

SITE DATA

EQUITABLE OWNER/OWNER:FRANKFORD STREET PARTNERS LLC

CONTACT NUMBER: 239.272.3173

PARID: N6SE3A 4 7 0204

DEED BOOK/PAGE: 283 000277

ADDRESS: 1513 MAPLE STREET

AREA: 11,495 SF (0.2639)

NUMBER OF LOTS –

EXISTING: 1

PROPOSED: 1

LINEAL FEET OF NEW STREETS – 0 L.F.

WATER SUPPLY – PROPOSED PUBLIC

SEWER – PROPOSED PUBLIC

ZONING DATA

ZONING DISTRICT:

RT HIGH DENSITY DISTRICT (MULTI-FAMILY DWELLINGS)

REQUIRED

EXISTING

PROPOSED

MINIMUM LOT SIZE:

9,000 SF

11,495 SF

11,495 SF

MINIMUM LOT WIDTH:

90 FT

100 FT

100 FT

MINIMUM YARDS:

FRONT: 10 FT

NA

10 FT

SIDE: 15 FT

NA

15 FT

REAR: 20 FT

NA

20 FT

MAX. BUILDING COVERAGE: 80%

13%

21%

MAX. BUILDING HEIGHT: 3 STORIES

NA

27.34 FT (TOP OF FASCIA)

37.67 FT (TOP OF RIDGE)

MIN. LOT AREA PER DWELLING UNIT:

1,200 SF

NA

1,916 SF

SURVEY NOTES:

1. THIS PLAN IS BASED ON A FIELD SURVEY CONDUCTED MAY 23, 2023 BY BLACK FOREST ENGINEERING LLC USING A TOTAL STATION AND GPS RTK UNIT.

2. BEARINGS BASED ON PA STATE PLANE SOUTH,NAD83.

3. ELEVATIONS BASED ON NAVD88.

4. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE AND HAVE BEEN BASED ON VISIBLE ABOVE-GROUND EVIDENCE. A CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF ALL UTILITIES SHOWN ON THIS PLAN AND ANY ADDITIONAL EXISTING UTILITIES NOT SHOWN ON THIS PLAN.

5. BOUNDARY LINES SHOWN WITH BEARINGS AND DISTANCES OR CURVE INFORMATION HAVE BEEN FIELD VERIFIED BY THIS SURVEY.

BENCHMARK FOR THIS PLAN

VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BEARING SYSTEM BASED UPON THE PENNSYLVANIA NORTH AMERICAN DATUM OF 1983, SOUTH ZONE, US FOOT (PA-NAD83).

1. EXISTING MAGNAIL ELEV.=351.92

EXISTING

Legend

PROPERTY LINE

EXISTING RIGHT-OF-WAY

EXISTING EDGE OF PAVE

EXISTING VEGETATION

EXISTING CENTERLINE

EXISTING ROAD PAVEMENT

EXISTING SIDEWALK

EXISTING STRUCTURE

EXISTING ADJOINER

EXISTING MINOR CONTOUR

EXISTING MAJOR CONTOUR

EXISTING ELECTRIC POLE

EXISTING IRON PIN

EXISTING CONTROL POINT

EXISTING TEST PIT/PROBE

PROPOSED

Legend

PROP. PROPERTY LINE

PROP. TRACT LINE

PROP. RIGHT-OF-WAY

PROP. EASEMENT

PROP. BUILDING RESTRICTION LINE

PROP. FENCE

PROP. TREE LINE

PROP. CENTERLINE

PROP. SIDEWALK

PROP. CURB

PROP. DRIVEWAY

PROP. CONTOUR MAJOR

PROP. CONTOUR MINOR

PROP. IRON PIN

PROP. CONCRETE MONUMENT

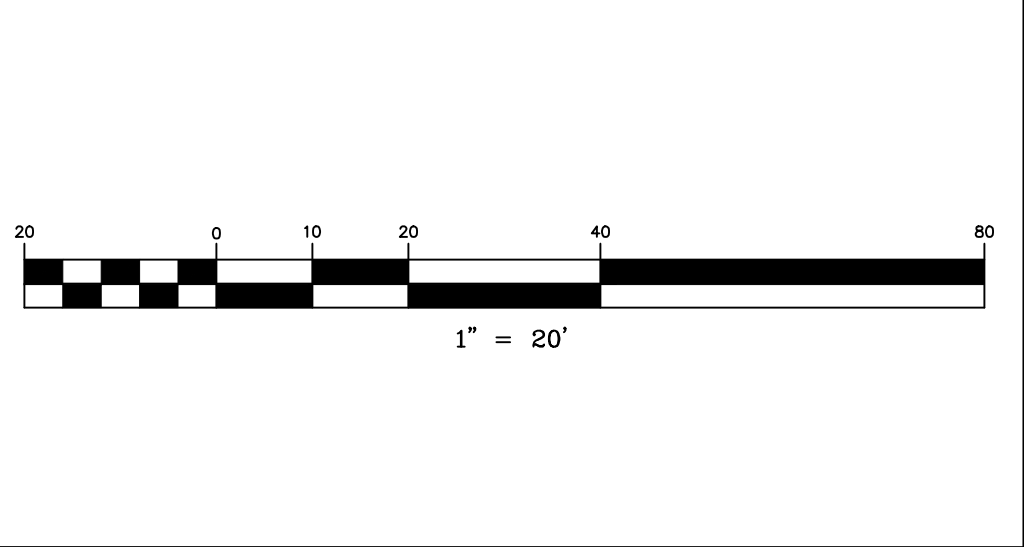
PROP. SIGN

PROP. TREE

PROP. BENCHMARK

PROP. BUILDING/STRUCTURE

PROP. DRIVEWAY



FINAL PLAN SHEET INDEX

PLAN TITLE

SHEET NO.

* RECORD PLAN

1 OF 6

EXISTING FEATURES PLAN

2 OF 6

GRADING & UTILITY PLAN

2 OF 6

LANDSCAPE AND LIGHTING PLAN

3 OF 6

EROSION CONTROL PLAN

4 OF 6

CONSTRUCTION DETAILS

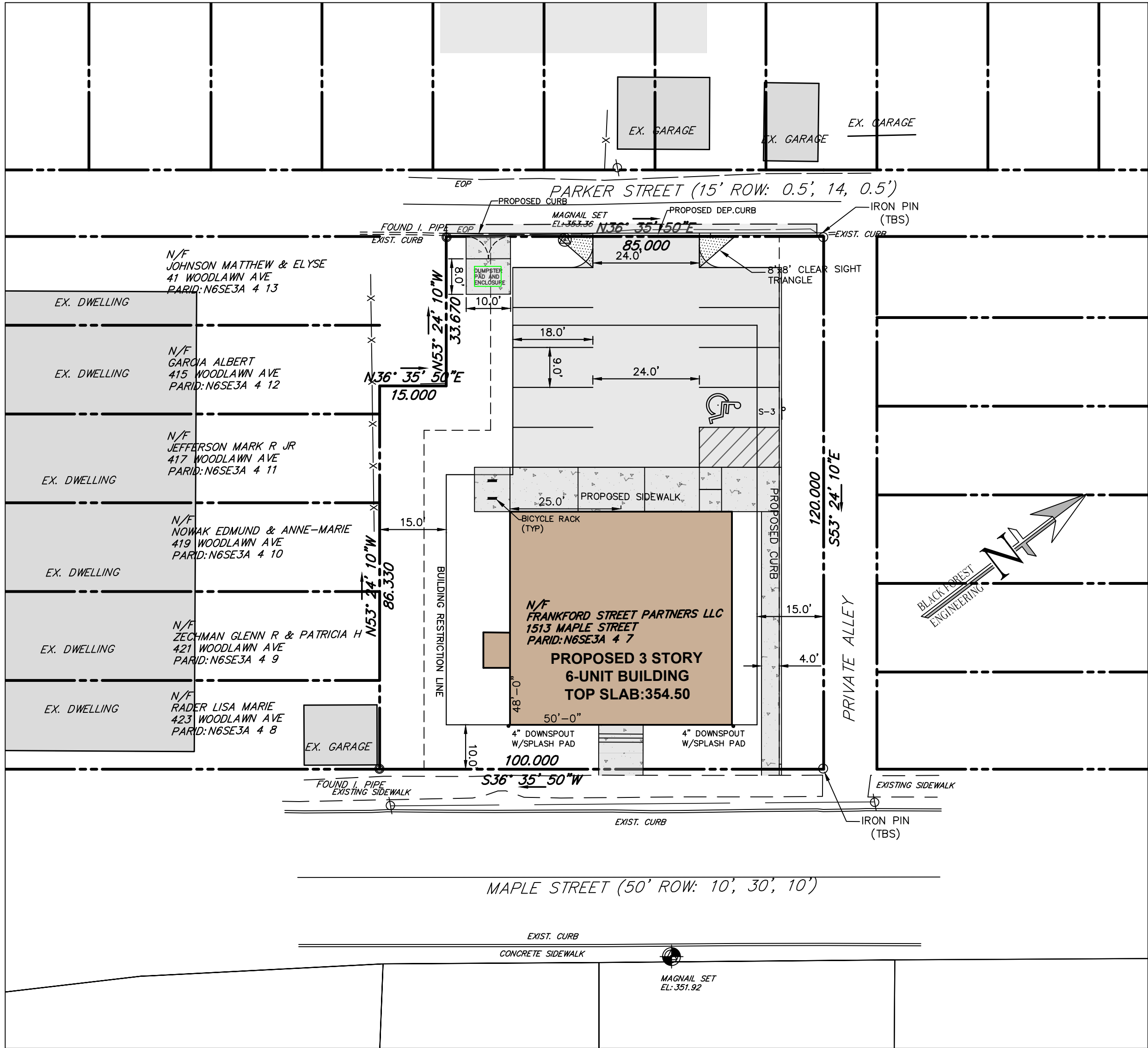
5 OF 6

CONSTRUCTION DETAILS

6 OF 6

PLAN INTENT

THE APPLICANT WISHES TO RAZE THE EXISTING DWELLING AND GARAGE AND THEN CONSTRUCT A SIX (6) UNIT APARTMENT BUILDING WITH ASSOCIATED OFFSTREET PARKING, SIDEWALKS, UTILITIES AND LANDSCAPING IMPROVEMENTS.



PARKING REQUIREMENT

VEHICLE:
1.5 SPACES PER DWELLING
6 UNITS x 1.5 = 9 SPACES REQ'D (9 PROVIDED)

IMPERVIOUS COVER

EXISTING CONDITION=2,713 SF
PROPOSED CONDITION=6,617 SF

NOTE:AN INCREASE OF 3,904 SF IS PROPOSED AND THEREFOR ACT 167 APPROVAL IS NOT REQUIRED.

LAND DEVELOPMENT LOCATED IN THE
CITY OF BETHLEHEM
WARD 15 BLOCK 113
NORTHAMPTON COUNTY
COMMONWEALTH OF PENNSYLVANIA

INVOLVING PARCEL LOCATED AT
1513 MAPLE STREET

1513 MAPLE STREET
LAND DEVELOPMENT
PRELIMINARY/FINAL PLAN

SIGN SCHEDULE

SYMBOL

LEGEND

QTY.

BLANK SIZE

PENNDOT #

S-2

RESERVED PARKING WITH PARKING FINE PLAQUE

0

12 X 18
12 X 18

R7-8
R7-8B

S-3

SAME AS S-2 WITH VAN ACCESSIBLE PLAQUE AND PARKING FINE PLAQUE

1

12 X 18
12 X 6
12 X 18

R7-8
R7-8A
R7-8B

SIGNATURE BLOCKS

CERTIFICATION OF OWNERSHIP

I (WE) THE OWNER(S) OF _____, BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT I (WE) AM (ARE) THE SOLE OWNER(S) OF THE ABOVE PROPERTY IN PEACEFUL POSSESSION OF THE SAME AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.

SIGNATURE OF OWNER _____ PRINTED NAME OF OWNER _____

NOTARIZATION

SWORN AND SUBSCRIBED BEFORE ME THIS _____ DAY

OF _____ A.D.

(LEGIBLE IMPRESSION OF NOTARY SEAL)

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

PLANNING COMMISSION APPROVAL

THE WITHIN PLOT OR PLAN OF LAND LOCATED IN BETHLEHEM, NORTHAMPTON COUNTY, PENNSYLVANIA, WAS APPROVED BY THE BETHLEHEM CITY PLANNING COMMISSION.

CHAIRMAN _____ DATE _____

PLANNING DIRECTOR _____ DATE _____

ENGINEER'S CERTIFICATION

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.

JOSEPH EDWARD RENTKO
REGISTRATION NO. PE085609

PROOF OF RECORDING

PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY.

PENNSYLVANIA, UNDER DOCKET ID # _____

ON THE _____ DAY OF _____, 20____

WITNESS MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____, 20____

RECORDER OF DEEDS

WITNESS: _____

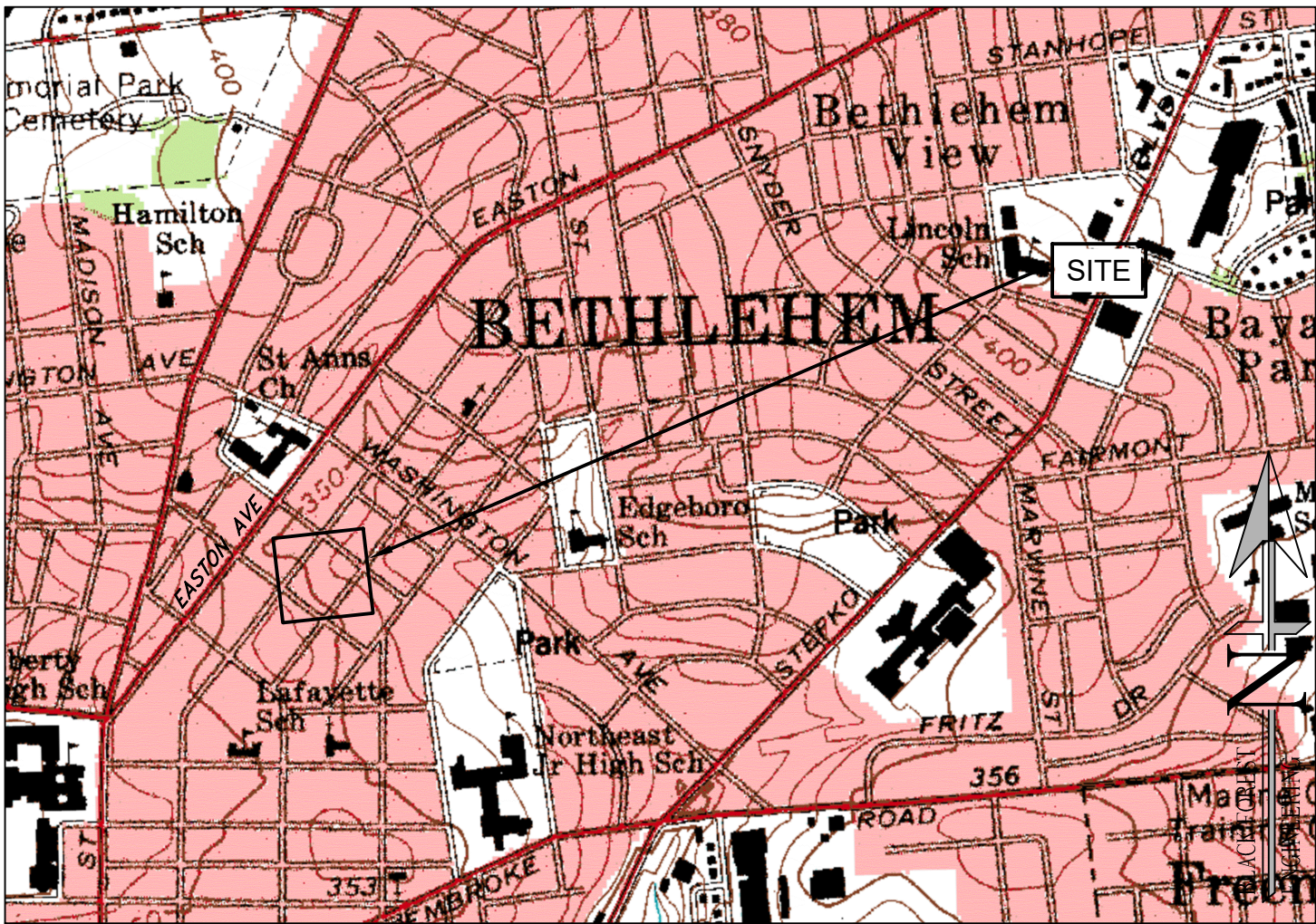
L.V.P.C. REVIEW

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

PLANNING _____ DATE _____

RECORD NOTES

- EACH LOT SHOWN IS SUBJECT TO ALL EASEMENTS VISIBLE, OR ON RECORD, OR AS REQUIRED BY A UTILITY TO SERVE SAID LOT AT SUCH TIME AS THE UTILITY IS INSTALLED.
- ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF BETHLEHEM STANDARDS AND SPECIFICATIONS AND THE APPROPRIATE PUBLIC UTILITY AUTHORITIES.
- THE SITE WAS EVALUATED FOR WETLANDS AND WATERCOURSES AND IT WAS DETERMINED THAT WETLANDS AND WATERCOURSES DO NOT EXIST ON THE SITE.
- THERE ARE NO FEMA DELINEATED 100-YR FLOODPLAINS OR WATERCOURSES ON OR NEAR THIS PROPERTY.
- ALL LOTS SHALL HAVE A TEN (10) FOOT DRAINAGE, GRADING AND UTILITY EASEMENT ALONG OUTER LOT LINES. THE DRAINAGE EASEMENT PROVIDED FOR THE FLOW OD STORM WATER ACROSS LOTS, AND MAY NOT BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER. NO OBSTRUCTIONS SUCH AS PLANTING 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.
- ACTUAL UTILITY CONNECTION POINTS SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
- ALL LOTS SHALL BE LAID OUT AND GRADED TO PREVENT CROSS LOT DRAINAGE AND TO PROVIDE POSITIVE DRAINAGE AWAY FROM PROPOSED BUILDING AREAS.
- ALL CITY PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- RUNOFF FROM ALL ON-SITE IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE PUBLIC SANITARY SEWER, ACROSS THE SIDEWALK AREA WITHIN THE PUBLIC RIGHT-OF-WAY, OR ONTO ADJOINING PROPERTIES, SECTION 1753.08 B.4 OF THE CITY PROPERTY REHABILITATION & MAINTENANCE CODE.
- ALL LATERAL SANITARY SEWER PIPING IS TO BE SCH 40 OR SDR-26 PVC PIPING UNLESS OTHERWISE NOTED..
- WORK TO BE PERFORMED ONSITE, SHALL BE DONE IN ACCORDANCE WITH THE IBC.
- ANY RETAINING WALL 4 FEET OR GREATER IN HEIGHT SHALL HAVE A DESIGN PREPARED, SIGNED, AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PENNSYLVANIA AND SHALL BE SUBMITTED AT THE TIME OF BUILDING PERMIT APPLICATION TO BE REVIEWED AND APPROVED BY AN APPROVED THIRD PARTY REVIEWER. THE WALL SHALL BE DESIGNED TO BE CONTAINED COMPLETELY WITHIN THE APPLICANT'S PROPERTY OR AN EASEMENT SHALL BE ACQUIRED AND INDICATED ON THE RECORD PLAN TO ALLOW FOR THE CONSTRUCTION OF ANY PORTION OF THE WALL AND/OR WALL TIE BACKS TO BE CONSTRUCTED ON THE ADJOINING PROPERTY.
- ALL PAVEMENT MARKINGS MUST BE THERMOPLASTIC PAVEMENT MARKINGS.
- THE PROJECT WILL REQUIRE AN APPROVED PLANNING MODULE FOR 6-UNITS, SEE DEP CODE# (xxxxxxxxx).
- THE CITY OF BETHLEHEM FIRE DEPARTMENT SHALL APPROVE THE FINAL LOCATION OF THE KNOX BOX. THE PROPOSED UNITS WILL BE INDIVIDUALLY SPRINKLERED AND THEREFORE A FIRE DEPARTMENT CONNECTION (FDC), AND POST INDICATING VALVE (PIV) HAVE NOT BEEN PROPOSED.
- ANY CHANGE IN THE LOCATION OF THE FIRE DEPARTMENT CONNECTION AND/OR KNOX BOX MUST BE APPROVED BY THE CITY OF BETHLEHEM FIRE DEPARTMENT.
- CHAPTER 33 OF THE IFC "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" SHALL BE ENFORCED FOR THE DURATION OF THE CONSTRUCTION PROJECT.
- BY SUBMISSION OF THESE PLANS THE ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE IN COMPLETE CONFORMANCE WITH THE CITY OF BETHLEHEM STORMWATER MANAGEMENT ORDINANCE.
- IN ORDER TO MAINTAIN CONTINUITY BETWEEN PLAN REVISIONS, ANY 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 DATE IN THE REVISION BLOCK.
- ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWNGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEER'S OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PA 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 MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (IE PE STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLANAS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN THE APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
- THE CURRENT LANDOWNER SHALL BE RESPONSIBLE TO ENSURE THAT THE HITCH, RACK OR LOCKER CONTINUES TO BE AVAILABLE AND IS WELL MAINTAINED AND IS REPLACED IF DAMAGED OR REMOVED.



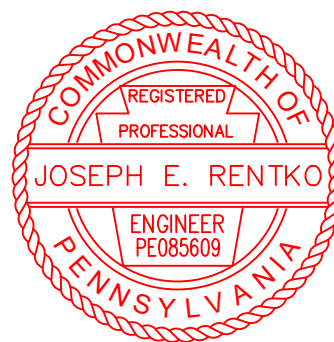
LOCATION MAP
USGS NAZARETH QUADRANGLE
SCALE:1"=1000'

"CALL BEFORE YOU DIG"
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
SERIAL NUMBER: 20242420007

BLACK FOREST ENGINEERING, LLC
2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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SEAL:



JOSEPH E. RENTKO, P.E. #PE085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
270-239-4499

01	CITY REVIEW LETTER	JER	10/8/24		
REV.	DESCRIPTION:	BY	DATE		

PROJECT TITLE:
1513 MAPLE STREET

EQUITABLE OWNER:
FRANKFORD STREET PARTNERS LLC
580 W MACADA ROAD
BETHLEHEM, PA 18017

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 15 BLOCK 3
NORTHAMPTON COUNTY
PENNSYLVANIA**

PLAN TITLE:

RECORD

SCALE:

DATE:

DRAWN:

CHECKED:

1"=20'

9/3/24

JER

JER

PROJECT NO.

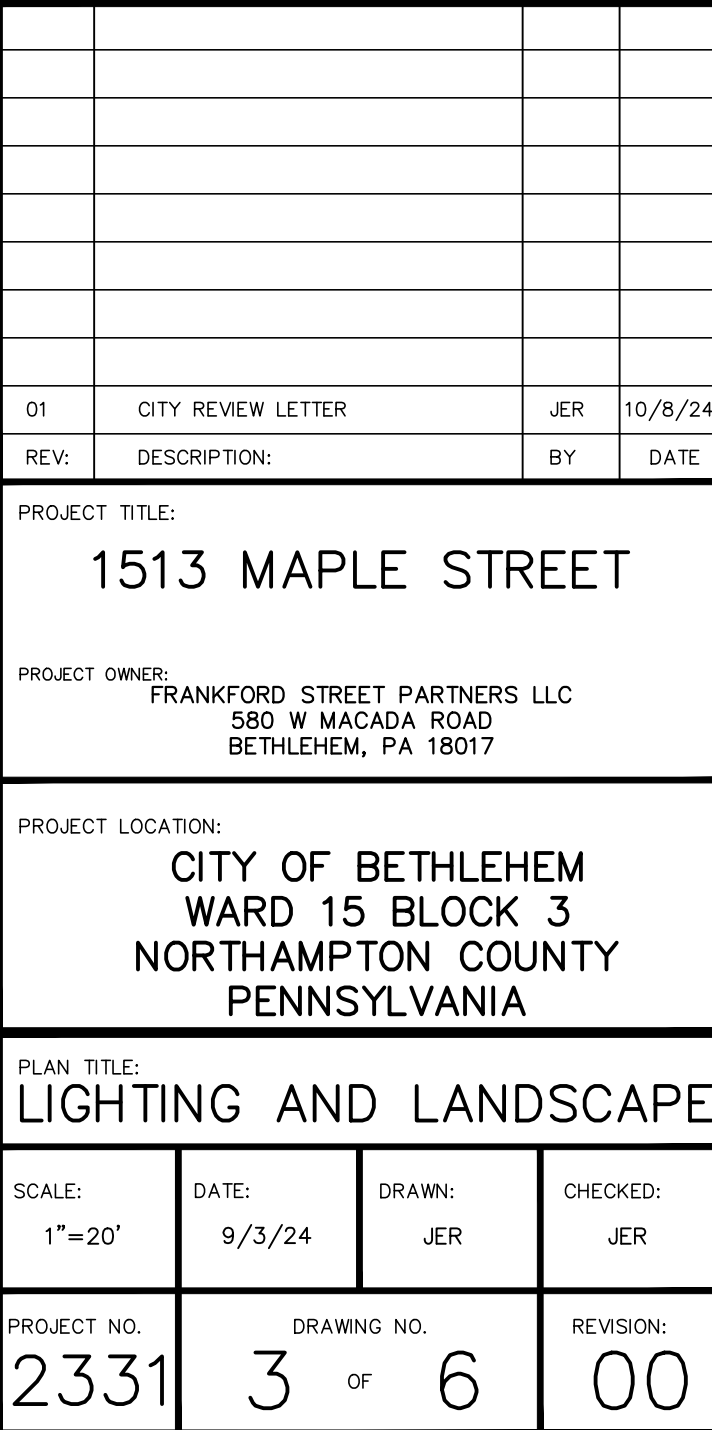
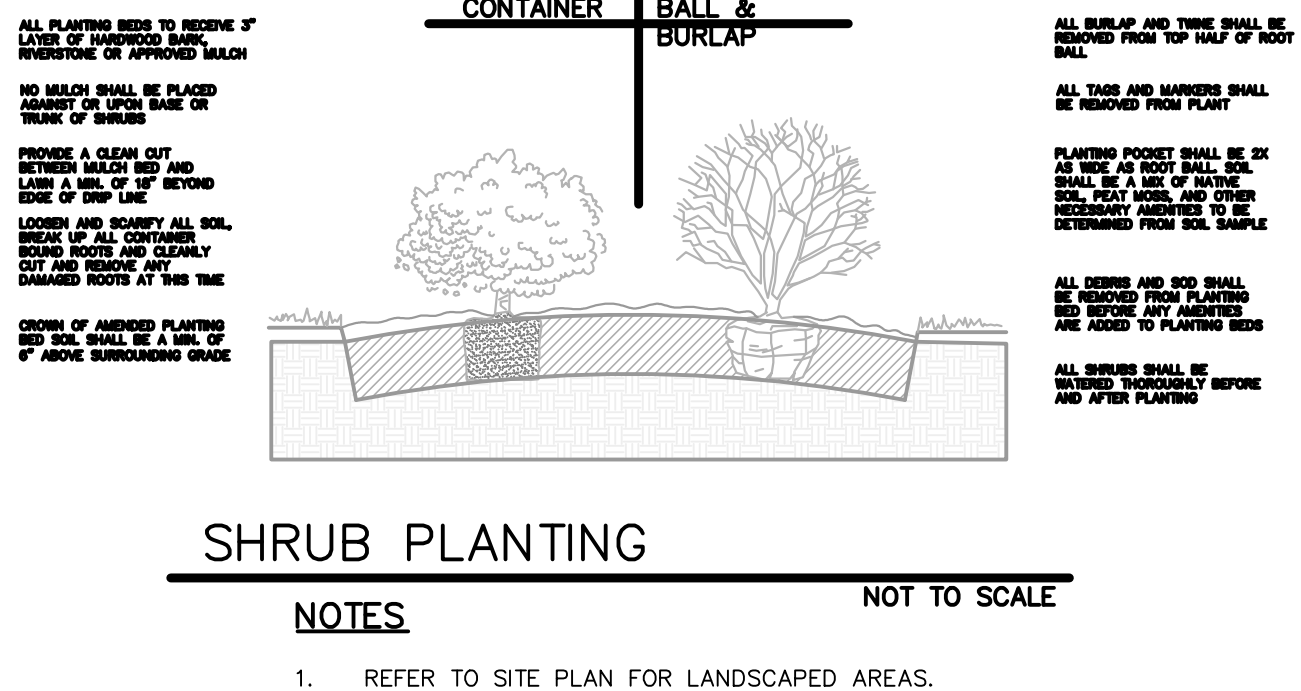
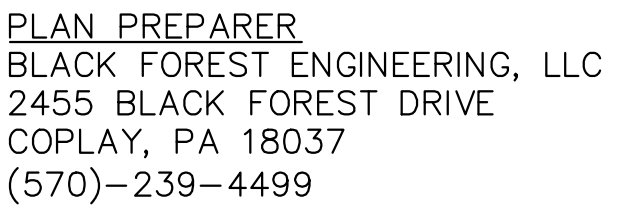
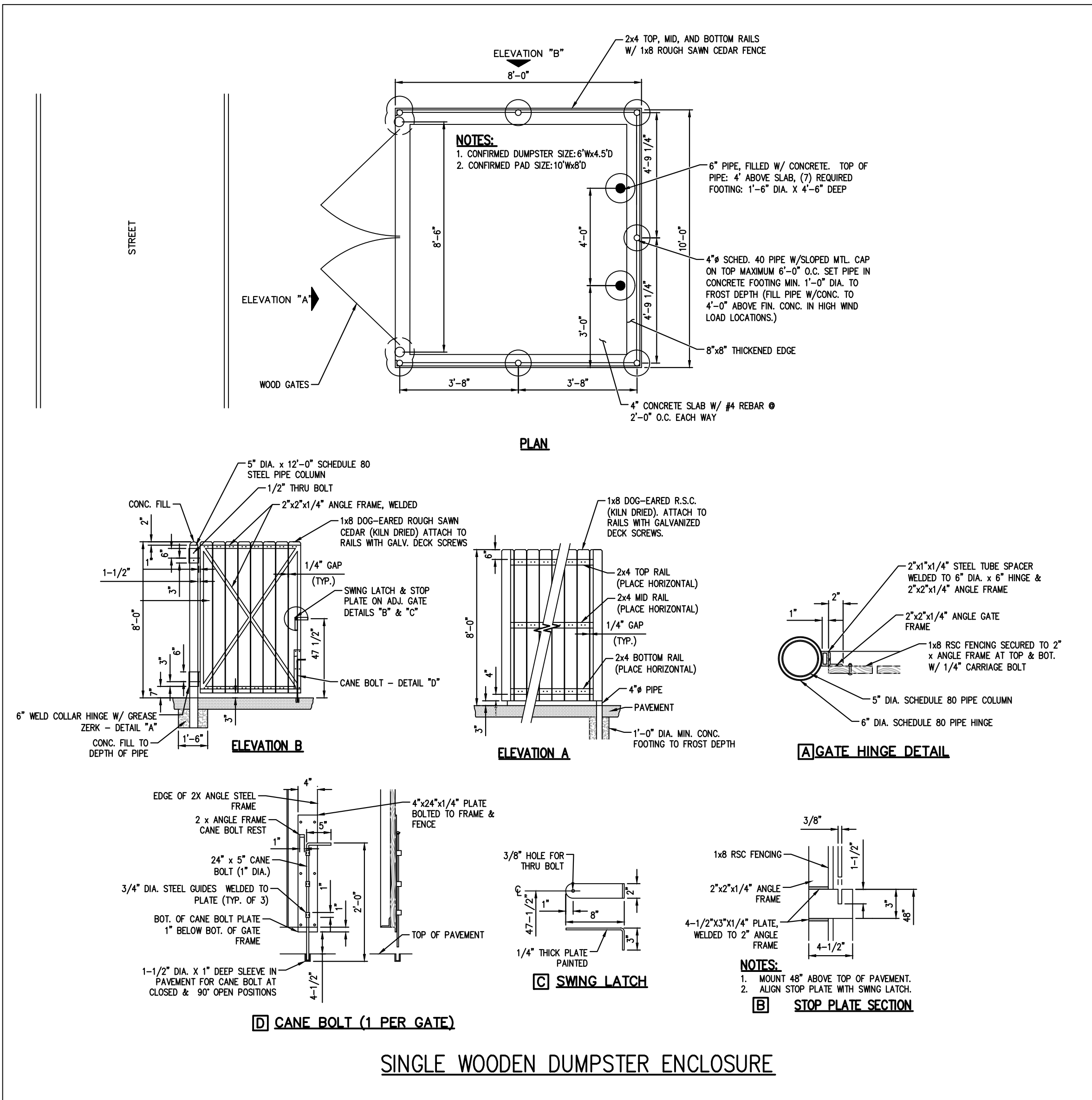
DRAWING NO.

REVISION:

2331

1 OF 6

00



KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
AB	ACER BUERGERIAUM / TRIDENT MAPLE	2"-2.5" CAL.	B&B	4
AR	ACER RUBRUM / OCTOBER GLORY	2"-2.5" CAL.	B&B	6

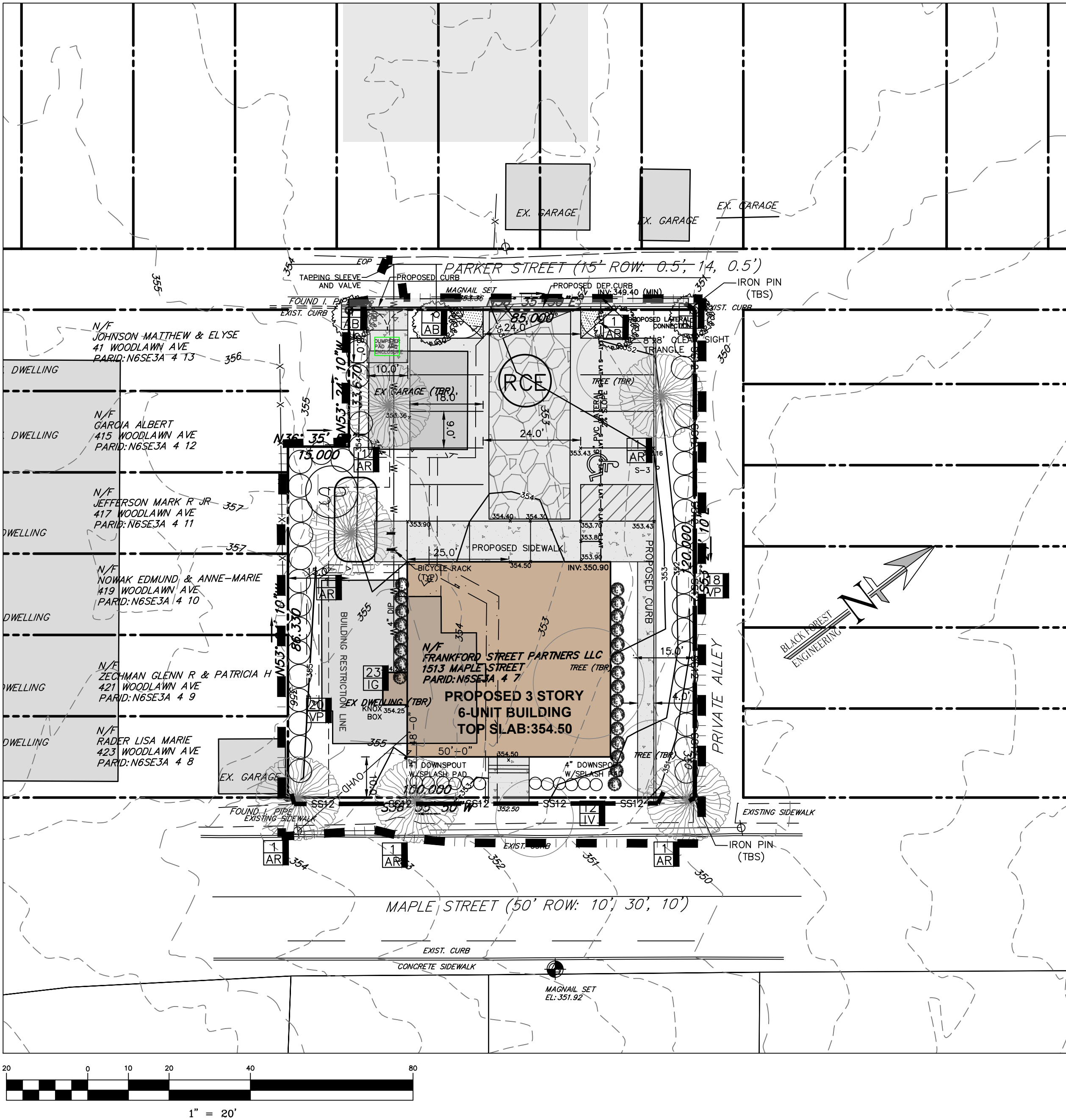
PLANT LIST: BUFFER PLANTS

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
VP	VBURNUM X PRAENSE / PRAENSE VIBURNUM	7 LB	B&B	38

PLANT LIST: FOUNDATION PLANTS

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
IG	ILEX GLABRA / SHAMROCK	5 LB	CONT.	23
IV	ITEA VIRGINICA / LITTLE HENRY	5 LB	CONT.	12

ALL TREES AND SHRUBS SHALL BE MATCHES, IN FORM, IN THEIR VARIETY.



EROSION AND SEDIMENT POLLUTION CONTROL LEGEND	
	ROCK CONSTRUCTION ENTRANCE
	EROSION CONTROL MATTING S75
	TOPSOIL STOCKPILE
	SILT SOCK (XX REPRESENTS SILT SOCK NO.)
LIMIT OF DISTURBANCE: 13,311 SF (0.30 AC)	

PLAN PREPARER
BLACK FOREST ENGINEERING, LLC
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
(570)-239-4499

CONSTRUCTION NOTES:

- All grading shall be done in accordance with the City of Bethlehem.
- No earthmoving or grading activities may take place until a grading permit is granted by the City of Bethlehem.
- The City Engineer and/or staff may enter the property to inspect all grading and construction activities on the site.
- At least 7 days prior to any earth disturbance activities, the operator shall notify the City and invite all contractors involved in those activities, and the landowner to an on-site meeting.
- At least 7 days prior to any earth disturbance activities, the operator shall provide notice in writing to the City of Bethlehem that earth disturbance activities will be commencing.
- Temporary and permanent seeding shall be in accordance with requirements on the details. Compost Filter Socks shall be installed downslope of all topsoil stockpiles as indicated in the Topsoil Stockpile detail.
- a. Topsoil pile locations may be adjusted to fit the contractor schedule as long as the silt sock is placed downslope of the pile locations.
- b. Prior to any seeding and lime and fertilizer application, a soil test shall be performed to determine the pH factor. Additional lime and fertilizer may be required.
- All disturbed areas shall be immediately stabilized if earth disturbance/construction has ceased. Disturbed slopes of 3:1 or greater shall be stabilized with erosion control matting.
- Soil compaction and vehicle traffic shall be kept to a minimum at areas designated for sanitary absorption or stormwater infiltration BMPs.
- Topsoil should be striped and stockpiled prior to all earthwork. Only strip the amount of topsoil necessary to perform earthwork. All disturbed areas shall be stabilized immediately if disturbance has ceased.
- On a daily basis, the Contractor shall inspect and clean any sediment that is tracked onto existing roads.
- All erosion control facilities shall be inspected after every runoff event and on a weekly basis, any necessary repairs must be made immediately.
- An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.
- NAGS75 matting to be applied to all proposed 3:1 slopes.

SEQUENCE OF CONSTRUCTION

- At least 7 days before starting any earth disturbance activities, the operator provide written notification to the City of Bethlehem and shall invite all contractors involved in those activities, appropriate municipal officials, the ESPC plan preparer and the landowner to an on-site meeting.
- At least 3 days prior to starting any earth disturbance activities, or expanding into 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.
- Flag and mark the Limits of Disturbance. No grading or earthmoving may take place beyond the Limits of Disturbance.
- Install Rock Construction Entrance (RCE) off of Parker Street where indicated on the Plan. This shall be the only ingress and egress from the site. Any sediment tracked onto the public roadway shall be collected and returned to the site by the end of each workday. Any sediment tracked onto the public roadway during RCE construction shall be cleaned immediately.
- Install perimeter compost filter socks at locations indicated on plan and per details.
- Remove existing buildings, structures and asphalt from the site. Immediately stabilize any disturbed areas outside of construction area. Any remaining topsoil shall be stockpiled in stockpile locations indicated on the Plan.
- Begin bulk earthwork for the building pad and driveways. Rough grade the driveway; Fill should be compacted in layers so as to minimize sliding, slumping and erosion of soil. Erosion Control matting shall be installed on any graded slopes of 3:1 or greater.
- Begin building construction, utility connection installation, and binder. Complete final paving (wearing course) once site work is substantially complete.
- Upon completion of proposed improvements, any temporary staging area shall be restored to existing condition. Proposed landscaping shall be installed upon completion of building.
- After the site is stabilized, remove E&S BMPs. Immediately stabilize any areas disturbed by the removal of the erosion and sediment pollution controls and plant street trees. An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.

Notes.

Include the following notes on the site or grading plan in addition to the landscape plan when applicable:

- No soil disturbance or compaction, construction materials, traffic, burial pits, trenching or other land disturbance is allowed in the tree protection zone unless indicated on the plan.
- Barricades must be installed prior to any destruction and/or construction activity.
- The root protection zone shall be the area encompassed by a circle with a radius extending 1.25 ft. from the trunk of the tree for every inch DBH (diameter at breast height) of the tree.
- Violations of tree protection requirements are subject to penalty per City ordinance
- All trees on public property are protected by ordinance: no pruning, root pruning of roots over one inch in diameter, and/or tree removal is to be performed without a permit and work must be performed by a City licensed tree contractor.
- All plant materials are to conform to the American Standard for Nursery Stock, Latest Edition, American Nursery and Landscape Association.
- Street and parking lot trees shall be a 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, such as zelkova, may have the first lateral branch at 6' above the root ball.
- All landscaping shall conform to the current edition of the Arboricultural Specifications and Standards of Practice of the City of Bethlehem.

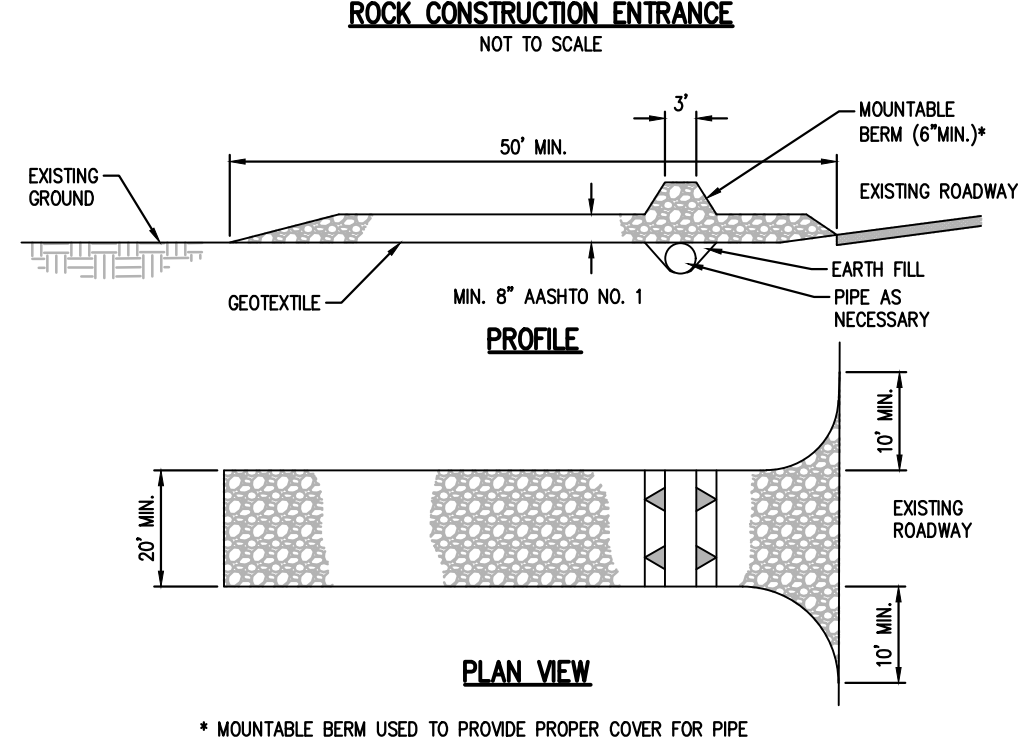
MULCHING—Mulch absorbs rainfall impact, increases the rate of infiltration, reduces soil moisture loss due to evaporation, moderates soil temperatures, provides a suitable environment for germination, and protects the seeding from intense sunlight. All seeded areas should be mulched or blanketed to minimize the potential for failure to establish an adequate vegetative cover. Mulching may also be used as a temporary stabilization of disturbed areas in non-germinating seasons.

Apply mulches at the rates shown in table 11.6

Straw and hay mulch should be anchored immediately after application to prevent being windblown. A tractor-drawn implement may be used to crimp the straw or hay into the soil (about 3 inches). This method should be limited to slopes no steeper than 3H:1V. The machinery should be operated on the contour. (Note: Crimping of hay or straw by running over it with tracked machinery is not recommended.

Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq.yd.	
Straw	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4-6 tons	185-275 lb.	1,650-2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations above

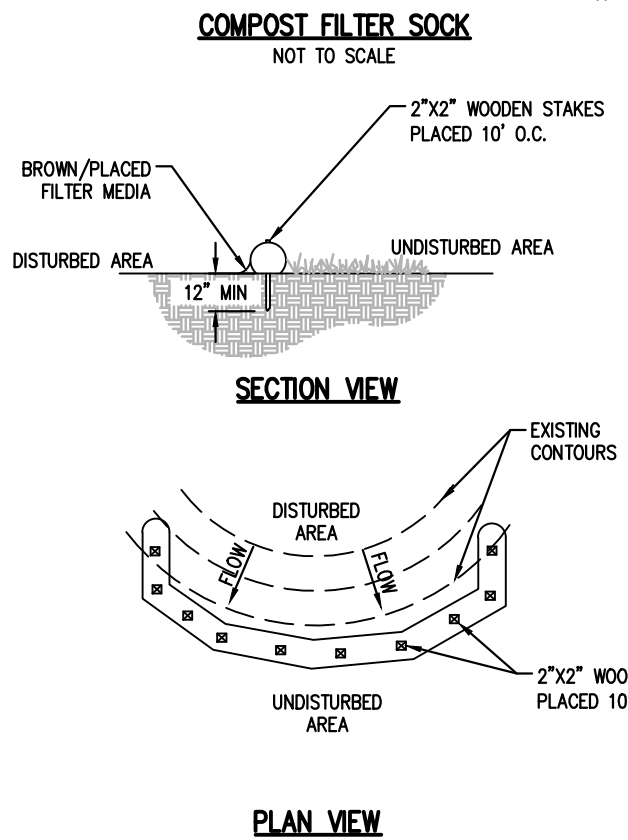
Standard Construction Detail # 3-1



General Notes:

- REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 - RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 - MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
- MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

Standard Construction Detail # 4-1



General Notes:

- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (SEE FIGURE 4.1 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, MAR. 2012).
- MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN OF FIGURE 4.2 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, (MAR. 2012). STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

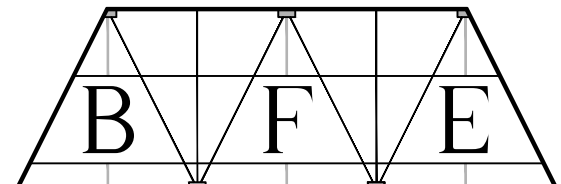
TABLE 4.1 COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HMPP)
MATERIAL CHARACTERISTICS	PHOTO - DEGRADABLE	PHOTO - DEGRADABLE	BIO - DEGRADABLE	PHOTO - DEGRADABLE	PHOTO - DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH	26 psi	26 psi	26 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.	100% AT 1000 HR.	100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAxIAL NET CONTINUOUSLY WOUND				
	FUSION-WELD JUNCTURES				
	3/4" X 3/4" MAX. APERTURE SIZE				
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER & NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
	SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.				

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MAR. 2012). COMPOST SHALL MEET THE FOLLOWING STANDARDS:

TABLE 4.2 COMPOST STANDARDS	
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	50% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 gS/m (mmhos/cm) MAXIMUM

PROPOSED Legend

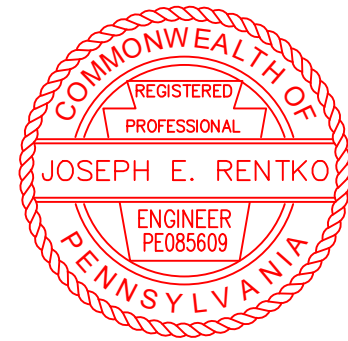
	PROP. PROPERTY LINE
	PROP. TRACT LINE
	PROP. RIGHT-OF-WAY
	PROP. EASEMENT
	PROP. BUILDING RESTRICTION LINE
	PROP. FENCE
	PROP. TREE LINE
	PROP. CENTERLINE
	PROP. SIDEWALK
	PROP. CURB
	PROP. DRIVEWAY
	PROP. CONTOUR MAJOR
	PROP. CONTOUR MINOR
	PROP. GAS LINE
	PROP. GAS LATERAL LINE
	PROP. SANITARY LINE
	PROP. SANITARY LATERAL LINE
	PROP. STORM LINE
	PROP. WATER LINE
	PROP. WATER LATERAL LINE
	PROP. DRAINAGE PATH
	PROP. IRON PIN
	PROP. CONCRETE MONUMENT
	PROP. UTILITY POLE
	PROP. SANITARY MANHOLE
	PROP. CLEANOUT
	PROP. VENT
	PROP. STORM MANHOLE
	PROP. INLET
	PROP. SIGN
	PROP. FIRE HYDRANT
	PROP. WATER VALVE
	PROP. WELL
	PROP. GAS VALVE
	PROP. TREE
	PROP. BENCHMARK
	PROP. CONCRETE WHEELSTOP
	PROP. BUILDING/STRUCTURE
	PROP. DRIVEWAY



BLACK FOREST ENGINEERING, LLC
2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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SEAL:



JOSEPH E. RENTKO, P.E. #PE085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
270-239-4499

01	CITY REVIEW LETTER	JER	10/8/24
REV.	DESCRIPTION:	BY	DATE

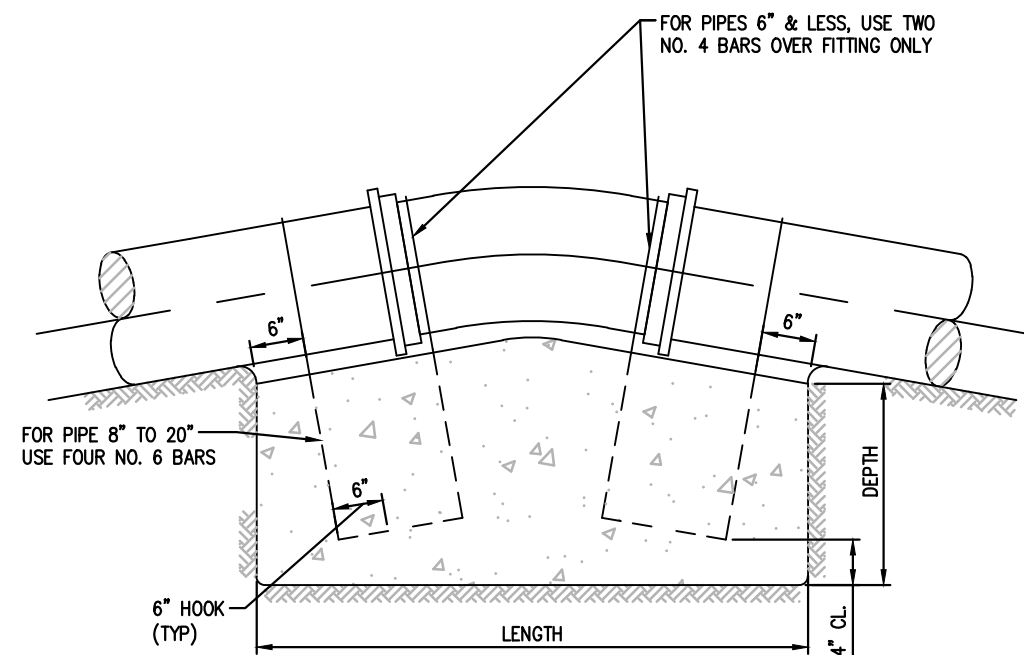
PROJECT TITLE:
1513 MAPLE STREET

PROJECT OWNER:
FRANKFORD STREET PARTNERS LLC
580 W MACADA ROAD
BETHLEHEM, PA 18017

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 15 BLOCK 3
NORTHAMPTON COUNTY
PENNSYLVANIA**

PLAN TITLE: ESPC			
SCALE: 1"=20'	DATE: 9/3/24	DRAWN: JER	CHECKED: JER
PROJECT NO. 2331	DRAWING NO. 4 OF 6	REVISION: 00	

PROJECT NO. 2331	DRAWING NO. 5 OF 6	REVISION: 00
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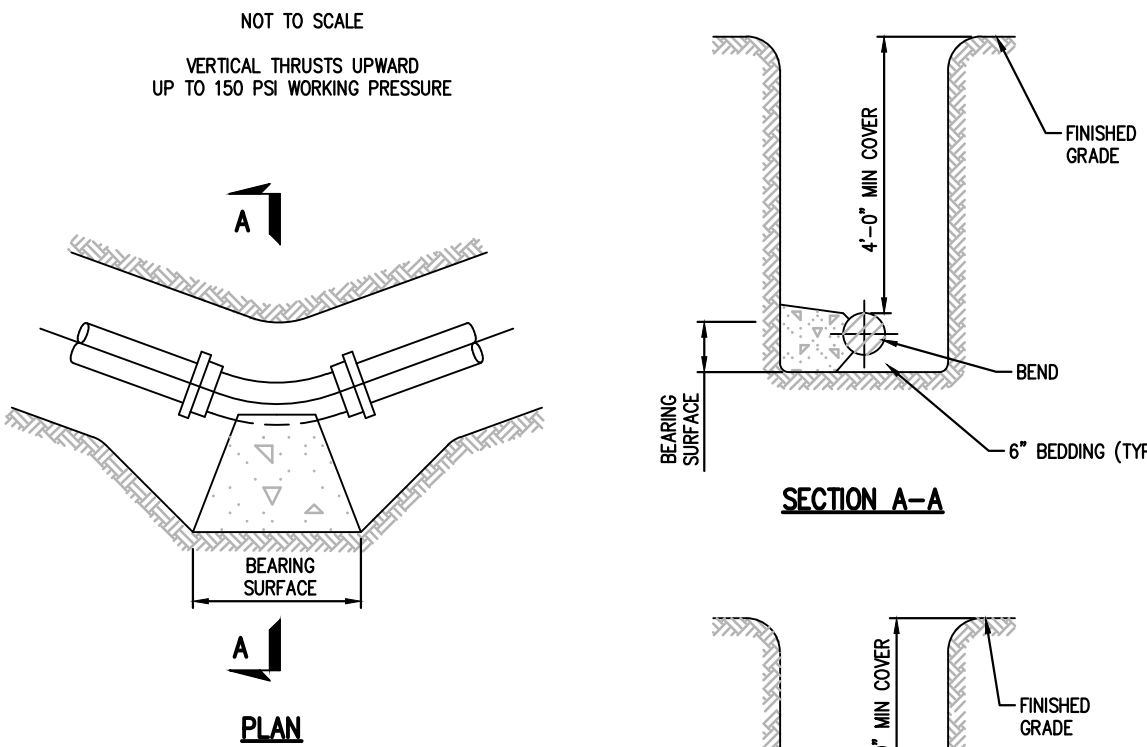
TYPICAL SECTION

PIPE SIZES (inches)	DIMENSIONS OF CONCRETE BLOCKING							
	LENGTH				WIDTH			
4 & SMALLER	11 1/4	22 1/2	45	11 1/4	22 1/2	45	11 1/4	22 1/2
6 & 8	2'	4'	4'	1.5'	3'	3'	1'	2'
10 & 12	4.5'	6'	8'	3'	3'	4'	3.5'	5'
14 & 16	6'	8'	11'	3.5'	3.5'	5'	3.5'	5'
18 & 20	7'	9'	13'	4'	5'	5.5'	4'	5'

Notes:

1. NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.
2. REINFORCING BAR STRAPS TO BE SHAPED TO PIPE CURVATURE.
3. ALL EXPOSED STEEL TO BE PAINTED WITH TWO COATS ASPHALTIC PAINT.

Thrust Blocking - Vertical Thrusts

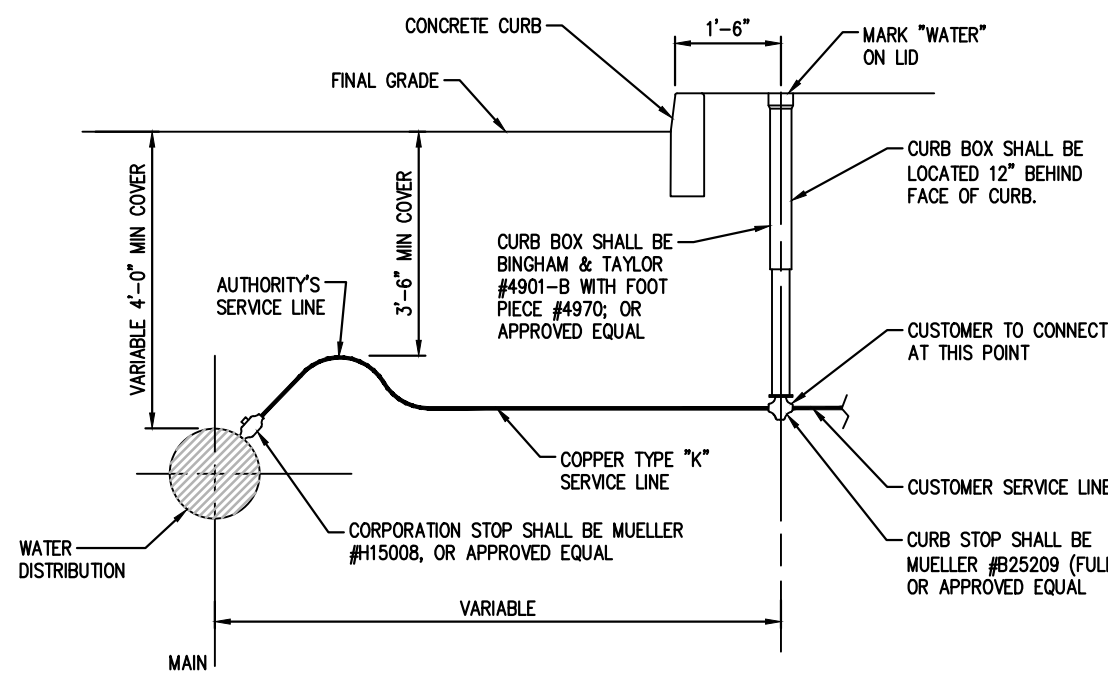


Notes:

1. SEE STANDARD DETAIL STANDARD DETAIL VI-27 FOR BEARING AREA REQUIRED.
2. NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.

Thrust Blocking For Bends

NOT TO SCALE
TYPICAL BLOCKING FOR HORIZONTAL & VERTICAL DOWNWARD THRUSTS UP TO 150 PSI WORKING PRESSURE



CORPORATION STOP SHALL BE TAPERED THREAD AT CONNECTION TO MAIN. ALL TUBING CONNECTIONS SHALL HAVE COMPRESSION FITTINGS.

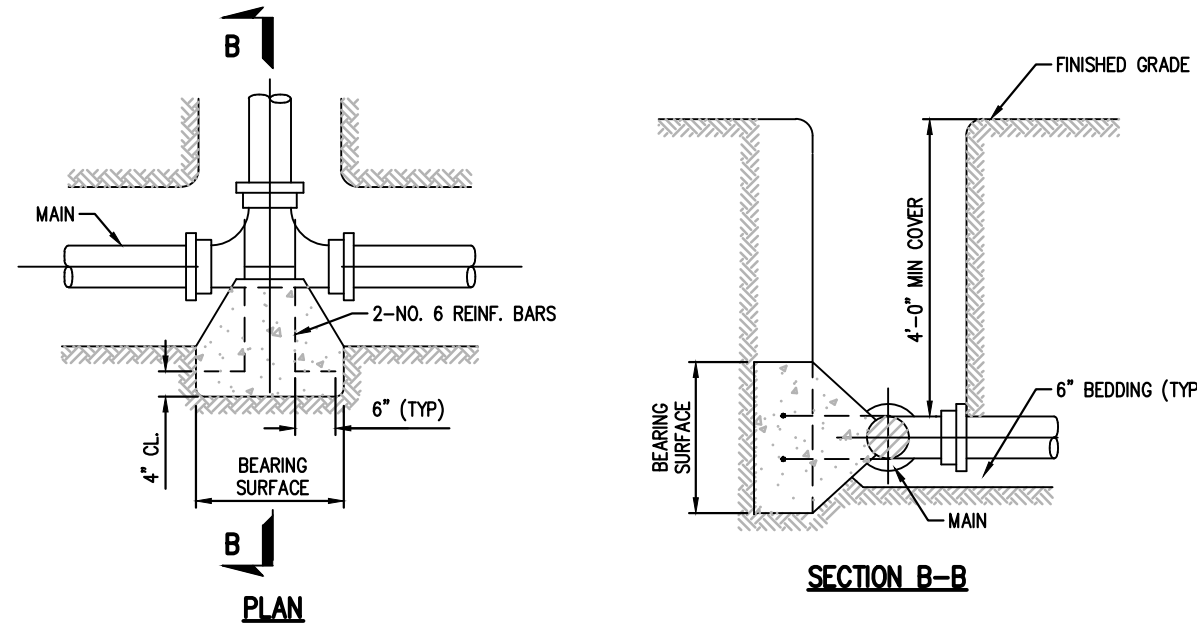
1. COPPER SERVICE SHALL BE LAID LOOSELY HORIZONTALLY TO PREVENT DAMAGE UPON SETTLING OF TRENCH

Notes:

1. ALL PIPE MUST BE BEDDED IN A MIN. 4" LAYER OF SAND OR SCREENINGS AND SHALL BE BACK FILLED WITH THE SAME MATERIAL IN MAX. 6" LAYERS COMPACTED. EACH LAYER SHALL BE HAND TAMPED UNTIL 1" OF COVER EXISTS OVER THE PIPE.
2. PIPES AROUND WIRES AND ALL PLUGS, CAPS, HYDRANTS, TEES, CROSSES, VALVES, ETC., SHALL BE BLOCKED WITH CONCRETE TO TAKE THE REACTION AND OR THRUST.

Water Lateral Small Service Connection

NOT TO SCALE

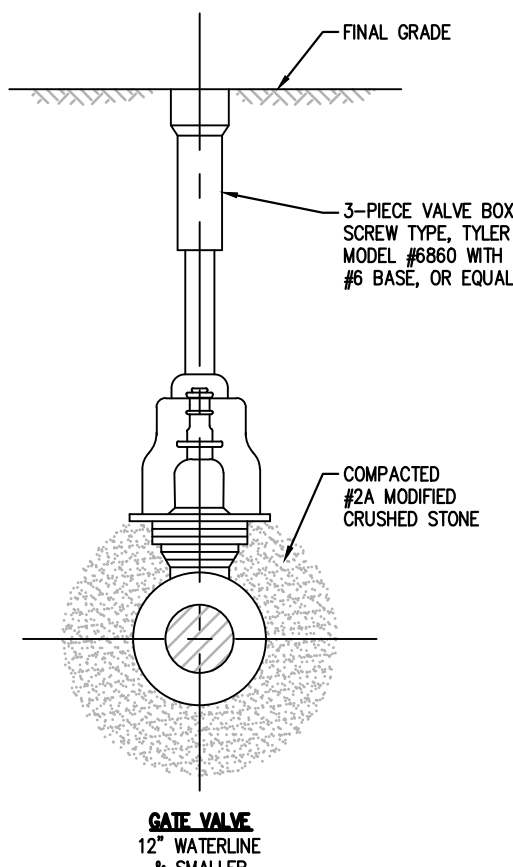


Notes:

1. SEE STANDARD DETAIL STANDARD DETAIL VI-27 FOR BEARING AREA REQUIRED.
2. NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.
3. REINFORCING BAR STRAPS TO BE SHAPED TO PIPE CURVATURE.
4. ALL EXPOSED STEEL TO BE PAINTED WITH TWO COATS ASPHALTIC PAINT.

Thrust Blocking For Tees

NOT TO SCALE
TYPICAL BLOCKING FOR HORIZONTAL & VERTICAL DOWNWARD THRUSTS UP TO 150 PSI WORKING PRESSURE

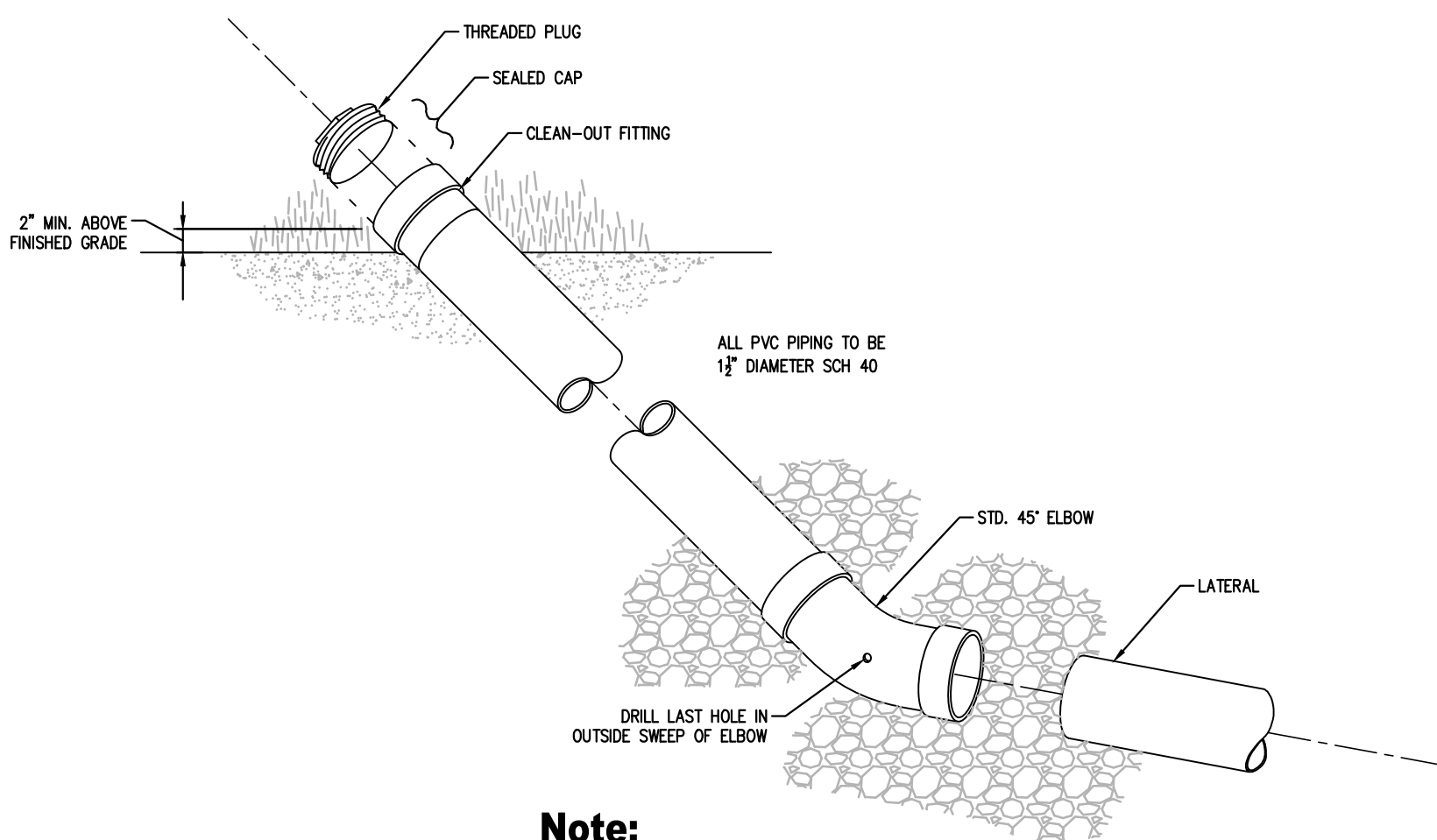


Valving Detail

NOT TO SCALE

NOTE:

1. VALVES 8" OR SMALLER SHALL BE RODDED TO A FITTING WITH 2 ALL-THREAD RODS, 12" VALVES WITH 4 ALL-THREAD RODS.
2. ROD DIAMETER SHALL BE EQUAL TO THAT OF THE GLAND BOLTS. RODS SHALL BE GIVEN ONE COAT OF BITUMASTIC PAINT.

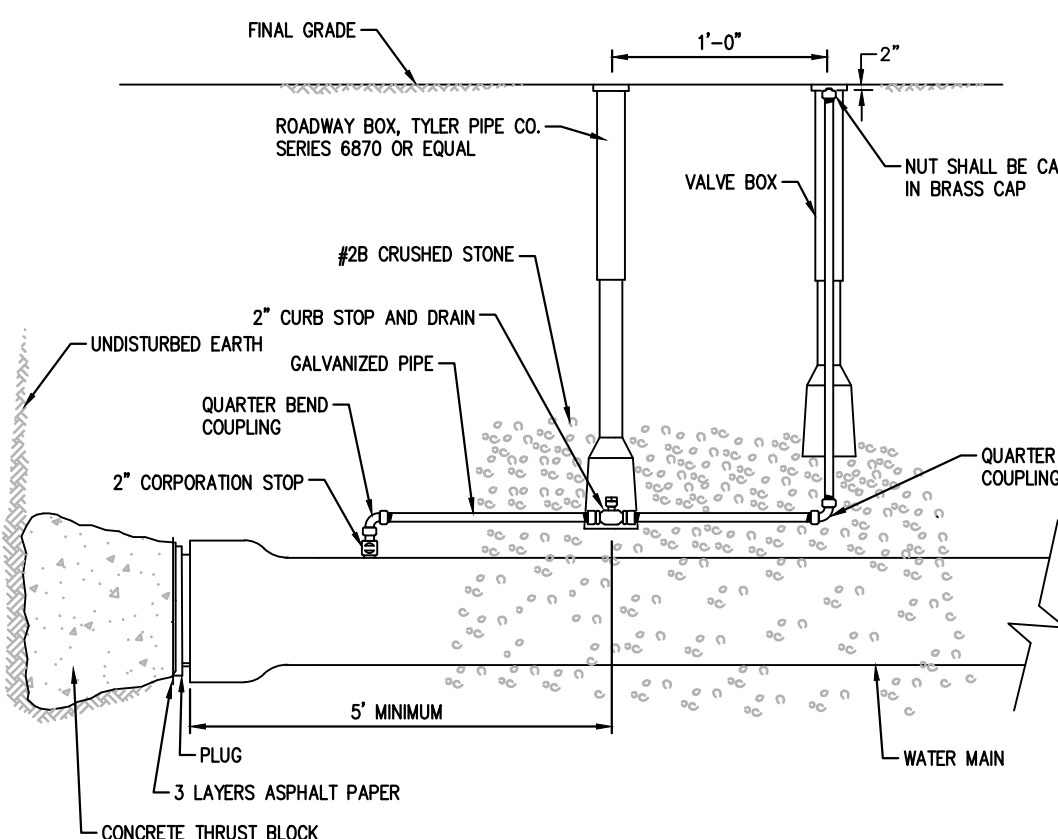


Note:

TYPICAL AT END OF ALL LATERALS

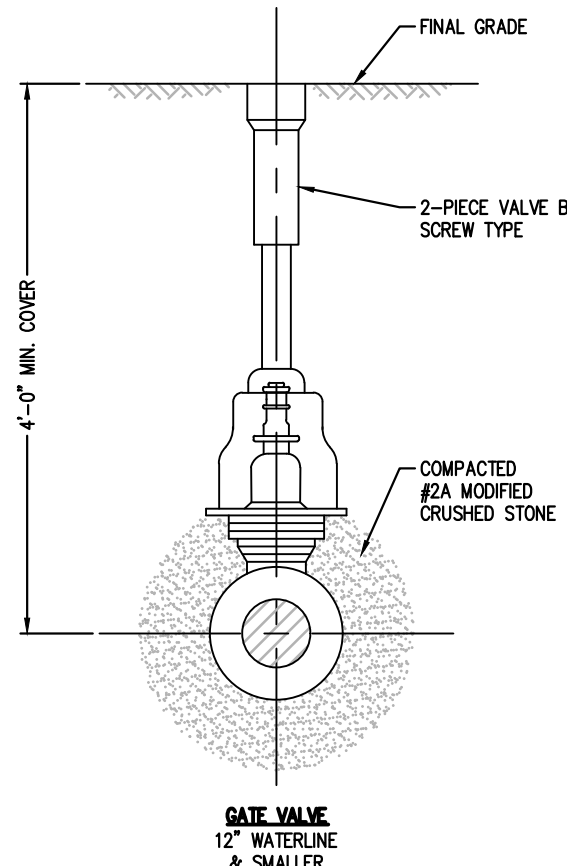
Lateral Clean-out

NOT TO SCALE



2" Surface Blowoff

NOT TO SCALE



Gate Valve Detail

NOT TO SCALE

NOTE:

1. RETAINER GLANDS REQUIRED ON ALL MECHANICAL JOINT FITTINGS
2. ROD DIAMETER SHALL BE EQUAL TO THAT OF THE GLAND BOLTS. RODS SHALL BE GIVEN ONE COAT OF BITUMASTIC PAINT.

Type of Bearing Material and Allowable loads, psf	4" and less DEGREE BEND				6" and 8" DEGREE BEND				10" and 12" DEGREE BEND			
	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90
LOOSE SAND OR MEDIUM CLAY - 2,000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	10.0	3.0	6.2	12.0	22.0
PACKED GRAVEL AND SAND - 4,000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.0	1.5	3.1	6.0	11.0
ROCK - 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	1.0	1.3	2.4	4.4

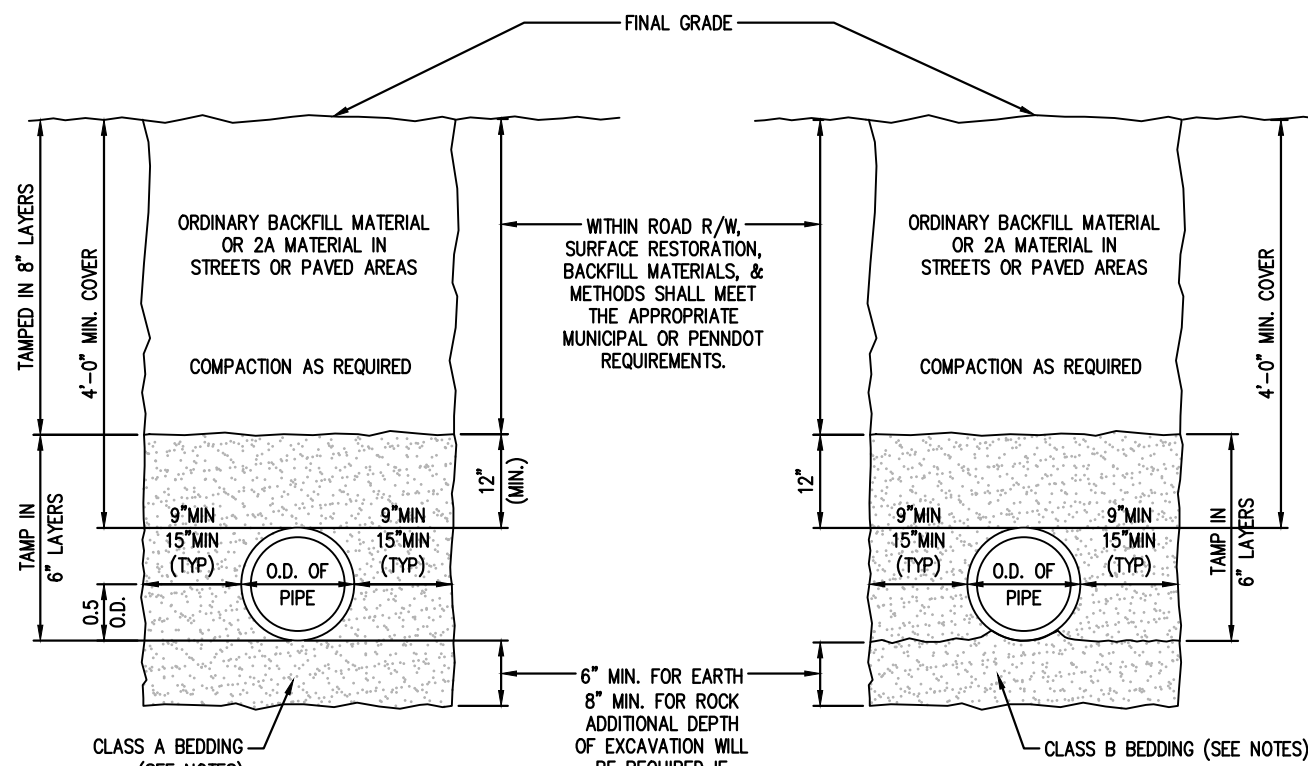
Type of Bearing Material and Allowable Loads	14" and 16" DEGREE BEND OR DEFLECTION				18" and 20" DEGREE BEND OR DEFLECTION			
	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90
LOOSE SAND OR MEDIUM CLAY - 2,000	6.0	12.0	22.5	40.0	9.5	19.0	37.0	67.0
PACKED GRAVEL AND SAND - 4,000	3.0	6.0	11.3	20.0	4.8	9.5	18.5	33.5
ROCK - 10,000	1.2	2.4	4.5	8.0	2.0	3.8	7.4	13.5

Notes:

THRUST BLOCKING FOR TEES SHALL HAVE THE SAME BEARING AREA AS 90° BENDS OF THE PIPE SIZE OF THE OUTLET. DEAD ENDS SHALL HAVE THE SAME BEARING AS 90° BENDS.

Thrust Blocking Schedule

NOT TO SCALE
SCHEDULE OF DIMENSIONS UP TO 150 PSI WORKING PRESSURE



Ductile Iron & PVC Pipe

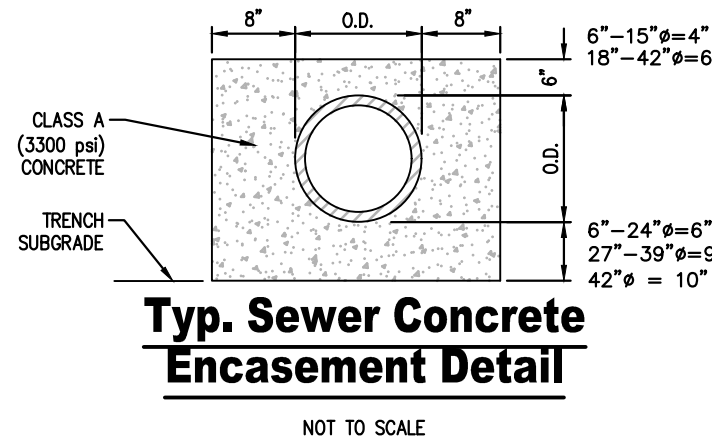
Typical Trench Details

NOT TO SCALE

HDPE Or Reinforced Concrete Pipe

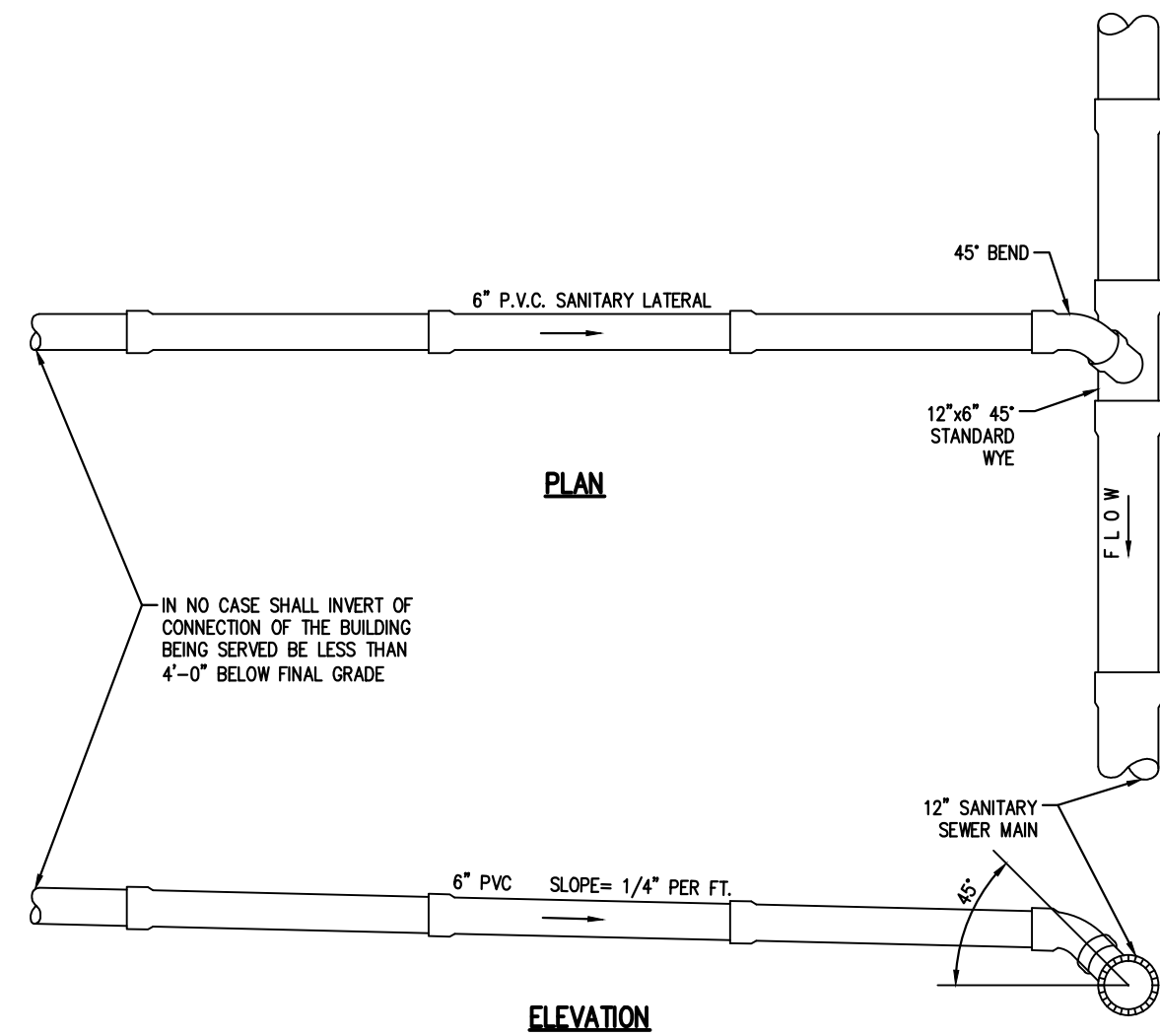
Notes:

1. ALL BACKFILL MATERIAL IS SUBJECT TO CITY APPROVAL OR UOI APPROVAL FOR GAS MAIN.
2. CLASS A BEDDING: APPROVED SCREENINGS TO 12" ABOVE PIPE.
3. CLASS B BEDDING: FINE AGGREGATE
4. SELECT BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 3-INCHES.
5. ORDINARY BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 6-INCHES.
6. SLAG MATERIAL IS PERMITTED ABOVE THE 12 INCHES OF INTIAL COVER MATERIAL ABOVE THE PIPE.
7. HYDRO HAMMERS CAN BE USED AT DISTANCES GREATER THAN 3' ABOVE THE TOP OF THE PIPE IF THE SOIL DENSITY HAS BEEN PREVIOUSLY COMPACTED TO A MINIMUM 95% STANDARD PROCTOR.
8. PVC PIPE TO BE SDR 35 FOR PIPE RUNS LESS THEN 15' DEEP. FOR SANITARY SEWER RUNS GREATER THEN 15' IN DEPTH, SDR 26 SHALL BE USED.



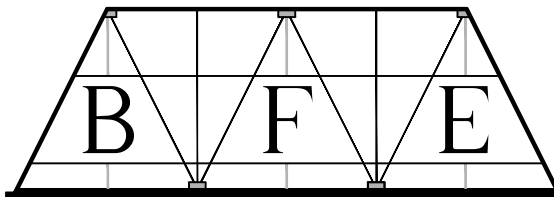
Typ. Sewer Concrete Encasement Detail

NOT TO SCALE



Typical Sanitary Sewer Lateral Connection

NOT TO SCALE



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2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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SEAL:

JOSEPH E. RENTKO, P.E. #PE085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
202-239-4469

01	CITY REVIEW LETTER	JER	10/8/24
REV:	DESCRIPTION:	BY	DATE

PROJECT TITLE:
1513 MAPLE STREET

PROJECT OWNER:
FRANKFORD STREET PARTNERS LLC
580 W MACADA ROAD
BETHLEHEM, PA 18017

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 15 BLOCK 3
NORTHAMPTON COUNTY
PENNSYLVANIA**

PLAN TITLE:
CONSTRUCTION DETAILS

SCALE: AS NOTED	DATE: 9/3/24	DRAWN: JER	CHECKED: JER
PROJECT NO. 2331	DRAWING NO. 6	OF 6	REVISION: 00