

### SURVEY NOTES

THIS PLAN IS BASED UPON A FELD SURVEY CONDUCTED AS OF JUNE 24, 2018 BY XEYSTONE CONSULTING ENGINEERS INC. USING A TRIVELE S-5 ROBOTIC TOTAL STATION AND A TRIVELE R-8 GPS WITH KEINET.

UTILITY LOCATIONS EDITED HEREON ARE AFFECTABLE AND ARE BASED ON FIELD LOCATION OF OPPOOLS ADDICATIONAD THEORET, LICEOSTROMA DIASS WHOSE PRESENCE IS NOT BARELED ON THE SURFACE BY MACKINGS OR STRUCTURES WAY NOT HAVE BEEN SHOWN. THIS PLAN LOCES NOT CHARANTEE THAT ACCORDIAL LIGHTIES TO NOT DEST.

THE DISTRICE AND LOCATIONS OF UNDERGROUND UTILITIES ON THE SITE SHALL BE VERIFIED BY THE CONTRACTOR IN ACCORDANCE WITH FA ACT 187 AND 121 PROR TO COMMENCING ANY EXCAVATION WITHOUT THE PROPERTY OF THE PROPER

PROPERTY OWNER NAME, DEED AND TAX FARCEL DENTIFIER INTORNATION AS SHOWN IS BASED UPON
MORTHAMPTION COUNTY TAX MAP PECOPOS AND IS SUBJECT TO THE ACCURACES OR INACCURACES
THEFEIGH.

LINES AS SHOWN WITH BEARINGS AND DISTANCES OR CURVE INFORMATION INDICATE LINES MEASURED BY THIS SURVEY, LINES WITHOUT ANY CEOWETPIC ANNOTATION MAY HAVE BEEN PLOTTED USING RECORD INFORMATION AND ARE INTENDED FOR CONFALL SITE ORIENTATION CALLY. BEARINGS AND COOPDINATES AS SHOWN HEREON ARE BASED ON FA SOUTH ZONE STATE PLANE COORDINATE SYSTEM IN US FRET, DISTANCES AS SHOWN ARE ORDINAD MEASUREMENTS (NO GRID SCALE PACTOR HAS BEEN APPELOD.)

ELEVATIONS AND CONTICUES AS SHOWN HEREON ARE BASED LIFON CPS OBSERVATIONS USING A TRIMBLE R-B WITH KETNET AND APE ACCURATE WITHIN 0.15" OF USGS NORTH AMERICAN VERTICAL DATUM OF 1868.

PIAN PETERENCES: "BLOCK SUPYEY SHOWING DEED AND OCCUPATION DISTANCES," BY R.L. FOX CITY DYSINER, DATED 1836, "SOUTH BETHLEHEN GREENWAY", DATED 9/27/13, BY VAN CLEEF DYSINERN THIS SURVEY AND FLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND IS THEREFORE SUBJECT TO ANY EXSURBITS OR OTHER PERTINENT FACTS WHICH SUCH MIGHT DISCLOSE.

STREET ROHT-OF-WAY INTORMATION HAS BEEN BASED UPON CITY OF BETHLEHEM BLOCK SURVEY MORE RULLY REFERENCED IN SURVEY NOTE 8 AND NOTING AS REFERENCED IN DOCUMENTS RECORDED IN THE MORTHWAYTON COUNTY RECORDER OF DEEDS OFFICE. THIS PROPERTY IS NOT IN A 100 YEAR FLOOGPLAN AS FER FEMA FIFM JULY 16, 2014.

# EXISTING PROPERTY GRADES

SLOPES 0-15X

SLOPES 15-25X SLOPES 25X-35X

SOILS DATA: UkoB Urban land - 0-8% slopes

(Data for area of development only)
(Data taken from USDA Web Soil Survey)

RIODO FLAN NOTE: Information from the National Rood Insurance Program was obtained for the site. Northampton County Rood Insurance Rate Map number 4209500307 E, effective date July 15, 2014.

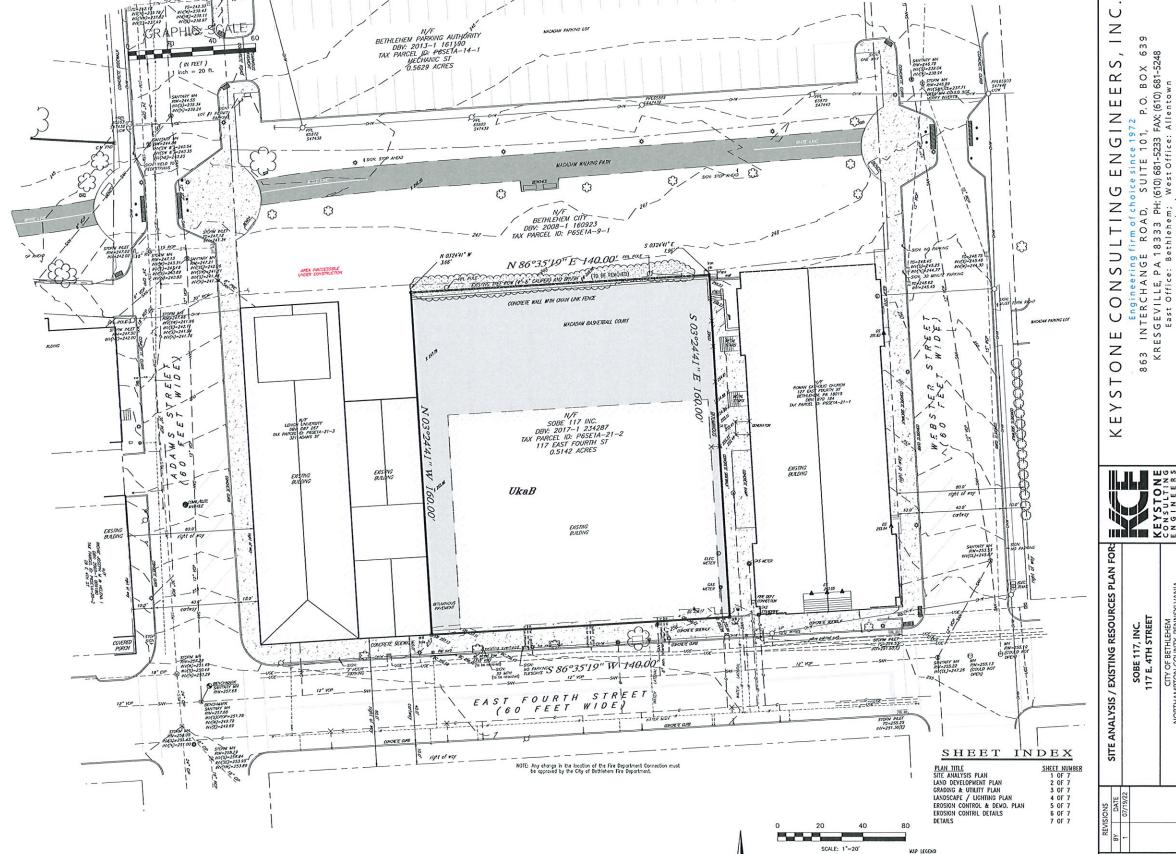
No flood plain exists within the proposed development area.

# WETLAND NOTE

BY AFROMAL OF THIS FLAN, THE OITY OF BETHLDEN HAS NEITHER COMPRISED NOR DONED HE DISTRICK ANG/OR DITTON OF ANY PETLAND JAESA METLER OR NOT DELINEATIDE OF HE SAN PLAN, NO ANY DESCRIPTION THEREOF FOR ANY FEASON MAY DESCRIPTION TO THE SHOWER HOLY RESIDENCE HE SALE FEES NO. ASSESS, AND SHALL BE SHEED OF THE PROSPECTION OF THE JOSY CORPS OF DISCRESS AND SHALL BE SHEED TO THE ARRISOCION OF THE JOSY CORPS OF DISCRESS AND OFFILE TO PROSPECT TO THE ARRISOCION OF THE JOSY CORPS OF DISCRESS AND/OR THE PROSSTUANA (EPJATNET) OF DISCRESS AND OFFILE PROSSTUANA (EPJATNET) OF DISCRESS AND OFFILE PROSSTUANA (EPJATNET) OF THE RAISE AND FEDULATIONS OF THE ARRISOCIONAL REPORT SHALL CONTRAIN TO THE RAISE AND FEDULATIONS OF THE ARRISOCIONAL REPORT SHALL CONTRAIN TO THE RAISES AND FEDULATIONS OF THE ARRISOCIONAL REPORTS.

Keystone Consulting Engineers has determined through field verification that no wellands exist within the subject property. The inventory for welland conditions was conducted according to Federal and State guidelines as described in the Regional Supplement to Corps of Engineers Welland Defineation Homous's Northeentral and Northeest Region, Version 2.0 as the agreed to process for Identifying and defineating wellbands in Pennsylvania.

No wetlands exist within the development area.





## ENGINEER CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, PARKING AREAS, WALKWAYS, AND THER STRUCTURES AND IMPROVEMENTS SHOWN HEREON.

ERIC S. SNYDER, P.E. 055671 ESS INTERCHANCE ROAD, SUITE 101 P.O. BOX 633 KRESSEYULE, PA 180333 610-581-5235



PENNSTLYANIA ONE CALL STSIM, INC. In compliance with Act 38, it shall be the Contractors responsibility to contact individual companies to have utility locations marked in the field and to otherwise locate underground objects as may be necessary prior to the start of construction. Pennsylvania clar requires 3 working days notice for the construction phase and 10 norking days in design stage — call

SCALE: 1"=20"				
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0000	FOST STREET ADDRESS	Ä	EX. FIRE H	

1 SHEET NUMBER FOR PLAN CONTINUATION NOTE: Stanted text represents existing features.

	WAP LEGEND			
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SOBE 117, INC. 117 E. 4TH STREET

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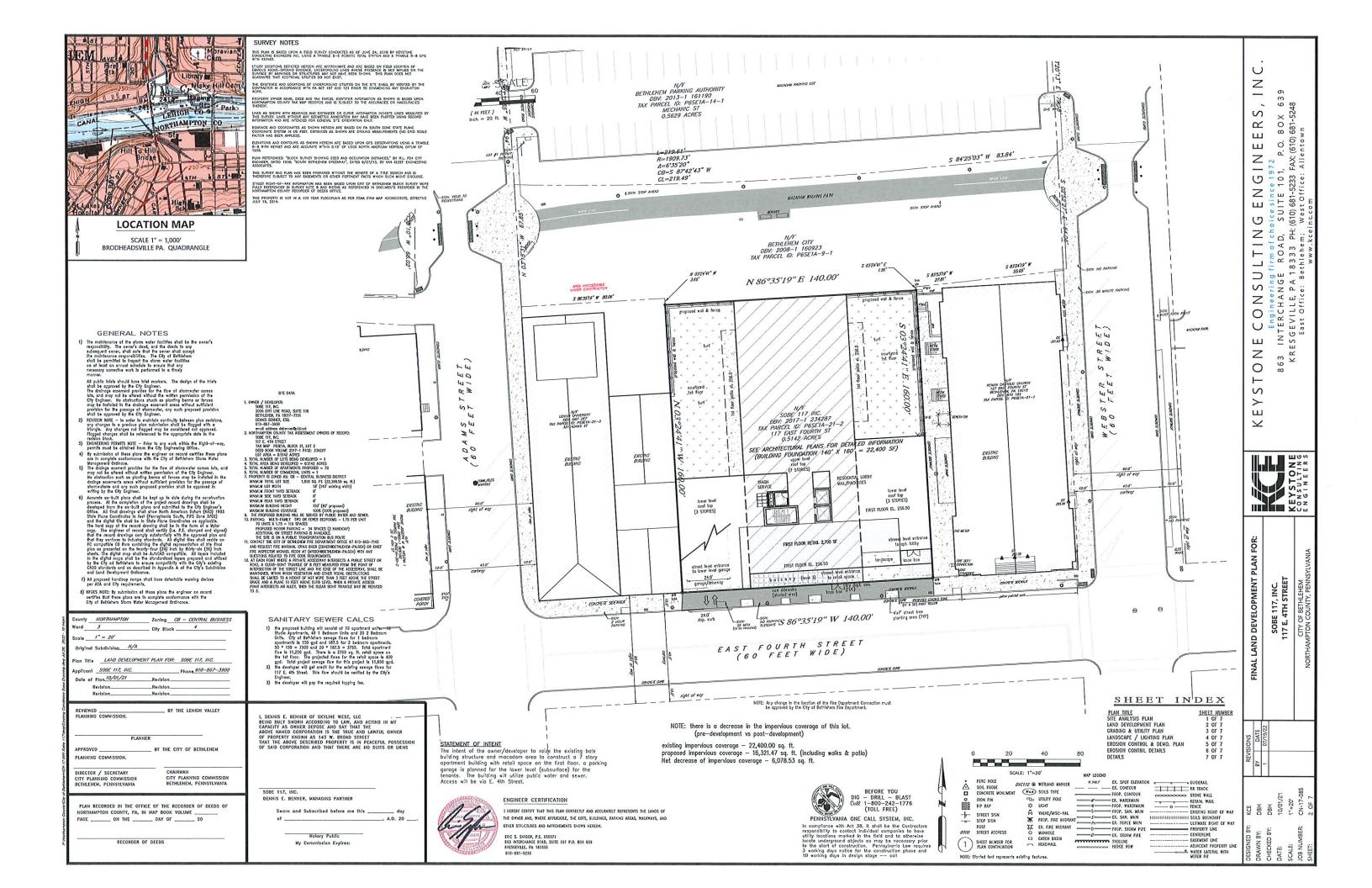
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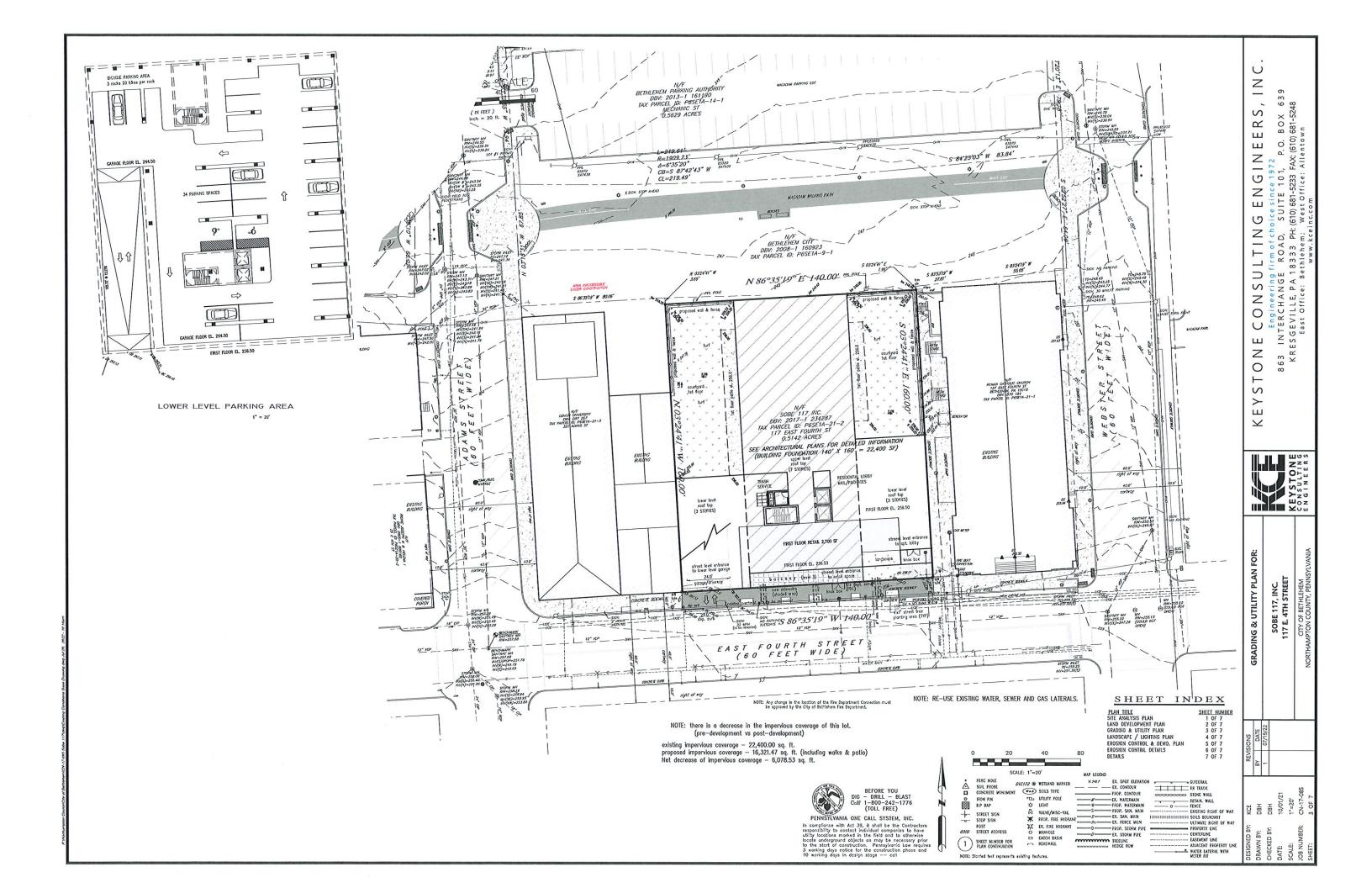
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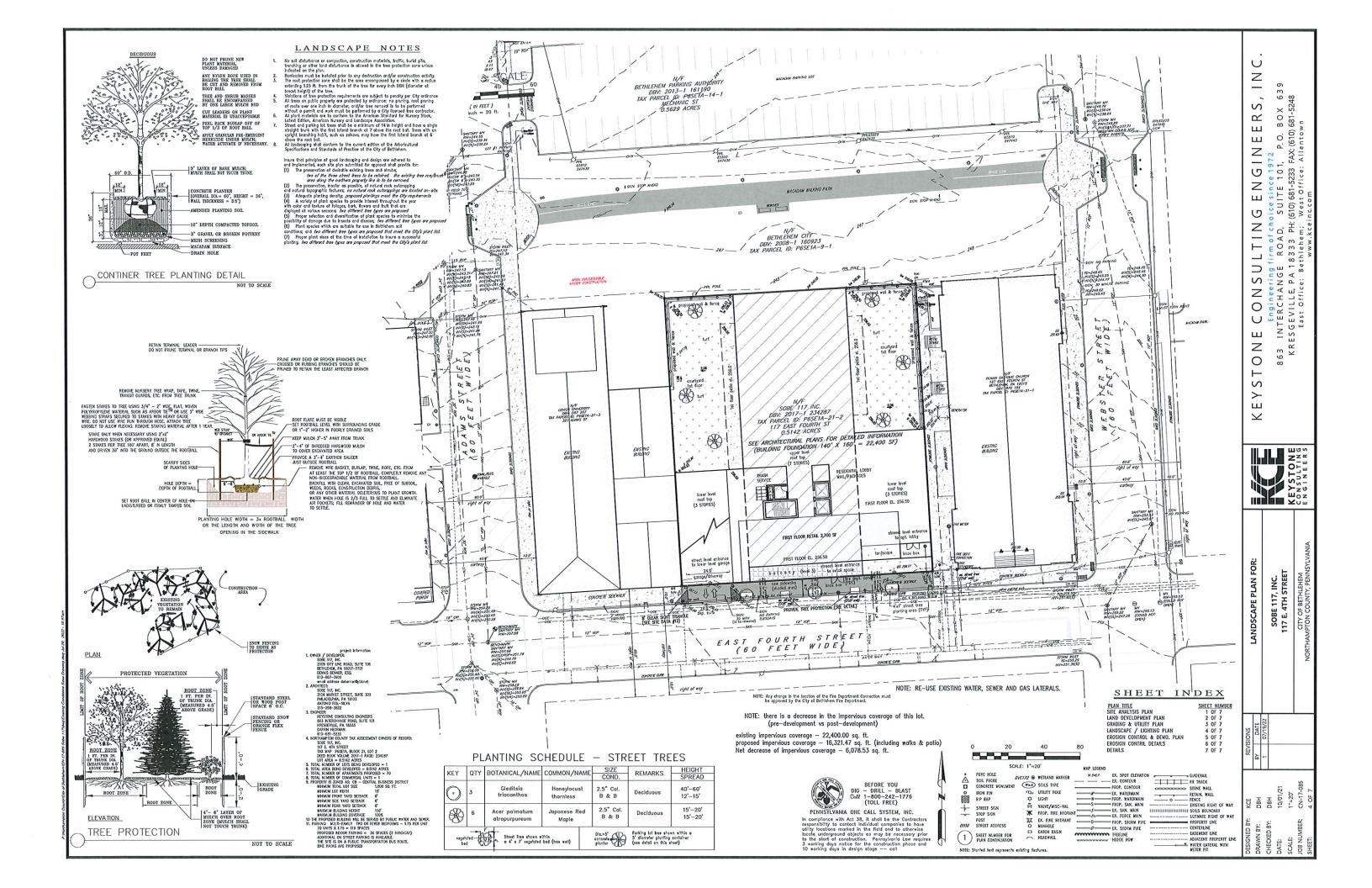
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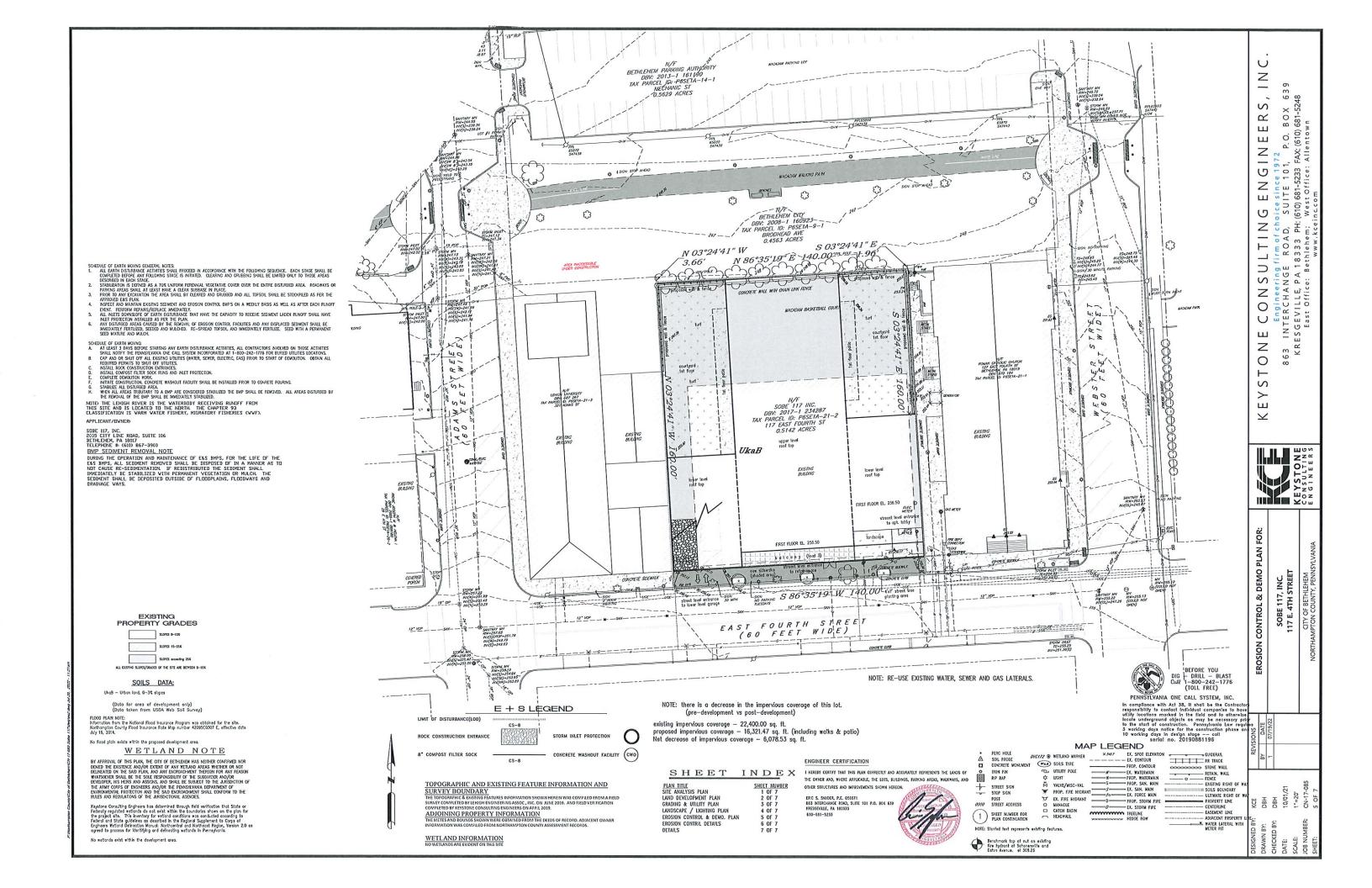
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AT ITS DISCRETION,
2. AT LEAST D'ANS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING
CLEARING AND GRUBBING, THE OWNER AND OR OPERATOR SHALL INVITE ALL CONTRACTORS,
THE LANDOWNER, APPROPARTS HE MUNCIPAL DEFECULS. THE EAS PLAN PREPARET, THE PCSM
PLAN PREPARET, THE INCENSED PROFESSIONAL RESPONSIBLE FOR OVERSIONT OF CRITICAL
STAGES OF INVIENCEMENTATION OF THE PCSM PLAN AND A REPRESENTATIVE FROM THE LOCAL
CONVERSATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

3. AT LEAST 3 DAYS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNAWARCE, THE PENNSYLVANA ONE CALL SYSTEM INC. SHALL BE IXOTIFIED AT 1-50-262-1/ThF FOR LOCATION OF EXISTING WICERGROUND UNILINES.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVATION FROM THAT SEQUENCE MUST BE APPROVED IN VIKITING FROM THE LOCAL CONSERVATION (ISSTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.

6. CLEANING, GRUBERYS, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGES OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEANING GRUBERING AND TOPSOIL STRIPPING MAY BOT COMMENCE IN ANY STAGE OR PHASE OF THE FROMEOT LYTIR. THE ESS BUY'S SPECIALED BY THE BUY BEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONARY AS DECKRED IN HIS ESS FLAX.

PHASE HAVE BEENINSTALLED AND ARE FLAVIDARIA AS DELOCATED IN THE COST.

AT NO THE SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE
LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE
CLEARLY MARKED AND PEIZE OF BEFORE CLEARLY MARKED AND PEIZE OF BEFORE CLEARLY MARKED AND PEIZE OF PEFEROR CLEARLY MARKED AND PEIZE OF BEFORE CLEARLY MARKED AND PEIZE AND PEIZE OF BEFORE PARTICIPATION.

ACCELERATED EROSION AND OR SECURENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANGEMENT PRACTICES TO MENAZE THE POTENTIAL FOR EROSION AND SECURLIF POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONA OFFICE OF THE DEPARTMENT.

10, ALL BUILDING MATERIALS AND WASTE SHALL BE REMOVED FROM THE SITE AND RECYCLED

AGTIVATED.

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL ON SITE IS CLEAN FILL. FORM FP-DOI MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASED OF REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO AVALYTICAL TESTING.

13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS,

14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE CONSTRUCTION AREA. ALL VEHICLES AND EQUIPMENT MUST UTILIZE A ROCK CONSTRUCTION ENTRANCE, AS INDICATED ON THE PLAN.

EMTRAICE, AS INDICATED ON THE PLAN.

IS, UMIT, THE SET IS STABLIZED, ALL EROSION AND SECIVENT BWPS SHALL BE WAINTAINED PROPERLY. MAINTENANCE SHALL INCLIDE RISPECTIONS OF ALL EROSION AND SECIMENT BWPS AFTER EACH RINOFF EVENT AND ON AN YEARY BRASS. ALL PREVENTIATIVE AND REVENUL MAINTENANCE WORK, INCLIDANG CLEAN OUT, REPAIR, REPLACEVENT, RECRADING, RESECOING, REMULCHING AND PERSETTION AND TEST PERFORMED INVENTIATELY. IF THE 25S BWPS FAIL TO PERFORM AS EXPECTED, REPLACEVENT BWPS OR MODIFICATIONS OF THOSE INSTALLED WILL BER SIGNLIED.

RECOUNDS.

16. A LOG SHOWING DATES THAT BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

17. SEGMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEYALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE EIRO OF FACH WORK DAY AND DISPOSED IN THE MANNER DESCREED IN THE FAILN. IN INCASE SHALL THE SEGMENT BE WASHED, SHOYELED, OR SWEPT INTO A ROADSIDE DITCH, STORM SEVER, OR SURFACE WASHED,

18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBE ON THE PLAN DRAWNING, SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, VETLANDS, LOODPLAINS OR DRAWNINGE SWALES AND INVIGIDATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPLES.

19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHED ON COMPACTED SOILS) PROR TO THE PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAYE A MINIMUM A PRICHES OF TO

20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMANT, SUBSICIEC, OR OTHER RELATED PROBUSE. ST. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUIT, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

1. ALL EARTHEN FILLS SHALL BE FLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES

IN THICKNESS.

22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS SOD, OR OTHER FOREION OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

25, SEEPS OR SPRING ENCOUNTERED DURING CONSTRUCTION SHALLE BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED THE THOO.

28. ALL GRADIYA AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING PINSHED GRADE. CUT SLOPES IN COVEREENT BEGROCK AND ROCK FILLS NEED NOT BE VEGETATED. SECEOD AREAS WITHIN SOFEET OF A SUPPLICE WATER ORAS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABELIZE ALL DISTURBED AREAS, DURING DINOIGENMENTM MONTHS, MULCH OR PROTECTIVE BLANCETING SHALL BE EXPLIED AS DESCRIBED IN THE PLANL. AREAS NOT AT TRUSHED GROUP, WHICH WILL BE REACTIVATED WITHIN 1 YEAR ANY BE STABLEZED INACCORDANCE WITH THE TEMPORARY STABLIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABLIZED IN ACCORDANCE WITH THE TEMPORARY STABLIZATION SPECIFICATIONS.

STANDARD IN THE STANDARD HIS DEFINED AS A MANAGEMENT OF THE PROPERTY OF THE STANDARD TO STANDARD TO STANDARD THE STANDARD

29, E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR NOTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

OF ALL DISTURBED AREAS, THE OWNERS AND OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVALICONVERSION OF THE E&S

BMP5.

31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHEVED, TEMPORARY EROSION AND SEDURINT BMP5 MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMP5. AREAS ISSTURBED DURING REMOVAL OR CONVERSION OF THE BMP5 HALL BE STRABLED DIMEDALTE. IN RODGET TO INSTRUCTION OF DISTURBED AREAS, SUCH REMOVALICONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATION SEASON.

OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

AS JABLUES TO CORRECTLY INSTALL EAS BUPS, FAILURE TO PREVENT SEDMENITADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE INVECTORE CORRECTIVE ACTION TO RESOLVE FAILURE OF EAS BUPS HAVE PERSULT HAD ADMINISTRATIVE, CIVIL ANDOR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINEDIN SECTION 602 OF THE PENASTY LAVAGE CLEAN STREAMS LAVE PROVIDES FOR UP TO \$100,000 FRED DAY IN CIVIL PENALTIES, UP TO \$100,000 INSUMMARY CRIMINAL PENALTIES, AND

UP TO \$25,000 IN MISDEMEANOR PENALTIES FOR EACH VIOLATION. 34, ALL CONSTRUCTION VEHICLES ENTERING OR EXITING THE CONSTRUCTION AREA MUST UTILIZE CONSTRUCTION ENTRANCES.

35, CONCRETE WASH WATER: IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

36, ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND

37. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINNS. ANY BASE FLOWMHITH THE CHANNEL SHALL BE CONVEYED PAST THE WANNER DESCRIBED IN THIS FLANLATIL SUCH RESTORATION IS COMPLETE.

38. EROSION CONTROL BLANKETH/S SHALL BE INSTALLED ON ALL SLOFES 3H IV OR STEEPER WITH HIS FEET OF A SURFACE WITHER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE FLAIM MAPS AND ON DETAIL. SHEETS.

49. ALL DISTING UTILLIES SHOWN ON THE FLANS, ABOVE OR UNDERGROUND, ARE SHOWN AT THEIR APPROJUNITE LOCATIONS. ALSO THE ENGINEER DOES NOT GUAPANTEE ALL EASING UTILITIES ON SHE ARE SHOWN ON THE FLANS. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE FLAND OF THE SHOWN OF THE PERSON THE PERSON THE STATE OF THE PERSON THE PE

41. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROPLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.

ALTHE CONTROLOR IS ADDISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX BLEROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART, DEPARTMENT OF ENTARON-WITHJAL PROTECTION, SURPART, CROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

43, STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

Upon completion of each stage of development, all erosion control device (permanent and/or temporary) shall be inspected for adequacy.

The permittee and co-permittee must ensure that visual site inspections are conducted bi-weekly, and after each runoff event by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that the BMP's are operational and effective in preventing pollution to the waters of the Commonwealth. A written report of each inspection shall be kept, and include:

(1) a summary of site conditions, BMP's, and compliance; and (2) the date, time, and the name of the person conducting the

DEVICE	NECESSARY REPAIR
Stockpiled Topsoil	Re-seed or re-mulch any oreas where seeding has been damaged by water runoff or seeding techniques have not sufficiently cerminated.
Fobric Fencing /Compost Socks	Cleanout upon sit reaching one half the fence or sock height, replacing any damaged posts, fabric, or sections immediately.
Rock Filter	Cleanout upon silt reaching 1/2 the stone height, replacing any stone immediately.
Construction Entrance	Replace and reposition any moved stones.
Seeding and Mulching	Re—seed or re—mu'ch any areas where seeding has been domaged by water runoff or seeding techniques have not sufficiently germinated.
Storm Inlet Protection	Cleanout upon sediment reaching one half the berm height, replace and reposition moved stone.

These repair techniques will be performed upon any damage or worn erosion control device.

Replacement of any erosion control item \*ill be determined upon completion of a stage, or after a serious erosion producing runnoff event. It \*ill be at this the that any device \*ill be repaired or replaced. The inspector \*ill make these decisions.

RECYCLING/DISPOSAL OF PROJECT WASTES NOTE

DERING CONSTRUCTION BUILDING AND DEPOLITION MASTE SUCH AS ASPHALT, BRICKS, CONCRETE, PLASTERBOARD, TIMERS, SOIL, AND OTHER CONSTRUCTION SITE MASTES WASTES PROPERLY MANAGED AND DISPOSED TO REQUEE THE RISK OF POLLUTION FROM SUCH MATERIALS. PREVENTION AND CLEANUP MEASURES CAN REQUEE THE POTENTIAL FOR STORMMATER RUNGEF TO DEBILIZE CONSTRUCTION SITE WASTES AND CONTAMINATE SURFACE OR GROUND WATER.

PROPER MANAGEMENT AND DISPOSAL OF VASTES SHOULD BE PRACTICED AT CONSTRUCTION SITE, PROPERLY LOCATE REFUSE PILES, COVER MATERIALS THAT MIGHT BE DISPLACED BY RAINFALL OR STORMWATER ROUNDE.

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE WANNEEMENT REQULATIONS AT 25 PA. CIDE 2601 ET. SEO, 2711 ET. SEO, AND 287.1 ET SEO. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL DE WASTES AT THE SITE.

## TOPSOIL SUPPLEMENT AND SPECIFICATIONS

IMMEDIATELY AFTER EACH SECTION OF FINAL GRADING HAS BEEN COMPLETED, ALL DISTURBED AREAS SHALL BE PERMANENTLY STABLIZED. TO ACHIEVE THIS A THIN LAYER OF TOSOIL, 2 TO 4 HUCH BEPTH, SHALL BE EVENLY DISPRESE OVER ALL DISTURBED AREAS THEN PERMANENTLY SEEDED AND MULCHED ACCORDING TO THE

NOTE.

IN THE EVENT THAT THE SITE DOES NOT HAVE ENOUGH NATIVE TOPSOIL TO COVER THE DISTURBED AREAS, THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO EXTRACT DEPOIL, FROM NOTHER SITE THAT HAS BEEN PRE-APPROVED BY THE COUNTY CONSERVATION DISTRICT.

## TEMPORARY SEEDING / INTERIM STABILIZATION

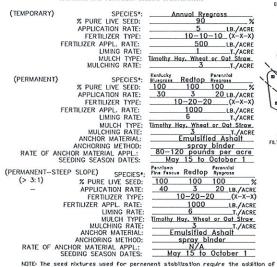
PERMANENT STABILIZATION MEASURES SHALL BE IMPLEMENTED IMMEDIATLEY ON ANY DISTURBED AREA AFTER THE FINAL EARTH MOVING HAS BEEN COMPLETED OR VHERE THE ACTIVITY CEASES FOR ANY LEGITH OF TIME.

TEMPORARY SEEDING AND MULCHING TECHNIQUES WILL BE UTILIZED IN DISTURBED AREAS PRIDE TO THE FINAL STAGE OF PERMANENT STABILIZATION. SUCH AREAS WILL CONSIST OF STOCKPILED TOPSOIL, BERTH BERNS, ETC.

TEMPRIARY SEED TYPES ARE ANNUAL RYEGRASS, VINITER VHEAT, AND VINITER RYE. SEED SHALL BE APPLIED AT A RATE OF 5 LBS. PER 1000 SQ. FT. TEMPURARY SEEDING MAY TAKE PLACE FROM SPRING TO OCTOBER 1.

TEMPORARY MULCH TYPES: TIMOTHY HAY, VHEAT, OR DAT STRAV. MULCH SHALL BE APPLIED EVENLY AT A RATE OF 3 TONS PER ACRE.

# STANDARD WORKSHEET #7



NOTE: The seed inktures used for pernenent stabilization require the addition of a nurse crop of spring oats (spring) at 64 lbs per acre, or annual rye gross (spring if all 0 at 10 lbs per acre, on winter wheat (fall) at 90 lbs per acre, or winter rye (fall 56 lbs per acre.

Straw mulch shall be applied in long strands, not finely chopped or finely broken. ENVIRONMENTAL DUE DILIGENCE NOTE

APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT OWALFIES AS CLEAN FILL DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOV. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE PAREFS POLICY MANAGEMENT OF FILL, DOLUMENT NUMBER 289-2182-773. A COPY OF THIS POLICY IS AVAILABLE DILING AT VAVILEPYERSTATEPAUS, UNDER THE HEADING DUCK ACCESS ON THE LET SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATION." ON THE LET SIDE OF THE SCREEN CLICK ON "FORMS AND PUBLICATION." ON THE LET SIDE OF THE SCREEN CLICK ON "FORMS AND PUBLICATION." ON THE LET SIDE OF THE SCREEN CLICK ON "FORMS AND PUBLICATION." ON THE LET SIDE OF THE MATERIAL PUBLICATION OF THE MOLIMENT OF THE

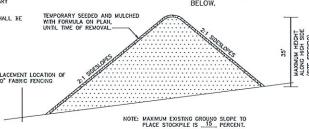
CLEAN FILL IS DEFINED AS UNCONTAMBNATED, NON-VATER SOLUBLE, NON-DECOMPOSABLE, DESTI, SOLID MATERIAL. THE TERM INCLUDES SOILL ROCK, STONE, DESCORD MATERIAL, USED ASPHALT, NOD BRICK, BLOCK DE CONCRETE FROM CONSTRUCTION AND DEPOLITION OF THE DESCRIPTION OF THE DESCRIPTION OF THE DESCRIPTION OF THE DEPOLITION OF THE DEPO

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A 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 BELOV THE

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 ID CERTIFY THE DRIGHT OF FILL THAT FILL AS CLEAN FILL FOR FP-001 MUST BE RETAINED BY THE DYNER OF THE PROPERTY RECEIVING THE FILL.

ENVISIONEMIAL IUE DILIGENCE DIVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEV OF PROPERTY USE HISTORY, SANDRON MAPS, MG. PROPERTY OF THE PROPERTY OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REQULATED SUBSTANCE, IT MUST BE TESTED TO LETERHURE IF IT OWLFIFES A CLEAN FILL ITSTING SHOULD BE PERFORMED IN ACCORDANCE VITH FILL REGULATED FOR THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REQULATED SUBSTANCE, IT MUST BE TESTED TO LETERHURE IF IT OWLFIFES AS CLEAN FILL ITSTING SHOULD BE PERFORMED IN ACCORDANCE VITH FACTOR MAY BE AND A STANDARD OF THE PROPERTY OF THE PROPE

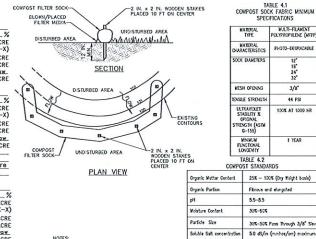
# MAXIMUM ALLOWABLE HEIGHT OF STOCKPILE IS 35 FEET. SEE SITE SPECIFIC CONDITIONS



1. The stockpiled topsoil and fill material will be inspected on a daily basis and after every runoff event. All necessary repairs will be made immediately

2. All stockpiles will be temporary seeded and mulched at all times.

SOIL STOCKPILES AND MAINTENANCE NOT TO SCALE



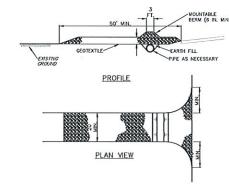
SOCK FASRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSON CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSON CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL CRADE. BOTH ENDS OF THE BARRER SHALL BE EXTENDED AT LEAST 6 FEET UP SLOPE AT 45 DECREES TO THE WAN BARRER ALIQUADENT, MAXIMAL SLOPE LINGHIN BADOVE ANY BARRER SHALL NOT EXCED THAT SHAPEDFED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTOGEGRADABLE SOCKS AFTER 1 YEAR, POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VECETATED OR FERMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE WULCH SPREAD AS A SOL SUPPLEMENT.

# STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK NOT TO SCALE



CITY OF BETHLEHEM

PL Electric Utilities

U G I Corporation

ZAYO Bandwidth

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

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

MANTENANCE ROCK CONSTRUCTION DITRANCE THICKNESS SHALL BE CONSTAINTLY MANTANED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPLE SHALL BE MANTANED ON SITE OF THIS REPORTS. ALL SEQUENCE AND PARED RODIDARYS SHALL BE REWOOD AND REPORT OF THE STATE OF

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

CONTACT PERSON ADDRESS

Fran Swirble

Mike Ciamaco

10 East Church Stree Bethlehem PA 18018

entown PA 18104

2124 Avenue C Bethlehem PA 18017

1800 E. Race Street Catasauqua PA 18032 400 Centennial Parkway Suite 200

PHONE NO.

(610) 865-707

484) 634-3268

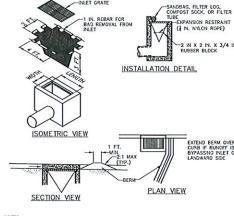
(610) 443-2956

(610) 868-0902

610) 866-095

(610) 264-2039

(610) 628-9365



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SOBE 117, INC. 117 E. 4TH STREET

DETAILS

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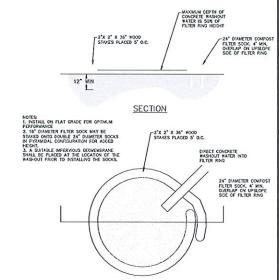
MAXMUM DRAINAGE AREA = 1/2 ACRE.

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

ROLLED EASTHEN BERM SHALL BE MAINTAINED UNITL ROLDWAY IS STOKED. ROAD SUSBASE BERM SHALL BE MAINTAINED UNITL ROADWAY IS PAYED, XX NICH MAINUM HEIGHT ASPHALT BEAM SHALL BE MAINTAINED UNITL ROADWAY IS PAYED, XX NICH MAINUM HEIGHT ASPHALT BEAM SHALL BE MAINTAINED UNITL ROADWAY SUSFACE RECORDS FINAL LOCAL FOR THE MEMORY OF THE MAINUM PRESENCE OF THE STATE OF THE MEMORY OF THE MEMOR

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

STANDARD CONSTRUCTION DETAIL #4-15



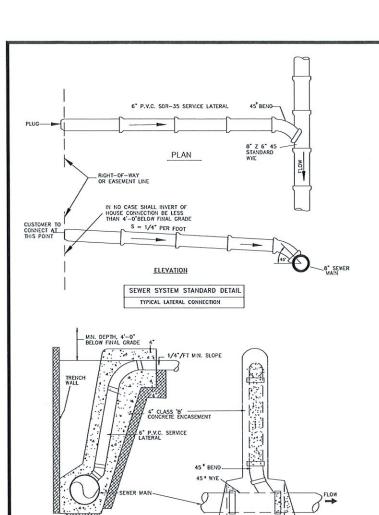
PLAN TYPICAL COMPOST SOCK WASHOUT INSTALLATION
NOT TO SCALE

# SHEET INDEX

PLAN TITLE	SHEET NU
SITE ANALYSIS PLAN	1 OF 7
LAND DEVELOPMENT PLAN	2 OF 7
GRADING & UTILITY PLAN	3 OF 7
LANDSCAPE / LIGHTING PLAN	4 OF 7
EROSION CONTROL & DEMO. PLAN	5 OF 7
EROSION CONTRIL DETAILS	6 OF 7
DETAILS	7 OF 7

BEFORE YOU
DIG - DRILL - BLAST
O-22 1-800-242-1776
(TOLL FREE)
PENNSTLVANIA ONE CALL SYSTEM, INC.

In compliance with Act 38, it shall be the Controctors responsibility to contact individual companies to have utility locations marked in the field and to otherwise locate underground objects as may be necessary prior to the start of construction. Pennsylvania law requires 3 working days notice for the construction phase and 10 working days in design stage — call



SEWER SYSTEM STANDARD DETAIL
SERVICE LATERAL RISER DETAIL
NO SCALE

## UTILITY NOTES

- All water lines shall have a minimum 4' of cover.
   All 8' & 12' water lines shall be ductile iron pipe Class 52 unless otherwise noted.
- 3. Domestic water service laterals shall be 2° K copper.

  4. Fire protection water service laterals shall be 4° ductile iron pipe class 52.
- The protection where service letterals shall be 4. Outside to 5. In occordance with ACT [35] the contractor shall notify all willing companies prior to commencing with any construction activity on the site.

  6. All opartment buildings will contain sprinklers.
- 7. All scritcry sever mains shall be 8° PVC SDR-35 8. All scritcry sever service laterals shall be 6° PVC SDR-35
- Remote Stamese fire department connections shall be installed for each building.
  These connections shall be located within 250 feet a fire hydrant and shall be located adjacent to the building water lateral.
- 10. Additional notes as follows:

2' - 6"

- A Underground Detention decreated the end of construction.

  The Contractor shall deem all occumulated sediment and sit from the detention areas at the end of the construction, and return the areas to their original design condition.
- areas to their original escept condition.

  \*\*Moltenance Note\*\*

  The maintenance of the storm with facilities, including the detention areas, shall be the ceneria responsibility. The ceneria deed, and the deeds to any subsequent cener, shall note that the exert shall accept the moltenance responsibilities. The City of Bethleten shall be permitted to inspect the storm wider facilities on all least on amount schedule to exame that any necessary corrective with its performed in a timely monner.
- necessary corrective sork is performed in a timely morner."

  As-DUT NOW:

  The developer shall ensure that current as-built records are mointained during construction. Upon completion of construction, Certified (i.e. P.E., Stamped) cs-built develops shall be submitted by the developer's supplears. Bases cs-built develops shall be found coceptable by the City Engineer prior to reflecte of any remaining security.
- Any change in the location of the Fire Department Connection must be approved by the City of Bethlehem Fire Department.

# NOTES:

- 1. ALL SANITARY PIPING SHALL CONSIST OF SDR 35 PVC PIPE. EXCEPT ALL MAINS WITH A DEPTH IN EXCESS OF 15' SHALL BE SDR 26 PVC PIPE.
- 2. EXPOSED VERTICAL & HORIZONTAL SURFACES SHALL BE PREPARED AS PER PUB. 408, SECT. 401.3(F).
- 3. FULL DEPTH SAW CUT BACK OF
- 4. TACK COAT EDGES AND SURFACE BEFORE
- 5. JOINTS IN SURFACE SHALL BE SEALED
- (12" WIDE BM-1 OR A-1 SEAL).
- 6. ALL BACKFILL MATERIAL IS SUBJECT TO

1-1/2" SUPERPAYE WEARING COURSE-7 1/2" SUPERPAVE BASE COURSE NG ROAD GRADE WITHIN ROAD RIGHTS-TRENCH REPAIR NOTES: ALL WATERLINE PIPING SHALL CONSIST OF DUCTLE IRON PIPE. EXPOSED VERTICAL & HORIZONTAL SURFACES SHALL BE PREPARED AS PER PUB. 408, SECT. 401.3(F). FULL DEPTH SAW OUT BACK OF EDISTING PAVEMENT. SAND OR SCREENINGS TACK COAT EDGES AND SURFACE BEFORE PLACING WEARING COURSE 4" M.N. BEDDING TYPE '2A' STONE MECHANICALY TAMPED JOINTS IN SURFACE SHALL BE SEALED (1" WIDE BM-1 OR A-1 SEAL). O.D. OF ADDITIONAL DEPTH OF ALL BACKFILL MATERIAL IS SUBJECT TO MUNICIPAL APPROVAL. EXCAVATION WILL BE REQUIRED IF SUBSOIL IS UNSUITABLE AS DETERMINED BY ENGINEER. DUCTILE IRON PIPE

TYPICAL TRENCH DETAIL FOR WATER LINES IN ROADWAY

FINAL GRADE -

#28 CRUSHED STONE

-UNDISTURBED EARTH

GALVANIZED PIPE

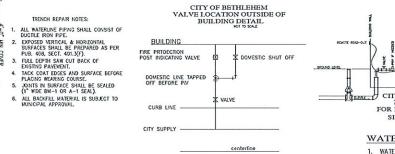
2" OURS STOP AND DRAI

QUARTER BEND COUPLIN

2" CORPORATION STOP-

5' WNMUM

- 3 LAYERS ASPIRALT PAPER 2" Surface Blowoff



-CITY OF BETHLEHEM FOR 1 1/2" AND LARGER SIDE VIEW-DETAIL, ANY OURSTONS, CALL METER SHOP AT METER S

## WATERLINE NOTES

- 1. WATERLINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BETHLEHEM STANDARDS AND PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS AS APPLICABLE
- WATERINES SHALL BE CLASS 52 DUCTILE IRON PIPE OF THE SIZES INDICATED ON THE PLANS.
  WATER SERVICES SHALL BE 8-INCH DUCTILE IRON PIPE WITH PLUGGED ENDS, UNLESS OTHERWISE NOTED.
- PROVDE 10-FEET OF HORIZONTAL SEPARATION BETMEEN WATERLINES AND SANITARY SEWERS OR STORM SEWERS. WHERE A WATERLINE CROSSES A SANITARY OF STORM SEWER, PROVIDE A VERTICAL SEPARATION OF 18-INCHES BETWEEN THE PIPES AND CENTER A FULL LENGTH OF WATERLINE ACROSS THE SEWER LINE TO MAXIMIZE THE DISTANCE OF THE JOINTS FROM THE SEWER LINE
- -ALARM CHECK VALVE
  ALARM CHECK VALVE
  6. FIRE PROTECTION WATER SERVICE LATERALS SHALL BE 6\* DUCTILE IRON PIPE CLASS 52

TO SAMESE CONNECTION CITY OF BETHLEHEM OSAY VALVE (TAMPER SWITCH) AVES 3000ss DOUBLE CHECK VALVE TAMPER SWITCH & LOCKED TEREVENIUS Y VALVE (TAMPER SWITCH) POST INDICATING ALVE CITY OF BETHLEHEM

TO SPRINKLER SYSTEM

FIRE LINE RISER DETAIL

FENCE DETAIL

SEE ARCHITECTURAL PLANS FOR DETAILED INFORMATION (BULDING FOUNDATION 140" X 160" = 22,400 SF) FENCE FENCE FRST FLOOR EL. 256.50 BUILDING FOUNDATION WALL X EL 24868 EX CRUSE GARAGE FLOOR EL 244.50

NORTH WALL DETAIL

SLOPE 10% MAY, SIDEWALK SLOPE 2% SEE NOTE 7 SIDEWALK AREA APRON APRON GEPTH = RESIDENTIAL 6", BUSINESS & INDUSTRIAL 8" CONCRETE OR BITAINOUS CONCRETE CONCRETE P EMANSON NATION NO. S. - Q. (LIN) CHI CHETCH - 12 - Q. (CONTROLY NATION NO. S. - 13, - Q. (CONTROLY 11.3 RM NOTES: 1. No driveway allowed within 25 feet of the street line sets on private parcey; and shall be all read if wide by it will be provided in the private parcey. A conditional provided in the private parcey is a conditional public right-of-way shall be 10%.

A manifold privately private provided public right-of-way shall be 10%.

A monotifile driveray option and curb may be primitted.

C. Charges to demonstrately requirements may be considered in create where obstructions or encodements easily. Any exceptions must be approved by the City Englerer. Current Provided Private Provided Private Provided Private Provided Private Provided Private Priva CITY OF BETHLEHEM, PA **TYPE 1 DRIVEWAY ENTRANCE AND APRON** NOTE: Whenever a curb, gutter and/or sidewolk is located in a Historic District, special requirements may apply.

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SOBE 117, INC. 117 E. 4TH STREET DETAIL SHEET FOR

SHEET INDEX

PLAN TITLE SITE ANALYSIS PLAN SHEET NUMBER 1 OF 7 LAND DEVELOPMENT PLAN
GRADING & UTILITY PLAN
LANDSCAPE / LIGHTING PLAN
EROSION CONTROL & DEMO. PLAN 5 OF 7 **EROSION CONTRIL DETAILS** 6 OF 7 7 OF 7 DETAILS

men Dun 12/10/14

ING ROAD GRADE THE '-0" MN, COVER 6' - 0" MAX, COVER WITHIN ROAD RIGHTS—
OF-WAY, SUFFACE
RESTORATION, BACKFILL
MATERIALS, & METHOOS 4" MIN. FOR EARTH 8" MIN. FOR ROCK TYPE '2A' STONE

> TYPICAL TRENCH DETAIL FOR SANITARY SEWERS IN ROADWAY

WITHN ALL STREET RIGHTS-OF-WAY, BACKFILLING SHALL BE DOKE IN ACCORDANCE WITH THE RECORDANCE WITH THE RECORDANCE OF PERMOD FIRE. 408, SECTION AND WEETING THE RECORDANCE OF THE FULL DEPTH OF THE PERMOD AND WEETING THE REQUIREMENTS OF PERMOD FIVE. 408, SECTION 359.2, UNLESS OTHERMASS SECTION FOR THE BEDOM FORTHOR OF THE TENDANCE.