



GENERAL NOTES:

- 1. SITE ADDRESS: WALKER AND OLD EAGLE SCHOOL ROAD...
2. LOCATION: THE SUBJECT PROPERTY IS LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF WALKER ROAD AND OLD EAGLE SCHOOL ROAD...
3. THIS SITE IS CURRENTLY ZONED R-1, RESIDENTIAL, AND "P" PROFESSIONAL DISTRICTS...
4. THE PURPOSE OF THIS PLAN IS TO DEPICT THE CONSTRUCTION OF A NEW STORMWATER REGIONAL DETENTION BASIN...
5. THE PARCEL NUMBERS FOR THIS SITE ARE 43-4E-96 FOUND IN DEED BOOK 8665, PAGE 1290 AND 43-4F-13 FOUND IN DEED BOOK 8665, PAGE 1290 AS SHOWN ON CHESTER COUNTY BOARD OF ASSESSOR'S TAX PARCEL LOCATION MAP...
6. THE EXISTING TOPOGRAPHIC SURVEY WAS COMPLETED BY HOWELL KLINE SURVEYING, LLC...
7. SITE BENCHMARK: BENCHMARK LOCATED AT INVERT OF SANITARY SEWER MANHOLE LOCATED ALONG OLD EAGLE SCHOOL ROAD WITH AN INVERT ELEV. OF 154.57'.

WATER NOTES:

- 1. THE WATER PROVIDER IS AQUA AMERICA. CONTACT AQUA BEFORE TAPPING THE EXISTING WATER MAIN. ALL WORK ON THE WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE AQUA STANDARDS AND SPECIFICATIONS (LATEST EDITION). INCLUDING BUT NOT LIMITED TO:
- UTILITY LINE SPECIFICATIONS - ABSTRACT
1999
2. FIRE HYDRANT AND WATER MAINS TO BE INSTALLED AND UNDER PRESSURE BEFORE ANY COMBUSTIBLE CONSTRUCTION IS STARTED.
3. WATER LINE CONSTRUCTION SHALL BE SEQUENCED IN SUCH A MANNER AS TO MINIMIZE LOSS OF SERVICE TO ANY INDIVIDUAL CUSTOMER. CONTRACTOR SHALL NOTIFY TREDYFFRIN TOWNSHIP AND THE OWNER 48 HOURS IN ADVANCE OF ANY LOSS OF SERVICE. DEPENDENT UPON THE NATURE OF THE LOSS OF SERVICE, THE TOWNSHIP MAY REQUIRE THAT WORK BE COMPLETED IN THE EVENING AFTER NORMAL BUSINESS. ALL VALVES NEEDED FOR SHUT-DOWN SHALL BE OPERATED BY AQUA PERSONNEL ONLY, UNLESS OTHERWISE APPROVED.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CUT SHEETS FOR ALL WATER SYSTEM CONSTRUCTION FOR REVIEW AND APPROVAL BY AQUA PRIOR TO CONSTRUCTION.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE WATER METER VAULT THAT MEET ALL OF THE AQUA AMERICA STANDARDS.
6. MINIMUM COVER OF ALL WATER MAIN AND APPURTENANCES SHALL BE FOUR FEET (4').
7. A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES BETWEEN ANY UTILITY AND THE WATER MAIN AND APPURTENANCES OF THE TOWNSHIP.
8. A SEPARATE WATER METER SHUT-OFF VALVE WILL BE REQUIRED FOR EACH INDIVIDUAL TENANT CONNECTION.
9. SANITARY SEWER NOTES:

- 1. ALL SANITARY SEWER CONSTRUCTION MUST CONFORM TO TREDYFFRIN TOWNSHIP MUNICIPAL AUTHORITY STANDARDS AND SPECIFICATIONS (LATEST EDITION), INCLUDING BUT NOT LIMITED TO:
- UTILITY LINE SPECIFICATIONS - ABSTRACT
1999
STANDARD CONSTANTS AND SPECIFICATIONS FOR SANITARY SEWER EXTENSIONS, 1999
2. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERT OF EXISTING SANITARY SEWER MAINS AND EXISTING LATERALS FOR CONNECTION TO EXISTING SEWER SYSTEM.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CUT SHEETS FOR ALL SANITARY SYSTEM CONSTRUCTION FOR REVIEW AND APPROVAL BY TREDYFFRIN TOWNSHIP PRIOR TO CONSTRUCTION.
4. TYPICAL COVER OF THE SANITARY SEWER MAIN SHALL BE FOUR TO FIVE FEET (4'-5').
5. THE SANITARY MAIN PIPE AND FITTINGS SHALL BE GASKETED 36" SEWER PIPE.
6. MANHOLE STRUCTURES SHALL CONFORM TO ASTM C-478 AND PENNDOT PUB. 408, TO SUPPORT HS20-44 LOADING.
7. UNLESS OTHERWISE NOTED, SANITARY LATERALS SHALL CONSIST OF SIX (6) INCH DIAMETER SCHEDULE 40 OR SDR-21 IPS PRESSURE RATED PIPE AT A MINIMUM SLOPE OF 1/4" PER FOOT.
8. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE WATER METER VAULT THAT MEET ALL OF THE AQUA AMERICA STANDARDS.

RECORDER OF DEEDS

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF CHESTER COUNTY AT WEST CHESTER, PENNSYLVANIA ON THE 20th DAY OF 2017.

PROPERTY OWNER

COMMONWEALTH OF PENNSYLVANIA COUNTY OF CHESTER. BEFORE ME, the Subscribber, a Notary Public of the Commonwealth of Pennsylvania, residing in Chester County, Pennsylvania, personally appeared [Name], who acknowledged himself to be a corporation, and that he as such is being authorized to do so. ACKNOWLEDGED THIS PLAN TO BE THE PLAN OF PROPERTY SHOWN THEREON, SITUATED IN TREDYFFRIN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW. WITNESS MY HAND AND NOTARIAL SEAL THE DAY AND YEAR AFORESAID.

GENERAL UTILITY NOTES:

- 1. IN ACCORDANCE WITH PA ACT 287 (1974), AS AMENDED, THE CONTRACTOR SHALL NOTIFY ALL UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
2. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS. HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXACT LOCATION AND PROTECTION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
5. CONTRACTOR MUST APPLY FOR ALL UTILITY CONNECTION APPLICATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONNECTION FEES FOR CONSTRUCTION. REFER TO COVER SHEET FOR AVAILABLE UTILITY COMPANY LIST.
6. CONTRACTOR MUST OBTAIN ANY REQUIRED UTILITY DETAILS FOR RECONNECTION OF EXISTING SERVICES OR NEW SERVICE AND IS RESPONSIBLE FOR THE CONSTRUCTION OF EACH NEW SERVICE PER THE APPROPRIATE UTILITY COMPANY'S SPECIFICATIONS.
7. THE LOCATION OF THE EXISTING OVERHEAD UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM FIELD OBSERVATION.
8. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE TO CURBING, PAVING, AND COMPACTED SUB-BASE GRADE.
9. IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
10. ALL PIPE LENGTHS AND DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.
11. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
12. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR OF ANY DEFICIENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES.
13. CONTRACTOR SHALL EXCAVATE ANY ENOUGH TRENCH FOR WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.
14. BEDDING REQUIREMENTS SPECIFIED HEREON ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
15. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THE THEORETICAL MAXIMUM DRY DENSITY (ASTM D999). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES OR COMPACTED FILL THICKNESS. FOR ADDITIONAL INFORMATION, REFER TO GEOTECHNICAL REPORT PREPARED BY PENNDO, DATED SEPTEMBER 1, 2016. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
16. RUNOFF SHALL NOT BE DIRECTED INTO THE SANITARY SEWER NOR ONTO ADJACENT PROPERTIES.
17. ALL ON-SITE BUILDING IMPROVEMENTS SHALL CONFORM TO THE TOWNSHIP'S INTERNATIONAL BUILDING CODE.

SITE NOTES:

- 1. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER OF ANY DISCREPANCIES OR ERRORS THEY DISCOVER IN THE PLAN.
2. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.
3. NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC, SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION.
4. ALL CONCRETE SHALL BE CLASS A, 4500 PSI AT 28 DAYS COMPRESSIVE STRENGTH WITH A MAXIMUM SLUMP OF 4" UNLESS NOTED OTHERWISE. ALL EXPOSED CONCRETE TO HAVE A FINE BROOM FINISH.
5. RAMPS SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB OR IS PART OF AN ACCESSIBLE ROUTE THAT HAS A SLOPE OF 1:50 OR GREATER. THE RAMP SHALL HAVE A MINIMUM WIDTH OF 36 INCHES CLEAR EXCLUSIVE OF FLARED SIDES AND A MAXIMUM SLOPE OF 12 INCHES OF RUN FOR EVERY 1 INCH OF RISE. IF THE RAMP HAS 72 INCHES OF RUN THERE SHALL BE A HANDRAIL ON BOTH SIDES OF THE RAMP.
6. ACCESSIBLE ROUTE SHALL START AT THE HANDICAP PARKING SPACE AND SHALL GO INTO THE PRIMARY ENTRANCE OF ALL NEW OR RENOVATED BUILDINGS SPACES. A.N.S.I. 117.1 1996 4.3, 4.4, 4.5, 4.6, 4.7 AND 4.8.

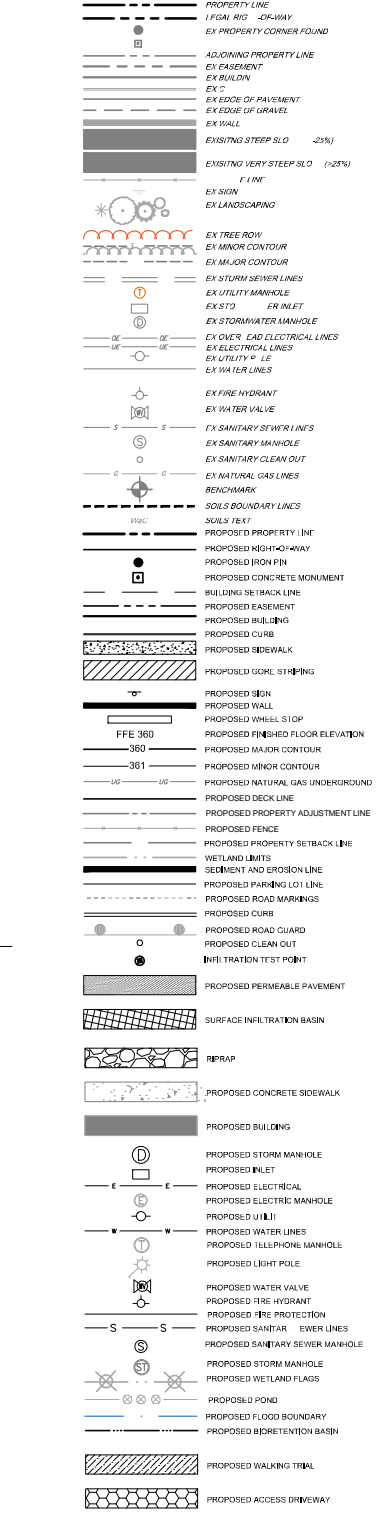
GENERAL CONSTRUCTION AND GRADING NOTES:

- 1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS, AS APPLICABLE:
A. PENNDOT SPECIFICATION, PUB. 402007 OR LATEST REVISION.
B. PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION, PUBLICATION 72, LAST REVISED 01/08/09 OR LATEST REVISION.
C. PENNDOT HANDBOOK OF APPROVED SIGNS, PUB. 2362006 OR LATEST REVISION.
D. AMERICANS WITH DISABILITIES ACT OF JULY 1991 AS AMENDED.
E. THE PENNSYLVANIA CLEAN STREAM LAW (P.S. SECTION 8911 (ET. SEC.)).
F. REGULATIONS OF PA CODE TITLE 25, CHAPTER 102.
G. TREDYFFRIN TOWNSHIP STANDARDS AND SPECIFICATIONS (LATEST EDITION).
H. UTILITY LINE SPECIFICATIONS - ABSTRACT
IN EVENT OF A CONFLICT AMONG THESE REQUIREMENTS AND/OR PLANS, THE MORE RESTRICTIVE REGULATION SHALL APPLY OR A CLARIFICATION SHALL BE OBTAINED FROM THE ENGINEER.
3. THE CONTRACTOR SHALL BE REQUIRED TO REVIEW AND ABIDE BY SPECIFICATIONS OF THE PLAN AND ALL SUPPORTING DOCUMENTS, PERMITS, AND REPORTS FOR THIS SITE, INCLUDING BUT NOT LIMITED TO:
- EROSION AND SEDIMENTATION CONTROL PLAN
- POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
- REGIONAL BASIN AND STREAM RESTORATION CONSTRUCTION PLANS DATED 01/01/15 AND LAST REVISED 01/30/17
- WAYNE GLEN DAM AND BRIDGE EVALUATION GEOTECHNICAL REPORT DATED 01/14/18 AND LAST REVISED 01/19/17
- CARBONATED CONCRETE GEOLOGY STUDY DATED 08/01/13 AND LAST REVISED 07/16/14
4. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER OF ANY DISCREPANCIES OR ERROR THEY DISCOVER IN THE PLANS.
5. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE OF THE WORK TO BE UNACCEPTABLE.
6. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND TENANT.
7. TRAFFIC CONTROL METHODS, SUCH AS BARRICADES, SUFFICIENT LIGHTS, SIGNS, ETC., MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION.
8. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AREA.
9. HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
10. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS NEAR CONSTRUCTION. IN THE EVENT OF RAIN OR MUD, ROADS SHALL BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CARRIED STONE BASE, ETC., WITH A MINIMUM WIDTH OF 20 FEET. ACCESS TO BUILDINGS THAT HAVE SPRINKLER OR STANDPIPE SYSTEMS SHALL BE WITHIN 6 FEET OF THE FIRE DEPARTMENT CONNECTION. (NFPA 1141 3-1)
11. BEDDING REQUIREMENTS SPECIFIED HEREON ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
12. THE CONTRACTOR WILL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR CONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR GRADING AS REQUIRED BY THE ENGINEER. EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE, NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
13. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
14. SOIL TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND TON THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
15. ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY MUST COMPLY WITH THE TREDYFFRIN TOWNSHIP STANDARDS AND SPECIFICATIONS.
16. ALL PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
17. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL CONFORM TO CURRENT MUNICIPAL UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
18. ARCHITECT TO PROVIDE DETAIL FOR ALL EARTH ACTIVITY WITHIN 6' OF FINISHED FLOOR ELEVATION FOR ALL BUILDING CONSTRUCTION.
19. PROPOSED CLEAN OUT
20. INFILTRATION TEST POINT
21. PROPOSED PERMEABLE PAVEMENT
22. SURFACE INFILTRATION BASIN
23. REFRAP
24. PROPOSED CONCRETE SIDEWALK
25. PROPOSED BUILDING
26. PROPOSED STORM MANHOLE
27. PROPOSED INLET
28. PROPOSED ELECTRICAL
29. PROPOSED ELECTRIC MANHOLE
30. PROPOSED U/I II
31. PROPOSED WATER LINES
32. PROPOSED TELEPHONE MANHOLE
33. PROPOSED LIGHT POLE
34. PROPOSED WATER VALVE
35. PROPOSED FIRE HYDRANT
36. PROPOSED FIRE PROTECTION
37. PROPOSED SANITARY SEWER LINES
38. PROPOSED SANITARY SEWER MANHOLE
39. PROPOSED WETLAND FLAG
40. PROPOSED POND
41. PROPOSED FLOOD BOUNDARY
42. PROPOSED BIoretENTION BASIN
43. PROPOSED WALKING TRAIL
44. PROPOSED ACCESS DRIVEWAY

TREE PROTECTION SPECIFICATIONS

- 1. ALL WOODY VEGETATION TO BE RETAINED WITHIN 25 FEET OF A BUILDING SITE, PARKING AREA, OR OTHER PROPOSED IMPROVEMENT SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY 4" SHOWN FENCING. OTHER EFFECTIVE BARRIERS MAY BE APPROVED BY THE TOWNSHIP, UPON WRITTEN REQUEST. FENCING SHALL BE PLACED AROUND TREES TO BE REMAIN AT THE DIAPHRANE OF THE TREE OR 15' FROM THE TRUNK, WHICHEVER IS GREATER.
2. HEAVY EQUIPMENT OPERATORS SHALL NOT DAMAGE EXISTING TREE TRUNKS AND ROOT SYSTEMS BY DRIVING HEAVY EQUIPMENT WITHIN OR OTHERWISE DISTURBING THE AREAS CIRCUMSCRIBED BY THE DIAPHRANE OF ANY TREE. IN ADDITION, ROOTS SHALL NOT BE CUT OR DISTURBED WITHIN THE AREA CIRCUMSCRIBED BY THE DIAPHRANE OF ANY TREE. IF THERE IS NO ALTERNATIVE TO LOCATING A UTILITY LINE WITHIN THE TREE DIAPHRANE, IT IS STRONGLY ENCOURAGED THAT TUNNELING, RATHER THAN TRENCHING, BE USED TO MINIMIZE POTENTIAL DAMAGE TO TREE ROOT SYSTEMS. IN SUCH CASES, THE OFFICE OF THE TOWNSHIP LANDSCAPE ARCHITECT SHALL DETERMINE THE MOST DESIRABLE LOCATION FOR THE SURVIVAL OF THE TREE(S), WHERE TRENCHING IS UNAVOIDABLE. TRENCHED HOLES SHALL BE FILLED AS SOON AS POSSIBLE AND TAMPED LIGHTLY TO AVOID THE CREATION OF AIR SPACES.
3. TREES SHALL NOT BE USED FOR ROPING, CABLES, SIGNS, FENCING, OR LIGHTING. NAILS AND SPIKES SHALL NOT BE DRIVEN INTO TREES.
4. TREE PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH STANDARDS SET FORTH BY THE TREE CARE INDUSTRY ASSOCIATION, INC. IN THE LATEST EDITION OF "AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS ANSI 300 (PART 60)- 2006" MANAGEMENT OF TREES AND SHRUBS DURING SITE PLANNING, SITE DEVELOPMENT, AND CONSTRUCTION OR LATEST EDITION AND THE NATIONAL SOCIETY OF ARBORICULTURE COMPANION PUBLICATION "BEST MANAGEMENT PRACTICES FOR MANAGING TREES DURING CONSTRUCTION SPECIAL COMPANION PUBLICATION TO THE ANSI A300 PART 60" 2008 OR LATEST EDITION.

LEGEND:



SHEET LIST INDEX:

Table with columns: SHEET, PAGE, SHEET NAME, and a column for 'REVISIONS' with sub-columns for DATE, NO., and BY. Lists sheets CS0001 through CS9607 and LP-1 through LP-5.

PA ONECALL UTILITIES LIST

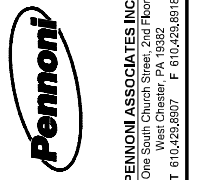
- 1. PECO ENERGY C/O USIC 450 S HENDERSON RD SUITE B KING OF PRUSSIA, PA. 19406 CONTACT: NIKKIA SIMPKINS EMAIL: NIKKIASIMPKINS@USICLLC.COM
2. AT&T LOCAL SERVICES 360 GEES MILL BUSINESS PKWY NE CONYERS, GA. 30013 CONTACT: NANCY SPENCE EMAIL: NS2821@ATT.COM
3. AQUA PENNSYLVANIA INC 762 W LANCASTER AVE BRYN MAWR, PA. 19010 CONTACT: STEVE PIZZI EMAIL: SBPIZZI@AQUAAMERICA.COM
4. COMCAST CABLE COMMUNICATIONS INC 1004 CORNERSTONE BLVD DOWNTOWN, PA. 19335 CONTACT: TOM RUSSO EMAIL: TOM\_RUSSO@CABLE.COMCAST.COM
5. TREDYFFRIN TOWNSHIP 1100 DUPORTAIL RD BERWYN, PA. 19312 CONTACT: DARIN FITZGERALD EMAIL: DFITZGERALD@TREDYFFRIN.ORG
6. LEVEL 3 COMMUNICATIONS LLC 1025 ELDORADO BLVD BLDG BROOMFIELD, CO. 80021 CONTACT: LEVEL 3 OPERATOR PERSONNEL EMAIL: RELO@LEVEL3.COM
7. ZAYO BANDWIDTH FORMERLY PPL TELECOM LLC 1060 HARDEES DR UNIT H ABERDEEN, MD. 21001 CONTACT: GEORGE HUSS EMAIL: GEORGE.HUSS@ZAYO.COM
8. VERIZON PENNSYLVANIA INC 15 MONTGOMERY AVENUE, FLOOR 2 PITTSBURGH, PA. 15212 CONTACT: DEBORAH BARUM EMAIL: DEBORAH.D.DELIA@VERIZON.COM
9. VERIZON BUSINESS FORMERLY MCI 400 INTERNATIONAL PARKWAY RICHARDSON, TX. 75081 CONTACT: CURTIS KEEFER EMAIL: INVESTIGATIONS@VERIZON.COM
10. AMERIGAS PROPANE LP 9 N BACTON HILL RD FRAZER, PA. 19355 CONTACT: CURTIS KEEFER EMAIL: CURTIS.KEEFER@AMERIGAS.COM
11. CROWN CASTLE 2000 CORPORATE DR CANONSBURG, PA. 15317 CONTACT: REBECCA BYRD EMAIL: REBECCA.BYRD@CROWNCASTLE.COM



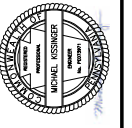
CALL BEFORE YOU DIG BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776 PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC. SERIAL NUMBER(S): 2017300480

PLAN SHEETS CS0002, CS0003, CS1000, CS1001, CS1002, AND CS1003 ARE TO BE RECORDED AT THE CHESTER COUNTY RECORDER OF DEEDS OFFICE.

NOT FOR CONSTRUCTION



PENNONI ASSOCIATES, INC. One South Church Street, 2nd Floor Philadelphia, PA 19106 T 800-242-8267 F 800-242-8689



ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

WAYNE GLEN WALKER ROAD AND OLD EAGLE SCHOOL ROAD TREDYFFRIN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

PLAN NOTES

ARCADIA TREDYFFRIN, LLC 1060 HARDEES DR UNIT H ABERDEEN, MD. 21001 CONTACT: GEORGE HUSS EMAIL: GEORGE.HUSS@ZAYO.COM

Table with columns: REVISIONS, DATE, NO., BY. Contains revision history for sheets CS0002 and CS0003.

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT BEING PREPARED FOR ANY OTHER PROJECT. ANY BELIEF WITHOUT WRITTEN SPECIFICATION OR AGREEMENT BY PENNONI ASSOCIATES FOR ANY SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS RISK AND WITHOUT LIABILITY TO PENNONI ASSOCIATES. PENNONI ASSOCIATES SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS ARISING OUT OF OR RESULTING THEREFROM.

PROJECT: ARLC1701 DATE: 2017-12-31 DRAWING SCALE: 1"=30' DRAWN BY: MEM APPROVED BY: MKK

CS0002 SHEET 2 OF 50

TREDFYFRN TOWNSHIP BOARD OF SUPERVISORS GRANTED CONDITIONAL USE APPROVAL ON 6/22/15 SUBJECT TO CONDITIONS OF APPROVAL LATER MODIFIED BY THE SETTLEMENT AGREEMENT DATED 12/7/15 BETWEEN ARCADIA TREFYFRN LLC, ITS SUCCESSORS AND ASSIGNS, AND THE BOARD OF SUPERVISORS OF TREFYFRN TOWNSHIP (SETTLEMENT AGREEMENT) AS MORE SPECIFICALLY LISTED BELOW:

**Conditions of Approval**

The following conditions are imposed and attached pursuant to Section 603 (c)(2) of the Municipality's Planning Code and Zoning Ordinance Section 208-117.B. Except where a different deadline is expressly noted, or unless the context clearly states otherwise, all conditions shall be satisfied prior to preliminary land development approval. For the purpose of this Decision and Order, and specifically the following conditions, the term "Applicant" shall include the Applicant's successors and assigns and interests with respect to the Property and the Application. In addition, subject to the terms and conditions contained in the Settlement Agreement, the Conditional Use Plan for the Residential Parcel is modified as set forth in the Settlement Plan, prepared by Pennoni Associates Inc., dated August 28, 2015 and last revised December 1, 2015 (the "Settlement Plan"). The Conditional Use Plan is incorporated into the Settlement Plan and all references to the Settlement Plan shall be deemed to incorporate the Conditional Use Plan as modified by the Settlement Plan. Any reference to the Conditional Use Approval shall mean as modified by the Settlement Agreement.

- Land development approval for the Residential Parcel and the Office Parcel may be pursued by the Applicant in separate phases ("residential phase" and "non-residential phase", respectively). The development of the Office Parcel shall comply only with those Conditions that are applicable to the development of the Office Parcel, and the development of the Residential Parcel shall likewise comply only with those Conditions that are applicable to the development of the Residential Parcel, as all identified on Exhibit "B" attached to the Settlement Agreement, except those Conditions identified on Exhibit "C" as applicable to the development of both the Office Parcel and Residential Parcel. (Exhibit B listed below these Conditions of Approval.)
- As required by Section 208-150 (11)(a), Conditional Use approval is granted for the general layout of roads, buildings, parking, and stormwater management facilities as shown on the Settlement Plan. Future modifications to the Settlement Plan shall be governed by Paragraph 4 of the Settlement Agreement.
- It is understood that the specific quantities of measurement referenced in the conditional use plans (for example, impervious coverage percentages, storm water facility volume capacities, loading and recharge rates, areas of green roof, square footage of buildings, and similar measurements) may change following the date of this decision as a result of either the land development process and/or third party approval and permitting processes. Future modifications to the Settlement Plan shall be governed by Paragraph 4 of the Settlement Agreement.
- The stormwater management system for the Residential Parcel shall be designed and managed to include an additional 200 square feet per unit or more of impervious cover to account for future decks, patios, generators and other outdoor impervious cover for the residential units as required by 208-163 (b) and the HOA declaration shall contain a provision limiting the combined areas of such impervious areas to 200 square feet per residential unit and shall permit Township enforcement of such restrictions on terms reasonably satisfactory to the Township.
- All residential units shall be provided with stone, brick, cement board siding, stucco, or like materials. Neither vinyl, exterior insulation finishing systems (EIFS), nor aluminum siding shall be used.
- At least 50% of the residential units shall be provided with the option of either an elevator or a first floor master bedroom as required by 208-162 (b)(2) and 208-6 (definition of age-targeted housing).
- At least twenty-five (25) of the residential units constructed on the Property (regardless of the total number of residential units constructed) shall be carriage homes.
- All carriage homes shall have a first floor master bedroom having a dedicated full bathroom (i.e., shower/bath, toilet and sink).
- Each residential unit shall provide a minimum of 2.5 parking spaces as required by 208-103 (C)(2) and 181-60 (a)(4)(b). The 5 parking spaces per residential unit to be considered guest parking shall be provided within the on-street parking bays shown on the plans.
- All interior roads within the Residential Parcel shall be owned and maintained by the Homeowners Association ("HOA") of Wayne Glen. All interior streets within the Office Parcel will be owned and maintained by the owner of the Office Parcel.
- Indirect vehicular access shall be provided from the Residential Parcel to Swedesford Road. The location of such access is to be determined during the land development process for the Office Parcel and shall be constructed with the development of the Office Parcel, subject to PennDOT approval, if applicable.
- Owners and occupants of the Residential Parcel shall be granted permanent rights of vehicular and pedestrian access from the Office Parcel to Swedesford Road as per Condition #11 above.
- Emergency access roads shall be provided from the Residential Parcel to Walker Road and to Old Eagle School Road. These access roads shall be a minimum of 18 feet in width to accommodate two-way traffic and shall have grades no steeper than 8 percent.
- If Road A is constructed prior to occupancy of any residential unit, the emergency access road on the Residential Parcel to Old Eagle School Road may be constructed.
- A walkway as depicted on the Settlement Plan along the northern border of the Residential Parcel will traverse the top of the proposed dam along Walker Road, subject to DEP approval, and shall tie into the internal pedestrian network within the Residential Parcel to allow pedestrian access to Road A as well as determined during land development. All sidewalks within the public rights-of-way of Old Eagle School Road shall be constructed when the Residential Parcel is developed and completed prior to the issuance of the first use and occupancy permit for the Residential Parcel. Sidewalks within the public rights-of-way of Swedesford Road adjacent to the Office Parcel shall be provided when that parcel is developed.
- The Applicant shall be responsible for the reasonable cost of repair of any physical damage to residential structure located on properties which are both (i) adjacent to and (ii) down-drain of the Property (including Tax Parcel No. 43-4E-33) existing as of the date of this Decision and Order, if and to the extent caused by stormwater water impacts directly resulting from the Applicant's construction both during construction of, and for a two year period after the date of final completion of, the stormwater facilities for the Residential Parcel, as measured from the date of the issuance of a use and occupancy permit for the last of the residential units approved for construction.
- The width of all streets within the Residential Parcel (except for emergency access roads, which shall be governed by item 13 above) within the Property shall be at least 24 feet in width with the exception of Road E, as depicted on the Settlement Plan, which shall be 20 feet in width. The required SALDO base widening to street width is reflected on the Settlement Plan.
- All driveways for the Residential Parcel shall be vaulted in length but shall be between 20 feet and 24 feet in length for the villa and at least 24 feet in length for the carriage homes. The driveway lengths shall be measured from the paved driveway edge of the intersecting street and extending into the lot, as set forth in Section 181-46.1(b) of the SALDO. Notwithstanding the foregoing, for driveways that front onto sidewalks, there shall be at least twenty (20) feet of driveway length measured from the interior boundary of the sidewalk and the residential structure.
- The Township shall have the right to review and approve all documents and the HOA, including a recordable declaration of covenants and restrictions, the provisions of which shall include, at a minimum:
  - Provisions imposing upon the HOA the responsibility, subject to liens on the HOA property and the residents' properties, to comply with the post-construction O&M requirements and funding thereof; and
  - That all unit purchasers and their successors execute a written acknowledgment of the foregoing responsibilities.
- Applicant shall engage a credentialed historical consultant which may use other methods (other than ground penetrating radar) of conducting its investigation, as may mutually be agreed upon by Arcadia and Valley Friends Meeting, up to 50 feet outside the perimeter of the property for the purpose of investigating whether the remains of any persons are interred within the study area. In the event that human remains are found as a result of such investigation, they shall be identified and re-interred within the boundary of the cemetery on the grounds of the Valley Friends Meeting (if Valley Friends Meeting so permits) and Applicant shall secure any required permits from the Pennsylvania Historical and Museum Commission to conduct the investigation.
- The Applicant shall be responsible for the reasonable cost of repair of any physical damage to residential structure located on properties which are both (i) adjacent to and (ii) down-drain of the Property existing as of the date of this Decision and Order (including Tax Parcel No. 43-4E-33) if and to the extent caused by stormwater water impacts directly resulting from the Applicant's construction both during construction of, and for a two year period after the date of final completion of, the stormwater facilities for the Office Parcel, as measured from the date of the issuance of a use and occupancy certificate for the Office Parcel.
- The stormwater management system designed, built and maintained by the Applicant shall be maintained to achieve the following performance standards:
  - The stormwater management system shall recharge the runoff generated during the 2-year/24 hour storm, as required by Code Section 208-161 A)(3)(a).
  - The stormwater management system shall exceed rate control requirements of Article 17A by at least 50% for runoff generated, as required by Code Section 208-161 A).
  - The stormwater management system shall provide a 20% reduction in pre-development flow rate for the 100 year design storm and a 5% reduction in pre-development flow rate for the 2 year design storm based on meteorology typical in the industry for modeling storm water, as required by 208-161 A)(3)(a).
  - All stormwater structures and facilities shall be designed to manage on-site the volume of stormwater generated during the 100 year storm to prevent the overtopping of Walker Road during such storm events.
- Prior to the issuance of the final unconditional use and occupancy permit for the Residential Parcel, the Applicant will replace the existing culvert at Walker Road with a culvert consistent with the design identified in the Trout Creek Study or as otherwise approved by the Township Engineer and PADEP.
- The Regional Detention Basin shown on the Plan as the "Proposed Public Stormwater Improvement (Regional Detention Basin Storage Area)" shall be owned and maintained by the HOA of Wayne Glen.
- Additional details of annual basin operations and maintenance requirements and costs shall be in a modified operations and maintenance plan, which shall be submitted and approved by the Township Engineer during the land development approval process and incorporated into the HOA declaration.
- The Property shall be served by public sanitary sewers. No on-site sanitary sewage systems shall be permitted.
- An access easement for vehicular access and maintenance to the manholes and trunk line located in the existing sewer easement shall be provided to the satisfaction of the Township Engineer to facilitate routine maintenance and repair by the Township of the existing sanitary sewer facilities owned by the Township.
- During land development, grading shall be revised such that:
  - No retaining wall is located closer than 8 feet to any dwelling unit unless approved by the Township Engineer.
  - All grades within 8 feet of any dwelling unit do not exceed 20%.
 Access for equipment necessary for operations and maintenance shall be provided without further grading required, which access shall be shown on the Subdivision and Land Development Plan for the Residential Parcel.
- Applicant shall remove Walker Road from its intersection with Old Eagle School Road and continuing 975 linear feet in a westward direction along the Property's boundary according to specifications reviewed and approved by the Township Engineer by the sooner to occur of: (1) the first annual anniversary of the completion of construction activities of the Residential Parcel; or (2) the fifth annual anniversary following the commencement of construction of the Residential Parcel. The Applicant shall financially secure the cost of this road improvement at the time of recording of the approved final plan for the first phase of development.
- The developer of the Office Parcel shall remove Old Eagle School Road between its intersection with Swedesford Road to its intersection with Walker Road according to specifications reviewed and approved by the Township Engineer by the sooner to occur of: (1) the first annual anniversary of the completion of construction activities of the Office Parcel; or (2) the fifth annual anniversary following the commencement of construction of the Office Parcel. The Applicant shall financially secure the cost of this road improvement at the time of recording of the approved final plan for the first phase of development.
- The Applicant shall obtain approval from the Planning Commission for the project and development of the Property in the location and in the manner generally depicted in the Settlement Plan, consistent with this Decision and Order as modified by the Settlement Agreement, provided however that the Settlement Plan is preliminary in nature and may change as necessary to reflect the engineering of the project and to comply with this Decision and Order as modified by the Settlement Agreement, and the requirements of the Township Subdivision and Land Development Ordinance and other governmental approvals, as mutually agreed by the Applicant and the Planning Commission, subject to Paragraph 4 of the Settlement Agreement concerning future modifications to the Settlement Plan.
- The Applicant shall execute and provide to the Township a recordable, notarized copy of a memorandum containing a metes and bounds description of the Property and stipulating the terms and conditions of this approval and shall conform to the recording by the Township in the office of the Recorder of Deeds of Chester County within thirty (30) days following the expiration of the approval period, or, if applicable, upon the decision and Order, within 30 days following a resolution of the appeal.

**Stormwater, Traffic, Sanitary Sewer and Geotechnical Conditions**

- Required Permits for the Residential Parcel and the Office Parcel may be pursued separately.
  - Third party permits (PADEP, CCOD, PADDOT, etc.) and Township permits shall be obtained prior to the recording of a Final Subdivision and Land Development Plan for which such permits are required.
  - PADEP Permit (PADEP).
  - Chapter 10610a, Dam Safety Permits, as related to the proposed stream crossing, stream and floodplain regrading, restoration, and stabilization, floodplain and proposed dam structure (PADEP).
  - Highway Occupancy Permits (PADDOT), if necessary; and
  - Sanitary Sewer Planning Approval (PADEP).
- Township Permits
  - Township Permits
  - Stormwater and Grading permit
  - Road Opening Permit
  - Sewer Connection Permit
- Township Sanitary Sewer Tank Line for the Residential Parcel
  - Access easements shall be provided to the Township's sanitary trunk line on both the eastern and western sides of the stream channel. To ensure adequate access for maintenance activities, as well as during flooding conditions access points shall not be located on the dam embankment. Access plans shall be subject to that approval of the Township Engineer prior to Final Land Development Plan approval.
  - Access points to internal roadways shall be free of parked cars or other obstructions so as to not limit or restrict access to the Township's Trunk Run Trunk sewer line. Therefore, there shall be no parking spaces, trees, fire hydrants, etc. blocking these access points, and that should be clearly identified on the plans.
  - The access easement shall be shown on the Conditional Use and Land Development Plans and the location and grades, etc. approved by the Township Engineer and Director of Public Works.
  - The Applicant shall perform a technical inspection of the existing sanitary sewer through the project and adjacent roadways, especially within the regional basin, stormwater facilities, and internal roadways, to determine its condition. Should the Township Engineer determine the condition of the sanitary sewer system, including manholes, to be inadequate with regard to structural integrity, alignment, and/or water tightness, and/or impacted by the proposed construction activities, the sanitary sewer shall be repaired to the satisfaction of the Township Engineer or replaced, if necessary. Repairs may include but are not limited to replacement, pipe lining, grouting, manhole lining, exterior manhole sealing or other repairs as approved by the Township Engineer.
- Traffic (This Condition 3 shall not apply to the Residential Parcel)
  - Prior to Final Land Development approval for the Office Parcel, the Applicant(s) for the Office Parcel shall comply with the applicable traffic metrics in the Oth-Rodgers review letter, dated April 8, 2014, to the satisfaction of the Planning Commission.
  - As part of the Subdivision and Land Development Plan for the Office Parcel, the Applicant(s) for the Office Parcel shall update the traffic study and/or traffic signal timing modifications at the intersection of Old Eagle School Rd and Swedesford Road, as deemed necessary by the Township Engineer.
  - The Applicant for the Office Parcel shall secure all PADDOT HCP and Traffic Signal Permits, as necessary, prior to the recording of the approved Land Development Plan for the Office Parcel. Copies of all PADDOT permits shall be provided to the Township, as well as noted on the Final Plans to be recorded.
  - Stormwater Management
    - The Applicant shall provide the Township with copies of all stormwater permits and approvals from third party agencies, such as Chester County Conservation

District, PA Department of Environmental Protection, ACQE, etc. prior to the recording of the approved Land Development Plan. All permit data shall be noted on the Final Land Development Plans that are to be recorded in Chester County.

b. For each of the Residential and Office Parcels, the on-site stormwater management features shall maintain positive storage (storage below the lowest outlet) adequate to store the entire runoff volume from the two-year storm in accordance with 208-161 A)(3a) for the Parcel.

c. For the Proposed (Carriage Homes) the total volume is 43,985 CF (0.34 Acre-Ft).

d. For P&OZ (Carriage Homes) the total volume is 56,702 CF (1.34 Acre-Ft).

e. All proposed stormwater management BMPs (Bioswale/Infiltration Basins, Roadway Pervious Pavement/ Underground Infiltration Beds, etc.) used to provide post-construction stormwater volume reduction shall be designed in accordance with the design of the proposed stormwater management. The monitoring well on the Residential Parcel shall be accessible by the HOA, the HOA professional engineer, Township, and PADEP to ensure that the storage is empty due to infiltration within a 72-hour period following a storm event. The monitoring well on the Office Parcel shall be accessible by the owner/occupant, professional engineer, Township and PADEP to ensure that the storage is empty due to infiltration within a 72-hour period following a storm event.

f. It is determined that the systems are not able to provide adequate drainage in 72 hours following a storm event, additional infiltration BMPs shall be provided on-site within the same POI to provide an amount of storage equal to that of the system in question. If needed, these additional BMPs shall not impact the proposed peak rate compliance in accordance with 208-165 A)(2), and be designed and constructed in a manner that does not impact the proposed approved zoning calculations. These additional BMPs shall also adhere to the Township's loading rate criteria.

g. The on-site stormwater management features shall maintain peak flow reductions at each POI equal to 50% of the baseline peak rate reductions of Chapter 174 in accordance with 208-164.

h. All portions of the Property (exclusive of footage sidewalks and entrance driveways) which bypass the proposed stormwater management systems shall be maintained in a meadow condition.

i. For the Residential Parcel, all downspouts shall be directed to pervious lawn areas or stormwater basin areas and be directly connected to the pervious pavement/underground bed proposed BMPs. Surface grading should be maintained to ensure that downspout flow will reach the intended BMPs without the potential for bypass.

j. A finalized planting plan shall be prepared prior to final land development approval that details the soil preparation, seeding methods, seeding mix, and planting plan for all stormwater management features, bypass meadow areas and the regional basin.

k. All off-site areas which are contributory to the site shall be conveyed to the stream in a manner that creates no impacts (flooding, erosion or other impacts) to adjacent properties.

l. The Residential Parcel shall be equipped with monitoring equipment, especially for the regional basin facility. The details of the monitoring plan shall be submitted to the Township Engineer for review and approval prior to Final Land Development Plan approval.

m. The Applicant shall prepare an executive summary of the site's stormwater management compliance with reference to the Township Stormwater Ordinance, TCO Ordinance, Trout Creek Study, and current state standards.

n. Given the complexity of the proposed Wayne Glen Stormwater Management and Site Land Development Plan, the Applicant shall agree to develop a post-construction stormwater management O&M final plan, and demonstrate how they and/or the HOA, or other entities will provide for the start and long term operation and maintenance of all the proposed CU stormwater management facilities on the proposed plans. The plan should clearly demonstrate that there will be adequate staff, professional engineering support services, and funding mechanisms in place for both short-term and long-term, routine, as well as all emergency inspection, maintenance and repairs and to ensure the safe and efficient and compliant operation and maintenance of all proposed stormwater management facilities. Given that the site is underlain by Kent geology upfrost loading should be site study by the HOA, and future property home owners for both shrub/maintenance, but even more importantly stormwater facility operation and maintenance (O&M) and further collected by the HOA, and future property home owners in a quarterly or yearly basis in a manner which identifies a can only be used for stormwater O&M (inspections, routine repair/maintenance activities, and/or emergency repair/maintenance replacement).

o. During the construction process the Applicant shall have a full-time professional engineer conduct inspections and certify that the regional basin, dam, and all other site stormwater management facilities are constructed in accordance with the approved plan, Township, PADEP, and CCOD permit requirements. For inspection purposes, the Township should be kept informed of the progress of the construction process and all critical steps during the construction process. A final certification shall be provided by the Applicant's professional engineer at the completion of each and all phases of construction.

p. A detailed Erosion and Sediment Control Plan and a Construction Sequencing Plan shall be provided prior to the issuance of a Township Stormwater and Grading permit for each of the Residential Parcel and the Office Parcel, and each shall also demonstrate compliance with PADEP and CCOD 102/ NPDES Erosion & Sediment Control requirements.

q. All proposed stormwater management features shall maintain a minimum two foot thick layer of native soil above the proposed infiltration bed bottom elevation during construction.

r. All detention, infiltration basins, Roadway Underdrain Infiltration Systems shall not be brought to grade until the drainage area to the basin, bed or systems are fully stabilized. In cases where any BMPs cannot meet this requirement the Applicant(s) must submit a request and plan justifying what measures are proposed in the construction sequence, timing, construction methods, oversight, to preserve the permeability of the underlying soils, prohibit soil clogging, and ensure the design compliance is met. This plan must be approved by the Township Engineer prior to Final Land Development approval, as well as by the PADEP EPCO.

s. The proposed infiltration BMP areas shall be clearly field delineated to prevent any potential conversion back to construction activities.

t. Continuity infiltration testing in accordance with the 174 Township Stormwater Ordinance and PA BMP Manual requirements shall be conducted at the proposed bottom elevation of all stormwater volume reduction/ infiltration systems. Documentation of this testing shall be provided to the Township Engineer prior to construction of these stormwater facilities.

u. If infiltration testing does not meet the original design values, the Applicant shall redesign the impacted stormwater features in order to ensure drainage and provide on-site compensatory areas, and/or provide a compensatory reduction of site impervious coverage.

v. In the event that the site plan for the Office Parcel is approved as a preliminary plan, the Applicant(s) shall provide a final engineering report and final site plan to the Township Engineer prior to the recording of the final use and occupancy permit for the Office Parcel. Such final site plan shall include a minimum required total 2-year volume control for the Commercial P&OZ regardless of whether or not the site is developed under the Trout Creek Overlay Ordinance, and shall include a minimum level of stormwater management benefits as maintained on the Trout Creek Watershed.

w. The Applicant shall provide an engineering stormwater management executive summary, as per condition 4)(k) above, which details and documents the measure of benefits, such as reduction in flood water levels at the Walker Rd, and/or the benefits downstream at the Gibraltar Road Bridge. Demonstration of benefits should summarize the proposed reductions in flood elevations, roadway overtopping, peak rate and volume for various events, velocity, etc. and shall include the following information:
 

- Applicant will install improvements to dissipate the energy of the water flowing over Walker Road and out of the culvert to mitigate the erosive effect of such outflow on the existing stream bank.
- As part of Applicant's post-construction operations and maintenance requirements, Applicant will be responsible for demonstrating the effectiveness of the energy dissipation improvements, to the satisfaction of the Township's Engineer, for all regulated storms from the 1-year through 100-year storm events.
- Applicant will design and implement stream stabilization measures from the outflow of the Walker Road culvert to the Gibraltar Road culvert to mitigate the erosive effect of the outflow from the new culvert to be installed by Applicant under Walker Road. The stream stabilization measures shall be proposed by Applicant and subject to review and approval by the Township Engineer (and any consulting engineer engaged by the Township).

x. Operations and Maintenance
 

- A detailed Operation and Maintenance Plan shall be prepared for review by the Township, clearly detailing the routine, yearly, and emergency maintenance inspection, maintenance, and repairs, and reporting to the Township, prior to a Final Land Development approval.
- The O&M Plan shall include a plan showing the location of stormwater features which demonstrate full access to the perimeter of each proposed SMM facility. Access routes for each facility shall not be encumbered by adjacent residential units or landscaping and should have a min. 10-ft min width with slopes less than or equal to 5:1.
- The HOA shall be responsible for the operation and maintenance all stormwater facilities within the town home and carriage home (POT #1 and #2) portions of the site on the Residential Parcel.
- The owners and operators of the Office Parcel shall be responsible for the operation and maintenance of all stormwater facilities within the Office Parcel.
- All property owners shall receive a simplified educational poster detailing the property's stormwater management features, which poster shall be subject to review and approval of the Township Engineer.
- Runoff encroachers shall be used for winter road treatment and no landscaping materials (i.e., soils, sands, mulch, etc.) shall be stockpiled on the proposed roadway.
- During the construction process, the Applicant shall have a full-time professional engineer conduct an inspection of all of the stormwater management facilities on the Property, specifically including the regional basin, the following are initial events greater than one inch of observed rain for the Office Parcel, and reported to the PADEP, Chester County Conservation District, and the Township Engineer. Inspection reports shall be provided within one week of the rainfall event.
- For the Residential Parcel, the HOA shall ensure that the regional basin be inspected on a bi-monthly basis during the initial year of operation. Following that, the HOA shall hire a professional engineer to inspect the basin following any rainfall events greater than one inch of observed rain for the Office Parcel, and report all every storm with more than 2.7 inches of rainfall over a 24-hour period. Copies of these inspection reports shall be provided to the Township Engineer, within 14-days of the inspections.
- Annual inspection reports completed by a Professional Engineer on April 1st of each calendar year. The reports shall document any major and all routine inspections, maintenance, and repairs conducted on the regional basin and all private stormwater facilities. The report shall include a list of any outstanding maintenance items which are not completed by the Township.
- In addition, to the annual inspection reports the HOA shall maintain up to date contact with the Township with the responsible parties for operation and maintenance, and provide an updated list of contacts, cell phone, and email for all contacts.
- For the Residential Parcel, the HOA (and/or owners of the property) shall provide the Township copies of all Annual PADEP Dam Safety Inspection Reports, and certification by a Professional Engineer that all required maintenance (routine, non-routine, and emergency, etc.) has been adequately performed to ensure the safe operation of the regional basin and dam retention structures. The HOA will also be responsible for any, all, inspections of the culverts, embankments, dam on both the HOA and Township property(s), since they will be integral to the facility and a requirement of PADEP.

y. Geotechnical
 

- Due to the unique combination of high density development and known karst conditions (i.e., sinkholes), this site has a higher than average propensity for the formation of sinkholes. As a result, there are there shall be financial security allocated for post-construction stormwater management operations and maintenance and possible sinkhole remediation shall be funded via an association reserve account contribution per dwelling unit at the Residential Parcel of \$1,000 per unit at the time of settlement of each unit with assessments in the amount of \$400 per year per unit, which shall commence for each unit in the initial year of convergence of each unit. Such funds shall be set aside in a separate escrow account and accumulate until such time that the account balance is sufficient as determined by a reserve study to be conducted by a professional engineer with expertise in such studies and utilizing typical methodology for infiltration indexing via the consistency price index, which study shall be presented to the Township for its review and approval. This shall not be construed as a limit on Arcadia or the HOA's ability to replace the reserve account with an insurance policy in an equal amount at some time in the future containing terms acceptable to the Township in its reasonable discretion.
- The Applicant shall provide the Township documentation of all sinkholes and solution features that develop, including location and dimensions, on the Wayne Glen site during construction on the construction as-built plans. All such sinkholes on the Property (that are not in infiltration areas, which are covered in 6)(i) below) shall be remediated to the satisfaction of the Township Engineer. The information provided pursuant to this condition shall include details and documentation of all remedial actions taken for each feature.
- Special foundation considerations, when met by sub-surface conditions, shall be indicated on the plans and applications submitted to the Township for all future building and zoning permits. Examples of considerations include grouting, deep dynamic compaction, grade beam or mat design of foundations and, if necessary, piles to support grade beam structural foundations.
- The Operations and Maintenance (O&M) manual should include sections regarding industry accepted best management practices within carbonate geology, and industry accepted protocol for addressing subsidence activity that becomes evident during the life of the project. Inclusion in the O&M manual would be a listing of allowed and prohibited karst remediation techniques (i.e., remediation methods that would impair the function of proposed stormwater infiltration facilities and underground stone beds in the field). This document should also include a notification plan when a sinkhole occurs that includes an on-call geotechnical engineer under contract with the HOA and notification to the PADEP and Township Engineer.
- For units within the Residential Parcel, a statement shall be included in the property deed, and HOA documents stating that that homes and development are located on a carbonate formation. The documentation should also include the industry accepted and best management practices for managing the risks associated with development in active karst areas.
- All stormwater pipe and connections must be provided with watertight gaskets.
- Backfill of utility conduit and pipe (including, but not limited to sewer and stormwater) shall not use coarse bedding material, but rather use native material.
- The Township shall have unrestricted access during construction for inspection purposes. The Township shall be notified prior to the completion of any karst-related remedial efforts.
- In the case that additional sinkhole or solution features are uncovered within the limits of infiltration facilities during construction, the Applicant(s) shall revise their stormwater management plan(s) to remediate the discovered features (i) in a method which maintains the BMPs proposed stormwater volume, rate, and water quality benefits in the approved plans. These plan(s) shall be submitted to and approved by the Township Engineer. In cases where these features(s) in BMPs cannot be remediated in a method that preserves the quantified stormwater benefits the Applicant shall replace the affected stormwater BMP, propose alternative solutions acceptable to the Township Engineer, and/or provide a compensatory reduction of impervious surface to compensate for the loss of any required infiltration volumes.

**Additional Conditions of Approval per the Settlement Agreement**

- Any condition requiring the undertaking of any construction shall not be required to be satisfied prior to Preliminary Subdivision and Land Development approval and shall be satisfied and completed during the construction of the applicable Phase. Further, Arcadia shall not be required to perform additional karst analysis in connection with the Preliminary or Final Subdivision and Land Development Plans for the Residential Parcel or Office Parcel, provided, however that this provision shall have no effect on Arcadia's continuing obligations expressly set forth in the Decision as amended by the Settlement Agreement, specifically including, without limitation, Conditions 6)(i) and 6)(j) of the Decision.
- The provisions of Paragraph 2 of the Settlement Agreement shall supersede any conflicting Conditions of Approval. Further, to the extent that there is a conflict between the Settlement Agreement (which includes the Settlement Plan) and the Decision, the Settlement Agreement shall control the development of the Property. Notwithstanding the foregoing, to the extent not modified, either explicitly or implicitly, by the terms of the Settlement Agreement, the Conditional Use Decision shall remain in full force and effect.
- The Residential Parcel and the Office Parcel may be constructed or installed in separate phases (each a "Phase") over time, as determined by Arcadia.
- The Parties acknowledge that the Settlement Plan is preliminary and not yet fully engineered. Following execution of the Settlement Agreement, certain modifications to the Settlement Plan may be necessary to facilitate engineering, environmental, design modification as well as modifications required by county, state and federal regulatory agencies in connection with the application of the Settlement Agreement, and such modifications shall not be construed as being inconsistent with the Settlement Plan or the Settlement Agreement and will be permitted absent amendment of the Conditional Use Decision or the Settlement Agreement, provided the Modifications do not: (i) increase the density proposed for the Residential Parcel, (ii) decrease the road widths or driveway lengths for the Residential Parcel, (iii) increase the residential coverage for the Residential Parcel, (iv) increase the impervious coverage for the Office Parcel, (v) violate any terms of the Conditional Use Decision, as modified by the Settlement Agreement, (vi) violate the Zoning Ordinance (except to the extent that relief thereof is expressly provided in the Settlement Agreement); (vii) violate the SALDO (except to the extent that relief therefrom is expressly provided in the Settlement Agreement); (viii) modify the layout set forth in the Settlement Plan in a material manner, or (ix) reduce the stormwater management benefits of the development shown on the Settlement Plan. In addition, such Modifications shall not result in the need to seek new conditional use approval, provided, however, that if Arcadia and the Township cannot agree as to whether proposed Modifications shall be permitted or not, the Township may require that the Modifications be reflected on Arcadia's Subdivision and Land Development Plan for the phase(s) of construction of the Property in which such change(s) will occur.

**EXHIBIT "B"**

Condition	Applies to Residential Independently	Applies to Office Independently	Applies to Office Independently
1	X		
2	X		
3	X		
4	X		
5	X		
6	X		
7	X		
8	X		
9	X		
10	X		
11	X		
12	X		
13	X		
14	X		
15	X		
16	X		
17	X		
18	X		
19	X		
20	X		
21	X		
22	X		
23	X		
24	X		
25	X		
26	X		
27	X		
28	X		
29	X		
30	X		
31	X		
32	X		
33	X		
34	X		
35	X		
36	X		
37	X		
38	X		
39	X		
40	X		
41	X		
42	X		
43	X		
44	X		
45	X		
46	X		
47	X		
48	X		
49	X		
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67	X		
68	X		
69	X		
70	X		
71	X		
72	X		
73	X		
74	X		
75	X		
76	X		
77	X		
78	X		
79	X		
80	X		
81	X		
82	X		
83	X		
84	X		
85	X		
86	X		
87	X		
88	X		
89	X		
90	X		
91	X		
92	X		
93	X		
94	X		
95	X		
96	X		
97	X		
98	X		
99	X		
100	X		

The Residential Parcel shall comply with those portions of the Condition applicable to the Residential Parcel, and the Office Parcel shall comply with those portions of the Conditions applicable to the Office Parcel.

The Residual Use Parcel shall comply with this Condition only as to the Stormwater Management Facilities on the Residential Parcel, and the Office Parcel shall comply with this Condition only as to the Stormwater Management Facilities on the Office Parcel.

The Residual Use Parcel and the Office Parcel shall each have a separate Operations and Maintenance (O&M) manual related to the respective property, within the respective Plans.

WAVERS AND VARIANCES APPROVED PER THE SETTLEMENT AGREEMENT DATED 12/07/15 BETWEEN ARCADIA TREFYFRN LLC, ITS SUCCESSORS AND ASSIGNS, AND THE BOARD OF SUPERVISORS OF TREFYFRN TOWNSHIP

- SECTION 181-45 B: THE MINIMUM BLOCK LENGTH SHALL BE 60-FT
- SECTION 181-46 A)(8): GLAZE-IN STREETS ARE PROHIBITED
- SECTION 181-46 B)(3): PERMANENT CURB-TO-CURB STREETS SHALL HAVE A CIRCULAR TURNAROUND
- SECTION 181-46 C)(1)(A): MINIMUM ROAD ON CENTER LINE ON SUBURBAN STREETS
- SECTION 181-46 F)(4): MINIMUM WIDTHS OF WAY AND CURBWAY WIDTHS FOR ALL STREETS
- SECTION 181-46 H: STREET CONSTRUCTION STANDARDS
- SECTION 181-46 J)(8): DRIVEWAY STRAIGHT LENGTH
- SECTION 181-46 J)(10): DRIVEWAY ANGLES
- SECTION 181-46 J)(15): PROVIDING DRIVEWAYS ON BOTH SIDES OF THE STREET
- SECTION 181-46 B)(10): NO DWELLING SHALL BE LOCATED CLOSER THAN 20 FEET TO ANY INTERIOR LOT STREET, COURT, CUL-DE-SAC, MODIFIED CUL-DE-SAC OR COMMON PARKING AREA
- SECTION 181-46 J)(1): A PARTIAL WAIVER(S) OF THE BUFFER AREA PLANTING PERMETER YARD PLANTING AND STORMWATER IMPROVEMENT PLANTING, AS APPLICABLE, AND TO DETERMINE FUTURE PLANTING OF THE DAM AND REGIONAL BASIN CONJUNCTION WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, SECTION 208-163.2(A) PERMITS REDUCTIONS IN BUFFER REQUIREMENTS UNDER SOME CIRCUMSTANCES
- SECTION 181-54: A GENERAL WAIVER OF 181-45.B IS REQUESTED, AS APPLICABLE.

SECTION 181-54-1

SECTION 181-54



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ALL DIMENSIONS