STATE OF

COUNTY O

ON THE DAY OF , 20 BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID THE UNDERSIGNED OFFICER, PERSONALLY APPEARED WHO ACKNOWLEDGED HIMSELF/HERSELF TO BE THE AND THAT HE/SHE AS SUCH , BEING AUTHORIZED TO DO SO, EXECUTED THE WITHIN PLAN AND ACKNOWLEDGED THAT THE SAME WAS EXECUTED AS THE OFFICIAL PLAN OF IMPROVEMENTS, HIGHWAYS AND PROPERTY SHOWN THEREON AND DESIRED THAT THE PLAN BE RECORDED ACCORDING TO LAW BY SIGNING THE NAME OF THE CORPORATION BY HIMSELF/HERSELF AS

(SEAL

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

(NOTARY PUBLIC

MY COMMISSION EXPIRES

CERTIFICATION OF OWNERSHIP (CORPORATIO

I. STEVE FERNSTROM OF BETHLEHEM PARKING AUTHORITY

BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS EXECUTIVE DIRECTOR

DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF PROPERTY KNOWN AS P6 2 2-13 0204 & P6 2 2-14 0204; THAT THE ABOVE DESCRIBED PROPERTY IS IN PEACEFUL

POSSESSION OF SAID CORPORATION AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.

BETHLEHEM PARKING AUTHORITY CORPORATION

BY: STEVE FERNSTROM, EXECUTIVE DIRECTOR

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

. RICHARD ROSEBERRY, P.E. COLLIERS ENGINEERING & DESIGN (DBA MASER CONSULTING) 941 MARCON BOULEVARD, SUITE 801 ALLENTOWN, PA 18109

SEAL REGISTRATION NO. PE 46162-R

DATE

SURVEYOR'S CERTIFICATION

ENGINEER'S CERTIFICATIO

I, ROBERT W. TELSCHOW JR., A REGISTERED LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA; DO HEREBY CERTIFY THAT THE PLAN, PREPARED FROM A FIELD SURVEY PERFORMED SEPTEMBER, 2014, CORRECTLY REPRESENTS THE PROPERTY BOUNDARY OF THE PROPOSED SUBDIVISION OR LAND DEVELOPMENT.

ROBERT W. TELSCHOW, P.L.S. (SU075641) COLLIERS ENGINEERING & DESIGN (DBA MASER CONSULTING) 2000 MIDLANTIC DRIVE, SUITE 100

MT.LAUREL, NJ 08054 RECORDER OF DEEDS

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY, PENNSYLVANIA ON

20____. IN MAP BOOK VOLUME_____, PAGE _____.

NORTHAMPTON COUNTY RECORDER OF DEEDS

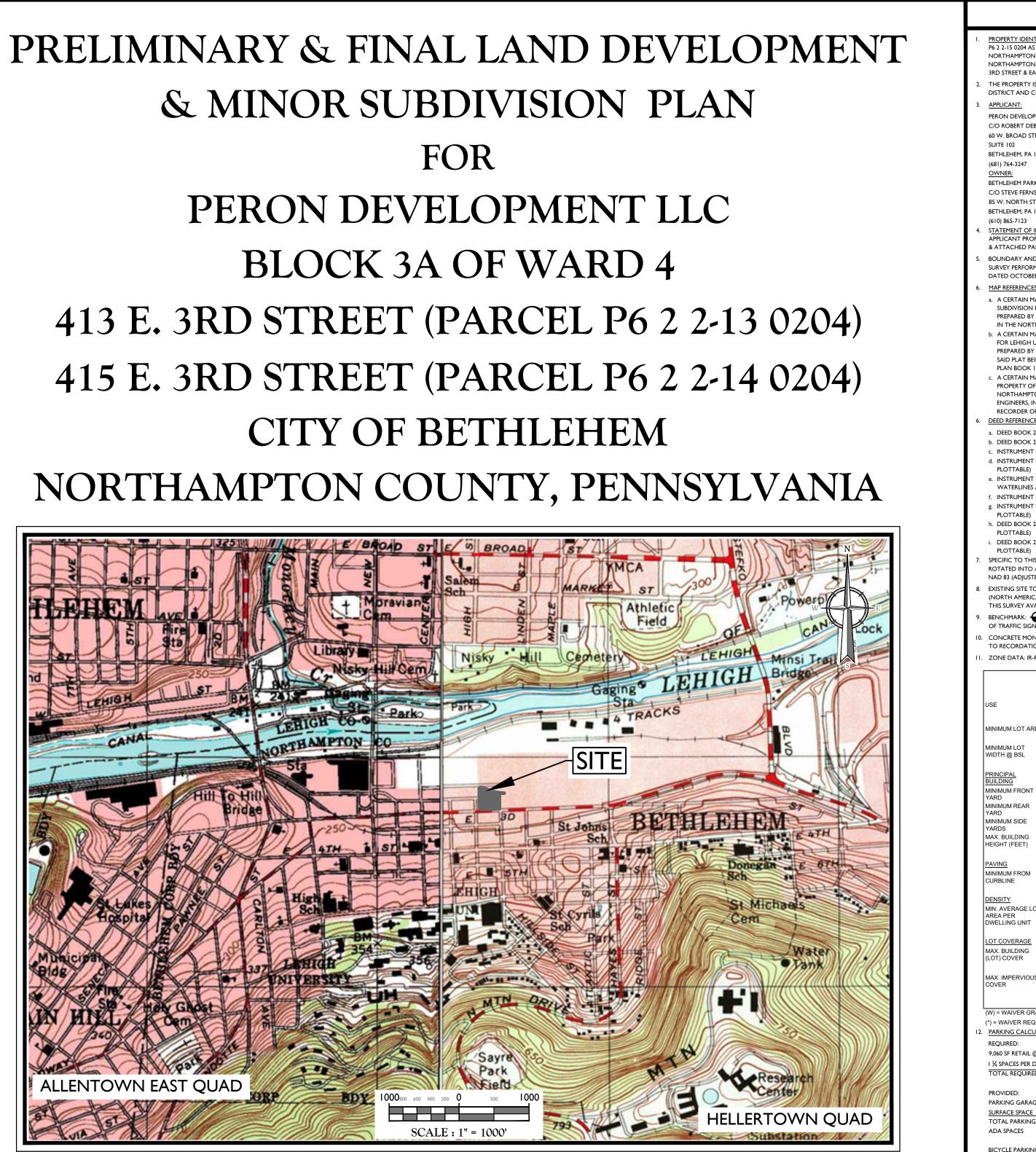
APPROVED BY: BETHLEHEM CITY PLANNING COMMISSION

CHAIRPERSON SECRETAR' REVIEWED: LEHIGH VALLEY PLANNING COMMISSION

DATE REVIEWER

* PLANS TO BE RECORDED

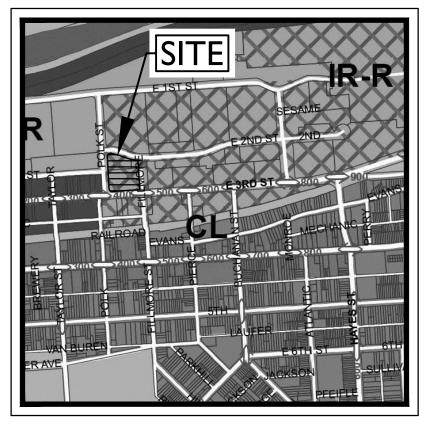
INDEX OF SHEETS						
PAGE NO.	SHEET	DATE REVISED				
* 1	COVER SHEET	1/17/2022				
2	EXISTING FEATURES PLAN	1/17/2022				
3	SITE DEMOLITION PLAN	1/17/2022				
* 4	MINOR SUBDIVISION PLAN	1/17/2022				
* 5	DIMENSION PLAN	1/17/2022				
6	GRADING PLAN	1/17/2022				
7	UTILITIES PLAN	1/17/2022				
8	LANDSCAPING PLAN	1/17/2022				
9	LIGHTING PLAN	1/17/2022				
10	LANDSCAPING & LIGHTING DETAILS	1/17/2022				
11	SOIL EROSION & SEDIMENT CONTROL PLAN	1/17/2022				
12	E&S CONSTRUCTION NOTES	1/17/2022				
13	E&S DETAILS	1/17/2022				
14-15	CONSTRUCTION DETAILS	1/17/2022				



PA ONE CALL FACILITY OWNER LIST

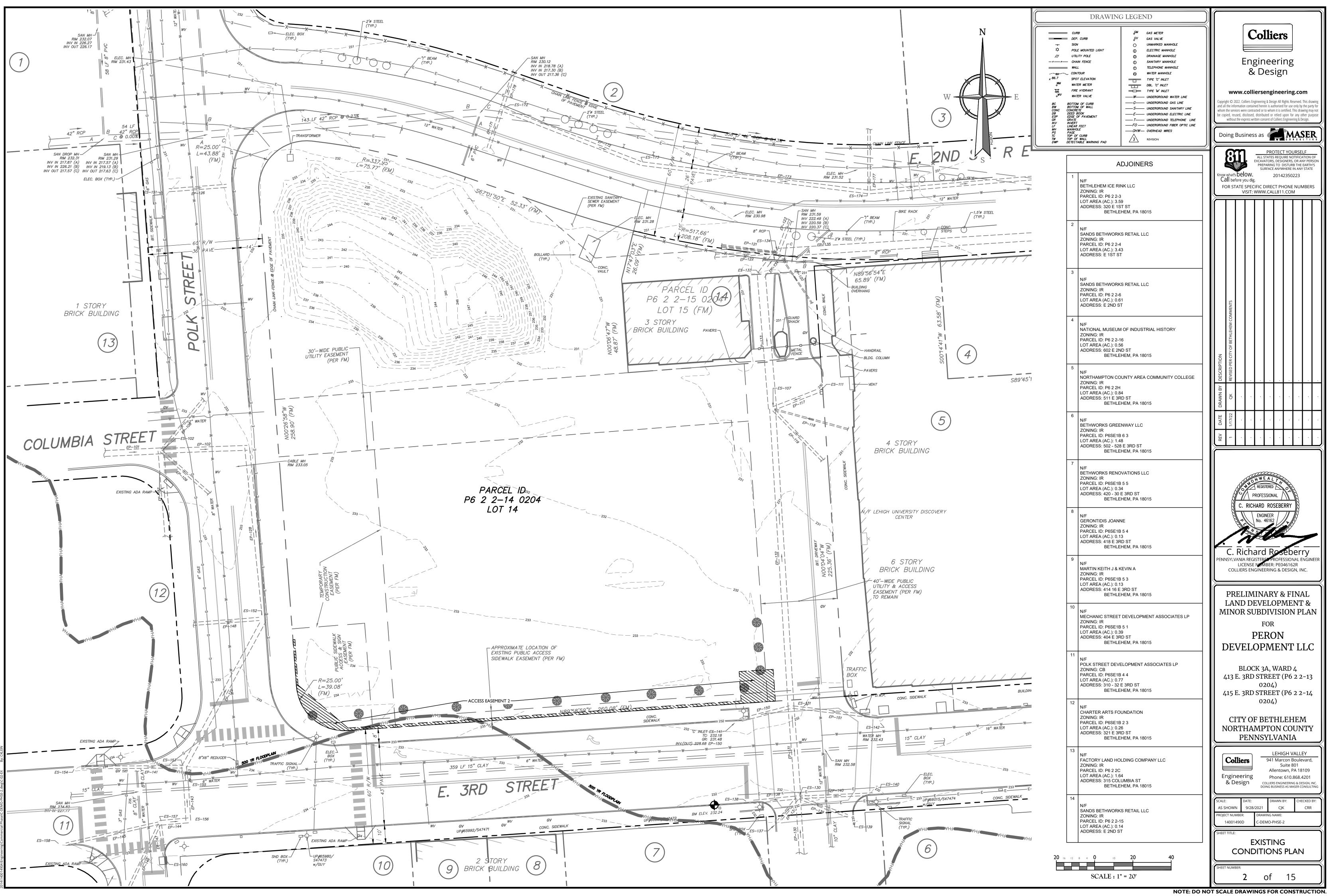
BETHLEHEM CITY DEPT OF WTR/SWR RESOURCES MORAVIAN COLLEGE ORASURE TECHNOLOGIES INC PPL ELECTRIC UTILITIES CORPORATION RCN TELECOM SERVICES INC SERVICE ELECTRIC CABLE TV INC UGI UTILITIES INC VERIZON BUSINESS FORMERLY MCI VERIZON PENNSYLVANIA LLC ZAYO BANDWIDTH FORMERLY PPL TELCOM LLC

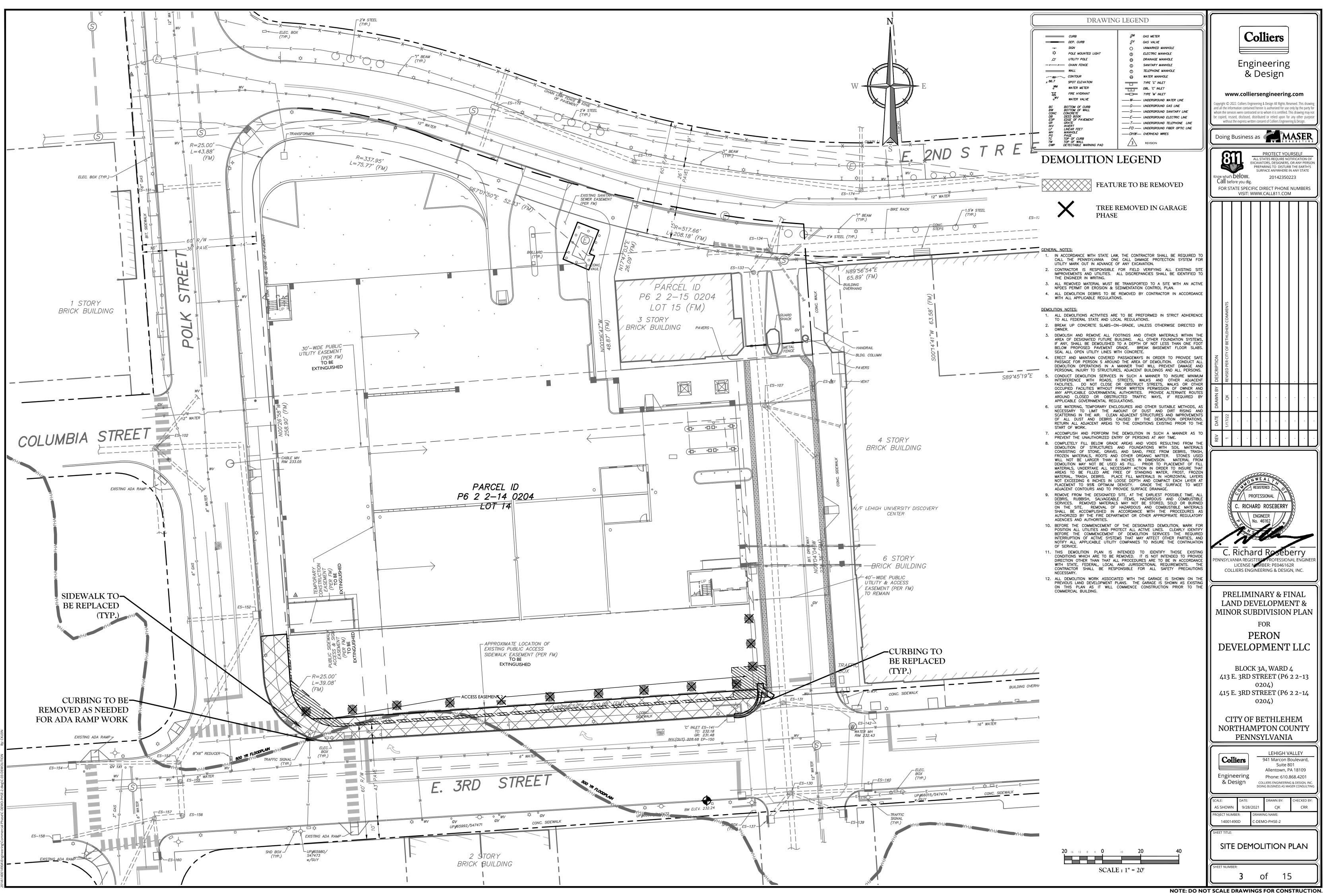
KEY MAP

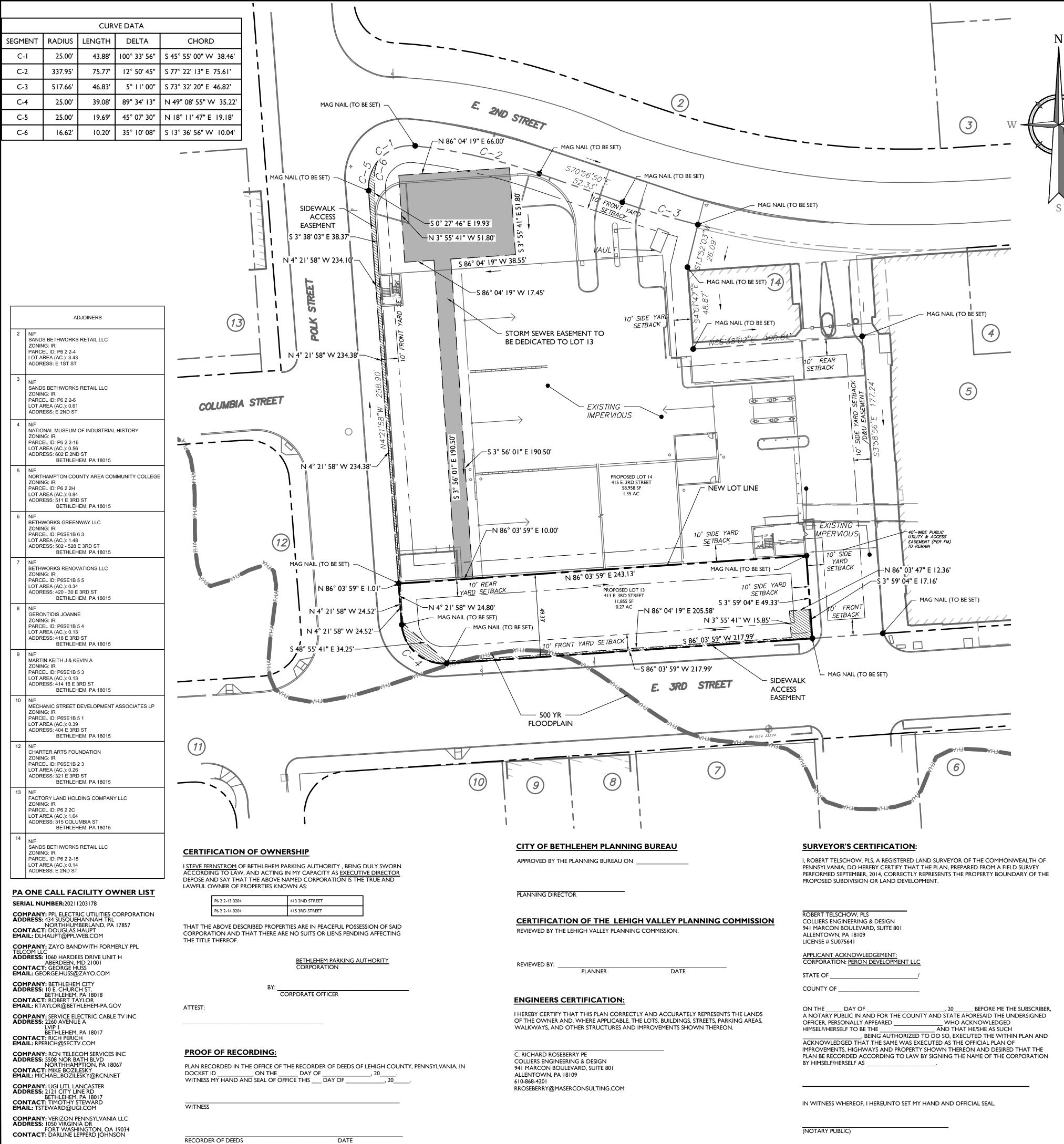


ZONING MAP

GENERAL INFO					
PROPERTY IDENTIFICATION: BEING KNOWN AS PARCEL NOS. P6 2 2-13 0204, P6 2 2-14 0204 AND P6 2 2-15 0204 AS SHOWN ON THE CURRENT OFFICIAL TAX MAP OF THE CITY OF BETHLEHEM, NORTHAMPTON COUNTY, PENNSYLVANIA. ADDRESS FOR THE LOTS , AS LISTED BY NORTHAMPTON COUNTY ASSESSMENT RECORDS ARE RESPECTIVELY: EAST 2ND STREET, EAST	OWNED AN OPERATED BY THE CITY OF BETHLEHEM. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 3 FEET OF COVER FROM	Colliers			
3RD STREET & EAST SECOND STREET. 2. THE PROPERTY IS LOCATED IN THE IR-R INDUSTRIAL REDEVELOPMENT- RESIDENTIAL ZONING DISTRICT AND CONTAINS A TOTAL TRACT AREA OF 77,102 SF, 1.770 ACRES.	THE TOP OF PIPE TO PROPOSED GRADE. 25. SANITARY SEWERS SHALL BE SEPARATED FROM WATER MAINS BY AT LEAST 10 FEET HORIZONTALLY. IF SUCH SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES. WITH THE SANITARY SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE	Engineering			
B. <u>APPLICANT:</u> PERON DEVELOPMENT LLC C/O ROBERT DEBEER OW PROAD STREET	WATER MAIN. WHERE APPROPRIATE SEPARATION IS NOT POSSIBLE, THE SEWER SHALL BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS, FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION,	& Design			
60 W. BROAD STREET SUITE 102 BETHLEHEM, PA 18018 (681) 764-3247	ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS ARE AS FAR AWAY AS POSSIBLE FROM THE WATER LINE. 26. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO	www.colliersengineering.com			
OWNER: BETHLEHEM PARKING AUTHORITY C/O STEVE FERNSTROM	SITE CONSTRUCTION AND SHALL BE INSTALLED UNDERGROUND AND PER ORDINANCE REQUIREMENTS. 27. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY	Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose			
85 W. NORTH STREET BETHLEHEM, PA 18018 (610) 865-7123 STATEMENT OF INTENT: THE SUBJECT PROPERTY IS PRESENTLY A SURFACE PARKING LOT. THE	AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/ AUTHORITIES. 28. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP).	without the express written consent of Colliers Engineering & Design.			
STATEMENT OF INTENT: THE SUBJECT PROPERTY FOR THE PERMITTED USES OF RETAIL, OFFICE APPLICANT PROPOSES TO DEVELOP THE PROPERTY FOR THE PERMITTED USES OF RETAIL, OFFICE & ATTACHED PARKING STRUCTURE. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON WAS OBTAINED FROM FIELD	 28. STOKETSLEVERS STALL BE CLASS IN (OKTINGTICK IN TOTED) REINFORCED CONCRETE THE (RCL). PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. 29. REFUSE AND RECYCLABLES SHALL BE COLLECTED INTERNALLY AND REMOVED BY 	Doing Business as			
SURVEY PERFORMED ON SEPTEMBER 3, 2014 AND PREPARED BY MASER CONSULTING, PA, PLAN DATED OCTOBER 28, 2014. MAP REFERENCES:	CONTRACTED HAULER. 30. TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.	PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S UNDER OF COMPANY FOR THE ARTH'S			
a. A CERTAIN MAP ENTITLED: "BETHLEHEM WORKS - PHASE I, BETHLEHEM PENNSYLVANIA, SUBDIVISION PLAN, SHEET I OF I", DATED MARCH 24, 1999, REVISED TO APRIL 24, 2000, PREPARED BY KEYSTONE CONSULTING ENGINEERS, INC., SAID PLAT BEING DULY RECORDED IN THE NORTHAMPTON COUNTY RECORDER OF DEEDS IN PLAN BOOK 2000-I PAGE 195.	 THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HERON, IS NOT A SURVEY. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS. 	SURFACE ANYWHERE IN ANY STATE Know what's below. 20142350223 Call before you dig.			
b. A CERTAIN MAP ENTITLED: "SITE DEVELOPMENT PLAN, SMART DISCOVERY CENTER, 501 E. 3RD FOR LEHIGH UNIVERSITY, CITY OF BETHLEHEM, NORTHAMPTON COUNTY, PENNSYLVANIA", PREPARED BY BARRY ISSET & ASSOCIATES, PC, DATED JUNE 17, 1996, REVISED TO JULY 8, 1996, SAID PLAT BEING DULY FILED IN THE NORTHAMPTON COUNTY RECORDER OF DEEDS IN	33. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.	FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM			
PLAN BOOK 1996-5 PAGE 269. c. A CERTAIN MAP ENTITLED" "FINAL PLAN SHOWING WEST BUILDING SUBDIVISION ON PROPERTY OF BETHLEHEM STEEL CORPORATION IN THE CITY OF BETHLEHEM,	34. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR				
NORTHAMPTON COUNTY, PENNSYLVANIA", PREPARED BY KEYSTONE CONSULTING ENGINEERS, INC., SAID PLAT BEING DULY FILED ON THE NORTHAMPTON COUNTY RECORDER OF DEEDS IN PLAN BOOK. 1996-5 PAGE 257. DEED REFERENCES:	CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.				
 a. DEED BOOK 2008-I PAGE 277037 (SUBJECT PREMISES DEED OF RECORD) b. DEED BOOK 2005-I PAGE 76224 (SUBJECT PREMISES DEED OF RECORD - QUIT CLAIM DEED) c. INSTRUMENT NUMBER: 1996032222 (SANITARY SEWER EASEMENT)(NOT PLOTTABLE) 	35. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED				
 d. INSTRUMENT NUMBER: 1999002855 (PARTIAL RELEASE OF SANITARY SEWER EASEMENT)(NOT PLOTTABLE) e. INSTRUMENT NUMBER: 2013026430 (DEED OF EXTINGUISHMENT FOR ABANDONED PUBLIC WATERLINES AND STORM SEWER LINESI(NOT PLOTTABLE). 	CONSTRUCTIONS, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL				
 f. INSTRUMENT NUMBER: 1996032223 (STORM SEWER RIGHT OF WAY)(NOT PLOTTABLE) g. INSTRUMENT NUMBER: 201020290 (VERIZON PENNSYLVANIA RIGHT OF WAY)(NOT PLOTTABLE) 	IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.				
 h. DEED BOOK 2000-I PAGE 95669 (PENNSYLVANIA POWER AND LIGHT RIGHT OF WAY)(NOT PLOTTABLE) i. DEED BOOK 2001-I PAGE 078339 (PENNSYLVANIA POWER AND LIGHT RIGHT OF WAY)(NOT PLOTTABLE) 	 THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED. EXISTING PILES OF DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION. 	IENTS			
7. SPECIFIC TO THIS PROJECT: ALL RECORD DEED GEOMETRY HAS BEEN MAINTAINED BUT ROTATED INTO AND BASED UPON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 (ADJUSTED TO NEAR SURFACE DERIVED COORDINATES UTILIZING KEYNET GPS).	38. THE MAINTENANCE OF ON-SITE STORMWATER FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER. THE MASTER DEED, AND THE DEED TO ANY SUBSEQUENT OWNER, SHALL NOTE THAT THE OWNER SHALL ACCEPT THE MAINTENANCE RESPONSIBILITIES. THE CITY OF BETHLEHEM SHALL BE PERMITTED TO INSPECT THE STORM WATER FACILITIES ON AT LEAST AN	EM COMMENTS			
 EXISTING SITE TOPOGRAPHIC INFORMATION AS SHOWN HEREON IS BASED UPON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988). REFERENCE NGS MONUMENTS UTILIZED IN THIS SURVEY AVAILABLE UPON REQUEST. BENCHMARK: K 	ANNUAL SCHEDULE TO ENSURE THAT ANY NECESSARY CORRECTIVE WORK IS PERFORMED IN A TIMELY MANNER. 39. DRAINAGE EASEMENTS, IF ANY, MAY NOT BE ALTERED WITHOUT THE WRITTEN PERMISSION OF	ВЕТНІЕНЕМ			
 DENCHMARK: PR IN CORE ON SOUTH SIDE OF 3RD STREET TWENTT-THREE FEET WEST OF TRAFFIC SIGNAL BASE AT 3RD & FILLMORE STREETS. CONCRETE MONUMENTS AND IRON PINS SHALL BE SET UPON APPROVAL OF THIS PLAN PRIOR TO RECORDATION. 	THE CITY ENGINEER. NO OBSTRUCTIONS SUCH AS PLANTED BERMS OR FENCES MAY BE INSTALLED IN THE DRAINAGE EASEMENT AREAS WITHOUT SUFFICIENT PROVISION FOR THE PASSAGE OF STORM WATER, AND ANY SUCH PROPOSED PROVISION SHALL BE APPROVED IN WRITING BY THE CITY ENGINEER.	ION R CITY OF			
I. ZONE DATA: IR-R INDUSTRIAL REDEVELOPMENT- RESIDENTIAL REQUIRED EXISTING PROPOSED	 ALL STORMWATER INLETS SHALL BE LABELED "DRAINS TO WATERWAY" ALL ROADWAYS, CURBS, PARKING LOTS, SANITARY SEWERS, STORM SEWERS, STORMWATER MANAGEMENT DEVICES, AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE 	DESCRIPTION REVISED PER CI			
USE RETAIL, OFFICE & PARKING STRUCTURE P6 2 2-13 P6 2 2-14 0204 0204 0204 (415 E. 3RD (413 E. 3RD	WITH THE APPROVED PLANS AND TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF BETHLEHEM, CITY OF BETHLEHEM DEPARTMENT OF WATER AND SEWER RECOURSES AND THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION.				
MINIMUM LOT AREA 2,000 SF 20,660 SF 50,153 SF 58,958 SF 11,855 SF 0.474 AC 1.151 AC 1.353 AC 0.272 AC	42. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ALL PAVEMENT MARKINGS, STREET SIGNS, TRAFFIC DIRECTIONAL AND CONTROL SIGNS SHOWN ON THIS PLAN IN ACCORDANCE WITH THE CITY OF BETHLEHEM STANDARDS. ALL SIGNAGE SHALL BE CONSISTENT WITH EXISTING SIGNAGE WITHIN THE CITY OF BETHLEHEM.	DRA			
MINIMUM LOT WIDTH @ BSL 30 Ft 250 Ft 206.98 Ft PRINCIPAL	 CONTRACTOR(S) SHALL RECEIVE A COPY OF THE APPROVED EROSION & SEDIMENTATION CONTROL PLANS. THE CITY OF BETHLEHEM SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE OF ANY AREA 	DATE 1/17/22			
BUILDING MINIMUM FRONT 10 Ft N/A 1.01* 1.32* MINIMUM FEAR MINIMUM FEAR Image: 10 Ft N/A 1.01* 1.32*	NOT DEDICATED TO THE CITY. 45. NO FEATURES SHALL OBSTRUCT THE CLEAR SIGHT TRIANGLE PER THE CITY OF BETHLEHEM ZONING ORDINANCE ARTICLE 1318.06	L · · · · · · · · · ·			
MINIMUM KLAK 10 Ft N/A N/A 4.25* 9.37* MINIMUM SIDE 10 Ft N/A N/A 0.18* 0.13* YARDS 10 Ft N/A N/A 0.18* 0.13* MAX. BUILDING 200 Ft N/A N/A 79 Ft 42 Ft	 THERE SHALL BE NO CHANGES OR DEVIATION FROM THESE PLANS UNLESS APPROVED BY THE ENGINEER. SUCH PLAN CHANGES, SHOULD THEY BECOME NECESSARY, ARE SUBJECT TO THE CITY OF BETHLEHEM ORDINANCES. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITIES AT LEAST SEVENTY-TWO (72) 				
HEIGHT (FEET) 200 Ft IN/A N/A 79 Ft 42 Ft PAVING MINIMUM FROM MINIMUM FROM MINIMUM FROM MINIMUM FROM MINIMUM FROM	HOURS PRIOR TO THE START OF ANY CONSTRUCTION. ALL UTILITIES HAVE BEEN IDENTIFIED BASED ON THE BEST AVAILABLE INFORMATION AND LISTED ON THESE PLANS IN ACCORDANCE WITH ACT 287 REQUIREMENTS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND ALL EFFORTS SHALL BE UNDERTAKEN TO PROTECT EXISTING UTILITIES	HON WEAL 74			
CURBLINE 15 Ft N/A 20.6 Ft 19 Ft N/A DENSITY	AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. RESTORATION OF ALL EXISTING SURFACE IMPROVEMENTS DAMAGED OR ALTERED DURING CONSTRUCTION,	PROFESSIONAL			
MIN. AVERAGE LOT AREA PER 1,200 SF N/A 20.6 Ft N/A DWELLING DWELLING UNIT UNIT*	 INCLUDING LANDSCAPING, SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR. 48. THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING THE SAFE FLOW OF TRAFFIC DURING CONSTRUCTION WITHIN THE EXISTING ROAD RIGHTS-OF-WAY WHILE ENTERING AND LEAVING THE SITE. 	C. RICHARD ROSEBERRY ENGINEER No. 46162			
LOT COVERAGE MAX. BUILDING 90% 0.00% 0.00% 66.41% 76.42% (LOT) COVER 90% 0 SF 0 SF 39,156 SF 9,060 SF	 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS RELATIVE TO THE CONSTRUCTION PROPOSED ON THE PLANS. APPROVAL OF THESE PLANS DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT OF 				
MAX. IMPERVIOUS COVER 90% 1.34% 81.56% 95.09% 83.51% (W) (W) 276 SF 40.907 SF 56.063 SF 9.900 SF	WASTEWATER COLLECTION, CONVEYANCE, OR TREATMENT CAPACITY. 51. RETAINING WALL DESIGNS SHALL BE SUBMITTED FOR REVIEW PRIOR TO THE START OF SITE WORK.	C. Richard Roseberry			
(W) = WAIVER GRANTED ON DECEMBER 11, 2014 (*) = WAIVER REQUIRED 2. <u>PARKING CALCULATION</u>	52. AS-BUILTS: ACCURATE AS-BUILT DRAWINGS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWINGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEERS OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE	PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER LICENSE NOMBER: PE046162R COLLIERS ENGINEERING & DESIGN, INC.			
REQUIRED: 9,060 SF RETAIL @ 4 SPACES/1000 SF = 37 SPACES 1 ¾ SPACES PER DWELLING UNIT = 62 SPACES	COORDINATES IN FEET (PENNSYLVANIA SOUTH, FIPS ZONE 3702) AND THE DIGITAL FILE SHALL BE IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF A MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY BY SIGNING AND SEALING THAT THE RECORD DRAWINGS SUBSTANTIALLY COMPLY				
TOTAL REQUIRED = 99 SPACES PROVIDED: PARKING GARAGE = 760 SPACES	WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON THE 24"X36" SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE	PRELIMINARY & FINAL LAND DEVELOPMENT & MINOR SUPPLY///////////////////////////////////			
PARKING GARAGE = 760 SPACES SURFACE SPACE = 15 SPACES TOTAL PARKING PROVIDED = 775 SPACES ADA SPACES = 2% OF TOTAL (16 SPACES)	THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CADD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.	MINOR SUBDIVISION PLAN FOR			
BICYCLE PARKING REQUIRED = 4 SPACES BICYCLE PARKING PROVIDED = 6 SPACES 3. THE MAXIMUM NUMBER OF EMPLOYEES PER SHIFT WILL NOT EXCEEDED 50.	 ENGINEERING PERMITS: PRIOR TO ANY WORK WITHIN THE RIGHT OF WAY, PERMITS MUST BE OBTAINED FROM THE CITY ENGINEER'S OFFICE. RETAINING WALLS: THE DESIGN AND DETAILS OF ANY RETAINING WALLS WILL BE PREPARED BY AN ENGINEER EXPERIENCED IN THE DESIGN OF RETAINING WALLS AND LICENSED IN THE 	PERON DEVELOPMENT LLC			
 THE SITE WILL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER. THERE ARE NO WETLANDS WITHIN THE PROPOSED DEVELOPMENT AREA. 	STATE OF PENNSYLVANIA. ALL RETAINING WALL PLANS SHALL BE SIGNED AND SEALED AND SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL. 55. PLAN REVISIONS: IN ORDER TO MAINTAIN CONTINUITY BETWEEN PLAN REVISIONS, ANY	DEVELOPMENT LLC			
6. SUBJECT PROPERTY LIES WITHIN ZONE X ("OTHER FLOOD AREAS") AS SHOWN ON FIRM MAP ENTITLED "FIRM FLOOD INSURANCE RATE MAP, NORTHAMPTON COUNTY, PENNSYLVANIA, (ALL JURISDICTIONS), PANEL 326 OF 355, MAP NUMBER 42095C0326E, EFFECTIVE DATE JULY 16, 2014, PREPARED BY THE FEDERAL MANAGEMENT AGENCY FOR 100-YEAR FLOOD PLAIN ELEVATION.	CHANGES TO A PREVIOUS PLAN SUBMISSION SHALL BE FLAGGED WITH A TRIANGLE. ANY CHANGES NOT FLAGGED MAY BE CONSIDERED NOT APPROVED. FLAGGED CHANGES SHALL BE REFERENCED TO THE APPROPRIATE REVISION DATE IN THE REVISION BLOCK. 56. BY SUBMISSION OF THESE PLANS THE ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE	BLOCK 3A, WARD 4 413 E. 3RD STREET (P6 2 2-13			
 SOIL INFORMATION AS SHOWN ON THESE PLANS WAS TAKEN FROM THE USDA NATIONAL WEB SOIL SURVEY . THE UNDERLYING ROCK FORMATION FOR THIS SITE IS THE ALLENTOWN FORMATION. 	IN COMPLETE COMPLIANCE WITH THE CITY OF BETHLEHEM STORM WATER MANAGEMENT ORDINANCE. 57. THIS LAND DEVELOPMENT PLAN WAS PREPARED IN ACCORDANCE WITH REQUIREMENTS	0204) 415 E. 3RD STREET (P6 2 2-14			
 THE PROPOSED DEVELOPMENT IS LOCATED WITHIN THE CATASAUQUA CREEK WATERSHED, SUBAREAS 57 WITH A RELEASE RATE OF 30/CNDII (NO DETENTION). NO TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS AUTHORIZED BY THE CITY AND/OR 	ESTABLISHED IN THE CITY OF BETHLEHEM SUBDIVISION AND DEVELOPMENT ORDINANCE AND THE ZONING ORDINANCE OF THE CITY OF BETHLEHEM. 58. ALL SHEETS INCLUDED IN THIS LAND DEVELOPMENT PLAN SET ARE TO BE CONSIDERED AS IF RECORDED WITH THE RECORD PLAN.				
NCCD. 21. EXCESS CONSTRUCTION WASTE AND DEBRIS SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF THE PROJECT. UNDER NO CIRCUMSTANCES SHALL SUCH MATERIAL BE ALLOWED TO BE BURIED OR USED AS BACKFILL MATERIAL	 59. THESE GENERAL NOTES APPLY TO ALL SHEETS IN THE SET. 60. PER ORDINANCE NO. 4342 SANITARY SEWER TAPPING FEE TO BE PAID AT A RATE OF \$2,527/EDU. 	CITY OF BETHLEHEM NORTHAMPTON COUNTY			
ALLOWED TO BE BURIED OR USED AS BACKHILL MATERIAL 22. MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH. A. PENNSYLVANIA DEPARTMENT OF TRANSPORTATION "SPECIFICATIONS PUBLICATION 408",	 ALL UTILITY WORK ON POLK ST TO BE COORDINATED WITH CONSTRUCTION OF ADJACENT CHARTER SCHOOL PROJECT TO AVOID DEGRADATION OF NEWLY OVERLAID PAVEMENT. ALL PUBLIC INLETS SHOULD HAVE INLET MARKERS. THE DESIGN OF INLET MARKERS SHALL BE APPROVED BY THE CITY ENGINEER. 	PENNSYLVANIA			
2003; AS SUPPLEMENTED. B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.	 63. ALL CROSSWALKS, STOP BARS, ARROWS, AND "ONLY"S WITHIN THE PUBLIC RIGHT~OF-WAY SHALL BE HOT THERMOPLASTIC. 64. ALL NECESSARY ACCESS POINTS SHALL HAVE KNOX BOXES FOR THE CITY OF BETHLEHEM FIRE 	Colliers 941 Marcon Boulevard, Suite 801 Allentown, PA 18109			
 C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS. D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS. 23. WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE ON FILLMORE STREET, 	DEPARTMENT. 65. CONSTRUCTION ENTRANCE ON 3RD STREET IS NOT TO BE USED FOR THE CONSTRUCTION OF THE GARAGE. DURING THE CONSTRUCTION OF THE RETAIL BUILDING, THE FILMORE AVE GARAGE ENTRANCE WILL BE CLOSED TO RESTRICT PASSENGER VEHICLES FROM ACCESSING THE	Engineering Phone: 610.868.4201 & Design Colliers Engineering & Design, INC. Doing BUSINESS AS MASER CONSULTING			
OWNED AND OPERATED BY THE CITY OF BETHLEHEM WATER DEPARTMENT. PROPOSED FIRE HYDRANT LOCATIONS ARE SUBJECT TO REVIEW AND APPROVAL BY THE CITY'S BUREAU OF WATER AND FIRE DEPARTMENT. ACCORDING TO THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS, AMERICAN WATERWORKS ASSOCIATION	 GARAGE ENTRANCE WILL BE CLOSED TO RESTRICT PASSENGER VEHICLES FROM ACCESSING THE CONSTRUCTION ENTRANCE. ALL TRAFFIC CONTROL TO BE COORDINATED WITH THE CITY. 66. IF THE COMMERCIAL DEVELOPMENT PHASE DOES NOT COMMENCE WITHIN 6 MONTHS OF THE DATE OF ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR THE GARAGE, THEN 	SCALE: DATE: DRAWN BY: CHECKED BY:			
STANDARDS, PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC EPOXY TYPE COATING. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.	LANDSCAPING IN ADDITION TO THE LAWN AREA SHALL BE INSTALLED AT THE FRONT OF THE GARAGE. THE LANDSCAPE SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL CONSTRUCTION IS INITIATED IN THE COMMERCIAL DEVELOPMENT AREA. 67. ANY CHANGE IN THE LOCATION IN THE FIRE DEPARTMENT CONNECTION MUST BE APPROVED	AS SHOWN 9/28/2021 CJK CRR PROJECT NUMBER: DRAWING NAME: 14001490D C-CVER-PHSE-2			
44. SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO EAST 3RD STREET. DISCHARGE SHALL BE TO THE EXISTING SANITARY SEWER IN EAST 3RD STREET, WAIVERS	SHEET TITLE:				
THE FOLLOWING WAIVERS WERE GRANTED BY THE CITY OF BE	COVER SHEET				
 SALDO SECTION 1306.01.10.b) ALLOWING IMPERVIOUS COVE SALDO SECTION 1306.01.10.b) ALLOWING FRONT YARD SETB 		SHEET NUMBER:			







GENERAL NOTES:

- AREA OF 70,813 SF, 1.626 ACRES. 3. <u>APPLICANT</u>:
- PERON DEVELOPMENT LLC C/O ROBERT DEBEER 60 W. BROAD STREET
- SUITE 102 BETHLEHEM, PA 18018
- (681) 764-3247
- OWNER:
- BETHLEHEM PARKING AUTHORITY C/O STEVE FERNSTROM
- 85 W. NORTH STREET
- BETHLEHEM, PA 18018
- (610) 865-7123 LOT 13 AND A MIXED USE BUILDING ON LOT 14
- 6. MAP REFERENCES

- 6. DEED REFERENCES:

- LINES)(NOT PLOTTABLE).

- GPS).
- 8. MAG NAILS SHALL BE SET UPON APPROVAL OF THIS PLAN.
- THE PLANS.
- 11. WATER AND SEWER SERVICE TO BE PUBLIC. 12. ZONE DATA: IR-R INDUSTRIAL REDEVELOPMENT- RESIDENTIAL

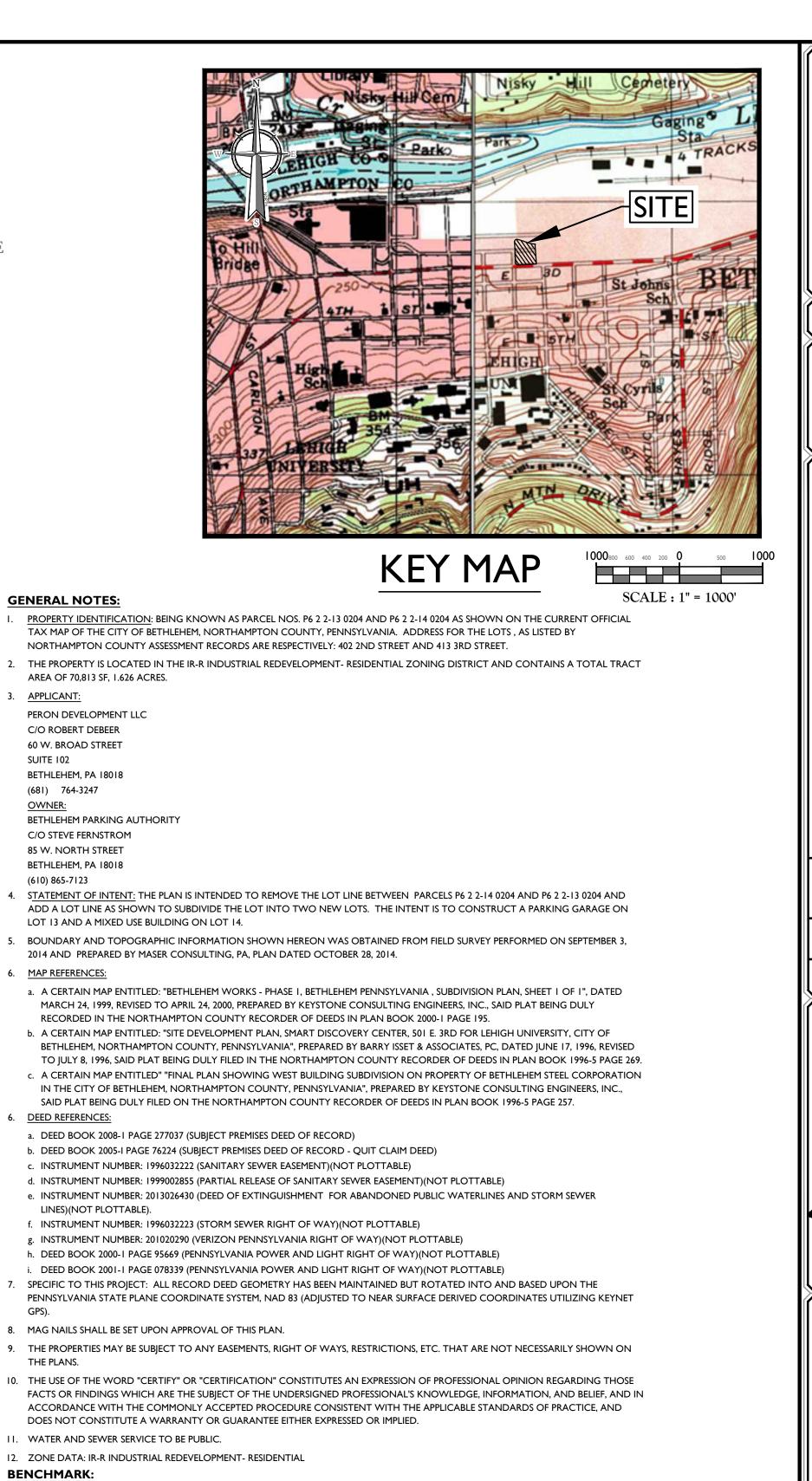
BENCHMARK:

I. PK IN CURB ON SOUTH SIDE OF 3RD STREET TWENTY-THREE FEET WEST OF TRAFFIC SIGNAL BASE AT 3RD & FILLMORE STREETS.

								0204)	
	REQUIRED	EXIS	TING	PROP	OSED		415 E. 3RD	STREET (P6	2 2-14
SE	RETAIL, OFFICE & PARKING STRUCTURE	P6 2 2-13 0204	P6 2 2-14 0204	P6 2 2-14 0204 (415 E. 3RD STREET)	P6 2 2-13 0204 (413 E. 3RD STREET)			0204)	
INIMUM LOT AREA	2,000 SF	20,660 SF	50,153 SF	58,958 SF	11,855 SF	EXISTING LEGEND PROPOSED	CITY O	F BETHLEH	EM
INIMUM LOT IDTH @ BSL	30 Ft	0.474 AC	1.151 AC	1.353 AC 250 Ft	0.272 AC 206.98 Ft	$ \begin{array}{c} $		MPTON COU NSYLVANIA	
RINCIPAL JILDING						RIGHT OF WAY LINE — — — —			
INIMUM FRONT ARD	10 Ft	N/A	N/A	1.01*	1.32*	PROPERTY LINE	Colliers	LEHIGH V/ 941 Marcon B	
INIMUM REAR ARD	10 Ft	N/A	N/A	4.25*	9.37*	— — — — — EDGE OF PAVEMENT —	Comers	Suite 8	01
INIMUM SIDE ARDS	10 Ft	N/A	N/A	0.18*	0.13*	FACE FACE FACE	Engineering	Allentown, P Phone: 610.8	
AX. BUILDING EIGHT (FEET)	200 Ft	N/A	N/A	79 Ft	42 Ft	BACK BACK BACK	& Design	COLLIERS ENGINEERING DOING BUSINESS AS MA	
AVING INIMUM FROM URBLINE	15 Ft	N/A	20.6 Ft	19 Ft	N/A	SIDEWALK	SCALE: DATE: AS SHOWN 9/28,	DRAWN BY: /2021 CJK	CHECKED BY: CRR
<u>ENSITY</u> IN. AVERAGE LOT REA PER WELLING UNIT	1,200 SF	N/A	20.6 Ft	N/A	338.7 SF/ DWELLING UNIT*	x x	PROJECT NUMBER: 14001490D	DRAWING NAME: C-MINR-SUBD-PHSE-2	
DT COVERAGE							SHEET TITLE:		
AX. BUILDING OT) COVER	90%	0.00%	0.00%	66.41%	76.42%	FHA 500 YR FLOODPLAIN LINE FHA	MINOR SL	JBDIVISION	PLAN
AX. IMPERVIOUS		0 SF	0 SF	39,156 SF	9,060 SF				
OVER	90%	1.34%	81.56%	95.09% (W)	83.51% (W)	30 24 18 12 6 0 15 30 60	>		
		276 SF	40,907 SF	56,063 SF	9,900 SF		SHEET NUMBER:		. 1
V) = WAIVER GRANT) = WAIVER REQUIR		8 11, 2014				SCALE : 1" = 30'	4	of 15	<u> </u>

MY COMMISSION EXPIRES:

(SEAL)



NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers

Engineering

& Design

www.colliersengineering.com

right © 2022. Colliers Engineering & Design All Rights Reserved. This dra all the information contained herein is authorized for use only by the party

hom the services were contracted or to whom it is certified. This drawing m

e copied, reused, disclosed, distributed or relied upon for any other pur

without the express written consent of Colliers Engineering & Design

FOR STATE SPECIFIC DIRECT PHONE NUMBERS

VISIT: WWW.CALL811.COM

A REGISTERE

PROFESSIONAL

. RICHARD ROSEBERRY

ENGINEER

No. 46162

LICENSE NOMBER: PE046162R

COLLIERS ENGINEERING & DESIGN, INC.

PRELIMINARY & FINAL

LAND DEVELOPMENT &

MINOR SUBDIVISION PLAN

FOR

PERON

DEVELOPMENT LLC

BLOCK 3A, WARD 4

413 E. 3RD STREET (P6 2 2-13

berrv

ROFESSIONAL ENGINE

C. Richard Ro

INSYLVANIA REGISTE

Doing Business a

ow what's **below.**

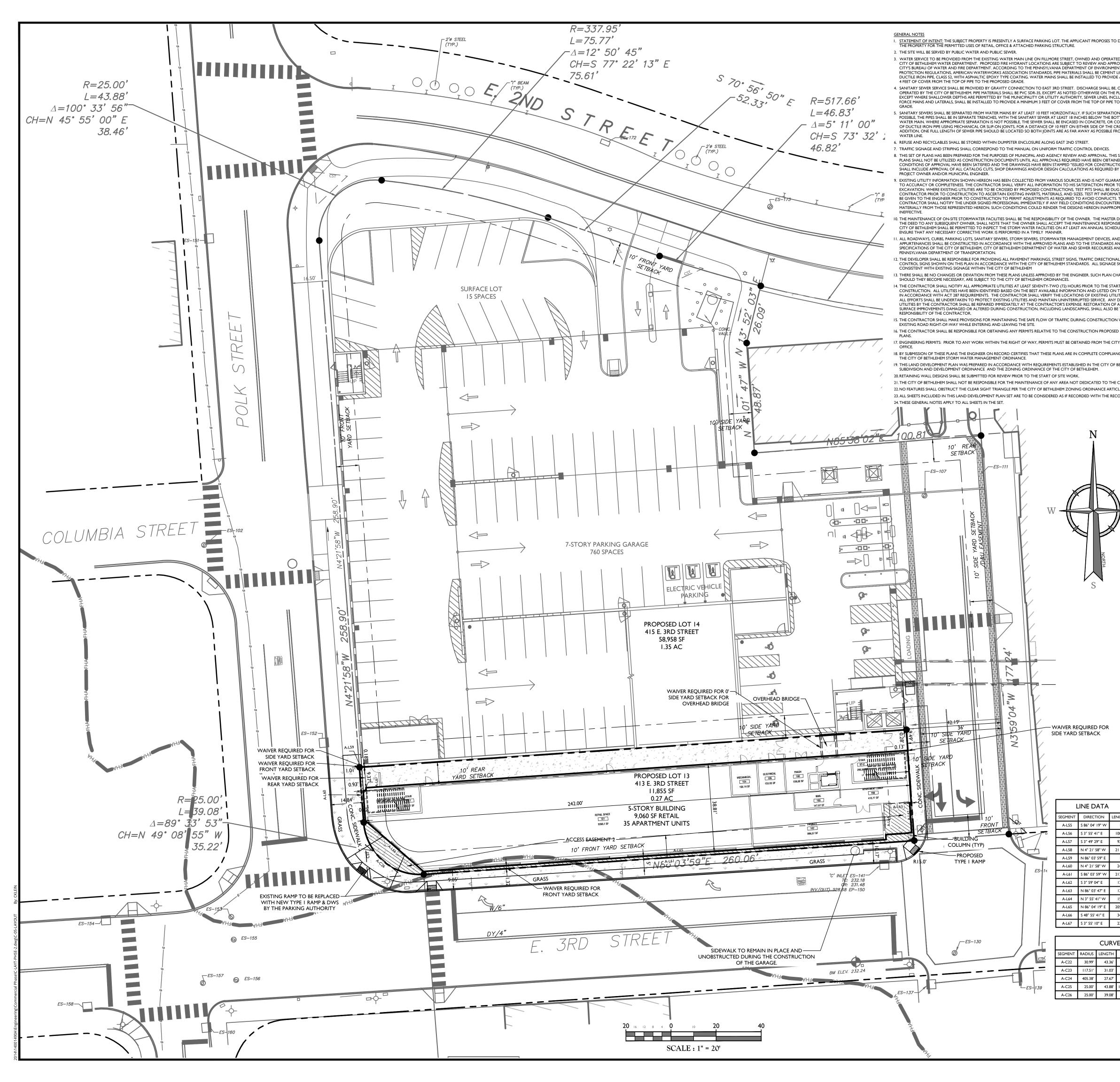
Call before you dig.

MASER

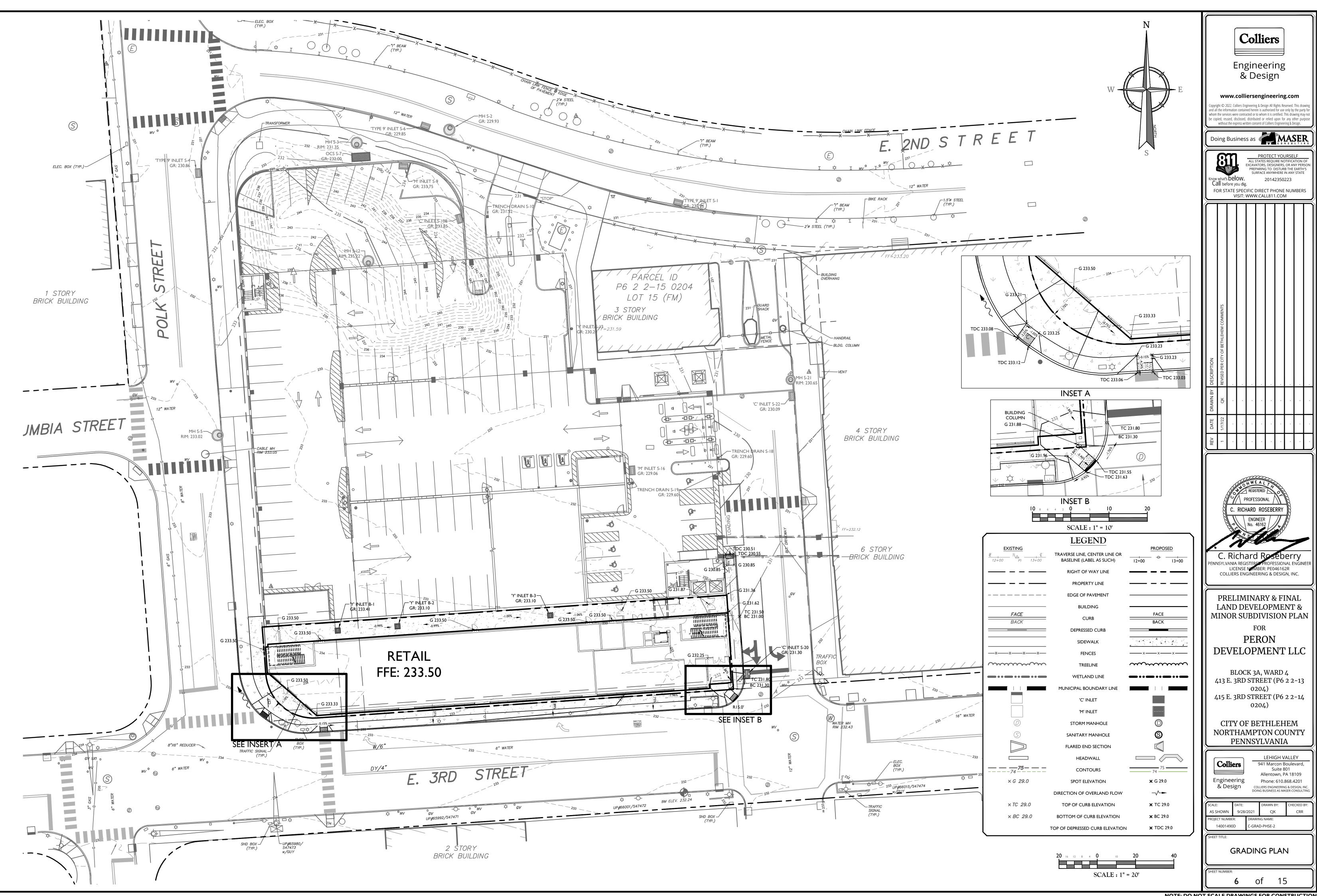
PROTECT YOURSELF EXCAVATORS, DESIGNERS, OR ANY PER

PREPARING TO DISTURB THE EARTH' SURFACE ANYWHERE IN ANY STATE

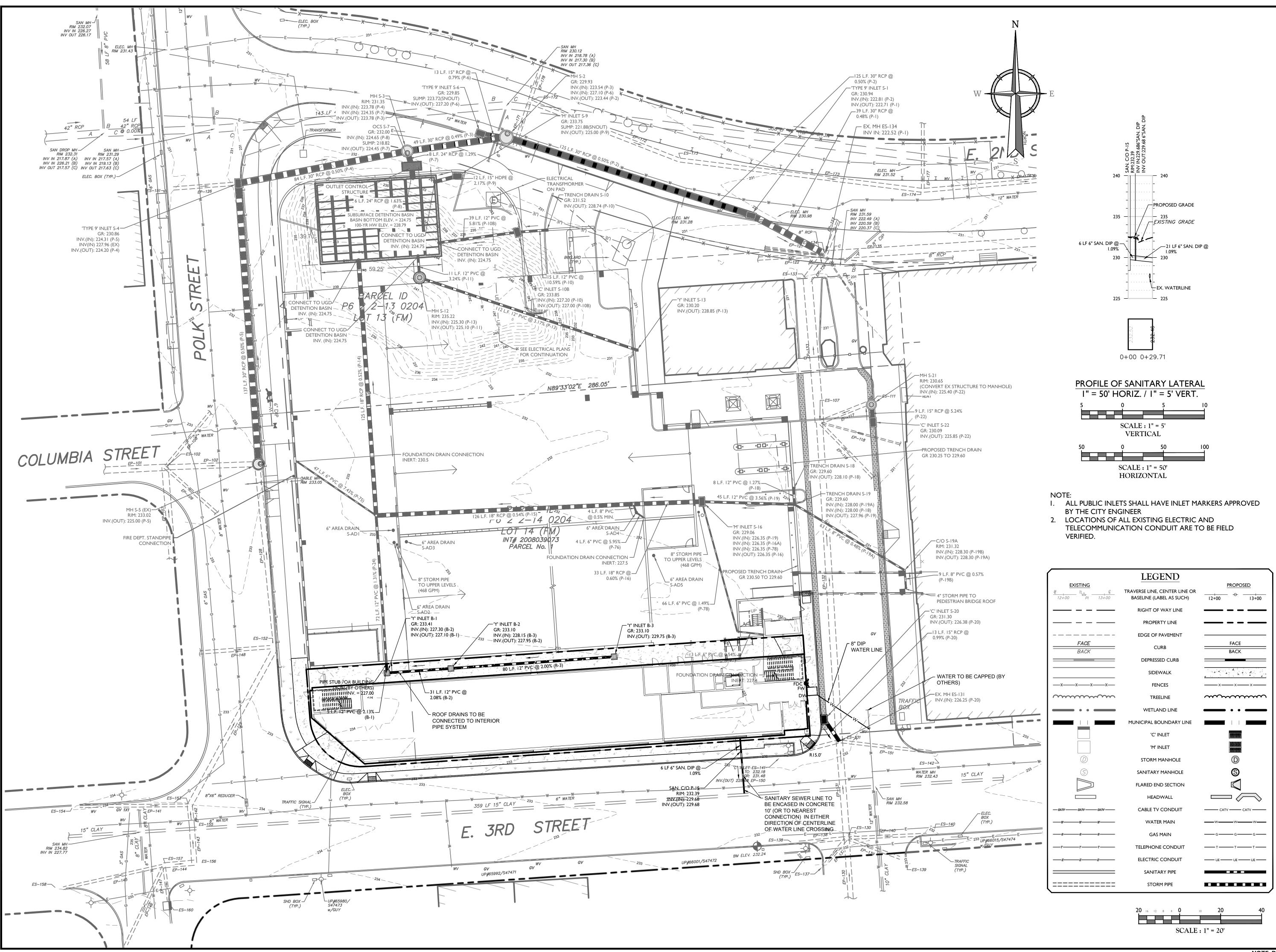
20142350223

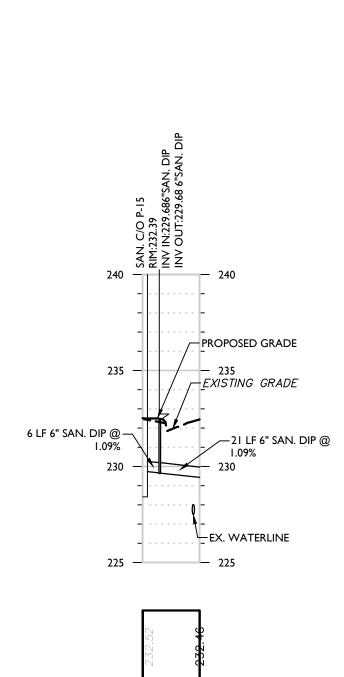


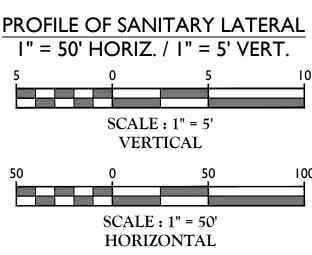
DEVELOP	APPLICANT ACKNOWLEDGEMENT: CORPORATION: PERON DEVELOPMENT LLC	
D BY THE OVAL BY THE	STATE OF/ COUNTY OF	Colliers
NTAL LINED E A MINIMUM	ON THE DAY OF, 20, 20 BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID THE UNDERSIGNED OFFICER, PERSONALLY APPEARED	
owned an Plans. Juding O proposed	WHO ACKNOWLEDGED HIMSELF/HERSELF TO BE THE AND THAT HE/SHE AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE WITHIN PLAN AND ACKNOWLEDGED	Engineering & Design
N IS NOT TTOM OF THE	THAT THE SAME WAS EXECUTED AS THE OFFICIAL PLAN OF IMPROVEMENTS, HIGHWAYS AND PROPERTY SHOWN THEREON AND DESIRED THAT THE PLAN BE RECORDED ACCORDING TO LAW BY SIGNING THE NAME OF THE CORPORATION BY HIMSELF/HERSELF AS	
ONSTRUCTED ROSSING. IN OM THE		www.colliersengineering.com Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing
	IN WITNESS WHEREOF, I HEREUNTO SET MY HAND AND OFFICIAL SEAL.	and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.
SET OF ED, ALL ION". THIS Y THE		
NTEED AS O S BY THE	(NOTARY PUBLIC)	Doing Business as
TION SHALL THE RED DIFFER	MY COMMISSION EXPIRES: (SEAL) CERTIFICATION OF OWNERSHIP (CORPORATION)	PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON
PRIATE OR DEED, AND IBILITIES. THE	I, STEVE FERNSTROM OF BETHLEHEM PARKING AUTHORITY	PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE Know what's below. 20142350223
ULE TO D	BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS EXECUTIVE DIRECTOR DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF PROPERTY	Call before you dig. FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM
ND ID THE L AND	KNOWN AS P6 2 2-13 0204 & P6 2 2-14 0204; THAT THE ABOVE DESCRIBED PROPERTY IS IN PEACEFUL	
ANGES,	POSSESSION OF SAID CORPORATION AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.	
.T OF ANY THESE PLANS TIES AND	BETHLEHEM PARKING AUTHORITY CORPORATION	
DAMAGE TO ALL EXISTING	BY: STEVE FERNSTROM, EXECUTIVE DIRECTOR	
	ATTEST:	
) on the Y engineer's	ENGINEER'S CERTIFICATION	
ICE WITH	I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.	
CITY.	C. RICHARD ROSEBERRY, P.E.	IMENTS
CITY. LE 1318.06 ORD PLAN.	COLLIERS ENGINEERING & DESIGN (DBA MASER CONSULTING) 941 MARCON BOULEVARD, SUITE 801 ALLENTOWN, PA 18109 SEAL	OF BETHLEHEM COMMENTS
	SURVEYOR'S CERTIFICATION:	
	I, ROBERT W. TELSCHOW JR., A REGISTERED LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA; DO	
	HEREBY CERTIFY THAT THE PLAN, PREPARED FROM A FIELD SURVEY PERFORMED SEPTEMBER, 2014, CORRECTLY REPRESENTS THE PROPERTY BOUNDARY OF THE PROPOSED SUBDIVISION OR LAND DEVELOPMENT.	DIT
	ROBERT W. TELSCHOW, P.L.S. (SU075641) DATE COLLIERS ENGINEERING & DESIGN (DBA MASER CONSULTING) 2000 MIDLANTIC DRIVE, SUITE 100 MTL HUBEL NORSE4 DATE	DRAWN BY CIK
١	MT.LAUREL, NJ 08054 RECORDER OF DEEDS:	
E	RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY, PENNSYLVANIA ON	DATE 1/17/22
	, 20, IN MAP BOOK VOLUME, PAGE	
	NORTHAMPTON COUNTY RECORDER OF DEEDS	
	APPROVED BY: BETHLEHEM CITY PLANNING COMMISSION	
	CHAIRPERSON SECRETARY DATE	REGISTERED OF
	REVIEWED: LEHIGH VALLEY PLANNING COMMISSION	C. RICHARD ROSEBERRY
	REVIEWER DATE	ENGINEER No. 46162
		C. Richard Roseberry
		PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER LICENSE NOMBER: PE046162R
		COLLIERS ENGINEERING & DESIGN, INC.
		PRELIMINARY & FINAL
		LAND DEVELOPMENT & MINOR SUBDIVISION PLAN
	LEGEND	FOR
	EXISTING PROPOSED Image: Proposed state stat	PERON
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	DEVELOPMENT LLC
		BLOCK 3A, WARD 4
IGTH 1.18'		413 E. 3RD STREET (P6 2 2-13 0204)
00.38' 92.34'	FACE FACE BACK BACK	415 E. 3RD STREET (P6 2 2-14 0204)
11.45' 1.01'	DEPRESSED CURB	CITY OF BETHLEHEM
24.52' 17.99'	FENCES	NORTHAMPTON COUNTY
17.16' 12.36'		PENNSYLVANIA
15.85' 05.58' 34.25'	••• ••• ••• •••	Colliers LEHIGH VALLEY 941 Marcon Boulevard, Suite 801
23.79'	STALL COUNT	Allentown, PA 18109 Engineering Phone: 610.868.4201
E DATA	ADA ACCESSIBLE STALL	& Design Colliers Engineering & Design, Inc. Doing Business as Maser Consulting
	CHORD DEPRESSED CURB AND ADA RAMP HC V	SCALE: DATE: DRAWN BY: CHECKED BY: AS SHOWN 9/28/2021 CJK CRR
3° 54' 40" S 8	7° 01' 58" W 30.94' DIRECTION OF TRAFFIC FLOW 1° 26' 26" E 27.67' PROPOSED ASPHALT PAVING	PROJECT NUMBER: DRAWING NAME: 14001490D C-LAYT-PHSE-2
	15° 55' 00" E 38.46' 19° 08' 55" W 35.22' PROPOSED CONCRETE PAVING	SHEET TITLE:
	PROPOSED LAWN	DIMENSION PLAN
		SHEET NUMBER:
		5 of 15

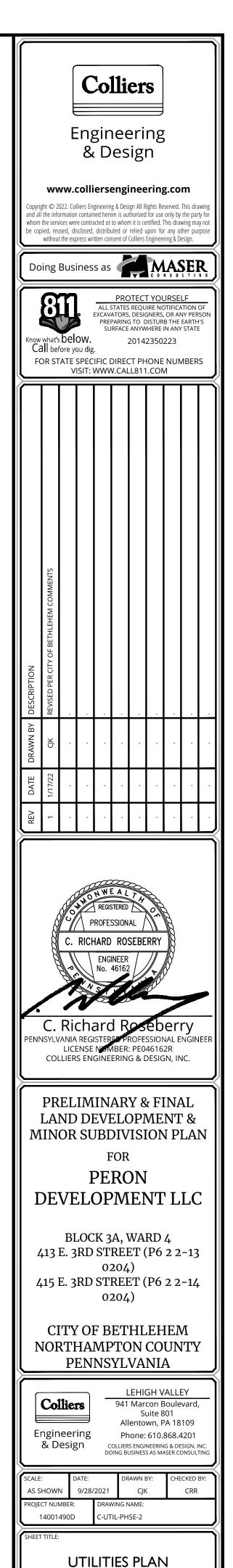


NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.





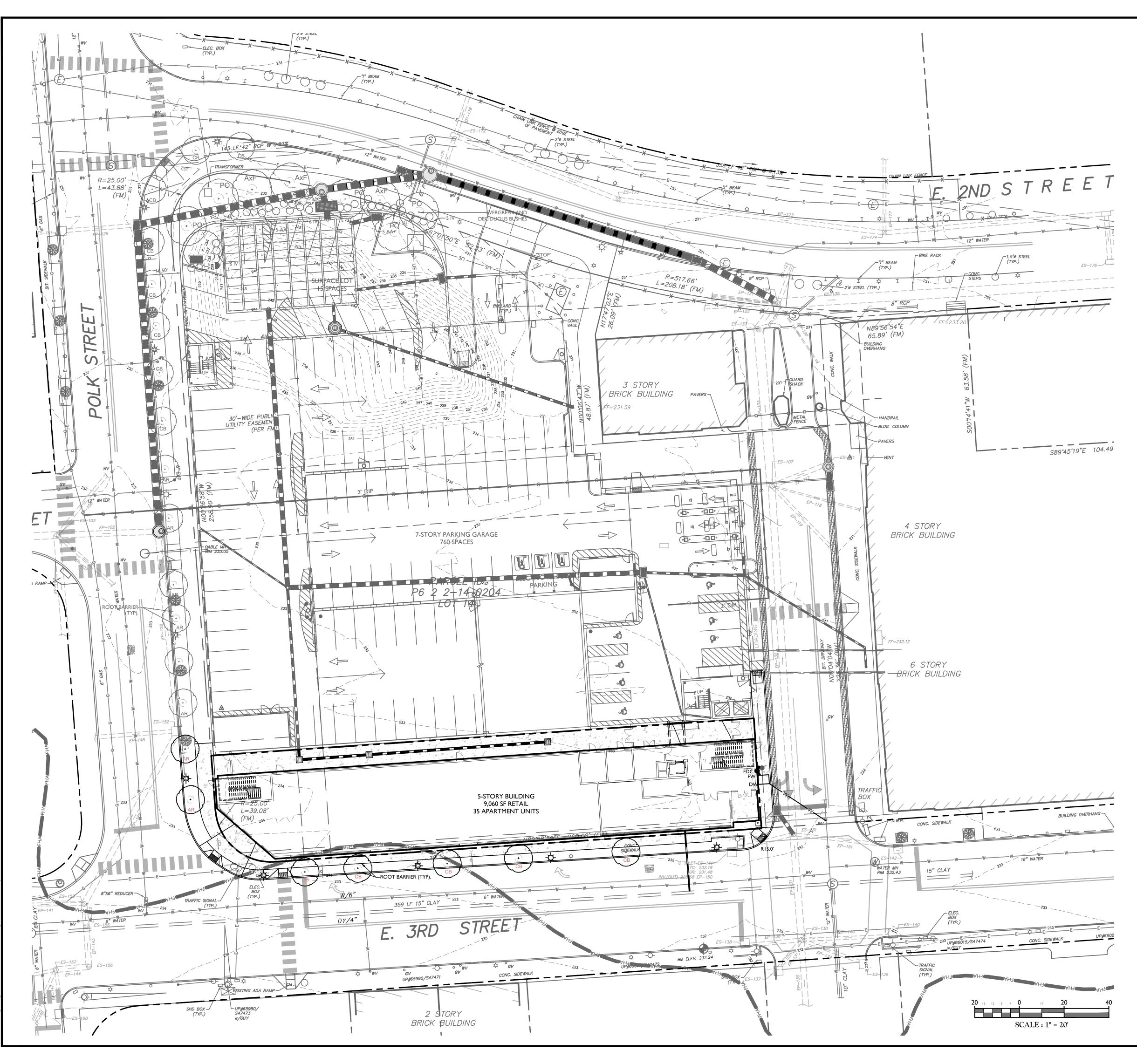




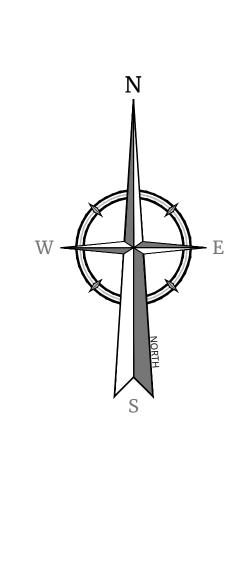
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

of

15



4\14001490A\Engineering\Commercial Phase\C-LAND-PHSE-2.dwg\C-08-LANDSCAPE By: CKLEIN



DECIDUOUS STREET / PARKING LOT TREE SYMBOL & TYPE

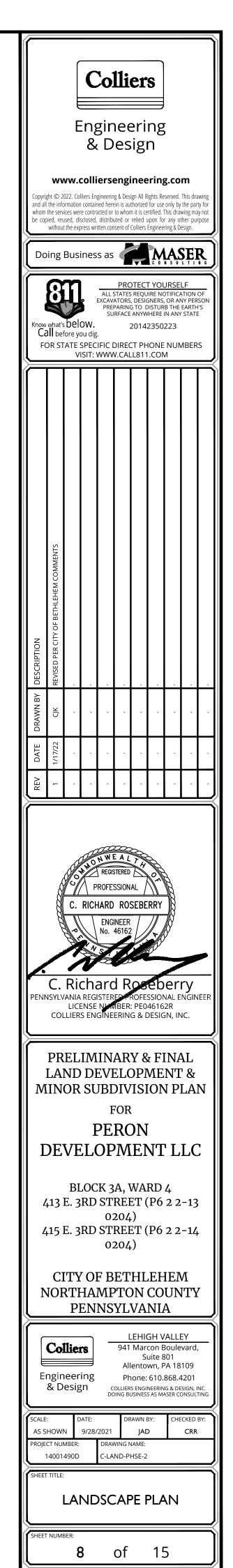
GENERAL LANDSCAPE NOTES I. ALL EXISTING TREES ARE TO BE REMOVED.

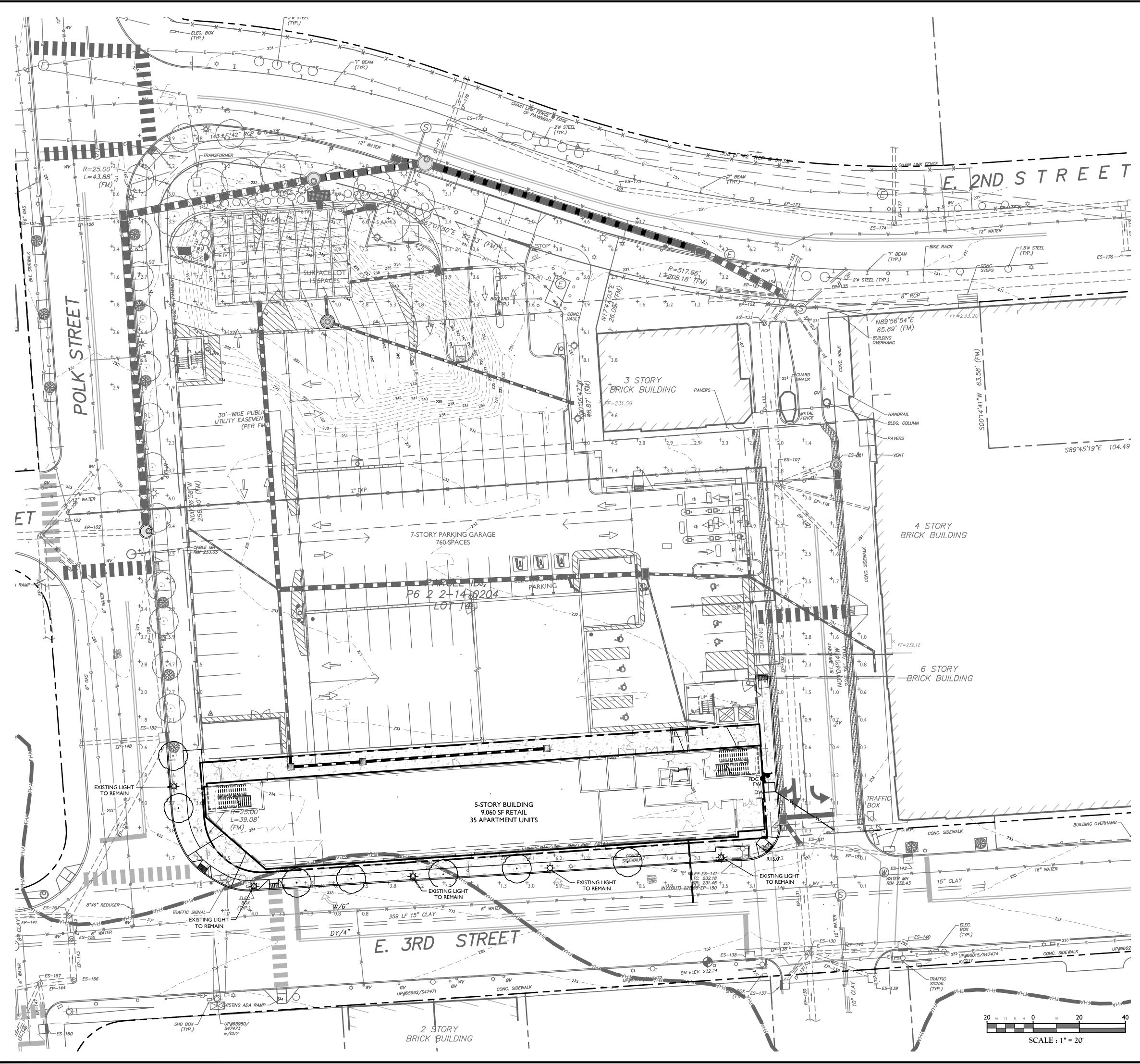
(**+**)

PO

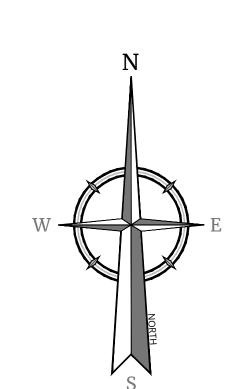
- SEE LANDSCAPE PLANTING SCHEDULE FOR REQUIRED TREE PLANTINGS.
 ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN
- STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN LANDSCAPE AND NURSERY ASSOCIATION.
 STREET AND PARKING LOT TREES SHOULD BE MINIMUM OF 14' IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7' ABOVE THE ROOT BALL. TREES WITH
- AN UPRIGHT BRANCHING HABIT MAY HAVE THE FIRST BRANCH AT 6' ABOVE THE ROOT BALL. 5. ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF
- PRACTICE OF THE CITY OF BETHLEHEM.
 A ROOT CONTROL SYSTEM IS REQUIRED WHEN INSTALLING STREET TREES. THE ROOT BARRIER SHALL BE OF THE BIO-BARRIER TYPE AND A MINIMUM OF 18" WIDE. ANY SUBSTITUTION SHALL BE APPROVED BY THE CITY FORESTER. THE ROOT CONTROL SYSTEM IS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. TREE OPENINGS IN THE SIDEWALK SHALL HAVE THE BIO-BARRIER INSTALLED ALONG THE FACE OF THE TREE OPENING WHICH IS PARALLEL TO THE STREET AND CLOSEST TO THE PROPERTY LINE, OVERLAPPING THE NEAREST TWO CORNERS BY APPROXIMATELY 4". WHERE TREES ARE TO BE PLANTED IN A PARKWAY OR PLANTING STRIP BETWEEN CURB AND SIDEWALK, THE BARRIER SHALL BE INSTALLED ALONG THE SIDEWALK EDGE CLOSEST TO THE CURB AND CENTERED ON THE ROOT SOURCE. THE LENGTH OF THE BARRIER SHALL BE AT A MINIMUM LENGTH EQUAL TO THE SPREAD OF THE TREE CANOPY AT MATURITY PLUS 10'.
 THE MAINTENANCE OF THE LANDSCAPING WITHIN THE
- THE MAINTENANCE OF THE LANDSCAPING WITHIN THE RIGHT-OF-WAY SHALL BE THE RESPONSIBILITY OF THE ABUTTING PROPERTY OWNER.
 SEE SHEET 10 FOR LANDSCAPING SCHEDULE AND PLANTING

DETAILS.		
EXISTING	LEGEND	PROPOSED
₽ TL 12+00 PI 13+0	<u>ℓ</u> TRAVERSE LINE, CENTER LINE 00 OR BASELINE (LABEL AS SUCH)	12+00 · · · · · · · · · · · · · · · · · ·
	- RIGHT OF WAY LINE	— – – —
	- PROPERTY LINE	<u> </u>
	- EDGE OF PAVEMENT	
BACK	CURB	FACE BACK
	DEPRESSED CURB	
XX	– FENCES	xx
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	• TREELINE	
<del></del>	ROADWAY SIGNS	<u> </u>
<b>—</b> • • <b>—</b>	WETLAND LINE	<b>— · · </b>
	MUNICIPAL BOUNDARY LINE	
	'C' INLET	
	'M' INLET	
$\bigcirc$	STORM MANHOLE	
S	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
Ŕ	HYDRANT	X
¢	POLE MOUNTED LIGHT	œ
CATV	- CABLE TV CONDUIT	CATV
W	- WATER MAIN	w
<i>G</i>	– GAS MAIN	G
<i>T</i>	- TELEPHONE CONDUIT	т
——————————————————————————————————————	- ELECTRIC CONDUIT	E
	SANITARY PIPE	





)"Е	104.49	

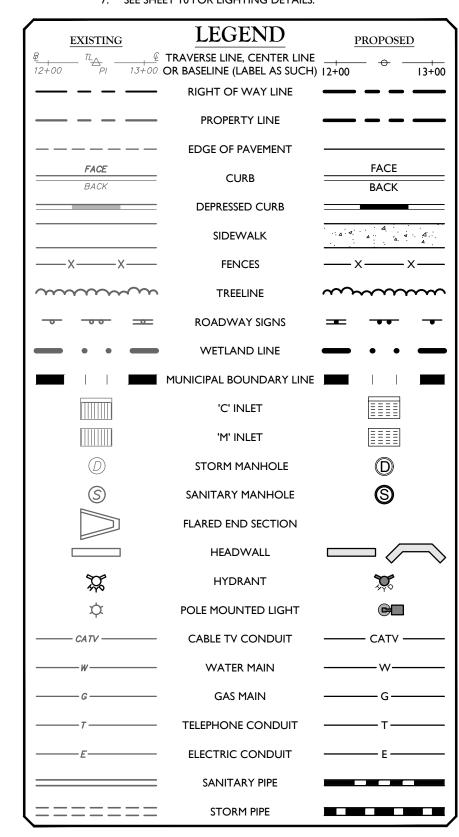


Luminaire Schedule

			Mounting
Symbol	Quantity	Description	
Φ	4	21st Century Town Square: COA15S5J12P11ABGBK - LS29/1CABKH - GWLF200/SCABKH - AB-31-4 RFD8497B - GP15AHPMC 2BS94CHP27 S-67516	POLE
坐	6	BEACON: (2)VP-S/60NB-136/ 5K/T5W/UNV/BCW/SF2/XXX (1)SSS-B-20-40-A-2-B2-XXX -VM1 (1)ASM-TABLET-BCW	SURF.

LIGHTING PLAN NOTES I. THIS PLAN IS TO BE USED FOR LIGHTING PURPOSES ONLY. 2. LUMINAIRES AS DETAILED OR APPROVED EQUAL. 3. LUMINAIRES SHALL BE POLE WITH LED LAMPS AND

- PHOTOCELLS. POLE LOCATIONS ARE APPROXIMATE AND MAY VARY DUE TO SITE CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY POLE LOCATIONS PRIOR TO INSTALLATION TO
- ACCOMMODATE UTILITIES, PAVEMENT, CURB, ETC. 5. EXISTING LIGHTS TO BE RELOCATED AS SPECIFIED ON PLANS.
- WALL PACK LIGHTS TO BE MOUNTED AT A HEIGHT OF 18 FEET AND SHALL INCLUDE FULL CUTOFF LUMENS AND BE GLARE FREE. 7. SEE SHEET 10 FOR LIGHTING DETAILS.



	<b>Colliers</b> Engineering & Design									
and a whon be co	www.colliersengineering.com Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.									
Knov	v what's all be OR ST	s bel	OW. Du dig	ALL EXCAV PRE SU	PRC STATES ATORS PARING IRFACE	, desig g to t ANYW 2014	IIRE NO GNERS DISTUR (HERE 2350	OTIFICA , OR AI B THE IN ANY 223	ATION NY PER EARTH / STATI	ISON I'S E
DATE DRAWN BY DESCRIPTION	1/17/22 CJK REVISED PER CITY OF BETHLEHEM COMMENTS									
REV D.	1/1 1									
PEN	NSYLV	Rie			ED P //BER	AL SEBE	eb ssion 4616	2R		IEER
	PR LA IIN	OR	DI SU	EVI JBI	ELO DIV FOR <b>RC</b>	DPI TSI	ME ION	N'I J P	'& LA	
	BLOCK 3A, WARD 4 413 E. 3RD STREET (P6 2 2-13 0204) 415 E. 3RD STREET (P6 2 2-14 0204)									
			HA EN	MF	PTC YL	DN	CO NL		JTY EY	
SCALL AS S	ingir & D	eesig	<b></b> ■ ing	DC 2021 DRAV		S lento none: is engi usines RAWN I jAJE	uite 8 wn, F 610. NEERIN S AS M. BY:	301 PA 18 868.4 IG & DE ASER CI	109 4201 Esign, I	NC. TING BY:
	T TITLE	LI BER:	GH		NG of	6 Pl	LAI			

I. THIS PLAN SHALL DE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERS DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.

2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.

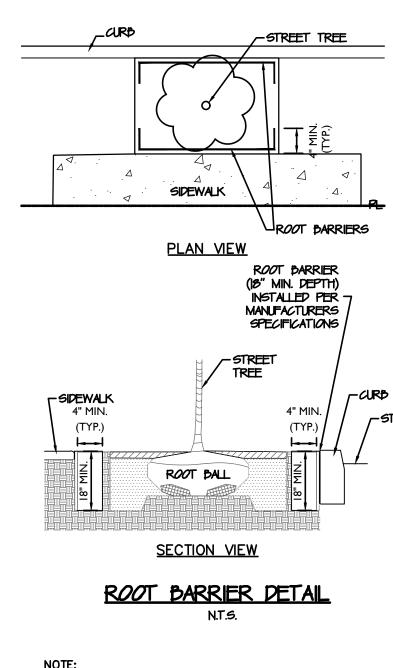
3. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE PLANT PLANT SCHEDULE SHOLD ANY PLANT QUANTITY DISCREPANCIES MATERIAL WILL DE UNACCEPTADLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.

OF THE LANDSCAPE ARCHITECT OR TOWNSHIP OFFICIALS. WRITTEN PROOF OF PLANT MATERIAL UNAVAILADILITY MUST DE DOCUMENTED.

5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT. NO SHADE TREE, STREET TREE, ORNAMENTAL FLOWERING TREE OR EVERGREEN TREE SHALL BE PLANTED CLOSER THAN 10' FROM ANY SIDEWALK, DRIVEWAY, CURD OR UTILITY LOCATION UNLESS SPECIFICALLY DIMENSIONED ON THE LANDSCAPE PLAN.

PLANT SCHEDULE

STREET		BOTANICAL NAME / COMMON NAME	CONT	CAL
AR	2	Acer rubrum 'Armstrong' / Armstrong Red Maple	B¢B	MIN 2.5"Cal (TRIMMED TO 7' ABOVE GRADE)
СВ	5	Carpinus betulus 'Fastigiata' / Pyramidal European Hornbeam	B\$B	MIN 2.5"Cal (TRIMMED TO 7' ABOVE GRADE)



<u>NOTE:</u> BARRIER TO BE INSTALLED (BIO–BARRIER OR APPROVED EQUAL) IN ALL THE TREE WELLS ALONG THE CURB LINE AND ALONG THE EDGE OF THE SIDEWALK PARALLEL TO THE CURB. THE BARRIER SHALL BE WRAPPED A MINIMUM OF 4" INCHES ALONG THE SIDE OF THE TREE WELL.

> retain terminal leader do not prune terminal or branch tips

REMOVE NURSERY TREE WRAP, TAPE, TWINE, TRANSIT GUARDS, ETC. FROM TREE TRUNK

FASTEN STAKES TO TREE USING 3/4" - 2" WIDE, FLAT, WOVEN POLYPROPYLENE MATERIAL SUCH AS ARBOR TIE[™] OR USE 3" WIDE WEBBING STRAPS SECURED TO STAKES WITH HEAVY GAUGE WIRE. DO NOT USE WIRE RUN THROUGH HOSE. ATTACH TREE LOOSELY TO ALLOW FLEXING. REMOVE STAKING MATERIAL AFTER 1 YEAR. STAKE ONLY WHEN NECESSARY USING 2"x2"

HARDWOOD STAKES (OR APPROVED EQUAL) 2 STAKES PER TREE 180° APART, 8' IN LENGTH

AND DRIVEN 30" INTO THE GROUND OUTSIDE THE ROOTBALL -----

SCARIFY SIDES OF PLANTING HOLE -----

> HOLE DEPTH = DEPTH OF ROOTBALL

SET ROOT BALL IN CENTER OF HOLE ON UNDISTURBED OR FIRMLY TAMPED SOIL

OCCLE

B-0

8. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS, GUY WIRES SHALL BE ATTACHED TO THE TREE AT A HEIGHT OF TWO-THIRDS THE HEIGHT OF THE TREE 4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD AND SHOLLD BE LOCATED AT POINTS SO AS TO NOT SPLIT THE TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION TRUNKS OF MULTI-STEM TREES. PROVIDE THREE TREE STAKES PER TREE UNLESS NOTED OTHERWISE, INSTALL ALL PLANT MATERIAL ON UNDISTURDED GRADE. PROVIDE BURLAP WRAPPING WITH A 50% OVERLAP. OUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL.

PRUNED.

## GENERAL PLANTING NOTES

6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" Above THE ELEVATION OF THE ADJACENT CURP. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRINED TO NOT HAVE BRANCHES BELOW

9. BRANCHES OF DECIDUOUS TREES SHALL DE PRUNED DACK DY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE

10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL. PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL DE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE.

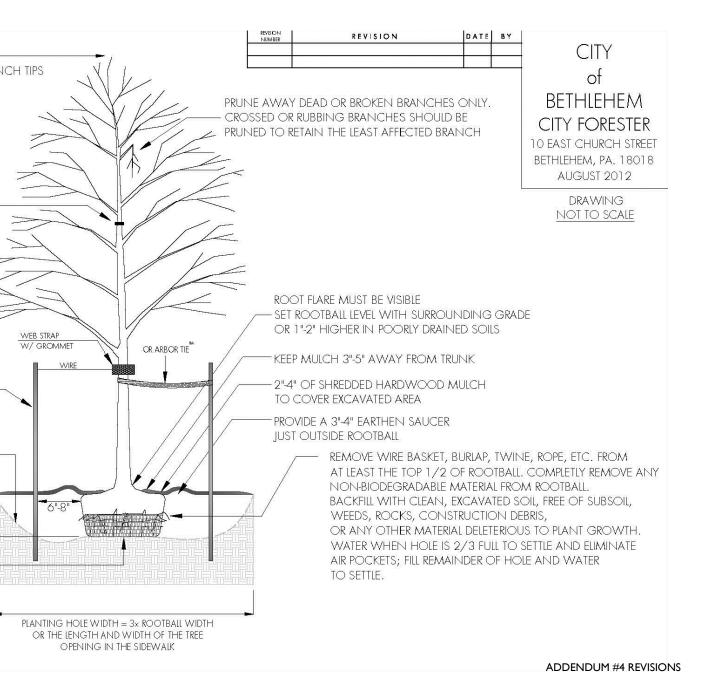
II. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.

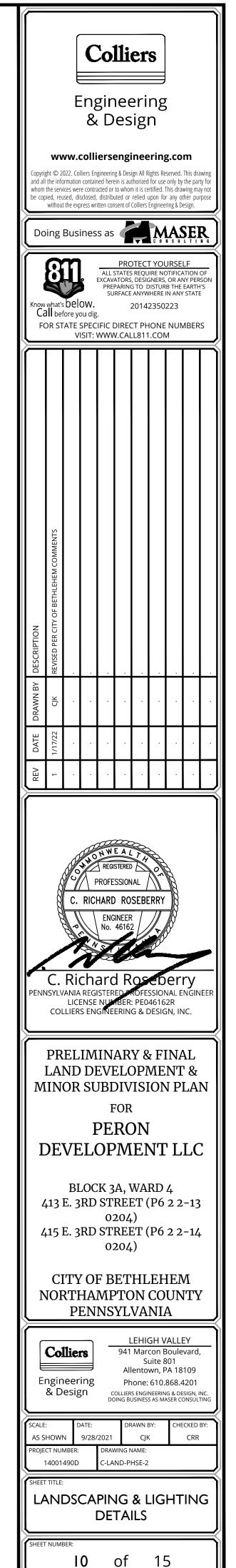
12. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL DE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.

13. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL DE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE CONTRACTOR.

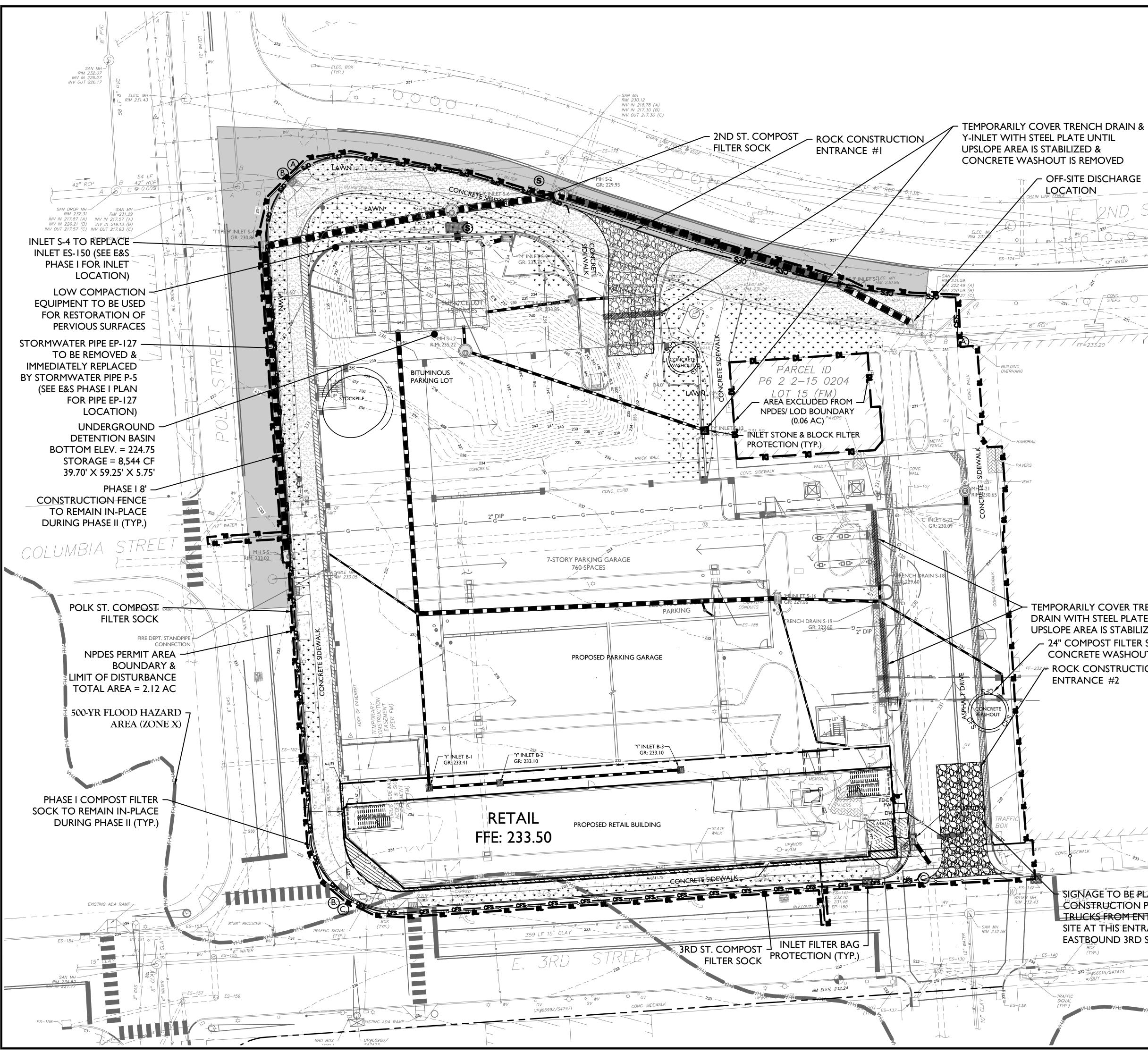
		Parking	Commercial
Existing Trees to be Removed.	Total	Garage Phase	Phase
ROW	6	6	0
On-Site (greater than 8" caliper)	35	23	12
On-Site (less than 8" caliper)	2	2	0
Tree Replacement per Zoning			
ROW (1 tree every 40 feet per IR-R requirement)	24	17	7
On-site (2 per every 8"+ caliper tree removed)	70	46	24
Surface Lot (1 tree every 15 spaces)	1	1	0
Proposed Trees			
ROW	24	17	7
On-site	5	5	0
<b>ET</b> Surface Lot	1	1	0

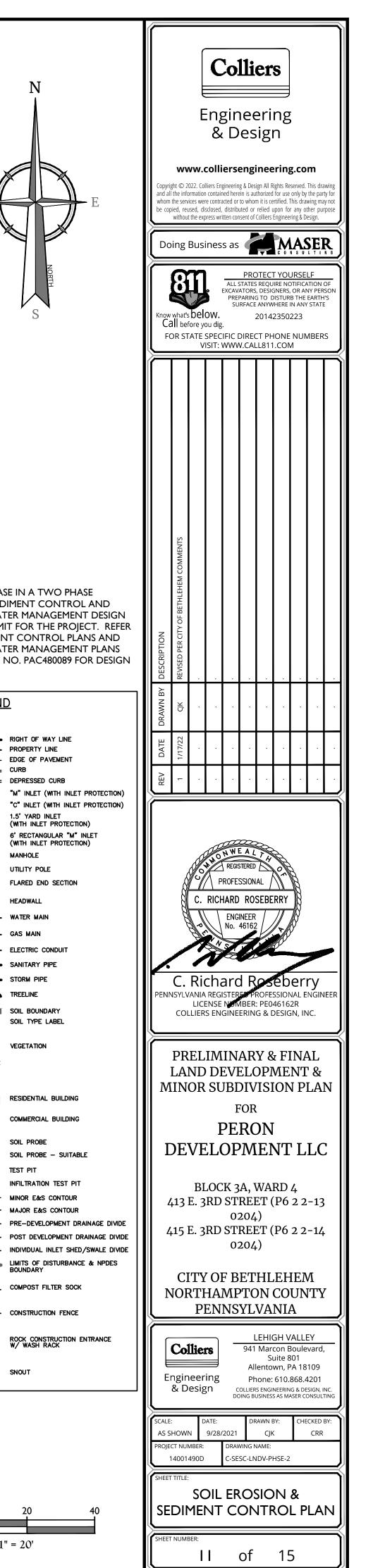
Additional needed trees to be established on the streetscape and other public areas as determined by COB.





of





RE

THIS PROJECT IS THE SECOND PHASE IN A TWO PHASE PROJECT. THE SOIL EROSION & SEDIMENT CONTROL AND POST-CONSTRUCTION STORMWATER MANAGEMENT DESIGN IS TO FOLLOW THE OVERALL PERMIT FOR THE PROJECT. REFER TO APPROVED EROSION & SEDIMENT CONTROL PLANS AND POST-CONSTRUCTION STORMWATER MANAGEMENT PLANS ASSOCIATED WITH NPDES PERMIT NO. PAC480089 FOR DESIGN AND DETAILS.

NOTE:

		<u>E&amp;S LEGEN</u>	<u>ID</u>		DRAWN E CJK								
	<u>EXISTING</u>	PROPOSED			DR/								
			<ul> <li>RIGHT OF WAY LINE</li> <li>PROPERTY LINE</li> </ul>		DATE 1/17/22								
			- EDGE OF PAVEMENT		D/ 1/1								L
		BACK	: CURB : DEPRESSED CURB		- REV								
			"M" INLET (WITH INLET PROTECTION)		<u> </u>								
			"C" INLET (WITH INLET PROTECTION)										
	•	•	1.5' YARD INLET (WITH INLET PROTECTION)										
			6' RECTANGULAR "M" INLET (WITH INLET PROTECTION)				Ð	00		2			
	0	•	MANHOLE			S	1	WE		A.	7		
	-0-	+					$\mathcal{A}$	registe Ofess	L	$\mathcal{N}$	J.		
		Δ	FLARED END SECTION		Ŕ	<u>// //</u>	1						
	Δ	Δ	HEADWALL		Ę	<u>с.</u>							
	W	w	- WATER MAIN		,	g o		ENGINE Io. 46			R		
	G	\$	GAS MAIN			Ale					Ŷ		
EA IS STABILIZED	ε	E					S)	ŧ,	1			-	
POST FILTER SOCK AROUND			<ul><li>SANITARY PIPE</li><li>STORM PIPE</li></ul>		<u> </u>								
ETE WASHOUT (TYP.)			TREELINE	P	ENNSYL								IFF
CONSTRUCTION			SOIL BOUNDARY			LICE	NSE N	ЮMВ	ER: F	PE0461	62R		LL
NCE #2		HaB	SOIL TYPE LABEL			ULLIER:	5 ENGI	INEEF	(ING	& DES	IGN, II	NC.	
	•	-											=
	SHADE TREE	$\mathbf{\nabla}$	VEGETATION		PI	REL	IMI	NA	RY	7 & I	- IN/	AL	
										PM			
					MIN	IOR	SU	BD	IVI	SIO	ΝP	LA	Ν
			RESIDENTIAL BUILDING					FC	)R				
			COMMERCIAL BUILDING				п			NT			
	^		SOIL PROBE					EF					_
			SOIL PROBE - SUITABLE		DE	<b>V</b> E	LC	PI	٧H	EN'	ΓL	LC	,
		TP-I	TEST PIT										
		TP-I/IT	INFILTRATION TEST PIT			BL	OCF	K 3A	., W	/ARI	)4		
		<u> </u>	MINOR E&S CONTOUR		413	E. 3	RD S	STR	ĒΕ′	T (P	522	2-13	,
			MAJOR E&S CONTOUR     PRE-DEVELOPMENT DRAINAGE DIVIDE					020	• •				
			POST DEVELOPMENT DRAINAGE DIVIDE		415	E. 3				Г (Р	522	2-14	•
		. <u></u>	INDIVIDUAL INLET SHED/SWALE DIVIDE					020	94)				
BUILDING OVE		— DL —	LIMITS OF DISTURBANCE & NPDES BOUNDARY		_								
K		~	COMPOST FILTER SOCK							HLE			_
		~~~~			NO					N C		VTY	
		o	CONSTRUCTION FENCE			PI	<u>''</u> NN	ISY	LV	AN	IA		_
		hanna	ROCK CONSTRUCTION ENTRANCE		_		_		١F	HIGH	VALL	FY	
			ROCK CONSTRUCTION ENTRANCE W/ WASH RACK		C	olliei	s	ç		/larcor	Boule		,
STRUCTION PROHIBITING		(\mathbb{S})	SNOUT						Alle	Suite ntown		3109	
KS FROM ENTERING THE		9	31001			neeri Desig				ne: 61			
AT THIS ENTRANCE FROM				- 11	αı	Jesig	,r I			ENGINEEF			
					CALE:		ATE:			WN BY:	CUI	ECKED I	DV.
ВОХ (ТҮР.)					AS SHOV		9/28/20	021	DRAI	CJK	Сп	CRR	
εεεεεεεεε				P	ROJECT NI	JMBER:	0	DRAWIN	IG NA	ME:			_
еееее JP#66015/S47474CONC. SIDEWALK w/GUY				l	1400	1490D	C	C-SESC	-LND	V-PHSE	-2		_
m/ <u>co</u> ,				s	HEET TITL	E:							_
						SC)IL I	ERC	DS	ION	&		
АНТ	20 16 12	8 4 O 10	20 40		SEDI	MEI	NT (CC	N.	TRC)L P	۷LA	N
HT AHT AHT AHT AHT AHT AHT AHT AHT AHT A													=
		SCALE :	1" = 20'	S	HEET NUN				ſ	~	F		
							1	0	f	Ĩ	5		

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

CONSTRUCTION TIMING & SEQUENCE

CONTACT NORTHAMPTON COUNTY CONSERVATION DISTRICT 48 HOURS PRIOR TO BEGINNING

CONSTRUCTION. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWN SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE ALL EXISTING UTILITIES SHOWN ON THE PLAN ARE SHOWN AT APPROXIMATE LOCATIONS. THE NEER DOES NOT GUARANTEE ALL EXISTING UTILITIES ON SITE ARE SHOWN ON THE PLAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UTILITIES AND TO CALL THE PENNSYLVANIA ONE CALL SYSTEM (1-800-242-1776) BEFORE DIGGING. INSTALL ROCK CONSTRUCTION ENTRANCE #1 OFF OF 2ND STREET INSTALL SEDIMENT FILTER SACK INLET PROTECTION ON EXISTING INLETS SURROUNDING THE SITE, LOCATED ALONG FILMORE AND 2ND STREET. INSTALL SEDIMENT FILTER SACK INLET PROTECTION ON EXISTING ON-SITE INLETS. INSTALL CONSTRUCTION FENCING SURROUNDING THE SITE AS SHOWN ON THE PLANS

INSTALL PERIMETER COMPOST FILTER SOCK BARRIERS AS SHOWN ON THE PLAN ANY COMPOST SOCK WHICH HAS BEEN DAMAGED SHALL BE REPAIRED IN ACCORDANCE WITH

- MANUFACTURES RECOMMENDATIONS OR REPLACED WITHIN 24 HOURS
- THE CONTRACTOR SHALL MONITOR THE LENGTH AND SLOPE OF DRAINAGE AREA SILT FENCES, TO ENSURE THAT THE MAXIMUM UPHILL LENGTH FROM A COMPOST FILTER SOCK IS
- BEGIN REMOVAL OF ABOVE GROUND EXISTING ON-SITE FEATURES PER THE PLANS. THIS INCLUDES BUT IS NOT LIMITED TO: WHEEL STOPS, BOLLARDS, METER BOXES, TREES, OVERHEAD WIRES AND ELECTRICAL POLES, FENCES, LIGHT POLES, AND BRICK WALLS.
- BEGIN REMOVAL OF ALL EXISTING ON-SITE HARD SURFACES, I.E. BITUMINOUS PAVEMENT AND
- SIDEWALKS, PER THE PLANS. EXCAVATE TRENCH AND INSTALL STORM SEWER PIPES AND STRUCTURES FROM EXISTING MANHOLE ES-134 TO EXISTING INLET ES-150/ PROPOSED INLET S-4. STORMSEWER PIPES TO BE INSTALLED INCLUDE P-1; P-2; P-3; P-4. STRUCTURES TO BE INSTALLED INCLUDE S-1; S-2; S-3. WORK ROM DOWNSTREAM TO UPSTREAM. DIRECT STORMWATER AWAY FROM OPEN INLETS TO MAINTAIN FLOW TO THE COMPOST FILTER SOCKS.
- REMOVE EXISTING PIPE EP-127 AND IMMEDIATELY FOLLOWING REMOVAL INSTALL PROPOSED PIPE BEGIN REMOVAL OF EXISTING REMAINING STORMWATER SEWER FACILITIES PER THE PLANS. UPON
- REMOVAL OF THE PIPES ANY PREVIOUS CONNECTION POINT WITH THE MAIN SEWER SYSTEM SHOULD
- REMOVE ANY EXCESS EXCAVATED MATERIALS FROM THE SITE AND DISPOSE OF IN AN APPROVED
- UPON COMPLETION OF DEMOLITION, PROCEED WITH PHASE II EROSION & SEDIMENTATION CONTROL
- INSTALL ROCK CONSTRUCTION ENTRANCE WITH # 2 ALONG FILLMORE STREET
- BEGIN CONSTRUCTING THE FOUNDATION FOR THE PROPOSED PARKING GARAGE AND RETAIL SPAC INSTALL UNDERGROUND DETENTION BASIN: INSURE INLET FILTERS ARE IN PLACE TO ELIMINATE SEDIMENT INTO THE BASIN UNTIL THE ENTIRE SITE IS BUILT AND STABILIZED. (ENGINEER TO BE PRESENT DURING THIS ACTIVITY). SEE PCSM PLANS FOR CONSTRUCTION SPECIFICATIONS AND
- a. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER THE PENNSYLVANIA EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL) DURING CONSTRUCTION. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
- b. ENSURE ALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES HAVE BEEN INSTALLED. c. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (O EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
- d. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY ST. EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO EDGE OF THE BED, PER PLAN.
- e. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIB
- f. APPROVED SOIL MEDIA SHOULD BE PLACED OVER UNDERGROUND DETENTION BASIN IN MAXIMUM g. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES
- UNTIL SITE IS FULLY STABILIZED. EXCAVATE TRENCH AND INSTALL REMAINING STORM SEWERS WORKING FROM DOWNSTREAM TO UPSTREAM. DIRECT STORMWATER AWAY FROM OPEN INLETS TO MAINTAIN FLOW TO THE COMPOST FILTER SOCKS.
- INSTALL REQUIRED INLET PROTECTION AND FILTER BAGS IMMEDIATELY AFTER STORM SEWER AND INLETS HAVE BEEN INSTALLED.
- EXCAVATE TRENCH AND INSTALL ALL UNDERGROUND UTILITIES. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN
- BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER. WHICH ACCUMULATES IN THE OPEN TRENCH. WILL BE COMPLETELY REMOVED BY FILTER BAG
- PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS
- BEGIN GRADING OF THE SITE. CONSTRUCT RETAINING WALLS
- . REMOVE ANY EXCESS EXCAVATED MATERIALS FROM THE SITE AND DISPOSE OF IN AN APPROVED
- . BEGIN CONSTRUCTION OF PROPOSED PARKING GARAGE AND ATTACHED BUILDING
- 30. CONSTRUCT PROPOSED PARKING GARAGE ENTRANCE.
- INSTALL LIGHTING POLES AND FIXTURES 2. BEGIN PAVING OF SURFACE PARKING LOT AND FILLMORE STREET
- 5. BEGIN INSTALLATION OF LANDSCAPED AREA.
- 4. ALL BARE EARTH AREAS SHALL BE STABILIZED IMMEDIATELY WITH SEED MIXTURE SPECIFIED ON LANDSCAPE PLAN. BEGIN INSTALLATION OF NEW SIDEWALK.
- 6. PLANT PROPOSED STREET TREES WITHIN SIDEWALK.
- ONCE THE ABOVE IMPROVEMENTS ARE COMPLETED AND THE SITE IS STABILIZED. CONTACT THE COUNTY CONSERVATION DISTRICT FOR PERMISSION TO REMOVE PERIMETER COMPOS FILTER SOCKS AND CONSTRUCTION FENCING. UNTIL THE SITE IS STABILIZED ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED
- PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK; INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. UPON THE RE-ESTABLISHMENT OF VEGETATION ON ALL DENUDED AREAS, ALL THE REMA
- TEMPORARY E&S CONTROLS SHOULD BE REMOVED. ALL AREAS DISTURBED DURING THE REMOVAL PROCESS SHOULD BE IMMEDIATELY STABILIZED. A SITE INSPECTION AND APPROVAL BY THE NORTHAMPTON COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OF THE FINAL E&S DEVICES, NO E&S CONTROLS CAN BE
- TAKEN OUT UNTIL INSPECTION AND APPROVAL BY A LCCD REPRESENTATIVE.
- 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 COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES.

GENERAL NOTES

. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE; THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST. ALL PREVENTIVE AND REMEDIAL WORK, INCLUDING CLEAN OUT REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED. WHERE BMPS ARE FOUND TO FAIL TO ALLEVATE EROSION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE POLLUTION INFORMATION:

A. THE LOCATION AND SEVERITY OF THE BMPS FAILURE AND ANY POLLUTION EVENTS. B. ALL STEPS TAKEN TO REDUCE, ELIMINATE, AND PREVENT THE RECURRENCE OF THE

NON-COMPLIANCE. C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED

E&S PLAN PRESERVES THE INTEGRITY OF RECEIVING STREAM CHANNELS AND MAINTAINS AND PROTECTS PHYSICAL BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAM;

THE EROSION AND SEDIMENT CONTROL PLAN PRESERVES THE INTEGRITY OF THE RECEIVING STREAM CHANNELS, MAINTAINS AND PROTECTS THE PHYSICAL BIOLOGICAL AND CHEMIC QUALITIES OF THE RECEIVING STREAMS, PREVENTS AN INCREASE IN THE RATE OF STORM WATER RUNOFF AND MINIMIZES ANY INCREASE IN STORM WATER RUNOFF VOLUME BY 1) REDUCING THE RATE OF STORM WATER RUNOFF FROM THE SITE TO BELOW THE PRE DEVELOPMENT STORM WATER RUNOFF RATE; 2) PROPOSED WATER QUALITY BMPS (MECHANICAL WATER QUALITY DEVICES AND STREET SWEEPING) WILL IMPROVE THE WATER QUALITY OF STORM WATER RUNOFF FROM THE SITE BY REMOVING POLLUTANTS THROUGH VARIOUS MEANS OF FILTRATION.

MINIMIZING RUNOFF RATE WILL PRESERVE AND PROTECT THE PHYSICAL QUALITIES OF THE RECEIVING STREAM CHANNEL. ADDING WATER QUALITY BMPS WILL PRESERVE AND PROTECT THE CHEMICAL AND BIOLOGICAL QUALITIES OF THE RECEIVING STREAM CHANNEL.

E&S PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:

THE EROSION AND SEDIMENT CONTROL PLAN MAXIMIZES THE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION BY 1) BY MAINTAINING EXISTING DRAINAGE PATHS THAT UTILIZE THE EXISTING MUNICIPAL COLLECTION SYSTEM. NO NEW OUTFALLS ARE PROPOSED. ACCORDINGLY THIS ELIMINATES LINEAR TRENCHING IN ENVIRONMENTALLY SENSITIVE AREAS THAT WOULD HAVE BEEN REQUIRED IF NEW OUTFALLS WERE PROPOSED. . E&S MINIMIZES THE EXTENT OF LAND CLEARING AND GRADING:

THE EXTENT OF EARTH DISTURBANCE HAS BEEN LIMITED TO THE GREATEST EXTENT POSSIBLE IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE EXTENT OF EARTH DISTURBANCE WAS MINIMIZED IN THE PROJECT PLANNING STAGE BY REMOVING THE SURFACE PARKING LOTS AND PROVIDING A PERVIOUS LANDSCAPED AREA. THE PERVIOUS AREA WILL RECEIVE SOIL SUPPLEMENTS TO INCREASE THEIR ABILITY TO ABSORB AND FILTER STORMWATER.

5. E&S PLAN MINIMIZES SOIL COMPACTION: HE EXTENT OF SOIL COMPACTION HAS BEEN LIMITED TO THE GREATEST EXTENT POSSIBLE IN

ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS. NOTES HAVE BEEN ADDED TO THE E&S AND PCSM PLANS DETAILING THAT LOW COMPACTION EQUIPMENT SHALL BE UTILIZED FOR THE RESTORATION OF THE PERVIOUS SURFACES OF THE SITE E&S MINIMIZE IMPERVIOUS AREA:

- HE PROPOSED SITE IS LOCATED IN THE IR-R (INDUSTRIAL/RE-DEVELOPMENT, RESIDENTIAL ZONING DISTRICT THAT ALLOWS 90% IMPERVIOUS COVERAGE. THE PROPOSED SITE IS THE AMOUNT OF IMPERVIOUS PROPOSED IS THE MINIMUM AMOUNT NEEDED FOR THE THAT ALLOWS 90% IMPERVIOUS COVERAGE. THE PROPOSED SITE IS AT 93% CONSTRUCTION OF THE GARAGE FACILITY.
- PROCEDURE FOR MANAGING SOIL, GROUNDWATER AND OTHER POTENTIALLY CONTAMINATED MATERIALS GENERATED OR EXPOSED DURING CONSTRUCTION. AND FOR THE REUSE AND/OR OFF SITE DISPOSAL OF GENERATED MATERIALS:

ALL EARTHWORKS ON SITE SHALL BE IN COMPLIANCE WITH PENNSYLVANIA'S LAND RECYCLING PROGRAM (ACT 2), GENERAL PERMIT NUMBER WAGRO65, & THE BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN. THE CONTRACTOR SHALL BE PROVIDED WITH A COPY OF BETHLEHEM OMMERCE CENTER SOIL MANAGEMENT PLAN & GENERAL PERMIT NUMBER (WMGR065) PRIOR TO CONSTRUCTION.

PROCEDURES FOR ADDRESSING AND RESOLVING UNANTICIPATED ENVIRONMENTAL ISSUES DURING CONSTRUCTION

EXCAVATED SOIL THAT IS VISIBLY STAINED OR PRODUCES ELEVATED PID READINGS (SUSTAINED 10 PPM OR GREATER) WILL BE CONSIDERED POTENTIALLY CONTAMINATED AND STOCKPILED SEPARATELY ON SITE FOR FURTHER ASSESSMENT. ANY EXCAVATED SOIL WHICH IS CONFIRMED O BE CONTAMINATED AT CONCENTRATIONS WHICH EXCEED THE PA DEP CLEAN FILL STANDARI SHOULD BE DISPOSED OFF SITE AT A PERMITTED FACILITY. DISPOSAL MANIFESTS SHOULD BE MAINTAINED. THE STOCKPILED SOIL/FILL SHALL BE PLACED ON POLYETHYLENE SHEETING AND THEN SAMPLED TO DETERMINE ITS DISPOSITION. THE SOIL SHALL BE COMPLETELY COVERED USING POLYETHYLENE SHEETING. SOIL AWAITING ANALYTICAL RESULTS OR AWAITING TRANSPORTATION WILL BE STORED CONTINUOUSLY ON-SITE UNDER POLYETHYLENE SHEETING.

- TRANSPORTATION OF POLLUTANTS POLLUTANTS MAY BE TRANSPORTED EITHER BY SUSPENSION OR IN SOLUTION.
- A. THE GROUNDWATER IN EXCAVATIONS SHALL BE OBSERVED FOR ANY NOTICEABLE SHEEN. B. WATER IN THE EXCAVATIONS SHALL NOT BE DISCHARGED TO THE GROUND SURFACE IF: B.A. STAINING OR PID MEASUREMENTS ABOVE BACKGROUND AIR OBSERVED IN THE
- EXCAVATION B.B.A SHEEN IS PRESENT ON THE WATER SURFACE . IF ANY OF THESE ABOVE CONDITIONS EXIST, THE WATER PUMPED FROM THE EXCAVATIONS WILL BE CONTAINERIZED AND ANALYZED IN ACCORDANCE WITH PA DEP SURFACE WATER AND
- GROUNDWATER QUALITY REGULATIONS AND THE NPDES PERMIT FOR THE PROJECT. D. IF THE WATER MEETS THESE STANDARDS. IT MAY BE DISCHARGED TO THE GROUND SURFA
- AND IF NOT, THE WATER MAY BE DISCHARGED TO THE LOCAL SEWER AUTHORITY UNDER A DISCHARGE PERMIT. . IF THE WATER QUANTITY IS SUCH THAT THE LOCAL SEWER AUTHORITY DISCHARGE PERMI
- REQUIREMENTS WILL BE EXCEEDED OR THE LOCAL SEWER AUTHORITY WILL NOT APPROVE THE DISCHARGE TO A SEWER, IT WILL BE TRANSPORTED OFFSITE FOR PROPER DISPOSAL OR REATED ON SITE VIA A TREATMENT SYSTEM THAT HAS BEEN APPROVED BY THE PA DEP.
- F. RUNOFF FROM SURFACE DISCHARGES SHALL BE CONTROLLED IN ACCORDANCE WITH THE NPDES PERMIT FOR THE PROJECT.
- G. NO DISCHARGES SHALL ENTER A SURFACE WATER BODY WITHOUT THE PROPER PERMITS. H. TRADITIONAL BMP'S SHOULD BE ADEQUATE TO PROTECT RECEIVING WATERS

<u>RECYCLING OR DISPOSAL OF MATERIALS \$102.8 (F)(11)</u>

ALL EARTHWORKS ON SITE SHALL BE IN COMPLIANCE WITH PENNSYLVANIA'S LAND RECYCLING PROGRAM (ACT 2), GENERAL PERMIT NUMBER WMGR065, & THE BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN. THE CONTRACTOR SHALL BE PROVIDED WITH A COPY OF BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN & GENERAL PERMIT NUMBER (WMGR065) PRIOR TO CONSTRUCTION. NORMAL CONSTRUCTION PROCEDURES SHOULD BE FOLLOWED, INCLUDING OSHA REGULATIONS FOR PROTECTION OF CONSTRUCTION WORKERS. IF UNSUITABLE MATERIALS ARE ENCOUNTERED DURING RE-GRADING ACTIVITIES, LVIP AND/OR ITS DESIGNATED REPRESENTATIVE MUST BE CONTACTED MMEDIATELY AND THE PROCEDURES OUTLINED IN THE BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN.

GENERAL EXCAVATION MATERIAL EXCAVATED DURING CONSTRUCTION ACTIVITIES MAY BE UTILIZED AS FILL OR GRADING MATERIAL ON SITE, UNLESS THE MATERIAL IS UNSUITABLE FOR THAT PURPOSE. THE CONTRACTOR SHALL CONSULT THE BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN TO IDENTIFY PROCEDURES TO DETERMINE IF THE MATERIAL IS UNSUITABLE FOR REUSE ON SITE, AND NECESSAR' CTIONS TO PROPERLY MANAGE EXCAVATED MATERIALS DURING FUTURE SITE REDEVELOPMENT ACTIVITIES.

KCAVATION OF SOILS FOR THE PLACEMENT OF FOOTERS OR FOUNDATION REMOVED SOILS SHOULD BE MANAGED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE BETHLEHEM COMMERCE CENTER SOIL MANAGEMENT PLAN. SUITABLE MATERIALS MAY BE STOCKPILED

WITHIN THE PROJECT AREA FOR FUTURE USE AS GRADING AND/OR TILL MATERIAL WITHIN THE CONFINES OF THE PROJECT. IF OWNER HAS EXCESS SUITABLE MATERIAL THAT CANNOT BE USED AS LL AND/OR GRADING MATERIAL ON THE OWNER'S PROPERTY, OWNER MAY TAKE IT TO ANOTHER LOCATION ON THE BCC SITE, DESIGNATED BY LVIP EXCAVATED DEBRIS

IF CONSTRUCTION AND DEMOLITION (C&D) DEBRIS (F.G. REBAR RAILROAD TIES AND STEEL STRUCTURAL MEMBERS) IS EXCAVATED FROM THE GROUND DURING CONSTRUCTION ACTIVITIES, IT WILL E OWNER'S RESPONSIBILITY TO TAKE THAT MATERIAL OFF SITE AND MANAGE IT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. ASPHALT, CONCRETE AND THOSE MATERIALS SPECIFIED IN THE FACILITY'S GENERAL PERMIT ARE NOT CONSIDERED C&D DEBRIS AND MAY BE REUSED ON SITE.

DISPOSAL OF ON-SITE MATERIALS

RESIDUAL WASTE ("WASTE") FROM A REMEDIATION SITE OWNED BY THE PERMITTEE MAY BE USED AS CONSTRUCTION FILL AT AN ADJACENT ACT 2 REMEDIATION SITE, ALSO OWNED BY THE PERMITTEE. ONLY BENEFICIAL USE OF THE FOLLOWING TYPES OF RESIDUAL WASTES RELATED TO THE MANUFACTURING OF IRON AND STEEL IS AUTHORIZED UNDER THIS PERMIT: REFRACTORIES, FOUNDRY SANDS, SLAGS, AIR EMISSION CONTROL SOLIDS, MANGANESE DIOXIDE ORE, CHROMIUM OXIDE ORE, MILL SCALE, AND THE MEDIA ASSOCIATED WITH THEIR EXCAVATION. A LIST OF INDIVIDUAL WASTES COVERED UNDER EACH OF THESE TYPES OF RESIDUAL WASTES IS FOUND IN THE GENERAL PERMIT (WMGR065).

THERMAL IMPACTS

THERMAL IMPACTS WILL BE ADDRESSED BY DETAINING A PORTION SITE RUNOFF UNDERGROUND IN HE POST DEVELOPMENT CONDITIONS AND BY PROVIDING TREES ADJACENT TO PAVED SURFACES.

SILT FENCE SHALL BE INSTALLED PER THE DETAIL SEDIMENT SHALL BE REMOVED FROM SILT FENCES ERNMX-153 WHEN IT REACHES 1/2 THE FENCE HEIGHT OR AS DIRECTED BY THE CONSERVATION DISTRICT OR TOWNSHIP ENGINEER. SILT FENCING WHICH HAS BEEN UNDERMINED OR TOPPED WILL BE REPLACED WITH ROCK FILTER OUTLETS IMMEDIATELY.

COMPOST FILTER SOCK

COMPOST FILTER SOCK SHALL BE INSTALLED PER THE DETAIL. SEDIMENT SHALL BE REMOVED FROM BEHIND FILTER SOCKS AFTER EACH STORM EVENT. WHEN FILTER BERM BECOMES CLOGGED WITH SEDIMENT, THE FILTER SOCK SHALL BE REPLACED WITH NEW COMPOST SOCK. MULCH PER TYPE ACRE

DUST CONTROL

DUST AND OTHER PARTICLES SHALL BE KEPT WITHIN TOLERABLE LIMITS BY USING WATER. APPLICATION SHALL BE AS NEEDED OR AS DIRECTED BY THE TOWNSHIP ENGINEER OR THE CONSERVATION DISTRICT. USE OF CALCIUM CHLORIDE OR OTHER SIMILAR APPROVED AGENTS SHALL BE LIMITED TO ONLY THOSE PARTICULAR SITUATIONS IN WHICH PERIODIC CLEANING AND/OR WELLING IS NOT FEASIBLE DUE 7 CONDITIONS CAUSED BY WEATHER, TRAFFIC, ETC.

AIR POLUTION

BURNING OF TREES, STUMPS, CUTTINGS AND OTHER PERISHABLE MATERIALS WILL NOT BE PERMITTED UNLESS SPECIFICALLY ALLOWED BY THE MUNICIPALITY. THE PROVISIONS OF THE PENNSYLVANIA AIR POLLUTION CONTROL ACT, JANUARY 8, 1990, AS AMENDED TO DATE, WILL GOVERN AND AREA A PART THIS PLAN BY REFERENCE.

OTHER BMPS (SPECIFY)

SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT. <u>ROCK FILTER</u>

ROCK FILTER SHALL BE INSTALLED IMMEDIATELY AND USED IN CONJUNCTION WITH FILTER BARRIER ROCK FILTERS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. CLOGGED FILTER STONE (AASHTO #57) SHOULD BE REPLACED. NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT

PLACING TOPSOIL OR TOPSOIL MIXTURE

PREPARATION OF AREAS TO BE TOPSOILED GRADE THE AREAS TO BE COVERED BY TOPSOIL USING ACCEPTABLE METHODS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE PLACING THE TOPSOIL. REMOVE STONES AND OTHER FOREIGN MATERIAL PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH DEPTH OF 2 INCHES BEFORE PLACING THE TOPSOIL REMOVE STORES AND OTHER FOREIGN MATERIAL 2 INCHES OR LARGER IN DIMENSION. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL

PLACING AND SPREADING TOPSOIL

COMPACT TO A 4-INCH UNIFORM DEPTH \pm 1 1/2 INCHES. COMPACT WITH A ROLLER WEIGHING NOT OVER 120 POUNDS PER FOOT WIDTH OF ROLLER OR BY OTHER ACCEPTABLE METHODS, AS DIRECTED. REMOVE OVERDEPTH TOPSOIL, UNLESS OTHERWISE AGREED UPON IN WRITING. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.

INLET PROTECTION

FILTER BAG INLET PROTECTION; FILTER BAG PROTECTION SHALL BE INSTALLED IMMEDIATELY ON ALL REQUIRED INLETS PER THE PLAN. FILTER BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. FILTER BAGS SHOULD BE CLEANED OR REPLACED WHEN THE BAG IS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING.

STABILIZED CONSTRUCTION ENTRANCE

THE STABILIZED CONSTRUCTION ENTRANCE HAS TO BE CONSTRUCTED PER THE DETAIL. THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

ON-LINE AT WWW.PACODE.COM

1.000 SQ. FT. TONS PER ACRE. 7. MOW AS REQUIRED.

HOSE INSTALLED WILL BE REQUIRED.

SEED TYPE

ANNUAL RYEGRASS

BEEN PERFORMED

STRAW | 3 TONS

3 TONS

HAY

PERFORMEN

PERFORMED.

SEEDING SPECIFICATIONS

WHERE DENUDED AREAS ARE DESIRED TO BE LAWN: PERFORM ALL CULTURAL OPERATION AT RIGHT ANGLES TO THE SLOPE

APPLY LIME ACCORDING TO TEST OR AT THE RATE OF 275 LBS. OF GROUND LIMESTONE 3. APPLY FERTILIZER ACCORDING TO SOIL TEST OR WORK IN TOP 6", 11.5 LBS. OF 100-200-200 C

FT OR OTHER APPROVED MIXTURE 3. COVER GRASS AND LEGUME SEEDS WITH 1/4" OF SOIL WITH SOIL EQUIPMENT, MULCH, USING 3

8. NOTE: WHERE SLOPES EXCEED 25% JUTE NETTING OR OTHER APPROVED (EQUAL) SLOPE STABILIZATION MEASURES SHALL BE UTILIZED. IN ADDITION, THE SEEDING SPECIFICATIONS FOR STEEP SLOPES SHALL BE INCREASED TO INCLUDE 3 LBS/1,000 SQ. FT. OF ANNUAL RYEGRASS FOR RAPID VEGETAL ESTABLISHMENT.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE. . MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON

ALL SLOPES 3:1 AND STEEPER. 3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN. 4. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL

BMPS AFTER EACH RUNOFF 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 SEDIMEN CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS O

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

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. THE CONTRACTOR SHALL NOT ILLEGALLY SEEDING AND SOIL SUPPLEMENTS

THE FOLLOWING SPECIFICATIONS ARE IN ACCORDANCE WITH PENNDOT PUBLICATION #408, SECTION TEMPORARY SEED MIXTURES

% BY WEIGHT PURITY MAX. WEED SEED (PENNDOT FORMULA E) 100 98% 0.15%

APPLY SEED AT A RATE OF 50 LBS. PER ACRE. APPLY STRAW MULCH (SEE MULCH APPLICATION RATES TABLE) APPLY PULVERIZED AGRICULTURAL LIMESTONE AT A RATE OF 1 TON/ACRE UNLESS TESTING HAS

APPLY 10-10 FERTILIZER AT A RATE OF 500 LBS./ACRE UNLESS TESTING HAS BEEN SEEDING SEASON DATES: MARCH 15 TO OCTOBER 15

PERMANENT SEED MIXTURES			
SEED TYPE	% BY WEIGHT	PURITY	MAX. WEED SEED
(PENNDOT FORMULA B)			
PERENNIAL RYEGRASS MIXTURE *	20	98%	0.15%
(LOLIUM PERENNE)			
CREEPING RED FESCUE	30	98%	0.15%
KENTUCKY BLUEGRASS MIXTURE **	50	98%	0.20%
(POA PRATENSIS)			

APPLY SEED AT A RATE OF 105 LBS. PER ACRE APPLY STRAW OR HAY MULCH (SEE MULCH APPLICATION RATES TABLE)

APPLY PULVERIZED AGRICULTURAL LIMESTONE AT A RATE OF 2 TONS/ACRE UNLESS TESTING HAS BEEN PERFORMED APPLY 10-20-20 ANALYSIS COMMERCIAL FERTILIZER AT A RATE OF 680 LBS./ACRE UNLESS TESTING HAS BEEN PERFORMED. APPLY 38-0-0 UREAFORM FERTILIZER AT A RATE OF 250 LBS./ACRE UNLESS TESTING HAS SEEDING SEASON DATES: MARCH 15 TO JUNE 1; AUGUST 1 TO OCTOBER 15

APPLY FLEXTERRA FGM (OR EQUAL) ACCORDING TO MANUFACTURER'S SPECIFICATIONS. * A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT. * A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 25% OF TOTAL BLUEGRASS COMPONEN

PERMANENT SEED MIXTURES	ON STEEP SLC	PES (SLOP	ES EXCEEDING 3:1)
(PENNDOT FORMULA D)		•	•
SEED TYPE	% BY WEIGHT	PURITY	MAX. WEED SEED
TALL FESCUE	70	98%	0.15%
(FESTUCA ARUNDINACEA VAR.	KENTUCKY 21)		
CREEPING RED FESCUE	30	98%	0.15%

APPLY SEED AT A RATE OF 105 LBS. PER ACRE MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED. APPLY PULVERIZED AGRICULTURAL LIMESTONE AT A RATE OF 2 TONS/ACRE UNLESS TESTING HAS BEEN

APPLY 10-20-20 ANALYSIS COMMERCIAL FERTILIZER AT A RATE OF 680 LBS./ACRE UNLESS TESTING HAS BEEN PERFORMED. APPLY 38-0-0 UREAFORM FERTILIZER AT A RATE OF 250 LBS./ACRE UNLESS TESTING HAS SEEDING SEASON DATES: MARCH 15 TO JUNE 1; AUGUST 1 TO OCTOBER 15

PERMANENT SEED MIXTURES FOR SWALE ERNST CONSERVATION SEEDS RAIN GARDEN MIX - ERNMX-180

SEEDING RATE: 15 LBS. PER ACRE (ERNST CONSERVATION SEEDS - 1-800-873-3321, FAX: 814-336-5191, INFOGERNSTSEED.COM) SEEDING SEASON DATES: MAY 15 TO OCTOBER 15 APPLY FLEXTERRA FGM (OR EQUAL) ACCORDING TO MANUFACTURER'S SPECIFICATIONS. THIS MIX SHOULD ONLY BE MOWN DURING THE DORMANT SEASON.

PERMANENT SEED MIXTURE FOR SOIL AMENDMENT /RESTOR ATION AREA

SEEDING RATE: 20 LBS. PER ACRE

(ERNST CONSERVATION SEEDS - 1-800-873-3321, FAX: 814-336-5191, INFOGERNSTSEED.COM) SEEDING SEASON DATES: MAY 15 TO OCTOBER 15 THIS MIX SHOULD ONLY BE MOWN DURING THE DORMANT SEASON.

LICATION RAT	E (MIN.)		
PER 1,000 SQ.FT.	PER 1,000 SQ. YD.	NOTES	
140 LB	1,240 LB	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN	
140 LB	1,240 LB	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE	

UTILITY LINE TRENCH EXCAVATION NOTES

LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY. 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. 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.

6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED. CLEAN FILL NOTES

PROPERTY OWNER /PERMITTEE.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INER' PLACING AND SPREADING TOPSOIL PLACE TOPSOIL ON THE PREPARED AREAS AND, UNLESS OTHERWISE INDICATED, SPREAD AND COMPACT TO A 4-INCH UNIFORM DEPTH ± 1 1/2 INCHESS COMPACT WITH A ROLLER WEIGHING NOT COMPACT TO A 4-INCH UNIFORM DEPTH ± 1 1/2 INCHESS COMPACT WITH A ROLLER WEIGHING NOT FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

> 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 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 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 FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. 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 DISDECTION AND COR DEVIEW OF THE DAST LAND. USE OF THE DEODED VINCOUSTS STATE THE 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 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THIS REGULATIONS ARE AVAILABLE

MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES A ROUTINE 'END OF DAY CHECK' SHALL BE MADE DURING CONSTRUCTION TO MAKE SURE THAT ALL CONTROL MEASURES ARE WORKING PROPERLY. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL PREVENT ACCELERATED EROSION AND SEDIMENTATION. THERE SHALL BE NO ADVERSE DISCHARGE OF THE SEDIMENT OR OTHER SOUND MATERIALS FROM THE SITE AS A RESULT OF CODMUNITY DURINGE. OF STORMWATER RUNOFF.

 APPLY FERTILIZER ACCORDING TO SUID TEST OR WORK IN TOP 0, THE LOC 0, THE LO WORK, INCLUDING CLEAN OUT, REPAIR, REPI RENETTING MUST BE PERFORMED IMMEDIATELY.

BMP OPERATION & MAINTENANCE

COMPOST FILTER SOCK (CFS) PERIMETER CONTROL: SEDIMENT REMOVAL EFFICIENCY: HIGH, THIS DEVICE IS AN ABACT FOR HQ AND EV WATERSHEDS COMPOST FILTER SOCK (CFS) FACILITIES TRAP SEDIMENT BY FILTERING WATER PASSING THROUGH THE CFS BERM AND ALLOWING WATER TO POND, CREATING A SETTLING OF SUSPENDED SOLIDS. FLOWS THROUGH RATES WITH CFS EXCEED VALUES FOR TRADITIONAL SILT FILTER FABRIC FENCE. SINCE CFS FILTERS WATER AT A FOSTER ROTE THAN TRADITIONAL SILT FENCE, WORK AREAS MAY DRAIN FOSTER ALLOWING THE WORK AREA TO DRY OUT FASTER. ACCEPTABLE APPLICATION OF CFS'S IN LIEU OF FILTER FABRIC FENCING:

1. PERIMETER CONTROL.

- 2. ON ROCKY SLOPES. 3. ON FROZEN GROUND
- 4. ON PAVED SURFACES. OR ON HARD. COMPACT GROUND WHERE TRENCHING IS CHALLENGING 5. IN AREAS WHERE TRENCHING IS NOT ALLOWED DUE TO IT CAUSING ADDITIONAL SEDIMENT DISTURBING ACTIVITIES.
- 6. AROUND AREA DRAINS OR INLETS LOCATED IN A 'SUMP' 7. ABOVE AND BELOW EXPOSED AND ERODIBLE SLOPES.
- B. WITHIN AREAS OF HIGH SHEET EROSION, AND ON STEEP SLOPES UP TO AND EXCEEDING A 2:1 SLOPE . AROUND SENSITIVE TREES WHERE TRENCHING OF SILT FENCE IS NOT BENEFICIAL FOR TREE
- SURVIVAL OR MAY UNNECESSARILY DISTURB ESTABLISHED VEGETATION. 10. WITHIN SENSITIVE ENVIRONMENTAL AREAS, WHERE MIGRATION OF AQUATIC LIFE, INCLUDING TURTLES. SALAMANDERS AND OTHER AQUATIC LIFE IS IMPEDED BY THE USE OF SILT FENCE.

GENERAL SPECIFICATIONS 1. SOCK FABRIC SHALL MEET STANDARDS OF E&S MANUAL TABLE 4.1; AND COMPOST SHALL MEET THE STANDARDS OF E&S MANUAL TABLE 4.2. 2. PRIOR TO INSTALLATION COMPOST MATERIAL MUST BE TESTED THAT IT MEETS THE STANDARDS

- OF E&S MANUAL TABLE 4.2 AND DOCUMENTED PROOF MUST BE SENT TO LEHIGH COUNTY CONSERVATION DISTRICT (LCCD 3. REFER TO MANUFACTURER SPECIFICATIONS AND GUIDELINES FOR COMPLETE INFORMATION AND
- SPECIFICATIONS ON THE USE OF THE CFS. 4. CFS MAY BE USED IN ANY AREA REQUIRING SEDIMENT OR EROSION CONTROL WHERE RUNOFF IS IN THE FORM OF SHEET FLOW OR IN AREAS THAT FILTER FABRIC FENCE IS NORMALLY CONSIDERED ACCEPTABLE.

5. CFS SHOULD REMAIN IN PLACE AND BE MAINTAINED UNTIL FINAL SITE STABILIZATION AS DEFINED BY THE EROSION CONTROL PLAN IS ACCOMPLISHED.

- NSTALLATION: 1. WHERE REQUIRED BY PROPRIETARY PRODUCT SPECIFICATIONS, CONTRACTOR IS REQUIRED TO BE A CERTIFIED INSTALLER OF THE CFS PRODUCT THAT IS BEING UTILIZED. 2. INSTALL AT LOCATIONS AS DESIGNATED ON THE EROSION CONTROL PLANS AS APPROVED BY
- THE CONSERVATION DISTRICT.
- 3. HEAVY VEGETATION SHOULD BE REMOVED PRIOR TO INSTALLING THE SOCK. TRENCHING IS NOT REQUIRED FOR INSTALLATION OF CFS. 4. IN EXTREME CONDITIONS (2:1 SLOPES), OR WHEN SHEET FLOW FLOWS INCLUDE OFF-SITE
- DRAINAGE WHICH CROSSES THE WORK AREA, A SECOND CFS SHALL BE INSTALLED AT THE TOP OF THE SLOPE IN ORDER TO DISSIPATE ADDITIONAL FLOWS. (REFER SOCK SIZE INDICATIONS IN THE DRAINAGE CHART) 5. FILTER FABRIC FENCE EQUIVALENCE:
- A) 8" CFS MAY BE USED IN LIEU OF 18" FILTER FABRIC FENCE, ONLY ON CONSTRUCTION OF SINGLE FAMILY LOTS FOR LEVEL OR NEARLY LEVEL AREAS WHERE MINIMAL PROTECTION IS REQUIRED, AND DRAINAGE AREA TO THE SOCK IS L4 ACRE OR LESS THAT ARE TRIBUTARY TA A SEDIMENT BASIN OR SEDIMENT TRAP.
- B) 12" CFS MAY BE USED IN LIEU OF STANDARD 18" FILTER FABRIC FENCE, FOR LEVEL OR NEARLY LEVEL AREAS WHERE MINIMAL PROTECTION IS REQUIRED. C) 18" CFS MAY BE USE IN SEVERE AREAS IN LIEU OF 30" REINFORCED WIRE BACKED FILTER FABRIC FENCE, SUPER SILT FENCE, OR OTHER TYPES OF SILT FENCE REINFORCED
- TO CREATE GREATER PENDING AREA. D) 24" &: 32" CFS MAY BE USED IN LIEU OF SUPER SILT FENCE.
- 6. STAKING: A) STOKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE CFS ON MINIMUM 10 FT
- CENTERS, USING 2 IN X 2 IN X 3 FT WOODEN STOKES. B) CFS INSTALLED ON PAVEMENT AREA, WHERE STOKING IS NOT FEASIBLE, SHALL BE SECURED WITH CONCRETE BLOCK, PLACED ON DOWNGRADE SIDE, AT SOME SPACING REQUIRED FOR STOKE INSTALLATION.
- C) STAKING DEPTH FOR SAND AND SILT LOOM SOILS SHALL BE 12 INCHES, AND 8 INCHES FOR CLAY SOILS. . LEVEL CONTOUR:
- A) CFS SHOULD BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA (AT EXISTING LEVEL GRADE), PERPENDICULAR TO SHEET FLOW.
- B) INSTALL CFS AT EXISTING LEVEL GRADE TO ASSIST IN DISSIPATING FLOW INTO SHEET FLOW RATHER THAN CONCENTRATED FLOWS. C) DO NOT INSTALL CFS IN SUCH A MANNER THAT CONCENTRATES RUNOFF OR CHANNELS
- WATER.
- D) SHEET FLOW OF WATER SHOULD BE PERPENDICULAR TO THE CFS AT POINT OF IMPACT AND RELATIVELI

PUMPED WATER FILTER BAG:

CONSTRUCTION DETAIL #3-16.

BMP

SILT SOCK

SILT FENCE

CONSTRUCTION

ENTRANCE

INI FT

PROTECTION

UMPED WATER

FILTER BAG

ROCK FILTER

OPERATION AND MAINTENANC

- 8. FLAT SLOPES: A) WHERE POSSIBLE, INSTALL CFS AT A DISTANCE OF 5' OR GREATER AWAY FROM THE TOE OF THE SLOPES TO MAXIMIZE SPACE AVAILABLE FOR SEDIMENT DEPOSIT. B) WHEN A MINIMUM DISTANCE OF 5' IS NOT AVAILABLE DUE TO PHYSICAL RESTRICTIONS, A
- SECOND ROW OF CFS MAY BE REQUIRED. 9. FLOW AROUND ENDS: A) BOTH TERMINAL ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT.
- B) ENDS OF THE CFS MUST BE ADEQUATELY STAKED AND SECURED TO PREVENT MOVEMENT DURING HIGH FLOW EVENTS. 10. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE CFS, FILLING THE
- SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE. IMPROVING FILTRATION AND SEDIMENT RETENTION. 11. CFS MAY BE USED IN DIRECT FLOW SITUATIONS WITHIN ENGINEERED RUNOFF CHANNELS NOT
- EXCEEDING 3 FEET IN DEPTH. 1B" OR 24" CFS MAY BE USED FOR ENGINEERED CHANNEL FILTRATION. CFS SHALL BE STOKED AND SECURED IN ACCORDANCE WITH STAKING GUIDELINES TO PREVENT MOVEMENT.
- 12. CFS MAY NOT BE USED IN WETLANDS; OR WITHIN REGULATED PERENNIAL, EPHEMERAL, OR INTERMITTENT STREAMS AND WATERWAYS WHERE STRICTLY PROHIBITED.

FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS PRIOR TO DISCHARGING TO SURFACE WATERS. THEY MAY ALSO BE USED TO FILTER WATER PUMPED FROM THE SEDIMENT STORAGE AREAS OF SEDIMENT BASINS AND SEDIMENT TRAPS. HE MAXIMUM PUMPING RATE FOR ANY BAG IN USE OR PROPOSED FOR USE ON A SITE SHOULD RE AVAILABLE AT THE SITE AT ALL TIMES DURING PUMPING OPERATIONS. PUMPING RATES WILL ARY DEPENDING ON THE SIZE OF THE FILTER BAG, AND THE TYPE AND AMOUNT OF SEDIMENT DISCHARGED TO THE BAG. FILTER BAGS SHOULD BE INSTALLED ACCORDING TO THE DETAILS SHOWN IN STANDARD

END OF WORK DAY

SEDIMENT DEPOSITED

ROADWAYS SHALL BE REMOVE

AND RETURNED TO THE CONSTRUCTION SITE

ONE THICKNESS AND FINIS

ELEVATION SHALL BE CONSTANT

MAINTAINED TO THE SPECIFIED

DIMENSIONS BY ADDING ROCI

IF ANY PROBLEM IS DETECT

PUMPING SHALL CEASE

MMEDIATELY AND NOT RESUM

UNTIL THE PROBLEM IS

FILTER BAGS SHALL BE REPLAC

WHEN THEY BECOME 1/2 FULL (

SEDIMENT

- BMP OPERATION & MAINTENANCE (CONT)
- PUMPED WATER FILTER BAG MAINTENANCE & INSPECTION: . A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAI PURPOSES SHALL BE PROVIDED.
- FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH
- LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA. AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER
- STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5% CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
- 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. 9. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
- 10. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL
- CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. COMPOST FILTER SPECIFICATIONS:
- . FOR PROPRIETARY CFS PRODUCTS, REFER TO MANUFACTURER INFORMATION FOR COMPLETE MATERIAL SPECIFICATIONS ON COMPOST FILLER MATERIAL. NON-COMPOSTED PRODUCTS WILL NOT BE ACCEPTED. MATERIAL SHALL BE RELATIVELY FREE (<1% BY DRY WEIGHT) OF INERT OR FOREIGN MAN MODE MATERIALS.
- 3. COMPOST (FILTER MEDIA) SHOULD BE A WELL DECOMPOSED, WEED-FREE ORGANIC MATTER DERIVED FROM AGRICULTURE, FOOD, STUMP GRINDINGS, AND YARD OR WOOD/BARK ORGANIC MATTER SOURCES. . WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS
- ORE NOT ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX. 5. THE COMPOST SHALL BE PRODUCED USING AN AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS, INCLUDING TIME AND TEMPERATURE DATA INDICATING EFFECTIVE WEED SEED, PATHOGEN AND INSECT LARVAE KILL
- 6. THE COMPOST (FILTER MEDIA) SHALL BE FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. TEST METHODS FOR THE ITEMS BELOW SHOULD FOLLOW USCC IMECC GUIDELINES FOR LABORATORY PROCEDURES. GENERAL CRITERIA:
- A) ORGANIC MATTER CONTENT BO% TO 100% (DRY WEIGHT BASIS) B) ORGANIC PORTION - FIBROUS &: ELONGATED C) PH - 5.5 TO 8.0
- D) MOISTURE CONTENT 35% TO 55% E) PARTICLE SIZE - 98% PASS THRU 1" SCREEN
- F) SOLUBLE SALT CONCENTRATION 5.0 DS MAXIMUN 8. A COPY OF AN APPROVED REPORT AND CERTIFICATION WHICH VERIFIES THAT THE COMPOST FILLER HAS BEEN MANUFACTURED IN ACCORDANCE WITH STANDARD CFS SPECIFICATIONS SHALL BE KEPT ON FILE AND BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.
- MAINTENANCE &: INSPECTION:
- 1. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS. . WHERE CFS IS BREACHED BY EXCAVATION FOR INSTALLATION OF UTILITIES. THE AREA OF THE BREACH SHALL BE REPAIRED ACCORDINGLY, OR PROVIDED WITH A RACK FILTER OUTLET. 3. IF THE CFS IS DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR: OF ALTERNATELY DAMAGED AREA SHALL BE REMOVED AND PROVIDED WITH A ROCK FILTER OUTLET. 4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN
- 24 HOURS OF INSPECTION. 5. INSPECTIONS SHOULD VERIFY THAT THE CFS ARE MAINTAINING THEIR SHAPE AND ORE PRODUCING ADEQUATE HYDRAULIC FLOW-THROUGH. THE CONTRACTOR SHALL MAINTAIN THE CFS
- IN A FUNCTION CONDITION AT ALL TIMES.
- 6. IF PENDING BECOMES EXCESSIVE, ADDITIONAL CFS MAY BE REQUIRED TO REDUCE EFFECTIVE SLOPE LENGTH OR SEDIMENT REMOVAL MAY BE NECESSARY. 7. CFS SHALL BE INSPECTED UNTIL AREA ABOVE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED
- 8. THE CONTRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE CFS WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE CFS, OR WHEN AS DIRECTED BY THE CONSERVATION DISTRICT OR MUNICIPAL ENGINEER. ALTERNATIVELY, WHEN PERMITTED BY THE CONSERVATION DISTRICT AND MUNICIPAL ENGINEER. A NEW CFS CAN BE PLACED ON TOP OF AND SLIGHTLY BEHIND THE ORIGINAL ONE CREATING MORE SEDIMENT STORAGE CAPACITY WITHOUT SOIL DISTURBANCE.
- 9. CFS SHALL BE MAINTAINED UNTIL DISTURBED AREA ABOVE THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED. 10. SHEET FLOW AND RUNOFF SHOULD NOT EXCEED HEIGHT OF CFS CAPACITY IN MOST STORM EVENTS. IF OVERFLOW OF THE CFS IS A POSSIBILITY, LARGER CFS SHOULD BE INSTALLED, OR OTHER POSSIBLE SEDIMENT CONTROL BMP'S MAY BE NECESSARY. ALTERNATIVELY, A SECOND SET OF CFS MAY BE CONSTRUCTED OR USED IN COMBINATION WITH COMPOST BLANKETS TO PREVENT SEDIMENT FROM MIGRATING.
- . BIODEGRADABLE CFS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE CFS SHAL BE REPLACED AFTER 1 YEAR; AND POLYPROPYLENE CFS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

REMOVA . UPON STABILIZATION OF THE TRIBUTARY AREA, THE FILTER SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED.

FERTILIZER ARE REQUIRED FOR VEGETATION ESTABLISHMENT.

AFTER STORM EVENT

DAMAGED SOCKS SHALL BE REPAIRED

24 HOURS OF INSPECTION.

FILTER OUTLET

FILTER BAGS SHOULD BE CLEANED

FLOODING OR BYPASSING OF THE

INLET

IF ANY PROBLEM IS DETECTED.

PUMPING SHALL CEASE IMMEDIATELY

IS CORRECTED.

AND NOT RESUME UNTIL THE PROBLEM

LTER BAGS SHALL BE REPLACE

WHEN THEY BECOME 1/2 FULL OF

SEDIMENT

INITIATED IMMEDIATELY AFTER THE

INSPECTION

NEEDED REPAIRS SHOULD

THE ENGINEER.

E&S BMP MAINTENANCE & INSPECTION SCHEDULE

WEEKLY

MAGED SOCKS SHALL BE REPAIR

ACCORDING TO MANUFACTURER'S

24 HOURS OF INSPECTION.

INDERMINED OR TOPPED SHALL BE

FILTER OUTLET

FILTER BAGS SHOULD BE CLEANED

HALF FULL OR WHEN FLOW CAPACITY

FLOODING OR BYPASSING OF THE

INLET

NEEDED REPAIRS SHOULD B

INSPECTION

THE REDEVELOPMENT AUTHORITY OF BETHLEHEM SHALL OWN, OPERATE, AND MAINTAIN ALL STORM WATER AND EROSION & SEDIMENT CONTROL BMPS.

ALL EROSION AND SEDIMENT CONTROL, INSPECTION, MAINTENANCE AND REPAIRS SHOULD BE DOCUMENTED. THE INSPECTION LOG WILL BE MAINTAINED BY THE APPLICANT'S SITE MANAGER. THE LOG SHOULD BE AVAILABLE FOR REVIEW AND INSPECTION AT THE SITE AT ALL TIMES.

APPLICANT'S SITE MANAGER. THE LOG SHOULD BE AVAILABLE FOR REVIEW AND INSPECTION AT THE SITE AT ALL TIMES.

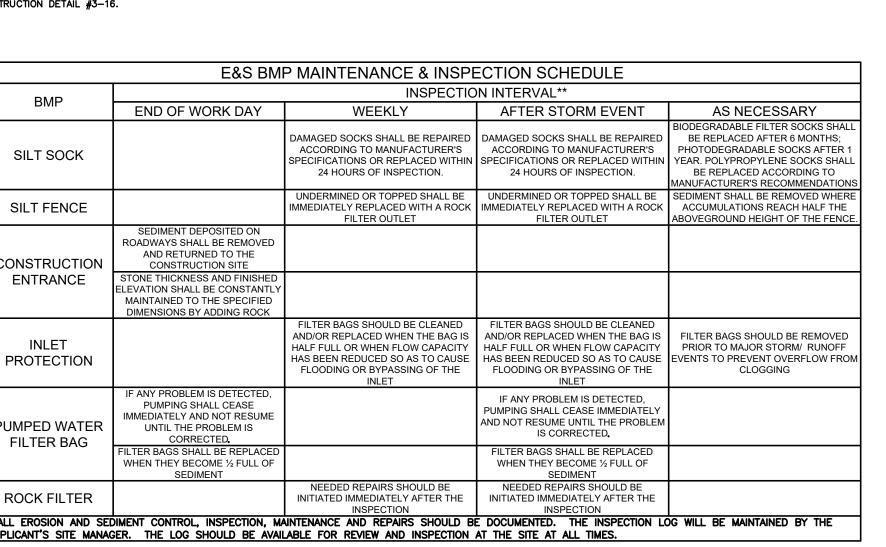
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE CONTROL FACILITIES DURING CONSTRUCTION.

INITIATED IMMEDIATELY AFTER THE

INSPECTION INTERVAL*

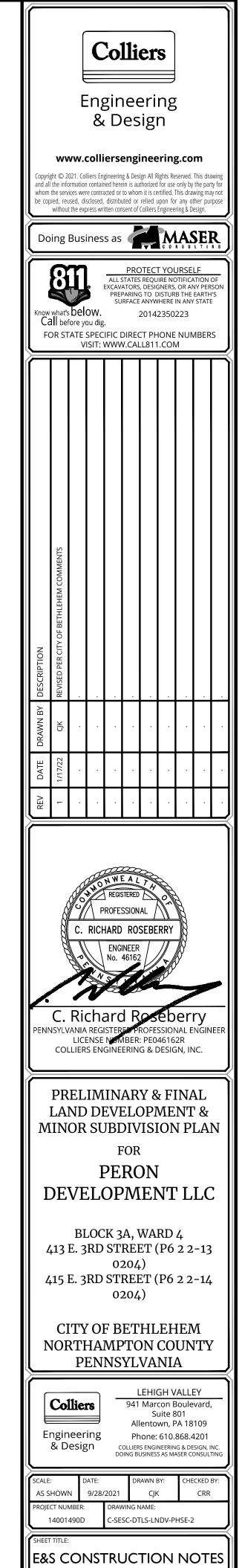
2. STAKING SHALL BE REMOVED WHEN CFS IS NO LONGER OPERATIONAL. 3. IF THE CFS IS SPECIFIED ONLY AS A TEMPORARY SHORT TERM EROSION CONTROL MEASURE, UPON STABILIZATION OF THE SITE AS DEFINED BY THE EROSION CONTROL PLAN, THE MESH IS CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT. CFS COMPOST MAY BE DISPERSED WITH A LOADER. RAKE. BULLDOZER OR OTHER DEVICE TO BE INCORPORATED II THE SOIL OR LEFT ON TOP OF THE SOIL FOR FINAL SEEDING TO OCCUR.

- 4. NON BIO-DEGRADABLE MESH NETTING MATERIAL SHALL BE COLLECTED AND DISPOSED OF IN NORMAL TRASH CONTAINER AS A CONSTRUCTION WASTE. IN CASES WHERE BIODEGRADABLE OR PHOTODEGRADABLE PRODUCTS ARE USED, THEY MAY BE LEFT ON SITE AT THE DIRECTION OF
- 5. IF THE CFS IS TO REMAIN AS A PERMANENT LONG TERM FILTER, OR PORT OF THE NATURAL LANDSCAPE, IT SHOULD BE SEEDED AT TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION. THE APPROPRIATE SEED MIX MUST BE DETERMINED BY THE DESIGN ENGINEER. FOR PERMANENT AREAS, APPLY REQUIRED SEEDING TO THE CFS TO ALLOW VEGETATION TO BE ESTABLISHED DIRECTLY IN THE CFS AND IMMEDIATELY IN FRONT AND BACK



STANDARD E&S PLAN NOTES

- 1 ALL FARTH DISTURBANCES INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION. 2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING
- CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING
- NTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO
- MPLEMENTATION. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- . CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL HE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN
- 7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN. 8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND
- SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT. 10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED,
- OR DISCHARGED AT THIS SITE. 11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED OCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL 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. ALL PUMPING SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOTS
- SPECIFY LOT NUMBERS) ONTO (SPECIFY ROAD NAMES). VEHICLES AND EQUIPMENT MAY NLY ENTER AND EXIT THE CONSTRUCTION SITE VIA A STABILIZED ROCK CONSTRUCTION ENTRANCE. 15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED
- PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. THE OPERATOR WILL MAINTAIN AND AKE AVAILABLE TO LEHIGH COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. 16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIE FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND B
- MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 3. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOI AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL 20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL
- REQUIREMENTS OR CODES. 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN HICKNESS
- 22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED CCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING
- FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN N THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF
- 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR OTHER PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED MTHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE TABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 8. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR MOTHER MOVEMENTS.
- 29. EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS MITHIN THE TRIBUTARY AREAS OF THOSE BMPS. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY HE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT
- 30, 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 PRIOR TO REMOVAL/CONVERSION OF THE E&S
- 31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BURNES. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 32. 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. 33. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN
- CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION. 34. IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE LEHIGH COUNTY CONSERVATION DISTRICT WILL BE MADE AWARE OF THE SINKHOLE DISCOVERY IMMEDIATELY. 35. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN
- IS PROPERLY AND COMPLETELY IMPLEMENTED. 36. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS THE 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.
- 37. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS. 38. ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO
- ANY EARTHMOVING ACTIVITY. 39. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN 40. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR
- GROUNDWATER SYSTEMS. 41. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- 42. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF HE DAMAGED PROPERTY.
- 43. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

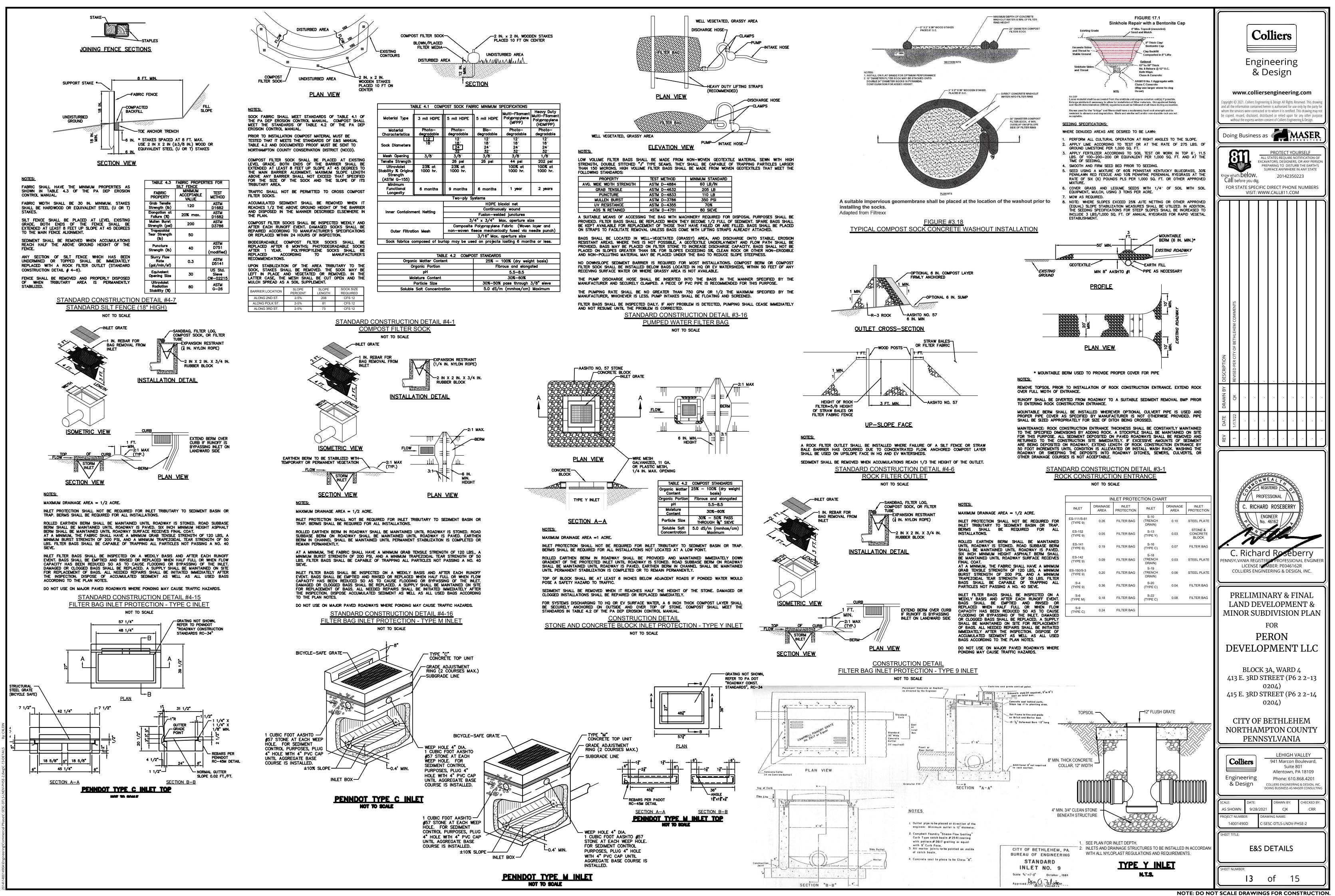


12

of

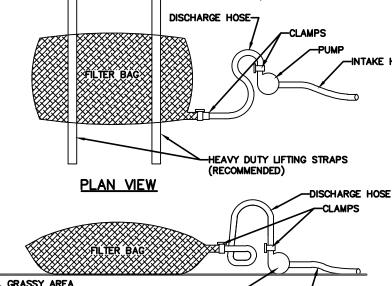
15

OF THE. SOCK AT A MINIMUM DISTANCE OF 5 FEET. VEGETATION ON AND AROUND THE CFS WILL ASSIST IN SLOWING DOWN RUNOFF FOR FILTRATION. NO OTHER SOIL AMENDMENTS OR

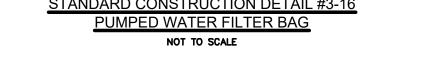


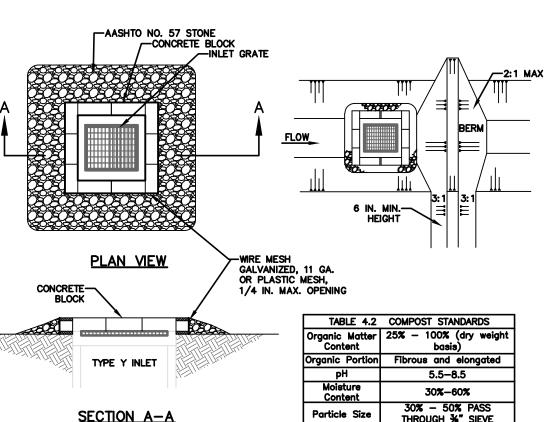
ST SOCK FAB	RIC MINIMUM S	PECIFICATIONS	
5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Photo– degradable	Bio- degradable	Photo– degradable	Photo- degradable
12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
3/8"	3/8"	3/8"	1/8″
26 psi	26 psi	44 psi	202 psi
23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
9 months	6 months	1 year	2 years
Two-ply Systems			
	HDPE bi	axial net	
	Continuou	sly wound	
	Fusion-weld	ed junctures	
3/	'4" x 3/4" M	lax. aperture si	ze
Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)			
3/16" Max. aperture size			

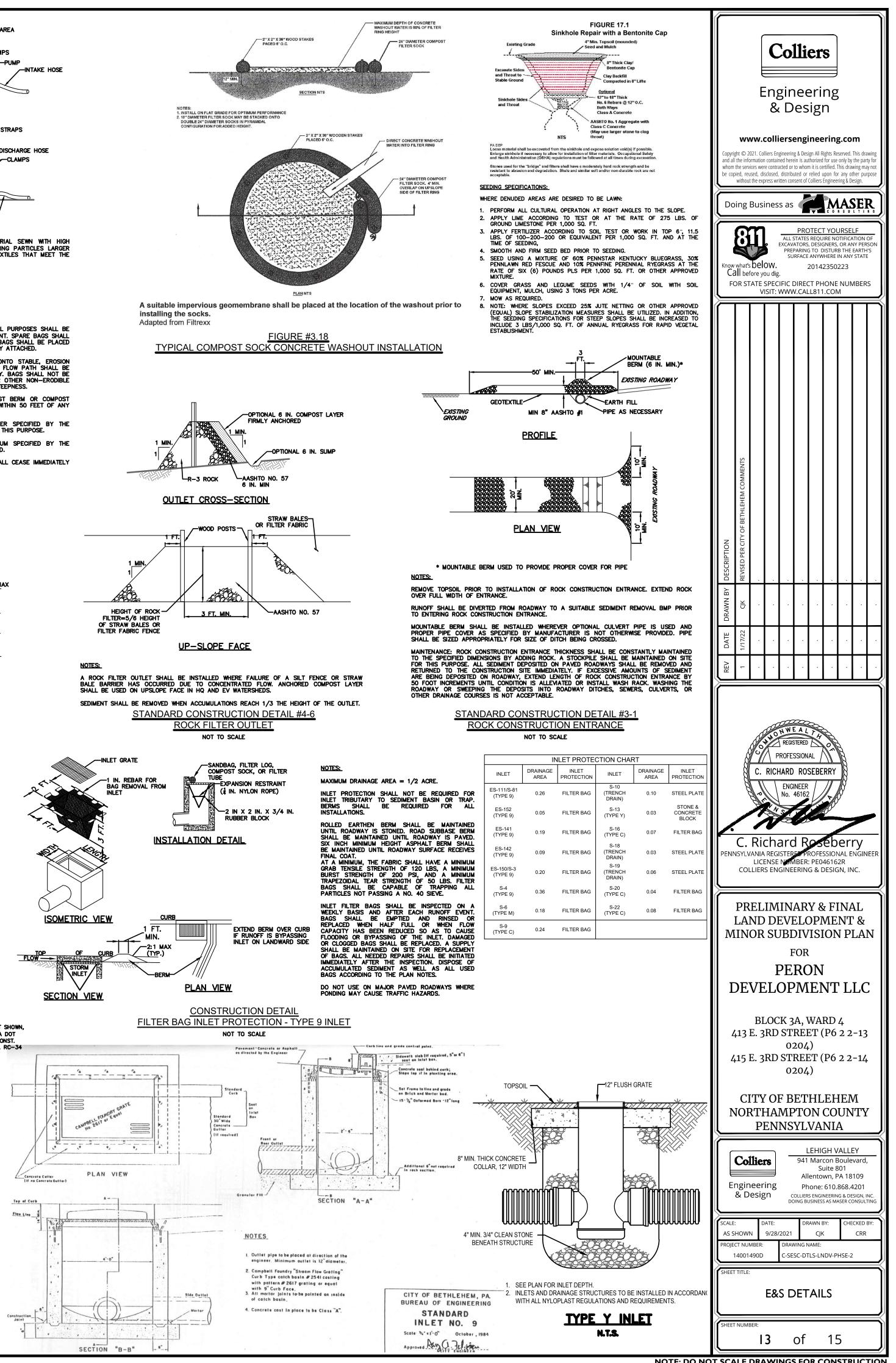
E 4.2 COMPC	DST STANDARDS		
ıt	25% — 100% (dry weight basis)		
	Fibrous and elongated		
	5.5-8.5		
	30%-60%		
	30%—50% pass through 3/8" sieve		
ion	5.0 dS/m (mmhos/cm) Maximum		

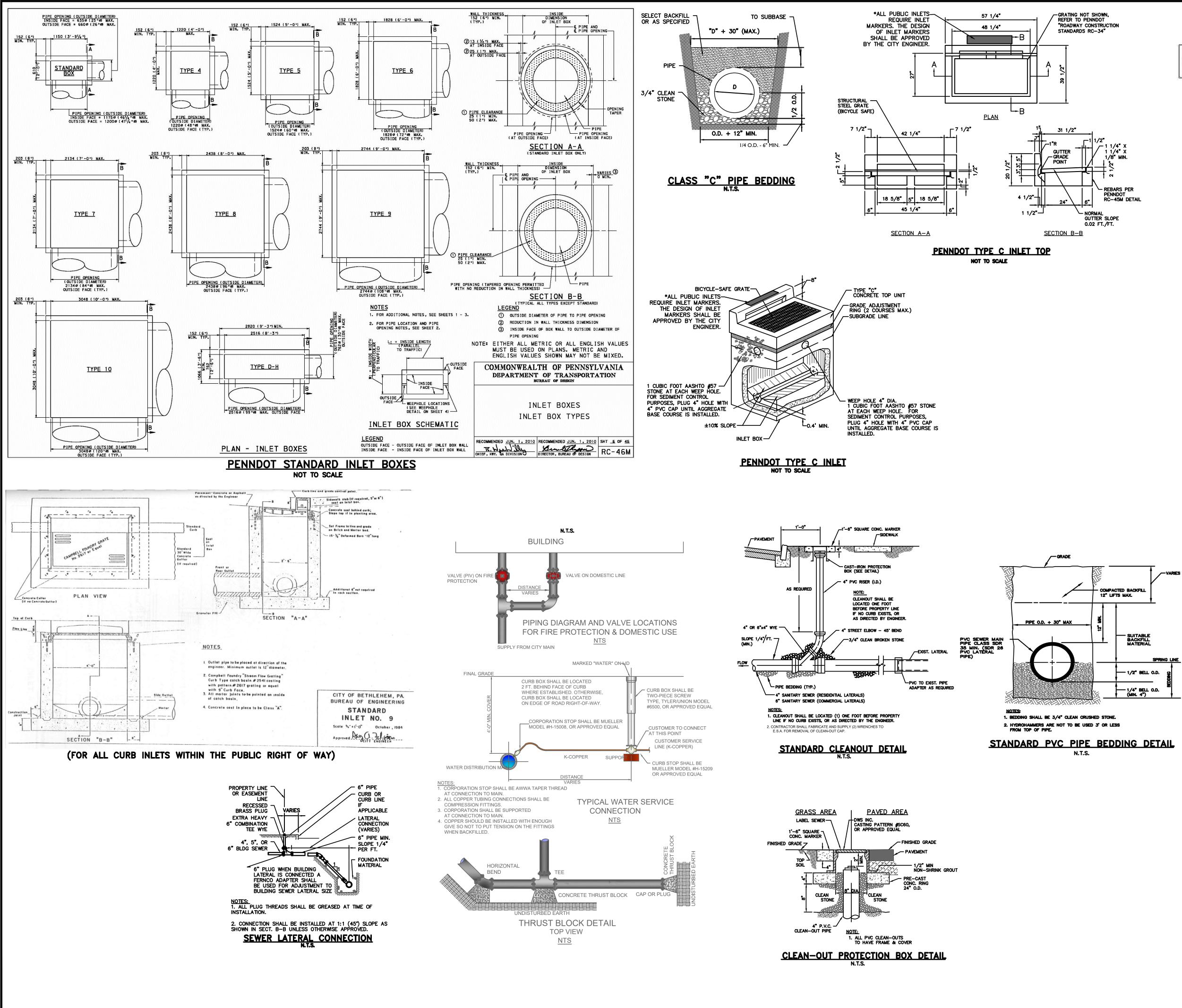


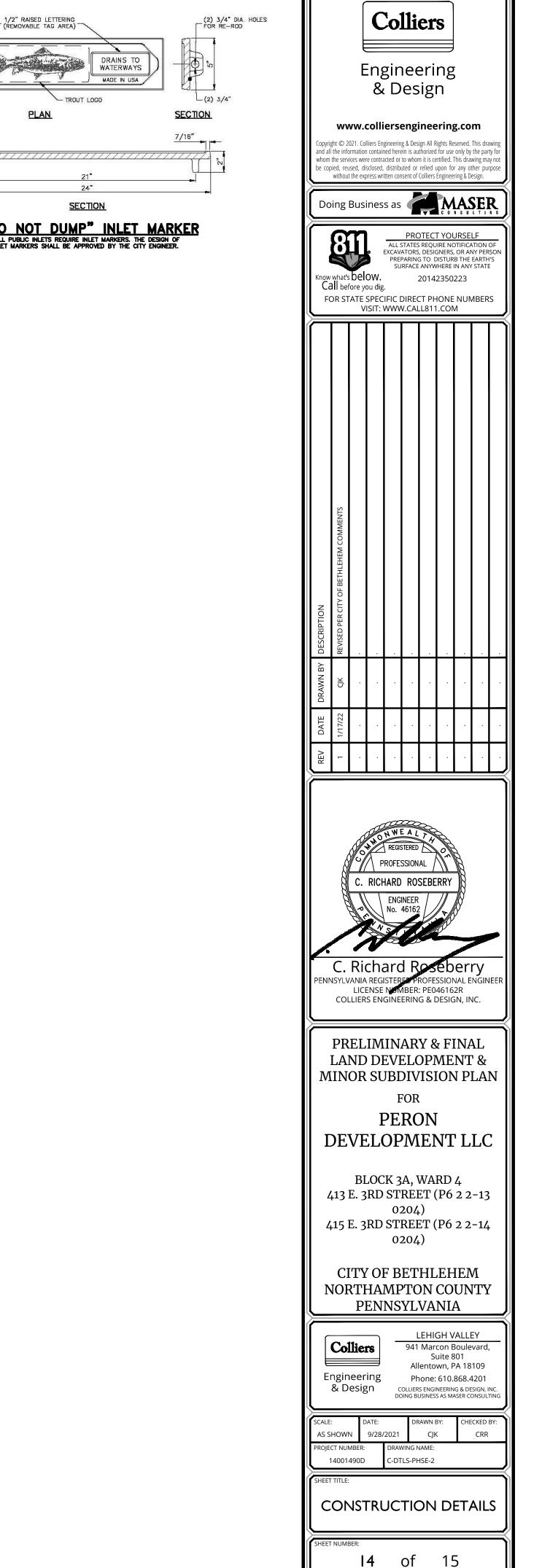
PROPERTI	IEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE
A CULTARIE MEANO OF ACCESSING THE RAC WATH MACHINERY RECURRED FOR		

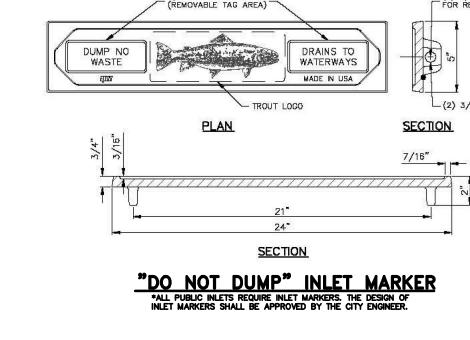


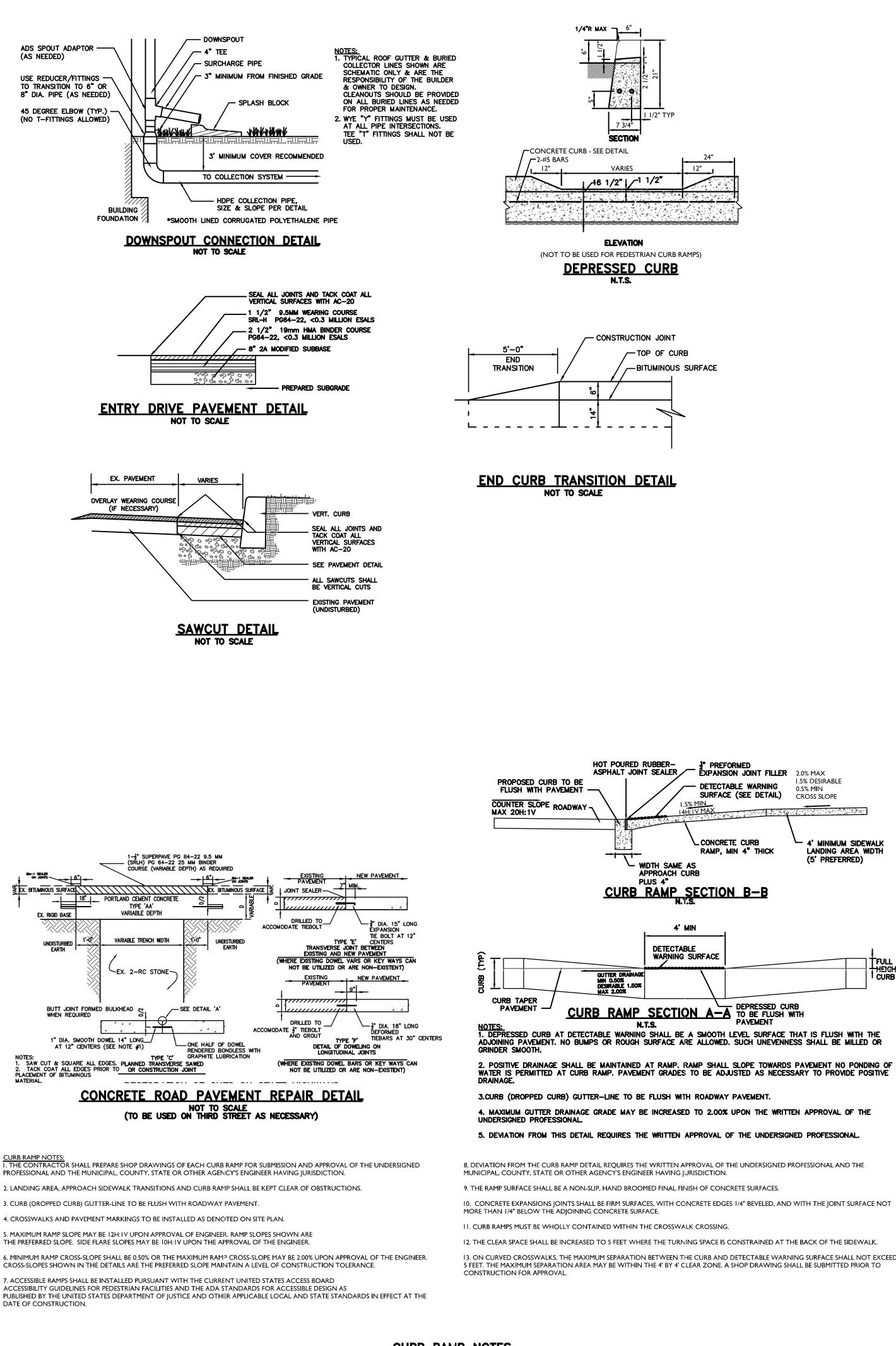












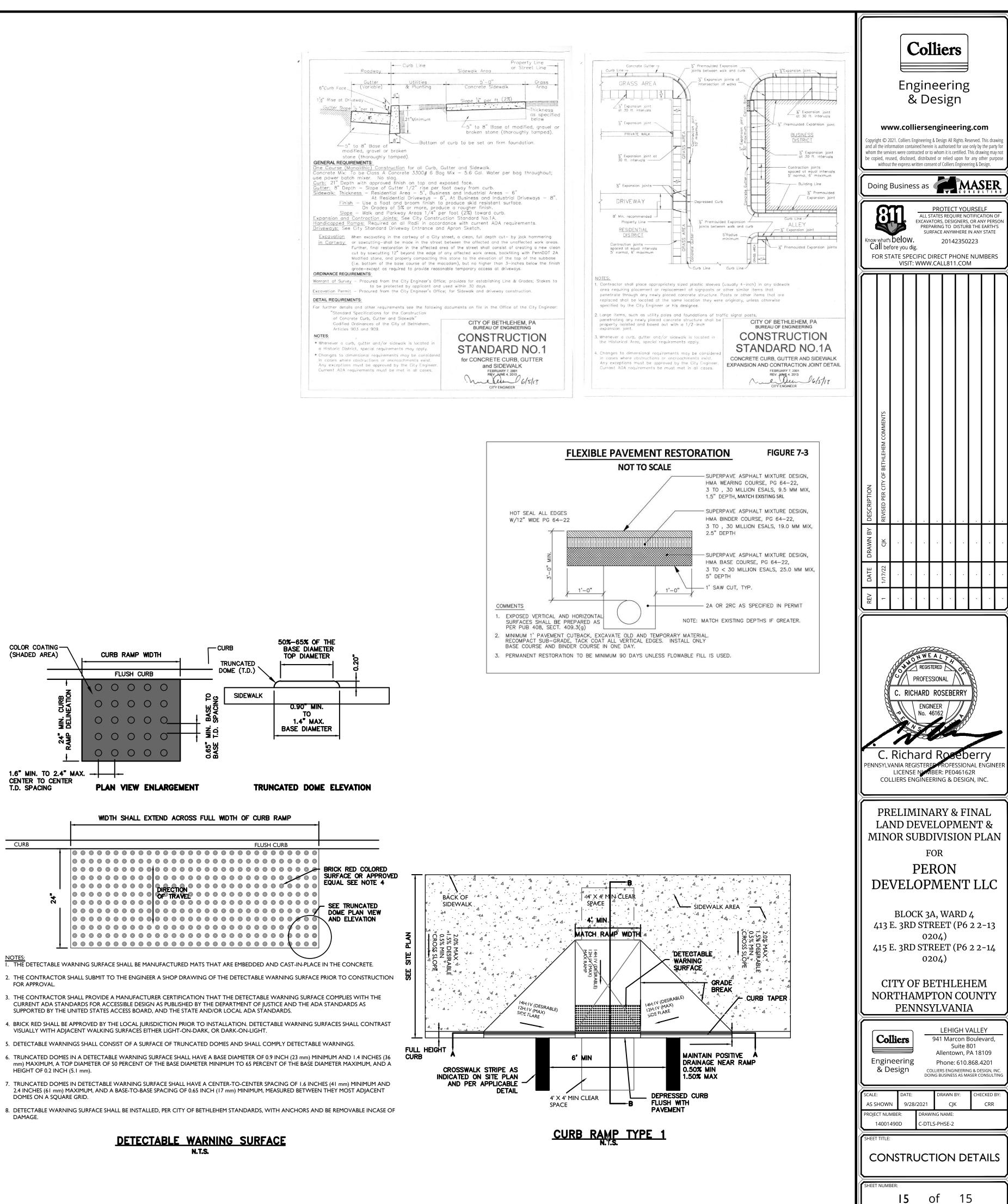
CURB RAMP NOTES

S SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK.
CURB AND DETECTABLE WARNING SURFACE SHALL NOT EXCEE R ZONE. A SHOP DRAWING SHALL BE SUBMITTED PRIOR TO

HEIGHT OF 0.2 INCH (5.1 mm). DOMES ON A SQUARE GRID. DAMAGE.

FOR APPROVAL.

- PAVEMENT
- FULL
- 1.5% DESIRABLE DETECTABLE WARNING 0.5% MIN SURFACE (SEE DETAIL) CROSS SLOPE CONCRETE CURB 4' MINIMUM SIDEWALK LANDING AREA MDTH (5' PREFERRED) RAMP, MIN 4" THICK
- COLOR COATING-- CURB BASE DIAMETER TOP DIAMETER (SHADED AREA) CURB RAMP WIDTH TRUNCATED DOME (T.D.) FLUSH CURB 0 0 0 0SIDEWALK 1.4" MAX. BASE DIAMETER 0 0 0 01.6" MIN. TO 2.4" MAX. -CENTER TO CENTER PLAN VIEW ENLARGEMENT TRUNCATED DOME ELEVATION T.D. SPACING WIDTH SHALL EXTEND ACROSS FULL WIDTH OF CURB RAMP CURB FLUSH CURB



DETECTABLE WARNING SURFACE N.T.S.

VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.