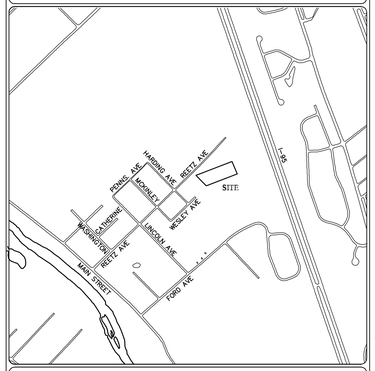
SITE LOCATION MAP (1"=1,000')



TAX PARCEL INFORMATION

SUBJECT TRACT MAY BE IDENTIFIED BY BUCKS COUNTY TAX INFORMATION AS FOLLOWS:

MIDDLETOWN TOWNSHIP

RECORDED DEED DATA IS AS FOLLOWS:

AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN PENNSYLVANIA

PARCEL NO.	DEED BOOK/PAGE	RECORD OWNER	TRACT AREA
22-039-012	29/1478	ALBERT LYKON 615 FORD AVE. HULMEVILLE, PA 19047	2.1868 Ac.

ZONING DATA

OBTAINED FROM THE MIDDLETOWN TOWNSHIP ZONING ORDINANCE, AS LAST AMENDED.

DISTRICT CLASSIFICATION: "R-1" – RESIDENTIAL

REQUIREMENT	REQUIRED	LOT 1	LOT 2
MINIMUM LOT AREA:	15,000S.F.	50,073 S.F.	45,185 S.F.
MINIMUM LOT WIDTH @ BUILDING LINE:	100 FT.	100.7 FT.	106.3 FT.
FRONT YARD RESTRICTION:	35 FT.	35 FT.	35 FT.
SIDE YARD RESTRICTION:	10/30 AGG FT.	10/30 FT.	10/30 FT.
REAR YARD RESTRICTION:	35 FT.	35 FT.	35 FT.
MAXIMUM IMPERVIOUS COVERAGE:	30 %	10.1%	11.2%
BUILDING HEIGHT:	35 FT.	LESS 35 FT.	LESS 35 FT.
MAXIMUM BUILDING COVERAGE:	20 %	5.5%	6.1%

NATURAL RESOURCE CALCULATIONS

RESOURCE	PROTECTION RATIO	LAND IN RESOURCE	REQUIRED RESOURCE PROTECTION LAND	PROVIDED RESOURCE PROTECTION LAND
FLOODPLAINS/FLOODPLAIN SOILS	1.00	0.00 Ac.	0.00 Ac.	0.00 Ac.
LAKES OR PONDS	1.00	0.00 Ac.	0.00 Ac.	0.00 Ac.
WETLANDS/WATERCOURSES	1.00	0.23 Ac.	0.23 Ac.	0.23 Ac.
STEEP SLOPES (>25%)	0.85	0.12 Ac.	0.10 Ac.	0.10 Ac.
STEEP SLOPES (15–25%)	0.70	0.39 Ac.	0.27 Ac.	0.27 Ac.
STEEP SLOPES (8–15%)	0.50	0.82 Ac.	0.41 Ac.	0.51 Ac.
WOODLANDS	0.50	1.95 Ac.	0.975 Ac.	1.44 Ac.
WOODLANDS (SENSITIVE)	0.80	0.23 Ac.	0.184 Ac.	0.23 Ac.

SLOPES 8 TO 15%

SLOPES 15 TO 25%

SLOPES 25%+

BUILDING ENVELOPE:

BUILDING AREA (EXCLUSIVE OF PROTECTED NATURAL FEATURES)

LOT 1: 7,044 S.F.
LOT 2: 5,374 S.F.

GENERAL NOTES

1. TITLE LINE INFORMATION AND TOPOGRAFICAL INFORMATION WAS TAKEN FROM DEEDS AND PLANS OF RECORD AND A SURVEY BY DENNIS M. LITZENBERGER, PLS, COMPLETED MAY 2019. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND WAS PREPARED FROM DOCUMENT OF RECORD. BEARING BASIS FOR THE BOUNDARY RETRACEMENT SURVEY HAS BEEN REFERENCED TO NAD83 PA STATE PLANE COORDINATES SYSTEM. (SOUTH ZONE). ELEVATION DATUM – NAVD 1988 (SEE PLAN FOR BENCHMARK).

2. THE PROPOSED USE SHALL BE SERVICED BY PUBLIC WATER AND SEWER PROVIDED BY BUCKS COUNTY WATER AND SEWER AUTHRORITY.

3. THE PROPOSED STORMWATER MANAGEMENT FACILITIES, SHALL BE MAINTAINED BY THE HOMEOWNERS.

4. ALL LOTS SHALL BE GRADED TO INSURE DRAINAGE FLOW AWAY FROM BUILDINGS WITHOUT PONDING OR OBSTRUCTION.

5. EXISTING SUB SURFACE UTILITY INFORMATION DEPICTED IN THESE PLANS IS BASED UPON VISUAL FIELD INSPECTION. SIZE, MATERIAL, DEPTH, ETC INFORMATION OF THE SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATION AND DEPTHS WHERE SUCH INFORMATION WAS AVAILABLE. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITIES SIZE, LOCATION, DEPTH, ETC AS DEPICTED EXIST BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, ETC. OF ALL UTILITIES BEFORE CONSTRUCTION.

6. ALL LOT CORNERS WILL BE MARKED WITH IRON PINS AT THE COMPLETION OF FINAL GRADING.

8. SOILS INFORMATION:

ToA – TOWHEE SILT LOAM, 0 TO 3% SLOPES
MoC – MANOR LOAM, 8 TO 15% SLOPES

9. THE SITE IS NOT LOCATED WITH A MAP FLOODPLAIN AREA PER FEMA FIRM 42017c0444K, EFFECTIVE 3/21/2017.

10 IMPERVIOUS COVERAGE INFORMATION:

LOT 1

HOUSE AREA:	2,740 S.F.
DRIVEWAY:	1,828 S.F.
WALK/PATIOS:	500 S.F.
TOTAL:	5,068 S.F.

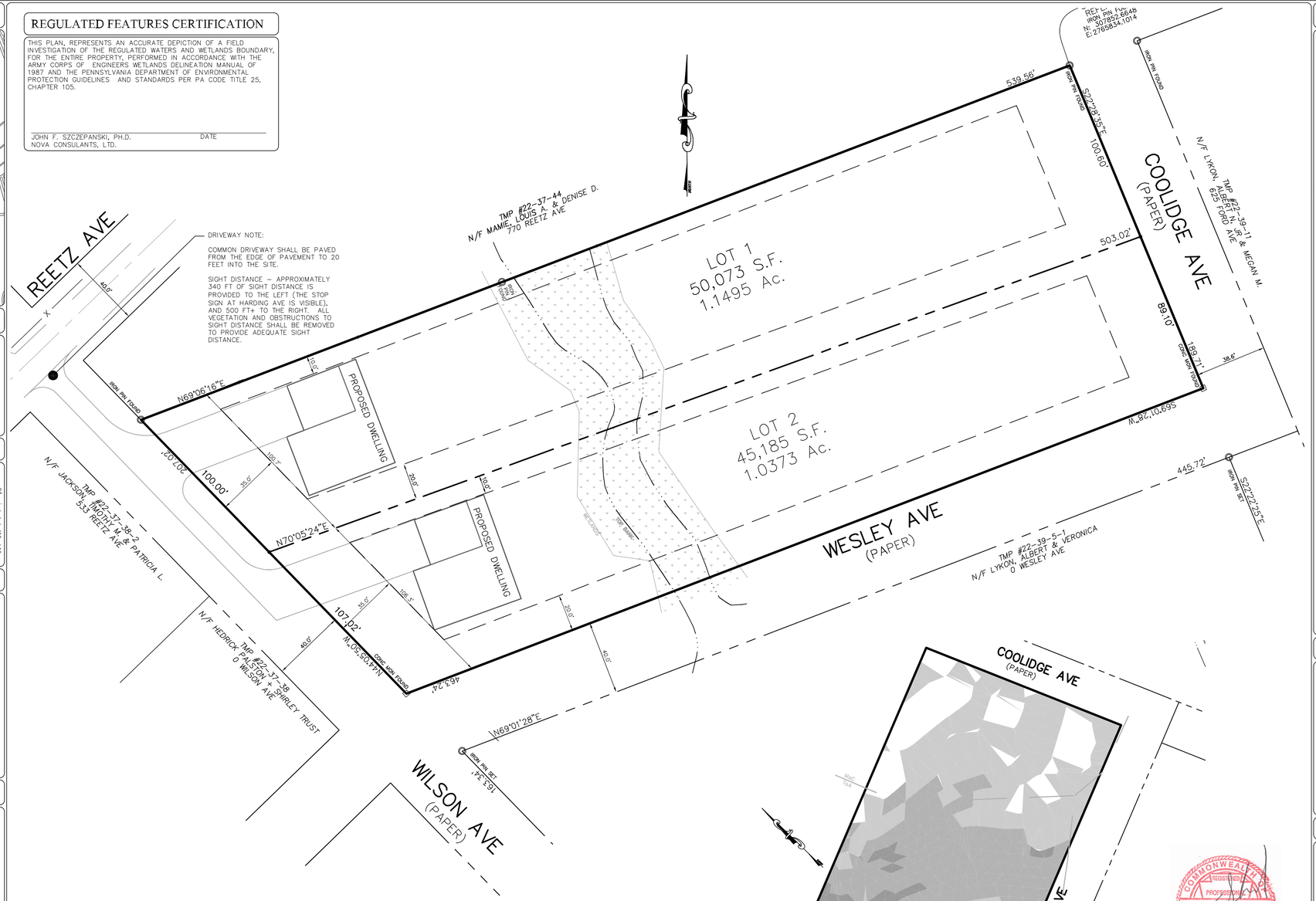
LOT 2

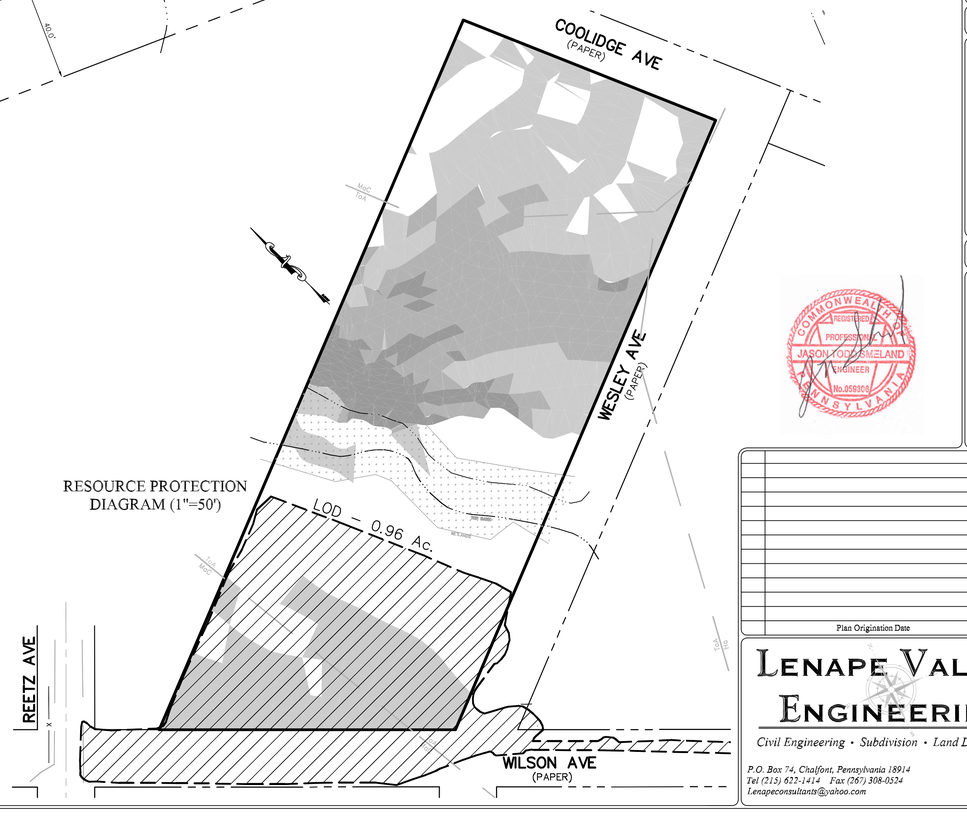
HOUSE AREA:	2,740 S.F.
DRIVEWAY:	1810 S.F.
WALK/PATIOS:	500 S.F.
TOTAL:	5,050 S.F.

REGULATED FEATURES CERTIFICATION

THIS PLAN, REPRESENTS AN ACCURATE DEPICTION OF A FIELD INVESTIGATION OF THE REGULATED WATERS AND WETLANDS BOUNDARY, FOR THE ENTIRE PROPERTY, PERFORMED IN ACCORDANCE WITH THE ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL OF 1987 AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES AND STANDARDS PER PA CODE TITLE 25, CHAPTER 105.

JOHN F. SZCZEPANSKI, PH.D. — DATE
NOVA CONSULANTS, LTD.





RECORDING ACKNOWLEDGMENTS

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF BUCKS

SIGNATURE OF OWNER — SIGNATURE OF OWNER

ON THIS_____DAY OF_____, 20____, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____ PERSONALLY APPEARED _____

KNOW TO ME (OR SATISFACTORY PROVEN) TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING PLAN, AND ACKNOWLEDGE THAT THEY ARE THE REGISTERED OWNERS OF THE DESIGNATED PLAN, THAT ALL NECESSARY APPROVALS OF THE PLAN HAVE BEEN OBTAINED AND IS ENDORSED THEREON, AND THAT THEY DESIRE THAT THE FOREGOING PLAN BE RECORDED ACCORDING TO LAW.

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

_____
NAME

_____
NOTARY PUBLIC

_____
COMMISSION EXPIRATION DATE

APPROVED BY THE MIDDLETOWN TOWNSHIP BOARD OF SUPERVISORS
THIS _____ DAY OF _____ 20___.

PROCESSED AND REVIEWED. REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.
CERTIFIED THIS DATE_____

BCPC # XXXXX

EXECUTIVE DIRECTOR,
BUCKS COUNTY PLANNING COMMISSION

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___.

RECORDER OF DEEDS

ENGINEER'S CERTIFICATION

I, JASON T. SMELAND, P.E., DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE INFORMATION CONTAINED IN THE ACCOMPANYING PLANS, SPECIFICATIONS AND REPORTS HAVE BEEN PREPARED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

(REGISTRATION NUMBER 059306) — JASON T. SMELAND, P.E.

SURVEYOR'S CERTIFICATION

I, DENNIS M. LITZENBERGER, P.L.S., HEREBY CERTIFY THAT THIS PLAN REPRESENTS A SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE MONUMENTATION SHOWN HEREON EXISTS AS LOCATED, AND THAT ALL DIMENSIONAL AND GEODETIC DETAILS ARE CORRECT.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONALLY JASON TODD SMELAND ENGINEER No. 059306 PENNSYLVANIA

DENNIS M. LITZENBERGER, P.L.S. — REGISTRATION NO. 37816E

Plan Origination Date	09-25-2019

RECORD PLAN
Prepared for
ALBERT LYKON
As part of
T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
PENNSYLVANIA

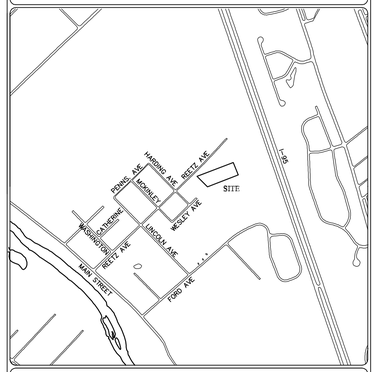
LENAPE VALLEY ENGINEERING
Civil Engineering • Subdivision • Land Development
P.O. Box 74, Chalfont, Pennsylvania 18914
Tel (215) 822-1414 Fax (267) 308-0324
Lenapeconsultants@yahoo.com

JASON T. SMELAND
PROFESSIONAL ENGINEER
PA NO. 059306

GRAPHIC SCALE: 30 0 15 30 60 90

PROJECT MANAGER	DRAWING SCALE	SHEET NUMBER
J.T.S.	1"=30'	1 OF 7
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2198	

SITE LOCATION MAP (1"=1,000')



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SLOPES 25%+

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ToA – TOWHEE SILT LOAM, 0 TO 3% SLOPES
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Plan Origination Date	09-25-2019

EXISTING FEATURES PLAN

Prepared for

ALBERT LYKON

As part of

T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
PENNSYLVANIA

LENAPE VALLEY ENGINEERING

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30 0 15 30 60 90
GRAPHIC SCALE

PROJECT MANAGER	DRAWING SCALE	SHEET NUMBER
J.T.S.	1"=30'	2 OF 7
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2305	

SEEDING PROCEDURES

SOIL AMENDMENTS FOR PERMANENT SEEDING

MINIMUM STANDARD FOR LIMESTONE AND FERTILIZER (IF A SOIL TEST IS NOT PERFORMED) LIMESTONE SHALL BE APPLIED AT THE RATE OF 6 TONS PER ACRE. FERTILIZER SHALL BE APPLIED AT THE RATE OF 1000 LBS. OF 10-20-20 TO THE ACRE.

GRASS SEED MIX

PROPORTION BY WEIGHT	NAME OF GRASS	PURITY	GERMINATION
50%	KENTUCKY BLUE GRASS	90%	80%
20%	RED TOP	95%	92%
30%	PERENNIAL RYE GRASS	98%	89%

APPLICATION RATE = 4 LBS. / 1000 SQ. FEET

ALL AREAS WHICH ARE UNPAVED AND UNPLANTED SHALL BE CONSIDERED GRASS AREAS AND BE SEEDED WITH SPECIFIED MIXTURE, EXCEPT THOSE AREAS SPECIFIED FOR SOD PLACEMENT.

SOIL AMENDMENTS FOR TEMPORARY SEEDING

SITE PREPARATION

APPLY 1 TON AGRICULTURAL-GRADE LIMESTONE PLUS FERTILIZER AT THE RATE OF 50-50-50 AND WORK IN WHERE POSSIBLE. AFTER SEEDING, MULCH WITH HAY OR STRAW AT A RATE OF 3.0 TONS PER ACRE.

SEED MIXTURES	LB/ACRE
FOR SPRING SEEDING: (UP TO JUNE 30)	
(A) ANNUAL RYEGRASS, OR	40
(B) SPRING OATS, OR	96 (3 BU)
(C) SPRING OATS PLUS ANNUAL RYEGRASS	96 OATS + 26 RYE
FOR LATE SPRING AND SUMMER SEEDING: (5/15 – 8/15)	
(A) SUDANGRASS, OR	40
(B) ANNUAL RYEGRASS	
FOR LATE SUMMER AND FALL SEEDINGS: (AUGUST 15 ON)	
(A) ANNUAL RYEGRASS, OR	40
(B) WINTER RYE, OR	168 (3 BU)
(C) WINTER WHEAT	180 (3 BU)

EARTHWORK STAGING

IN ORDER TO KEEP EROSION AND SEDIMENT POLLUTION DURING CONSTRUCTION TO AN ABSOLUTE MINIMUM, THE FOLLOWING PROCEDURES AND STAGES SHALL FOLLOWED:

1. CONSTRUCT AND INSTALL TEMPORARY ACCESS TO THE SITE. PLACE SILT FENCING AS DEPICTED ON PLANS AND DOWNSTREAM OF ALL TOPSOIL STOCKPILING AREAS.
2. ROUGH CUT DRIVEWAY TO SERVE AS ACCESS TO WORK AREA. DRIVEWAY SUBBASE SHALL BE INSTALLED (SEE DETAIL) AS SOON AS PRACTICAL TO CREATE CLEAN SURFACE TO ACCESS BUILDING AREA. AND WILL BE USED AS THE TIRE CLEANER
3. STRIP TOPSOIL AS REQUIRED WITHIN BUILDING AREA AND STOCKPILE AS SHOWN. SILT FENCE SHALL BE PLACED ON THE DOWNSTREAM PERIMETER OF STOCKPILING AREAS.
4. BEGIN CONSTRUCTION OF BUILDING AND UTILITY CONNECTIONS.
5. CONSTRUCT SEEPAGE BEDS PER DETAIL. STORMWATER CONVEYANCE PIPE & INLETS SHALL BE CAPPED UNTIL THE CONTRIBUTING DRAINAGE SHED IS STABILIZED.
6. FINISH GRADE, SEED, MULCH AND LANDSCAPE ENTIRE SITE (REFER TO SEEDING PROCEDURES).
7. REMOVE TEMPORARY CONTROL MEASURES AFTER VEGETATION HAS BEEN ESTABLISHED AND STABILIZATION OF THE SITE IS COMPLETE. AREAS DISTURBED DURING THE REMOVAL OF THE CONTROLS MUST BE STABILIZED.

EROSION CONTROL 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 APPROPRIATE 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.

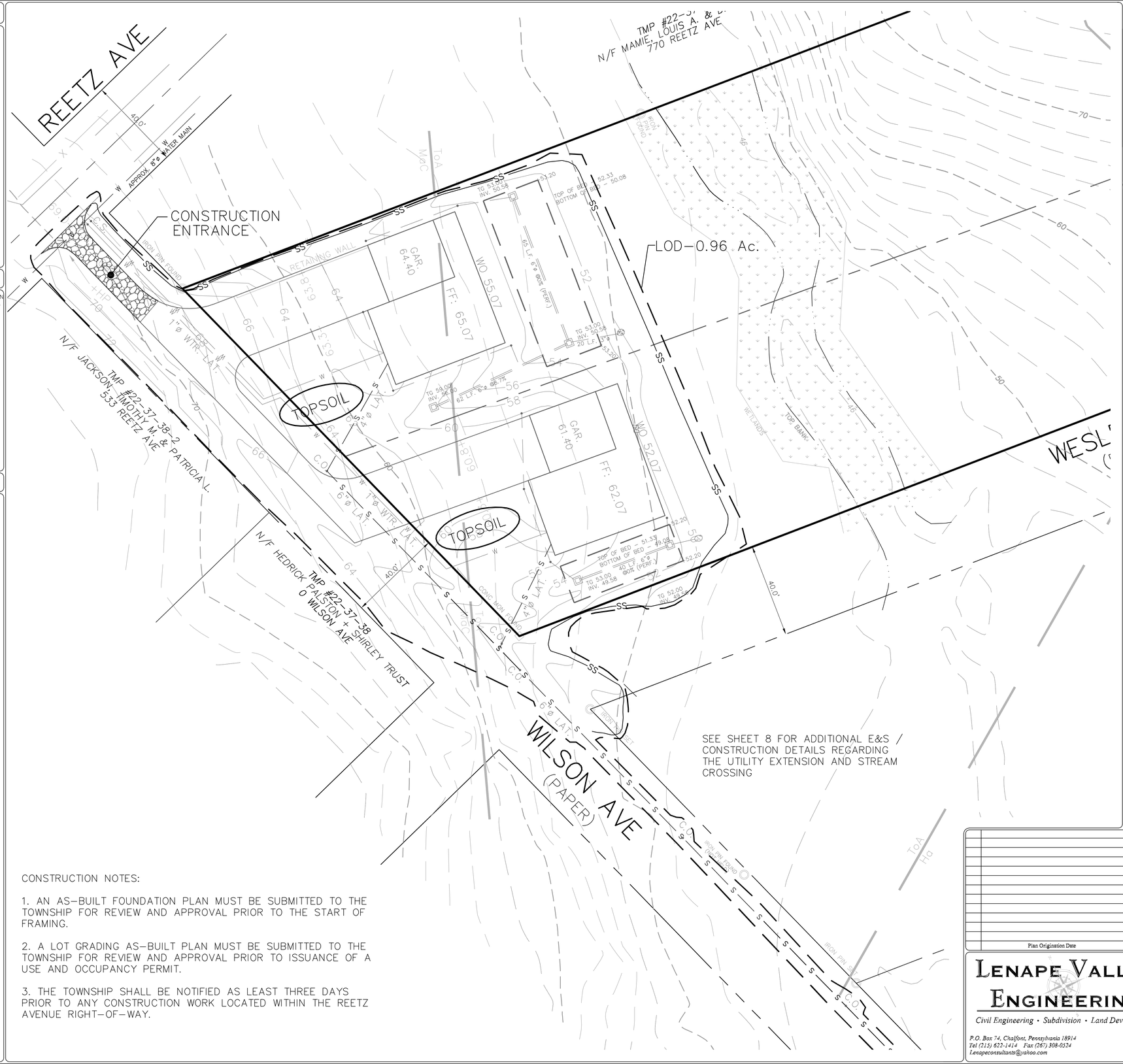
UPON THE INSTALLATION OF TEMPORARY SEDIMENT BASIN RISER(S), A QUALIFIED SITE REPRESENTATIVE SHALL CONDUCT AN IMMEDIATE INSPECTION OF THE RISER(S), WHEREUPON THE BUCKS COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER IS SEALED (WATERTIGHT).

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, REFUELING 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.

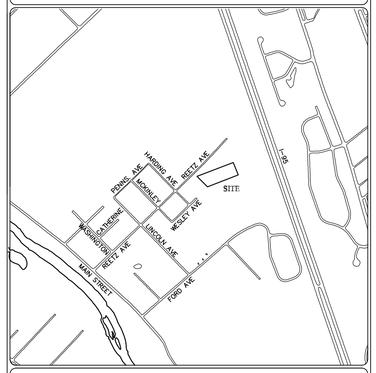
ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS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



CONSTRUCTION NOTES:

1. AN AS-BUILT FOUNDATION PLAN MUST BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO THE START OF FRAMING.
2. A LOT GRADING AS-BUILT PLAN MUST BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT.
3. THE TOWNSHIP SHALL BE NOTIFIED AS LEAST THREE DAYS PRIOR TO ANY CONSTRUCTION WORK LOCATED WITHIN THE REETZ AVENUE RIGHT-OF-WAY.

SITE LOCATION MAP (1"=1,000')



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MaC – MANOR LOAM, 8 TO 15% SLOPES

E&S LEGEND

PROP. TIRE CLEANER

TEMPORARY TOPSOIL STOCKPILE AREA — TOPSOIL STOCKPILE AREA

SS — 12" SILT SOCK

18" — 18" SILT FENCE

LIMIT OF DISTURBANCE LINE

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP! CALL BEFORE YOU DIG!

THE UNDERGROUND UTILITY LINE PROTECTION LAW
(ACT 287 OF 1974 AS AMENDED BY ACT 187 OF 1996)
1-800-242-1776

ATTENTION ALL CONTRACTORS: LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM THE UTILITY COMPANY RECORDS AND OR ABOVE GROUND INSPECTION OF SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT 287 OF 1974 AS AMMENDED BY ACT 187 OF 1996, CONTRACTORS MUST VERIFY LOCATIONS OF UNDERGROUND UTILITIES BY NOTIFYING FACILITY OWNERS THROUGH THE ONE CALL SYSTEM, 1-800-242-1776, NO LESS THAN 3 NOR MORE THAN 10 DAYS PRIOR TO EXCAVATION OR DEMOLITION WORK.

Plan Origination Date	09-25-2019

LENAPE VALLEY ENGINEERING
Civil Engineering • Subdivision • Land Development

P.O. Box 74, Chalfont, Pennsylvania 18914
Tel (215) 822-1414 Fax (267) 308-0324
Lenapeconsultants@yahoo.com

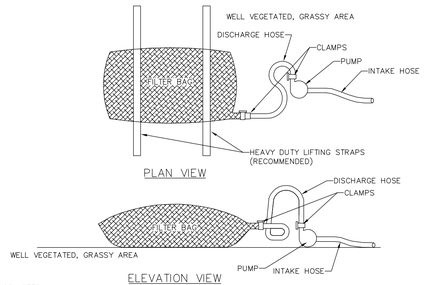
E&S PLAN
Prepared for
ALBERT LYKON
As part of
T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
PENNSYLVANIA

JASON T. SMELAND
PROFESSIONAL ENGINEER
PA NO. 059306

GRAPHIC SCALE
20 0 10 20 40 60

PROJECT MANAGER	DRAWING SCALE	SHEET NUMBER
J.T.S.	1"=20'	3 OF 7
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2305	



\pt0.88;NOTES:
\pt;
\pt0.88;LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

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

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
\pt0.88;
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
\pt;
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
\pt0.88;
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG

NOT TO SCALE

* POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2-1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

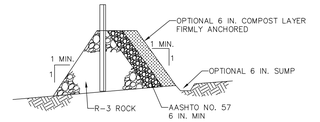
SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

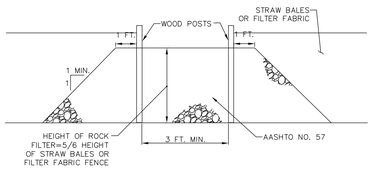
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-10
SUPER SILT FENCE

NOT TO SCALE





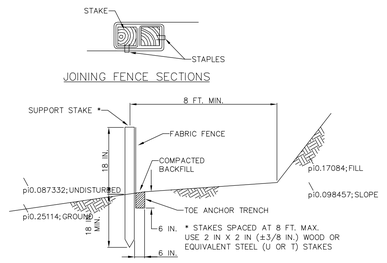
NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

NOT TO SCALE



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

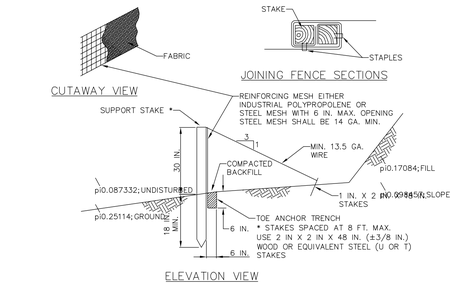
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)

NOT TO SCALE



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. AN 18 IN. SUPPORT STAKE SHALL BE DRIVEN 12 IN. MINIMUM INTO UNDISTURBED GROUND.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

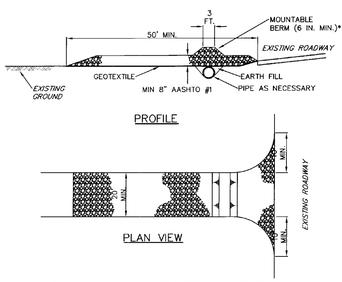
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-8
REINFORCED SILT FENCE (30" HIGH)

NOT TO SCALE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

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

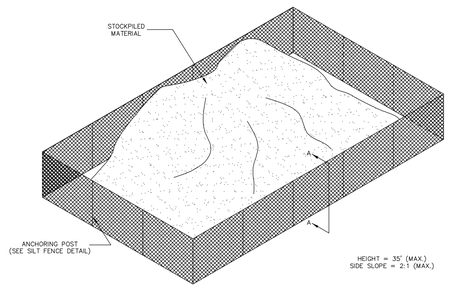
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

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

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

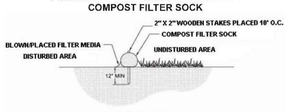


STOCKPILE CONTROL

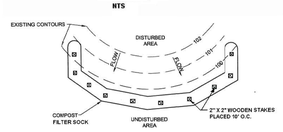
N.T.S.

SILT FENCE SHALL BE INSTALLED ON THE DOWNSLOPE SIDE OF THE TOPOSIL STOCKPILE.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK



SECTION VIEW
NTS



PLAN VIEW
NTS

Filtrexx

Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

Plan Origination Date	09-25-2019

E&S DETAIL SHEET

Prepared for

ALBERT LYKON

As part of

T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
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PA NO. 059306

GRAPHIC SCALE

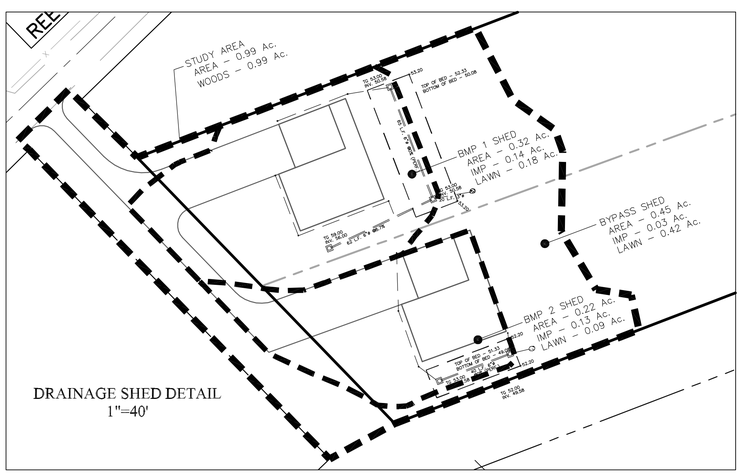
PROJECT MANAGER	DRAWING SCALE	SHEET NUMBER
J.T.S.	NTS	4 OF 7
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2305	

PROP. WTR. LAT
PROP. SAN. LAT
BUILDING SETBACK LINE
LOT LINE
PROP. EASEMENT
PROP. STORMSEWER
300 PROP. CONTOUR

EXIST. STREAM
EXIST. FLOODPLAIN
EXIST. R/W
SOILS LINE
EXIST. CONTOUR
EXIST. CONTOUR
EXIST. EDGE ROAD
EXIST. EASEMENT
EXIST. PROP. BOUNDARY
EXIST. DRIVES
EXIST. CENTERLINE
EXIST. STORM SEWER LINE

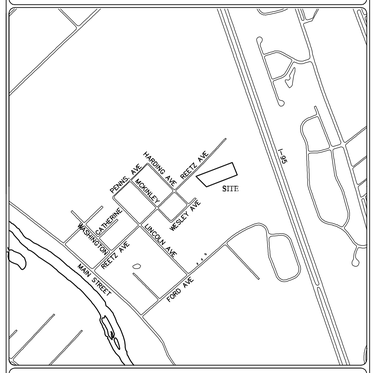
EXIST. CONC. MONUMENT
EXIST. IRON PIN
EXIST. UTILITY POLE
EXIST. WELL

EXIST. WETLANDS



DRAINAGE SHED DETAIL
1"=40'

SITE LOCATION MAP (1"=1,000')



TAX PARCEL INFORMATION

SUBJECT TRACT MAY BE IDENTIFIED BY BUCKS COUNTY TAX INFORMATION AS FOLLOWS:

MIDDLETOWN TOWNSHIP

RECORDED DEED DATA IS AS FOLLOWS:

AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN PENNSYLVANIA

PARCEL NO.	DEED BOOK/PAGE	RECORD OWNER	TRACT AREA
22-039-012	29/1478	ALBERT LYKON 615 FORD AVE. HULMEVILLE, PA 19047	2.1868 Ac.

STORMWATER MANAGEMENT NOTES

1. THE TOWNSHIP ENGINEER SHALL BE NOTIFIED A MINIMUM OF THREE DAYS IN ADVANCE PRIOR TO THE START OF CONSTRUCTION OR EARTH MOVING ACTIVITIES.

2. THE OWNER/APPLICANT SHALL ENTER INTO A STROMWATER FACILITIES MAINTENANCE AND MONITORING AGREEMENT WITH THE TOWNSHIP.

3. ALL AREAS DEPICTED AS PROTECTED TREES, MUST BE PRESERVED OR ADDITIONAL STORMWATER MANAGEMENT CONTROLS WILL BE REQUIRED.

SOILS DATA

SOIL INFORMATION WAS TAKEN FROM THE SOIL SURVEY OF BUCKS COUNTY, PENNSYLVANIA, U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE.

ToA – TOWHEE SILT LOAM, 0 TO 3% SLOPES
MoC – MANOR LOAM, 8 TO 15% SLOPES

MAINTENANCE ACKNOWLEDGEMENT

THE INFILTRATION STORMWATER FACILITIES (AS SHOWN IN THIS PLAN) ARE A BASIC AND PERPETUAL PART OF THE STORM DRAINAGE SYSTEM OF THE TOWNSHIP OF MIDDLETOWN, AND AS SUCH ARE TO BE PROTECTED AND PRESERVED IN ACCORDANCE WITH THE APPROVED PLOT PLAN BY THE HOMEOWNER. MAINTENANCE OF THE THE INFILTRATION FACILITIES SHALL INCLUDE THE FOLLOWING:

SEMIANNUAL INSPECTION AND ON GOING (SEASONAL)

EXAMINE TO ENSURE THAT INLET AND OUTLET DEVICES ARE FREE OF DEBRIS AND OPERATIONAL.

STANDARD MAINTENANCE

THE VEGETATION SUROUINDING THE INFILTRATION TRENCH SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.

ENGINEER'S CERTIFICATION

I JASON T. SMELAND, P.E., ON THIS DAY, _____, 201_____, HEREBY CERTIFY THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE NESHAMINY CREEK WATERSHED ACT 167 STORMWATER MANAGEMENT ORDINANCE OR PLAN.

059306
(REGISTRATION NUMBER)

JASON T. SMELAND, P.E.

APPLICANT'S CERTIFICATION

I _____ ACKNOWLEDGE THAT ANY REVISIONS OF THE APPROVED SWM SITE PLAN MUST BE APPROVED BY THE MUNICIPALITY AND THAT A REVISED E&S PLAN MUST BE SUBMITTED TO THE CONSERVATION DISTRICT.

SIGNATURE

Plan Origination Date	09-25-2019

STORMWATER AND GRADING PLAN

Prepared for

ALBERT LYKON

As part of

T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
PENNSYLVANIA

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PA NO. 059306

20 0 10 20 40 60
GRAPHIC SCALE

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J.T.S.	1"=20'	5 OF 6
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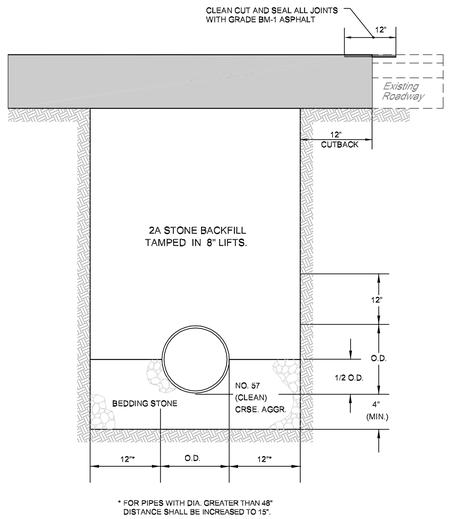
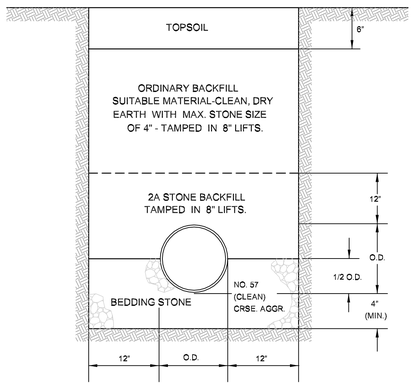
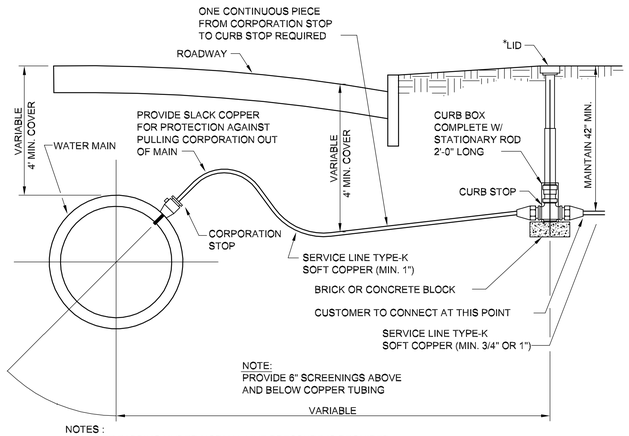


TRENCH RESTORATION DETAIL WITHIN PAVED AREAS



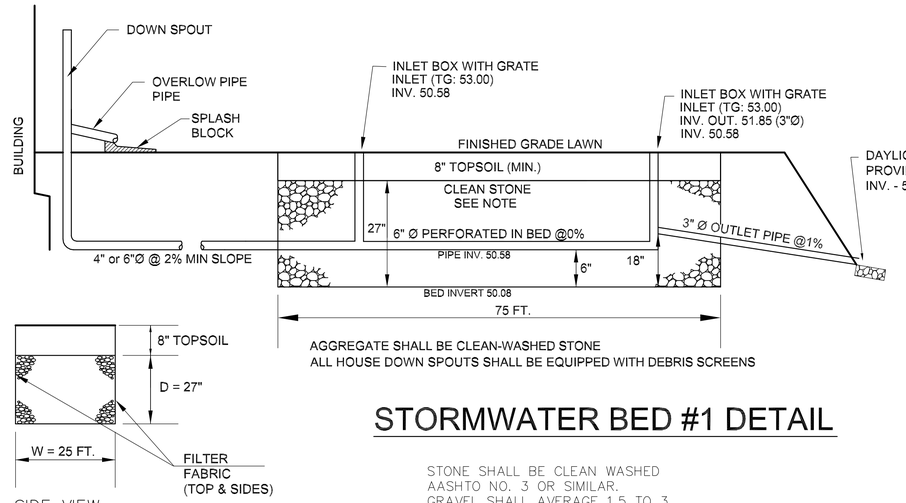
TRENCH RESTORATION DETAIL UNPAVED AREAS



NOTES :

1. WET TAPPING UNDER NORMAL LINE PRESSURE IS REQUIRED.
2. CORPORATION STOPS: MULLER B-25008, OR McDONALD 4701BT, OR FORD FB1000-3G.
3. CURB STOPS: MULLER B-25209, OR McDONALD 6100-T2, OR FORD B44-333Q.
4. CURB BOX: EXTENSION TYPE W/ ARCH BASE AND SHUT OFF ROD.
5. LID WITH CENTER, REMOVABLE, PENTAGONAL PLUG: MUELLER 89375, OR McDONALD 5614L
6. CORPORATION STOP AND CURB STOP TO HAVE COMPRESSION FITTINGS. FLARE FITTINGS NOT PERMITTED.

LATERAL DETAIL



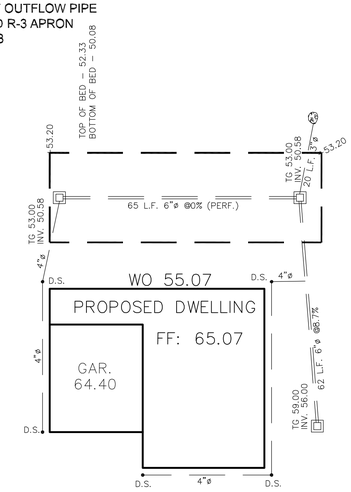
SIDE VIEW

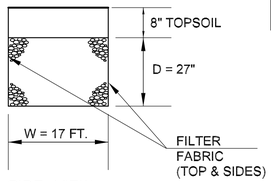
STORMWATER BED #1 DETAIL

VOLUME CALCULATION:

L x W x D x VOID RATIO
= 75 FT x 25 FT x 2.25 FT x 0.4 =1688 C.F.

STONE SHALL BE CLEAN WASHED AASHTO NO. 3 OR SIMILAR. GRAVEL SHALL AVERAGE 1.5 TO 3 INCH IN DIAMETER. OR #4 CLEAN BALLAST





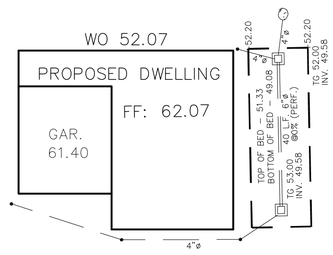
SIDE VIEW

STORMWATER BED #2 DETAIL

VOLUME CALCULATION:

L x W x D x VOID RATIO
= 50 FT x 17 FT x 2.25 FT x 0.4 =765 C.F.

STONE SHALL BE CLEAN WASHED AASHTO NO. 3 OR SIMILAR. GRAVEL SHALL AVERAGE 1.5 TO 3 INCH IN DIAMETER. OR #4 CLEAN BALLAST



Plan Origination Date	09-25-2019

SITE IMROVEMENTS DETAIL SHEET

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ALBERT LYKON

As part of

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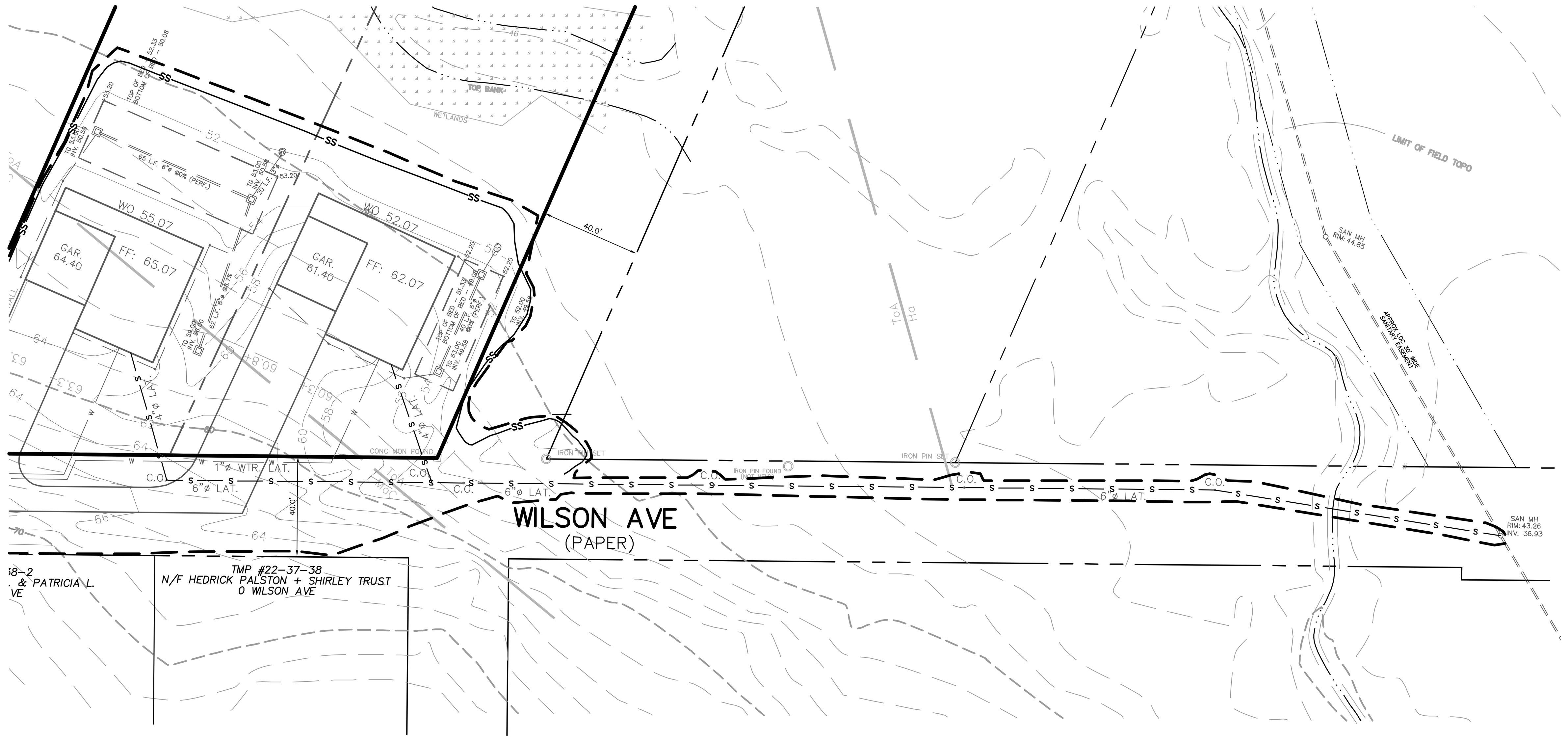
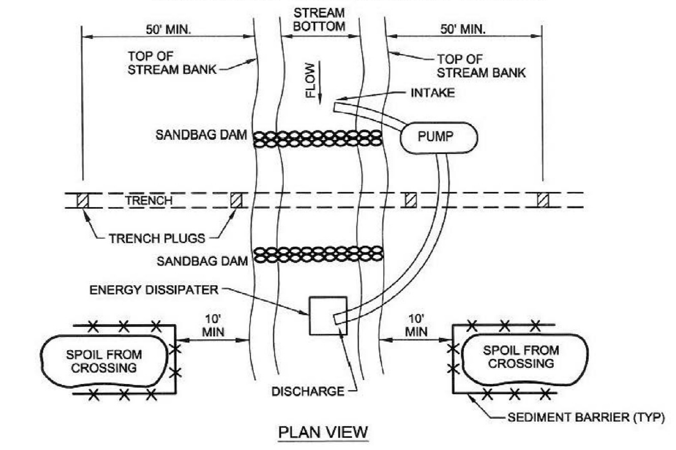
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2305	





STANDARD CONSTRUCTION DETAIL #13-2
Typical Utility Line Stream Crossing with Pump Bypass

PA DEP

Grubbing shall not take place within 50 feet of top-of-bank until all materials required to complete crossing are on site and pipe is ready for installation.

Bypass pump intake shall be maintained a sufficient distance from the bottom to prevent pumping of channel bottom materials.

Trench plugs shall be installed within the trench on both sides of the stream channel (Standard Construction Detail #13-4).

Water accumulating within the work area shall be pumped to a pumped water filter bag or sediment trap prior to discharging into any receiving surface water.

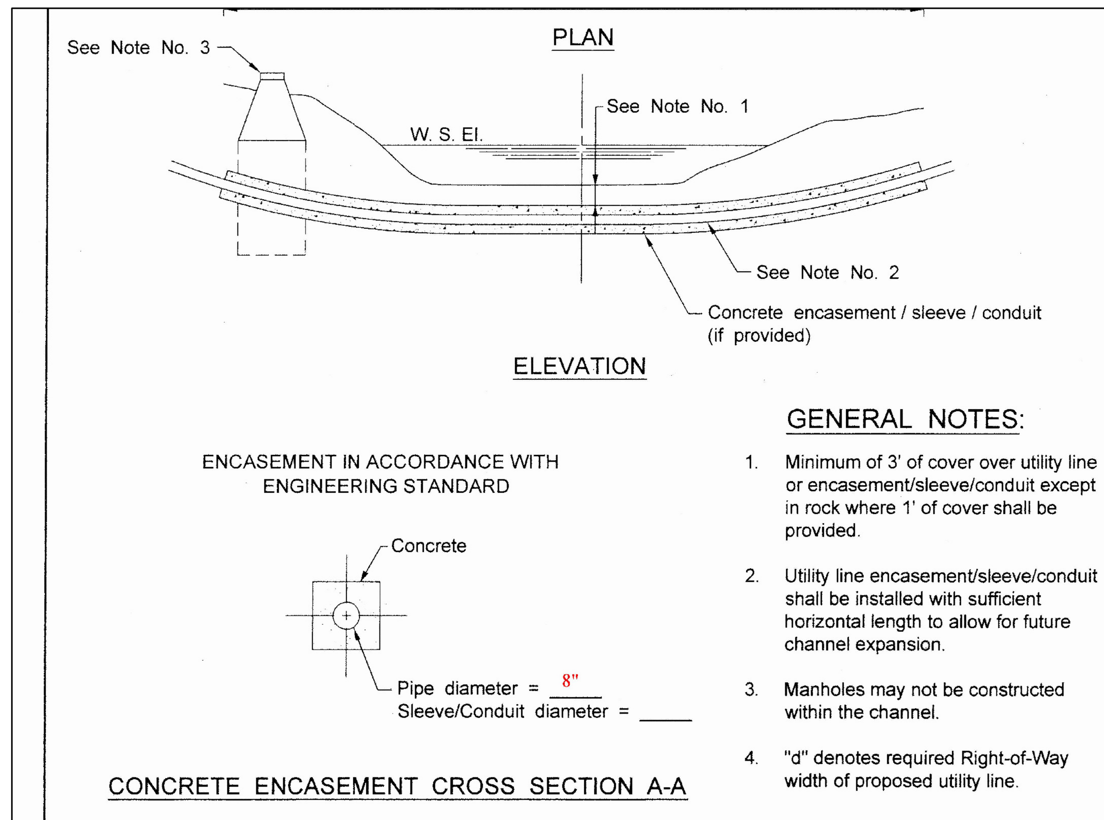
Hazardous or pollutant material storage areas shall be located at least 100 feet back from the top of streambank.

All excess excavated material shall be immediately removed from the stream crossing area.

All disturbed areas within 50 feet of top-of-bank shall be blanketed or matted within 24 hours of initial disturbance for minor streams or 48 hours of initial disturbance for major streams unless otherwise authorized.

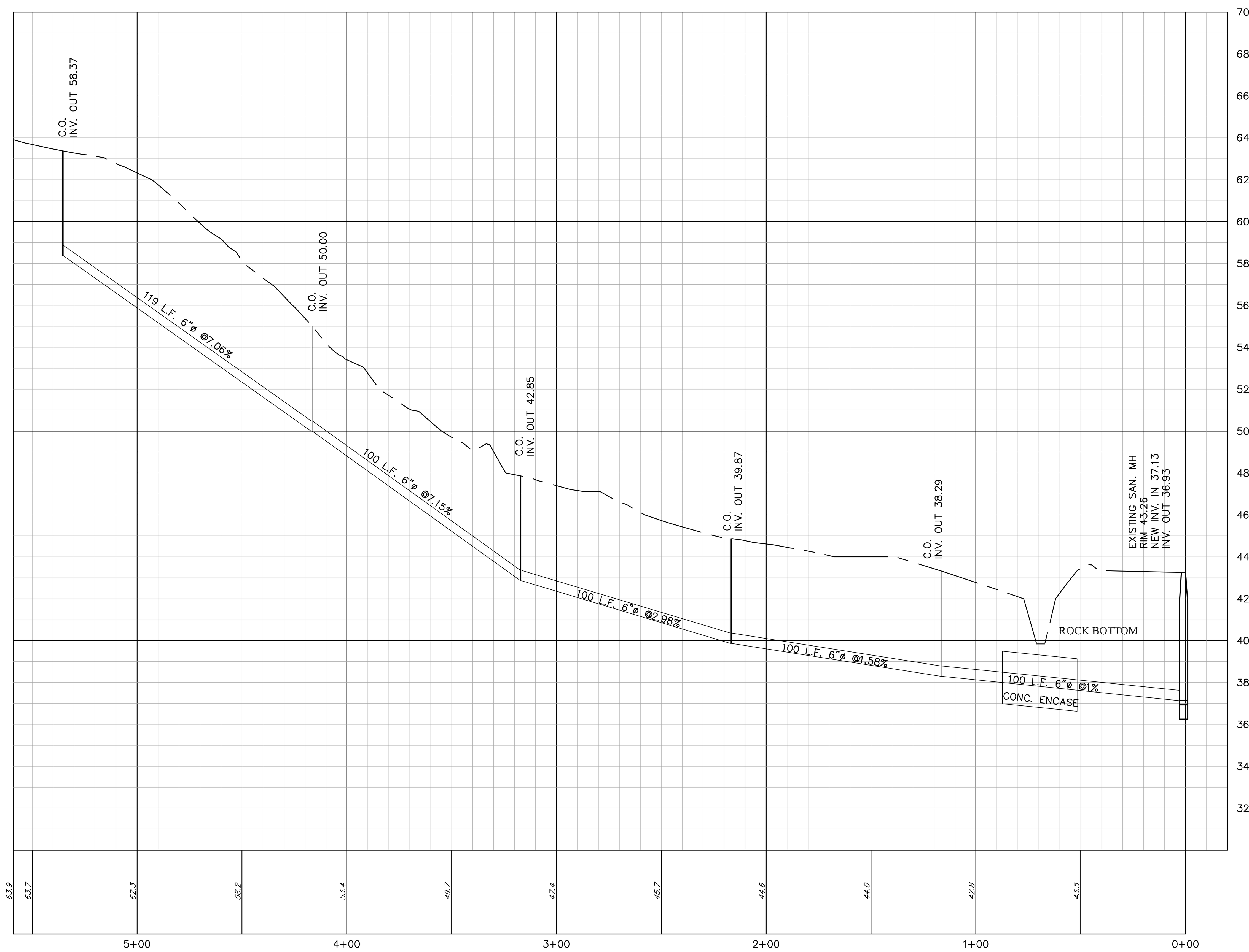
Appropriate streambank protection shall be provided within the channel.

363-2134-008 / March 31, 2012 / Page 288



GENERAL NOTES:

1. Minimum of 3' of cover over utility line or encasement/sleeve/conduit except in rock where 1' of cover shall be provided.
2. Utility line encasement/sleeve/conduit shall be installed with sufficient horizontal length to allow for future channel expansion.
3. Manholes may not be constructed within the channel.
4. "d" denotes required Right-of-Way width of proposed utility line.



	Plan Origination Date	09-25-2019

SANITARY SEWER PROFILE

Prepared for

ALBERT LYKON

As part of

T.M.P. 22-039-012

MIDDLETOWN TOWNSHIP
BUCKS COUNTY
PENNSYLVANIA

LENAPE VALLEY ENGINEERING

Civil Engineering • Subdivision • Land Development

P.O. Box 74, Chalfont, Pennsylvania 18914
Tel (215) 622-1414 Fax (267) 308-0524
Lenapeconsultants@yahoo.com

JASON T. SMELAND
PROFESSIONAL ENGINEER
PA NO. 059306

40 0 20 40 80 120
GRAPHIC SCALE

PROJECT MANAGER	DRAWING SCALE	SHEET NUMBER
J.T.S.	1"=40' H 1"=4' V	7 OF 7
DRAFTED BY	PROJECT NUMBER	
B.C.S.	2305	