW OF THE AS-BUILT DRAWINGS BUT PRIOR TO THE RELEASE OF THE FINAL FINANCIAL GUARANTEE FOR COMPLETION OF FINAL GRADING, VEGETATIVE CONTROLS REQUIRED BY THE BMP STANDARDS OR OTHER SITE RESTORATION.

7. FINANCIAL SECURITY FOR THE IMPROVEMENTS WILL NOT BE CONSIDERED FOR RELEASE UNLESS THE TOWNSHIP ENGINEER IS PROPERLY NOTIFIED AND THE SUBSURFACE IMPROVEMENTS ARE INSPECTED PRIOR TO BACKFILLING.

DRY EXTENDED DETENTION BASIN

A DRY EXTENDED DETENTION BASIN IS AN EARTHEN STRUCTURE CONSTRUCTED EITHER BY IMPOUNDMENT OF A NATURAL DEPRESSION OR EXCAVATION OF EXISTING SOIL. THAT PROVIDES TEMPORARY STORAGE OF RUNOFE AND FUNCTIONS HYDRAULICALLY TO ATTENUATE STORMWATER RUNOFE THE DRY DETENTION BASIN, AS CONSTRUCTED IN COUNTLESS LOCATIONS SINCE THE MID-1970'S AND REPRESENTING THE PRIMARY BM MEASURE UNTIL NOW, HAS SERVED TO CONTROL THE PEAK RATE OF RUNOFF ALTHOUGH SOME WATER QUALITY BENEFIT ACCRUED BY SETTLEMENT OF THE LARGER PARTICULATE FRACTION OF SUSPENDED SOLIDS. THIS EXTENDED VERSION IS INTENDED TO ENHANCE THIS MECHANISM IN ORDER TO MAXIMIZE WATER QUALITY BENEFITS.

CONSTRUCTION SEQUENCE

1. PROTECT DETENTION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.

2. IF POSSIBLE, INSTALL DETENTION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT LADEN WATER FROM ENTERING INLETS AND PIPES.

- 3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- 4. IF NECESSARY, EXCAVATE DETENTION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. 5. INSTALL OUTLET CONTROL STRUCTURES. 6. SEED AND STABILIZE TOPSOIL. (VEGETATE IF APPROPRIATE WITH NATIVE PLANTINGS.)
- 6. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

MAINTENANCE ISSUES

PROPERLY DESIGNED AND INSTALLED DETENTION AREAS REQUIRE SOME REGULAR MAINTENANCE:

- MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (> 1 INCH RAINFALL DEPTH): 1. INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- 2. INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED

3. MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER DETENTION BASIN OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN DETENTION BASSIN IS DRY TO AVOID RUTTING

4. INSPECT FOR LITTER; REMOVE PRIOR TO MOWING

5. INSPECT DETENTION BASIN INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED

1. RE-PLANT SPECIFIED GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT. INSTALL NAG S75 MATTING IN AREAS WHERE INITIAL GRASS ESTABLISHMENT WAS NOT SUCCESSFUL.

- 2. RESEED BARE AREAS; INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING.
- 3. ROTOTILL AND REPLANT DETENTION BASIN IF DRAW DOWN TIME IS MORE THAN 72 HOURS.

4. WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY

MANAGED RELEASE CONCEPT

MANAGED RELEASE CONCEPT (MRC) IS A POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) STRATEGY THAT COMPRISES THE COLLECTION, MANAGEMENT, AND FILTRATION OF CAPTURED RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA THROUGH A BEST MANAGEMENT PRACTICE (BMP) THAT IS PREFERABLY VEGETATED AND INCLUDES RELEASE OF A PORTION OF THE CAPTURED RUNOFF THROUGH AN UNDERDRAIN WITHIN THE BMP. MRC IS INTENDED TO BE USED FOR PROJECT AREAS OR SUBAREAS WHERE INFILTRATION IS CONSIDERED INFEASIBLE TO MEET REGULATORY REQUIREMENTS UNDER § 102.8(g)(2).

MRC REQUIRES THAT RUNOFF FROM THE 1.2-INCH/2-HOUR STORM1 IS TEMPORARILY IMPOUNDED FOR USE BY VEGETATION, IS FILTERED THROUGH A SOIL MEDIA OR ANOTHER ACCEPTABLE PRE-TREATMENT DEVICE, IS INFILTRATED THROUGH ON-SITE UNDISTURBED SOILS TO THE HIGHEST DEGREE FEASIBLE, AND IS RELEASED THROUGH AN UNDERDRAIN OR CONTROL STRUCTURE AT A RATE SIMILAR TO THE LATERAL UNSATURATED FLOW MOVEMENT TO THE RECEIVING WATERS FROM UNDEVELOPED AREAS. FLOW OUT OF THE MRC DURING THE 1.2-INCH/2-HOUR STORM EVENT MUST BE LIMITED TO THE MANAGED RELEASE RATE (I.E., FLOW THROUGH THE UNDERDRAIN ONLY).

RUNOFF ABOVE THE 1.2-INCH/2-HOUR STORM AND UP TO THE 2-YEAR/24-HOUR STORM IS MANAGED BACK TO THE 1-YEAR/24-HOUR PEAK RATE IN ONE OR MORE BMPS TO PROTECT AND IMPROVE GEOMORPHOLOGIC PROCESSES DOWNSTREAM OF EARTH DISTURBANCES. AN INTERNAL WATER STORAGE IS INCLUDED IN THE DESIGN FOR FURTHER WATER QUALITY AND EVAPOTRANSPIRATION BENEFITS. WHEN THE MRC IS DESIGNED ACCORDING TO THE DESIGN STANDARDS WITHIN, IT MAY BE USED TO SATISFY 25 PA. CODE § 102.8(g)(2) REQUIREMENTS FOR THE MANAGEMENT OF ALL EVENTS UP TO AND INCLUDING THE 2-YEAR/24-HOUR STORM.

CRITICAL STAGES OF CONSTRUCTION

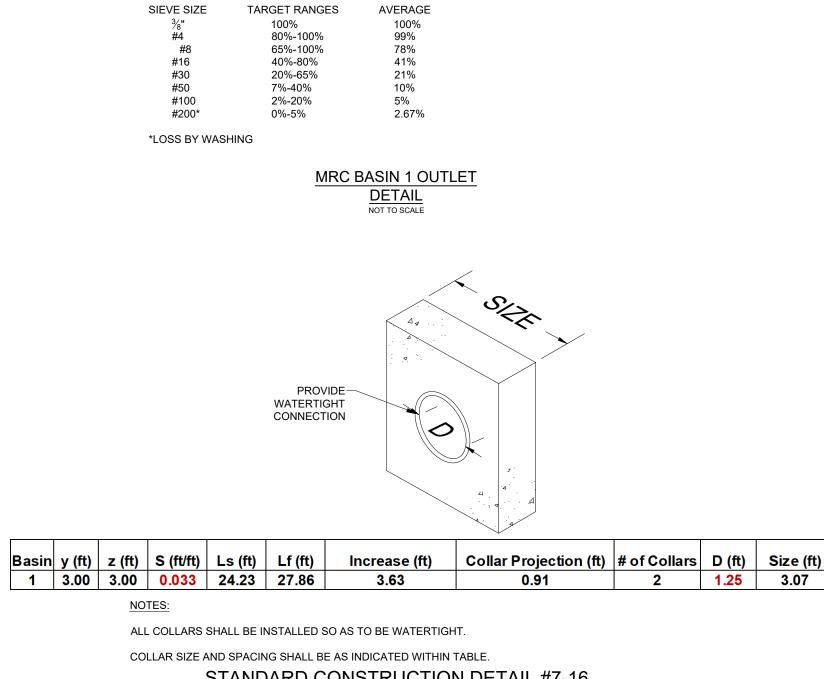
6. AT THE COMPLETION OF BACKFILLING AND STABILIZATION.

7. WHEN ALL TRIBUTARY AREAS ARE SUFFICIENTLY STABILIZED.

NORTH LEBANON TOWNSHIP (717-273-7132) AND CHRISLAND ENGINEERING (717-954-6513) SHALL BE CONTACTED FOR INSPECTION AT THE FOLLOWING CRITICAL STAGES OF CONSTRUCTION:

5. AT THE COMPLETION OF THE INSTALLATION OF THE AMENDED SOILS IN THE MRC DETENTION BASIN BOTTOM.

FOLLOWING CRITICAL STAGES OF CONSTRUCTION:	
MRC DETENTION BASIN	
1. AT THE COMPLETION OF ROUGH GRADING OF THE BOTTOM OF THE MRC DETENTION BASIN.	
2. AT THE COMPLETION OF INSTALLATION OF ALL STORM SEWER PIPING AND INLETS.	
3. AT THE COMPLETION OF INSTALLATION OF THE CATCH BASINS AND OUTLET PIPE.	
4. AT THE COMPLETION OF THE INSTALLATION OF THE CLAY CORE AND ANTI-SEEP COLLARS PRIOR TO THE BACKFILLING OF THE BERM.	



STANDARD CONSTRUCTION DETAIL #7-16 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS NOT TO SCALE

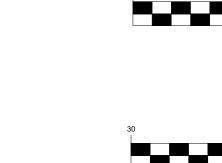
PUBLICATION TYPE A AGGE
SIEVE SIZE
3/8"
#4
#8
#16
#30
#50
#100
#200*

SEED RAIN GARDEN BOTTOM WITH E M BROWN CONSERVE LOW MAINTENANCE **INSTALL 2' MINIMUM AMENDI** (75% TOPSOIL, 15% SAND, 10% COM

SAND NOTE

UNCOMPACTED NATIVE SOIL

	EL. 514.00'
ED SOIL MPOST)	
EL. 512.00'	



(75% TOPSOIL 15% SAND 10% COMPOST)

INSTALL 24" OF AMENDED SOIL

CORE MATERIAL WITHIN KEY TRENCH SHALL BE IMPERVIOUS

I-10 (TYPE M

TOP ELEV. =516.04

15" SLCPP INV. OUT = 512.00'

3" DIA ORIFICE INV. = 514.00'

0.8125" ORIFICE INV. = 513.00'

10.5" W x 7" H ORIFICE INV. = 514.50'

MATERIAL OF THE UNIFIED SOILS CLASSIFICATION ML OR CL -EXTENDING THE FULL LENGTH OF THE EMBANKMENT AND SHALL EXTEND 2' BELOW EXISTING GRADE.

SS ORIFICE PLATE AND

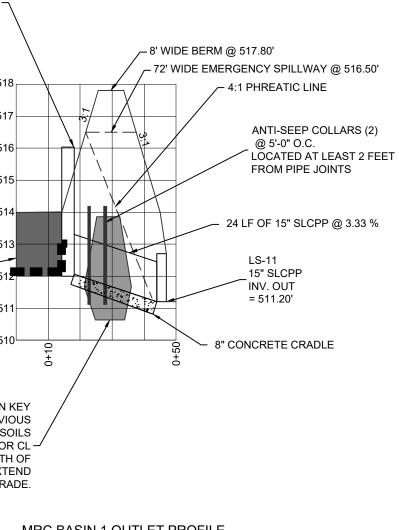
3" DIA. ORIFICE @ 514.00'

SS ORIFICE PLATE AND -

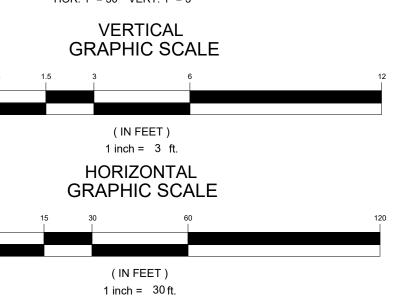
TRASH RACK

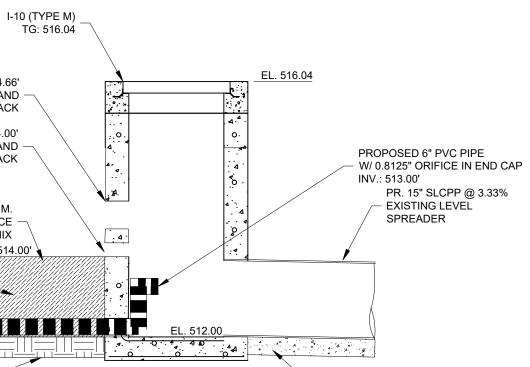
TRASH RACK

10.5" W x 7" H ORIFICE @ 514.66'



MRC BASIN 1 OUTLET PROFILE HOR: 1" = 30' VERT: 1" = 3'





- 8" CONCRETE CRADLE

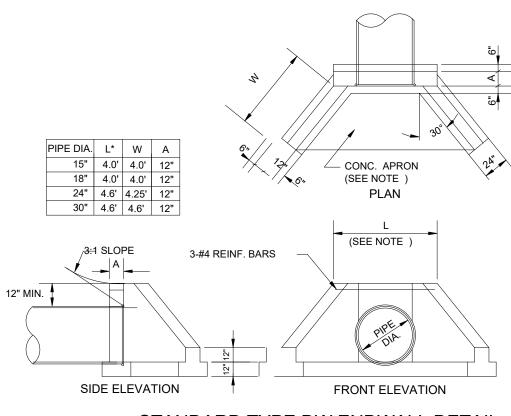
SHALL BE DEP SAND (WASHED B3. WASHED #10) WHICH MEETS ALL PENNDOT N 408 SECTION 703 STANDARDS AND IS LISTED IN BULLETIN 14 AS AN APPROVED REGATE SOURCE - AVERAGE GRADATION

			1		
		1 (P.L.S. IN LBS/AC)	(LBS/ACRE)	2 (TONS/ACRE)	
TEMPORARY	ANNUAL RYE	(F.L.3. IN ED3/AC) 174	50-50-50 N-P O ₂ -K 0	1 AG GRADE	OCTOBER 30
	FINE FESCUES	60	202		
PERMANENT	KENTUCKY BLUEGRASS	90	100-200-200 N-P_OK_0 2_5_2	6 AG GRADE	AUGUST 30 AND OCTOBER 30
	PERENNIAL RYEGRASS	25	202		
ATHLETIC	KENTUCKY BLUEGRASS	150	100-200-200	6	AUGUST 30
FIELDS	PERENNIAL RYEGRASS	25	N-P_0K_0	AG GRADE	AND OCTOBER 30
DETENTION BASIN	F.M. BROWN CONSERVE LOW MAINTENANCE BASIN	20	100-200-200 N-P O -K 0 2 5 2	6 AG GRADE	AUGUST 30 AND OCTOBER 30
	- - - -	STEEP SL	OPES		1
NURSE CROP	ANNUAL RYE	64	50-50-50 N-P O -K 0 2 5 2	1 TON/AC AG GRADE*	OCT. 15
	BIRDSFOOT TREFOIL PLUS	10			
PERMANENT	PLUS TALL FESCUE	30	100-200-200 N-P ₂ O ₅ -K ₀	1 TON/AC AG GRADE*	MARCH 15 AND OCT. 15

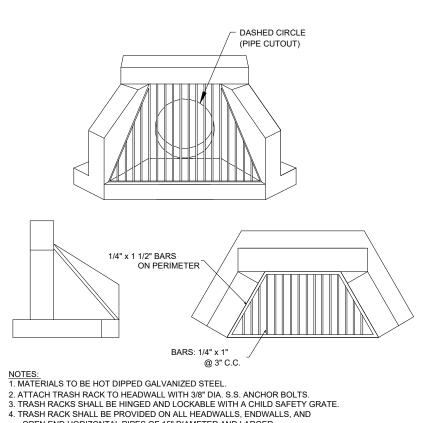
1. PLS IS PURE LIVE SEED, PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. TO SECURE THE ACTUAL PLANTING RATE, DIVIDE THE POUNDS PLS BY THE PLS PERCENTAGE SHOWN ON THE SEED TAG OR AS PREVIOUSLY DISCUSSED. THUS, IF THE PLS CONTENT OF FINE FESCUES IS 50%, DIVIDE 7 PLS BY 0.50 TO OBTAIN 140 POUNDS OF SEED PER ACRE. 2. LIMING RATE SHALL BE IN ACCORDANCE WITH SOIL TEST RESULTS. APPLY 6 TONS OF AGRICULTURAL

GRADE LIMESTONE/AC OF LAND DISTURBED BY DIVERSIONS AND DAMS. - ALL SEEDED AREAS SHALL BE MULCHED WITH STRAW APPLIED AT A RATE OF 3 TONS/ACRE, MULCH TO BE ANCHORED WITH WOOD CELLULOSE FIBER @ 750 LBS/AC ALL DIVERSIONS, CHANNELS, SED TRAPS AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.

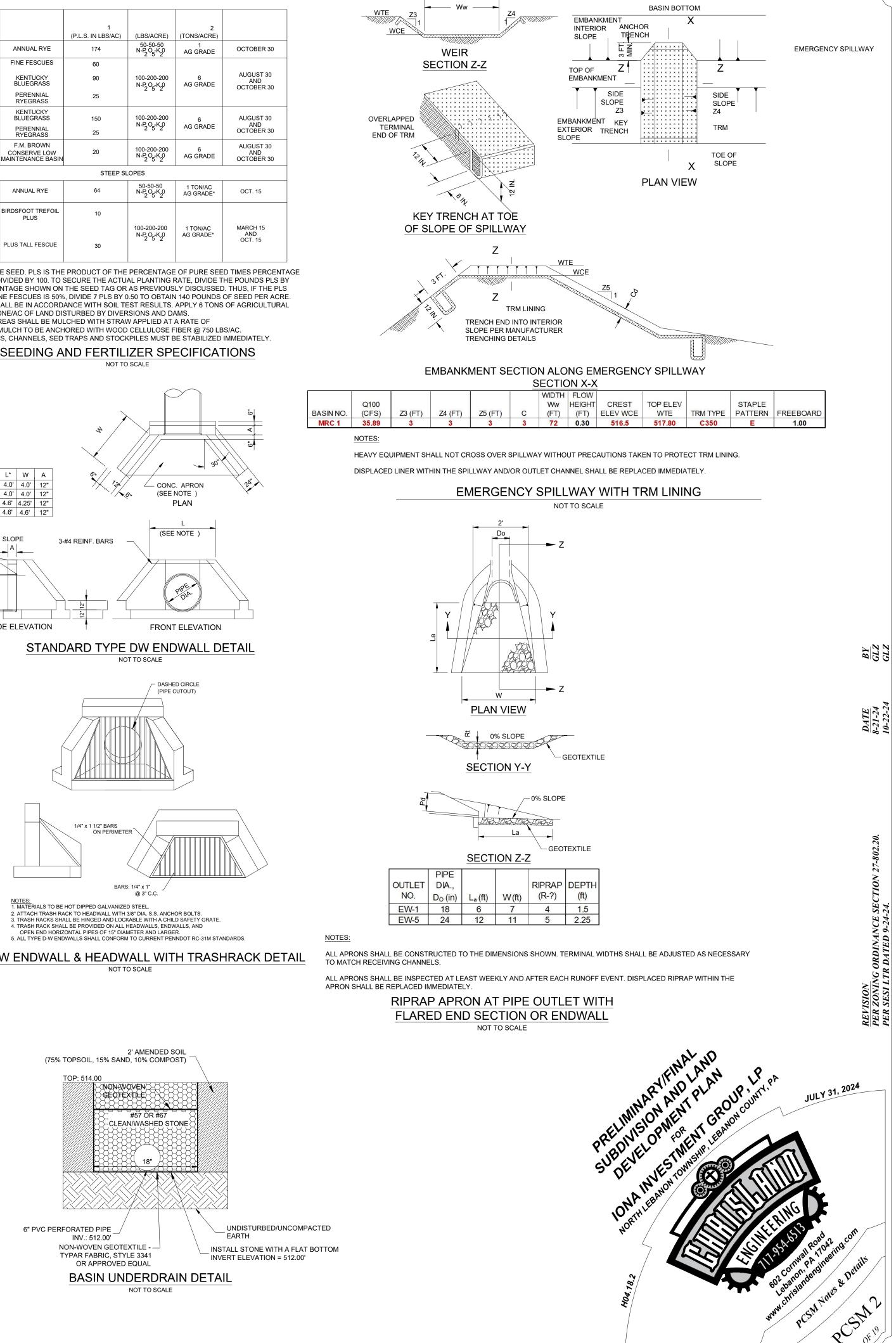
SEEDING AND FERTILIZER SPECIFICATIONS NOT TO SCALI

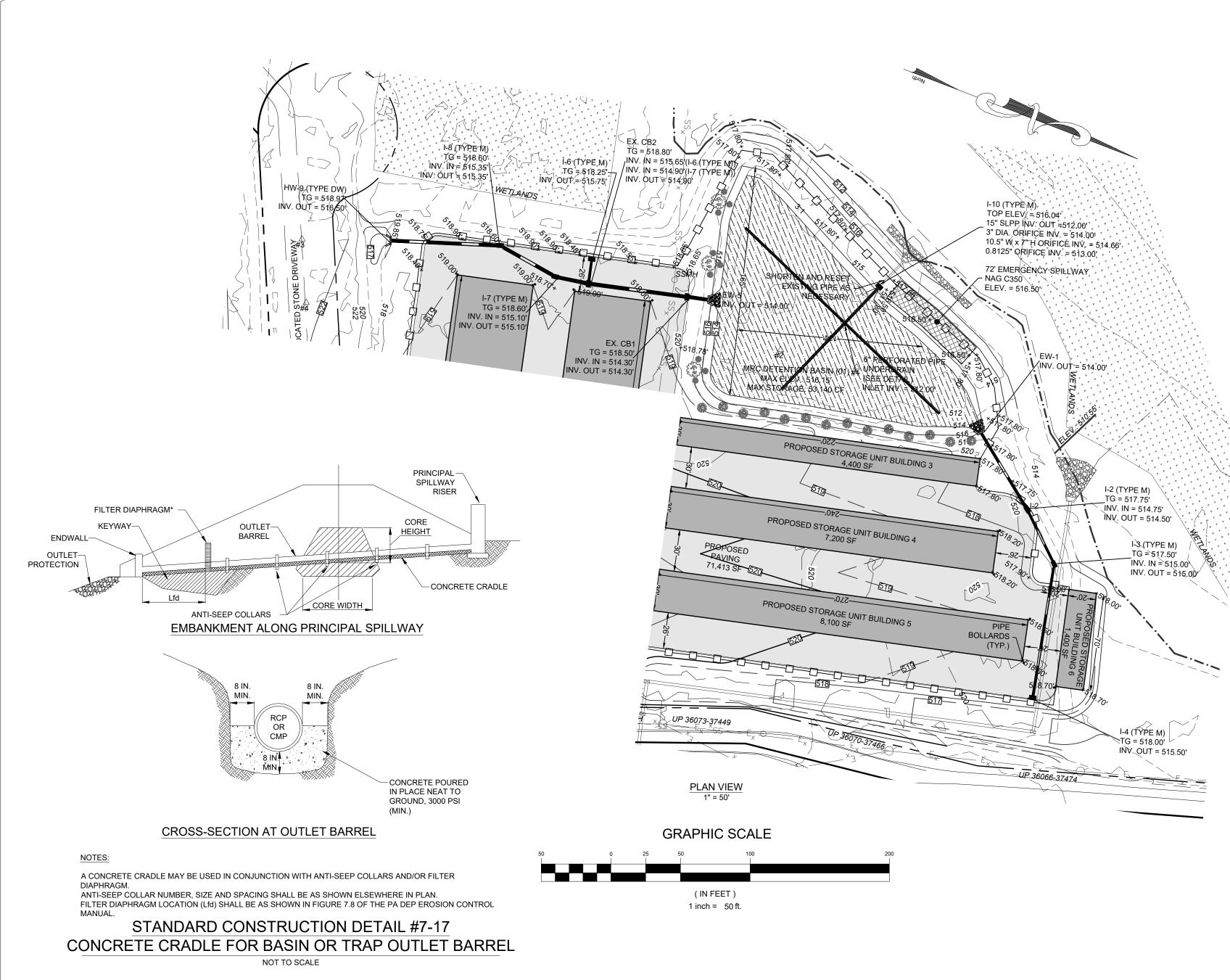


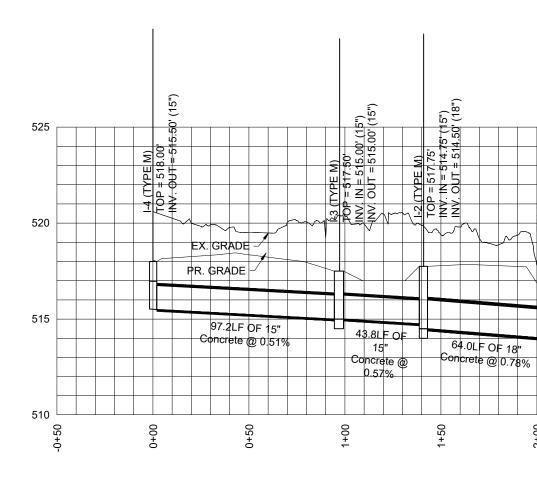
STANDARD TYPE DW ENDWALL DETAIL



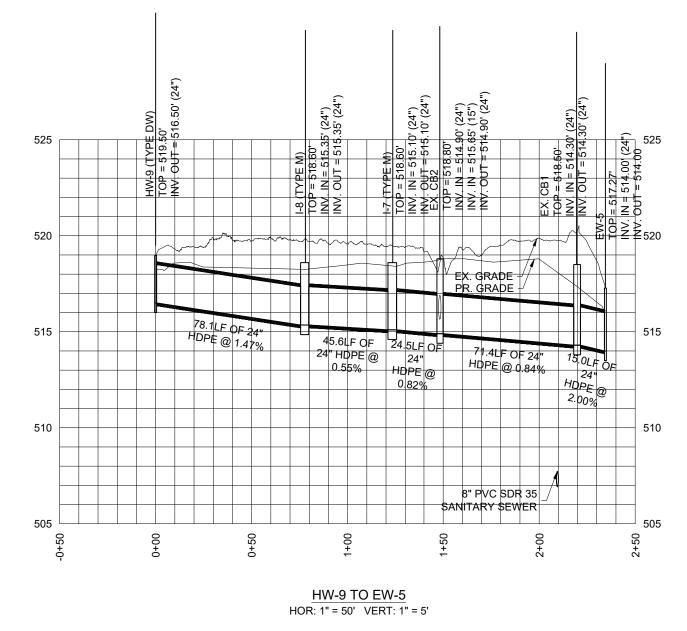
TYPE DW ENDWALL & HEADWALL WITH TRASHRACK DETAIL

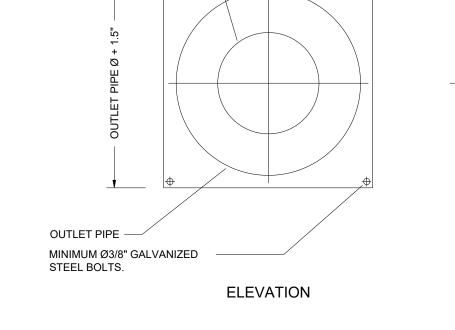


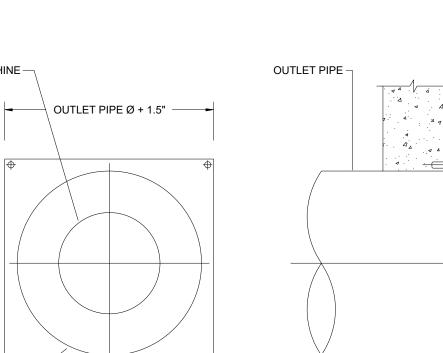




I-4 TO EW-1 PROFILE HOR: 1" = 50' VERT: 1" = 5'







NOT TO SCALE



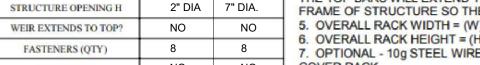
8 8 NO NO COVER RACK.

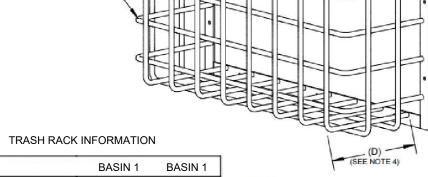
NOTES:

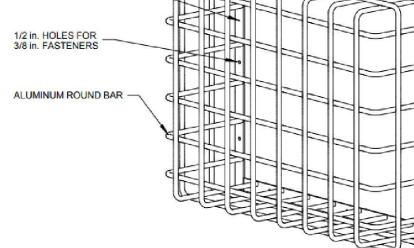
EXTENDS TO THE TOP OF THE STRUCTURE, THE DEPTH OF 2" DIA. 10.5" THE TOP BARS WILL EXTEND TO MEET TOP GRATING OR FRAME OF STRUCTURE SO THERE IS NO GAP. 5. OVERALL RACK WIDTH = (W) + 4 INCHES NO 6. OVERALL RACK HEIGHT = (H) + BAR DIAMETER + 2 INCHES 7. OPTIONAL - 10g STEEL WIRE MESH WITH 1 1/2 in. GRID TO

2. WELD ALL INTERSECTIONS.

MAX. SPACING. MINIMUM OF (4).







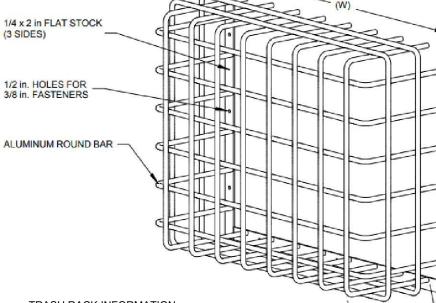
11"

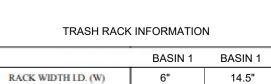
1/2"

3"

4" 4"

1/2"





6"

2"

(3 SIDES)

RACK HEIGHT I.D. (H)

RACK DEPTH O.D. (D)

BAR DIAMETER (1/2" OR 3/4")

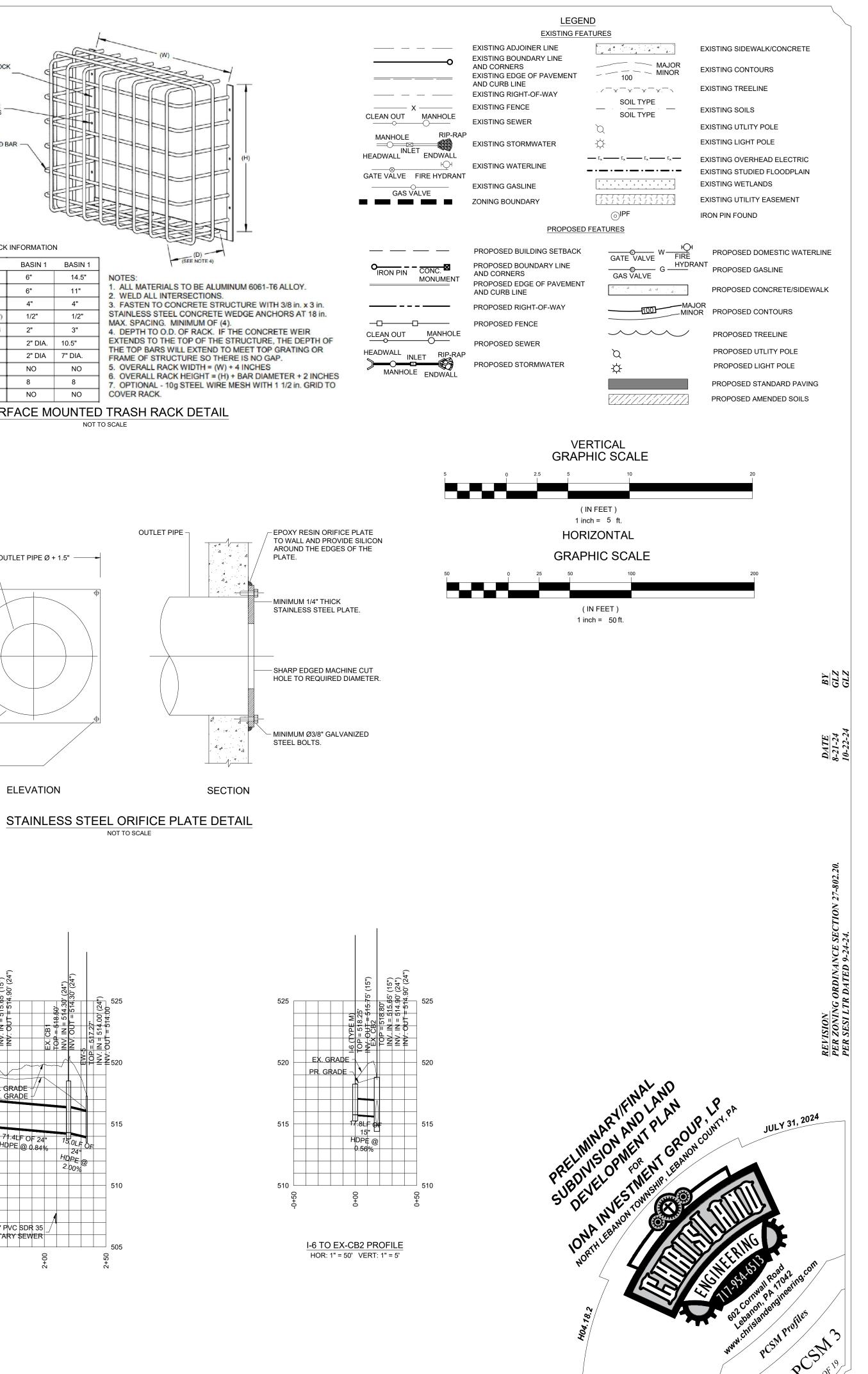
BAR CENTERLINE SPACING

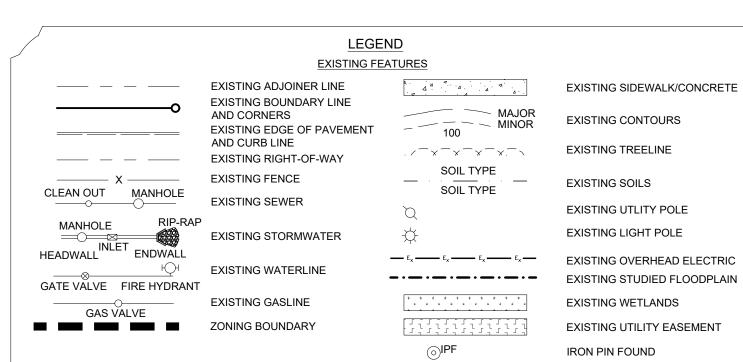
STRUCTURE OPENING W

FASTENERS (QTY)

SHARP EDGED MACHINE -

CUT ORIFICE





EXISTING SIDEWALK/CONCRETE

EXISTING CONTOURS

EXISTING TREELINE

EXISTING SOILS

EXISTING UTLITY POLE EXISTING LIGHT POLE

EXISTING STUDIED FLOODPLAIN EXISTING WETLANDS

EXISTING UTILITY EASEMENT

PRE-DEVELOPMENT 1 DRAINAGE AREA = 9.31 AC

562 SHALLOW CONC. FLOW @ 7.83%

IRON PIN FOUND



BeC

BkC

BrA

CmA

CmB

WeB WeD

Ho

Map Unit Name Bedington Shaly Silt Loam Bedington Shaly Silt Loam Berks Channery Silt Loam Brinkerton Silt Loam

Weikert Channery Silt Loam Weikert Channery Silt Loam

Comly Silt Loam

Comly Silt Loam

Holly Silt Loam

@ 2.50%

Acres 13.80 4.40 0.00 1.50 1.10 1.20 10.70 0.80 1.00

В С B/D D D

HSG

В

39.80 12.80 0.10 4.40 3.20 3.40 31.00 2.30 2.90

% of Disturbed Area

0" – 72" 0" – 46" 0" – 65" 0" – 65" 0" - 65" 0" - 62" 0" - 28" 0" - 25"

Depth (ft)

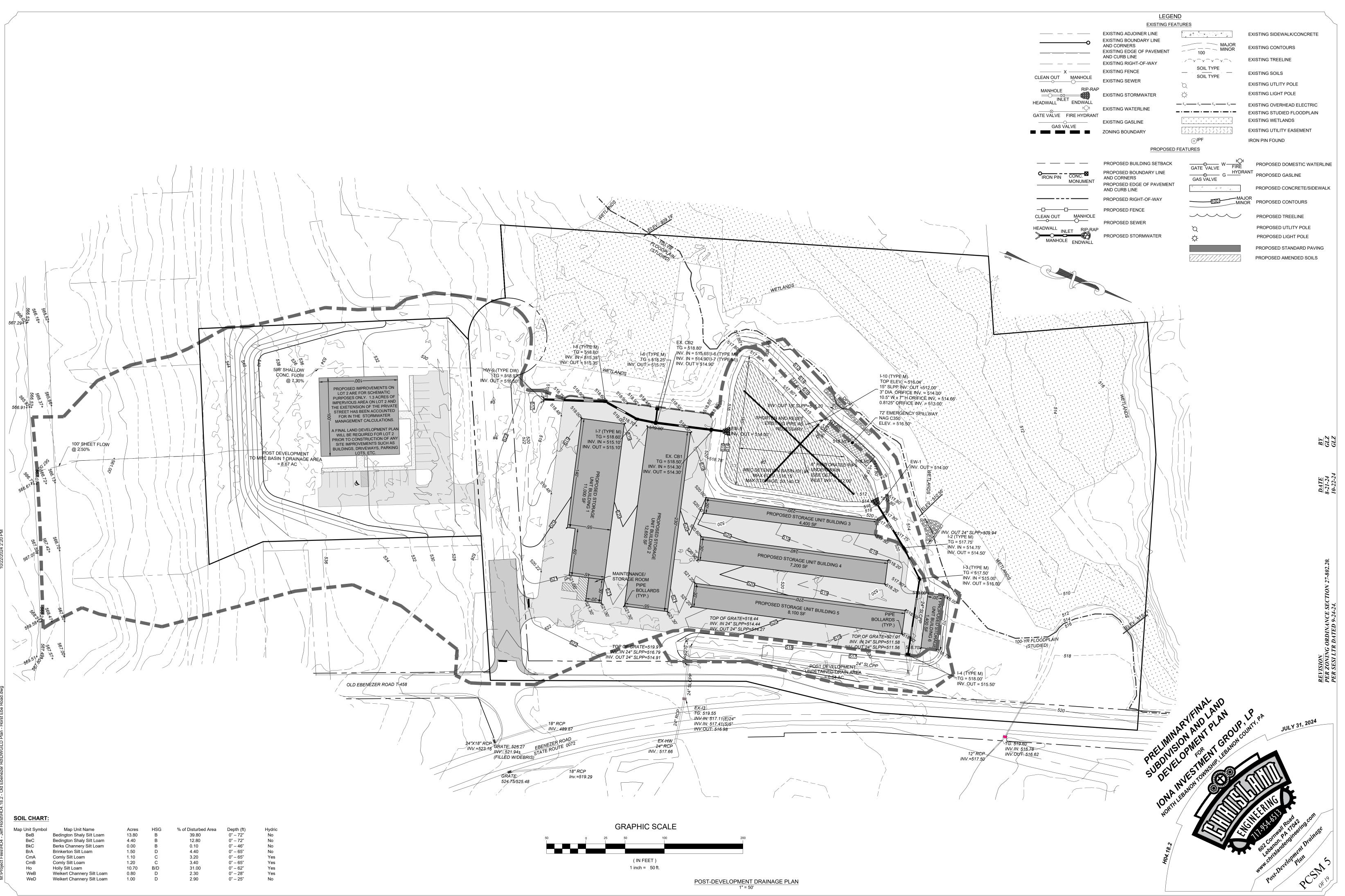
0" – 72"

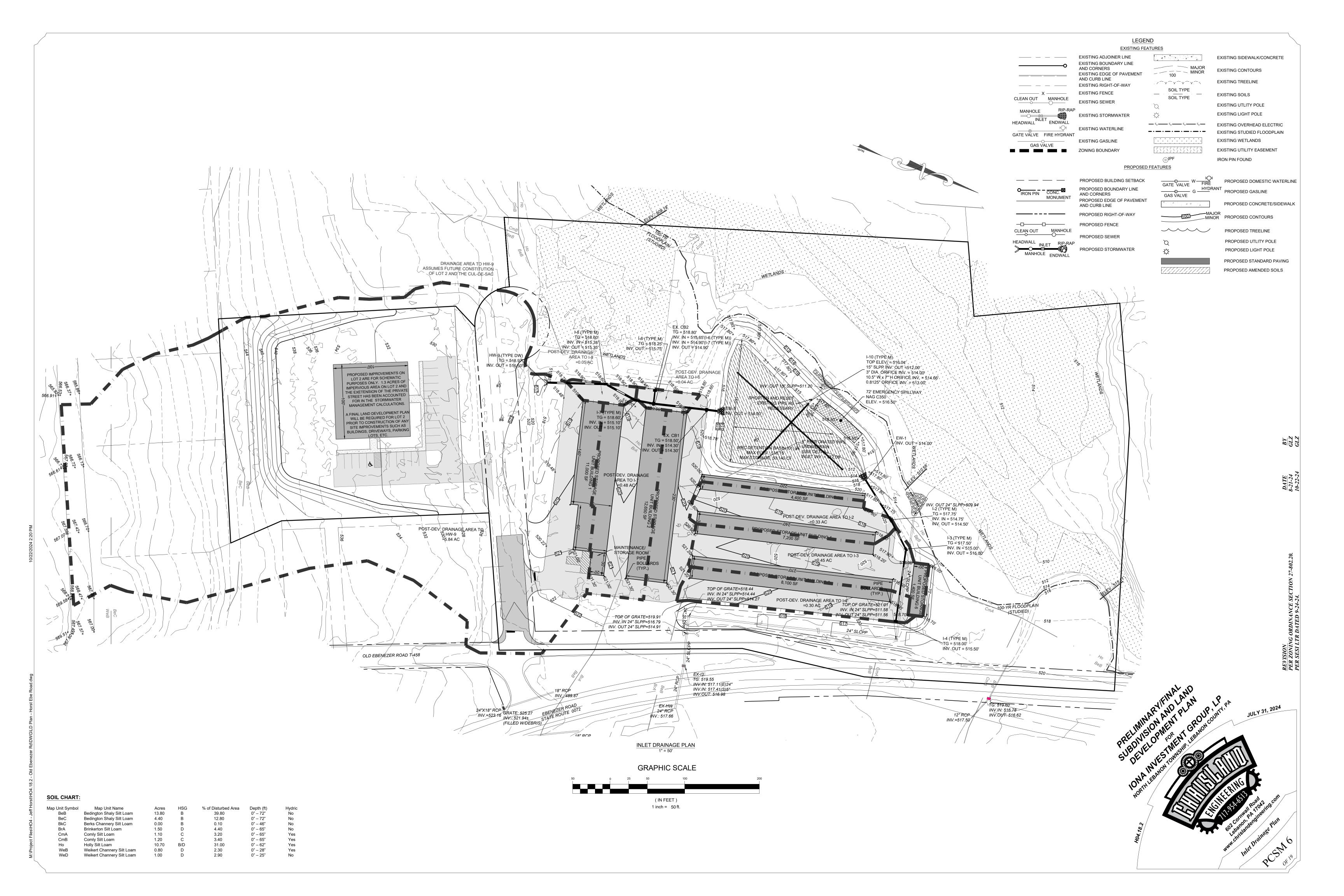
No No No Yes Yes Yes Yes No

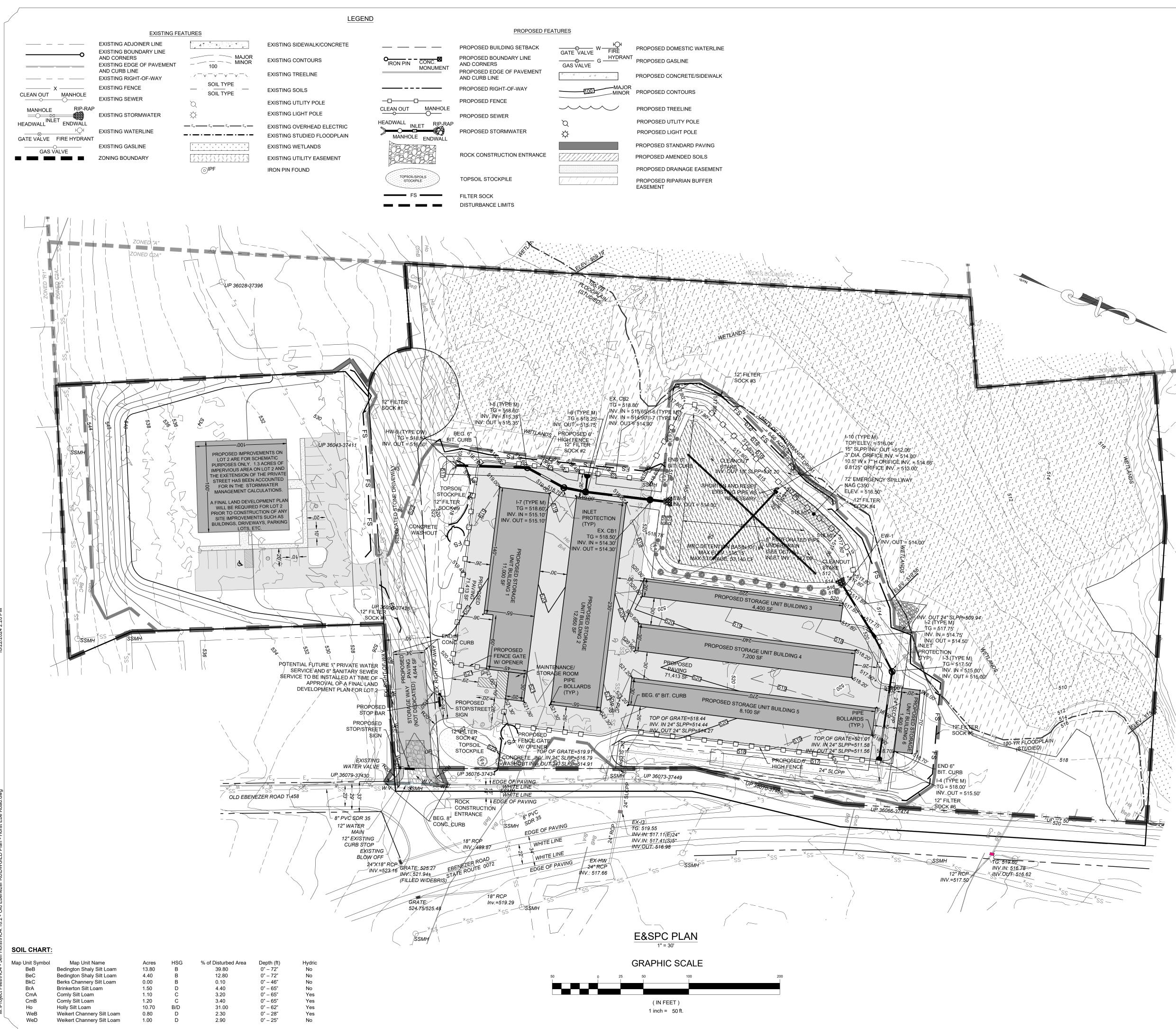
Hydric

No









GATE VALVE W FIRE GATE VALVE G HYDRANT GAS VALVE	F
 	Ρ
MAJOR MINOR	F
	F
Д Ф	F
	Ρ
	Ρ
	F
	F

- STANDARD E&S PLAN NOTES
- 1. All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times. The reviewing agency shall be notified of any changes to the approved plan prior to implementation of those changes. The reviewing agency may require a written submittal of those changes for review and approval at its discretion.
- 2. At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the Lebanon County Engineer, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
- 3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities. 4. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence
- must be approved in writing from the local conservation district or by the Department prior to implementation 5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material. 6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site
- clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan. 7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
- 8. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan maps(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter. 9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator
- shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department. 10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid
- Waste Management Regulations at 25 Pa. Code 260.1 et seq. 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site. 11. All off-site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated.
- 12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as clean fill due to analytical testing. 13. All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas.
- 14. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, remulching and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required. 15. A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained
- on the site and be made available to regulatory agency officials at the time of inspection. 16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.
- 17. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings. 18. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches — 6 to 12 inches on compacted soils — prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes shall have a minimum of 2 inches of topsoil.
- 19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes. 20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
- 21. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills
- 22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills. 23.Fill shall not be placed on saturated or frozen surfaces.
- 24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method. 25.All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded areas within 50 feet of a surface water, or as otherwise shown on the plan drawings, shall be blanketed according to the standards of this plan.
- 26.Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications. 27.Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non-vegetative cover with a
- density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements 28.E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the local conservation district or the Department.
- 29.Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district for an inspection prior to removal/conversion of the E&S BMPs. 30. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed or converted to permanent post
- construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal/conversions are to be done only during the germinating season. 31. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district to schedule a final inspection.
- 32.Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Department as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to \$10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation. 33.Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work area in the manner described in this plan until such
- restoration is complete. 34. 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.
- 35.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 9" layered lifts at 95% density.



EROSION AND SEDIMENT POLLUTION CONTROL NARRATIVE Preliminary/Final Land Development Plan for Iona Investment Group, LP

North Lebanon Township, Lebanon County, PA

A. SITE LOCATION

The site is located at 101 Old Ebenezer Road, PA 17046, North Lebanon Township, Lebanon County, PA. The deed book and page for the property is 02121-7091. The Lebanon County map number for the property is 27-2329277-374492-0000 (See USGS Map).

B. PROJECT DESCRIPTION

The project consists of the construction of six (6) storage unit buildings, paving, parking areas, and associated stormwater management facilities (See Site Plan). The disturbance area for this project is 6.55 acres.

C. EXISTING SITE CONDITIONS & DOWNSTREAM DRAINAGE PATH

The deeded acreage for 101 Old Ebenezer Road is 13.09 acres. The subject property has been in said condition since 2018 according to research done on the Pennsylvania Imagery Navigator (PASDA). The site is currently stabilized by grass/meadow open spaces, a gravel access driveway, and disturbed topsoil. Until the past few years, the site consisted of cultivated agricultural fields. The site slopes north, the highest elevations are on the southeast side of the property. Once leaving the property, runoff is intercepted by Tributary 09861 to Swatara Creek, in the Swatara Creek Watershed. Chapter 93 designation of Tributary 09861 to Swatara Creek is Warm Water Fishes (WWF).

Assessed Use: Recreational Attain Use: Impaired

Source Cause: AGRICULTURE - ESCHERICHIA COLI (E. COLI); RURAL (RESIDENTIAL AREAS) - ESCHERICHIA COLI (E. COLI)

Assessed Use: Aquatic Life Attain Use: Impaired

Source Cause: AGRICULTURE - NUTRIENTS; AGRICULTURE - FLOW REGIME

D. SOIL LIMITATIONS AND RESOLUTIONS

The following soil was found within or adjacent to the area directly disturbed by earth moving activities.

stabilized with building and pavement cover along with tree plantings and mulched landscaping beds.

SOIL CHART:

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
BeB	Bedington Shaly Silt Loam	13.80	В	39.80	0" – 72"	No
BeC	Bedington Shaly Silt Loam	4.40	В	12.80	0" – 72"	No
BkC	Berks Channery Silt Loam	0.00	В	0.10	0" – 46"	No
BrA	Brinkerton Silt Loam	1.50	D	4.40	0" – 65"	No
CmA	Comly Silt Loam	1.10	С	3.20	0" – 65"	Yes
CmB	Comly Silt Loam	1.20	С	3.40	0" – 65"	Yes
Ho	Holly Silt Loam	10.70	B/D	31.00	0" - 62"	Yes
WeB	Weikert Channery Silt Loam	0.80	D	2.30	0" – 28"	Yes
WeD	Weikert Channery Silt Loam	1.00	D	2.90	0" – 25"	No

Many soil limitations exist for the proposed project. The Web Soil Survey indicates lawns and landscaping establishment limitations classified as very limited for the BeB. BeC, BkC, CmA, and CmB soil type due to due to dustiness, large stones content, gravel content, depth to saturated zone, depth to bedrock, doughtiness, slope, dustiness, and low exchange capacity. The BrA, Ho, WeB, and WeD soil types classified as somewhat limited due to dustiness, doughtiness, depth to saturation zone, ponding, depth to cement pan, depth to bedrock, gravel content, low exchange capacity and large stones content. This potential limitation should not be a problem since the project includes the placement of fill over native soils which will allow placement of topsoil and establishment of lawns and grasses. In addition, the site will be

The Web Soil Survey indicated dwellings with and without basements establishment limitations classified as very limited for the BkC, BrA, Ho, WeB and WeD soil types due to to slope, shrink-swell, depth to saturated zone, ponding, flooding, large stones and depth to bedrock. The BeC, CmA, and CmB, soil types classified as somewhat limited due to depth to saturated zone and slope. This limitation will be taken into consideration when designing the proposed features.

The Soil Rutting Hazard limitation classified as severe due to low strength. Standard construction practices will be utilized to avoids excessive rutting and erosion associated with rutting will be controlled with standard erosion and sediment pollution controls.

E. CALCULATIONS

Temporary and permanent erosion control facilities were designed in accordance with the standards established in the Erosion and Sediment Pollution Control Manual (PA DEP Bureau of Soil and Water Conservation).

Runoff calculations were performed using the Rational Method in accordance with PaDEP, North Lebanon Township regulations. The proposed condition peak rates of runoff and runoff volumes will remain consistent with existing conditions. The vegetative cover will be restored to existing conditions to mitigate any potential increase in peak rates of runoff and runoff volumes.

F. STAGING OF EARTHMOVING

All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved by the Lebanon County Conservation District or by the Department prior to implementation. Each step of the sequence shall be completed before proceeding to the next step, except where noted

Construction of the site improvements is expected to begin fall of 2024. Construction will proceed in a timely manner in order to limit the potential for accelerated erosion and sedimentation. If the controls shown on the plan are incapable of addressing the erosion and sediment control problems on the lot, the owner/developer shall be responsible for adapting adequate alternative measures.

The construction sequence for development of the project shall be as follows:

1. 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, and a representative from the Lebanon County Conservation District (717-277-5275) to an on-site preconstruction meeting.

Also, at least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.

- 2. Install stabilized construction entrance(s). The base course shall be AASHTO #1 installed at a minimum of 20-ft wide and 50-ft long.
- 3. Stake out limits of proposed earth disturbance prior to any earth disturbance activities taking place.

4. Install filter sock at topsoil stockpile and other areas as indicated on the attached plan. Filter sock is to be installed along the contour at a level grade. Upon installation or stabilization of all perimeter sediment control BMPs, and at least 3 days prior to proceeding with the bulk earth disturbance activities, the

permittee or co-permittee shall provide notification to the Department or authorized conservation district 5. Clear, grub, and strip areas as necessary to construct improvements. Excess topsoil shall be placed on the "Topsoil/Spoil Stockpile" shown hereon. Immediately

- stabilize topsoil stockpile.
- 6. Rough grade site for installation of the storage unit buildings, paved access drives, parking areas, and stormwater management facility facilities.

Take care to avoid unnecessary compaction of the detention basin bottom. Excavation shall take place from outside the limits of the detention facility. If compaction occurs, the detention basin bottom shall be scarified to loosen the soils prior to placement of the amended soils.

- 7. Construct detention basin/sediment basin and install basin berm, outlet pipe, outlet structure, temporary riser, and cleanout stake.
- 8. Backfill and bring site to necessary grade for storage unit buildings, paved access drives, and parking areas. Place stone base as soon as practicable.

9. Install storm sewer and backfill 10. Install inlet protection and pumped water filter bags at concrete inlets as soon as practicable to prevent sediment laden runoff from entering the detention facility

- 11. Construct storage unit buildings and paved access drives.
- 12. Fine grade any remaining areas as shown on the grading plan. Spread 6-in of topsoil on freshly graded areas. Final passes during fine grading shall be made at right angles to the slopes. Prepare the remainder of the disturbed area for permanent stabilization.
- 13. Install slope matting as indicated on the plan. Seedbed shall be prepared in accordance with accepted practices. Seed mixture shall be applied in accordance with the manufacturers rates and instruction.
- 14. Install trees, shrubs, and landscaping areas.
- 15. Convert sediment basin to final configuration. Remove built up sediment from basin bottom, remove temporary riser, remove temporary seals from basin outlet orifices, install amended soils, fine grade, and install basin bottom seeding.
- 16. Mulch all remaining disturbed areas and seeded areas with hay or straw at a minimum rate of three (3) tons per acre (or mulch as a part of hydroseeding).
- 17. Remove all temporary erosion and sediment controls once the site is completely stabilized (defined as a minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation in all areas tributary to the controls). All areas disturbed during this process shall be stabilized immediately through seeding and mulching.
- 18. The operator shall remove from the site, recycle or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 PA Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury dump or discharge any building material or wastes on or off the site.

G. TEMPORARY CONTROL MEASURES

1. Topsoil Stockpile

- a. A stockpile shall be used to contain all stripped topsoil in a limited area in order to keep disturbance to a minimum. Stockpiles shall be stabilized immediately in accordance with the temporary seeding specification contained hereon.
- Stockpiles shall be located so that all swales can function as designed
- d. Stockpile heights must not exceed 35' in height. Side slopes shall be 2:1 or flatter
- 2. Filter Sock
- a. Filter sock shall be used to intercept sediment-laden runoff from small watersheds.
- b. Filter sock must be installed at level grade. Sediment must be removed when accumulations reach $\frac{1}{2}$ the above ground height of sock.
- d. All areas of concentrated flow and at all areas where the filter sock has been undercut due to excessive flows, rock filters shall be installed (see Temporary Control Measures, item 3.)

Interim Stabilization

a. Temporary seeding and mulching shall be applied where indicated to provide interim stabilization to exposed areas. Temporary seeding/mulching shall be as applied as specified on the Seeding Schedule contained on the E&SPC Plan. 4. Rock Construction Entrance

- used to eliminate the tracking of flowing of sediment onto the existing cartway.
- d. Manual cleaning of tires with a broom shall be completed prior to site egress.
- H. PERMANENT CONTROL MEASURES
- 1. Permanent Grass or Legume Cover

- 2. Mulch
- 3. Sod
- a. Sod shall be installed in areas where permanent stabilization with seed alone is difficult.
- trap embankment.
- 4. Rip-Rap Outlet Protection
- I. MAINTENANCE
- reseeding, re-mulching, and re-netting, must be performed immediately.
- 3. Stockpiles must be stabilized immediately.
- disturbed during this process will be mulched and permanently stabilized with seed.
- wner, sod installed
- 7. Any sock section that has been undermined or topped must be immediately replaced with a rock filter outlet. See rock filter outlet detail.
- of the controls must be stabilized immediately.
- J. FILL MATERIALS

environmental due diligence rests on the applicant. K. CLEAN FILL

Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block, or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized.

Fill materials affected by a spill or release of a regulated substance still qualifies as a clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in Tables FP-1a and FP-1b found in the Department's policy "Management of Fill."

M. ENVIRONMENTAL DUE DILIGENCE

Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

N. POTENTIAL POLLUTANT CAUSING MATERIALS The site consists of Bedington, Berks, Brinkerton, Comly, Holly, and Weikert soils which have the potential to erode when disturbed. Standard erosion controls such as rock construction entrances, filter socks, and temporary and final seeding will be utilized to minimize the potential for erosion.

The construction sequence addresses the anticipated sequence of construction and provides provisions for interim stabilization and a periodic stabilization schedule to minimize the duration and extend of disturbance at any one time.

P. E&S PLAN MINIMIZES SOIL COMPACTION

last steps of the project with limited potential for unwarranted compaction.

similar to pre-development conditions.

R. THERMAL IMPACTS ANALYSIS

No thermal impacts are expected from this project. The runoff is collected and conveyed to the MRC Detention basin via subsurface conveyance facilities which allow the runoff to cool prior entering the basin. Once entering the basin, the runoff will be detained and allowed to cool further prior to discharge. Furthermore, the landscaping and more specifically the basin buffer plantings are proposed to help shade and cool the runoff prior to site discharge.

S. ANALYSIS OF DOWNSTREAM CHANNEL

stable and will continue to be so in post-development conditions.

The MRC Detention Basin and undetained areas discharge to the existing low point north of the project site to Tributary 09861 to Swatara Creek. The downstream drainage path was inspected via aerial imagery and LiDAR contours until flow meets Tributray 09861 to Swatara Creek. The drainage path generally traverses wetlands and floodplain north of the project site and there did not appear to be any visible erosion along the drainage path as it appeared to have a relatively shallow slope. No adverse impacts are expected as part of this development. The proposed stormwater management system proposes to reduce the peak flow rates and 2-year runoff

volume to less than pre-development conditions. Therefore, the conveyance capacity of the downstream drainage path will be improved. The current drainage path is

a. A stabilized pad of crushed stone (AASHTO #1) shall be located where construction traffic will be entering and leaving the site. The rock construction entrance is b. Public street sweeping with a vacuum sweeper and rolling of dirt and gravel roads shall be completed at the end of each work day (or more frequently as needed). Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.

a. All disturbed areas that are not paved shall be permanently stabilized with grass to minimize erosion. All swales shall be permanently seeded as required in accordance with the seeding specification shown on the attached E&SPC Plan. b. Permanent grass cover shall be applied as specified in accordance with the Seeding Schedule and Notes contained on the attached E&SPC Plan.

a. Mulch shall be applied to all seeded areas to help establish a permanent grass cover and to prevent erosion on all areas permanently stabilized with seed. b. Mulch shall be applied at a rate of 3 tons per acre. Mulch shall be anchored with wood cellulose fiber at 750 lbs/acre.

b. Sod materials and installation shall meet the approval of the Lebanon County Conservation District.

c. All permanent and temporary spillways are to be sodded to provide immediate erosion protection. Sod shall extend from the spillway to the top of the slope of the

a. Rip-rap shall be used at all pipe outlets to reduce the outflow velocity and minimize erosion potential at the outlet pipe. b. Rip-rap shall be installed in accordance with the dimensions and materials shown on the attached plan.

1. The Applicant/or His Designee shall be responsible for maintaining all facilitates shown on this plan.

2. Until the site is stabilized, all erosion and sedimentation must be maintained properly. Maintenance must include inspections of all erosion and sedimentation control after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean-out, repair, replacement, regrading,

4. All sediment removed from sediment trapping devices shall be disposed within the site in a manner that will not cause erosion or sedimentation. All areas

5. Any permanently seeded area that becomes eroded or disturbed shall have the topsoil replaced, the grass re-sown and mulch reapplied or, at the discretion of the

6. Filter sock must be installed at level grade. Sediment must be removed when accumulations reach ½ the above ground height of the sock.

8. Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2:1 or flatter.

9. Any disturbed area on which activity has ceased and which will remain exposed must be stabilized immediately. During non-germinating periods, mulch must be applied at the recommended rates. Disturbed areas which are not at finished grade and which will be re-disturbed within one (1) year may be stabilized in accordance with temporary seeding specifications. Disturbed areas which are either at finished grade or will not be re-disturbed within one (1) year must be stabilized in accordance with permanent seeding specifications.

10. After final site stabilization has been achieved (defined as a minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation in all areas tributary to the controls), temporary erosion and sedimentation controls must be removed. Areas disturbed during removal

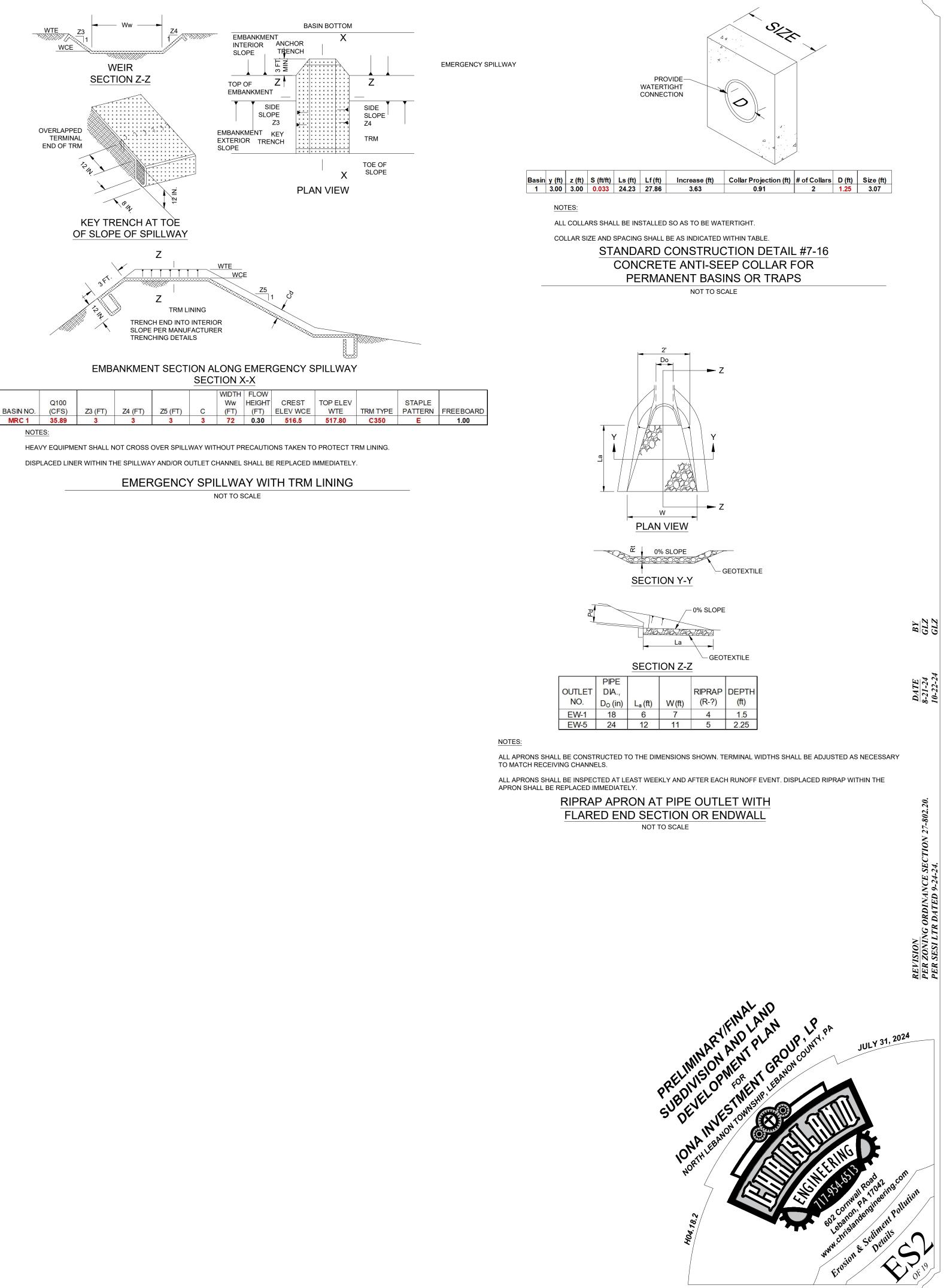
If the site will need to have fill imported from an off-site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off-site location, the responsibility of clean fill determination and

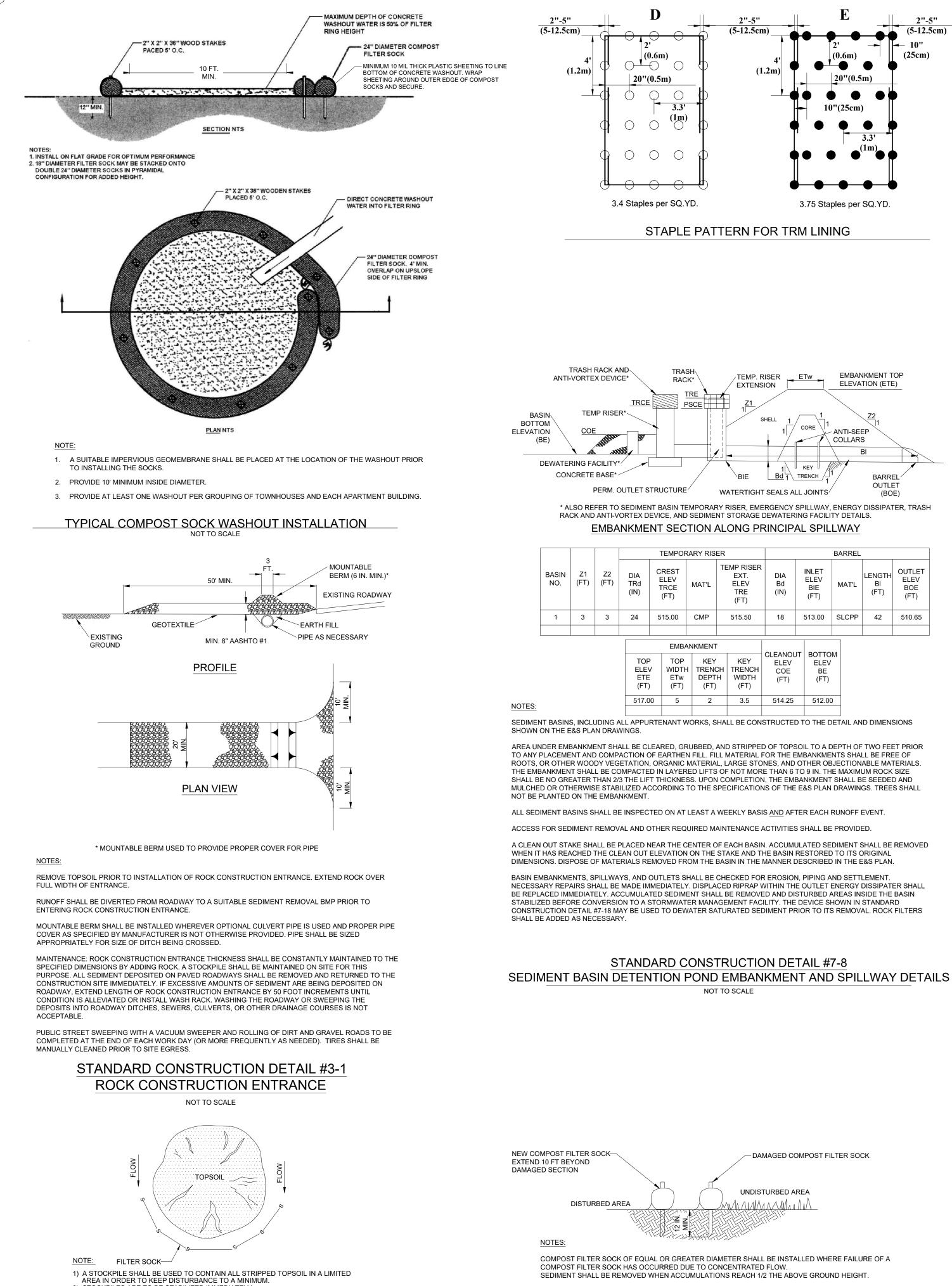
L. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE

O MINIMIZE THE EXTEND AND DURATION OF EARTH DISTURBANCE

The project will compact fill only as needed to provide the necessary structural stability. It is not anticipated there will be any unnecessary compaction by construction equipment since the project is limited in size and construction equipment will generally to concentrated in areas of proposed driveways immediately adjacent to the proposed structures. Topsoil will be placed in accordance with industry standards and will not be overly compacted. The topsoil placement and stabilization will be the

Q. E&S PLAN UTILIZES OTHER MEASURES OR CONTROLS THAT PREVENT OF MINIMIZE GENERATION OF INCREASED STORMATER RUNOFF A stormwater management system is proposed to reduce peak rates of runoff and the volume of runoff. Disturbed areas will be restored to meadow/grass conditions





2) STOCKPILES ARE TO BE STABILIZED IMMEDIATELY. 3) STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET 4) STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

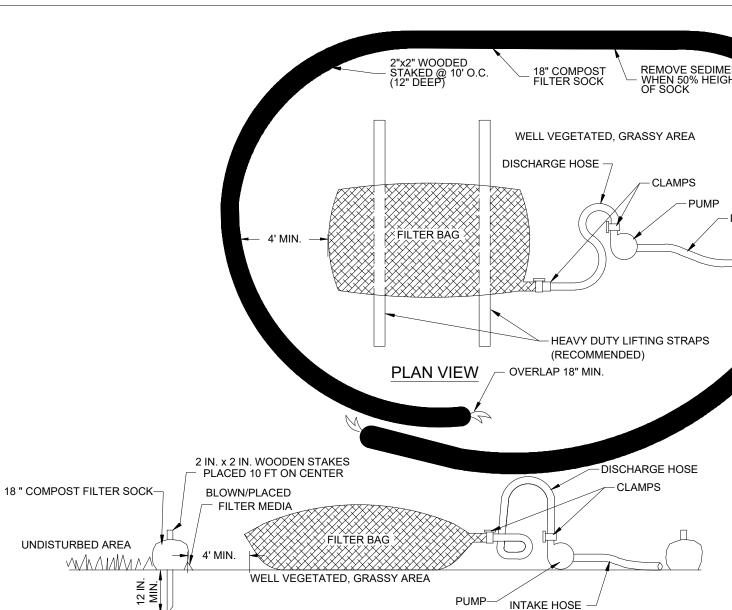
5) STOCKPILES SHALL BE LOCATED SO THAT ALL SWALES CAN FUNCTION AS DESIGNED

TOPSOIL STOCKPILE

NO SCALE

RARY RISER					BARREL					
Ν	MAT'L TEMP RISER EXT. ELEV TRE (FT)		DIA Bd (IN)	INLET ELEV BIE (FT)		Ν	/AT'L	LENGTH Bl (FT)	OUTLET ELEV BOE (FT)	
CMP		515.50	18	513.00		S	LCPP	42	510.65	
ANKMENT										
1	KEY TRENC DEPTI (FT)	н	KEY TRENCH WIDTH (FT)	CLEANOU ELEV COE (FT)	JT	BOTTO ELEV BE (FT)	M			
	2		3.5	514.25		512.00)			

ADDITIONAL FILTER SOCK AT DAMAGED FILTER SOCK NOT TO SCALE



ELEVATION VIEW

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

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

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

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

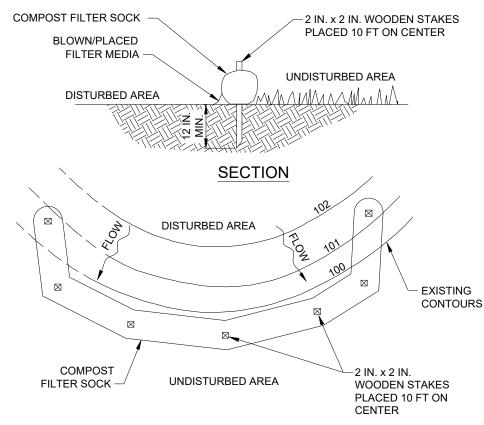
A FILTER SOCK RING OF NO LESS THAN 18" IN DIAMETER SHALL BE INSTALLED AT LEAST 4 FT. FROM THE PUMPED WATER FILTER BAG.

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

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

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

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



PLAN VIEW

NOTES

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

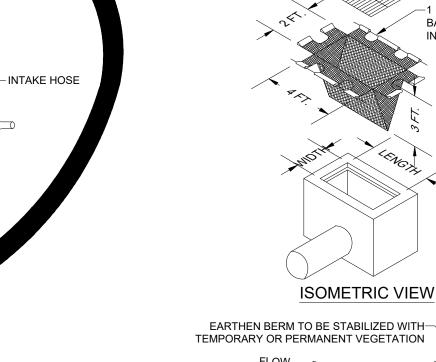
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED

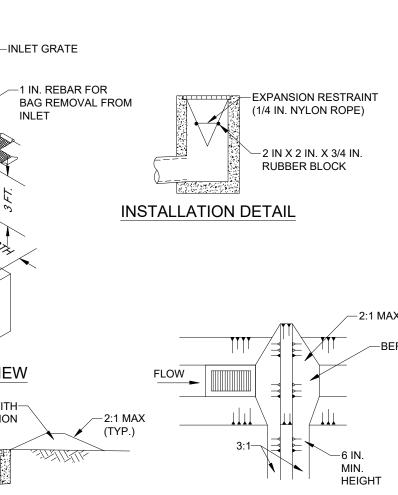
SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

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

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

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





PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

STORM

\ INLET

SECTION VIEW

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

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

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

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

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

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

NOT TO SCALE (P.L.S. IN LBS/AC) (LBS/ACRE) (TONS/ACRE TEMPORARY ANNUAL RYE 174 OCTOBER 30 N-P_0_-K_0 AG GRADE FINE FESCUES PERMANENT AUGUST 30 100-200-200 KENTUCKY BLUEGRASS AG GRADE N-P_O_-K_0 2 5 2 OCTOBER 30 PERENNIAL RYEGRASS KENTUCKY BLUEGRASS 100-200-200 AUGUST 30 150 ATHLETIC N-P_O_-K_0 2 5 2 FIELDS AG GRADE PERENNIAL RYEGRASS OCTOBER 30 F.M. BROWN AUGUST 30 DETENTION 100-200-200 CONSERVE LOW AND OCTOBER 30 BASIN N-P-0-K 0 AG GRADE MAINTENANCE BASIN STEEP SLOPES 1 TON/AC ANNUAL RYE

50-50-50 N-P_O_-K_0 2⁻⁰⁵⁻² NURSE CROP OCT. 15 AG GRADE* BIRDSFOOT TREFOIL PLUS 00-200-200 1 TON/AC MARCH 15 PERMANENT AND OCT. 15 N-PO-K0 2 5 2 AG GRADE* PLUS TALL FESCUE 30 1. PLS IS PURE LIVE SEED. PLS IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. TO SECURE THE ACTUAL PLANTING RATE, DIVIDE THE POUNDS PLS BY

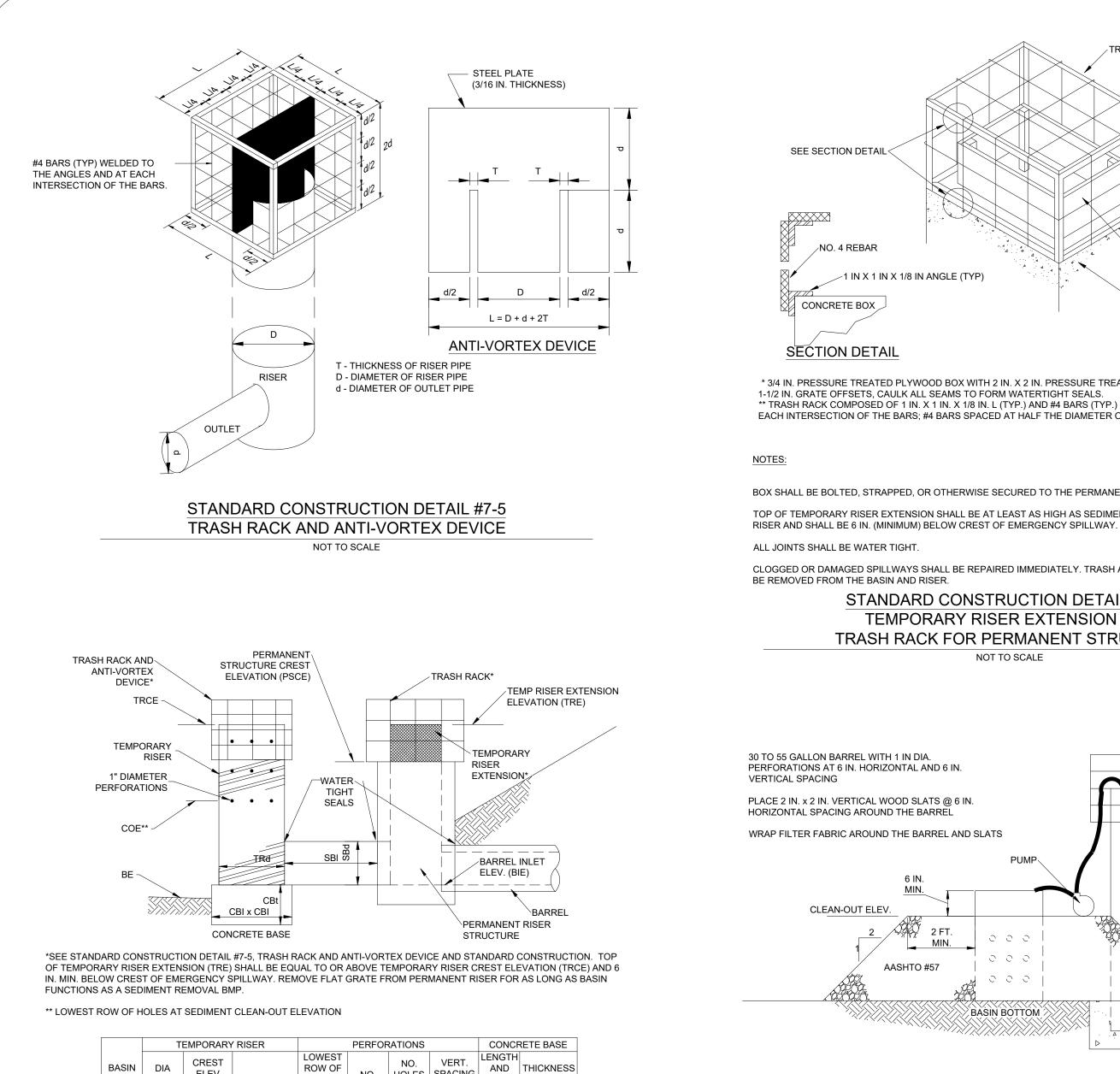
THE PLS PERCENTAGE SHOWN ON THE SEED TAG OR AS PREVIOUSLY DISCUSSED. THUS, IF THE PLS CONTENT OF FINE FESCUES IS 50%, DIVIDE 7 PLS BY 0.50 TO OBTAIN 140 POUNDS OF SEED PER ACRE. 2. LIMING RATE SHALL BE IN ACCORDANCE WITH SOIL TEST RESULTS. APPLY 6 TONS OF AGRICULTURAL GRADE LIMESTONE/AC OF LAND DISTURBED BY DIVERSIONS AND DAMS.

- ALL SEEDED AREAS SHALL BE MULCHED WITH STRAW APPLIED AT A RATE OF 3 TONS/ACRE. MULCH TO BE ANCHORED WITH WOOD CELLULOSE FIBER @ 750 LBS/AC. - ALL DIVERSIONS, CHANNELS, SED TRAPS AND STOCKPILES MUST BE STABILIZED IMMEDIATELY. SEEDING AND FERTILIZER SPECIFICATIONS NOT TO SCALE



DATED

<u>></u>|~ «



			TEMPORARY RISER					PERFORATIONS						CONCRETE BASE		
	BASIN NO.	N DIA TRd (IN)	EI	REST LEV RCE FT)	MAT'L	RO HC E	OWEST ROW OF HOLES ELEV (FT)		NO. DWS**	NO. HOLES PER ROW	SPAC OF RC	VERT. SPACING OF ROWS (FT)		-	THICKNESS CBt	
	1	24	51	6.04	CMP	51	5.00		2	4	4 0.25		30	18	18	
	[TEMPORARY STU						PE	RMANENT STRUCTU			RE E	BARREL		
		BASIN NO.	DIA SBd (IN)	INVERT ELEV SBIE (FT)	.EV BIE MAT'L		LENGTH SBI (FT)		CRE ELE PSC (F1	EV I DE	REST ELEV TRE (FT)	LEV E		INLET ELEV BIE (FT)		
		1	24	512.00	CMP		5		516.04		516.04 51		2.00	512.00		
NOTES:	L			1			I									

A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.

EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT. CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

ORIFICES FOR THE PERMANENT RISER OPENED PRIOR TO CONVERSION OF THE SEDIMENT BASIN TO THE PERMANENT CONDITION SHALL BE SEALED IN A WATERTIGHT CONDITION.

STANDARD CONSTRUCTION DETAIL #7-9 SEDIMENT BASIN/DETENTION POND RISER STRUCTURES NOT TO SCALE

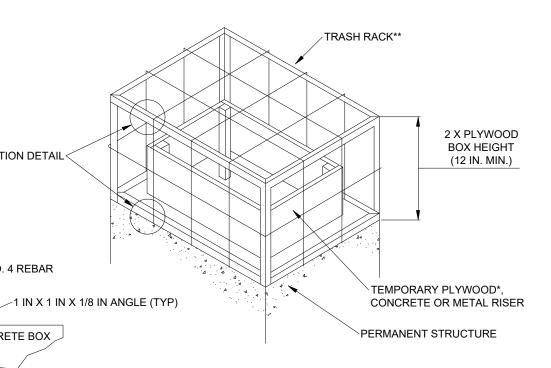
– 2" X 4" STAKE \Leftrightarrow

PRINTED WORD ON STAKE CLEANOUT ELEV. SEDIMENT BASIN = 515.00 - FLORESCENT PAINT OR TAPE - BOTTOM OF SEDIMENT BASIN = 514.00

NOTES:

NOTES:

CLEANOUT STAKES MUST BE PLACED AT A HALF DISTANCE FROM CONCENTRATED INFLOWS TO TEMPORARY RISERS. WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION ON ANY STAKE, IT MUST BE REMOVED TO RESTORE BASIN CAPACITY. CLEANOUT STAKE NOT TO SCALE

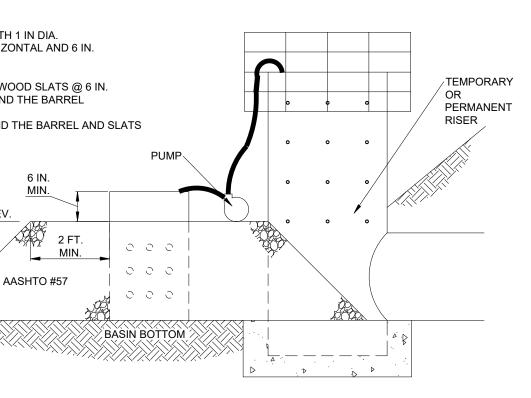


* 3/4 IN. PRESSURE TREATED PLYWOOD BOX WITH 2 IN. X 2 IN. PRESSURE TREATED CORNER SUPPORTS, SET INTO 1-1/2 IN. GRATE OFFSETS, CAULK ALL SEAMS TO FORM WATERTIGHT SEALS. ** TRASH RACK COMPOSED OF 1 IN. X 1 IN. X 1/8 IN. L (TYP.) AND #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS; #4 BARS SPACED AT HALF THE DIAMETER OF THE BARREL MAX.

BOX SHALL BE BOLTED, STRAPPED, OR OTHERWISE SECURED TO THE PERMANENT RISER. TOP OF TEMPORARY RISER EXTENSION SHALL BE AT LEAST AS HIGH AS SEDIMENT BASIN TEMPORARY

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL

STANDARD CONSTRUCTION DETAIL #7-10 TEMPORARY RISER EXTENSION AND TRASH RACK FOR PERMANENT STRUCTURE NOT TO SCALE



DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP. PRIOR TO INITIATING OPERATION OF DEWATERING FACILITY, ALL ACCUMULATED SEDIMENT SHALL BE CLEANED FROM THE INSIDE OF THE BARREL.

DEWATERING FACILITY SHALL BE CONTINUOUSLY MONITORED DURING OPERATION. IF FOR ANY REASON THE DEWATERING FACILITY CEASES TO FUNCTION PROPERLY, IT SHALL BE IMMEDIATELY SHUT DOWN AND NOT RESTARTED UNTIL THE PROBLEM HAS BEEN CORRECTED.

> STANDARD CONSTRUCTION DETAIL #7-18 SEDIMENT BASIN OR SEDIMENT TRAP SEDIMENT STORAGE DEWATERING FACILITY NOT TO SCALE

