

SITE DATA & ZONING DATA
 PIN: 642802745755
 PROPERTY ADDRESS: 1224 EATON AVE
 AREA: 28,631 SF (GROSS); 25,897 SF (NET)
 OWNER: PAJ VENTURES LP
 1177 6TH ST
 WHITEHALL PA 18052
 NUMBER OF LOTS - EXISTING: 1; PROPOSED: 1
 NUMBER OF UNITS - EXISTING: 1; PROPOSED: 6 TOTAL (1 SFD + 3 TOWNHOMES + 1 DUPLEX)
 LINEAL FEET OF NEW STREETS - 0 LF.
 WATER SUPPLY - PROPOSED PUBLIC
 SEWER - PROPOSED PUBLIC

ZONING DISTRICT:	RG RESIDENTIAL DISTRICT		
	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT SIZE:	12,000 SF	28,631 SF	25,897 SF
MINIMUM LOT WIDTH:	20 FT	83 FT	83 FT
MINIMUM YARDS:			
FRONT: 20 FT	20 FT	20 FT	20 FT
SIDE: 10 FT	10 FT	10 FT	10 FT
REAR: 30 FT	30 FT	30 FT	30 FT
MAX. BLDG COVERAGE:	70%	5.3% (1515 SF)	18% (4715 SF)
MAX. BUILDING HEIGHT:	35 FT/2.5 STORY	NA	30 FT / 2 STORY

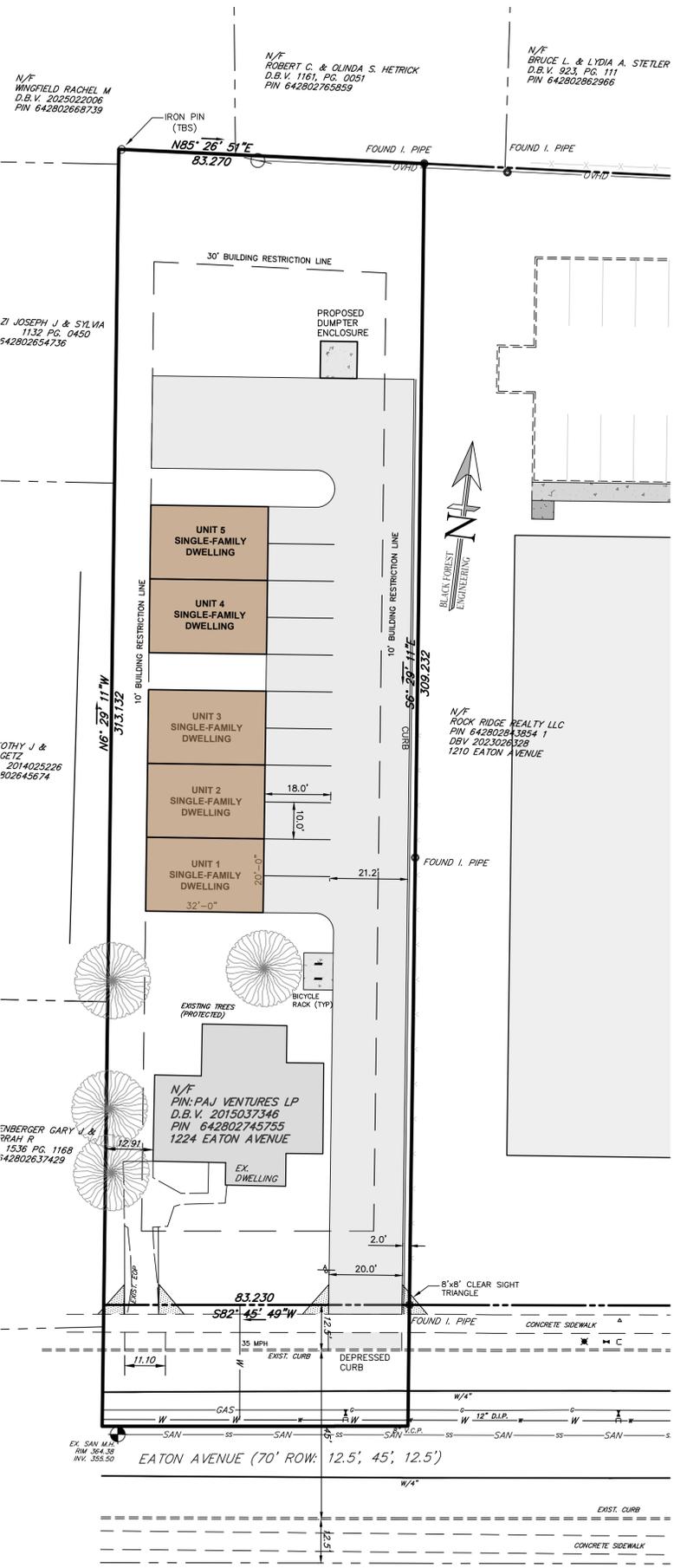
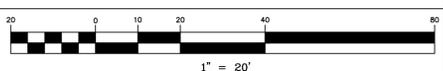
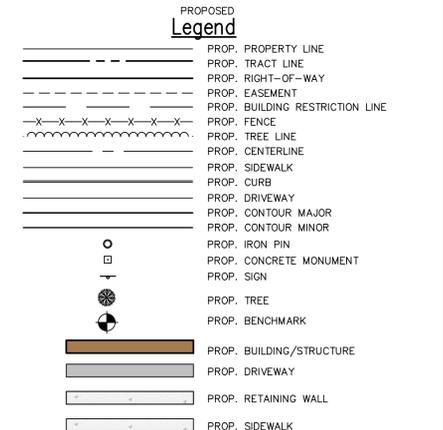
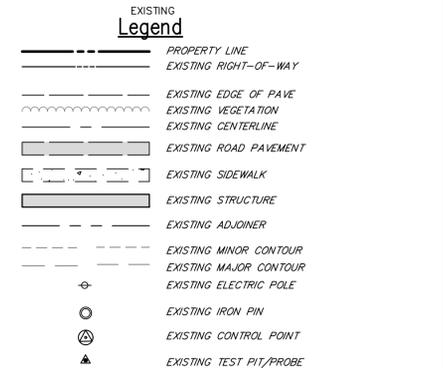
PARKING REQUIREMENT
 VEHICLE:
 2 SPACES PER DWELLING
 6 UNITS x 2 = 12 SPACES REQ'D (13 PROVIDED)

IMPERVIOUS COVER
 EXISTING CONDITION=5,161 SF
 PROPOSED CONDITION=13,910 SF

NOTE: A NET INCREASE OF 8,749 SF IS PROPOSED AND THEREFORE ACT 167 APPROVAL IS NOT REQUIRED THROUGH LVPC. HOWEVER, AN INFILTRATION BASIN IS PROPOSED TO MITIGATE SURFACE RUNOFF.

SURVEY NOTES:
 1. THIS PLAN IS BASED ON A FIELD SURVEY CONDUCTED 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 NAVD83.
 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 MANHOLE RIM=364.38



NARRATIVE
 THE APPLICANT WISHES TO IMPROVE THE OVERSEEN PROPERTY BY CONSTRUCTING THREE (3) TOWNHOMES AND A DUPLEX (2 ATTACHED UNITS), WHICH WOULD BE LOCATED IN THE REAR (BEHIND) AND EXISTING SINGLE-FAMILY DETACHED DWELLING WHICH IS CURRENTLY RENTED. THIS PROPOSAL IS A PERMITTED USE WITHIN THE RG DISTRICT. THE APPLICANT WAS GRANTED DIMENSIONAL RELIEF BY THE ZONING HEARING BOARD WAS GRANTED FOR THE FOLLOWING THREE (3) SECTIONS:
 1308.01(A)(3) WHICH HAS TO DO WITH LOT AREA.
 1319.02(G)(4) WHICH HAS TO DO WITH A REQUIRED 2.5 FT OFFSET FOR A RESIDENTIAL DRIVEWAY TO A PROPERTY LINE.
 1319.03(A)(4) REGARDING THE REQUIREMENT FOR A 24 FT DRIVE AISLE WHERE THERE IS PARKING SPACES AND TWO-WAY TRAFFIC.

LAND DEVELOPMENT LOCATED IN THE
 CITY OF BETHLEHEM
 WARD 13 BLOCK 149
 NORTHAMPTON COUNTY
 COMMONWEALTH OF PENNSYLVANIA

INVOLVING PARCEL LOCATED AT
 1224 EATON AVENUE

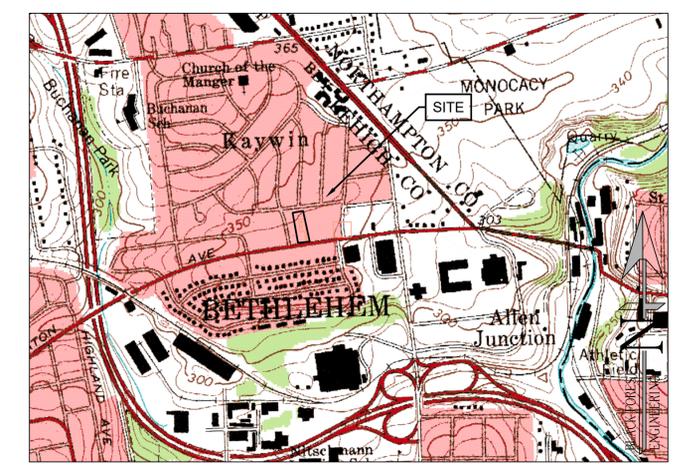
1224 EATON AVENUE
 LAND DEVELOPMENT
 PRELIMINARY/FINAL PLAN

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 LOT LINES ADJOINING NEIGHBORS. THE DRAINAGE EASEMENT PROVIDED FOR THE FLOW OF 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 BY SITE CONTRACTOR 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 THE BACKS TO BE CONSTRUCTED ON THE ADJOINING PROPERTY.
- ALL PAVEMENT MARKINGS MUST BE THERMOPLASTIC PAVEMENT MARKINGS.
- THE PROJECT HAS AN APPROVED PLANNING MODULE FOR THE PROPOSED 5-UNITS, SEE DEP CODE# (2-.....).
- 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 DRAWINGS 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.

SIGN SCHEDULE

KEY	DESC.	PENNDOT CODE	QTY	SIZE
A	STOP SIGN	RI-1	1	30" x 30"



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

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

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 _____
 SECRETARY _____ 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 _____

SURVEYOR'S CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN COMPILED FROM A SURVEY ACTUALLY MADE, ON THE GROUND, THAT IS CORRECT, AND AT THE TIME THE SURVEY WAS MADE, THERE WERE NO EASEMENTS OR ENCROACHMENTS ACROSS PROPERTY LINES, OTHER THAN THOSE SHOWN.
 SURVEYOR _____ DATE REGISTERED _____

"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

BLACK FOREST ENGINEERING, LLC
 1903 MAIN STREET
 NORTHAMPTON, PA 18067
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SEAL:

 JOSEPH E. RENTKO, P.E. #PE085609
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037
 717-239-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
**1224 EATON AVE
 LAND DEVELOPMENT**
 PROJECT OWNER:
 PAJ VENTURES LP
 1177 6TH ST
 WHITEHALL, PA 18052
 PROJECT LOCATION:
 CITY OF BETHLEHEM
 WARD 13; BLOCK 149
 LEHIGH COUNTY
 PENNSYLVANIA

PLAN TITLE:
RECORD

SCALE: 1"=20'
 DATE: 2/2/26
 DRAWN: JER
 CHECKED: JER/KTH

PROJECT NO. 1224
 DRAWING NO. 1 OF 6
 REVISION: 00

PLAN INTENT

THE APPLICANT WISHES TO CONSTRUCT THREE (3) TOWNHOMES AND A DUPLEX (2 UNITS) BEHIND THE EXISTING SINGLE FAMILY DETACHED DWELLING LOCATED AT 1224 EATON AVE.

GENERAL UTILITY NOTES

1. THE DEVELOPER IS RESPONSIBLE TO SECURE AND PAY FOR ALL ESTABLISHED CITY APPLICATION, ALLOCATION AND TRANSMISSION AND TREATMENT FEES OR PERMITS NECESSARY FOR THE CONNECTION OF THE WATER AND SEWER SYSTEMS TO THE CITY PUBLIC SYSTEMS.
2. ALL DEVELOPMENT CONSTRUCTION IMPROVEMENTS ARE SUBJECT TO QUALITY CONTROL INSPECTION BY THE CITY OR THEIR ASSIGNED AGENTS. ALL WORK CONSTRUCTED WITHOUT QUALITY CONTROL INSPECTION WILL BE SUBJECT TO REJECTION AND REMOVAL AND RECONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY A MINIMUM OF 3 DAYS PRIOR TO ANY CONSTRUCTION OPERATIONS WITHIN THE CITY RIGHT-OF-WAY OR AFFECTING A CITY UTILITY.
3. ALL PROPOSED UTILITIES SHALL BE LOCATED UNDERGROUND.

SANITARY SEWER NOTES

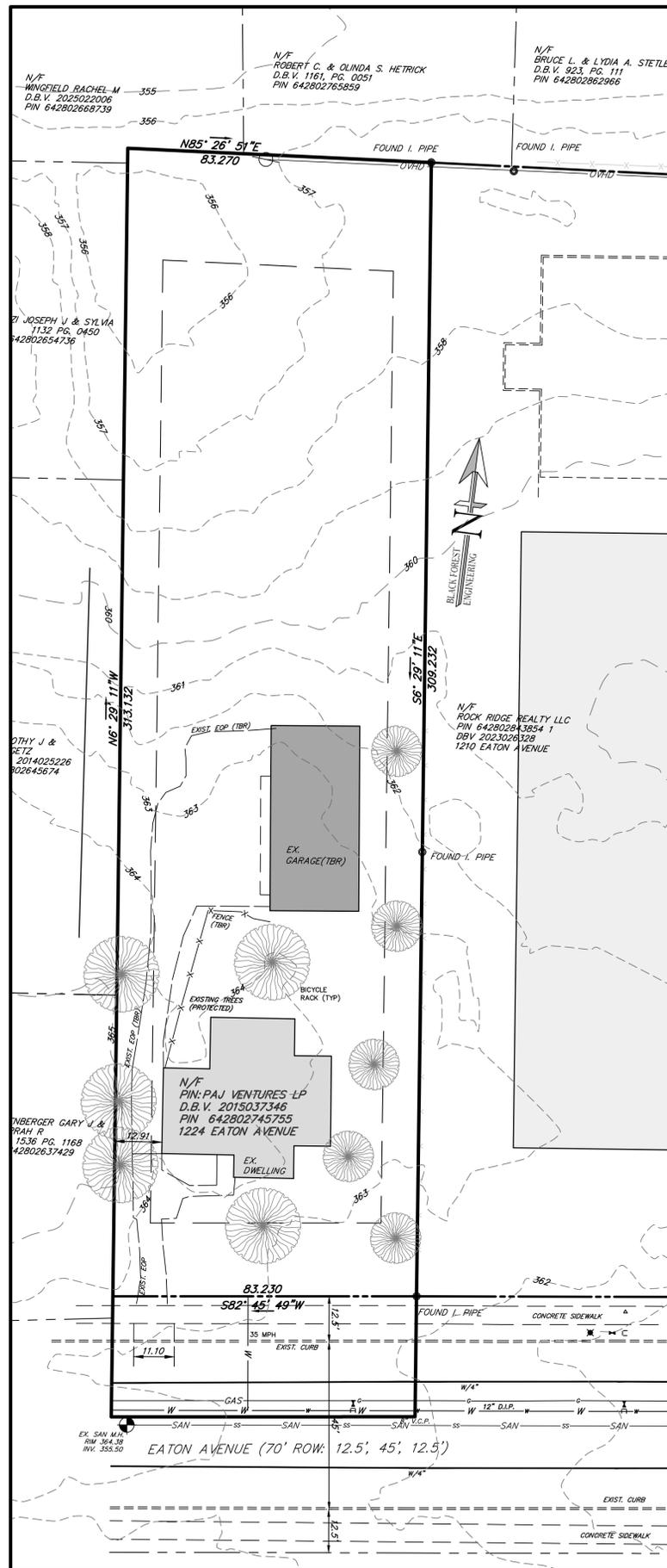
1. ALL SANITARY SEWER MATERIAL AND APPURTENANCES TO BE DEDICATED TO THE CITY MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BETHLEHEM CONSTRUCTION SPECIFICATIONS, AS AMENDED AND THE PA DEP DOMESTIC WASTEWATER FACILITIES MANUAL, LATEST REVISION.
2. ALL SANITARY SEWER PIPE, FITTINGS, AND APPURTENANCES MUST BE SDR-26 OR 35 PVC, UNLESS NOTED OTHERWISE.
3. CONNECTION TO EXISTING SANITARY SEWER MANHOLE MUST BE MADE USING WATERTIGHT CONNECTION.
4. EXISTING SANITARY SEWER CONNECTIONS SHALL BE CAPPED AT THE MAIN PRIOR TO DEMOLITION. CAPPING PERMITS SHALL BE OBTAINED FROM THE CITY OF BETHLEHEM ENGINEERING BUREAU.

WATER UTILITY NOTES

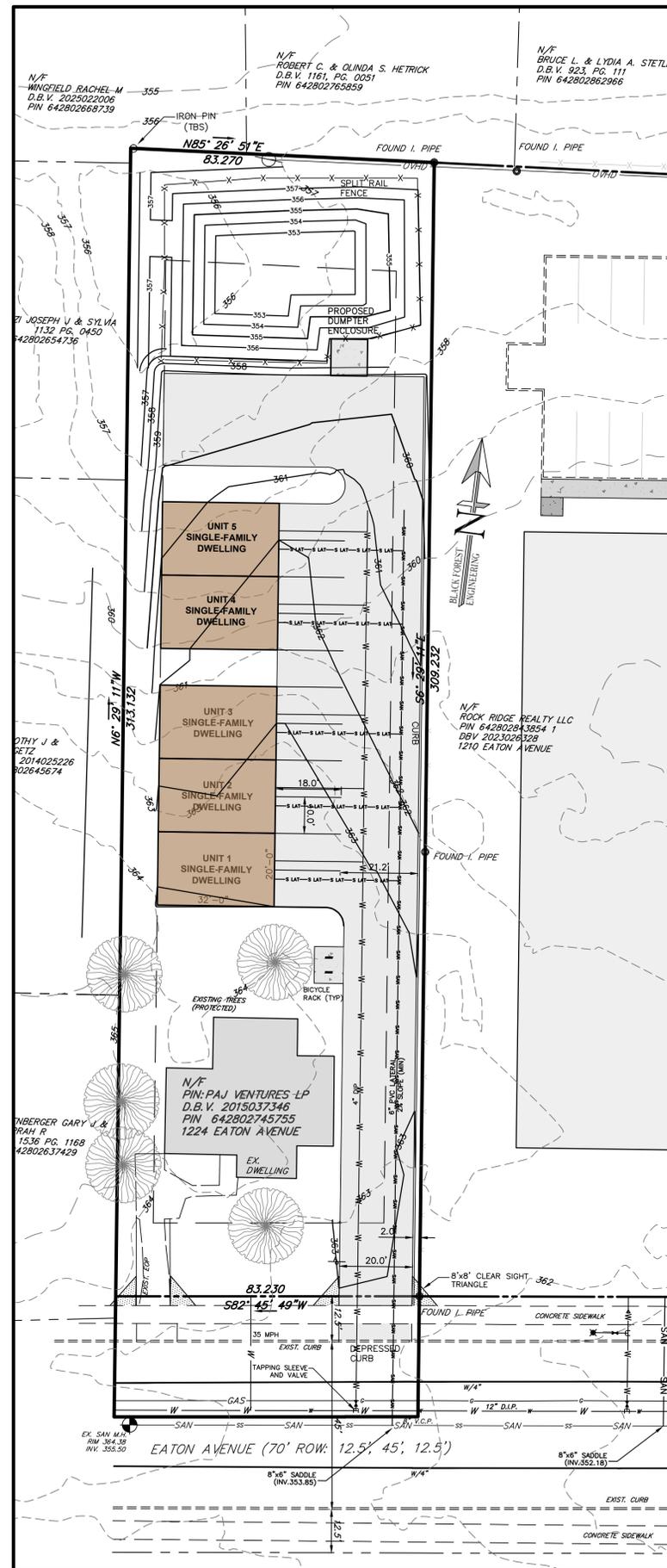
1. ALL WATER SERVICE LATERALS MUST BE INSTALLED FROM THE MAIN, CORPORATION STOP TO THE CURB STOP AT THE CITY RIGHT-OF-WAY WITHOUT A SPLICE CONNECTION.
2. THE CONTRACTOR SHALL NOT OPERATE EXISTING VALVES, FIRE HYDRANTS, ETC., WITHIN THE CITY'S WATER SYSTEM. ARRANGEMENTS SHALL BE MADE THROUGH THE CITY FOR OPERATION.
3. ALL WATER SYSTEM MATERIALS, APPURTENANCES AND CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY MUST BE IN COMPLIANCE WITH THE CITY OF BETHLEHEM CONSTRUCTION SPECIFICATIONS, AS AMENDED AND THE PA DEP PUBLIC WATER SUPPLY MANUAL, LATEST EDITION.
4. ALL WATER LATERALS AND APPURTENANCES MUST MAINTAIN A MINIMUM OF 4 FEET COVER FROM FINISHED GRADE AND SHALL BE DUCTILE IRON PIPE.

EXISTING TREES:

THERE ARE FIVE (5) EXISTING TREES MEETING THE REQUIREMENTS OF CITY ORDINANCE 1318.28 PLANNED FOR REMOVAL. ANY SUCH EXISTING TREE MEETING THIS REQUIREMENT SHALL BE REPLACED AS REQUIRED.



EXISTING FEATURES



GRADING & UTILITY

EXISTING Legend

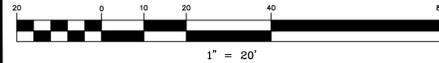
- PROPERTY LINE
- - - - - EXISTING RIGHT-OF-WAY
- - - - - BUILDING RESTRICTION LINE
- - - - - EXISTING EDGE OF PAVE
- - - - - EXISTING VEGETATION
- - - - - EXISTING CENTERLINE
- - - - - EXISTING ROAD PAVEMENT
- - - - - EXISTING SIDEWALK
- - - - - EXISTING STRUCTURE
- - - - - EXISTING ADJOINER
- - - - - EXISTING GAS LINE
- - - - - EXISTING SANITARY LINE
- - - - - EXISTING STORM SEWER
- - - - - EXISTING WATER LINE
- - - - - EXISTING CURB
- - - - - EXISTING FENCE
- - - - - EXISTING MINOR CONTOUR
- - - - - EXISTING MAJOR CONTOUR
- - - - - EXISTING ELECTRIC POLE
- - - - - EXISTING GAS VALVE
- - - - - EXISTING WATER VALVE
- - - - - EXISTING FIRE HYDRANT
- - - - - EXISTING IRON PIN
- - - - - EXISTING CONTROL POINT
- - - - - EXISTING TEST PIT/PROBE
- - - - - EXISTING INLET

PROPOSED Legend

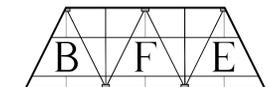
- PROP. PROPERTY LINE
- PROP. TRACT LINE
- PROP. RIGHT-OF-WAY
- PROP. EASEMENT
- PROP. BUILDING RESTRICTION LINE
- PROP. FENCE
- PROP. TREE LINE
- PROP. CENTERLINE
- PROP. SIDEWALK
- PROP. CURB
- PROP. DRIVEWAY
- PROP. CONTOUR MAJOR
- PROP. CONTOUR MINOR
- PROP. GAS LINE
- PROP. GAS LATERAL LINE
- PROP. 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. 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
- PROP. RETAINING WALL
- PROP. SIDEWALK

SOIL TYPES

- UoB Urban land-Duffield Complex, 0 to 8 percent slopes
- UoD Urban land-Duffield Complex, 8 to 25 percent slopes



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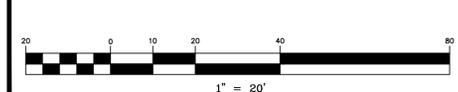
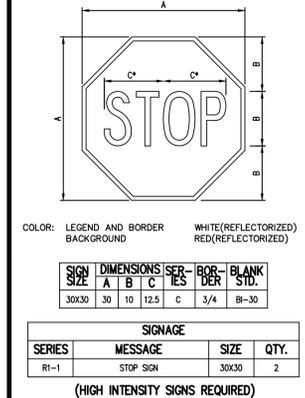
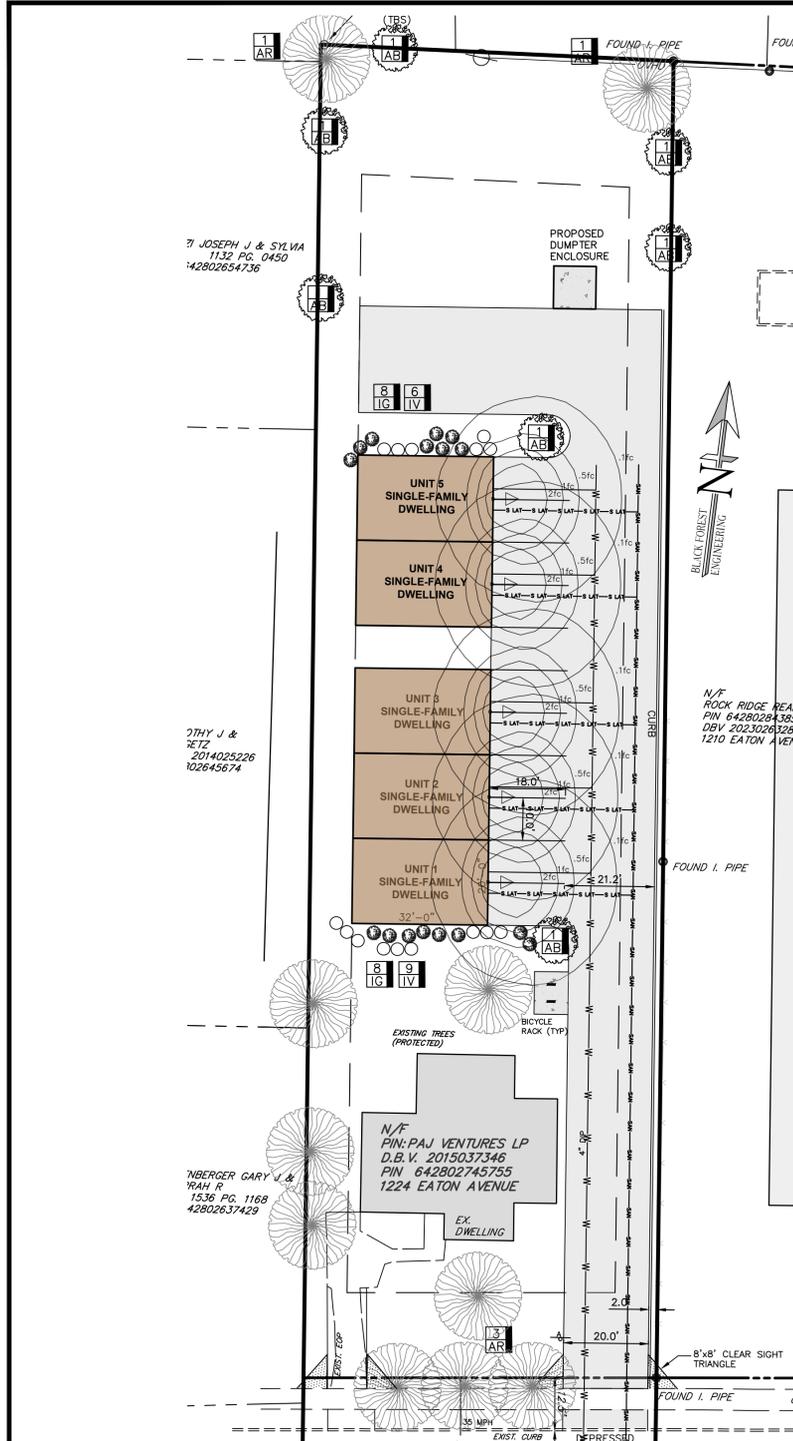
PROJECT TITLE:
**1224 EATON AVE
 LAND DEVELOPMENT**

PROJECT OWNER:
 PAJ VENTURES LP
 1177 6TH ST
 WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
 WARD 13; BLOCK 149
 LEHIGH COUNTY
 PENNSYLVANIA**

PLAN TITLE:
EX. FEAT.; G&U

SCALE: 1"=20'	DATE: 2/2/26	DRAWN: JER	CHECKED: JER/KTH
PROJECT NO. 1224	DRAWING NO. 2 OF 6	REVISION: 00	



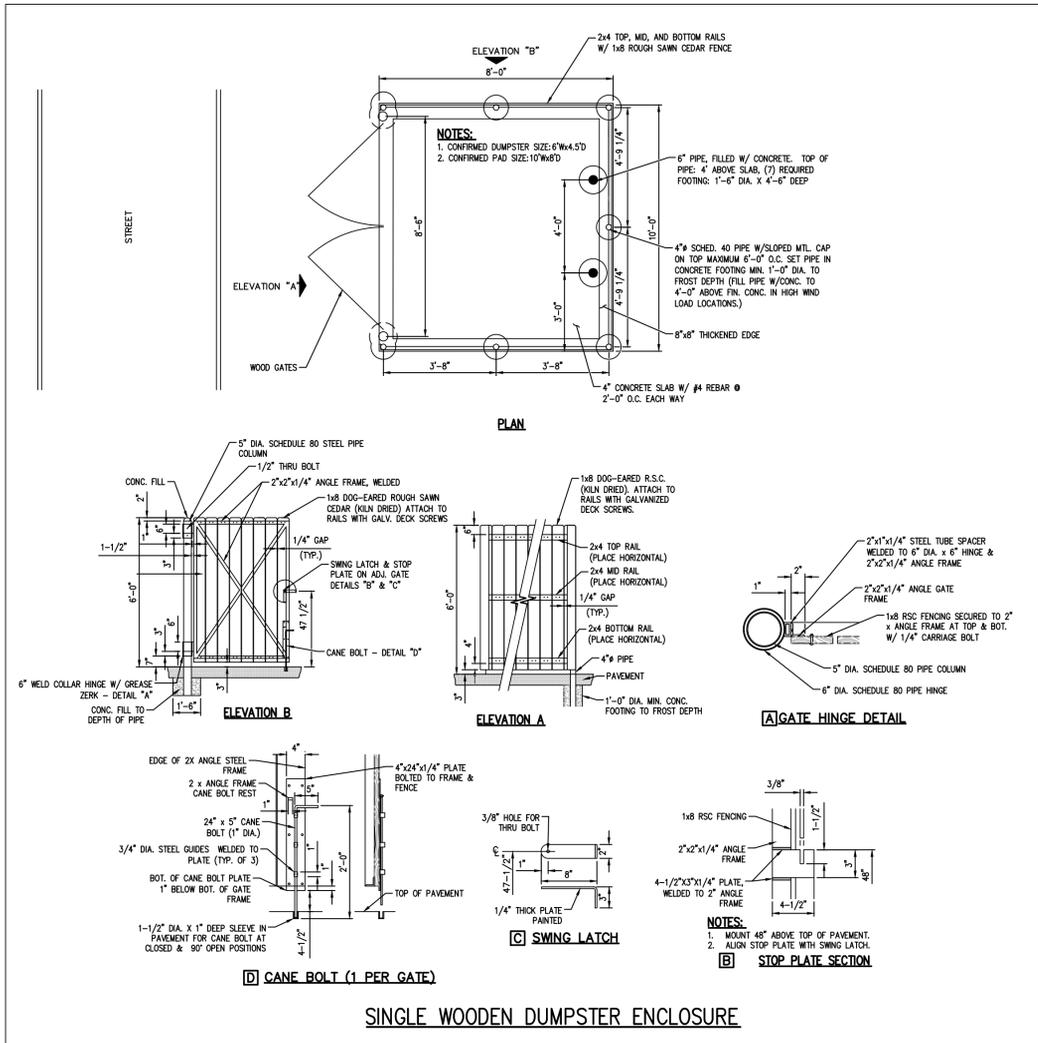
PLANT LIST: STREET & PARKING LOT TREES

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
AB	ACER BUERGERIAUM / TRIDENT MAPLE	2"-2.5" CAL.	B&B	10
AR	ACER RUBRUM / OCTOBER GLORY	2"-2.5" CAL.	B&B	2

PLANT LIST: FOUNDATION PLANTS

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
IG	ILEX GLABRA / SHAMROCK	5 LB	CONT.	16
IV	ITEA VIRGINICA / LITTLE HENRY	5 LB	CONT.	15

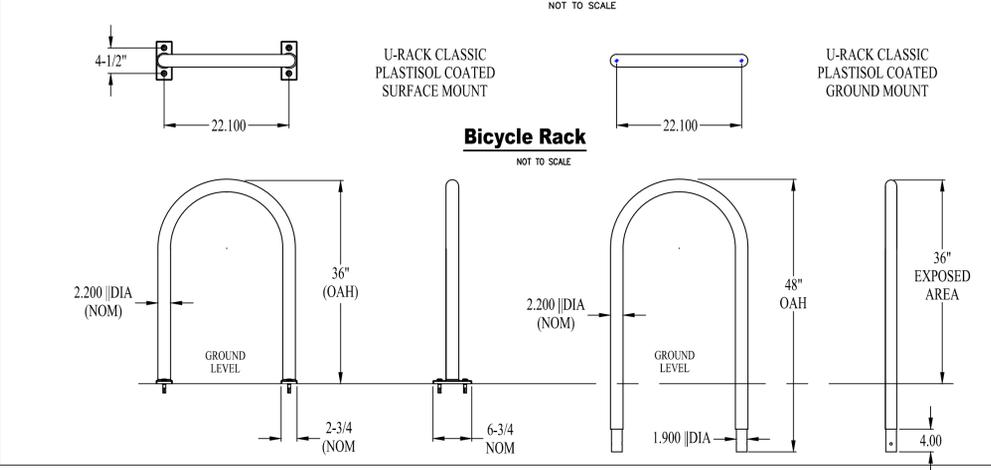
ALL TREES AND SHRUBS SHALL BE MATCHES, IN FORM, IN THEIR VARIETY.



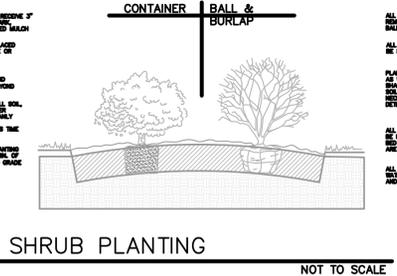
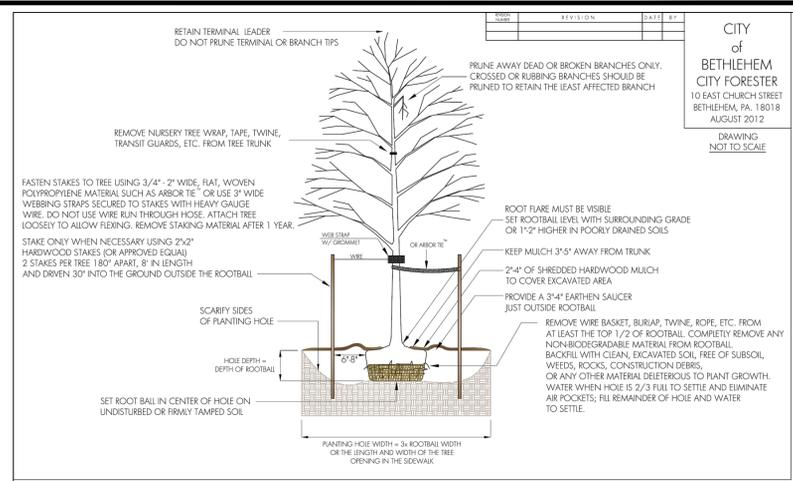
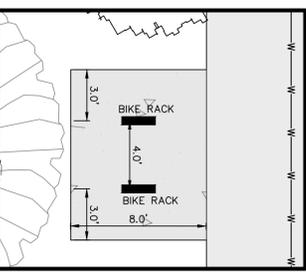
LIGHTING SCHEDULE

KEY	COMPANY	PRODUCT NAME	QTY
ARC	LITHONIA	ARC 1 LED P1 30K	5

PROPOSED BUILDING LIGHTS MODEL: ARC 1 LED P1 30K (OR EQUAL) 10FT HT



- REQUIRED LANDSCAPING:**
- STREET TREES:**
EATON AVE. = 83 LF FRONTAGE (1 TREE REQD PER 30 LF); 2.76 TREES REQD; 3 PROVIDED (3 PROPOSED)
- LANDSCAPE AREAS EQUAL TO 10 PERCENT OF THE OFFSTREET PARKING AREA SHALL BE PROVIDED. APPROX PARKING AREA=4,360 SF REQD LANDSCAPE AREA=436 SF
 - TOTAL REQD LANDSCAPE AREA=436 SF PROVIDED LANDSCAPE AREA=>800 SF
 - ONE (1) TREE PER 15 PARKING SPACES; 1 TREES REQUIRED; 2 PROVIDED
 - FIVE (5) SITE TREES REMOVED MEETING THE CRITERIA FOR REPLACEMENT; 5 PROVIDED



- 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.

CITY of BETHLEHEM
CITY FORESTER
10 EAST CHURCH STREET
BETHLEHEM, PA. 18018
AUGUST 2012
DRAWING NOT TO SCALE

SHRUB PLANTING
NOT TO SCALE

B F E
BLACK FOREST ENGINEERING, LLC
1903 MAIN STREET
NORTHAMPTON, PA 18067

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SEAL:

JOSEPH E. RENTKO, P.E. #PE085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
610-339-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
**1224 EATON AVE
LAND DEVELOPMENT**

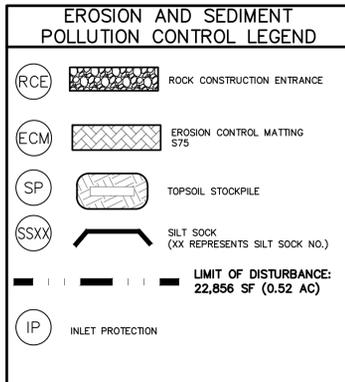
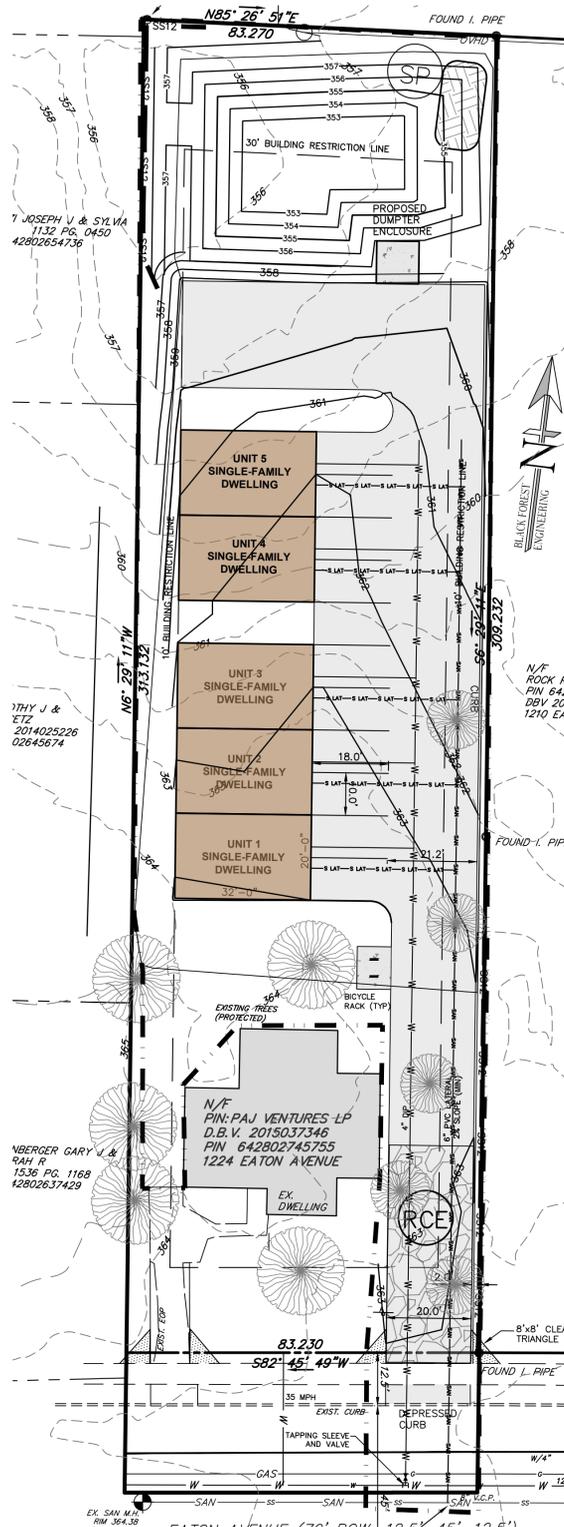
PROJECT OWNER:
PAJ VENTURES LP
1177 6TH ST
WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 13; BLOCK 149
LEHIGH COUNTY
PENNSYLVANIA**

PLAN TITLE:
LIGHTING & LANDSCAPING

SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	2/2/26	JER	JER/KTH

PROJECT NO.	DRAWING NO.	REVISION:
1224	3 OF 6	00



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.
- Topsoil pile locations may be adjusted to fit the contractor schedule as long as the silt sock is placed downslope of the pile locations.
- 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 Eaton Ave 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 trees. Strip topsoil and stockpile locations indicated on the Plan.
- Begin bulk earthwork for the building pad, swale and parking lot. 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 or 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.

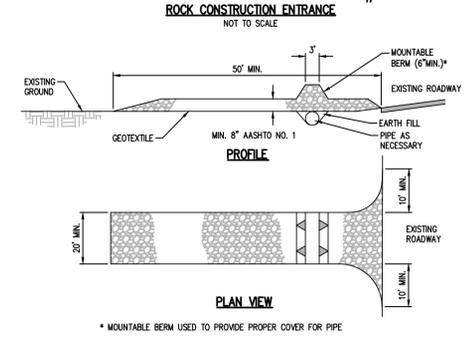
Apply mulches at the rates shown in table 11.6

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.)

Table 11.6. Mulch Application Rates

Mulch Type	Application Rate (Min.)		Notes
	Per Acre	Per 1,000 sq. ft.	
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

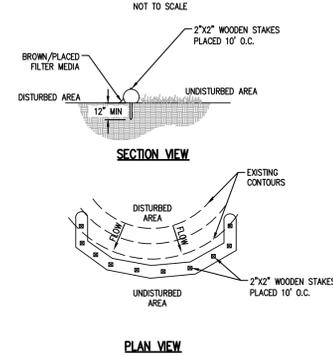


General Notes:

- 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

COMPOST FILTER SOCK



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 IN 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 (DMPP)
	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	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.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

TWO-PLY SYSTEMS

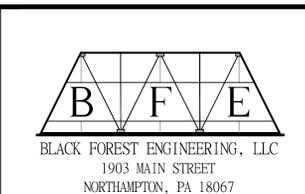
INNER CONTAINMENT NETTING	HOPE BIAXIAL NET	
	CONTINUOUSLY WOUND	
	FUSION-WELD JUNCTURES	
	3/4" X 3/4" MAX. APERTURE SIZE	
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER & NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)	
	3/16" MAX. APERTURE SIZE	

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	30% - 60%
PARTICLE SIZE	30% - SOX PASSES THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 gS/m (mmhos/cm) MAXIMUM



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JOSEPH E. RENTKO, P.E. #PE0805609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
212-239-4499

REV.	DESCRIPTION:	BY	DATE

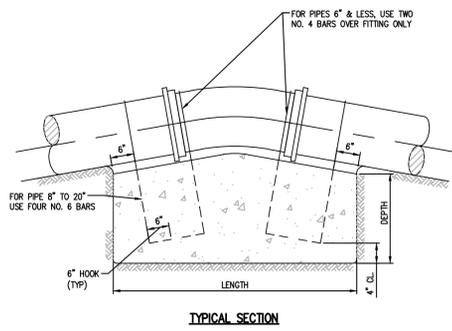
PROJECT TITLE:
**1224 EATON AVE
LAND DEVELOPMENT**

PROJECT OWNER:
PAJ VENTURES LP
1177 6TH ST
WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 13; BLOCK 149
LEHIGH COUNTY
PENNSYLVANIA**

PLAN TITLE:
ESPC

SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	2/2/26	JER	JER/KTH
PROJECT NO.	DRAWING NO.	OF	REVISION:
1224	4	6	00

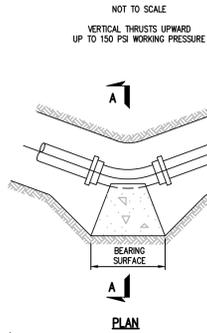


PIPE SIZES (inches)	DIMENSIONS OF CONCRETE BLOCKING					
	LENGTH		WIDTH		DEPTH	
4 & SMALLER	11 1/4	22 1/2	4 1/2	11 1/4	22 1/2	4 1/2
6 & 8	2'	4'	4'	1.5'	3'	3'
10 & 12	4.5'	6'	8'	3'	3'	4'
14 & 16	6'	8'	11'	3.5'	3.5'	5'
18 & 20	7'	9'	13'	4'	5'	6'

Notes:

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

Thrust Blocking - Vertical Thrusts

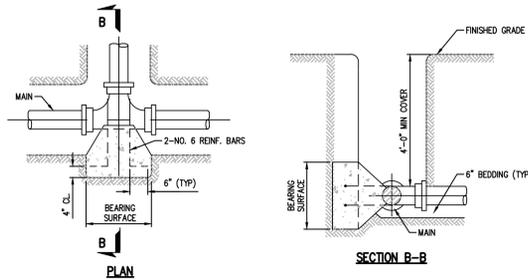


Notes:

- SEE STANDARD DETAIL STANDARD DETAIL VI-27 FOR BEARING AREA REQUIRED.
- 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



Notes:

- SEE STANDARD DETAIL STANDARD DETAIL VI-27 FOR BEARING AREA REQUIRED.
- NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.
- REINFORCING BAR STRIPS TO BE SHAPED TO PIPE CURVATURE.
- 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

BEARING AREA REQUIRED, SQUARE FEET

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

BEARING AREA REQUIRED, SQUARE FEET

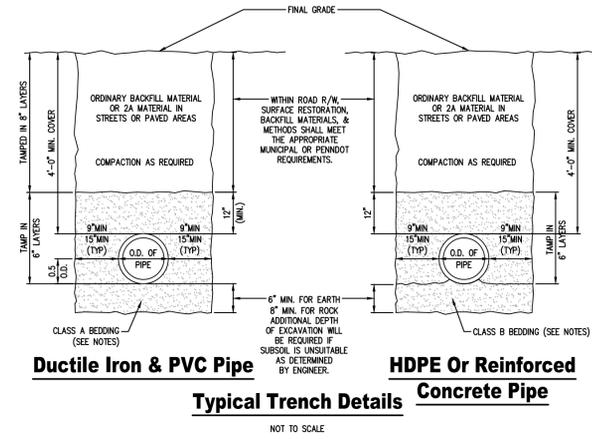
Type of Bearing Material and Allowable Loads	14" and 16" DEGREE BEND OR DEFLECTION			18" and 20" DEGREE BEND OR DEFLECTION		
	LOOSE SAND OR MEDIUM CLAY - 2,000	6.0	12.0	22.5	40.0	9.5
PACKED GRAVEL AND SAND - 4,000	3.0	6.0	11.3	20.0	4.8	9.5
ROCK - 10,000	1.2	2.4	4.5	8.0	2.0	3.8

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.

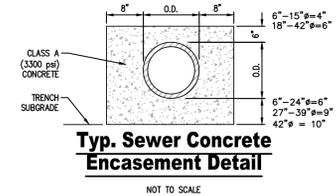
Thrust Blocking Schedule

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



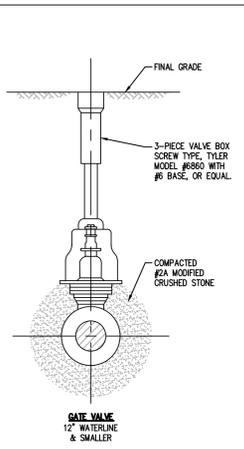
Notes:

- ALL BACKFILL MATERIAL IS SUBJECT TO CITY APPROVAL OR UGI APPROVAL FOR GAS MAIN.
- CLASS A BEDDING: APPROVED SCREENINGS TO 12" ABOVE PIPE.
- CLASS B BEDDING: FINE AGGREGATE
- SELECT BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 3-INCHES.
- ORDINARY BACKFILL: CLEAN DRY EARTH WITH A MAXIMUM STONE SIZE 6-INCHES.
- SLAG MATERIAL IS PERMITTED ABOVE THE 12 INCHES OF INTAL COVER MATERIAL ABOVE THE PIPE.
- 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.
- PVC PIPE TO BE SDR 35 FOR PIPE RUNS LESS THAN 15' DEEP. FOR SANITARY SEWER RUNS GREATER THAN 15' IN DEPTH, SDR 26 SHALL BE USED.



Typ. Sewer Concrete Encasement Detail

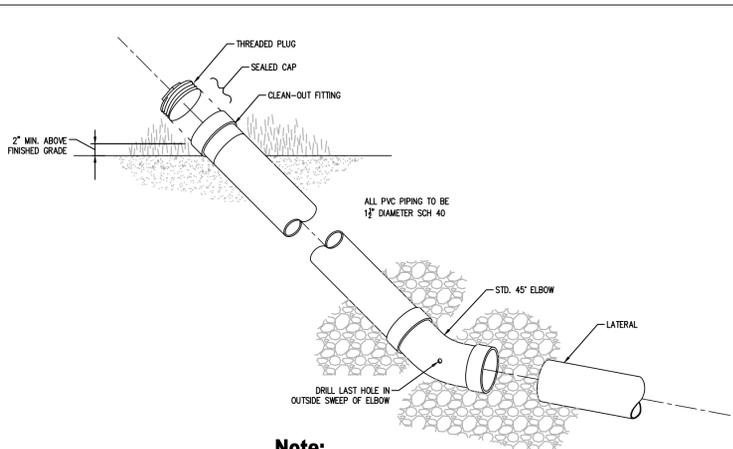
NOT TO SCALE



Valving Detail

NOTE:

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

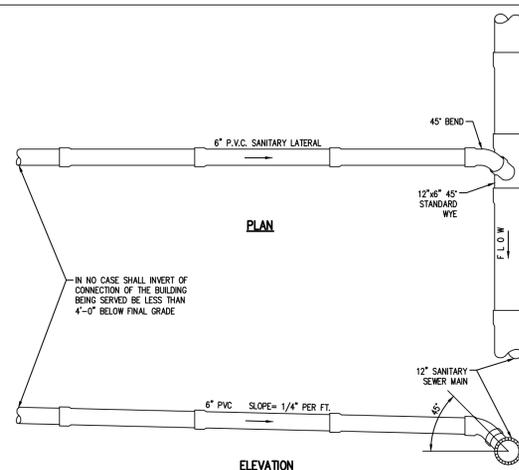


Note:

TYPICAL AT END OF ALL LATERALS

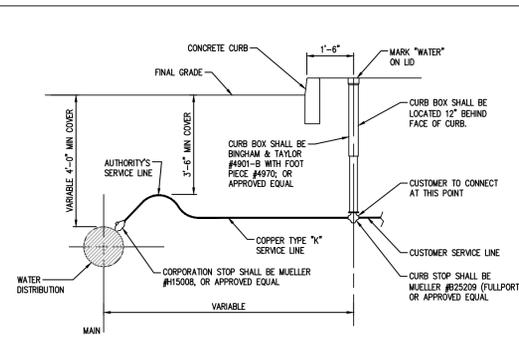
Lateral Clean-out

NOT TO SCALE



Typical Sanitary Sewer Lateral Connection

NOT TO SCALE

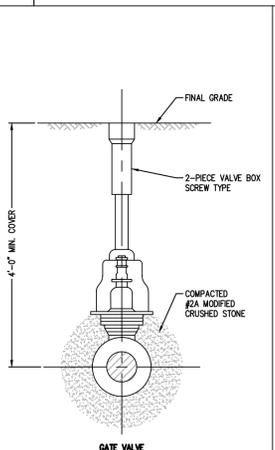


Notes:

- 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.
- 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

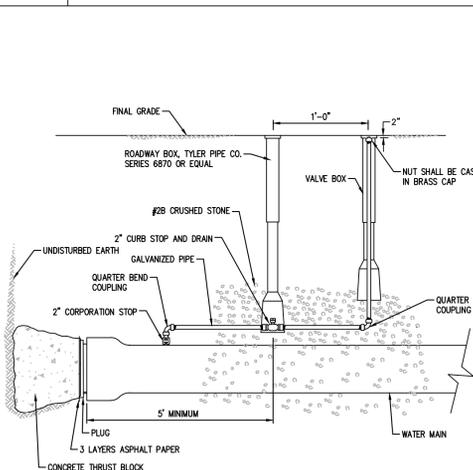
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Gate Valve Detail

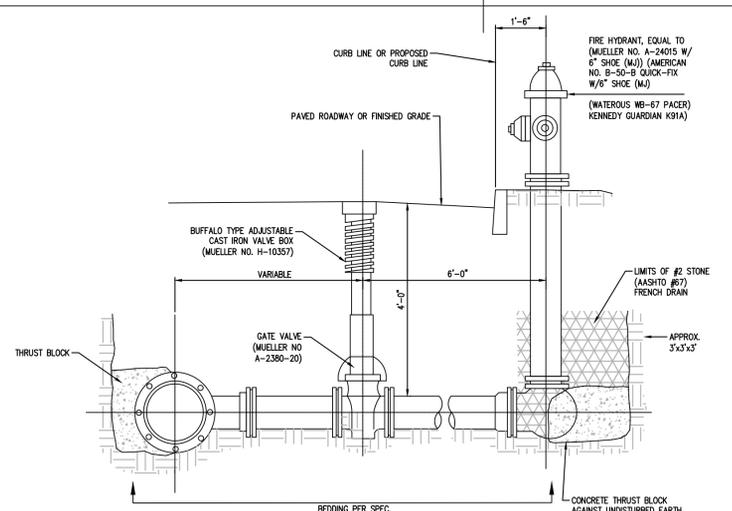
NOTE:

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



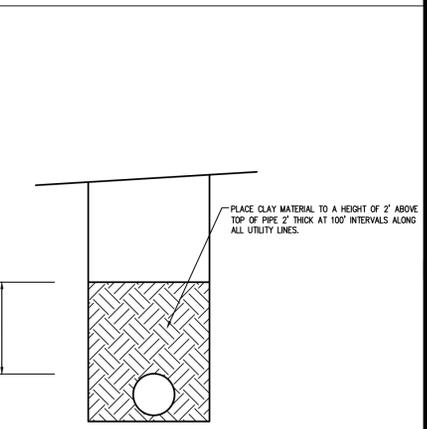
2" Surface Blowoff

NOT TO SCALE



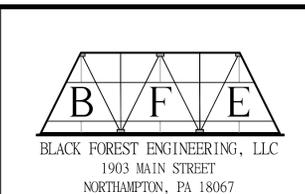
Typical Fire Hydrant Detail

NOT TO SCALE



Typical Trench Plug

NOT TO SCALE



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COPLAY, PA 18037
610-239-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
1224 EATON AVE LAND DEVELOPMENT

PROJECT OWNER:
PAJ VENTURES LP
1177 6TH ST
WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 13; BLOCK 149
LEHIGH COUNTY
PENNSYLVANIA**

DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
NOT TO SCALE	2/2/26	JER	JER/KTH
PROJECT NO.	DRAWING NO.	REVISION:	
1224	6 OF 6	00	