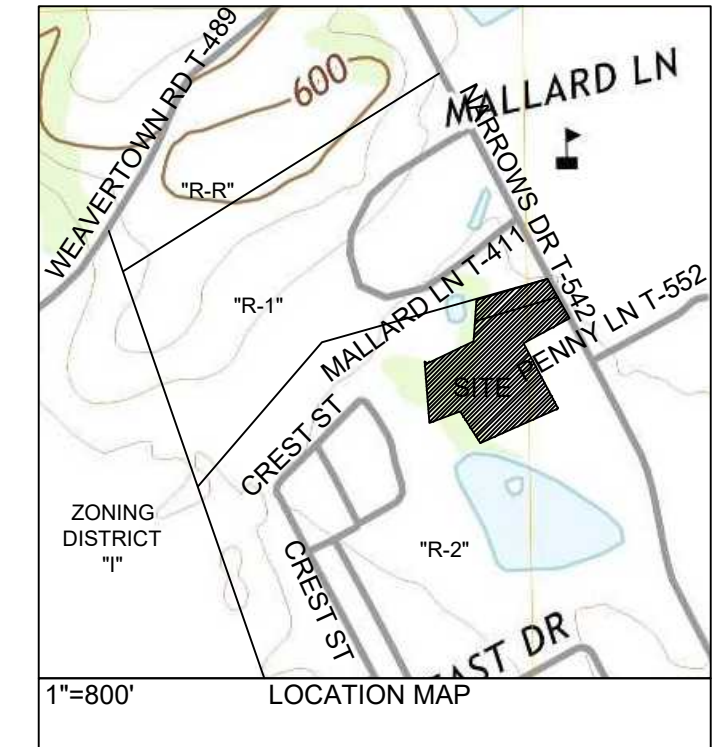


FINAL SUBDIVISION & LAND DEVELOPMENT PLAN

FOR STANLEY MARTIN - 275 NARROWS DRIVE N. LEBANON TOWNSHIP, LEBANON COUNTY, PA JULY 18, 2023



- GENERAL NOTES:**
- ◆ BENCHMARK: SANITARY SEWER MANHOLE LOCATED NORTHEAST OF THE PROPERTY ON NARROWS DRIVE.
- ELEVATION: 539.85
VERTICAL DATUM: NAVD 83
HORIZONTAL DATUM: NAD83 - COR 96
 - MATTHEW & HOCKLEY ASSOCIATES PERFORMED THE SURVEY ON MARCH 20, 2023.
 - UNDERGROUND UTILITIES ARE 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 PROVIDED BY OTHERS AND REFLECTED ON THESE DRAWINGS ARE CORRECT AND ACCURATE. CHRISLAND ENGINEERING ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
 - THE FLOODPLAIN SHOWN HEREON IS SHOWN IN ACCORDANCE WITH THE FLOOD INSURANCE RATE MAP FOR LEBANON COUNTY, PENNSYLVANIA (ALL JURISDICTIONS), PANEL 258 OF 380, MAP NUMBER 42075C0257E, EFFECTIVE DATE JULY 8, 2020.
 - THE WETLAND BOUNDARY AS SHOWN WAS DETERMINED BY A WETLAND STUDY CONDUCTED BY VORTEX ENVIRONMENTAL.
 - ANY REVISION TO THESE PLANS AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION DATE SHALL NOT BE THE RESPONSIBILITY OF CHRISLAND ENGINEERING.
 - NO ONE SHALL SCALE FROM THESE PLANS FOR CONSTRUCTION PURPOSES.
 - 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 ORIGINAL HARD COPY SEALED PLAN.
 - ALL SITE DEVELOPMENT SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND TOWNSHIP STANDARDS AND REQUIREMENTS.
 - CHRISLAND ENGINEERING HAS NOT PERFORMED ANY 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 CAUSED BY CONSTRUCTION ON ANY PORTION OF THE SITE WHICH IS THE SUBJECT OF THIS PLAN.
 - 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 UNDERLIES IT, AND THE IMPACT WHICH THOSE FORMATION(S) MAY HAVE UPON THEIR LAND OR ANY CONSTRUCTION PROPOSED THEREON, INCLUDING THE ABILITY TO CONSTRUCT THE REQUIRED STORM WATER MANAGEMENT FACILITIES AND OTHER SITE WORK IN ACCORDANCE WITH THE APPROVED SUBDIVISION PLAN.
 - CHRISLAND ENGINEERING SHALL NOT BE RESPONSIBLE FOR THE COST OF ANY ROCK REMOVAL, SINKHOLES, SOLUTION CHANNELS OR ROCK FRACTURES, OR FOR THE CONSTRUCTION, ENGINEERING, PERMITTING AND INSPECTION COST IMPACT WHICH ANY OF THESE GEOLOGICAL FEATURES MAY HAVE UPON THE LAND OWNER.
 - MATERIALS AND DETAILS SPECIFIED ON THE APPROVED PLAN SHALL NOT BE ALTERED DURING CONSTRUCTION WITHOUT WRITTEN APPROVAL BY THE LEBANON COUNTY PLANNING DEPARTMENT.
 - 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.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. DAMAGE TO ANY UTILITY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, UTILITY COMPANY OR AUTHORITY, AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS FROM THE MUNICIPALITY, COUNTY, STATE OR AUTHORITY RELATIVE TO CONSTRUCTION SHOWN ON THIS PLAN.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND RECORD DRAWINGS AS MAY BE REQUIRED BY THE MUNICIPALITY AND/OR THE VARIOUS AUTHORITIES RELATIVE TO THE CONSTRUCTION SHOWN ON THESE PLANS.
 - ALL PROPOSED SIGNS SHALL BE IN ACCORDANCE WITH THE NORTH LEBANON TOWNSHIP ZONING ORDINANCE.
 - THE PROPOSED SITE IS LOCATED WITHIN THE "NORTH LEBANON TOWNSHIP RESIDUAL" STORMWATER MANAGEMENT DISTRICT.
 - ALL APPLICABLE CORNER MARKERS SHALL BE SET UPON APPROVAL OF THE FINAL SUBDIVISION PLAN. RESETTING OF CORNER MARKERS AFTER CONSTRUCTION OF THE DWELLINGS AND BUILDINGS SHOWN HEREON SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR LOT OWNER.
 - ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
 - CLEAR SIGHT TRIANGLES SHALL BE KEPT CLEAR OF ANY OBSTRUCTIONS WITH A HEIGHT GREATER THAN 30 INCHES.
 - ALL PLAN SHEETS, INCLUDING THE APPROVED POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT AND EROSION AND SEDIMENT POLLUTION CONTROL REPORT ARE PART OF THIS PLAN AND ARE ENFORCEABLE AS IF THEY APPEARED IN TOTAL HEREIN.
 - THE DEVELOPER SHALL BE FINANCIALLY RESPONSIBLE FOR ANY ATTORNEY FEES WHEN THE ATTORNEY IS ENGAGED ON BEHALF OF THE TOWNSHIP AUTHORITY RELATING TO THE REVIEW OF THE SUBDIVISION PLANS OR LAND DEVELOPMENT PLANS THAT ARE SUBMITTED TO THE TOWNSHIP AUTHORITY. PAYMENT OF ALL INVOICES IS DUE AND PAYABLE WITHIN 30 DAYS OF RECEIPT BUT IN ALL CASES PRIOR TO PLAN APPROVAL BY THE BOARD OF SUPERVISORS. ANY QUESTIONS ON INVOICES MUST BE REPORTED TO THE TOWNSHIP AUTHORITY IN WRITING WITHIN 10 DAYS OF RECEIPT OF THE BILL.
 - A DRIVEWAY PERMIT WILL BE REQUIRED FROM THE TOWNSHIP.
 - A STREET CUT PERMIT WILL BE REQUIRED FROM THE TOWNSHIP.

NORTH LEBANON TOWNSHIP
722 KIEMERLINGS ROAD
LEBANON, PA 17046
CONTACT - CHERI GRUMBINE
717-273-7132

VERIZON PENNSYLVANIA LLC
15 E MONTGOMERY AVE
PITTSBURGH, PA 15212
CONTACT - OFFICE PERSONNEL
877-502-2876

BUCKEYE PARTNERS
FIVE TEK PARK
999 HAMILTON BLVD
BREINIGSVILLE, PA 18031
CONTACT - DAVE JONES
djones@buckeye.com
610-904-4000

COMCAST CABLE LEBANON
C/O CLS LOCATING SERVICES INC
9045 RIVER ROAD, STE 300
INDIANAPOLIS, IN 46240
CONTACT - CLS PERSONNEL
317-575-7800

FIRSTENERGY CORP
76 S MAIN ST
AKRON, OH 44308-1890
CONTACT - OFFICE PERSONNEL
609-653-4766

UGI UTILITIES INC
1301 AIP DR
MIDDLETOWN, PA 17057-5987
CONTACT - JOANNE ARCHFIELD
jarchfield@ugi.com
717-255-1453

SERIAL NUMBER: 20231572067 (NORTH LEBANON TOWNSHIP) DATE: 06/06/2023

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:

- 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.
 - 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.
 - 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.
 - 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). LEBANON COUNTY ID NO. 20231572067
- 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 EASEMENT 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. THE EASEMENT SHALL BE LOCATED TEN (10) FEET FROM THE CENTERLINE OF THE STREAM CHANNEL AND AT THE BOUNDARY OF ALL WETLANDS.
 - THE GRANTOR, FOR ITSELF, ITS SUCCESSORS, AND ASSIGNS, AUTHORIZES THE BOROUGH AND ITS AUTHORIZED REPRESENTATIVES TO ENTER UPON THE PREMISES TO INSPECT THE FACILITIES LOCATED WITHIN THE EASEMENT.
 - ALL FACILITIES LOCATED WITHIN THE ABOVE MENTIONED EASEMENTS SHALL BE SUBJECT TO THE PROVISIONS OF THE STORMWATER MAINTENANCE AND OWNERSHIP PROGRAM.

OWNER DATA
STANLEY MARTIN
2370 S 5TH AVE
LEBANON, PA 17042
EMAIL: stanm1966@gmail.com
PH: (717) 507-3650

SITE DATA
ADDRESS: 275 NARROWS DRIVE
LEBANON, PA 17046
DEED BOOK/PAGE: 02152-5655
PARCEL NO.: 27-2350955-376888-000
SITE AREA: 5.53 ACRES (GROSS)

PURPOSE OF PLAN NOTE
THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE A SINGLE 0.8462 AC LOT (LOT #1) FROM THE EXISTING 5.33 AC PROPERTY (UP# 27-2350955-376888); AS WELL AS CONSTRUCT A NEW HOUSE, DRIVEWAY AND ASSOCIATED STORMWATER MANAGEMENT FACILITIES.

ZONING DATA		ZONING DISTRICT:	
REQUIRED	PROVIDED	HIGH DENSITY RESIDENTIAL DISTRICT (R-2)	
MIN. LOT AREA:	9,000 SQ. FT.	25,451 SQ. FT.	
MAX. LOT COVERAGE:	40%	23.97%	
MIN. LOT WIDTH:	85'	108.74'	
FRONT YARD:	30 FT		
REAR YARD:	30 FT		
SIDE YARD:	10 FT		
ACCESSORY BUILDINGS:	5 FT		
MAX. BUILDING HEIGHT:	2 1/2 STORIES OR 35'		
OFF-STREET PARKING:	TWO (2) SPACES PER DWELLING UNIT		

BMP FACILITY LOCATION

FACILITY NAME	LATITUDE	LONGITUDE
RAIN GARDEN A	40°21'34.34" N	-76°22'41.36" W

SEWAGE DISPOSAL NOTE:

- SEWAGE DISPOSAL FOR THE PROPOSED LOT SHALL BE PROVIDED BY EXTENSION OF THE PUBLIC SEWAGE DISPOSAL SYSTEM. EXTENSION OF THE EXISTING SEWAGE DISPOSAL SYSTEM SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER/SUBDIVIDER/DEVELOPER, AS SHOWN HEREON. CONNECTION TO THE PUBLIC SEWAGE DISPOSAL SYSTEM IS REQUIRED.
- THE CONNECTION TO THE EXISTING SEWER SHALL BE COMPLETED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE NORTH LEBANON TOWNSHIP MUNICIPAL AUTHORITY.

WATER SUPPLY NOTE:
WATER SERVICE SHALL BE PROVIDED VIA EXTENSION OF THE EXISTING PUBLIC WATER SYSTEM. CONNECTION TO THE PUBLIC WATER SYSTEM IS REQUIRED.

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

SHEET INDEX

SHEET 1 of 7	COVER SHEET
SHEET 2 of 7	EXISTING CONDITIONS PLAN
SHEET 3 of 7	SUBDIVISION & LAYOUT PLAN
SHEET 4 of 7	EASEMENT, GRADING & UTILITY PLAN
SHEET 5 of 7	PRE & POST DEVELOPMENT DRAINAGE PLAN
SHEET ES1 of 7	EROSION AND SEDIMENT POLLUTION CONTROL PLAN (E&SPC)
SHEET ES2 of 7	E&SPC NOTES & DETAILS

*TO BE RECORDED

E&SPC PLAN
THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN WAS APPROVED BY THE LEBANON COUNTY CONSERVATION DISTRICT VIA A LETTER DATED XXX2023. THE PLAN APPROVAL WILL EXPIRE DECEMBER X, 202X.

RECORDER OF DEEDS
Recorded in the office for Recording of Deeds, in and for Lebanon County, Pennsylvania, in Subdivision Plan Book _____, Volume _____, Page _____. Witness my hand and seal of office this _____ day of _____ A.D., 20____.

_____, 20____ Recorder of Deeds

LEBANON COUNTY PLANNING DEPARTMENT
_____, 20____ Reviewed

NORTH LEBANON TOWNSHIP PLANNING COMMISSION REVIEW CERTIFICATE
Reviewed _____

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 design, engineering, construction, or expected function of the matters reviewed and/or accepted.

Reviewed and Accepted _____

Reviewed and Accepted _____

Reviewed and Accepted _____

PLAN CERTIFICATE (SURVEY)
I hereby certify that the plat shown and described hereon as well as all drawings bearing my seal are true and correct as to accuracy as required by the Lebanon County and North Lebanon Township Ordinances.

_____, 20____
Joshua T. Weaver, P.E.

CARBONATE GEOLOGY CERTIFICATION
I, Joshua T. Weaver, P.E., to the best of my knowledge, certify that the proposed stormwater management facilities (circle one) are underlain by a carbonate geology.

_____, 20____
Joshua T. Weaver, P.E.

CERTIFICATE OF OWNERSHIP, ACKNOWLEDGEMENT OF PLAN AND OFFER OF DEDICATION
COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LEBANON

On this, the _____ day of _____, 2023, before me, the undersigned officer, personally appeared Stanley A. Martin, who being duly sworn according to law, deposes and says that he is the owner of the property shown on this plan, that the plan thereof was made at their direction, that he acknowledges the same to be his act and plan, that he desires 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. He also hereby acknowledges that this proposed Subdivision/Land Development may be subject to the requirements of additional Township, State and Federal regulations.

Stanley A. Martin (Owner)

Notary

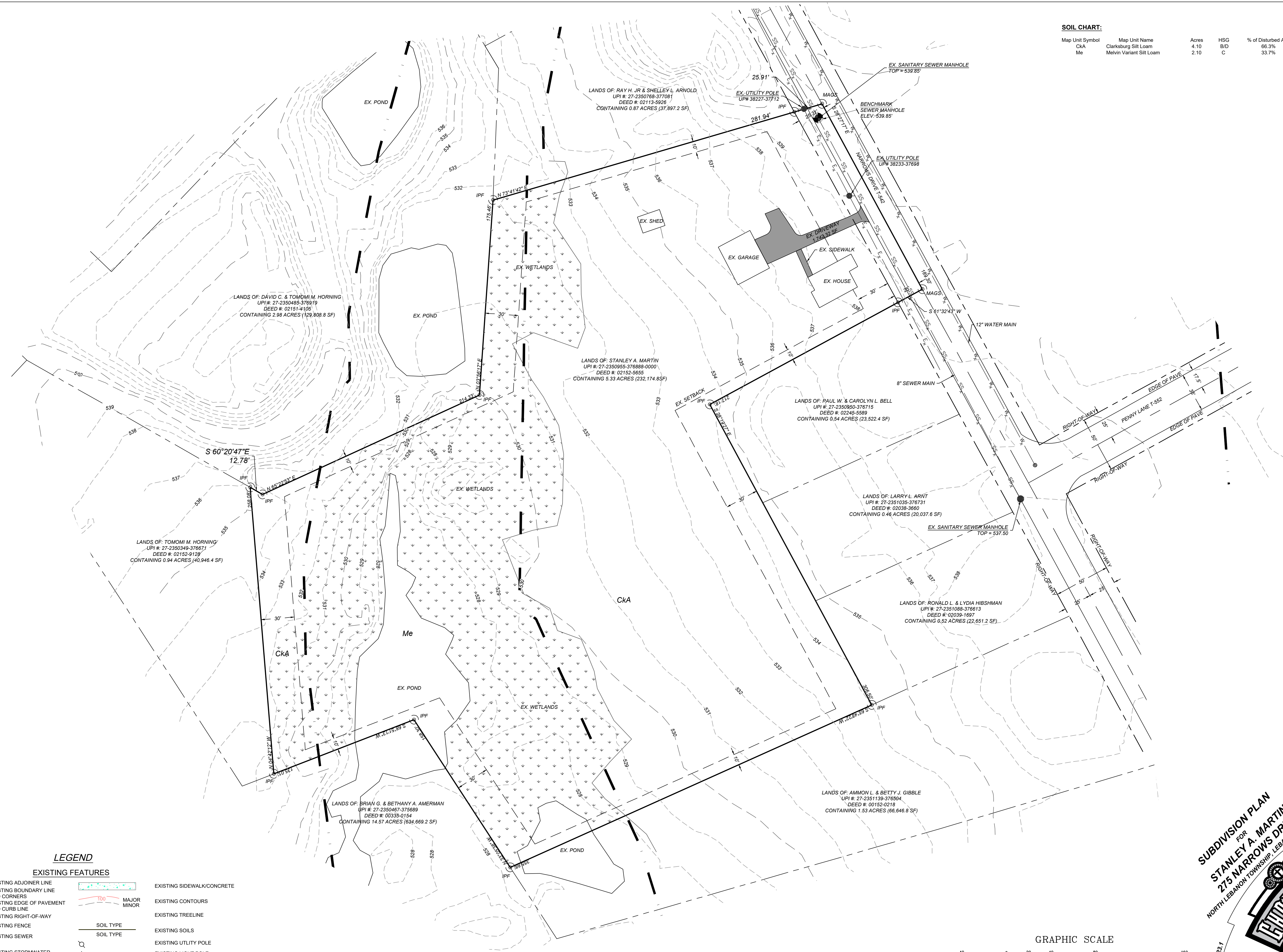
My Commission Expires _____, 20____



BY _____ DATE _____ REVISION _____

SOIL CHART:

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
CkA	Clarksburg Silt Loam	4.10	B/D	66.3%	0" - 84"	No
Me	Melvin Variant Silt Loam	2.10	C	33.7%	0" - 60"	Yes



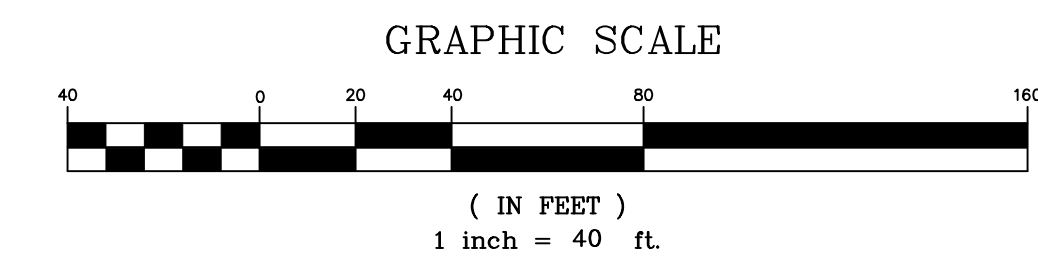
LEGEND

EXISTING FEATURES

- | | | | |
|--|---|--|----------------------------|
| | EXISTING ADJOINER LINE | | EXISTING CONTOURS |
| | EXISTING BOUNDARY LINE AND CORNERS | | EXISTING TREELINE |
| | EXISTING EDGE OF PAVEMENT AND CURB LINE | | EXISTING SOILS |
| | EXISTING RIGHT-OF-WAY | | EXISTING UTILITY POLE |
| | EXISTING FENCE | | EXISTING LIGHT POLE |
| | CLEAN OUT | | EXISTING OVERHEAD ELECTRIC |
| | MANHOLE | | |
| | RIP-RAP | | |
| | HEADWALL | | |
| | GATE VALVE | | |
| | FIRE HYDRANT | | |
| | GAS VALVE | | |
| | EXISTING SEWER | | |
| | EXISTING STORMWATER | | |
| | EXISTING WATERLINE | | |
| | EXISTING GASLINE | | |
| | MAJOR | | |
| | MINOR | | |

EXISTING CONDITIONS PLAN

1" = 40'



SUBDIVISION PLAN
FOR
STANLEY A. MARTIN
275 NARROWS DRIVE
NORTH LEBANON TOWNSHIP, LEBANON COUNTY, PA

CRISTAL ENGINEERING
17-934-6513
892 Cornwall Road, Lebanon, PA 17042
www.cristalengineering.com

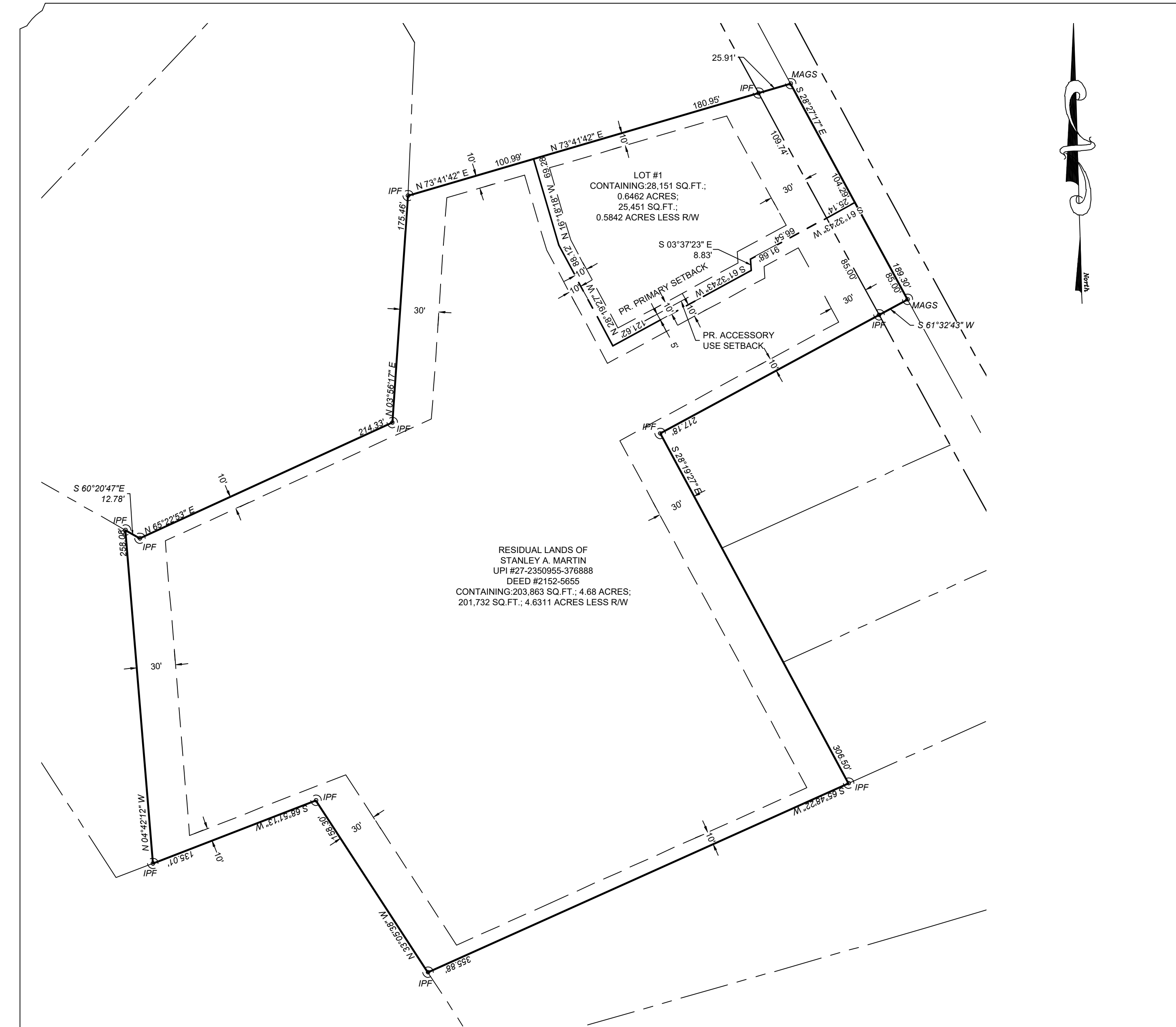
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JULY 18, 2023

Existing Conditions

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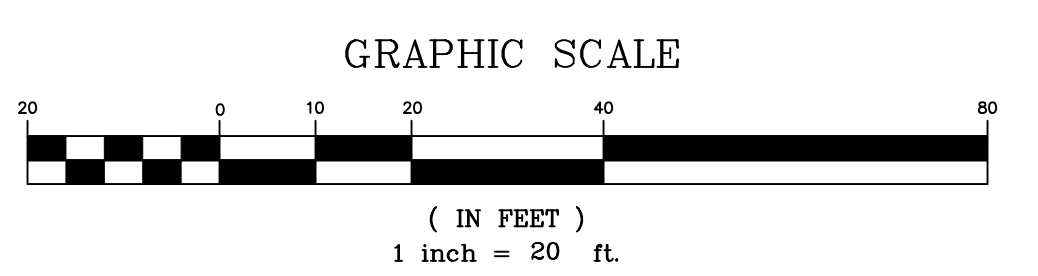
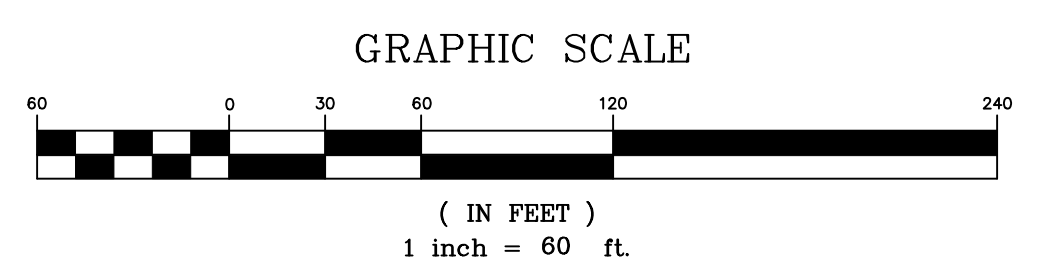
DATE BY REVISION



OVERALL SUBDIVISION PLAN
1" = 60'

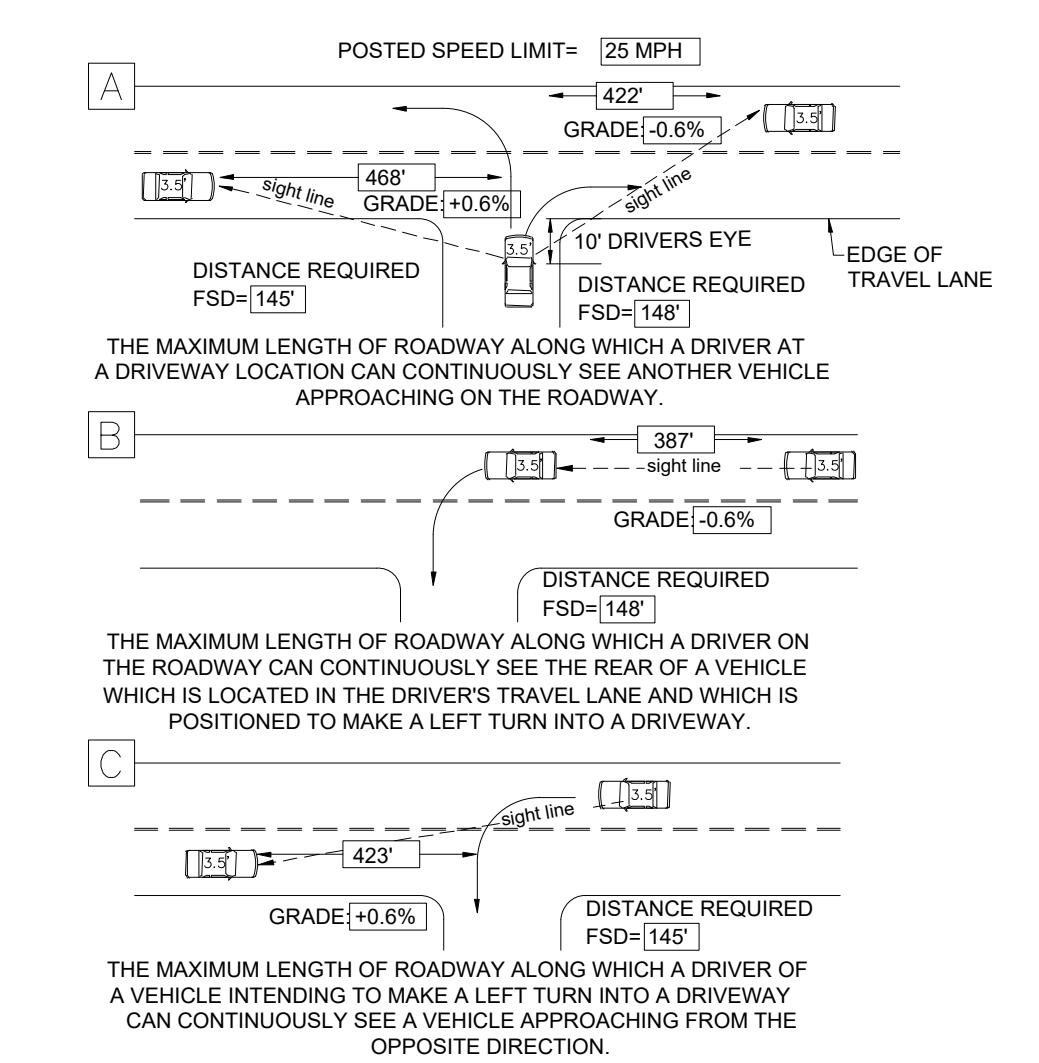
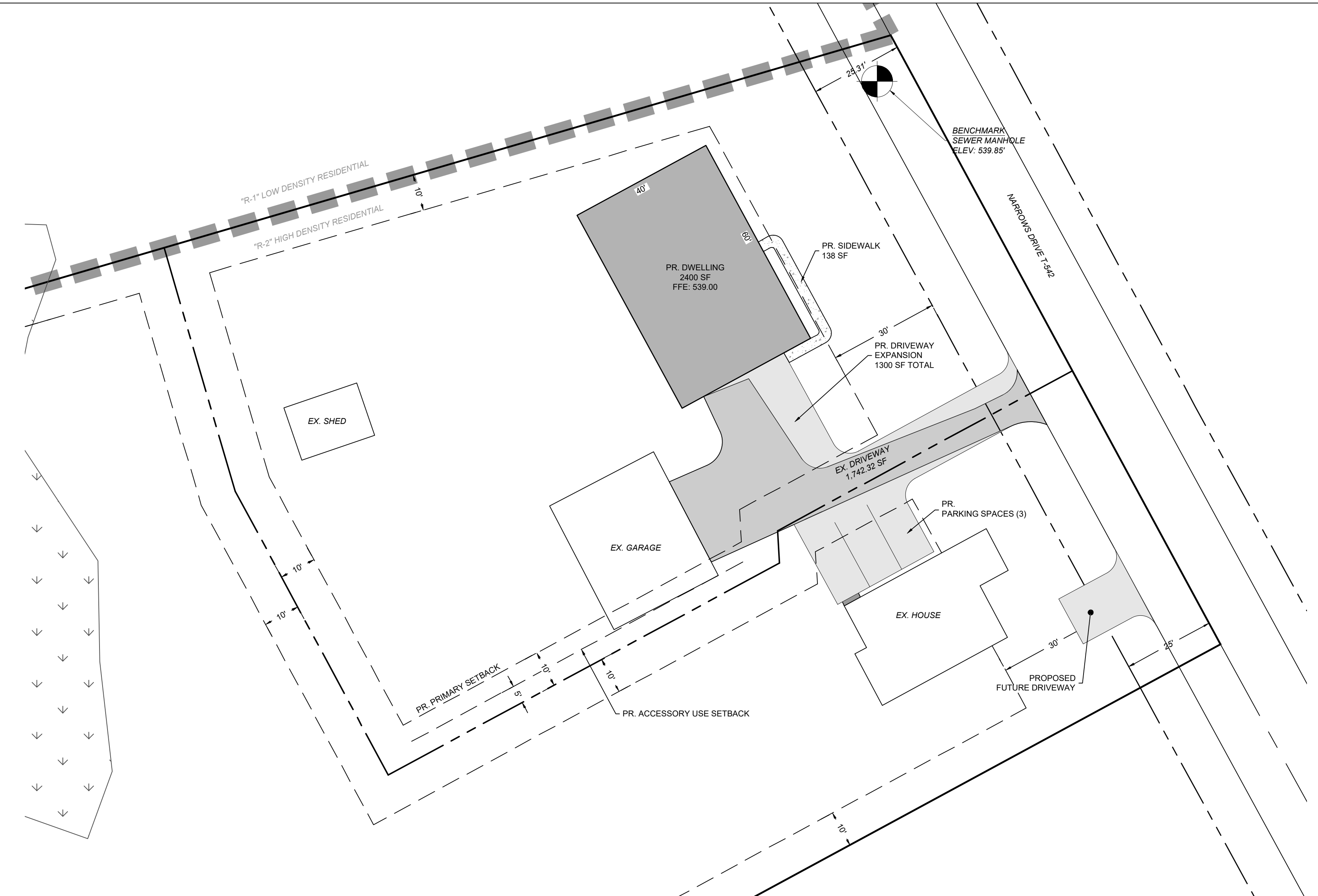
PRE-ANNEX			
SITE DATA ADDRESS:	LOT 9 701 LINDEN ST RICHLAND, PA 17087	LOT 7 701 LINDEN ST RICHLAND, PA 17087	LOT 6 701 LINDEN ST RICHLAND, PA 17087
PLAN BOOK:	2263-7767	2263-7779	2263-7779
PARCEL NUMBER:	17-2386404-376463	17-2385986-376529	17-2386172-376268
SITE AREA:	39.72 ACRES	4.77 ACRES	1.06 ACRES

POST-ANNEX			
SITE DATA	LOT 9	LOT 7	LOT 6
SITE AREA:	40.89 ACRES	4.66 ACRES	N/A

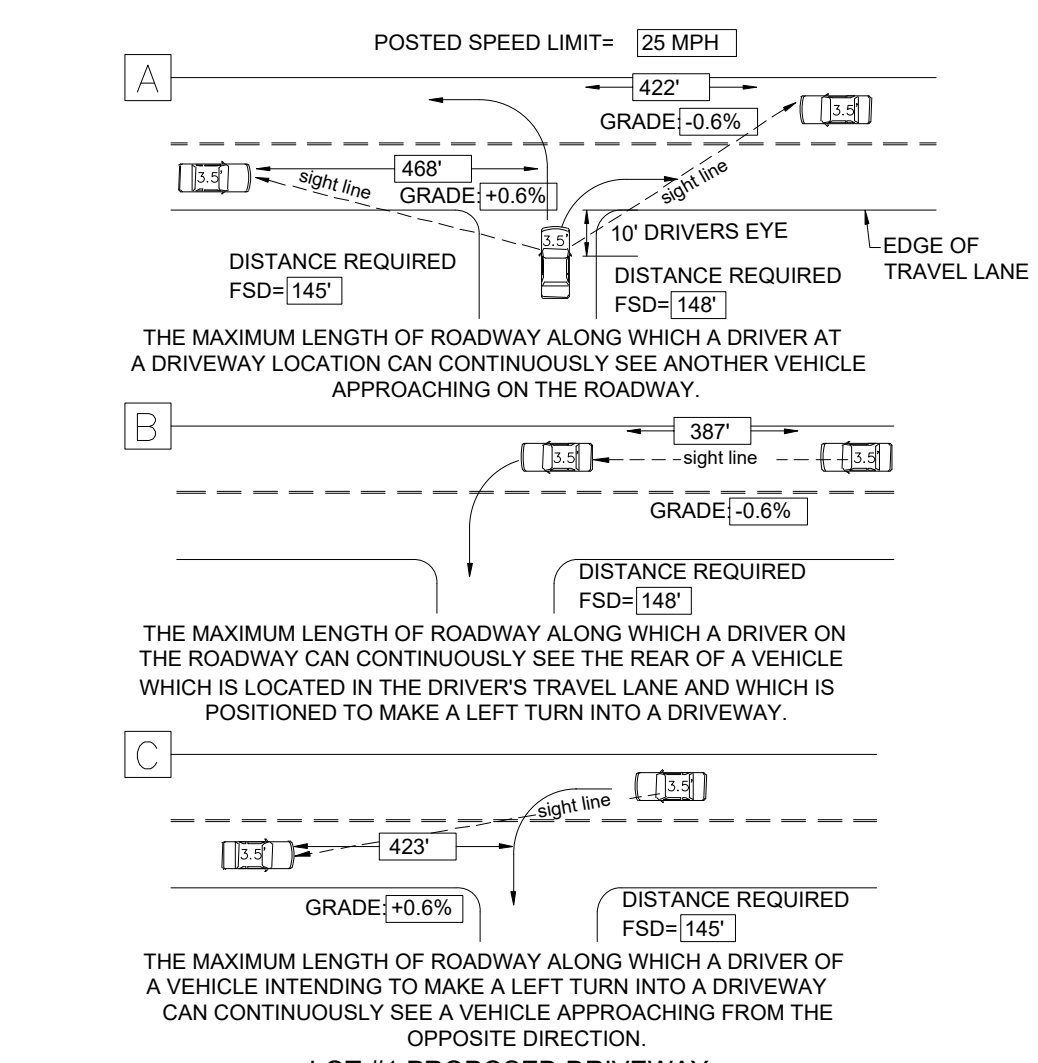


LEGEND

EXISTING FEATURES		PROPOSED FEATURES	
	EXISTING ADJOINER LINE		PROPOSED BUILDING SETBACK
	EXISTING BOUNDARY LINE AND CORNERS		PROPOSED BOUNDARY LINE AND CORNERS
	EXISTING EDGE OF PAVEMENT AND CURB LINE		PROPOSED EDGE OF PAVEMENT AND CURB LINE
	EXISTING RIGHT-OF-WAY		PROPOSED RIGHT-OF-WAY
	EXISTING FENCE		PROPOSED FENCE
	EXISTING SEWER		PROPOSED SEWER
	MANHOLE		CLEAN OUT
	RIP-RAP		MANHOLE
	EXISTING STORMWATER		INLET
	EXISTING WATERLINE		RIP-RAP
	GATE VALVE		MANHOLE
	FIRE HYDRANT		ENDWALL
	GAS VALVE		MANHOLE
	EXISTING SIDEWALK/CONCRETE		FIRE HYDRANT
	EXISTING CONTOURS		FIRE HYDRANT
	EXISTING TREELINE		GAS VALVE
	EXISTING SOILS		FIRE HYDRANT
	EXISTING UTILITY POLE		GAS VALVE
	EXISTING LIGHT POLE		FIRE HYDRANT
	EXISTING OVERHEAD ELECTRIC		GAS VALVE
	PROPOSED DRAINAGE EASEMENT		FIRE HYDRANT
	PROPOSED DOMESTIC WATERLINE		GAS VALVE
	PROPOSED GASLINE		FIRE HYDRANT
	PROPOSED CONCRETE/SIDEWALK		GAS VALVE
	PROPOSED CONTOURS		FIRE HYDRANT
	PROPOSED TREE LINE		GAS VALVE
	PROPOSED UTILITY POLE		FIRE HYDRANT
	PROPOSED LIGHT POLE		GAS VALVE
	PROPOSED STANDARD PAVING		FIRE HYDRANT



SIGHT DISTANCE NOTE
VEGETATION MAY NEED TO BE REMOVED AND/OR MAINTAINED ON THE PROPOSED LOT TO MAINTAIN ADEQUATE SIGHT DISTANCE. ALL VEGETATION SHALL BE REMOVED/MAINTAINED ON A REGULAR BASIS AND NOT LESS FREQUENT THAN TWICE PER YEAR.



SIGHT DISTANCE NOTE
VEGETATION MAY NEED TO BE REMOVED AND/OR MAINTAINED ON THE PROPOSED LOT TO MAINTAIN ADEQUATE SIGHT DISTANCE. ALL VEGETATION SHALL BE REMOVED/MAINTAINED ON A REGULAR BASIS AND NOT LESS FREQUENT THAN TWICE PER YEAR.

SUBDIVISION PLAN
FOR
STANLEY A. MARTIN
275 NARROWS DRIVE
NORTH LEBANON TOWNSHIP, LEBANON COUNTY, PA

CRISTAL ENGINEERING
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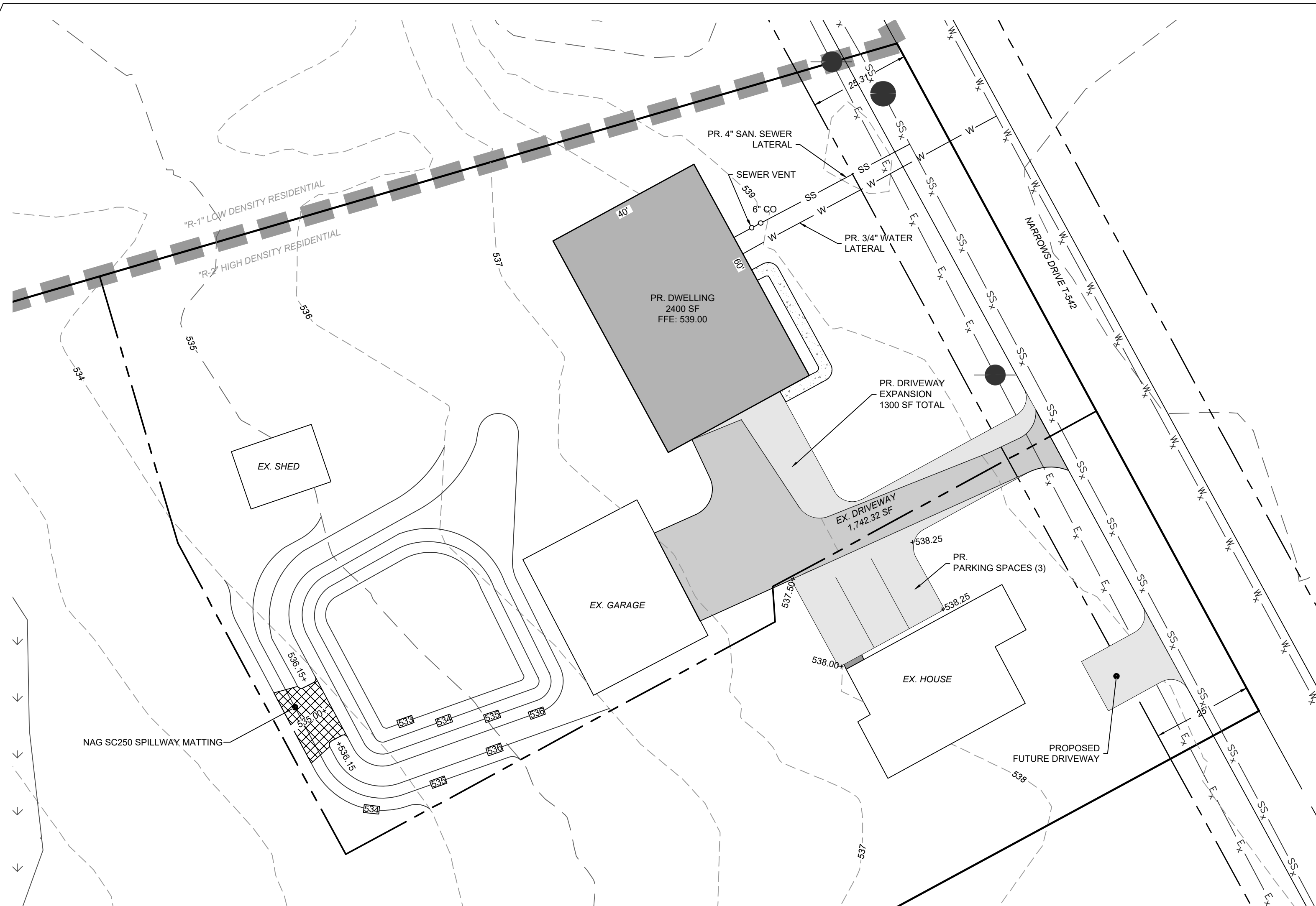
MA 10.23.1
892 Cornwall Road, Lebanon, PA 17042
Subdivision & Layout Plan

JULY 18, 2023

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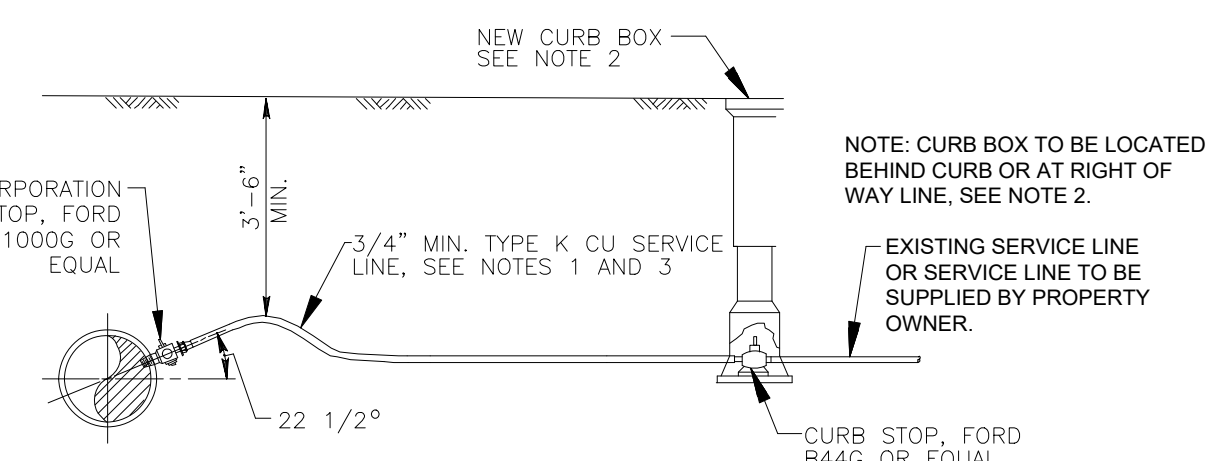
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BY: DATE: REVISION:

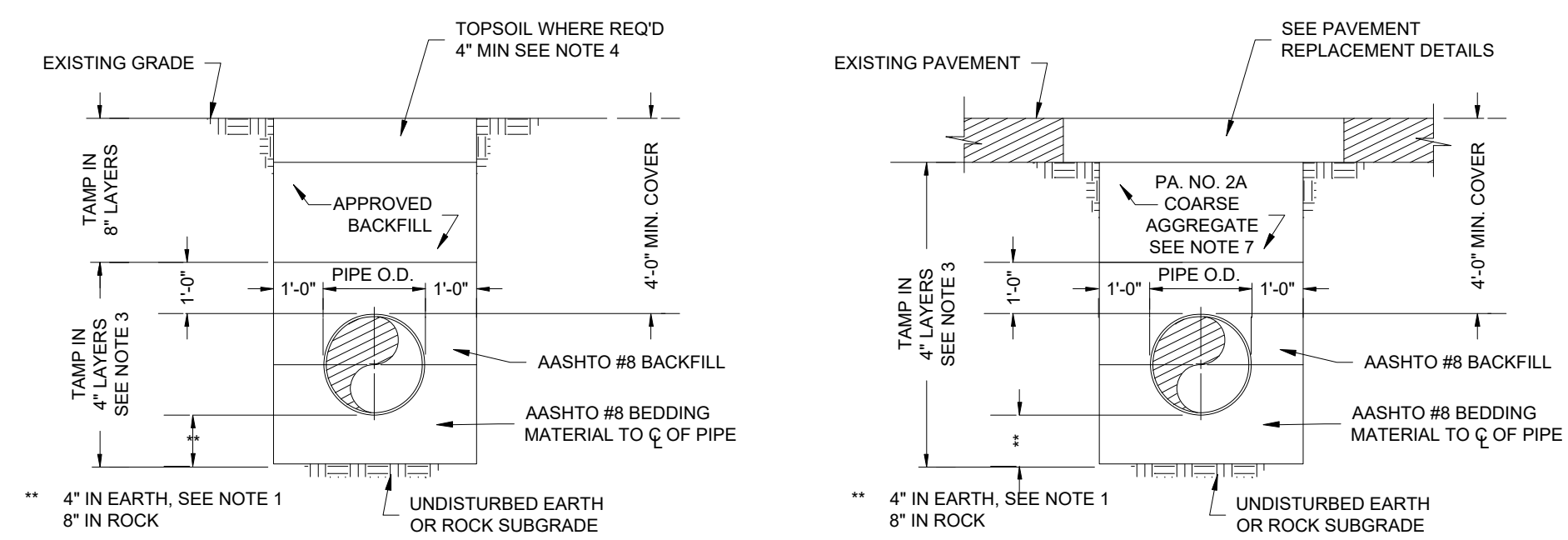


GRADING & UTILITY PLAN
1" = 20'

- NOTES**
1. REPLACE EXISTING WATER SERVICE LINES WITH MIN 3/4" CU. IF EXISTING SERVICE IS LARGER DIAMETER, REPLACE WITH SAME SIZE.
 2. CURB STOP LOCATION NO MORE THAN 1'-0" BEHIND CURB UNLESS WATER MAIN IS BEHIND CURB, THEN LOCATED AT EDGE OF PUBLIC R.O.W.
 3. NEW WATER LATERAL - FROM CORPORATION STOP TO CURB STOP, INCLUDING NEW CURB BOX.

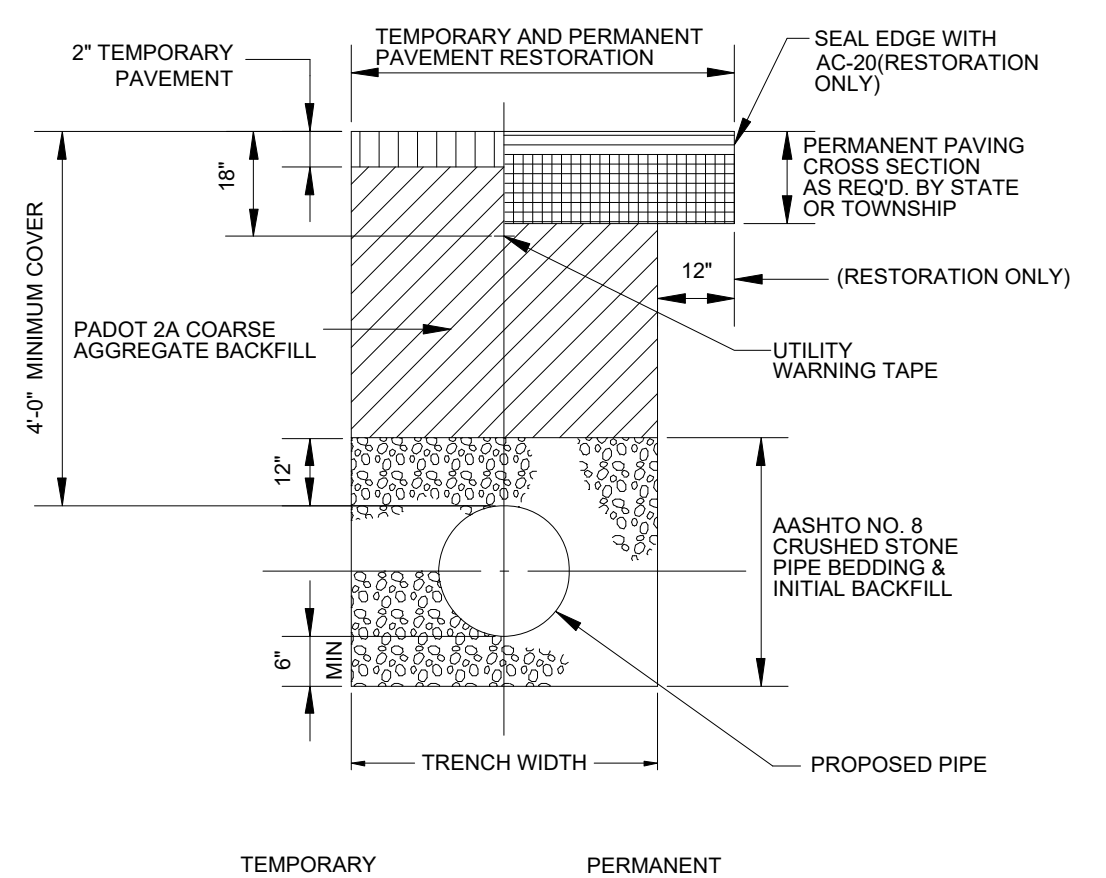


TYPICAL WATER SERVICE CONNECTION DETAIL
NOT TO SCALE

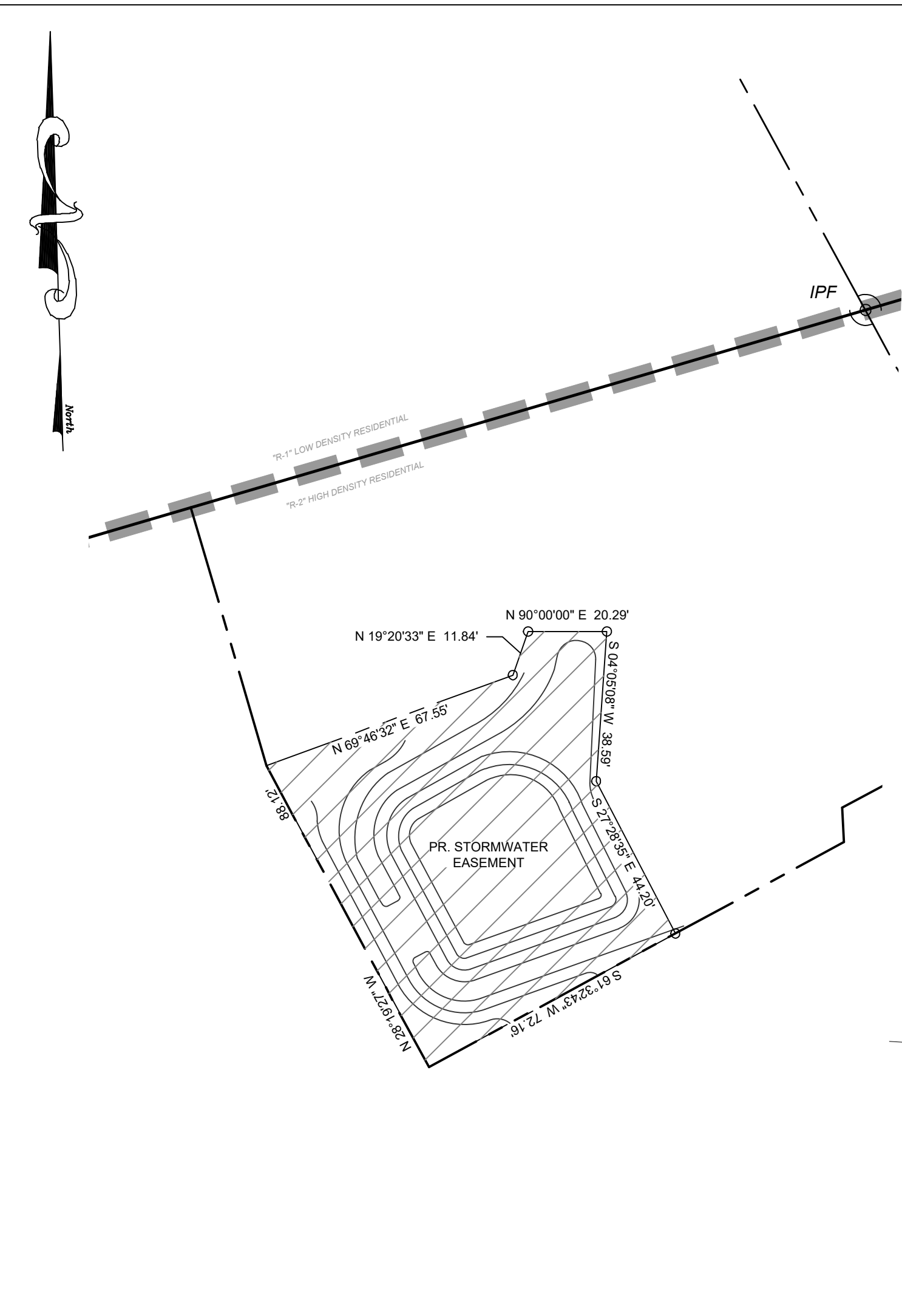


- TRENCH NOTES**
1. IF UNSUITABLE SUBSOIL IS ENCOUNTERED AT THE NORMAL TRENCH SUBGRADE, THE CONTRACTOR SHALL REMOVE IT TO THE DEPTH DIRECTED BY THE ENGINEER IN THE FIELD, AND BACKFILL W/ CLASS A BEDDING IN 4" LAYERS.
 2. BOTTOM OF TRENCH SHALL BE FREE OF WATER PRIOR TO WATER MAIN INSTALLATION.
 3. IF VIBRATORY COMPACTION EQUIPMENT IS USED BACKFILL MAY BE IN 8" LAYERS.
 4. PROVIDE 4" OF TOPSOIL WHERE SEEDING IS REQUIRED. SEE NOTE 6 AT GRAVEL DRIVEWAYS.
 5. CONTRACTOR SHALL SHORE THE TRENCH IN ACCORDANCE WITH OSHA REGULATIONS.
 6. GRAVEL AND PAVED DRIVEWAYS TO BE RESTORED IN KIND.
 7. COMPACT BACKFILL IN TRENCHES INSIDE TOWNSHIP ROW PER TOWNSHIP REQUIREMENTS.
 8. ALL PAVING RESTORATION TO BE IN ACCORDANCE WITH NORTH LEBANON TOWNSHIP REQUIREMENTS.

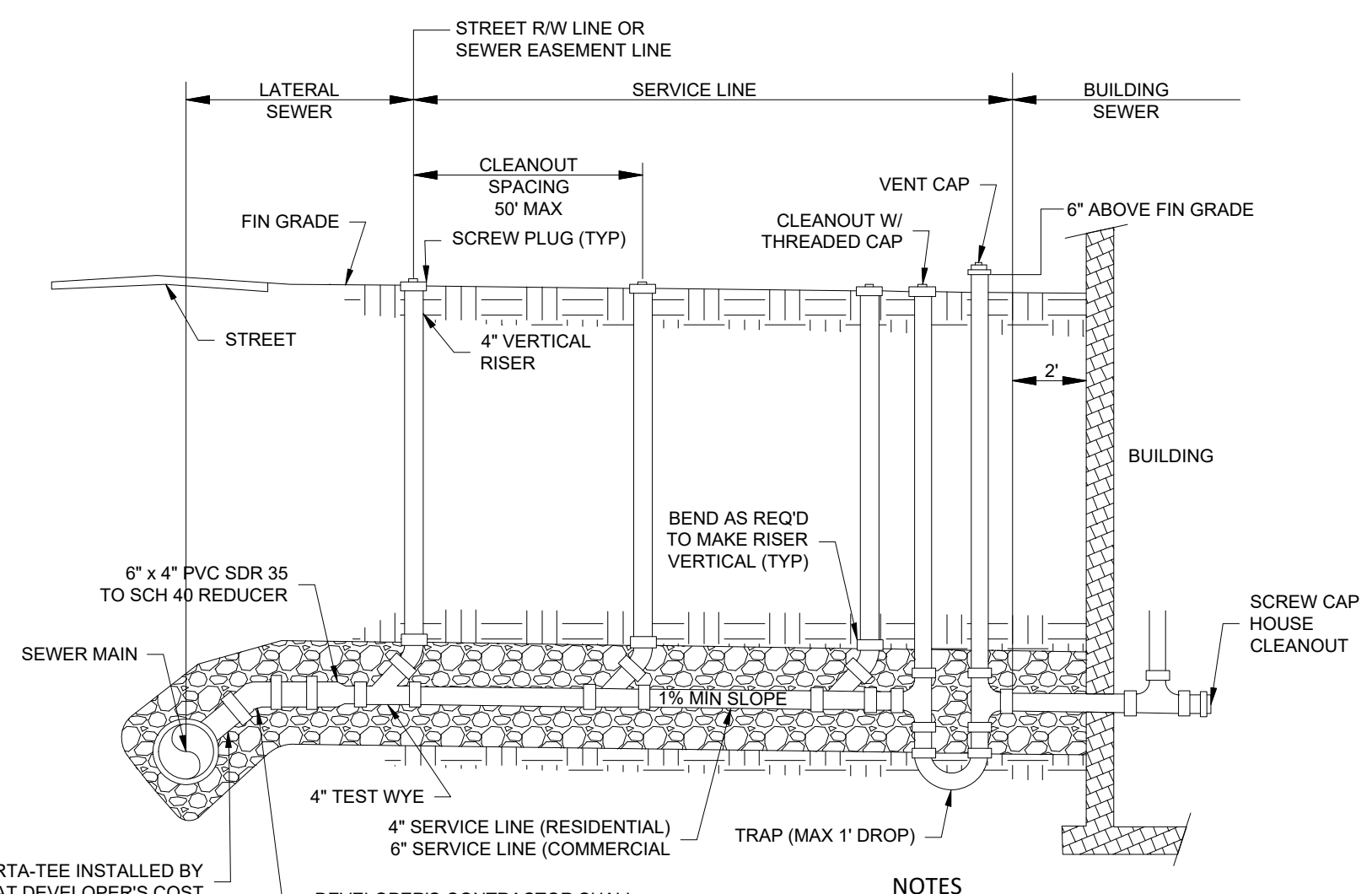
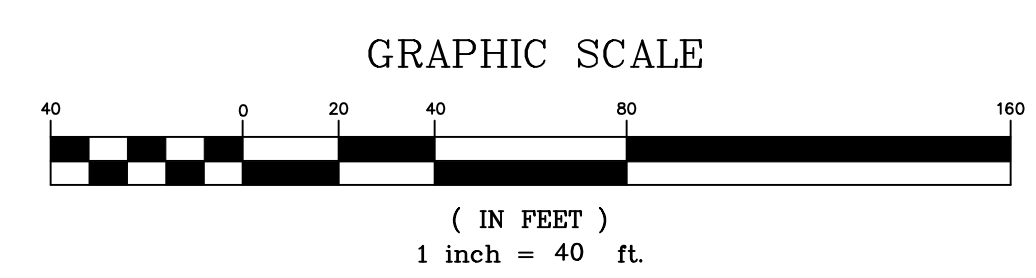
TYPICAL TRENCH DETAIL
NOT TO SCALE



TRENCH RESTORATION DETAIL
NOT TO SCALE



EASEMENT PLAN
1" = 40'



SANITARY SERVICE LINE INSTALLATION DETAIL
NOT TO SCALE

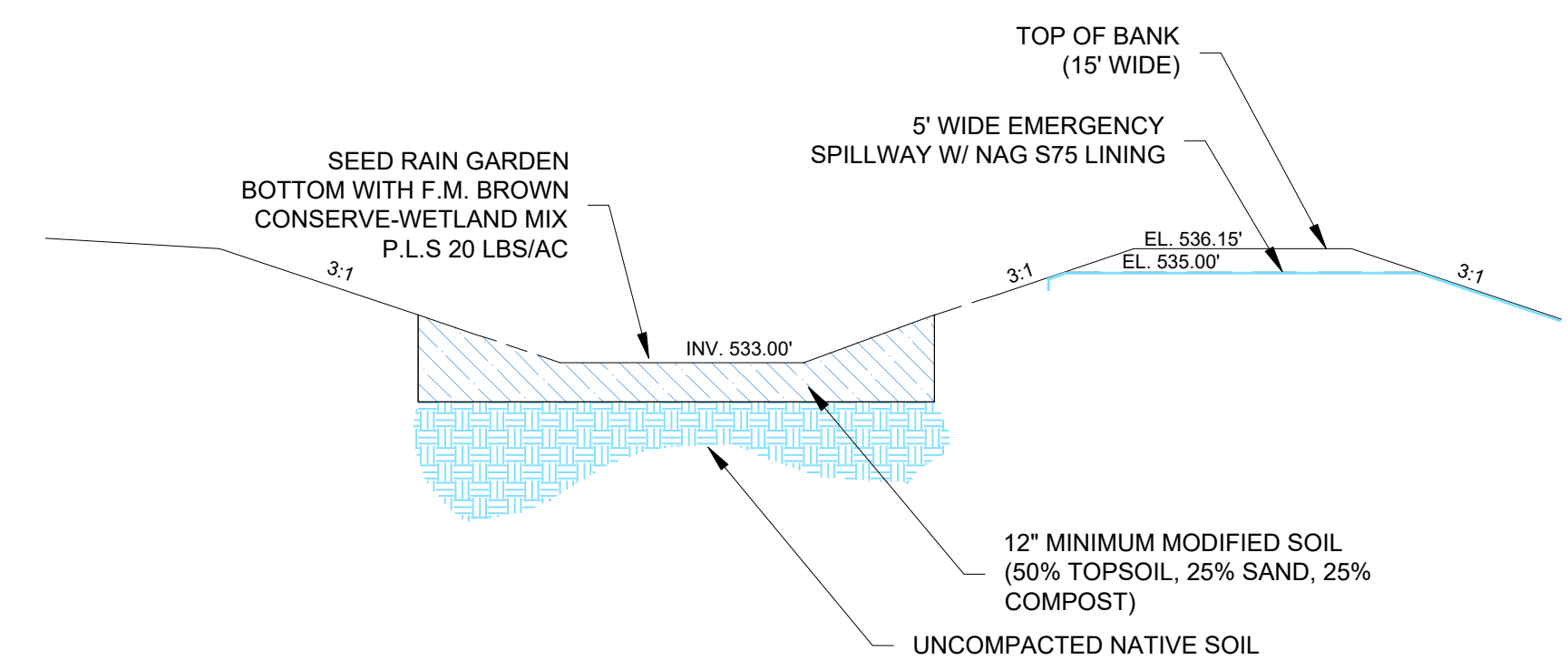
- NOTES**
1. PROVIDE 6" OF AASHTO NO. 8 (18) STONE BELOW PIPE 12" ABOVE PIPE (TYPICAL ENTIRE LENGTH OF LATERAL)
 2. MINIMUM SLOPE = 1% (1/8" PER FT)
 3. MINIMUM DEPTH OF COVER = 3 FT
 4. PIPE MATERIALS
LATERAL SEWER - PVC SDR 35
BUILDING SEWER - PVC SCH 40
 5. ALL RISERS SHALL BE SOLVENT WELD

LEGEND

EXISTING FEATURES		PROPOSED FEATURES	
EXISTING ADJOINER LINE	EXISTING BOUNDARY LINE AND CORNERS	PROPOSED BOUNDARY LINE AND CORNERS	PROPOSED BUILDING SETBACK
EXISTING EDGE OF PAVEMENT AND CURB LINE	EXISTING RIGHT-OF-WAY	PROPOSED EDGE OF PAVEMENT AND CURB LINE	PROPOSED RIGHT-OF-WAY
EXISTING FENCE	EXISTING SEWER	PROPOSED FENCE	PROPOSED SEWER
CLEAN OUT	MANHOLE	CLEAN OUT	MANHOLE
MANHOLE	RIP-RAP	HEADWALL	INLET
HEADWALL	INLET	MANHOLE	ENDWALL
GATE VALVE	FIRE HYDRANT	EXISTING WATERLINE	PROPOSED STORMWATER
GAS VALVE		EXISTING GASLINE	
		GATE VALVE	FIRE HYDRANT
		GAS VALVE	
		PROPOSED DOMESTIC WATERLINE	
		PROPOSED GASLINE	
		PROPOSED CONCRETE/SIDEWALK	
		PROPOSED CONTOURS	
		PROPOSED TREELINE	
		PROPOSED UTILITY POLE	
		PROPOSED LIGHT POLE	
		PROPOSED STANDARD PAVING	

SOIL CHART:

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
CkA	Clarksburg Silt Loam	4.10	B/D	66.3%	0" - 84"	No
Me	Melvin Variant Silt Loam	2.10	C	33.7%	0" - 60"	Yes



RAIN GARDEN A
NOT TO SCALE

- NOTES:**
1. A KEY TRENCH (CUT OFF TRENCH) OF IMPERVIOUS MATERIAL SHALL BE PROVIDED UNDER ALL EMBANKMENTS THAT REQUIRE FILL MATERIAL. THE KEY TRENCH SHALL BE A MINIMUM OF EIGHT (8) FEET WIDE, TWO (2) FEET BELOW EXISTING GRADE AND HAVE SIDE SLOPES OF ONE (1) HORIZONTAL TO ONE (1) VERTICAL (1:1). THE CLAY CORE SHALL BE FOUR (4) FEET WIDE AT THE TOP AND BE ON (1) FOOT BELOW THE EMERGENCY SPILLWAY ELEVATION AND HAVE SIDE SLOPES OF ONE (1) HORIZONTAL TO ONE (1) VERTICAL (1:1). THE KEY TRENCH/CLAY CORE MUST BE CONSTRUCTED WITH SOILS SUITABLE FOR THIS APPLICATION (MLCL) AND FOUND TO BE ACCEPTABLE BY THE TOWNSHIP ENGINEER. PROPER COMPACTION TECHNIQUES ACCEPTABLE TO THE TOWNSHIP ENGINEER ARE TO BE UTILIZED DURING CONSTRUCTION.

SUBDIVISION PLAN
FOR
STANLEY A. MARTIN
275 NARROWS DRIVE
NORTH LEBANON TOWNSHIP, LEBANON COUNTY, PA

LEBANON ENGINEERING
717-934-6513
692 Cornwall Road, Lebanon, PA 17042
www.cristianlebanonengineering.com

MA10.23-1
Easement, Grading & Utility Plan
JULY 18, 2023

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BY: DATE: REVISION: 4 OF 7

INFILTRATION BASINS / RAIN GARDENS

BIORETENTION IS A METHOD OF TREATING STORMWATER BY POOLING WATER ON THE SURFACE AND ALLOWING FILTERING AND SETTLING OF SUSPENDED SOLIDS AND SEDIMENT AT THE MULCH LAYER, PRIOR TO ENTERING THE PLANT/SOIL/MICROBE COMPLEX MEDIA FOR INFILTRATION AND POLLUTANT REMOVAL. BIORETENTION TECHNIQUES ARE USED TO ACCOMPLISH WATER QUALITY IMPROVEMENT AND WATER QUANTITY REDUCTION.

INFILTRATION BASINS ARE SHALLOW, IMPOUNDED AREAS DESIGNED TO TEMPORARILY STORE AND INFILTRATE STORMWATER RUNOFF. THE SIZE AND SHAPE CAN VARY FROM ONE LARGE BASIN TO MULTIPLE, SMALLER BASINS THROUGHOUT A SITE. IDEALLY, THE BASIN SHOULD AVOID DISTURBANCE OF EXISTING VEGETATION. IF DISTURBANCE IS UNAVOIDABLE, REPLANTING AND LANDSCAPING MAY BE NECESSARY AND SHOULD INTEGRATE THE EXISTING LANDSCAPE AS SUBTLY AS POSSIBLE AND COMPACTION OF THE SOIL MUST BE PREVENTED. INFILTRATION BASINS USE THE EXISTING SOIL MANTLE TO REDUCE THE VOLUME OF STORMWATER RUNOFF BY INFILTRATION AND EVAPOTRANSPIRATION. THE QUALITY OF THE RUNOFF IS ALSO IMPROVED BY THE NATURAL CLEANSING PROCESSES OF THE EXISTING SOIL MANTLE AND ALSO BY THE VEGETATION PLANTED IN THE BASINS.

CONSTRUCTION SEQUENCE

1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL INFILTRATION 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 INFILTRATION 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.)
7. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

MAINTENANCE ISSUES

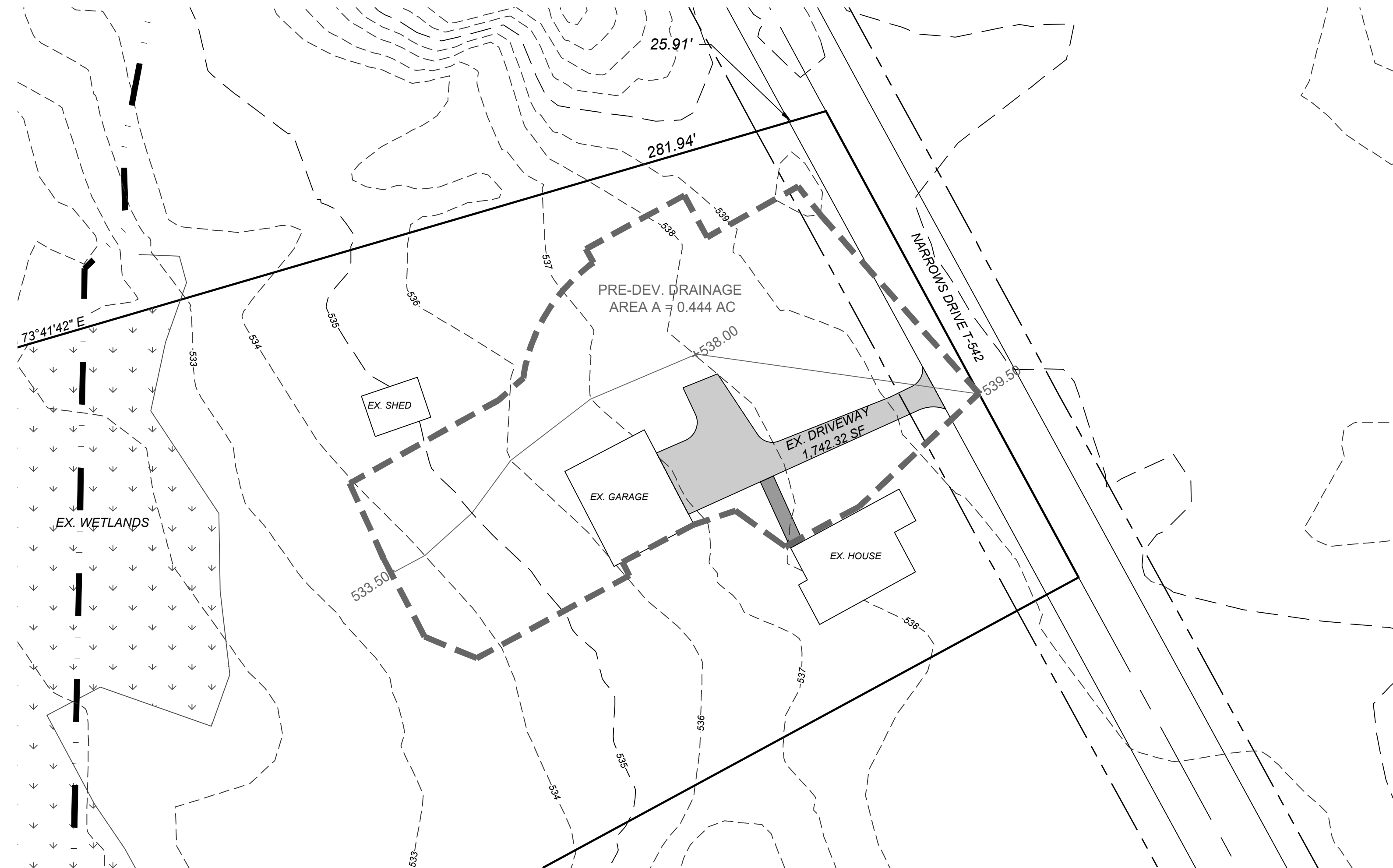
PROPERLY DESIGNED AND INSTALLED RETENTION AREAS REQUIRE SOME REGULAR MAINTENANCE:

MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (> 1 INCH RAINFALL DEPTH):

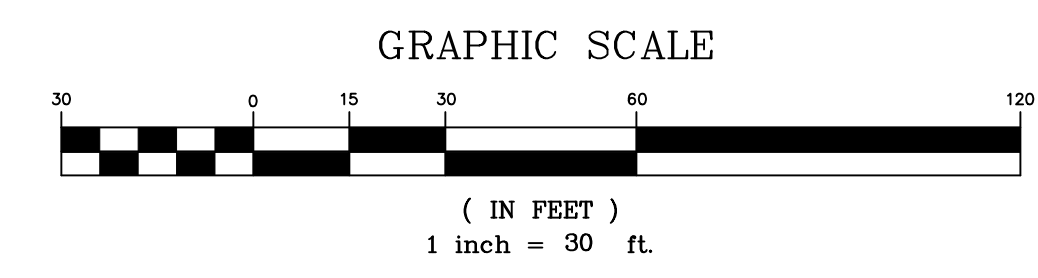
1. INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
2. INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
3. MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER RETENTION BASIN OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN RETENTION BASIN IS DRY TO AVOID RUTTING
4. INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
5. INSPECT RETENTION 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 INFILTRATION BASIN/BIORETENTION IF DRAW DOWN TIME IS MORE THAN 72 HOURS.
4. WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE ONLY WHEN ABSOLUTELY NECESSARY.



PRE-DEVELOPMENT DRAINAGE PLAN
1" = 30'

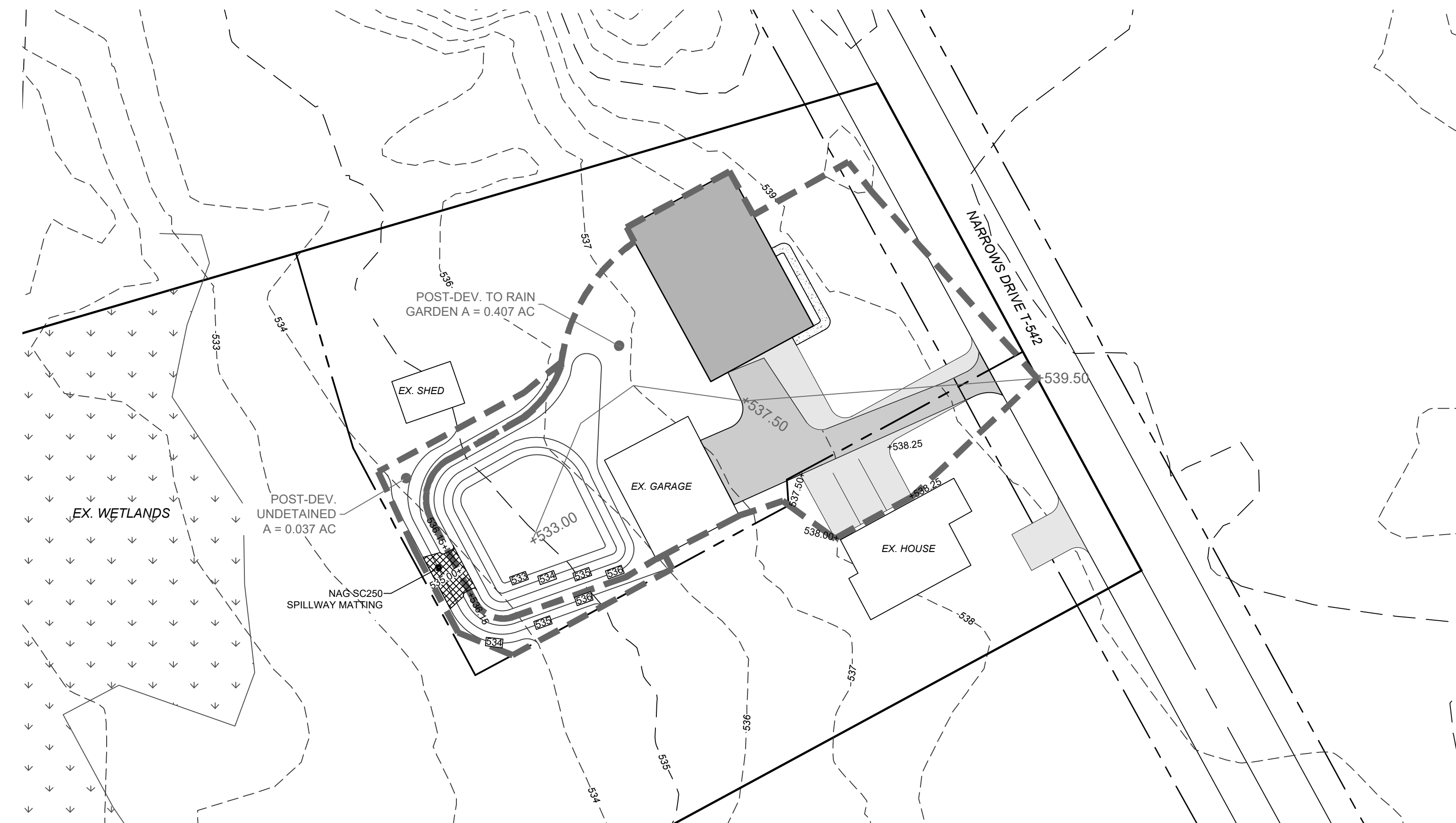


LEGEND

EXISTING FEATURES		PROPOSED FEATURES	
	EXISTING ADJOINER LINE		PROPOSED BUILDING SETBACK
	EXISTING BOUNDARY LINE AND CORNERS		PROPOSED BOUNDARY LINE AND CORNERS
	EXISTING EDGE OF PAVEMENT AND CURB LINE		PROPOSED EDGE OF PAVEMENT AND CURB LINE
	EXISTING RIGHT-OF-WAY		PROPOSED RIGHT-OF-WAY
	EXISTING FENCE		PROPOSED FENCE
	EXISTING SEWER		PROPOSED SEWER
	EXISTING STORMWATER		PROPOSED STORMWATER
	EXISTING WATERLINE		PROPOSED WATERLINE
	EXISTING GASLINE		PROPOSED GASLINE
	EXISTING OVERHEAD ELECTRIC		PROPOSED OVERHEAD ELECTRIC
	EXISTING SIDEWALK/CONCRETE		PROPOSED CONCRETE/SIDEWALK
	EXISTING CONTOURS		PROPOSED CONTOURS
	EXISTING TREELINE		PROPOSED TREELINE
	EXISTING SOILS		PROPOSED UTILITY POLE
	EXISTING UTILITY POLE		PROPOSED LIGHT POLE
	EXISTING LIGHT POLE		PROPOSED STANDARD PAVING
	EXISTING OVERHEAD ELECTRIC		
	PROPOSED DRAINAGE EASEMENT		

SOIL CHART:

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
CkA	Clarksburg Silt Loam	4.10	B/D	66.3%	0" - 84"	No
Me	Melvin Variant Silt Loam	2.10	C	33.7%	0" - 60"	Yes



POST-DEVELOPMENT DRAINAGE PLAN
1" = 30'

SUBDIVISION PLAN
FOR
STANLEY A. MARTIN
275 NARROWS DRIVE
NORTH LEBANON TOWNSHIP, LEBANON COUNTY, PA

MA 10.23.1

CRISTINA ENGINEERING
171-934-6513
692 Cornwall Road, Lebanon, PA 17042
www.cristinaindengineering.com

Pre & Post Development Drainage Plan

JULY 18, 2023

5 OF 7

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DATE: BY: REVISION:

LEGEND

EXISTING FEATURES

- EXISTING ADJOINER LINE AND CORNERS
- EXISTING EDGE OF PAVEMENT AND CURB LINE
- EXISTING FENCE
- EXISTING RIGHT-OF-WAY
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING WATERLINE
- EXISTING GASLINE
- EXISTING SIDEWALK/CONCRETE
- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING SOILS
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE

PROPOSED FEATURES

- PROPOSED CONTOURS

ROCK CONSTRUCTION ENTRANCE

TOPSOIL STOCKPILE

FILTER SOCK

SWALE/SLOPE MATTING

INLET PROTECTION

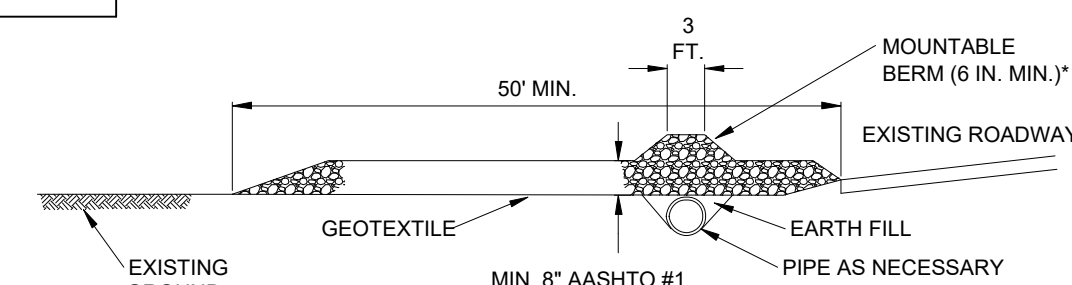
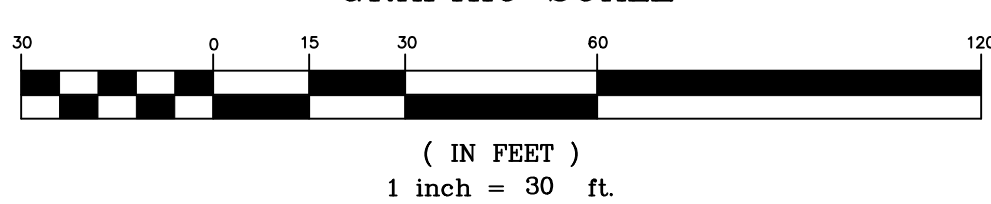
DISTURBANCE LIMITS

NPDES LIMITS

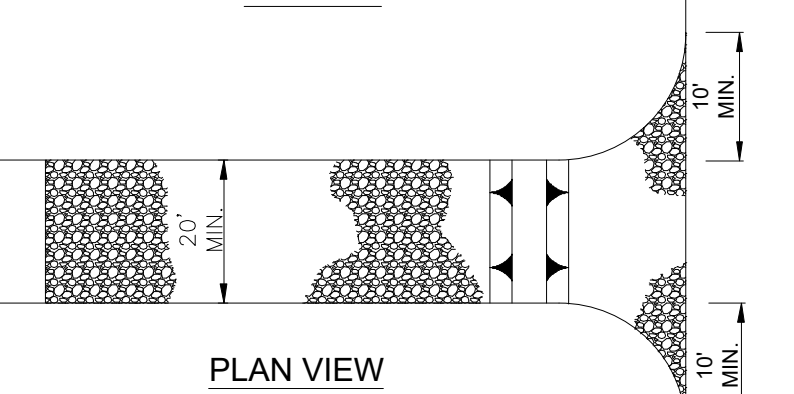
SOIL CHART:

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
CKA	Clarksburg Silt Loam	4.10	B/D	66.3%	0' - 84"	No
Me	Melvin Variant Silt Loam	2.10	C	33.7%	0' - 60"	Yes

GRAPHIC SCALE



PROFILE



PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

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

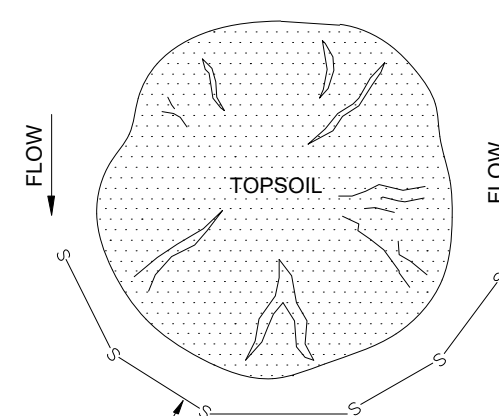
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

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

**STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE**

NOT TO SCALE



NOTE: FILTER SOCK

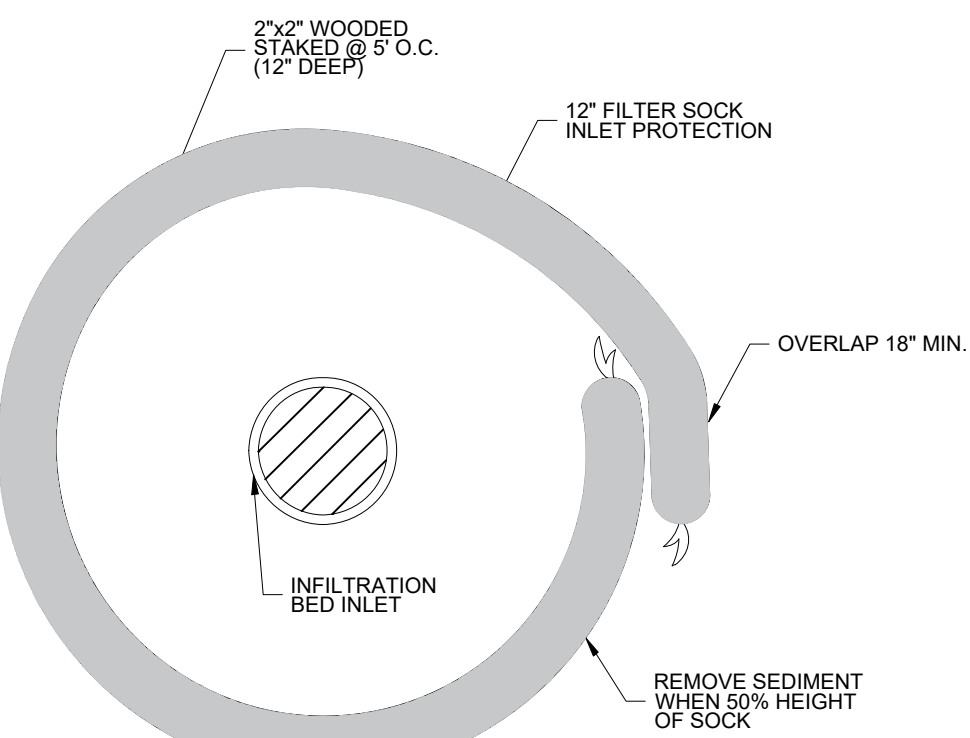
- 1) A STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A LIMITED AREA IN ORDER TO KEEP DISTURBANCE TO A MINIMUM.
- 2) STOCKPILES ARE TO BE STABILIZED IMMEDIATELY.
- 3) STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.
- 4) STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- 5) STOCKPILES SHALL BE LOCATED SO THAT ALL SWALES CAN FUNCTION AS DESIGNED.

TOPSOIL STOCKPILE

NO SCALE

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 submission of those changes for review and approval at its discretion.
2. At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
4. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation district or by the Department prior to implementation.
5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan.
7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
8. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan map(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter.
9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department.
10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq. 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
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, mulching 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 outcrops 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.



FILTER SOCK INLET PROTECTION

NOT TO SCALE

APPLICATION	SPECIES	APPLICATION RATE 1 (P.L.S. IN LBS/AC)	FERTILIZER (LBS/ACRE)	LIMING RATE 2 (TONS/ACRE)	FINAL SEEDING DATE
TEMPORARY	ANNUAL RYE	174	50-50-50 N-P-O ₂ -K ₂ 2-9-2	1 AG GRADE	OCTOBER 30
PERMANENT	FINE FESCUES	60			
	KENTUCKY BLUEGRASS	90	100-200-200 N-P-O ₂ -K ₂ 2-9-2	6 AG GRADE	AUGUST 30 AND OCTOBER 30
ATHLETIC FIELDS	PERENNIAL RYEGRASS	25			
	KENTUCKY BLUEGRASS	150	100-200-200 N-P-O ₂ -K ₂ 2-9-2	6 AG GRADE	AUGUST 30 AND OCTOBER 30
RIPARIAN BUFFER	PERENNIAL RYEGRASS	25			
	ERNST MIX ERNMX-178	20	100-200-200 N-P-O ₂ -K ₂ 2-9-2	6 AG GRADE	AUGUST 30 AND OCTOBER 30
STEEP SLOPES					
NURSE CROP	ANNUAL RYE	64	50-50-50 N-P-O ₂ -K ₂ 2-9-2	1 TON/AC AG GRADE*	OCT 15
PERMANENT	BIRDSFOOT TREFLOIL PLUS	10			
	CROWN VETCH PLUS	20	100-200-200 N-P-O ₂ -K ₂ 2-9-2	1 TON/AC AG GRADE*	MARCH 15 AND OCT 15
	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 & FERTILIZER SPECIFICATIONS

NOT TO SCALE

EROSION & SEDIMENT POLLUTION CONTROL PLAN

1" = 20'

SUBDIVISION PLAN
FOR
STANLEY A. MARTIN
275 NARROWS DRIVE
LEBANON TOWNSHIP, LEBANON COUNTY, PA

MA 10.23-1

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EROSION & SEDIMENT POLLUTION CONTROL PLAN

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OF 7

REVISION BY DATE

JULY 18, 2023

