

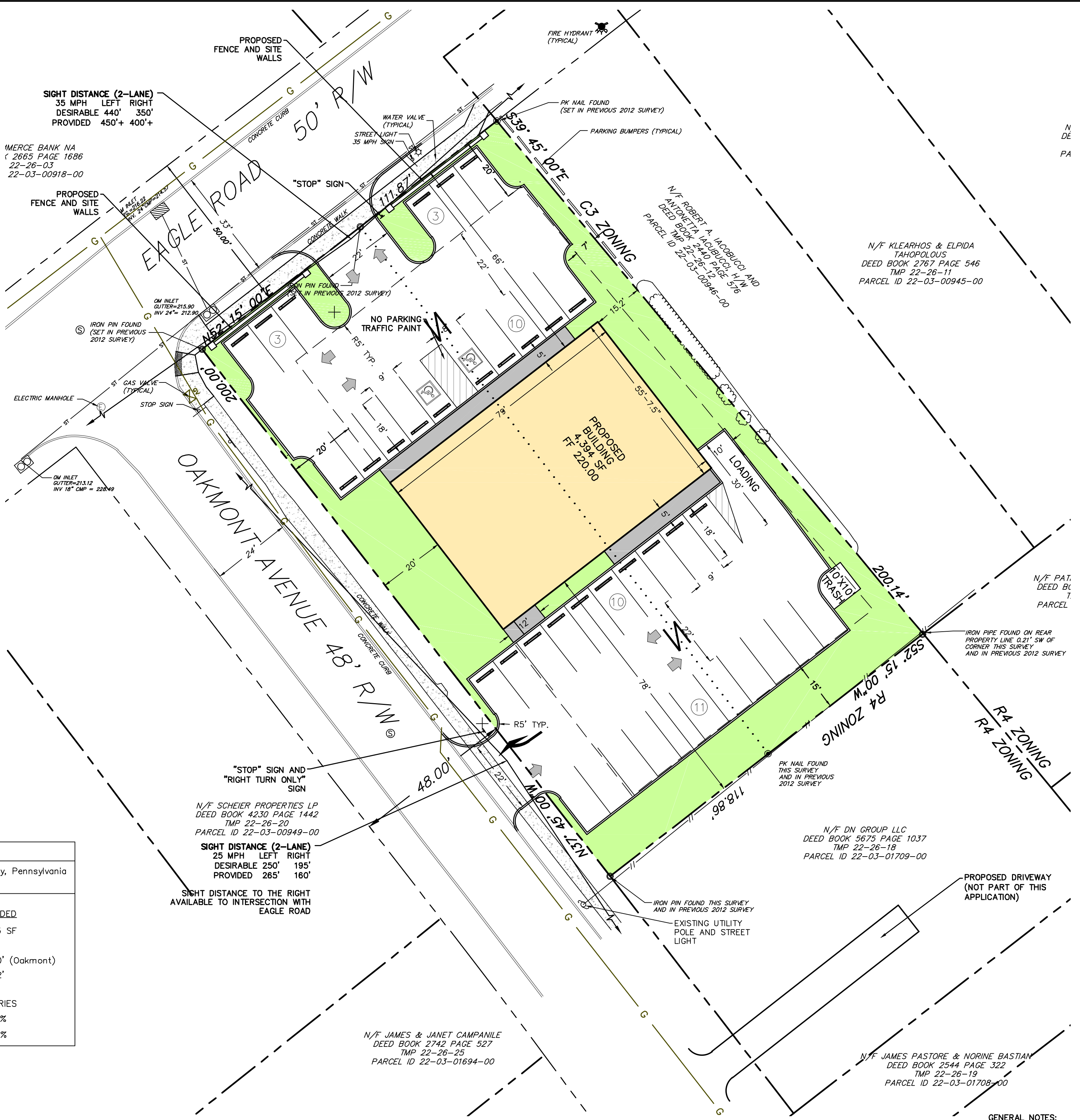
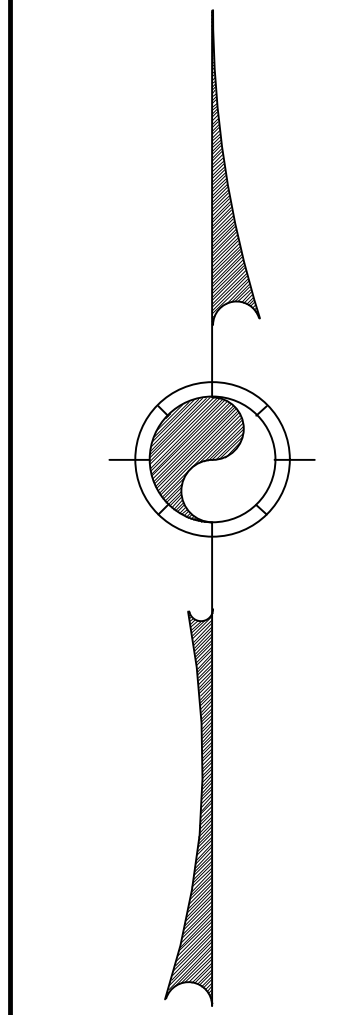
ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

**LINE TYPE LEGEND:**

---	PROPERTY LINE
- - -	R/W LINE
- - - - -	EXISTING BUILDING SETBACK
- - - - -	EXISTING FENCE
- - - - -	EXISTING OVERHEAD ELECTRIC
- - - - -	EXISTING ELECTRIC LINE
- - - - -	EXISTING GAS LINE
- - - - -	EXISTING TELECOM LINE
- - - - -	EXISTING WATER LINE
- - - - -	EXISTING SANITARY LINE
- - - - -	EXISTING STORM PIPES
- - - - -	EXISTING MAJOR CONTOUR
- - - - -	EXISTING MINOR CONTOUR
- - - - -	PROPERTY LINE TO BE REMOVED
○	PARKING NUMBER
■	PROPOSED BUILDING AREA
■	PROPOSED SIDEWALK
■	PROPOSED GREEN AREAS



**ZONING REQUIREMENTS**

Zoning Data: 109 & 115 W. Eagle Road, Haverford Township, Delaware County, Pennsylvania  
Zone: C-3 - COMMERCIAL DISTRICT

	REQUIRED (PER C-3)	PROVIDED
Lot Area:	6,250 SF MIN.	23,073 SF
Min. Yard Setbacks:		
Front:	20'	66' (Eagle); 20' (Oakmont)
Side:	7'	15.2'
Rear:	15'	78'
Max. Bldg Height	45' (3 STORIES)	2 STORIES
Max. Bldg. Coverage	25%	19.0%
Max. Impervious Coverage	75%	74.9%

I HEREBY CERTIFY THAT THIS PLAN HAD BEEN MADE UNDER MY IMMEDIATE SUPERVISION, THAT THE MONUMENTS SHOWN EXIST OR SHALL BE LOCATED AND THAT ALL GEODETIC AND DIMENSIONAL DETAILS ARE CORRECT AND THAT THIS MAP COMPLIES WITH THE PROVISIONS OF THE MAP FILING LAW, THE MUNICIPAL ORDINANCES AND REQUIREMENTS APPLICABLE THERETO.

DATE \_\_\_\_\_ PROFESSIONAL LAND SURVEYOR/PROFESSIONAL ENGINEER

THIS IS TO CERTIFY THAT THIS PLAN HAS BEEN REVIEWED BY HAVERFORD TOWNSHIP IN ACCORDANCE WITH THE CODE OF THE TOWNSHIP OF HAVERFORD.

DATE \_\_\_\_\_ TOWNSHIP ENGINEER

THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAN HAS BEEN APPROVED BY:

DATE \_\_\_\_\_ PRESIDENT OF THE BOARD OF COMMISSIONERS

DATE \_\_\_\_\_ CHAIRMAN OF PLANNING COMMISSION

DATE \_\_\_\_\_ SECRETARY OF PLANNING COMMISSION

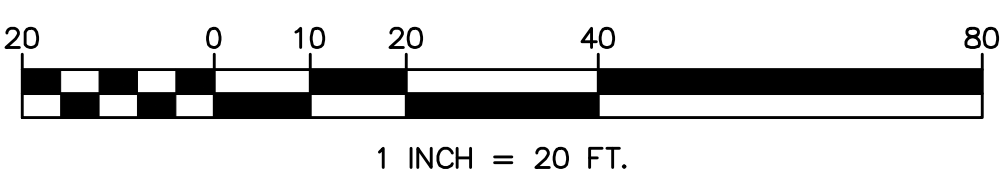
THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAN HAS BEEN APPROVED BY THE BOARD OF TOWNSHIP COMMISSIONERS ON:

DATE \_\_\_\_\_ TOWNSHIP SECRETARY

ON THIS, THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, BEFORE ME THE UNDERSIGNED OFFICER PERSONALLY APPEARED, WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THAT HE IS OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE SUBDIVISION PLAN THEREOF WAS MADE AT HIS DIRECTION AND THAT HE ACKNOWLEDGES THE SAME TO BE HIS ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

WITNESS MY HAND AND SEAL \_\_\_\_\_ THE DAY AND DATE ABOVE WRITTEN.

SIGNATURE OF OWNER \_\_\_\_\_ NOTARY PUBLIC \_\_\_\_\_



**PARKING REQUIREMENTS PER CODE SECTION 182-707.B.**

OFFICE GROSS FLOOR AREA = 7,400 SF  
PARKING REQUIREMENT = 1 SPACE / 200 SF FLOOR AREA

TOTAL PARKING SPACES REQUIRED = 37 SPACES  
TOTAL PARKING SPACES PROVIDED = 37 SPACES

MIN. PARKING SIZE = 162 SF (9'x18')  
PARKING SIZE PROVIDED = 162 SF (9'x18')

**WAIVER REQUESTS:**

FROM CODE SECTION 160-5.B(3)(1) - FOR THE CARTWAY WIDTH OF OAKMONT AVENUE TO REMAIN AT 24 FEET, IN LIEU OF THE REQUIRED 27 FOOT CARTWAY WIDTH.

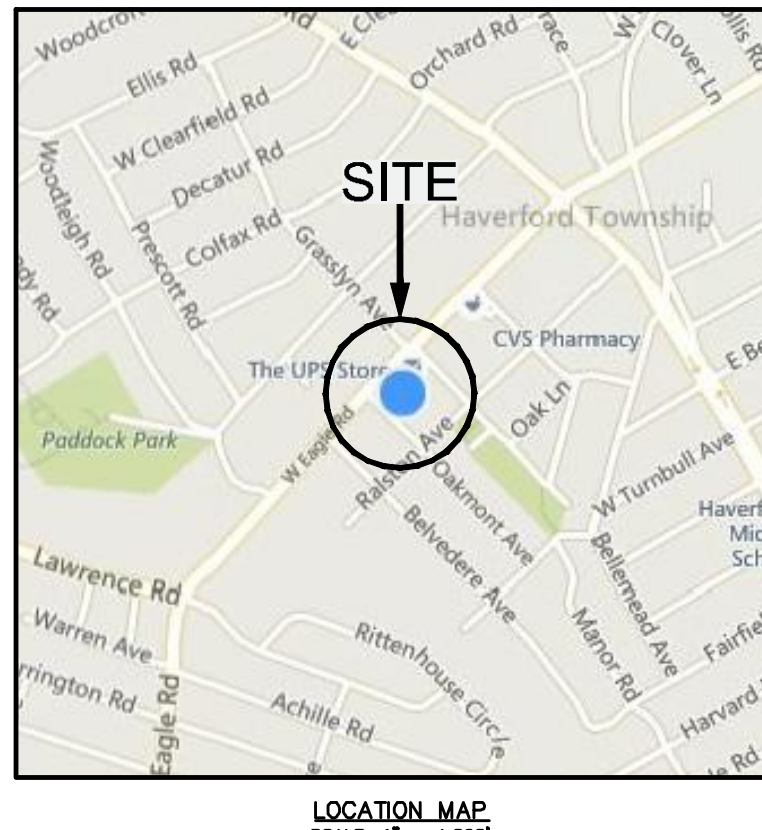
FROM CODE SECTION 160-5.B(3)(2) - FOR THE RIGHT-OF-WAY WIDTH REQUIREMENT OF OAKMONT AVENUE TO REMAIN 48 FEET, IN LIEU OF THE REQUIRED 50 FOOT RIGHT-OF-WAY WIDTH.

FROM CODE SECTION 160-5.B(4)(1) - TO NOT PROVIDE ADDITIONAL STREET LIGHTING ON OAKMONT AVENUE.

**SHEET INDEX:**

SHEET 1: RECORD PLAN  
SHEET 2: EXISTING CONDITIONS / DEMOLITION PLAN  
SHEET 3: GRADING AND UTILITY PLAN  
SHEET 4: EROSION & SEDIMENTATION CONTROL PLAN  
SHEET 5: CONSTRUCTION DETAILS  
SHEET 6: CONSTRUCTION DETAILS  
SHEET 7: LANDSCAPE PLAN  
SHEET 8: LIGHTING PLAN

- GENERAL NOTES:**
- OWNER/APPLICANT: DN GROUP, LLC 162 W. EAGLE ROAD, HAVERFORD, PA 19083
  - THE INTENT OF THIS PLAN IS TO DEPICT THE CONSOLIDATION OF THE TWO EXISTING PARCELS INTO ONE PROPERTY. PROPOSED IMPROVEMENTS INCLUDE THE DEMOLITION AND REMOVAL OF THE EXISTING BUILDINGS, PAVING, AND OTHER EXISTING FEATURES TOGETHER WITH THE CONSTRUCTION OF A NEW OFFICE BUILDING, PARKING FACILITIES, WALKWAYS, AND ASSOCIATED IMPROVEMENTS.
  - UNDERGROUND UTILITIES SHOWN WERE PLOTTED FROM OBSERVABLE EVIDENCE AT THE TIME OF SURVEY AND INFORMATION FROM PLANS SUPPLIED BY UTILITY COMPANIES. NO GUARANTEE IS MADE THAT UNDERGROUND UTILITIES ARE ACCURATELY OR COMPLETELY SHOWN HEREON.
  - SOIL DATA RETRIEVED VIA THE WEB SOIL SURVEY PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE AVAILABLE ONLINE AT <http://websoilsurvey.nrcs.usda.gov/>.
  - PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
  - THE PROPERTY WILL BE SERVED BY PUBLIC SANITARY SEWER SERVICE AND PUBLIC DOMESTIC WATER SERVICE.
  - FOUNDATION AS-BUILTS SHALL BE PROVIDED TO ENSURE ADEQUATE BUILDING SETBACKS.
  - A TOWNSHIP ROAD OPENING PERMIT WILL BE REQUIRED FOR CONSTRUCTION OF THE PROPOSED DRIVEWAY AND UTILITIES.
  - A 10' WIDE BUFFER STRIP IS REQUIRED ALONG THE EASTERN SIDE YARD AS SHOWN ON THE PLANS.

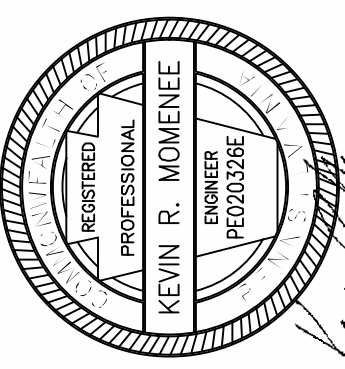


- GENERAL NOTES:**
- THIS PLAN REFERENCES AN ACTUAL FIELD SURVEY PERFORMED ON THE PREMISES ON AUGUST 19, 2015 BY MOMENEE SURVEY GROUP, INC., AND FURTHER SUPPLEMENTED DATA ON AUGUST 25, 2015 AND DEPICTS CONDITIONS ON THOSE DATES.
  - THE EXISTENCE AND/OR LOCATION OF ALL SUBSURFACE UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED BY ALL CONTRACTORS PRIOR TO CONSTRUCTION.
  - THE PA. ONE CALL NUMBER FOR THIS SITE IS 20152302982.
  - THE VERTICAL DATUM SHOWN ON THIS PLAN IS PER NAVD 1988 OBTAINED VIA GPS NETWORK.
  - THE REFERENCED SURVEY, AND THIS PLAN, WAS COMPLETED WITHOUT THE AVAILABILITY OF A CURRENT TITLE REPORT AND SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED IN A FULL AND ACCURATE TITLE REPORT.
  - IN ACCORDANCE WITH FEMA PANEL NUMBER 42045C0102F EFFECTIVE DATE NOVEMBER 18, 2009, THE PREMISES IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.
- ZONING DISTRICT C-3 (COMMERCIAL DISTRICT):**
- |                     |               |
|---------------------|---------------|
| LOT AREA            | 6,250 SF MIN. |
| STREET FRONTAGE     | 50' MIN.      |
| BUILDING COVERAGE   | 25% MAX.      |
| FRONT YARD          | 20' MIN.      |
| SIDE YARD           | 7' MIN.       |
| REAR YARD           | 15' MIN.      |
| BUILDING HEIGHT     | 45' MAX       |
| IMPERVIOUS COVERAGE | 75% MAX.      |
- FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF HAVERFORD TOWNSHIP, LATEST EDITION.
- 109 W. EAGLE ROAD LOT DATA:**  
GROSS LOT AREA = 11,074 SF OR 0.254 ACRES  
NET LOT AREA = 11,074 SF OR 0.254 ACRES
- EXISTING IMPERVIOUS COVERAGE (109 W. EAGLE ROAD):**
- |                   |                   |
|-------------------|-------------------|
| RESIDENCE, PORCH  | 1,552 SF (14.01%) |
| PORTION OF GARAGE | 820 SF            |
| ASPHALT           | 5,023 SF          |
| DECK, STEPS       | 48 SF             |
| WALLS, MISC.      | 155 SF            |
| TOTAL             | 7,598 SF (68.61%) |
- 115 W. EAGLE ROAD LOT DATA:**  
GROSS LOT AREA = 12,000 SF OR 0.276 ACRES  
NET LOT AREA = 12,000 SF OR 0.276 ACRES
- EXISTING IMPERVIOUS COVERAGE (115 W. EAGLE ROAD):**
- |                          |                   |
|--------------------------|-------------------|
| RESIDENCE, PORCH, GARAGE | 2,069 SF (17.24%) |
| ASPHALT                  | 4,898 SF          |
| CONCRETE                 | 797 SF            |
| WOOD RAMP                | 126 SF            |
| WALLS, STEPS             | 74 SF             |
| TOTAL                    | 7,965 SF (66.38%) |
- REFERENCE PLAN:**  
BOUNDARY AND TOPOGRAPHIC SURVEY OF 109 & 115 W. EAGLE ROAD FOR D'ALONZO AND ASSOCIATES, ARCHITECTS, PREPARED BY MOMENEE SURVEY GROUP, INC., DATED SEPTEMBER 2, 2015, FILE NO: 15-243.
- SOURCE OF TITLE:**  
DN GROUP, LLC  
DEED BOOK 5675 PAGE 1037  
109 W. EAGLE ROAD  
HAVERFORD, PA 19087  
T.M.P. 22-26 UNIT 13  
PARCEL I.D. 22-03-00947-00
- SOURCE OF TITLE:**  
DN GROUP, LLC  
DEED BOOK 5675 PAGE 1037  
115 W. EAGLE ROAD  
HAVERFORD, PA 19087  
T.M.P. 22-26 UNIT 14  
PARCEL I.D. 22-03-00948-00
- CONSOLIDATED LOT DATA:**  
GROSS LOT AREA = 23,073 SF OR 0.530 ACRES  
NET LOT AREA = 23,073 SF OR 0.530 ACRES
- PROPOSED IMPERVIOUS COVERAGE:**
- |                    |                   |
|--------------------|-------------------|
| BUILDING           | 4,394 SF (19.0%)  |
| PAVING AND CURBS   | 12,085 SF         |
| WALKS, STEPS, ETC. | 794 SF            |
| TOTAL              | 17,273 SF (74.9%) |
- MAX ALLOWABLE 17,305 SF (75.0%)
- APPROXIMATE EXISTING BUILDING SETBACKS ON EAST SIDE OF EAGLE ROAD WITHIN 300 FEET OF THE SITE:**
- |                |       |
|----------------|-------|
| 123 EAGLE ROAD | = 39' |
| 125 EAGLE ROAD | = 51' |
| 129 EAGLE ROAD | = 53' |
| 107 EAGLE ROAD | = 58' |
| 61 EAGLE ROAD  | = 59' |
| 101 EAGLE ROAD | = 59' |
| 133 EAGLE ROAD | = 60' |
| 105 EAGLE ROAD | = 64' |
- PROPOSED SETBACK = 66'



Serial Number: 2015-230-2982

CALL BEFORE YOU DIG!  
3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE STOP CALL  
Pennyroad One Call System, Inc.  
1-800-242-1776



**MOMENEE & ASSOCIATES, INC.**  
CIVIL ENGINEERS AND LAND SURVEYORS  
924 COUNTY LINE ROAD, BRN MAWR, PA 19010  
PHONE: (610) 527-3030 FAX: (610) 527-9008

**RECORD PLAN**  
PRELIMINARY / FINAL LAND DEVELOPMENT  
109 & 115 W. EAGLE ROAD  
HAVERFORD TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

OWNER / APPLICANT: DN GROUP, LLC  
DRAWN BY: BDM  
CHECKED BY: KRM

ONE-CALL: 20152302982  
DATE: OCTOBER 29, 2015



REV.	DATE	PER. TWP. ENG.	ENG.	COMMENTS
1	10/29/15	BDM	KRM	
2	07/20/16	BDM	KRM	

DATE: OCTOBER 29, 2015  
SHEET NO. 1  
OF 8  
SCALE: 1" = 20'  
FILE NO.: 15-243



**UTILITY SERVICE TERMINATION NOTE:**  
 ALL UTILITY SERVICES TO THE EXISTING BUILDING BEING DEMOLISHED SHALL BE SHUT OFF AT THE STREET IN ACCORDANCE WITH THE STANDARD MEANS AND METHODS APPROVED BY THE INDIVIDUAL UTILITY COMPANIES.

**CHECKLIST FOR APPLICATION FOR A DEMOLITION PERMIT:**

- SEWER SEAL PERMIT ISSUED, INSPECTED AND APPROVED BY THE TOWNSHIP PUBLIC WORKS DEPARTMENT OR SEWER AUTHORITY. (IF APPLICABLE)
- RODENT CERTIFICATE/LETTER FROM A LICENSED PEST CONTROL OPERATOR STATING THE PROPERTY IS RODENT FREE.
- ELECTRIC AND/OR GAS COMPANY LETTER STATING THE GAS AND/OR ELECTRIC SERVICE HAS BEEN TERMINATED. (IF APPLICABLE)
- WATER COMPANY LETTER STATING THE WATER SERVICE HAS BEEN TERMINATED. (IF APPLICABLE)
- NOTICE TO NEIGHBORS DIRECTLY ADJOINING THE PROPERTY, INCLUDING PROPERTIES DIRECTLY ACROSS THE STREET(S). PROVIDE COPY OF LETTER AND LIST OF RECIPIENTS.
- ON-SITE SEWER SYSTEM - (IF APPLICABLE) APPROVAL FROM THE TOWNSHIP SEWER ENFORCEMENT OFFICER.
- WELL - (IF APPLICABLE) A LETTER FROM A PLUMBER LICENSED IN THE TOWNSHIP STATING THE WELL HAS BEEN CAPPED.
- TEAR DOWN AND REBUILD: MINOR GRADING PERMIT/RUNOFF & EROSION CONTROL PERMIT ISSUED BY THE PLANNING DIVISION OF THE TOWNSHIP.
- THE APPLICANT SHALL ENSURE THAT THE CONTRACTOR TAKES APPROPRIATE MEASURES TO MINIMIZE DUST AT ALL TIMES DURING DEMOLITION; A HOSE OR WATER TRUCK SHALL BE PROVIDED ON SITE TO SPRAY BUILDINGS DURING DEMOLITION AS TO MINIMIZE AIR POLLUTION.
- IF ASBESTOS OR ANY OTHER REGULATED HAZARDOUS MATERIALS EXIST WITHIN THE BUILDING IT SHALL BE REMOVED AND CERTIFICATIONS TO THAT EFFECT SHALL BE FILED WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- DEMOLISHED STRUCTURES AND MATERIAL SHALL BE REMOVED FROM THE SITE IN AN APPROVED MANNER UNDER THE LOCAL GOVERNING AUTHORITY.
- THE APPLICANT SHALL UTILIZE THE SERVICES OF AN ARCHITECTURAL SALVAGE OR DECONSTRUCTION COMPANY, TO PRESERVE OR RECYCLE BUILDING MATERIALS ON THE EXISTING OR STRUCTURES INCLUDING BUT NOT LIMITED TO STONE, BRICK, AND WOOD ARCHITECTURAL DETAILS SUCH AS WINDOWS AND INTERIOR AND EXTERIOR DETAILS INCLUDING BUT NOT LIMITED TO FIXTURES AND ANY WOOD, GLASS AND METALWORK OF QUALITY AND GOOD CONDITION SHALL BE SALVAGED. THE APPLICANT SHALL PROVIDE DOCUMENTATION TO PLANNING STAFF INDICATING HOW THIS CONDITION WILL BE MET.

**REQUIRED PRIOR TO THE ISSUANCE OF THE DEMOLITION PERMIT:**

SITE INSPECTION OF THE INSTALLED EROSION CONTROL/SILT FENCING, TREE PROTECTION AND CONSTRUCTION ENTRANCE/TIRE CLEANER HAS BEEN PERFORMED AND APPROVED BY THE TOWNSHIP SITE INSPECTOR.

IF APPLICABLE, A FENCE INSTALLED AROUND THE PERIMETER OF THE EXISTING OR STRUCTURES ON THE SITE SEWER SYSTEM TO PROTECT THE DRAIN FIELD, TANK AND UNDERGROUND PIPING FROM EQUIPMENT AND VEHICLES.

DIRECTOR OF BUILDING & PLANNING APPROVAL (REQUIRED).

**TREE REMOVAL CALC:**

#	TYPE	SIZE	TBR
1	MAPLE	23"	1
2	MAPLE	22"	1
3	MAGNOLIA	6"	1
4-5	YEW	6"	2
6-8	CEDAR	6"	3
TOTAL			8

**TREE REPLACEMENT NOTES:**

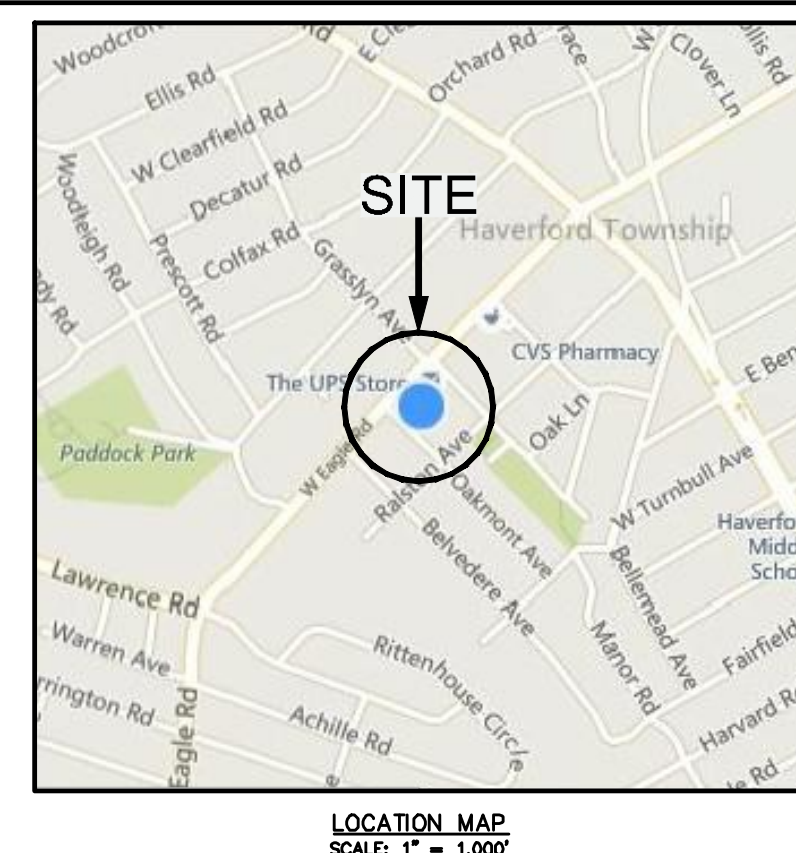
- REPLACEMENT TREES WILL BE SELECTED FROM THE LIST OF TOWNSHIP APPROVED TREES PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- TREES TO BE PLANTED OUTSIDE THE REQUIRED SITE LINE.
- NEW TREES SHALL HAVE A MINIMUM DIAMETER OF 2", MEASURED 4 1/2 FEET ABOVE THE GROUND. REPLANTING SHALL BE DONE ACCORDING TO THE SPECIFICATIONS OF THE SHADE TREE COMMISSION AND THE STANDARDS SPECIFIED BY THE AMERICAN NURSERYMEN'S ASSOCIATION.

**SOILS INFORMATION**

SYMBOL	NAME	%SLOPE	DEPTH TO SH WATER	DEPTH TO BEDROCK	HYDROLOGIC GROUP
Mc	MADE LAND SILT AND CLAY MATERIALS		6.6+	6.6+	C

**LINE/TYPE LEGEND:**

---	PROPERTY LINE
---	R/W LINE
---	EXISTING BUILDING SETBACK
---	EXISTING FENCE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING ELECTRIC LINE
---	EXISTING GAS LINE
---	EXISTING WATER LINE
---	EXISTING SANITARY LINE
---	EXISTING STORM PIPES
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	PROPERTY LINE TO BE REMOVED
---	IMPERVIOUS TO BE REMOVED
---	TREE TO BE REMOVED
---	PK NAIL FOUND
---	SANITARY MANHOLE
---	ELECTRIC MANHOLE
---	LIGHT FIXTURE
---	WATER VALVE
---	SIGN
---	DOOR SILL ELEVATION



**GENERAL NOTES:**

- THIS PLAN REFERENCE AN ACTUAL FIELD SURVEY PERFORMED ON THE PREMISES ON AUGUST 19, 2015 BY MOMENEE SURVEY GROUP, INC., AND FURTHER SUPPLEMENTED DATA ON AUGUST 25, 2015 AND DEPICTS CONDITIONS ON THOSE DATES.
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- THE PA. ONE CALL NUMBER FOR THIS SITE IS 20152302982.
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- IN ACCORDANCE WITH FEMA PLAN NUMBER 42045C01022 EFFECTIVE DATE NOVEMBER 18, 2009, THE PREMISES IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

**ZONING DISTRICT C-3 (COMMERCIAL DISTRICT):**

LOT AREA 6,250 SF MIN.  
 STREET FRONTAGE 50' MIN.  
 BUILDING COVERAGE 25% MAX.  
 FRONT YARD 20' MIN.  
 SIDE YARD 7' MIN.  
 REAR YARD 15' MIN.  
 BUILDING HEIGHT 45' MAX.  
 IMPERVIOUS COVERAGE 75% MAX.

FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF HAVERFORD TOWNSHIP, LATEST EDITION.

**109 W. EAGLE ROAD LOT DATA:**  
 GROSS LOT AREA = 11,074 SF OR 0.254 ACRES  
 NET LOT AREA = 11,074 SF OR 0.254 ACRES

**EXISTING IMPERVIOUS COVERAGE (109 W. EAGLE ROAD):**

RESIDENCE, PORCH	1,552 SF (14.01%)
PORTION OF GARAGE	820 SF
ASPHALT	5,023 SF
DECK, STEPS	48 SF
WALLS, MISC.	155 SF
TOTAL	7,598 SF (68.61%)

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ASPHALT	4,898 SF
CONCRETE	797 SF
WOOD RAMP	126 SF
WALLS, STEPS	74 SF
TOTAL	7,965 SF (66.38%)

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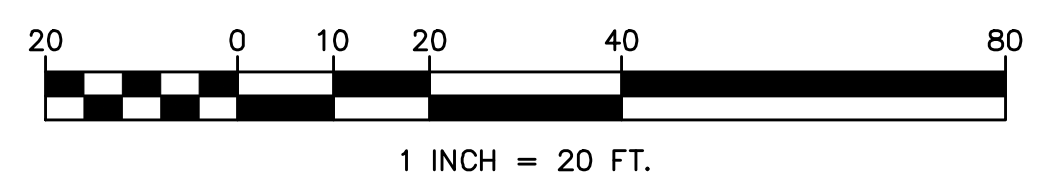
**SOURCE OF TITLE:**  
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 DEED BOOK 5675 PAGE 1037  
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 HAVERFORD, PA 19087  
 T.M.P. 22-26 UNIT 13  
 PARCEL I.D. 22-03-00948-00

**SOURCE OF TITLE:**  
 DN GROUP, LLC  
 DEED BOOK 5675 PAGE 1037  
 115 W. EAGLE ROAD  
 HAVERFORD, PA 19087  
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 PARCEL I.D. 22-03-00948-00

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AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.



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**MOMENEE & ASSOCIATES, INC.**  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 924 COUNTY LINE ROAD, BRN MNR, PA 19010  
 PHONE: (610) 527-3030 FAX: (610) 527-9008

**EXISTING CONDITIONS / DEMOLITION PLAN**

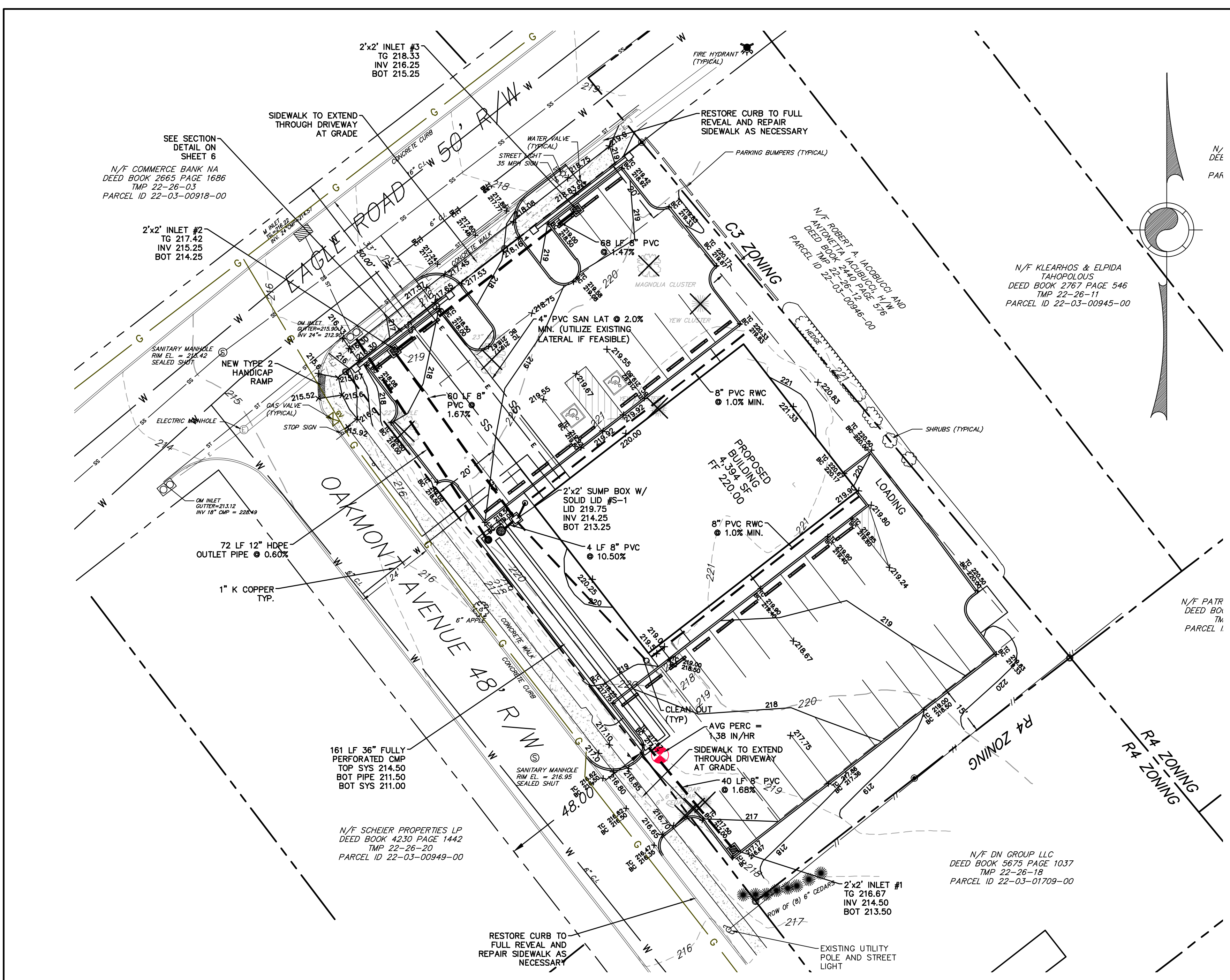
PRELIMINARY / FINAL LAND DEVELOPMENT  
 109 & 115 W. EAGLE ROAD  
 HAVERFORD TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

OWNER / APPLICANT: DN GROUP, LLC  
 109 W. EAGLE ROAD, HAVERFORD, PA 19087

ONE-CALL: 20152302982  
 DRAWN BY: BDM  
 CHECKED BY: KRM

REV.	DATE	PER. TWP. ENG.	PER. TWP. ENG.	COMMENTS
2	07/20/16			
1	12/15/15			

DATE: OCTOBER 29, 2015  
 SHEET NO. 2 OF 8  
 SCALE: 1" = 20'  
 FILE NO.: 15-243



**TREE REMOVAL CALC.**

#	TYPE	SIZE	TBR
1	MAPLE	23"	1
2	MAPLE	22"	1
3	MAGNOLIA	8"	1
4-5	YEW	6"	2
6-8	CEDAR	6"	3
TOTAL		81"	8

81" PROPOSED TO BE REMOVED  
 81" / 4" PER INCH REMOVED  
 20" OF REPLACEMENT TREES REQ'D  
 ACCORDING TO THE LIST OF  
 REPLACEMENT TREES ACCEPTABLE TO  
 HAVERFORD TOWNSHIP

**TREE REPLACEMENT NOTES:**

- REPLACEMENT TREES WILL BE SELECTED FROM THE LIST OF TOWNSHIP APPROVED TREES PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- TREES TO BE PLANTED OUTSIDE THE REQUIRED SITE LINE.
- NEW TREES SHALL HAVE A MINIMUM DIAMETER OF 2", MEASURED 4 1/2 FEET ABOVE THE GROUND. REPLANTING SHALL BE DONE ACCORDING TO THE SPECIFICATIONS OF THE SHADE TREE COMMISSION AND THE STANDARDS SPECIFIED BY THE AMERICAN NURSERYMEN'S ASSOCIATION.

**CARE OF EXISTING TREES:**

- TREE PROTECTION FENCING SHALL BE INSTALLED TO PROTECT ALL EXISTING TREES FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND OTHERS. MAINTAIN PROTECTION FENCING FOR THE DURATION OF PROJECT.
- SELECTIVELY PRUNE EXISTING TREES AT THE EDGE OF ALL TREE PROTECTION ZONES, AND OTHER EXISTING TREES AFFECTED BY CONSTRUCTION, UNDER LANDSCAPE ARCHITECT'S DIRECTION. REMOVE SUCKER SHOOTS, DEAD, RUBBING AND DAMAGED BRANCHES.
- ANY EXCAVATION NEAR ADJACENT ROOT SYSTEMS WILL REQUIRE ROOT PRUNING OF AFFECTED TREE(S).
- FERTILIZE PRUNED EXISTING TREES WITH 3 TO 4 LBS. OF LIQUID FERTILIZER PER 1,000 SQUARE FEET OF DRIP AREA, OR 5 GALLONS OF LIQUID FERTILIZER PER CALIPER INCH OF TRUNK DIAMETER.
- FERTILIZE IN EARLY SPRING BEFORE GROWTH BEGINS.
- FERTILIZE BEGINNING 2' FROM TRUNK AT INTERVALS 2' TO 3' ON CENTER IN A GRID-LIKE PATTERN TO A DEPTH OF 6-18" WITHIN THE DRIPLINE AND BEYOND WHERE POSSIBLE. INJECTION FERTILIZATION METHOD SHALL BE ACCEPTABLE SUBJECT TO LANDSCAPE ARCHITECT'S APPROVAL.

**NOTES:**

- THE PROPOSED STORMWATER MANAGEMENT SYSTEM WAS DESIGNED TO CONTROL THE MAXIMUM ALLOWABLE IMPERVIOUS COVER ON SITE OF UP TO 17,305 SF.
- THE TOWNSHIP ENGINEER'S OFFICE SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF EARTHMOVING ACTIVITIES AND PRIOR TO THE INSTALLATION OF THE PROPOSED STORMWATER MANAGEMENT SYSTEM #1.
- CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.
- THE MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES IS THE RESPONSIBILITY OF THE OWNER.
- THE PROPERTY OWNER SHALL PROVIDE THE TOWNSHIP WITH ACCESS TO THE STORMWATER MANAGEMENT FACILITIES FOR INSPECTIONS AND EMERGENCY MAINTENANCE.
- ON-SITE TREES ARE TO BE SAVED AND PRESERVED WHEREVER POSSIBLE.
- ALL WOODY VEGETATION TO BE RETAINED WITHIN TWENTY-FIVE FEET OF A BUILDING SITE OR DISTURBED AREA SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING PLACED AT THE DRIPLINES.
- GRADE CHANGES AROUND THE DRIPLINES OF TREES TO BE RETAINED SHALL BE MINIMIZED. TREATMENT OF THE TREES PRIOR TO CONSTRUCTION TO PROTECT THE ROOT SYSTEM SHALL BE PERFORMED.
- ALL DISTURBED ROOTS MUST BE CUT AS CLEANLY AS POSSIBLE. THE TRENCH MUST BE BACKFILLED AS QUICKLY AS POSSIBLE, AVOIDING COMPACTION. TREE LIMBS MUST BE CUT BACK IN PROPORTION TO THE ROOT AREA LOSS.
- ON-SITE TREES TO BE SAVED SHALL BE PREPARED FOR CONSTRUCTION BY APPROPRIATE CROWN AND DEEP ROOTING FERTILIZATION AND PROTECTED BY APPROPRIATE FENCING. ALL TREES ARE TO BE DEEP ROOT FERTILIZED USING 16-32-16 SLOW RELEASE, WATER DISPERSIBLE @ 15 LBS. PER 100 GALLON OR EQUAL.
- ALL DOWNSPOUTS SHALL BE EQUIPPED WITH LEAF STRAINING DEVICES
- ANY SUBSTANDARD CURB AND SIDEWALK SHALL BE REPLACED.

**STORMWATER PERCOLATION TEST**

PERCOLATION TESTING WAS PERFORMED BY DELAWARE VALLEY SEPTICS, INC. IN OCTOBER, 2015 IN THE LOCATION NOTED ON THE PLAN.

AVERAGE PERCOLATION RATE WAS 1.38 INCHES PER HOUR

**INFILTRATION BMP NOTES:**

- INFILTRATION BMP FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION SEEPAGE BEDS, APPROPRIATE MEASURES (I.E. CLEANING THE SOIL/SEDIMENT FROM FABRIC, STONE, BED ETC. AND OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
- ALL STONE FOR THE CONSTRUCTION OF THE INFILTRATION BMP SHOULD BE UNIFORMLY GRADED AND CLEAN WASHED AGGREGATE.
- THE BOTTOM OF ALL INFILTRATION BMPs SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE.
- INFLOW AND OUTFLOW POINTS INTO THE INDIVIDUAL ON-LOT SYSTEMS SHOULD BE KEPT CLEAR OF LEAVES AND OTHER DEBRIS. ANY LEAVES AND DEBRIS WILL NEGATIVELY IMPACT THE PERFORMANCE OF THESE SYSTEMS. ALL DOWNSPOUTS AND OVERFLOW PIPES SHOULD BE KEPT IN GOOD WORKING ORDER.
- ALL INFILTRATION BMPs SHALL BE LOCATED A MINIMUM OF 10' FROM A BASEMENT WALL.
- AFTER THE INFILTRATION BED IS COMPLETELY INSTALLED, ALL HEAVY CONSTRUCTION EQUIPMENT SHALL BE RESTRICTED FROM THE INFILTRATION BEDS TO ELIMINATE IMPACTS WHICH MAY COMPROMISE IT. IN THE EVENT ANY IMPACTS COMPROMISE THE FUNCTIONALITY OF THE INFILTRATION BEDS, IT MUST BE IMMEDIATELY REPAIRED OR REPLACED TO DESIGN SPECIFICATIONS.

**STORMWATER MANAGEMENT FACILITY MAINTENANCE PLAN**

THE STORMWATER MANAGEMENT SYSTEM ON THIS LOT CONSISTS OF A SUBSURFACE DETENTION/RECHARGE BASIN. THE BASIN IS COMPRISED OF FULLY PERFORATED CORRUGATED METAL PIPE WITHIN A STONE BED SURROUNDED BY FILTER FABRIC. AN INTERNAL CONTROL RISER ALLOWS CONTROLLED DISCHARGE OF FLOWS FROM THE SYSTEM. WATER RUNOFF IS DIRECTED TO THE BASIN VIA A ROOF RAINWATER COLLECTION SYSTEM, SERIES OF INLETS, AND PIPING WHICH CAPTURE AND COLLECT RUNOFF FROM THE ROOF, PAVED AREAS, AND SOME YARD AREAS. THE INLETS ARE PROVIDED WITH A ONE FOOT SUMP BELOW THE INLET AND OUTLET PIPES SO THAT DEBRIS CAN BE COLLECTED PRIOR TO FLOWING INTO THE SUBSURFACE SYSTEM.

THE SYSTEM IS DESIGNED TO PROMOTE GROUNDWATER RECHARGE. A CONTROL STRUCTURE WITHIN THE SYSTEM DISCHARGES TO THE EXISTING CONVEYANCE SYSTEM IN EAGLE ROAD. AN ACCESS MANHOLE WITH A LADDER IS PROVIDED AT THE END OF THE SUBSURFACE PIPE SYSTEM TO FACILITATE ACCESS AND MAINTENANCE OF THE SYSTEM.

THE RESPONSIBILITY FOR THE CONTINUED OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES ON THIS LOT IS THAT OF THE PROPERTY OWNER. MAINTENANCE OF THE FACILITIES SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- THE OWNER, OCCUPANT, TENANT OR OTHER USER OF THE PROPERTY SHALL NOT IMPEDE THE FLOW OF WATER DRAINING TO THE STORMWATER MANAGEMENT BASIN.
- ALL ROOF DOWNSPOUTS, INLETS, CURB OPENINGS AND OTHER WATER WAYS SHALL BE KEPT OPEN AND OPERATION TO PASS THE FLOW OF WATER TO THE BASIN AS INTENDED.
- GRASS AND LANDSCAPING IN THE VICINITY OF ALL INLETS SHALL BE KEPT TRIM AND FREE FROM DEBRIS ACCUMULATION, AND DOWNSPOUTS AND INLETS SHALL BE KEPT FREE OF OBSTRUCTIONS THAT COULD BLOCK THE FREE FLOW OF WATER WITHIN THEM.
- INLET SUMPS SHALL BE CLEANED OF ACCUMULATED DEBRIS BEFORE ANY DEBRIS CAN BE DISCHARGED INTO THE SYSTEMS. INLET STRUCTURES SHALL BE INSPECTED AT LEAST MONTHLY TO INSURE THAT THEY ARE CLEAN AND REMAIN OPERATIONAL.
- SUBSURFACE PIPES SHALL BE INSPECTED ON AN ANNUAL BASIS TO INSURE THAT THEY ARE CLEAN AND OPERATIONAL. ANY ACCUMULATED DEBRIS AND SILT SHALL BE REMOVED IN A TIMELY MANNER. THE SUBSURFACE PIPES SHALL BE KEPT FREE OF OBSTRUCTIONS THAT COULD BLOCK THE FREE FLOW OF WATER WITHIN THEM.
- PROMPT REMEDIAL MEASURES ARE TO BE TAKEN IN THE EVENT OF ANY BLOCKAGE OR MALFUNCTION OF THE SYSTEM.

THE OWNER, OCCUPANT, TENANT OR OTHER USER OF THE PROPERTY SHALL NOT TAKE ANY MEASURES TO DISRUPT OR IN ANY WAY IMPAIR THE EFFECTIVENESS OF THE BASIN OR ITS CONTROLS. THIS INCLUDES ALTERATION OF GRADES IN ANY MANNER THAT WOULD DIVERT RUNOFF AWAY FROM INLET COLLECTION POINTS.



**GENERAL NOTES:**

- THIS PLAN REFERENCES AN ACTUAL FIELD SURVEY PERFORMED ON THE PREMISES ON AUGUST 19, 2015 BY MOMENEE SURVEY GROUP, INC., AND FURTHER SUPPLEMENTED DATA ON AUGUST 25, 2015 AND DEPICTS CONDITIONS ON THOSE DATES.
- THE EXISTENCE AND/OR LOCATION OF ALL SUBSURFACE UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED BY ALL CONTRACTORS PRIOR TO CONSTRUCTION.
- THE PA. ONE CALL NUMBER FOR THIS SITE IS 20152302982.
- THE VERTICAL DATUM SHOWN ON THIS PLAN IS PER NAVD 1988 OBTAINED VIA GPS NETWORK.
- THE REFERENCED SURVEY, AND THIS PLAN, WAS COMPLETED WITHOUT THE AVAILABILITY OF A CURRENT TITLE REPORT AND SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED IN A FULL AND ACCURATE TITLE REPORT.
- IN ACCORDANCE WITH FEMA PANEL NUMBER 4204500102F EFFECTIVE DATE NOVEMBER 18, 2009, THE PREMISES IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

**ZONING DISTRICT G-3 (COMMERCIAL DISTRICT)**

LOT AREA	6,250 SF MIN.
STREET FRONTAGE	50' MIN.
BUILDING COVERAGE	25% MAX.
FRONT YARD	20' MIN.
SIDE YARD	7' MIN.
REAR YARD	15' MIN.
BUILDING HEIGHT	45' MAX.
IMPERVIOUS COVERAGE	75% MAX.

FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF HAVERFORD TOWNSHIP, LATEST EDITION.

**109 W. EAGLE ROAD LOT DATA:**  
 GROSS LOT AREA = 11,074 SF OR 0.254 ACRES  
 NET LOT AREA = 11,074 SF OR 0.254 ACRES

**EXISTING IMPERVIOUS COVERAGE (109 W. EAGLE ROAD):**

RESIDENCE, PORCH	1,552 SF (14.01%)
PORTION OF GARAGE	820 SF
ASPHALT	5,023 SF
DECK, STEPS	48 SF
WALLS, MISC.	155 SF
TOTAL	7,598 SF (68.61%)

**115 W. EAGLE ROAD LOT DATA:**  
 GROSS LOT AREA = 12,000 SF OR 0.276 ACRES  
 NET LOT AREA = 12,000 SF OR 0.276 ACRES

**EXISTING IMPERVIOUS COVERAGE (115 W. EAGLE ROAD):**

RESIDENCE, PORCH, GARAGE	2,069 SF (17.24%)
ASPHALT	4,898 SF
CONCRETE	797 SF
WOOD RAMP	126 SF
WALLS, STEPS	74 SF
TOTAL	7,965 SF (66.38%)

**REFERENCE PLAN:**  
 BOUNDARY AND TOPOGRAPHIC SURVEY OF 109 & 115 W. EAGLE ROAD FOR D'ALONZO AND ASSOCIATES, ARCHITECTS, PREPARED BY MOMENEE SURVEY GROUP, INC., DATED SEPTEMBER 2, 2015, FILE NO: 15-243.

**SOURCE OF TITLE:**  
 DN GROUP, LLC  
 DEED BOOK 5675 PAGE 1037  
 109 W. EAGLE ROAD  
 HAVERTOWN, PA 19087  
 T.M.P. 22-26 UNIT 13  
 PARCEL I.D. 22-03-00947-00

**SOURCE OF TITLE:**  
 DN GROUP, LLC  
 DEED BOOK 5675 PAGE 1037  
 115 W. EAGLE ROAD  
 HAVERTOWN, PA 19087  
 T.M.P. 22-26 UNIT 14  
 PARCEL I.D. 22-03-00948-00

**CONSOLIDATED LOT DATA:**  
 GROSS LOT AREA = 23,073 SF OR 0.530 ACRES  
 NET LOT AREA = 23,073 SF OR 0.530 ACRES

**PROPOSED IMPERVIOUS COVERAGE:**

BUILDING	4,394 SF (19.0%)
PAVING AND CURBS	12,085 SF
WALKS, STEPS, ETC.	794 SF
TOTAL	17,273 SF (74.9%)

MAX ALLOWABLE 17,305 SF (75.0%)

REV.	DATE	BY	COMMENTS
1	07/20/16	PER. TWP. ENG.	
2	12/15/15	PER. TWP. ENG.	

I, KEVIN R. MOMENEE, P.E., ON THIS DATE HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL STANDARDS AND CRITERIA OF THE HAVERFORD TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

KEVIN R. MOMENEE, P.E.

I, \_\_\_\_\_, ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY HAVERFORD TOWNSHIP.

**LINE/TYPE LEGEND:**

---	PROPERTY LINE
- - -	R/W LINE
---	EXISTING BUILDING SETBACK
X	EXISTING OVERHEAD ELECTRIC
E	EXISTING ELECTRIC LINE
G	EXISTING GAS LINE
W	EXISTING WATER LINE
SS	EXISTING SANITARY LINE
ST	EXISTING STORM PIPES
- - -	EXISTING MAJOR CONTOUR
- - -	EXISTING MINOR CONTOUR
- - -	PROPOSED STORMPIPE
- - -	PROPOSED SANITARY LINE
- - -	PROPOSED WATER LINE
- - -	PROPOSED CONTOUR
⊗	TREE TO BE REMOVED
⊙	PK NAIL FOUND
⊕	SANITARY MANHOLE
⊖	ELECTRIC MANHOLE
⊛	LIGHT FIXTURE
⊜	WATER VALVE
⊝	SIGN
⊞	PERC TEST LOCATION
X 220.75	PROPOSED SPOT ELEVATION
X BC 221.00	TOP/BOT OF CURB

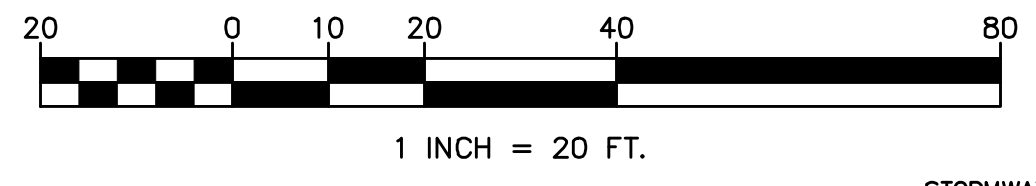
ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

**SOILS INFORMATION**

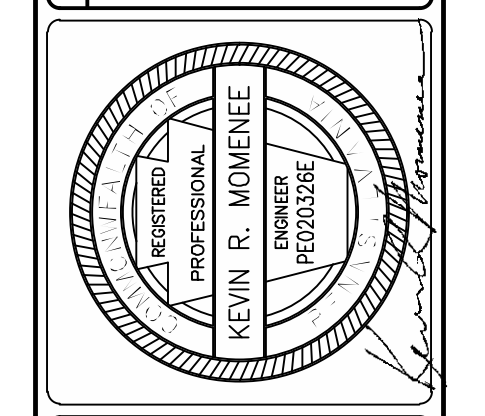
SYMBOL	NAME	%SLOPE	DEPTH TO SH WATER	DEPTH TO BEDROCK	HYDROLOGIC GROUP
Mc	MADE LAND SILT AND CLAY MATERIALS		6.6+	6.6+	C



MOHAWK ENGINEERING & ASSOCIATES, INC. 1000 W. MARKET ST. SUITE 200, PHILADELPHIA, PA 19102  
 TEL: (215) 581-1100 FAX: (215) 581-1101  
 WWW.MOHAWKENGINEERING.COM

Serial Number: 2015-230-2982

CALL BEFORE YOU DIG!  
 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



**MOMENEE & ASSOCIATES, INC.**  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 924 COUNTY LINE ROAD, BRN MNR, PA 19010  
 PHONE: (610) 527-3030 FAX: (610) 527-9008

**GRADING & UTILITY PLAN**

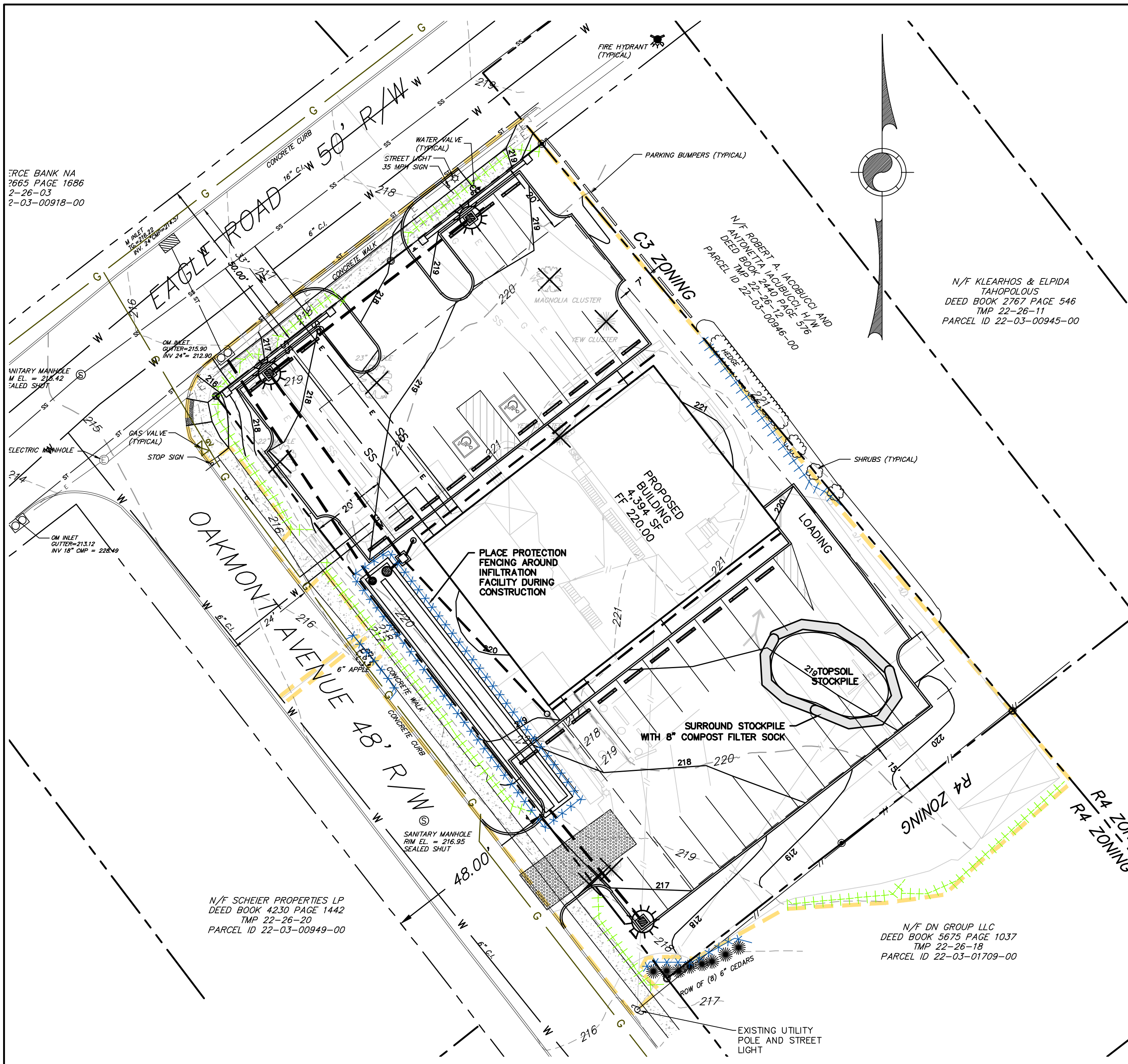
PRELIMINARY / FINAL LAND DEVELOPMENT  
 109 & 115 W. EAGLE ROAD  
 HAVERFORD TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

OWNER / APPLICANT: DN GROUP, LLC  
 109 W. EAGLE ROAD, HAVERTOWN, PA 19083

ONE-CALL: 20152302982  
 DRAWN BY: BDM  
 CHECKED BY: KRM

**MA**

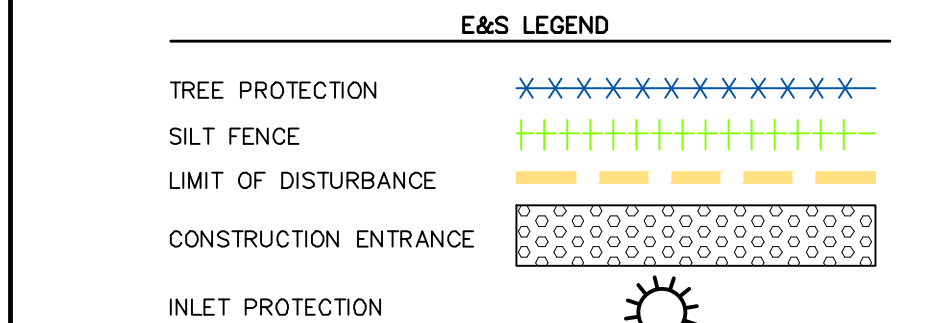
DATE: OCTOBER 29, 2015  
 SHEET NO. 3 OF 8  
 SCALE: 1" = 20'  
 FILE NO.: 15-243



**EROSION AND SEDIMENTATION CONTROL PLAN**  
 DISTURBED AREA 28,175 SF± (0.65 AC)

**NOTE:**  
 A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IS TO BE AVAILABLE ON SITE AT ALL TIMES.

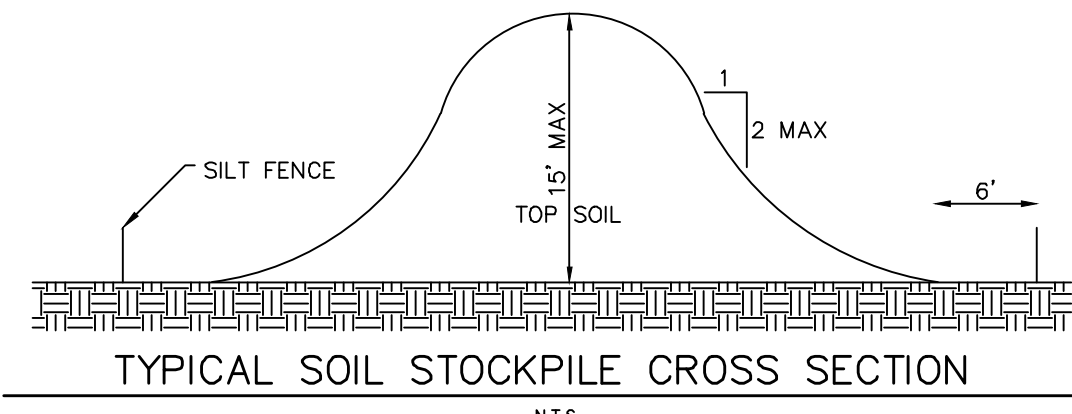
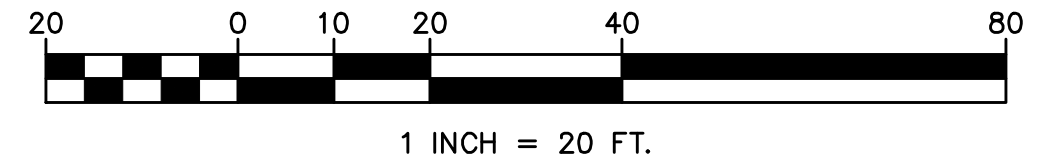
SOILS INFORMATION				
SYMBOL	NAME	KSLOPE	DEPTH TO WATER	HYDROLOGIC GROUP
Mc	MADE LAND SILT AND CLAY MATERIALS	6.6+	6.6+	C



ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.



**NOTE:** SILT FENCE MUST COMPLETELY ENCLOSE STOCKPILES

**TOP SOIL PROTECTION:**  
 TOPSOIL SHALL NOT BE REMOVED FROM THE DEVELOPMENT SITE OR USED AS FILL. TOPSOIL SHALL BE REMOVED FROM THE AREAS OF CONSTRUCTION AND STORED SEPARATELY. THE TOPSOIL SHALL BE STABILIZED TO MINIMIZE EROSION DURING STORAGE. UPON COMPLETION OF CONSTRUCTION, THE TOPSOIL SHALL BE UNIFORMLY REDISTRIBUTED ON THE SITE.

- PLACING TOPSOIL OR TOPSOIL MIXTURE**  
**PREPARATION OF AREAS TO BE TOPSOILED**  
 GRADE THE AREAS TO BE COVERED BY TOPSOIL. USING ACCEPTABLE METHODS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE PLACING THE TOPSOIL. REMOVE STONES AND OTHER FOREIGN MATERIAL 2 INCHES OR LARGER IN DIMENSION. REMOVE OVERDEPTH SATISFACTORILY. DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.
- PLACING AND SPREADING TOPSOIL**  
 PLACE TOPSOIL ON THE PREPARED AREAS AND, UNLESS OTHERWISE INDICATED, SPREAD AND COMPACT TO A 4-INCH UNIFORM DEPTH ± 1 1/2 INCHES. COMPACT WITH A ROLLER WEIGHING NOT OVER 120 POUNDS PER FOOT WIDTH OF ROLLER OR BY OTHER ACCEPTABLE METHODS, AS DIRECTED. REMOVE OVERDEPTH TOPSOIL, UNLESS OTHERWISE AGREED UPON IN WRITING. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.
- SEEDING SPECIFICATIONS:**  
 WHERE DENuded AREAS ARE DESIRED TO BE LAWN:  
 1. PERFORM ALL CULTURAL OPERATION AT RIGHT ANGLES TO THE SLOPE.  
 2. APPLY LIME ACCORDING TO TEST OR AT THE RATE OF 25 LBS. OF GROUND LIMESTONE PER 1,000 SQ. FT.  
 3. APPLY FERTILIZER ACCORDING TO SOIL TEST OR WORK IN DEEPLY 20 LBS. OF 10-20-20 OR EQUIVALENT PER 1,000 SQ. FT. AND AT THE TIME OF SEEDING, WORK INTO THE SURFACE 10 LBS. OF 10-10-10 OR EQUIVALENT PER 1,000 SQ. FT. OR OTHER APPROVED MIXTURE.  
 4. SMOOTH AND FIRM SEEDS PRIOR TO SEEDING.  
 5. SEED USING A MIXTURE OF 60% PENNSTAR KENTUCKY BLUEGRASS, 30% PENNLAWN RED FESCUE AND 10% PENNFINE PERENNIAL RYEGRASS AT THE RATE OF FIVE (5) POUNDS PER 1,000 SQ. FT. OR OTHER APPROVED MIXTURE.  
 6. COVER GRASS AND LEGUME SEEDS WITH 1/4" OF SOIL WITH SOIL EQUIPMENT, MULCH, USING 2 BALES/1,000 SQ. FT.  
 7. MOW AS REQUIRED.  
 8. WHERE SLOPES EXCEED 25% JUTE NETTING OR OTHER APPROVED (EQUAL) SLOPE STABILIZATION MEASURES SHALL BE UTILIZED. IN ADDITION, THE SEEDING SPECIFICATIONS FOR STEEP SLOPES SHALL BE INCREASED TO INCLUDE 3 LBS/1,000 SQ. FT. OF ANNUAL RYEGRASS FOR RAPID VEGETAL ESTABLISHMENT.

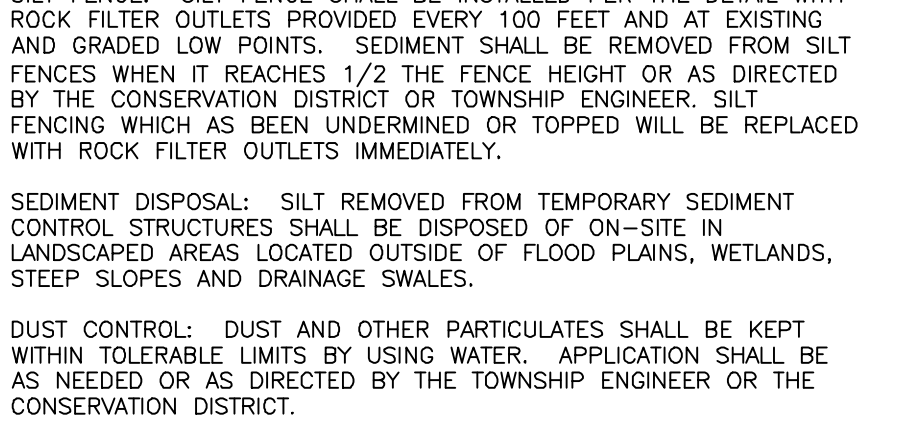
**MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES**  
 STABILIZED CONSTRUCTION ENTRANCE: THE STABILIZED CONSTRUCTION ENTRANCES ARE TO BE CONSTRUCTED PER THE DETAIL. THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED SO THAT THE SCRUBBING ACTIVITY DOES NOT BECOME INEFFECTIVE. ANY BUILDUP OF MUD OR SOIL ON THE STREET SHALL BE CLEANED AT THE END OF EACH WORKING DAY.

**INLET SILT TRAPS:** INLET SILT TRAPS SHALL BE CONSTRUCTED PER THE DETAIL AND CLEANED AFTER EACH STORM EVENT OR AS DIRECTED BY THE CONSERVATION DISTRICT OR TOWNSHIP ENGINEER.

**SILT FENCE:** SILT FENCE SHALL BE INSTALLED PER THE DETAIL WITH ROCK FILTER OUTLETS PROVIDED EVERY 100 FEET AND AT EXISTING AND GRADED LOW POINTS. SEDIMENT SHALL BE REMOVED FROM SILT FENCES WHEN IT REACHES 1/2 THE FENCE HEIGHT OR AS DIRECTED BY THE CONSERVATION DISTRICT OR TOWNSHIP ENGINEER. SILT FENCING WHICH HAS BEEN UNDERMINED OR TOPPED WILL BE REPLACED WITH ROCK FILTER OUTLETS IMMEDIATELY.

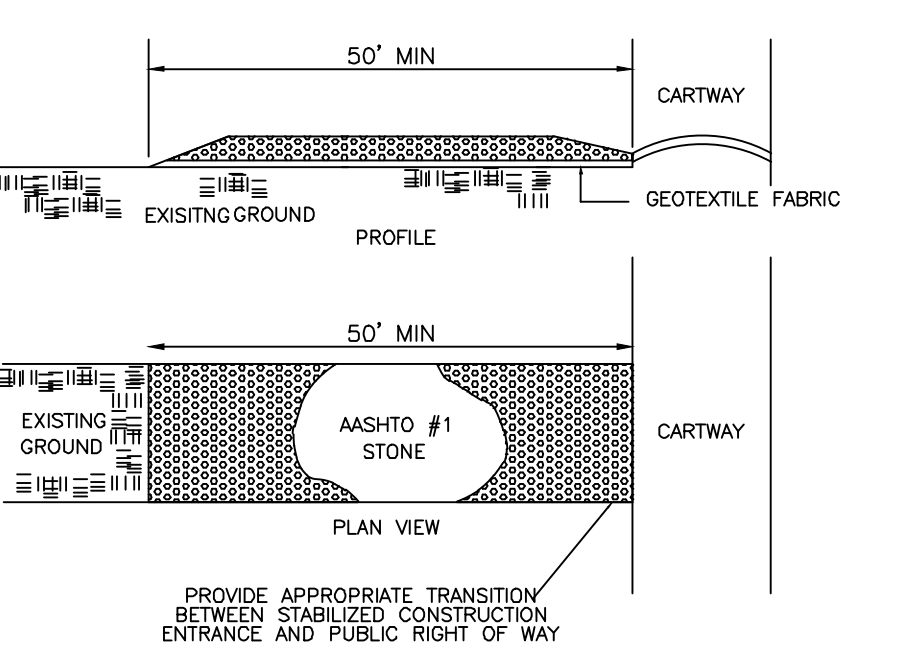
**SEDIMENT DISPOSAL:** SILT REMOVED FROM TEMPORARY SEDIMENT CONTROL STRUCTURES SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS LOCATED OUTSIDE OF FLOOD PLAINS, WETLANDS, STEEP SLOPES AND DRAINAGE SWALES.

**DUST CONTROL:** DUST AND OTHER PARTICULATES SHALL BE KEPT WITHIN TOLERABLE LIMITS BY USING WATER. APPLICATION SHALL BE AS NEEDED OR AS DIRECTED BY THE TOWNSHIP ENGINEER OR THE CONSERVATION DISTRICT.

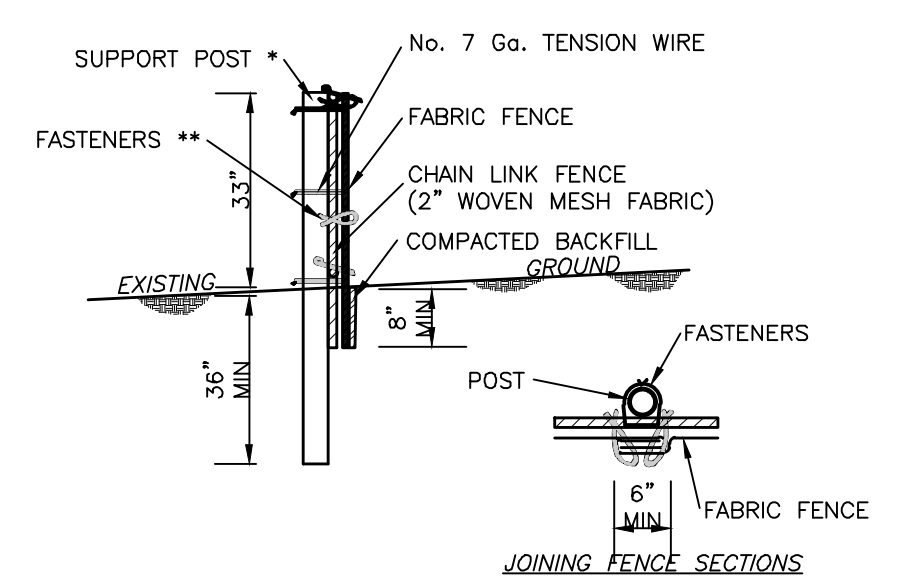
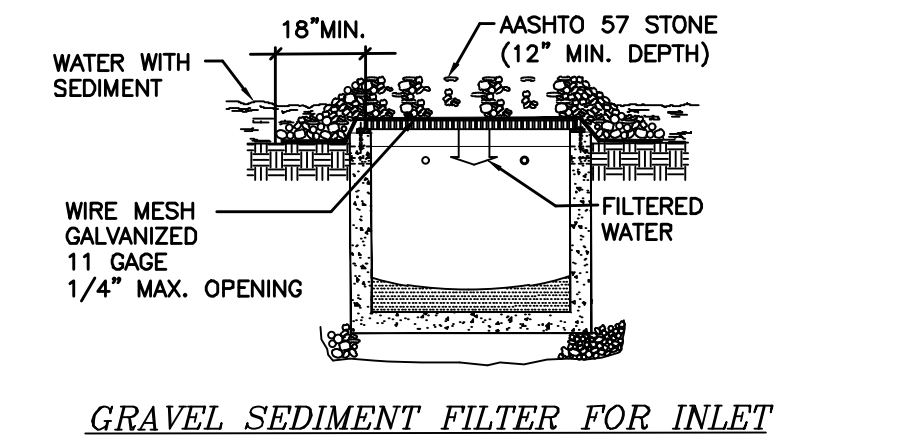


**HYDROSEEDING SPECIFICATIONS**  
 DEFINITION: STABILIZING SEDIMENT PRODUCING AND SEVERELY ERODED AREAS BY ESTABLISHING PERMANENT GRASS COVER.  
 PURPOSE: TO PROVIDE PERMANENT VEGETATIVE COVER TO CONTROL RAPID RUN-OFF AND EROSION.  
 PROCEDURE: SURFACE TO BE HYDRO-SEEDED SHALL BE CLEANED OF ALL DEBRIS AND OTHER MATTER HARMFUL TO UNIFORM GERMINATION. A WATER-SLURRY MIXTURE COMPOSED OF THE BELOW LISTED MATERIALS SHALL BE SPRAYED UNIFORMLY OVER THE AREAS TO BE HYDRO-SEEDED.  
 MATERIALS: PERMANENT SEEDING APPLICATION RATE

NAME	DESCRIPTION	(PER ACRE)
1)	60% PENNSTAR KENTUCKY BLUEGRASS	260 LBS.
	30% PENNLAWN RED RESCUE	
	10% PENNFINE PERENNIAL RYEGRASS	
2)	COMMERCIAL FERTILIZER	1,000 LBS.
	10-20-20	
3)	LIME	2 TONS
	GROUND AGRICULTURAL LIMESTONE (MAY BE APPLIED SEPARATELY)	
4)	MULCH	3 TONS
	HAY OR STRAW	
5)	SOIL STABILIZER	20 LBS.
	TERRA TACK OR EQUIVALENT	
TEMPORARY		
1)	SEED	40 LBS.
	ANNUAL RYEGRASS (95% PURE)	
2)	COMMERCIAL FERTILIZER	1,000 LBS.
	5-5-5	
3)	LIME	1 TON
	GROUND AGRICULTURAL LIMESTONE (MAY BE APPLIED SEPARATELY)	
4)	MULCH	3 TONS
	HAY OR STRAW	



- STABILIZED CONSTRUCTION ENTRANCE**  
 N.T.S.
- THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
  - WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



**GRAVEL SEDIMENT FILTER FOR INLET**  
 N.T.S.

**SUPER FILTER FABRIC FENCE**  
 N.T.S.

\* Posts spaced @ 10' max. Use 2.5" dia. galvanized or aluminum posts.  
 \*\* Chain Link To Post Fasteners spaced @ 14" max. Use No. 6 Ga. aluminum wire or No. 9 steel galvanized preformed clips. Chain Link To Tension Wire Fasteners spaced @ 6" max. Use No. 10 Ga. galvanized steel wire. Fabric To Chain Link Fasteners spaced @ 24" max. C. to C.

Filter Fabric Fence must be placed at level grade. Both ends of the barrier must be extended at least 8 feet up slope at 45 degrees to the main barrier alignment.

Sediment must be removed when accumulations reach 1/2 the above ground height of the fence.

\*EXCEEDS MAXIMUM SLOPE LENGTH. ROCK FILTER OUTLET SHALL BE INSTALLED AND DISTURBED AREA SHALL BE STABILIZED IMMEDIATELY AS SPECIFIED IN THE CONSTRUCTION TIMING AND SEQUENCE.

- CONSTRUCTION TIMING AND SEQUENCE**  
 NOTE: THE TOWNSHIP ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF EARTHMOVING ACTIVITIES.
- NOTIFY THE TOWNSHIP THAT CONSTRUCTION IS GOING TO COMMENCE. ANTICIPATED DATE: APRIL 2016.
  - INSTALL THE STABILIZED CONSTRUCTION ENTRANCE. THIS ENTRANCE MUST BE UTILIZED BY ALL CONSTRUCTION VEHICLES ENTERING/EXITING THE SITE.
  - INSTALL SUPER SILT FENCE AS SHOWN ON PLAN AND ON DOWNHILL SIDE OF ANY EXCAVATION OR ANTICIPATED DISTURBANCE. INSTALL TREE PROTECTION AS INDICATED ON PLAN. INSTALL PROTECTION FENCING AROUND PROPOSED INFILTRATION SYSTEM AS SHOWN.
  - PRIOR TO EARTH DISTURBANCE, NOTIFY THE TOWNSHIP ENGINEER THAT CONSTRUCTION IS GOING TO BEGIN.
  - CLEAR AND GRUB THE AREAS AS NECESSARY WITHIN THE LIMITS OF DISTURBANCE OF EXISTING VEGETATION. STRIP TOPSOIL AND STOCKPILE SUITABLE MATERIAL FOR FUTURE USE. UNSUITABLE MATERIALS SHALL BE DISPOSED OF PROPERLY. SURROUND STOCKPILE WITH SILT FENCE. TEMPORARILY SEED ALL STOCKPILED TOPSOIL.
  - ONCE THE TEMPORARY CONTROLS ARE IN PLACE AND FUNCTIONING, BEGIN DEMOLITION AND REMOVAL OF THE EXISTING BUILDINGS, PAVING, AND EXISTING FEATURES DESIGNATED FOR REMOVAL AS SHOWN. REMOVE ANY TREES DESIGNATED FOR REMOVAL. ALL CONSTRUCTION MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER.
  - ON THE DEMOLITION AND REMOVAL OF THE IMPERVIOUS FEATURES ON THE ADJACENT PROPERTY, IMMEDIATELY STABILIZE AND REMOVE THE SILT FENCE FROM THE ADJACENT PROPERTY.
  - EXCAVATE FOR AND CONSTRUCT FOUNDATIONS FOR THE PROPOSED BUILDING. UPON COMPLETION OF FOUNDATION WALLS, BACKFILL FOUNDATION AND ROUGH GRADE THE SITE. ANY GRADED OR DISTURBED AREA MUST BE TEMPORARILY SEEDED IF NO FURTHER EARTH MOVING IS ANTICIPATED IMMEDIATELY.
  - CONTINUE WITH CONSTRUCTION OF BUILDINGS AND INSTALL SITE UTILITIES AS NECESSARY.
  - INSTALL THE ROOF RAINWATER COLLECTION SYSTEM, INLETS, AND THE ASSOCIATED CONVEYANCE PIPING. INLETS TO BE SEALED TO PREVENT RUNOFF FROM ENTERING INLETS DURING CONSTRUCTION.
  - BEGIN TO INSTALL STONE BASE COURSE FOR NEW PAVED AREAS WITH THE EXCEPTION FOR THE AREAS AROUND THE PROPOSED INFILTRATION FACILITY.
  - UPON APPROVAL FROM THE TOWNSHIP ENGINEER, INSTALL THE PROPOSED STORMWATER MANAGEMENT SYSTEM. CONNECT INLETS TO THE SYSTEM. CONNECT THE SYSTEM TO THE EXISTING CONVEYANCE SYSTEM IN EAGLE ROAD. INLETS SHALL REMAIN SEALED UNTIL THE ENTIRE CONTRIBUTORY AREA TO THE INLETS ARE STABILIZED.
  - PLACE STONE BASE FOR THE REMAINDER OF THE NEW PAVED AREAS.
  - INSPECT SEDIMENT BARRIERS FREQUENTLY, ESPECIALLY AFTER HEAVY STORMS. REPLACE AND REPAIR SEDIMENT BARRIERS AS NECESSARY.
  - UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADE, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY.
  - INSTALL THE FINAL BINDER AND WEARING COURSES FOR THE NEW PAVED AREAS.
  - FINAL GRADE DENuded AREAS, SPREAD STOCKPILED TOPSOIL AND SEED GRADED AREAS TO REESTABLISH PERMANENT VEGETATION. STABILIZE SLOPES IN EXCESS OF 4:1 WITH SOD OR EROSION CONTROL NETTING AND MULCH.
  - REMOVE EXCAVATED MATERIALS NOT REQUIRED FOR FINAL CONSTRUCTION FROM SITE AND DISPOSE OF THEM IN AN APPROVED MANNER.
  - PLANT REQUIRED TREES AND INSTALL FINAL LANDSCAPE FEATURES AND HARDSCAPE MATERIALS.
  - UPON PERMANENT STABILIZATION, REMOVE THE SEDIMENT BARRIERS. IMMEDIATELY SEED ANY DENuded AREAS DUE TO THEIR REMOVAL.
  - CONSTRUCTION COMPLETED. ANTICIPATED DATE: APRIL 2017.

- NOTES**
- NEWLY GRADED SLOPES TWENTY FIVE PERCENT (25% OR GREATER) SHALL BE SODDED OR STABILIZED WITH EROSION CONTROL NETTING.
  - GEOTEXTILE FABRIC SHALL BE CLASS 1. GEOTEXTILE FABRIC IN ACCORDANCE WITH PENNDOT SPECIFICATION FROM 408. THE TYPE AND/OR THICKNESS SHALL BE DUPONT TYPAR #3401, AMCO PROPEX #4545 OR APPROVED EQUAL OR AS OTHERWISE INDICATED ON THE PLAN.
  - TO ALL AREA WHICH REMAIN DISTURBED FOR MORE THAN 20 DAYS AND WILL BE SUBJECT TO THE ACTION OF EARTHMOVING AND OTHER EQUIPMENT, APPLY A MULCH (WOODCHIP-20 TONS PER ACRE; HAY OR STRAW-3 TONS PER ACRE). ALL OTHER DISTURBED AREAS REMAINING OPEN FOR MORE THAN 20 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED.
  - SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF/AND OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOODCHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
  - THE CONTRACTOR SHALL, BY SCHEDULING THE CONSTRUCTION, UTILIZE NEW PLANTINGS AND PROPERLY INSTALL EROSION CONTROL FENCING, HAY BALES AND OTHER EROSION CONTROL MEASURES TO MINIMIZE EROSION DAMAGE.
  - ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 20 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH. DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
  - FORDING OF LIVE STREAMS OR TRAVEL IN THEIR BEDS BY MECHANIZED EQUIPMENT IS NOT PERMITTED; BRIDGES OR CULVERTS SHALL BE USED WHEN CROSSING STREAMS IS NECESSARY.
  - A ROUTINE "END-OF-DAY-CHECK" SHALL BE MADE DURING CONSTRUCTION TO MAKE SURE THAT ALL CONTROL MEASURES ARE WORKING PROPERLY. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL DESIGN, IMPLEMENT, AND MAINTAIN CONTROL MEASURES WHICH PREVENT ACCELERATED EROSION AND SEDIMENTATION. THERE SHALL BE NO ADVERSE DISCHARGE OF THE SEDIMENT OR OTHER SOLID MATERIALS FROM THE SITE AS THE RESULT OF STORMWATER RUNOFF.
  - TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED ONLY AFTER THE CONSTRUCTION AREA AND CONTAINED SILT IS STABILIZED AND THE LAWN AREA ESTABLISHED.

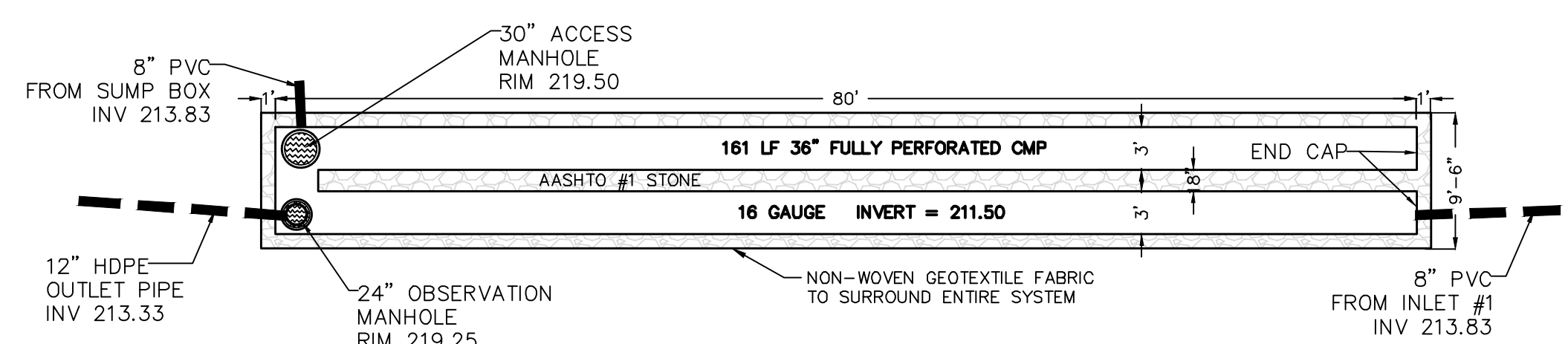
Serial Number: 2015-230-2982

CALL BEFORE YOU DIG!  
 5 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE STOP CALL  
 Pennsylvania One Call System, Inc.  
 1-800-242-1776

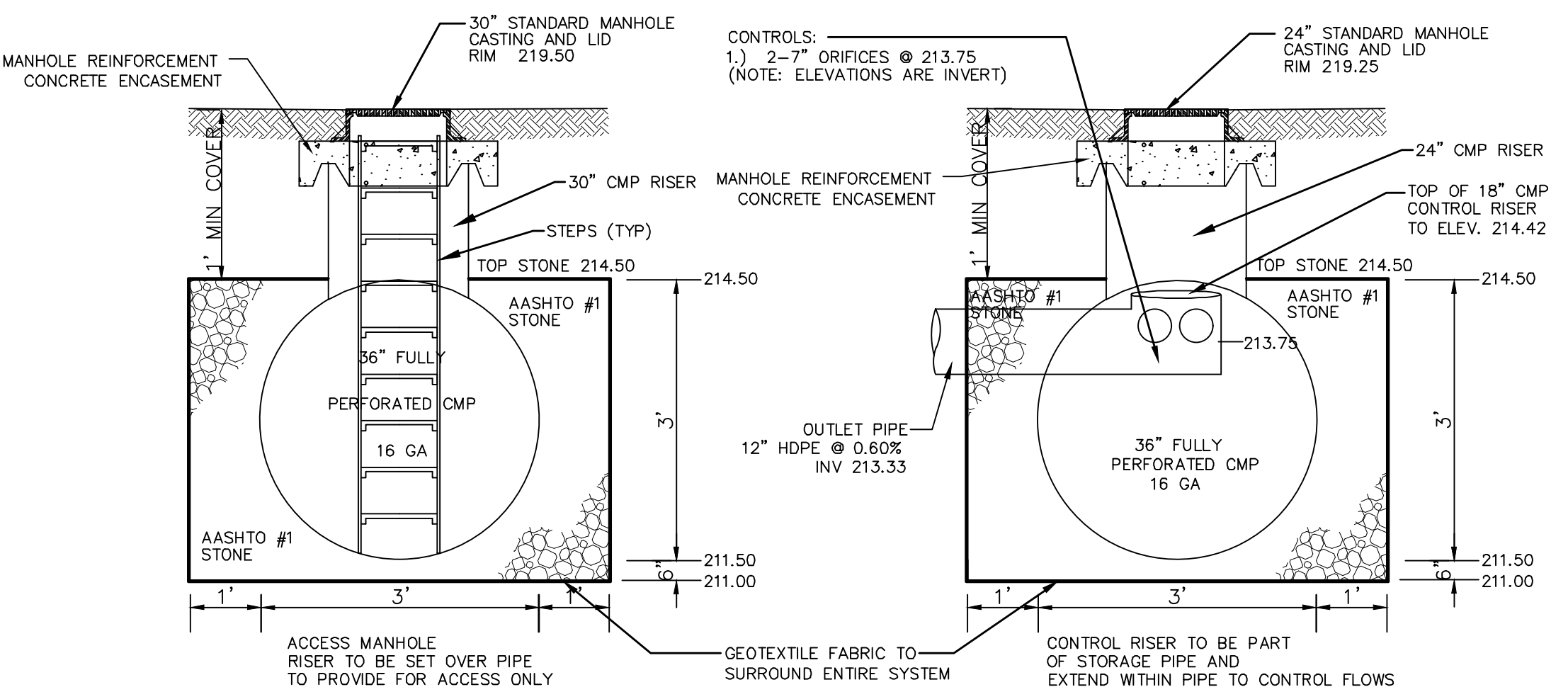
**MOMENEE & ASSOCIATES, INC.**  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 924 COUNTY LINE ROAD, BRN MAWR, PA 19010  
 PHONE: (610) 527-3030 FAX: (610) 527-9008

**EROSION & SEDIMENTATION CONTROL PLAN**  
 PRELIMINARY / FINAL LAND DEVELOPMENT  
 109 & 115 W. EAGLE ROAD  
 HAVERTOWN TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA  
 OWNER / APPLICANT: BDM GROUP, LLC  
 1000 BAZEL ROAD  
 HAVERTOWN, PA 19083  
 ONE-CALL: 20152302982  
 DRAWN BY: BDM  
 CHECKED BY: KRM

DATE: OCTOBER 29, 2015  
 SHEET NO. 4  
 OF 8  
 SCALE: 1" = 20'  
 FILE NO.: 15-243



**STORMWATER MANAGEMENT SYSTEM**  
161 LF 36" FULLY PERFORATED CMP  
TOP OF SYSTEM 214.50  
BOTTOM OF PIPE 211.50  
BOTTOM OF SYSTEM 211.00



**STORMWATER MANAGEMENT SYSTEM**  
NTS

**INFILTRATION BMP NOTES:**

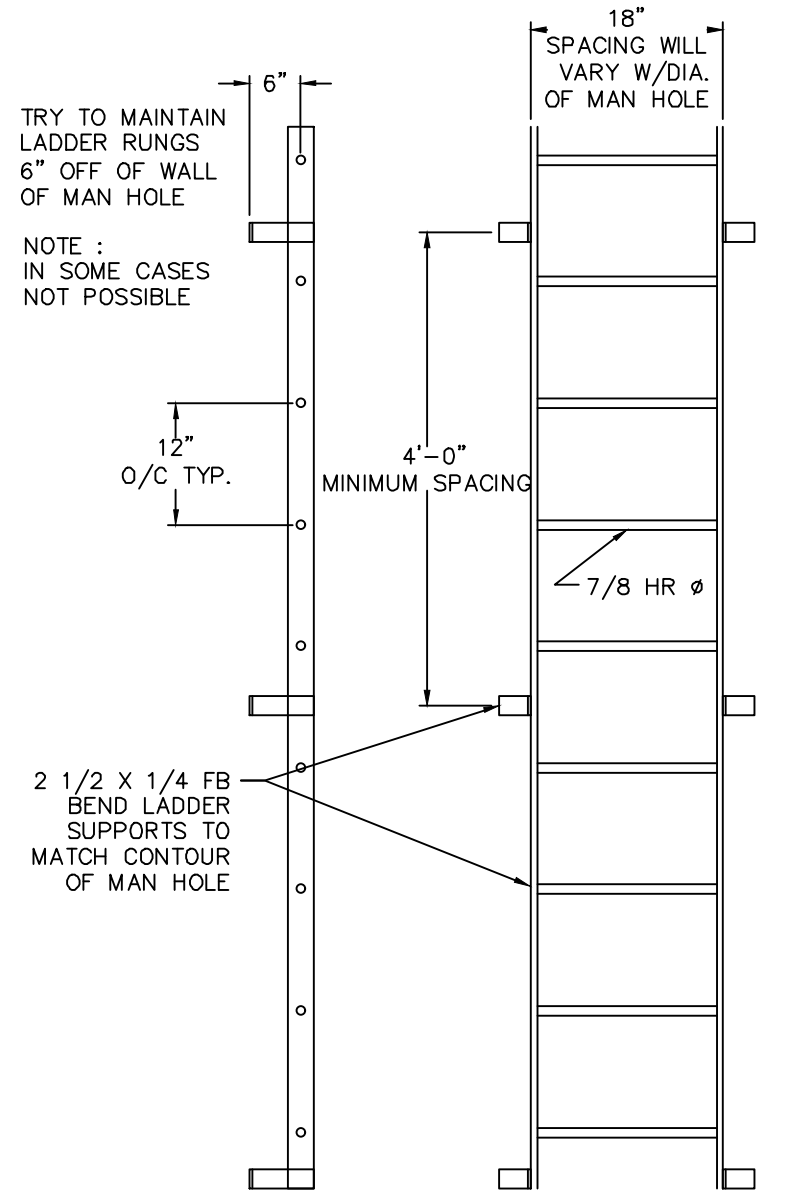
- 1) INFILTRATION BMP FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION SEEPAGE BEDS, APPROPRIATE MEASURES (i.e. CLEANING THE SOIL/SEDIMENT FROM FABRIC, STONE, BED ETC. AND OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
- 2) ALL STONE FOR THE CONSTRUCTION OF THE INFILTRATION BMP SHOULD BE UNIFORMLY GRADED AND CLEAN WASHED AGGREGATE.
- 3) THE BOTTOM OF ALL INFILTRATION BMPs SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE.
- 4) INFLOW AND OUTFLOW POINTS INTO THE INDIVIDUAL ON-LOT SYSTEMS SHOULD BE KEPT CLEAR OF LEAVES AND OTHER DEBRIS. ANY LEAVES AND DEBRIS WILL NEGATIVELY IMPACT THE PERFORMANCE OF THESE SYSTEMS. ALL DOWNSPOUTS AND OVERFLOW PIPES SHOULD BE KEPT IN GOOD WORKING ORDER.
- 5) ALL INFILTRATION BMPs SHALL BE LOCATED A MINIMUM OF 10' FROM A BASEMENT WALL.

**NOTES:**

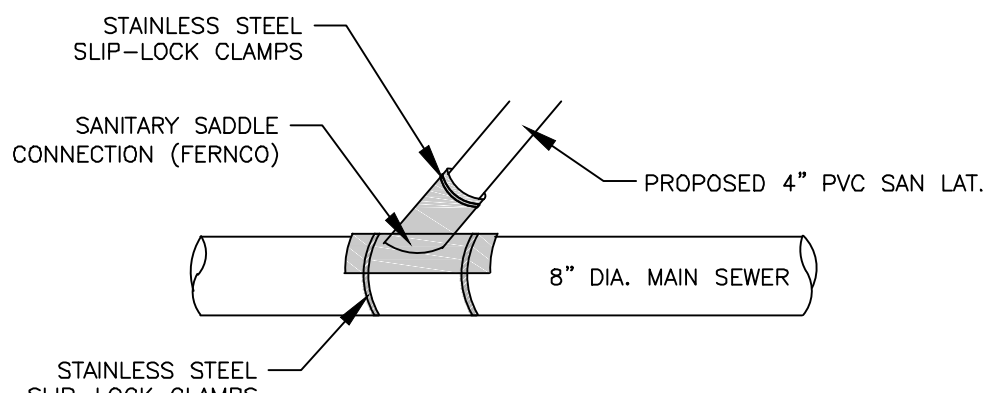
- 1) ALL CMP TO BE ALUMINUM OR ALUMINIZED STEEL.
- 2) PERFORATIONS FOR 48" CMP SHALL SATISFY AASHTO DESIGNATION M36/M38M-90 FOR CLASS 2 PERFORATIONS. THE PERFORATIONS SHALL BE CIRCULAR HOLES WITH NOMINAL DIAMETERS OF 5/16 TO 3/8 INCH. THE PERFORATIONS SHALL BE UNIFORMLY SPACED AROUND THE FULL PERIPHERY OF THE PIPE. THE PERFORATIONS SHALL PROVIDE AN OPENING AREA OF NOT LESS THAN 3.3 SQ. IN. PER SQ. FT. OF PIPE SURFACE BASED ON NOMINAL DIAMETER AND LENGTH OF PIPE. 30 PERFORATIONS, 3/8 INCH DIAMETER, PER SQUARE FOOT OR 565 PERFORATIONS PER LINEAR FOOT SATISFIES THIS REQUIREMENT.

**CONSTRUCTION SPECIFICATIONS STORMWATER DETENTION SYSTEMS**

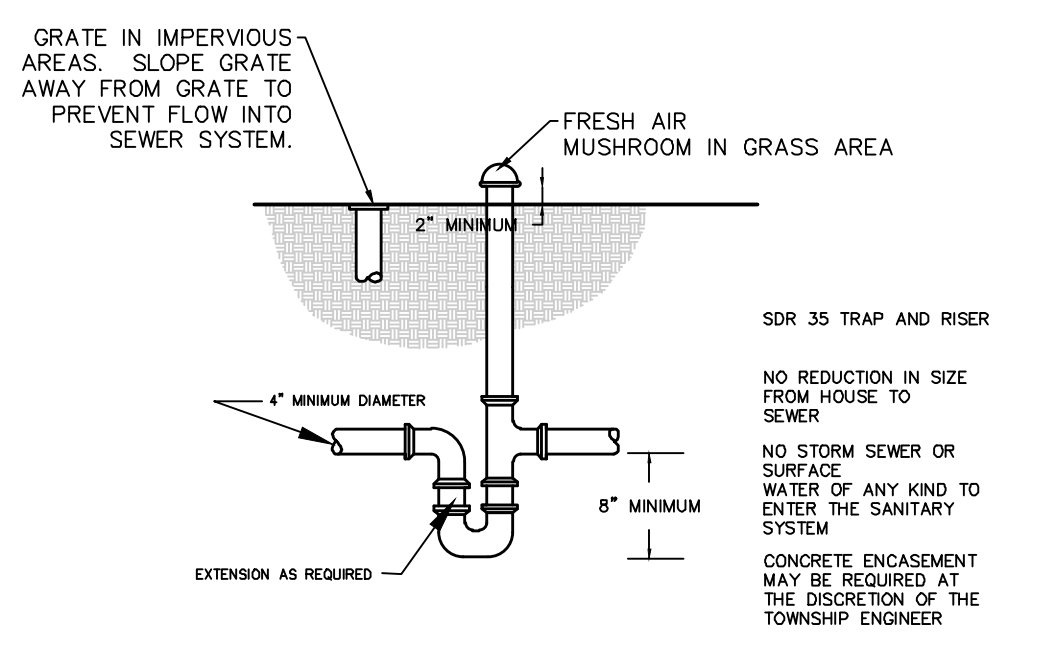
1. ALTER AND REFINE THE GRADES AS NECESSARY TO BRING SUBGRADE TO REQUIRED GRADES AND SECTIONS AS SHOWN IN THE DRAWINGS.
2. THE TYPE OF EQUIPMENT USED IN SUBGRADE PREPARATION CONSTRUCTION SHALL NOT CAUSE UNIFORM SUBGRADE COMPACTION. TRAFFIC OVER SUBGRADE SHALL BE KEPT AT A MINIMUM.
3. INSTALL POLYPROPYLENE GEOTEXTILE FABRIC (i.e., DUPONT TYPAR #3401, AMOCO PROPEX #545, OR APPROVED EQUAL) ON BOTTOM OF BED AREAS AND TACK UP SIDES OF EXCAVATION. WHERE EDGES OF ROLLS OVERLAP, THEY SHALL DO SO BY AT LEAST TWO FEET. ADEQUATE FABRIC SHALL BE LEFT ON THE ROLLS (NOT CUT FROM SIDE INSTALLATION) TO FACILITATE OVERTOPPING THE STONE AT COMPLETION OF BED AREA.
4. ALL STONE USED SHALL BE CLEAN, WASHED, CRUSHED STONE AGGREGATE MEETING PENNDOT/AASHTO #1 SPECIFICATIONS.
5. STONE BASE COURSE SHALL BE LAID OVER A DRY SUBGRADE, TO A DEPTH SHOWN IN DRAWINGS, IN LIFTS TO LAY NATURALLY COMPACTED. DO NOT ROLL OR COMPACT THE STONE BASE COURSE. KEEP THE BASE COURSE CLEAN FROM DEBRIS, CLAY AND ERODING SOIL.
6. COVER STONE BED WITH REMAINING FABRIC.
7. STONE BED TO BE TOTALLY ENCLOSED IN THE GEOTEXTILE FABRIC.
8. ALL CMP TO BE ALUMINIZED STEEL PIPE.
9. STORMWATER RISER ACCESS LADDER WILL BE USED.



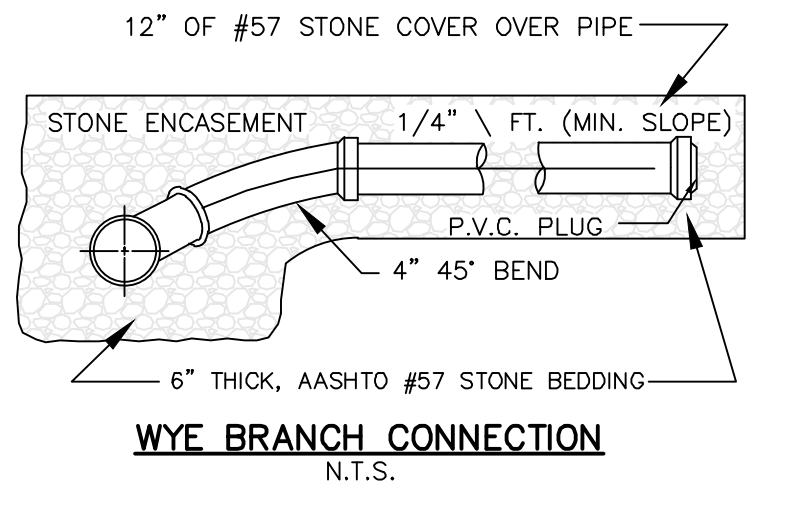
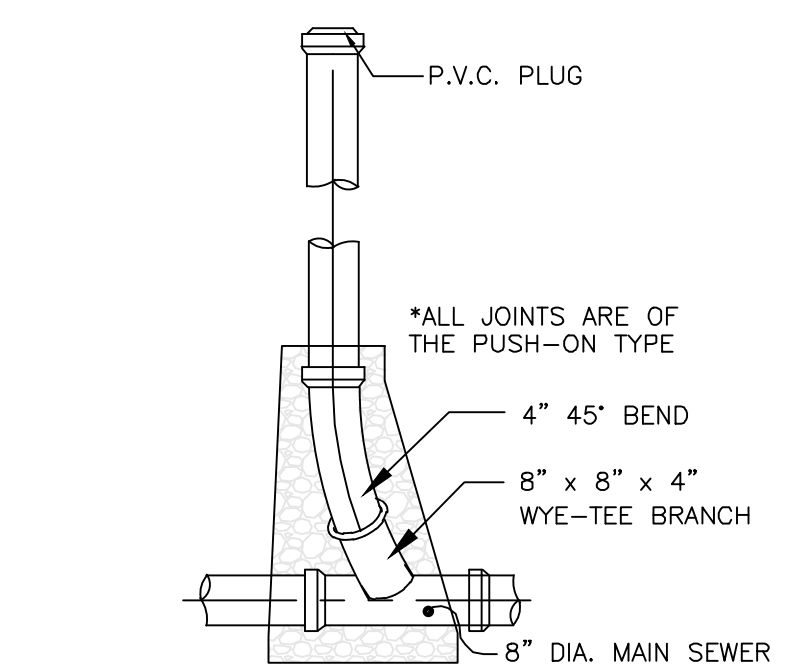
**STORMWATER RISER ACCESS LADDER**  
N.T.S.



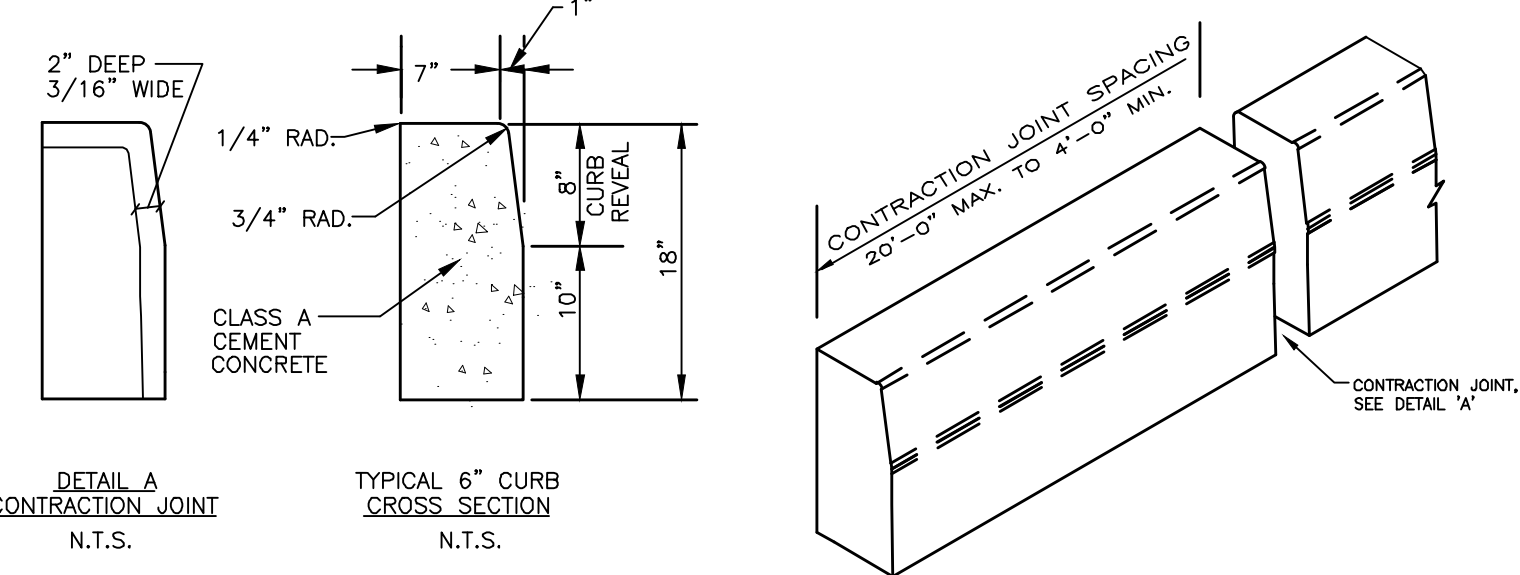
**SADDLE CONNECTION DETAIL**  
N.T.S.



**SANITARY SEWER LATERAL TRAP**

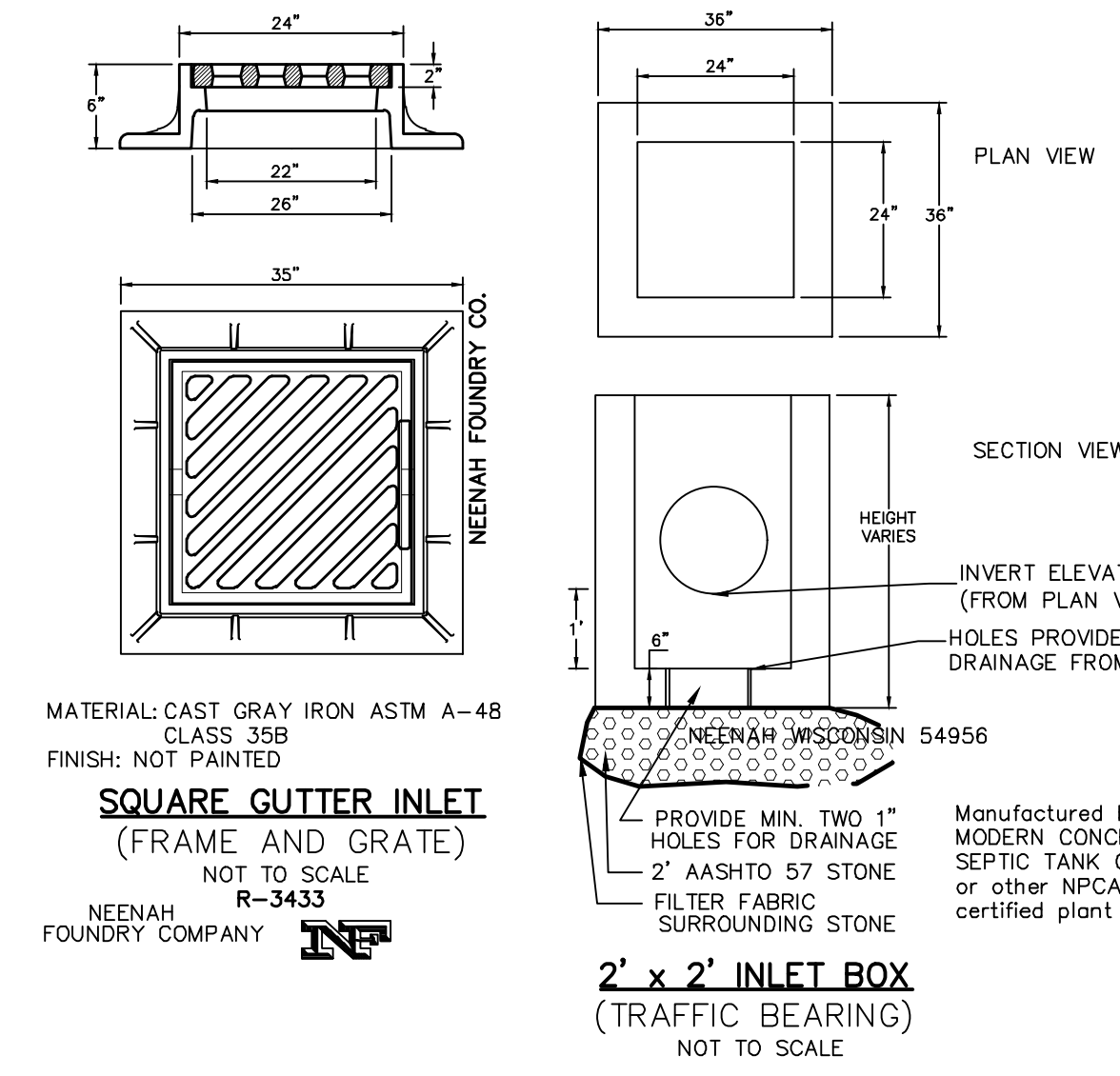
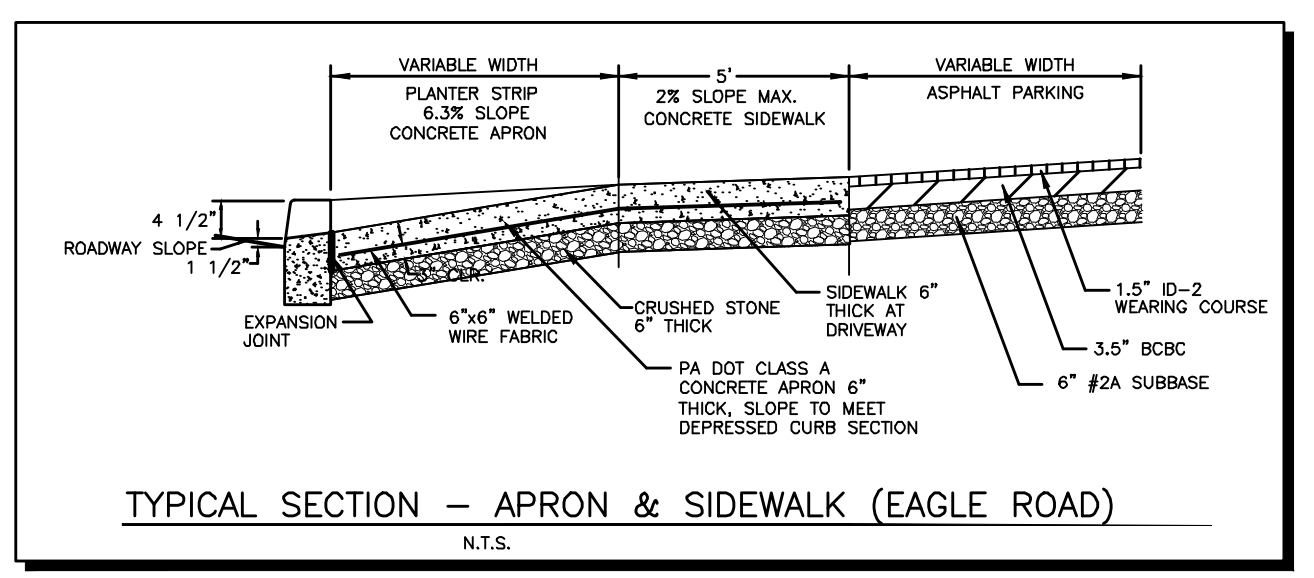
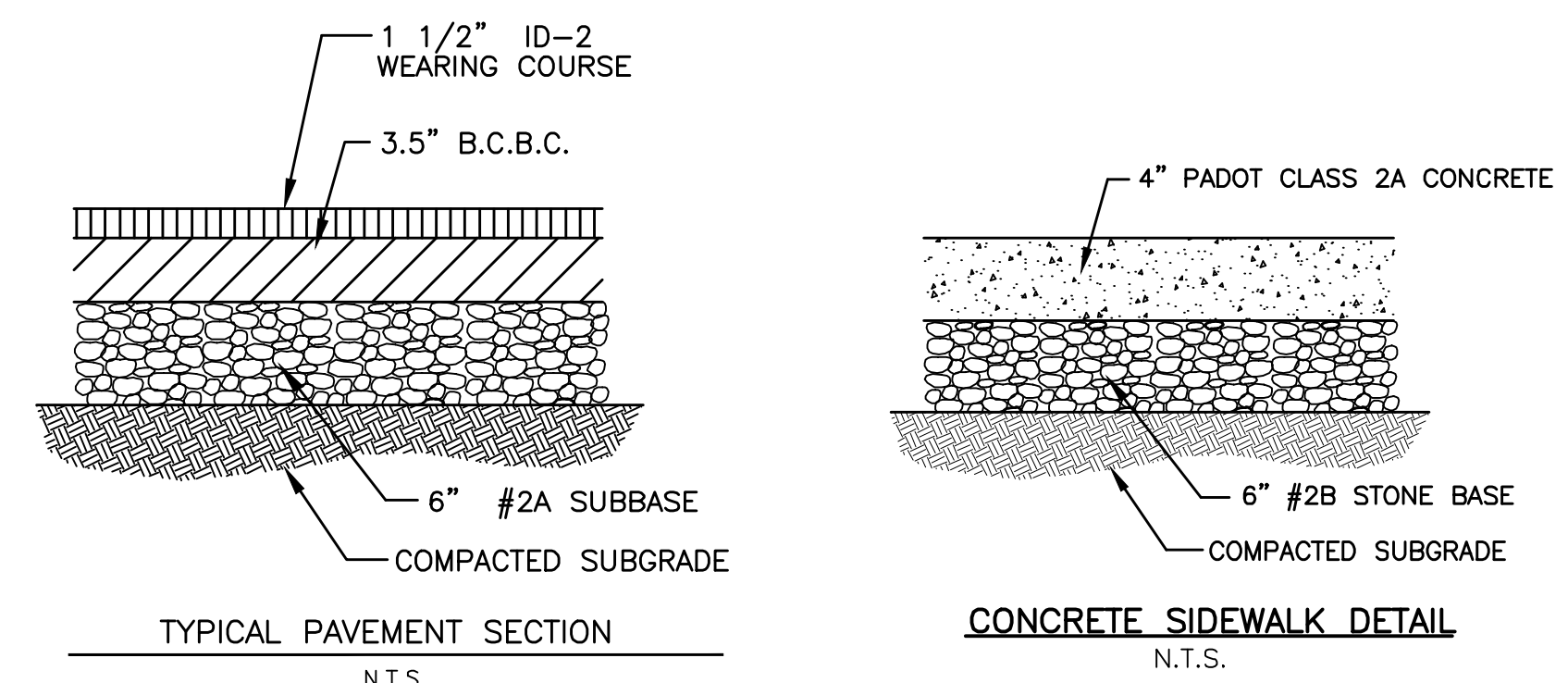
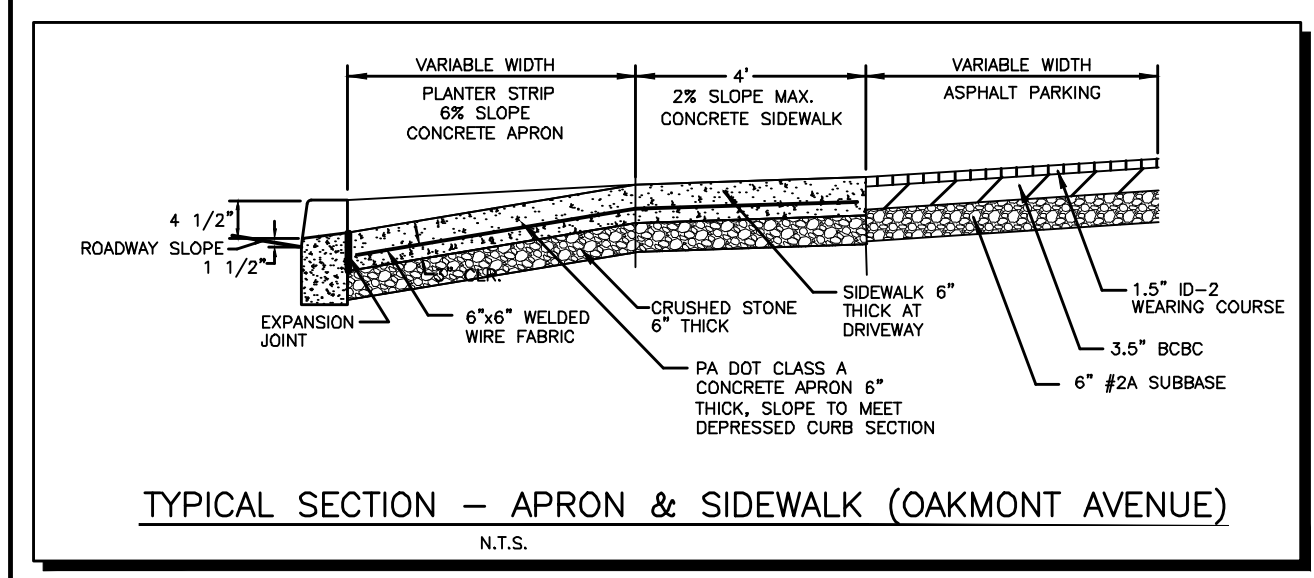
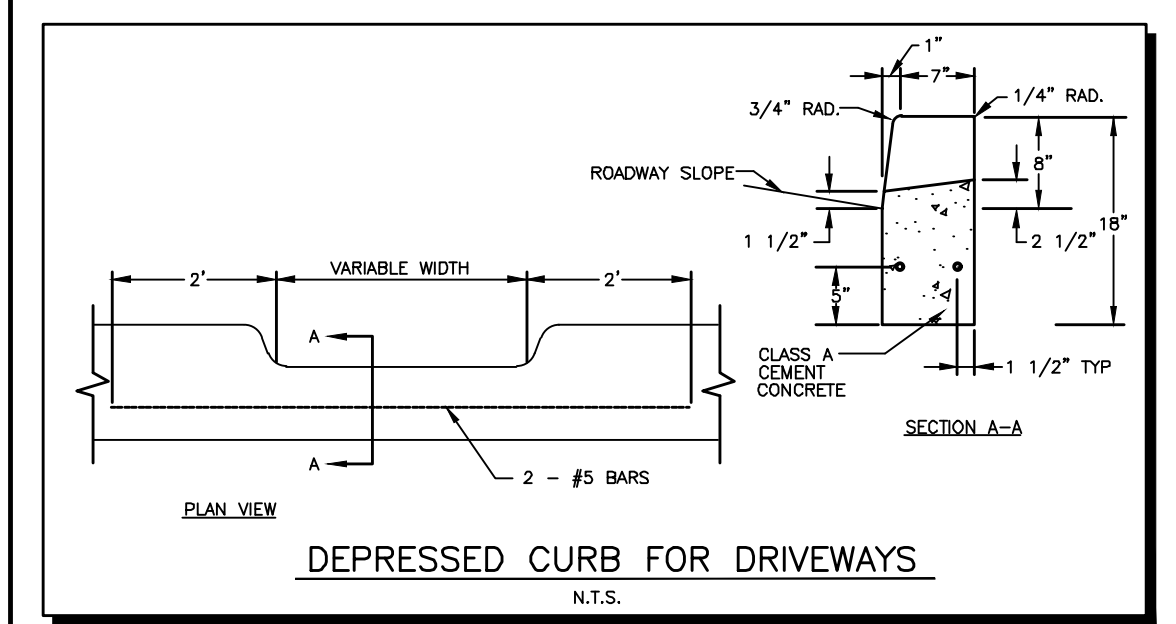


**WYE BRANCH CONNECTION**  
N.T.S.



1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 AND 640 FOR PLAIN CEMENT CONCRETE CURB.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4" PREMOULDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

**PLAIN CEMENT CONCRETE CURB**  
N.T.S.



**SOILS NOTES:**

**SITE PREPARATION**  
THE PROPOSED DEVELOPMENT SHOULD INCLUDE THE COMPLETE REMOVAL OF ALL REMNANT FOUNDATIONS, FLOOR SLABS, CONCRETE PADS, PAVEMENTS AND UTILITIES LOCATED WITHIN AND TEN FEET BEYOND THE PERIMETER OF THE PROPOSED BUILDINGS FOOTPRINTS. THE REMAINDER OF THESE STRUCTURES MAY GENERALLY REMAIN IN PLACE IF REMOVED TO A MINIMUM DEPTH OF TWO FEET BELOW FINAL GRADES, PROVIDING THEIR LOCATION DOES NOT CONFLICT WITH OTHER CONSTRUCTION SUCH AS UTILITY INSTALLATION. ACTIVE UTILITIES THAT ARE PRESENT ON SITE SHOULD BE RELOCATED TO AREAS OUTSIDE OF THE PROPOSED BUILDING AREA.  
BACKFILL OF ALL DEMOLITION AND UTILITY RELOCATION AREAS SHOULD BE PERFORMED IN ACCORDANCE WITH THE FILL AND COMPACTION CRITERIA SECTION THAT FOLLOWS. THE BACKFILL MATERIAL SHOULD BE INSPECTED AND TESTED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER OF RECORD.  
PRIOR TO THE PLACEMENT OF ANY REQUIRED FILL, AREAS EXTENDING A MINIMUM OF TEN (10) FEET BEYOND THE PROPOSED CONSTRUCTION SHOULD BE STRIPPED OF ALL TOPSOIL, ROOT MAT, ASPHALT, CONCRETE, STONE, AND OTHER DELETERIOUS MATERIALS. FOLLOWING REMOVAL OF THE SURFACE MATERIALS AND PRIOR TO STRUCTURAL FILL PLACEMENT IN THE PROPOSED AREAS, ALL AREAS SHOULD BE PROOF-ROLLED AND COMPACTED. IT IS RECOMMENDED THAT A STEEL DRUM ROLLER HAVING A MINIMUM STATIC WEIGHT OF TEN (10) TONS BE UTILIZED FOR THIS PURPOSE. PROOF-ROLLING AND COMPACTION PROCEDURES ARE NECESSARY TO COMPACT AND VERIFY THE INTEGRITY OF THE UPPER ZONES OF THE SOILS. ANY LOOSE OR UNSTABLE AREAS ENCOUNTERED DURING PROOF-ROLLING, WHICH ARE THE RESULT OF EXCESSIVE MOISTURE WITHIN THE SOIL MATRIX, CAN BE AERATED AND DRIED IN-PLACE. FOLLOWING ADEQUATE DRYING TIME, THESE SOILS CAN BE DENSIFIED IN-PLACE. ALTERNATELY, ANY LOOSE OR SOFT ZONES OF SOIL, CAN BE REMOVED AND REPLACED WITH STRUCTURAL FILL AS OUTLINED IN THE FILL AND COMPACTION SECTIONS BELOW DUE TO THE FINED-GRAINED NATURE OF THE EXISTING RESIDUAL SOILS, REPEATED CONSTRUCTION TRAFFIC ACROSS THE SITE WILL LEAD TO INSTABILITIES. CONSTRUCTION TRAFFIC SHOULD BE LIMITED ACROSS THE SITE. IT IS RECOMMENDED THAT ALL CONSTRUCTION AREAS, INCLUDING THOSE WHICH WERE EXCAVATED TO ACHIEVE ELEVATION, BE PROOF-ROLLED AND COMPACTED IMMEDIATELY PRIOR TO THE PLACEMENT OF THE SUBBASE STONE AND AGAIN BEFORE THE CONCRETE SLAB OR THE ASPHALT PAVEMENT SECTION. THIS WILL ALLOW FOR SOFT AND WEAK AREAS TO BE OBSERVED AND REMEDIATED, IF REQUIRED.

**FILL CRITERIA**

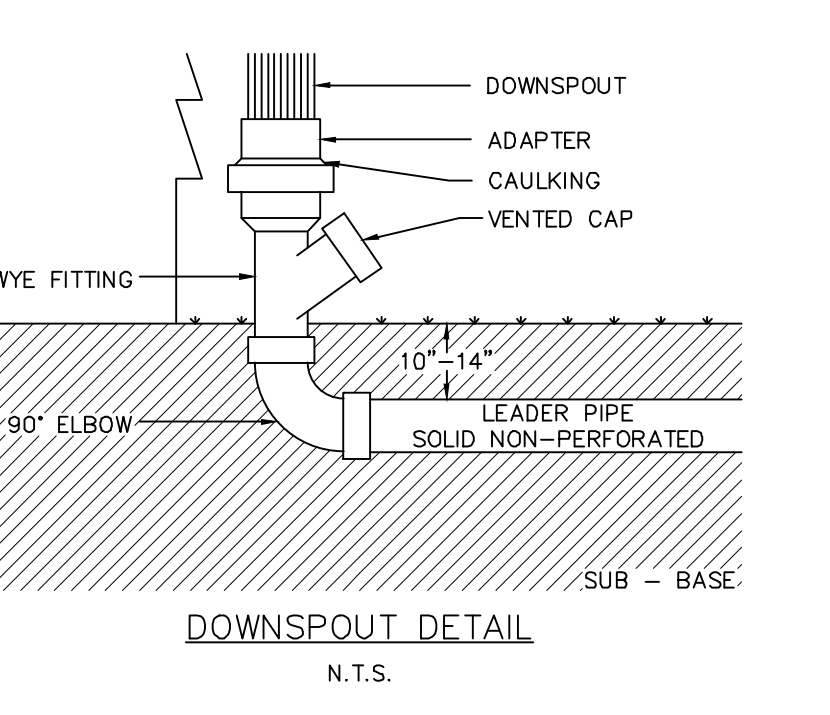
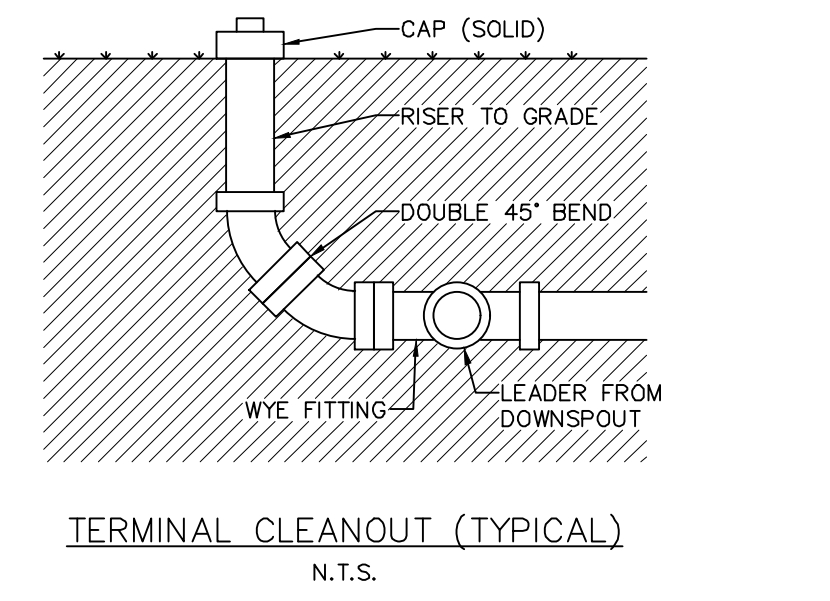
FILL MATERIAL, WHICH SUPPORTS FOUNDATIONS, FLOOR SLABS, AND PAVEMENTS, AS WELL AS MATERIAL USED FOR RETAINING WALL BACKFILL AND TO CONSTRUCT BASIN BERMS, IS CONSIDERED STRUCTURAL FILL. FOLLOWING SITE PREPARATION MEASURES, STRUCTURAL FILL REQUIRED TO ELEVATE THE BUILDING PADS AND PAVEMENT AREAS MAY BE PLACED. IT IS ANTICIPATED THAT EXCAVATIONS TO ACHIEVE THE PROPOSED BUILDING AND SITE GRADES WILL MAKE AVAILABLE THE RESIDUAL SOILS, WEATHERED ROCK, AND POSSIBLY THE BEDROCK FOR USE AS STRUCTURAL FILL. OTHER FILL WILL HAVE TO BE IMPORTED. THE ADDITION OF WATER MAY BE REQUIRED TO ACHIEVE OPTIMUM MOISTURE CONTENT. EXCAVATED ROCK MAY ALSO BE UTILIZED AS STRUCTURAL FILL PROVIDED IT IS PROCESSED TO LESS THAN 4 INCHES IN SIZE, AND MIXED WITH THE SUITABLE RESIDUAL SOILS TO PROVIDE A WELL-GRADED STRUCTURAL FILL. SOILS EXCAVATED AT THE SITE SHOULD BE MAINTAINED BY THE CONTRACTOR, IN ORDER TO MINIMIZE PROBLEMS WITH STOCKPILED SOILS BECOMING TOO WET FOR USE AS STRUCTURAL FILL. THE SOILS EXCAVATED AND STOCKPILED SHOULD BE GRADED TO SHED WATER AND ROLLED WITH A SMOOTH DRUM ROLLER. DURING PERIODS OF WET SITE CONDITIONS, TRAVEL UPON THE BUILDING PADS AND WITHIN THE ROADWAYS SHOULD BE LIMITED TO MINIMIZE DISTURBANCES WHICH WILL LEAD TO INSTABILITIES.  
ANY STRUCTURAL OR LOAD BEARING SOIL WHICH IS IMPORTED TO THE SITE (IF REQUIRED) SHOULD MEET THE FOLLOWING CRITERIA: 1) FREE OF ORGANIC MATTER, ASH, CHINDERS, AND DEMOLITION DEBRIS, 2) PARTICLE SIZE DISTRIBUTION THAT IS WELL GRADED, 3) PLASTICITY INDEX LESS THAN 10, AND 4) LESS THAN 15 PERCENT BY WEIGHT ROCK FRAGMENTS LARGER THAN 3", LESS THAN 30 PERCENT BY WEIGHT LARGER THAN 3/4" AND LESS THAN 30 PERCENT BY WEIGHT SMALLER THAN THE NO. 200 SIEVE.

THE ABOVE CRITERIA ARE PROVIDED AS A GENERAL GUIDELINE FOR SOIL MATERIALS IMPORTED TO THE SITE. SOIL MATERIALS AVAILABLE FOR USE AS A STRUCTURAL FILL, SHOULD BE SUBMITTED TO A GEOTECHNICAL ENGINEER FOR EVALUATION PRIOR TO IMPORTATION TO THE SITE.

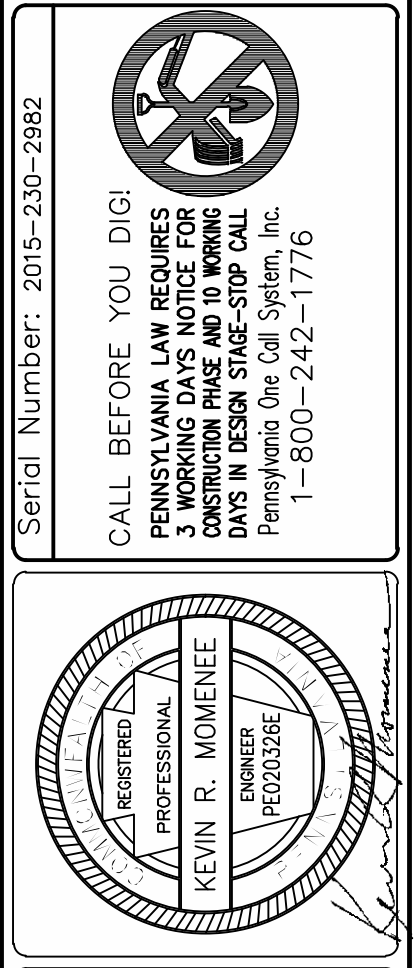
**COMPACTION CRITERIA**

STRUCTURAL FILL SHOULD GENERALLY BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING EIGHT (8) INCHES IN LOOSE THICKNESS AND COMPACTED WITH A SHEEPSFOOT OR SMOOTH DRUM VIBRATORY ROLLER WITH A MINIMUM STATIC WEIGHT OF 10 TONS. USE OF A SHEEPSFOOT ROLLER WILL AID IN CRUSHING EXCAVATED WEATHERED ROCK MATERIAL FOR USE AS STRUCTURAL FILL. SOILS EXCAVATED AT THE SITE SHOULD BE MAINTAINED BY THE CONTRACTOR, WHERE COMPACTION BY HAND-OPERATED EQUIPMENT IS NECESSARY. THE OPTIMUM LIFT THICKNESS AND NUMBER OF REPETITIONS NECESSARY TO ACHIEVE THE REQUIRED PERCENTAGE COMPACTION VALUES SHOULD BE DETERMINED IN THE FIELD WITH TEST PASSES OF THE CHOSEN COMPACTION EQUIPMENT. THE FILL MATERIAL SHOULD BE PLACED AT, OR DEVIATE NOMINALLY FROM, THE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM STANDARD D698 AND COMPACTED TO A MINIMUM PERCENTAGE OF THE MAXIMUM DRY DENSITY AS INDICATED IN THE FOLLOWING TABLE.

FILL AREA	PERCENT OF MAXIMUM DRY DENSITY AS PER ASTM STANDARD D 698
PAVEMENTS, SLAB-ON-GRADE AND FOUNDATION BEARING AREAS	98
WALKWAYS, AND BASIN BERMS	95
NON-STRUCTURAL	92



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**CONSTRUCTION DETAILS**  
PRELIMINARY / FINAL LAND DEVELOPMENT  
109 & 115 W. EAGLE ROAD  
HAVERFORD TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA  
OWNER / APPLICANT: 101 N. GROUP, LLC  
DRAWN BY: BDM  
CHECKED BY: KRM  
ONE-CALL: 20152302982  
DATE: 10/29/2015

DATE: OCTOBER 29, 2015  
SHEET NO. 5  
SCALE: AS NOTED  
FILE NO.: 15-243



ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

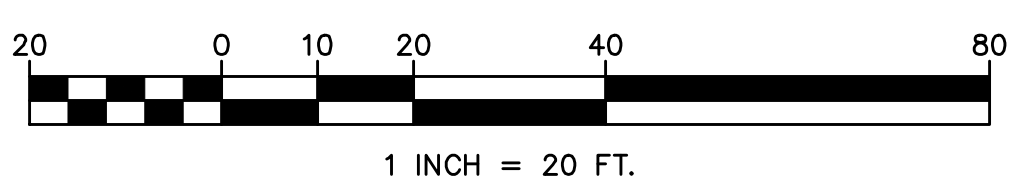
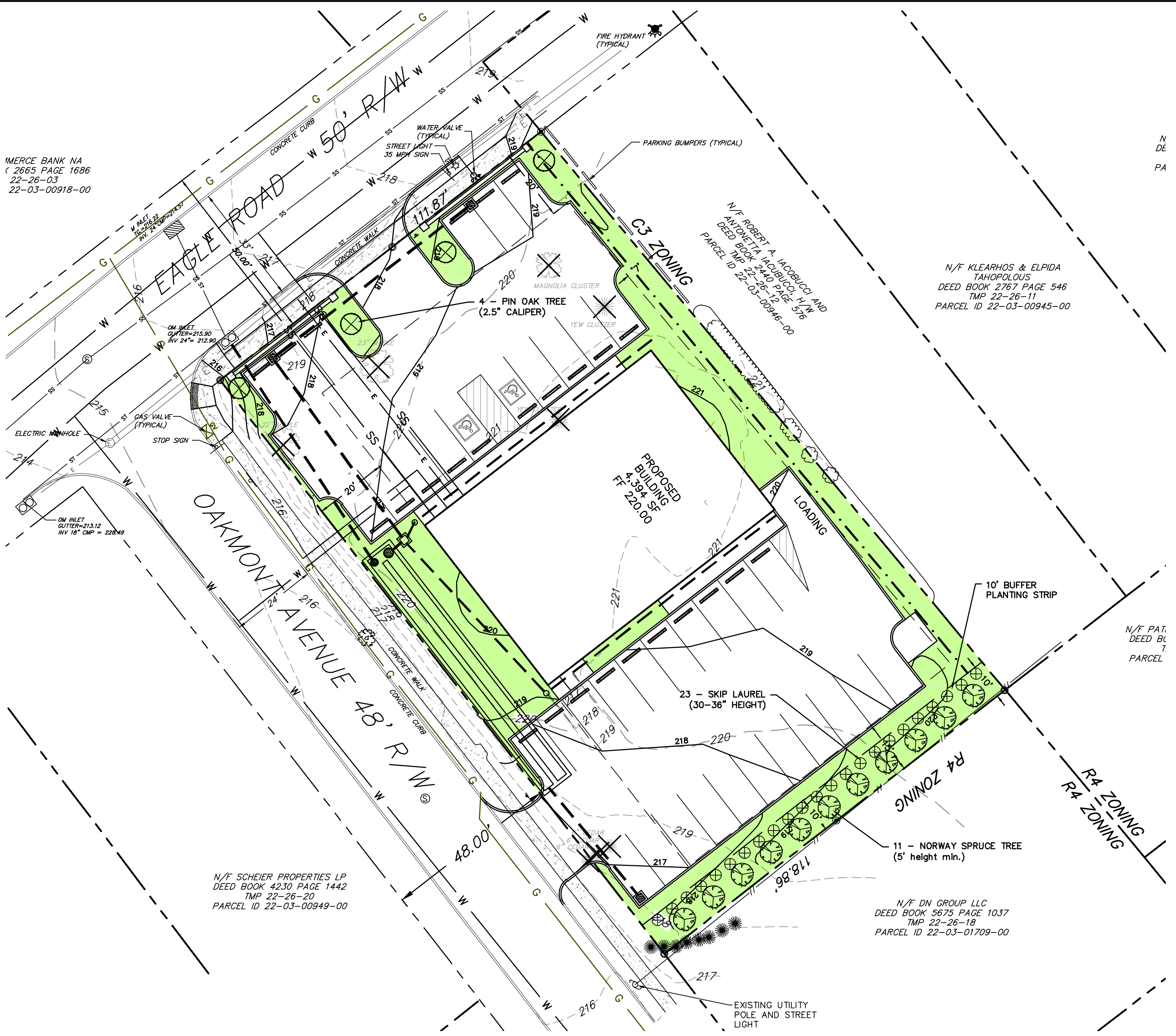
ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

**LINE TYPE LEGEND:**

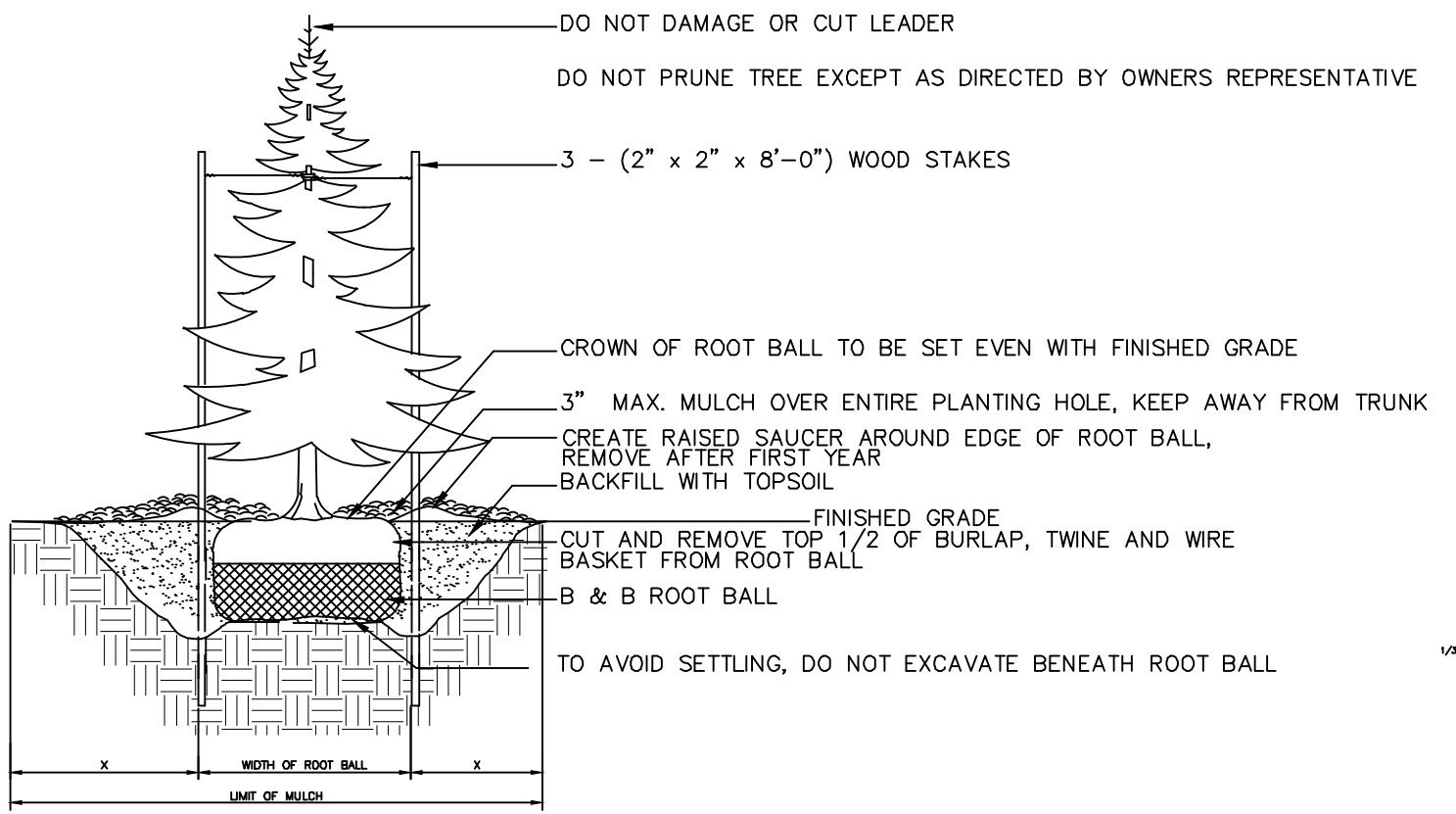
---	PROPERTY LINE
- - -	R/W LINE
- - - - -	EXISTING BUILDING SETBACK
- - - - -	EXISTING FENCE
- - - - -	EXISTING OVERHEAD ELECTRIC
- - - - -	EXISTING ELECTRIC LINE
- - - - -	EXISTING GAS LINE
- - - - -	EXISTING TELECOM LINE
- - - - -	EXISTING WATER LINE
- - - - -	EXISTING SANITARY LINE
- - - - -	EXISTING STORM PIPES
- - - - -	EXISTING MAJOR CONTOUR
- - - - -	EXISTING MINOR CONTOUR
- - - - -	PROPOSED GREEN AREA
⊗	TREE TO BE REMOVED

MERCER BANK NA  
C 2685 PAGE 1686  
22-20-03  
22-03-00918-00



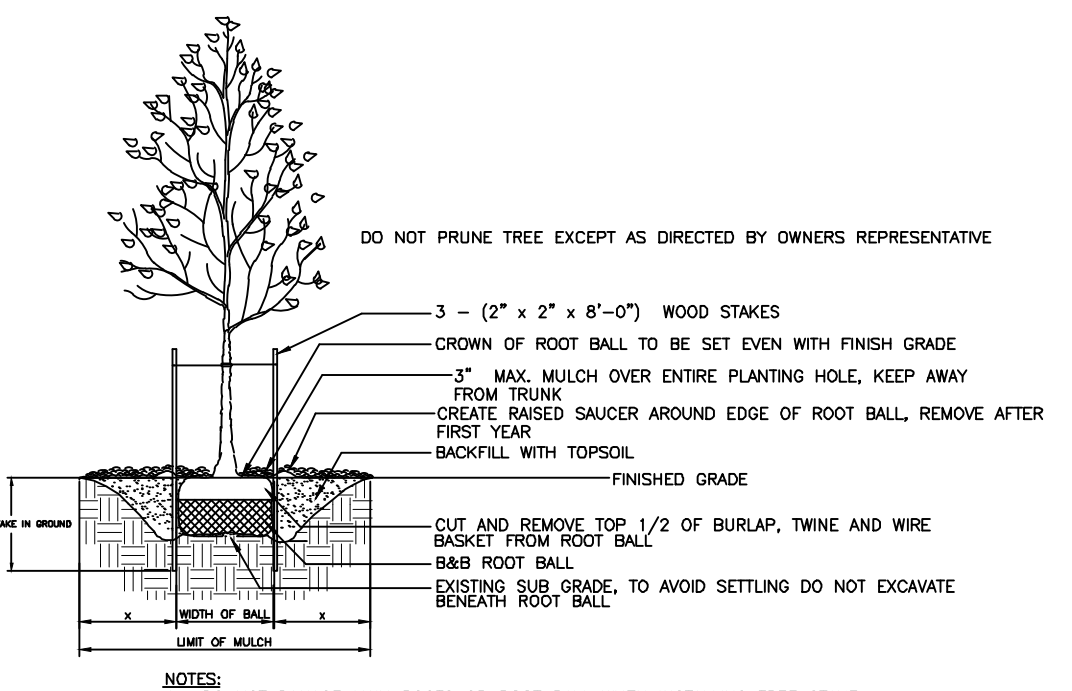
**PLANTING LEGEND:**

⊗	NORWAY SPRUCE
⊗	PIN OAK
⊗	SKIP LAUREL



- SPECIFICATIONS:**
- DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE SAUCER AND STAKES TWO YEARS OR LESS AFTER INSTALLATION.

**TYPICAL EVERGREEN TREE PLANTING DETAIL**  
NOT TO SCALE



- NOTES:**
- DO NOT DAMAGE MAIN ROOTS OR ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE SAUCER AND STAKES TWO YEARS OR LESS AFTER INSTALLATION.
  - CONTRACTOR IS NOT TO USE TREE WRAP.

**TYPICAL DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE

**TREE REMOVAL CALCS:**

#	TYPE	SIZE	TBR
1	MAPLE	23"	1
2	MAPLE	22"	1
3	MAGNOLIA	6"	1
4-5	YEW	6"	2
6-8	CEDAR	6"	3
TOTAL		81"	8

81" PROPOSED TO BE REMOVED  
81" / 4" PER INCH REMOVED  
20" OF REPLACEMENT TREES REQ'D  
ACCORDING TO THE LIST OF  
REPLACEMENT TREES ACCEPTABLE TO  
HAVERFORD TOWNSHIP

**TREE REPLACEMENT NOTES:**

- REPLACEMENT TREES WILL BE SELECTED FROM THE LIST OF TOWNSHIP APPROVED TREES PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- TREES TO BE PLANTED OUTSIDE THE REQUIRED SITE LINE.
- NEW TREES SHALL HAVE A MINIMUM DIAMETER OF 2", MEASURED 4 1/2 FEET ABOVE THE GROUND. REPLANTING SHALL BE DONE ACCORDING TO THE SPECIFICATIONS OF THE SHADE TREE COMMISSION AND THE STANDARDS SPECIFIED BY THE AMERICAN NURSERYMEN'S ASSOCIATION.

**CARE OF EXISTING TREES:**

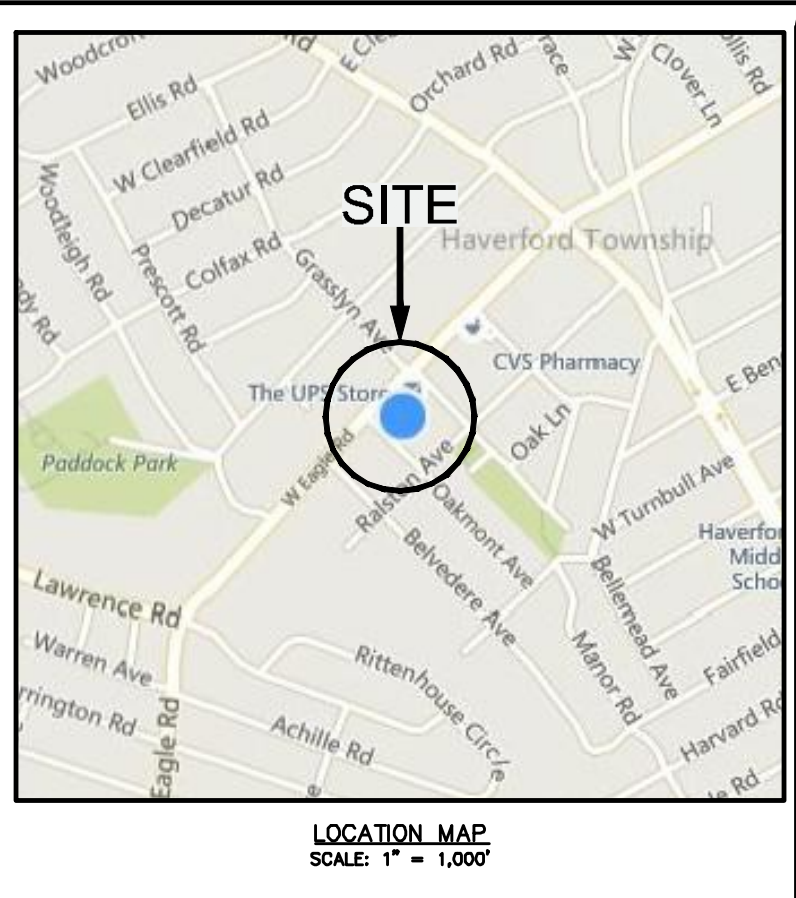
- TREE PROTECTION FENCING SHALL BE INSTALLED TO PROTECT ALL EXISTING TREES FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND OTHERS. MAINTAIN PROTECTION FENCING FOR THE DURATION OF PROJECT.
- SELECTIVELY PRUNE EXISTING TREES AT THE EDGE OF ALL TREE PROTECTION ZONES, AND OTHER EXISTING TREES AFFECTED BY CONSTRUCTION, UNDER LANDSCAPE ARCHITECT'S DIRECTION. REMOVE SUCKER SHOOTS, DEAD, RUBBING AND DAMAGED BRANCHES.
- ANY EXCAVATION NEAR ADJACENT ROOT SYSTEMS WILL REQUIRE ROOT PRUNING OF AFFECTED TREE(S).
- FERTILIZE PRUNED EXISTING TREES WITH 3 TO 4 LBS. OF LIQUID FERTILIZER PER 1,000 SQUARE FEET OF DRIP AREA, OR, 5 GALLONS OF LIQUID FERTILIZER PER CALIPER INCH OF TRUNK DIAMETER.
- FERTILIZE IN EARLY SPRING BEFORE GROWTH BEGINS.
- FERTILIZE BEGINNING 2' FROM TRUNK AT INTERVALS 2' TO 3' ON CENTER IN A GRID-LIKE PATTERN TO A DEPTH OF 6-16" WITHIN THE DRIFLINE AND BEYOND WHERE POSSIBLE. INJECTION FERTILIZATION METHOD SHALL BE ACCEPTABLE SUBJECT TO LANDSCAPE ARCHITECT'S APPROVAL.

**TREE REPLACEMENT CALCS:**

COMMON NAME	QUANTITY	SIZE
NORWAY SPRUCE	11	2" caliper
PIN OAK	4	2.5" caliper
TOTAL	15	32"

32" OF TOTAL REPLACEMENT TREES ARE PROPOSED

SHRUBS	QUANTITY	SIZE
SKIP LAUREL	23	30-36" height



**LOCATION MAP**  
SCALE: 1" = 1,000'

**GENERAL NOTES:**

- THIS PLAN REFERENCES AN ACTUAL FIELD SURVEY PERFORMED ON THE PREMISES ON AUGUST 19, 2015 BY MOMENEE SURVEY GROUP, INC., AND FURTHER SUPPLEMENTED DATA ON AUGUST 25, 2015 AND DEPICTS CONDITIONS ON THOSE DATES.
- THE EXISTENCE AND/OR LOCATION OF ALL SUBSURFACE UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED BY ALL CONTRACTORS PRIOR TO CONSTRUCTION.
- THE PA. ONE CALL NUMBER FOR THIS SITE IS 20152302982.
- THE VERTICAL DATUM SHOWN ON THIS PLAN IS PER NAVD 1988 OBTAINED VIA GPS NETWORK.
- THE REFERENCED SURVEY, AND THIS PLAN, WAS COMPLETED WITHOUT THE AVAILABILITY OF A CURRENT TITLE REPORT AND SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED IN A FULL AND ACCURATE TITLE REPORT.
- IN ACCORDANCE WITH FEMA PANEL NUMBER 42045C0102F EFFECTIVE DATE NOVEMBER 18, 2009, THE PREMISES IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

**ZONING DISTRICT C-3 (COMMERCIAL DISTRICT):**

LOT AREA	6,250 SF MIN.
STREET FRONTAGE	50' MIN.
BUILDING COVERAGE	25% MAX.
FRONT YARD	20' MIN.
SIDE YARD	7' MIN.
REAR YARD	15' MIN.
BUILDING HEIGHT	45' MAX.
IMPERVIOUS COVERAGE	75% MAX.

FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF HAVERFORD TOWNSHIP, LATEST EDITION.

**109 W. EAGLE ROAD LOT DATA:**  
GROSS LOT AREA = 11,074 SF OR 0.254 ACRES  
NET LOT AREA = 11,074 SF OR 0.254 ACRES

**EXISTING IMPERVIOUS COVERAGE (109 W. EAGLE ROAD):**

RESIDENCE, PORCH	1,552 SF (14.01%)
PORTION OF GARAGE	820 SF
ASPHALT	5,023 SF
DECK, STEPS	48 SF
WALLS, MISC.	155 SF
TOTAL	7,598 SF (68.61%)

**115 W. EAGLE ROAD LOT DATA:**  
GROSS LOT AREA = 12,000 SF OR 0.276 ACRES  
NET LOT AREA = 12,000 SF OR 0.276 ACRES

**EXISTING IMPERVIOUS COVERAGE (115 W. EAGLE ROAD):**

RESIDENCE, PORCH, GARAGE	2,069 SF (17.24%)
ASPHALT	4,898 SF
CONCRETE	797 SF
WOOD RAMP	126 SF
WALLS, STEPS	74 SF
TOTAL	7,965 SF (66.38%)

**REFERENCE PLAN:**  
BOUNDARY AND TOPOGRAPHIC SURVEY OF 109 & 115 W. EAGLE ROAD FOR D'ALONZO AND ASSOCIATES, ARCHITECTS, PREPARED BY MOMENEE SURVEY GROUP, INC., DATED SEPTEMBER 2, 2015, FILE NO. 15-243.

**SOURCE OF TITLE:**  
DN GROUP, LLC  
DEED BOOK 5675 PAGE 1037  
109 W. EAGLE ROAD  
HAVERFORD, PA 19087  
T.M.P. 22-26 UNIT 13  
PARCEL I.D. 22-03-00947-00

**SOURCE OF TITLE:**  
DN GROUP, LLC  
DEED BOOK 5675 PAGE 1037  
115 W. EAGLE ROAD  
HAVERFORD, PA 19087  
T.M.P. 22-26 UNIT 14  
PARCEL I.D. 22-03-00948-00

**CONSOLIDATED LOT DATA:**  
GROSS LOT AREA = 23,073 SF OR 0.530 ACRES  
NET LOT AREA = 23,073 SF OR 0.530 ACRES

**PROPOSED IMPERVIOUS COVERAGE:**

BUILDING	4,594 SF (19.0%)
PAVING AND CURBS	12,085 SF
WALKS, STEPS, ETC.	794 SF
TOTAL	17,273 SF (74.9%)

MAX ALLOWABLE 17,305 SF (75.0%)

Serial Number: 2015-230-2982

CALL BEFORE YOU DIG!  
3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE STOP CALL  
Pennywood One Call System, Inc.  
1-800-242-1776

**MOMENEE & ASSOCIATES, INC.**  
CIVIL ENGINEERS AND LAND SURVEYORS  
924 COUNTY LINE ROAD, BRN MAWR, PA 19010  
PHONE: (610) 527-3030 FAX: (610) 527-9008

**LANDSCAPE PLAN**  
PRELIMINARY / FINAL LAND DEVELOPMENT  
109 & 115 W. EAGLE ROAD  
HAVERFORD TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

OWNER / APPLICANT	DN GROUP, LLC
DESIGNER	109 W. EAGLE ROAD
CHECKED BY:	KRM

**MA**

DATE:	OCTOBER 29, 2015
SHEET NO.	7
OF	8
SCALE:	1" = 20'
FILE NO.:	15-243

REV.	DATE	PER.	TWP. ENG.	COMMENTS
2	07/20/16			
1	12/15/15			

