

LEGEND	
	EXISTING INDEX CONTOUR
	EXISTING INTERIOR CONTOUR
	EXISTING INLET
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY SEWER PIPE
	EXISTING WATER LINE
	SOILS BOUNDARY LINE
	EXISTING CURB
	EXISTING EDGE OF PAVEMENT
	EXISTING FENCE
	EXISTING FIRE HYDRANT
	WATER VALVE
	EXISTING D-W ENDWALL
	RIP RAP
	EXISTING SIGN

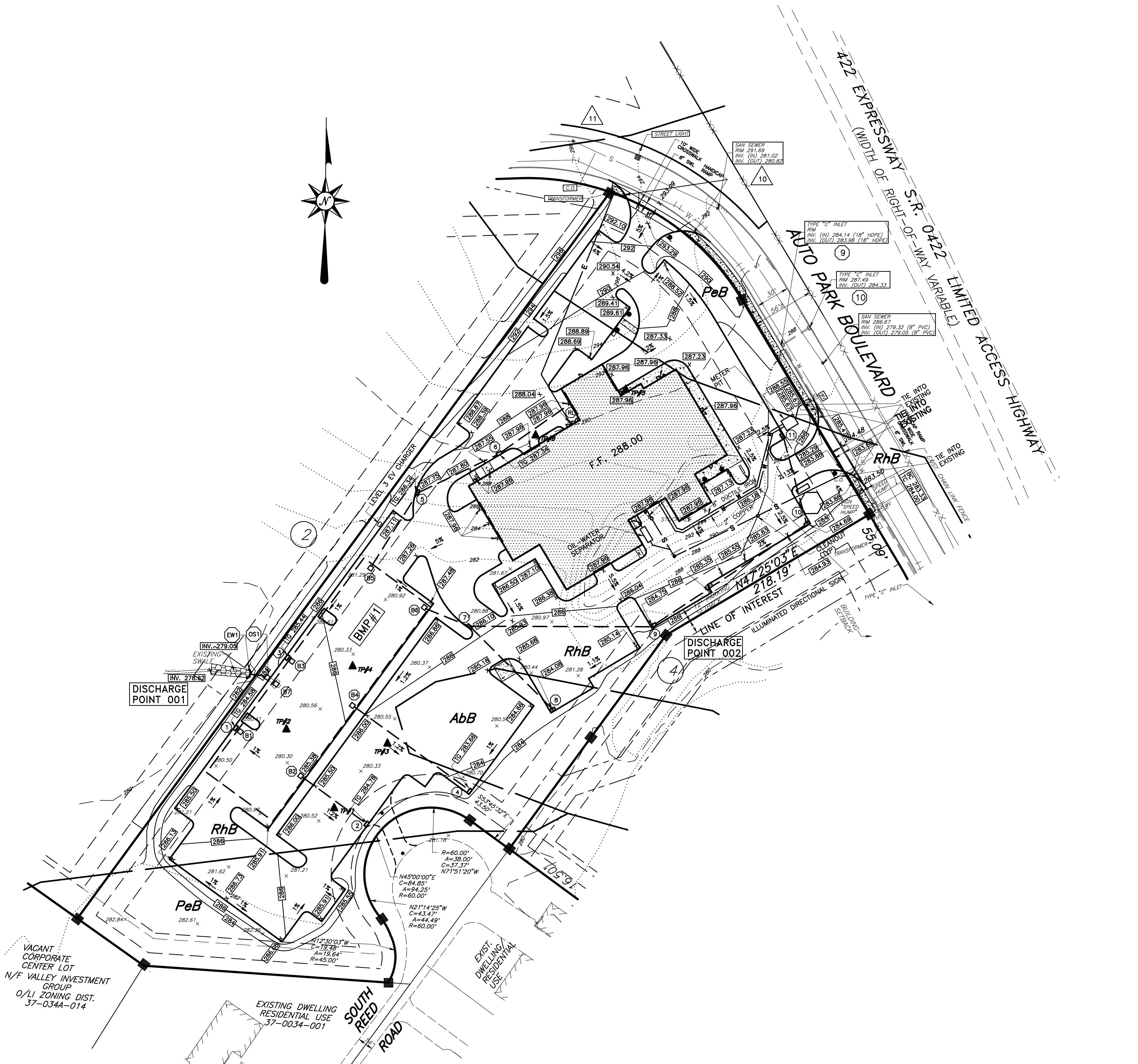
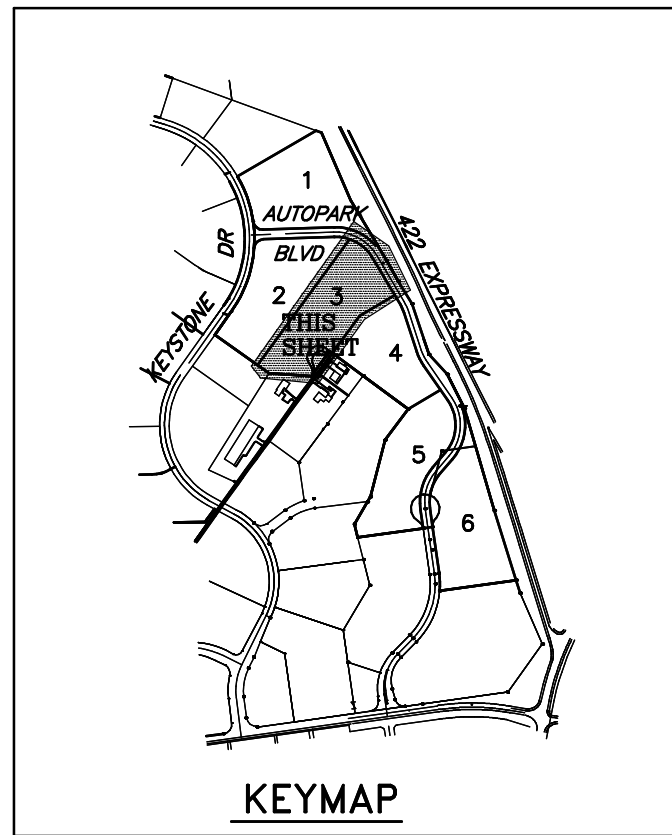
SOILS CLASSIFICATION	
Abb	ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP D.
PeB	PENN SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP B.
RhB	REAVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP D.

NATURAL FEATURES	
FEATURE	AREA OF FEATURE
STEEP SLOPE 15%-25%	0 ACRES, SLOPES ARE MANMADE FOR SOIL STOCKPILE
STEEP SLOPE 25%+	0 ACRES, SLOPES ARE MANMADE FOR SOIL STOCKPILE
WOODLANDS	0 ACRES
WETLANDS	0 ACRES

NOTE:
THERE ARE NO NATURALLY OCCURRING STEEP SLOPES LOCATED ONSITE AND ANY STEEP SLOPES SHOWN ARE MANMADE DUE TO AN EXISTING TOPSOIL STOCKPILE DUE TO PAST BULK EARTHWORK ACTIVITIES.

FINAL
EXISTING RESOURCE AND
SITE ANALYSIS PLAN

5. 11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4. 10-20-22	ADDRESS OCCD COMPLETENESS ITEMS (UPDATED 12-9-22)
3. 10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
2. 6-29-22	REVISED PER TOWNSHIP CONSULTANT JUNE REVIEW LETTERS
LAND DEVELOPMENT PLAN FOR LOT 3 LIMERICK AUTOPARK	
LIMERICK TOWNSHIP	MONTGOMERY COUNTY, PA
Edward B. Walsh & Associates, Inc. CIVIL ENGINEERS & SURVEYORS	
Whiteland Business Park 855 Springdale Drive, Suite 202 Exton, Pennsylvania 19341 Phone: 610-903-0060 Fax: 610-903-0080	Project- 2616 Date- 2-25-22 Scale- 1" = 50' Drawn- SLM Checked- AJB Sheet- 2 OF 16
Plotted: 12/22/2022 File: F:\JB\2616\LOT 3\FPS\2616-LOT 3-B.pro	



LEGEND	
---	EXISTING INDEX CONTOUR
---	EXISTING INTERIOR CONTOUR
---	PROPOSED CONTOUR
94.68	PROPOSED SPOT ELEVATION
---	EXISTING INLET
---	PROPOSED INLET
---	EXISTING STORM SEWER PIPE
---	PROPOSED STORM SEWER PIPE
---	EXISTING SANITARY MANHOLE
---	EXISTING SANITARY SEWER PIPE
---	PROPOSED SANITARY SEWER PIPE
---	PROPOSED GAS SERVICE PIPE
---	PROPOSED ELECTRIC SERVICE
---	EXISTING WATER LINE
---	PROPOSED WATER LINE
---	SOILS BOUNDARY LINE
---	EXISTING FIRE HYDRANT
---	WATER VALVE
---	EXISTING D-W ENDWALL
---	RIP RAP
---	LIGHT POLE & FIXTURE
---	EXISTING SIGN
---	PROPOSED SIGN
---	EXISTING CURB
---	PROPOSED CURB
---	EXISTING FENCE

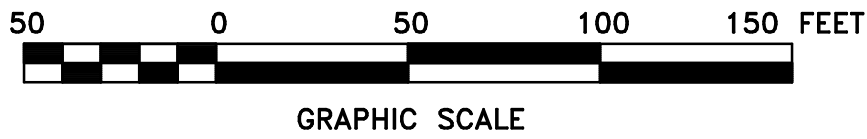
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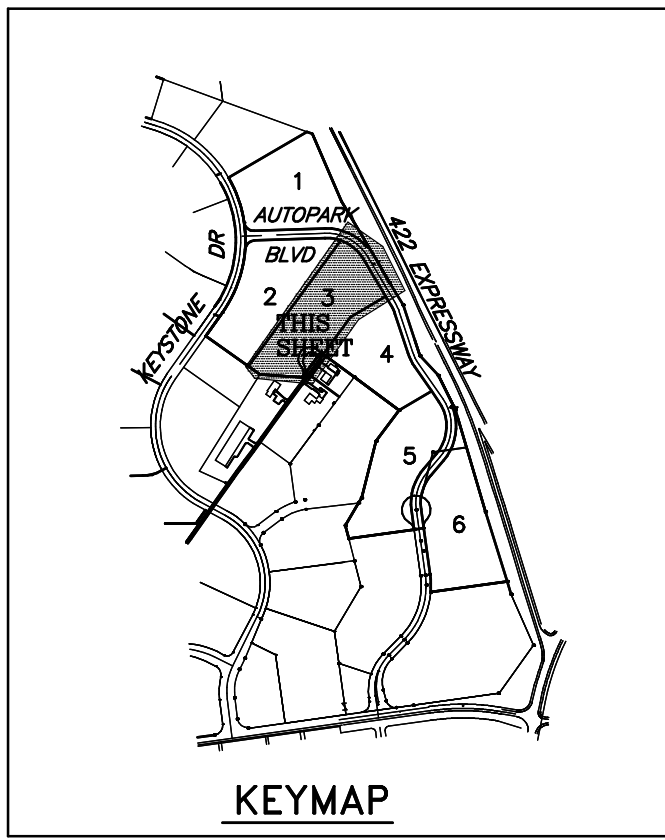
WHEREVER FILL MATERIAL IS TO BE USED, THE APPLICANT SHALL BE RESPONSIBLE FOR TESTING TO DETERMINE ITS DRY DENSITY AS PER ASTM D1556. IT IS RECOMMENDED THAT THE DENSITY OF ANY LOAD-BEARING LAYER SUPPORTING OR TO BE INCORPORATED IN A ROAD SURFACE, DETENTION BASIN OR EROSION SWALE SHALL BE NOT LESS THAN 90% OF THE MAXIMUM DENSITY.

FINAL
GRADING & UTILITIES PLAN

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PARCEL 37-00-01114-30-7





SOILS DATA TABLE						
SOILS SERIES	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH OF BEDROCK	REACTION (PH)	WINTER GRADING	TOPSOIL	HYDROLOGIC SOIL GROUP
ABBOTTSTOWN SILT LOAM	1/2" - 1 1/2"	3'-8"	5.0-6.5	POOR	FAIR	D
PENN SILT LOAM	3'+	1 1/2" - 3'	.16	GOOD	FAIR	B
REAVILLE SHALY SILT LOAM	0-1'	1'-3'	5.0-6.5	POOR	POOR	D

SOILS CLASSIFICATION

AbB - ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES, HYDROLOGIC SOIL GROUP D.
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SOIL LIMITATIONS

AbB: Cutbanks cave (4), Corrosive to Concrete / Steel (6), Easily Erodeable (2), Depth to saturated zone / seasonal high-water table (1), Hydric / hydric inclusions (1), Low strength / landslide prone (2), Slow percolation (1), Piping (1), Poor source of topsoil (5), Frost action (3), Wetness (1).
PeB: Cutbanks cave (4), Corrosive to concrete (6), Droughty (2), Hydric / hydric inclusions (1), Low strength / landslide prone (4), Piping (1), Poor source of topsoil (5), Frost action (3).
RhB: Cutbanks cave (4), Corrosive to Concrete / Steel (6), Droughty (2), Easily Erodeable (2), Depth to saturated zone / seasonal high-water table (1), Hydric / hydric inclusions (1), Slow percolation (1), Piping (1), Poor source of topsoil (5), Frost action (3), Wetness (1).

RESOLUTIONS

- ANY WATER ENCOUNTERED DURING UTILITY EXCAVATION MUST BE PUMPED TO A DEWATERING FACILITY. NO WETLAND AREAS WERE IDENTIFIED IN WETLAND DETERMINATION.
- DISTURBED AREAS MUST BE KEPT TO A MINIMUM AND STABILIZED IMMEDIATELY UPON COMPLETION OF WORK. ECB SHALL BE USED WHERE APPLICABLE AND PLANT TOLERANCES SHALL BE CONSIDERED WHEN SELECTING VEGETATION.
- ROADWAYS SHALL BE PROTECTED AGAINST DAMAGE FROM FROST HEAVING.
- SHALLOW EXCAVATIONS MAY BE UNSTABLE. SOILS SHALL BE EXCAVATED USING PROPER SHORING METHODS.
- ANY STRIPPED TOPSOIL SHALL BE CAREFULLY PRESERVED IN DESIGNATED STOCKPILE FOR LATER USE IN RESTORATION. IF TOPSOIL IS NOT SUITABLE, FURTHER AMENDMENT MAY BE NECESSARY.
- PROPOSED BUILDING CONSTRUCTION CURRENTLY DOES NOT INCLUDE SUBSURFACE ELEMENTS THAT COULD BE AFFECTED BY CORROSIVE ACTION. IF STEEL PIPE IS USED, PROTECT PROTECTION BY COATINGS AND/OR USE OF CATHODIC PROTECTION IS RECOMMENDED.

CLEAN FILL RESPONSIBILITY

THE CONTRACTOR IS RESPONSIBLE TO PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE THAT IMPORTED FILL MATERIAL MEETS THE PADEP QUALIFICATIONS FOR "CLEAN FILL".

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

ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSECTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL, OR RELEASE OF REGULATED SUBSTANCE. IF IT MUST BE RESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL, TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PAS DEPS' POLICY "MANAGEMENT OF FILL".

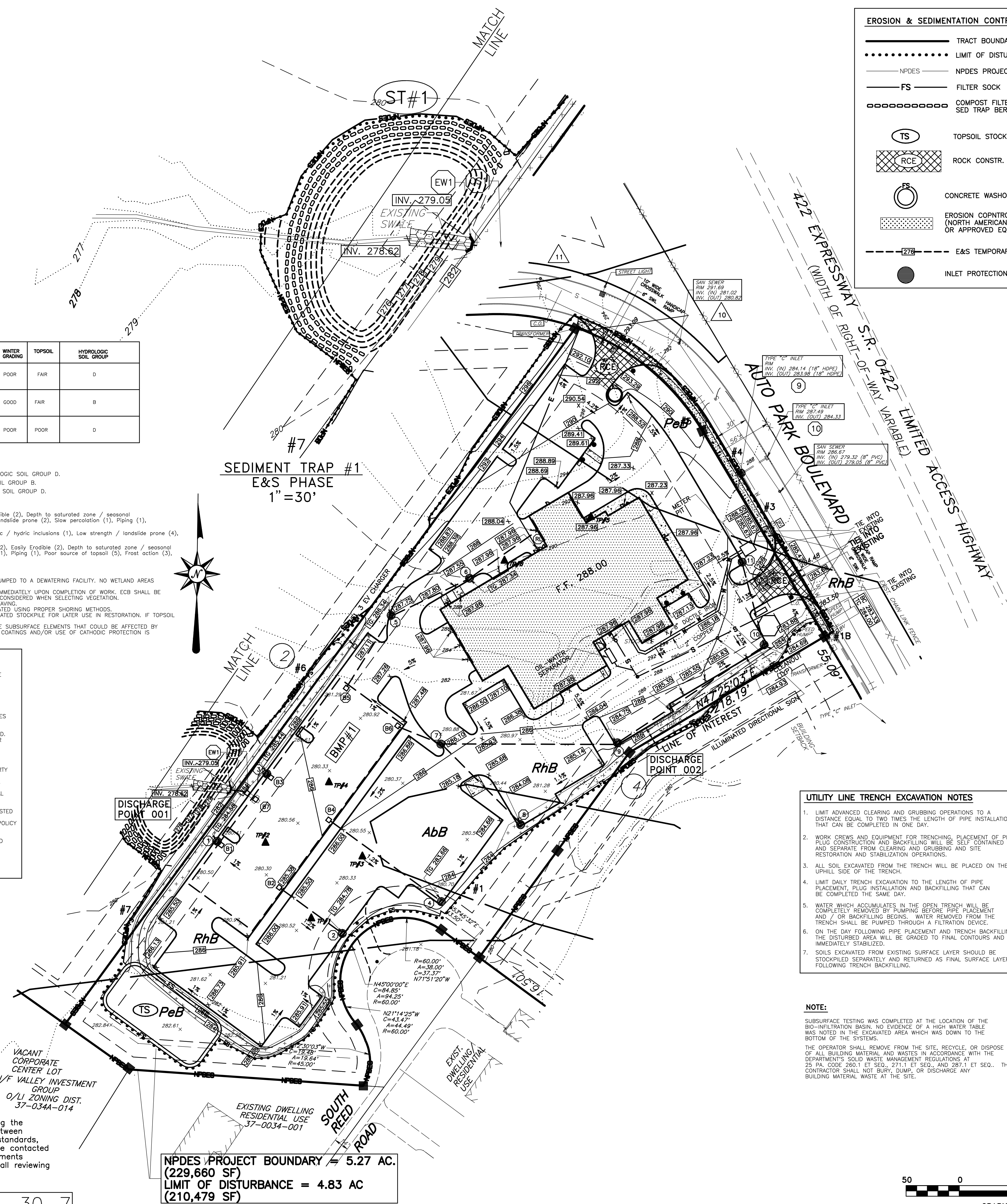
FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE PADEP'S MUNICIPAL OR RESIDENTIAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.



USER NOTICE:

Any user of these plans is responsible for contacting the appropriate agency in the event of discrepancies between the plan, plan details, shop drawings, construction standards, and field conditions. The applicable agency must be contacted and discrepancies resolved before proposed improvements are constructed. The preparer of these plans and all reviewing agencies are not liable for any discrepancies.

PARCEL 37-00-01114-30-7



EROSION & SEDIMENTATION CONTROL LEGEND

- TRACT BOUNDARY
- LIMIT OF DISTURBANCE
- NPDES
- NPDES PROJECT BOUNDARY
- FS
- FILTER SOCK
- COMPOST FILTER SOCK
- SED TRAP BERM
- TS
- TOPSOIL STOCKPILE
- RCE
- ROCK CONSTR. ENTRANCE
- FS
- CONCRETE WASHOUT AREA
- EROSION COPNTROL BLANKET (NORTH AMERICAN GREEN C125 OR APPROVED EQUAL)
- E&S TEMPORARY GRADING
- INLET PROTECTION

LEGEND

- 430
- EXISTING INDEX CONTOUR
- EXISTING INTERIOR CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING INLET
- PROPOSED INLET
- EXISTING STORM SEWER PIPE
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- SOILS BOUNDARY LINE
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- WATER VALVE
- EXISTING D-W ENDWALL
- RIP RAP
- LIGHT POLE & FIXTURE
- EXISTING SIGN
- PROPOSED SIGN
- POROUS PAVEMENT AREA
- EXISTING CURB
- PROPOSED CURB
- EXISTING FENCE

CONSTRUCTION SEQUENCE

- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES THE OPERATOR SHALL INVITE ALL APPROPRIATE MUNICIPAL OFFICIALS, MCCD STAFF AND THE PLAN PREPARER TO AN ON-SITE PRE-CONSTRUCTION MEETING. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITY LOCATIONS.
- INSTALL ROCK CONSTRUCTION ENTRANCE AT LOCATIONS SHOWN & DELINEATE LIMIT OF DISTURBANCE.
- INSTALL FILTER SOCK AT LOCATIONS SHOWN, AND GRADE / CONSTRUCT SEDIMENT TRAP #1.
- CLEAR AND GRUB THE AREA NECESSARY FOR GRADING & BUILDING CONSTRUCTION.
- BEGIN REMOVAL OF TOPSOIL FROM AREAS TO BE DISTURBED. TOPSOIL TO BE STOCKPILED AT LOCATION SHOWN. STOCKPILE HEIGHT NOT TO EXCEED 35 FEET. SIDE SLOPES TO BE 2:1 OR FLATTER. UPON COMPLETION OF TOPSOIL REMOVAL, SEED AND MULCH STOCKPILE WITH TEMPORARY SEED MIX AND MULCH. INSTALL SILT FENCE AROUND STOCKPILE.
- BEGIN EARTH MOVING TO ESTABLISH ROUGH SUBGRADE FOR PARKING LOT AND BUILDING PAD.
- INSTALL STORMWATER MANAGEMENT BMP#1 AND STORMWATER CONVEYANCE. INSTALL INLET PROTECTION WHERE NOTED.
- THIS IS A CRITICAL BMP THAT MUST BE INSPECTED BY THE PROJECT ENGINEER OR LICENSED PROFESSIONAL.
- BEGIN BUILDING CONSTRUCTION & INSTALL UTILITIES TO SERVICE BUILDING.
- INSTALL SIDEWALKS & CURBING IN PARKING LOT.
- INSTALL LANDSCAPING AS SHOWN ON LANDSCAPE PLAN (BY OTHERS)
- STABILIZE AREAS DISTURBED BY SPREADING PERMANENT SEED MIX AND MULCH ON ALL DISTURBED AREA.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER FAILURE MODES.
- ONCE AREA UPGRADE OF SEDIMENT TRAP #1 HAS BEEN SEEDDED AND STABILIZED, THE TRAP MAY BE REMOVED. THE TRAP AREA SHALL BE RETURNED TO PRE-DEVELOPED CONDITION BASED UPON THE CONVERSION SEQUENCE ON SHEET 14.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, THE MCCD SHALL INSPECT THE SITE. UPON APPROVAL, E&S BMP'S MAY BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
- THE PROJECT ENGINEER OR OTHER LICENSED PROFESSIONAL SHALL INSPECT BMP#1 TO ENSURE IT IS FUNCTIONING PROPERLY.
- PAVE PARKING LOT AND INSTALL STRIPING & SIGNAGE.
- AFTER CONSTRUCTION IS COMPLETE, THE OWNER SHALL SUBMIT A NOTICE OF TERMINATION TO THE MCCD.

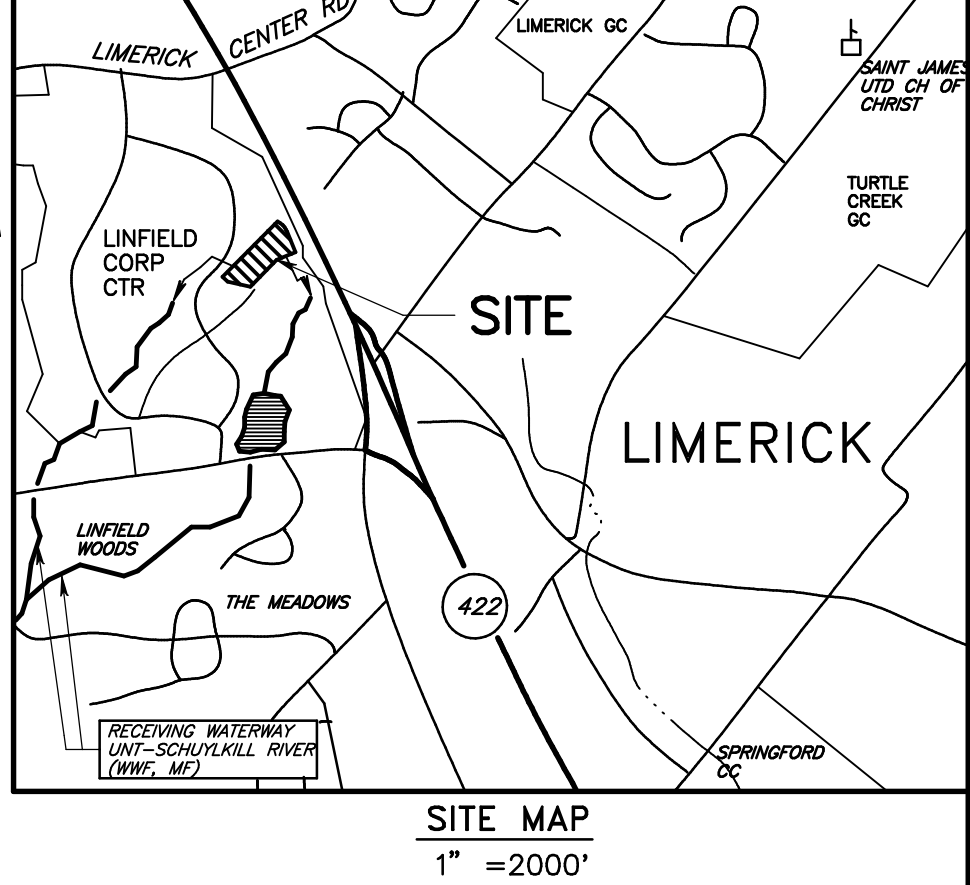
UTILITY LINE TRENCH EXCAVATION NOTES

- LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
- ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
- SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

NOTE:

SUBSURFACE TESTING WAS COMPLETED AT THE LOCATION OF THE BIO-INFILTRATION BASIN. NO EVIDENCE OF A HIGH WATER TABLE WAS NOTED IN THE EXCAVATED AREA WHICH WAS DOWN TO THE BOTTOM OF THE SYSTEMS.

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIAL AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL WASTE AT THE SITE.



NOTES:

- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL FACILITIES WEEKLY AND AFTER EACH RAINFALL EVENT. ANY DAMAGED OR BROKEN FACILITY MUST BE REPAIRED OR REPLACED IMMEDIATELY.
- PRIOR TO THE REMOVAL OF E AND S CONTROLS, THE COUNTY CONSERVATION DISTRICT MUST BE NOTIFIED.
- ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH N.A.G-5-75 EROSION CONTROL BLANKET.
- ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- THE E & S PLAN/DESIGN PROVIDES THE FOLLOWING:
 - A. MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCE BY DISTURBING ONLY THE AREAS NECESSARY FOR THE SITE DEVELOPMENT AND PERFORMS CONSTRUCTION IN ONE PHASE.
 - B. MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION BY INSTALLING A SEDIMENT TRAP UPSLOPE FROM THE WETLANDS AND WATERCOURSE TO COLLECT AND REMOVE SEDIMENT FROM THE WORK ZONE.
 - C. MINIMIZE SOIL COMPACTION BY NOT PERFORMING EXCESSIVE SITE DISTURBANCE OR GRADING.
 - D. UTILIZES SEDIMENT TRAPS AND FILTER SOCKS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF.
 - E. PERMANENT SITE STABILIZATION THAT MUST BE ACHIEVED PRIOR TO REMOVAL OF E&S CONTROLS IS DEFINED AS VEGETATION THAT MUST PROVIDE A MINIMUM UNIFORM 70% PERENNIAL VEGETATED COVER OVER THE ENTIRE DISTURBED AREA.
 - F. THE POTENTIAL FOR THERMAL IMPACTS IS CREATED BY THE DETENTION OF SEDIMENT AND SEDIMENTATION TRAPS. TO AVOID ANY THERMAL IMPACTS THE TRAPS HAVE BEEN DESIGNED TO DISCHARGE AS SHALLOW CONCENTRATED FLOW TO THICK VEGETATION TO ENSURE IT COOLS PRIOR TO ENTERING THE WETLANDS AND WATERCOURSE.

WATERSHED NOTES:

- THE RUNOFF FROM THE SITE DISCHARGES TO THE SCHUYLKILL RIVER WHICH IS CLASSIFIED AS WWF. EXTREME CARE SHOULD BE EXERCISED IN ALL DISTURBANCE ACTIVITIES TO PREVENT DEGRADATION TO THE WATERS OF THE COMMONWEALTH.
- THE LIMIT OF DISTURBANCE MUST BE LIMITED TO THE MINIMUM NECESSARY FOR THE PROPOSED CONSTRUCTION ACTIVITY.
- UPON COMPLETION OF TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES, THE PROJECT SITE MUST BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
- ALL EXISTING DRAINAGE FEATURES MUST BE PROTECTED AND NOT DISTURBED IN ANY WAY.
- CONSTRUCTION ACTIVITIES MUST BE PERFORMED IN A MANNER TO MINIMIZE COMPACTION OF SOILS IN AREA TO BE DISTURBED.
- THE PROPOSED E & S BMP'S HAVE BEEN PROVIDED TO PREVENT SEDIMENT DISCHARGE FROM THE SITE AND TO ENSURE AN INCREASE IN THE RATE OF RUNOFF DOES NOT OCCUR DURING CONSTRUCTION.

PAST AND PRESENT LAND USES:

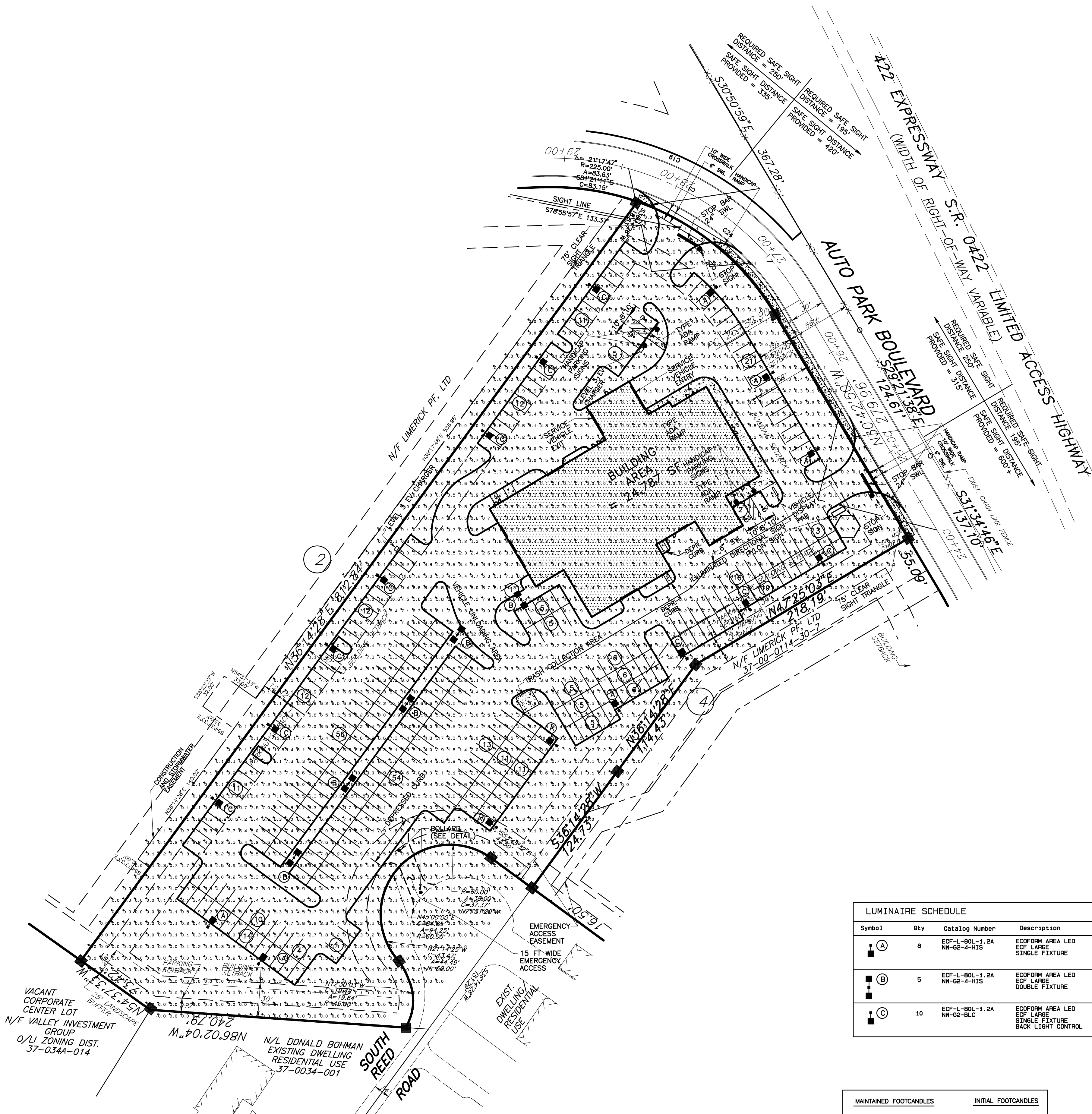
THE SITE FOR THE PAST FIVE YEARS HAS BEEN AN UNDEVELOPED INDUSTRIAL LOT WITH WOODS AND MEADOW AREAS. FIFTY YEARS FROM THE CURRENT DAY THE SITE WAS AN AGRICULTURAL USE WITH CROPS BEING GROWN.

THERE ARE NO GEOLOGIC CONDITIONS FOUND ON THE SITE THAT REQUIRE ATTENTION DURING CONSTRUCTION.

THE TRACT DRAINS TO AN UNNAMED TRIBUTARY OF THE SCHUYLKILL RIVER WATERSHED. ALL TRIBUTARIES IN THIS SECTION ARE CLASSIFIED WWF, MF IN PA CODE CHAPTER 93. THIS TRIBUTARY IS IMPAIRED BY FLOW REGIME ALTERATION & SILTATION CAUSED BY URBAN RUNOFF / STORM SEWERS. NO FINALIZED TMDLS EXIST.

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<u>MAINTAINED FOOTCANDLES</u>	<u>INITIAL FOOTCANDLES</u>
AVERAGE $F_c = 4.0$	AVERAGE $F_c = 4.21$
MAXIMUM $F_c = 15.5$	MAXIMUM $F_c = 16.52$
MINIMUM $F_c = 1.7$	MINIMUM $F_c = 1.79$

1. POST-APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED FOR TOWNSHIP REVIEW AND APPROVAL.
2. THE TOWNSHIP RESERVES THE RIGHT TO CONDUCT POST-INSTALLATION NIGHTTIME INSPECTIONS TO VERIFY COMPLIANCE WITH THE ZONING ORDINANCE AND IF APPROPRIATE, TO REQUIRE REMEDIAL ACTION AT THE EXPENSE OF THE OWNER.
3. ALL FIXTURES SHALL MEET IESNA FULL CUTOFF CRITERIA.
4. ALL LIGHTS TO BE TURNED ON BY PHOTOCELL.
5. ALL OUTSIDE LIGHTING SHALL BE POINTED STRAIGHT DOWN AND SHALL NOT BE SHINED OR REFLECTED IN ANY MANNER THAT WILL NOT BE VIEWED FROM ANY POINT OF THE LOT ON WHICH THE BUILDING, STRUCTURE, DRIVEWAY OR PARKING AREA BEING ILLUMINATED IS LOCATED AND SO THAT ONLY THE BUILDING OR AREA BEING ILLUMINATED IS ILLUMINATED. LIGHTS SHALL BE AIMED, LOCATED, DESIGNED, FITTED AND MAINTAINED SO AS NOT TO PRESENT A HAZARD TO DRIVERS OR PEDESTRIANS BY IMPAIRING THEIR ABILITY TO SAFELY TRAVEL. LIGHTS SHALL NOT BE SO NOISY AS TO PROJECTIONS OR REFLECTING OBJECTIONABLE LIGHT ONTO A NEIGHBORING USE OR PROPERTY.
6. ALL LIGHTING SHALL COMPLY WITH THE REQUIREMENTS IN I-515-17 AND PARTIAL CUTOFF CRITERIA FOR LIGHTING WHERE THE LATEST IESNA STANDARDS AND THAT LIGHTING ON PREDOMINANTLY HORIZONTAL SURFACES SUCH AS ROADWAYS, VEHICULAR AND PEDESTRIAN TRAVEL AREAS, AREAS OF ACCESS TO BUILDING ENTRANCES, SIDEWALKS, PARKING AREAS, ETC., FIXTURES SHALL BE AIMED STRAIGHT DOWN AND SHALL MEET IESNA FULL CUTOFF CRITERIA IN ACCORDANCE WITH I-515-17-1.5-17.1.5-17.2.(2).

DETAIL LIGHT POLE FOUNDATION

N.T.S.

The diagram illustrates the foundation for a light pole. Key components and dimensions include:

- Pole Dimensions:** A straight square steel pole (EMCO SS54-18-4-7-D1-WP) cut to 17'-6" height.
- Foundation Height:** Total height is 17'-6". The distance from the curb to the top of the pole is 20'. The base of the pole has a 2'-6" width.
- Base Details:** The pole sits on a base cover with a 1" chamfer. Below this is a concrete foundation with a 2'-6" width at the base.
- Reinforcement:** The foundation contains a #4 rebar cage at 6" o.c., extending 1' from each way to the top and bottom. Anchor bolts are provided per manufacturer requirements, with 5/8" x 6' long copper weld driver ground rods.
- Other Features:** A conduit runs along the side of the pole. The sonotube diameter is 24".

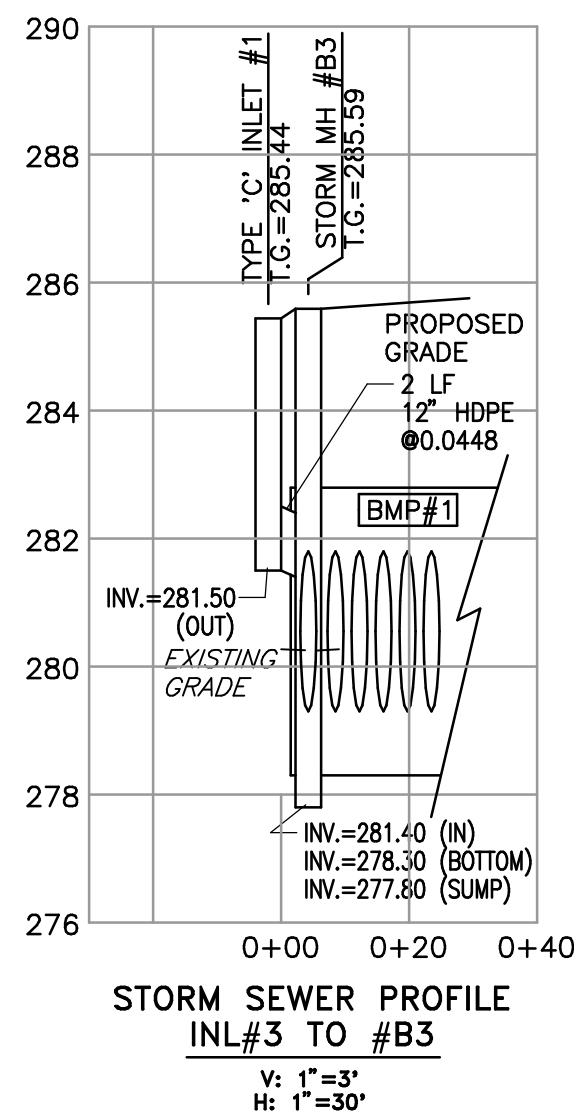
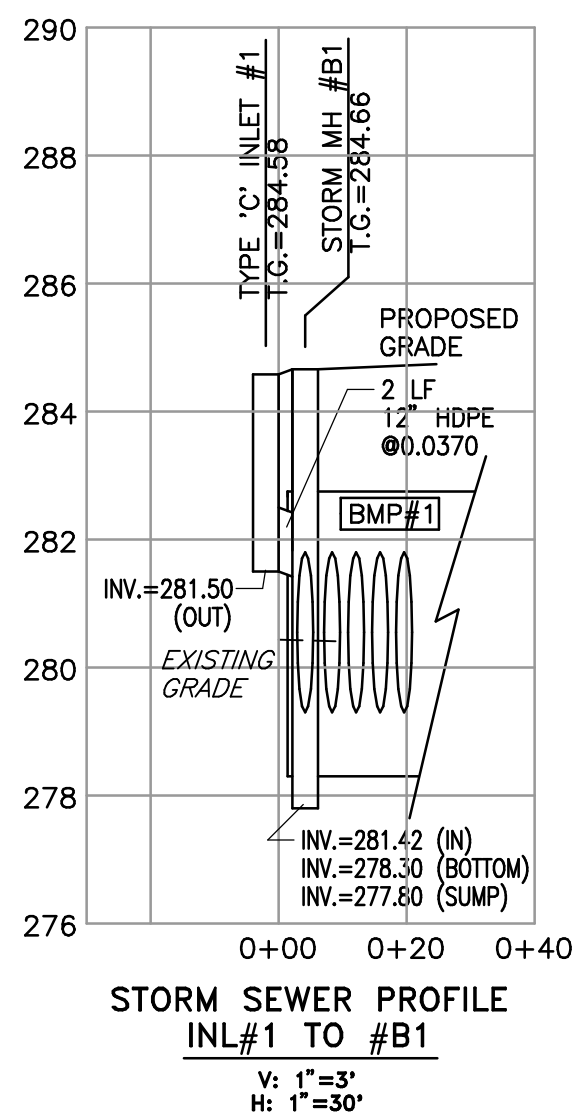
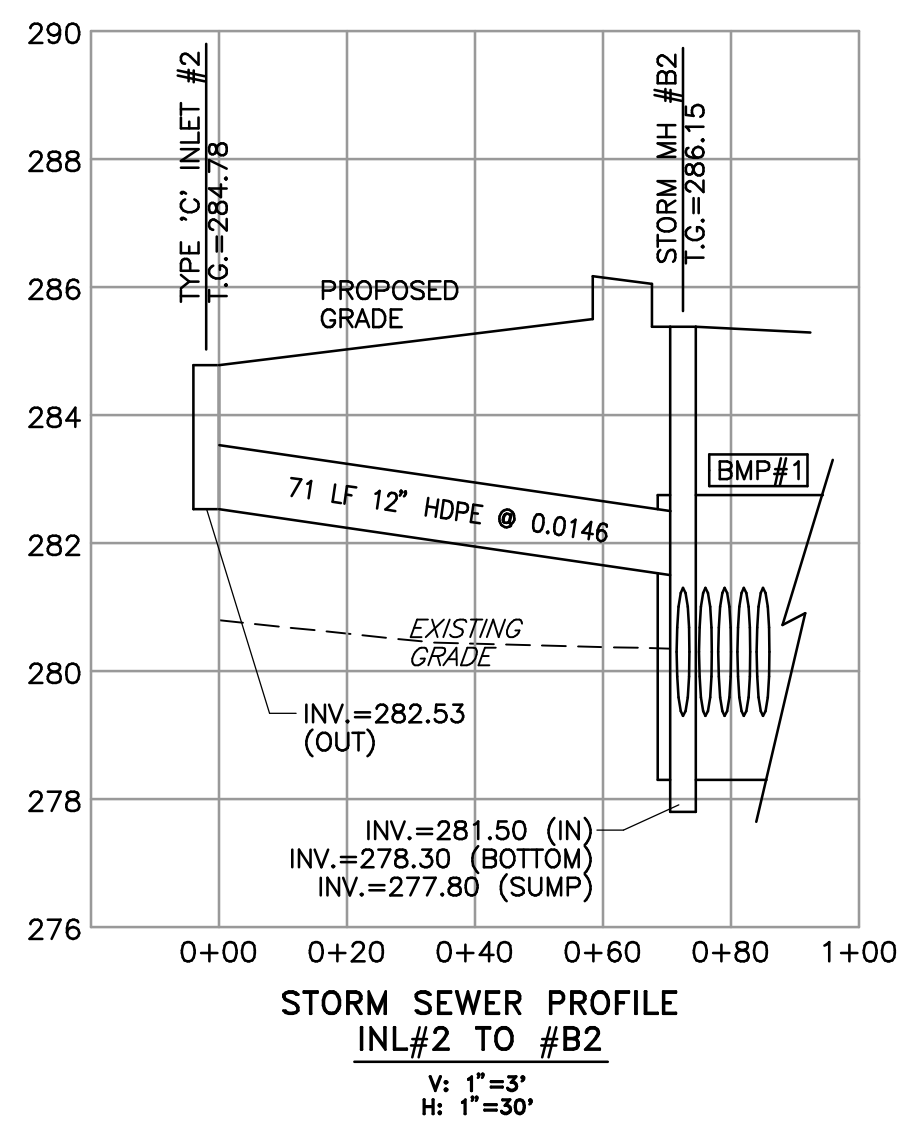
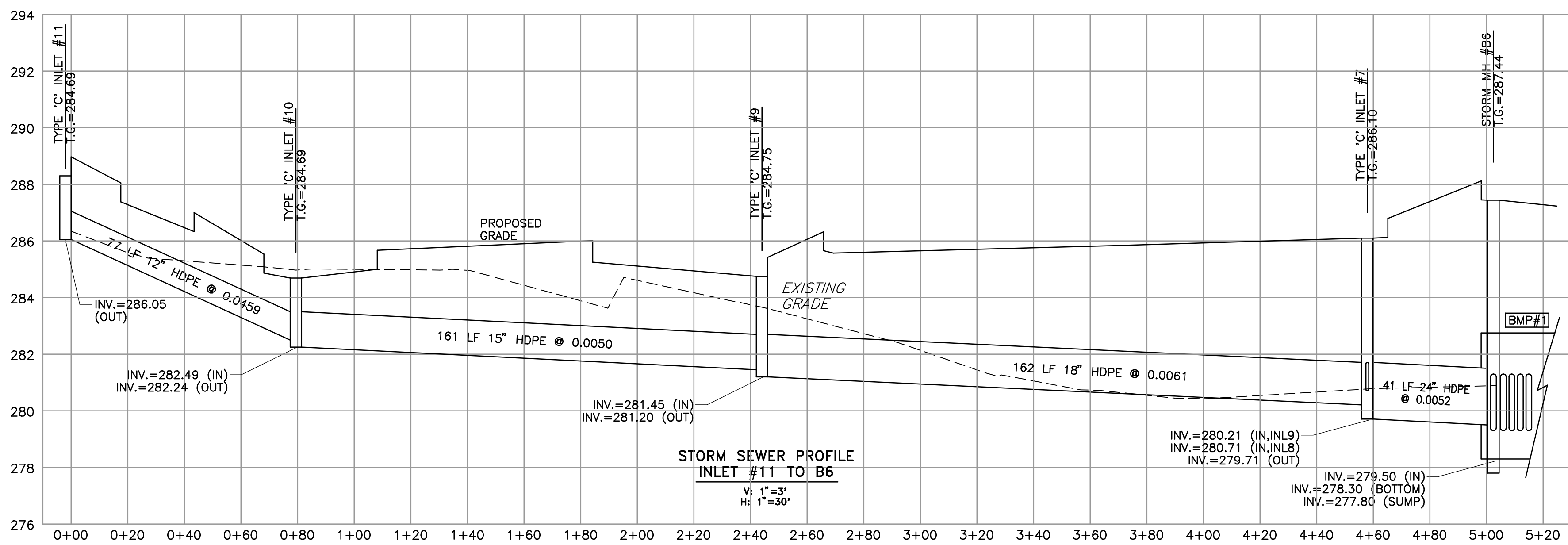
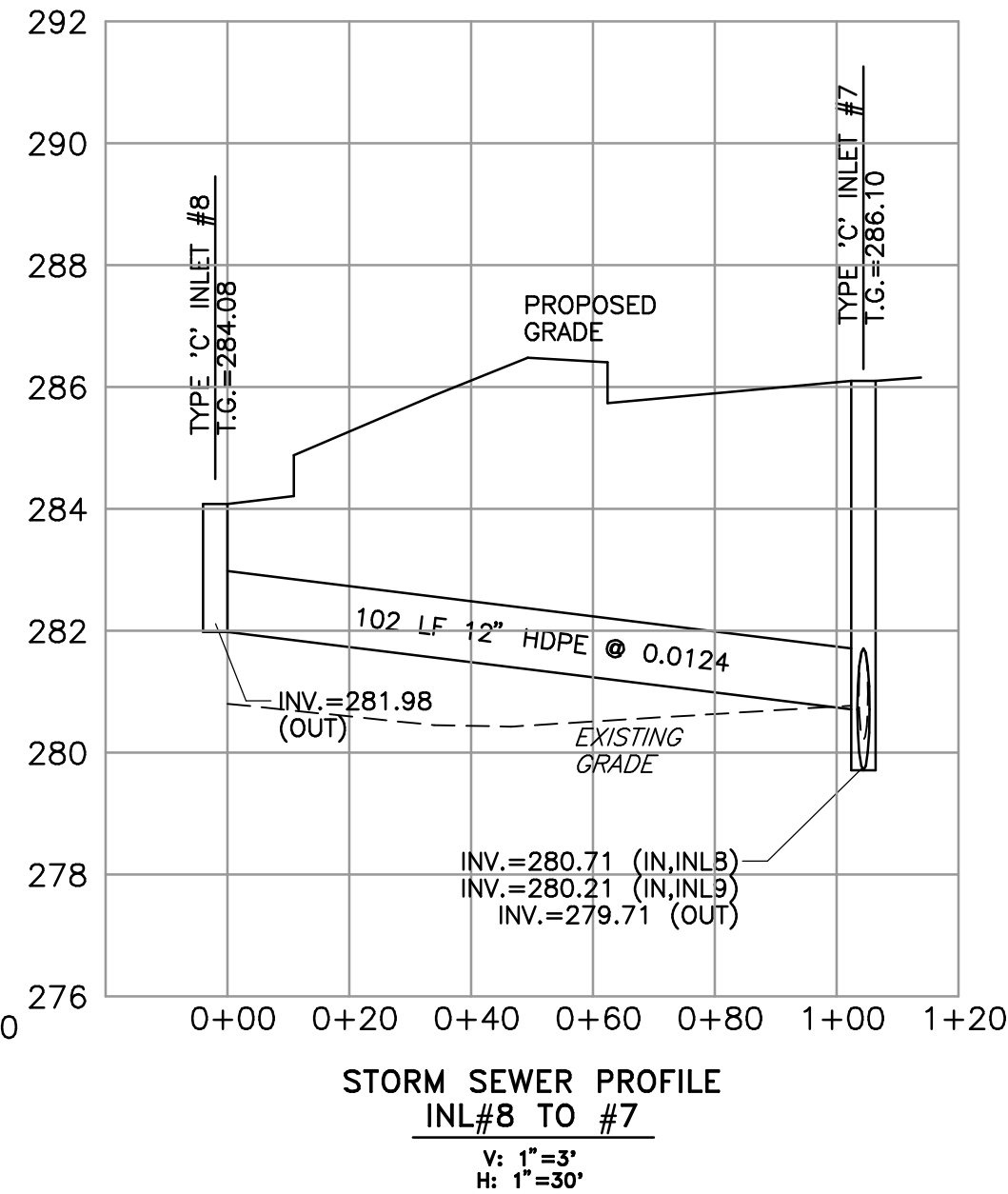
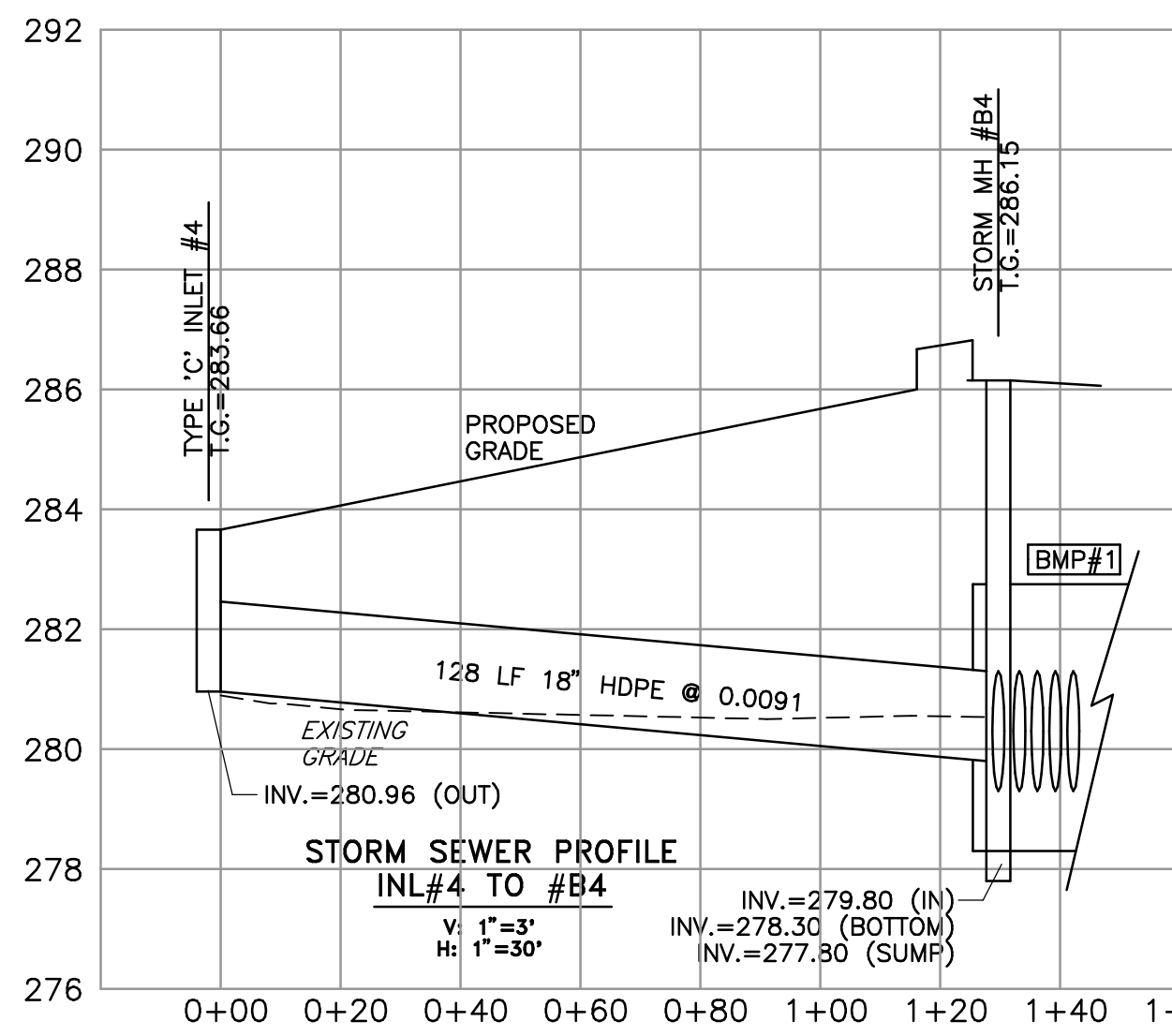
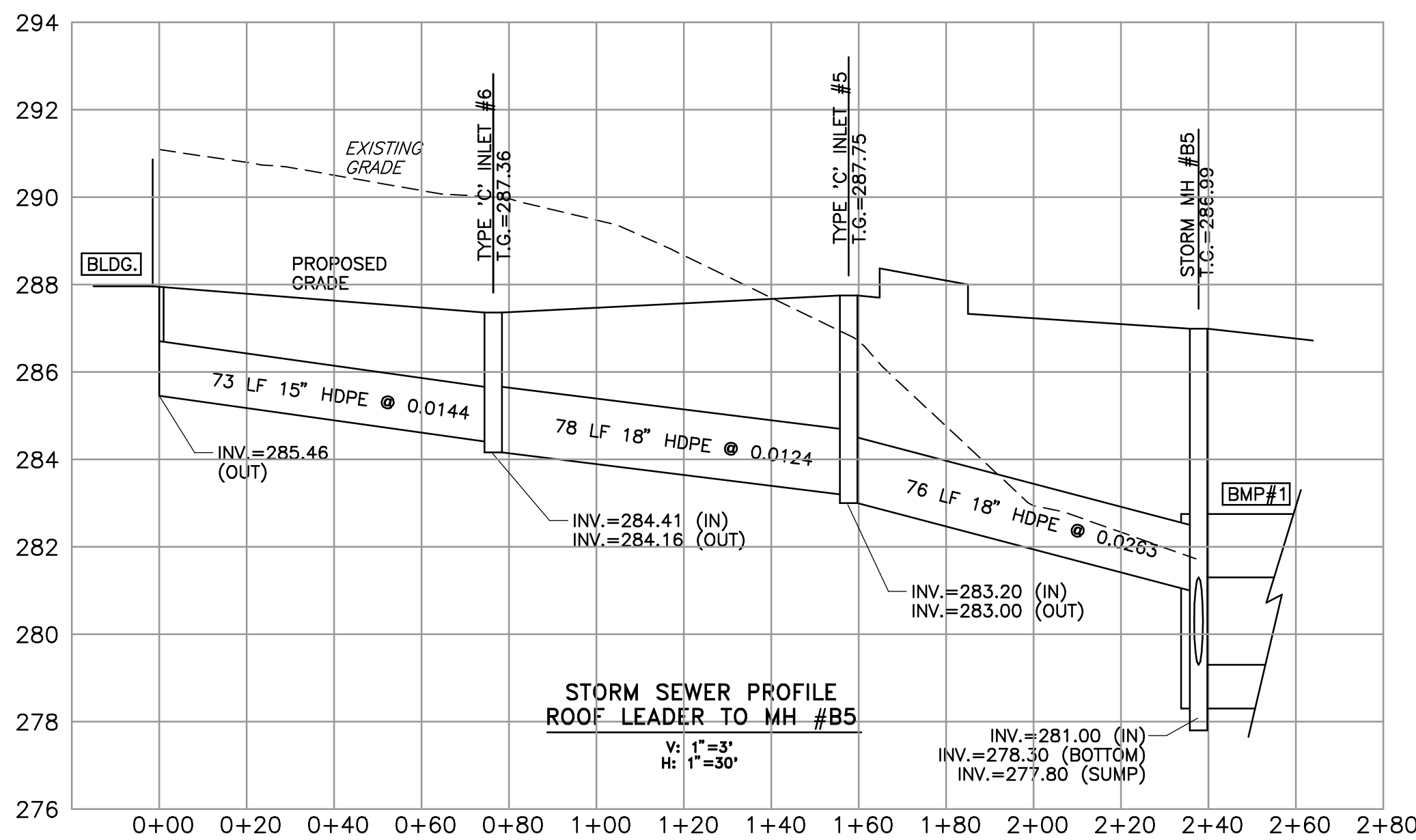
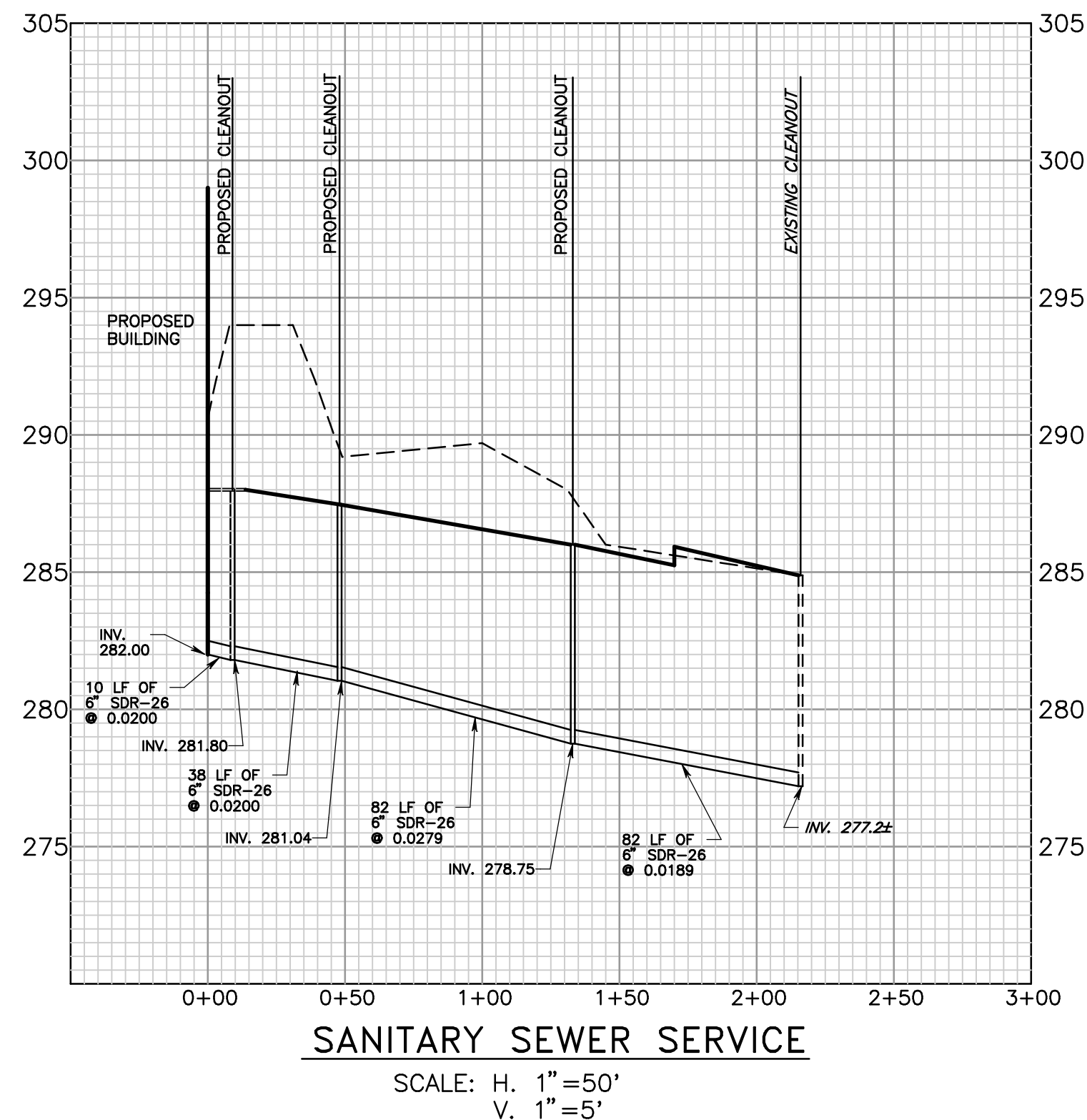
NOTE: IF LIGHT FIXTURE IS IN LOCATION WHERE THERE IS NO CURB THEN POLE FOUNDATION IS 1'-6" FROM SIDEWALK.

[illegible]

5.	11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4.	10-20-22	ADDRESS CCCD COMPLETENESS ITEMS (UPDATED 12-9-22)
3.	10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
2.	6-29-22	REVISED PER TOWNSHIP CONSULTANT JUNE REVIEW LETTERS

LAND DEVELOPMENT PLAN FOR LOT 3 LIMERICK AUTOPARK

LIMERICK TOWNSHIP		MONTGOMERY COUNTY, PA											
Edward B. Walsh & Associates, Inc.													
CIVIL ENGINEERS & SURVEYORS													
Whiteland Business Park 855 Springdale Drive, Suite 202 Exton, Pennsylvania 19341 Phone: 610-903-0860 Fax: 610-903-0080		 <table border="1"> <tr> <td>Project-</td> <td>2616</td> </tr> <tr> <td>Date-</td> <td>2-25-22</td> </tr> <tr> <td>Scale-</td> <td>1" = 50'</td> </tr> <tr> <td>Drawn-</td> <td>SLM</td> </tr> <tr> <td>Checked-</td> <td>AJB</td> </tr> </table>		Project-	2616	Date-	2-25-22	Scale-	1" = 50'	Drawn-	SLM	Checked-	AJB
Project-	2616												
Date-	2-25-22												
Scale-	1" = 50'												
Drawn-	SLM												
Checked-	AJB												



FINAL PROFILE SHEET

5. 11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4. 10-20-22	ADDRESS OCCD COMPLETENESS ITEMS (UPDATED 12-9-22)
3. 10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
2. 6-29-22	REVISED PER TOWNSHIP CONSULTANT JUNE REVIEW LETTERS
LAND DEVELOPMENT PLAN FOR LOT 3 LIMERICK AUTOPARK	
LIMERICK TOWNSHIP	MONTGOMERY COUNTY, PA
Edward B. Walsh & Associates, Inc. CIVIL ENGINEERS & SURVEYORS	Project- 2616 Date- 2-25-22
Whiteland Business Park 855 Springdale Drive, Suite 202 Exton, Pennsylvania 19341 Phone: 610-903-0060 Fax: 610-903-0080	Scale- 1"= 50' Drawn- SLM Checked- AJB Sheet- 7 OF 16
Plotted: 12/29/2022	File: F:\JB\2616\LOT 3\FPS\2616-LOT 3-B.pro

PLANTING SCHEDULE					
QTY	SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	NOTES
§155-16 PARKING LOT LANDSCAPING TREES					
3		GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEY LOCUST	2.5-3" CAL., B&B, SPACING AS SHOWN	
11		MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	1.5" CAL., B&B, SPACING AS SHOWN	
6		ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE AMERICAN ELM	2.5-3" CAL., B&B, SPACING AS SHOWN	
GROUND COVER					
87		JUNIPERUS HORIZONTALIS	CREEPING JUNIPER	18-24" HT., 5" O.C.	
§155-27 STREET TREES & IMPERVIOUS LANDSCAPING TREES					
9		ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5-3" CAL., B&B, SPACING AS SHOWN	
3		GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEY LOCUST	2.5-3" CAL., B&B, SPACING AS SHOWN	
8		QUERCUS BICOLOR	SWAMP WHITE OAK	2.5-3" CAL., B&B, SPACING AS SHOWN	
§155-27.1 BUFFERS AND SCREENS TREES					
13		CERCIS CANADENSIS	EASTERN REDBUD	1.5" CAL., B&B, SPACING AS SHOWN	
6		GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEY LOCUST	2.5-3" CAL., B&B, SPACING AS SHOWN	
7		MALLUS X 'ADIRONDAK'	ADIRONDAK CRABAPPLE	1.5" CAL., B&B, SPACING AS SHOWN	
11		NYSSA SLYATICA	BLACK GUM	2.5-3" CAL., B&B, SPACING AS SHOWN	
21		CRYPTOMERIA JAPONICA 'YOSHINO'	YOSHINO JAPANESE CEDAR	6-8" HT., B&B, SPACING AS SHOWN	
20		PICEA ABIES	NORWAY SPRUCE	6-8" HT., B&B, SPACING AS SHOWN	
20		PINUS STROBUS	WHITE PINE	6-8" HT., B&B, SPACING AS SHOWN	
SHRUBS					
20		CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	18-24" HT., 5" O.C.	
25		MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	18-24" HT., 5" O.C.	
23		VIBURNUM 'PRAGENSE'	PRAGUE VIBURNUM	18-24" HT., 5" O.C.	
§155- SITE ELEMENT SCREENS SHRUBS, GRASSES, AND GROUND COVERS					
162		CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	18-24" HT., 3" O.C.	
116		FOTHERGILLIA GARDENII	DWARF FOTHERGILLIA	18-24" HT., 3" O.C.	
229		ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	18-24" HT., 3" O.C.	
572		PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GALLON, 24" O.C.	
424		PENNISETUM ALOPECUROIDES 'HAEMEL'	DWARF FOUNTAIN GRASS	1 GALLON, 24" O.C.	

LIMERICK TOWNSHIP LANDSCAPING REQUIREMENTS DISTRICT : OFFICE / LIMITED INDUSTRIAL (O/LI)			REQUIRED	PROPOSED
CODE LANGUAGE §155-16 DRIVEWAYS & PARKING AREAS (SALDO) C. PARKING LOT LANDSCAPING (2)(e) EACH PLANTING ISLAND SHALL CONTAIN 1 CANOPY TREE & A SHRUB OR GROUND COVER (3) PARKING LOTS SHALL BE SCREENED FROM PUBLIC ROADS & ADJACENT PROPERTIES PER §155-27.1				20 CANOPY TREES 87 GROUND COVER
§155-27 STREET TREES & LANDSCAPING (SALDO) C. STREETS TREES SHALL BE PLACED BETWEEN THE ROW & BUILDING SETBACK (4) 1 TREE PER 50 LF OF ROAD FRONTAGE AUTO PARK BLVD: 274 / 50 = 5.5 TREES TREES			6 DECIDUOUS TREES	6 DECIDUOUS TREES*
D. 1 ADDITIONAL TREE SHALL BE PLANTED FOR EACH 10,000 SQFT. OF ADDED IMPERVIOUS COVERAGE MAX IMPERVIOUS COVERAGE NET LOT AREA- 138,170 SF 138,170 / 10,000 = 13.8 OR 14 ADDITIONAL TREES			14 DECIDUOUS TREES	14 DECIDUOUS TREES
§155-27.1 BUFFERS AND SCREENS (SALDO) C.(1)(a) PROPERTY LINE BUFFERS ARE REQUIRED ON ALL NONRESIDENTIAL DEVELOPMENTS C.(4). BUFFER AREA LOCATIONS & DIMENSIONS (a) BUFFER AREAS SHALL BE NO LESS THAN 25'-0" WIDE (c) BUFFER AREAS SHALL BE CONTINUOUS PERVIOUS BEDS OF TREES, SHRUBS, & GROUND COVER C.(5). BUFFER PLANTINGS PER 100 LF OF PROPERTY LINE (a) LOW INTENSITY: 1 CANOPY AND 1 ORNAMENTAL TREE. - EVERGREEN TREES CAN BE SUBSTITUTED EAST TRACT A + B: 594 / 100 = 5.94 5.94 X 1 = 5.94 CANOPY TREES 5.94 X 1 = 5.94 ORNAMENTAL TREES WEST TRACT: 813 / 100 = 8.1 8.1 X 1 = 8 CANOPY TREES 8.1 X 1 = 8 ORNAMENTAL TREES (c) HIGH INTENSITY: 1 EVERGREEN TREE EVERY 8 LF STAGGERED 12' ON CENTER. 2 ORNAMENTAL AND 1 CANOPY 15 SHRUBS OR 750 SQFT OF PERENNIALS PROVIDED FOR EVERY 100 LF - 1 SHRUB SUBSTITUTED EVER 50 SQFT. OF PERENNIALS. SOUTH TRACT: 304 / 100 = 3 3 X (100 / 8 = 12.5) = 37.5 EVERGREEN TREES 3 X 2 = 6 ORNAMENTAL TREES 3 X 1 = 3 CANOPY TREES 3 X 15 = 45 SHRUBS			6 CANOPY TREES 6 ORNAMENTAL TREES 8 CANOPY TREES 8 ORNAMENTAL TREES 38 EVERGREEN TREES 6 ORNAMENTAL TREES 3 CANOPY TREES 45 SHRUBS	6 CANOPY TREES 6 ORNAMENTAL TREES 8 CANOPY TREES 8 ORNAMENTAL TREES 40 EVERGREEN TREES 6 ORNAMENTAL TREES 3 CANOPY TREES 45 SHRUBS
D. SITE ELEMENT SCREENS (a) TYPE NO. 1 : SHRUBS PLACED 3' O.C. IN PLANT BEDS TO CREATE A HEDGE-LIKE APPEARANCE AUTO PARK BLVD: 278 / 3 = 92.6			93 SHRUBS	93 SHRUBS ** 220 GRASSES
EAST TRACT: 594 / 3 = 198			198 SHRUBS	198 SHRUBS 280 GRASSES
WEST TRACT: 647 / 3 = 215.6			216 SHRUBS	216 SHRUBS 500 GRASSES

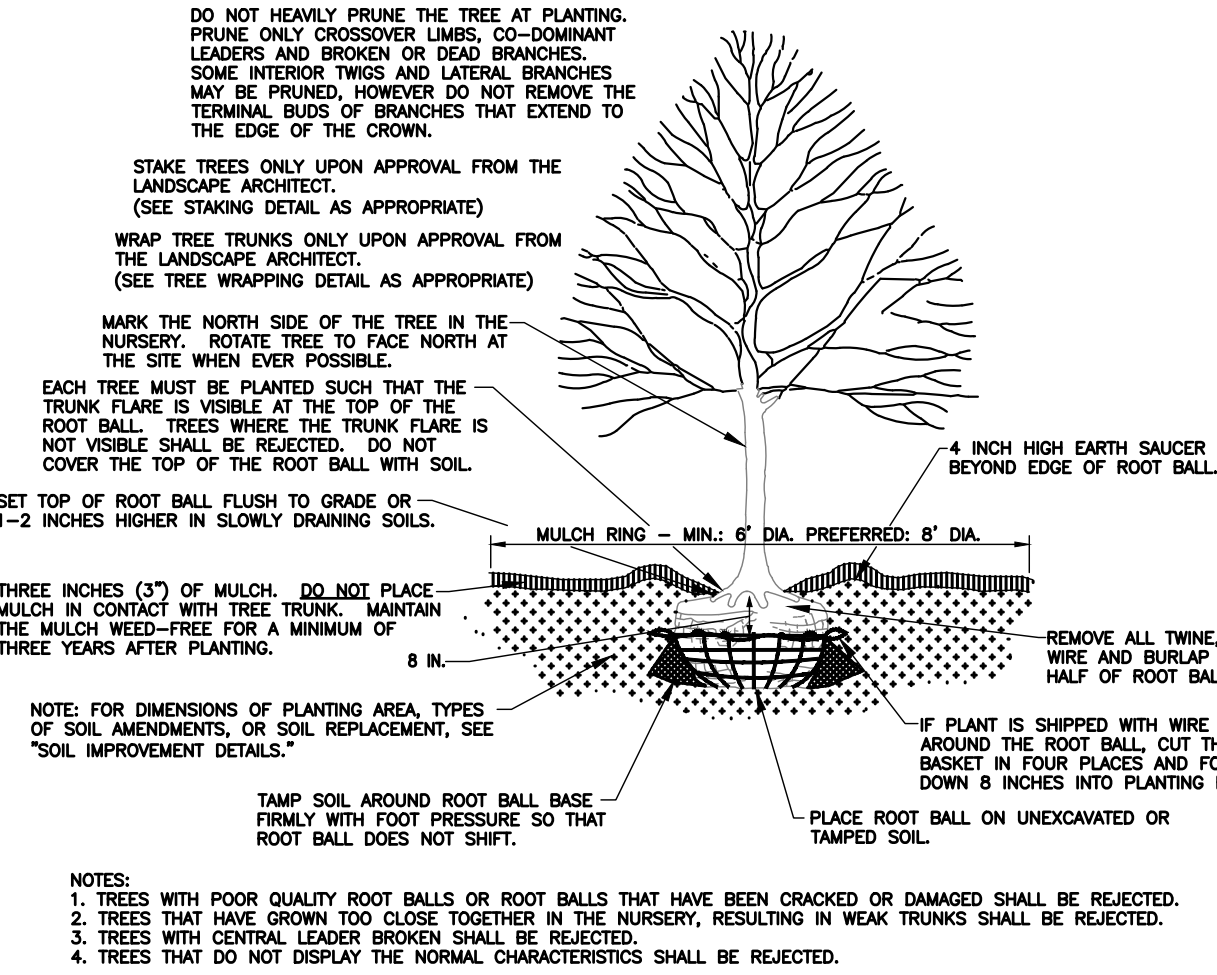
*THE PROPOSED STREET TREES ALONG AUTOPARK BLVD. HAVE BEEN GROUPED AND ARE IN AGREEMENT WITH THE ADJACENT PROPERTY.
** FOR VISIBILITY CONSIDERATIONS THE APPLICANT HAS LOCATED SOME OF THE PLANT MATERIAL FOR AUTOPARK BLVD. ROAD SCREENINGS AROUND THE MAIN BUILDING.

GENERAL PLANTING NOTES:

- ALL PLANT MATERIAL SHALL BE GUARANTEED FOR 18 MONTHS.
- ALL PLANT MATERIAL SHALL BE OF SPECIMEN QUALITY.
- ALL PLANT MATERIAL SHALL BE LAID OUT IN FIELD BY LANDSCAPE ARCHITECT. (NOTE: NO SHRUBS SHALL BE PLANTED UNTIL ALL TREE PLANTING IS COMPLETED.)
- ALL PLANT MATERIAL SHALL BE THOROUGHLY WATERED DURING INSTALLATION AND THROUGHOUT THE GUARANTEE PERIOD.
- ALL PLANT MATERIAL SHALL BE WATERED BY CONTRACTOR AT LEAST THREE (3) TIMES IN ABSENCE OF NATURAL RAINFALL OR UNTIL THE END OF THE GUARANTEE PERIOD.
- ALL TREES SHALL BE PROVIDED WITH A 3" DEEP SAUCER, CONSISTING OF SHREDED OAK BARK MULCH.
- ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PLANT ACCORDING TO ANSI A300 PART 6.
- CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT WITH NURSERY SOURCE OF ALL PLANT MATERIAL. LANDSCAPE ARCHITECT SHALL PERFORM A SITE VISIT TO INSPECT NURSERY SOURCE PRIOR TO DELIVERY OF ANY PLANT MATERIAL.
- ALL TREES AND SHRUBS DELIVERED TO THE SITE SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. ALL TREES AND SHRUBS SHALL HAVE WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.
- ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE TOWNSHIP.
- ANY PLANT MATERIAL EXHIBITING SIGNS OF DISEASE, INSECTS, EGGS, LARVAE AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS OR DISFIGUREMENT SHALL BE REJECTED.
- ALL PROPOSED SHRUBS SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS, CONSISTING OF 3" OF OAK BARK MULCH. SCARIFY THE SUBGRADE AND SIDES OF THE PLANTING HOLE WHEN PLANTING IN CLAY SOILS (MORE THAN 15% CLAY).
- LIFT AND SET THE TREE BY ROOTBALL ONLY. DO NOT LIFT USING THE TREE TRUNK AND DO NOT USE TREE TRUNK AS A LEVER.
- SET THE TOP OF THE ROOTBALL LEVEL WITH THE SOIL SURFACE OR SLIGHTLY HIGHER IF THE SOIL IS PRONE TO SETTLING.
- AFTER THE TREE IS SET IN PLACE, REMOVE BURLAP, WIRE AND STRAPS FROM AT LEAST THE UPPER 1/2 OF THE ROOTBALL.
- PRUNING SHALL BE LIMITED TO DEAD, DISEASED, OR BROKEN LIMBS ONLY AND SHALL BE IN ACCORDANCE WITH THE ANSI A300 SPECIFICATIONS. IF ADDITIONAL PRUNING IS NECESSARY, IT SHALL BE DONE BY A CERTIFIED ARBORIST.
- REMOVE ANY TRUNK WRAP REMAINING AT TIME OF PLANTING. NO WRAPS SHALL BE PLACED ON TRUNK.
- DO NOT REMOVE TREE IDENTIFICATION TAGS UNTIL THE LANDSCAPE ARCHITECT HAS CONFIRMED CORRECT SPECIES MATCHES THE PROJECT PLANTING SCHEDULE.
- LANDSCAPING MATERIALS SHALL BE FIELD ADJUSTED DURING INSTALLATION TO AVOID CONFLICT BETWEEN THE LIGHT FIXTURES, UTILITIES, AND TREE CANOPIES.

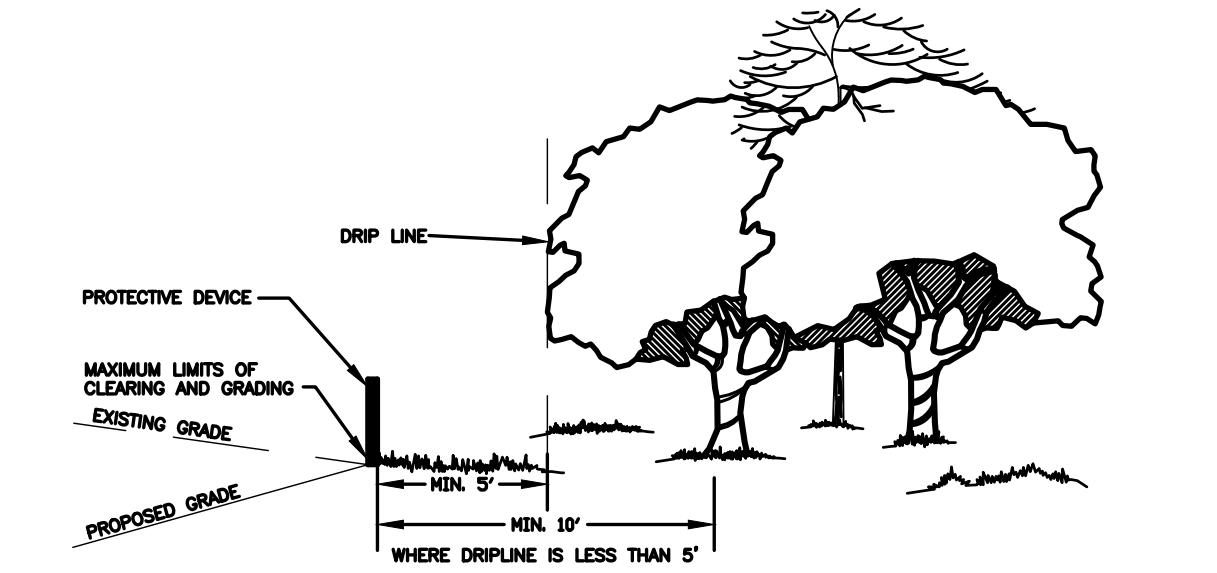
LIMERICK TOWNSHIP SPECIFIC NOTES:

- A. General requirements.
(1) The location, dimensions and spacing of required plantings should be adequate for their proper growth and maintenance, taking into account the sizes of such plantings at maturity and their present and future environmental requirements, such as wind, soil, moisture and sunlight.
- B. Plant specifications.
All plants shall meet the minimum standards for health, form and root condition as outlined in the American Association of Nurserymen (AAN) standards.
- (1) All plant material shall be hardy within the United States Department of Agriculture (USDA) Hardiness Zone 6, applicable to Limerick Township.
- (2) Canopy trees shall reach a minimum height and spread of 30 feet at maturity as determined by the AAN standards and shall be deciduous. New trees shall have a minimum caliper of 2.5 inches at planting.
- (3) Ornamental trees or large shrubs shall reach a typical minimum height of 10 feet at maturity based on AAN standards. Trees and shrubs may be deciduous or evergreen and shall have a distinctive ornamental character such as showy flowers, fruit, habit, foliage or bark. New ornamental trees shall have a minimum height of six feet or a one-and-one-half-inch caliper. New large shrubs shall have a minimum size of 2.5 to three feet at time of planting.
- (4) Small shrubs may be evergreen or deciduous and shall have a minimum height at maturity of four feet based on AAN standards for that species. New shrubs shall have a minimum size of 18 inches at time of planting.
- (5) Evergreen trees shall reach a typical height of 20 feet at maturity based on AAN standards for that species and shall remain evergreen throughout the year. New evergreens shall have a minimum height at planting of six feet.
- C. Maintenance.
Required plant material shall be maintained for the life of the project to achieve the required visual effect of the buffer or screen. It shall be the ultimate responsibility of successive property owners to ensure that the required plantings are properly maintained. Dead or diseased plant material shall be removed promptly by the property owner and replaced at the next growing season.
- (1) Safety: All sight triangles shall remain clear, and any plant which could endanger safety such as material unstable limbs shall be removed and the plant material replaced. It shall be the responsibility of the property owner to ensure all plantings and architectural elements are maintained to provide a safe environment.
- (2) Maintenance guidelines for the plantings are encouraged to be published by the planting plan designer, to be used by grounds maintenance personnel to ensure the design's visual buffering and screening concepts are continued.
- D. Landscape bond.
(1) Any tree or shrub which dies within 18 months of planting shall be replaced. Any tree or shrub which, within 18 months of planting or replanting, is deemed, in the opinion of the township, not to have survived or to have grown in a manner uncharacteristic of its type shall be replaced. Substitutions for certain species of plants may be made only when approved by the township.



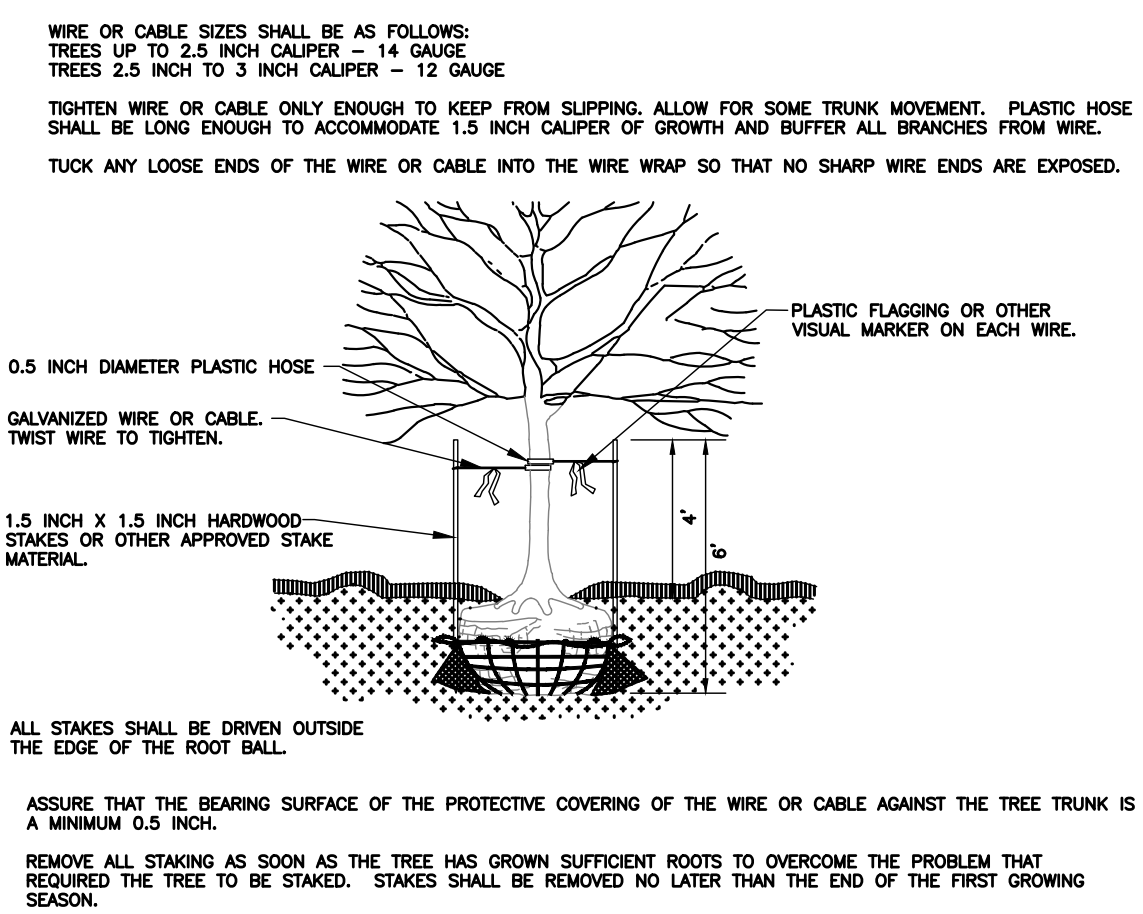
DECIDUOUS TREE PLANTING DETAIL
IN ALL SOIL TYPES

THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 8 FEET SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.



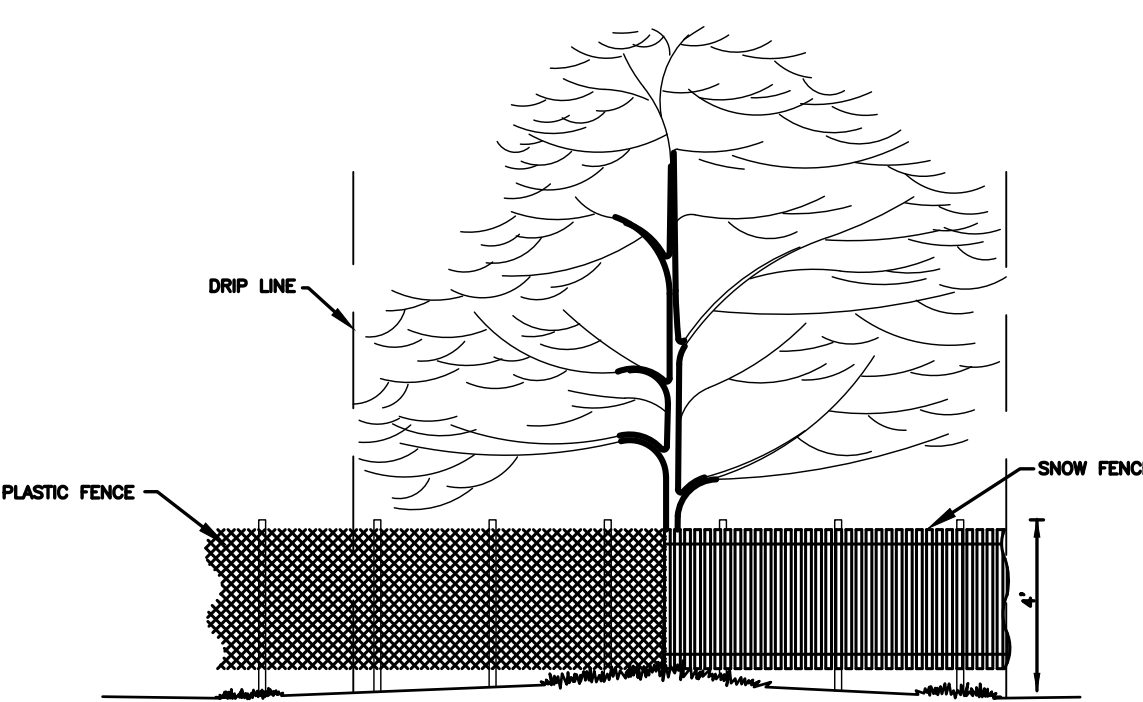
CONSTRUCTION OPERATIONS RELATIVE
TO THE LOCATION OF PROTECTED TREES

N.T.S.



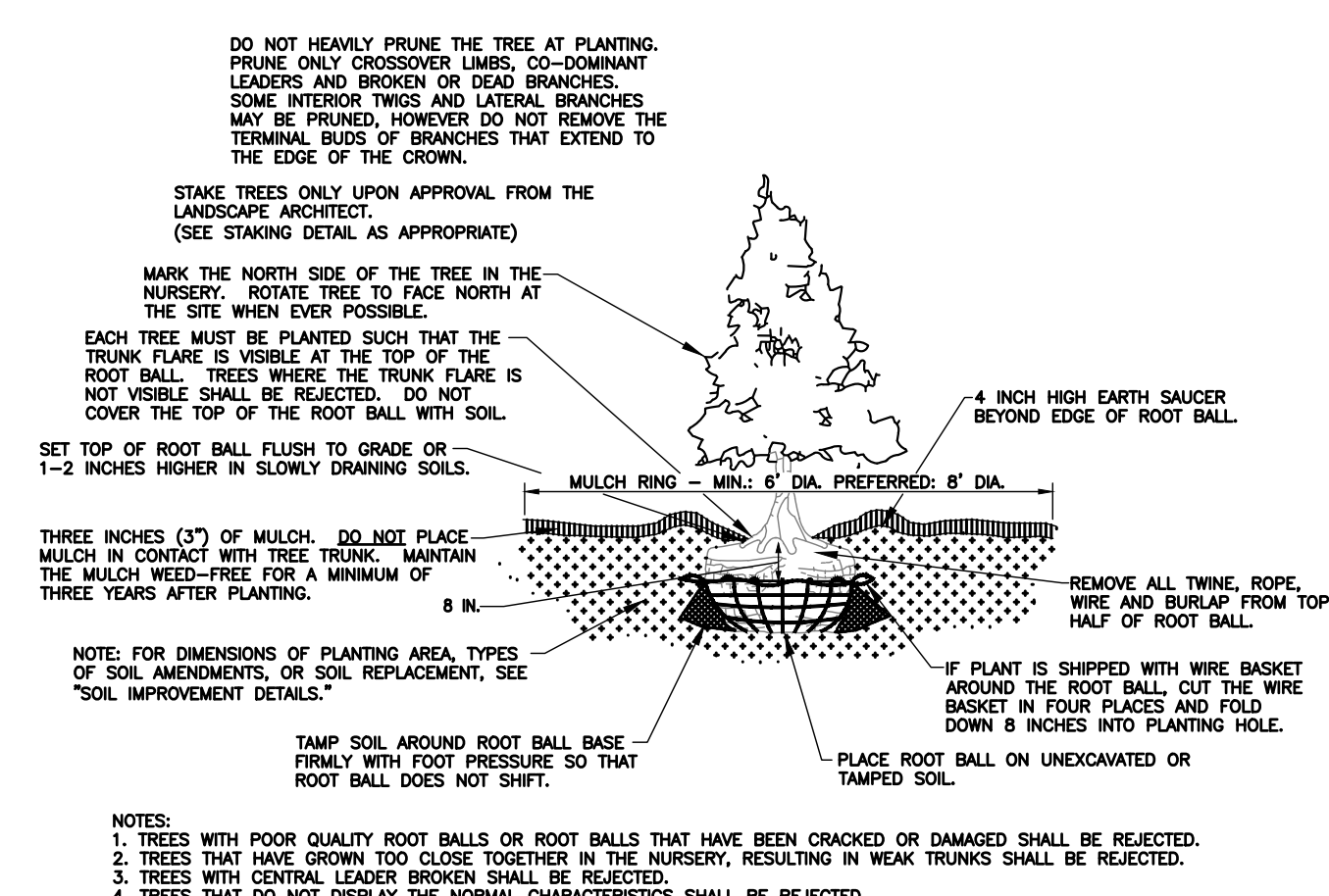
DECIDUOUS TREE STAKING DETAIL
TREES 3\"/>

N.T.S.



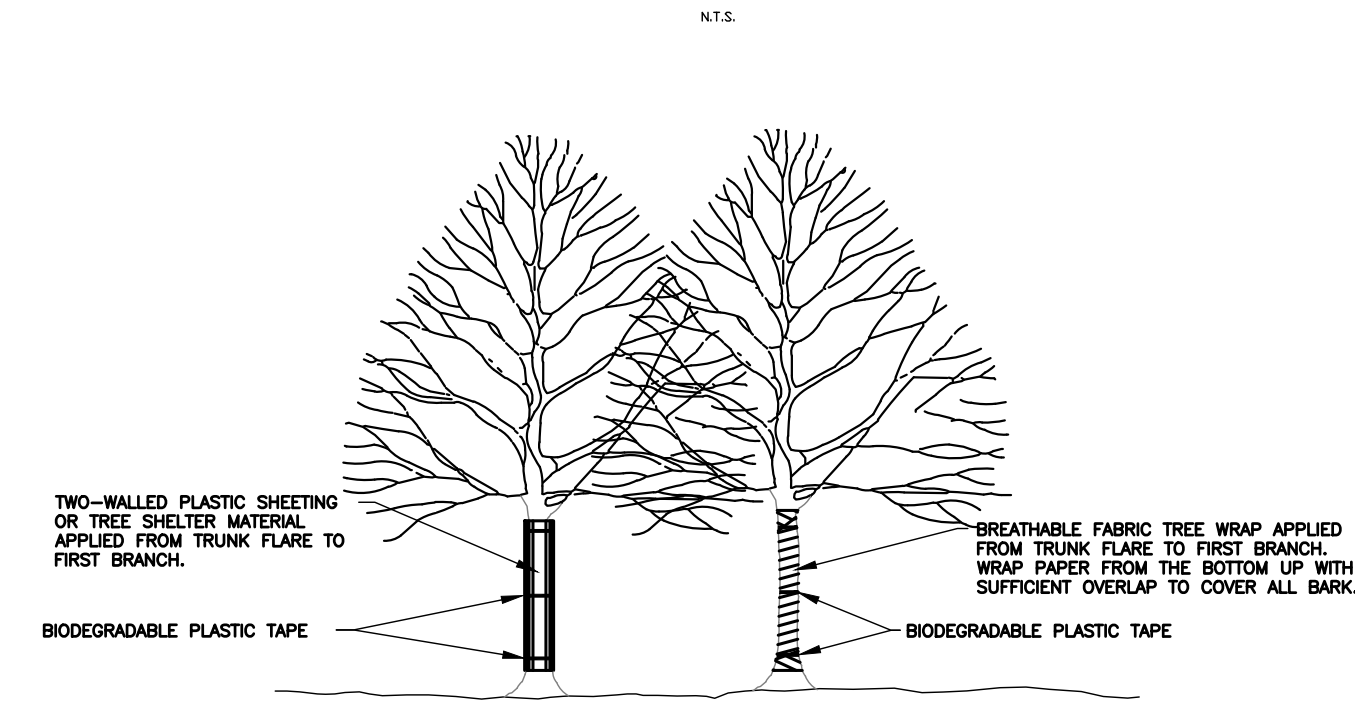
TREE PROTECTION FENCING

N.T.S.



EVERGREEN TREE PLANTING DETAIL
IN ALL SOIL TYPES

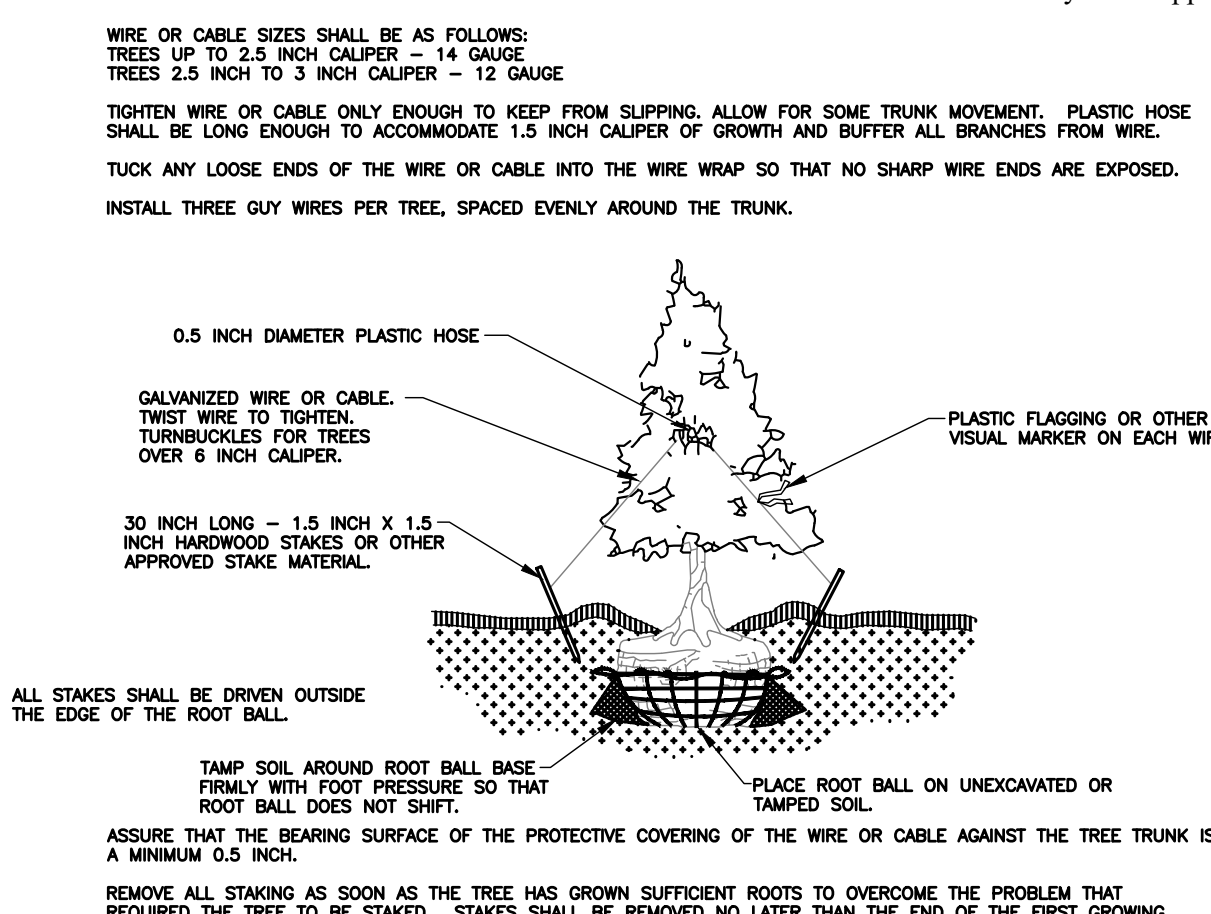
THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 8 FEET SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.



THE TREE WRAP SHOULD BE INSTALLED AT TIME OF PLANTING AND BE REMOVED WHEN DIRECTED BY THE LANDSCAPE ARCHITECT, BUT NO LATER THAN 12 MONTHS AFTER PLANTING.
TREES WHOSE NORTH ORIENTATION IS NOT CHANGED FROM THE NURSERY DO NOT NEED TO BE WRAPPED EXCEPT TREES WITH VERY THIN BARK, SUCH AS RED MAPLE, SHOULD BE WRAPPED IF APPROVED BY THE LANDSCAPE ARCHITECT.

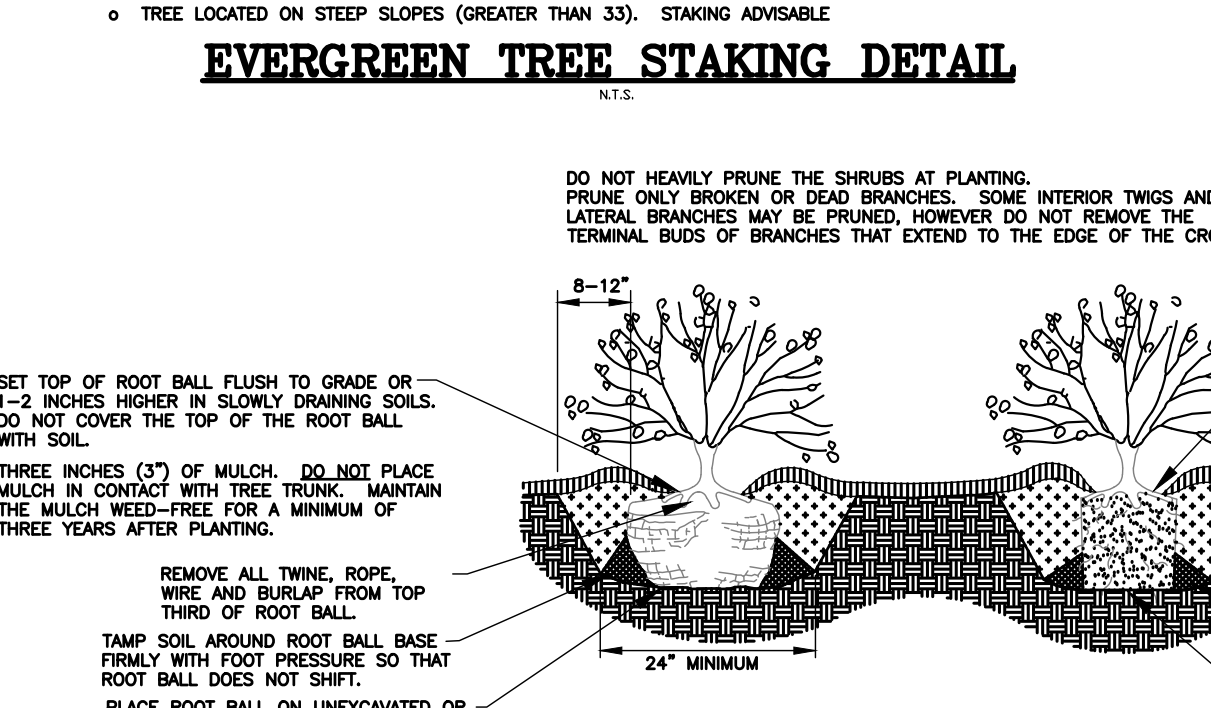
TREE WRAPPING DETAIL

N.T.S.



EVERGREEN TREE STAKING DETAIL

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BALLED AND BURLAPPED CONTAINER

PLANTS WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.
2. PLANTS THAT DO NOT DISPLAY THE NORMAL CHARACTERISTICS FOR THEIR SPECIES SHALL BE REJECTED.

DECIDUOUS & EVERGREEN SHRUB DETAIL

N.T.S.

[PRELIMINARY / FINAL LAND DEVELOPMENT]



SEAL



TEAM

LANDSCAPE ARCHITECT
STUART AND ASSOCIATES, LLC.
860 FIRST AVENUE, SUITE 9B
KING OF PRUSSIA, PA 19406
TEL. 610.337.2100

OWNER
PIAZZA MANAGEMENT COMPANY
1100 1ST AVE
KING OF PRUSSIA, PA. 19406
TEL. 610.630.7911

CIVIL
E.B. WALSH & ASSOCIATES, INC.
WHITELAND BUSINESS PARK
855 SPRINGDALE DRIVE, SUITE 202
EXTON, PA., 19341
TEL. 610.903.0060

PROJECT NAME

HYUNDAI OF
POTTSTOWN

LOT 3 LIMERICK AUTO PARK
LIMERICK TOWNSHIP
MONTGOMERY COUNTY, PA.

REVISIONS

NO.	DATE	NOTES
01	06.01.2022	REVISED PER PENNNONI REVIEW LETTER DATED 04/01/22
02	07.11.2022	REVISED PER PENNNONI REVIEW LETTER DATED 06/17/22
03	12.21.2022	REVISED PER CLIENT REQUEST

DRAWN BY KKM

CHECKED BY PJS

SCALE VARIES

DATE 02.25.2022

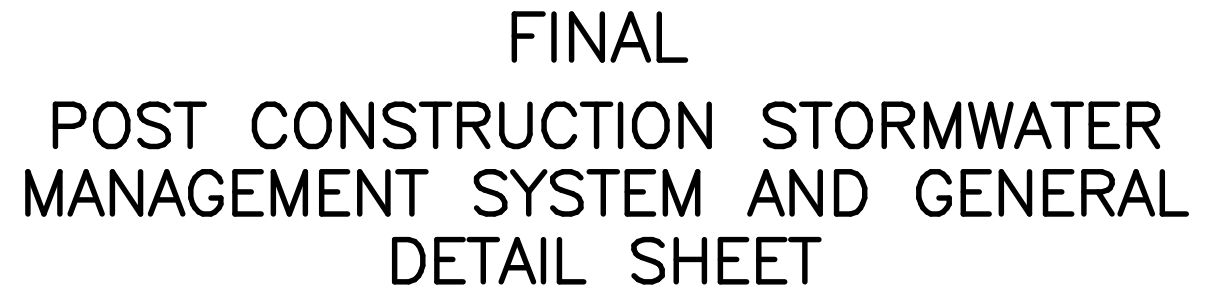
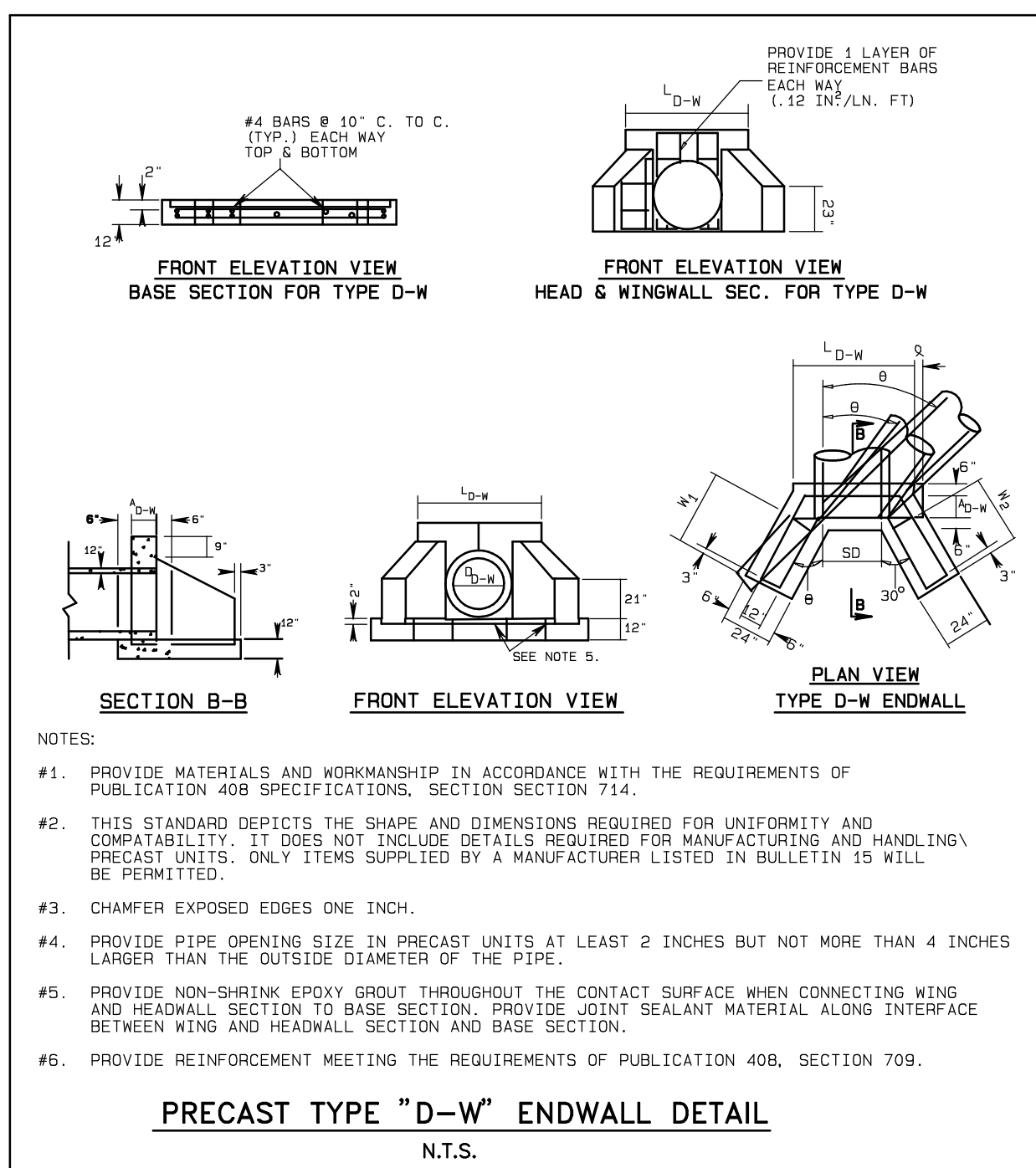
PLOTTED DATE 12.21.2022

DRAWING NAME

TOWNSHIP LANDSCAPE
SCHEDULE + DETAILS

DRAWING NUMBER
SHEET NUMBER

L9.00
02 OF 02



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LAND DEVELOPMENT PLAN
FOR
LOT 3 LIMERICK AUTOPARK

LIMERICK TOWNSHIP MONTGOMERY COUNTY, PA

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

Whiteland Business Park
855 Springdale Drive, Suite 202
Exton, Pennsylvania 19341
Phone: 610-903-0060
Fax: 610-903-0080



Project— 2616

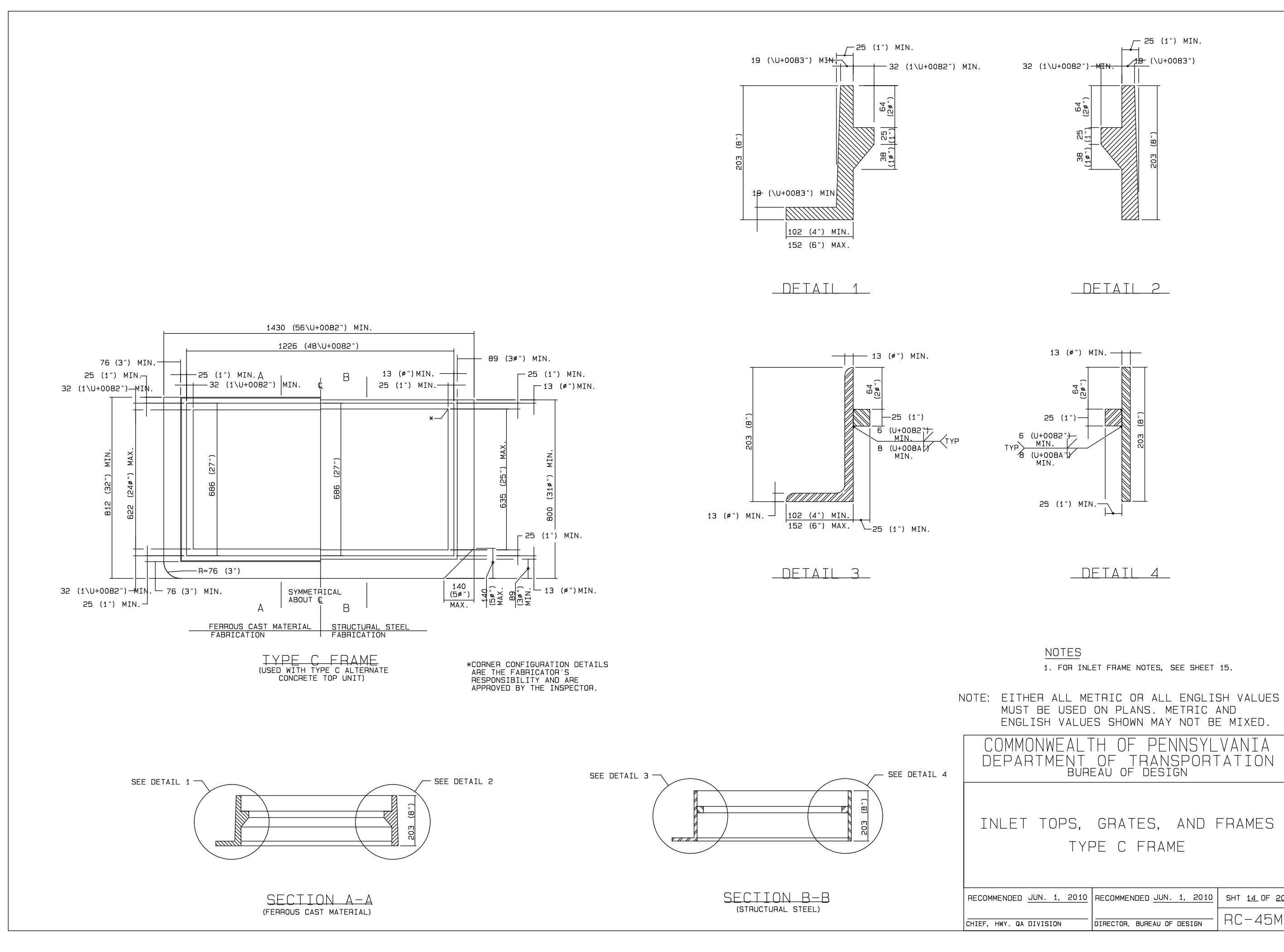
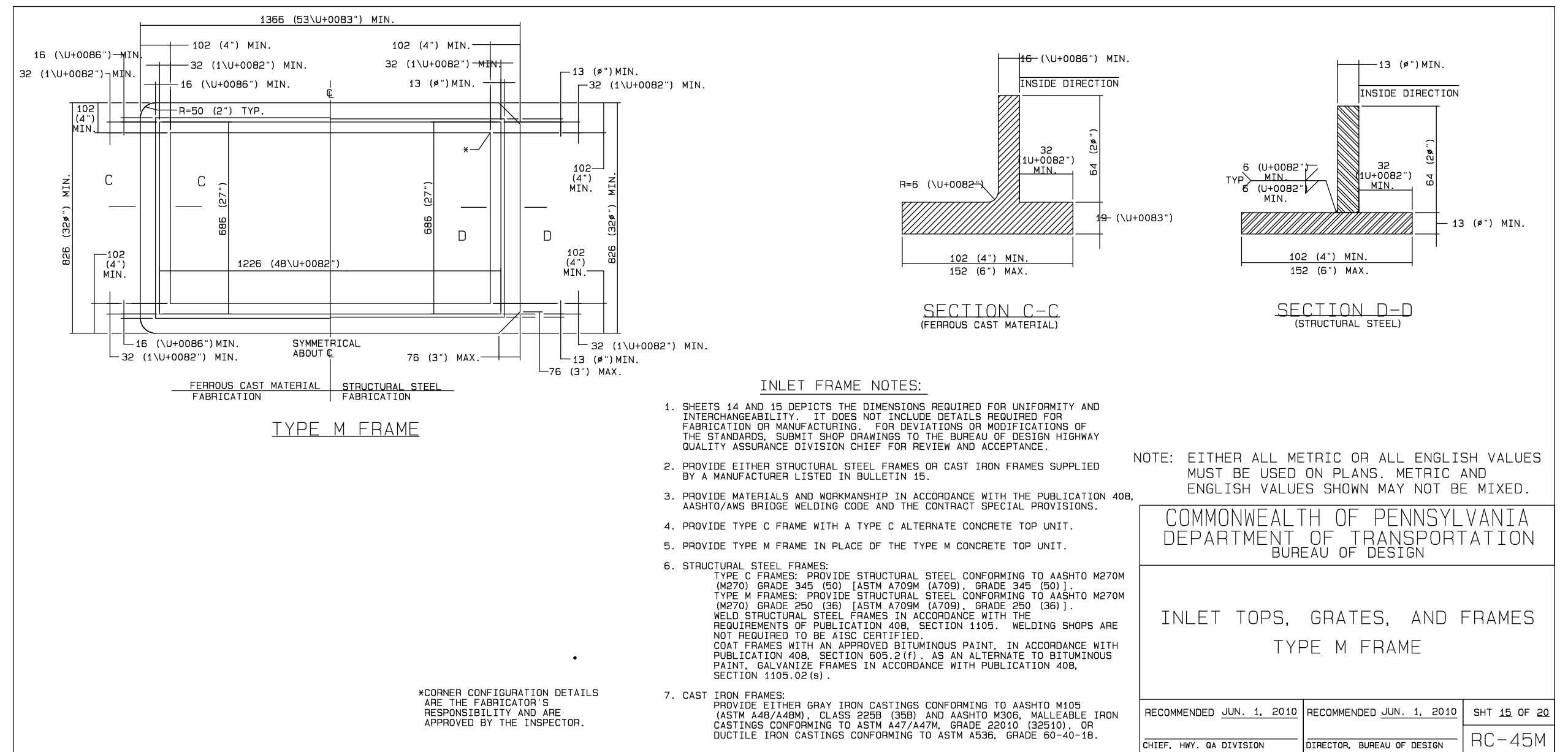
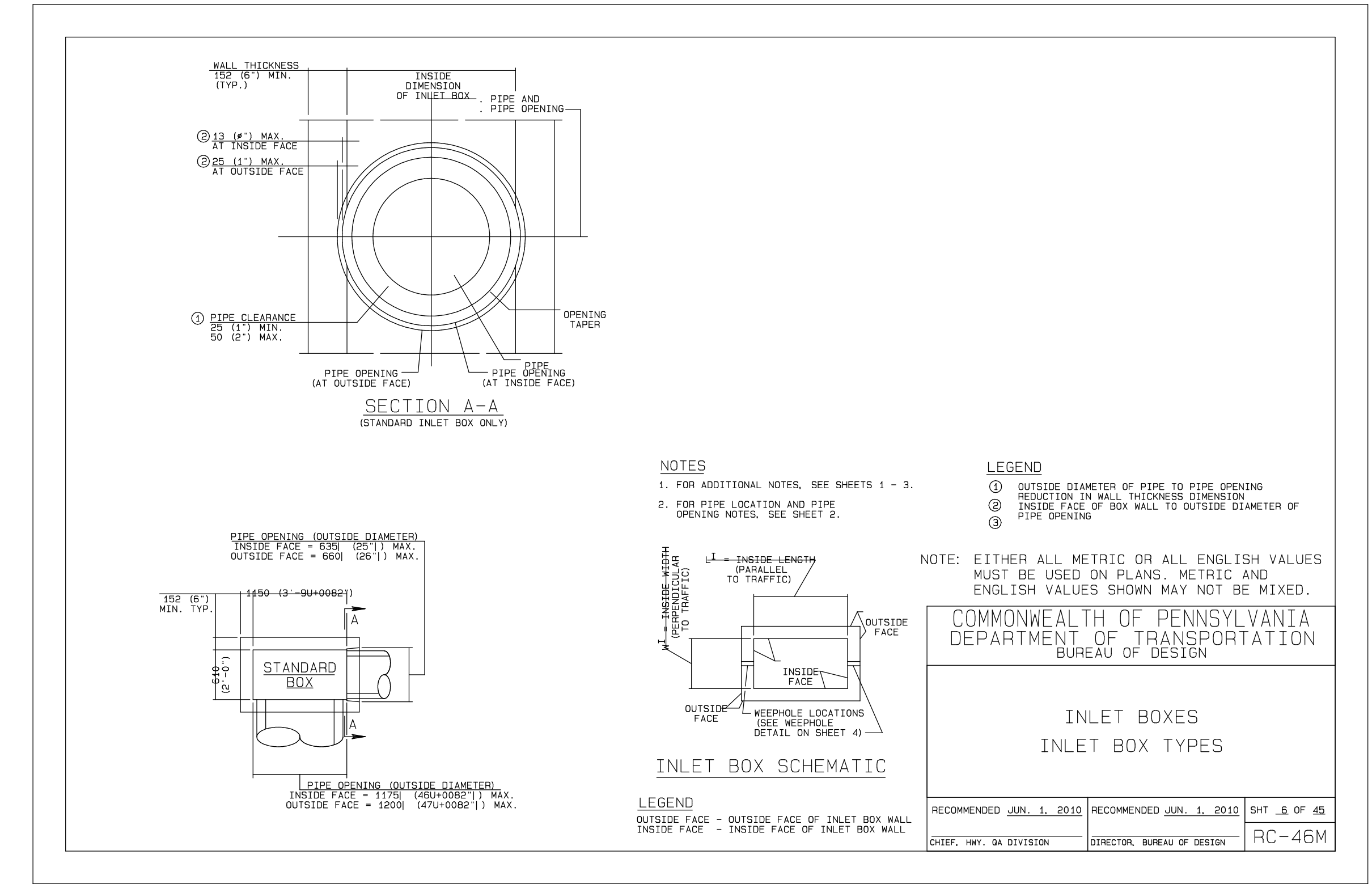
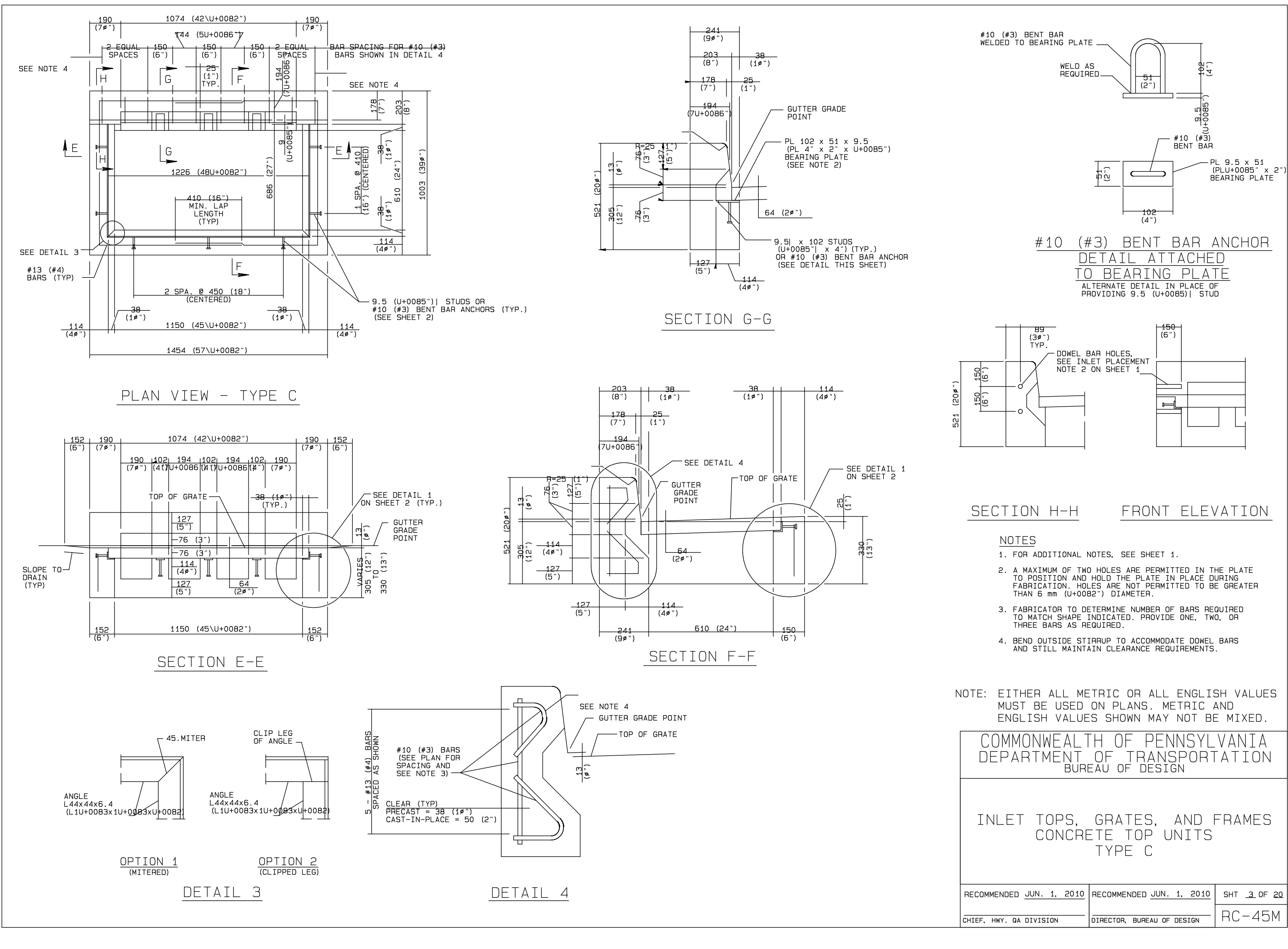
Date— 2-25-22

Scale— 1" = 50'

Drawn— SLM

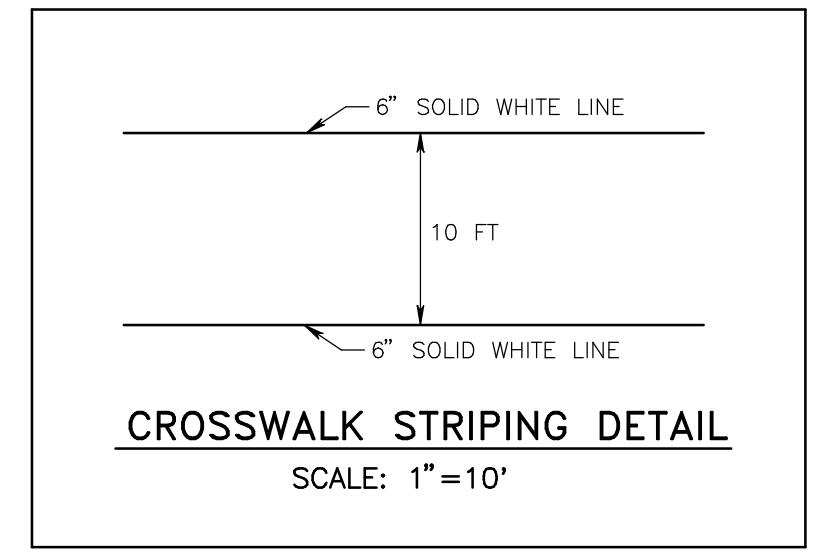
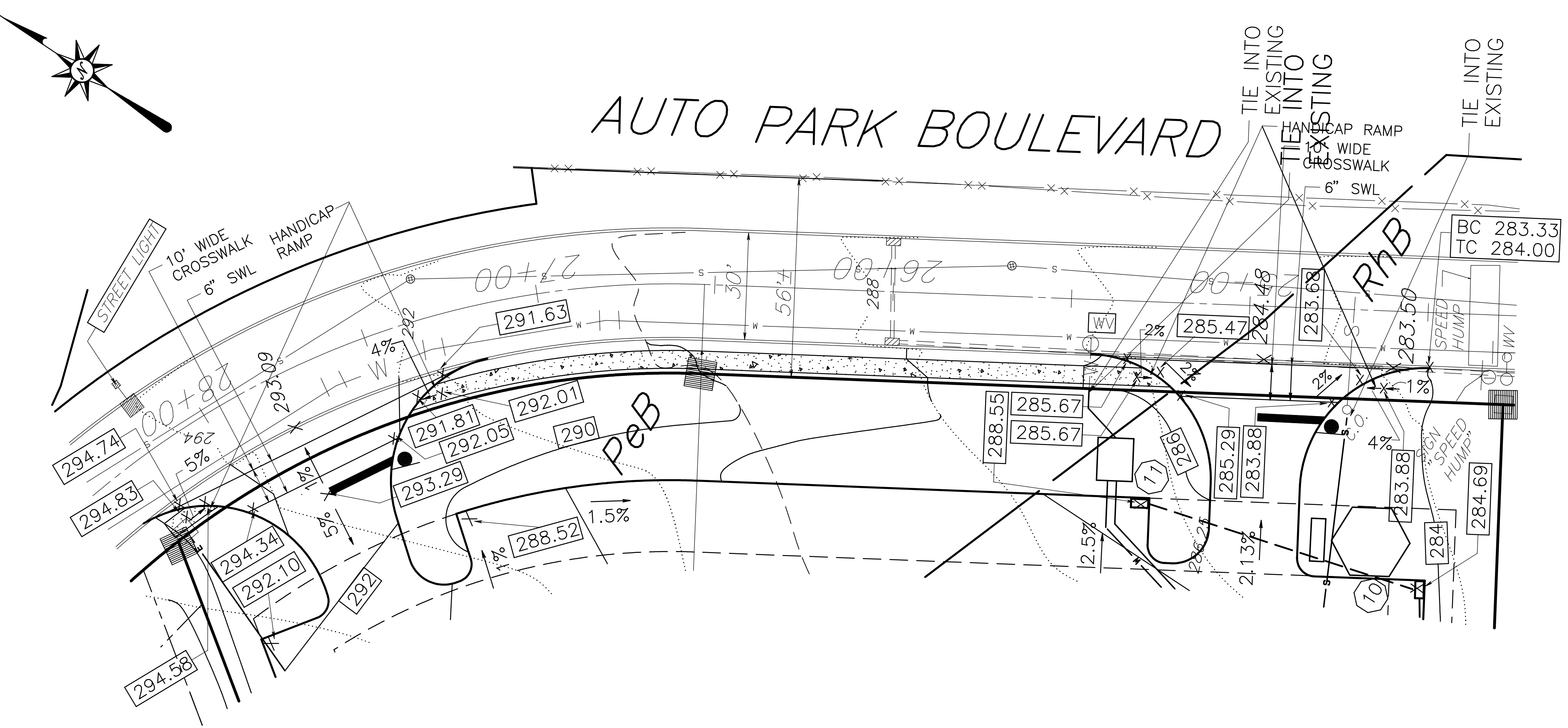
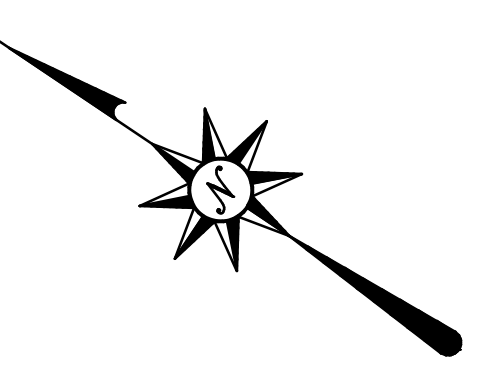
Checked— AJB

Sheet— 10 OF 16

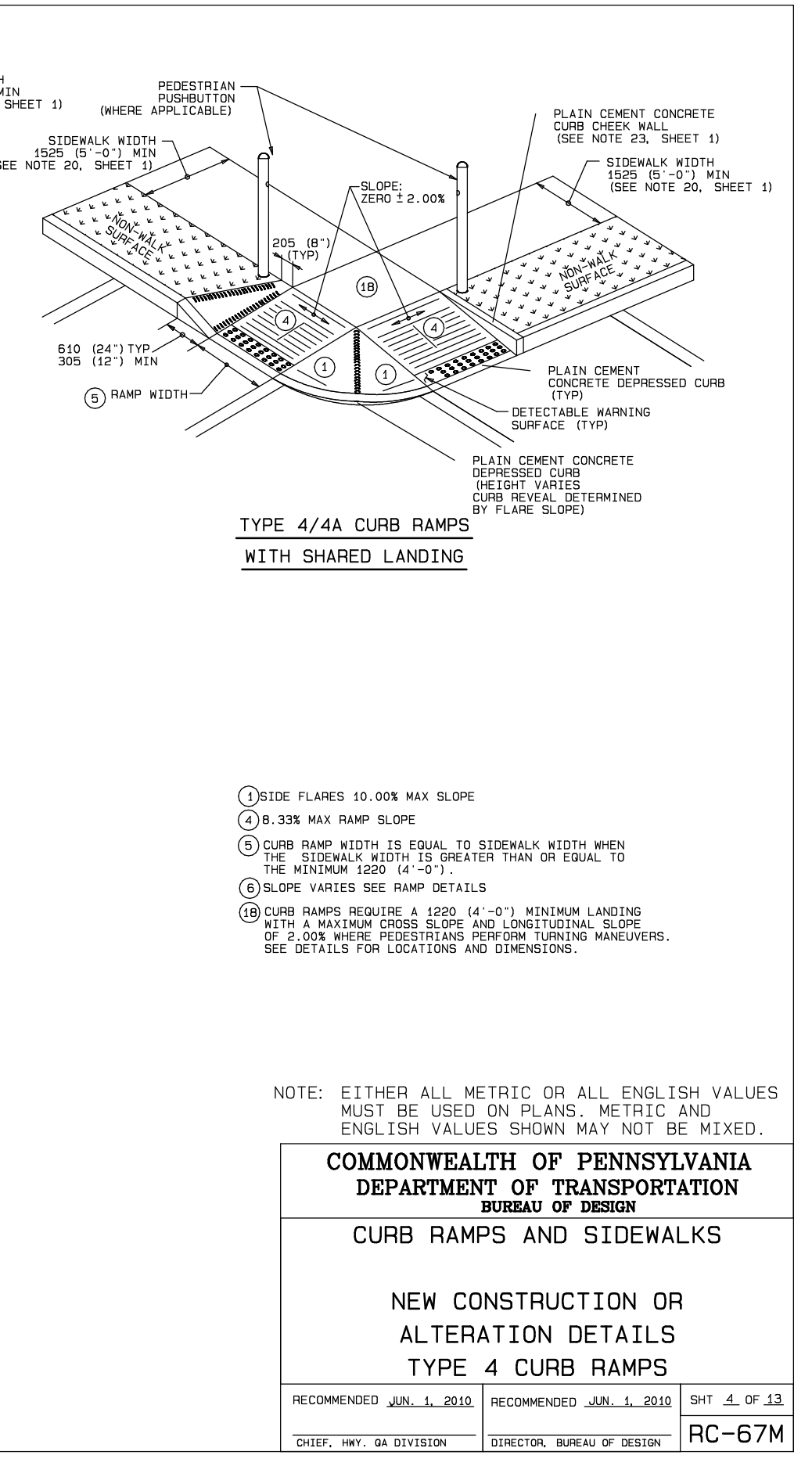
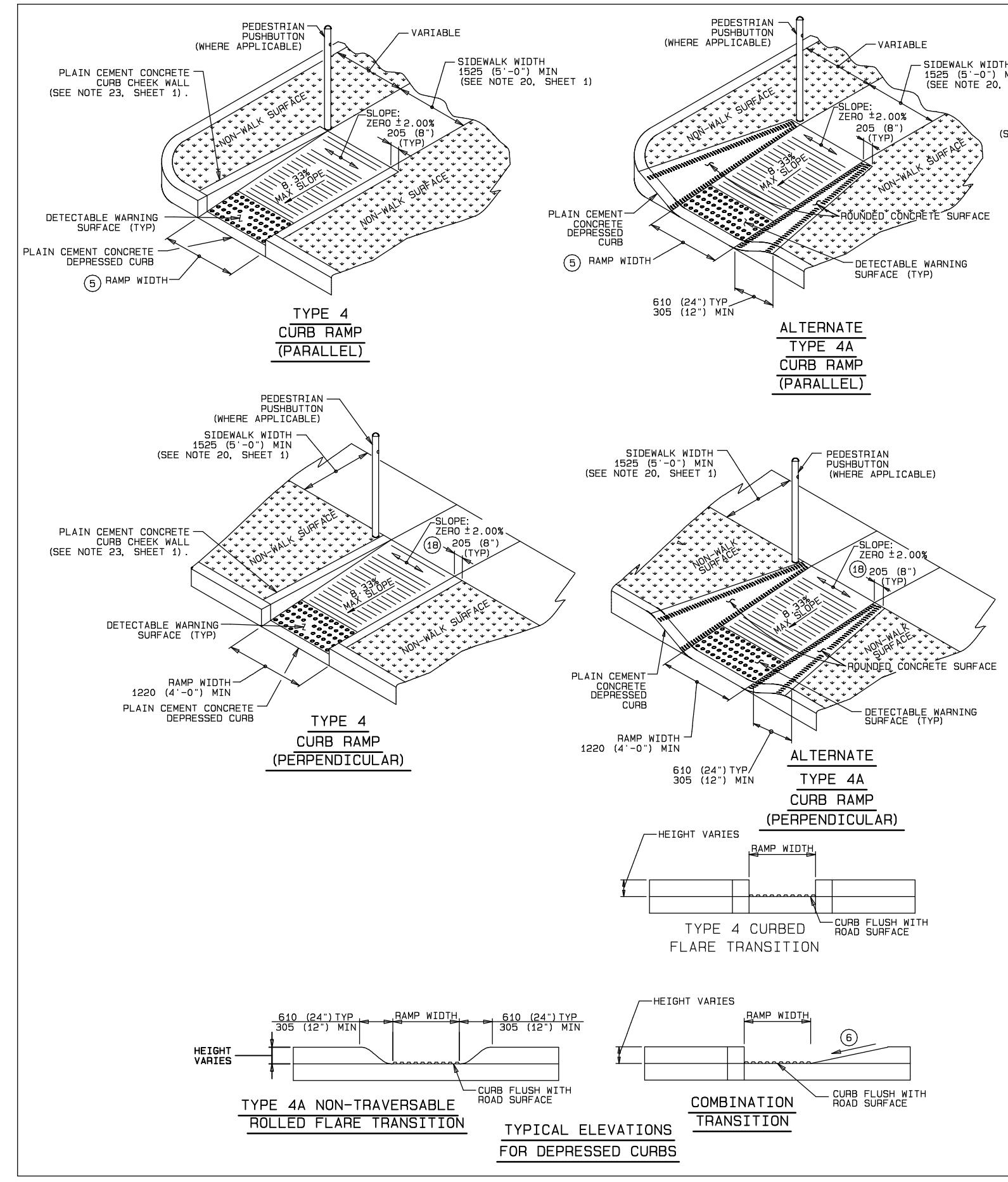
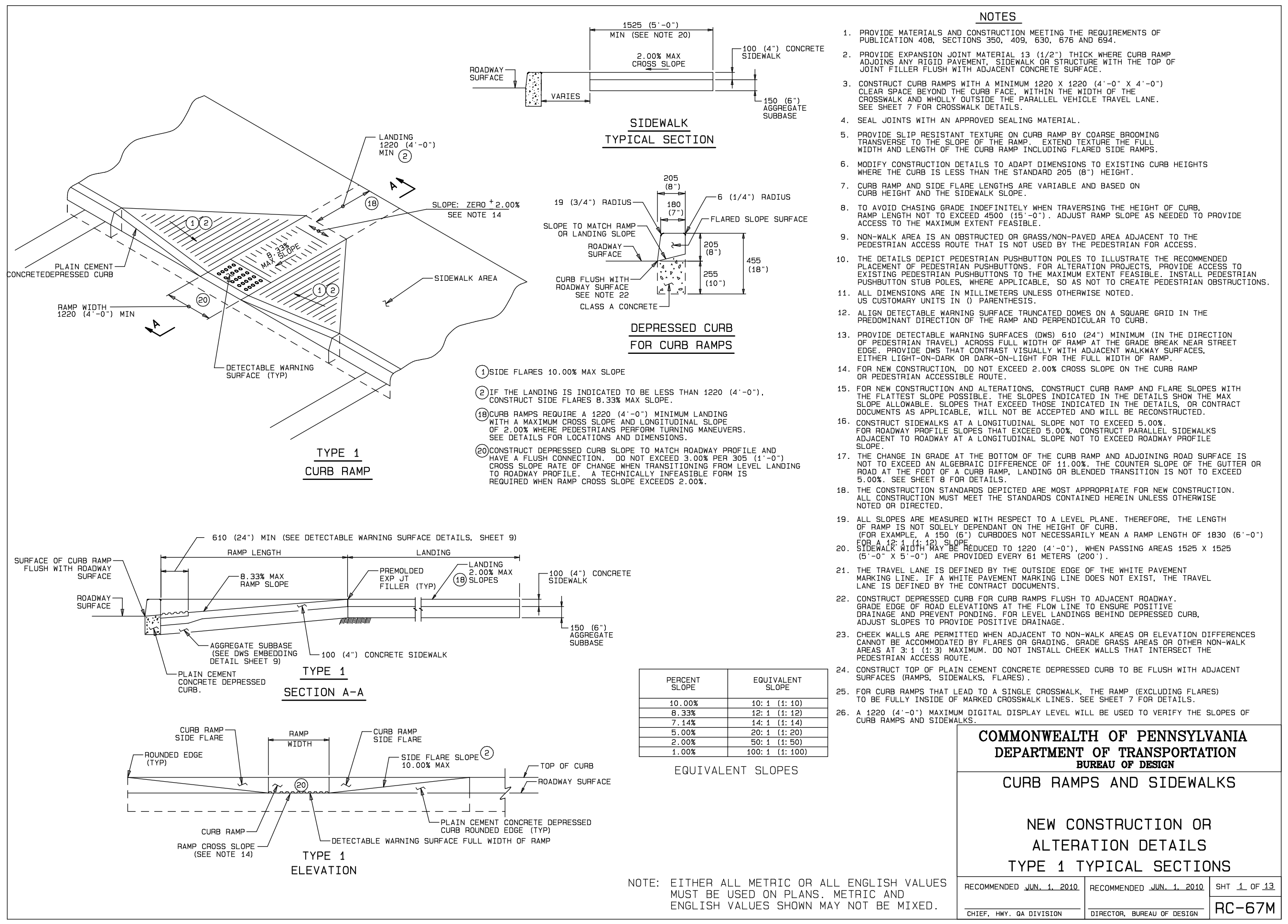


FINAL DETAIL SHEET

5. 11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4. 10-20-22	ADDRESS OCCD COMPLETENESS ITEMS (UPDATED 12-9-22)
3. 10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
2. 6-29-22	REVISED PER TOWNSHIP CONSULTANT JUNE REVIEW LETTERS
LAND DEVELOPMENT PLAN FOR LOT 3 LIMERICK AUTOPARK	
LIMERICK TOWNSHIP	
Edward B. Walsh & Associates, Inc. CIVIL ENGINEERS & SURVEYORS	
Whiteland Business Park 855 Springdale Drive, Suite 202 Exton, Pennsylvania 19341 Phone: 610-903-0060 Fax: 610-903-0080	
Project-- 2616 Date-- 2-25-22 Scale-- 1"= 50' Drawn-- SLM Checked-- AUB Sheet-- 12 OF 16	
Plotted: 12/22/2022 File: F:\JB\2616\LOT 3\FPS\2616-LOT 3-B.pro	



LEGEND	
---	430
---	EXISTING INDEX CONTOUR
---	EXISTING INTERIOR CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED SPOT ELEVATION
---	EXISTING INLET
---	PROPOSED INLET
---	EXISTING STORM SEWER PIPE
---	PROPOSED STORM SEWER PIPE
---	EXISTING SANITARY MANHOLE
---	EXISTING SANITARY SEWER PIPE
---	PROPOSED SANITARY SEWER PIPE
---	PROPOSED GAS SERVICE PIPE
---	PROPOSED ELECTRIC SERVICE
---	EXISTING WATER LINE
---	PROPOSED WATER LINE
---	SOILS BOUNDARY LINE
---	EXISTING FIRE HYDRANT
---	WATER VALVE
---	EXISTING D-W ENDWALL
---	RIP RAP
---	LIGHT POLE & FIXTURE
---	EXISTING SIGN
---	PROPOSED SIGN
---	EXISTING CURB
---	PROPOSED CURB
---	EXISTING FENCE



NOTE: EXISTING CURBING TO BE REPLACED WHERE NECESSARY TO PROVIDE REQUIRED PAVEMENT SLOPE IN CROSSWALK AREA.

SOILS CLASSIFICATION	
Abb	- ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP D.
PeB	- PENN SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP B.
RnB	- REAVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES. HYDROLOGIC SOIL GROUP D.

WHEREVER FILL MATERIAL IS TO BE USED, THE APPLICANT SHALL BE RESPONSIBLE FOR TESTING TO DETERMINE ITS DRY DENSITY AS PER ASTM D1556. IT IS RECOMMENDED THAT THE DENSITY OF ANY LOAD-BEARING LAYER SUPPORTING OR TO BE INCORPORATED IN A ROAD SURFACE, DETENTION BASIN OR EROSION SWALE SHALL BE NOT LESS THAN 90% OF THE MAXIMUM DENSITY.

FINAL SIDEWALK ALONG ROAD FRONTAGE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

CURB RAMP AND SIDEWALKS

NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 4 CURB RAMP

RECOMMENDED JAN. 3, 2010
CHIEF, HWY. & DIVISION

RECOMMENDED JAN. 3, 2010
DIRECTOR, BUREAU OF DESIGN

SHT 3 OF 13
RC-67M



5. 11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4. 10-20-22	ADDRESS CCOD COMPLETENESS ITEMS (UPDATED 12-9-22)
3. 10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
2. 6-29-22	REVISED PER TOWNSHIP CONSULTANT JUNE REVIEW LETTERS

LAND DEVELOPMENT PLAN
FOR
LOT 3 LIMERICK AUTOPARK

LIMERICK TOWNSHIP
MONTGOMERY COUNTY, PA

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

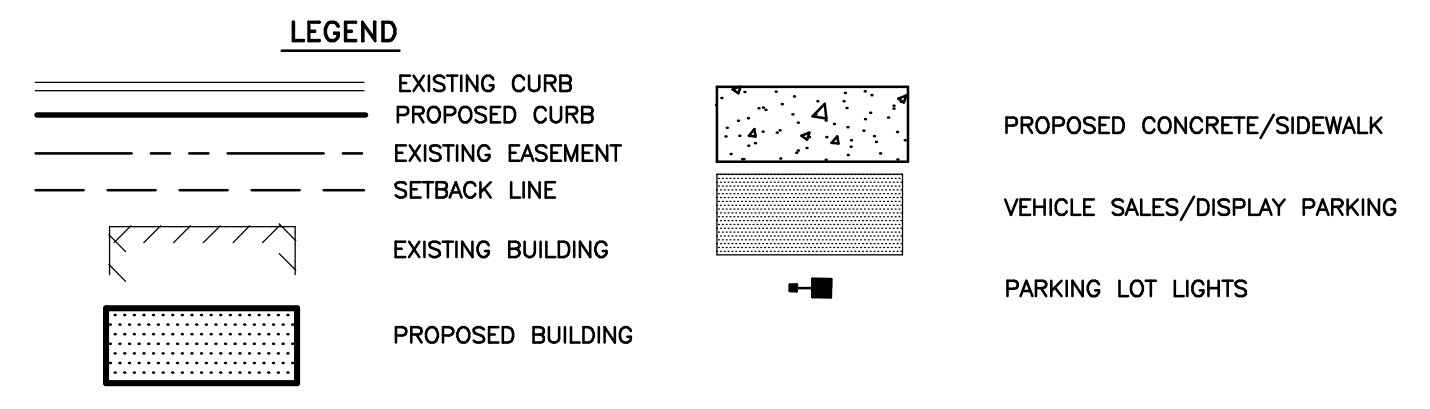
Whiteland Business Park
855 Springdale Drive, Suite 202
Exton, Pennsylvania 19341
Phone: 610-903-0060
Fax: 610-903-0080

Project- 2616
Date- 2-25-22
Scale- 1"= 80'
Drawn- SLM
Checked- AUB
Sheet- 15 OF 16

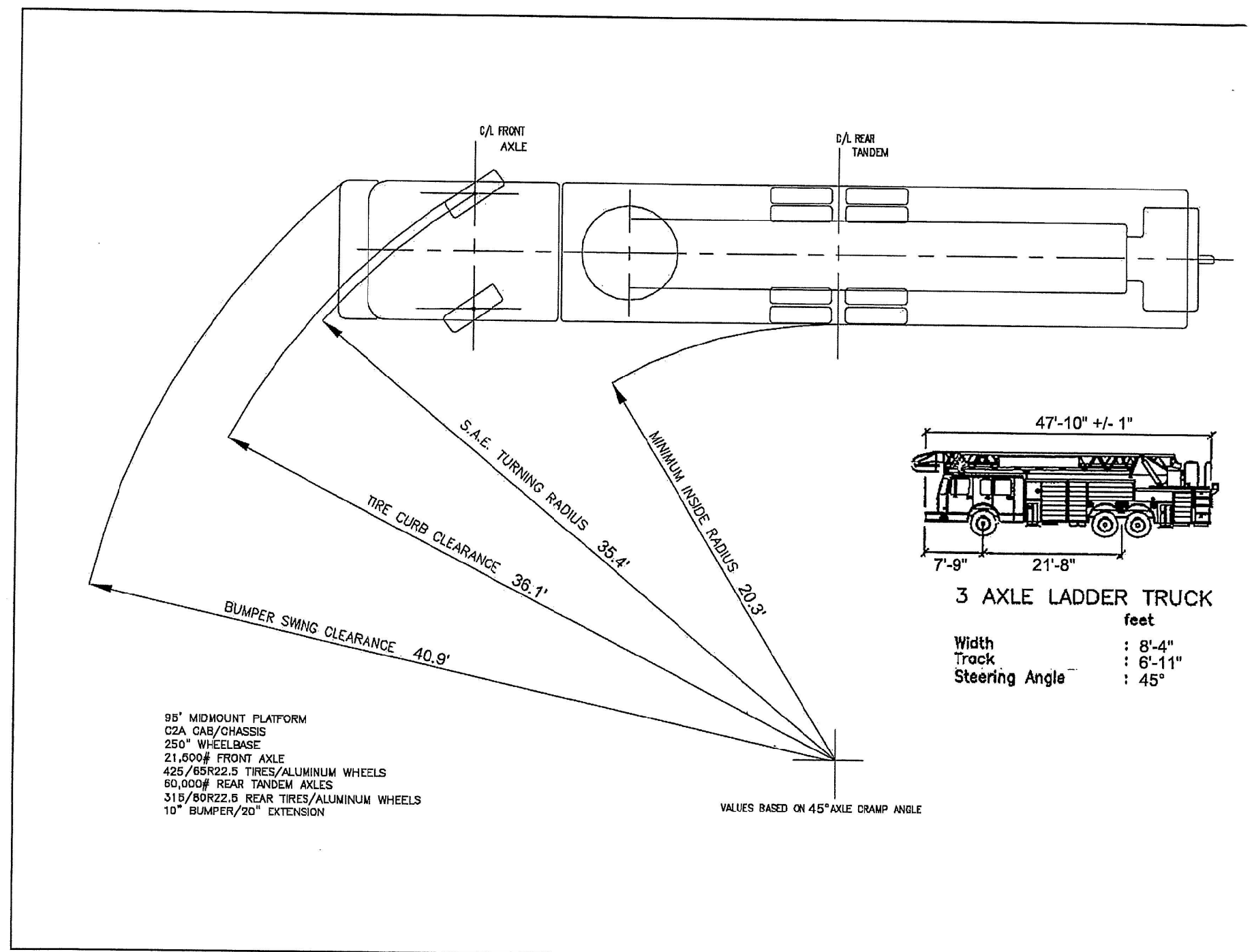
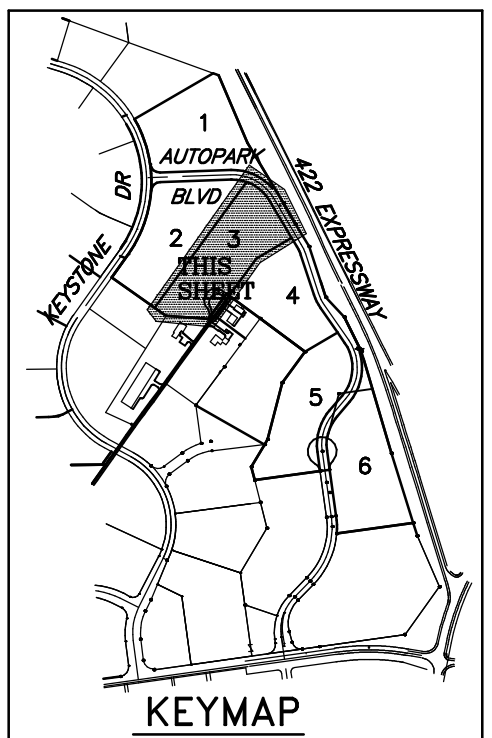
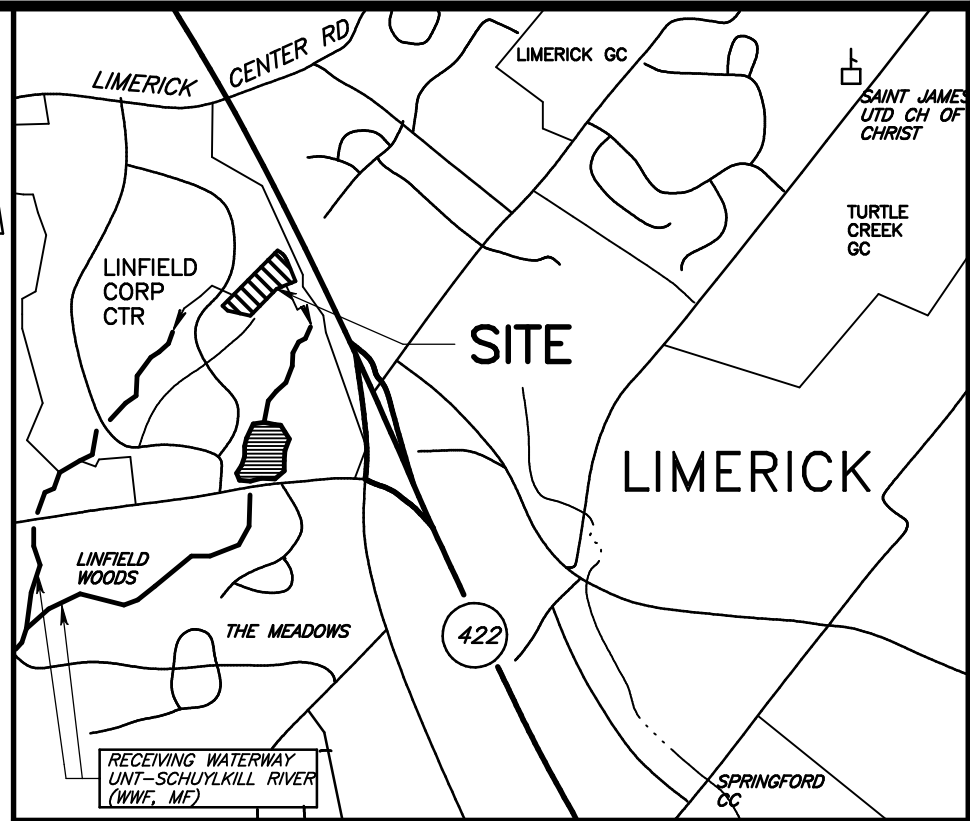
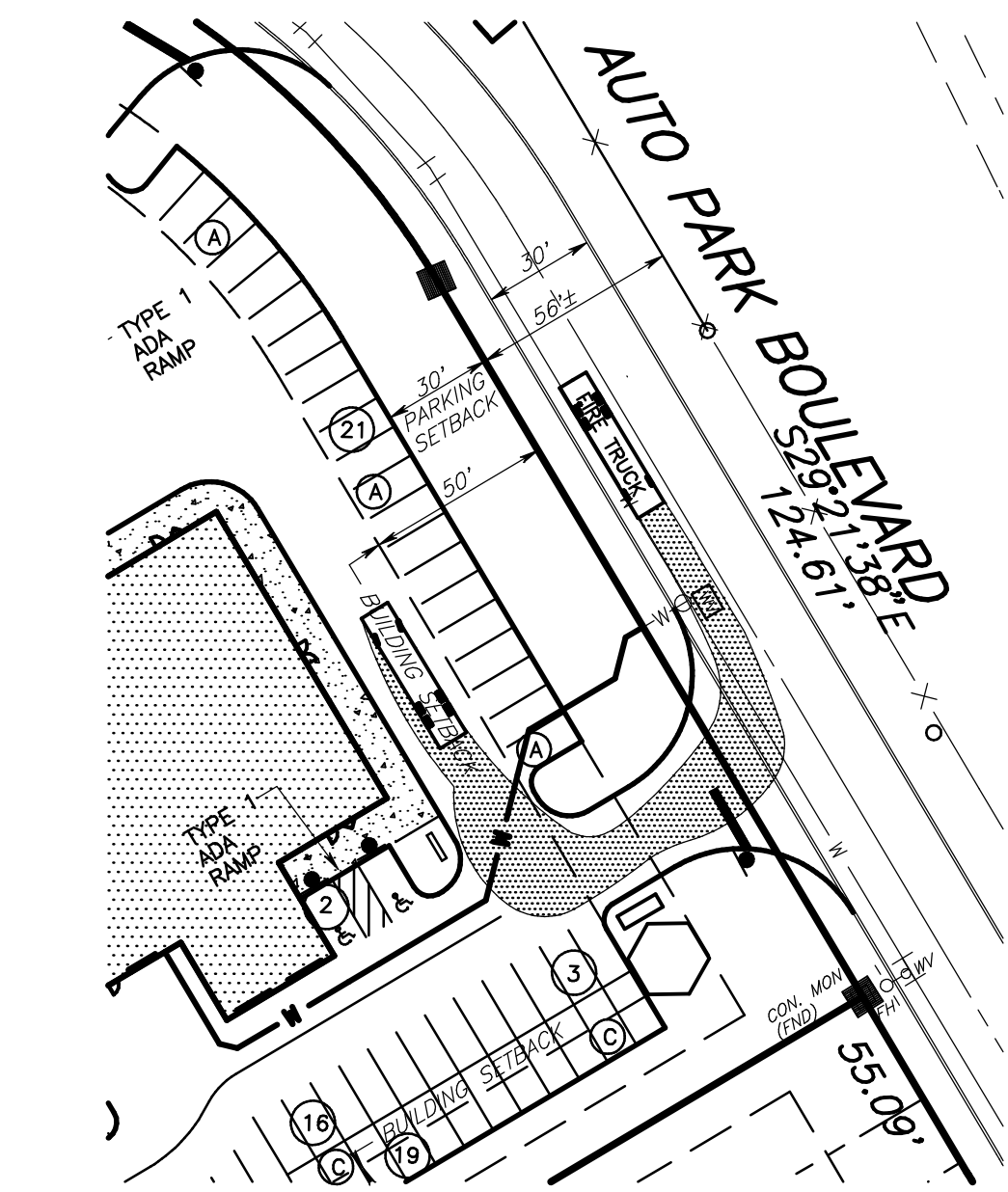
Plotted: 12/22/2022 **File: F:\JB\2616\LOT 3\FPS\2616-LOT 3-B.pro**

EMERGENCY SERVICE NOTES

1. THE PROPERTY AND ALL LOTS SHALL BE MARKED AND READILY IDENTIFIABLE FOR PUBLIC SAFETY AND INSPECTION PURPOSES AT ALL TIMES.
2. BURNING OF REFUSE AND CONSTRUCTION DEBRIS IS PROHIBITED.
3. APPROVED TYPES OF FIRE EXTINGUISHERS SHALL BE PROVIDED IN APPROVED LOCATIONS.
4. FURNISH THE NAME AND CONTACT INFORMATION TO THE DEPARTMENT OF EMERGENCY SERVICES OF THE OWNER'S REPRESENTATIVE WHO WILL ASSUME THE ROLE OF FIRE PREVENTION PROGRAM SUPERINTENDENT; SUBSEQUENTLY FOR THE OFFICE TO MEET WITH HIM/HER AND REVIEW THEIR FIRE PREVENTION PLAN.
5. IF THERE ARE ANY CHAINS/GATES UTILIZED FOR SECURITY OR OTHER PURPOSES, DURING CONSTRUCTION, THEY NEED TO BE SECURED IN AN APPROVED FASHION.
6. IF SMOKING IS PERMITTED ON THE GROUNDS, DESIGNATED AREAS SHALL BE ESTABLISHED.
7. A MEANS OF CONTACTING 9-1-1, IN THE EVENT OF AN EMERGENCY, SHALL BE PROVIDED AND MAINTAINED.
8. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LIMERICK TOWNSHIP CODE AND THE 2009 INTERNATIONAL FIRE CODE, IN PARTICULAR CHAPTER 14 (FIRE SAFETY DURING CONSTRUCTION) INCLUDING, BUT NOT LIMITED TO HEATING MEANS, GENERAL SAFETY, AND STORAGE OF HAZARDOUS MATERIALS.
9. SUBMIT A COMPLETED EMERGENCY CONTACT INFORMATION FORM.
10. ALERTING, NOTIFICATION, AND SUPPRESSION PERMITS SHALL BE SUBMITTED, AS APPLICABLE, IN ADDITION TO ANY REQUIREMENTS ESTABLISHED BY THE CODE SERVICES DEPARTMENT.
11. KNOX BOX WILL NEED TO BE INSTALLED. LOCATION TO BE DETERMINED BY THE FIRE MARSHAL'S OFFICE.
12. EXTERIOR GATES AND FENCES THAT ARE ON SITE WILL NEED TO BE FITTED WITH A KNOX BOX PAD LOCK.
13. THE DESIGN AND CONSTRUCTION OF ALL BUILDING SYSTEMS THAT MAY AFFECT EMERGENCY SERVICES SHALL BE COORDINATED WITH THE TOWNSHIP FIRE MARSHAL'S OFFICE, (i.e., FIRE DEPARTMENT CONNECTIONS, FENCING OR OTHER BARRIERS, INTERNAL EVAC PLANS).
14. IF THERE WILL BE AN EMERGENCY ACCESS ROAD OR A TRAIL THAT DOUBLES AS AN EMERGENCY ACCESS ROAD THAT IS PART OF THE FINISHED PROJECT, THERE SHALL BE BOLLARDS INSTALLED AT EACH END OF THE ACCESS ROAD. THESE BOLLARDS SHALL MEET LIMERICK TOWNSHIP'S SPECIFICATIONS, WHICH CAN BE FOUND ON THE TOWNSHIP'S WEBSITE, OR A COPY CAN BE PROVIDED TO YOU FROM THE TOWNSHIP.



PARCEL 37-00-01114-27-1

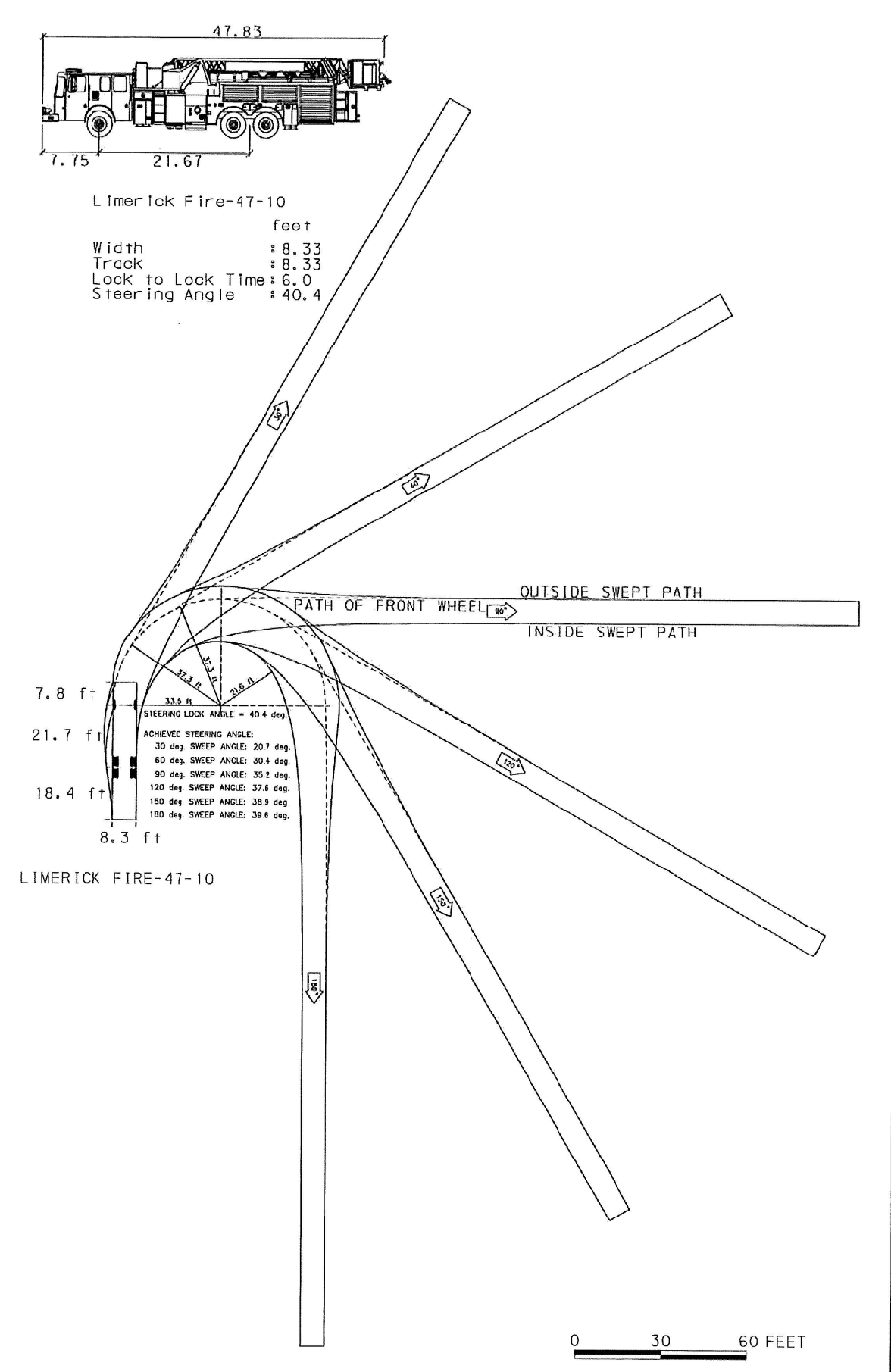


SAE Turning Radius Calculations for Quote No. 81188				
Wheelbase:	260"	Front Bumper Size:	10"	
Body Width:	100"	Front Bumper Extension:	20"	
Front Axle Kingpin Camber:	65.06°	Front Wheel Type:	ALUMINUM	
Front Axle Track:	63"	Rear Wheel Type:	ALUMINUM	
Front Axle Tire Width:	16.2"	Tire Brand:	MICHELIN	
Dimension Over Rear Tires:	38.59"			
Body Front Overhang:	92"			

Inside Cramp Angle	S. A. E. Turning Radius	Tire Curb Clearance	Bumper Swing Clearance	Minimum Inside Radius
35	43.1'	43.8"	42.2"	33.7'
36	42.1'	42.8"	42"	28.4'
37	41.2'	41.9"	42.2"	27.4'
38	40.2'	41"	42.4"	26.3'
39	39.3'	40.2'	42.6"	25.4'
40	38.4'	39.4"	42.8"	24.4'
41	37.5'	38.5"	43.1"	23.5'
42	36.7'	37.7"	42.6"	22.7'
43	35.7'	37.3"	42"	21.8'
44	34.9'	36.7"	41.5"	21.1'
45	34.1'	36.1"	40.9"	20.3'
46	34.9'	35.5"	39.4"	19.2'
47	34.3'	35"	39.9"	18.8'
48	33.8'	34.5"	39.5"	18.1'
49	33.3'	33.9"	39"	17.4'
50	32.8'	33.5"	38.6"	16.8'

Leaf spring suspension: up to and including 445/65R22.5 tires	45 degrees
Leaf spring suspension: 445/65R22.5 tires	38 degrees
Reyno IFS: up to and including 385/65R22.5 tires	48 degrees
Reyno IFS: 445/65R22.5 tires	45 degrees
Reyno IFS: 445/65R22.5 tires without front intake	42 degrees
Timoney Independent Front Suspension (IFS): up to and including 445/65R22.5 tires	44 degrees
Timoney Independent Front Suspension (IFS): 445/65R22.5 tires	42 degrees
Front Drive Axle: up to and including 425/65R22.5 tires	35 degrees

This Turning Radius report reflects how the quote was configured. Any succeeding changes may slightly alter the turning radius of the vehicle and the data in this report.



E-ONE

LIMERICK FIRE COMPANY

LIMERICK, PA.

SO141003/Q81188

AERIAL BODY

CYCLONE II R CHASSIS

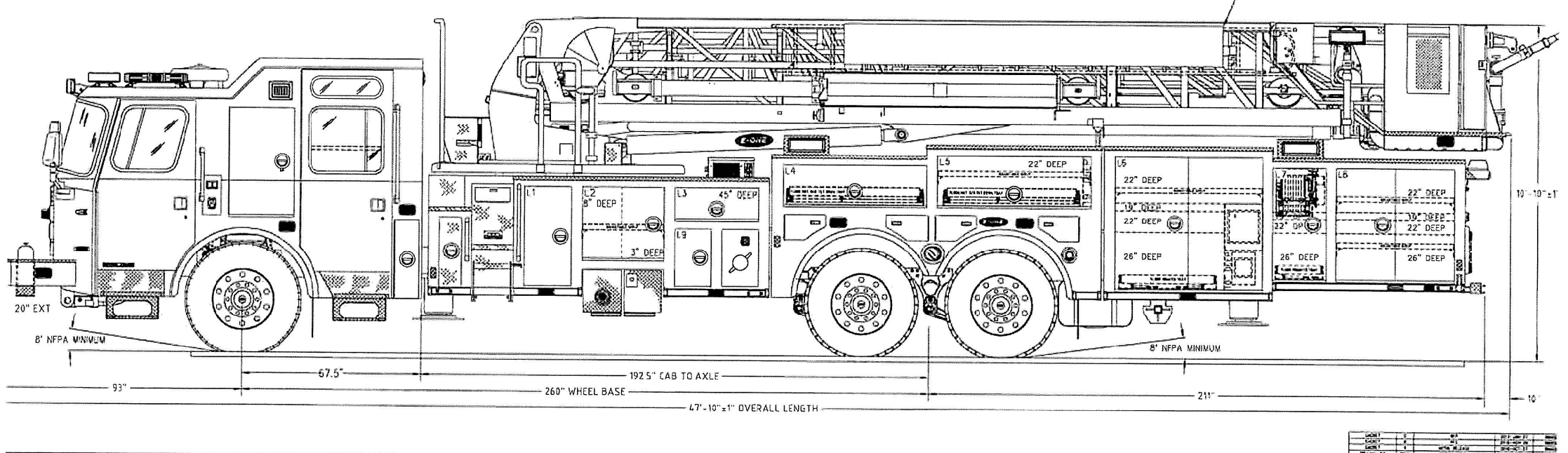
HP907 AERIAL PLATFORM

APPROVED FOR PRODUCTION

DATE: _____

COMP	OPENING	INTERIOR DIMENSION
R1	18W 35H	OR RESERVOIR
L2/R2	31W 27H	14 7/8 WBS 20MM
L3/R3	30W 12H	37W (22H) NOTED
L4/R4	54W 15H	54W 15H 235
L5/R5	58W 19H	58W 19H NOTED
L6/R6	58W 53H	58W 28H 1015 10MM
L7/R7	20W 43H	20W 28H 1015 10MM
L8/R8	43W 43H	43W 28H 1015 10MM
L9/R9	14W 22H	14W 22H 235

ITEM	LADDER LENGTH	MOTOR NUMBER	QTY
A	35' 2-SECT	1500-A-35	1
B	28' 2-SECT	1500-A-28	2
C	24' 2-SECT	800-A-24	1
D	18' 1000'	875-A-18	2
E	16' 1000'	875-A-16	3 (10 SH JEROL)
F	10' ATTIC	845-A-10	1
G	12' 1000'	775-A-12	1 (SH AERIAL)



RECORD OWNER/APPLICANT

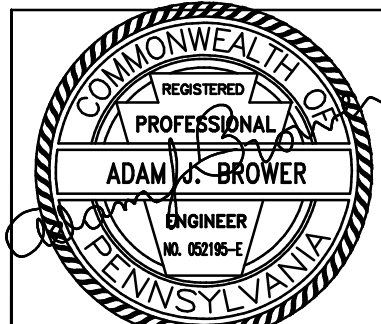
PARCEL 37-00-01114-27-7

LIMERICK PF, LTD

1000 1ST AVENUE, SUITE 100

KING OF PRUSSIA, PA. 19406

610-630-7911



FINAL EMERGENCY SERVICES COORDINATION PLAN

5. 11-16-22	REVISED PER TOWNSHIP CONSULTANT OCTOBER REVIEW LETTERS
4. 10-20-22	ADDRESS OCCD COMPLETENESS ITEMS (UPDATED 12-9-22)
3. 10-05-22	REVISED PER TOWNSHIP CONSULTANT JULY REVIEW LETTERS & UPDATE PARKING COUNT
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LAND DEVELOPMENT PLAN FOR LOT 3 LIMERICK AUTOPARK	
LIMERICK TOWNSHIP	MONTGOMERY COUNTY, PA
Edward B. Walsh & Associates, Inc.	
CIVIL ENGINEERS & SURVEYORS	
Whiteland Business Park	
855 Springdale Drive, Suite 202	
Exton, Pennsylvania 19341	
Phone: 610-903-0060	
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Checked-	ALB
Sheet-	16 OF 16

Plotted: 12/22/2022 File: F:\JB\2616\LOT 3\FPS\2616-LOT 3-B.prc