

**PLUMSTEAD TOWNSHIP ZONING TABLE**

Zone: RO Rural Residential District

ITEM	PERMITTED	EXISTING	PROPOSED LOT 1	PROPOSED LOT 2	ORDINANCE SECTION
Use			B-1 Single Family Detached Dwelling		27-503.1
<b>District Regulations- B-1 Single Family Detached Dwelling Use</b>					
Min. Lot Area	2 Acres	5.66 Ac.	3.28 Ac.	2.38 Ac.	27-503.1.A
Min. Lot Width	200 FT	644.2 FT	237.2 FT	250.6 FT	27-503.1.A
Min. Front Yard Setback	50 FT	98.9 FT	98.9 FT	182.8 FT	27-503.1.A
Min. Side Yard Setback (each)	40 FT	231.0 FT	231.0 FT	62.5 FT	27-503.1.A
Min. Rear Yard Setback	40 FT	339.4 FT	89.4 FT	154.9 FT	27-503.1.A
Max. Impervious Coverage	25%	3.43%	5.92%	7.51%	27-503.1.A
Max. Building Coverage	10%	1.85%	3.20%	3.06%	27-503.1.A
Max. Building Height	35 FT	<35 FT	<35 FT	<35 FT	27-503.1.A
Min. Building Envelope	13,000 SF	>13,000 SF	43,837 SF	25,500 SF	27-2402.A

**LOT CALCULATIONS**

	EXISTING		PROPOSED LOT 1		PROPOSED LOT 2	
	Area (SF)	Area (AC)	Area (SF)	Area (AC)	Area (SF)	Area (AC)
Gross Lot Area	284,434	6.530	173,026	3.972	111,408	2.558
Utility Right-Of-Ways and/or Easements	0	0.000	0	0.000	0	0.000
Existing Street Right-Of-Ways	19,295	0.443	14,196	0.326	5,099	0.117
Future Street Right-Of-Ways	18,275	0.420	15,893	0.365	2,382	0.055
<b>Net Lot Area</b>	<b>246,864</b>	<b>5.667</b>	<b>142,937</b>	<b>3.281</b>	<b>103,927</b>	<b>2.386</b>

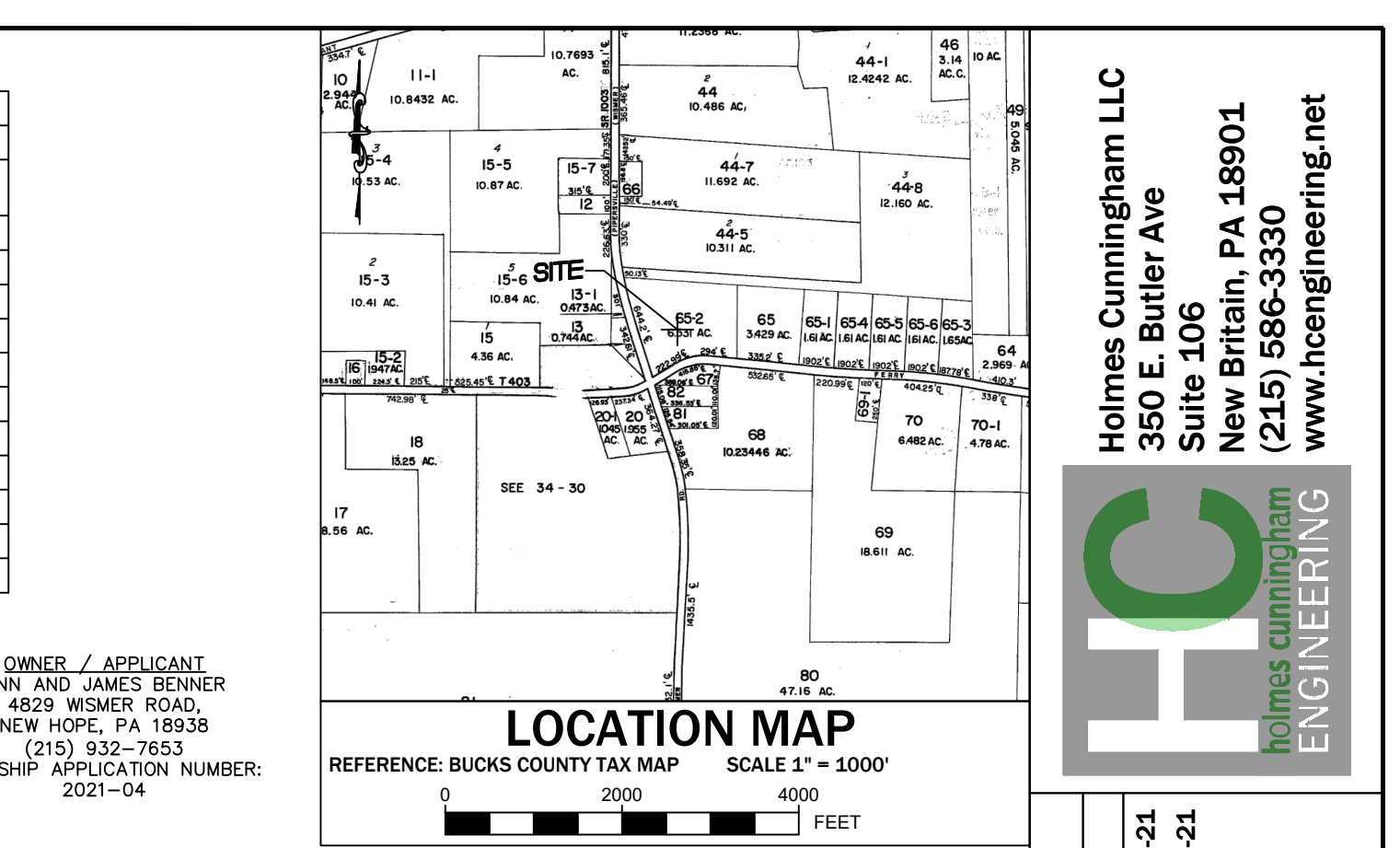
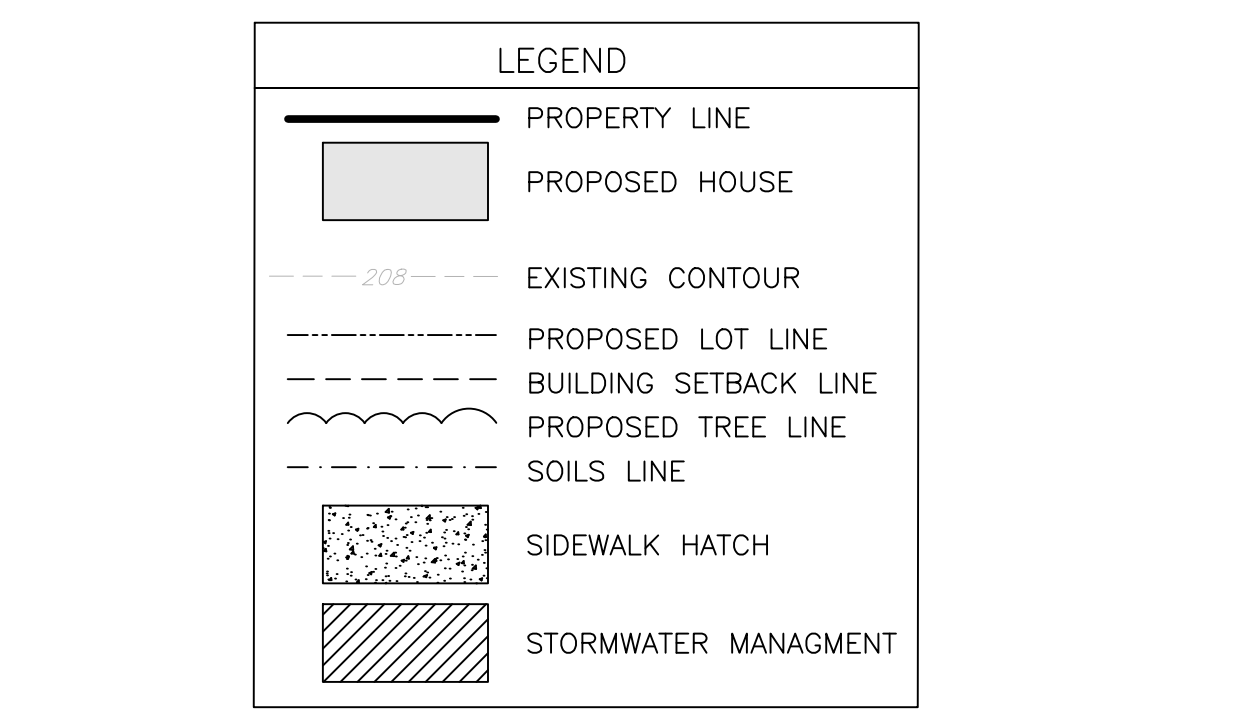
**RESOURCE PROTECTION STANDARDS**

Resource	Min. Required Protection Ratio	Total Area of Land in Resource		Required Resource Protection Land		Actual Resource Protection Land	
		(Ac.)	(%)	(Ac.)	(%)	(Ac.)	(%)
Floodplain	100%	0.00	0.00	0.00	0.00	0.00	N/A
Floodplain Soil	100%	0.00	0.00	0.00	0.00	0.00	N/A
Streams, Watercourses, Waters of Commonwealth, Waters of the U.S., and Riparian Buffer Areas	100%	0.00	0.00	0.00	0.00	0.00	N/A
Lakes and Ponds	100%	0.00	0.00	0.00	0.00	0.00	N/A
Wetlands and Wetland Margins	100%	0.00	0.00	0.00	0.00	0.00	N/A
Steep Slopes 25%+	85%	0.00	0.00	0.00	0.00	0.00	N/A
Steep Slopes 15%-25%	70%	0.00	0.00	0.00	0.00	0.00	N/A
Forest (RP,RO-R-1,R-2,R-3,R-4,VR, and MHP)	80%	4.74	3.79	3.79	80%	3.79	80%
Forest (C-1,C-2,C-3,R-5,VC,L1 and Q)	60%	0.00	0.00	0.00	0.00	0.00	N/A

**DRAWING LIST**

SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE
1	C2.0	MINOR SUBDIVISION PLAN
2	C2.1	EXISTING CONDITIONS PLAN
3	C2.2	AERIAL PLAN
4	C2.3	SITE IMPROVEMENT PLAN
5	C2.4	SITE IMPROVEMENT DETAILS

- NOTES:**
- THE BOUNDARY AND TOPOGRAPHIC INFORMATION IS TAKEN FROM AN AS-BUILT SURVEY PREPARED BY EFFICIENT DESIGN LLC, DATED 10/05/2020. ALL ELEVATION ARE BASED ON NAVD 88 VERTICAL DATUM.
  - TAX PARCEL 34-018-065-002, INSTRUMENT NO. 201803185.
  - REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, ASSIGNED SERIAL NUMBERS AND IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 2008, (800-242-1778)
  - SUBJECT PROPERTY AND SURROUNDING PROPERTIES ARE WITHIN RO - RURAL RESIDENTIAL DISTRICT.
  - FLOOD ZONE INFORMATION: SUBJECT PARCEL AREA IS LOCATED OUTSIDE ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 189 OF 532, COMMUNITY MAP NO. 420702189, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2015.
  - NO NEW STREETS ARE PROPOSED AS PART OF THIS PROJECT.
  - THE OWNER OF THE LOT SHALL BE RESPONSIBLE TO MAINTAIN ANY STORMWATER IMPROVEMENTS LOCATED ON THEIR LOT IN ACCORDANCE WITH THE PLANS FOR THE PROJECT. THE STORMWATER DESIGN FOR THIS PROJECT IS A VEGETATED FILTER STRIP WHICH IS TO BE PERMANENTLY PRESERVED.
  - ULTIMATE RIGHT OF WAY OF SURROUNDING STREETS (FERRY ROAD AND WISMER ROAD) ARE OFFERED FOR DEDICATION TO THE TOWNSHIP OR GOVERNMENT BODY HAVING JURISDICTION.
  - THE EXISTING HOME IS SERVED BY ON LOT WATER AND SEWER. THE PROPOSED LOT IS TO BE SERVED BY ON LOT WELL AND SEWER.
  - SOIL TYPES ARE MAPPED UNITS BASED ON NRCS SOIL SURVEY INFORMATION. PROPERTY WAS SUBJECTED TO CONTROLLED FILL AND THE ACTUAL SOIL ON-SITE ARE CONSIDERED MADE LAND.
  - REFER TO PLANS APPROVED BY BUCKS COUNTY HEALTH DEPARTMENT FOR DETAILED INFORMATION REGARDING SEPTIC SYSTEM CONSTRUCTION.
  - THE PLANS WERE DESIGNED BASED UPON THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF PLUMSTEAD TOWNSHIP ADOPTED APRIL 18, 1995, LAST REVISED MAY 9, 2017; THE PLUMSTEAD TOWNSHIP ZONING ORDINANCE ADOPTED SEPTEMBER 18, 2001, LAST REVISED NOVEMBER 28, 2017; AND THE PLUMSTEAD TOWNSHIP WATER ORDINANCE ADOPTED MAY 3, 2001, LAST REVISED FEBRUARY 11, 2014.
  - TOPSOIL SHALL NOT BE REMOVED FROM THE DEVELOPMENT SITE. TOPSOIL SHALL BE STRIPPED, STOCKPILED, AND REDISTRIBUTED ON THE SITE.
  - ALL EFFORTS SHOULD BE MADE WITH THE TREE PROTECTION FENCING TO STAY AS CLOSE TO THE DRIPLINE AS PRACTICAL. STRICT ADHERENCE TO MINIMIZING COMPACTION WITHIN THE DRIPLINE AND PREVENTING DAMAGE TO THE TRUNK OF THE TREE BY EQUIPMENT IS A MUST. THERE IS TO BE NO STORAGE OF MATERIALS OR EQUIPMENT WITHIN THE ROOT PROTECTION ZONE. ONCE THE SITE IS LAID OUT AND THE LOCATION OF THE PROPOSED TREE PROTECTION FENCE IS INDICATED A SITE INSPECTION MUST BE PERFORMED TO MAKE SURE ANY DAMAGE WILL BE MINIMAL.
  - SHEETS 1 THROUGH 5 INCLUSIVE, ON RECORD AT PLUMSTEAD TOWNSHIP, SHALL BE CONSIDERED A PART OF THE APPROVAL FINAL PLAN AS IF RECORDED WITH SAME.
  - THE APPLICANT WILL BE REQUIRED TO OBTAIN A DRIVEWAY PERMIT FROM PLUMSTEAD TOWNSHIP DEPARTMENT OF PUBLIC WORKS DURING THE BUILDING PERMIT PROCESS.
  - ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND, AS REQUIRED BY SECTION 22-930.1 OF THE SUBDIVISION ORDINANCE.



**OWNER / APPLICANT**  
ANN AND JAMES BERNER  
4829 WISMER ROAD,  
NEW HOPE, PA 18938  
(215) 932-7853  
TOWNSHIP APPLICATION NUMBER:  
2021-04

**ENGINEER'S CERTIFICATION**  
ROBERT CUNNINGHAM, A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS PLAN IS ACCURATE AND CORRECT AS INDICATED.

DATE: \_\_\_\_\_ ROBERT CUNNINGHAM, P.E.  
PA PE076424

**CERTIFICATION OF ACCURACY**  
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT.

DATE: \_\_\_\_\_ (SURVEYOR)

**OWNER SIGNATURE BLOCK & ACKNOWLEDGEMENT**  
TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT I, \_\_\_\_\_ HAS LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF PLUMSTEAD, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, CERTAIN LOTS ACCORDING TO THIS PLAN WHICH IS INTENDED TO BE FORTHWITH RECORDED, WITNESS OUR HAND AND SEAL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

BY: \_\_\_\_\_ NAME \_\_\_\_\_ TITLE \_\_\_\_\_ DATE: \_\_\_\_\_  
CORPORATION \_\_\_\_\_

OWNER(S): \_\_\_\_\_  
TITLE(S): \_\_\_\_\_  
COMMONWEALTH OF \_\_\_\_\_  
(OR IF NOT PENNSYLVANIA, STATE OF \_\_\_\_\_)  
COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D., 20\_\_\_\_, BEFORE ME A NOTARY PUBLIC, PERSONALLY APPEARED \_\_\_\_\_ OF \_\_\_\_\_, OWNER OF THE SUBJECT PROPERTY, AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT ON ITS BEHALF FOR THE USES AND PURPOSES THEREIN SET FORTH.

IN WITNESS WHEREOF, I HAVE HERETO SET MY HAND AND OFFICIAL SEAL.

SEAL \_\_\_\_\_ NOTARY PUBLIC \_\_\_\_\_  
COMMISSION EXPIRATION DATE \_\_\_\_\_

**TOWNSHIP ENGINEER ACKNOWLEDGEMENT**  
THIS PLAN HAS BEEN REVIEWED BY THE TOWNSHIP ENGINEER ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

ENGINEER: \_\_\_\_\_

**BUCKS COUNTY PLANNING COMMISSION ACKNOWLEDGEMENT**  
BUCKS COUNTY PLANNING COMMISSION NOTATION BCPC NO 12582 PROCESSED AND REVIEWED. REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS DATE, \_\_\_\_\_.

EXECUTIVE DIRECTOR, BUCKS COUNTY PLANNING COMMISSION

**RECORDER OF DEEDS ACKNOWLEDGEMENT**  
RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF BUCKS, AT DOYLESTOWN, PENNSYLVANIA IN PLAN BOOK PAGE \_\_\_\_\_ ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

BUCKS COUNTY RECORDER OF DEEDS

**BOARD OF SUPERVISORS ACKNOWLEDGEMENT**  
THIS PLAN APPROVED BY THE BOARD OF SUPERVISORS OF PLUMSTEAD TOWNSHIP THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

**OWNER CERTIFICATION FOR STORMWATER BMP'S**  
THE STORMWATER BMP'S ARE FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY PLUMSTEAD TOWNSHIP.

PROPERTY OWNER \_\_\_\_\_

**Holmes Cunningham LLC**  
350 E. Butler Ave  
Suite 106  
New Britain, PA 18901  
(215) 586-3330  
www.hcengineering.net

**REVISIONS**

Date	Description
04-22-2021	PER TWP. ENG. REVIEW DATED 2-23-21
05-17-2021	PER TWP. ENG. REVIEW DATED 4-30-21

**4829 WISMER ROAD**  
T.M.P.# 34-018-065-002  
PLUMSTEAD TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA  
**MINOR SUBDIVISION PLAN**

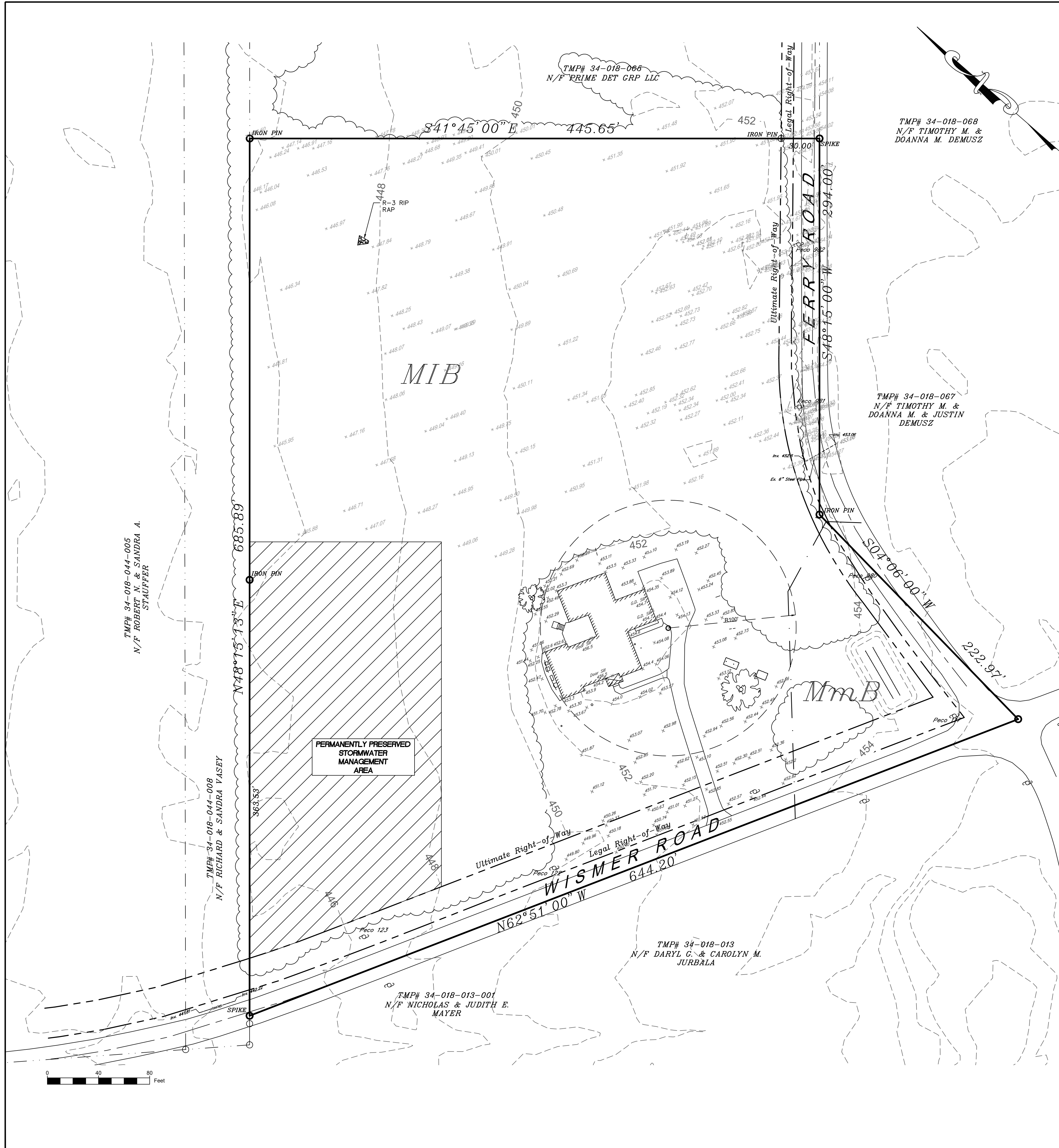
**ROBERT T. CUNNINGHAM, P.E.**  
PA Lic. No. PA076424

**File No.**  
1474\_C2.0\_Subdivision.DWG

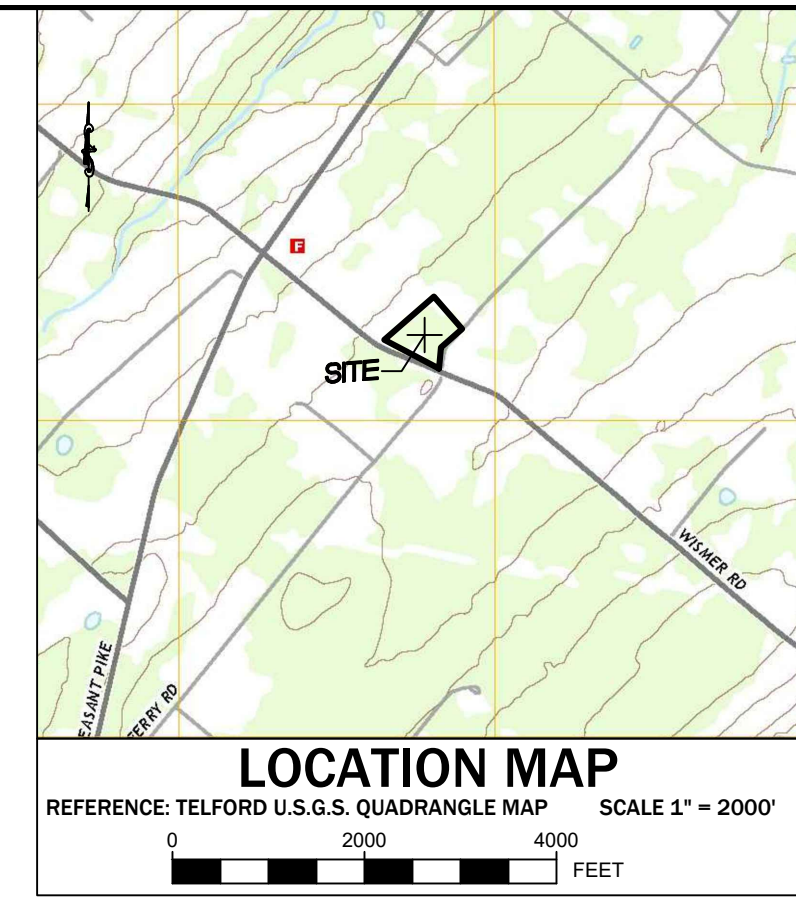
HCE Job	Date	Scale	Designed	RC	Sheet
1474	1/20/2020	1"=40'			1 of 5

**Drawing No.**  
C2.0





- NOTES:
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  - ULTIMATE RIGHT OF WAY OF SURROUNDING STREETS ARE NOT OFFERED FOR DEDICATION.
  - SOIL TYPES ARE MARKED UNITS BASED ON NRCS SOIL SURVEY INFORMATION. PROPERTY WAS SUBJECTED TO CONTROLLED FILL AND THE ACTUAL SOIL ON-SITE ARE CONSIDERED MADE LAND.
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**4829 WISMER ROAD**  
 T.M.P.# 34-018-068-002  
 PLUMSTEAD TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

**EXISTING FEATURES PLAN**

File No.	1474_C2.0_Subdivision.DWG				
HCE Job	1474	Date	1/20/2020	Scale	1"=40'
Designed	RC	Sheet	2	of	5
Drawing No.	C2.1				





AERIAL IMAGE OBTAINED FROM PASDA, AERIAL IMAGE DATE: 2010



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 Suite 106  
 New Britain, PA 18901  
 (215) 586-3330  
 www.hcengineering.net

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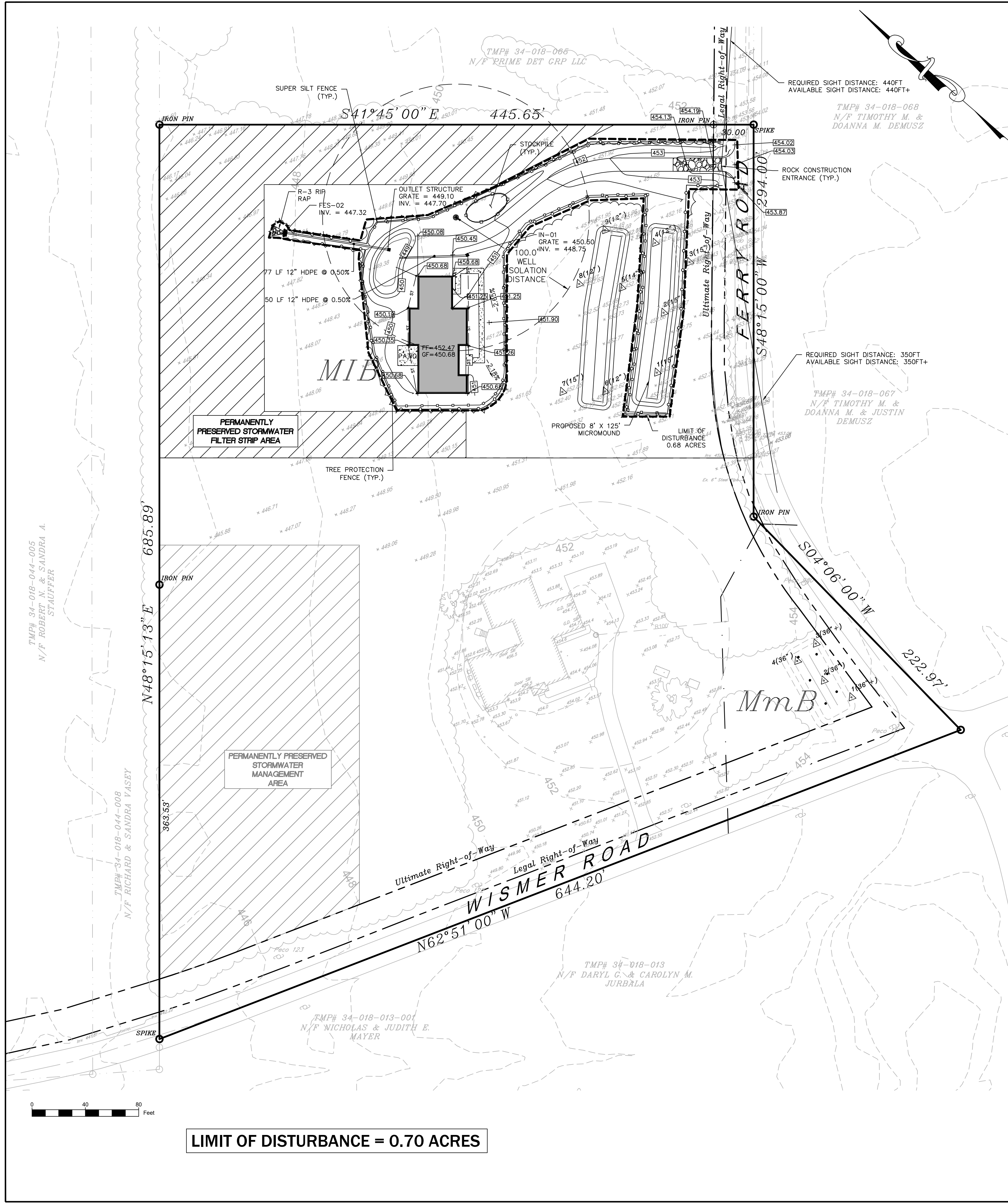
CALL BEFORE YOU DIG !!  
 THIS DRAWING IS FOR CONSTRUCTION PHASE AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF HOLMES CUNNINGHAM LLC. PENNSYLVANIA ONE STOP & CALL CENTER SERVICE. CALL SYSTEM, INC. 1-800-942-1776  
 UTILITY LOCATIONS AS SHOWN ON THIS DRAWING ARE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO ANY EXCAVATION.

**4829 WISMER ROAD**  
 T.M.P.# 34-018-065-002  
 PLUMSTEAD TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA  
**AERIAL PLAN**

**ROBERT T. CUNNINGHAM, P.E.**  
 PA Lic. No. PA076424

File No.	1474_C2.0_Subdivision.DWG				
HCE Job	1474	Date	1/20/2020	Scale	1"=50'
Designed	RC	Sheet	3	of	5
Drawing No.	C2.2				





SOIL TYPES					
SYM	NAME	Hydric (Y/N)	DEPTH TO BEDROCK (IN.)	DEPTH TO WATER TABLE (IN.)	HSG
MIB	Mount Lucas Silt Loam, 3 to 8 Percent Slopes	N	48-99 Inches	12-30 Inches	C/D
MmB	Mount Lucas Silt Loam, 0 to 8 Percent Slopes	N	48-99 Inches	6-36 Inches	C/D

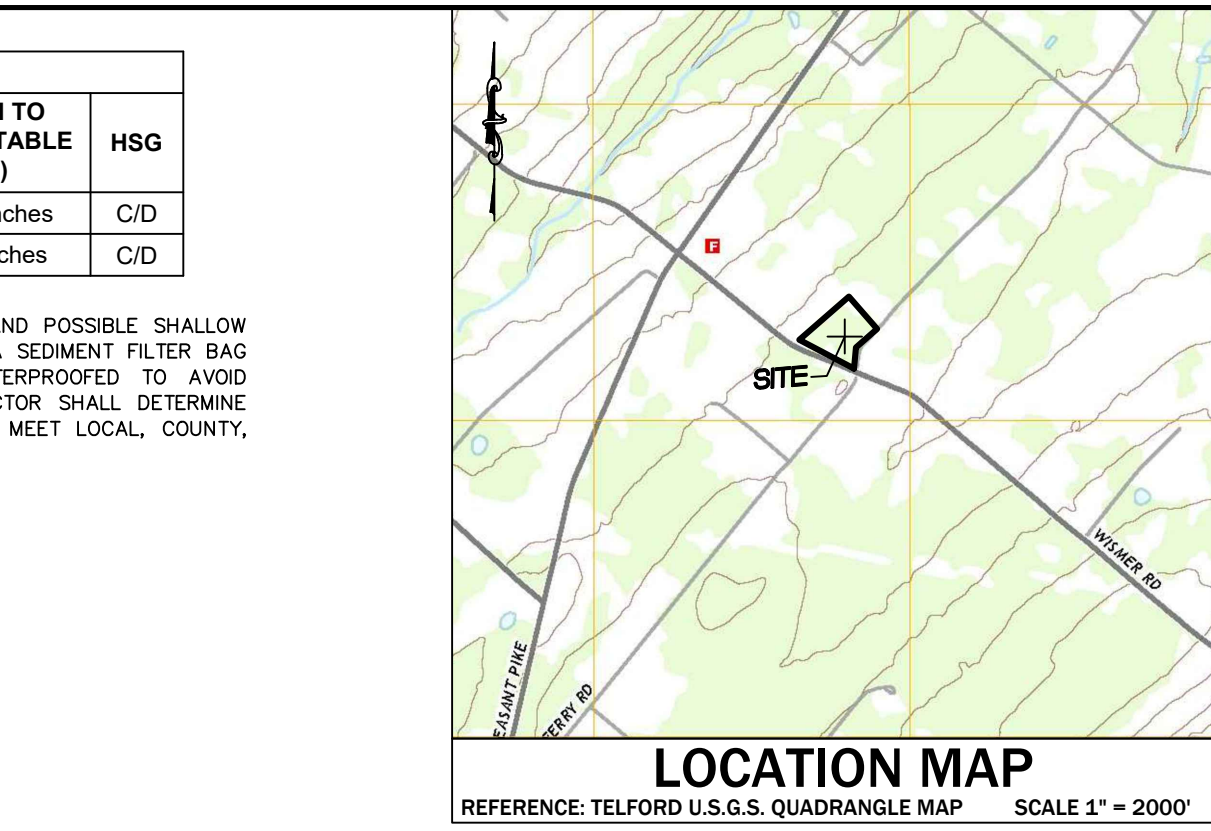
**SOIL LIMITATIONS AND RESOLUTION:**  
 THE SOILS FOUND WITHIN THE PROJECT LIMITS HAVE LIMITATIONS DUE TO SHALLOW DEPTH TO GROUNDWATER AND POSSIBLE SHALLOW DEPTH TO BEDROCK. IN ORDER TO RESOLVE THIS ISSUE, ANY STANDING WATER SHOULD BE PUMPED THROUGH A SEDIMENT FILTER BAG DURING CONSTRUCTION, AND THE CONTRACTOR SHALL ENSURE THAT THE DWELLINGS ARE PROPERLY WATERPROOFED TO AVOID GROUNDWATER ISSUES POST-CONSTRUCTION. FOR AREAS WHERE SHALLOW BEDROCK IS A LIMITATION, CONTRACTOR SHALL DETERMINE WHETHER ROCK IS RIPRAPABLE. IF ROCK IS NOT RIPRAPABLE, BLASTING WILL BE REQUIRED. ALL BLASTING SHALL MEET LOCAL, COUNTY, STATE AND FEDERAL REGULATIONS.

- GRADING AND DRAINAGE NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
  - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER, LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
  - CONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS, FOR ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITEWORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
  - SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
  - PVC = POLYVINYLCHLORIDE PIPE, HDPE = HIGH DENSITY POLYETHYLENE PIPE, RCP = REINFORCED CONCRETE PIPE.
  - STORM DRAINAGE PIPING TO UTILIZE WATER TIGHT JOINTS.
  - COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:
 

FILL AREA	% OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	95%
SIDEWALKS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA
  - PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
  - REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON-SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.
  - ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
  - THE CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO THE INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE, MANHOLES SIZES, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
  - CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE OWNER FOR ALL CATCH BASINS, MANHOLES, AND OTHER STORM AND SANITARY STRUCTURES.
  - PLUMSTEAD TOWNSHIP SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY.
  - ALL STORMWATER MANAGEMENT FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED OR MODIFIED WITHOUT PRIOR APPROVAL FROM PLUMSTEAD TOWNSHIP.

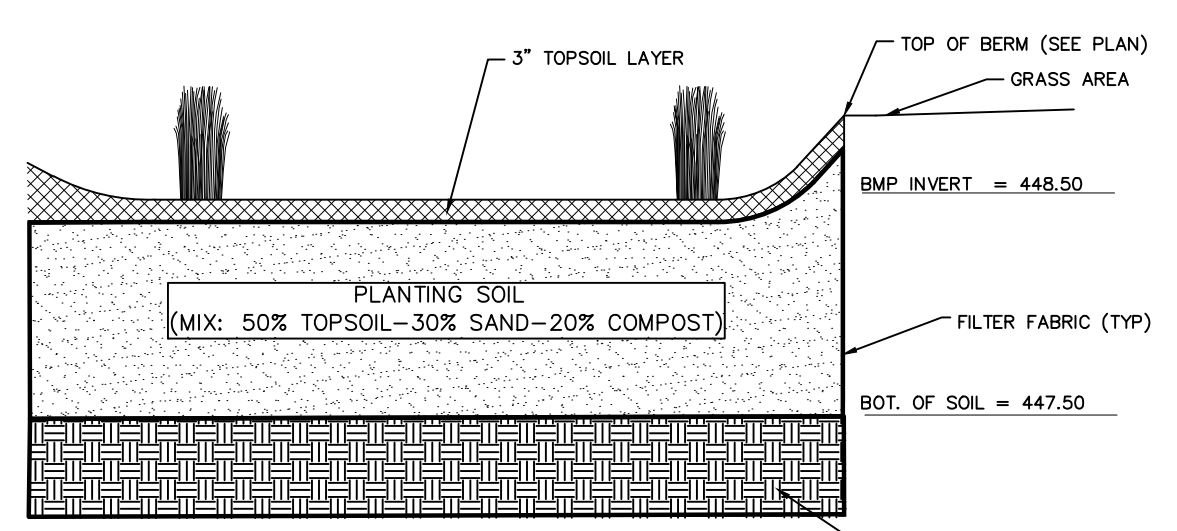
- UTILITY NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
  - THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY (WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE) LOCATIONS, INVERTS AND CONDITIONS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND REQUIRING MODIFICATIONS TO THE SITE DESIGN SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE CONSTRUCTION. DIFFERING UTILITY CONDITIONS THAT ARE ENCOUNTERED BY THE CONTRACTOR, THAT REQUIRE MODIFICATION OF SITE DESIGN AND THAT ARE NOT BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT AT HIS SOLE COST.
  - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER, LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL, TELEPHONE, CABLE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS AND LOCATIONS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY AGENCIES FOR APPROVAL OF UTILITY LOCATIONS AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
  - THE LOCATION OF EXISTING GAS MAINS ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
  - THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
  - MIN. DEPTH OF COVER OVER ELECTRIC, GAS, AND CABLE SERVICES SHALL BE TWO (2) FT.
  - THE LOT WILL BE SERVED BY ON-LOT WATER AND ON-LOT SEWER SYSTEMS.
  - ALL ELECTRIC, TELEPHONE, CABLE TELEVISION AND COMMUNICATION FACILITIES, BOTH MAIN AND SERVICE LINES, SHALL BE PROVIDED BY UNDERGROUND CABLES, INSTALLED IN ACCORDANCE WITH THE PREVAILING STANDARDS AND PRACTICES OF THE UTILITY AND OTHER COMPANIES PROVIDING SUCH SERVICES.

- NOTES:**
- REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, ASSIGNED SERIAL NUMBERS AND IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 2008. (800-242-1776)
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  - NO NEW STREETS ARE PROPOSED AS PART OF THIS PROJECT.
  - THE OWNER OF THE LOT SHALL BE RESPONSIBLE TO MAINTAIN ANY STORMWATER IMPROVEMENTS LOCATED ON THEIR LOT IN ACCORDANCE WITH THE PLANS FOR THE PROJECT. THE STORMWATER DESIGN FOR THIS PROJECT IS A VEGETATED FILTER STRIP WHICH IS TO BE PERMANENTLY PRESERVED.
  - ULTIMATE RIGHT OF WAY OF SURROUNDING STREETS ARE NOT OFFERED FOR DEDICATION.
  - SOIL TYPES ARE MAPPED UNITS BASED ON NRCS SOIL SURVEY INFORMATION. PROPERTY WAS SUBJECTED TO CONTROLLED FILL AND THE ACTUAL SOIL ON-SITE ARE CONSIDERED MADE LAND.
  - REFER TO PLANS APPROVED BY BUCKS COUNTY HEALTH DEPARTMENT FOR DETAILED INFORMATION REGARDING SEPTIC SYSTEM CONSTRUCTION.
  - THE OWNERS OF THE LOTS SHALL NOT OBSTRUCT, DIVERT, OR OTHERWISE AFFECT RUNOFF FROM THE EXISTING CULVERT ON FERRY ROAD THAT DISCHARGES WITHIN THE SITE WITHOUT THE APPROVAL OF PLUMSTEAD TOWNSHIP.



**LEGEND**

- PROPERTY LINE
- PROPOSED HOUSE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SUPER SILT FENCE
- TREE PROTECTION FENCE
- LIMIT OF DISTURBANCE



- RAIN GARDEN CONSTRUCTION SEQUENCE:**
- IF ANY UNFAVORABLE CONDITIONS ARE ENCOUNTERED DURING THE INSTALLATION OF THE INFILTRATION BASIN (I.E. GROUNDWATER AND/OR BEDROCK PINNACLES OF CARBONATE BEDROCK, ETC.), THE OWNER/ENGINEER SHOULD BE NOTIFIED IMMEDIATELY SINCE THE PROPOSED INFILTRATION BASIN MAY NEED TO BE RELOCATED TO A MORE SUITABLE LOCATION ON THE PROPERTY.
  - INSTALL TEMPORARY SEDIMENT CONTROL BMS AS SHOWN ON THE PLANS.
  - EXISTING SUB-GRADE IN BIOPINTEGRATION AREAS SHALL NOT BE COMPACTED OR SUBJECTED TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC.
  - INITIAL EXCAVATION CAN BE PERFORMED DURING ROUGH SITE GRADING BUT SHALL NOT BE CARRIED TO WITHIN ONE FEET OF THE FINAL BOTTOM ELEVATION. FINAL EXCAVATION SHOULD NOT TAKE PLACE UNTIL ALL DISTURBED AREAS IN THE DRAINAGE AREA HAVE BEEN STABILIZED. INFILTRATION BASIN BED AREAS MAY BE USED AS TEMPORARY SEDIMENT FACILITIES PROVIDED THAT THE PROPOSED FINISH ELEVATION OF THE BED IS 12 INCHES LOWER THAN THE BOTTOM ELEVATION OF THE SEDIMENT TRAP. IF SEDIMENT FACILITIES ARE LOCATED WITHIN 12 INCHES OF BMP ELEVATION, CONTRACTOR SHALL EXCAVATE MATERIAL TO A DEPTH 36 INCHES BELOW FINAL GRADE AND REPLACE WITH 12 INCHES OF CLEAN, LIGHTLY COMPACTED SOIL PRIOR TO PLACING PLANTING SOIL.
  - WHERE EROSION OF SUB-GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING IN THE GRADED BOTTOM, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 8 INCHES WITH A YORK RAKE OR EQUIVALENT BY LIGHT TRACTOR.
  - BRING SUBGRADE OF BIOPINTEGRATION AREA TO LINE, GRADE AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSION, PONDING OR TRAFFIC.
  - UPON COMPLETION OF THE SUBGRADE WORK, THE ENGINEER SHALL BE NOTIFIED AND SHALL INSPECT AT THE ENGINEER'S DISCRETION BEFORE PROCEEDING WITH INSTALLATION.
  - PLANTING SOIL SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE. ANY ACCUMULATION OF DEBRIS OR SEDIMENT THAT TAKES PLACE AFTER APPROVAL OF SUBGRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF PLANTING SOIL AT NO EXTRA COST TO THE OWNER.
  - INSTALL PLANTING SOIL IN 18 INCH MAXIMUM LIFTS AND LIGHTLY COMPACT (TAMP WITH BACKHOE OR BY HAND), KEEP EQUIPMENT MOVING TO A MINIMUM. DO NOT OVER COMPACT. INSTALL PLANTING SOIL TO GRADES SHOWN ON PLANS.
  - PLANT TREES AND SHRUBS ACCORDING TO INFILTRATION BASIN DETAILS AND NOTES.
  - PROTECT THE INFILTRATION BASIN FROM SEDIMENT AT ALL TIMES. HAYBALES, DIVERSION BERMS AND/OR OTHER APPROPRIATE MEASURES SHALL BE USED AT THE TOE OF THE SLOPES THAT ARE ADJACENT TO THE INFILTRATION BASIN TO PREVENT SEDIMENT FROM WASHING INTO THESE AREAS DURING SITE DEVELOPMENT.
  - WHEN SITE IS FULLY VEGETATED AND THE SOIL MANTLE IS STABILIZED THE PLAN DESIGNER SHALL BE NOTIFIED AND SHALL INSPECT THE INFILTRATION BASIN DRAINAGE AREA AT THE ENGINEER'S DISCRETION BEFORE THE AREA IS BROUGHT ONLINE AND SEDIMENT CONTROL DEVICES REMOVED.
  - CONTINUOUS MOISTURE FOR 4-6 WEEKS MUST BE INSURED TO ALLOW PROPER GERMINATION. IF RAIN DOES NOT OCCUR CONTRACTOR SHALL PROVIDE SUPPLEMENTAL IRRIGATION TO NEWLY SEEDING AREAS PER INSTRUCTIONS INCLUDED IN SEEDING SPECIFICATION.

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**REVISIONS**

Date	Description
04-22-2021	PER TWP. ENG. REVIEW DATED 2-22-21
05-17-2021	PER TWP. ENG. REVIEW DATED 4-30-21

**4829 WISMER ROAD**  
 T.M.P.# 34-018-068-002  
 PLUMSTEAD TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

**ROBERT T. CUNNINGHAM, P.E.**  
 PA Lic. No. PA076424

**File No.**  
1474\_C2.0\_Subdivision.DWG

HCE Job	Date	Scale	Designed	RC	Sheet
1474	1/20/2020	1"=40'			4 of 5

**Drawing No.**  
C2.3



**EROSION / SEDIMENT CONTROL PLAN STANDARD NOTES**

STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET; STOCKPILE SLOPES MUST NOT EXCEED 2:1.

THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE O/RP SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

THE O/RP SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE BUCKS COUNTY CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.

ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER UNDISTURBED AREAS.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.

EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE O/RP SHALL INVITE ALL CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPLICABLE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER AND THE BUCKS COUNTY CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INC. AT 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS.

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY CEASES, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS.

DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% (PERCENT) VEGETATIVE OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

UPON THE INSTALLATION OF TEMPORARY SEDIMENT BASIN RISER(S), A QUALIFIED SITE REPRESENTATIVE SHALL CONDUCT AN IMMEDIATE INSPECTION OF THE RISER(S), WHEREUPON THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER IS SEALED (WATERTIGHT).

AT STREAM CROSSING, A 50-FOOT BUFFER SHALL BE MAINTAINED, ON BUFFERS, CLEARINGS, SOD DISTURBANCES AND EXCAVATIONS, EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITY SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REMOVAL AND MAINTAINING EQUIPMENT SHOULD BE AVOIDED WITHIN BUFFER ZONES.

UNTIL A SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.

SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN SOIL STOCKPILES AND STABILIZED.

ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

**SEEDING NOTES:**

**TEMPORARY SEEDING:**

TEMPORARY SEEDING SHALL BE DONE IN AREAS WHERE NO ACTIVITY WORK WILL BE PERFORMED, ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE SEED AND MULCHED IMMEDIATELY.

- 1. DURING NON-GERMINATING PERIODS, ONLY MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. AREAS MULCHED DURING THE NON-GERMINATING PERIODS, MUST BE LIMED, FERTILIZED, SEED, AND MULCHED IMMEDIATELY FOLLOWING THE END OF THE NON-GERMINATING PERIODS.
- 2. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MAY BE SEED AND MULCHED WITH A QUICK-GROWING TEMPORARY SEED MIXTURE.
- 3. DISTURBED AREAS WHICH ARE AT EITHER FINISHED GRADE OR WILL NOT BE REDISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCHED.
- 4. TEMPORARY SEEDING STEPS:
  - A. APPLY AGRICULTURAL LIMESTONE AT A RATE OF ONE (1) TON PER ACRE. (5 POUNDS PER 1,000 SQUARE FEET)
  - B. APPLY FERTILIZER AT THE RATE OF 50-50-50 PER ACRE.
  - C. WORK THE LIMESTONE AND FERTILIZER INTO THE SOIL.
  - D. UTILIZING THE FOLLOWING SEEDING TYPES, RATES AND TIME SCHEDULE :

TEMPORARY SEEDING table with columns: SEASON, RATE, TYPE

- E. APPLY HAY OR STRAW MULCH (IN ACCORDANCE WITH SECTION NO. 4) AT A RATE OF THREE (3) TONS PER ACRE.

ALL SEED SHALL BE LABELED, DATED AND QUALITY CONSISTENT WITH SECTION NO. 2

**PERMANENT SEEDING:**

- 1. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE DISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEED AND MULCH WITH A PERMANENT SEED MIXTURE AND MULCHED.
- 2. SEEDING SHALL BE DONE DURING PERIODS FROM APRIL 15TH TO OCTOBER 31ST, UNLESS OTHERWISE DIRECTED. IF SEEDING IS DONE AFTER OCTOBER 15TH, DORMANT SEED MUST BE USED AND DISTURBED AREAS MUST BE MULCHED.
- 3. DISTURBED FINAL GRADED AREAS AND DRAINAGE SWALES WILL BE PERMANENTLY SEED AS FOLLOWS:
  - A. MINIMUM OF 4" OF TOPSOIL SHALL BE SPREAD OVER ALL AREAS TO BE SEED. TOPSOIL SHALL BE FREE OF STONES, STICKS, WASTE MATERIAL AND SIMILAR DEBRIS. FROZEN GROUND SHALL NOT BE SPREAD AS TOPSOIL AND TOPSOIL SHALL NOT BE SPREAD OVER FROZEN GROUND.
  - B. A SOIL ANALYSIS IS RECOMMENDED, HOWEVER, IN LIEU OF AN ANALYSIS APPLY AGRICULTURAL LIMESTONE AND FERTILIZER AT RATES RECOMMENDED BELOW (OR AS SUGGESTED BY THE SOIL TEST RESULTS (ONE (1) TEST PER 25 ACRES)).
  - C. THE LIMESTONE AND FERTILIZER SHALL BE WORKED INTO THE SOIL TO DEPTHS OF 3 TO 4 INCHES. D. GRASS SHALL NOT BE PLANTED AFTER HEAVY RAIN OR WATERING.
  - D. ALL SEED USED SHALL BE LABELED IN ACCORDANCE WITH THE U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT IN EFFECT AT THE TIME OF PURCHASE. INERT MATTER SHALL NOT EXCEED 1% AND BLUE TAG CERTIFIED SEED SHALL BE SUPPLIED WHEREVER POSSIBLE.
  - E. SMOOTH AND FIRM SEED BED WITH CULTIPACKER OR SIMILAR EQUIPMENT PRIOR TO SEEDING. APPLY SEED UNIFORMLY BY BROADCASTING, DRILLING OR HYDRO SEEDING. COVER SEEDS WITH 1/2" OF SOIL WITH SUITABLE EQUIPMENT.
  - F. APPLY HAY OR STRAW MULCH (IN ACCORDANCE WITH SECTION NO. 4) AT A RATE OF THREE (3) TONS PER ACRE.

PERMANENT SEEDING FOR NORMAL MOWED LAWN AREAS table with columns: SEASON, RATE, TYPE

(\*) USE DORMANT SEED, UNIFORMLY APPLIED, WORKING INTO A DEPTH OF 1/4 INCH. THE USE OF MULCH IS REQUIRED. THE USE OF NETTING OR EROSION CONTROL MATS MAY BE REQUIRED.

PERMANENT SEEDING FOR SPECIAL AREAS (SWALES, POND EMBANKMENTS, LEAVES, DIVERSION CHANNELS, ETC.):

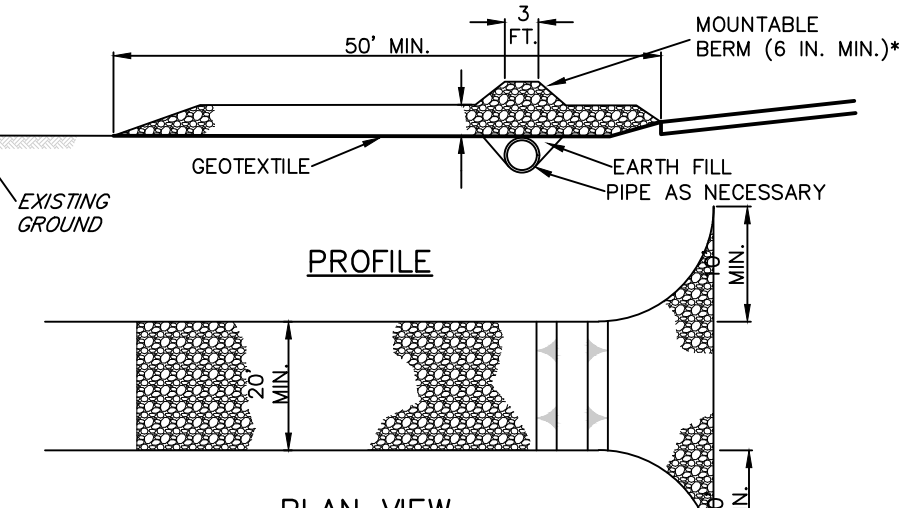
PERMANENT SEEDING FOR SPECIAL AREAS table with columns: SEASON, RATE, TYPE

NOTE : SEEDING PERIODS AND SPECIFICATIONS MAY VARY DUE TO SITE CONDITIONS AND VARIANCES FROM THE TIME THIS REPORT IS WRITTEN AND APPROVED. IT MAY BE NECESSARY TO ADAPT SEED SPECIFICATION, VARIETIES, AND QUALITIES FOR SPECIAL CONDITIONS CONSULT "GUIDELINE FOR REGULATION OF SEVERELY DISTURBED AREAS," PENNSYLVANIA STATE UNIVERSITY.

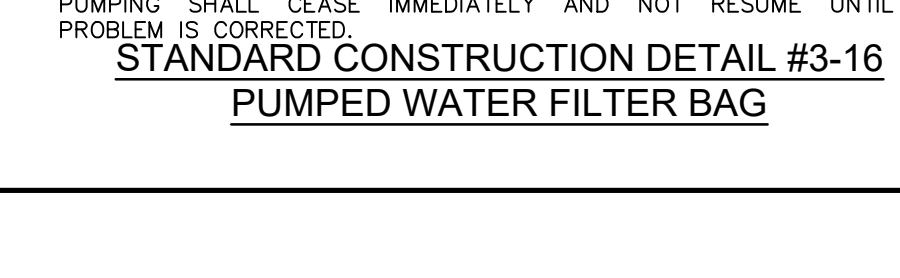
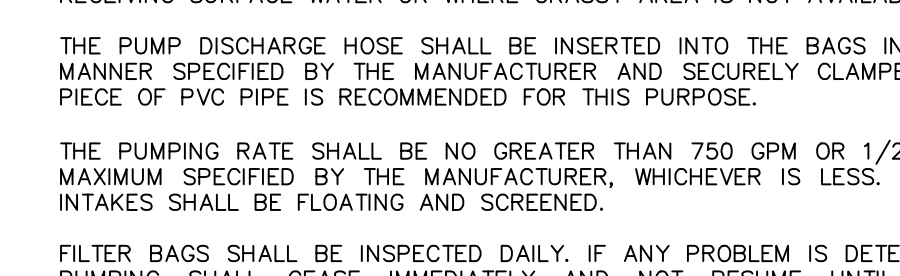
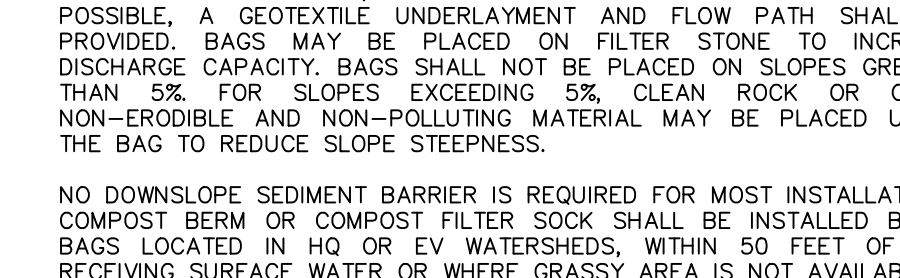
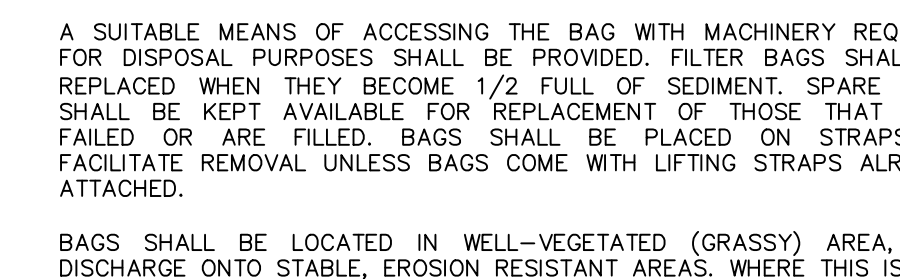
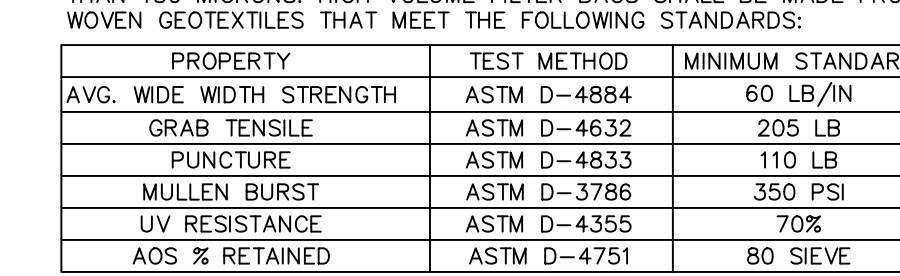
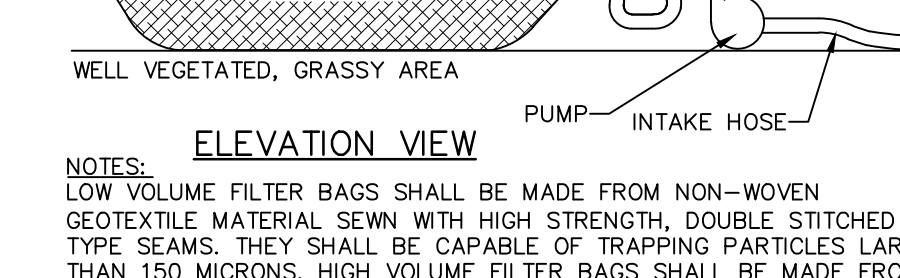
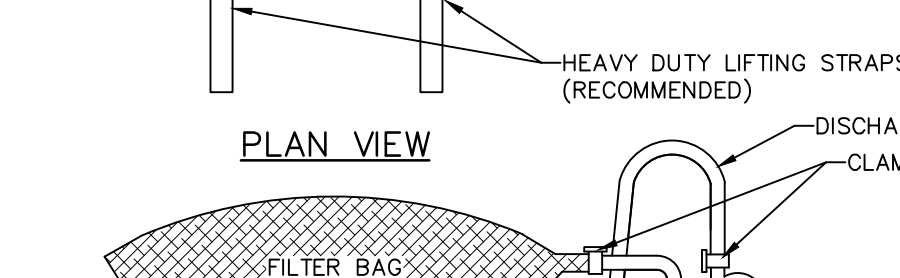
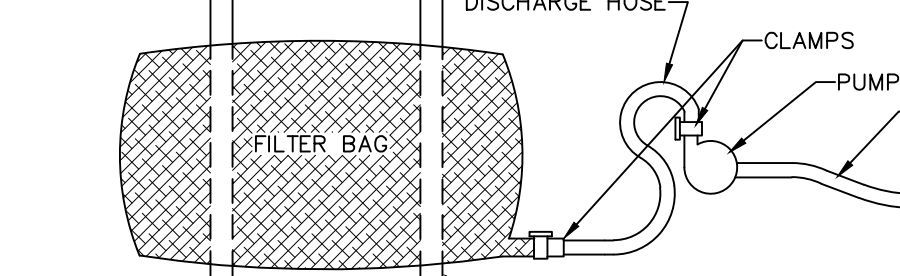
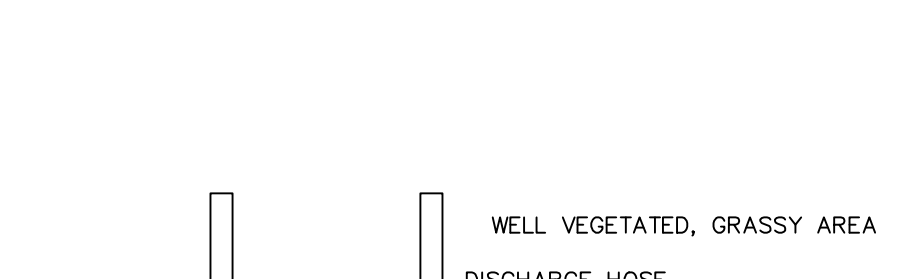
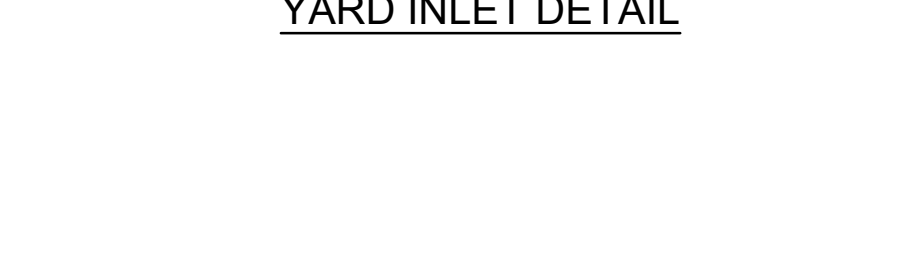
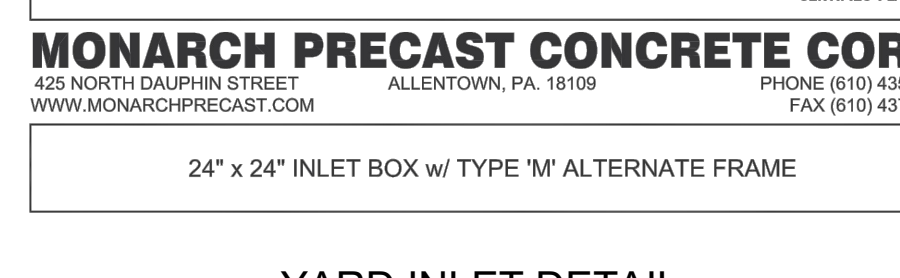
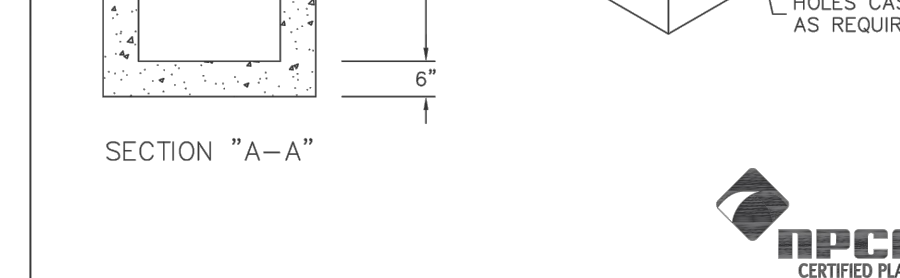
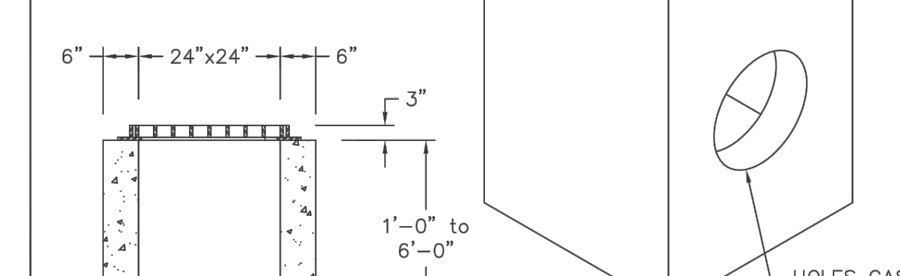
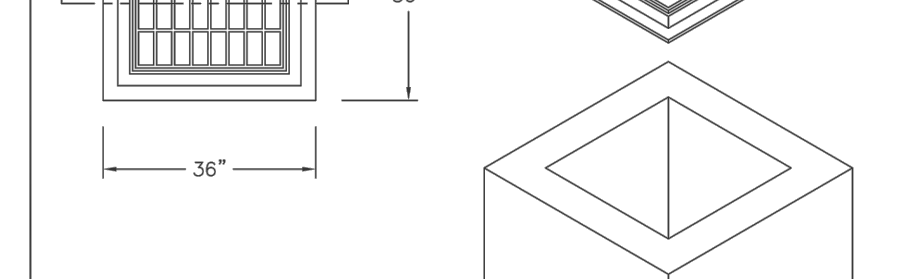
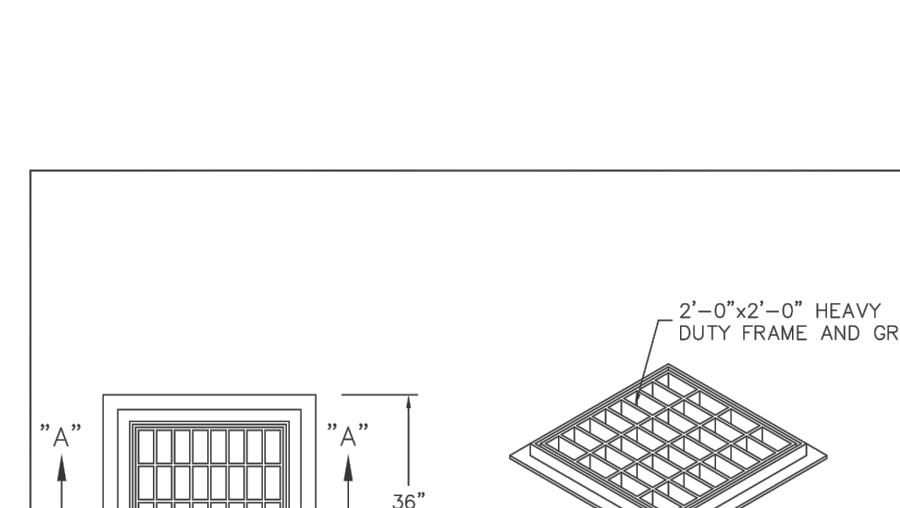
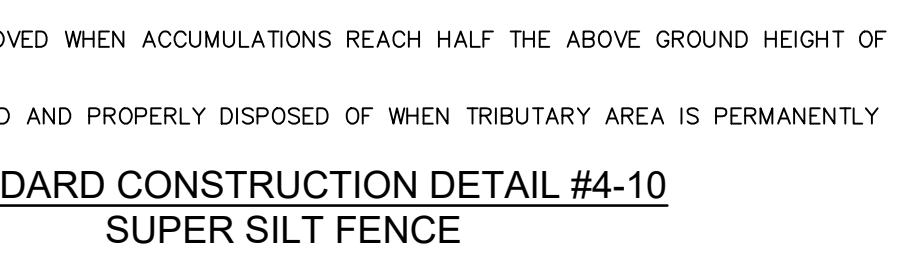
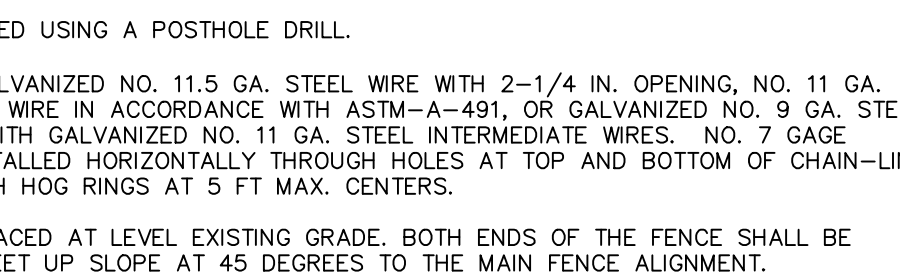
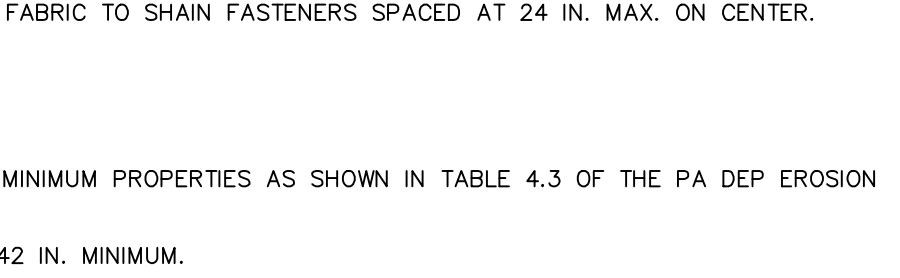
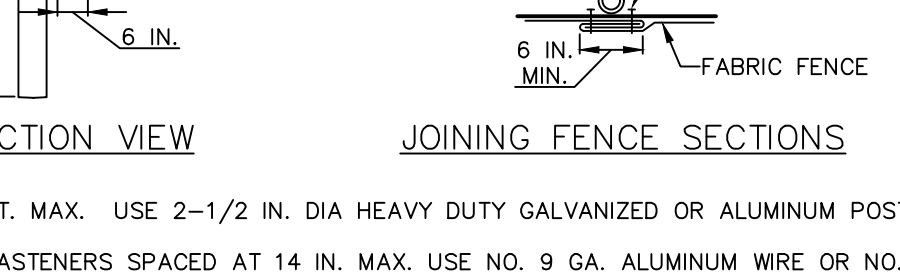
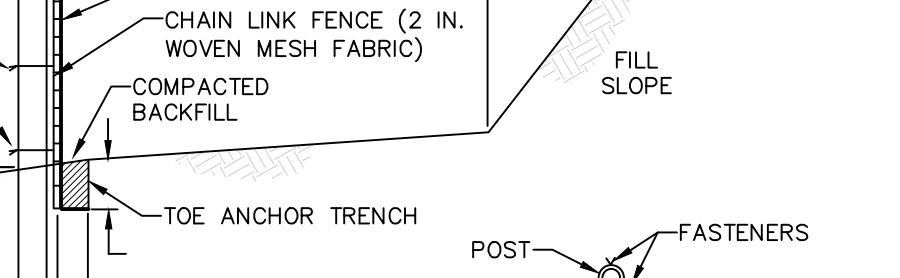
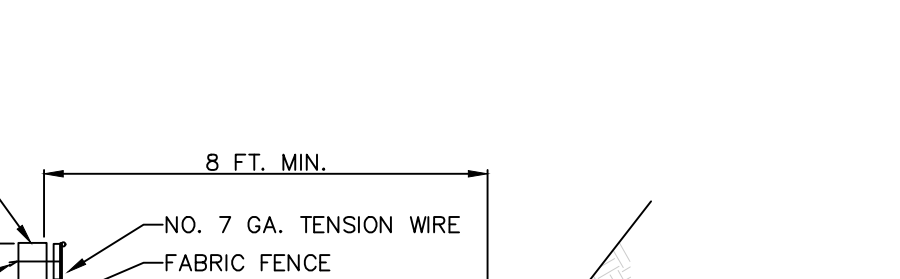
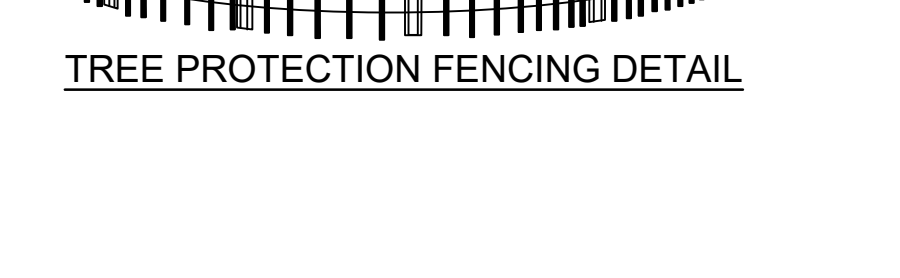
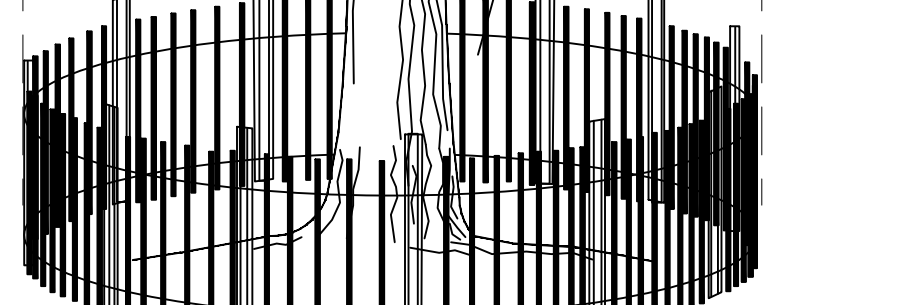
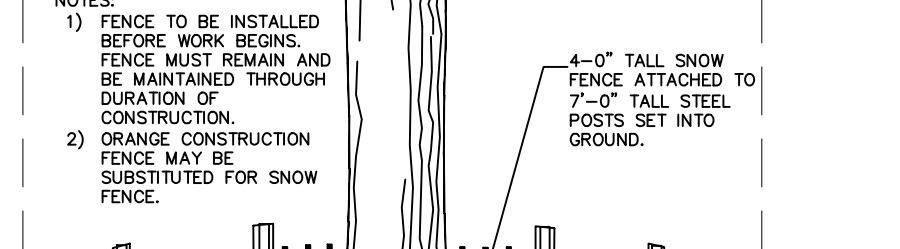
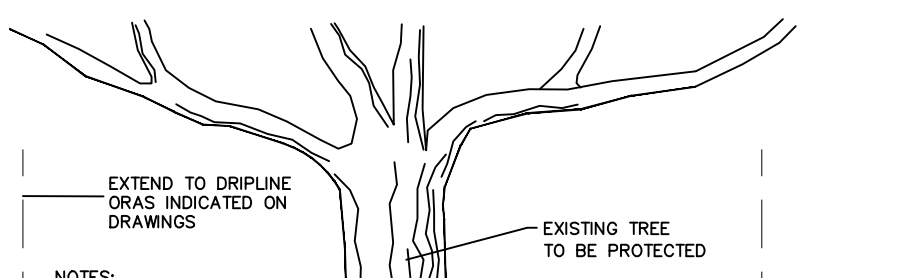
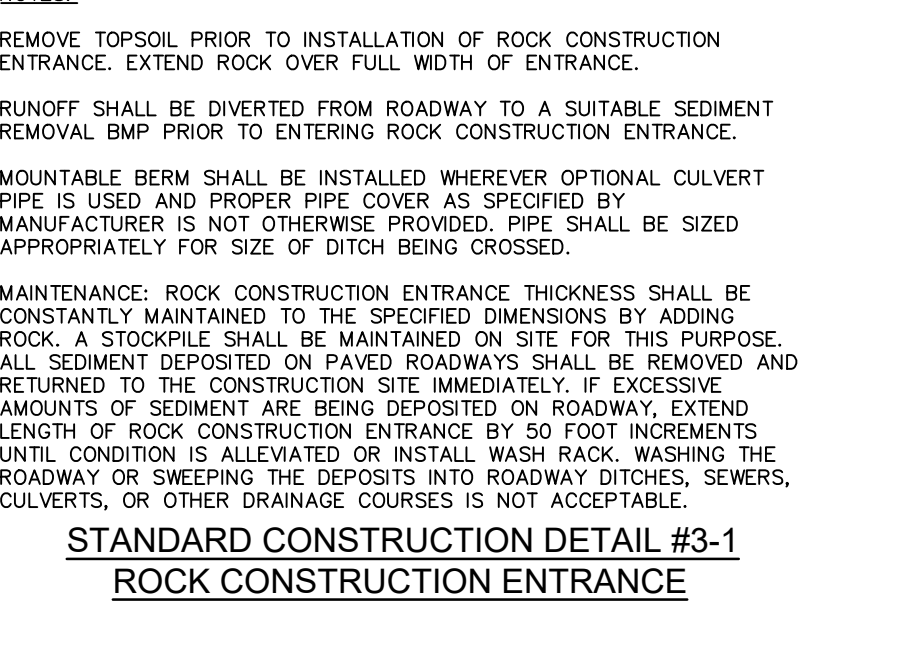
- 4. FERTILIZER : A SOIL ANALYSIS IS RECOMMENDED BUT IN LIEU OF AN ANALYSIS APPLY AGRICULTURAL LIMESTONE AT A RATE OF FOUR (4) TONS/ACRE AND 10-20-20 FERTILIZER AT A RATE OF 50 LBS. PER 1000 SF. THESE MATERIALS WILL BE UNIFORMLY APPLIED AND WORKED INTO THE TOPSOIL TO A DEPTH OF 3 TO 4 INCHES IMMEDIATELY BEFORE SEEDING. A 1 0- 10 FERTILIZER WILL BE WORKED INTO THE SURFACE AT A RATE OF 10 LBS. PER 1000 SF.
- 5. HYDRO SEEDING: LIME AND SEED SHALL BE AS SPECIFIED ABOVE, AND FERTILIZER SHALL BE APPLIED AT A RATE OF 40-80. CROWN FERTILIZERS RATE SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S RATE. SHOULD FERTILIZER BE APPLIED WITH THE INOCULANT, THE MIXTURE SHALL NOT REMAIN IN A SLURRY FOR MORE THAN ONE HOUR. WOOD CELLULOSE FIBER, APPLIED AT A RATE OF 35 LBS. PER 1000 SF. MAY BE APPLIED AS PART OF THE SLURRY IN LIEU OF MULCHING BINDER, SUCH AS CURASOL, DCA-70, TERRE-TACK OR AN APPROVED EQUAL SHALL BE USED PER THE MANUFACTURER'S INSTRUCTIONS TO ANCHOR THE MULCH.

**MULCHING: MULCHING SHALL BE APPLIED AS FOLLOWS:**

- A. STRAW - SHALL BE ALL DRIED AND FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIAL. APPLY AT A RATE OF 115 TO 150 LBS PER 1000 SF OR 3 TONS PER ACRE. MULCHED AREAS SHALL BE CHECKED PERIODICALLY AND IMMEDIATELY AFTER STORMS AND WIND. DAMAGED OR MISSING MULCH SHALL BE REPLACED. A TACKIFIER APPLIED AFTER STRAW IS RECOMMENDED. TACKIFIER MAY BE ASPHALT OR POLYMER SPRAY. APPLY AT A RATE RECOMMENDED BY THE MANUFACTURER WITH SUITABLE EQUIPMENT. IN LIEU OF MANUFACTURERS RECOMMENDATIONS APPLY AT A RATE OF .04 TO .06 GALLONS PER SQUARE YARD.
- B. NETTING / EROSION CONTROL BLANKETS - THE USE AND INSTALLATION OF EROSION CONTROL BLANKETS OR NETTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND SHALL BE SELECTED FOR THE PROPER APPLICATION AND CONDITIONS.



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



**UTILITY TRENCHING GUIDELINES:**

**CONSTRUCTION REQUIREMENTS -**

- A. LIMIT AVOIDANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- B. 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.
- C. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- D. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING AS REQUIRED, TO A FACILITY FOR REMOVAL OF SEDIMENTS IN ACCORDANCE WITH PADEP GUIDELINES.
- E. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE AT THE END OF EACH WEEK.

**EXCEPTIONS -**

- 1. IN CERTAIN CASES TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDRASTICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED. IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM 1 WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:
  - A. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
  - B. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES/FACILITIES WILL BE INSTALLED, AND THE AREAS SEED AND MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

**BMP MAINTENANCE**

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE PROPER CONSTRUCTION AND STABILIZATION OF PERMANENT CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PERFORMING INSPECTIONS OF THE BMPs AFTER EACH RUNOFF EVENT AS WELL AS ON A WEEKLY BASIS. THE CONTRACTOR SHALL KEEP A LOG OF ALL INSPECTIONS AND MAINTENANCE PERFORMED ON THE BMPs. THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT CONTROL MEASURES.

SOIL SEDIMENT REMOVED FROM ANY TEMPORARY CONTROL MEASURE DURING REGULAR MAINTENANCE WILL BE INCORPORATED BACK INTO THE EARTHWORK AS FILL ON THE SITE. SOIL SEDIMENT MATERIAL SHALL BE DISTRIBUTED ON-SITE WITHOUT CHANGING DRAINAGE PATTERNS DURING A SPECIFIC CONSTRUCTION STAGE.

SILT FENCE AND ROCK FILTERS WILL BE INSPECTED ONCE A WEEK OR AFTER EVERY STORM EVENT, WHICHEVER COMES FIRST. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE FENCE FUNCTIONAL. DEPOSITS WILL BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE/FILTER. UNDERCUTTING OR EROSION OF THE TOE ANCHOR OF THE SILT FENCE WILL BE REPLACED IMMEDIATELY WITH ROCK FILTER OUTLETS. ANY MANUFACTURER'S RECOMMENDATIONS WILL BE ADHERED TO FOR REPLACING SILT FENCE DUE TO WEATHERING.

THE CONSTRUCTION ENTRANCE WILL BE INSPECTED AT THE END OF EACH WORK DAY. THE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.

**CLEAN FILL NOTE:**

IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE OPERATOR.

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

ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENT, 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 SUBJECT TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."

**SEQUENCE OF CONSTRUCTION**

- 1. SITE DEVELOPMENT OPERATIONS SHOULD BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING GENERAL SEQUENCE OF OPERATIONS. THE CONTRACTOR MAY DEVIATE FROM THE STAGING OF PERMANENT SITE IMPROVEMENT CONSTRUCTION ITEMS, WITH APPROVAL OF THE CONSERVATION DISTRICT INSPECTOR. DEVIATION FROM THE RELATIVE ORDER OF EROSION AND SEDIMENT CONTROL MEASURES SHOULD NOT OCCUR WITHOUT APPROVAL OF THE CONSERVATION DISTRICT INSPECTOR AND SITE ENGINEER.
- 2. CONTACT THE BUCKS COUNTY CONSERVATION DISTRICT (215-345-7577), PLUMSTEAD TOWNSHIP AND PLUMSTEAD TWP. ENGINEER AT LEAST THREE (3) WORKING DAYS PRIOR TO SITE DISTURBANCE.
- 3. INSTALL COMPOST FILTER SOCK AND TREE PROTECTION FENCING IN ALL AREAS SHOWN ON THE PLAN.
- 4. CLEAR AND GRUB AREA IN LIMITY OF DISTURBANCE. CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION. SEE TEMPORARY STABILIZATION NOTES ON THIS SHEET.
- 5. COMMENCE STRIPPING OF TOPSOIL AND STORE IN STOCKPILE AREA.
- 6. ROUGH GRADE SITE IN AREA OF PROPOSED BUILDING.
- 7. EXCAVATE FOR THE FOUNDATION OF THE BUILDING, AND BEGIN BUILDING CONSTRUCTION.
- 8. INSTALL UTILITIES AS REQUIRED (SEWER, WATER, ELECTRIC, CABLE, TELEPHONE) TO THE BUILDINGS. SEE TRENCHING SPECIFICATIONS.
- 9. BASE COURSE PAVING FOR DRIVEWAY CAN COMMENCE ANYTIME AFTER BUILDING FOUNDATION CONSTRUCTION IS COMPLETED.
- 10. UPON COMPLETION OF THE BUILDING STRUCTURE AND STABILIZATION OF TRIBUTARY AREAS, CONSTRUCT RAIN GARDENS AS SHOWN ON THE PLAN. CONSTRUCTION OF THESE BMPs MAY REQUIRE THE OVERSIGHT OF A LICENSED PROFESSIONAL.
- 11. IMMEDIATELY STABILIZE ALL DISTURBED AREAS, NO MORE THAN 15,000 SF OF DISTURBED AREAS SHALL REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS.
- 12. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED IN THE FOLLOWING MANNER. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
  - A. REMOVE ALL REMAINING SEDIMENT FROM COMPOST FILTER SOCK, AND STOCKPILE FOR USE IN LANDSCAPE AREAS.
  - B. ANY UNSUITABLE SOIL AND / OR FILL WILL BE REMOVED OFF-SITE AND DISPOSED OF LEGALLY. IF STOCKPILES ARE TO REMAIN, APPLY PERMANENT SEEDING AND MULCHING.
  - C. REMOVE TEMPORARY SILT FENCE, ETC. WHEN THE ENTIRE SITE IS COMPLETELY STABILIZED.
  - D. AREAS DISTURBED DURING THE REMOVAL OF THE TEMPORARY CONTROLS MUST BE STABILIZED IMMEDIATELY.

**BMP MAINTENANCE/RESTRICTIONS PLAN**

NOTE: AN ANNUAL REPORT SHALL BE SUBMITTED TO THE TOWNSHIP STATING THE FOLLOWING MAINTENANCE HAS BEEN PERFORMED. THE HOMEOWNER IS RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER CONVEYANCE SYSTEM AND ALL PROPOSED TEMPORARY BMPs ON THE LOT.

**VEGETATED FILTER STRIP**

- REGULARLY INSPECT TO ENSURE THEY ARE INFILTRATING;
- MONITOR AFTER MAJOR STORM EVENTS
- INSPECT TO ENSURE THAT VEGETATION IS PERSEVED. REMOVE FALLEN TREES, AVOID RUNNING HEAVY EQUIPMENT OVER THE FILTER STRIP. ROUTINELY REMOVE ACCUMULATED TRASH AND DEBRIS.
- REMOVE INVASIVE PLANTS AS NEEDED.
- INSPECT FOR SIGNS OF FLOW CHANNELIZATION

REVISIONS table with columns: No., Description, Date

Engineering firm information including contact details for Holmes Cunningham LLC.

Project location and details for 4829 Wismer Road, Plumstead Township, Bucks County, Pennsylvania.

Professional Engineer seal for Robert T. Cunningham, P.E.

File number and drawing details: 1474\_C2.0\_Subdivision.DWG, Drawing No. C2.4

HCE Job details including Date, Scale, Designed, and Sheet information.