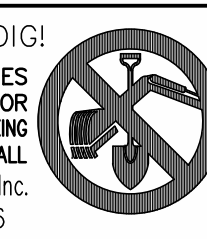


Serial Number: 2016-011-1937

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



THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. SERIAL NUMBER(S): 20141072620

Table with 2 columns: UTILITY COMPANY, PHONE NUMBER. Lists AT & T, PECO, ZAYO BANDWIDTH, AQUA PENNSYLVANIA, INC., LEVEL 3, VERIZON, COMCAST CABLE, MCI, RADNOR TOWNSHIP.

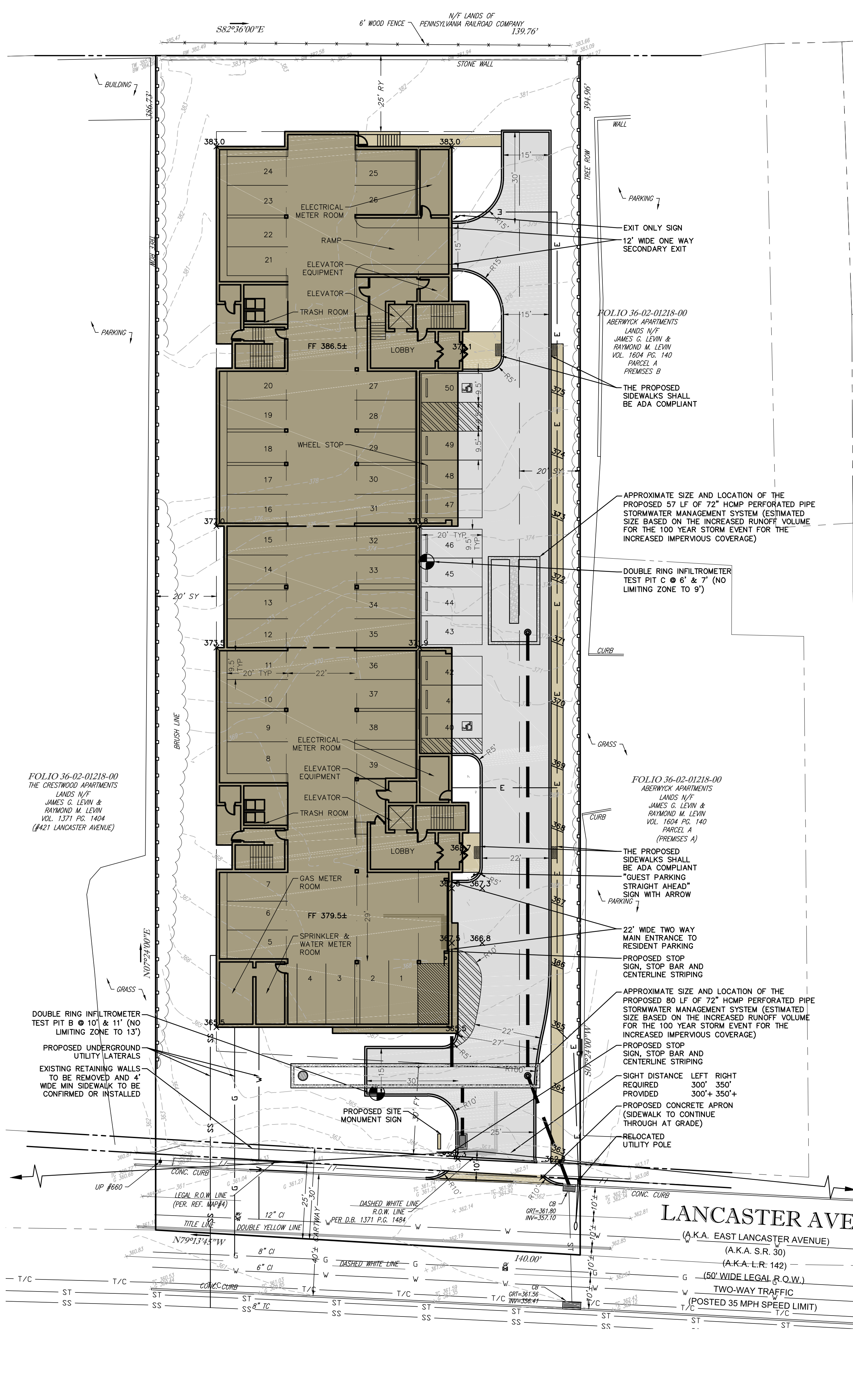
LEGEND

- Legend items: EXISTING CONTOUR, EXISTING SPOT ELEVATION, EXIST. TOP OF CURB ELEVATION, EXIST. GUTTER ELEVATION, EXIST. TOP OF WALL ELEVATION, EXIST. BOTTOM OF WALL ELEVATION, EXIST. FINISHED FLOOR ELEVATION, WATER VALVE, UNKNOWN VALVE, GAS VALVE, GAS METER, OVERHEAD WIRES, APPROX. LOC. UNDERGROUND GAS LINE, APPROX. LOC. UNDERGROUND TEL. LINE, APPROX. LOC. UNDERGROUND WATER LINE, UTILITY POLE, UTILITY POLE/LIGHT POLE, SIGN, MAIL BOX, ABOVE GROUND, UNDER GROUND, DEPRESSED CURB, EDGE OF PAVEMENT, LANDSCAPED AREA, RAILROAD TIE WALL, TYPICAL, WATER MANHOLE, CATCH BASIN OR INLET, PARKING SPACE COUNT, DEPRESSED CURB, DEED DESIGNATION, OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE, SOLID YELLOW LINE, DOUBLE YELLOW LINE, HEIGHT, DASHED WHITE LINE, BUILDING, ELEVATION.

- Proposed Building, Proposed Paving, Proposed Impervious Walks, Walls, Etc.

Table with 5 columns: SYMBOL, NAME, SLOPE, HYDROLOGIC GROUP, DEPTH TO WATER BEDROCK. Lists MADE LAND GABBRO AND DIABASE MATERIALS.

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE DISTURBED AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE. ADEQUACY OF SOIL TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS REQUIRED. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SITE GEOTECHNICAL ENGINEER SHALL ALSO BE CONSULTED DURING WINTER GRADING OPERATIONS.



ZONING DATA R-6 (RESIDENCE DISTRICT): REQUIRED, EXISTING, PROPOSED. Lists metrics like MINIMUM LOT SIZE, MAXIMUM BUILDING COVERAGE, etc.

- NOTES: 1. EXISTING NON-COMFORMITY, 2. LOT AREA PER UNIT BASED ON CONSOLIDATED LOT AREA, 3. IMPERVIOUS PERCENTAGES BASED ON CONSOLIDATED SITE AREA, 4. FOR MORE DETAILED INFORMATION REFER TO THE ZONING CODE OF RADNOR TOWNSHIP, LATEST EDITION.

EXISTING LOT DATA: TAX FOLIO NUMBER, TAX MAP NUMBER, SITE AREA, LOT AREA.

TAX FOLIO NUMBER, TAX MAP NUMBER, SITE AREA, LOT AREA.

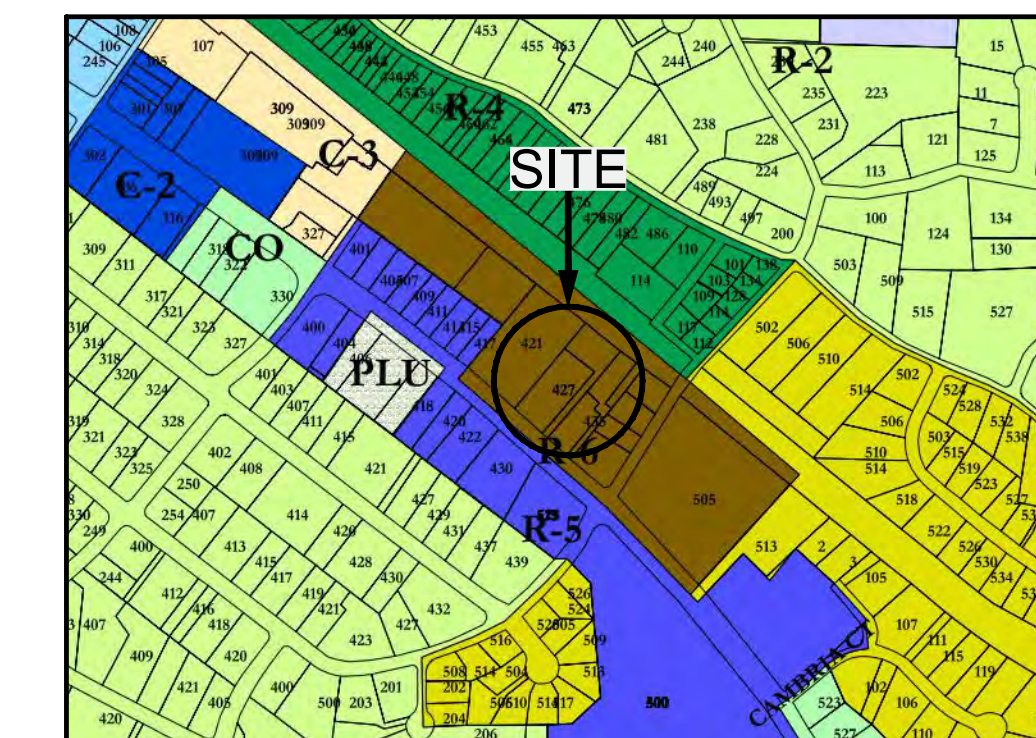
CONSOLIDATED LOT DATA: SITE AREA, LOT AREA.

EXISTING IMPERVIOUS COVERAGE: BUILDINGS & PORCHES, WALKS, PATIOS, ASPHALT DRIVES, GRAVEL DRIVES, OTHER.

PROPOSED IMPERVIOUS COVERAGE: BUILDINGS, WALKS, DRIVES, OTHER.

- GENERAL NOTES: 1. THESE PLANS ARE BASED ON THE NOTED REFERENCES AND THE INTENT OF THESE PLANS IS TO ILLUSTRATE A 22 UNIT MULTI-FAMILY DEVELOPMENT AS PERMITTED BY THE RADNOR TOWNSHIP R-6 ZONING DISTRICT. THE UNITS WILL BE A MIX OF 2 AND 3 BEDROOM UNITS. 2. THE MAJORITY OF THE EXISTING FEATURES WILL BE REMOVED AS SHOWN ON THE DEMOLITION PLAN. 3. THIS PROJECT WILL BE DEVELOPED AS A PLANNED COMMUNITY OR A CONDOMINIUM. 4. TRASH AND SNOW REMOVAL WILL BE THE RESPONSIBILITY OF THE HOME OWNERS ASSOCIATION. COMMON DUMPSTER AREAS ARE SHOWN ON THE PLAN. A WASTECADDY OR SIMILAR PRODUCT WILL BE USED TO WHEEL THE DUMPSTERS OUT OF THE GARAGE. 5. THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT FACILITIES WILL BE THE OBLIGATION OF THE HOME OWNERS ASSOCIATION. 6. THE PROPERTY SHALL BE GRADED SO THAT RUNOFF FROM THE MAJORITY OF THE PROPOSED DEVELOPMENT WILL BE DIRECTED TO AND COLLECTED BY A SERIES OF INLETS AND SWALES AND CONVEYED TO THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM WHICH WILL PROVIDE THE TOWNSHIP AND DEP. REQUIRED RATE AND VOLUME CONTROLS. THE COLLECTED RUNOFF WILL BE OVER-CONTROLLED BY THE STORMWATER FACILITIES TO COMPENSATE FOR THE RUNOFF FROM THE REMAINING SITE AREAS THAT ARE UNCONTROLLED. OVERFLOW FROM THE PROPOSED STORMWATER MANAGEMENT FACILITIES WILL BE PIPED TO EXISTING STORM SEWER FACILITIES LOCATED IN LANCASTER AVENUE. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 7. THE DEVELOPMENT WILL BE SERVICED BY A NEW GRAVITY SEWER LATERAL WHICH WILL CONNECT TO EXISTING SEWER MAIN IN LANCASTER AVENUE. 8. THE DEVELOPMENT WILL BE SERVICED BY NEW WATER LATERAL WHICH WILL CONNECT TO EXISTING WATER MAIN IN LANCASTER AVENUE. 9. ALL PROPOSED UTILITY LINES SHALL BE UNDERGROUND WHERE FEASIBLE. 10. LIGHTING WILL BE PROVIDED FOR THE PROPOSED PARKING AND PEDESTRIAN WALKWAYS IN ACCORDANCE WITH TOWNSHIP CODES INCLUDING 280-105.E. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 11. THE PROPOSED MONUMENT SIGN SHALL BE INSTALLED IN ACCORDANCE WITH TOWNSHIP CODES INCLUDING 280-121.C. 12. LANDSCAPING WILL BE PROVIDED IN ACCORDANCE WITH THE TOWNSHIP CODES. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 13. TYPICAL EROSION AND SEDIMENTATION CONTROLS WILL BE PROVIDED FOR THE CONSTRUCTION OF THIS PROPERTY INCLUDING A STABILIZED CONSTRUCTION ENTRANCE, FILTER SOCKS, SILT FENCE, INLET PROTECTION, TOPSOIL STOCKPILES SURROUNDED BY SILT FENCE AND EROSION CONTROL MATTING, ETC. AS WELL AS OTHER TYPICAL EROSION CONTROL MEASURES INCLUDING LIMITING SITE DISTURBANCE, IMMEDIATE STABILIZATION, ETC. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 14. THE PROJECT'S RECEIVING WATERCOURSE IS ITHAN CREEK WHICH IS PART OF THE DARBY CREEK WATERSHED AND THE CHAPTER 93 CLASSIFICATION IS CWF, MF. 15. A LOW VOLUME HIGHWAY OCCUPANCY PERMIT SHALL BE OBTAINED FROM THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FOR ANY WORK PROPOSED WITHIN THE STATE RIGHT OF WAY. 16. AS REQUIRED BY PENNDOT, DURING CONSTRUCTION, PEDESTRIAN ACCESSIBLE ROUTES MUST BE MAINTAINED OR TEMPORARY FACILITIES PROVIDED FOR ALL EXISTING PEDESTRIAN ROUTES ALONG LANCASTER AVENUE (SR 30). 17. THE APPLICANT SHALL PAY A FEE IN LIEU OF PROVIDING PARK AND RECREATION LAND IN ACCORDANCE WITH 255-43.1. 18. PROPOSED WALKWAYS SLOPES SHALL NOT EXCEED 5%.

AVERAGE BUILDING GRADE CALCULATIONS: FRONT, BACK. Lists ELEV, AVERAGE, LENGTH, PRODUCT.



LOCATION MAP SCALE: 1" = 600'

- REFERENCE PLANS: 1. BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR RADNOR FAMILY PRACTICE BY CONTROL POINT ASSOCIATES, INC., CHALFONT, PA, DATED MAY 2, 2014 AND LAST REVISED MAY 14, 2014. FILE NO. CP14056. 2. ZONING MAP OBTAINED ELECTRONICALLY FROM THE RADNOR TOWNSHIP WEBSITE. 3. LIDAR TOPOGRAPHY AND OTHER GIS OBTAINED ELECTRONICALLY FROM SHAPE FILES DISTRIBUTED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION. FILES WERE OBTAINED VIA WWW.PASDPS.EDU. 4. AERIAL PHOTOGRAPH "PA\_X24\_Y082" & "PA\_X25\_Y082" PROVIDED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION AND AERIAL PHOTOMETRY ACCESSED ELECTRONICALLY AT MAPS.GOOGLE.COM. 5. SOILS INFORMATION VIA THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (WEBSOILSURVEY.SC.EGOV.USDA.GOV).

- REFERENCE PLAN #1 NOTES: 1. PROPERTY KNOWN AS FOLIO 36-02-01219-00 & 36-02-01219-01, BLOCK 61 AS IDENTIFIED ON THE TAX MAPS OF DELAWARE COUNTY, RADNOR TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA. 2. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PERMITTED BY THE RADNOR TOWNSHIP R-6 ZONING DISTRICT. 3. THIS PROJECT WILL BE DEVELOPED AS A PLANNED COMMUNITY OR A CONDOMINIUM. 4. TRASH AND SNOW REMOVAL WILL BE THE RESPONSIBILITY OF THE HOME OWNERS ASSOCIATION. COMMON DUMPSTER AREAS ARE SHOWN ON THE PLAN. A WASTECADDY OR SIMILAR PRODUCT WILL BE USED TO WHEEL THE DUMPSTERS OUT OF THE GARAGE. 5. THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT FACILITIES WILL BE THE OBLIGATION OF THE HOME OWNERS ASSOCIATION. 6. THE PROPERTY SHALL BE GRADED SO THAT RUNOFF FROM THE MAJORITY OF THE PROPOSED DEVELOPMENT WILL BE DIRECTED TO AND COLLECTED BY A SERIES OF INLETS AND SWALES AND CONVEYED TO THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM WHICH WILL PROVIDE THE TOWNSHIP AND DEP. REQUIRED RATE AND VOLUME CONTROLS. THE COLLECTED RUNOFF WILL BE OVER-CONTROLLED BY THE STORMWATER FACILITIES TO COMPENSATE FOR THE RUNOFF FROM THE REMAINING SITE AREAS THAT ARE UNCONTROLLED. OVERFLOW FROM THE PROPOSED STORMWATER MANAGEMENT FACILITIES WILL BE PIPED TO EXISTING STORM SEWER FACILITIES LOCATED IN LANCASTER AVENUE. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 7. THE DEVELOPMENT WILL BE SERVICED BY A NEW GRAVITY SEWER LATERAL WHICH WILL CONNECT TO EXISTING SEWER MAIN IN LANCASTER AVENUE. 8. THE DEVELOPMENT WILL BE SERVICED BY NEW WATER LATERAL WHICH WILL CONNECT TO EXISTING WATER MAIN IN LANCASTER AVENUE. 9. ALL PROPOSED UTILITY LINES SHALL BE UNDERGROUND WHERE FEASIBLE. 10. LIGHTING WILL BE PROVIDED FOR THE PROPOSED PARKING AND PEDESTRIAN WALKWAYS IN ACCORDANCE WITH TOWNSHIP CODES INCLUDING 280-105.E. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 11. THE PROPOSED MONUMENT SIGN SHALL BE INSTALLED IN ACCORDANCE WITH TOWNSHIP CODES INCLUDING 280-121.C. 12. LANDSCAPING WILL BE PROVIDED IN ACCORDANCE WITH THE TOWNSHIP CODES. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 13. TYPICAL EROSION AND SEDIMENTATION CONTROLS WILL BE PROVIDED FOR THE CONSTRUCTION OF THIS PROPERTY INCLUDING A STABILIZED CONSTRUCTION ENTRANCE, FILTER SOCKS, SILT FENCE, INLET PROTECTION, TOPSOIL STOCKPILES SURROUNDED BY SILT FENCE AND EROSION CONTROL MATTING, ETC. AS WELL AS OTHER TYPICAL EROSION CONTROL MEASURES INCLUDING LIMITING SITE DISTURBANCE, IMMEDIATE STABILIZATION, ETC. ADDITIONAL INFORMATION WILL BE PROVIDED WITH THE FINAL LAND DEVELOPMENT PLANS. 14. THE PROJECT'S RECEIVING WATERCOURSE IS ITHAN CREEK WHICH IS PART OF THE DARBY CREEK WATERSHED AND THE CHAPTER 93 CLASSIFICATION IS CWF, MF. 15. A LOW VOLUME HIGHWAY OCCUPANCY PERMIT SHALL BE OBTAINED FROM THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FOR ANY WORK PROPOSED WITHIN THE STATE RIGHT OF WAY. 16. AS REQUIRED BY PENNDOT, DURING CONSTRUCTION, PEDESTRIAN ACCESSIBLE ROUTES MUST BE MAINTAINED OR TEMPORARY FACILITIES PROVIDED FOR ALL EXISTING PEDESTRIAN ROUTES ALONG LANCASTER AVENUE (SR 30). 17. THE APPLICANT SHALL PAY A FEE IN LIEU OF PROVIDING PARK AND RECREATION LAND IN ACCORDANCE WITH 255-43.1. 18. PROPOSED WALKWAYS SLOPES SHALL NOT EXCEED 5%.

- REFERENCE PLAN #2 REFERENCES: 1. MAP #015 OF THE OFFICIAL TAX MAPS OF THE RADNOR TOWNSHIP, DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA. 2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 36 OF 250", COMMUNITY-PANEL NUMBER 420428 0036 F, MAP REVISED: NOV 18, 2009. 3. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 17 OF 250", COMMUNITY-PANEL NUMBER 420428 0017 F, MAP REVISED: NOV 18, 2009. 4. MAP ENTITLED "COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF HIGHWAYS, DRAWING FOR CONSTRUCTION AND CONDEMNATION OF RIGHT OF WAY ROUTE NO. 142 SECTION NO. 1 IN DELAWARE COUNTY; FROM STA. 2882+35 TO STA. 2891+10, LENGTH 875.0 FT @ 0.166 MI, SHEETS 1-3. 5. MAP ENTITLED "AS BUILT SURVEY MADE FOR J. GORDON AND LOIS T. LONGENECKER, RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA," PREPARED BY YERKS ASSOCIATES, INC., DATE MARCH 28, 2002, PLAN D-36-13-384.

RECORD OWNER: WALKER FAMILY PROPERTIES, LLP 427 EAST LANCASTER AVENUE WAYNE, PA 19087

EQUITABLE OWNER: 427 LANCASTER AVE, LLC 44 PAPER MILL ROAD NEWTOWN SQUARE, PA 19073

COMMONWEALTH OF PENNSYLVANIA COUNTY OF ... ON THIS THE ... DAY OF ... 20... BEFORE ME, THE UNDERSIGNED PERSONALLY APPEARED DAVID SCOTT BREHMAN, MEMBER OF 427 E. LANCASTER, LLC, WHO BEING DULY SWORN ACCORDING TO LAW DEPOSES AND SAYS THAT 427 E. LANCASTER, LLC IS THE EQUITABLE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE LAND DEVELOPMENT PLAN WAS MADE AT HIS DISCRETION AS SUCH MEMBER AND THAT HE ACKNOWLEDGES THE SAME TO BE THE ACT AND PLAN OF 427 E. LANCASTER, LLC AND DESIRES THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

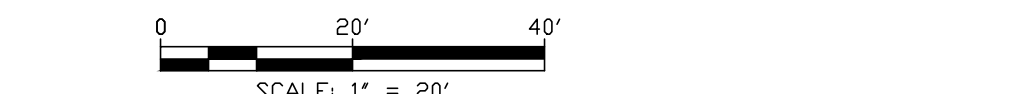
427 E. LANCASTER, LLC

BY: NAME: DAVID SCOTT BREHMAN TITLE: MEMBER

WITNESS MY HAND AND SEAL THE DAY AND YEAR AFORESAID.

NOTARY SIGNATURE

MY COMMISSION EXPIRES:



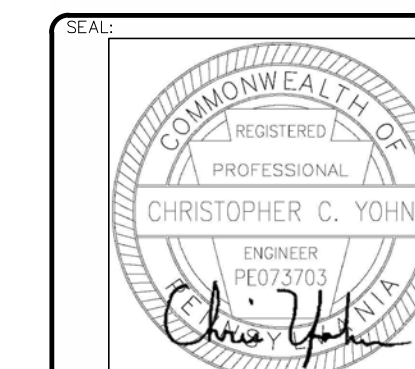
PROJECT: PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT PROJECT ADDRESS: 427 EAST LANCASTER AVENUE, WAYNE, PA 19087 MUNICIPALITY: RADNOR TOWNSHIP COUNTY: DELAWARE COUNTY

PLAN SET: PRELIMINARY PLANS SHEET NAME: ILLUSTRATIVE SITE PLAN

Table with 3 columns: REV, DATE, COMMENTS. Shows revision 1 on 02/22/16 per TWP ENCS.

PREPARED FOR: EQUITABLE OWNER/APPLICANT 427 E LANCASTER 44 PAPER MILL ROAD NEWTOWN SQUARE, PA 19073 DATE: DECEMBER 31, 2015 SCALE: 1" = 20' ONE CALL NUMBER: 2016-011-1937 DRAWN BY: CCY PROJECT NUMBER: 15-031

PREPARED BY: YOHN ENGINEERING, LLC 555 SECOND AVENUE, SUITE G-110 COLLEGEVILLE, PA 19426 610-489-4580 WWW.YOHNENGINEERING.COM



Serial Number: 2016-011-1937

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



THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. SERIAL NUMBER(S): 20141072620

Table with 2 columns: UTILITY COMPANY, PHONE NUMBER. Lists AT & T, PECO, ZAYO BANDWIDTH, AQUA PENNSYLVANIA, INC., VERIZON, COMCAST CABLE, RADNOR TOWNSHIP.

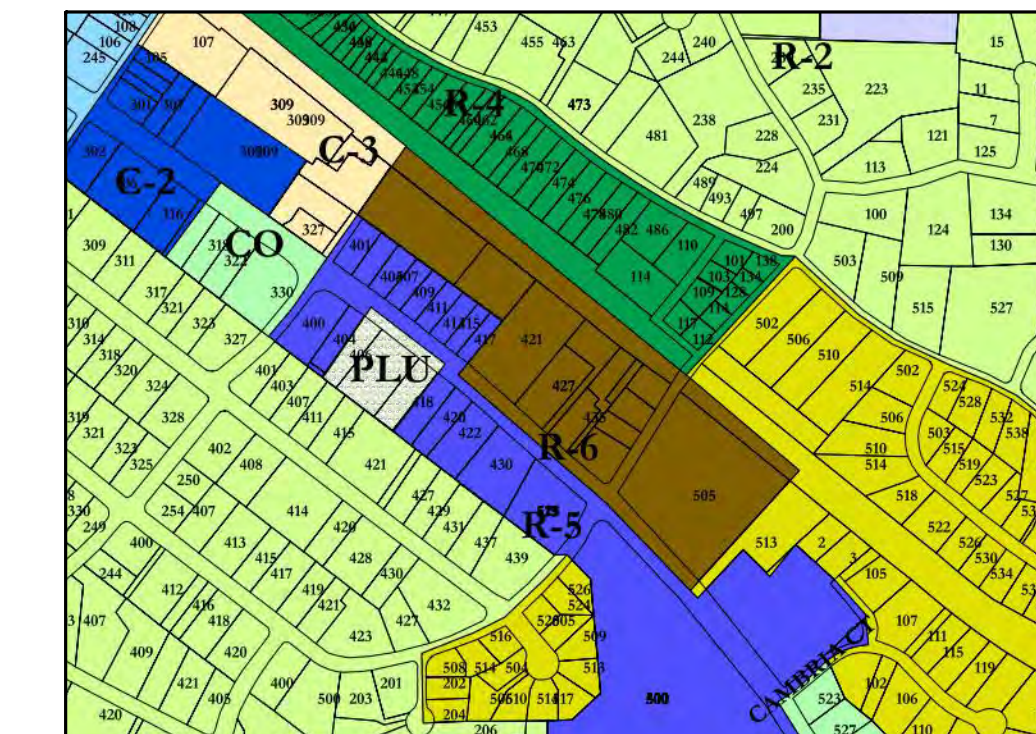
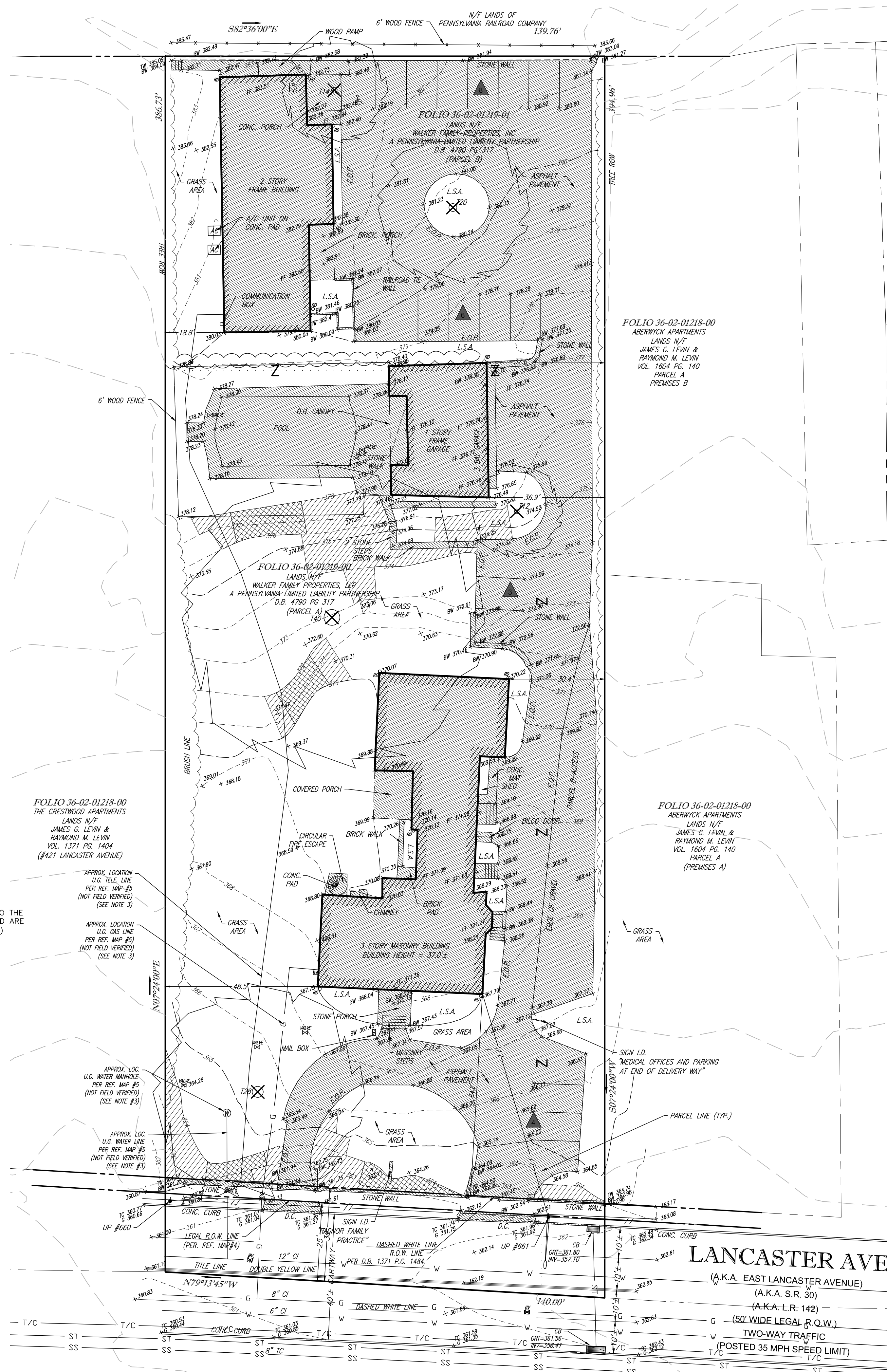
LEGEND

- Legend symbols for existing contours, spot elevations, curbs, walls, floors, valves, wires, poles, signs, mail boxes, ground types, curbs, pavements, landscaped areas, railroad walls, typical features, manholes, basins, parking counts, and deed designations.

- Legend for slopes and impervious areas: IMPERVIOUS TO BE REMOVED, SLOPES 14%-20%, SLOPES 20% AND GREATER.

Table with 6 columns: SYMBOL, NAME, SLOPE, HYDROLOGIC GROUP, DEPTH TO WATER BEDROCK, DEPTH TO WATER. Lists MADE LAND GABBRIC AND DIABASE MATERIALS.

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE DISTURBED AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE.



LOCATION MAP SCALE: 1" = 600'

- REFERENCE PLANS: 1. BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR RADNOR FAMILY... 2. ZONING MAP OBTAINED ELECTRONICALLY FROM THE RADNOR TOWNSHIP WEBSITE... 3. LIDAR TOPOGRAPHY AND OTHER GIS OBTAINED ELECTRONICALLY FROM SHAPE FILES... 4. AERIAL PHOTOGRAPH "PA\_X24\_Y082" AND "PA\_X25\_Y082" PROVIDED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION... 5. SOILS INFORMATION VIA THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (WEBSOILSURVEY.SC.EGOV.USDA.GOV.)

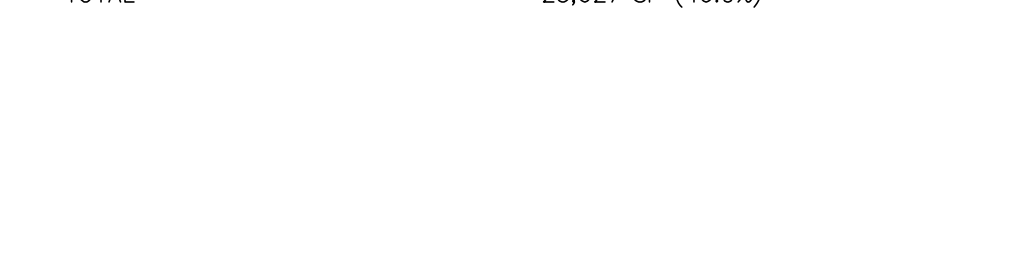
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- REFERENCE PLAN #1 REFERENCES: 1. MAP #015 OF THE OFFICIAL TAX MAPS OF THE RADNOR TOWNSHIP, DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA... 2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 36 OF 250", COMMUNITY-PANEL NUMBER 420428 0036 F, MAP REVISED: NOV 18, 2009... 3. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 17 OF 250", COMMUNITY-PANEL NUMBER 420428 0017 F, MAP REVISED: NOV 18, 2009... 4. MAP ENTITLED "COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF HIGHWAYS, DRAWING FOR CONSTRUCTION AND CONDEMNATION OF RIGHT OF WAY ROUTE NO. 142 SECTION NO. 1 IN DELAWARE COUNTY; FROM STA. 2882+35 TO STA. 2891+10, LENGTH 875.0 FT @ 0.166 MI." SHEETS 1-3... 5. MAP ENTITLED "AS BUILT SURVEY MADE FOR J. GORDON AND LOIS T. LONGENECKER, RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA," PREPARED BY YERKS ASSOCIATES, INC., DATE MARCH 28, 2002, PLAN D-35-13-384.

RECORD OWNER: WALKER FAMILY PROPERTIES, LLP 427 EAST LANCASTER AVENUE WAYNE, PA 19087

Table with 2 columns: EXISTING LOT DATA, EXISTING IMPERVIOUS COVERAGE. Lists lot numbers, areas, and coverage types like buildings, walks, patios, etc.

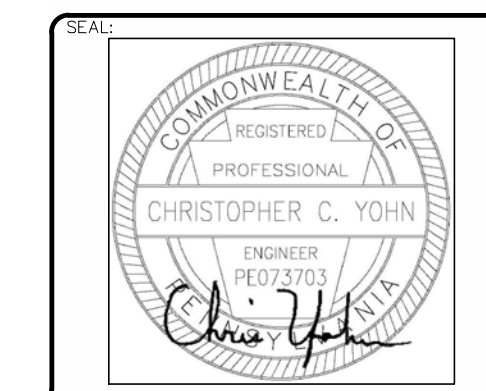
Table with 2 columns: EXISTING LOT DATA, EXISTING IMPERVIOUS COVERAGE. Lists lot numbers, areas, and coverage types like buildings, walks, patios, etc.



PROJECT: PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT PROJECT ADDRESS: 427 EAST LANCASTER AVENUE, WAYNE, PA 19087 MUNICIPALITY: RADNOR TOWNSHIP COUNTY: DELAWARE COUNTY

PLAN SET: PRELIMINARY PLANS SHEET NAME: EXISTING CONDITIONS / DEMOLITION PLAN

Table with 3 columns: REV, DATE, COMMENTS. Shows revision 1 dated 02/22/16 for PER TWP ENCS.



PREPARED FOR: EQUITABLE OWNER/APPLICANT 427 E. LANCASTER, LLC 44 PAPER MILL ROAD NEWTOWN SQUARE, PA 19073

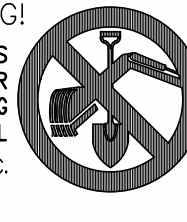
DATE: DECEMBER 31, 2015 SCALE: 1" = 20' ONE CALL NUMBER: 2016-011-1937 DRAWN BY: CCY PROJECT NUMBER: 15-031

PREPARED BY: YOHN ENGINEERING, LLC 555 SECOND AVENUE, SUITE G-110 COLLEGEVILLE, PA 19426 610-489-4580 WWW.YOHNEENGINEERING.COM

YOHN Engineering, LLC 2 OF 3

Serial Number: 2016-011-1937

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



THE FOLLOWING COMPANIES WERE NOTIFIED  
BY PENNSYLVANIA ONE CALL SYSTEM, INC.  
1-800-242-1776) AND REQUESTED TO MARK  
OUT UNDERGROUND FACILITIES AFFECTING AND  
SERVICING THIS SITE. THE UNDERGROUND  
UTILITY INFORMATION SHOWN HEREON IS  
BASED UPON THE UTILITY COMPANIES  
RESPONSE TO THIS REQUEST.  
SERIAL NUMBER(S): 20141072620

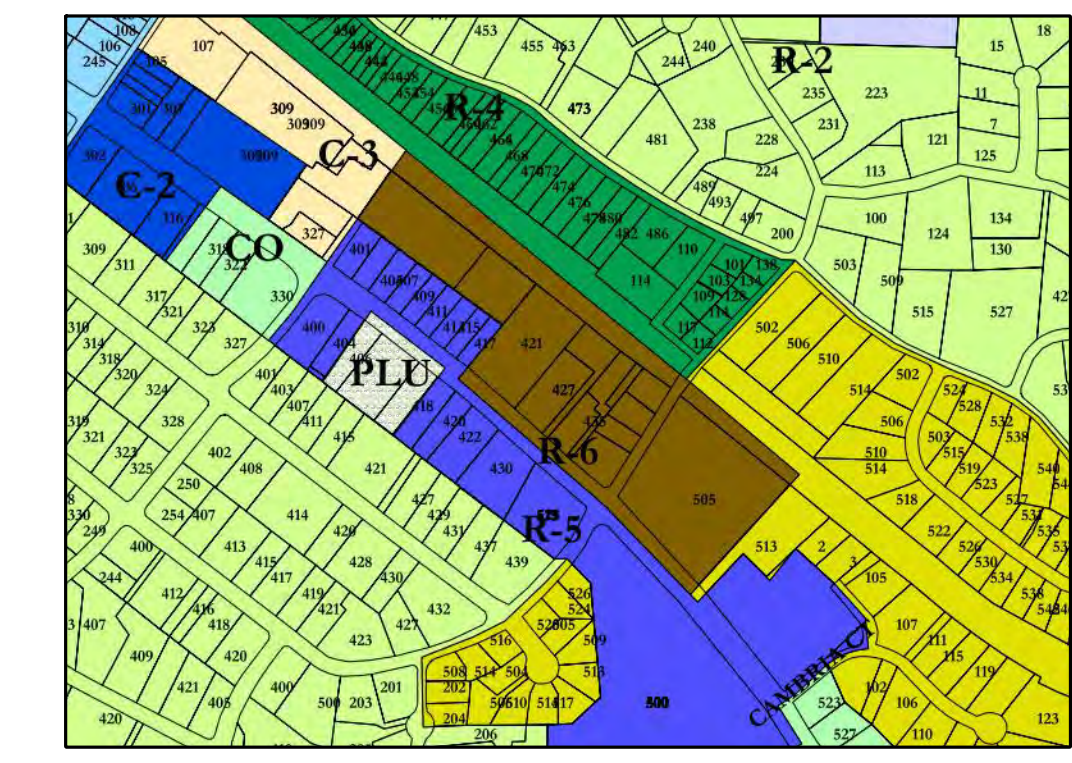
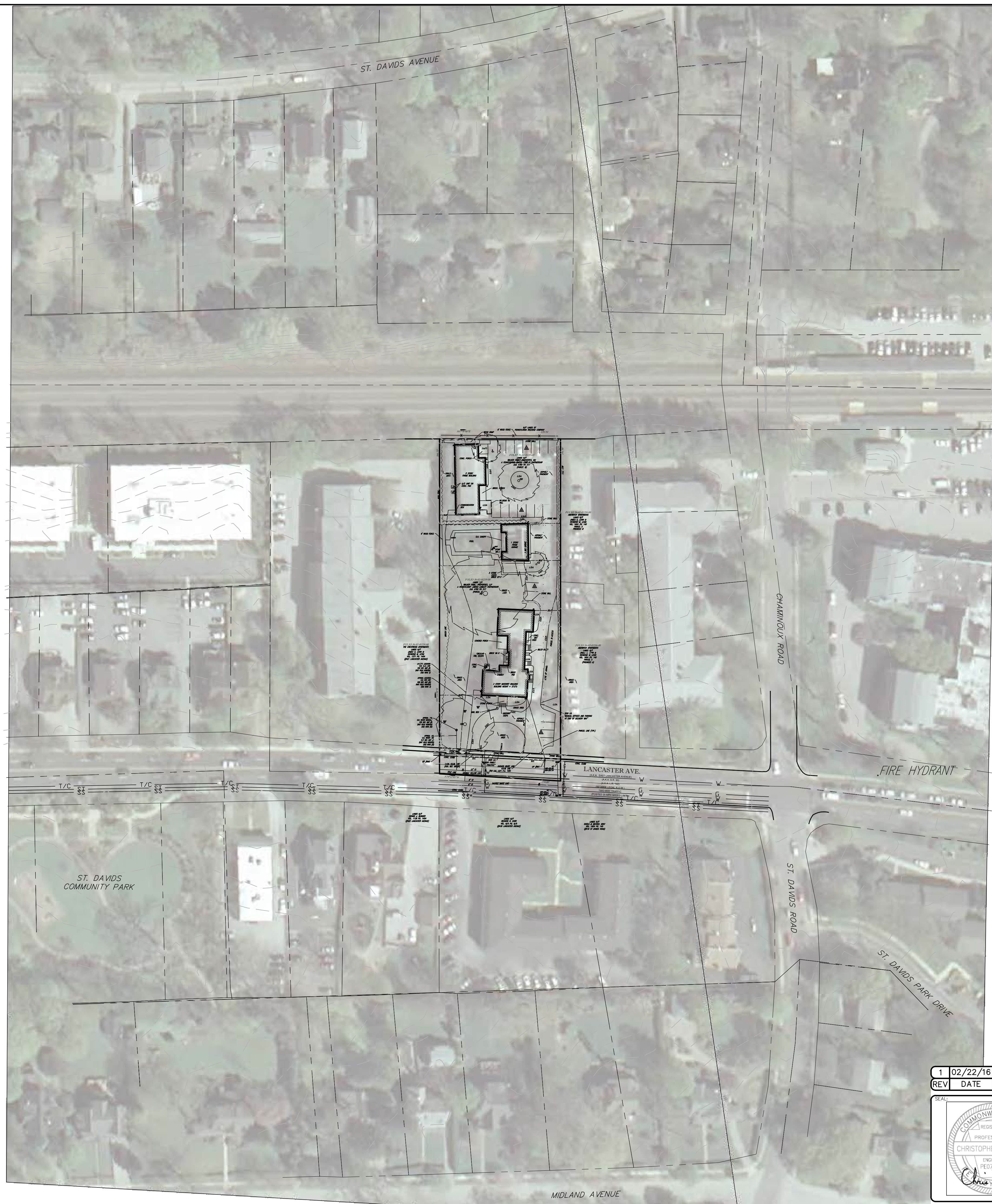
UTILITY COMPANY	PHONE NUMBER
AT & T	215-233-3474
PECO	215 841-4000
ZAYO BANDWIDTH	1-800-390-6094
AQUA PENNSYLVANIA, INC.	610-525-1400
LEVEL 3	720-888-0165
VERIZON	215-571-7050
COMCAST CABLE	888 240-8321
MCI	610 285-4448
RADNOR TOWNSHIP	610 688-5600

LEGEND

- 124 --- EXISTING CONTOUR
- 125 --- EXISTING SPOT ELEVATION
- X 123.45 EXIST. TOP OF CURB ELEVATION
- X G 123.45 EXIST. GUTTER ELEVATION
- X TW 123.45 EXIST. TOP OF WALL ELEVATION
- X BW 123.45 EXIST. BOTTOM OF WALL ELEVATION
- X FF 123.45 EXIST. FINISHED FLOOR ELEVATION
- WV WATER VALVE
- UV UNKNOWN VALVE
- GV GAS VALVE
- GM GAS METER
- OW OVERHEAD WIRES
- G --- APPROX. LOC. UNDERGROUND GAS LINE
- T --- APPROX. LOC. UNDERGROUND TEL. LINE
- W --- APPROX. LOC. UNDERGROUND WATER LINE
- UP UTILITY POLE
- UPLP UTILITY POLE/LIGHT POLE
- SIGN
- MB MAIL BOX
- A.G. ABOVE GROUND
- U.G. UNDER GROUND
- D.C. DEPRESSED CURB
- E.O.P. EDGE OF PAVEMENT
- L.S.A. LANDSCAPED AREA
- RRT WALL RAILROAD TIE WALL
- (TYP.) TYPICAL
- WMH WATER MANHOLE
- CB CATCH BASIN OR INLET
- PS PARKING SPACE COUNT
- DEPRESSED CURB
- (TRACT 1)
- 1.0' OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE
- S.Y.L. SOLID YELLOW LINE
- D.Y.L. DOUBLE YELLOW LINE
- HT. HEIGHT
- DA.W.L. DASHED WHITE LINE
- BLDC BUILDING
- EL. ELEVATION

SOILS INFORMATION					
SYMBOL	NAME	%SLOPE	HYDROLOGIC GROUP	DEPTH TO SH WATER	DEPTH TO BEDROCK
Md	MADE LAND GABBRO AND DIABASE MATERIALS	NOT RATED	C	6.6+	6.6+

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE DISTURBED AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE. ADEQUACY OF SOIL TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS REQUIRED. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SITE GEOTECHNICAL ENGINEER SHALL ALSO BE CONSULTED DURING WINTER GRADING OPERATIONS.



- REFERENCE PLANS:
- BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR RADNOR FAMILY PRACTICE BY CONTROL POINT ASSOCIATES, INC., CHALFONT, PA, DATED MAY 2, 2014 AND LAST REVISED MAY 14, 2014, FILE NO. CP14056
  - ZONING MAP OBTAINED ELECTRONICALLY FROM THE RADNOR TOWNSHIP WEBSITE. FILES WERE OBTAINED VIA WWW.PA.DPS.EDU
  - LIDAR TOPOGRAPHY AND OTHER GIS OBTAINED ELECTRONICALLY FROM SHAPE FILES DISTRIBUTED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION.
  - AERIAL PHOTOGRAPH "PA\_X24\_Y082" & "PA\_X25\_Y082" PROVIDED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION AND AERIAL PHOTOMETRY ACCESSED ELECTRONICALLY AT MAPS.GOOGLE.COM.
  - SOILS INFORMATION VIA THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (WEBSOILSURVEY.SCEGVS.USDA.GOV.)

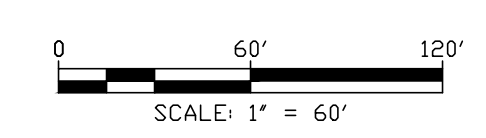
- REFERENCE PLAN #1 NOTES:
- PROPERTY KNOWN AS FOLIO 36-02-01219-00 & 36-02-01219-01, BLOCK 61 AS IDENTIFIED ON THE TAX MAPS OF DELAWARE COUNTY, RADNOR TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA.
  - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
  - THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
  - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
  - BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. MAP NUMBER 42045C0017F AND 42045C0036F. MAP REVISED NOVEMBER 18, 2009
  - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
  - ELEVATIONS ARE BASED UPON PA DOT BENCHMARK F101 REPUTED TO BE NAVD 1988 ELEVATION 343.57
  - UNDERGROUND STORM SEWER AND SANITARY SEWER PIPES ARE DRAWN GRAPHICALLY ON THIS SURVEY APPLICABLE TO UNDERGROUND STORM AND SANITARY PIPES SHOULD BE VERIFIED INDEPENDENTLY AS TO THEIR LOCATION, SIZE AND TYPE AND SHOULD BE CONSIDERED BY THE CONTRACTOR OR DESIGN CONSULTANT PRIOR TO CONSTRUCTION.
  - THESE UNDERGROUND UTILITY COMPANIES DID NOT RESPOND TO PA ONE CALL REQUEST: ELECTRIC, GAS, AND TELEPHONE.

- REFERENCE PLAN #1 REFERENCES:
- MAP #015 OF THE OFFICIAL TAX MAPS OF THE RADNOR TOWNSHIP, DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA.
  - MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 36 OF 250", COMMUNITY-PANEL NUMBER 420428 0036 F, MAP REVISED: NOV 18, 2009.
  - MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PENNSYLVANIA, DELAWARE COUNTY, PANEL 17 OF 250", COMMUNITY-PANEL NUMBER 420428 0017 F, MAP REVISED: NOV 18, 2009.
  - MAP ENTITLED "COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF HIGHWAYS, DRAWING FOR CONSTRUCTION AND CONDEMNATION OF RIGHT OF WAY ROUTE NO. 142 SECTION NO. 1 IN DELAWARE COUNTY; FROM STA. 2882+35 TO STA. 2891+10, LENGTH 875.0 FT @ 1.68 MI" SHEETS 1-3.
  - MAP ENTITLED "AS BUILT SURVEY MADE FOR J. GORDON AND LOIS T. LONGENECKER, RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA," PREPARED BY YERKS ASSOCIATES, INC., DATE MARCH 28, 2002, PLAN D-36-13 384.

RECORD OWNER: WALKER FAMILY PROPERTIES, LLP  
427 EAST LANCASTER AVENUE  
WAYNE, PA 19087

EXISTING LOT DATA:	
TAX FOLIO NUMBER:	36-02-01219-00
TAX MAP NUMBER:	36-13-384-000
SITE AREA:	34,770 SF (0.7982 AC)
LOT AREA:	31,171 SF (0.7156 AC)
TAX FOLIO NUMBER:	36-02-01219-01
TAX MAP NUMBER:	36-13-384-001
SITE AREA:	19,852 SF (0.4557 AC)
LOT AREA:	19,252 SF (0.4420 AC)

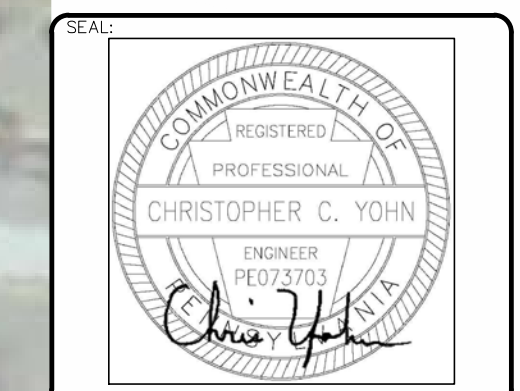
EXISTING IMPERVIOUS COVERAGE:	
BUILDINGS & PORCHES	7,915 SF (14.5%)
WALKS	726 SF
PATIOS	969 SF
ASPHALT DRIVES	14,168 SF
GRAVEL DRIVES	1,506 SF
OTHER	343 SF
TOTAL	25,627 SF (46.9%)



PROJECT: PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT  
PROJECT ADDRESS: 427 EAST LANCASTER AVENUE, WAYNE, PA 19087  
MUNICIPALITY: RADNOR TOWNSHIP COUNTY: DELAWARE COUNTY

PLAN SET: PRELIMINARY PLANS  
SHEET NAME: VICINITY PLAN

REV	DATE	COMMENTS
1	02/22/16	PER TWP ENCS

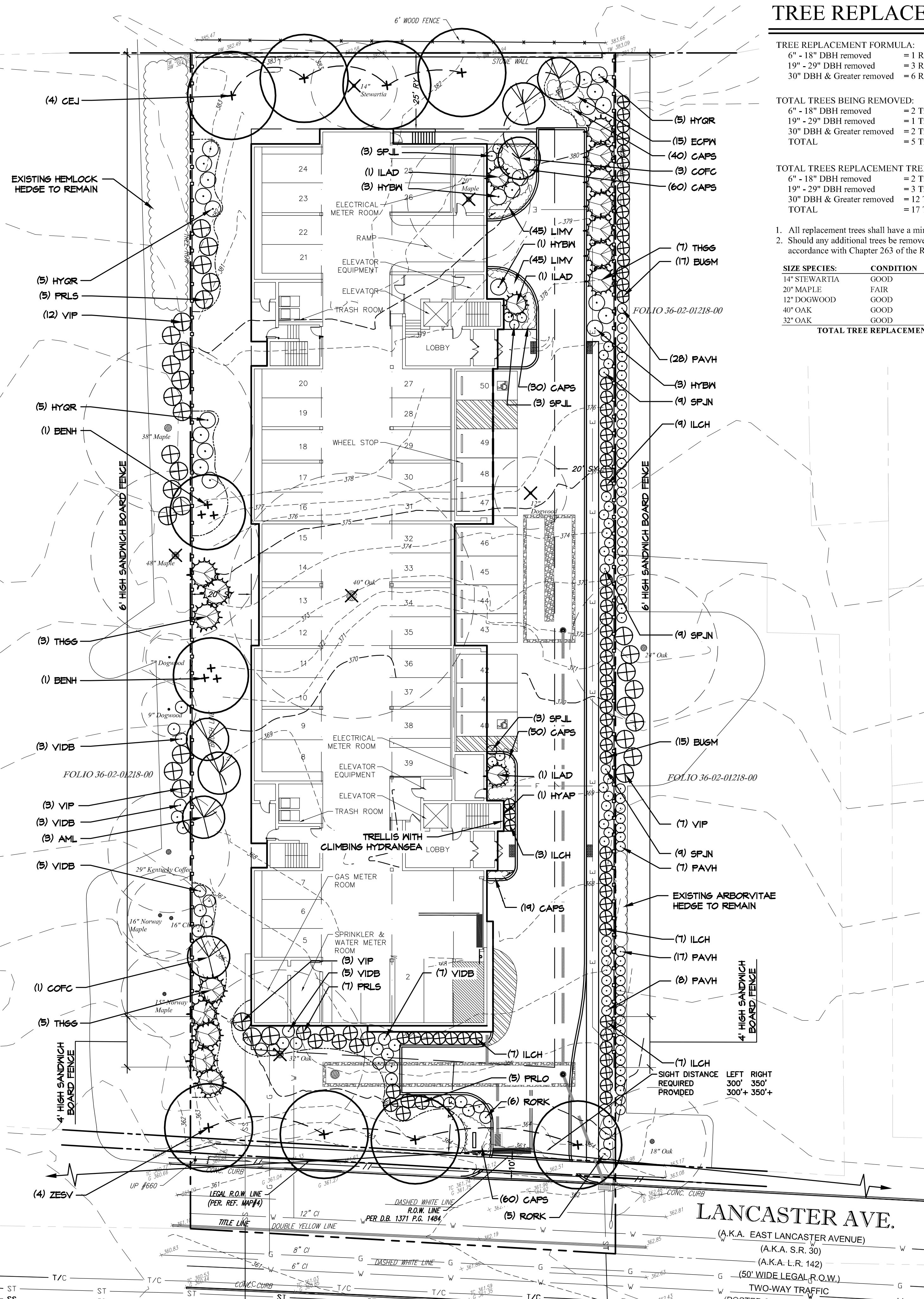


PREPARED FOR: EQUITABLE OWNER/APPLICANT  
427 E. LANCASTER, LLC  
44 PAPER MILL ROAD  
NEWTOWN SQUARE, PA 19073

DATE: DECEMBER 31, 2015  
SCALE: 1" = 60'  
ONE CALL NUMBER: 2016-011-1937  
DRAWN BY: CCY  
PROJECT NUMBER: 15-031

PREPARED BY: YOHN ENGINEERING, LLC  
555 SECOND AVENUE, SUITE G-110  
COLLEGEVILLE, PA 19426  
610-489-4580  
WWW.YOHNENGINEERING.COM





### TREE REPLACEMENT - SECTION 263-4.B.

TREE REPLACEMENT FORMULA:  
 6" - 18" DBH removed = 1 Replacement Tree  
 19" - 29" DBH removed = 3 Replacement Trees, 2 being large canopy trees  
 30" DBH & Greater removed = 6 Replacement Trees, 4 being large canopy trees

TOTAL TREES BEING REMOVED:  
 6" - 18" DBH removed = 2 Trees (x in poor condition or dead)  
 19" - 29" DBH removed = 1 Trees (x in poor condition or dead)  
 30" DBH & Greater removed = 2 Trees (x in poor condition or dead)  
 TOTAL = 5 Trees (x in poor condition or dead)

TOTAL TREES REPLACEMENT TREES REQUIRED:  
 6" - 18" DBH removed = 2 Trees  
 19" - 29" DBH removed = 3 Trees, 2 being large canopy trees  
 30" DBH & Greater removed = 12 Trees, 8 being large canopy trees  
 TOTAL = 17 Trees, 10 being large canopy trees

- All replacement trees shall have a minimum DBH of 2"-2.5".
- Should any additional trees be removed, additional replacement trees shall be provided in accordance with Chapter 263 of the Radnor Township Code.

SIZE SPECIES:	CONDITION	ACTION	REPLACEMENT
14" STEWARTIA	GOOD	REMOVE	1
20" MAPLE	FAIR	REMOVE	3
12" DOGWOOD	GOOD	REMOVE	1
40" OAK	GOOD	REMOVE	6
32" OAK	GOOD	REMOVE	6
<b>TOTAL TREE REPLACEMENT REQUIRED</b>			<b>17</b>

### GENERAL NOTES:

- Base information including topography, grading, utilities, building and existing vegetation location prepared by Yohn Engineering, LLC, February, 2016.
- Location of existing trees on adjacent properties are approximate based upon field observations conducted by Glackin Thomas Panzak, Inc., January 2016.
- This plan is for landscaping purposes only.
- The Landscape Architect's seal applies only to the landscape portion of this plan.
- See Sheet LP-2 for Planting Details and Planting and Maintenance Notes.
- All plant material is to be field adjusted as necessary to address existing site conditions, proposed unit landscaping, and to ensure that clear sight triangles and clear sight lines are maintained.
- Proposed shade trees shall not be planted over the top of any sewer or water laterals, mains or services. Sewer and water laterals, mains and services are shown on Landscape Plans for reference only. See engineer's plans for location of all utilities.
- Shade and evergreen trees shall be planted fifteen (15) feet from overhead utility lines or light standards. Utilities are shown on Landscape Plans for reference only. See engineer's plans for location of all utilities.
- No planting shall be installed closer than five (5) feet to any property line.
- All plantings shall be permanently maintained.
- All trees shall be pruned as necessary to maintain required light levels.
- Final location of all plant material proposed for adjacent properties shall be determined in the field in order to address existing conditions.

### LEGEND:

- EXISTING VEGETATION
- PROPOSED DECIDUOUS TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED GROUND COVERS / PERENNIALS
- EXISTING TREE TO BE REMOVED
- SANDWICH BOARD FENCE

### LANDSCAPE COMPLIANCE:

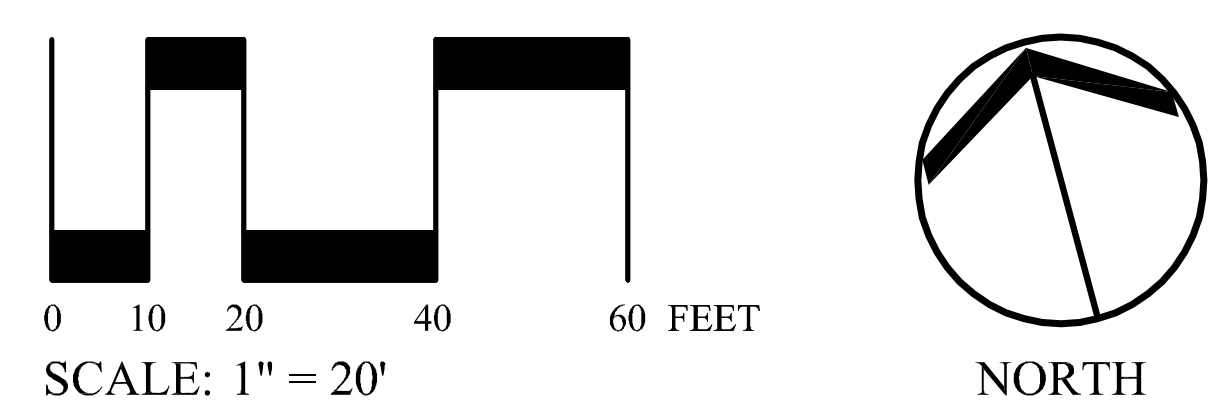
SECTION	CATEGORY	REQUIRED				PROVIDED			
		Shade Trees	Flowering Trees	Evergreen Trees	Shrubs	Shade Trees	Flowering Trees	Evergreen Trees	Shrubs
255-29.B.	PARKING FACILITY LANDSCAPE (1) 2.5" cal. per 5 Spaces of Single Bay Parking	2	--	--	--	2	--	--	--
255-38.B.	STREET TREES (1) 2.5" cal. tree spaced at 30' o.c. Applied to 115 LF*	4	--	--	--	4	--	--	--
255-42	BUFFER SCREENS CLASS B - Lancaster Ave. (Arterial Road Classification) Option of (1) Evergreen Tree per 15 LF and (1) Evergreen Shrub per 8 LF applied to 115 LF*	--	--	8	15	--	--	8	15
<b>TOTALS:</b>		<b>6</b>	<b>--</b>	<b>8</b>	<b>15</b>	<b>6</b>	<b>--</b>	<b>8</b>	<b>15</b>

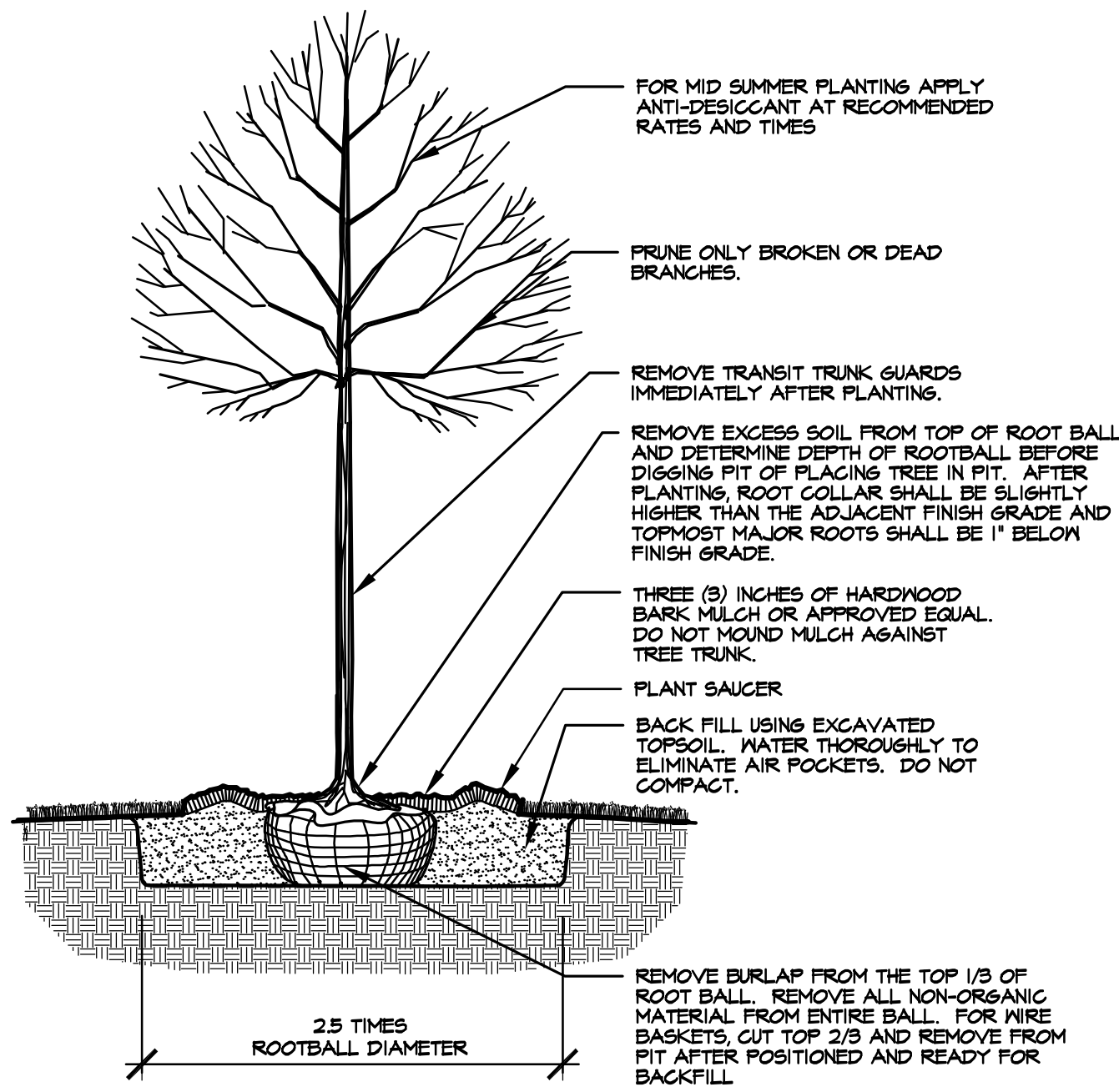
\*Linear foot measurement does not include access driveway width.

### PLANT LIST:

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>DECIDUOUS TREES</b>					
AML	3	Amelanchier laevis	Allegheny Serviceberry	2"-2.5" cal.	B&B
BENH	2	Betula nigra 'Heritage'	Heritage River Birch	12"-14" ht.	B&B, Multi-stem
CEJ	4	Cercidiphyllum japonicum	Katsura Tree	2"-2.5" cal.	B&B
COFC	4	Cornus florida 'Cherokee Princess'	Cherokee Princess Dogwood	2"-2.5" cal.	B&B
ZESV	4	Zelkova serrata 'Village Green'	Village Green Zelkova	2"-2.5" cal.	B&B
<b>EVERGREEN TREES</b>					
ILAD	3	Ilex aquipernyi 'Dragon Lady'	Dragon Lady Holly	8'-10' ht.	Cont.
THGG	15	Thuja plicata 'Green Giant'	Green Giant Arborvitae	8'-10' ht.	B&B
<b>SHRUBS</b>					
BUGM	32	Buxus x 'Green Mountain'	Green Mountain Boxwood	24"-30" ht.	Cont.
HYBW	7	Hydrangea 'Blue Wave'	Blue Wave Hydrangea	24"-30" ht.	Cont.
HYOR	15	Hydrangea quercifolia 'Ruby Slippers'	Ruby Slippers Oakleaf Hydrangea	24"-30" ht.	Cont.
ILCH	33	Ilex crenata 'Heller'	Helleri Japanese Holly	24"-30" ht.	Cont.
PRLO	5	Prunus laurocerasus 'Otto Luyken'	Otto Luyken Cherry Laurel	24"-30" ht.	Cont.
PRLS	12	Prunus laurocerasus 'Schipkaensis'	Skip Laurel	24"-30" ht.	Cont.
RORK	11	Rosa 'Red Knockout'	Red Knockout Rose	24"-30" ht.	Cont.
SPJL	9	Spiraea japonica 'Little Princess'	Little Princess Spiraea	24"-30" ht.	Cont.
SPJN	27	Spiraea japonica 'Neon Flash'	Neon Flash Spiraea	24"-30" ht.	Cont.
VIDB	23	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24"-30" ht.	Cont.
VIP	25	Viburnum x pragensis	Prague Viburnum	24"-30" ht.	Cont.
<b>PERENNIALS &amp; GROUNDCOVERS</b>					
CAPS	259	Carex pensylvanica	Pennsylvania Sedge	2 qt.	Cont. 12" o.c.
ECPW	15	Echinacea purpurea 'White Swan'	White Coneflower	1 gal.	Cont. 18" o.c.
LIMV	90	Liriope muscari 'Variegata'	Variegated Lilyturf	2 qt.	Cont. 12" o.c.
PAVH	60	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	3 gal.	Cont.
<b>VINES</b>					
HYAP	1	Hydrangea anomala v. petiolaris	Climbing Hydrangea	3 gal.	Cont., On Trellis

NOTE:  
 1. Where there is a discrepancy between the plant list and plan, the plan shall prevail.



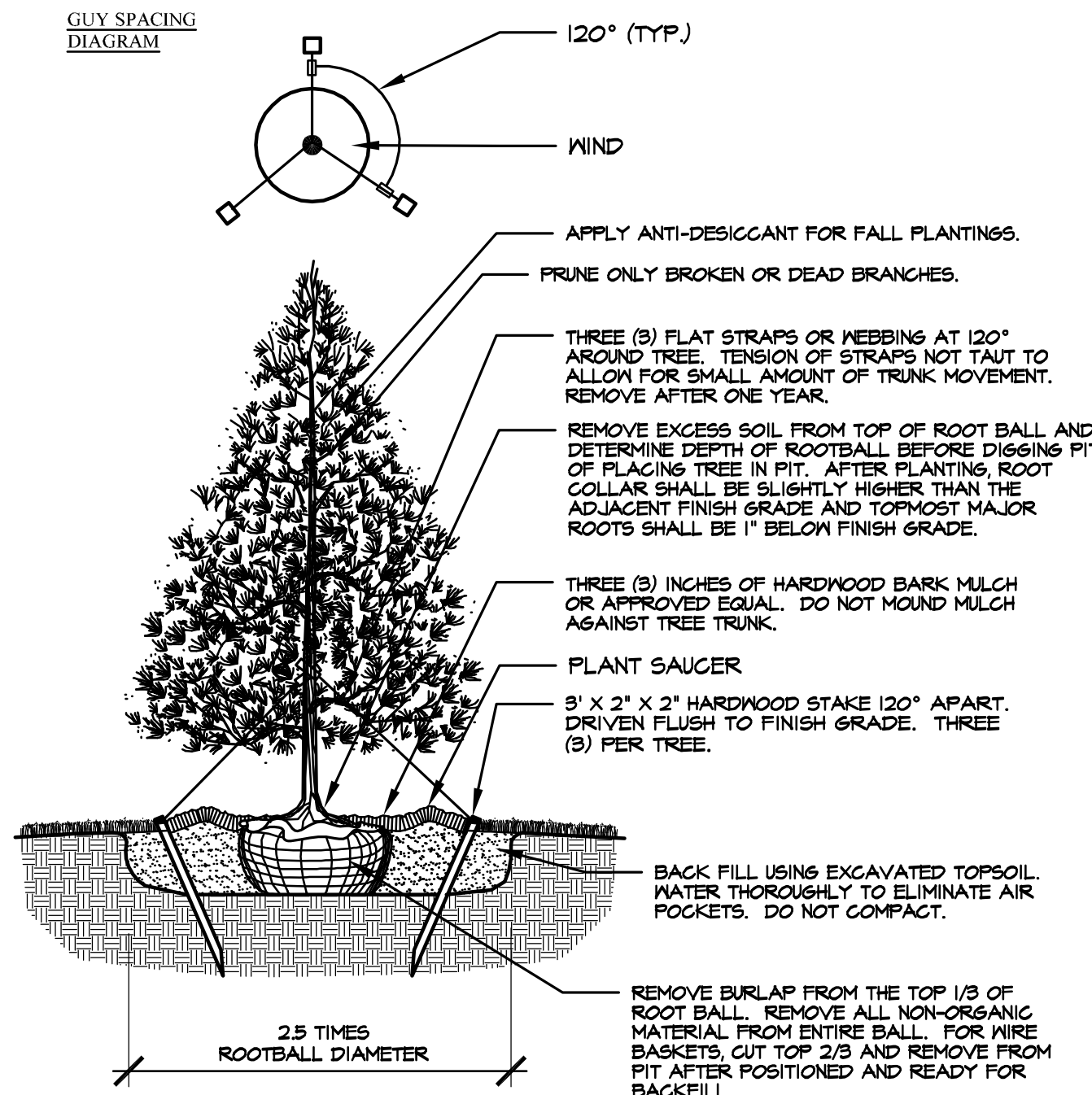


NOTES:  
 1. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.  
 2. TREES WITH CENTRAL LEADER BROKEN OR DEAD SHALL BE REJECTED.  
 3. TREES THAT DO NOT DISPLAY THE TYPICAL CHARACTERISTICS FOR THEIR SPECIES SHALL BE REJECTED.

**1 DECIDUOUS TREE DETAIL**

NTS

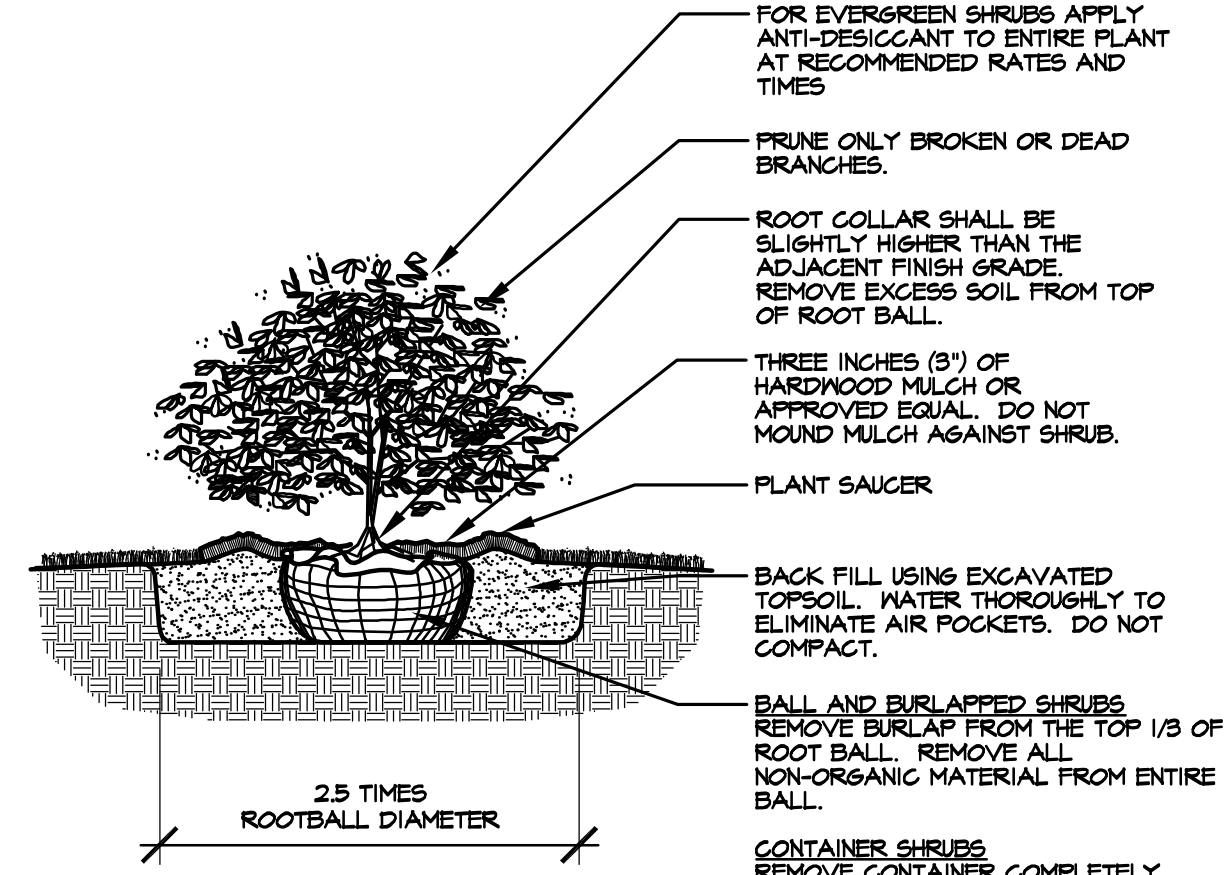
NOTE:  
 1. FLOOD PLANTING PIT WITH WATER TWICE WITHIN 24 HOURS OF PLANTING.



**2 EVERGREEN TREE DETAIL**

NTS

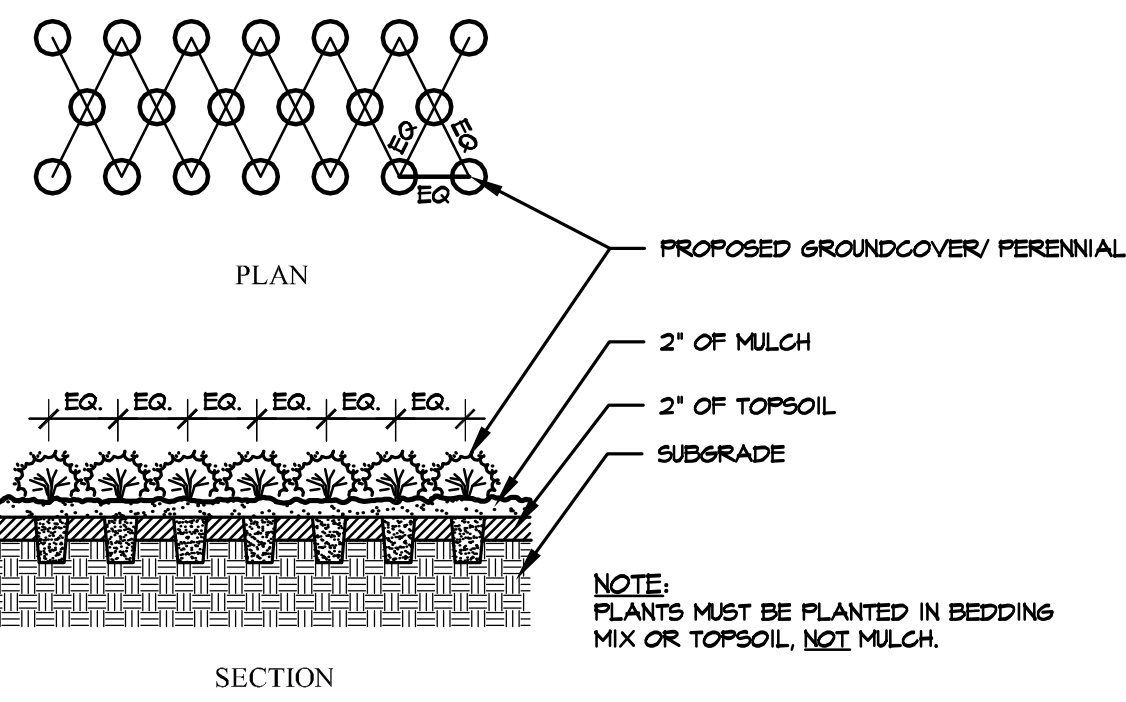
NOTE:  
 1. FLOOD PLANTING PIT WITH WATER TWICE WITHIN 24 HOURS OF PLANTING.



**3 SHRUB DETAIL**

NTS

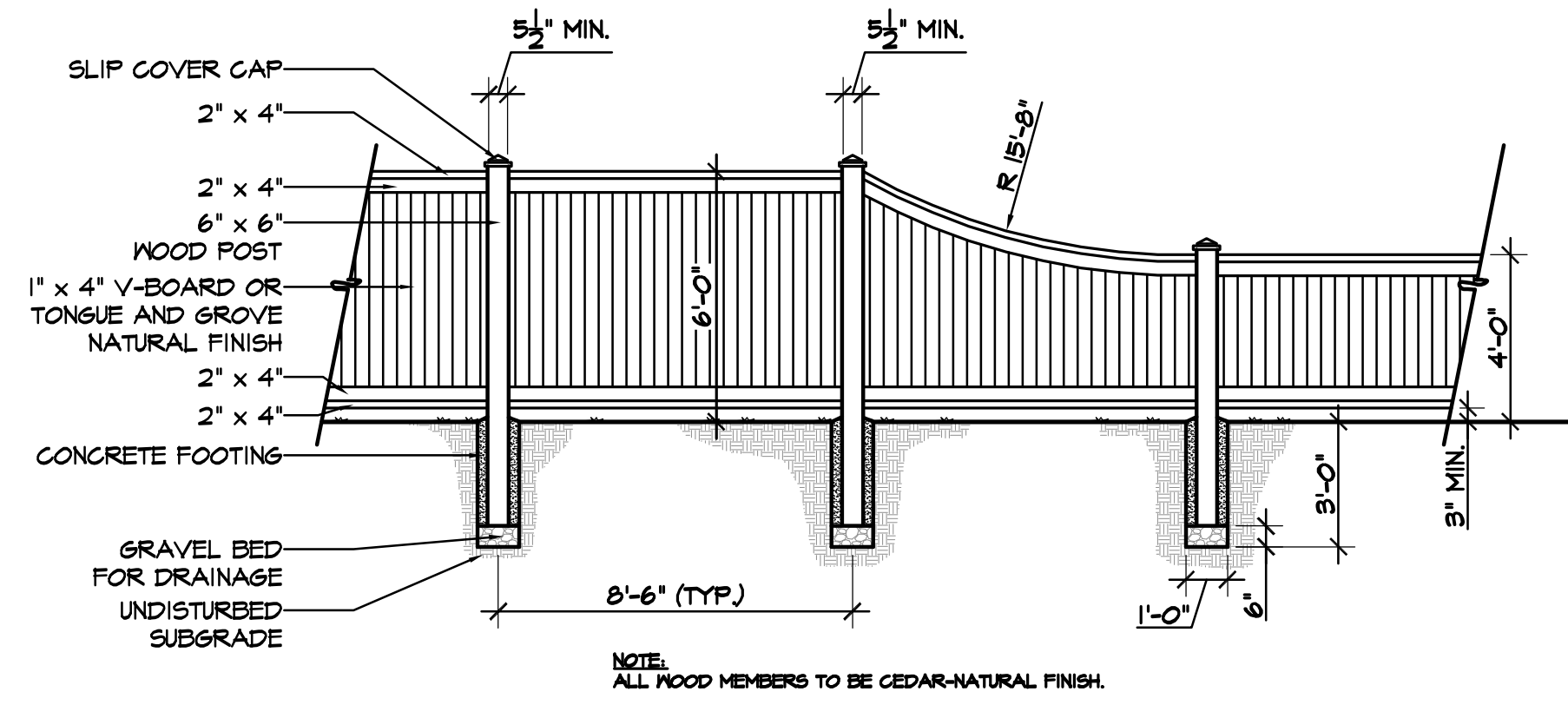
NOTE:  
 1. FLOOD PLANTING PIT WITH WATER TWICE WITHIN 24 HOURS OF PLANTING.



**4 PLANTING DETAIL**

NTS

NOTE:  
 PLANTS MUST BE PLANTED IN BEDDING MIX OR TOPSOIL, NOT MULCH



**5 SANDWICH BOARD FENCE**

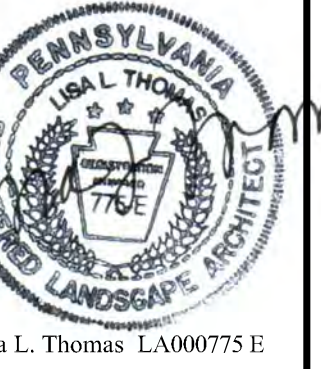
SCALE: 1/4" = 1'-0"

**PLANTING NOTES:**

- The contractor shall furnish and plant all plants shown on the drawings, as specified, and in quantities indicated on the plant list.
- All plants shall be nursery grown and freshly dug.
- All plants shall be in accordance with The American Standard for Nursery Stock, latest edition.
- All plants shall be hardy under climatic conditions similar to those in the locality of the project.
- Fall Digging Hazard: Any species listed below, if included on the plant list, must not be dug in the fall (October through December) because of risk to the tree's survival. Special exceptions may be granted if the owner is notified in writing and an extended warranty on these plants is agreed upon prior to digging. The following varieties should not be dug in fall: Betula, Carpinus, Celtis, Cercidiphyllum, Crataegus, Cryptomeria, Fagus, Halesia, Ilex (tree form varieties), Liquidambar, Liriodendron, Nyssa, Ostrya, Prunus, Pyrus, Quercus (except Quercus palustris), Salix weeping varieties, and Tilia tomentosa. Digging for Malus and Zelkova varieties should be avoided in fall only when in leaf.
- All plants shall be typical of their species or variety and shall have a normal habit or growth. They shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be certified by appropriate State and Federal authorities to be free of disease and insect pests, eggs or larvae. They shall have healthy, well-developed root systems.
- Trees with central leader broken or dead shall be rejected.
- Plants that do not display typical characteristics for their species shall be rejected.
- Substitutions: When plants of a specified kind or size are not available within a reasonable distance, substitutions may be made upon written request by the contractor, if approved by the owner and/or municipal authority.
- Measurement: Dimensions of trees and shrubs shall conform to The American Standard for Nursery Stock, latest edition.
- Size: All plants shall conform to the measurement specified on the plant list, unless authorized in writing by the Township landscape architect and the owner.
- Balled and burlapped plants shall be dug with firm natural balls of earth, of diameter and depth to include most of the fibrous roots. Container grown stock shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil together firm and whole. No plants shall be loose in the container.
- Plants with poor quality root balls or root balls that have been cracked or damaged shall be rejected.
- Root balls of all plants shall be adequately protected at all times from sun and drying winds or frost.
- Conditions detrimental to plants: The contractor shall notify the project representative in writing of all soil or drainage conditions which the contractor considers detrimental to the growth of plants. The contractor shall state the conditions and submit a proposal for correcting the conditions, including any change in cost, for review and acceptance by the project representative.
- The owner or the owner's representative shall be notified prior to beginning planting operations.
- All planting shall be at the locations indicated on the drawings. The contractor shall be responsible for planting at the correct grades, alignment, and to the indicated layout of the planting beds.
- Layout of planting: The contractor shall lay out with identifiable stakes the location of all planting beds as indicated on drawing. The layout of planting shall be approved by the project representative prior to any excavation of plant pits or plant beds.
- Minor adjustments to plant locations may be necessary due to field conditions and final grading. The contractor shall notify the owner if major adjustments are required.
- Planting soil shall be excavated native soil from the planting pit. Planting soil shall be thoroughly mixed, with all rocks, clods and roots removed.
- Plants with broken root balls or excessive damage to the crown shall be replaced prior to planting.
- If needed, trees shall be staked and guyed according to accepted industry practice.
- Each tree and shrub shall be pruned in accordance with The American Nursery and Landscape Association Standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed.
- Mulch: Immediately after planting operations are completed, all trees and shrub planting pits shall be covered with a 3" (three inch) layer of double shredded hardwood bark mulch, or other material approved by the owner or the owner's representative. A granular pre-emergent weed control shall be spread prior to mulching. The limit of this mulch for deciduous trees and single evergreen trees shall be the area of the pit. For shrub and perennial beds and for evergreen tree clusters, a continuous, mulched bed shall be created.
- Trees in leaf, including evergreens, when planted shall be treated with anti-desiccant such as Wilt-Pruf® if planted during the months of June through September, November, and December.
- Weed control: All planting areas shall be free from weeds prior to the beginning of planting operation. Contact herbicide sprays should only be used as required and all manufacturer's specifications followed.
- Guarantee: All plant material shall be guaranteed by the contractor for twenty four (24) months from the date of installation. The owner shall be responsible for maintenance unless otherwise agreed with contractor. It shall be the contractor's responsibility to monitor the project during the guarantee and notify the owner if problems develop with the plant material. Any material that is 25% dead or more shall be considered dead and must be replaced at no charge. A tree shall be considered dead when the main leader has died back, or there is 25% of the crown dead.
- All debris resulting from landscape contracting operations shall be cleaned up and removed from the site on a weekly basis.
- Watering: Landscape contractor is responsible for watering sufficiently at the time of planting and until the job is completed, accepted and turned over to the owner.
- All plant material shall be installed in accordance with the planting practices stated in chapter 5 of *Pirone's Tree Maintenance* by J. Hartman, T. Pirone and M. Sall (seventh or most recent edition).

**GLACKIN THOMAS PANZAK**  
 LAND PLANNING  
 LANDSCAPE ARCHITECTURE

Glackin Thomas Panzak, Inc.  
 Paoli Executive Green I  
 Suite 300  
 41 Leopard Road  
 Paoli, Pennsylvania 19301  
 610.408.9011  
 Fax: 610.408.9477  
 E-mail: plans@glackinplan.com



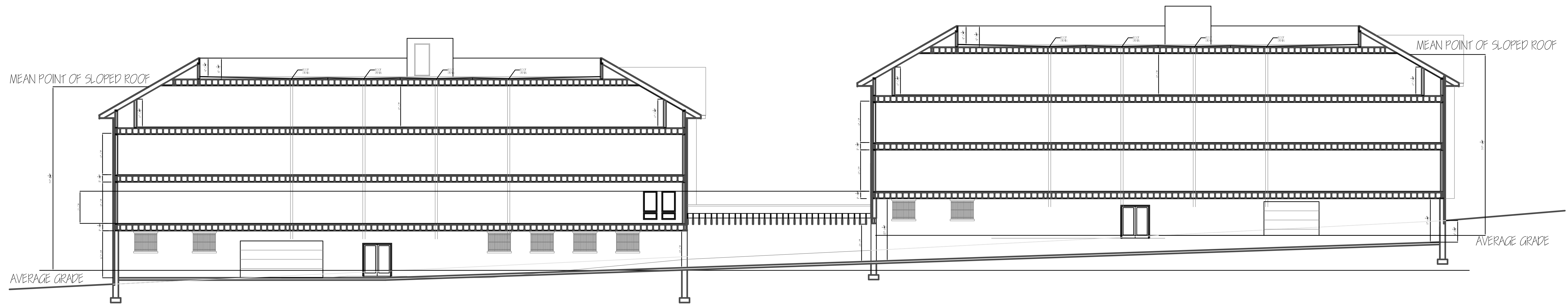
PRELIMINARY/FINAL LANDSCAPE NOTES & DETAILS  
**427 Lancaster Avenue**  
 RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

PROJECT #: 16-001  
 DATE: 2/22/16 (sa)  
 REV.:

SHEET:

**LP-2**

SLOPED ROOF HIDES 4' PARAPET TO FLAT ROOF BEHIND.  
 ALL HVAC CONDENSING UNITS ON FLAT ROOF BEHIND PARAPET.



BUILDING SECTION

FRAME FLOORS WITH 14" TJI'S SERIES 560  
 AT 16" O.C. - AS PER SARA - 6/26/15

SOUND CONTROL THROUGH FLOORS:  
 3/4" 'MAXXON' ACOUSTI-MAT 3 ON 3/4" PLYWOOD FLOOR DECK  
 REINFORCEMENT AND 1 1/2" 'MAXXON' UNDERLAYMENT  
 FINISHED FLOOR ENGINEERED WOOD OR TILE.

10" BATT INSULATION BETWEEN FLOOR JOISTS

CEILING BELOW FLOOR ASSEMBLY: (2) LAYERS 5/8" G.W.B.  
 SUSPENDED FROM FLOOR JOISTS WITH WAVE CLIPS



WAYNE CONDOMINIUMS  
 427 E. LANCASTER AVE.  
 WAYNE, PA 19087

BUILDING SECTION

REVISIONS

NO.	DATE	DESCRIPTION

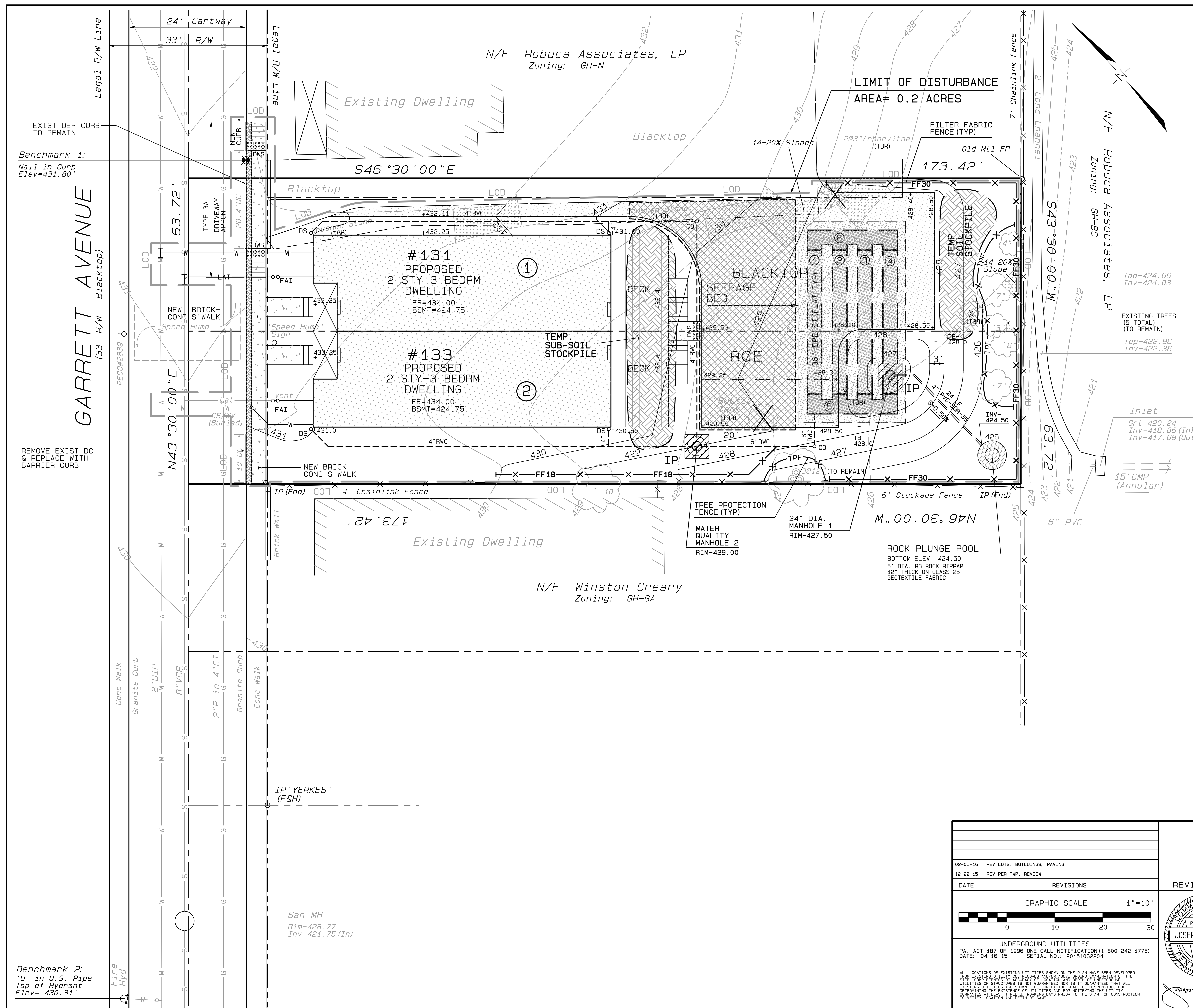
DATE:  
 FEB. 2, 2016  
 SCALE:  
 PROJECT NO.:  
 ISSUE DATE:

A-3









**SOILS LEGEND**  
 THE ENTIRE SITE IS COMPRISED OF THE FOLLOWING SOIL TYPE:  
 Me Made Land, Schist and Gneiss Materials

**STEEP SLOPE LEGEND**  
 14%-20% SLOPES  
 STEEP SLOPE: 20% OR MORE

**EROSION & SEDIMENT CONTROL LEGEND**  
 RCE ROCK CONSTRUCTION ENTRANCE  
 IP INLET PROTECTION  
 TOPSOIL STOCKPILE  
 FF18 FILTER FABRIC FENCE (18" HIGH)  
 FF30 FILTER FABRIC FENCE (30" HIGH)  
 SFFF SUPER FILTER FABRIC FENCE  
 TPF TREE PROTECTION FENCE  
 SAF SAFETY FENCE  
 LOD LIMIT OF DISTURBANCE LINE

**LEGEND**  
 CENTERLINE  
 TRACT BOUNDARY  
 PROPERTY LINE  
 LEGAL R.O.W., EASEMENTS  
 REQUIRED R.O.W.  
 EXISTING CONTOUR  
 PROPOSED CONTOUR  
 EXISTING WATER LINE  
 EXISTING SAN. SEWER LINE  
 EXISTING TELEPHONE LINE  
 EXISTING GAS LINE  
 EXISTING ELECTRIC LINE  
 EXISTING STORM SEWER/INLET  
 PROPOSED WATER LINE  
 PROPOSED SAN. SEWER LINE  
 PROPOSED ELECTRIC LINE  
 PROPOSED TELEPHONE LINE  
 PROPOSED GAS LINE  
 EXISTING MANHOLE  
 PROPOSED MANHOLE  
 EXISTING CURBLINE  
 EXISTING CURBLINE  
 UTILITY POLE  
 EXISTING VALVE, VENT, CO.  
 PROPOSED BUILDING  
 SINGLE-FAMILY SEMI-DETACHED  
 3 BEDROOM DWELLING  
 PROPOSED BLACKTOP  
 PROPOSED CONCRETE  
 WALKS, PATIOS, PADS

- CONSTRUCTION SEQUENCE:**
1. INSTALL ALL SILT FENCING AND ALL TREE PROTECTION FENCING.
  2. INSTALL ROCK CONSTRUCTION ENTRANCE.
  3. CLEAR AND GRUB SITE OF VEGETATION IN CONFLICT WITH CONSTRUCTION ACTIVITY. REMOVE SEPTIC TANK.
  4. STRIP TOPSOIL AND STOCKPILE AT DESIGNATED LOCATION.
  5. COMMENCE WITH BASEMENT EXCAVATION AND SUBSEQUENT BUILDING CONSTRUCTION. STOCKPILE SUB-SOIL AT DESIGNATED LOCATIONS.
  6. UPON COMPLETION OF THE INSTALLATION OF THE FOUNDATION WALLS, ROUGH GRADE ENTIRE SITE TO SUBGRADE ELEVATIONS.
  7. INSTALL ALL UTILITY CONNECTIONS.
  8. COMPLETE GARRETT AVENUE ROADWAY/FRONTAGE IMPROVEMENTS (E.G. CURBS AND SIDEWALKS).
  9. INSTALL SEEPAGE BED, ALL RAINWATER CONDUCTORS, AND SEEPAGE BED OUTLET PIPE.
  10. COMPLETE ROUGH GRADING.
  11. CONSTRUCT DRIVEWAY AND COMPLETE ALL PAVING OPERATIONS, EXCEPT FINAL WEARING COURSE.
  12. FINISH GRADE AND TOPSOIL ALL DISTURBED AREAS.
  13. SEED AND MULCH ALL DISTURBED AREAS AND ESTABLISH PERMANENT VEGETATIVE COVER. DO NOT PROCEED TO THE NEXT ITEM IN THE SEQUENCE UNTIL PERMANENT STABILIZATION IS ACHIEVED.  
 (FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED BY A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION.)
  14. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
  15. PLACE WEARING COURSE ON ALL PAVED SURFACES.

DATE	REVISIONS	REVISION NO.
02-05-16	REV LOTS, BUILDINGS, PAVING	
12-22-15	REV PER TMP. REVIEW	

GRAPHIC SCALE 1"=10'  
 0 10 20 30

UNDERGROUND UTILITIES  
 PA. ACT 187 OF 1996-ONE CALL NOTIFICATION(1-800-242-1776)  
 DATE: 04-16-15 SERIAL NO.: 20151062204

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY CO. RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE OF UTILITIES AND FOR NOTIFYING THE UTILITY COMPANIES AT LEAST THREE(3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF SAME.

PROJECT TITLE :  
**131-133 GARRETT AVENUE**  
 RADNOR TOWNSHIP - DELAWARE COUNTY - PENNSYLVANIA

DRAWING TITLE :  
**EROSION AND SEDIMENT CONTROL PLAN**

PREPARED BY :  
**JOSEPH M. ESTOCK**  
 Consulting Engineers & Land Surveyors

355 South Henderson Road  
 King of Prussia, PA 19406-2407  
 (610) 265-3035 - Fax (610) 962-9855  
 joe@josephmestock.com

SCALE 1" = 10'  
 DATE 27 APRIL 2015  
 FILE NO. 15003  
 FIELD BOOK 327  
 SHT. NO. 3 OF 6

Benchmark 2:  
 'U' in U.S. Pipe  
 Top of Hydrant  
 Elev= 430.31'

San MH  
 Rim=428.77  
 Inv=421.75 (1n)

**EROSION AND SEDIMENTATION CONTROL NOTES**

**A. GENERAL NOTES**

1. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
2. STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS, MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.
3. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
4. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
5. VEHICLES AND EQUIPMENT MUST ENTER DIRECTLY TO AND EXIT FROM THE SITE AT THE POINT WHERE THE ROCK CONSTRUCTION ENTRANCE HAS BEEN PLACED.
6. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO THE CONTROLS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
7. AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITY LOCATIONS.
8. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE.
9. THE PROJECTS RECEIVING WATERCOURSE IS MEADOWBROOK RUN WITHIN THE DARBY CREEK WATERSHED, AND THE CHAPTER 93 CLASSIFICATION IS CWF, MF.

**B. FILTER FABRIC FENCING & STRAW BALE BARRIERS**

1. FILTER FABRIC FENCING AND STRAW BALE BARRIERS MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE OR BARRIER SECTION MUST EXCEED 8 FEET UP SLOPE AT 45 DEGREES TO THE ALIGNMENT OF THE MAIN FENCE OR BARRIER.
2. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF FILTER FABRIC FENCING OR 1/3 THE ABOVE GROUND HEIGHT OF STRAW BALE BARRIERS.
3. ANY FILTER FABRIC FENCING OR STRAW BALE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH ROCK FILTER OUTLETS.
4. STRAW BALE BARRIERS SHOULD NOT BE USED FOR MORE THAN 3 MONTHS.

**C. SEDIMENT REMOVAL**

1. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
2. ALL SILT AND FOREIGN MATTER SHALL BE REMOVED FROM THE TOP OF THE BINDER COURSE AND PROPERLY DISPOSED OF BEFORE NEARING SURFACE IS INSTALLED.
3. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
4. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES.

**D. OPERATOR'S RESPONSIBILITY**

1. MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROL DEVICES IS THE RESPONSIBILITY OF THE OPERATOR DURING CONSTRUCTION.
2. THE RETENTION/SEDIMENT BASIN WILL BE CONSTRUCTED AND MAINTAINED BY THE OPERATOR. THE MAINTENANCE OF THIS BASIN WILL BE TRANSFERRED TO THE PERMITTEE UPON THE COMPLETION OF FINAL STABILIZATION.
3. THE OPERATOR IS RESPONSIBLE FOR PROVIDING DIVERSION TRENCHES, EROSION CHECKS, BENCHES, ETC., OR OTHER MEANS AS REQUIRED ON THE SITE TO PREVENT ACCELERATED RUNOFF AND EROSION, WHICH MAY NOT BE INDICATED, BUT IS WITHIN THE INTENT OF THIS PLAN.
4. THE OPERATOR MUST INSURE THE PROPER OPERATION OF THE DEVICES IS NOT HINDERED DUE TO EXCESSIVE SEDIMENT BUILD-UP OR UNAUTHORIZED ACTS OF THIRD PARTIES.
5. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO DISCHARGE OR OF STABILIZING THE SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE OPERATOR TO ELIMINATE ALL SUCH PROBLEMS.
6. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REPAIR WORK INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REANCHORING, AND FENCING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS TO THOSE INSTALLED WILL BE INSTALLED IMMEDIATELY.
7. 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, TITLE 25 PA, CODE CHAPTERS 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
8. IT IS THE INTENT OF THIS PLAN TO MEET REQUIREMENTS OF SOIL EROSION CONTROL.
9. THE OPERATOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 5A, EROSION CONTROL, RULES AND REGULATIONS, TITLE 25 PA, CODE CHAPTERS 271.1 ET SEQ. ENVIRONMENTAL PROTECTION, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE II, WATER RESOURCES, CHAPTER 102 EROSION CONTROL.
10. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
11. AT ANY TIME PRIOR TO STABILIZATION SHOULD ANY E & S PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL MEASURES, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEM.
12. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
13. IMMEDIATELY UPON DISCOVERING UNFORESSEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
14. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO BMP'S FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE BMP'S.
15. AT STREAM CROSSINGS, 50 FOOT STREAM BANK BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOO DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STAKING CUT LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.

**E. MULCHING**

1. MULCHING OF DISTURBED OR SEEDED AREA SHALL BE FURNISHED, PLACED, ANCHORED AND MAINTAINED IN ACCORDANCE WITH PENNDOT PUBL. 408, SECTION 608.
2. MULCHING SHALL BE PLACED IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETE.
3. HAY OR STRAW SHALL BE UNIFORMLY PLACED IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 3.0 TONS PER ACRE.
4. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS SHOULD BE INSTALLED ON ALL SLOPES 2:1 OR STEEPER.
5. STRAW MULCH SHOULD BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN

**F. SEEDING**

1. SEEDING SHALL BE PLACED IN ACCORDANCE WITH PENNDOT PUBL. 408, SECTION 604.
2. SEED FORMULAS:

FORMULA AND SPECIES	% PURITY	MIN. % WT	MIN. % SEED	MAX. % WEED	SEEDING RATE PER ACRE	SEEDING RATE 50 YDS.
<b>FORMULA B</b>					21.0 TOTAL	
* PERENNIAL RYEGRASS MIXTURE	20	98	90	0.15	4.0	6.0
* CREEPING RED FESCUE OR CHEWINGS FESCUE	30	98	85	0.15	4.0	6.0
* KENTUCKY BLUEGRASS MIXTURE	50	98	80	0.20	11.0	
<b>FORMULA C</b>					9.0 TOTAL	
* CROWNVETCH	45	98	70	0.10	4.0	4.0
* ANNUAL RYEGRASS	55	98	90	0.15	5.0	5.0
<b>FORMULA D</b>					21.0 TOTAL	
* TALL FESCUE	70	98	85	0.15	15.0	15.0
* CREEPING RED FESCUE OR CHEWINGS FESCUE	30	98	85	0.15	6.0	6.0
<b>FORMULA E</b>					10.0 TOTAL	
* ANNUAL RYEGRASS	100	98	90	0.15	10.0	10.0
<b>FORMULA I</b>					24.0 TOTAL	
* HARD FESCUE MIXTURE	55	98	85	0.15	13.0	13.0
* CREEPING RED FESCUE	45	98	85	0.15	5.0	5.0
* ANNUAL RYEGRASS	10	98	90	0.15	2.5	2.5
<b>FORMULA W</b>					10.5 TOTAL	
* TALL FESCUE	60	98	85	0.15	7.5	7.5
* BUTYRATED TREFOIL MIXTURE	20	98	80	0.15	4.0	4.0
* REDTOP	10	98	80	0.15	1.0	1.0

\* MINIMUM 20% HARD SEED AND 60% NORMAL SPROUTS

3. APPLICATION DATES:
  - FORMULA B, D, & I - MARCH 15 TO JUNE 15
  - FORMULA C - RYEGRASS PORTION: MARCH 1 TO OCTOBER 15
  - FORMULA C - CROWNVETCH PORTION: ANYTIME EXCEPT SEPTEMBER & OCTOBER
  - FORMULA E - MARCH 15 TO OCTOBER 15
  - FORMULA W - APRIL 1 TO JUNE 15
  - FORMULA W - AUGUST 16 TO SEPTEMBER 15

**4. SOIL SUPPLEMENTS MAY BE ADDED IN ACCORDANCE WITH SECTION 804 OR AS FOLLOWS:**

- FERTILIZER - STANDARD QUALITY
  - 200 LBS. PER 1000 S.Y.
  - 10-10-10 STARTER FERTILIZER 100 LBS. PER 1000 S.Y.
- LIME - AGRICULTURAL LIMESTONE
  - 90X MINIMUM OF CARBONATES 500 LBS. PER 1000 S.Y.

**5. FORMULA B SHALL BE USED TO ESTABLISH FINAL VEGETATION IN LAWN AREAS, FORMULA D SHALL BE USED TO ESTABLISH FINAL VEGETATION IN ROUGH AREAS, AND FORMULA E SHALL BE USED TO ESTABLISH TEMPORARY VEGETATION. FORMULAS C, W, AND N SHALL BE USED AS SPECIFICALLY INDICATED ON THE PLAN.**

**6. SEEDING AND MULCHING SCHEDULE**

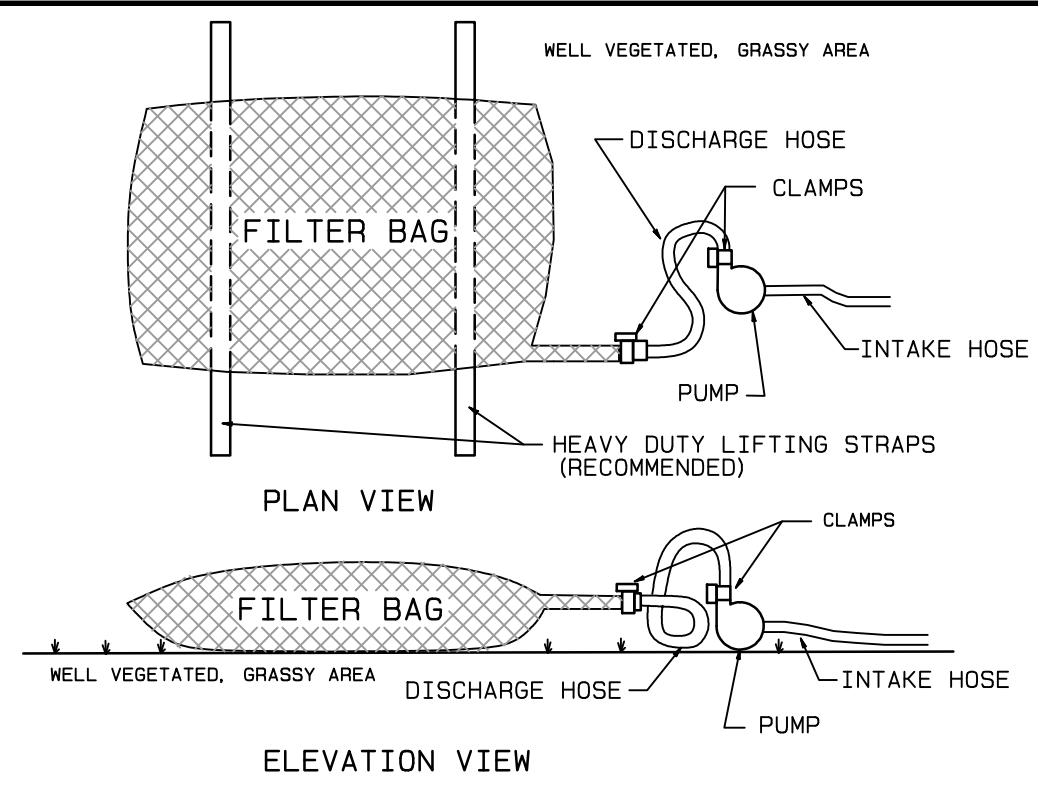
1. THE DIVERSIONS, CHANNELS, SEDIMENT BASINS, SEDIMENT TRAPS, AND STOCKPILES, WHEN USED, MUST BE STABILIZED IMMEDIATELY.
2. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
3. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM PERMANENT VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

**H. UTILITY LINE TRENCH EXCAVATION**

1. CONSTRUCTION REQUIREMENTS
  - A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
  - B. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PUMP CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
  - C. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PUMP INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED IN THE SAME DAY.
  - D. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEHIND PIPE AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
  - E. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
  - F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
  - G. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.
  - H. TRENCH PLUGS WILL BE SPACED IN ACCORDANCE WITH AND BE CONSTRUCTED OF THE MATERIALS AS INDICATED ON THE TRENCH PLUG DETAIL.
    - (1) AT ALL CROSSINGS OF WATERS OF THE COMMONWEALTH, TRENCH PLUGS WILL BE INSTALLED AT THE BANKS AFTER TRENCH EXCAVATION. THE PLUGS MAY BE TEMPORARILY REMOVED WHEN PLACING THE PIPE, BUT THEN REINSTALLED.
    - (2) CONSTRUCTION OF THE CROSSING WILL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "PIPELINES AND UTILITY LINE PROJECTS" SECTION OF THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.
2. EXCEPTIONS
  - IN CERTAIN CASES TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IN HYDROSTATICALLY TESTED AND THE COMPLETE BACKFILLING IS INSTALLED. IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM 1 WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:
    - 1C. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
    - 1E. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS. APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES/FACILITIES WILL BE INSTALLED, AND THE AREAS SEEDED AND MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

**I. CLEAN FILL**

1. IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR.
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREGGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
3. 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 FF-1A AND FF-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FF-001 TO CERTIFY THE ORIGIN OF THE FILL. MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FF-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FF-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
5. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL 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 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 A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN SUBJECTED TO 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".
6. 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 REGIONAL WASTE REGULATIONS BASED ON 25 PA, CODE CHAPTERS 271 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT [www.pacode.com](http://www.pacode.com).



**STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG (NTS)**

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH DOUBLE STITCHED "J" TYPE SEAMS. THE BAG SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 250 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE STANDARDS LISTED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. 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.

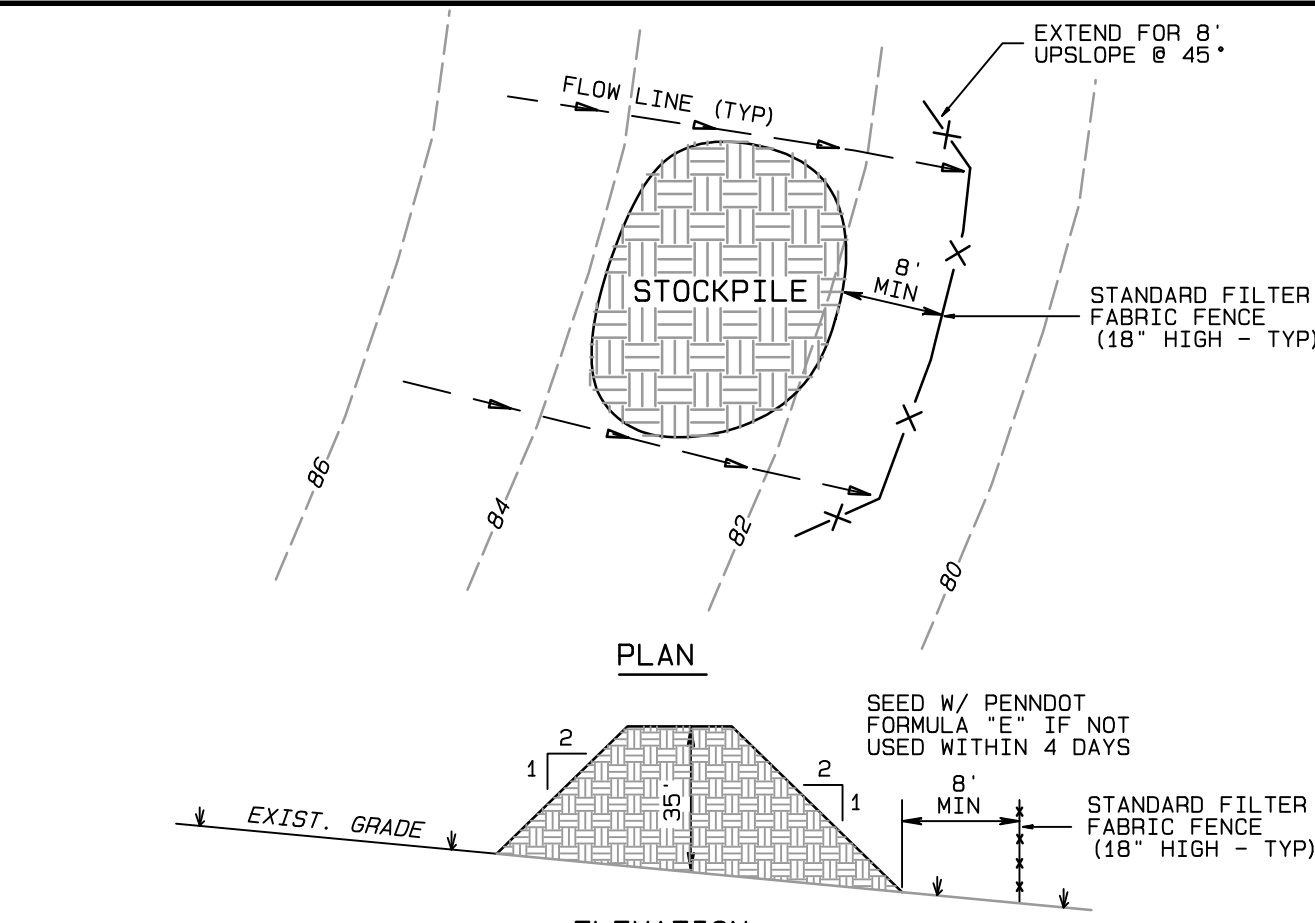
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREAS, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS WHERE THIS IS NOT POSSIBLE. A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 2:1. FOR SLOPES GREATER THAN 2:1, 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 HO OR EY WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHOULD BE NO GREATER THAN 750 GPM OR 1/2 RHE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

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



**TEMPORARY SOIL STOCKPILE AND MAINTENANCE DETAIL (NTS)**

NOTES:

1. INSTALL SILT FENCE DOWNSLOPE OF AREA OF STOCKPILE.
2. PLACE STOCKPILE IN AREAS SHOWN ON EROSION CONTROL PLAN WITHOUT BLOCKING NATURAL DRAINAGE PATTERNS.
3. FELLOW DIMENSIONS SHOWN ABOVE. HEIGHT SHOULD NOT EXCEED 35 FEET. SIDE SLOPES SHOULD NOT BE STEEPER THAN 2:1 (H TO 1 V).
4. SEED IMMEDIATELY WITH PENNDOT FORMULA "E" IF NOT USED WITHIN 4 DAYS. FOLLOW MULCHING AND SEEDING SPECIFICATIONS AND SCHEDULE.

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. 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.

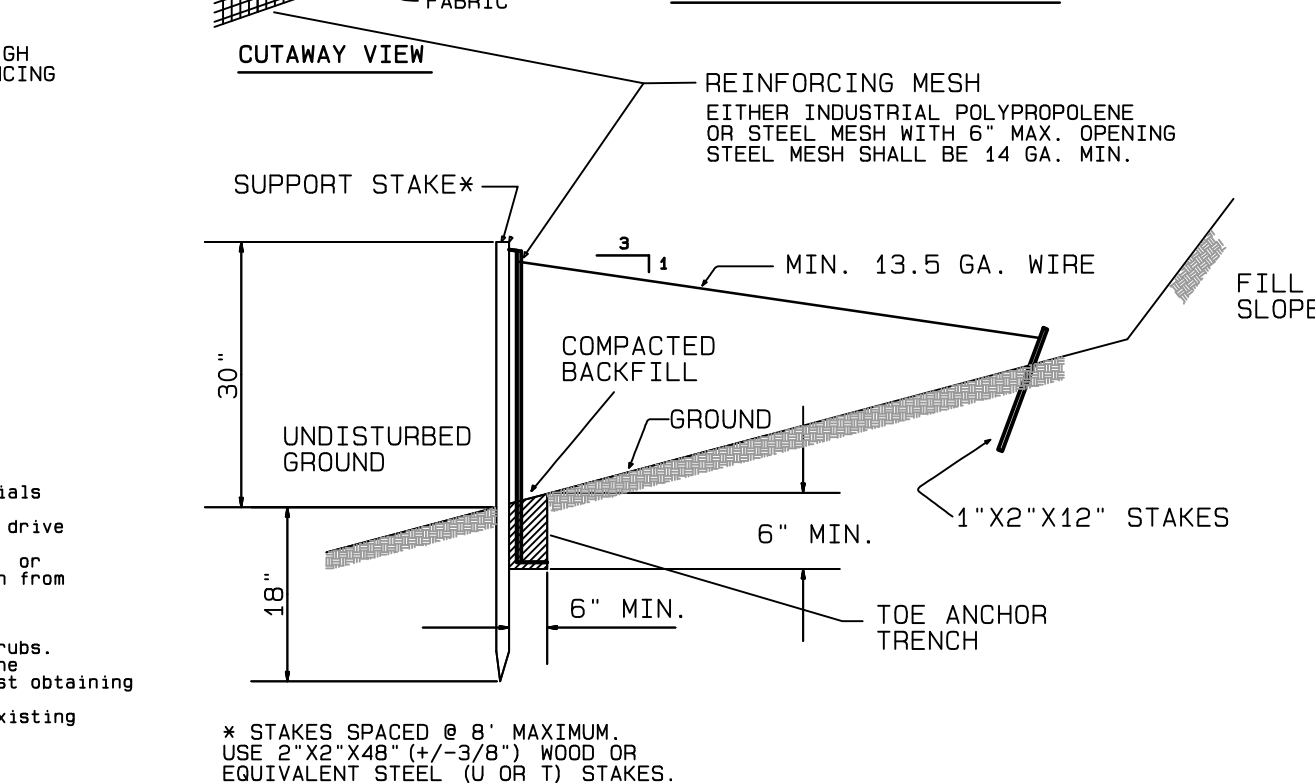
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREAS, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS WHERE THIS IS NOT POSSIBLE. A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 2:1. FOR SLOPES GREATER THAN 2:1, 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 HO OR EY WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHOULD BE NO GREATER THAN 750 GPM OR 1/2 RHE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

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



**STANDARD CONSTRUCTION DETAIL #4-8 REINFORCED SILT FENCE (30\"/>**

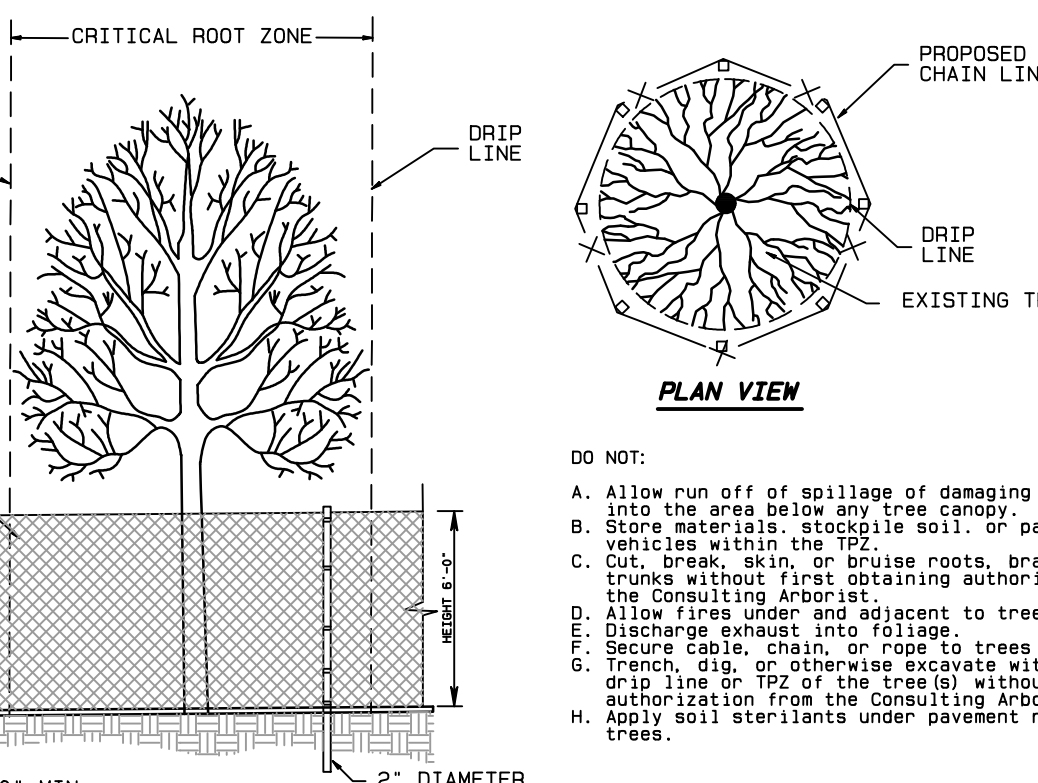
FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.

FABRIC WIDTH SHALL BE 42\"/>

**STANDARD CONSTRUCTION DETAIL #4-7 STANDARD SILT FENCE (18\"/>**

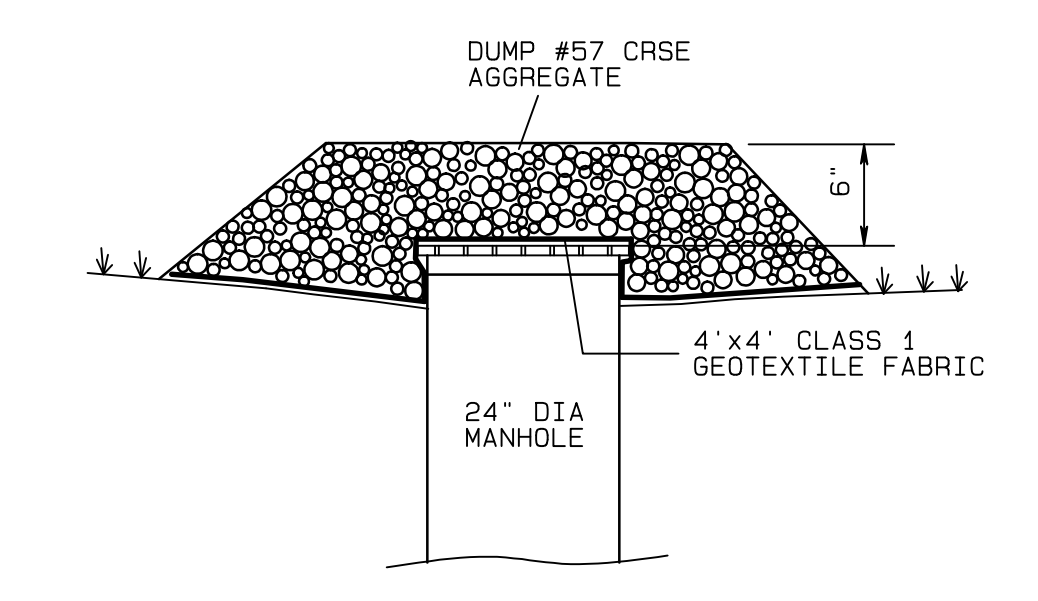
FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.

FABRIC WIDTH SHALL BE 30\"/>

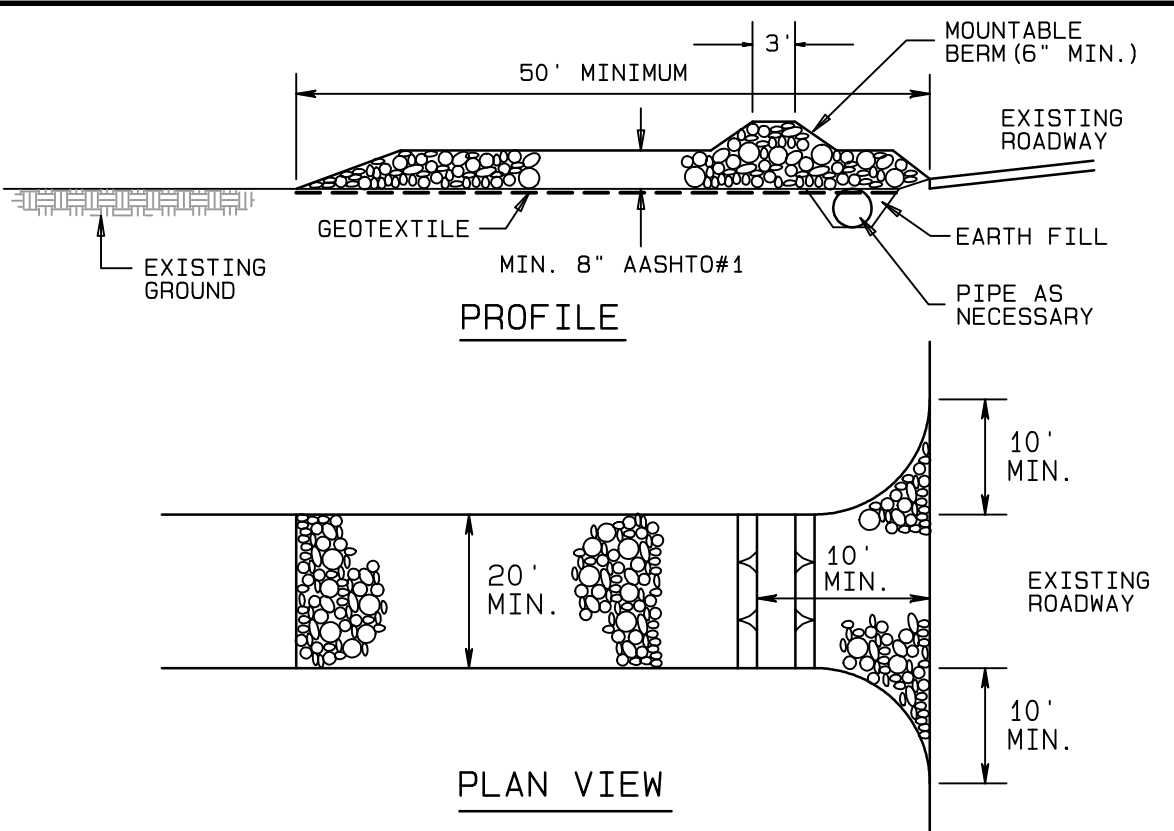


**TREE PROTECTION DETAIL (NTS)**

- TREE PROTECTION SPECIFICATIONS**
- I. A 4\"/>
  - II. A protective barrier of 6\"/>
  - III. Movable barriers of chain link fencing secured to concrete blocks can be substituted for "fixed" fencing if the Consulting Arborist agrees that the fencing will have to be moved to accommodate certain phases of construction. The builder may not move the fence without authorization from the Consulting Arborist.
  - IV. Where the Consulting Arborist has determined that tree protection fencing will interfere with the safety of work crews, trees may be used as an alternative form of tree protection. Wooden slats at least one inch thick are to be bound securely, edge to edge, around the trunk. A single layer or more of orange plastic construction fencing is to be wrapped and secured around the outside of the wooden slats. Major tree limbs may require protection as determined by the Consulting Arborist. Straw waddle may also be used as a trunk wrap by circling the trunk around the trunk up to a minimum height of six feet from grade. A single layer or more of orange plastic construction fencing is to be wrapped and secured around the straw waddle.



**INLET PROTECTION (TEMP.) MANHOLES 1 & 2 (NTS)**

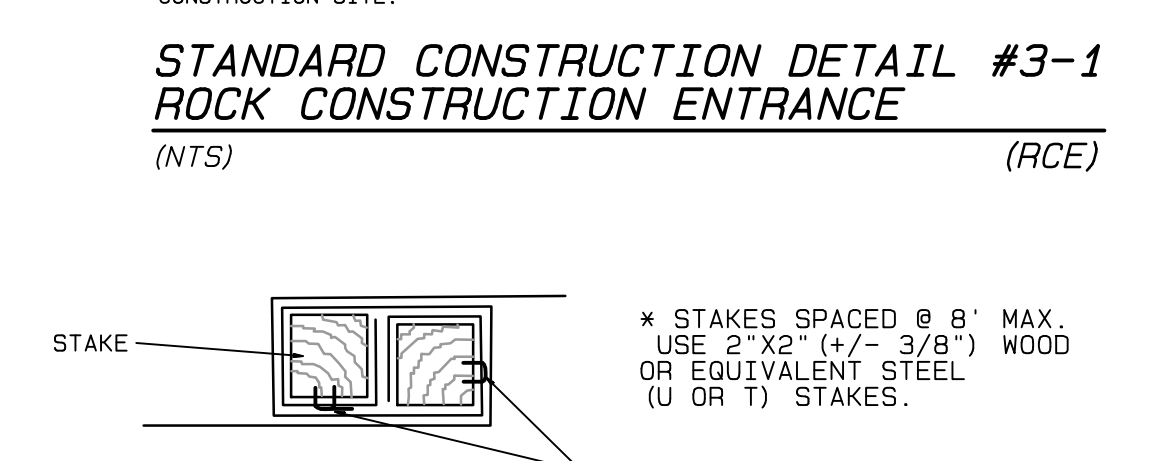


**STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE (RCE)**

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. ANY SEDIMENT LOCATED ON THE PUBLIC ROADWAY SHOULD BE REMOVED IMMEDIATELY AND RETURNED TO THE CONSTRUCTION SITE.

**MAINTENANCE:**

ROCK CONSTRUCTION ENTRANCE 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. ANY SEDIMENT LOCATED ON THE PUBLIC ROADWAY SHOULD BE REMOVED IMMEDIATELY AND RETURNED TO THE CONSTRUCTION SITE.



**STANDARD CONSTRUCTION DETAIL #4-18**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.

FABRIC WIDTH SHALL BE 42\"/>

**STANDARD CONSTRUCTION DETAIL #4-6**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL.

FABRIC WIDTH SHALL BE 30\"/>

**STANDARD CONSTRUCTION DETAIL #4-6**

DATE	REVISIONS	REVISION NO.
02-05-16	REV DETAILS	
12-22-15	REV PER TMP. REVIEW	

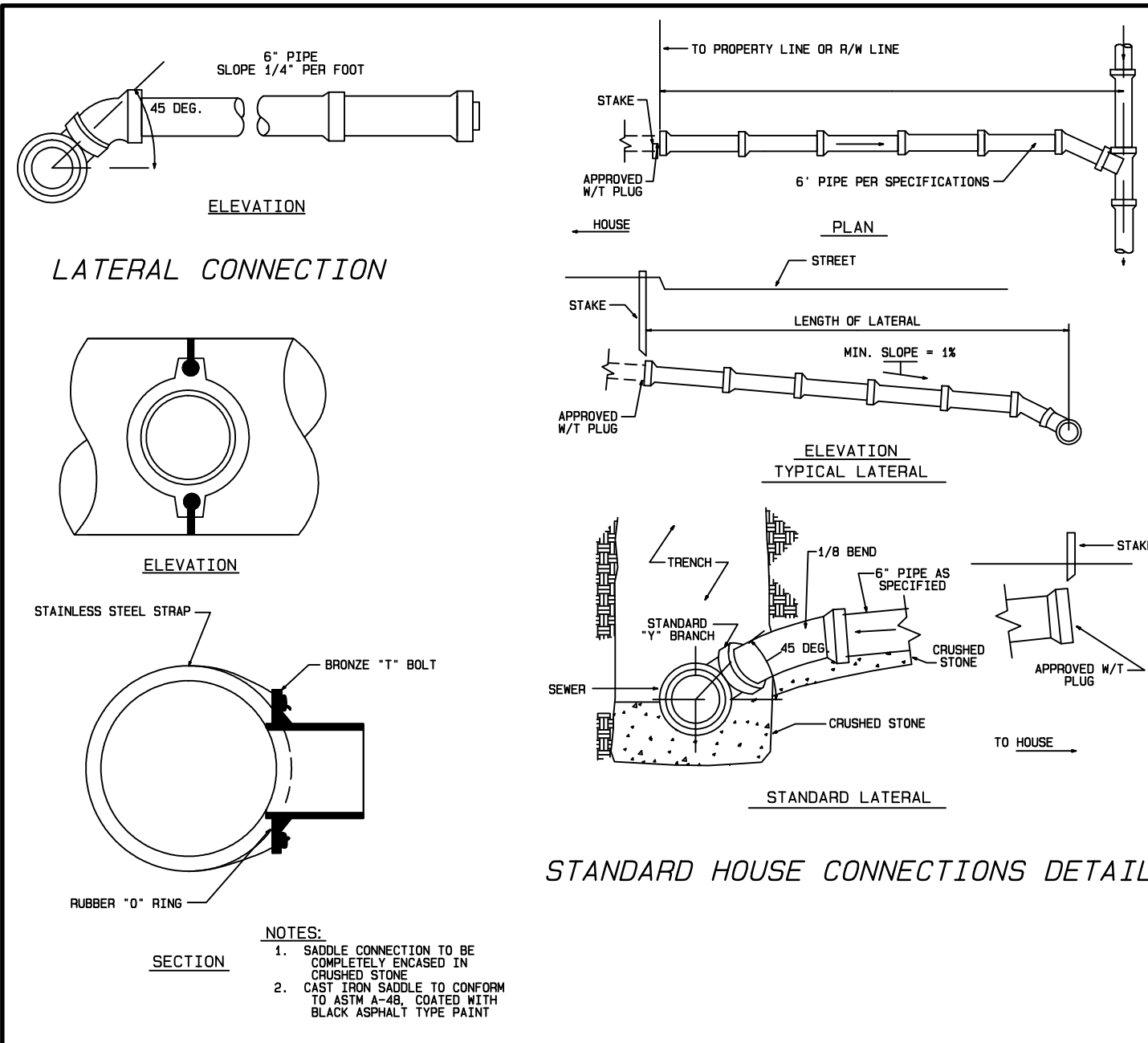
UNDERGROUND UTILITIES  
PA. ACT 197 OF 1996-ONE CALL NOTIFICATION (1-800-242-1776)  
DATE: 04-16-15 SERIAL NO.: 20151062204

REVISION NO. 1

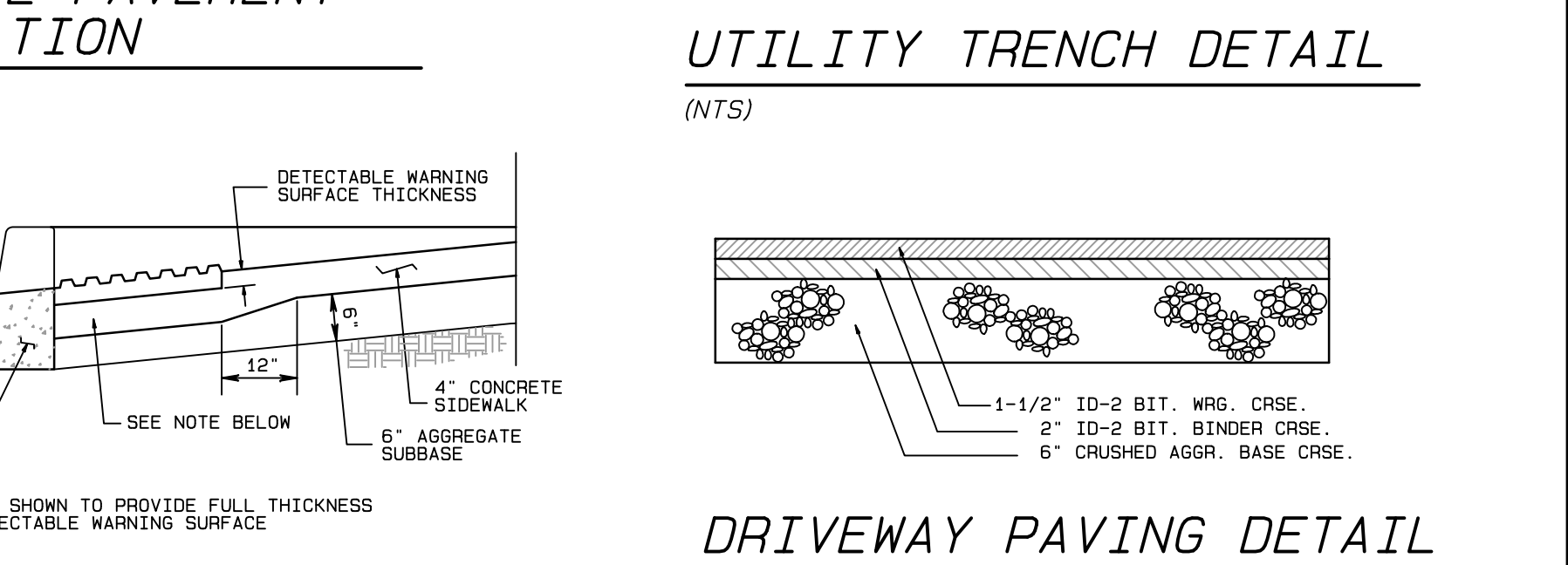
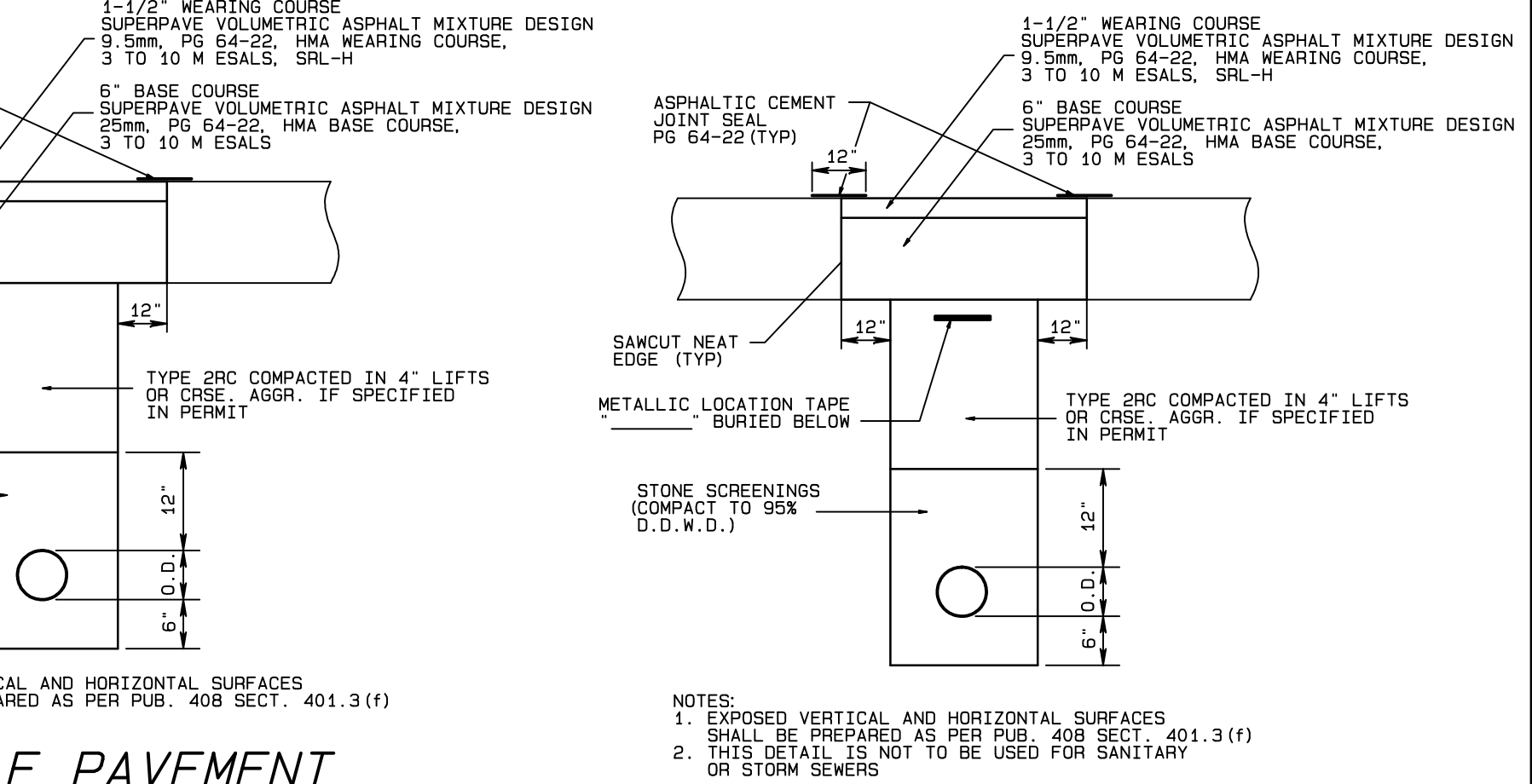
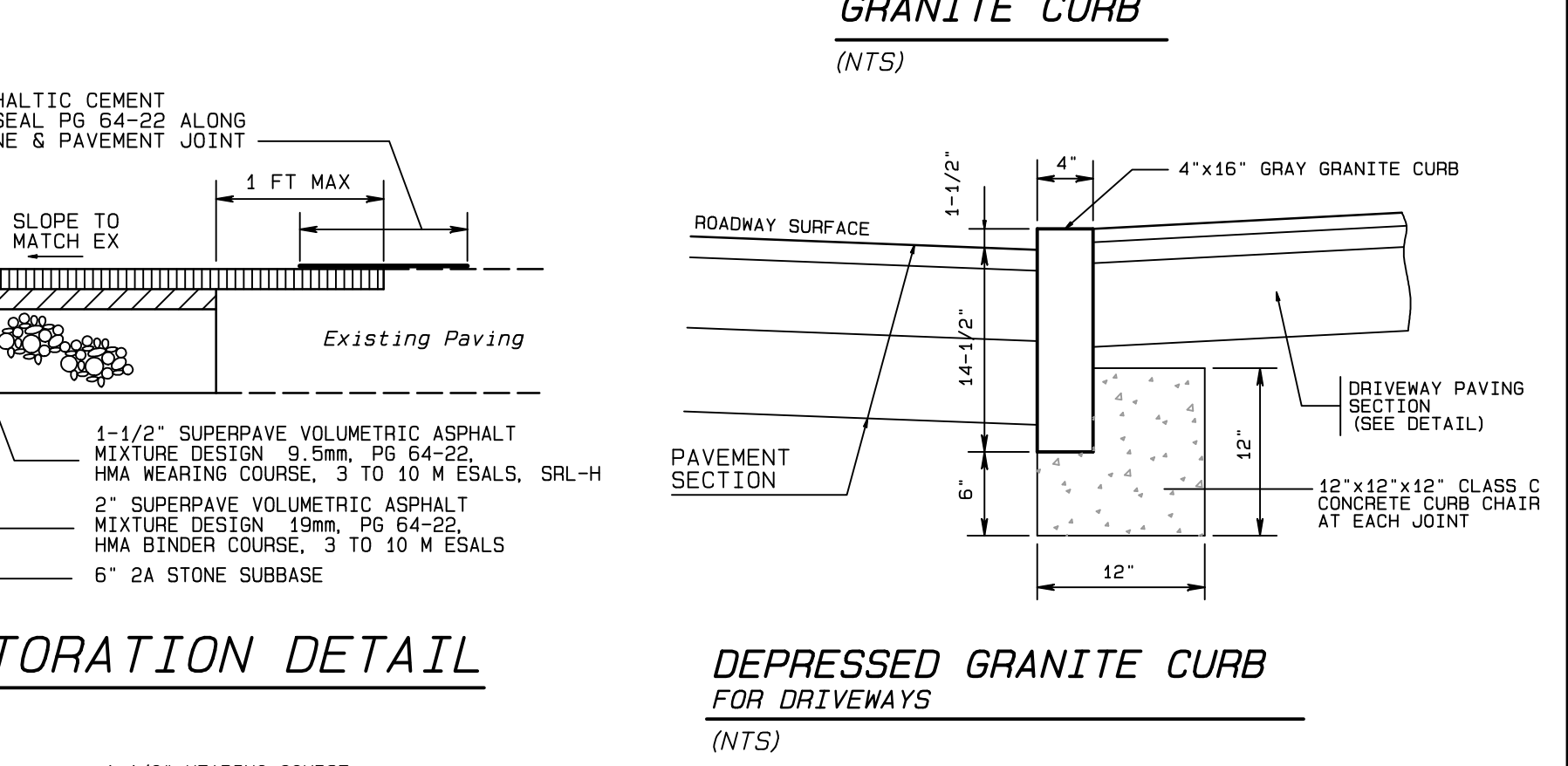
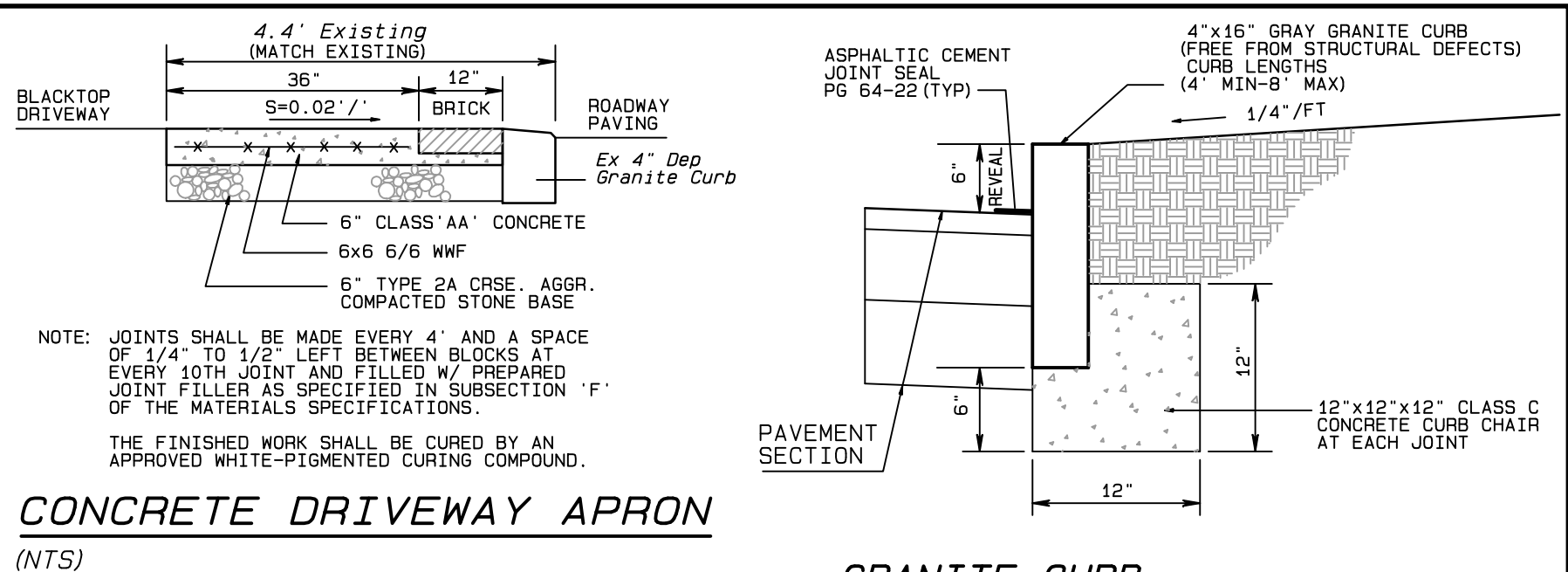
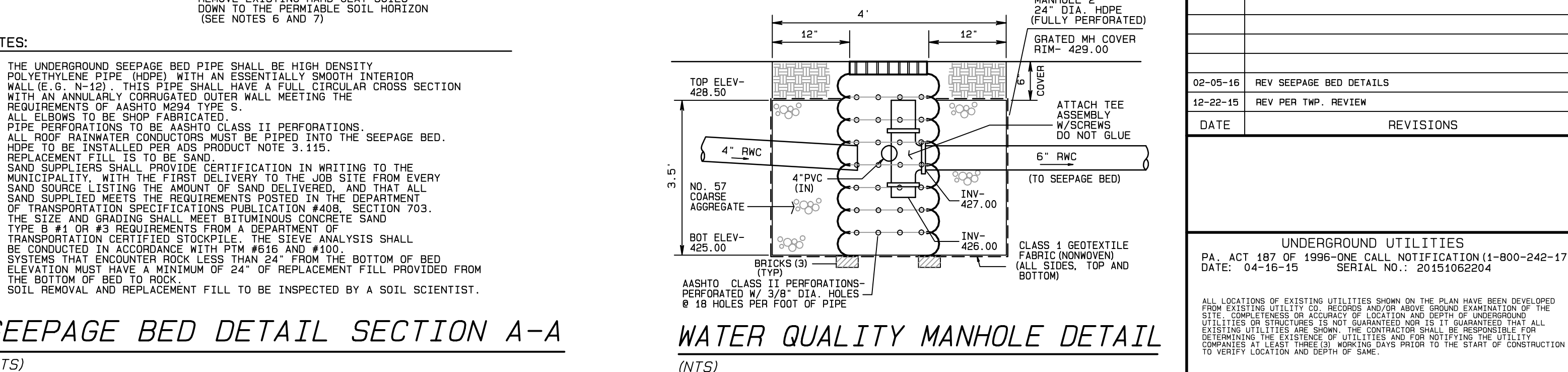
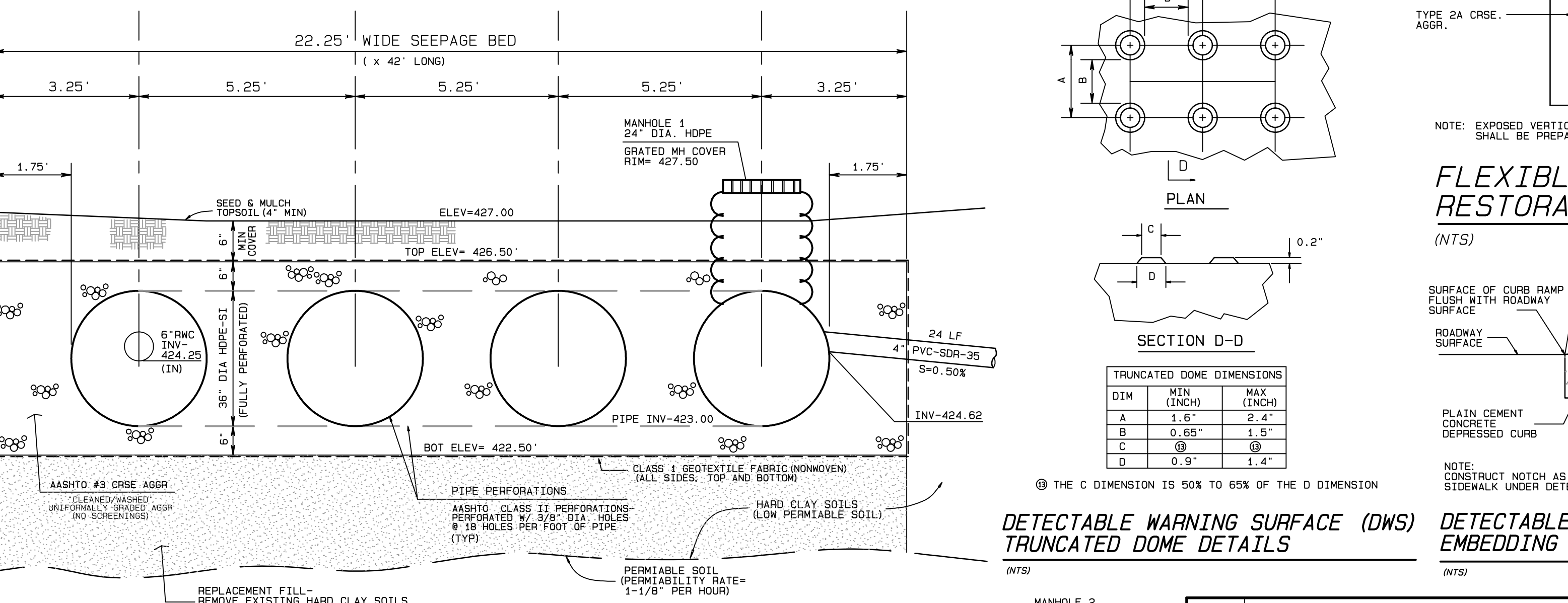
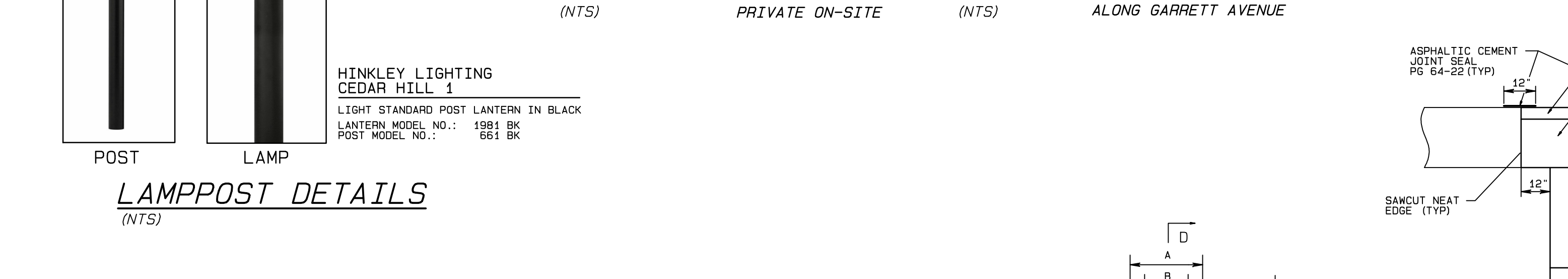
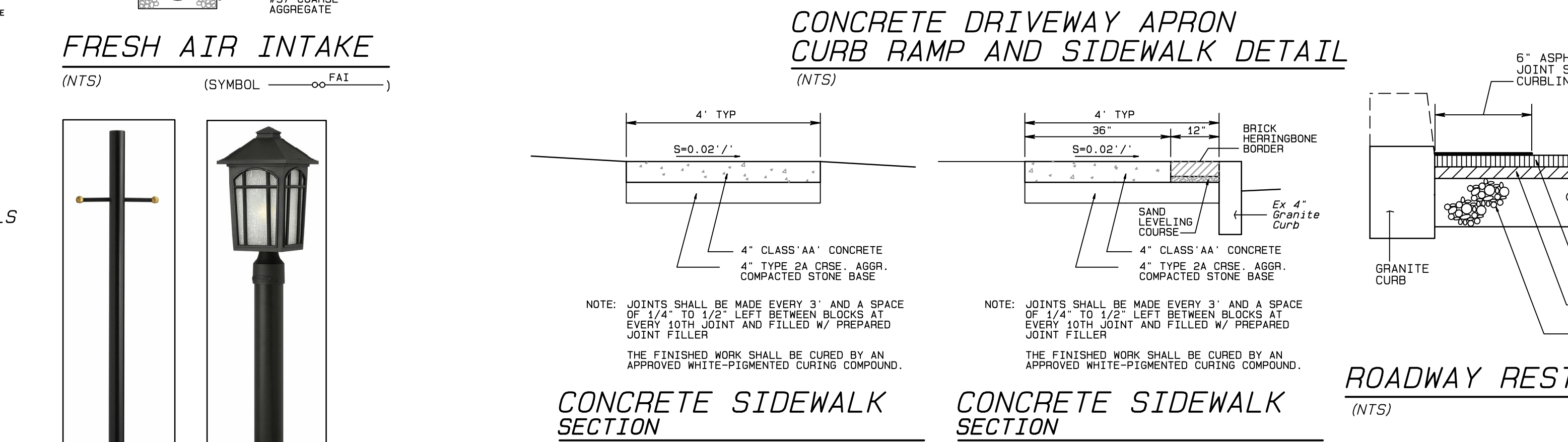
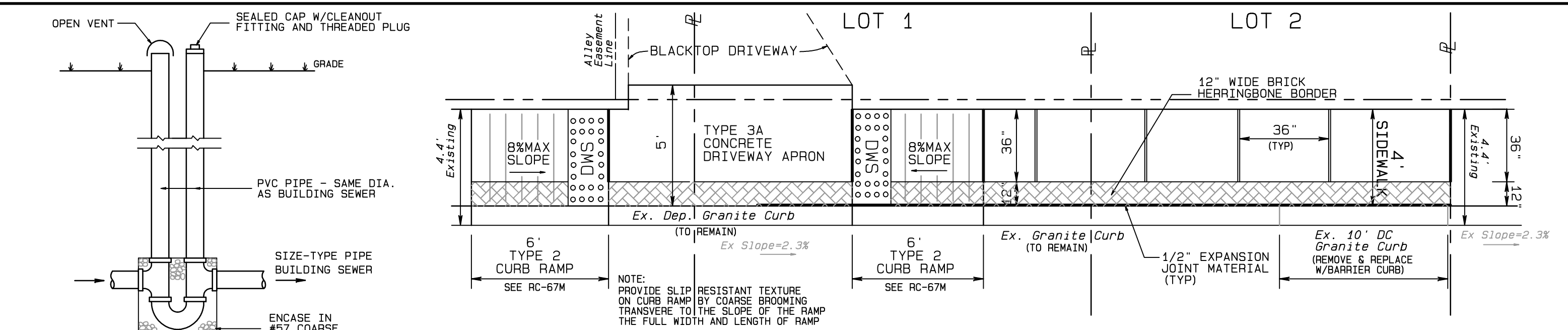
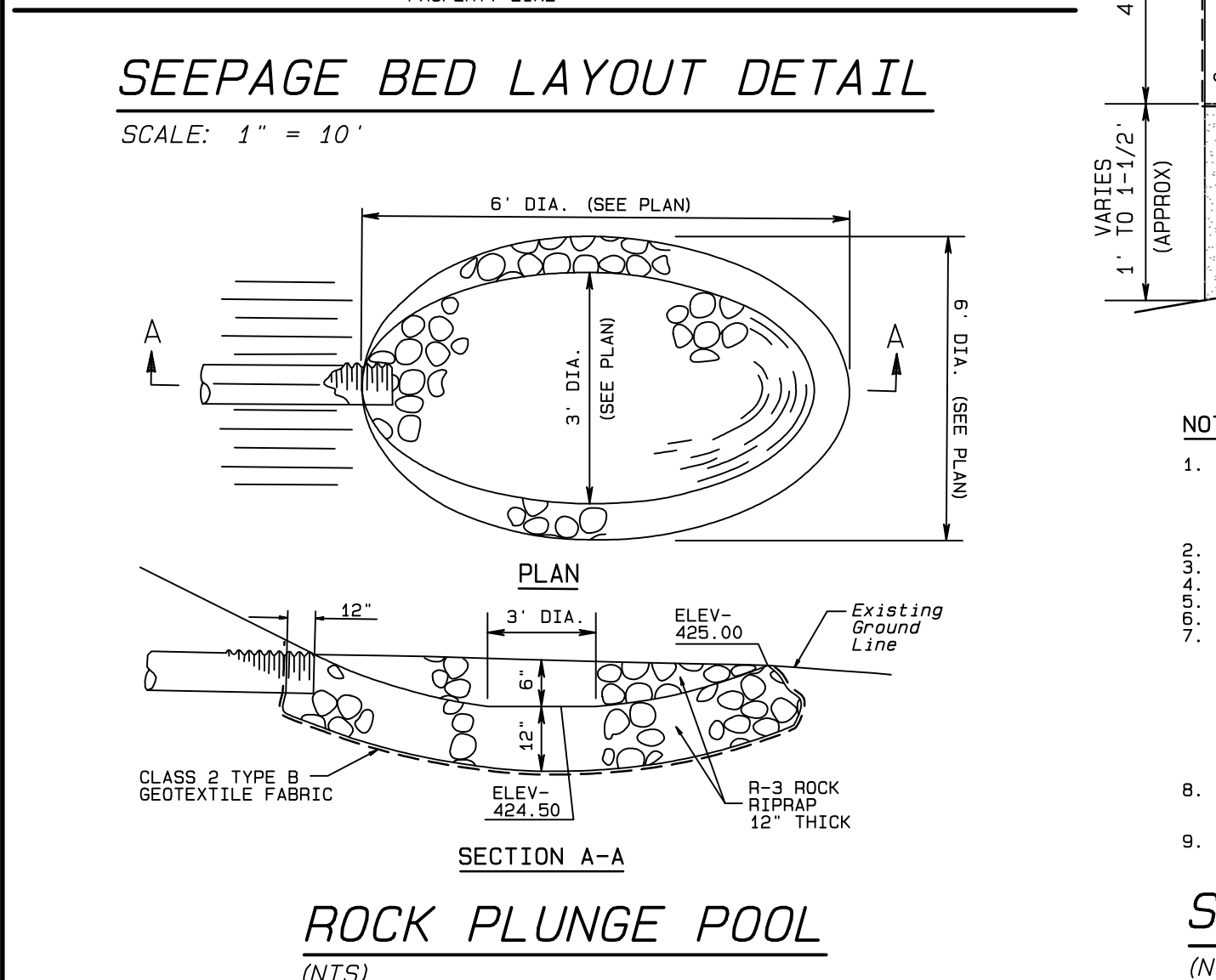
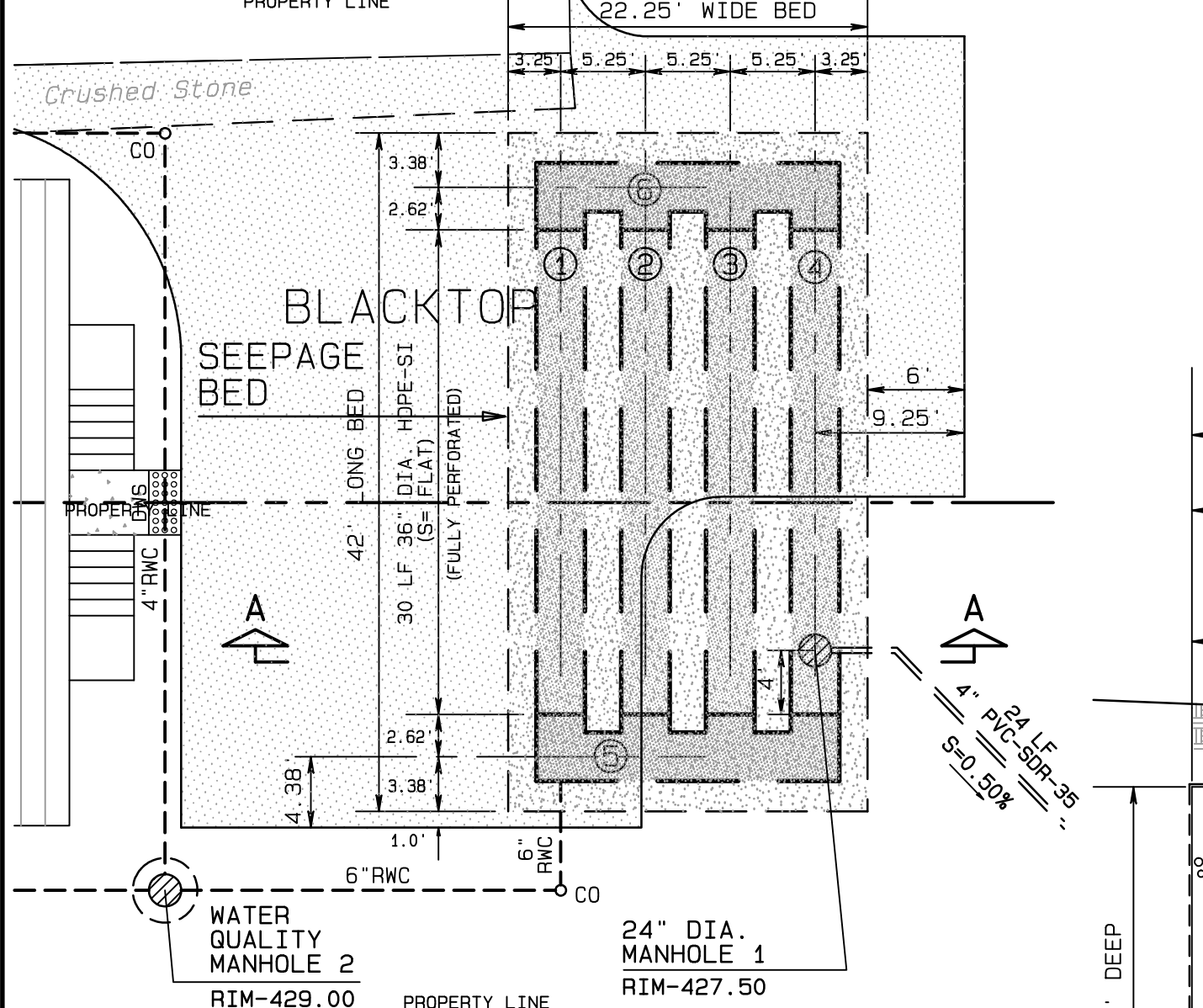
JOSEPH M. ESTOCK  
ENGINEER  
PE037302E  
PENNSYLVANIA

PROJECT TITLE :	DRAWING TITLE :	PREPARED BY :	SCALE :	DATE :	FILE NO. :	FIELD BOOK :	SHT. NO. :
131-133 GARRETT AVENUE RADNOR TOWNSHIP - DELAWARE COUNTY - PENNSYLVANIA	EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS	JOSEPH M. ESTOCK Consulting Engineers & Land Surveyors	AS NOTED	27 APRIL 2015	15003	327	4 of 6





**SANITARY SEWER LATERAL DETAILS**  
(NTS)



TRUNCATED DOME DIMENSIONS

DIM	MIN (INCH)	MAX (INCH)
A	1.6"	2.4"
B	0.65"	1.5"
C	0.6"	0.8"
D	0.9"	1.4"

@ THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION

**PROJECT TITLE:**  
**131-133 GARRETT AVENUE**  
RADNOR TOWNSHIP - DELAWARE COUNTY - PENNSYLVANIA

**DRAWING TITLE:**  
**CONSTRUCTION DETAILS**

**REVISIONS:**

DATE	REVISIONS	REVISION NO.
02-05-16	REV SEEPAGE BED DETAILS	
12-22-15	REV PER TWP. REVIEW	

**PREPARED BY:**  
JOSEPH M. ESTOCK  
Consulting Engineers & Land Surveyors

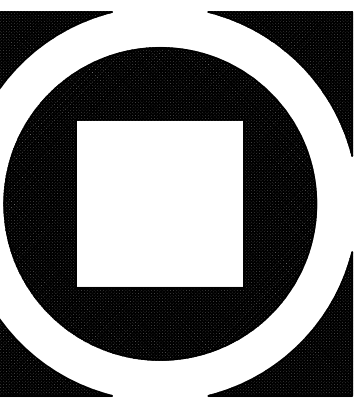
**ENGINEER:**  
JOSEPH M. ESTOCK  
PE037320E  
PENNSYLVANIA

**SCALE:** AS NOTED  
**DATE:** 27 APRIL 2015  
**FILE NO.:** 15003  
**FIELD BOOK:** 327  
**SHT. NO.:** 6 OF 6

# RADNOR MEMORIAL LIBRARY RENOVATION & EXPANSION

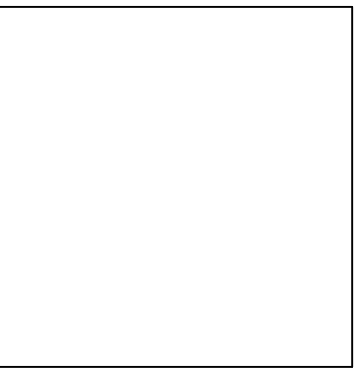
## PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

114 WEST WAYNE AVENUE | WAYNE, PA 19087



**KIMMEL BOGRETTE**  
**Architecture + Site**  
 Conshohocken, PA 19428  
 151 E. 10th Avenue, Suite 300  
 Phone: 610.834.7805  
 Facsimile: 610.834.7815  
 © COPYRIGHT 2015, KIMMEL BOGRETTE ARCHITECTURE + SITE, INC. ALL RIGHTS RESERVED

PROJECT TEAM	LOCATION MAP	AERIAL PHOTO	SITE / ZONING DATA	DRAWING LIST																																													
<p><b>OWNER:</b>                      RADNOR TOWNSHIP                      301 IVEN AVENUE                      WAYNE, PA 19087                      PHONE: 610-688-5600                      CONTACT: STEVE NORCINI                      EMAIL: SNORCINI@RADNOR.ORG</p> <p><b>ARCHITECT:</b>                      KIMMEL BOGRETTE ARCHITECTURE + SITE, INC.                      151 EAST 10TH AVENUE                      SUITE 300                      CONSHOHOCKEN, PA 19428                      PHONE: 610.834.7805                      CONTACT: SHERRI KIMMEL                      EMAIL: skimmel@kimmel-bogrette.com</p> <p><b>CIVIL ENGINEER:</b>                      LAND STUDIES, INC.                      315 NORTH STREET                      LITITZ, PA 17543                      PHONE: 717.624.4440                      CONTACT: KELLY GUTSHALL                      EMAIL: kelly@landstudies.com</p> <p><b>STRUCTURAL ENGINEER:</b>                      JOSEPH BARBATO ASSOCIATES, LLC                      6 DICKINSON DRIVE                      SUITE 103                      CHADDS FORD, PA 19317                      PHONE: 610.558.6050                      CONTACT: MIKE SHEER                      EMAIL: msheer@jbarbato.com</p> <p><b>MEP ENGINEER:</b>                      SHARPE ENGINEERING, INC.                      555 SECOND AVENUE                      SUITE G-260                      COLLEGEVILLE, PA 19426                      PHONE: 610.489.8212 ext. 23                      CONTACT: BILL CLEMENS                      EMAIL: wclemens@sharpe-eng.com</p>			<p><b>TOTAL SITE ACREAGE:</b> 1.05 AC. GROSS                      WAYNE BUSINESS OVERLAY DISTRICT (WBOD); SPECIAL USE AREA: SOUTH WAYNE MUNICIPAL LOT/POST OFFICE</p> <p><b>ZONING:</b>                      ZONING A: A                      OPEN SPACE AND RECREATION                      EXISTING LAND USE: OPEN SPACE AND RECREATION                      PROPOSED LAND USE: OPEN SPACE AND RECREATION                      SEWER: PUBLIC                      WATER: PUBLIC</p> <table border="1"> <thead> <tr> <th>SETBACKS</th> <th>REQUIRED</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>BUILD-TO LINE</td> <td>45 FT.</td> <td>25 FT.</td> </tr> <tr> <td>FRONT</td> <td>25 FT.</td> <td>25 FT.</td> </tr> <tr> <td>SIDE</td> <td>15 FT.</td> <td>3.5 FT.</td> </tr> <tr> <td>REAR</td> <td>15 FT.</td> <td>38 FT.</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>BUILDING HEIGHT</th> <th>REQUIRED</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>PRINCIPAL STRUCTURE</td> <td>30 FT. MIN / 55 FT. MAX.</td> <td>22 FT. TO 30 FT.</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>BUILDING WIDTH</th> <th>REQUIRED</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>PRINCIPAL STRUCTURE</td> <td>50 FT. MAX. (OR WITH ARCHITECTURAL OFFSETS)</td> <td>105 FT. W/ ARCH. OFFSETS</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>BUILDING FOOTPRINT</th> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td>24,050 SQFT</td> <td>32,669 SQFT</td> </tr> </tbody> </table> <p><b>IMPERVIOUS COVERAGE</b>                      (MAXIMUM IMPERVIOUS COVERAGE SHALL BE 90%)</p> <table border="1"> <thead> <tr> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>72.1% (.752 AC)</td> <td>83.5% (0.871 AC)</td> </tr> </tbody> </table> <p><b>AVERAGE SLOPE</b></p> <table border="1"> <thead> <tr> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>8.29%</td> <td></td> </tr> </tbody> </table> <p><b>PARKING</b></p> <table border="1"> <thead> <tr> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>32</td> <td>30</td> </tr> </tbody> </table>	SETBACKS	REQUIRED	PROPOSED	BUILD-TO LINE	45 FT.	25 FT.	FRONT	25 FT.	25 FT.	SIDE	15 FT.	3.5 FT.	REAR	15 FT.	38 FT.	BUILDING HEIGHT	REQUIRED	PROPOSED	PRINCIPAL STRUCTURE	30 FT. MIN / 55 FT. MAX.	22 FT. TO 30 FT.	BUILDING WIDTH	REQUIRED	PROPOSED	PRINCIPAL STRUCTURE	50 FT. MAX. (OR WITH ARCHITECTURAL OFFSETS)	105 FT. W/ ARCH. OFFSETS	BUILDING FOOTPRINT	EXISTING	PROPOSED		24,050 SQFT	32,669 SQFT	EXISTING	PROPOSED	72.1% (.752 AC)	83.5% (0.871 AC)	EXISTING	PROPOSED	8.29%		EXISTING	PROPOSED	32	30	<p>CS-1 COVER SHEET</p> <p><b>GENERAL</b>                      G1.0 GENERAL NOTES</p> <p><b>CIVIL</b>                      V1.0 EXISTING CONDITIONS                      C1.0 DEMOLITION PLAN                      C2.0 LAYOUT PLAN                      C3.0 GRADING AND E&amp;S                      C4.0 E&amp;S DETAILS                      C5.0 E&amp;S NARRATIVE                      C6.0 SITE DETAILS                      C7.0 SITE DETAILS                      C8.0 STORMWATER DETAILS</p> <p><b>LANDSCAPE</b>                      L1.0 SHADE TREE PLAN                      L2.0 LANDSCAPE PLAN                      L3.0 LANDSCAPE DETAILS</p>
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<p><b>ADDITIONAL REQUIRED APPROVALS</b></p> <p>PER TOWNSHIP CODE, THE FOLLOWING ADDITIONAL BOARD APPROVALS HAVE BEEN OBTAINED FOR THIS PROJECT:</p> <table border="1"> <thead> <tr> <th>REVIEW BOARD</th> <th>STATUS</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1. DESIGN REVIEW BOARD CONDITIONS:</td> <td>APPROVED</td> <td>3/9/2016</td> </tr> <tr> <td>2. SHADE TREE COMMISSION CONDITIONS: PROVIDE ADDITIONAL SHADE TREES, WHERE POSSIBLE, TO MEET THE REQUIREMENTS OF THE SHADE TREE ORDINANCE. TOWNSHIP WAS REQUESTED TO CONSIDER PLANTING ADDITIONAL CANOPY TREES IN THE SOUTH WAYNE LOT.</td> <td>APPROVED</td> <td>3/8/2016</td> </tr> </tbody> </table>					REVIEW BOARD	STATUS	DATE	1. DESIGN REVIEW BOARD CONDITIONS:	APPROVED	3/9/2016	2. SHADE TREE COMMISSION CONDITIONS: PROVIDE ADDITIONAL SHADE TREES, WHERE POSSIBLE, TO MEET THE REQUIREMENTS OF THE SHADE TREE ORDINANCE. TOWNSHIP WAS REQUESTED TO CONSIDER PLANTING ADDITIONAL CANOPY TREES IN THE SOUTH WAYNE LOT.	APPROVED	3/8/2016																																				
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**RADNOR MEMORIAL LIBRARY RENOVATION & EXPANSION PRELIMINARY / FINAL LAND DEVELOPMENT PLANS**  
 114 WEST WAYNE AVENUE  
 WAYNE, PA 19087

Submission Date: 02.01.2016  
 Drawn By: AK/EL  
 Checked By: KG/BE  
 Scale: AS NOTED

<p><b>CERTIFICATE OF OWNERSHIP</b></p> <p>I, ROBERT A. ZIENKOWSKI, DO HEREBY CERTIFY THAT THE TOWNSHIP OF RADNOR IS THE OWNER OF THE LAND SHOWN HEREON, AS HEREON RECITED. IT IS THE INTENTION OF SAID TOWNSHIP THAT THIS LAND BE DEVELOPED AS SHOWN HEREON.</p> <p>_____, 20____</p> <p>ROBERT A. ZIENKOWSKI                      TOWNSHIP MANAGER</p>	<p><b>APPROVED</b>                      RADNOR TOWNSHIP</p> <p>_____, 20____                      DIRECTOR OF PUBLIC WORKS</p> <p>_____, 20____                      ZONING OFFICER</p> <p>_____, 20____                      TOWNSHIP ENGINEER</p> <p>_____, 20____                      BOARD OF COMMISSIONERS, PRESIDENT</p> <p>_____, 20____                      BOARD OF COMMISSIONERS, SECRETARY</p>	<p><b>STORMWATER CERTIFICATION</b></p> <p>I, BENJAMIN J. EHRHART, ON THIS DATE _____, HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE RADNOR TOWNSHIP STORMWATER MANAGEMENT ORDINANCE. EXCEPT AS WAIVED BY THE TOWNSHIP AS NOTED ABOVE.</p> <p>_____, 20____</p> <p>BENJAMIN J. EHRHART, P.E.                      LANDSTUDIES, INC.                      315 NORTH STREET                      LITITZ, PA 17543</p>	<p><b>DELAWARE COUNTY PLANNING COMMISSION APPROVAL</b></p> <p>DATE: _____</p>
---	---	---	---

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, PERSONALLY APPEARED ROBERT A. ZIENKOWSKI, ACTING MANAGER OF THE TOWNSHIP OF RADNOR, AUTHORIZED TO ACT FOR IT AND IN ITS STEAD, KNOWN TO ME OR SATISFACTORILY PROVEN TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING CERTIFICATION, AND ACKNOWLEDGED THE SAME TO BE THE ACT AND DEED OF SAID TOWNSHIP.

\_\_\_\_\_  
 NOTARY PUBLIC

Sheet Name:	Sheet Name
Progress Prints:	
Revisions:	
Δ 1.15.16 TWP COMMENTS	
Δ 3.15.16 PC COMMENTS	
Δ SH. TR. COMMENTS	

**CS-1**  
 OF 14

**NOT FOR CONSTRUCTION**

## GENERAL PLAN NOTES

- THESE DRAWINGS SHOW THE RENOVATION AND EXPANSION OF THE RADNOR MEMORIAL LIBRARY.
- EXISTING FEATURES AND TOPOGRAPHIC INFORMATION IS FROM A FIELD SURVEY PERFORMED BY GANNETT FLEMING ON OCTOBER 9, 2015.
- MEETS AND BOUNDS DESCRIBED: TAKEN FROM SUBJECT DEED; BOOK 2715, PAGE 954 TOWNSHIP OF RADNOR.
- ANY ALTERATIONS TO THIS PLAN AFTER THE DATE OF PLAN PREPARATION OR THE LATEST REVISION SHALL NOT BE THE RESPONSIBILITY OF KIMMEL BOGRETTE ARCHITECTURE + SITE, INC. OR LANDSTUDIES, INC. (PROJECT TEAM, HEREIN)
- ALL PROPOSED UTILITIES SHALL BE UNDERGROUND
- THE EXISTING UTILITIES SHOWN HAVE BEEN DETERMINED AND REFERENCED BASED ON INFORMATION RECEIVED FROM THE UTILITY COMPANIES, SURVEYORS, VISITS TO THE SITE AND GENERAL BEST INFORMATION, TO THE BEST OF PROJECT TEAM'S KNOWLEDGE, AT THE TIME OF DESIGN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM 1-800-242-1776 A MINIMUM OF 3 DAYS PRIOR TO EXCAVATING OR WITH CAREFUL EXPLORATORY WORK, AT THE CONTRACTORS RISK, PRIOR TO CONSTRUCTION FOR THOSE PRIVATE LINES WHICH ARE NOT ABLE TO BE LOCATED THROUGH THE ONE CALL PROCESS. IT MAY BECOME NECESSARY IN THE FIELD TO ADJUST THE PROPOSED UTILITY LOCATION TO RESOLVE ANY UTILITY CROSSING CONFLICTS WHICH MAY OCCUR. KIMMEL BOGRETTE ARCHITECTURE + SITE, INC. SHALL BE NOTIFIED IMMEDIATELY IF ANY SUCH CONFLICTS ARE ENCOUNTERED.
- DRAWINGS ARE **NOT** TO BE SCALED FOR SIZES OR DIMENSIONS. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.

## UTILITY NOTES

### GENERAL NOTES - STORM DRAINAGE

- ALL STORM SEWER PIPES SHALL BE SMOOTH LINED CORRUGATED PLASTIC PIPE UNLESS OTHERWISE NOTED. ALL STORM SEWER STRUCTURES, PIPES AND CULVERTS SHALL BE WATERTIGHT PER MUNICIPAL REQUIREMENTS.
- CONSTRUCTION OF STORMWATER MANAGEMENT AND EROSION CONTROL FACILITIES SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY AND DELAWARE COUNTY CONSERVATION DISTRICT STANDARDS AND SPECIFICATIONS.
- ALL STPR, SEWER PIPES AND INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PENNDOT PUBLICATION 408, THE MUNICIPAL SPECIFICATION AND AS SHOWN ON THESE DRAWINGS. STORM SEWER STRUCTURES AND GRATES SHALL COMPLY WITH PENNDOT RC-34 CONSTRUCTION SPECIFICATIONS.

## CONTRACTOR NOTES

- THE OWNER WILL PROCURE AND OBTAIN, AT THEIR COST, THE NECESSARY BUILDING & DEMO PERMIT(S); IT IS THE RESPONSIBILITY OF THE INDIVIDUAL SUBCONTRACTORS TO PROCURE AND OBTAIN, AT THEIR COST, THEIR RESPECTIVE PERMITS AS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF DAMAGED OR DESTROYED EXISTING LANDSCAPE AND/OR SITE FEATURES WHICH ARE TO REMAIN.
- PLAN LOCATION AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE.
- PRIOR TO CONSTRUCTION STAKEOUT, CONTRACTOR SHALL VERIFY DIMENSIONS SET FORTH ON LATEST PLANS.
- ALL CONSTRUCTION TO CONFORM TO THE MUNICIPAL AND/OR DELAWARE COUNTY ORDINANCES AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING, AND SHORING, IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DONE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
- DIMENSIONS AND GEOMETRY SHOWN ON THIS PLAN SHALL BE VERIFIED DURING STAKE-OUT CALCULATIONS AND FIELD STAKE-OUT.

## E&S NOTES

- SOIL TYPES PRESENT ON THE SITE, PER THE SOIL SURVEY OF DELAWARE COUNTY, PENNSYLVANIA, AS FOLLOWS:

SYMBOL	NAME	SLOPE	HYDRO GROUP
Md	MADE LAND, GABBRO AND DIABASE MATERIALS	0-8%	C

- REFER TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ALL EROSION AND SEDIMENT CONTROL MEASURES. ALL DISTURBED AREAS MUST COMPLY WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- PER REQUIREMENTS OF CHAPTER 102 OF ADMINISTRATIVE CODES OF TITLE 25 (PA DEP RULES AND REGULATIONS) A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN, AND ITS PARTS, MUST BE AVAILABLE ON SITE DURING CONSTRUCTION UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED.

## UNDERGROUND UTILITY LINE PROTECTION ACT

IN COMPLIANCE WITH AN PURSUANT TO THE PROVISIONS OF 73 P.S. 176, AS AMENDED BY ACT 121 OF 2008, THE PROJECT TEAM HAS PERFORMED THE FOLLOWING REQUIREMENTS IN PREPARING THESE DRAWINGS THAT INCLUDE EXCAVATION OR DEMOLITION WORK WITHIN CLEM MACRONE PARK, AS SHOWN ON THE DRAWINGS HEREIN:

- PURSUANT TO 73 P.S. 176(2), THE PROJECT TEAM HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM NOT LESS THAN TEN (10) NOR MORE THAN NINETY (90) BUSINESS DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED. IF SUCH INFORMATION WAS OBTAINED MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, THE PROJECT TEAM HAS STATED IN THE REQUEST THAT WORK IS PRELIMINARY.
- PURSUANT TO 73 P.S. 176(2), THE PROJECT TEAM HAS SHOWN ON THESE DRAWINGS THE POSITION AND TYPE OF EACH FACILITY OWNER'S LINE, AS DERIVED FROM THE REQUEST MADE AS REQUIRED BY 73 P.S. 176(2), THE NAME OF THE FACILITY OWNER AND THE FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.
- PURSUANT TO 73 P.S. 176(2), THE PROJECT TEAM HAS CALLED THE ONE CALL SYSTEM AND SHOWN AS PROOF, THE SERIAL NUMBER OF ONE CALL NOTICE AND THE TOLL-FREE NUMBER OF THE ONE CALL SYSTEM ON THE DRAWINGS NEAR THE SERIAL NUMBER.
- IF PURSUANT TO 73 P.S. 176(2), THE PROJECT TEAM HAS REQUESTED LINE AND FACILITY INFORMATION FROM THE ONE CALL SYSTEM MORE THAN NINETY (90) DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED, THE PROJECT TEAM HAS INDICATED THAT THE REQUEST IS PRELIMINARY AND THE SERIAL NUMBER OF SAID REQUEST IS SHOWN ON THE DRAWINGS HEREIN.

THE PROJECT TEAM DOES NOT REPRESENT, WARRANT, ASSURE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO THE ONCE CALL SYSTEM REQUEST AND AS REFLECTED ON THESE DRAWINGS IS ACCURATE OR CORRECT. FURTHERMORE, THE PROJECT TEAM INCLUDES THE INFORMATION ONLY PURSUANT TO THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION ACT, AS AMENDED BY ACT 121 OF 2008.

PENNSYLVANIA ONE CALL SYSTEM SERIAL NO. (FINAL DESIGN): \_\_\_\_\_

PENNSYLVANIA ONE CALL SYSTEM TOLL-FREE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

PENNSYLVANIA ONE CALL SYSTEM SERIAL NO. (PRELIMINARY): 20153510508

PENNSYLVANIA ONE CALL SYSTEM TOLL-FREE NUMBER: 1-800-242-1776

DATE: 12/17/2015 BY: LANDSTUDIES, INC.

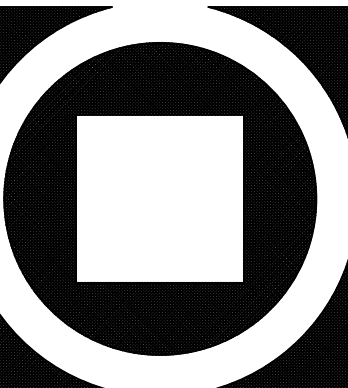
### UTILITY CONTACT INFORMATION

AT&T ATLANTA 2315 SALEM RD F11 CONYERS, GA 30013 CONTACT: NANCY SPENCE EMAIL: NSPENCE@EMS.ATT.COM	AQUA PENNSYLVANIA, INC. 762 W. LANCASTER AVE BRYN MAWR, PA 19010 CONTACT: STEVE PIZZI EMAIL: SBPIZZI@AQUAAMERICA.COM
COMCAST CABLEVISION 110 SPRINGBROOKE BLVD ASTON, PA 19014 CONTACT: RICH KAIN EMAIL: RICHARD_KAIN@CABLE.COMCAST.COM	VERIZON PENNSYLVANIA, LLC 15 MONTGOMERY AVE, FLOOR 2 PITTSBURGH, PA 15212 CONTACT: DEBORAH BARUM EMAIL: DEBORAH.D.DELIA@VERIZON.COM
RADNOR TOWNSHIP 301 IVEN AVE WAYNE, PA 19087 CONTACT: STEVE NORCINI EMAIL: SNORCINI@RADNOR.ORG	USIC 450 S HENDERSON RD, SUITE B KING OF PRUSSIA, PA 19406 CONTACT: NIKKIA SIMPKINS EMAIL: NIKKIASIMPKINS@USICLLC.COM
LEVEL 3 COMMUNICATIONS 1025 ELDORADO BLVD BLDG BROOMFIELD, CO 80021 CONTACT: LEVEL 3 OPERATION PERSONNEL EMAIL: RELO@LEVEL3.COM	VERIZON BUSINESS FORMERLY MCI 2400 N GLENNVILLE RICHARDSON, TX 75082 CONTACT: DEAN BOYERS EMAIL: DEADN.BOYERS@VERIZON.COM



PENNSYLVANIA ONE CALL SYSTEM, INC.  
CALL 3 BUSINESS DAYS BEFORE YOU DIG!  
1-800-242-1776 OR 8-1-1

## SITE CONTEXT AND UTILITIES



KIMMEL BOGRETTE

Architecture + Site

151 E. 10th Avenue, Suite 300  
Conshohocken, PA 19428

Phone: 610.834.7805  
Facsimile: 610.834.7815

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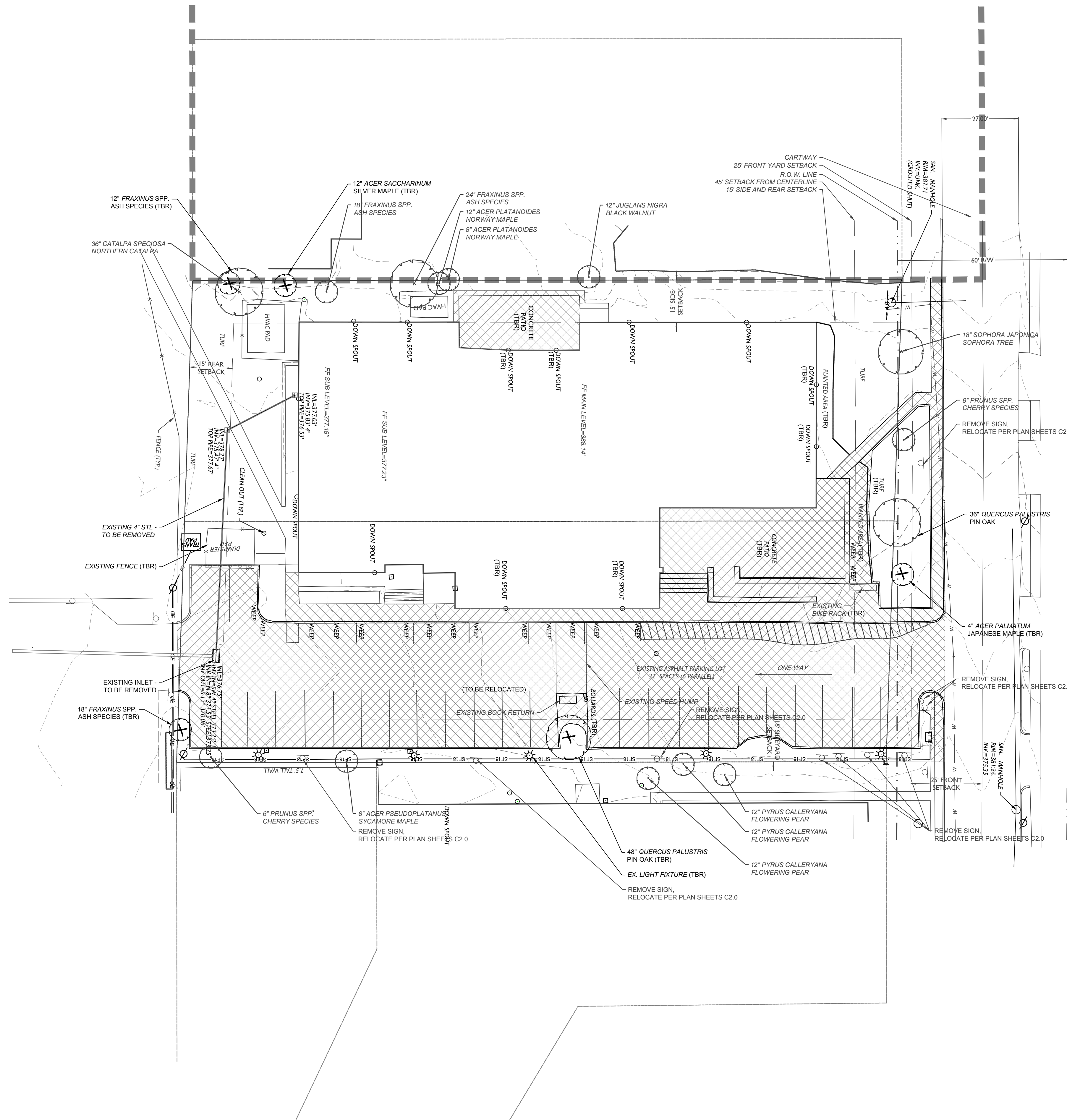
2.15.16 TWP COMMENTS  
3.15.16 PC COMMENTS  
SH. TR. COMMENTS

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OF 14

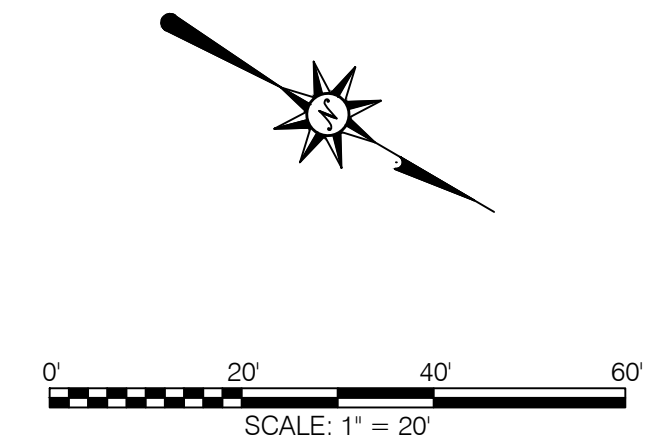


**OWNER:**  
 RADNOR TOWNSHIP  
 301 IVEN AVENUE  
 WAYNE, PA 19087  
 PHONE: 610-688-5600  
 CONTACT: STEVE NORCINI  
 EMAIL: SNORCINI@RADNOR.ORG



**LEGEND**

	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING WATER LINE
	EXISTING GAS LINE
	EXISTING SEWER LINE & MANHOLE
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING COMMUNICATIONS
	EXISTING UTILITY POLE
	EXISTING STORMWATER
	EXISTING CURB
	EXISTING SIDEWALK
	CENTERLINE (ROAD)
	RIGHT-OF-WAY LINE
	PROPERTY LINE
	ADJOINER
	EXISTING FENCE
	EASEMENT
	PROPOSED LIMIT OF DISTURBANCE
	TO BE REMOVED
	TREE TO BE REMOVED



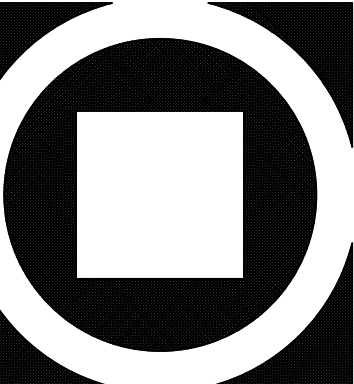
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 Checked By: KGBE  
 Scale: 1" = 20'

Sheet Name: DEMOLITION PLAN	
Revisions:	
Progress Prints:	
1	2.15.16 TWP COMMENTS
2	3.15.16 PC COMMENTS
3	SH. TR. COMMENTS





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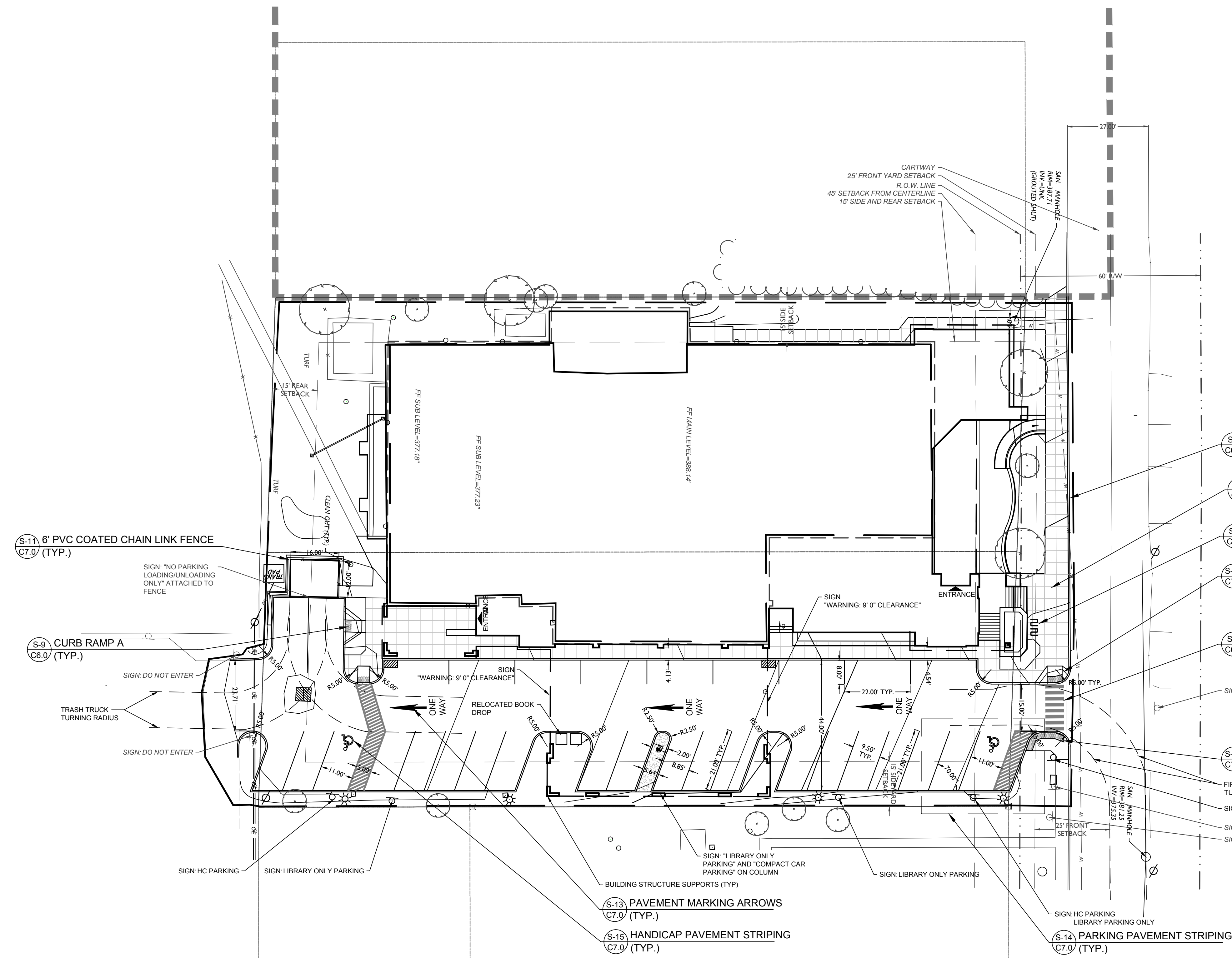
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 Checked By: KGBE  
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Sheet Name: LAYOUT PLAN
Progress Prints:
Revisions:
1. 2.15.16 TWP COMMENTS
2. 3.15.16 PC COMMENTS
3. SH. TR. COMMENTS

**C2.0**  
 OF 14

**LEGEND**

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING SEWER LINE & MANHOLE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING COMMUNICATIONS
- EXISTING UTILITY POLE
- EXISTING STORMWATER
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB
- EXISTING SIDEWALK
- CENTERLINE (ROAD)
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- ADJOINER
- EXISTING FENCE
- EASEMENT
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PAVEMENT MARKING



S-11 6' PVC COATED CHAIN LINK FENCE  
 C7.0 (TYP.)

S-9 CURB RAMP A  
 C6.0 (TYP.)

S-13 PAVEMENT MARKING ARROWS  
 C7.0 (TYP.)

S-15 HANDICAP PAVEMENT STRIPING  
 C7.0 (TYP.)

S-1 CONCRETE VERTICAL CURB  
 C6.0 (TYP.)

S-4 CONCRETE SIDEWALK  
 C6.0 (TYP.)

S-5 BIKE RACK (2)  
 C6.0 (TYP.)

S-10 CURB RAMP B  
 C7.0 (TYP.)

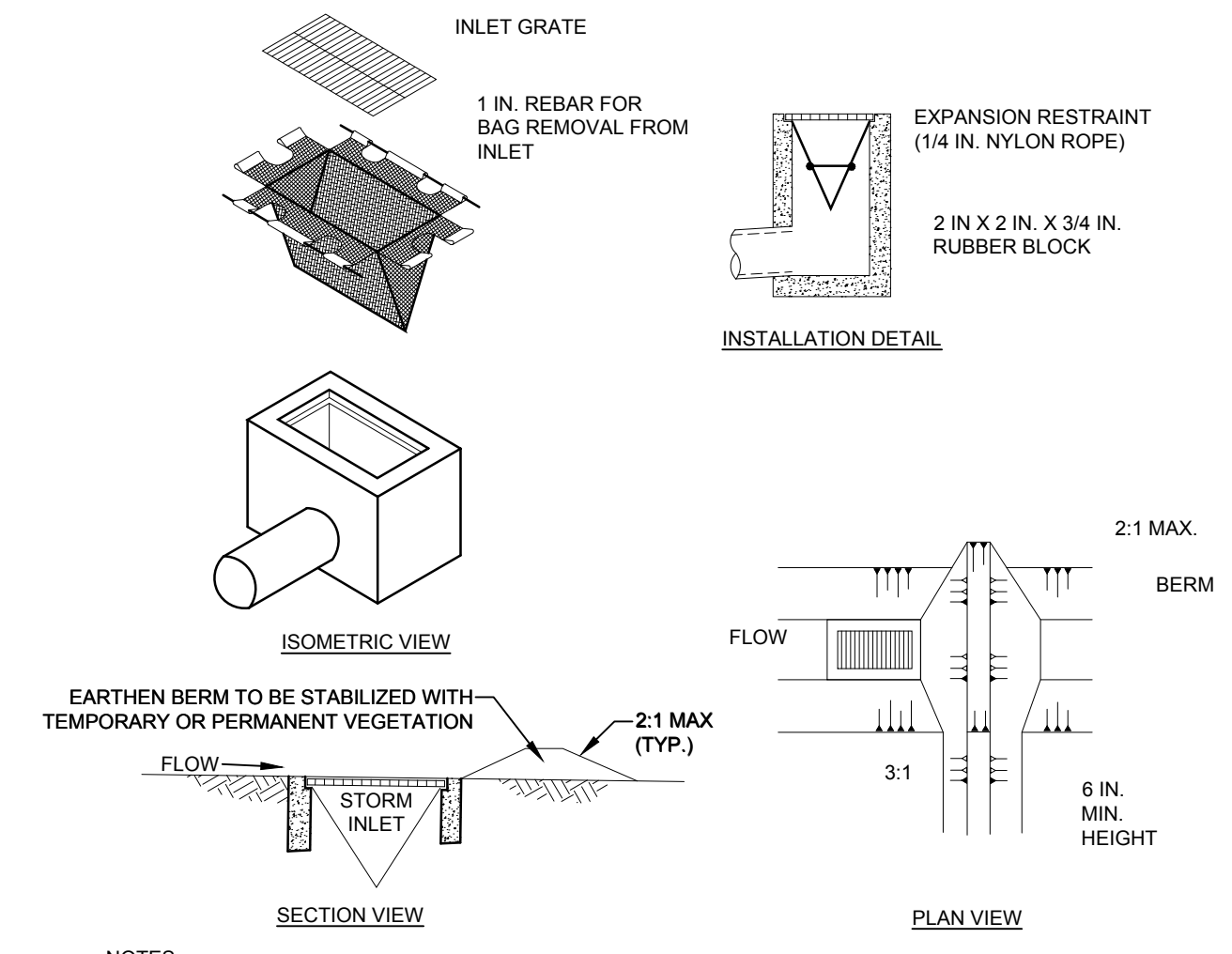
S-6 CROSSWALK  
 C6.0 (TYP.)

S-12 DETECTABLE WARNING STRIP  
 C7.0 (TYP.)

S-14 PARKING PAVEMENT STRIPING  
 C7.0 (TYP.)

**OWNER:**  
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 301 IVEN AVENUE  
 WAYNE, PA 19087  
 PHONE: 610-688-5600  
 CONTACT: STEVE NORCINI  
 EMAIL: SNORCINI@RADNOR.ORG





**NOTES:**

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

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

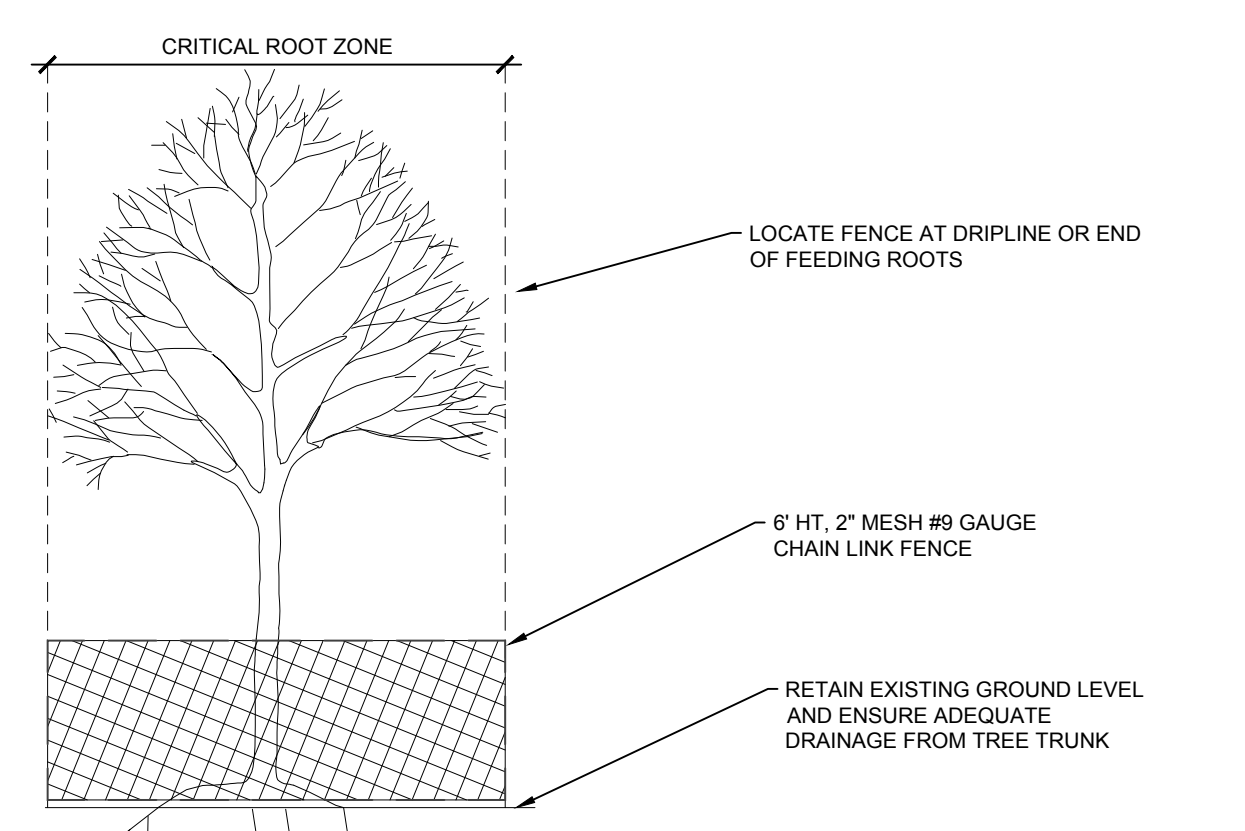
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

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

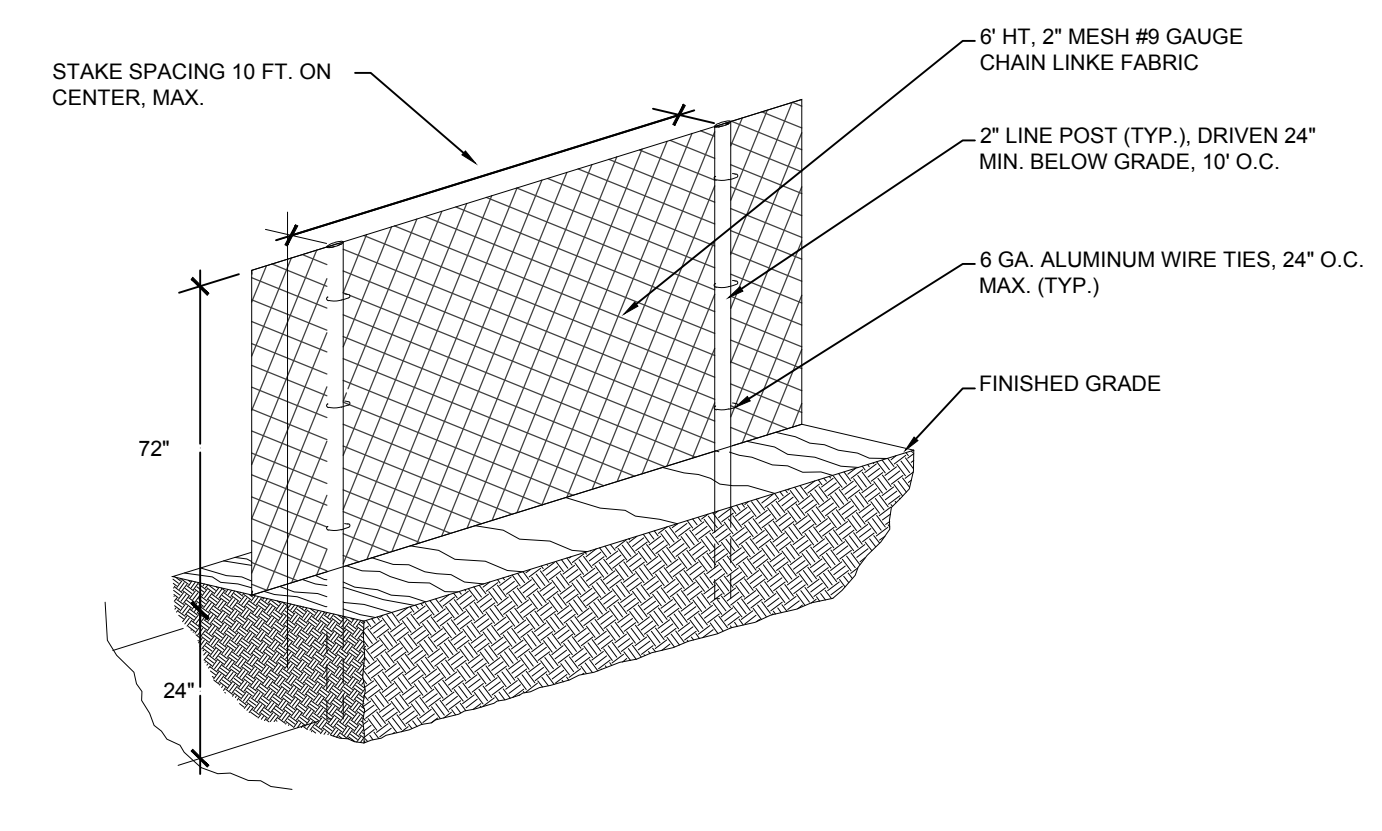
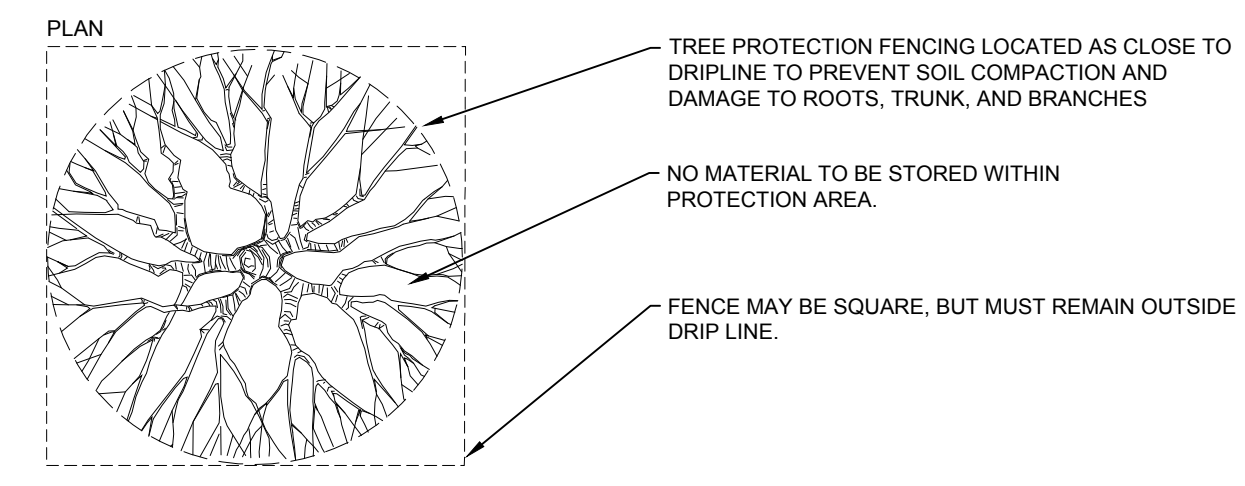
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

**STANDARD CONSTRUCTION DETAIL #4-16**  
**FILTER BAG INLET PROTECTION - TYPE M INLET**

E-1  
C4.0



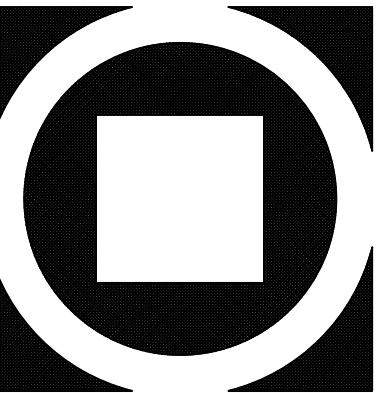
**NOTE:** FENCE TO REMAIN AND BE MAINTAINED THROUGHOUT ENTIRE BUILDING PHASE(S) DURING WHICH CONSTRUCTION MAY AFFECT TREES.



- DO NOT:**
- ALLOW RUN OFF OF SPILLAGE AND DAMAGING MATERIALS INTO THE AREA BELOW ANY TREE CANOPY.
  - STORE MATERIALS, STOCKPILE SOIL, OR PARK OR DRIVE VEHICLES WITHIN THE TPZ.
  - CUT, BREAK, SKIN, OR BRUISE ROOTS, BRANCHES, OR TRUNKS WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE CONSULTING ARBORIST.
  - ALLOW FIRES UNDER AND ADJACENT TO TREES.
  - DISCHARGE EXHAUST INTO FOLIAGE.
  - SECURE CABLE, CHAIN, OR ROPE TO TREES OR SHRUBS.
  - TRENCH, DIG, OR OTHERWISE EXCAVATE WITHIN THE DRIFLINE OR TPZ OF THE TREE(S) WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE CONSULTING ARBORIST.
  - APPLY SOIL STERILANTS UNDER PAVEMENT NEAR EXISTING TREES.

- TREE PROTECTION NOTES**
- A 4" LAYER OF COARSE MULCH OR WOODCHIPS IS TO BE PLACED BENEATH THE DRIFLINE OF THE PROTECTED TREES. MUCH IS TO BE KEPT 12" FROM THE TRUNK.
  - A PROTECTIVE BARRIER OF 6' CHAIN LINK FENCING SHALL BE INSTALLED AROUND THE DRIFLINE OF PROTECTED TREE(S). THE FENCING CAN BE MOVED WITHIN THE DRIFLINE IF AUTHORIZED BY THE CONSULTING ARBORIST, BUT NOT CLOSER THAN 2' INTO THE GROUND. THE DISTANCE BETWEEN POSTS SHALL NOT BE MORE THAN 10'. THIS ENCLOSED AREA IS THE TREE PROTECTION ZONE (TPZ).
  - MOVABLE BARRIERS OR CHAIN LINK FENCING SECURED TO CEMENT BLOCKS CAN BE SUBSTITUTED FOR "FIXED" FENCING IF THE CONSULTING ARBORIST AGREES THAT THE FENCING WILL HAVE TO BE MOVED TO ACCOMMODATE CERTAIN PHASES OF CONSTRUCTION. THE BUILDER MAY NOT MOVE THE FENCE WITHOUT AUTHORIZATION FROM THE CONSULTING ARBORIST.
  - WHERE THE CONSULTING ARBORIST HAS DETERMINED THAT TREE PROTECTION FENCING WILL INTERFERE WITH THE SAFETY OF WORK CREWS, TREE WRAP MAY BE USED AS AN ALTERNATIVE FORM OF TREE PROTECTION. WOODEN SLATES AT LEAST ONE (1) INCH THICK ARE TO BE BOUND SECURELY, EDGE TO EDGE, AROUND THE TRUNK. A SINGLE LAYER OR MORE OF ORANGE CONSTRUCTION FENCING IS TO BE WRAPPED AND SECURED AROUND THE OUTSIDE OF THE WOODEN SLOTS. STRAW WADDLE MAY ALSO BE USED AS A TRUNK WRAP BY COILING THE WADDLE AROUND THE TRUNK UP TO A MINIMUM HEIGHT OF SIX (6) FEET FROM GRADE. A SINGLE LAYER OR MORE OF ORANGE PLASTIC CONSTRUCTION FENCING IS TO BE WRAPPED AND SECURED AROUND THE STRAW WADDLE.

**E-2 TREE PROTECTION FENCING**  
 C4.0 NOT TO SCALE



**KIMMEL BOGRETTE**  
**Architecture + Site**  
 151 E. 10th Avenue, Suite 300  
 Conshohocken, PA 19428  
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 Facsimile: 610.834.7815  
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	3.15.16 FC COMMENTS
	SH. TR. COMMENTS

**C4.0**  
 OF 14

**STANDARD E&S PLAN NOTES**

- ALL EARTH 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.
- BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL CONSERVATION DISTRICT.
- THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
- 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 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. THE EROSION AND SEDIMENT CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER.
- THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- 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 THE 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.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- 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 FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH 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 FLATTER.
- 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.
- 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 FROM UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 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.
- ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- THE OPERATOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF 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.
- ALL VEHICLES SHALL ENTER AND EXIT FROM 801 CONESTOGA RD (CLEM MACRONE PARK) USING THE CONSTRUCTION ENTRANCE SPECIFIED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
- UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR SHALL MAINTAIN AND MAKE AVAILABLE TO LOCAL CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY. IF THE E&S BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 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 SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS -- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 6 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPAGE, 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.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 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.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 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 PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
- 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 BMP'S.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMP'S. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMP'S 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.
- 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.
- FAILURE TO CORRECTLY INSTALL E&S BMP'S, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMP'S MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA 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.
- THE NPDES BOUNDARY IS EQUAL TO THE LIMIT OF DISTURBANCE FOR THE SITE, AND ANY OFF-SITE AREAS WITHIN THE LIMIT OF DISTURBANCE THAT ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL. OFF-SITE FACILITIES SUCH AS: UTILITIES AND ROADWAY IMPROVEMENTS.
- THE PROJECT'S RECEIVING WATERCOURSE IS ITHAN CREEK (UNNAMED TRIBUTARY TO DARBY CREEK), AND THE CHAPTER 93 CLASSIFICATION IS COLD WATER FISHES (CWF), MIGRATORY FISHES (MF).

**CONSTRUCTION SEQUENCE**

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE

GENERAL NOTES:

- 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, AND A REPRESENTATIVE FROM THE DELAWARE COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION 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.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. **DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.**

- FIELD MARK LIMITS OF DISTURBANCE.
- IDENTIFY ALL TREES TO BE SAVED AND REMOVED AS INDICATED ON PLAN SHEET L1.0. INSTALL TREE PROTECTION (E-2) AS PER PLANS SHEETS C3.0 AND C4.0.
- CLEAR, GRUB & REMOVE ALL MARKED TREES AS INDICATED ON PLANS.
- BEGIN DEMOLITION OF EXTERIOR SITE FEATURES, AS SHOWN ON THE DEMOLITION PLAN, SHEET C1.0.
- BEGIN EXCAVATION OF PARKING LOT TO SUBGRADE AS PER PLAN SHEETS C3.0 AND C6.0.
- INSTALL INLET PROTECTION ON EXISTING INLET, PER SHEETS C3.0 AND C4.0. MAINTAIN INLET PROTECTION UNTIL SITE IS PERMANENTLY STABILIZED.
- BEGIN BUILDING EXPANSION CONSTRUCTION, AS PER ARCHITECTURAL PLANS.
- INSTALL PROPOSED STORMWATER INLETS AND PIPE, PER SHEETS C3.0 AND C6.0.
- INSTALL INLET PROTECTION ON I-2 (E-2), PER SHEETS C3.0 AND C4.0. MAINTAIN INLET PROTECTION UNTIL SITE IS PERMANENTLY STABILIZED.
- INSTALL PROPOSED CURBING (S-1) AS PER PLAN SHEETS C2.0, C3.0, AND C6.0. STABILIZE STEEP SLOPES, ADJACENT TO CURBING DAILY.
- PREPARE PARKING LOT SUBGRADE AND INSTALL 2A MODIFIED BASE AND BINDER COURSE (S-8) AS PER PLAN SHEETS C3.0 AND C6.0.
- INSTALL SIDEWALKS (S-4) AND DETECTABLE WARNING STRIPS (S-11) AS PER PLAN SHEETS C2.0, C3.0, AND C6.0.
- BACKFILL ALL DISTURBED AREAS WITH SUITABLE TOPSOIL TO FINISHED GRADE, PER PLAN SHEET C3.0. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE.
- REMOVE TREE PROTECTION FENCING FOLLOWING COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND INSTALL LANDSCAPING AND DECORATIVE STONE AS PER PLAN SHEETS C3.0, L2.0, AND L3.0.
- INSTALL PARKING LOT WEARING COURSE (S-8) AS PER PLAN SHEETS C3.0 AND C6.0.
- INSTALL RELOCATED SIGNS AND BOOK DROP, AS PER PLAN SHEET C2.0.
- INSTALL PARKING LOT MARKINGS AND CROSSWALK AS PER PLAN SHEET C2.0 AND C6.0.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, SITE PAVING AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE OWNER'S REPRESENTATIVE TO SCHEDULE A FINAL INSPECTION.

TEMPORARY STABILIZATION SEED MIX			
%	Botanical Name	Common Name	Application Rate
75	<i>Secale cereale</i>	Cereal Rye	Sept. 1 - Oct. 16 40 lbs./Acre
25	<i>Lolium multiflorum</i>	Annual Ryegrass	
OR			
75	<i>Avena sativa</i>	Oats	May 1 - Sept. 15 40 lbs./Acre
25	<i>Lolium multiflorum</i>	Annual Ryegrass	

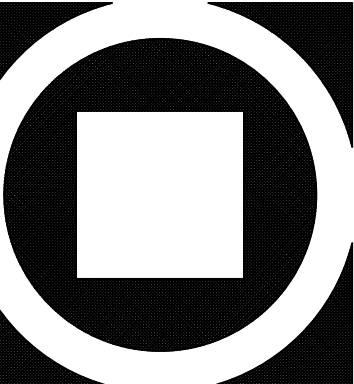
Soil Mapping Unit	Md
Soil	Made land, gabbro and diabase materials
Farm Class	Not prime farmland
Drainage Class	Well-drained
Slope Range	0-8%
Land Capability Class	6s
Hydrologic Group	C
Bedrock Depth	>80"
Seasonal Water Table	>80"
Flooding Potential	None
Bulk Density, 1/3 Bar	1.75 g/cm <sup>3</sup>
Profile Permeability	Moderately High
Whole Soil kw factor	0.10
Rock Free kf factor	0.49
T factor	4 tons/acre/yr
Leaching Potential	Not limited
Major Hydric	0

	Limitation Category	Md	Resolutions to soil use limitations
Soil Use Limitations and Rating	Lawns & landscaping	Very limited - Unstable fill: too dense, large stone contents, gravel, low exchange capacity and droughty	Appropriate lime and fertilizer will be applied based on soil test results
	Surface water management	Very Limited - Unstable fill, large rock fragments, 0.78 slope	Majority of site is rooftop and paved parking lot



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**KIMMEL BOGRETTE**

**Architecture + Site**

151 E. 10th Avenue, Suite 300  
Conshohocken, PA 19428  
Phone: 610.834.7805

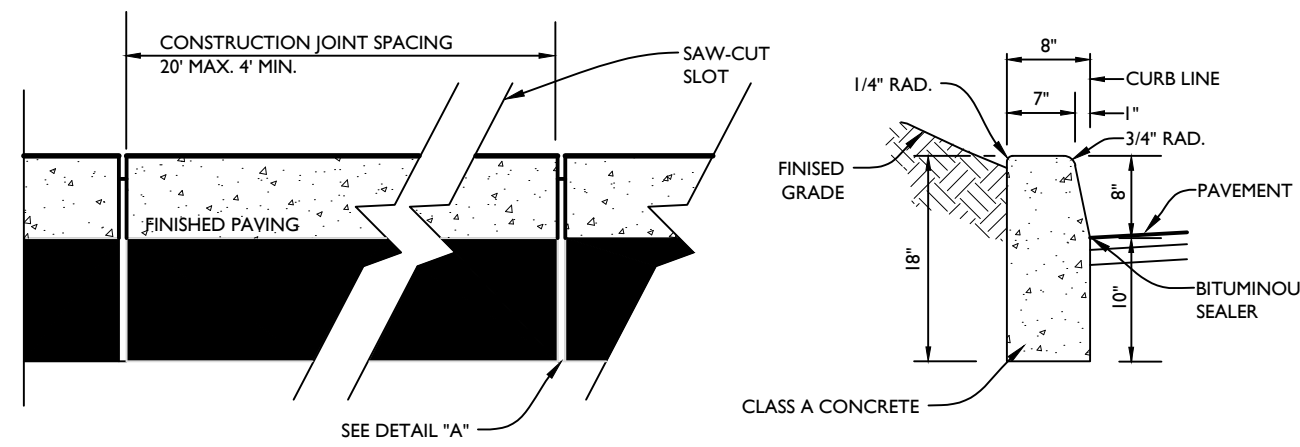
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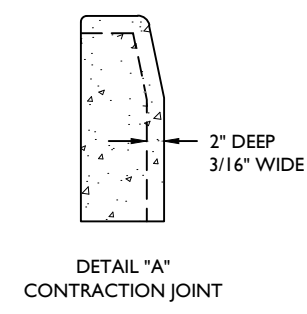
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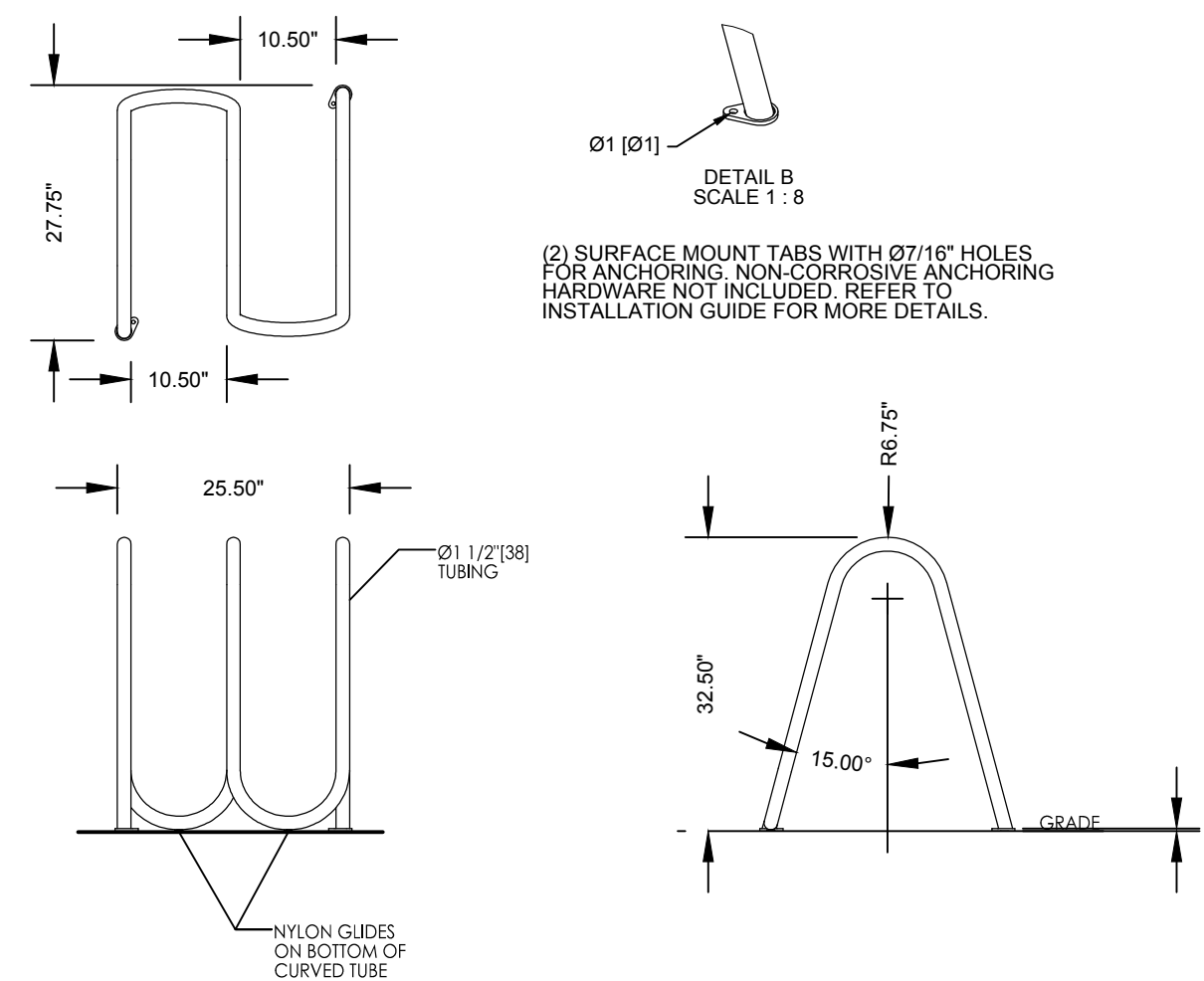
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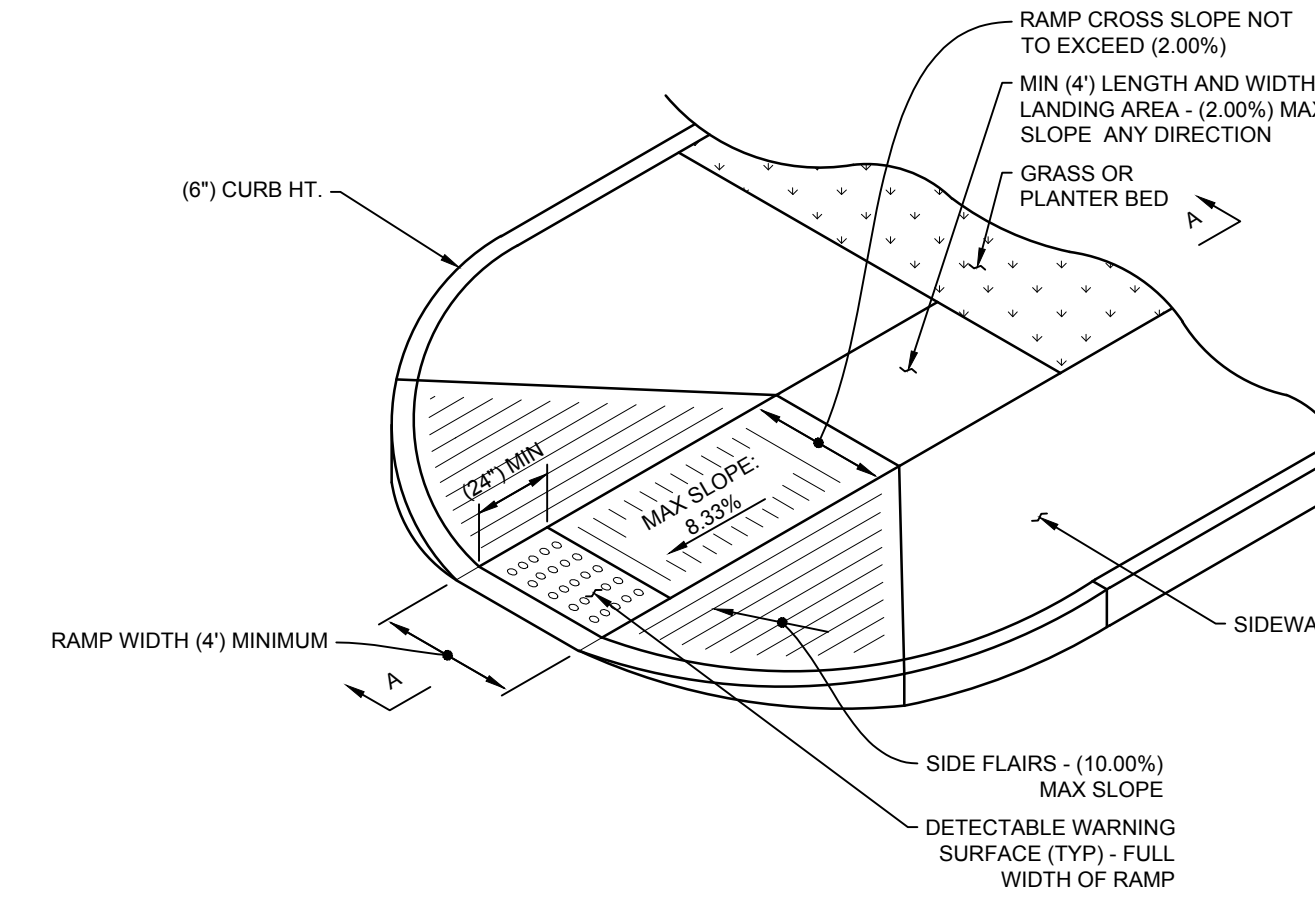
- NOTES
1. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PA D.O.T. PUBLICATION 408, LATEST EDITION
  2. SPACE CONSTRUCTION JOINTS IN UNIFORM LENGTHS OR SECTIONS
  3. PLACE 3/4" PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS-SECTIONAL AREA OF CURB.



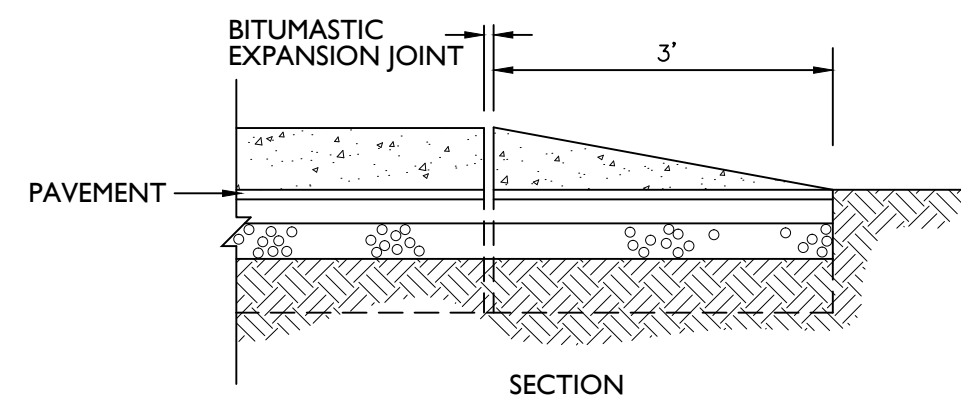
**S-1**  
**C6.0** CONCRETE VERTICAL CURB (PA D.O.T. RC-64)  
NOT TO SCALE



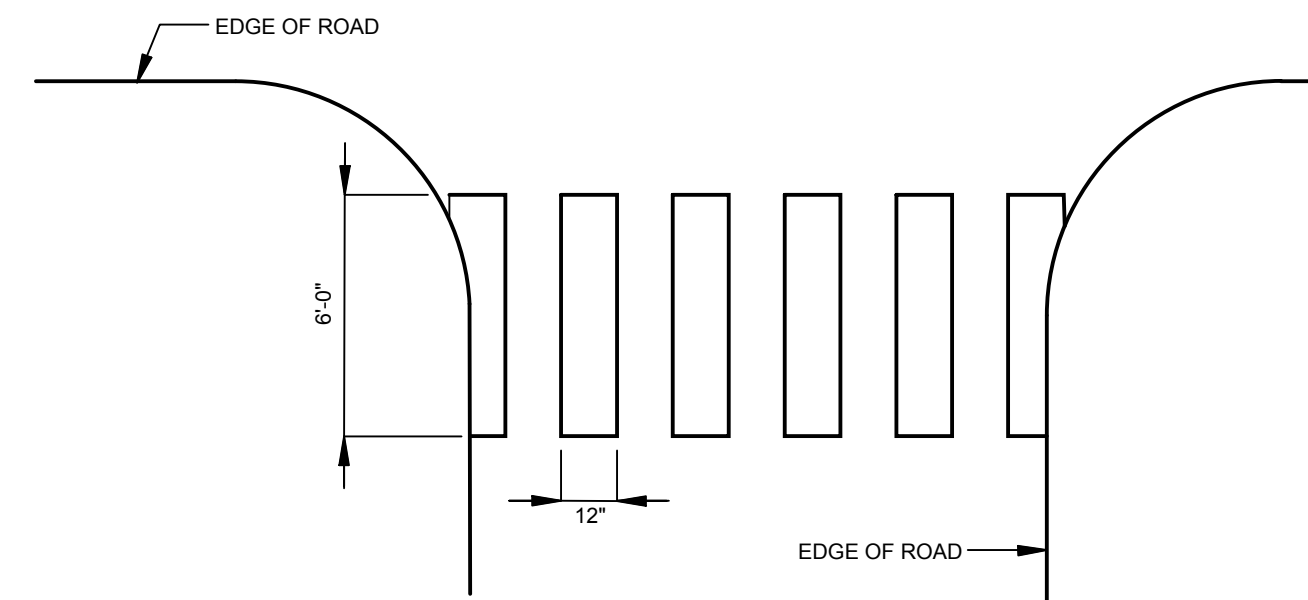
**S-5**  
**C6.0** BIKE RACK  
NOT TO SCALE



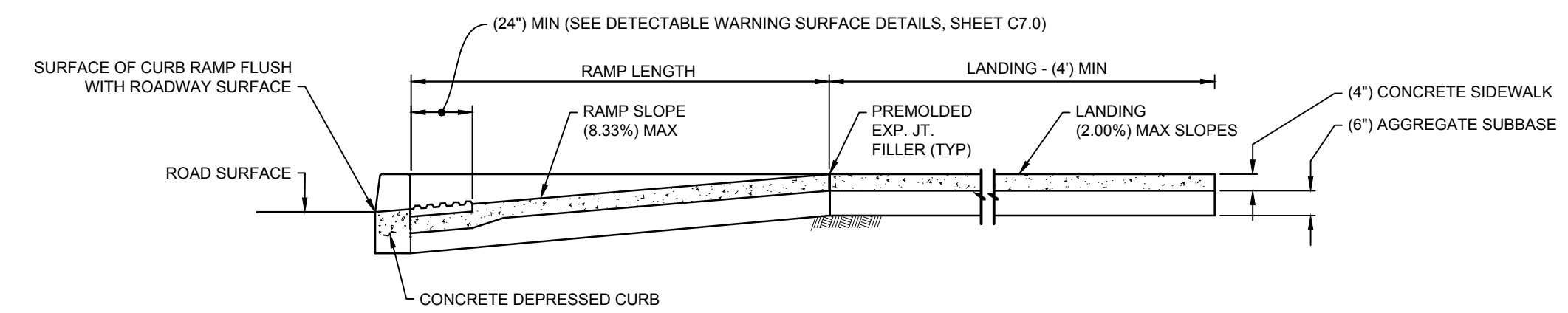
**TYPE 1**  
**CURB RAMP**



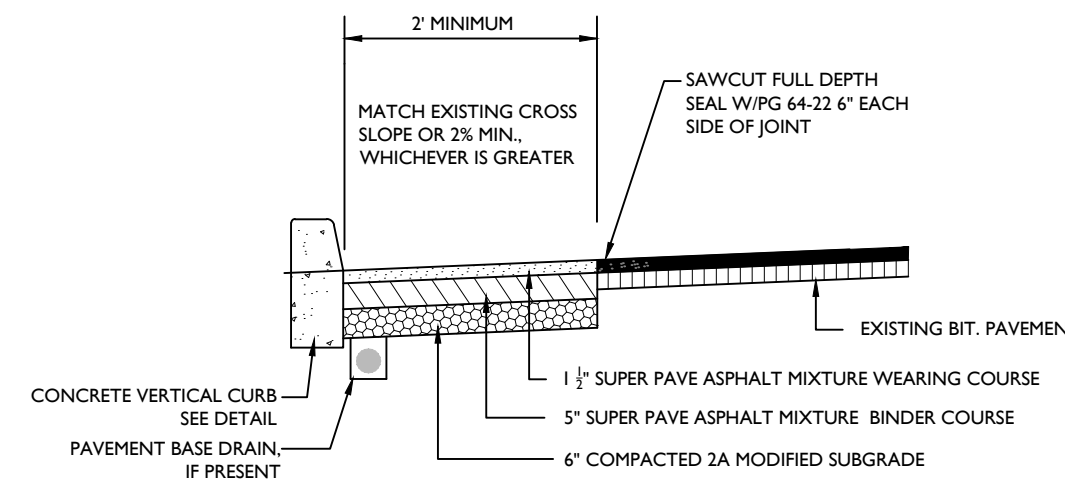
**S-2**  
**C6.0** CONCRETE CURB TAPER  
NOT TO SCALE



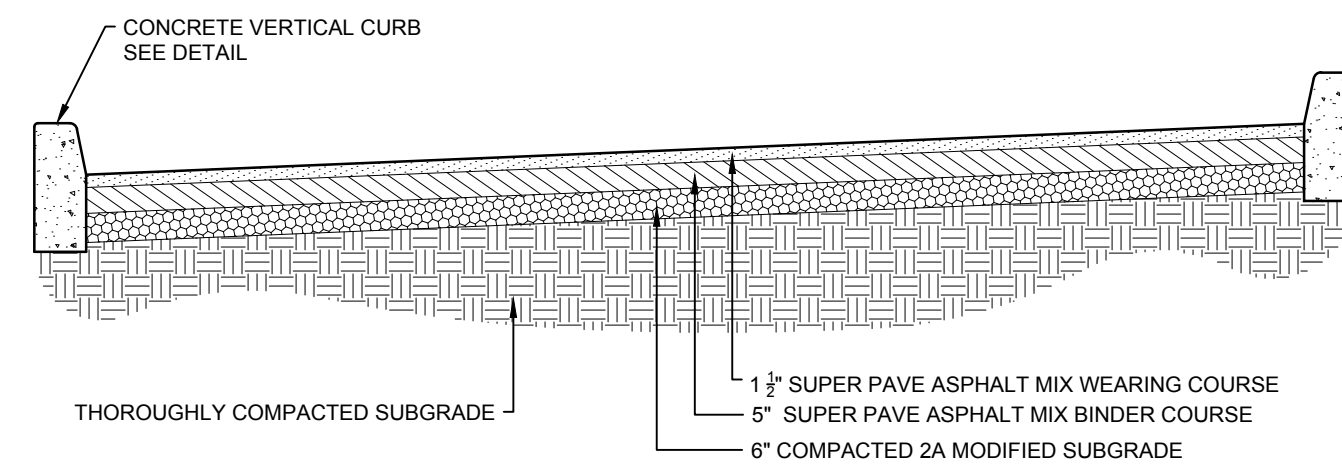
**S-6**  
**C6.0** CROSSWALK - TYPE C PERPENDICULAR  
NOT TO SCALE



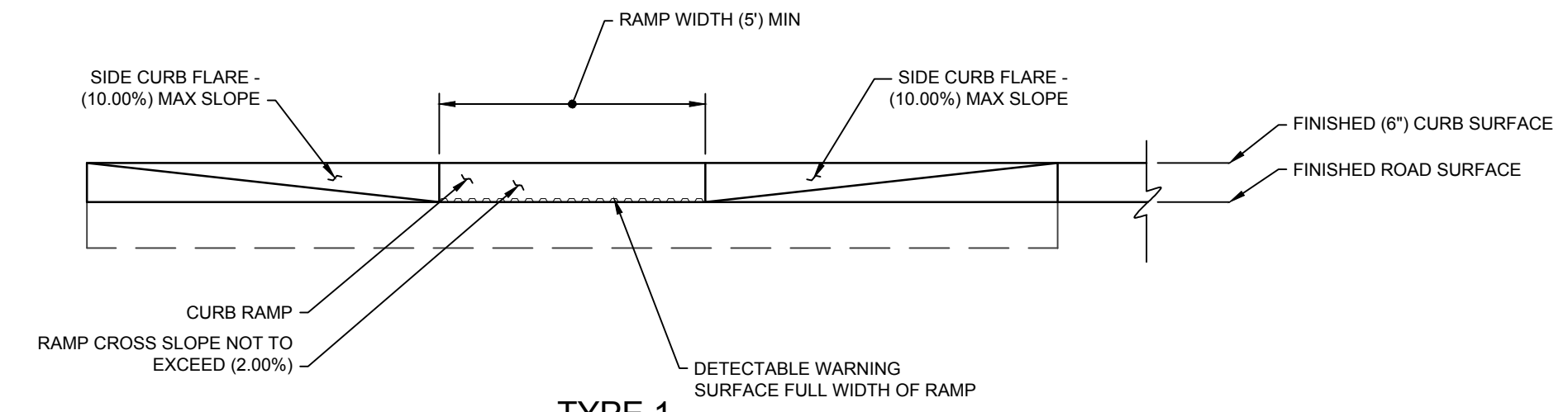
**TYPE 1**  
**SECTION A-A**



**S-3**  
**8** TYPICAL ROAD PAVING CROSS SECTION  
NOT TO SCALE

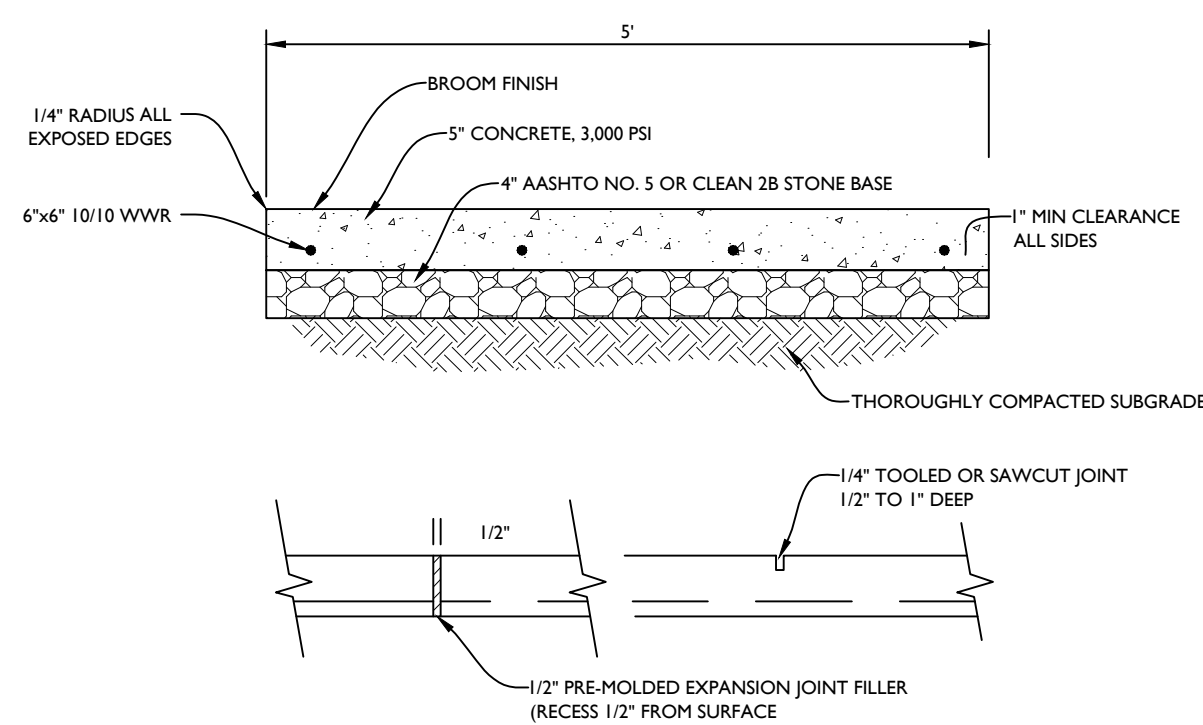


**S-8**  
**C6.0** ASPHALT PARKING LOT  
NOT TO SCALE



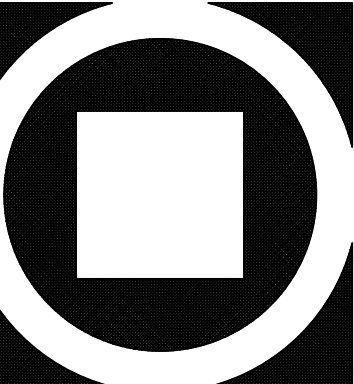
**TYPE 1**  
**ELEVATION**

**S-9**  
**C6.0** CURB RAMP A  
NOT TO SCALE



- NOTES
1. TOOLED JOINTS LOCATED AT INCREMENTS EQUAL TO WALK WIDTH
  2. SIDEWALK TO BE LIGHTLY BROOM FINISHED IN DIRECTION OF SIDEWALK WIDTH.

**S-4**  
**8** CONCRETE SIDEWALK  
NOT TO SCALE



**KIMMEL BOGRETTE**  
**Architecture + Site**  
Conshohocken, PA 19380  
151 E. 10th Avenue, Suite 300  
Phone: 610.834.7805  
Facsimile: 610.834.7815  
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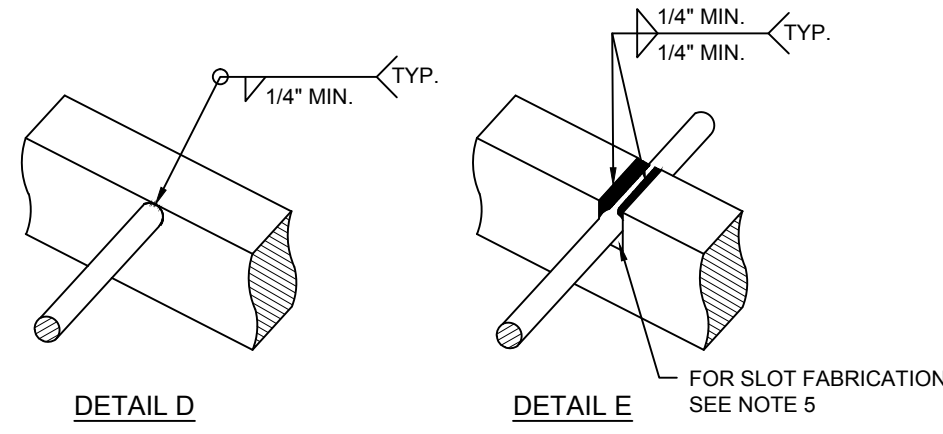
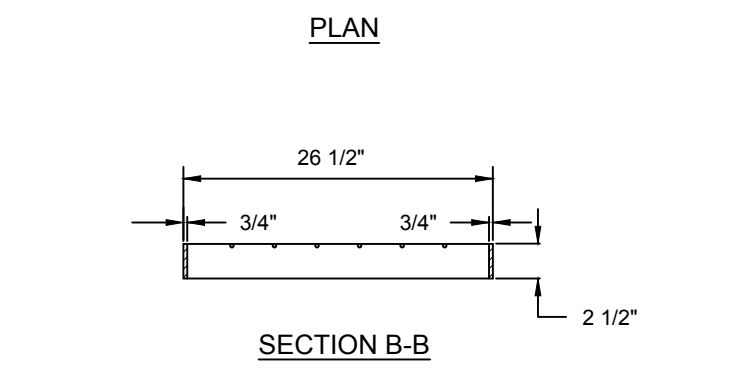
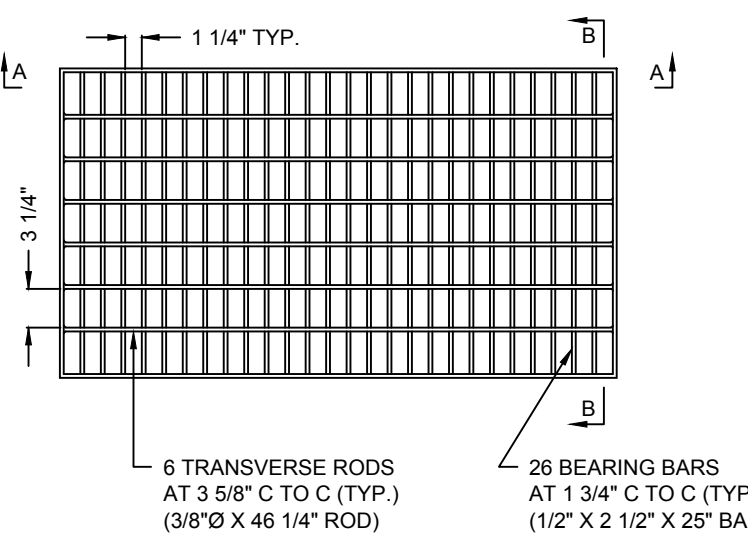
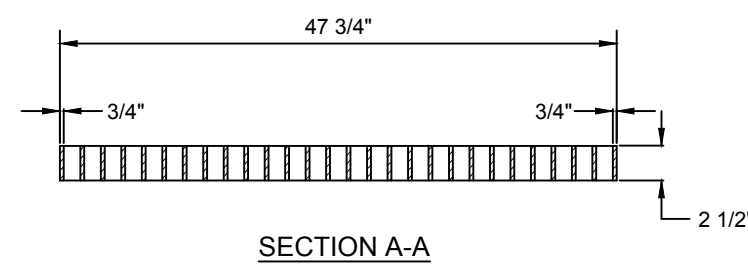
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Submission Date:	02.01.2016
Drawn By:	AK/EL
Checked By:	KG/BE
Scale:	

Revisions:	Comments:
1	2.15.16 TWP COMMENTS
2	3.15.16 PC COMMENTS
3	SH. TR. COMMENTS

**C6.0**  
OF 14

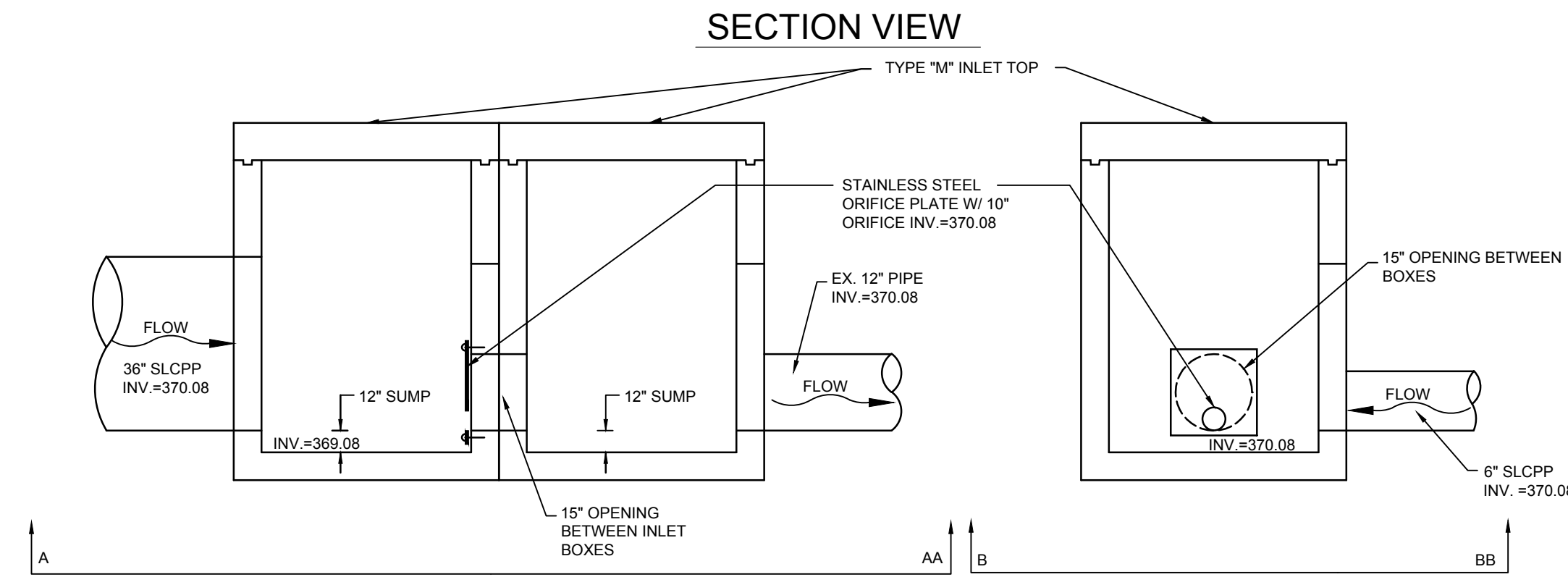
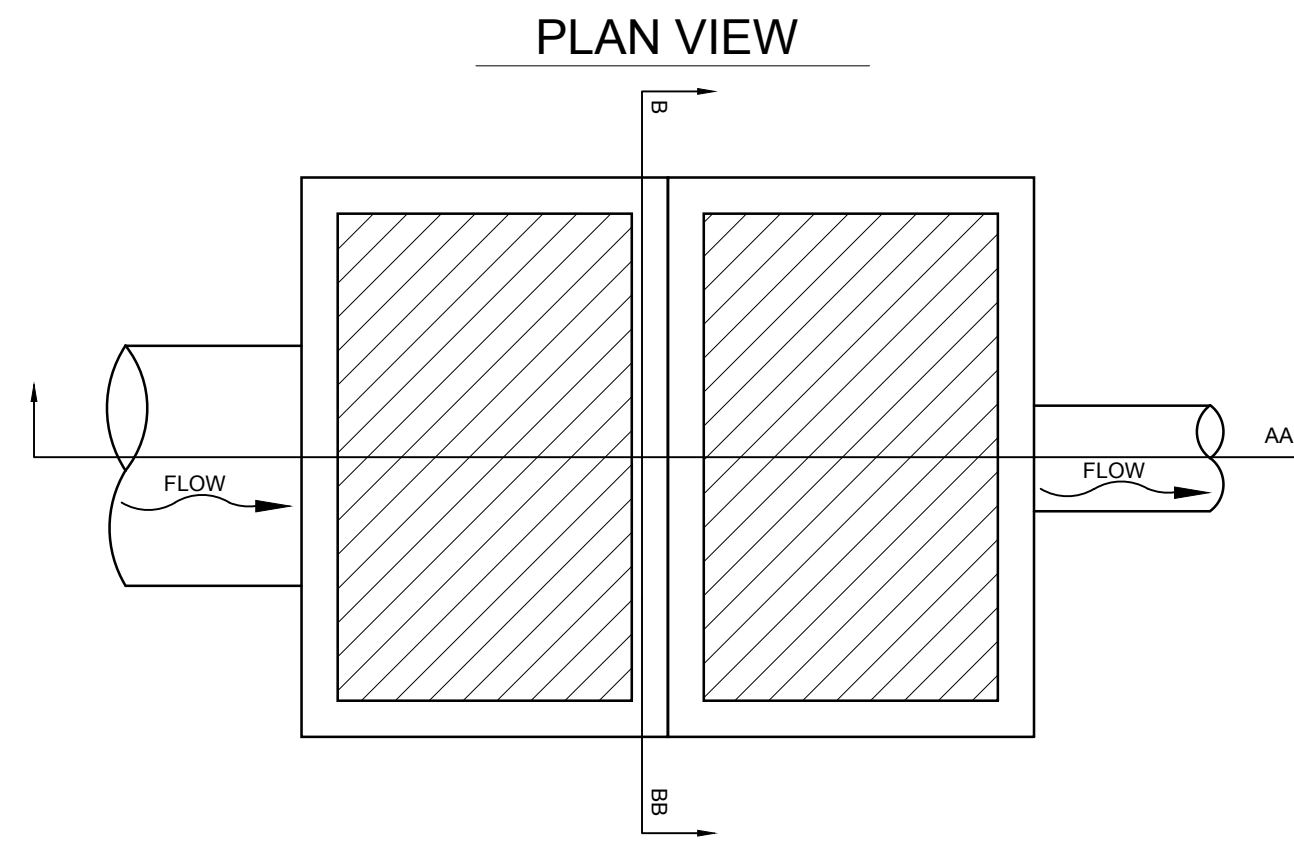




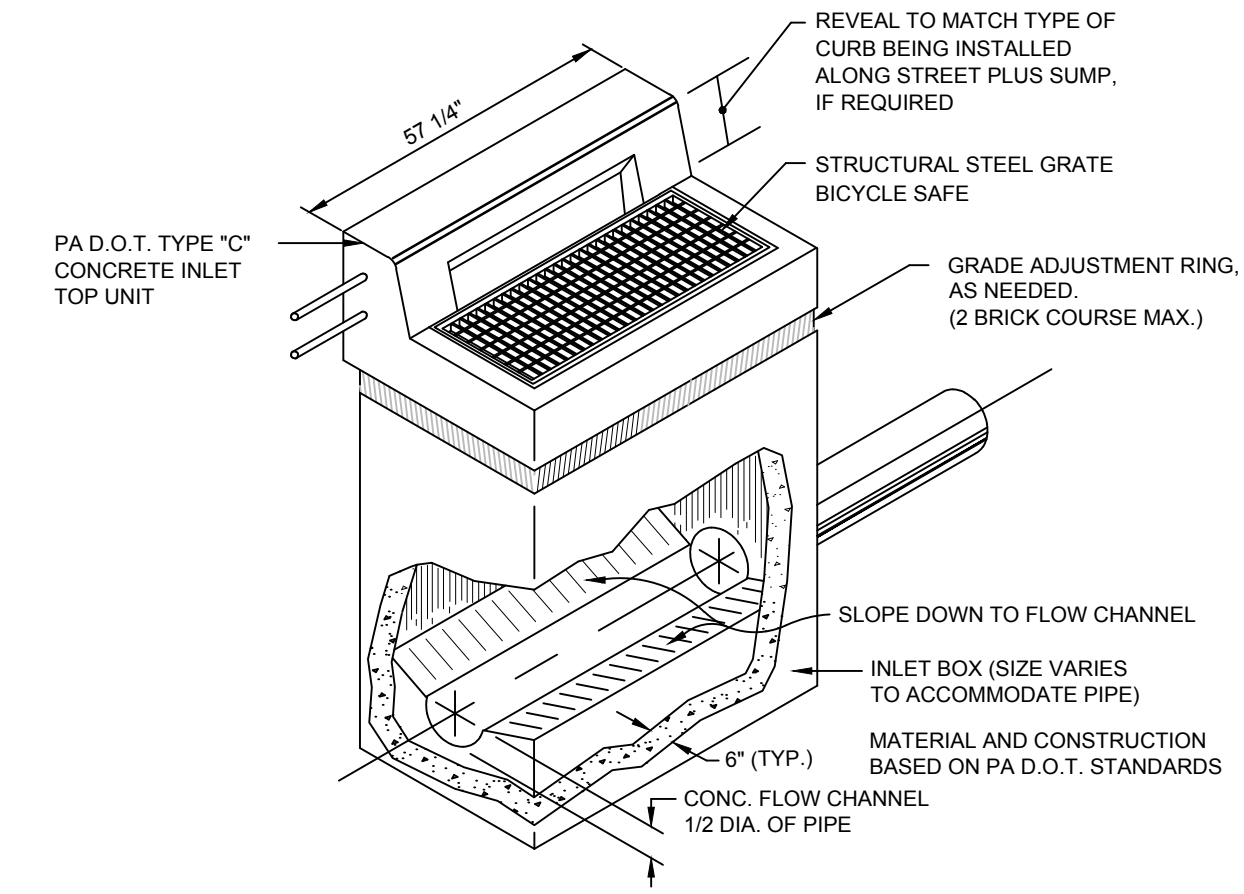
- NOTES:
1. THIS DETAIL DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. PERMIT ONLY GRATES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15. FOR A BULLETIN 15 LISTING, SUBMIT REPRODUCIBLE SHOP DRAWING TO THE BUREAU OF CONSTRUCTION AND MATERIALS, MATERIALS AND TESTING DIVISION FOR REVIEW AND APPROVAL.
  2. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408/2000, SECTION 1105.03(i).
  3. PROVIDE TRANSVERSE BARS MEETING THE REQUIREMENTS OF PUBLICATION 408M.
  4. PROVIDE BICYCLE-SAFE, STRUCTURAL STEEL OR CAST IRON VANE GRATES FOR INSTALLATION WHERE BICYCLE TRAFFIC IS ANTICIPATED, SUCH AS CURBED ROADWAYS IN URBAN AREAS OR ROADWAYS SPECIFICALLY ESTABLISHED AND SIGNED AS BIKEWAYS OR HAVING BIKE LANES. ALTERNATE BICYCLE-SAFE GRATE DESIGNS SHALL REQUIRE A SHOP DRAWING SUBMISSION, AS SPECIFIED IN NOTE 1, AND SHALL CONFORM TO THE DIMENSIONAL REQUIREMENTS FOR PROPER INSTALLATION WITH THE CURRENT CONCRETE TOP UNITS.
  5. FABRICATE SLOTS BY BURNING, DRILLING, SHEARING OR PUNCHING. HAVE THE BOTTOM OF ALL BURNED OR DRILLED SLOTS CONFORM TO THE SHAPE OF THE ROD.
  6. PROVIDE STRUCTURAL STEEL GRATES WITH THE GRATE SPACERS LOCATED FLUSH ALONG THE TOP SURFACE OF THE GRATE.

BAR & ROD SPACING DETAIL

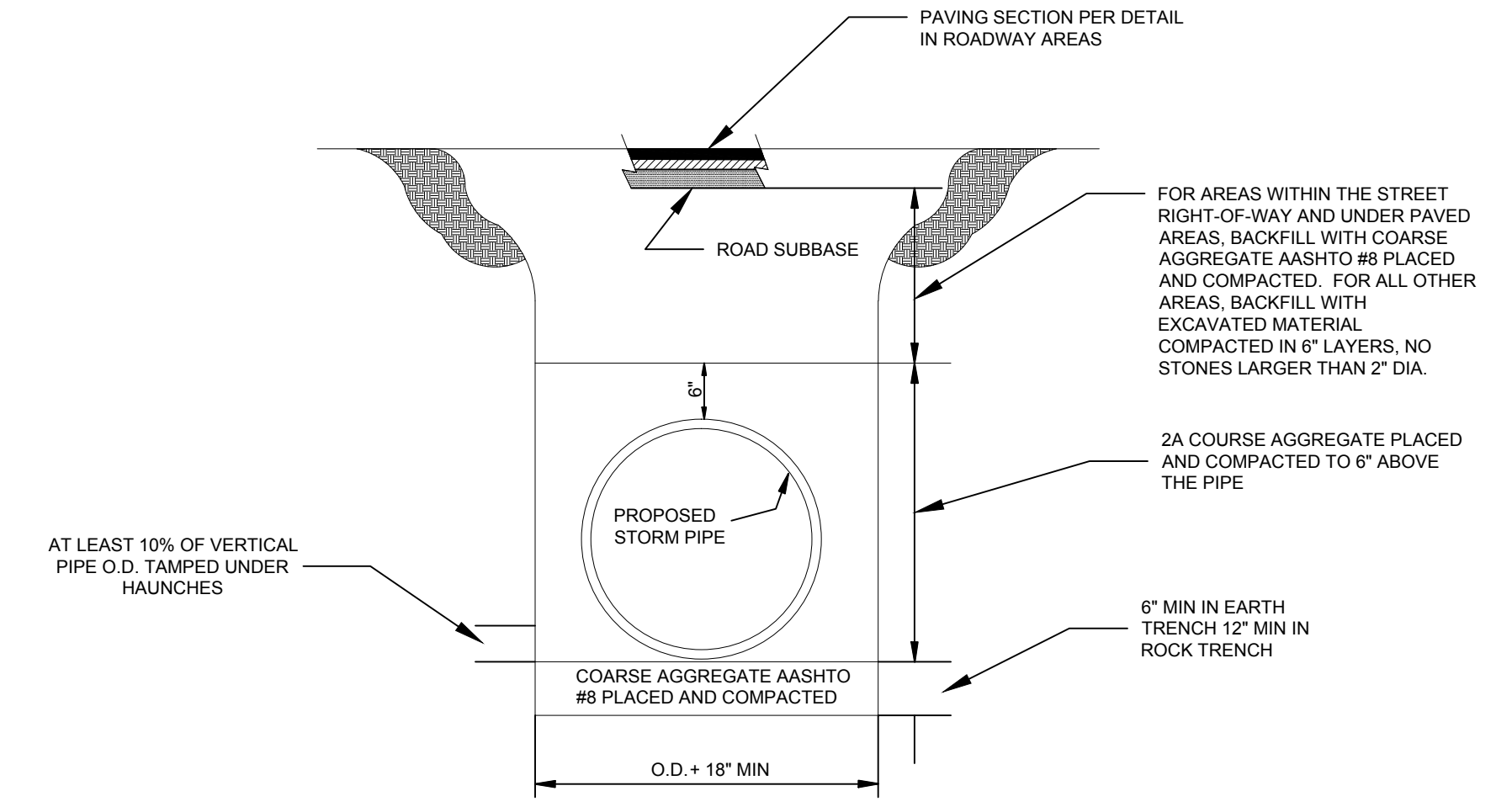
**SW-1** STRUCTURAL STEEL BICYCLE SAFE GRATE (PA D.O.T. RC-34)  
C8.0 NOT TO SCALE



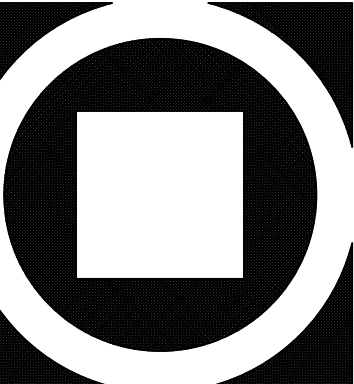
**SW-2** DOUBLE TYPE 'M' INLET  
C8.0 NOT TO SCALE



**SW-3** TYPE 'C' INLET (PA D.O.T. RC-34)  
C8.0 NOT TO SCALE



**SW-4** STORM SEWER PIPE BEDDING AND TRENCH DETAIL  
C8.0 NOT TO SCALE



**KIMMEL BOGRETTE**  
Architecture + Site  
151 E. 10th Avenue, Suite 300  
Conshohocken, PA 19428  
Phone: 610.834.7805  
Facsimile: 610.834.7815  
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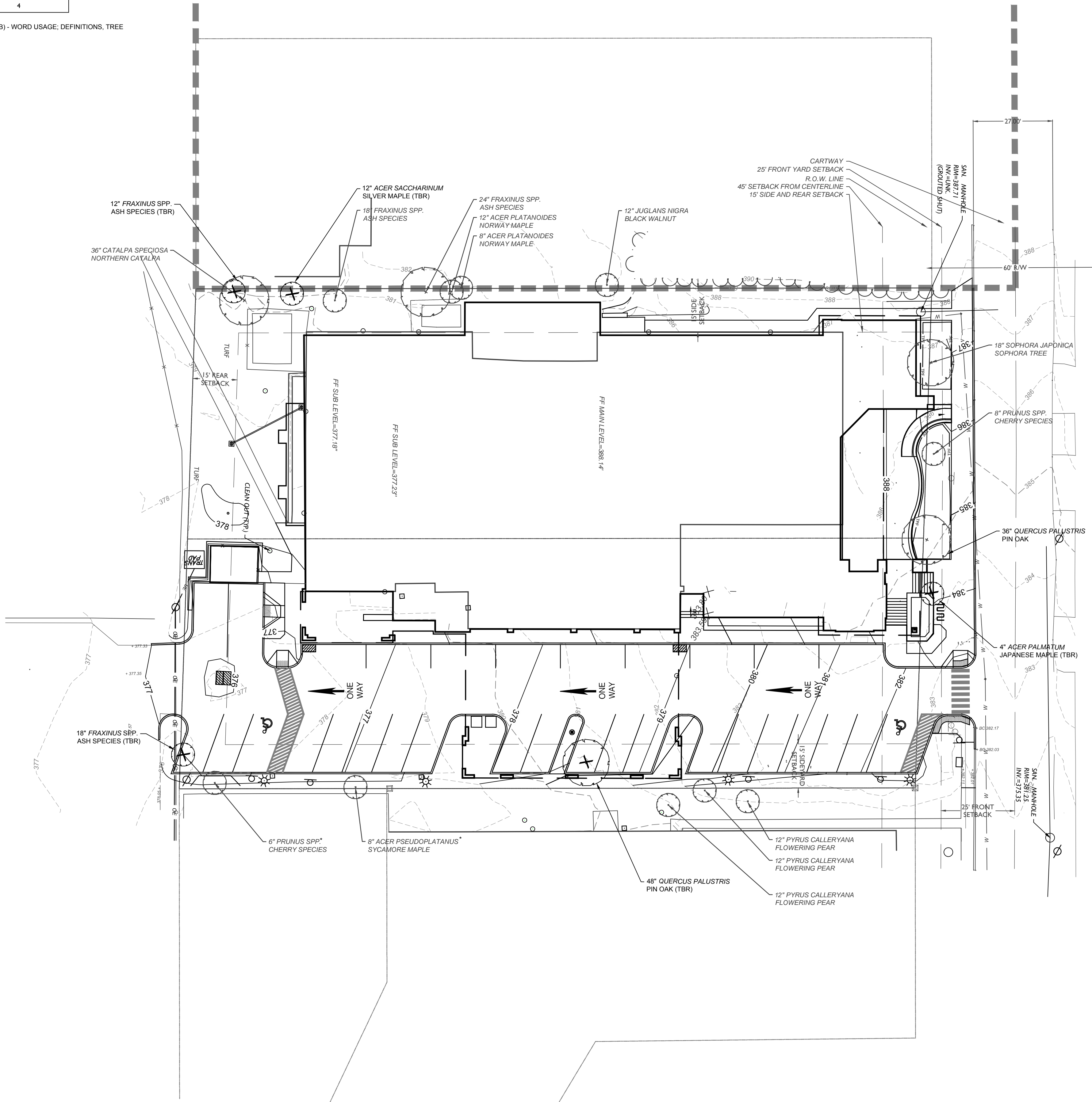
Revisions:	Progress Prints:
1. 2.15.16 TWP COMMENTS	
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3. SH. TR. COMMENTS	

EXISTING TREES TO BE REMOVED					
BOTANICAL NAME	COMMON NAME	SIZE (DBH)	QTY TO BE REMOVED	REQ'D REPLACEMENT TREES*	NOTES
ACER PALMATUM	JAPANESE MAPLE	4"	1	0	
ACER SACCHARINUM	SILVER MAPLE	12"	1	1	
FRAXINUS SPP.	ASH SPECIES	12"	1	1	
FRAXINUS SPP.	ASH SPECIES	18"	1	1	
QUERCUS PALUSTRIS	PIN OAK	48"	1	6	4 OF 6 TO BE CANOPY TREES
<b>TOTAL TREES TO BE REMOVED</b>			<b>5</b>		
<b>TOTAL REQ'D REPLACEMENT TREES*</b>				<b>9</b>	
MIN. REQ'D CANOPY TREES				<b>4</b>	

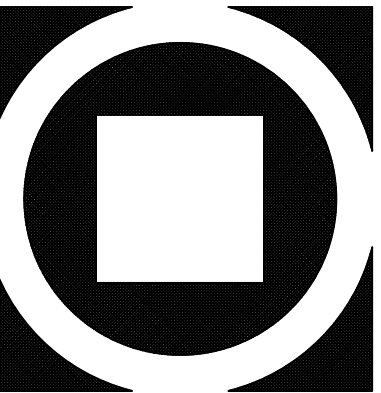
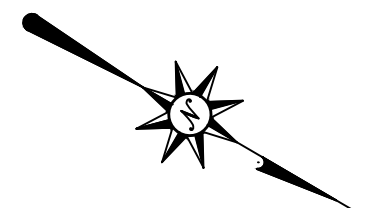
- \*REQUIRED REPLACEMENT TREES CALCULATIONS FROM TREE REPLACEMENT FORMULA IN CHAPTER 263-4(B) - WORD USAGE; DEFINITIONS, TREE REPLACEMENT FORMULA.
- SEE LANDSCAPE PLAN, SHEET L2.0, FOR SCHEDULE OF PROPOSED REPLACEMENT TREES

**LEGEND**

	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING WATER LINE
	EXISTING GAS LINE
	EXISTING SEWER LINE & MANHOLE
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING COMMUNICATIONS
	EXISTING UTILITY POLE
	EXISTING STORMWATER
	EXISTING EDGE OF PAVEMENT
	EXISTING CURB
	EXISTING SIDEWALK
	CENTERLINE (ROAD)
	RIGHT-OF-WAY LINE
	PROPERTY LINE
	ADJOINER
	EXISTING FENCE
	EASEMENT



**OWNER:**  
 RADNOR TOWNSHIP  
 301 IVEN AVENUE  
 WAYNE, PA 19087  
 PHONE: 610-688-5600  
 CONTACT: STEVE NORCINI  
 EMAIL: SNORCINI@RADNOR.ORG



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**Architecture + Site**  
 Conshohocken, PA 19380  
 151 E. 10th Avenue, Suite 300  
 Phone: 610.834.7805  
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Submission Date: 02.01.2016  
 Drawn By: AK/EL  
 Checked By: KG/BE  
 Scale: 1" = 20'

Sheet Name: SHADE TREE PLAN	
Progress Prints:	
Revisions:	
1	2.15.16 TWP COMMENTS
2	3.15.16 PC COMMENTS
3	SH. TR. COMMENTS

**LI.0**  
 OF 14



**PLANT SCHEDULE - SHADE MIX**

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	CONDITION	SPACING	SM 1	SM 2	SM 3	SM 4	SM 5
VA	<i>VIOLA AFFINIS</i>	SAND VIOLET	83	PLUG	CONTAINER	18"		23	20		17
VC	<i>VIOLA CANADENSIS</i>	CANADIAN WHITE VIOLET	83	PLUG	CONTAINER	18"		26	21	10	26
VS	<i>VIOLA SAGITTATA</i>	ARROWLEAF VIOLET	83	PLUG	CONTAINER	18"		26	21	10	26
ED	<i>ASTER DIVARICATA</i>	WHITE WOOD ASTER	55	QUART	CONTAINER	18"		17	13	4	17
HA	<i>HEUCHERA AMERICANA</i> 'DALE STRAIN'	AMERICAN ALUMROOT	40	QUART	CONTAINER	18"		15	10		3
HL	<i>HEUCHERA LONGIFLORA</i>	LONGFLOWER ALUMROOT	41	QUART	CONTAINER	18"		9	13	5	2
HM	<i>HEUCHERA MACROPHYLLA</i> 'AUTUMN BRIDE'	HAIRY ALUMROOT	19	QUART	CONTAINER	18"			7		5
HT	<i>HEUCHERA 'TIRAMISU'</i>	CORAL BELLS	12	QUART	CONTAINER	18"		9		3	
TO	<i>TIARELLA CORDIFOLIA</i>	FOAMFLOWER	33	QUART	CONTAINER	18"		9	10	2	12
PA	<i>POLYSTICHUM ACROSTICHOIDES</i>	CHRISTMAS FERN	26	QUART	CONTAINER	36"		6	9	4	7
OC	<i>OSMUNDASTRUM CINNAMOMEUM</i>	CINNAMON FERN	23	QUART	CONTAINER	36"		5	7		4
OS	<i>ONOCLEA SENSIBILIS</i>	SENSITIVE FERN	17	QUART	CONTAINER	36"		7	5		5

152 136 38 35 154

**PLANT SCHEDULE - GROUNDCOVER & SEASONAL FLOWERS**

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	CONDITION	SPACING	GC 1	GC 2	GC 3	GC 4	GC 5	GC 6
CP	<i>CAREX PENNSYLVANICA</i>	PENNSYLVANIA SEDGE	72	QUART	CONTAINER	18"		15	13	18	12	7
		SPRING FLOWERING BULBS	54					11	10	14	9	5
EP	<i>ECHINACEA PURPUREA</i>	PURPLE CONEFLOWER	32	QUART	CONTAINER	18"		5	5	12	4	3
EA	<i>ECHINACEA PARADOXA</i>	YELLOW CONEFLOWER	29	QUART	CONTAINER	18"		4	6	6	7	3
RL	<i>RUDBECKIA MAXIMA</i>	GREAT CONEFLOWER	26	QUART	CONTAINER	18"		6	5	6	3	3

41 39 56 35 21 21

**PLANT SCHEDULE - TREES AND SHRUBS**

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	CONDITION	NOTES
AR	<i>ACER RUBRUM</i>	RED MAPLE	2	2-2.5"	B&B	
BN	<i>BETULA NIGRA</i>	RIVER BIRCH	4	2-2.5"	B&B	MULTI-STEM
CC	<i>CERCIS CANADENSIS</i>	EASTERN REDBUD	2	#7	CONTAINER	
FG	<i>FOTHERGILLA GARDENII</i>	DWARF FOTHERGILLA	31	#3	CONTAINER	
HV	<i>HAMAMELIS VIRGINIANA</i>	WITCHHAZEL	1	#7	CONTAINER	
HQ	<i>HYDRANGEA QUERCIFOLIA</i>	OAKLEAF HYDRANGEA	20	#3	CONTAINER	
IG	<i>ILEX GLABRA</i>	INKBERRY	60	#3	CONTAINER	
IV	<i>ILEX VERTICILLATA</i>	WINTERBERRY	5	#3	CONTAINER	
LA	<i>LEUCOTHOE AXILLARIS</i>	LEUCOTHOE	14	#3	CONTAINER	
VD	<i>VIBURNUM DENTATUM</i>	ARROWWOOD VIBURNUM	5	#3	CONTAINER	
VN	<i>VIBURNUM NUDENS</i>	POSSUMHAW VIBURNUM	5	#3	CONTAINER	

Total Trees 8

REQUIRED NUMBER OF REPLACEMENT TREES (PER SHADE TREE ORDINANCE) 9

Total Shrubs 141

**PLANT SCHEDULE - RAIN GARDEN**

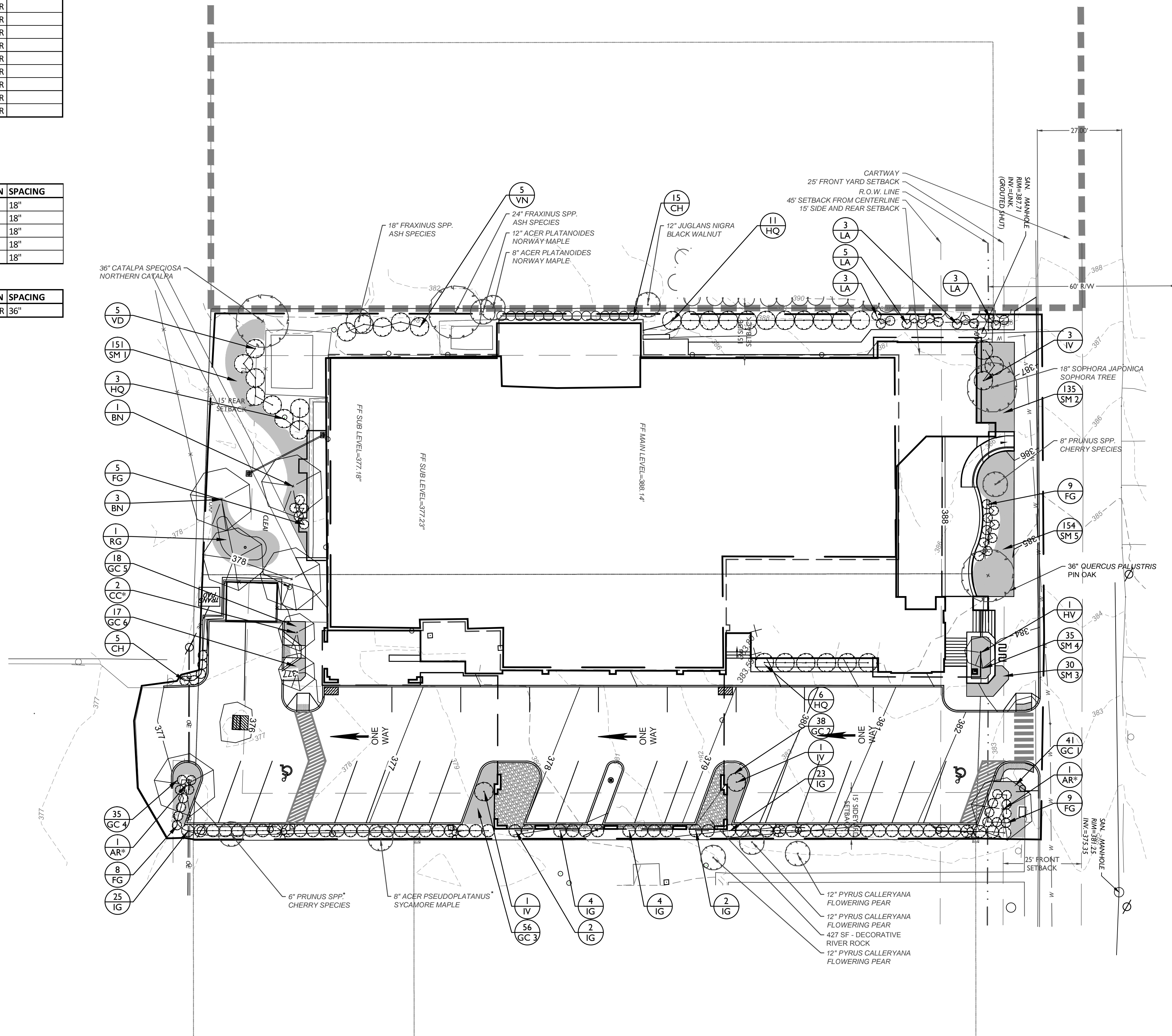
KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	CONDITION	SPACING
	<i>CHELONE GLABRA</i>	WHITE TURTLEHEAD				18"
	<i>GERANIUM MACULATUM</i>	WILD GERANIUM				18"
	<i>IRIS CRISTATA</i>	DWARF CRESTED IRIS				18"
	<i>POLYGONATUM COMMUTATUM</i>	SOLOMAN'S SEAL				18"
	<i>POLYSTICHUM ACROSTICHOIDES</i>	CHRISTMAS FERN				18"

**PLANT SCHEDULE - SCREENING**

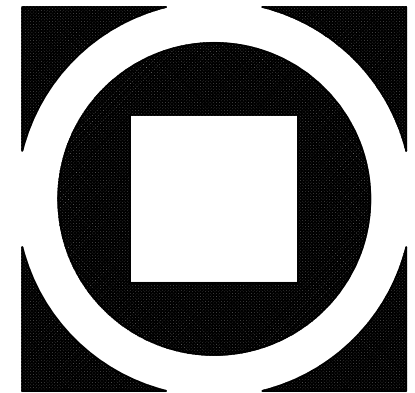
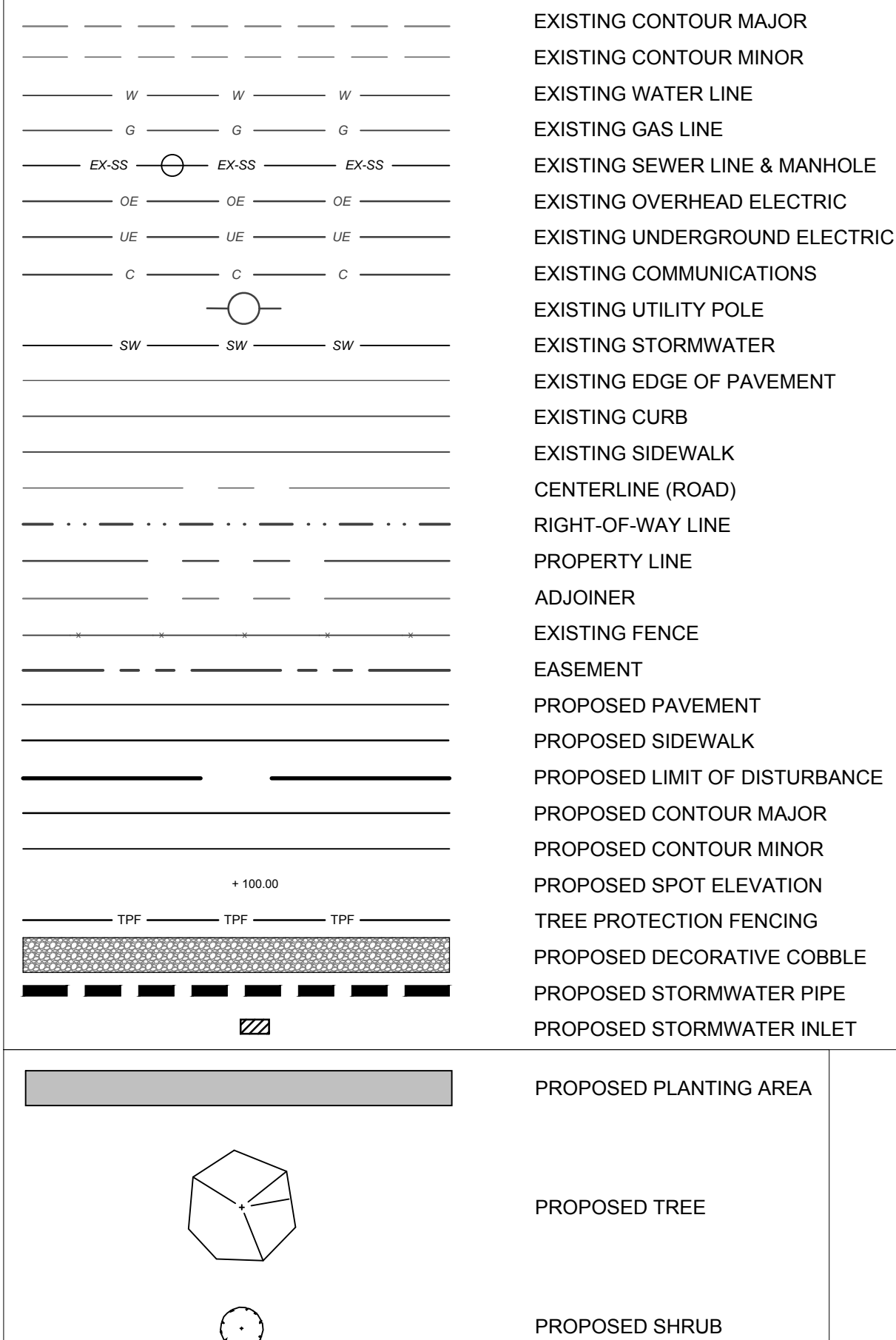
KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	CONDITION	SPACING
CH	<i>CHASMANTHIUM</i>	NORTHERN SEA OATS	20	QUART	CONTAINER	36"

**NOTES**

- PER SECTION 255.29(B)1, PARKING LOT LANDSCAPING REQUIREMENTS ARE MET AS FOLLOWS:
  - PARKING LOT AREA: 11,100 SF
  - LANDSCAPED AREA WITHIN PARKING LOT (10% MIN.; 1,800 SF (16.2%))
  - PARKING LOT TREES (MARKED WITH \*\*\* ON LANDSCAPE PLAN)
    - REQUIRED: 4
    - PROPOSED: 4
    - EXISTING: 2



**LEGEND**



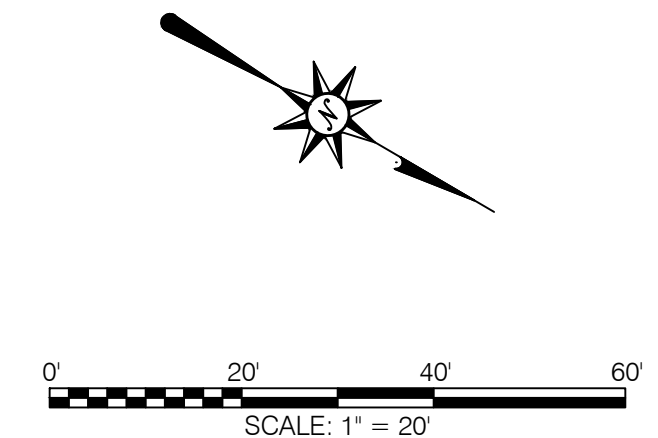
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**Architecture + Site**  
 Conshohocken, PA 19428  
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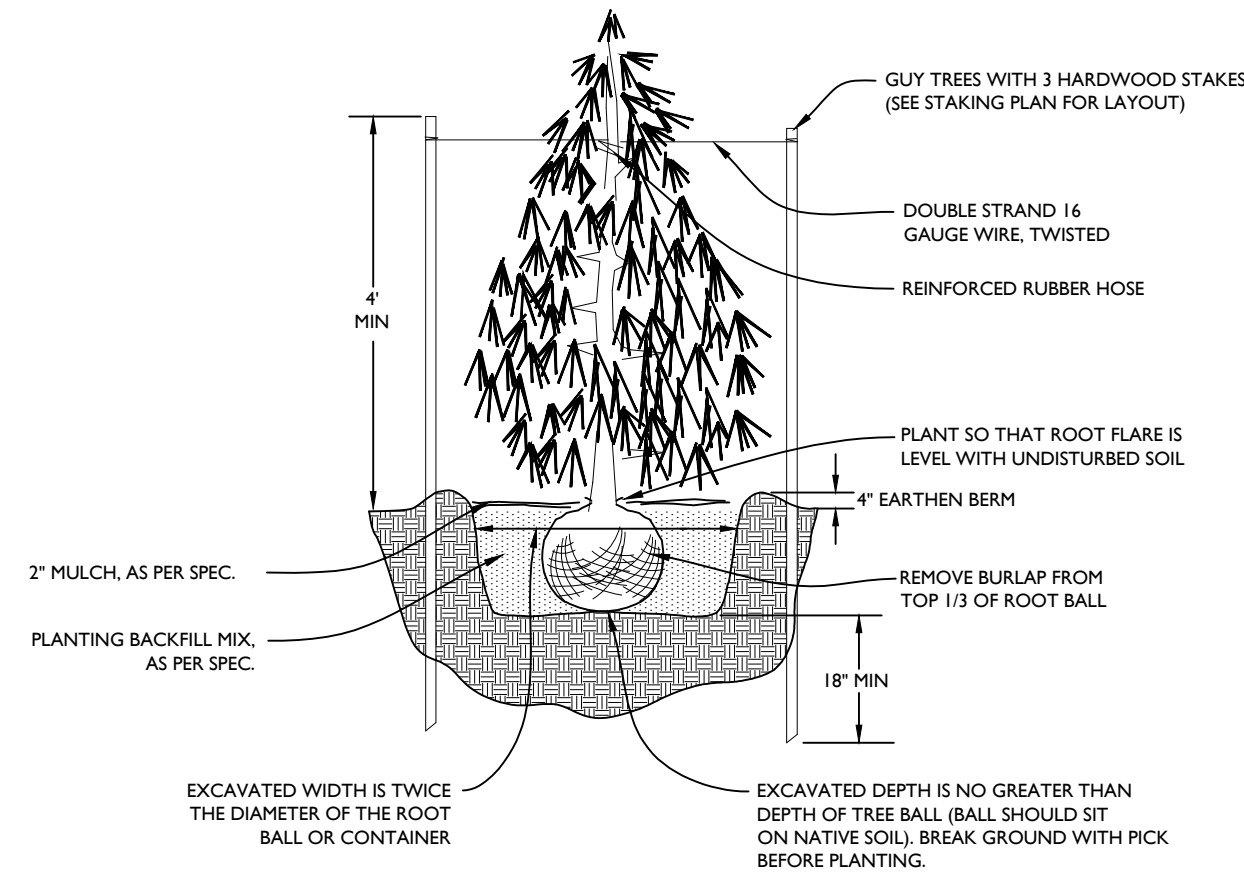
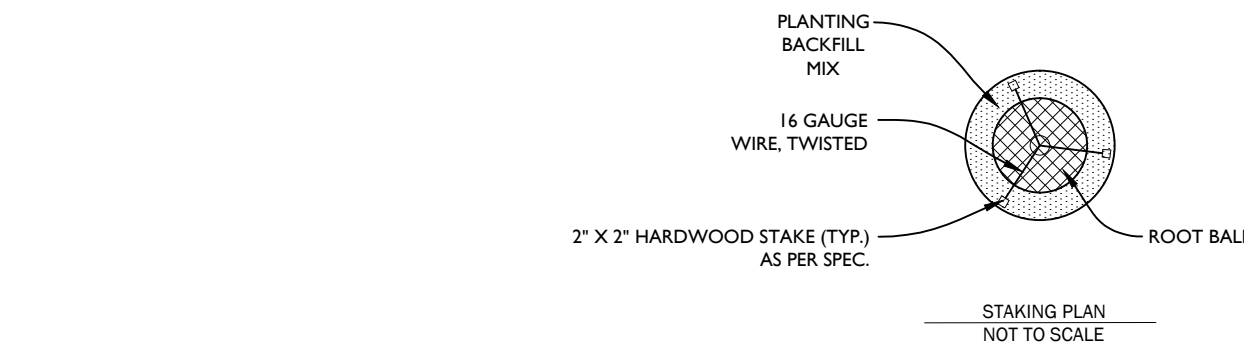
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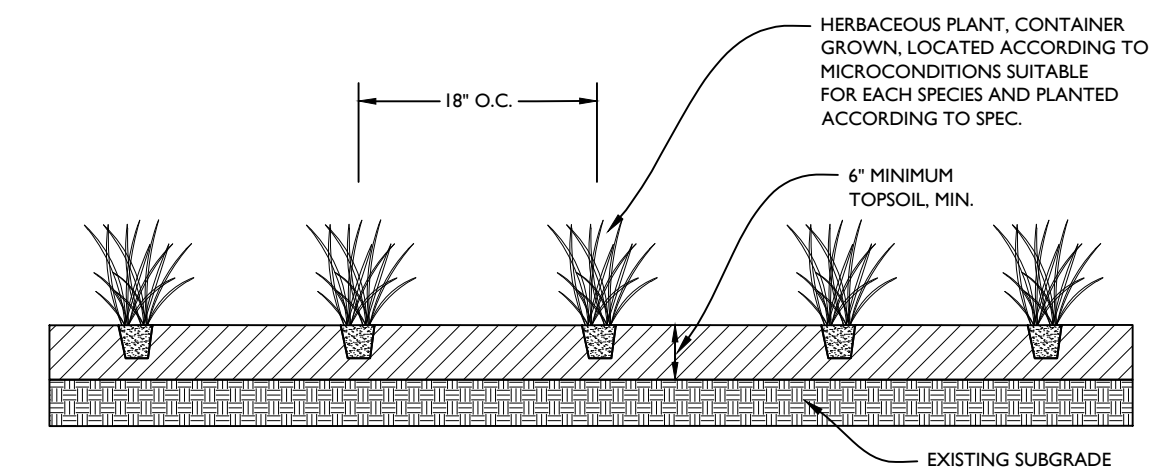
**L2.0**  
 OF 14



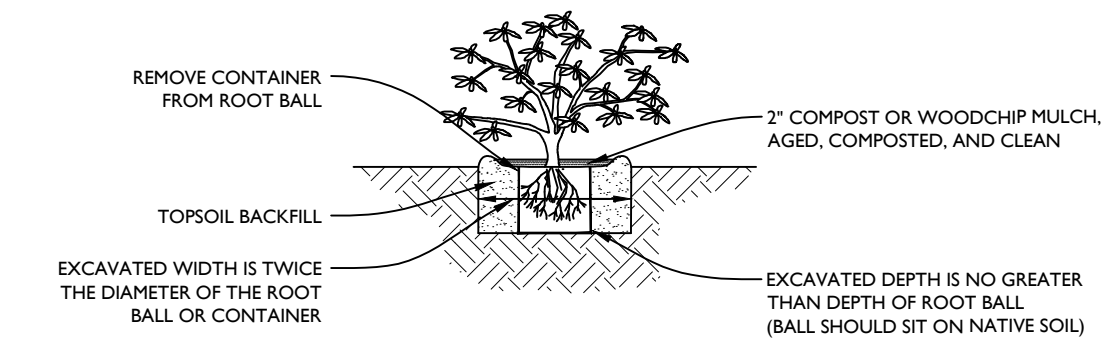
**L-4**  
**L3.0** B&B CONIFER PLANTING DETAIL  
NOT TO SCALE

**PLANTING NOTES:**

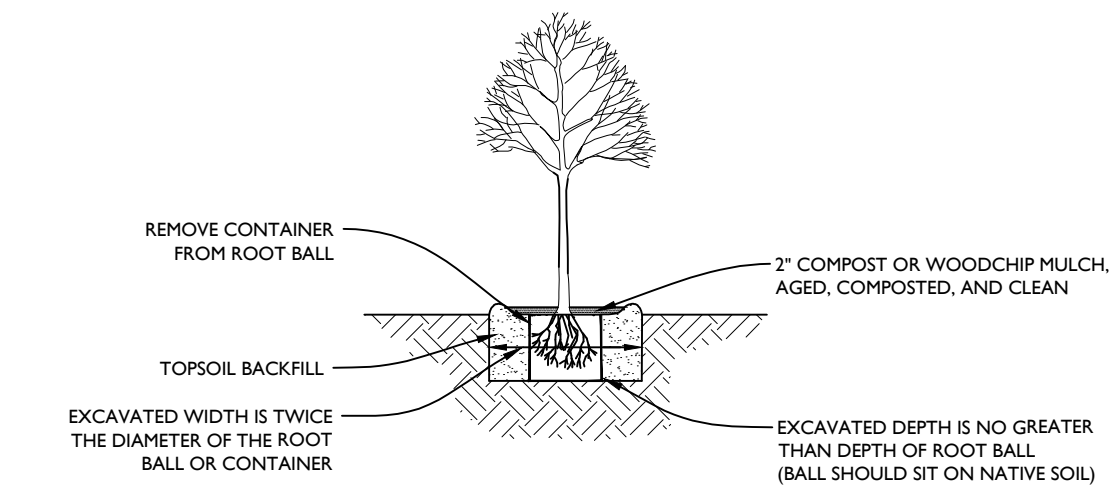
1. PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANT DETAILS PROVIDED ON SHEET L3.0.
2. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT APPROVAL BY OWNER'S REPRESENTATIVE.
3. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL. NO SOIL SHALL BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
4. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF THE ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE.
5. ALL PLANTING CONTAINERS, BASKETS, AND NON-BIODEGRADABLE MATERIAL SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND TRUNK OF TREE OR SHRUB AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING. EXTREME CARE SHALL BE TAKEN TO ENSURE ROOT BALL IS NOT DISTURBED.
6. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED TO FILL THE ENTIRE BED AREA OR PIT AREA. NO MULCH IS TO TOUCH THE FOLIAGE, STEM, OR TRUNK OF ANY PLANT.
7. ALL PLANTS SHALL BE WATERED DURING INSTALLATION.
8. BIOPLEX 5-IN-1, OR APPROVED EQUAL, SHALL BE USED ON ALL PLANTS DURING INSTALLATION, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
9. ALL PLANTS SHALL BE NURSERY GROWN WITHIN 350 MILES OF THE PROJECT SITE.
10. ALL PLANTS SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS, THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
11. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
12. REQUIREMENTS FOR THE MEASUREMENTS, AND QUALITY, SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ66, CURRENT EDITION, AS AMENDED.
13. BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ALL PLANT MATERIAL.



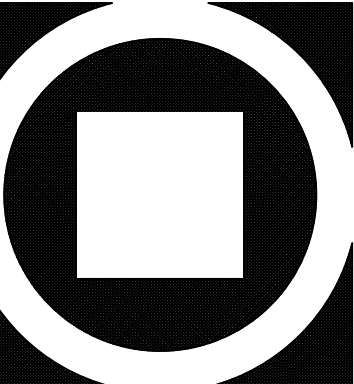
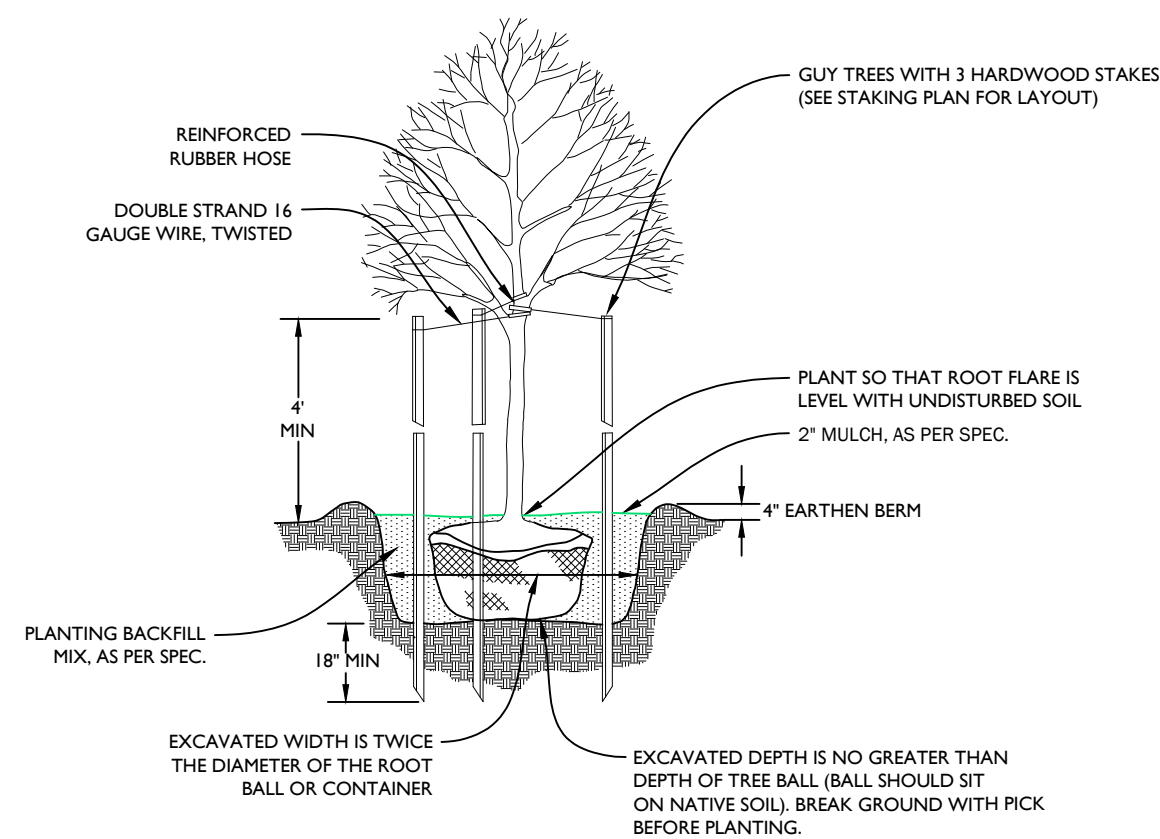
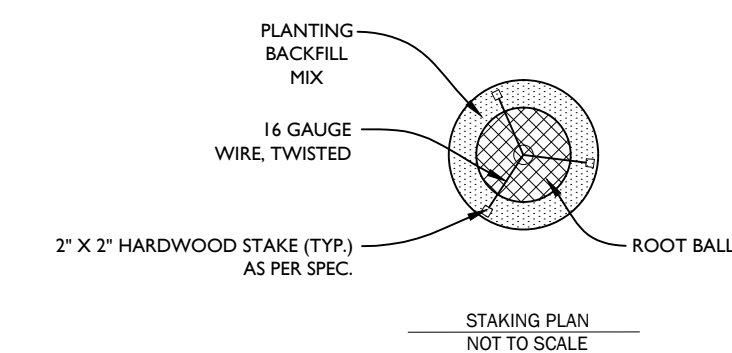
**L-1**  
**L3.0** HERBACEOUS CONTAINER PLANTING DETAIL  
NOT TO SCALE



**L-2**  
**L3.0** CONTAINER SHRUB PLANTING DETAIL  
NOT TO SCALE



**L-3**  
**L3.0** CONTAINER TREE PLANTING DETAIL  
NOT TO SCALE



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**Architecture + Site**  
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