

REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH

NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE

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07/12/2021 | PER CONSULTANT REVIEWS

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NO. DATE

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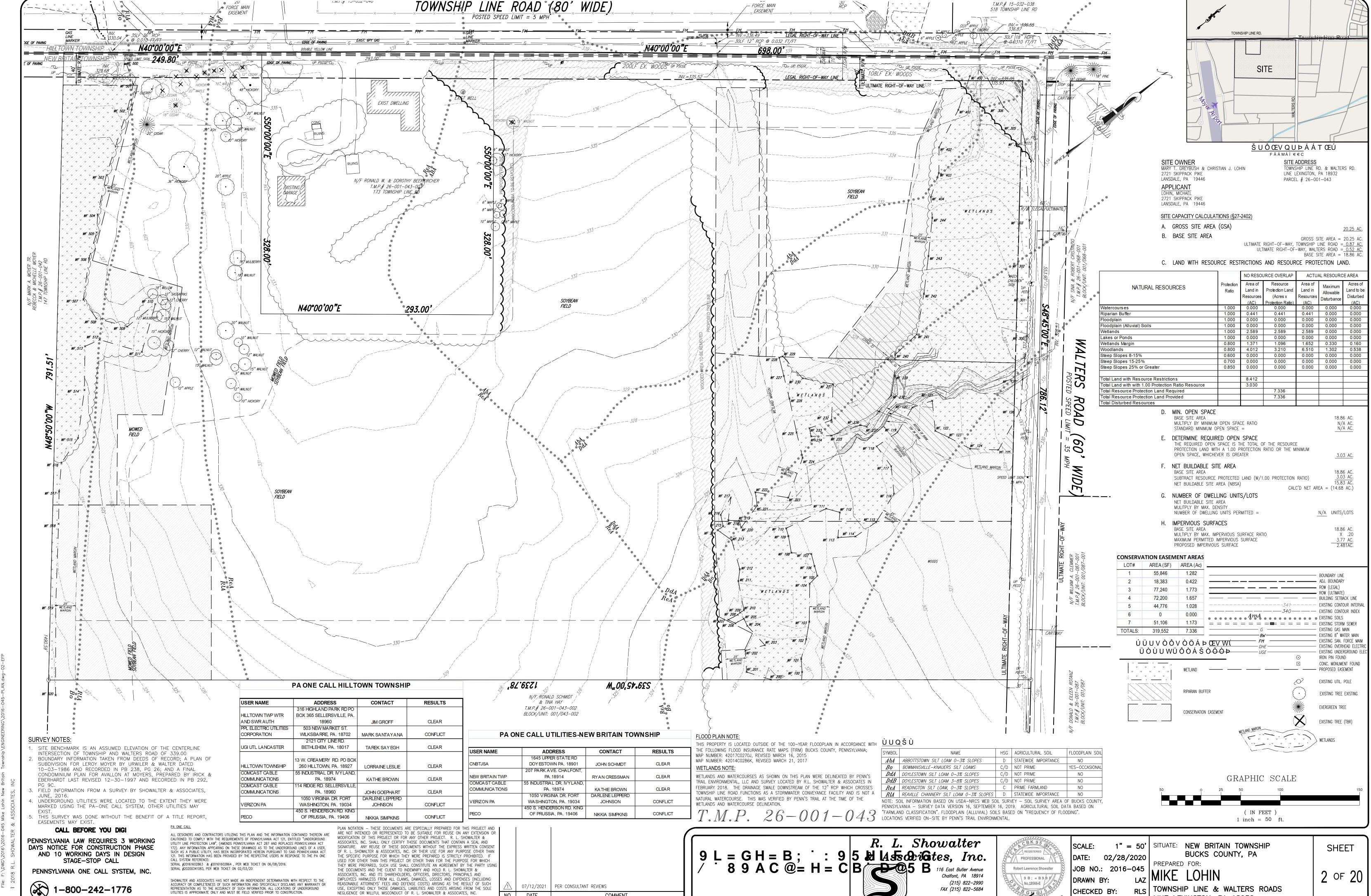
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TOWNSHIP LINE & WALTERS ROADS

LINE LEXINGTON, PA 18932

1-800-242-1776



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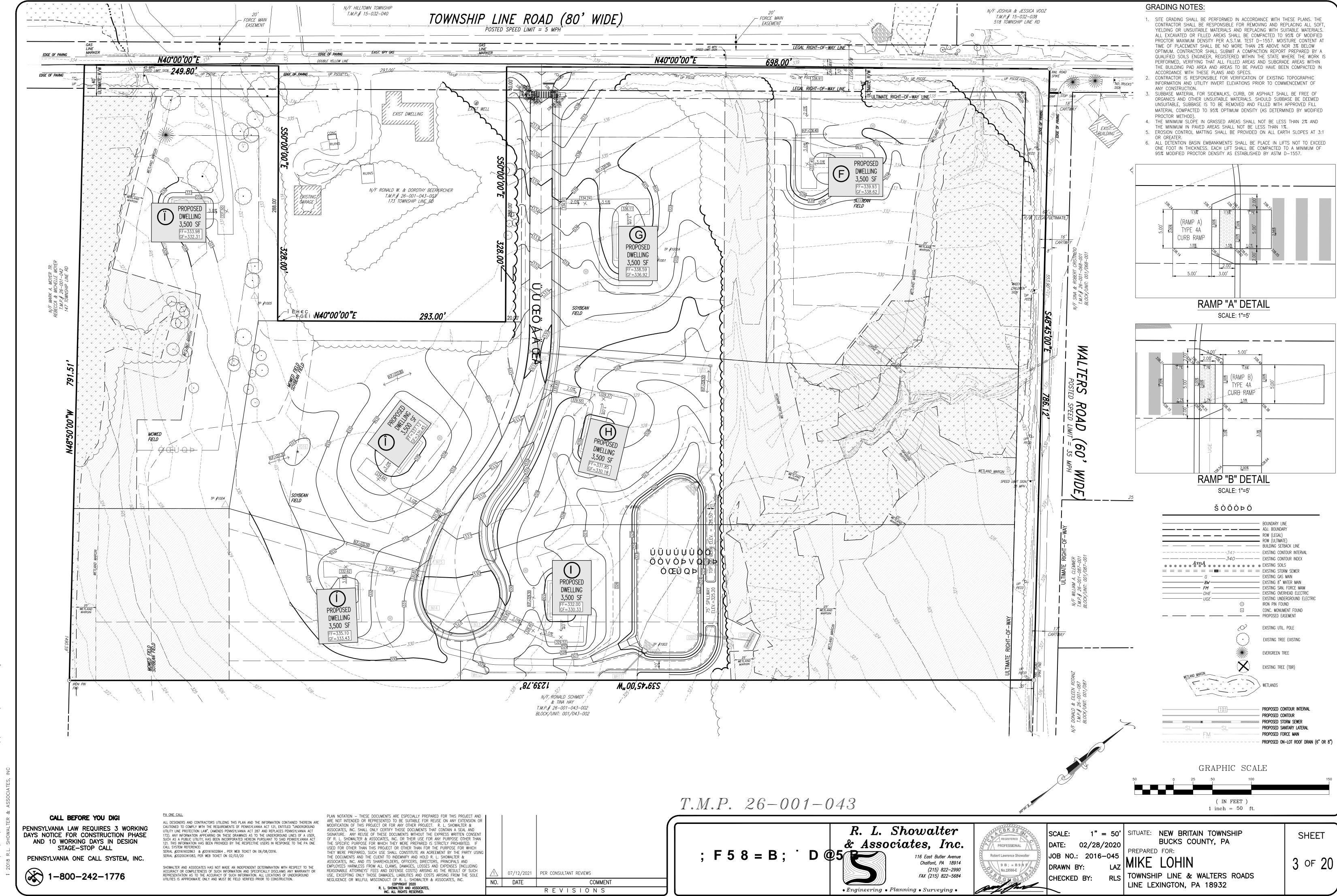
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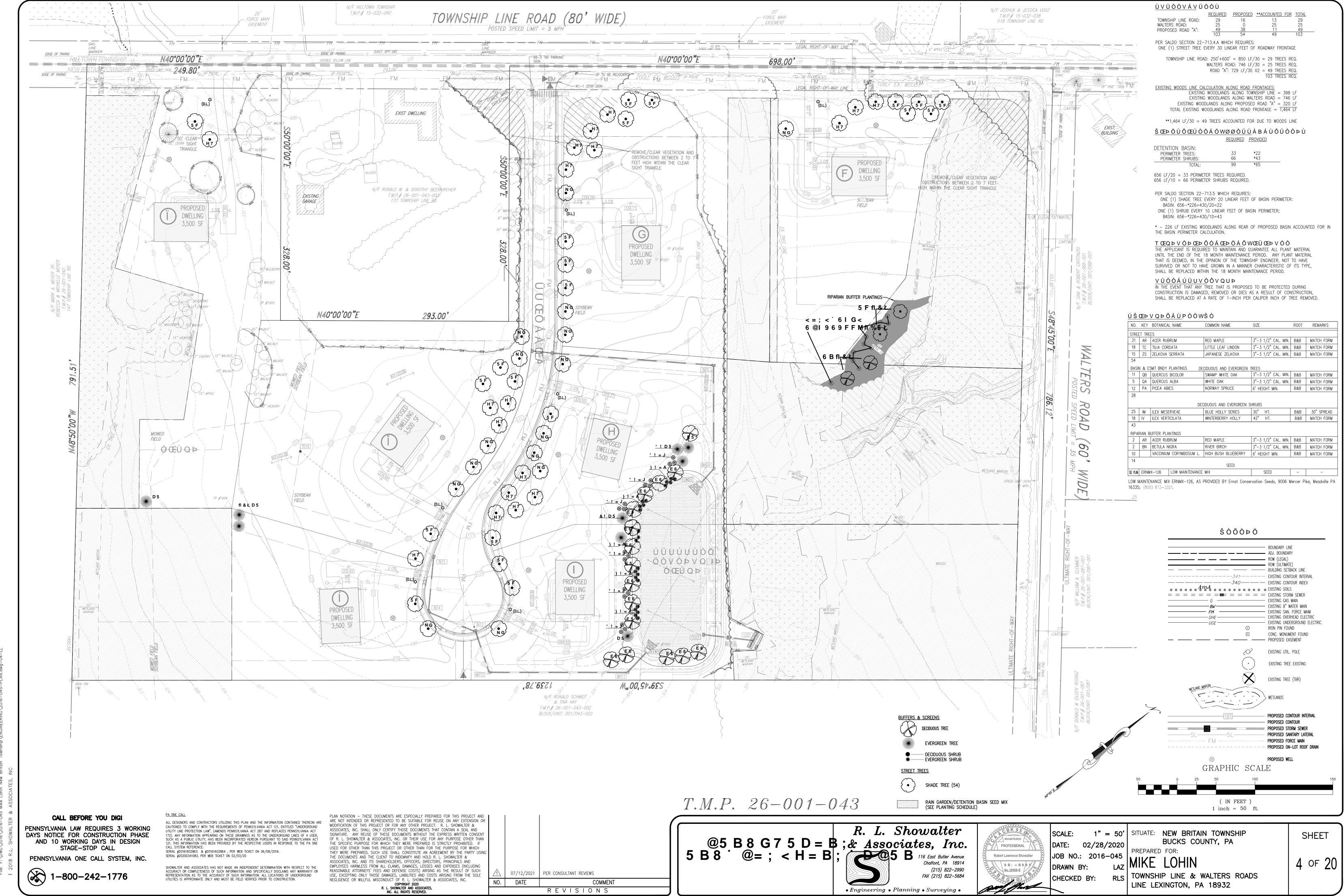
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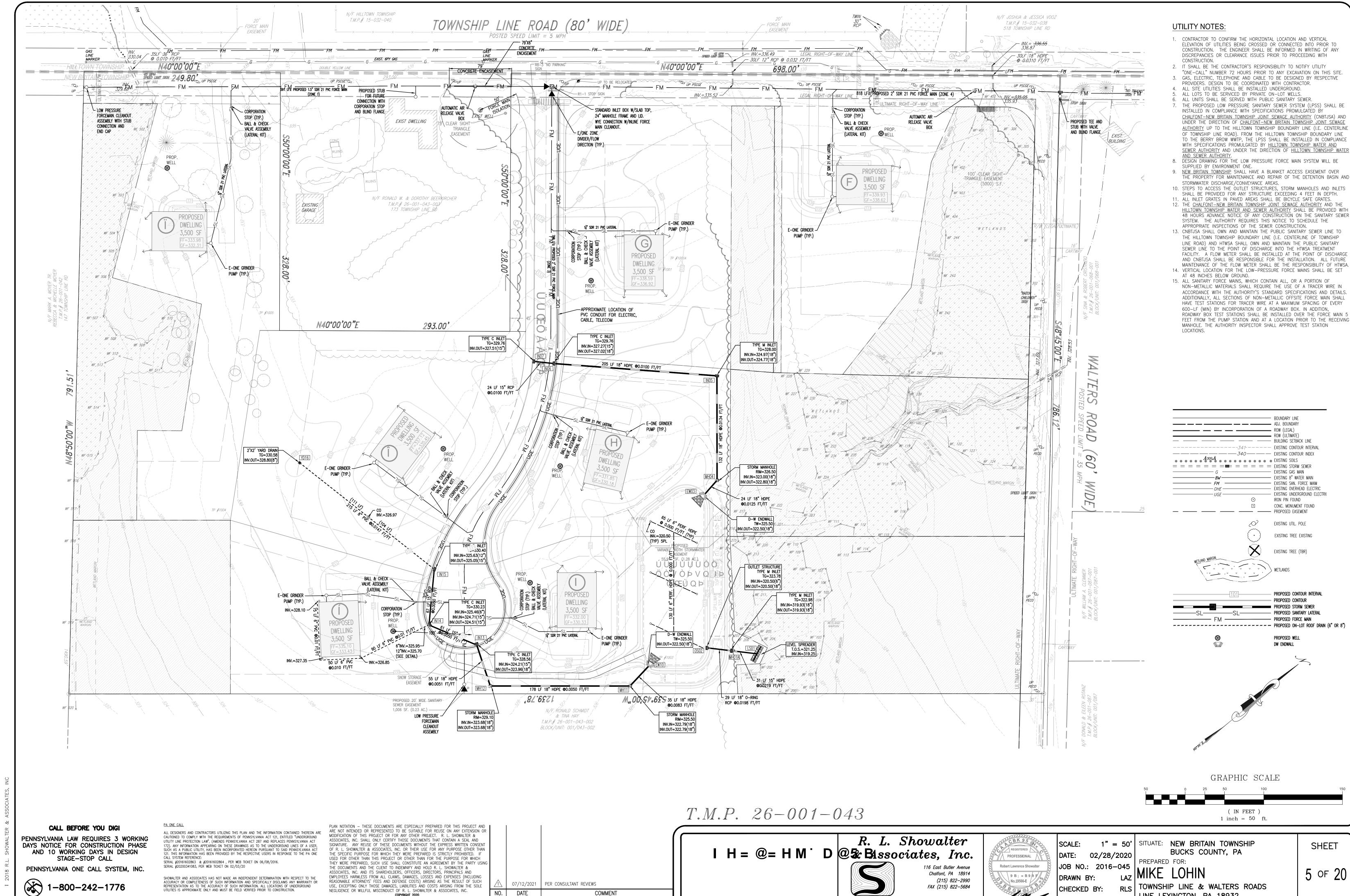


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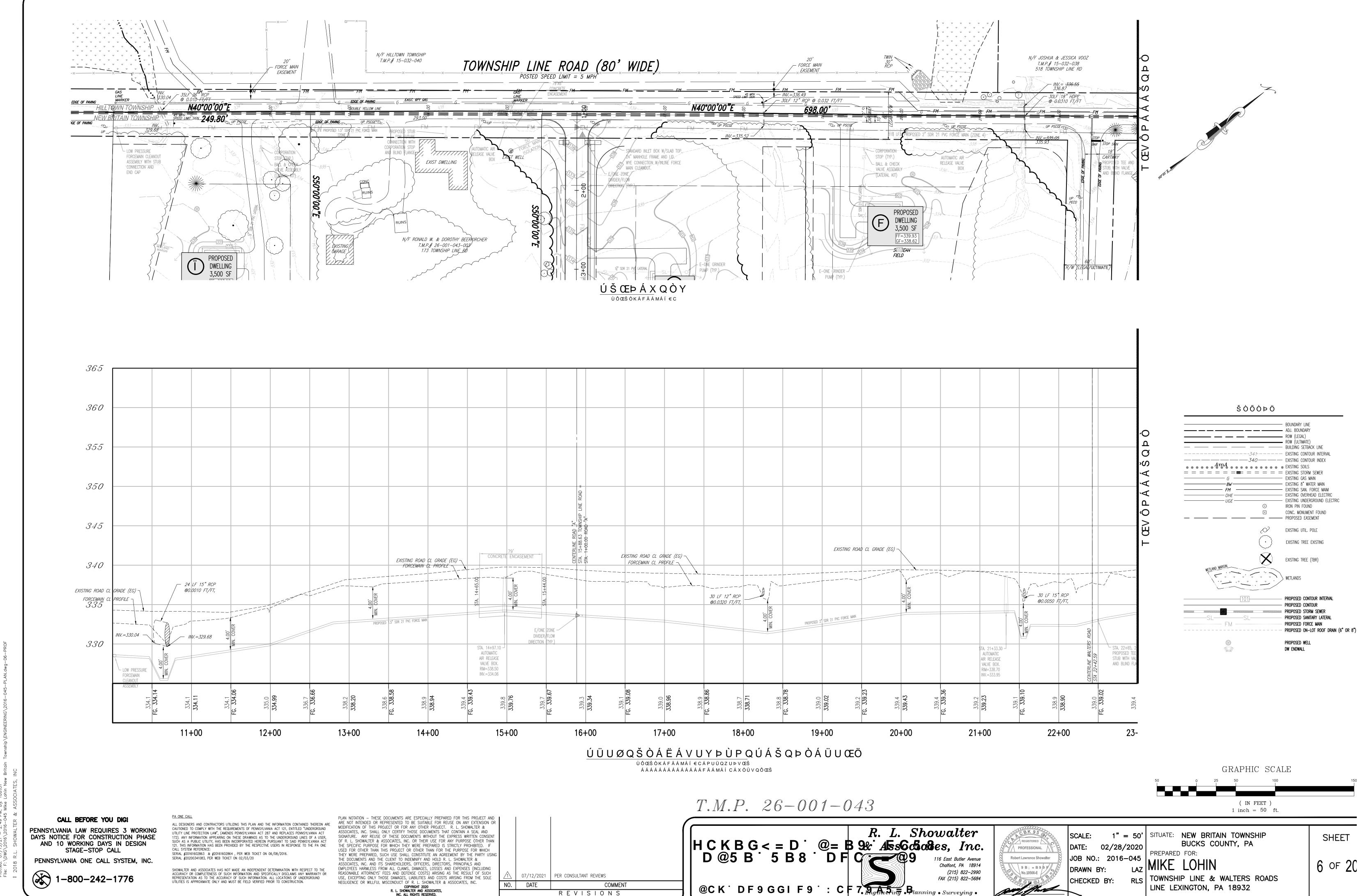
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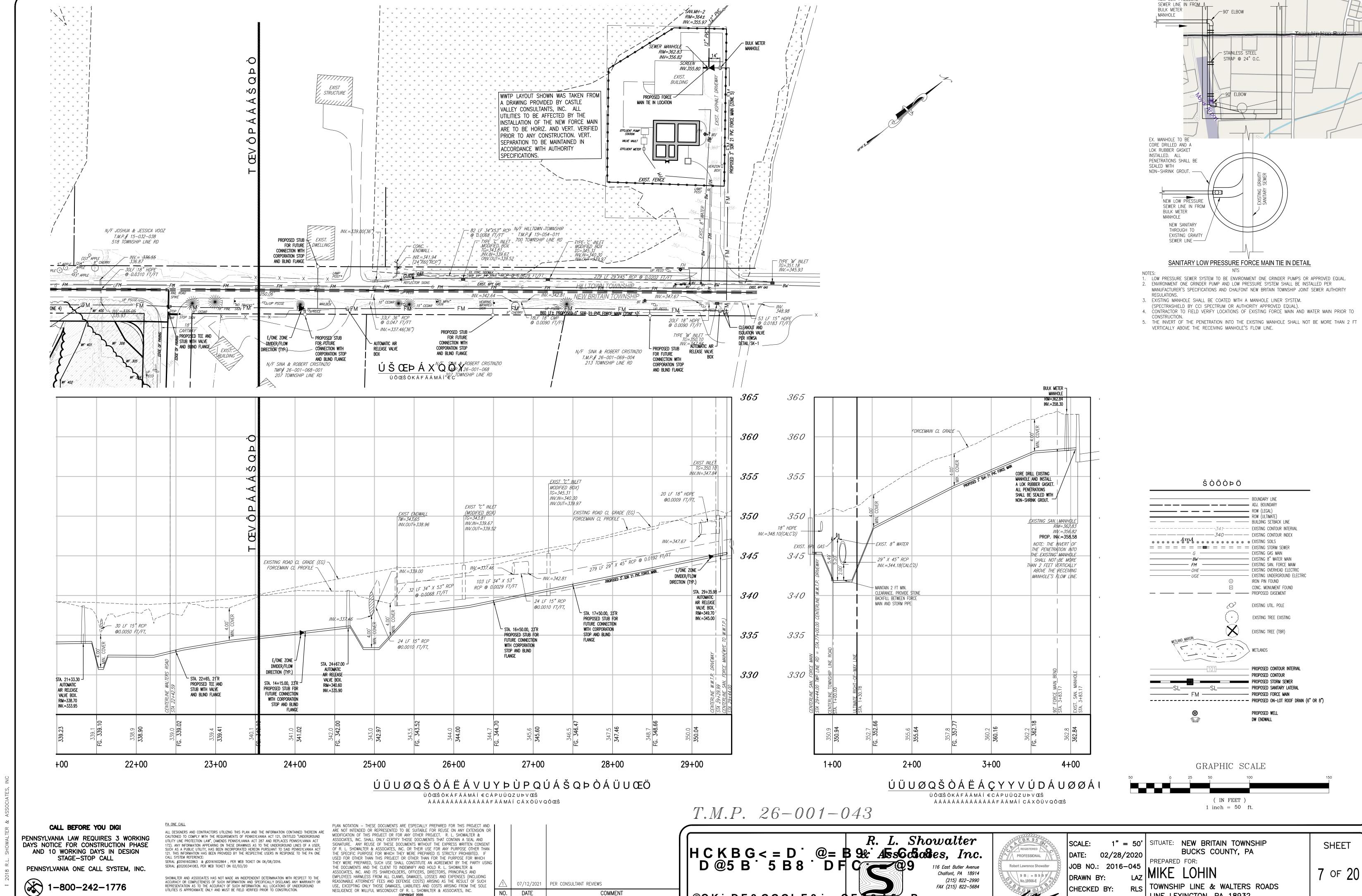
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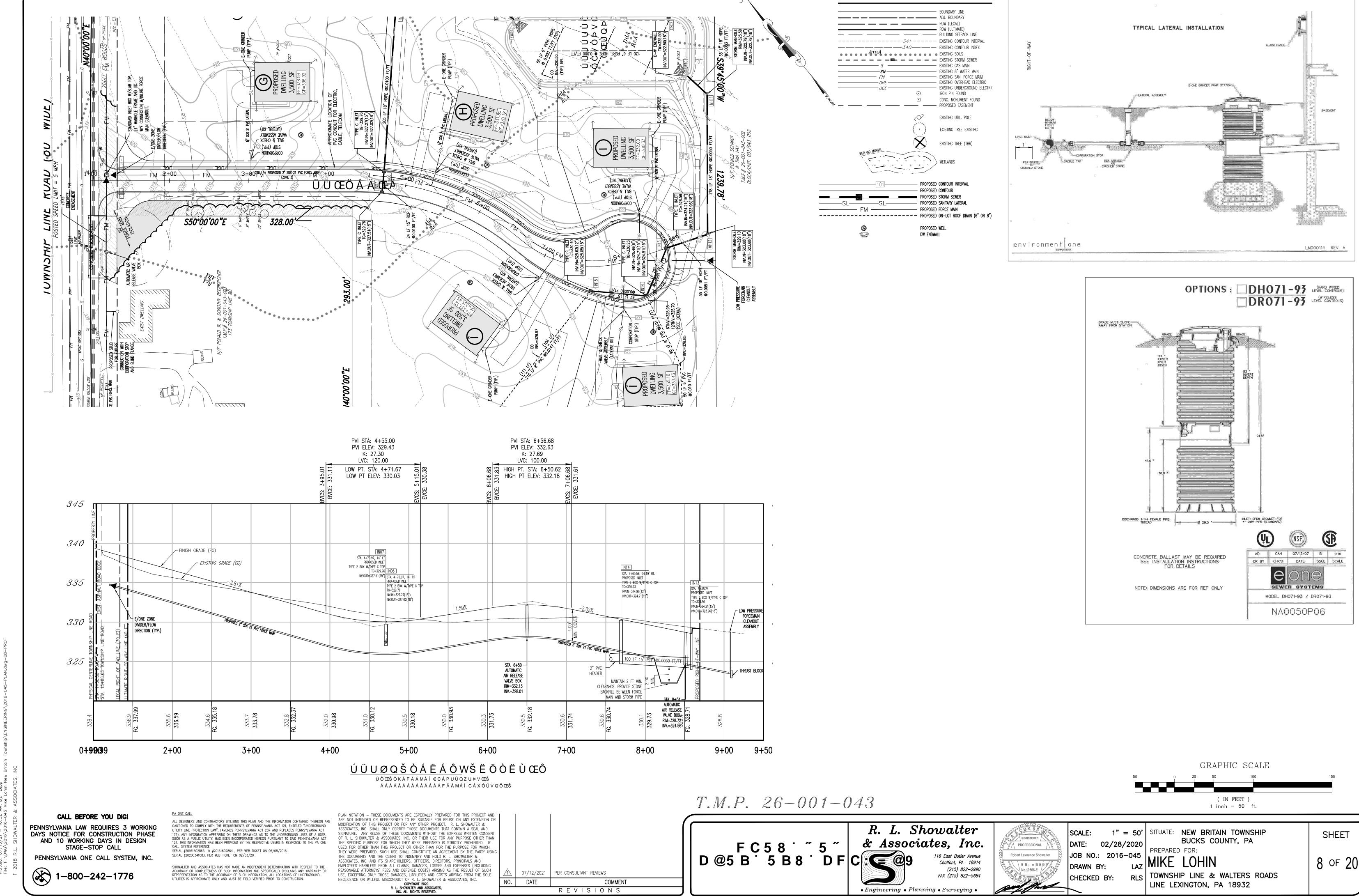
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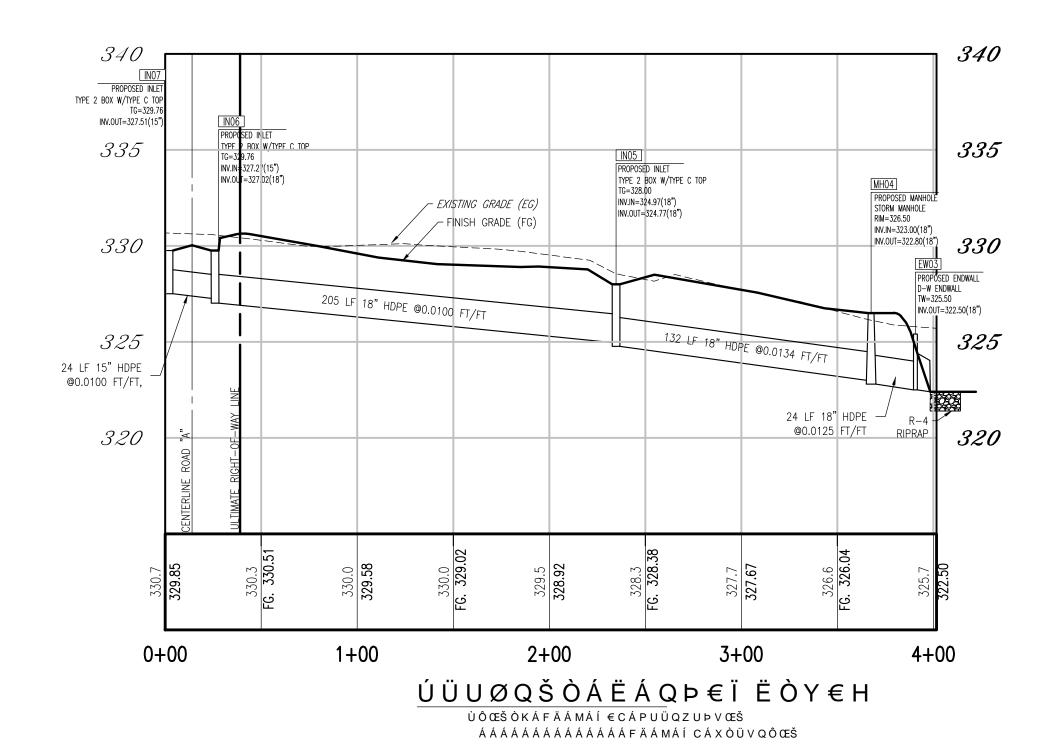
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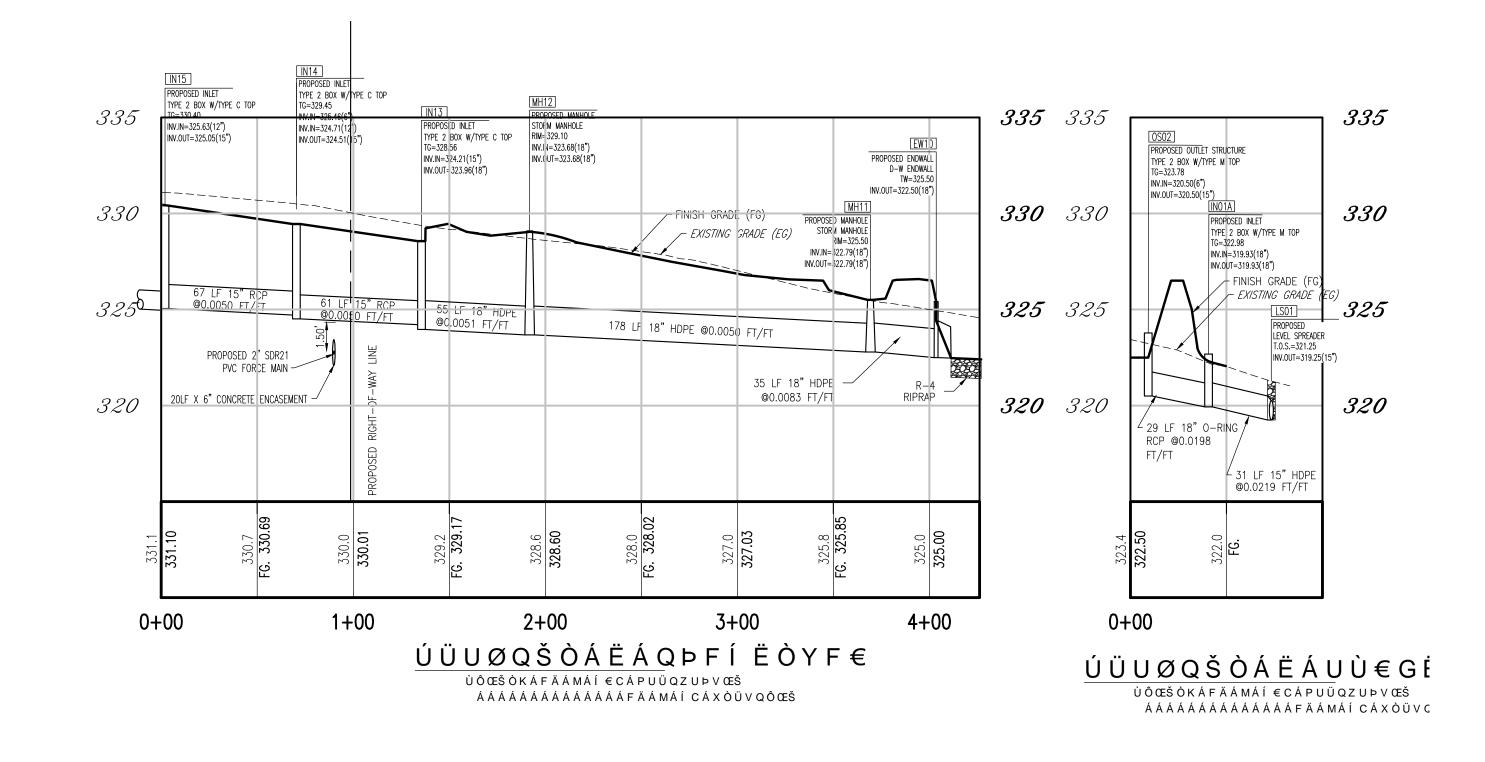
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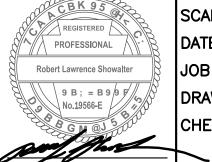
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\*\*Condition\*\*

\*\*Associates, Inc.\*\*

\*\*Chalfont, PA 18914\*\*





DATE: 02/28/2020 DRAWN BY:

1" = 50' | SITUATE: NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA PREPARED FOR:

TOWNSHIP LINE & WALTERS ROADS LINE LEXINGTON, PA 18932

GRAPHIC SCALE

( IN FEET ) 1 inch = 50 ft.

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

CALL BEFORE YOU DIG!

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PA ONE CALL ALL DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 121, ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". (AMENDS PENNSYLVANIA ACT 287 AND REPLACES PENNSYLVANIA ACT 172). ANY INFORMATION APPEARING ON THESE DRAWINGS AS TO THE UNDERGROUND LINES OF A USER, SUCH AS A PUBLIC UTILITY, HAS BEEN INCORPORATED HEREON PURSUANT TO SAID PENNSYLVANIA ACT 121. THIS INFORMATION HAS BEEN PROVIDED BY THE RESPECTIVE USERS IN RESPONSE TO THE PA ONE CALL SYSTEM REFERENCE: SERIAL #20161602863 & #20161602864 , PER WEB TICKET ON 06/08/2016. SERIAL #20200341083, PER WEB TICKET ON 02/03/20 SHOWALTER AND ASSOCIATES HAS NOT MADE AN INDEPENDENT DETERMINATION WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION AND SPECIFICALLY DISCLAIMS ANY WARRANTY OR REPRESENTATION AS TO THE ACCURACY OF SUCH INFORMATION. ALL LOCATIONS OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

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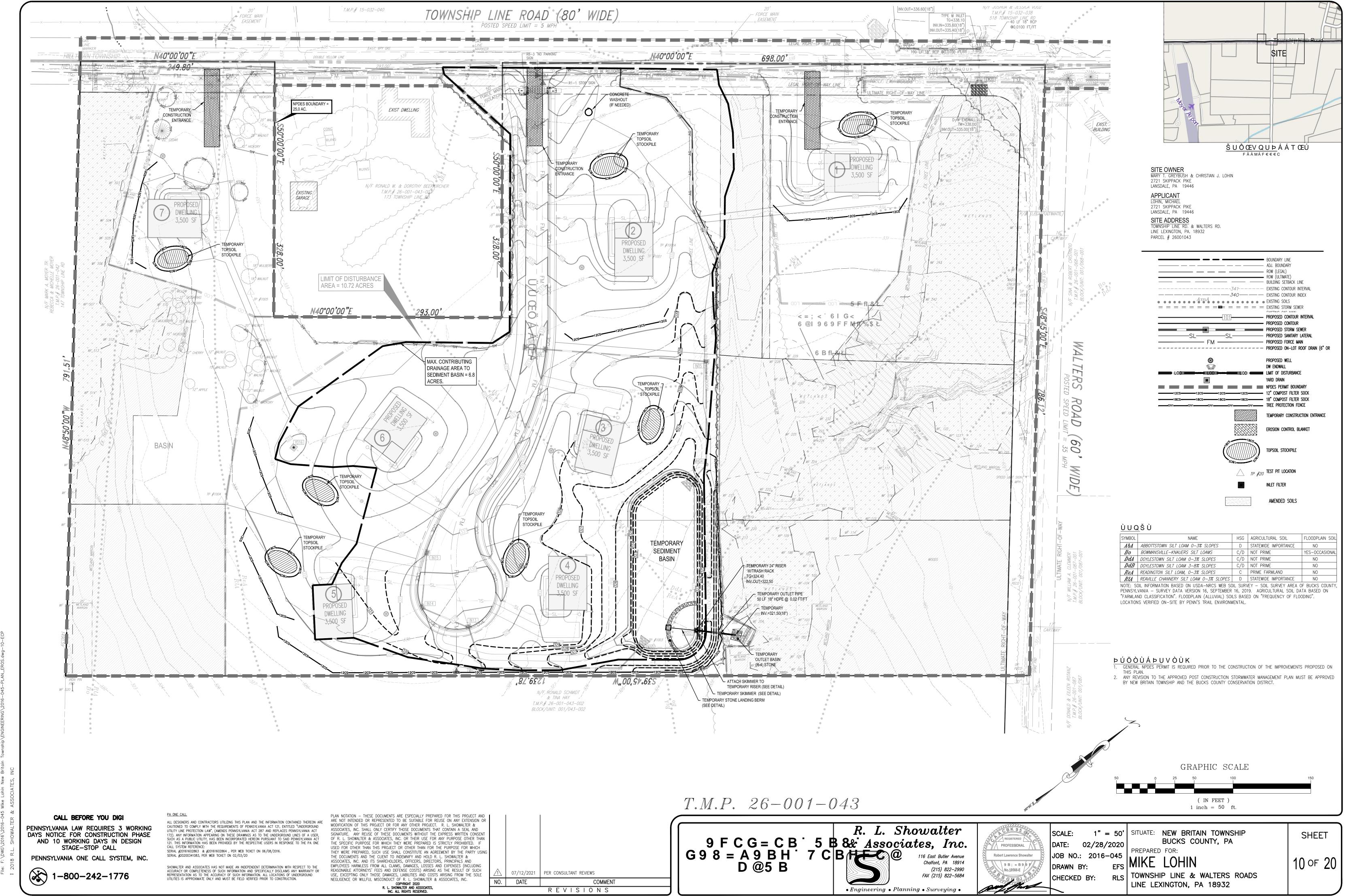
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DETAILS.

CONSERVATION DISTRICT AT LEAST 3 DAYS BEFORE THE START OF CONSTRUCTION.

. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE ALONG TOWNSHIP LINE ROAD.

. INSTALL TREE PROTECTION FENCE AND CONSTRUCTION FENCING WHERE SHOWN ON

REMOVE TREES INDICATED ON THE PLAN FOR REMOVAL (TBR) AND PERFORM OTHER

COMPOST SILT SOCK SHALL ENCIRCLE THE TOPSOIL STOCKPILES. SEED, FERTILIZE,

. ROUGH GRADE SITE WITHIN THE LIMITS OF DISTURBANCE, INCLUDING THE ROADWAY.

IMMEDIATELY STABILIZE. AS LAWN AREAS ARE BROUGHT TO GRADE, THEY SHALL

. BEGIN INSTALLATION OF UNDERGROUND UTILITIES, INCLUDING SANITARY FORCEMAIN

AND APPURTENANCES. BACKFILL/COMPACT IN ACCORDANCE WITH CONSTRUCTION

19. BEGIN CONSTRUCTION OF DWELLING UNITS. THE APPLICABLE E&S CONTROLS FOR

23. INSTALL STONE SUBBASE, BASE COURSE AND CORRECT ALL STRUCTURAL

TRIANGLES, DRAINAGE IMPROVEMENTS, LIGHTING AND LANDSCAPING.

24. INSTALL ALL OTHER PUBLIC IMPROVEMENTS, INCLUDING CLEARING OF SIGHT

EACH INDIVIDUAL LOT SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED

11. ONCE THE ENTIRE SITE HAS REACHED 70% UNIFORM STABILIZATION AND THE BUCKS.

CONTROL DEVICES. ANY AREAS DISTURBED DURING REMOVAL OF REMAINING EROSION

E&S BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN

EARTHMOVING ACTIVITY SHALL BE PLANTED WITH A TEMPORARY SEED MIX AND MULCHED. AREAS THAT ARE TO

A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT

INNUAL RYEGRASS IS A QUICK GERMINATING SPECIES OF GRASS, WHICH CAN BE SEEDED DURING MOST

STABILIZATION IN SOME DISTURBED AREAS IN NON-GERMINATING SEASONS. MULCH IS A LOOSE LAYER 3/4"

TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY

BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION. NETTING OR EROSION

CONTROL BLANKETS MUST BE INSTALLED ON SLOPES 3:1 AND STEEPER. MULCH SHALL BE APPLIED AT THE

E&S BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR

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

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST

4. AREAS WHICH AREA TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12

INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A

BE REMOVED OR CONVERTED TO PERMANENT PCSM BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON

THE PLAN IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO

IMMEDIATELY AFTER FARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBARFA OF THE PROJECT. THE O/RE

SHALL STABILIZE ALL DISTURBED AREAS, DURING NON-GERMINATING PERIODS, MULICH OR PROTECTIVE BLANKETING

MUST BE APPLIED AT SPECIFIED RATES. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REDISTURBED WITHIN ONE

YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY STABILIZATION SPECIFICATIONS DISTURBED AREAS THAT

ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN

UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED

AREAS. THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION

A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE,

A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE,

IF TEMPORARY SEEDING IS NECESSARY, DIVIDE THE FERTILIZER AND LIME RECOMMENDATIONS NOTED ABOVE IN

IT IS RECOMMENDED THAT THE PENN STATE UNIVERSITY "AGRONOMY GUIDE" BE CONSULTED. THE FOLLOWING

LL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCHING MAY BE USED AS A TEMPORARY

EMPORARY SEEDING SHALL BE APPLIED IMMEDIATELY. IF THE SITE IS TO REMAIN INACTIVE FOR

ÙÒÔVQUÞÁF€GÈGGÇæDÁËÁÚÒÜTŒÞÒÞVÁÙQVÒÁÙVŒÓÆ®®Q™®©®®©®©®©©®

COUNTY CONSERVATION DISTRICT APPROVES, REMOVE THE REMAINING FROSION

\*CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON-SITE AND

ANY DISTURBED AREA THAT IS NOT AT FINAL GRADE OR WHERE THERE HAS BEEN A CESSATION OF

BE EXPOSED FOR MORE THAN ONE YEAR SHALL BE SEEDED WITH PERMANENT SEED MIX AND MULCHED.

STRIP AVAILABLE TOPSOIL WITHIN THE LIMITS OF DISTURBANCE. AN 18-INCH

I. INSTALL COMPOST SOCKS WHERE INDICATED ON PLAN.

SITE CLEARING WORK WITHIN LIMITS OF DISTURBANCE.

RECEIVE A MINIMUM OF 8" TOPSOIL, SEED AND MULCH.

10. INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION.

UPSTREAM CONTRIBUTING DRAINAGE AREA IS STABILIZED.

CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY

LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)

FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)

ANNUAL RYEGRASS = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)

STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)

MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.

MEASURES AND SPECIFICATIONS FOR LONG TERM PROTECTION USE DURING EARTHMOVING

FERTILIZER = 1,000 LBS. PER ACRE (25 LBS. PER 1,000 S.F.)

FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)

FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)

APPLY THE REMAINDER AT THE TIME OF FINAL SEEDING AT THE FOLLOWING RATE:

(A) ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS

HALF. APPLY THE FOLLOWING AS PART OF THE TEMPORARY SEEDING:

LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)

LIME = 5.0 TONS PER ACRE (200 LBS. PER 1,000 S.F.)

CROP. SEEDING RATE = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)

PLANTING DATES = 4/1 - 5/31 AND 8/6 - 10/15

SEEDING RATE = 170 LBS. PER ACRE (4 LBS. PER 1,000 S.F.)

DETERMINE HOW MUCH SEED TO PLANT:

DIVIDE THE PLS% INTO ONE HUNDRED (100): 100 / 61 = 1.63.

FOLLOWING RATE: STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)

THUS, FOR EVERY 1 POUND OF SEED MIXTURE SPECIFIED, 1.63 LBS SHOULD BE APPLIED.

BE HELD IN PLACE WITH NETTING OR EROSION CONTROL BLANKET. MULCH SHALL BE APPLIED AT THE

MIXTURE WILL MEET THE REQUIREMENTS OF CHAPTER 102.

PERMANENT SEEDING - AREAS NOT PAVED SHALL BE PLANTED WITH PERMANENT SEED.

10. INSTALL FINAL WEARING COURSE FOR THE ROADWAY

PLAN AND/OR THE BUILDING PERMIT PLANS.

25. INSTALL BINDER COURSE ON DRIVEWAYS

SEEDBED PREPARATION AND SEEDING METHODS

AVAILABLE, APPLY LIME AT THE FOLLOWING RATE

(2) FERTILIZER - COMMERCIAL TYPE 10 - 10 - 20

FOLLOWING RATE:

AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:

ONE YEAR OR MORE A PERMANENT SEED MIX IS NECESSARY

JNTIL THEY ARE REPLACED BY ANOTHER APPROVED BMP.

ACCORDANCE WITH PERMANENT STABILIZATION SPECIFICATIONS

MULCHED. SEEDBED PREPARATION AND SEEDING METHODS:

PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.

(2) <u>FERTILIZER</u> — COMMERCIAL TYPE 10 — 20 — 20

APPLY FERTILIZER AT THE FOLLOWING RATE:

) <u>PERMANENT SEED MIXTURE</u>

(1) <u>LIME</u> - AGRICULTURAL GRADE LIMESTONE

THE BMPS MUST BE STABILIZED IMMEDIATELY

BE STABILIZED BY VEGETATION

26. FINISH CONSTRUCTION OF DWELLING UNITS.

DEFICIENCIES IN ROADWAY

11. FINE GRADE AND COMPACT SUBGRADE IN AREA OF ROADWAY.

. INSTALL SEDIMENT BASIN AND DIVERSION CHANNEL.

AND MULCH THE TOPSOIL STOCKPILES.

PREPARED AND COMPLETELY IMPLEMENTED. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LOCAL COUNTY

CONSERVATION DISTRICT COMPLETE. WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY 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. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT 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

LOCAL COUNTY CONSERVATION DISTRICT OFF-SITE WASTE AND BORROW: THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT AND/OR LOCAL MUNICIPALITY IN COMPLIANCE WITH CHAPTER 102 RULES AND

REGULATIONS, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE SOIL AND/OR ROCK SPOIL AND BORROW AREAS. REGARDLESS OF THEIR LOCATIONS 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.

THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64. EROSION CONTROL RULES AND REGULATIONS, TITLE 25. PART 1. DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

### WVQŠQVŸÁŠQÞÒÁVÜÒÞÔPÁÒÝÔŒXŒVQUÞÁÞJUSVÖYRIKKÍCAL STAGE: BEGIN CONVERSION OF SEDIMENT BASIN TO BIORETENTION BASIN AFTER 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 PLIMPED 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

## <u>ÙÒÔVQUÞÁF€GÈÍÇ^DÁËÁÚÜÒËÔU</u>ÞÙVÜWÔVQÛ HIMA TAGRICULTURAL GRABE LIMESTONE NOT TO ANY FARTH DISTURBANCE UNLESS OTHERWISE BY SERO DEP OR THE LOCAL COUNTY

RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

CONSERVATION DISTRICT. PERMITEES, CO-PERMITEES, OPERATORS, ALL APPROPRIATE MUNICIPAL OFFICIALS, REPRESENTATIVES FROM THE LOCAL COUNTY CONSERVATION DISTRICT AND THE SERO DEP, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY. INCLUDING IMPLEMENTATION OF THE E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRE-CONSTRUCTION MEETING.

#### ÔŚÒŒÞÁØQŠŠÁBÁÒÞXQÜUÞTÒÞVŒŠÁÖWÒÁÖQŠŢMQŌŢŌÒDPO PLAN TO LEAVE THE PROJECT DISTURBED AND INACTIVE FOR MORE THAN TWENTY IF FILL IS REQUIRED, THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FIL

APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US. UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATIONS." ON THE LEFT SIDE OF THE SCREEN CLICK ON "TECHNICAL GUIDANCE DOCUMENTS-FINAL." THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH. CLICK ON "MANAGEMENT OF 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 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 REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF

THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS

CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE

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 USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION 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 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". FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271

### <u>ÙOÖVQUÞÁF€GÈIÇà</u>DÇÍDÇ¢ãDÁËÁÜÒÔŸÔŠQÞÕÁUMÜ=Á6ÖDQQ ÈEFÚAUÐEÙ@EŠLAÁ LEERØ1ÁAOTSOEFVÒÜQŒŠÙ THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS

MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL

INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE. BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER

POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN F&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

#### ÙÒÔVQUÞÁF€GÈIÇàDÇÍDÇÇDÁËÁÙWÜØŒÔÒÁYŒVÖÜ6AK @LISBU JEUBLUE QAØQÔŒVQUÞ 20% CHEWINGS FESCUE THE SITE IS LOCATED WITHIN THE NESHAMINY CREEK WATERSHED. THE PROJECT'S RECEIVING 20% PERENNIAL RYEGRASS

WATERCOURSE IS AN UNNAMED TRIBUTARY TO READING CREEK (TRIBUTARY TO THE WEST BRANCH NESHAMINY CREEK). PER THE PENNSYLVANIA CODE, TITLE 25, CHAPTER 93 WATER QUALITY STANDARDS, THE RECEIVING WATERCOURSE HAS THE FOLLOWING STREAM DESIGNATION: (C) NOTE: ALL MIXTURES GIVEN ABOVE ARE FOR PURE LIVE SEED 100% (PLS 100%) WWF - WARM WATER FISHES

### ÙÒÔVQUÞÁF€GÈIÇàDÇÍDÇçããDÁËÁÔUÞÙVÜWÔVŒQŒULAFEÁLSÐ: DOÐÛ8WYÐURE QEED WITH 72% GERMINATION: 85 X 72 / 100 = 61% PLS OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS,

THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED.

ALL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS. NOT CHOPPED OR FINELY BROKEN. AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION WITH POLYMERIC OR GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURE'S RECOMMENDATIONS. MULCH ON SLOPES OF 8% OR GREATER SHOULD

(5) EROSION CONTROL BLANKET ALL SLOPES 3:1 OR STEEPER. AS WELL AS ALL DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER (WITH ALL DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CALITIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 121 ENTITLED "LINDERGROUND UTILITY LINE PROTECTION LAW". (AMENDS PENNSYLVANIA ACT 287 AND REPLACES PENNSYLVANIA ACT ANY INFORMATION APPEARING ON THESE DRAWINGS AS TO THE UNDERGROUND LINES OF A USER, SUCH AS A PUBLIC UTILITY. HAS BEEN INCORPORATED HEREON PURSUANT TO SAID PENNSYLVANIA AC

ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED. SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USIN THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND

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I MAINTENANCE ACTIVIT

ALL PLANTINGS, SHOULD BE INSTALLED DURING THE FINAL CONSTRUCTION PHASE OF THE PROJECT. 2. PLANTING TIME: PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH SPECIFIED MAINTENANCE

PERIODS TO PROVIDE MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION. COORDINATION WITH LAWNS: PLANT TREES AND SHRUBS AFTER FINAL GRADES ARE ESTABLISHED AND PRIOR TO PLANTING OF LAWNS. UNLESS OTHERWISE ACCEPTABLE. IF PLANTING OF TREES OCCURS AFTER LAWN WORK, PROTECT LAWN AREAS AND PROMPTLY REPAIR DAMAGE TO LAWNS RESULTING FROM PLANTING OPERATIONS TO REDUCE RISK OF INFESTATION BY INVASIVE SPECIES.

a. BEFORE PLACING SHRUBS IN PITS, SCARIFY A 3" LAYER OF EXISTING SOIL AT THE BOTTOM OF PIT AND TAMP LIGHTLY. ALL TREES SHALL BE PLACED DIRECTLY ON THE SCARIFIED SUBGRADE.

b. THE PLANT PIT SHALL BE FILLED WITH PLANTING MIXTURE AS SPECIFIED AND PLACED IN 6" LAYERS AROUND THE BALL. EACH LAYER SHALL BE CAREFULLY TAMPED IN PLACE IN A MANNER TO AVOID INJURY TO THE ROOTS OR BALL OR DISTURBING THE POSITION OF THE PLANT. WHEN APPROXIMATELY TWO-THIRDS (2/3) OF THE PLANT HAS BEEN BACKFILLED, THE PIT SHALL BE FILLED WITH WATER AND THE SOIL ALLOWED TO SETTLE AROUND THE ROOTS. B&B PLANTS SHALL HAVE ALL THE TWINE, WIRE BASKETS AND BURLAP CUT AWAY OR FOLDED BACK FROM THE TOP 1/3 OF THE BALL AND TRUNKS BEFORE APPLYING THE WATER. AFTER THE WATER HAS BEEN ABSORBED, THE PLANT HOLE SHALL BE FILLED WITH SOIL MIX AND TAMPED LIGHTLY TO GRADE.

c. ALL CONTAINERIZED STOCK SHALL BE REMOVED FROM CONTAINERS AND THE ROOT MASS SHOULD EITHER BE PHYSICALLY LOOSENED OR SLICED TO PREVENT STRANGULATION. d. BACKFILL MATERIAL SHALL BE FRIABLE AGRICULTURAL LOAM SUITABLE FOR GROWING PLANT MATERIAL FREE FROM STICKS, STONES, AND OTHER FOREIGN MATERIAL.

e. PLANT MATERIAL LOCATIONS ARE APPROXIMATE. WHEN NECESSARY, ADJUSTMENTS MAY BE MADE IN THE FIELD AND APPROVED BY THE MUNICIPALITY.

PRUNING: TREES SHALL BE PRUNED TO BALANCE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR NATURAL CHARACTER AND SHAPE. PRUNING SHALL BE RESTRICTED IN GENERAL TO THE SECONDARY BRANCHES AND SOFT/SUCKER GROWTH. NEVER CUT A LEADER. 5. MULCHING: BEFORE MULCH IS INSTALLED, APPLY PRE-EMERGENCE WEED KILLER AND INCORPORATE

INTO SOIL ACCORDING TO MANUFACTURER'S DIRECTIONS. ALL SURFACES WHICH ARE TO RECEIVE MULCH SHALL BE RAKED OFF AND SMOOTH AND FREE OF ALL ROCKS, DEBRIS, OR LARGE PIECES OF BARK PRIOR TO APPLICATION OF MULCH '. ALL TREES TO BE STABILIZED WITHIN 48 HOURS OF PLANTING. 8. REMOVAL OF ALL PLANTING DEBRIS IS REQUIRED. THE PROPERTY MUST BE LEFT IN A NEAT AND

ORDERLY CONDITION IN ACCORDANCE WITH GOOD AND ACCEPTED PLANTING PRACTICES. 9. PROTECT MATERIALS FROM DAMAGE BY OTHER CONTRACTORS, TRADES AND TRESPASSERS MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.

OÖVQUÞÁF€GÈGGÇàDÁËÁVÒTÚU܌ܟÁÙQVÒÁÙ**ÇŀĿÐĿĠŸŖŲŊŖ**ÁÙÒÛWÒÞÔÒÁBÁQÞÙVŒŠŠŒV OQUUOVOÞVQUÞÁOŒÙQÞÁYQVPÁŒTÒÞ:ÖÒÖÁÙ EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE.

> INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST FILTER SOCKS AS INDICATED ON THE PLAN) DOWNSTREAM OF PROPOSED CONSTRUCTION ACTIVITIES PRIOR TO EXCAVATION CLEAR, GRUB AND EXCAVATE TO DESIGN SUBGRADE ELEVATIONS. CARE SHOULD BE TAKEN TO AVOID

4. BEFORE INSTALLATION OF AMENDED SOILS, A LICENSED PROFESSIONAL SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY. AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS BEFORE FINAL GRADING IS COMPLETI

INSTALL AMENDED SOILS WITH UNDERDRAINS AND RISER OUTLET STRUCTURES. PERFORM AS-BUILT SURVEY TO CONFIRM TOP OF PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE. 6. ONCE AMENDED SOIL IS PLACED, INSTALL ORANGE CONSTRUCTION FENCE AROUND THE PERIMETER OF THE BMP OR MAINTAIN COMPOST FILTER SOCK. THE EXCAVATION MUST BE PROTECTED FROM

COMPACTION. VEHICULAR MOVEMENT ON THE SOIL SHALL BE AVOIDED AND WALKING MOVEMENT SHALL CONNECT RISERS TO STORM SEWER SYSTEM. TOPSOIL, FINE GRADE AND STABILIZE AREAS IMMEDIATELY. SEED RAIN GARDENS WITH SPECIFIED SEED MIX PER MANUFACTURER'S STANDARDS AND RECOMMENDATIONS

8. AFTER BASIN AND ITS TRIBUTARY AREA ARE COMPLETELY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS. RESTABILIZE ANY AREAS DISTURBED DURING THE REMOVAL OF BMPS.

MCCD MUST BE OBTAINED PRIOR TO CONVERSION.

REMOVE TEMPORARY RISER

THE REMOVAL OF BMPS

THE PROPOSED TRENCHING ACTIVITIES.

BE RESTABILIZED IMMEDIATELY

IMMEDIATELY STABILIZE

COMPLETED IN ONE DAY

ÔUÞXÒÜÙQUÞÁØÜUTÁÙÒÖQTÒÞVÁÓŒÙQÞK

SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS BEFORE FINAL GRADING IS COMPLETE.

MANUFACTURER'S STANDARDS AND RECOMMENDATIONS IN AREA AS DELINEATED ON PLAN.

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SETBACK AS DIRECTED BY THE OWNERS REPRESENTATIVE.

PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH

INSTALL UTILITIES, BACKFILL TRENCH AND STABILIZE IMMEDIATELY.

STRIP EXISTING TOPSOIL. SEPARATE TOPSOIL WITH ORGANIC MATERIAL FOR REUSE.

CONVERT TEMPORARY SEDIMENT BASIN INTO PERMANENT DETENTION BASIN UPON STABILIZATION OF UPSTREAM DRAINAGE AREA. APPROVAL FROM

EXCAVATE BASIN BOTTOM TO REMOVE ALL ACCUMULATED SEDIMENT MINIMUM 1 FT BELOW BOTTOM). CARE SHOULD BE TAKEN TO AVOID EXCESSIVE

TOPSOIL, FINE GRADE AND STABILIZE AREAS IMMEDIATELY. INSTALL SOIL AMENDMENTS AND SEED BASIN BOTTOM WITH SPECIFIED SEED MIX PER

AFTER BASIN IS COMPLETELY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS. RESTABILIZE ANY AREAS DISTURBED DURING

4. A LICENSED PROFESSIONAL SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT

8. VEHICULAR ACCESS ON BASIN BOTTOM SHOULD BE LIMITED AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS

SPECIFICATIONS INCLUDE ACCEPTABLE MATERIALS FOR TYPICAL APPLICATIONS, BUT ARE NOT INTENDED TO BE EXCLUSIVE OR LIMITING.

AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE

BEFORE THE TIME THE TOPSOIL IS PLACED, AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE

CONDITION TO A DEPTH OF EIGHT (8) INCHES BELOW FINAL TOPSOIL GRADE. THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL

REQUIRED. SUB-SOILING SHALL BE USED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED. SUB-SOILING

SHALL BE PERFORMED BY THE EXCAVATING CONTRACTOR AND SHALL OCCUR BEFORE TOPSOIL PLACEMENT. EXCEPTIONS TO SUB-SOILING INCLUDE

TRENCHING/DRAINAGE LINES ARE INSTALLED, WHERE COMPACTION IS BY DESIGN (ABUTMENTS, FOOTINGS, OR IN SLOPES) AND ON INACCESSIBLE

SLOPES, AS APPROVED BY THE OWNER'S REPRESENTATIVE. IN CASES WHERE EXCEPTIONS OCCUR, THE CONTRACTOR SHALL OBSERVE A MINIMUM

MATERIAL (OR APPROVED COMPOST, IF NOT ENOUGH TOPSOIL WITH ORGANIC MATERIAL EXISTS ON-SITE). TILL THE SOIL WITH A ROTARY TILLER THAT

4. RE-SPREAD EXISTING TOPSOIL TO A MINIMUM DEPTH OF SIX (6) INCHES WITH THE TOP TWO (2) INCHES CONSISTING OF TOPSOIL WITH ORGANIC

10. REMOVE EROSION AND SEDIMENT CONTROL BMPS AFTER AREA IS STABILIZED. ANY AREAS DISTURBED DURING THE REMOVAL OF THE BMPS SHALL

ANY UPSTREAM DISTURBANCE SHALL BE STABILIZED AND ALL CONTRIBUTING STORMWATER FACILITIES SHALL BE INSTALLED PRIOR TO DIVERTING

11. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND

3. INSTALL PERFORATED PIPE ALONG A CONTOUR TO CONSTRUCT A LEVEL BOTTOM AND BACKFILL WITH AASHTO #57 CLEAN STONE.

SURFACE EXCEEDING THREE (3) INCHES IN DEPTH. TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL WILL BE

CONSTRUCT SITEWORK IN ACCORDANCE WITH CONSTRUCTION SEQUENCE PER FROSION & SEDIMENT CONTROL PLAN

SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.

BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.

. EXCAVATE TO DESIGN DEPTH AND INSTALL GEOTEXTILE LINING ALONG SIDES AND BOTTOM OF TRENCH.

3.  $\,$  ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSTREAM

LINTIL THE SITE IS STABILIZED ALL FROSION AND SEDIMENT RMPS MIST BE MAINTAINED PROPERLY MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPS AFTER FACH RUNGEE EVENT AND ON A WEEKLY BASIS, ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO COMPLETE A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR, OR REPLACEMENT AND MAINTENANCE ACTIVITIES. A LOG SHOWING

4. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES

DATES THAT BMPS WERE INSPECTED, AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON-SITE AND BE MADE AVAILABLE TO THE REGULATORY AGENCY

·	ROCK CONSTRUCTION ENTRANCE	MAINTAIN THICKNESS TO SPECIFIED DIMENSIONS     REMOVE SEDIMENT DEPOSITED ON PUBLIC ROADWAYS/SIDEN IMMEDIATELY UPON DISCOVERY     IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SUFWATER.	ALKS OR	•	INSPECT DAILY	•	IN HAZARDOUS SITUATIONS WHEN MUD CAUSES SLICK CONDITIONS ON TRAVELED ROADWAYS, PRESSURE WASHING SHALL BE PERFORMED TO THE SATISFACTION OF THE TOWNSHIP. ALL SEDIMENT LADEN WATER GENERATED BY PRESSURE WASHING SHALL BE COLLECTED AND FILTERED THROUGH AN ADEQUATE FILTER CONTROL, SUCH AS A WATER FILTER BAG, PRIOR TO DISCHARGE TO SEWER OR WATER COURSE. REMOVAL OF MUD OR DEBRIS FROM THE HIGHWAY SHALL BE AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR AND/OR DEVELOPER.
	PUMPED WATER FILTER BAG	REPLACE BAGS WHEN THEY BECOME 1/2 FULL OF SEDIME	NT	•	INSPECT BAGS DAILY	•	IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED
	COMPOST FILTER SOCK	SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF TH ABOVEGROUND HEIGHT OF THE SOCK		•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL 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 SPECIFICATIONS.
	SEEDING AND MULCHING	SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED REGRADED AS NECESSARY, RESEEDED, AND MULCHED.     PROMPTLY REAPPLY MULCH MATERIALS, WHICH BECOME DISLODGED OR LOST, DUE TO WIND, RAIN, FIRE, OR OTHER CAUSES, AT INITIAL OR MODIFIED RATES, AS DIRECTED.		•	PROPERLY MAINTAIN SEEDED AND MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. REFER TO TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS FOR ADDITIONAL DETAIL	•	REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
-	EROSION CONTROL BLANKET	DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED (     REPLACED WITHIN 4 CALENDAR DAYS.	R	•	INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA.	•	AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF SLOPE FAILURE OCCURS (ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE) REPLACE THE MULCH AS DIRECTED.
	INLET FILTER BAG	BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE HIS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDU AS TO CAUSE FLOODING OR BYPASSING OF THE INLET.		•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	•	DAMAGED FILTER BAGS SHOULD BE REPLACED.
<i>/</i> (	VEGETATED CHANNELS  UPÁPUV	CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL IS REDUCED BY 25% AT ANY LOCATION.  SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACC CHANNEL WITHOUT FURTHER DAMAGE.  AMAGED LININGS SHALL BE REPAIRED/REPLACED WITHIN A HOURS OF DISCOVERY.	OF SS TO	•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	•	CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED.  DAMAGED FILTER BAGS SHOULD BE REPLACED.
Ùί	AND LEVEL SPREADERS	DISPLACED RIFRAP SHALL BE REPLACED IMMEDIATELY.     AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED IMMEDIATELY.		•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	•	SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER.
	LANDSCAPING AND VEGETATION	WATERING, CULTIVATING, WEEDING, MULCHING, CONTROL OF INSECTS AND DISEASES, AND PRUNING     RESET TREES TO PROPER GRADES AND/OR VERTICAL POSI REQUIRED	ION AS	•	AS NEEDED TO MAINTAIN PROPER GROWTH AND APPEARANCE OF PLANT MATERIAL PERFORM APPROPRIATE SEASONAL MAINTENANCE	•	PLANTS IN POOR HEALTH THAT LACK NORMAL GROWTH HABIT SHALL BE REMOVED AND REPLACED WITHIN 6 MONTHS. PLANTINGS SHALL BE MAINTAINED AND PROTECTED FOR 50 YEARS OR UNTIL REDEVELOPMENT OCCURS.
	SKIMMERS	ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.     ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLY SHALL BE REMOVED IMMEDIATELY.		•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	•	REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
	SEDIMENT BASINS AND TRAPS	SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN SHARESTORED TO ITS ORIGINAL DIMENSIONS.     EMBANKMENTS, SPILLWAYS AND OUTLETS SHALL BE INSPECTION FOR EROSION, PIPING AND SETTLEMENT AND REPAIRS MAD IMMEDIATELY.	LL BE TED	•	INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	•	TRASH AND OTHER DEBRIS SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY
)							DEW

ÔU Þ Ù V Ü WÔ V QU Þ Á Ù Ò Û WÒ Þ Ô Ò Á B Á Q Þ Ù V Œ Š Š Œ V QU Þ Á Þ U V Ò Ù Á Ø U Ü Á Ó QU Ü Ò V Ò Þ V QU Þ Á Ó Œ Ù Q Þ Á Ç Ó T Ú Á Î È I È Í D

/—TEMP. RISER <del>← ETW →</del> EMBANKMENT TOP TRASH RACK-ELEVATION (ETE) EXTENSION SKIMMER--ANTI-SEEP ` DISSIPATOR BERM \ COLLARS <u>ÔUÞÙVÜWÔVQUÞÁÙÒÛWÒÞÔÒÁØUÜÁÙUQŠÁŒTÒÞÖTÒÞVÁB</u>ÁÜÒÙVUÜŒV**ŒVŒŸŶ**ŢĹĂĴŖĖĬŢĦŢÁÇØŲÜ BASIN BOTTOM-TEMP. STUB-ELEVATION (BE) PERM. OUTLET STRUCTURE— WATERTIGHT SEALS ALL JOINTS—

			TEMP RISER		EMBAN	CLEAN OUT	воттом			
BASIN NO.	Z1 (FT)	Z2 (FT)	EXT. ELEV TRE (FT)	TOP ELEV ETE (FT)	TOP WIDTH ETw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)	ELEV COE (FT)	ELEV BE (FT)	
	3	3	324.40	326.00	326.00 6			323.50	322.50	
SKIMMER OUTLET BARREL										

IS SET TO A DEPTH OF SIX (6) INCHES TO ACHIEVE A MINIMUM SOIL TO ORGANIC TOPSOIL/COMPOST RATIO OF 2:1.	SKIMIMER			UUILLI DARKEL				
	DIA	LENGTH		DIA	INLET		LENGTH	OUTL
<u>ÔUÞÙVÜWÔVQUÞÁÙÒÛWÒÞÔÒÁBÁQÞÙVŒŠŠŒVQUÞÁÞUV</u> ÒÙÁØUÜÁWVQŠQVŸ	ÁSAC C	Þ <sub>(</sub> Þ) Á	V <sup>™</sup> Ü̇̀ÒI		ELEV BIE (FT)	MAT'L	BI (FT)	ELEV E
OYOCEX CEV QUPK  1. 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  NOTES:	3	30	PVC	18	322.50	HDPE	50	321.5

LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS

SHOWN ON THE E&S PLAN DRAWINGS. 4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND 5. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSLOPE OF RESTORATION. THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL, FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS. OR OTHER WOODY VEGETATION, ORGANIC MATERIAL

9. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE

LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS 12. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE ÔUPÙVÜWÔVQUPÁÙÒÛWÒPÔÒÁBÁQPÙVŒŠŠŒVQUPÁÞUVÒÙÁØUÜÆŠŠNÒOXTČIŠVÁTIÖNÝQŮ ČHĒEČTAČEÜAŇDKTHE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

> BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE

ÙVŒÞÖŒÜÖÁÔUÞÙVÜWÔVQUÞÁÖÒVŒQŠÁÀÏËI ÙÒÖQTÒÞVÁÓŒÙQÞÁÒTÓŒÞSTÒÞVÁŒÞÖÁÙÚQŠŠYŒŸÁÖÒVŒQŠÙÁËÁÙÐQVŒÐÖÖÖÐÖŒÜÖÁÔUÞÙVÜWÔVQUÞÁAÖÖÖSVMØŒOŢŠÁÅÏË

DEWATERING-FACILITY FLOAT-NOTES: PLAN VIEW NO GUIDE RAILS SHALL BE REQUIRED FOR THIS INSTALLATION. THIS DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD CONSTRUCTION DETAILS #7-2 Ù V Œ Þ Ö ŒÜ Ö Á Ô U Þ Ù V Ü WÔ V Q U Þ Á Ö Ò V Œ Q Š A ÙSQTTÒÜÁYQVPÁÙVUÞÒÁŠŒÞÖQÞ**Ô**ÁÓ -TRASH RACK TEMP RISER WATER SURFACE-**EXTENSION** ELEVATION (WSE) AT TOP ELEVATION (TRE) OF DEWATERING ZONE WATER SURFACE **STRUCTURE** -<del>TEMPORARY RISER</del> CREST EXTENSION\* WATER ENTRY UNIT-FI EVATION PERMANENT RISER ARM (DEWATERING TUBE)-STRUCTURE SKIMMER ARM-DIAMETER (SAd) \*AFFIX SKIMMER ✓STUB INLET TEMPORARY 24" CMF CLEAN-OUT RISER ELEV. (TSIE) ELEVATION (COE) ∠BARREL INLE¹ ELEV. (BIE) AASHTO NO. STONE STONE BERM-WATER TIGHT SEALS TEMPORARY STUB FLEXIBLE HOSE-ALL JOINTS SECURELY CLAMPED TO TEMPORARY STUB SURFACE FLEXIBLE HOSE ARM ELEV. DIA. LENGTH WSE DIA. HEAD LENGTH SAL (IN) | (IN) | (IN) (FT) PVC 3(MIN.) 60" 324.40

TEMPORARY RISER (24" DIA. CMP)

ALL ORIFICES ON PERMANENT RISER BELOW TEMPORARY RISER EXTENSION SHALL HAVE WATER-TIGHT

ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE

SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT

CLEAN-OUT STAKE OR THE TOP OF THE STONE BERM. SEE STANDARD CONSTRUCTION DETAIL #7-3 FOR

ÙSQTTÒÜÁ CEVVCE**ÔÚ PÒ ÒÜÖ ÁCELÞ LOÙÁÞ**OVÚÁÒ ÜÜÜRISER

TEMPORARY SEALS PROVIDED. TEMPORARY STUB INVERT ELEVATION SHALL BE SET AT OR BELOW SEDIMENT

A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED

ELEV PSCE

SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.

SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

(FT)

MAT'L

RISER EXTENSION

TRE | LENGTH | WIDTH

(FT) | (IN) | (IN)

CREST HORIZ OPENING | CREST | HORIZ OPENING | INLET

LENGTH WIDTH ELEV

PVC | 324.40 | 24 | 24 | NA | NA | NA

T.M.P. 26-001-043

R. L. Showalter

(215) 822-2990

DATE: 02/28/2020 JOB NO.: 2016-045 DRAWN BY: CHECKED BY:

PREPARED FOR:

ELEV

(FT)

CLEAN-OUT ELEVATION.

BUCKS COUNTY, PA TOWNSHIP LINE & WALTERS ROADS

11 of 20

SHEET

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

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100 FEET FOR HQ OR EV WATERS) MUST PBEN STARTHEATED. WHILLSEE BOSUMENTS ONTE PLEANUTE PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OF MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER &

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07/12/2021 PER CONSULTANT REVIEWS NO. DATE COMMENT REVISIONS

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Chalfont, PA 18914 FAX (215) 822-5684 ullet Engineering ullet Planning ullet Surveying ullet

PROFESSIONAL Robert Lawrence Showalte 9 B; = B9/9 ₽ No.19566-E

SITUATE: **NEW BRITAIN TOWNSHIP** 

LINE LEXINGTON, PA 18932

MAX. DEPTH OF CONCRETE

FILTER RING HEIGHT

WASHOUT WATER IS 50% OF

24" DIAMETER

FILTER SOCK

CONCRETE

WATER INTO

FILTER RING

WASHOUT

4" DIAMETER FILTER

4' MIN. OVERLAP ON

SIDE OF FILTER RING

UPSLOPE

∠TEMPORARY RISER EXTENSION

-TRASH RACK

AASHTÓ NO 57 STONE

2"X2"X36" WOODEN STAKES

SECTION VIEW

<u>PLAN VIEW</u>

TYPICAL COMPOST SOCK CONCRETE

WASHOUT INSTALLATION

NOT TO SCALE

OUTLET-

FLEXIBLE—

VENT-

BARRFI

2"X2"X36" WOODEN STAKES

PLACED AT 5' O.C.

PLACED AT 5' O.C.

INSTALL ON FLAT GRADE FOR

OPTIMUM PERFORMANCE.

A SUITABLE IMPERVIOUS

GEOMEMBRANE SHALL BE

THE WASHOUT PRIOR TO

INSTALLING THE SOCKS.

PLACED AT THE LOCATION OF

PERMANENT OUTLET

STRUCTURE

18 " DIA. FILTER SOCK MAY BE

DIAMETER SOCKS IN PYRAMIDAL

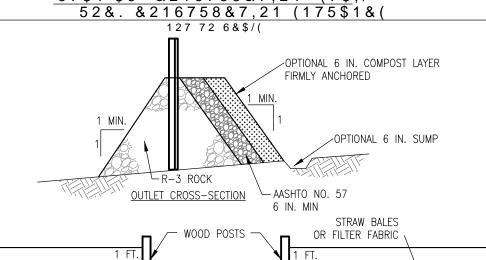
CONFIGURATION FOR ADDED HEIGHT

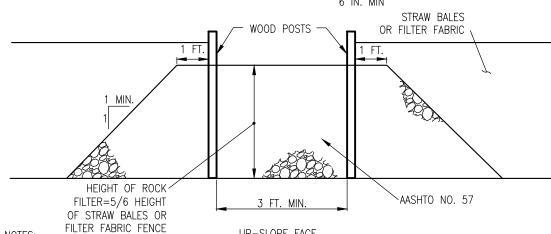
STACKED ONTO DOUBLE 24"

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

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





<u>UP-SLOPE FACE</u> 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.

SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF WELL VEGETATED, GRASSY AREA 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: AVG. WIDE WIDTH STRENGTH

AOS % RETAINED ASTM D-4751A 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.

TEST METHOD

ASTM D-4884

ASTM D-4632

ASTM D-4833

ASTM D-3786

ASTM D-4355

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

WELL VEGETATED, GRASSY AREA

-HEAVY DUTY LIFTING STRAPS

MINIMUM STANDARD

60 LB/IN

DISCHARGE HOSE

(RECOMMENDED)

PLA<u>N VIEW</u>

FILTER BAG

<u>(/(9\$7,21 9,</u>(:

PROPERTY

GRAB TENSILE

PUNCTURE

MULLEN BURST

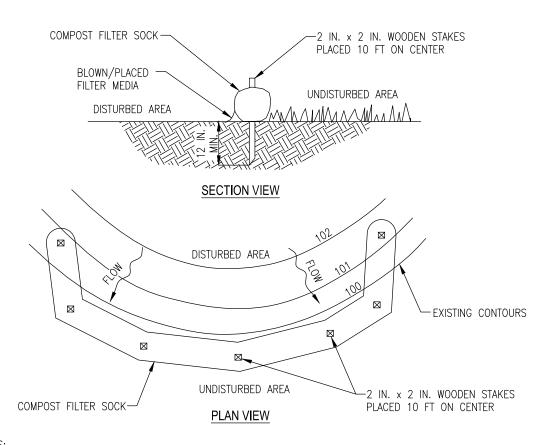
UV RESISTANCE

DISCHARGE HOSE -

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. 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.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

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



NOTES: SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

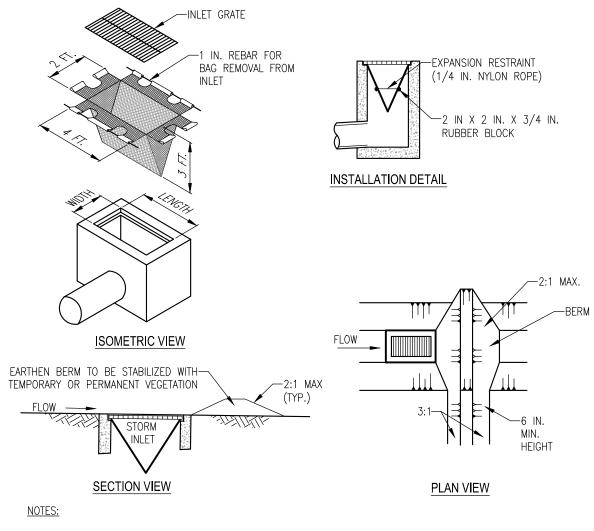
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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

SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED S RECOMMENDATIONS. ACCORDING TO MANUFACTURER 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.

67\$1'\$5' &216758&7,21 '(7\$,/



MAXIMUM DRAINAGE AREA = 1/2 ACRE.

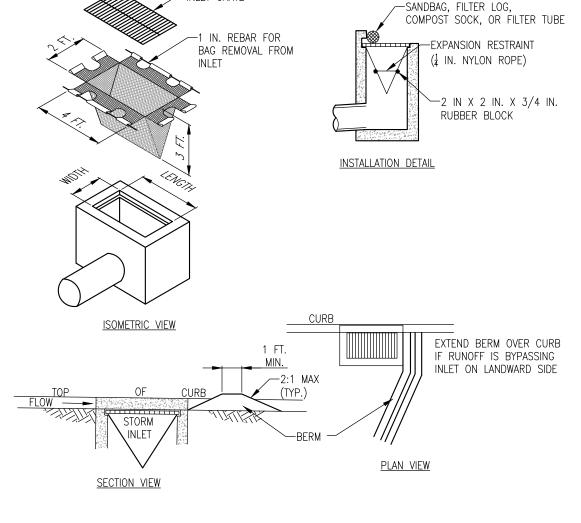
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

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

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

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

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. 67\$1'\$5' &216758&7,21 '(7\$,/ /7(5 %\$\* ,1/(7 3527(&7,21 7<3( 0 ,1/(7



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

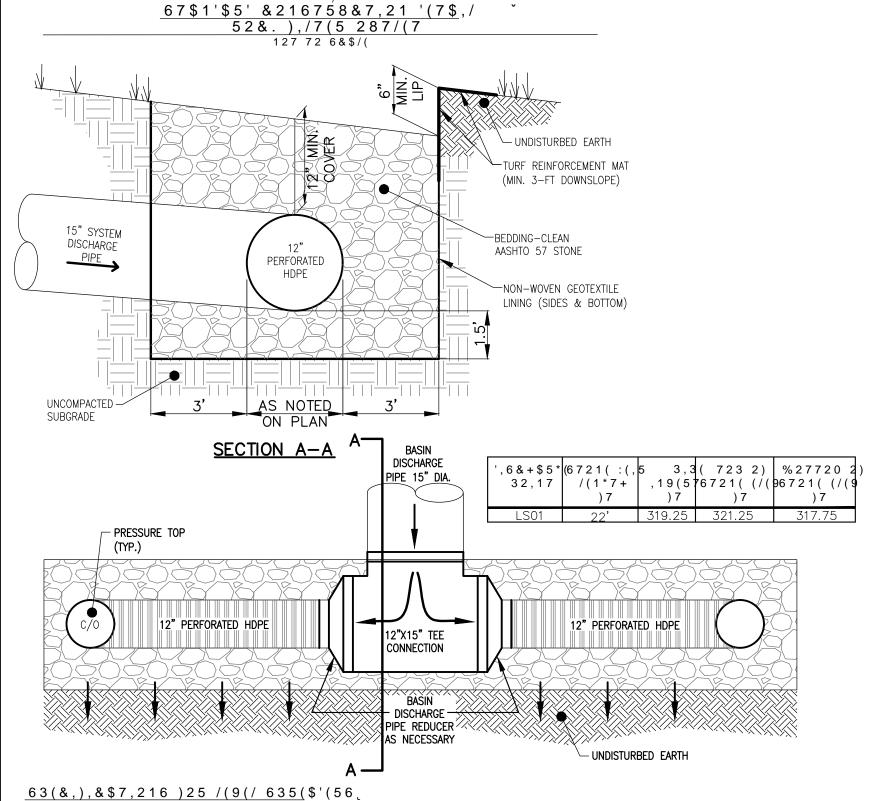
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

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

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

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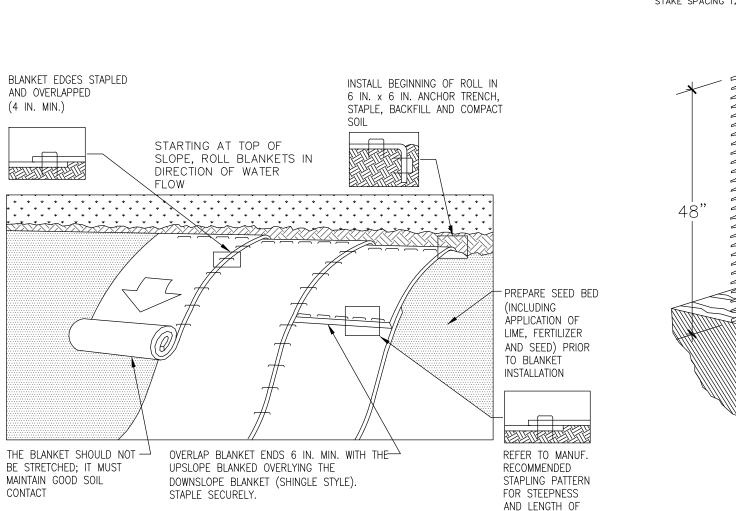
STONE FOR TRENCH O BE 1"-2" CLEAN WASHED STONE, UNIFORMLY GRADED, AND SHALL HAVE 40% VOIDS AS MEASURED BY ASTM-C29. NON-WOVEN GEOTEXTILE SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES: A. GRAB TENSILE STRENGTH (ASTM-D4632), 120 LBS

B. MULLEN BURST STRENGTH (ASTM-D3786), 225 PSI C. FLOW RATE (ASTM-D4491), 95 GAL/MIN/SQ.FT.

D. UV RESISTANCE AFTER 500 HOURS (ASTM-D4355), 70% E. HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND GEOTEX 451. PIPE SHALL BE CONTINUOUSLY PERFORATED, SMOOTH INTERIOR, WITH AN INSIDE DIAMETER OF 12 INCHES. HIGH-DENSITY POLYETHYLENE (HDPE) SHALL MEET AASHTO M252, TYPE S OR AASHTO M294, TYPE S

EXCAVATE TO DESIGN DEPTH AND INSTALL GEOTEXTILE LINING ALONG SIDES AND BOTTOM OF TRENCH. INSTALL PERFORATED PIPE ALONG A CONTOUR TO CONSTRUCT A LEVEL BOTTOM AND BACKFILL WITH AASHTO #57 CLEAN STONE

&216758&7,21 6(48(1&( ,167\$//\$7,21 127(6 )25 /(9(/ 635(\$'(56 1. ANY UPSTREAM DISTURBANCE SHALL BE STABILIZED AND ALL CONTRIBUTING STORMWATER FACILITIES SHALL BE INSTALLED PRIOR TO DIVERTING RUNOFF TO LEVEL SPREADERS. 127 72 6&\$/( 7 < 3 , & \$ / /(9(/ 635(\$'(5 '(7\$,/



SLOPE BEING

HEIGHT

NOTES: BLANKETED SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO

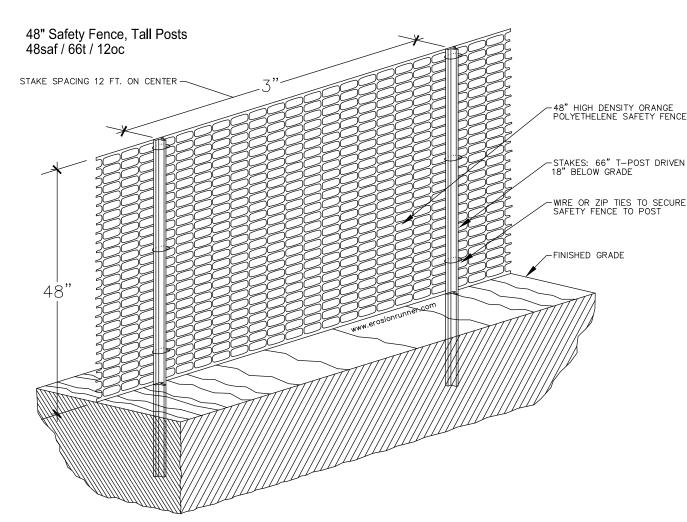
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE. SLOPE SURFACE SHALL BE

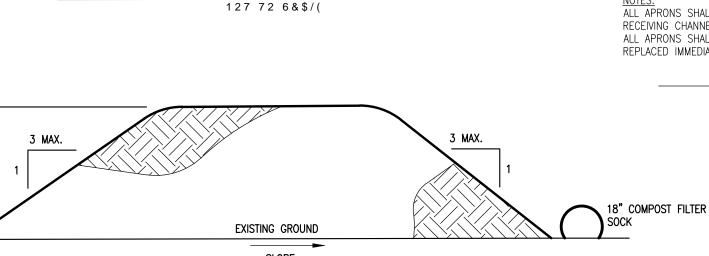
THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA.

DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

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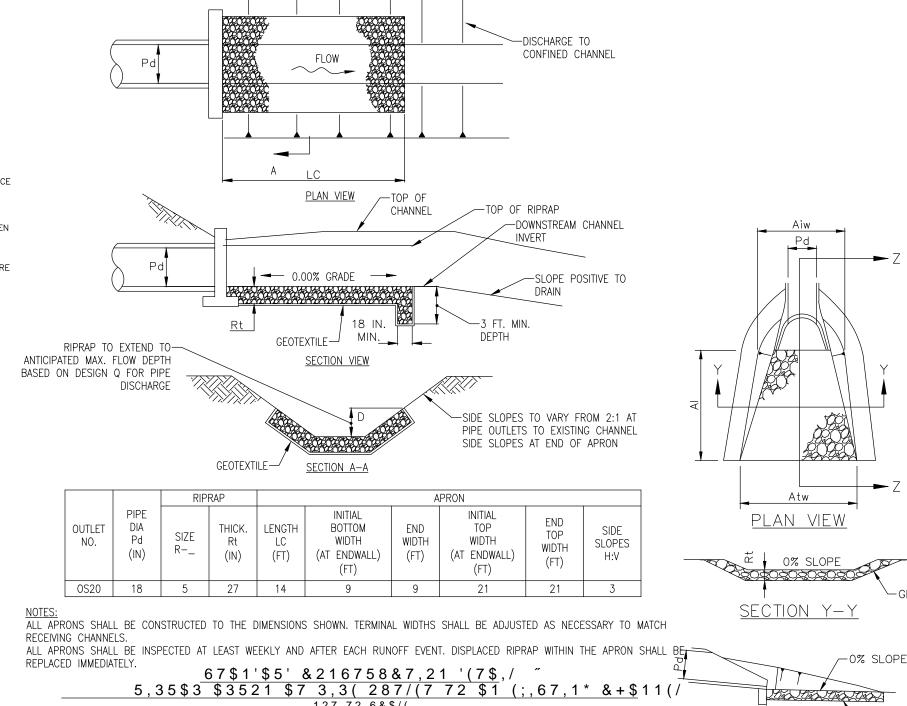


1. SILT SOCK SHALL BE PLACED AROUND TOPSOIL STOCKPILES TO PREVENT SEDIMENT FROM LEAVING THE SITE. IT SHOULD BE STAKED PER THE SILT SOCK DETAILS AS SHOWN ON THE PLAN.

> 67\$1'\$5' &216758&7,21 '(7\$,/72362,/672&.3,/( 127 72 6&\$/(

T.M.P. 26-001-043

2. SEED STOCKPILE PER TEMPORARY SEEDING SPECIFICATIONS.



THICK. LENGTH INITIAL TERMINAL WIDTH SIZE

NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

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127 72 6&\$/(

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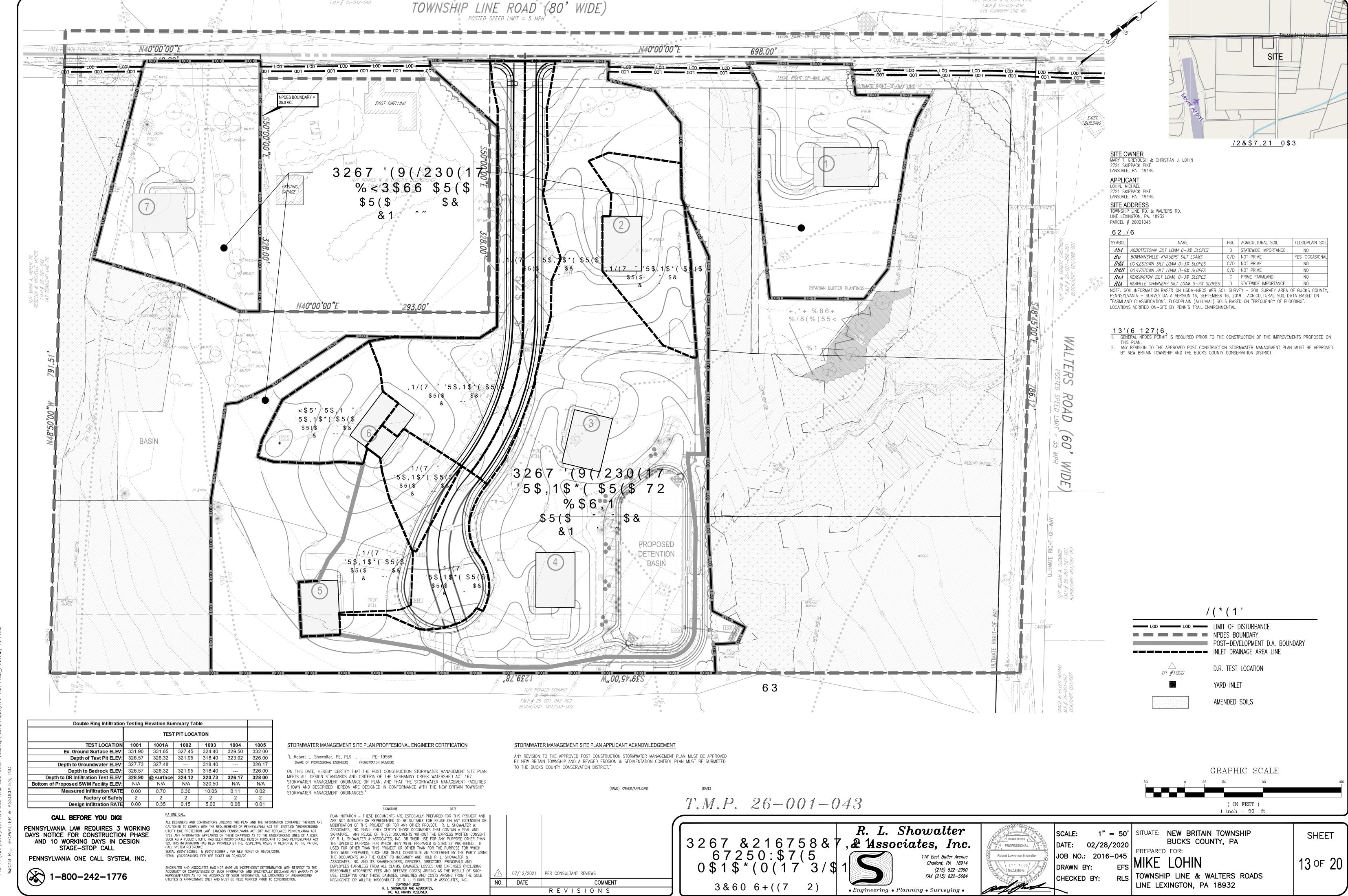
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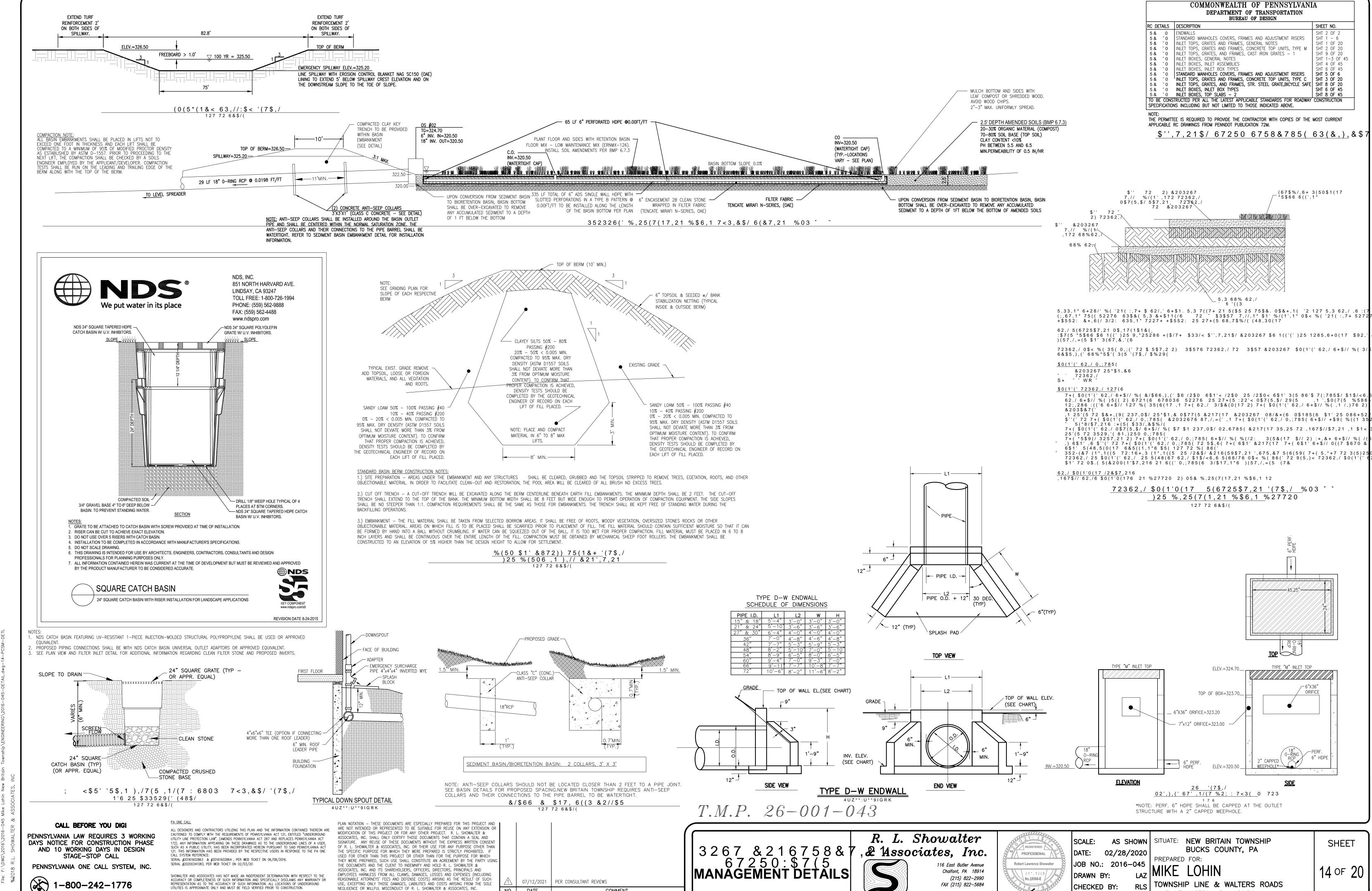
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UTILITIES IS APPROXIMATE ONLY AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

FROM CORROSIVE SOILS. THE CONCRETE INLET BOXES, MANHOLE SAND ELLIPTICAL PIPES SHOULD BE COATED TO PREVENT CORROSION. DROUGHTY - DROUGHTY SOILS ARE A LIMITATION TO CROPS SUCH AS CORN AND SOY. SINCE THIS

PROJECT PROPOSES NO CROPS, THIS LIMITATION SHOULD NOT HINDER THE PROPOSED IMPROVEMENTS. EASILY ERODIBLE - AREAS OF EARTH DISTURBANCE ARE PROTECTED BY EROSION CONTROL BMP'S. IN AREAS OF EASILY ERODIBLE SOILS, EROSION CONTROL BLANKETS MAY BE USED FOR SHORT DURATIONS

ALONG WITH TEMPORARY AND/OR PERMANENT VEGETATION AND MULCH AS NEEDED. FLOODING - IN CASE OF EXCAVATIONS FILLING WITH WATER, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE EXCAVATION

DEPTH TO SATURATED ZONE - TESTING SPECIFIC TO THIS SITE SHOWS THAT THE SATURATED ZONE WILL NOT BE ENCOUNTERED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS. HYDRIC INCLUSIONS - THE USDA NRCS WEB SOIL SURVEY LISTS ALL ON SITE SOILS AS NOT MEETING HYDRIC CRITERIA. WHERE IT IS NECESSARY TO CONSTRUCT ON OR NEAR HYDRIC SOILS, SPECIAL CARE

SHALL BE TAKEN TO MINIMIZE DISTURBANCE AND CONFIRM WITH APPLICABLE STATE AND FEDERAL PERMIT LAND SLIDE PRONE - THE DEPTH OF EXCAVATIONS AND SLOPES ON SITE WILL NOT BE ENOUGH TO HAVE A LAND SLIDE. TO PROTECT EXCAVATIONS FROM CAVING, SHORING IS REQUIRED WHEN EXCAVATION DEPTHS

CREATE A HAZARD. SLOW PERCOLATION - DUE TO THE CONTAMINANTS ON THE SITE, INFILTRATION BMPS PERCOLATING INTO THE GROUND ARE NOT PROPOSED THEREFORE, PERCOLATION RATE ARE NOT RELEVANT. PIPING - ALL PIPES WILL BE UNDERGROUND. NO PIPES WILL BE INSTALLED THROUGH EMBANKMENTS

THEREFORE THE DANGERS OF PIPING ARE NOT PRESENT. POOR SOURCE OF TOPSOIL - THE SOILS ON SITE ARE NOT EXPECTED TO BE USED AS TOP SOIL. CONTAMINATED SOILS ENCOUNTERED CAN NOT BE REUSED ON SITE. IF UNSUITABLE TOPSOIL IS NOT PRESENT, SOIL WILL BE IMPORTED.

FROST ACTION - PAVEMENT AND SIDEWALK SHOULD BE INSTALLED IN ACCORDANCE WITH DETAILS TO LIMIT DAMAGE CAUSED BY FROST ACTION. IF CRACKING OCCURS, REPLACEMENT OR OVERLAY MAY BECOME NECESSARY IN THE FUTURE.

WETNESS - FOR THE IMPROVEMENTS BEING PROPOSED, SOIL WETNESS SHOULD NOT BE A PROBLEM. IF HOWEVER, PONDING OCCURS, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE AREA.

TABLE E.1	LIMI	TATION	S OF	PEN	INSY	LVANIA	SOI	LS PERT	AINI	NG	TO E	ARTI	НМС	VIN	G	
SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE\STEEL	ркоиднту	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH / LANDSLIDE PRONE	SLOW PERCOLATION	DNIdid	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
ABBOTTSTOWN	Χ	C/S		Χ		X	Χ	X	Χ	Χ	Χ	X				X
BOWMANSVILLE	Χ	C/S			X	X	X	X	Χ	Χ	Χ	X				X
DOYLESTOWN	X	C/S	Χ	Χ		Х	X	X	Χ	Χ	X	X				X
		0/0		Χ		Х	X	Х	X	Х	Х	Χ				X
READINGTON	X	C/S		^		^	^	^				^				^

ÙÒÔVQUÞÁF€GÈÌÇ~DÇGDÁËÁÙUQŠÁWÙÒÁŠKQTQVŒVQUÞÙÙÁÒNĞÞVÖQÁÜÞÞÖAÙFUEŠĠMÈVIQÇЫÞDÙÇÍDÇçããDÁËÁÔUÞÙVÜWÔVQUÞÁEÐTÑÐNÍNMÁÐ, (P)(P)ÔPCSM BMP LONG-TERM OPERATION, MAINTENANCE, AND INSPECTION SCHEDULE UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS,

THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.

CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE. 6. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE, EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED.

PROPOSED IMPROVEMENTS CONTAINED HEREIN SHALL CONSTRUCTED IN THE FOLLOWING SEQUENCE:

THE CONTRACTOR SHALL NOTIFY MONTGOMERY COUNTY CONSERVATION DISTRICT AT LEAST 3 DAYS BEFORE THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TOWNSHIP AND TOWNSHIP ENGINEER A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. . STAKE OUT LIMITS OF DISTURBANCE.

INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE PICKERTOWN ROAD. 4. INSTALL TREE PROTECTION FENCE AND CONSTRUCTION FENCING WHERE SHOWN ON

5. INSTALL COMPOST SOCKS WHERE INDICATED ON PLAN. 6. REMOVE TREES INDICATED ON THE PLAN FOR REMOVAL (TBR) AND PERFORM OTHER SITE CLEARING WORK WITHIN LIMITS OF DISTURBANCE.

INSTALL SEDIMENT BASIN. 8. STRIP AVAILABLE TOPSOIL WITHIN THE LIMITS OF DISTURBANCE. AN 18-INCH COMPOST SILT SOCK SHALL ENCIRCLE THE TOPSOIL STOCKPILES. SEED, FERTILIZE,

AND MULCH THE TOPSOIL STOCKPILES. ROUGH GRADE SITE WITHIN THE LIMITS OF DISTURBANCE, INCLUDING THE ROADWAY. IMMEDIATELY STABILIZE. AS LAWN AREAS ARE BROUGHT TO GRADE, THEY SHALL RECEIVE A MINIMUM OF 8" TOPSOIL, SEED AND MULCH.

10. BEGIN INSTALLATION OF UNDERGROUND UTILITIES, INCLUDING SANITARY FORCEMAIN AND APPURTENANCES. BACKFILL/COMPACT IN ACCORDANCE WITH CONSTRUCTION DETAILS.

11. INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION. 12. FINE GRADE AND COMPACT SUBGRADE IN AREA OF ROADWAY.

13. BEGIN CONSTRUCTION OF DWELLING UNITS. THE APPLICABLE E&S CONTROLS FOR EACH INDIVIDUAL LOT SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLAN AND/OR THE BUILDING PERMIT PLANS.

14. INSTALL STONE SUBBASE, BASE COURSE AND CORRECT ALL STRUCTURAL DEFICIENCIES IN ROADWAY.

15. INSTALL ALL OTHER PUBLIC IMPROVEMENTS, INCLUDING CLEARING OF SIGHT TRIANGLES. DRAINAGE IMPROVEMENTS, LIGHTING AND LANDSCAPING.

16. INSTALL BINDER COURSE ON DRIVEWAYS 17. FINISH CONSTRUCTION OF DWELLING UNITS.

18. \*\*CRITICAL STAGE: BEGIN CONVERSION OF SEDIMENT BASIN TO BIORETENTION BASIN AFTER UPSTREAM CONTRIBUTING DRAINAGE AREA IS STABILIZED..

19. INSTALL FINAL WEARING COURSE FOR THE ROADWAY 20. ONCE THE ENTIRE SITE HAS REACHED 70% UNIFORM STABILIZATION AND THE BUCKS COUNTY CONSERVATION DISTRICT APPROVES, REMOVE THE REMAINING EROSION CONTROL DEVICES. ANY AREAS DISTURBED DURING REMOVAL OF REMAINING EROSION CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY.

\*\*CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON-SITE AND RESPONSIBLE DURING THIS STAGE.

#### ÙÒÔVQUÞÁF€GÈÌÇ~DÇÍDÁËÁÙWÜØŒÔÒÁYŒVÒÜÁÔŠŒÙŲQØQÔŒVQU⊧ THE SITE IS LOCATED WITHIN THE NESHAMINY CREEK WATERSHED. THE PROJECT'S RECEIVING

WATERCOURSE IS AN UNNAMED TRIBUTARY TO READING CREEK (TRIBUTARY TO THE WEST BRANCH NESHAMINY CREEK). PER THE PENNSYLVANIA CODE, TITLE 25, CHAPTER 93 WATER QUALITY STANDARDS, THE RECEIVING WATERCOURSE HAS THE FOLLOWING STREAM DESIGNATION: WWF - WARM WATER FISHES

<u>ÜÖÖVQUÞÁF€GÈÌ Ç~DÇFFDÁËÁÜÒÔŸÔŠQÞ</u>ÕÁUÜÁÖQÙÚUÙŒŠÁUØÁTŒVÒÜQŒŠÙ

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY

ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL

OR WASTES AT THE SITE. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER

POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. . ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

# ÚÒÜTŒÞÒÞVÁÔUÞVÜUŠÁTÒŒÙWÜÒÙÁØUÜÁŠUÞÕÁVÒÜTÁÚÜUVÒÔVQUÞÁÖWÜQÞÕ

ÒŒÜVPTUXQÞÕK A. PERMANENT SEEDING - AREAS NOT PAVED SHALL BE SEEDED WITH PERMANENT SEED MIXTURE AND MULCHED.

SEEDBED PREPARATION AND SEEDING METHODS: 1. LIME - AGRICULTURAL GRADE LIMESTONE

A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE: LIME - 6 TONS PER ACRE, 275 LBS. PER 1,000 S.F.

2. FERTILIZER - COMMERCIAL TYPE 10-20-20 A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY

FERTILIZER AT THE FOLLOWING RATE: FERTILIZER - 1000 LBS. PER ACRE, 25 LBS. PER 1000 S.F.

3. PERMANENT SEED MIXTURE

NOTE: ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS A COVER/NURSE CROP. ANNUAL RYEGRASS SEEDING RATE: 40 LBS. PER ACRE, 1 LB. PER 1,000 S.F.

TURF LAWN AND MOWED AREAS (SUNNY):

PERMANENT SEED MIX: 60% KENTUCKY BLUEGRASS 20% CHEWINGS FESCUE

20% PERENNIAL RYEGRASS

SEEDING RATE: 4LBS./1,000 S.F. OR 170 LBS./ACRE PLANTING DATES: 4/1 - 5/31 AND 8/6 - 10/15

NOTE: ALL MIXTURE GIVEN ABOVE ARE FOR PLS (PURE LIVE SEED) 100%. TO CALCULATE PLS, THE PERCENTAGE OF PURE LIVE SEED IS MULTIPLIED BY THE PERCENTAGE OF GERMINATION, AND THE PRODUCT IS DIVIDED BY ONE HUNDRED

TO DETERMINE HOW MUCH SEED TO PLANT, DIVIDE THE PERCENTAGE INTO ONE HUNDRED (100). EXAMPLE: 100 DIVIDED BY 61 = 1.63. THUS, EVERY POUND OF SEED MIXTURE CALLED FOR SHOULD THEN BE 1.63 LBS.

ALL AREAS THAT ARE SEEDED SHOULD BE MULCHED. MULCH IS A LOOSE LAYER THREE FOURTHS OF AN INCH TO ONE INCH (3/4" TO 1") DEEP OF CLEAN STRAW. MULCH REDUCES SOIL EROSION, AID SEED GERMINATION, AND CONSERVES MOISTURE. STRAW SHOULD NOT BE CHOPPED OR FINELY BROKEN DURING APPLICATION. MULCH SHOULD BE APPLIED AS FOLLOWS: MULCH - 3 TONS PER ACRE, 140 LBS. PER 1,000 S.F.

C. VEGETATIVE SURFACE STABILIZATION:

1. REFER TO THE ACCOMPANYING PLAN(S) AND SPECIFICATIONS PERTAINING TO PERMANENT SEEDING. 2. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE AFTER FINAL GRADES HAVE BEEN ESTABLISHED.

REFER TO "STAGING OF FARTHMOVING ACTIVITIES" FOR THE SEQUENCE.

3. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. 4. ON STEEP SLOPES, EROSION CONTROL MATTING SHOULD BE USED TO HOLD SEED AND TOPSOIL IN PLACE. SLOPE

FOR MATTING OR THE MULCH TACKING METHODS. 5. SURFACE ROUGHENING SHOULD BE APPLIED TO ALL SLOPES 3:1 OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED. SLOPE TRACKING MAY BE USED. PERFORM TRACKING BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE AND LEAVING TRACK MARKS PARALLEL TO THE CONTOUR.

STEEPNESS, SLOPE LENGTH, SOIL ERODIBILITY, AND CUT OR FILL CONDITION SHOULD BE CONSIDERED IN DETERMINING NEED

STORMWATER MANAGEMENT MAINTENANCE RESPONSIBILITY - THE STORMWATER MANAGEMENT FACILITIES WITHIN PRIVATE RIGHTS-OF-WAY SHALL BE OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION, OR EQUIVALENT, AND ARE ULTIMATELY THE RESPONSIBILITY OF THE PROPERTY OWNER THE STORMWATER MANAGEMENT FACILITIES WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE OWNED AND MAINTAINED BY THE MUNICIPALITY. ANY STORMWATER FACILITIES LOCATED OUTSIDE OF THE PROPOSED RIGHTS-OF-WAY SHALL BE CONTAINED WITHIN AN EASEMENT AS REQUIRED FOR PROPER ACCESS. THE HOA, OR EQUIVALENT, SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES LOCATED ON THE BUILDING LOTS. A BLANKET EASEMENT IS HEREBY OFFERED TO THE MUNICIPALITY FOR THE PURPOSE OF INSPECTION, MAINTENANCE, AND

ACCESS TO ANY STORMWATER FACILITIES NOT LOCATED WITHIN THEIR PUBLIC RIGHT-OF-WAY. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER (OR DESIGNEE) TO COMPLETE A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR, OR REPLACEMENT AND MAINTENANCE ACTIVITIES. A LOG SHOWING DATES THAT BMPS WERE INSPECTED, AS WELL AS ANY

DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON-SITE AND BE MADE AVAILABLE TO THE REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

IT SHALL BE UNLAWFUL TO ALTER OR REMOVE THE PERMANENT STORMWATER CONTROLS AND BMPS OR TO ALLOW THE PROPERTY TO REMAIN IN A CONDITION WHICH DOES NOT CONFORM TO THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN. 5. THE PROPERTY OWNER OR THEIR DESIGNATED RESPONSIBLE PARTY SHALL NOTIFY THE TOWNSHIPS OF ANY PROBLEMS OR FAILURES OBSERVED IN THE STORMWATER SYSTEM, INCLUDING SURFACE PONDING.

PCSM BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS	BMP FAILURE INDICATIONS & RESTORATIVE PROCEDURES
BIORETENTION BASIN (BMP 6.4.5)	WATER PLANTS REGULARLY UNTIL THEY BECOME ESTABLISHED INSPECT FOR TRASH AND REMOVE INSPECT DRAW-DOWN TIME TO ENSURE BASIN DRAINS BETWEEN 24 AND 72 HOURS - INSPECT FOR POOLS OF STANDING WATER VEGETATION IN BASIN AND CONTRIBUTING DRAINAGE AREAS SHOULD BE MAINTAINED IN GOOD CONDITION AND BARE SPOTS REVEGETATED REMOVE ACCUMULATED SEDIMENT IMMEDIATELY TO MAINTAIN INFILTRATION THROUGH THE AMENDED SOILS.	FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI-ANNUAL	MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3     YEARS. AVOID WOOD CHIPS.      AVOID EXCESSIVE COMPACTION BY MOWERS AND MOW ONLY AS     APPROPRIATE FOR VEGETATIVE SPECIES      PRUNE AND WEED AS VEGETATION IS BEING ESTABLISHED. REMOVED	STANDING WATER IN THE BASIN IN EXCESS OF 96 HOURS AFTER THE STORM EVENT "CHECK STRUCTURES/PIPING FOR CLOGGING. IF PROBLEM PERSISTS, REPLACE AMENDED SOILS ALONG BASIN BOTTOM AND RESTORE TO ORIGINAL CROSS—SECTION     VEGETATION DEAD OR DYING "REPLANT WITH NATIVE FLOODPLAIN PLANT SPECIES BEST SUITED TO VARIABLE ENVIRONMENTAL CONDITIONS     ERODED BERM (LIKELY DUE TO VEGETATION OR BROKEN PIPING) REPLACE PIPING AND REPLANT VEGETATION
STORM SEWER INLETS AND MANHOLES & PIPING	INLET GRATES SHOULD BE PULLED AND THE INSIDE OF THE INLET BOX SHOULD BE VISUALLY INSPECTED FOR SEDIMENT AND DEBRIS. ANY SEDIMENT FOUND SHOULD BE REMOVED AND ANY BLOCKAGE OF THE PIPES SHOULD BE CLEARED. FLUSH CLEAN WITH GARDEN HOSE OR OTHER FORM OF A FLUSHING SYSTEM	INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• X	VISIBLE CRACKING OR DETERIORATION→ REPLACE IN KIND
SEEDING AND MULCHING	SEED OR SOD TO RESTORE DEAD OR DAMAGED GROUND COVER     SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY, RESEEDED, AND MULCHED.	ANNUAL MAINTENANCE AS NEEDED	REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS	REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
LANDSCAPING (REVEGETATE DISTURBED AREAS AND TREES & SHRUBS) (BMP 5.6.3)	WATERING, CULTIVATING, WEEDING, MULCHING, CONTROL OF INSECTS AND DISEASES, AND PRUNING     RESET TREES TO PROPER GRADES AND/OR VERTICAL POSITION AS REQUIRED	AS NEEDED TO MAINTAIN PROPER GROWTH AND APPEARANCE OF PLANT MATERIAL     PERFORM APPROPRIATE SEASONAL MAINTENANCE	SHOULD ANY PLANTS APPEAR TO BE IN POOR HEALTH OR LACK NORMAL GROWTH HABIT, THEY SHALL BE REMOVED AT ONCE AND REPLACED	VEGETATION DEAD OR DYING "REPLANT WITH NATIVE SPECIES MOST SUITED TO THE ENVIRONMENTAL CONDITIONS AS RECOMMENDED BY THE SUPPLIER/MANUFACTURER'S SPECIFICATIONS
RIPRAP APRONS AND LEVEL SPREADERS	DISPLACED RIPRAP SHALL BE REPLACED.     AREAS UNDERCUT BY EROSION SHALL BE REPAIRED/RESEEDED.     INSPECT INLETS AND STRUCTURES DRAINING TO LEVEL SPREADER AND REMOVE SEDIMENT AND DEBRIS	INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI—ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER.     SHEET FLOW CONDITIONS SHALL BE SUSTAINED THROUGHOUT THE LIFE OF THE LEVEL SPREADER     MAINTAIN VIGOROUS VEGETATIVE COVER ON THE AREAS BELOW THE LEVEL SPREADER	DISPLACEMENT OF RIPRAP AND/OR EROSION DOWNSTREAM 'REPLACE STONE AND FABRIC LINER WITH MATERIAL AS APPROVED BY ENGINEER AND REPLANT VEGETATION UNTIL STABILIZATION OCCURS

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THE ANTICIPATED POST-CONSTRUCTION WASTES FROM THE PCSM BMPS INCLUDE BUT ARE NOT LIMITED TO: EXCESS SOIL AND SEDIMENT, LITTER, TRASH, ORGANIC DEBRIS INCLUDING LEAVES, GRASS CLIPPINGS, BRANCHES, VEGETATION, STONE, FILTER FABRIC, AND PIPING MATERIALS CONSISTING OF PLASTIC, CONCRETE, OR METAL. THESE ANTICIPATED POST-CONSTRUCTION WASTES FROM THE PCSM BMPS SHALL BE RECYCLED OR DISPOSED OF IN ACCORDANCE WITH PADEP SOLID WASTED MANAGEMENT

REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. WHENEVER POSSIBLE, RECYCLING OF THESE MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. THE RESPONSIBLE PARTY SHALL NOT ILLEGALLY BURN, BURN, DUMP, OR DISCHARGE

ANY BUILDING MATERIALS OR WASTES AT THE SITE.

ALL PLANTINGS, SHOULD BE INSTALLED DURING THE FINAL CONSTRUCTION PHASE OF THE PROJECT 2. PLANTING TIME: PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH

SPECIFIED MAINTENANCE PERIODS TO PROVIDE MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION. 3. COORDINATION WITH LAWNS: PLANT TREES AND SHRUBS AFTER FINAL GRADES ARE ESTABLISHED AND PRIOR TO PLANTING OF LAWNS. UNLESS OTHERWISE ACCEPTABLE.

IF PLANTING OF TREES OCCURS AFTER LAWN WORK, PROTECT LAWN AREAS AND PROMPTLY REPAIR DAMAGE TO LAWNS RESULTING FROM PLANTING OPERATIONS TO REDUCE RISK OF INFESTATION BY INVASIVE SPECIES.

STAKEOUT LIMITS OF BASIN CONSTRUCTION. BEGIN CONSTRUCTION ONLY WHEN UPGRADIENT TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE

2. INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST FILTER SOCKS AS INDICATED ON THE PLAN) DOWNSTREAM OF PROPOSED CONSTRUCTION ACTIVITIES PRIOR TO EXCAVATION. CLEAR, GRUB AND EXCAVATE TO DESIGN SUBGRADE ELEVATIONS. CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION.

4. BEFORE INSTALLATION OF AMENDED SOILS, A LICENSED PROFESSIONAL SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS BEFORE FINAL GRADING IS COMPLETE.

5. INSTALL AMENDED SOILS WITH UNDERDRAINS AND RISER OUTLET STRUCTURES. PERFORM AS-BUILT SURVEY TO CONFIRM TOP OF PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF 6. ONCE AMENDED SOIL IS PLACED, INSTALL ORANGE CONSTRUCTION FENCE AROUND THE PERIMETER OF THE BMP OR MAINTAIN COMPOST FILTER SOCK. THE EXCAVATION MUST BE PROTECTED

FROM COMPACTION. VEHICULAR MOVEMENT ON THE SOIL SHALL BE AVOIDED AND WALKING MOVEMENT SHALL BE MINIMIZED. 7. CONNECT RISERS TO STORM SEWER SYSTEM. TOPSOIL, FINE GRADE AND STABILIZE AREAS IMMEDIATELY. SEED RAIN GARDENS WITH SPECIFIED SEED MIX PER MANUFACTURER'S STANDARDS

AND RECOMMENDATIONS. 8. AFTER BASIN AND ITS TRIBUTARY AREA ARE COMPLETELY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS. RESTABILIZE ANY AREAS DISTURBED DURING THE REMOVAL b. THE PLANT PIT SHALL BE FILLED WITH PLANTING MIXTURE AS SPECIFIED AND PLACED IN 6" LAYERS AROUND THE BALL. EACH LAYER SHALL BE CAREFULLY TAMPED IN PLACE IN A MANNER TO AVOID INJURY TO THE ROOTS OR BALL OR DISTURBING THE POSITION OF THE PLANT. WHEN APPROXIMATELY TWO-THIRDS (2/3) OF THE PLANT HAS BEEN BACKFILLED, THE PIT SHALL BE FILLED WITH WATER AND THE SOIL ALLOWED TO SETTLE AROUND THE ROOTS. B&B PLANTS SHALL HAVE ALL THE TWINE, WIRE BASKETS AND BURLAP CUT AWAY OR FOLDED BACK FROM THE TOP 1/3 OF THE BALL AND TRUNKS BEFORE APPLYING THE WATER. AFTER THE WATER HAS BEEN ABSORBED, THE PLANT HOLE SHALL BE FILLED WITH SOIL MIX AND TAMPED LIGHTLY TO GRADE.

c. ALL CONTAINERIZED STOCK SHALL BE REMOVED FROM CONTAINERS AND THE ROOT MASS SHOULD EITHER BE PHYSICALLY LOOSENED OR SLICED TO PREVENT

d. BACKFILL MATERIAL SHALL BE FRIABLE AGRICULTURAL LOAM SUITABLE FOR GROWING PLANT MATERIAL FREE FROM STICKS, STONES, AND OTHER FOREIGN MATERIAL. e. PLANT MATERIAL LOCATIONS ARE APPROXIMATE. WHEN NECESSARY, ADJUSTMENTS MAY BE MADE IN THE FIELD AND APPROVED BY THE MUNICIPALITY.

5. PRUNING: TREES SHALL BE PRUNED TO BALANCE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR NATURAL CHARACTER AND SHAPE. PRUNING SHALL BE RESTRICTED IN GENERAL TO THE SECONDARY BRANCHES AND SOFT/SUCKER GROWTH. NEVER CUT A LEADER.

OUP Ù V Ü WÔ V Q U P Á Ù Ò Û WÒ P Ô Ò Á B Á Q P Ù V ŒŠ Š ŒV Q U P Á P U V Ò Ù Á Ø U Ü Á Ó Q U Ü Ò V Ò P V Q U P Á Ó ŒÙ Q P ÉA ÙÒÖQTÒÞVÁÓŒÙQÞK

CONVERT TEMPORARY SEDIMENT BASIN INTO PERMANENT DETENTION BASIN UPON STABILIZATION OF UPSTREAM DRAINAGE AREA. APPROVAL FROM MCCD MUST BE OBTAINED PRIOR TO CONVERSION.

MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSTREAM AT BASIN DISCHARGE.

EXCAVATE BASIN BOTTOM TO REMOVE ALL ACCUMULATED SEDIMENT MINIMUM 1 FT BELOW BOTTOM). CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION. . A LICENSED PROFESSIONAL SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS BEFORE FINAL GRADING IS COMPLETE.

REMOVE TEMPORARY RISER. 6. TOPSOIL, FINE GRADE AND STABILIZE AREAS IMMEDIATELY. INSTALL SOIL AMENDMENTS AND SEED BASIN BOTTOM WITH SPECIFIED SEED MIX PER MANUFACTURER'S STANDARDS AND

AFTER BASIN IS COMPLETELY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS. RESTABILIZE ANY AREAS DISTURBED DURING THE REMOVAL OF BMPS.

8. REMOVAL OF ALL PLANTING DEBRIS IS REQUIRED. THE PROPERTY MUST BE LEFT IN A NEAT AND ORDERLY CONDITION IN ACCORDANCE WITH GOOD AND ACCEPTED 9. PROTECT MATERIALS FROM DAMAGE BY OTHER CONTRACTORS, TRADES AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS.

7. ALL TREES TO BE STABILIZED WITHIN 48 HOURS OF PLANTING.

TREAT, REPAIR OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.

RECOMMENDATIONS IN AREA AS DELINEATED ON PLAN.

8. VEHICULAR ACCESS ON BASIN BOTTOM SHOULD BE LIMITED AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.

THESE SPECIFICATIONS INCLUDE ACCEPTABLE MATERIALS FOR TYPICAL APPLICATIONS, BUT ARE NOT INTENDED TO BE EXCLUSIVE OR LIMITING. STRIP EXISTING TOPSOIL. SEPARATE TOPSOIL WITH ORGANIC MATERIAL FOR REUSE. CONSTRUCT SITEWORK IN ACCORDANCE WITH CONSTRUCTION SEQUENCE PER EROSION & SEDIMENT CONTROL PLAN. BEFORE THE TIME THE TOPSOIL IS PLACED, AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF EIGHT (8) INCHES BELOW FINAL TOPSOIL GRADE. THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING THREE (3) INCHES IN DEPTH. TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING,

OR SCARIFICATION OF THE SUBSOIL WILL BE REQUIRED. SUB-SOILING SHALL BE USED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED. SUB-SOILING SHALL BE PERFORMED BY THE EXCAVATING CONTRACTOR AND SHALL OCCUR BEFORE TOPSOIL PLACEMENT. EXCEPTIONS TO SUB-SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE TRENCHING/DRAINAGE LINES ARE INSTALLED, WHERE COMPACTION IS BY DESIGN (ABUTMENTS, FOOTINGS, OR IN SLOPES) AND ON INACCESSIBLE SLOPES, AS APPROVED BY THE OWNER'S REPRESENTATIVE. IN CASES WHERE EXCEPTIONS OCCUR, THE CONTRACTOR SHALL OBSERVE A MINIMUM SETBACK AS DIRECTED BY THE

4. RE-SPREAD EXISTING TOPSOIL TO A MINIMUM DEPTH OF SIX (6) INCHES WITH THE TOP TWO (2) INCHES CONSISTING OF TOPSOIL WITH ORGANIC MATERIAL (OR APPROVED COMPOST, IF NOT ENOUGH TOPSOIL WITH ORGANIC MATERIAL EXISTS ON-SITE). TILL THE SOIL WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF SIX (6) INCHES TO ACHIEVE A MINIMUM SOIL TO ORGANIC TOPSOIL/COMPOST

ÔU Þ Ù V Ü WÔ V QU Þ Á Ù Ò Û WÒ Þ Ô Ò Á B Á Q Þ Ù V ŒŠ Š ŒV QU Þ Á Þ U V Ò Ù Á Ø U Ü Á Š Ò X Ò Š Á Ù Ú Ü Ò ŒÖ Ò Ü Ù K EXCAVATE TO DESIGN DEPTH AND INSTALL GEOTEXTILE LINING ALONG SIDES AND BOTTOM OF TRENCH.

ÔU Þ Ù V Ü WÔ V Q U Þ Á Ù Ò Û WÒ Þ Ô Ò Á B Á Q Þ Ù V ŒŠ Š ŒV Q U Þ Á Þ U V Ò Ù Á Ø U Ü Á WV Q Š Q V Ÿ Á Š Q Þ Ò Á V Ü Ò Þ Ô P Á Ö Y Ô ŒX ŒV Q Ü Þ K

2. 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. 3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. 5. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSLOPE OF THE PROPOSED TRENCHING ACTIVITIES. PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH.

INSTALL UTILITIES, BACKFILL TRENCH AND STABILIZE IMMEDIATELY. 9. 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. 10. REMOVE EROSION AND SEDIMENT CONTROL BMPS AFTER AREA IS STABILIZED. ANY AREAS DISTURBED DURING THE REMOVAL OF THE BMPS SHALL BE RESTABILIZED IMMEDIATELY.

11. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED. 12. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING

3. INSTALL PERFORATED PIPE ALONG A CONTOUR TO CONSTRUCT A LEVEL BOTTOM AND BACKFILL WITH AASHTO #57 CLEAN STONE.

<u>ÒÜÞÙVÁÙÒÒÖÁTQÝÁQÞÙVŒŠŠŒVQUÞÁŒÞÖÁTŒQ</u>ÞVÒÞŒÞÔÒÁQÞÙVÜWÔVQUÞÙK INVASIVE SPECIES, PARTICULARLY THOSE THAT WILL ADAPT TO WET CONDITIONS, SHOULD BE REMOVED OR SPRAYED WITH AN APPROVED. HERBICIDE BEFORE BECOMING INCORPORATED INTO THE SITE. PERENNIAL WEEDS NOT ADDRESSED BEFORE ESTABLISHMENT WILL BE DIFFICULT

WITHIN THE SPECIFICATIONS AND DIMENSIONS, ON—SITE CONSTRUCTION OF THE BERM AND OUTLETS MUST BE EXECUTED CAREFULLY TO

MAINTAIN STRUCTURAL INTEGRITY. THE INFILTRATION AND PLANT GROWTH AREAS SHOULD BE LOOSE AND FRIABLE, HIGH IN ORGANIC MATTER

AND COMPLETED WITHOUT COMPACTION FROM HEAVY EQUIPMENT. BY USING THE "DIG AND DROP" METHOD, ONE CAN USE AN EXCAVATOR TO DIG AND DROP EACH AREA OF THE BOTTOM SOIL IN A LOOSE MANNER. AT THIS POINT, LIME, COMPOSTED LEAVES AND/OR GRASS CLIPPINGS CAN BE INCORPORATED. THE EXCAVATION MACHINE DOES NOT MOVE OVER THE FINISHED SURFACE, THUS AVOIDING UNNECESSARY COMPACTION. NATIVE VEGETATION CAN BE PLANTED OR SEEDED OVER THIS UNEVEN ABSORBENT SURFACE. OATS OR RYE CAN PROVIDE TEMPORARY VEGETATION TO PROTECT THE SOIL UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED. THE USE OF SUCH NATIVE SPECIES AS ELYMUS VIRGINICUS (VIRGINIA WILD RYE) CAN CREATE AN INTERMEDIATE COVER THAT SUCCEEDS IN LONG-TERM NATIVE VEGETATION, STRAW MULCH OR STRAW COCONUT MATS ARE ERFOLENTLY USED TO CONTROL FROSION AND PROTECT EMERGING

SEEDLINGS FROM EXTREME TEMPERATURES AND DRYING OUT. MULCH SHOULD BE SPARSE IN ORDER TO ALLOW SUNLIGHT TO REACH THE GROUND. TRANSPLANTED SEEDLINGS AND SHRUBS MAY NEED TEMPORARY WATER UNTIL THEY BECOME WELL ROOTED. IRRIGATING SEEDED AREAS IS BENEFICIAL UNTIL SEEDLINGS BECOME ESTABLISHED.

FIRST YEAR GROWING SEASON MAINTENANCE: • WHENEVER VEGETATION REACHES A HEIGHT OF 18-24", USE A BRUSH HOG MOWER OR STRING TRIMMER TO TRIM THE MEADOW TO A HEIGHT OF 8". (NOTE: A LAWN MOWER IS NOT RECOMMENDED AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS WILL BE KILLED) THIS WILL REDUCE COMPETITION BY FAST GROWING WEEDS FOR SUNLIGHT, WATER, AND NUTRIENTS NEEDED BY SLOW-GROWING PERENNIAL NATIVES. MOWING SHOULD NOT BE DONE WITH A LAWN MOWER AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS KILLED OFF. MOWING SHALL CEASE BY MID-SEPTEMBER. PULLED OR TREATED WITH AN APPROVED HERBICIDE (SUCH AS RODEO $^{\odot}$ ).

SECOND GROWING SEASON AND BEYOND MAINTENANCE: PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2" (E.G., SHORTLY AFTER FORSYTHIA OR REDBUD BLOOMS), TRIM ANY MATERIAL STANDING FROM THE PREVIOUS YEAR CLOSE TO THE GROUND (APPROXIMATELY 2"). THIS WILL ALLOW THE SOIL TO WARM MORE QUICKLY, WHICH WILL STIMULATE THE EMERGENCE AND GROWTH OF NATIVE SEEDLINGS. IT WILL ALSO REDUCE THE LIKELIHOOD OF THE MEADOW BEING

. IF BIOENGINEERING OR CONTAINERIZED WOODY MATERIALS WERE USED ON THE SITE OR SEED OF SHRUBS/TREES WERE PART OF THE MIX, THE SITE SHOULD NOT BE TRIMMED AFTER THE ESTABLISHMENT YEAR. PROBLEM WEEDS SHOULD BE HAND PULLED OR SPOT-SPRAYED.

• ANNUAL INSPECTION, AT A MINIMUM, SHOULD BE CONDUCTED TO REMOVE/TREAT INVASIVE SPECIES AND/OR AGGRESSIVE WEEDS, VINES, ETC.

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

<u>PA ONE CALL</u>

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07/12/2021 PER CONSULTANT REVIEWS NO. DATE COMMENT REVISIONS

DCGH 7 CBGHFI GHCFAK5H9F

T.M.P. 26-001-043



PROFESSIONAL Robert Lawrence Showalte 9 B; = B9/9 F No.19566-E

AS SHOWN DATE: 02/28/2020 JOB NO.: 2016-045 DRAWN BY:

SITUATE: NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA PREPARED FOR:

LINE LEXINGTON, PA 18932

 $15\,\mathrm{or}~20$ 

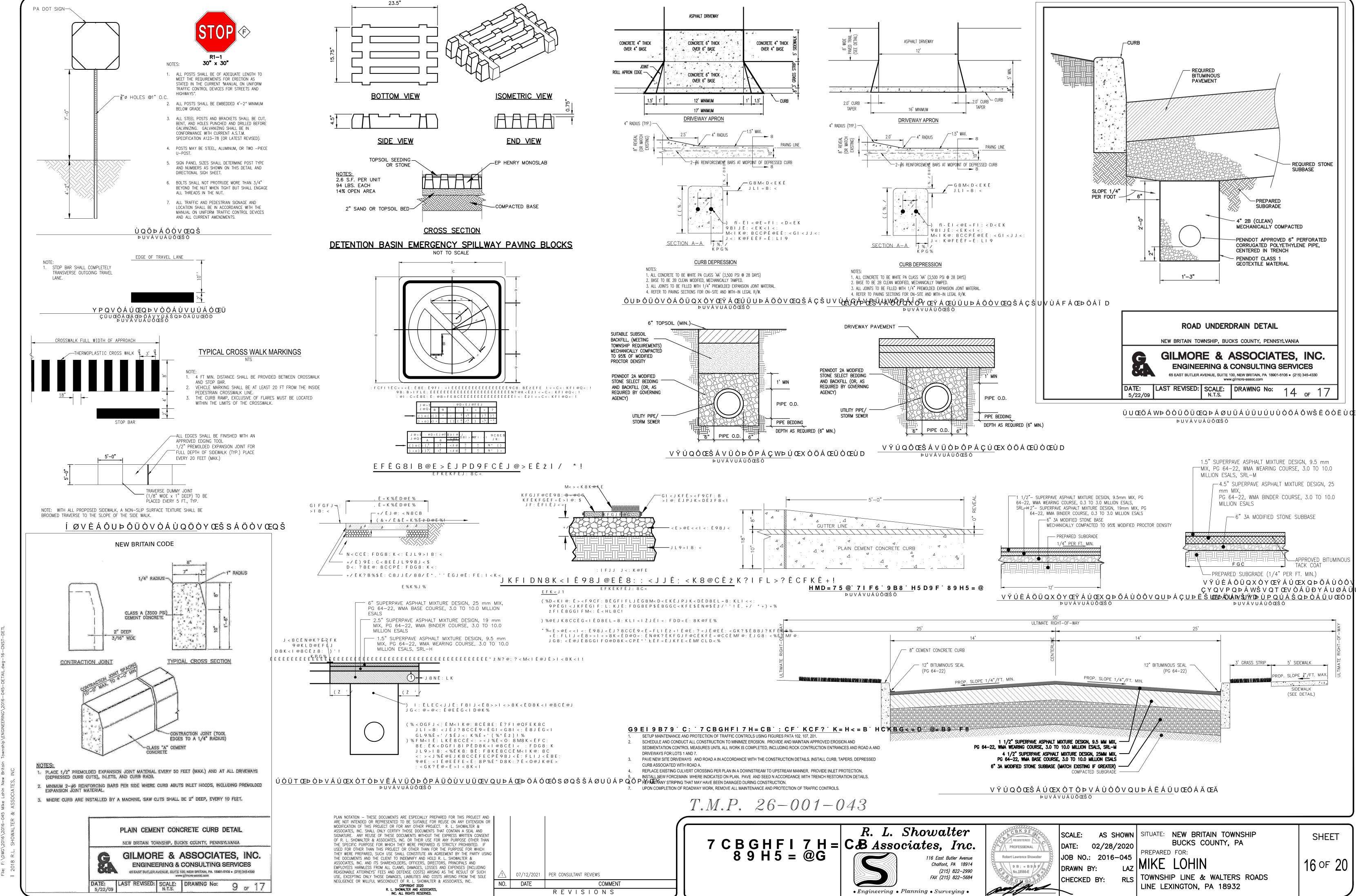
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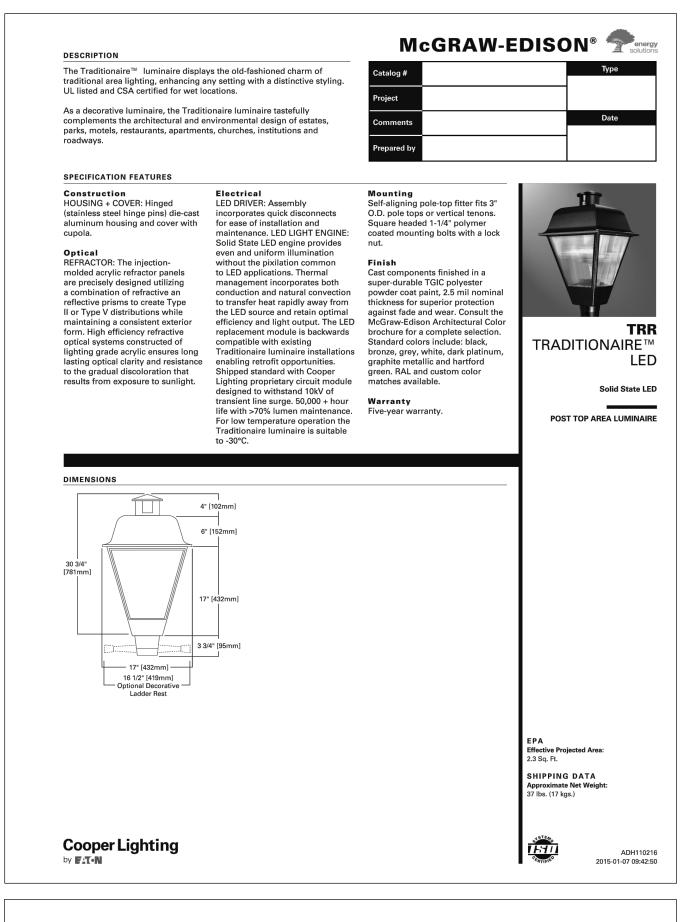
116 East Butler Avenue Chalfont, PA 18914 (215) 822-2990 FAX (215) 822-5684 ightharpoonup • Planning • Surveying •

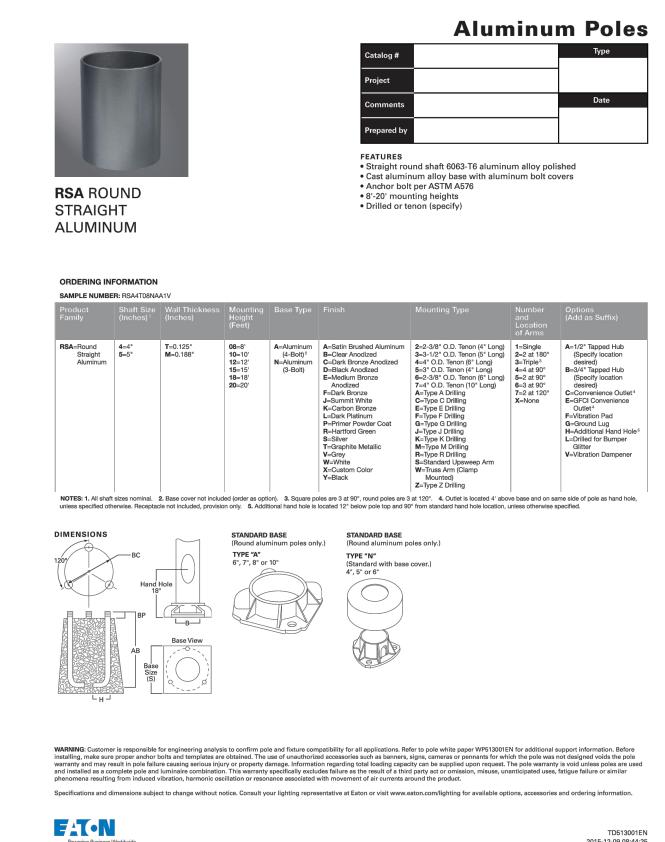
TOWNSHIP LINE & WALTERS ROADS CHECKED BY:



ullet Engineering ullet Planning ullet Surveying ullet

REVISIONS





ÖÜQXÒYŒŸÁŠŒTÚÁÚUÙVÁÖÒVŒQŠ UÜÁŒÚÚÜUXÒÖÁÒÛWŒŠ

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1. THE TOWNSHIP ENGINEER SHALL INSPECT AND APPROVE THE TREE PROTECTION FENCE INSTALLATION PRIOR TO ANY CLEARING OR EARTHMOVING ACTIVITIES.

2. IN THE OPINION OF THE TOWNSHIP ENGINEER'S REPRESENTATIVE OR CERTIFIED ARBORIST, ANY TREES DISTURBED, DAMAGED OR KILLED DURING OR AS A RESULT OF CONSTRUCTION SHALL BE REPLACED AT A ONE CALIPER INCH FOR ONE CALIPER INCH.

3. 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. PLANTINGS SHOULD BE SELECTED AND LOCATED WHERE THEY WILL NOT CONTRIBUTE TO CONDITIONS HAZARDOUS TO PUBLIC SAFETY.

4. PLANT SPECIFICATIONS. ALL PLANT MATERIAL SHALL MEET THE MINIMUM STANDARDS FOR HEALTH, FORM, AND ROOT CONDITION AS OUTLINED IN THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) Z60.1 — 1996, AS AMENDED. ALL PLANT MATERIAL SHALL BE HARDY AND WITHIN THE UNITED STATES DEPARTMENT OF AGRICULTURAL (USDA) HARDINESS ZONE 6, APPLICABLE TO BUCKS COUNTY, PENNSYLVANIA.

5. INSTALLATION. ALL SHADE AND EVERGREEN TREES SHALL BE SUPPORTED WITH STAKES AND GUY WIRING IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) STANDARDS. THE BACKFILL FOR EXCAVATED PLANTING AREAS SHALL BE COMPOSED OF NATIVE TOPSOIL AND SHALL BE MULCHED SIX INCHES BEYOND THE DRIPLINE.

MAINTENANCE AND GUARANTEE. THE APPLICANT IS REQUIRED TO MAINTAIN AND GUARANTEE ALL PLANT MATERIAL UNTIL THE END OF THE EIGHTEEN-MONTH MAINTENANCE PERIOD. ANY PLANT MATERIAL THAT IS DEEMED, IN THE OPINION OF THE TOWNSHIP ENGINEER, NOT TO HAVE SURVIVED OR NOT TO HAVE GROWN IN A MANNER CHARACTERISTIC OF ITS TYPE, SHALL BE REPLACED WITHIN THE EIGHTEEN-MONTH MAINTENANCE PERIOD.

7. PROTECT ALL PLANT MATERIAL FROM DEER DAMAGE AS REQUIRED UNTIL PROJECT COMPLETION AND ACCEPTANCE BY OWNER/MUNICIPALITY.

8. TOPSOIL SHALL BE A NATURAL, FRIABLE, FERTILE, FINE SANDY LOAM POSSESSING THE CHARACTERISTICS OF REPRESENTATIVE TOPSOILS IN THE VICINITY. THE TOPSOIL SHALL BE FREE FROM SUBSOIL, NOXIOUS WEEDS, STONES LARGER THAN 1" IN DIAMETER, LIME, CEMENT, ASHES, SLAG, OR OTHER DELETERIOUS MATTER.

9. THE SUBGRADE SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF AT LEAST THREE (3) INCHES BEFORE TOPSOIL IS SPREAD. TOPSOIL PREVIOUSLY STOCKPILED SHALL BE SPREAD OVER THE ENTIRE WORK AREA TO A DEPTH OF AT LEAST SIX (6) INCHES AFTER COMPACTION TO A SMOOTH FIRM SEEDBED PRIOR TO SEEDING. ADDITIONAL TOPSOIL SHALL BE PROVIDED WHERE ADJUSTMENTS ARE NECESSARY TO ATTAIN FINAL TRUE EVEN GRADES SHOWN ON THE DRAWINGS. TOPSOIL MAY BE SPREAD DURING ANY SEASON, EXCEPT THAT NO TOPSOIL SHALL BE SPREAD IN A FROZEN OR MUDDY CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ANY DAMAGE OR LOSS TO THE GRADE SURFACE CAUSED BY EROSION BEFORE PLANTING TAKES PLACE.

10. REFER TO EROSION CONTROL PLANS FOR TEMPORARY AND PERMANENT SEEDING AND FERTILIZATION SPECIFICATIONS.

SET PLANTS PLUMB, AND FACE TO GIVE BEST APPEARACE TO ADJACENT AREAS. DO NOT PRUNE EVERGREENS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES. SET TOP OF ROOT BALL ABOVE ADJACENT FINISH GRADE AT A HEIGHT OF 15-20% OF ROOT BALL. THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE. NEVER CUT LEADER. DO NOT USE TOPSOIL SAUCER. 2" MULCH. MULCH MUST NOT CONTACT THE TRUNK AT ANY POINT. REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED.

SPECIFIED PLANT MIX: 1/3 PEAT

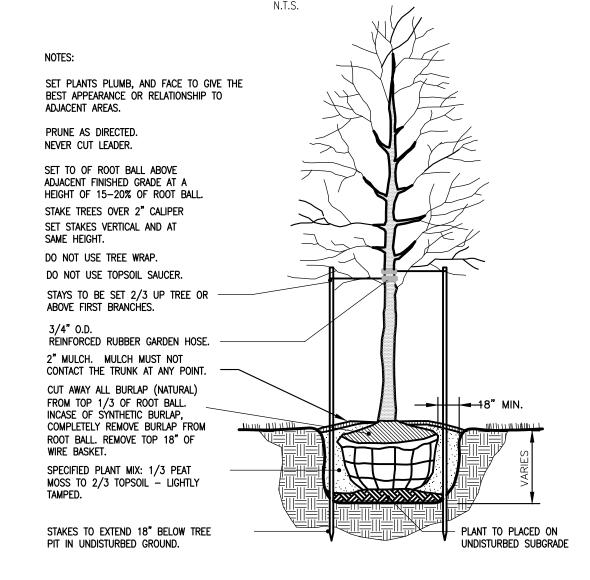
MOSS TO 2/3 TOPSOIL - LIGHTLY

PLANT TO PLACED ON

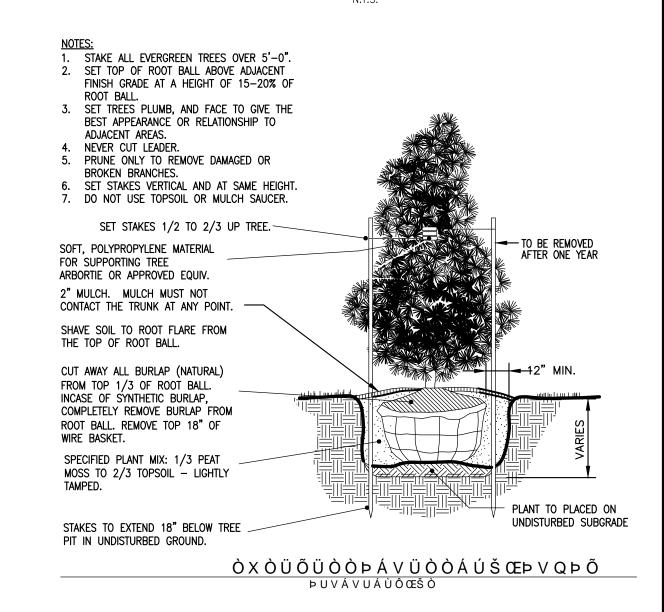
UNDISTURBED SUBGRADE

BARE ROOT OR BURLAPPED SHRUBS. CONTAINER SHRUBS.

## SHRUB PLANTING



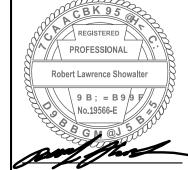
# DECIDUOUS TREE PLANTING



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T.M.P. 26-001-043





48" ORANGE BARRIER FENCE TO BE SET AT THE

OR 15 FEET FROM THE

PRIOR TO CONSTRUCTION.

TRUNK OF THE TREE, WHICHEVER IS GREATER,

- 6' METAL POST (MIN. 18" BELOW GROUND)

> AS SHOWN 02/28/2020

SITUATE: NEW BRITAIN TOWNSHIP BUCKS COUNTY, PA PREPARED FOR:

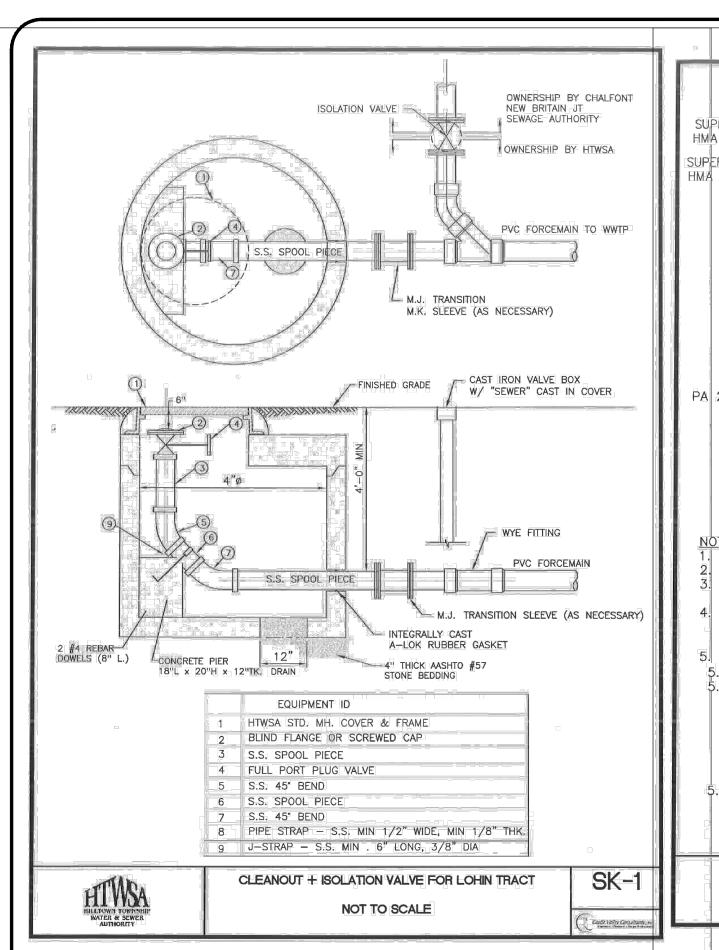
TOWNSHIP LINE & WALTERS ROADS LINE LEXINGTON, PA 18932

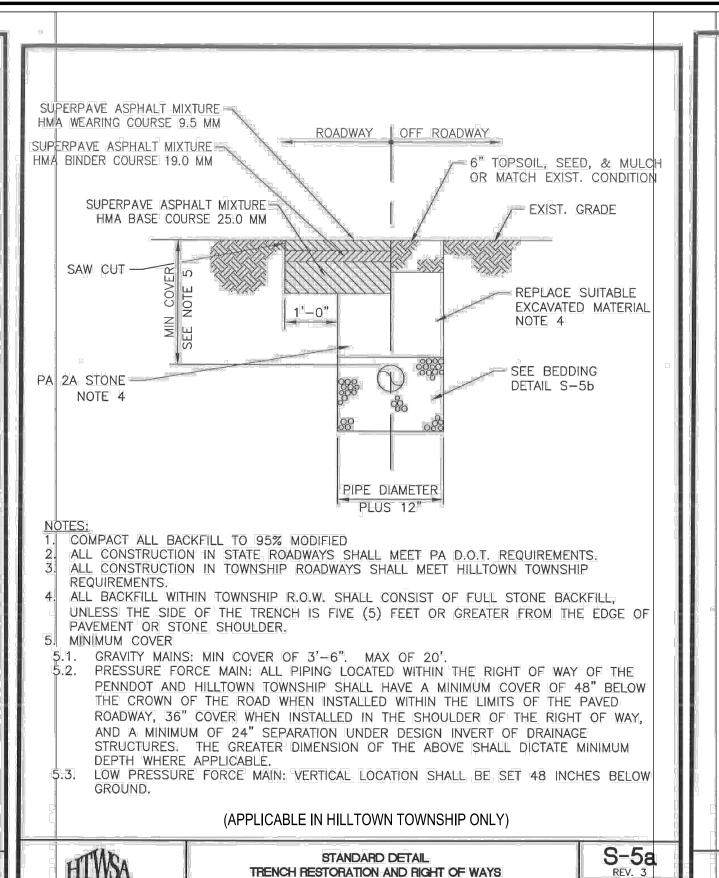
SHEET

**10'−12'** O.C.

(215) 822-2990 FAX (215) 822-5684 ullet Engineering ullet Planning ullet Surveying ullet

CHECKED BY:

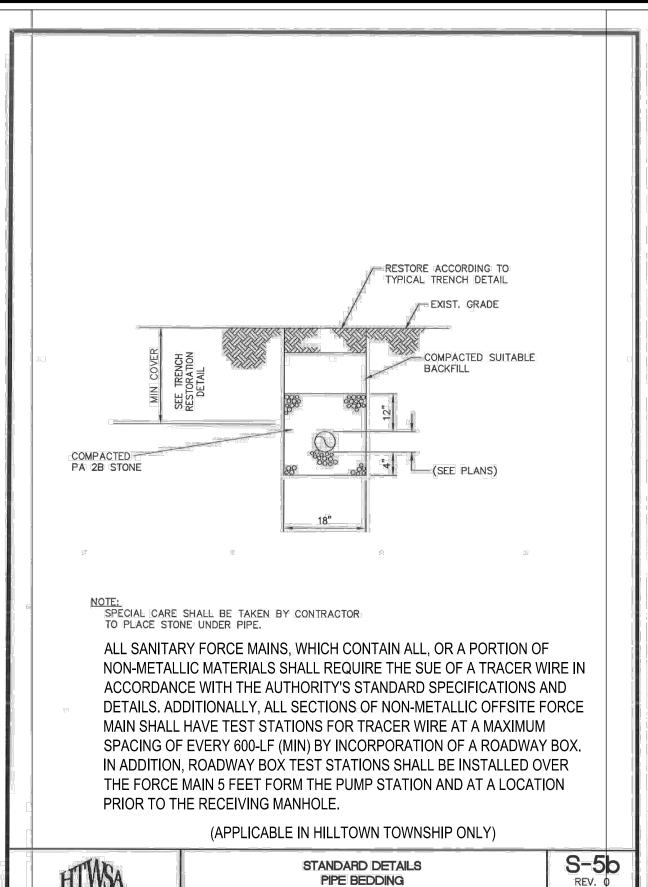




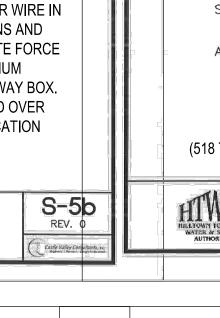
TRENCH RESTORATION AND RIGHT OF WAYS

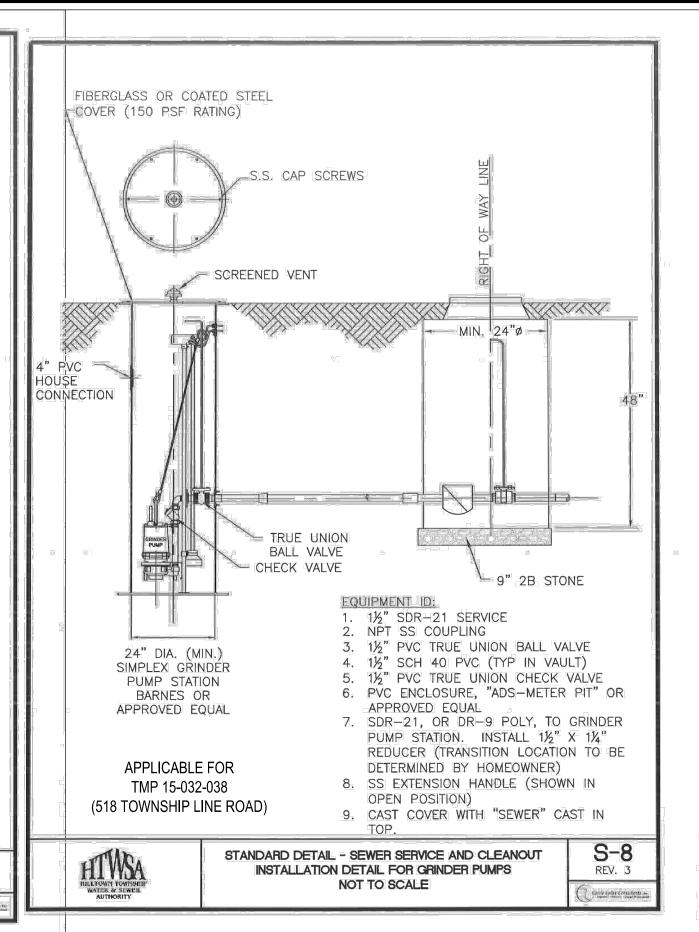
NOT TO SCALE

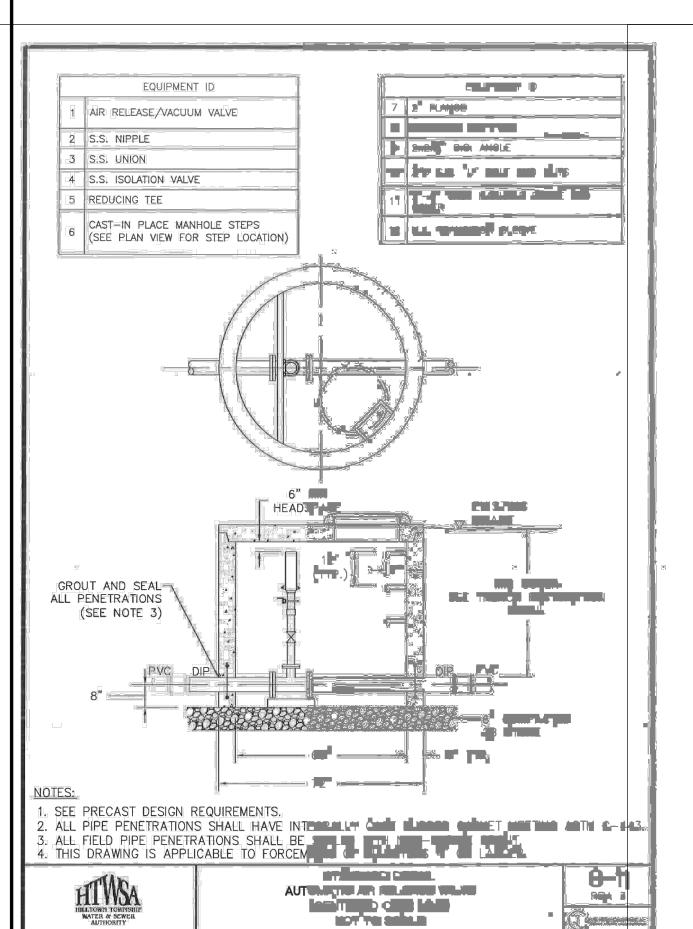
Castle Valley Consultants



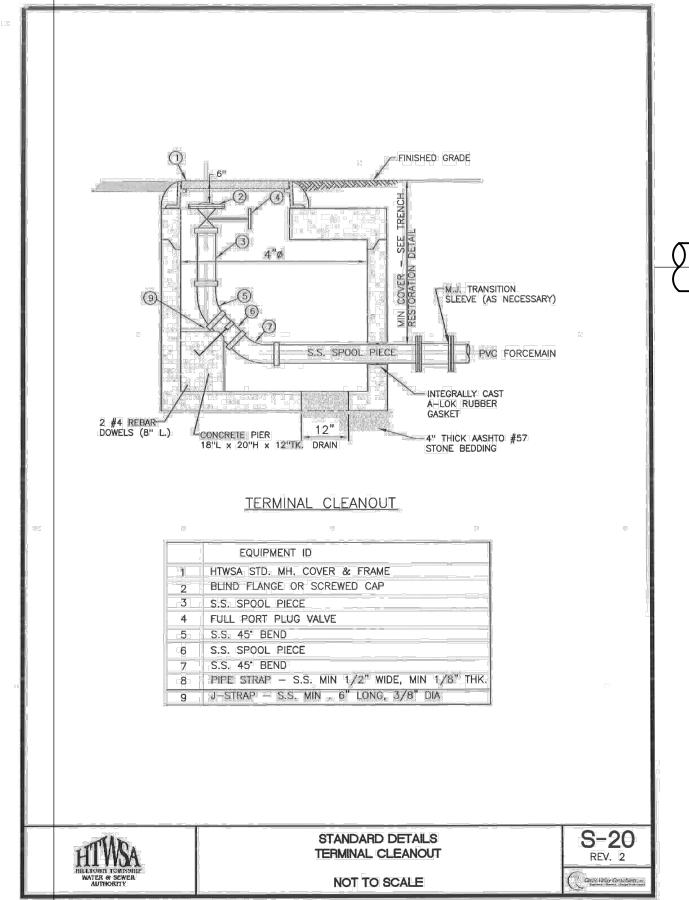
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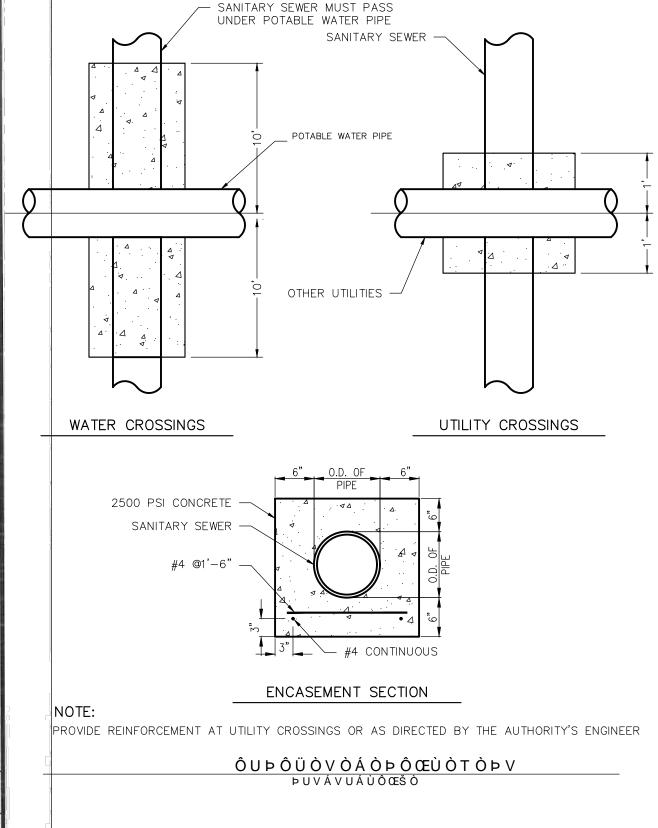






(APPLICABLE IN HILLTOWN TOWNSHIP ONLY)





CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PA ONE CALL

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07/12/2021 PER CONSULTANT REVIEWS NO. DATE COMMENT REVISIONS

T.M.P. 26-001-043

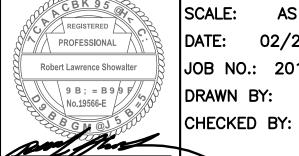
G 5 B = H 5 F M G 9 K&9A\(\text{E}\)sociates, Inc. 8 9 H 5 = @G 116 East Butler Avenue



ullet Engineering ullet Planning ullet Surveying ullet

R. L. Showalter Chalfont, PA 18914 (215) 822-2990

FAX (215) 822-5684



SITUATE: NEW BRITAIN TOWNSHIP AS SHOWN BUCKS COUNTY, PA DATE: 02/28/2020 PREPARED FOR:

LINE LEXINGTON, PA 18932

SHEET

18 of 20 TOWNSHIP LINE & WALTERS ROADS

