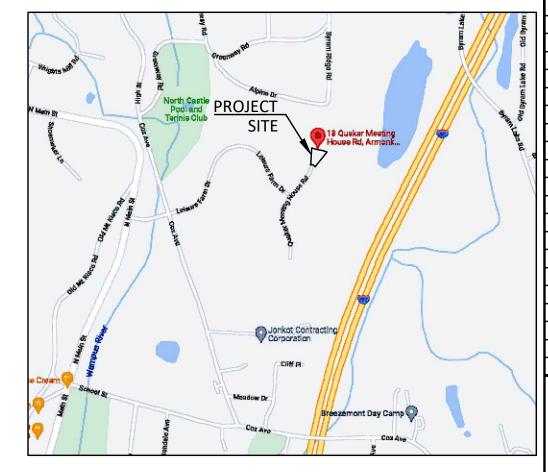
|  | LANNING DEPARTMENT<br>Adam R. Kaufman, AICP<br>Director of Planning  |
|--|--|
|  | GROSS LAND CO  |
|  | cation Name or Identifying Title:  |
|  | Inp Designation or Proposed Lot No.: _ Lot Coverage  |
| 1.   | Total lot Area (Net Lot Area for Lot   |
| 2.<br>3.   | Maximum permitted gross land cover BONUS maximum gross land cover  |
|  | Distance principal home is beyond a 24.67 x 10 =   |
| 4.<br>5.   | TOTAL Maximum Permitted gro  Amount of lot area covered by prin  |
| 6.   | 3,517 existing + 0  Amount of lot area covered by acce   |
| 7.   | 0 existing + 0  Amount of lot area covered by <b>deck</b>  |
| 8.   | existing +0  Amount of lot area covered by <b>porc</b>   |
| 9.   | existing +0  Amount of lot area covered by <b>driv</b> .   |
| 10.  | 3,242 existing + 0  Amount of lot area covered by terra  |
| 11.  | O existing + 509  Amount of lot area covered by tenn   |
| 12.  | 29 existing + 520  Amount of lot area covered by <b>all o</b>  |
| 13.  | existing +0 Proposed gross land coverage: To   |
| the pro  | e 13 is less than or equal to Line 4, you oject may proceed to the Residential Proof comply with the Town's regulations  |
| Signat   | ture and Seal of Professional Preparing  |
|  |  |
|  | ERAGE AREAS  |
|  | D NACCTINIA 1101100 5 5 5 5  |
| · · · · · · · · · · · · · · · · · · ·  | R MEETING HOUSE ROAD<br>NEW YORK 10504<br>STER COUNTY, NEW YORK  |
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| Gene Pad :   | NEW YORK 10504 STER COUNTY, NEW YORK  Prator Basement   = 15 sf Steps = 107 sf   |
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| WESTCHES  Gene Pad :  Walkway  TO  | erator Basement Steps = 107 sf  Frame Residence = 370 sf = 3,517 sf  |
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CONSTRUCTION SEQUENCE ZONE: ONE FAMILY RESIDENCE DISTRICT ZONE 'R-1A' 1. CONTRACTOR TO STAKE CLEARING AND GRADING LINE AS LIMIT TOWN OF NORTH CASTLE OF DISTURBANCE, INSTALL SILT FENCES ALONG LIMIT OF WESTCHESTER COUNTY DISTURBANCE AND CORDON OFF SEPTIC SYSTEM AS INDICATED ON SITE PLAN. LOT 25 17 Bedford Road /REQUIRED Armonk, New York 10504-1898 2. CONSTRUCT ANTI-TRACKING PAD AT CONSTRUCTION ENTRANCE **PROPOSED** TO POOL AREA. **EXISTING SWIMMING** Telephone: (914) 273-3542 RESIDENCE POOL 3. EXISTING TREES SHALL BE PROTECTED DURING CONSTRUCTION OF POOL AND PATIO AREA. Fax: (914) 273-3554 www.northcastleny.com 1.003 AC 1 AC MINIMUM LOT AREA: 4. EXISTING UNDERGROUND UTILITIES AND EXISTING WELLS SHALL BE PROTECTED DURING (43,708 SF) CONSTRUCTION. OVERAGE CALCULATIONS WORKSHEET FRONT YARD SETBACK 50 FT. 74.67 FT. > 50 FT 5. STRIP TOPSOIL FROM POOL AREA AND STOCKPILE WHERE CHARLES & NANCY SWIFT Date: 5/23/2022 SIDE YARD SETBACK 25 FT. 26.87 FT. 89.55 FT. INDICATED. ALL TOPSOIL STORAGE SITES ARE TO BE 101.03 - 3 - 28 SURROUNDED WITH SILT FENCE DURING CONSTRUCTION. REAR YARD SETBACK 40 FT. 98.88 FT. 43.33 FT 6. CONSTRUCT PROPOSED POOL. MAXIMUM HEIGHT 43,708 30 FT. < 30 FT. < 30 FT. ots Created After 12/13/06): A. FRAME AND EXCAVATE FOR POOL. ALL EXCAVATED MATERIAL TO BE REMOVED OFF SITE. NO MATERIAL TO BE STOCKPILED. 9,363 verage (per Section 355-26.C(1)(a)): 9,350 + 13 = 12 % MAXIMUM BUILDING COVERAGE 8.9 % B. INSTALL FORM WORK INSTALL GRAVEL BED, REINFORCING AND PLUMBING FOR POOL. SPRAY GUNITE FOR POOL. er (per Section 355-26.C(1)(b)): C. INSTALL POOL EQUIPMENT PAD. D. BACK FILL AREA SURROUNDING POOL. minimum front yard setback 246 E. ROUGH GRADE AWAY FROM POOL AREA F. INSTALL UTILITY CONNECTIONS; AND ELECTRIC FEED oss land coverage = Sum of lines 2 and 3 BETWEEN HOUSE AND POOL EQUIPMENT AREA. PER SECTION 326.41 OF THE 2020 RESIDENTIAL CODE OF THE STATE OF NEW YORK, A TEMPORARY BARRIER SHALL COMPLETELY SURROUND G. INSTALL COPING, PLASTER POOL SURFACE. cipal building: THE SWIMMING POOL DURING CONSTRUCTION UNTIL A PERMANENT 3,517 H. FILL POOL WITH WATER \_ proposed = BARRIER IS PROVIDED. THE TEMPORARY BARRIER SHALL BE A MINIMUM OF 48 INCHES IN HEIGHT 7. INSTALL POOL DRAWDOWN MITIGATION SYSTEM. SYSTEM TO REMAIN OFF LINE UNTIL WORK IS essory buildings: proposed = \_\_\_\_392 8. INSTALL LANDSCAPE SCREENING WHERE INDICATED ON PLAN. \_ proposed = 9. INSTALL POOL FENCING AND GATES. \_ proposed = 10. TOPSOIL, SEED, SOD OR HYDROSEED, MULCH AND RESTORE eway, parking areas and walkways: ALL DISTURBED AREAS. INSTALL ADDITIONAL LANDSCAPING. 3,242 PROPOSED 4'-0" HIGH, PERMANENT POOL — — S 64° 03' 05" E 11. REMOVE EROSION CONTROLS ONLY AFTER ALL AREAS HAVE BEEN BARRIER FENCE WITH SELF CLOSING GATES THOROUGHLY STABILIZED. COMPLIANT WITH THE 2020 RESIDENTIAL \_ proposed = CODE OF THE STATE OF NEW YORK — PROPOSED POOL EQUIPMENT PAD iis court, pool and mechanical equip: \_ proposed = EXISTING TREE TO BE PROTECTED other structures: 437 DURING CONSTRUCTION (TYP.) \_ proposed = 8,646 otal of Lines 5 - 12 =84.34' PROPOSED STORMWATER AREA TO BE CORDONED ur proposal complies with the Town's maximum gross land coverage regulations and OFF WITH ORANGE MESH CONSTRUCTION FENCE roject Review Committee for review. If Line 13 is greater than Line 4 your proposal FOR PROTECTION DURING CONSTRUCTION. PROPOSED STORMWATER MITIGATION SYSTEM PROVIDE 4 CULTEC CONTACTOR 150XL HD WITH CAPPED INSPECTION PORTS TO GRADE FINISHED GRADE: ±498.63 TOP OF UNIT = 497.92 INVERT IN = 497.25 BOTTOM OF UNIT = 496.38 PROPOSED ELECTRIC AND GAS SERVICE LINE BOTTOM OF GRAVEL BED = 495.88 FROM RESIDENCE TO POOL EQUIPMENT PROPOSED PRE-TREATMENT / PROPOSED WATER SERVICE LINE (5 FT. MIN. Pool Mech. Pool Terrace OVERFLOW STRUCTURE SEPARATION FROM STORMWATER SYSTEM) = 413 sf Equip. Pad 🛚 TO PRECEDE SYSTEM RIM ELEVATION = 498.52 INVERT = 497.52Pool Coping = 96 sf BUILDING SETBACK LIMIT LINE -Retaining Wall W/ Steps = 330 sfPROPOSED 16' x 30' IN-GROUND SWIMMING POOL WITH 12" COPING (REFER TO CONSTRUCTION DRAWINGS) Pool = 480 sf Wood Deck PROPOSED GRASS SWALE TO DIRECT SITE FLOW AWAY FROM SWIMMING POOL ■ A.C. Units = 14 sfTEMPORARY SOIL STOCKPILE AREA TO BE SURROUNDED WITH SILT FENCE. EXCESS MATERIAL Sidewalk TO BE REMOVED OFF-SITE AND RESTORED WITH - l = 117 sf TOPSOIL AND SEED UPON REMOVAL OF MATERIAL = 2,755 sfAREA = 8,646 S.F. PROPOSED LIMIT OF DISTURBANCE LINE Brick Porch — ERRACE, AND EQUIPMENT PAD WILL 2 Story Brick & Frame \ Brick Step — × 496.41 NO ACTIVITY RELATED TO STORMWATER SF OF NEW IMPERVIOUS SURFACE SYSTEM AND POOL CONSTRUCTION TO Tax Lot 28 OCCUR BEYOND LIMIT LINE. Filed Map Lot 25 ON OF LAND COVERAGE F.M.#26434 TOTAL AREA OF DISTURBANCE ASSOCIATED WITH CONSTRUCTION OF ADDITION, POOL Area = 43,708.396 S.F. 497AND TERRACE IS 7,100 S.F. \= 1.003 Acres -5 65° 08' 25" E × 500.86 INFORMATION: RIM=490.72 / RIM=490.50 × 500.90 QUAKER MEETING **HOUSE ROAD** × 501.05 × 500.62 Asphalt Drive AM RIVER BASIN ' ✓ 12" TREE (3) 1ATION × 499.68 (1.36" MAPLE × 499.07 5 47° 47' 00" W └─ Utility Riser 307.38' F.M.#26434 CLEARING LIMIT AS SHOWN ON SUBDIVISION PLAN — CONTRACTOR TO ACCESS AREA FROM EXISTING DRIVEWAY. — EXISTING WELL TO BE PROTECTED ILL CREATE A TOTAL AREA OF EXISTING WELL TO BE PROTECTED — — PROPOSED 8' WIDE CONSTRUCTION ACCESS. AREA TO BE RESTORED WITH TOPSOIL AND SEED UPON COMPLETION OF CONSTRUCTION. EATION OF APPROXIMATELY 1,029 SF — CONTRACTOR SHALL INSTALL SILT FENCE DOWNHILL OF CONSTRUCTION ACTIVITY D AS A RESULT OF THE CONSTRUCTION ALONG CONSTRUCTION LIMIT LINE. ATER SYSTEM. CONTRACTOR SHALL PROVIDE 8' WIDE, 25' LONG GRAVEL NG WILL REQUIRE A CHIPPING PERMIT TO ANTI-TRACKING PAD AT CONSTRUCTION ENTRANCE ARTMENT. TO THE HOURS OF 8:30 AM TO 4:00 PM, PING IS PROHIBITED ON SATURDAYS, SUNDAYS AND ALL LEGAL HOLIDAYS. . ANY ROCK CHIPPING WILL REQUIRE DUST MITIGATION AND SHALL INCORPORATE PREMISES BEING KNOWN AND DESIGNATED AS LOT 25 AS SHOWN ON A CERTAIN THE BEST DUST CONTROL PRACTICES INCLUDING, BUT NOT LIMITED TO A WATER MAP ENTITLED "AMENDED MAP OF SUBDIVISION OF LEISURE FARM IN THE TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NEW YORK" SPRAY SYSTEM(AIR SUPPRESSION OR SURFACE WETTING). SAID MAP FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE, DIVISION OF LAND CONTRACTOR SHALL CONTROL WATER RUNOFF AS A RESULT OF ANY WATER SPRAY RECORDS ON OCTOBER 8, 1999 AS MAP NO. 26434. PROGRAM.



## **LOCATION MAP** N.T.S.

**GENERAL POOL CONSTRUCTION NOTES:** 

POOL PLANS ARE DESIGNED BY USING THE 2020 RESIDENTIAL CODE OF NEW YORK STATE.

1. THE PROPOSED IN-GROUND POOL, SHALL BE DESIGNED AND CONSTRUCTED IN CONFORMANCE WITH ANSI / APSP / ICC5.

ENTIRE POOL SHALL BE SURROUNDED BY A PERMANENT POOL BARRIER AND IT SHALL BE INSTALLED AS PER ALL APPLICABLE REQUIREMENTS LISTED IN THE 2020 RESIDENTIAL CODE OF NEW YORK

- 2. ALL GATES ARE TO BE SELF CLOSING, SWING AWAY FROM POOL AND HAVE A LOCKING MECHANISM SUCH AS A MAGNA LATCH AT LEAST 40" ABOVE GRADE LEVEL.
- 3. POOL SHALL PROVIDE A SAFETY VACUUM RELEASE SYSTEM THAT CONFORMS TO ASME A112.19.17 PER SECTION R326. SUCTION COVERS ON DRAIN OUTLETS SHALL CONFORM TO ANSI / ASME 112.19.8M OR ALTERNATIVES PER R326.6.2

| DTP 1 SYMBOL FOR DEEP TEST HOLE 1     |           |  |  |  |  |  |  |  |
|---------------------------------------|-----------|--|--|--|--|--|--|--|
| DEEP TEST HOLE RESULTS APRIL 12, 2022 |           |  |  |  |  |  |  |  |
| -                                     | DEEP TEST | <u>PII 1</u>                             |  |  |  |  |  |  |
| ELEV.                                 |           |  |  |  |  |  |  |  |
| 498.00                                | G.L.      | LAWN                                     |  |  |  |  |  |  |
| 497.5                                 | 0"-6"     | TOPSOIL                                  |  |  |  |  |  |  |
| 496.67                                | 6"-16"    | BROWN LOOSE FINE SANDY<br>LOAM WITH SILT |  |  |  |  |  |  |
| 494.00                                | 16"-48"   | MODERATELY COMPACTED SILTY LOAM          |  |  |  |  |  |  |
| 490.83                                | 48"-86"   | FINE TO MEDIUM SANDS                     |  |  |  |  |  |  |
|                                       |           |  |  |  |  |  |  |  |

P1 SYMBOL FOR PERCOLATION TEST 1

\*86" TOTAL DEPTH, NO GROUND WATER OR LEDGE

PERCOLATION TEST 1 RESULTS APRIL 12, 2022

∕ S 69° 19′ 55″ E

50.00'

| HOLE # | DROP<br>MINUTE | DROP<br>INCHES | SOIL RATE |
|--------|----------------|----------------|-----------|
|        | 26 min.        | 3 inches       | 6.9 in/hr |
| 1      | 32 min.        | 3 inches       | 5.6 in/hr |
|        | 33 min.        | 3 inches       | 5.5 in/hr |

INFILTRATION TEST HOLES WERE EXCAVATED TO 42". TEST RUNS WERE CONDUCTED FROM 28" TO 31" DEPTHS

Approved by Town of North Castle Planning Board Resolution, Dated: \_\_\_\_\_

Christopher Carthy, Chairman,

Joseph M. Cermele, PE

**Kellard Sessions Consulting** 

**Consulting Town Engineers** 

Town of North Castle Planning Board

Engineering Plans Reviewed for Conformance to Resolution:

SCALE IN FEET

REVISION

TC Merritts Land Surveyors 394 Bedford Road Pleasantville, New York 10570 Tel: 914-769-8003

Charles & Nancy Swift 18 Quaker Meeting House Road Armonk, New York 10504

## DTS • PROVIDENT

DTS Provident Design Engineering, LLP

One North Broadway White Plains, NY 10601

P: 914.428.0010

Under New York State Education Law Article 145 (Engineering), Section 7209 (2), It Is A Violation Of This Law For Any Person, Unless Acting Under The Direction Of A Licensed Professional Engineer, To Alter This

© DTS Provident Design Engineering, LLP

SWIFT RESIDENCE POOL 18 Quaker Meeting House Road Town of North Castle

Westchester County, New York

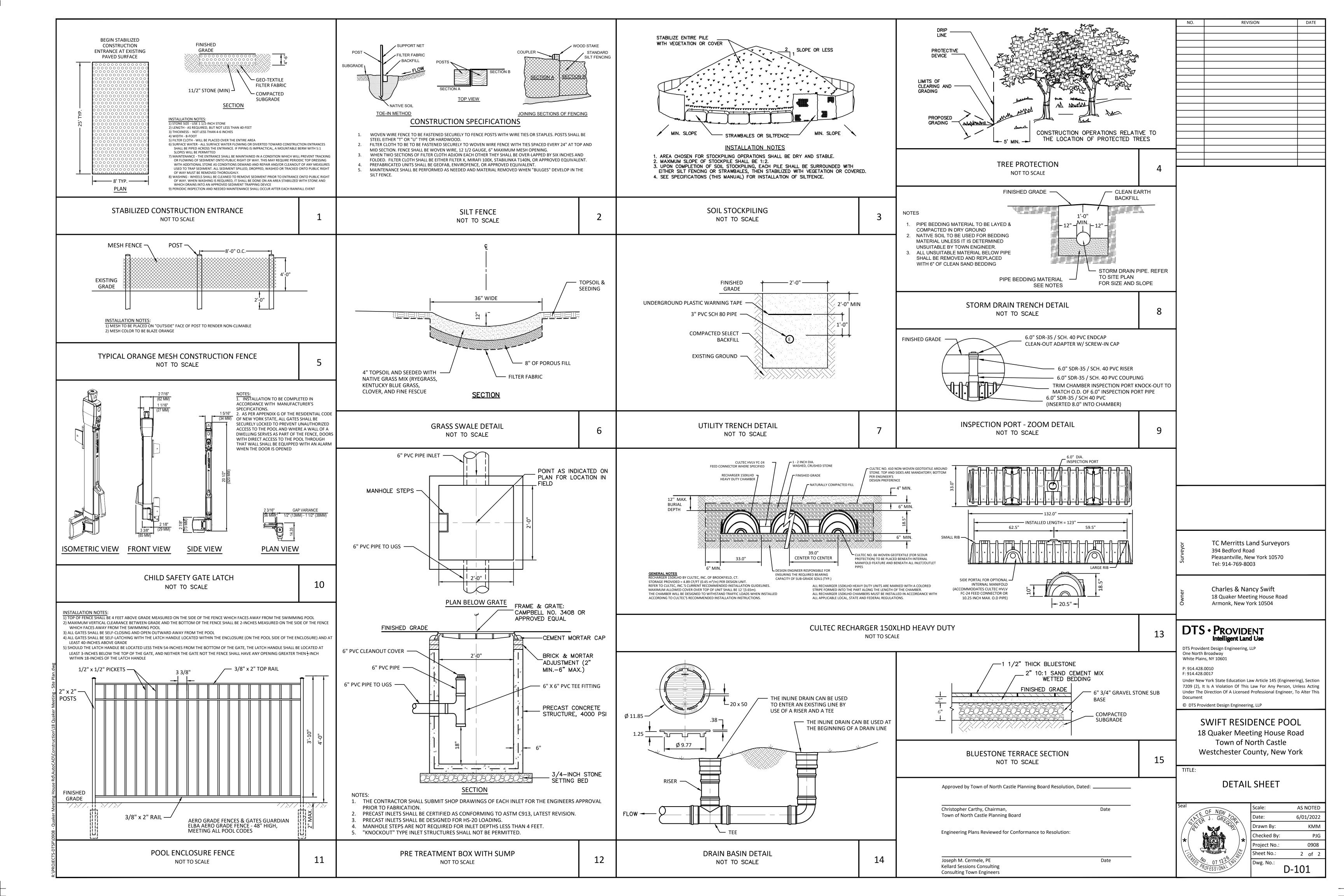
Date

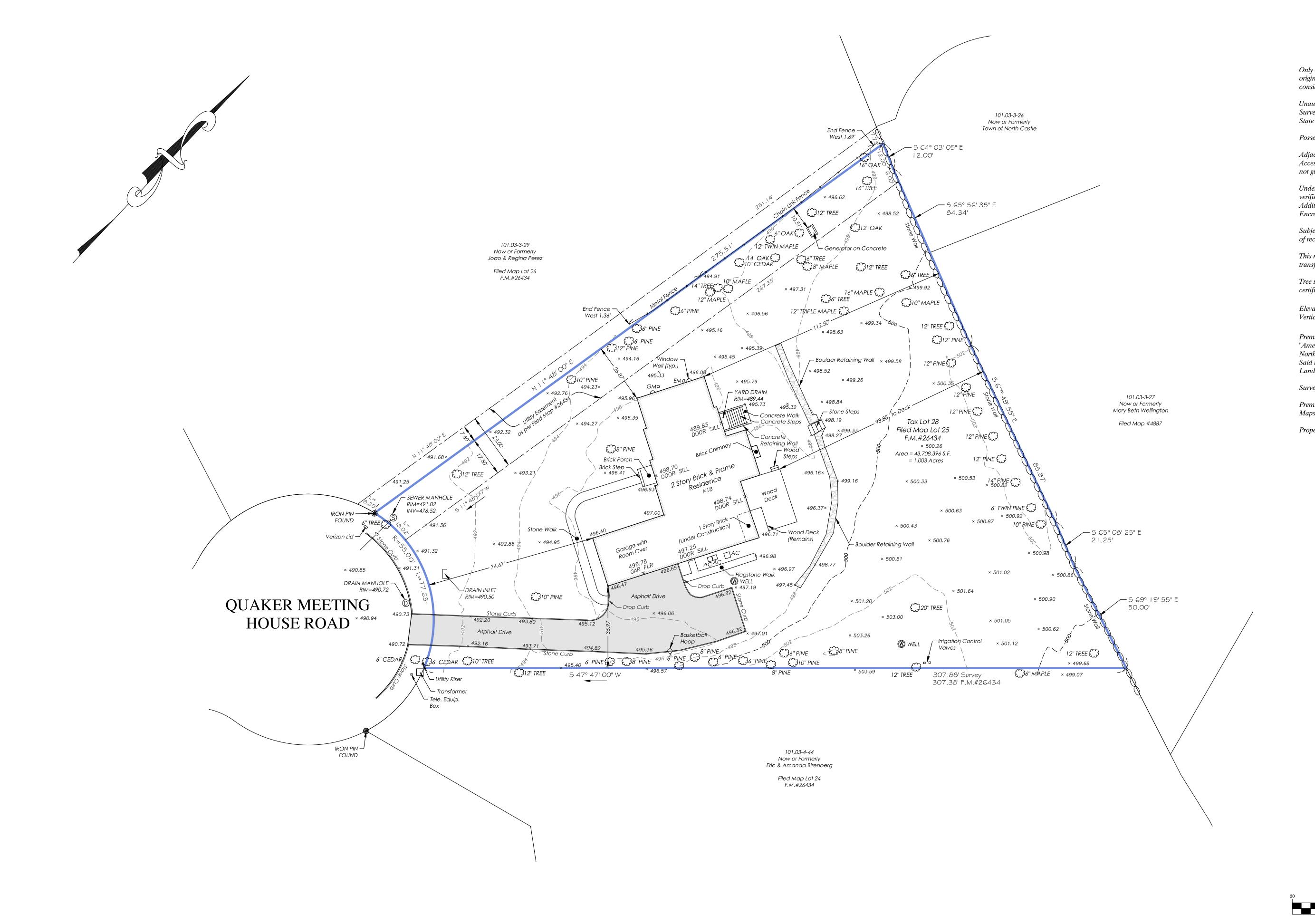
Date

SITE PLAN



| DE NEW                       | Scale:       | 1" =    |
|------------------------------|--------------|---------|
| J. GREGORY                   | Date:        | 6/01/20 |
| COPY \                       | Drawn By:    | KN      |
|                              | Checked By:  |         |
| *                            | Project No.: | 09      |
| 07/226                       | Sheet No.:   | 1 of    |
| . 07 1226<br>FESS I ONAL END | Dwg. No.:    | C-101   |





Only copies from the original of this topography map marked with an original of the Land Surveyors embossed seal or red colored seal shall be considered to be true, valid copies.

Unauthorized alteration or addition to a map bearing a licensed Land Surveyors seal is a violation of Section 7209, Subdivision 2 of the New York State Education Law.

Possession only where indicated.

Adjacent property lines and easements not surveyed or certified.
Access to adjacent rights of way, easements and public or private lands not guaranteed or certified.

Underground utilities shown hereon are approximate and should be verified before excavating.

Additional underground utilities are not shown or certified.

Encroachments and structures below grade, if any, not shown or certified.

Subject to covenants, easements, restrictions, conditions and agreements of record.

This map is prepared to show topography only and is not to be used for title transfer purposes. Map may not be certified to title companies and/or banks.

Tree species shown hereon to be verified by a licensed arborist and are not certified by surveyor.

Elevations shown hereon generally in accordance with North American Vertical Datum 88.

Premises hereon being Lot 25 as shown on a certain map entitled, "Amended Map of Subdivision of Leisure Farm, in the Town of North Castle, Westchester County, New York."

Said map filed in the Westchester County Clerk's Office, Division of Land Records October 8, 1999 as map number 26434.

Surveyed in accordance with Deed Control Number 612173550.

Premises shown hereon designated on the Town of North Castle Tax Maps as: Section 101.03, Block 3, Lot 28.

Property Address: 18 Quaker Meeting House Road Armonk, NY 10504

TOPOGRAPHIC SURVEY
PREPARED FOR
CHARLES SWIFT
AND
NANCY SWIFT

SITUATE IN THE TOWN OF NORTH CASTLE WESTCHESTER COUNTY, NEW YORK

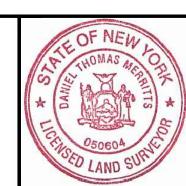
SCALE: 1'' = 20'

GRAPHIC SCALE

( IN FEET )
1 inch = 20 ft.

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Surveyed: April 11, 2022 Map Prepared: April 13, 2022

| Project:<br>22-095         | Reference:<br>03-116 |
|----------------------------|----------------------|
| Field Survey By:<br>AN/CTW | Drawn By:<br>CMP     |
| Project Manager:<br>CMP    | Checked By:<br>DA    |



DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

www.dtsprovident.com

Andrew V. Tung, ASLA, Esq., LEED AP Gerhard M. Schwalbe, P.E. Charles 'Carlito' Holt, P.E., PTOE Brian Dempsey, P.E., PTOE, RSP1

June 6, 2022

Mr. Adam Kaufman, AICP Director of Planning Town of North Castle 15 Bedford Road Armonk, New York 10504

Regarding: Swift Residence Pool

18 Quaker Meeting House Road Residential Site Plan Application

Dear Mr. Kaufman:

Our firm has been working with the owners, Charles and Nancy Swift of 18 Quaker Meeting House Road, in order to prepare an application to construct an in-ground swimming pool on their property. The property is part of the Leisure Farm subdivision which depicts a clearing and grading limit line for each lot in the subdivision. The pool is proposed to be located in the rear yard of the property which is currently lawn. The pool will be partially located outside of the Clearing and Grading Limit Line. While no trees are proposed to be removed there will be disturbance outside of the Limit Line and as such, Planning Board, site plan approval may be required.

The project will result in the creation of approximately 1,029 square feet of new impervious surface including pool, terrace and mechanical equipment. A stormwater infiltration system is proposed to serve the dual purpose of mitigating stormwater runoff and providing volume for pool drawdown. Soil testing in the form of deep hole and percolation tests were performed on April 12, 2022 and witnessed by the Town's Consultant Engineer.

There will not be any impact to Town regulated Wetland buffer areas or Town regulated steep slopes.



In support of this application the following material is provided:

- A Residential Site Plan Application Short Environmental Assessment Form Property Survey Site Plan Set and Details Gross Land Coverage Worksheet Stormwater Report and Calculations

The owners respectfully request to be placed on the next Planning Boards agenda to be considered for review. If you have any questions or require additional information, please do not hesitate to contact me at (914) 559-67455 or via email me at pgregory@dtsprovident.com. We look forward to meeting with you and discussing the project with the Board.

Very truly yours,

DTS-Provident Design Engineering, LLP

Peter J. Gregory, P.E.

Peter Gregory

Senior Associate



#### TOWN OF NORTH CASTLE

#### WESTCHESTER COUNTY 17 Bedford Road Armonk, New York 10504-1898

Telephone: (914) 273-3542 Fax: (914) 273-3554 www.northcastleny.com

## Application for Site Development Plan Approval

## Application Name

18 Quaker Meeting House Road - Pool

## I. IDENTIFICATION OF PROPERTY OWNER, APPLICANT AND PROFESSIONAL REPRESENTATIVES

| Name of Property Owner:                        | Charles & Nancy Swift                                |              |                             |
|--|--|--------------|-----------------------------|
| Mailing Address:                               | 18 Quaker Meeting House Road                         |              |                             |
| Telephone:                                     | Fax:   | e-mail _     | cwswiftjr@gmail.com         |
| Name of Applicant (if different)               | Same as Owner  |              |                             |
| Address of Applicant:                          |  |              |                             |
| Telephone:                                     | Fax:   | _ e-mail     |                             |
| Interest of Applicant, if other tha            | an Property Owner:                                   |              |                             |
| Is the Applicant (if different from            | m the property owner) a Contract Vendee              | ?            |                             |
| Yes No. ✓                                      |  |              |                             |
| If yes, please submit affidavit sa             | ting such. If no, application cannot be rev          | viewed by    | Planning Board              |
| Name of Professional Preparing Peter J. Gregor | Site Plan:<br>y, P.E. DTS Provident Design Engineeri | ng, LLP      |                             |
| Address: One North Broa                        | dway, White Plains, New York 10601                   |              | _                           |
|  | 5 Fax:   | e-ma         | ilpgregory@dtsprovident.com |
| Name of Other Professional:                    | Г.С. Merritts Land Surveyors, Р.С.                   |              |                             |
| Address:                                       | 894 Bedford Road, Pleasantville, New York 10570      |              | _                           |
| Telephone: 914 - 769 - 8003                    | Fax:   |              | e-maildaniel@tcmerritts.com |
| Name of Attorney (if any):                     |  |              |                             |
| Address:                                       |  | <del>-</del> |                             |
| V V  | Fax:   |              | mail                        |

#### Applicant Acknowledgement

By making this application, the undersigned Applicant agrees to permit Town officials and their designated representatives to conduct on-site inspections in connection with the review of this application.

The Applicant also agrees to pay all expenses for the cost of professional review services required for this application.

It is further acknowledged by the Applicant that all bills for the professional review services shall be mailed to the Applicant, unless the Town is notified in writing by the Applicant at the time of initial submission of the application that such mailings should be sent to a designated representative instead.

Signature of Applicant:

Date: 6-1-22

Signature of Property Owner:

Date: 6-1-22

MUST HAVE BOTH SIGNATURES

### II. IDENTIFICATION OF SUBJECT PROPERTY

| Street  | Address:  | 18 Quaker M  | leeting Ho   | ouse Road   |  |   |                            |                |
|---------|---|--|--|---|--|---|----------------------------|----------------|
| Locati  | on (in relation   | to nearest into  | ersectin   | g street):  |  |   |                            |                |
| 350     | feet (north,  | south, east o  | r west)  | of Leisure Fa   | arm Drive  | _   |                            |                |
|         | ng Street(s):   |  |  |   | *  |   |                            |                |
| Tax M   | Tap Designation   | (NEW): Sec   | tion   | 101.03  | Block  | 3   | Lot                        | 28             |
| Tax M   | Iap Designation   | (OLD): Sec   | tion   |   | Block  |   | Lot                        |                |
| Zonin   | g District:   | R-1A   | Total I  | Land Area _   | 1.003  |   |                            |                |
| Land A  | Area in North C   | Castle Only (i   | f differe  | ent)  |  |   |                            |                |
| Fire D  | istrict(s)A   | monk   | School   | l District(s)_  | Byram Hills  |   |                            |                |
| Is any  | portion of subj   | ect property a   | abutting   | g or located v  | vithin five hun  | dred (500   | ) feet of the f            | following:     |
|         | or highway? No Yes  The existing of for which the No Yes  The existing of or institution in the No Yes  The boundary No Yes | of any existic (adjacent) vay of any existic (adjacent) vay of any existic (adjacent) or proposed rise (adjacent) or proposed be a situated? so (adjacent) or of a farm op so (adjacent) or of a farm op so (adjacent) | e(s): ng or properties Ye listing of Ye listing of Ye listablish Y oundary eration | roposed Cours (within 500 or proposed Cours (within 500 oway of any saed channel les (within 500 oy of any cours (within 500 or any cours (within | nty or State pa ) feet) County or State ) feet) tream or drainines? )0 feet) nty or State ow 500 feet) agricultural de 500 feet) | rk or any e parkway age chann number age land listrict? | o, thruway, exnel owned by | pressway, road |
| Does 1  | the Property Ov<br>No Ye  | wner or Appli<br>S   | cant ha  | ve an interes   | t in any abuttii   | ng proper   | ty?                        |                |
| If yes, | please identify   | the tax map  | designa  | ition of that p   | property:  |   |                            |                |

#### III. DESCRIPTION OF PROPOSED DEVELOPMENT

| Proposed Use:                  | Residential - Swi   | mming Pool                        |                |                                   |                   |
|--------------------------------|---|-----------------------------------|----------------|-----------------------------------|-------------------|
| Gross Floor Area:              |   |                                   | Proposed       | S.F.                              |                   |
| Proposed Floor Ar              | ea Breakdown:   |                                   |                |                                   |                   |
| Retail                         |   | S.F.; Offi                        | ce             | S.F.;                             |                   |
| Industrial _                   |   | S.F.; Insti                       | itutional      | S.F.;                             |                   |
| Other Non                      | esidential  | S.F.; Res                         | idential       | S.F.;                             |                   |
| Number of                      | Dwelling Units: _   |                                   | _              |                                   |                   |
| Number of Parking              | g Spaces: Existing  | Rec                               | quired         | Proposed                          |                   |
| Number of Loadin               | g Spaces: Existing  | gRe                               | quired         | Proposed                          |                   |
| Earthwork Balance              | e: Cut 100 C.   | Y. Fill 10                        | C.Y.           |                                   |                   |
| (If yes, app                   | ecial flood hazard  | !? No _ ✓ _ ¬                     | Yes            | lowing:  Chapter 177 of the No    | orth Castle Town  |
| No<br>(If yes, app<br>Code may | lication for a Tree<br>also be required.)                     | Removal Peri                      | mit pursuant t | eater?<br>to Chapter 308 of the N | orth Castle Town  |
| (If yes, app                   | lated wetlands? N<br>lication for a Tow<br>also be required.) | No <u>V</u> Yes<br>yn Wetlands Pe | ermit pursuan  | t to Chapter 340 of the           | North Castle Town |
|                                | ated wetlands? N  |                                   |                | be required.)                     |                   |

#### IV. SUBMISSION REQUIREMENTS

The site development plan application package shall include all materials submitted in support of the application, including but not limited to the application form, plans, reports, letters and SEQR Environmental Assessment Form. **Submission of the following shall be required:** 

- One (1) set of the site development plan application package (for distribution to the Town Planner for preliminary review purposes).
- Once a completed preliminary site plan checklist has been received from the Planning Department, eight (8) additional sets of the site development plan application package (for distribution to Planning Board, Town Engineer, Town Attorney, Town Planner, Planning Board Secretary, police, fire department and ambulance corps).
- One (1) additional reduced sized set (11" x 17") of the site development plan application package if any portion of the subject property abuts or is located within five hundred (500) feet of the features identified in Section II of this application form (for distribution to Westchester County Planning Board).
- A check for the required application fee and a check for the required Escrow Account, both made payable to "Town of North Castle" in the amount specified on the "Schedule of Application Fees."

(continued next page)

#### V. INFORMATION TO BE INCLUDED ON SITE DEVELOPMENT PLAN

The following checklist is provided to enable the Applicant to determine if he/she has provided enough information on the site development plan for the Planning Board to review his/her proposal. Applicants are advised to review ARTICLE VIII, Site Development Plan of the North Castle Town Code for a complete enumeration of pertinent requirements and standards prior to making application for site development plan approval.

The application for site development plan approval will not be accepted for Planning Board review unless all items identified below are supplied and so indicated with a check mark in the blank line provided. If a particular item is not relevant to the subject property or the development proposal, the letters "NA" should be entered instead. In addition, the project will not be scheduled on a Planning Board agenda until the Applicant receives an initialed "site plan checklist" from the Planning Department.

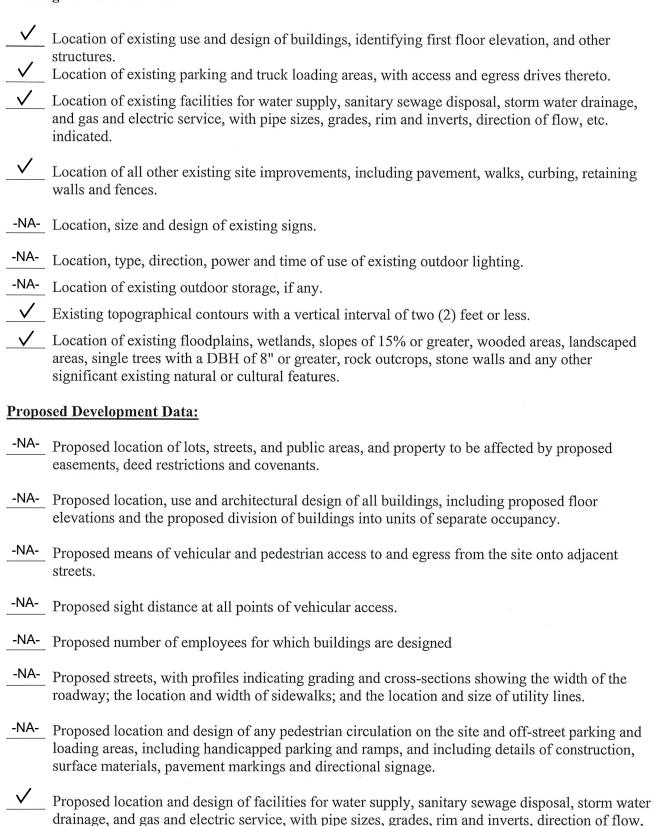
The information to be included on a site development plan shall include:

## Legal Data: ✓ Name of the application or other identifying title. Name and address of the Property Owner and the Applicant, (if different). Name, address and telephone number of the architect, engineer or other legally qualified professional who prepared the plan. Names and locations of all owners of record of properties abutting and directly across any and all adjoining streets from the subject property, including the tax map designation of the subject property and abutting and adjoining properties, as shown on the latest tax records. Existing zoning, fire, school, special district and municipal boundaries. ✓ Size of the property to be developed, as well as property boundaries showing dimensions and bearings as determined by a current survey; dimensions of yards along all property lines; name and width of existing streets; and lines of existing lots, reservations, easements and areas dedicated to public use. ✓ Reference to the location and conditions of any covenants, easements or deed restrictions that cover all or any part of the property, as well as identification of the document where such covenants, easements or deed restrictions are legally established. Schedule of minimum zoning requirements, as well as the plan's proposed compliance with those requirements, including lot area, frontage, lot width, lot depth, lot coverage, yards, off-street parking, off-street loading and other pertinent requirements. Locator map, at a convenient scale, showing the Applicant's entire property in relation to surrounding properties, streets, etc., within five hundred (500) feet of the site. North arrow, written and graphic scales, and the date of the original plan and all revisions, with notation identifying the revisions.

✓ A signature block for Planning Board endorsement of approval.

#### **Existing Conditions Data:**

etc. indicated.



|      | Proposed location of all structures and other uses of land, such as walks, retaining walls, fences, designated open space and/or recreation areas and including details of design and construction. |
|------|---|
| -NA- | Location, size and design of all proposed signs.  |
| -NA- | Location, type, direction, power and time of use of proposed outdoor lighting.  |
| NA-  | Location and design of proposed outdoor garbage enclosure.  |
| NA-  | Location of proposed outdoor storage, if any.   |
| -NA- | Location of proposed landscaping and buffer screening areas, including the type (scientific and common names), size and amount of plantings.  |
| NA   | Type of power to be used for any manufacturing  |
| -NA- | Type of wastes or by-products to be produced and disposal method  |
| -NA- | In multi-family districts, floor plans, elevations and cross sections   |
| NA   | The proposed location, size, design and use of all temporary structures and storage areas to be used during the course of construction.   |
|      | Proposed grade elevations, clearly indicating how such grades will meet existing grades of adjacent properties or the street.   |
|      | Proposed soil erosion and sedimentation control measures.   |
| -NA- | For all proposed site development plans containing land within an area of special flood hazard, the data required to ensure compliance with Chapter 177 of the North Castle Town Code.              |
| NA   | For all proposed site development plans involving clearing or removal of trees with a DBH of 8" or greater, the data required to ensure compliance with Chapter 308 of the North Castle Town Code.  |
| NA-  | For all proposed site development plans involving disturbance to Town-regulated wetlands,   |

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the data required to ensure compliance with Chapter 340 of the North Castle Town Code.

## Short Environmental Assessment Form Part 1 - Project Information

#### **Instructions for Completing**

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

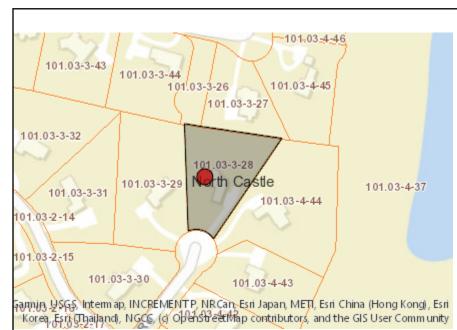
Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

| Part 1 – Project and Sponsor Information   |                                       |                               |                    |                      |        |       |         |
|--|---------------------------------------|-------------------------------|--------------------|----------------------|--------|-------|---------|
| Name of Action or Project:   |                                       |                               |                    |                      |        |       |         |
| Project Location (describe, and attach a location mag  | p):                                   |                               |                    |                      |        |       |         |
| Brief Description of Proposed Action:  |                                       |                               |                    |                      |        |       |         |
| Name of Applicant or Sponsor:  |                                       |                               | Teleph             | none:                |        |       |         |
|  |                                       |                               | E-Mai              | 1:                   |        |       |         |
| Address:   |                                       |                               |                    |                      |        |       |         |
| City/PO:   |                                       |                               | State:             |                      | Zip Co | ode:  |         |
| <ol> <li>Does the proposed action only involve the legis administrative rule, or regulation?</li> <li>If Yes, attach a narrative description of the intent of may be affected in the municipality and proceed to I</li> <li>Does the proposed action require a permit, appr If Yes, list agency(s) name and permit or approval:</li> </ol> | the proposed ac<br>Part 2. If no, con | tion and the entinue to quest | nvironm<br>tion 2. | nental resources tha | at     | NO NO | YES YES |
| 3. a. Total acreage of the site of the proposed action? acres b. Total acreage to be physically disturbed? acres c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? acres  |                                       |                               |                    |                      |        |       |         |
| 4. Check all land uses that occur on, are adjoining  | or near the propo                     | osed action:                  |                    |                      |        |       |         |
| 5. Urban Rural (non-agriculture)   | Industrial                            | Commercia                     | al l               | Residential (subur   | ban)   |       |         |
| ☐ Forest Agriculture ☐ Parkland  | Aquatic                               | Other(Spec                    | eify):             |                      |        |       |         |

| 5.    | Is the proposed action,  | NO          | YES             | N/A |
|-------|--|-------------|-----------------|-----|
|       | a. A permitted use under the zoning regulations?   |             | $\square$       |     |
|       | b. Consistent with the adopted comprehensive plan?   |             |                 |     |
|       |  | 1           | NO              | YES |
| 6.    | Is the proposed action consistent with the predominant character of the existing built or natural landscape?   | 1           |                 |     |
| 7.    | Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?  |             | NO              | YES |
| If Y  | Yes, identify:   |             | $\square$       |     |
|       |  |             | NO              | YES |
| 8.    | a. Will the proposed action result in a substantial increase in traffic above present levels?  |             | NO              | IES |
|       | b. Are public transportation services available at or near the site of the proposed action?  |             |                 |     |
|       | c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?   |             |                 |     |
| 9.    | Does the proposed action meet or exceed the state energy code requirements?  |             | NO              | YES |
| If th | he proposed action will exceed requirements, describe design features and technologies:  |             |                 |     |
| 10.   | Will the proposed action connect to an existing public/private water supply?   |             | NO              | YES |
|       | If No, describe method for providing potable water:  |             |                 |     |
| 11.   | Will the proposed action connect to existing wastewater utilities?   |             | NO              | YES |
|       | If No, describe method for providing wastewater treatment:   |             | $\triangleleft$ |     |
|       | a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district   | <del></del> | NO              | YES |
| Co    | ich is listed on the National or State Register of Historic Places, or that has been determined by the mmissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the te Register of Historic Places? | ;           | $\triangle$     |     |
|       | b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for haeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?                                     |             |                 |     |
| 13.   | a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?   |             | NO 🗸            | YES |
|       | b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?  |             |                 |     |
| If Y  | Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:  |             |                 |     |
|       |  |             |                 |     |

| Shoreline   | 14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: |           |     |
|---|--|-----------|-----|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?    16. Is the project site located in the 100-year flood plan?   17. Will the proposed action create storm water discharge, either from point or non-point sources?   NO YES   YES,   NO YES     18. Will storm water discharges flow to adjacent properties?   NO YES   YES, b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?   If Yes, briefly describe:   NO YES     18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?   YES, explain the purpose and size of the impoundment:   NO YES     19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?   Security   NO YES     19. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES     10. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES     10. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES     10. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES     10. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES     10. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?   NO YES   | ☐Shoreline ☐ Forest Agricultural/grasslands Early mid-successional   |           |     |
| Federal government as threatened or endangered?    16. Is the project site located in the 100-year flood plan?   17. Will the proposed action create storm water discharge, either from point or non-point sources?   NO YES   YES,     18. Will storm water discharges flow to adjacent properties?   NO YES     19. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?     19. However, in the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?     19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?     19. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?     10. VES     11. VERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE     Applicant/sponsor/name:   Date:  | Wetland   Urban Suburban   |           |     |
| 16. Is the project site located in the 100-year flood plan?  17. Will the proposed action create storm water discharge, either from point or non-point sources?  18. Will storm water discharges flow to adjacent properties?  19. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  19. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  10. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  11. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  12. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  13. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  149. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waster management facility?  15. Yes, describe:  20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  16. If Yes, describe:  27. Will storm water discharges, either from point or non-point sources?  17. Will storm water discharges, either from point or non-point sources?  18. No yes  18. Does the proposed action discharges be directed to established conveyance systems (runoff and storm drains)?  18. Does the proposed action or other activities that would result in the impoundment of water or discharges the proposed action or an adjoining property been the location of an active or closed solid waster and storm drains?  19. Ves, describe:  20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or closed solid waster and storm drains)?  21. Will storm drains.  22. Later of the proposed action or an adjoining property been the subject of remediation (ong |  | NO        | YES |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources?  If Yes,  a. Will storm water discharges flow to adjacent properties?  b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  If Yes, briefly describe:    Source   Proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:    Proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:    Proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:    Proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:    Date:   Date: | Federal government as threatened or endangered?  |           |     |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources?  If Yes,  a. Will storm water discharges flow to adjacent properties?  b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  If Yes, briefly describe:  18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  1 CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  | 16. Is the project site located in the 100-year flood plan?  | NO        | YES |
| If Yes, a. Will storm water discharges flow to adjacent properties?   |  |           |     |
| a. Will storm water discharges flow to adjacent properties?  b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  If Yes, briefly describe:  18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  | 17. Will the proposed action create storm water discharge, either from point or non-point sources?                         | NO        | ,   |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?  If Yes, briefly describe:  18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   | If Yes,  |           |     |
| If Yes, briefly describe:    18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:    49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:    20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:    1 CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE    Applicant/sponsor/name:   | a. Will storm water discharges flow to adjacent properties?  | $\square$ |     |
| 18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:   |  |           |     |
| or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  |  |           |     |
| or other liquids (e.g., retention pond, waste lagoon, dam)?  If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  |  |           |     |
| If Yes, explain the purpose and size of the impoundment:  49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   | 18. Does the proposed action include construction or other activities that would result in the impoundment of water        | NO        | YES |
| 49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   |  |           |     |
| management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   | if Tes, explain the purpose and size of the impoundment.   |           |     |
| management facility?  If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   |  |           |     |
| If Yes, describe:  20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:   | * * * * *  | NO        | YES |
| 20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  |  |           |     |
| completed) for hazardous waste?  If Yes, describe:  I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:  Date:  |  |           |     |
| If Yes, describe:   | 20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or                | NO        | YES |
| I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE  Applicant/sponsor/name:   |  |           |     |
| MY KNOWLEDGE  Applicant/sponsor/name:   | ii Tes, describe.  |           |     |
| MY KNOWLEDGE  Applicant/sponsor/name:   |  |           |     |
|   |  | ST OF     |     |
| Signature:Title:  | Applicant/sponsor/name:  |           |     |
|   | Signature:Title:   |           |     |

| 18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? | NO       | YES      |
|--|----------|----------|
| If Yes, explain purpose and size:  | l        |          |
|  | <b>√</b> |          |
|  |          |          |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?                               | NO       | YES      |
| If Yes, describe:  | 1        |          |
|  |          |          |
| 20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or   | NO       | YES      |
| completed) for hazardous waste?  |          |          |
| If Yes, describe:  | 1        |          |
|  |          |          |
| I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE   | BEST O   | EMV      |
| KNOWLEDGE  | obor o   | T. 147 T |
| Applicant/sponsor name) CHARLES SWIFT Date: 6-1-22   |          |          |
| Signature:   |          |          |
|  |          |          |



**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



| Part 1 / Question 7 [Critical Environmental Area]   | No  |
|---|---|
| Part 1 / Question 12a [National or State<br>Register of Historic Places or State Eligible<br>Sites] | No  |
| Part 1 / Question 12b [Archeological Sites]   | Yes   |
| Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]                                     | Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook. |
| Part 1 / Question 15 [Threatened or Endangered Animal]  | No  |
| Part 1 / Question 16 [100 Year Flood Plain]   | No  |
| Part 1 / Question 20 [Remediation Site]   | No  |



#### TOWN OF NORTH CASTLE

#### WESTCHESTER COUNTY 17 Bedford Road Armonk, New York 10504-1898

#### PLANNING DEPARTMENT Adam R. Kaufman, AICP Director of Planning

Telephone: (914) 273-3542 Fax: (914) 273-3554 www.northcastleny.com

#### GROSS LAND COVERAGE CALCULATIONS WORKSHEET

| Applicat  | tion Name or Identifying Title:                             | 18 Quaker Meeting House Road - Pool  | Date: | June 1, 2022 |
|-----------|---|--|-------|--------------|
| Tax Maj   | Designation or Proposed Lot No.: _                          | 101.03 - 3 - 28  |       |              |
| Gross L   | ot Coverage   |  |       |              |
| 1.        | Total lot Area (Net Lot Area for Lots                       | Created After 12/13/06):   |       | 43,708       |
| 2.        | Maximum permitted gross land cover                          | 9,363  |       |              |
| 3.        | BONUS maximum gross land cover                              | (per Section 355-26.C(1)(b)):  |       |              |
| 24.67     | Distance principal home is beyond m $x 10 = 246.7$          | inimum front yard setback  |       | 246          |
| 4.        | TOTAL Maximum Permitted gros                                | s land coverage = Sum of lines 2 and 3   |       | 9,609        |
| 5.        | Amount of lot area covered by <b>princ</b>                  |  |       | 3,517        |
| 6.        | Amount of lot area covered by <b>acces</b> existing +       |  |       | 0            |
| 7.        | Amount of lot area covered by <b>decks</b> 392 existing +   |  |       | 392          |
| 8.        | Amount of lot area covered by <b>porch</b>                  | proposed =   |       | 0            |
| 9.        | Amount of lot area covered by <b>drive</b> 3,242 existing + |  |       | 3,242        |
| 10.       | Amount of lot area covered by terrace existing +509         |  |       | 509          |
| 11.       |   | s court, pool and mechanical equip:<br>proposed =  |       | 549          |
| 12.       | Amount of lot area covered by <b>all ot</b>                 |  |       | 437          |
| 13. Prop  | osed gross land coverage: Tota                              | al of Lines $5 - 12 =$   |       | 8,646        |
| the proje |   | proposal <b>complies</b> with the Town's maximuject Review Committee for review. If Line |       |              |
| Pet       | ar Gregory<br>e and Seal of Professional Preparing V        | 6-1-2  | 22    |              |
| Signatur  | e and Seal of Professional Preparing V                      | Vorksheet Date   |       |              |



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## **STORMWATER CALCULATIONS**

## 18 QUAKER MEETING HOUSE ROAD

Town of North Castle, New York Section 101.03, Block 3, Lot 28

#### **OWNERS:**

CHARLES & NANCY SWIFT

#### PREPARED BY:

#### DTS PROVIDENT DESIGN ENGINEERING, LLP (DTSPDE)

ONE NORTH BROADWAY
WHITE PLAINS, NEW YORK 10601
TEL: (914) 428-0100
PROJECT No.: 20-070

JUNE, 2022



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#### **Section I – Project Information**

#### 1. Project Description

The purpose of this report is to present the Stormwater Calculations for the sizing of mitigation practices associated with stormwater runoff associated with the construction of a proposed pool, and terrace (the "Project") located at 18 Quaker Meeting House Road, Town of North Castle, Westchester County, New York. The Project Site, Tax Map Number 101.03-3-28, is comprised of one parcel totaling 1.003 acres located in the R-1A One - Family Residential District.

The proposed work includes the construction of an in-ground swimming pool and terrace in the rear yard of the property. The stormwater runoff will be directed toward a stormwater mitigation system. The Project will result in a net increase of impervious surface totaling approximately 1,029 square feet (sf).

#### **Section II - Storm Water Management**

#### 1. Methodology

Since the Project will generate stormwater runoff during and post-construction, the SWPPP includes design of water quantity and water quality controls as set forth in §189 to assure that post-development peak runoff rates will be equal to or less than pre-development peak runoff rates for up to the 25-year storm event. The controls have been designed in accordance with the following publications:

- "Urban Hydrology for Small Watersheds" (Technical Release No. 55), published by the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service, SCS), dated June 1986.
- <u>New York State Storm Water Management Design Manual</u> (DEC Design Manual), January 2015.

As required by the DEC Design Manual, the 24-hour rainfall data value to be used in the hydrologic analysis and computations is based on the updated isohyetal maps from the Northeast Regional Climate Center (NRCC). Current 24-hour NRCC rainfall precipitation and distribution data was used to compute runoff hydrographs for the 25-year design storms. The rainfall value associated with the 25-year design storm is 6.44 inches.

The pre-development and post-development runoff rate for the 25-year storm event was calculated using the computer software program entitled "HydroCAD", Version 10.0, Build 25. This program incorporates the methodology used in NRCS TR-20 and TR-55 to compute and route flood hydrographs.



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#### 2. Subsurface Investigation

#### Test Pit Excavation

One (1) test pit in the rear yard (designated TP-1) of the existing dwelling was excavated on April 12, 2022 and witnessed by DTS-PDE personnel and consultant engineers for the Town of North Castle. The test pit location is shown on Drawing C-101, "Site Plan" prepared by DTS-PDE. The depth of the test pit was 86 inches below existing grade. DTS-PDE personnel and the consultant engineers for the Town of North Castle measured the depths of the contrasting soil layers, performed visual inspections of the excavated material at each layer encountered to determine generalized soil classifications, and logged the measurements and observations.

As shown on the test pit log sheet provided in Appendix A, the test pit yielded positive results with no presence of groundwater or ledge rock. The test pit contained a 6 inch topsoil layer, a 6 inch layer of sandy loam, an 18" layer of silty loam, and finally a 36" layer compacted fine medium sands to the bottom of the test pit.

#### **Infiltration Testing**

DTS-PDE personnel also set up a soil infiltration test, adjacent to the test pit (designated P-1) on April 12, 2022. An infiltration test hole was dug to 42" below existing grade with the consultant engineers for Town of North Castle present to witness. The hole was filled with 18 inches of water and an initial reading was taken. A "final" reading was taken after twelve (12) minutes had passed. This procedure was repeated two (2) additional times for a total of three (3) observations to obtain the infiltration rate. The data sheet of test results provided in Appendix A shows that the existing subsoils possess a consistent infiltration rate of 5.5 inches per hour (in/hr.) (11.00 minutes per inch (min/in)), greater than the minimum rate of 0.5 in/hr. required by the standards in the DEC Design Manual for infiltration SMPs.

#### 3. Stormwater Management

#### a. Drainage Conditions

Existing condition consisting of a lawn convey stormwater runoff in a westerly direction, toward the side yard of the property. Total contributing area is 1,000 square feet, all lawn. The area is slightly sloped and in good condition. Runoff associated with the contributing area consists of 0.06 cfs rate of runoff and 192 cf of runoff volume for the 25 year storm event.



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#### b. Post Development Drainage Condition

Under post-development conditions, drainage patterns to the Design Point will remain similar to existing conditions, and therefore the location of the design point, which is located at the westerly side of the property, will remain unchanged.

However, the land cover area draining to the Design Point will change under post-development conditions as compared to existing conditions. The lawn area will be converted to impervious surface associated with a proposed pool and terrace area and landscaped/lawn area. Approximately 1,000 square feet of impervious surface will be created. Stormwater runoff rate increases to 0.14 cfs and volume increases to 511 cf. The proposed drainage calculations for the stormwater mitigation system are provided in Appendix B.

#### Water Quantity Control

NYSDEC and Chapter 189 require that post-development rates of storm water runoff from a site must be equal to or less than pre-development runoff rates so that downstream and/or adjacent properties are not adversely impacted. Increases in runoff rates are typically caused by changes in land use that increase the amount of total impervious area.

#### **SMP** Application

Based on the results of the investigation summarized in Section 2 above, it is the professional opinion of PDE that a subsurface infiltration/recharge SMP can be provided to capture and recharge the WQv, plus attenuate post-construction runoff associated with the Project construction.

The design of the subsurface infiltration/recharge SMP meets the criteria in Section 6.3 of the DEC Design Manual. The system will consist of 4 Cultec Recharger infiltration chambers Model 150 and a pretreatment box. The stormwater mitigation system effectively provides a storage volume of 162 cf and reduces rates of runoff by 0.11 cfs to 0.03 cfs, lower than pre-development rate of 0.06 cfs.

Swales, drain inlets, and subsurface drainage pipes will direct and capture the post-construction runoff from the new pool and terrace to the proposed subsurface infiltration/recharge SMP as depicted on Drawing C-101 and D-101.



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#### **Summary and Conclusion**

Based on the information presented in this report, the implementation of the proposed Storm Water Management Plan will meet the design objectives of Town of North Castle.

Respectfully submitted,

**DTS Provident Design Engineering, LLP** 

Peter J. Gregory, P.E.

Senior Associate

New York PE# 071226

Under New York State Education Law Article 145 - Engineering, Section 7209 (2), it is a violation of this law for any person to alter an item in any way in this Report, unless acting under the direction of a licensed professional engineer. If an item bearing the seal of an engineer is altered, the altering engineer shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.



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#### APPENDIX A

SUBSURFACE INVESTIGATION



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Andrew V. Tung, ASLA, Esq., LEED AP

APPENDIX A-1
TEST PIT LOGS
INFILTRATION TESTING

## INFILTRATION TESTING DATA SHEET

| Project Nan     | ne: Swift Residence Pool     | Municipality: | North Castle                        |  |
|-----------------|------------------------------|---------------|-------------------------------------|--|
| Owner:          | Charles & Nancy Swift        | Watershed:    | Long Island Sound-Byram River Basin |  |
| Address:        | 18 Quaker Meeting House Road | Sec/Bl/Lot:   | 101.03 / 3 / 28                     |  |
| Date:<br>Notes: | April 12, 2022               | Weather:      |                                     |  |

|       |       | CLC   | OCK TIME               |         |             | INFILTRATION RATE                    |                        |        |                      |
|-------|-------|-------|------------------------|---------|-------------|--------------------------------------|------------------------|--------|----------------------|
| TEST# | Run # | Start | Start Stop Elapse Time |         | ~           | Depth to Water from<br>Top of Casing |                        | Drop   | Infiltration<br>Rate |
|       |       | НН:ММ | НН:ММ                  | Mins    | Hours       | Start In.'s                          | Stop In's              | Inches | Inches/Hour          |
| P-1   | 1     | 8:59  | 9:25                   | 26      | 0.43        | 28                                   | 31                     | 3      | 6.92                 |
|       | 2     | 9:29  | 10:01                  | 32      | 0.53        | 28                                   | 31                     | 3      | 5.63                 |
|       | 3     | 10:03 | 10:36                  | 33      | 0.55        | 28                                   | 31                     | 3      | 5.45                 |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       | •     |       | Г                      | epth of | f Infiltrat | tion Testing: 50                     | 5"                     |        |                      |
|       |       | CLC   | OCK TIME               |         |             | INFILTRATION RATE                    |                        |        |                      |
| TEST# | Run # | Start | Stop                   |         | apse<br>me  |                                      | Water from<br>f Casing | Drop   | Infiltration<br>Rate |
|       |       | НН:ММ | НН:ММ                  | Mins    | Hours       | Start In.'s                          | Stop In's              | Inches | Inches/Hour          |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       |       |       |                        |         |             |                                      |                        |        |                      |
|       |       |       |                        |         |             |                                      |                        |        |                      |

## TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTENERED IN TEST HOLE

| DEPTH  | HOLE NO: 1                | HOLE NO: |  |
|--------|---------------------------|----------|--|
| G.L    | Lawn                      |          |  |
| 0'-6"  | Topsoil                   |          |  |
| 1'-0"  | Br. Loose Fine Sandy Loam |          |  |
| 1'-6"  |                           |          |  |
| 2'-0"  | Mod. Compact Silty loam   |          |  |
| 2'-6"  | 1                         |          |  |
| 3'-0"  | I                         |          |  |
| 3'-6"  | 1                         |          |  |
| 4'-0"  | Fine - Med. Sands         |          |  |
| 4'-6"  | 1                         |          |  |
| 5'-0"  | I                         |          |  |
| 5'-6"  | 1                         |          |  |
| 6'-0"  | 1                         |          |  |
| 6'-6"  | I                         |          |  |
| 7'-0"  | I                         |          |  |
| 7'-6"  | I                         |          |  |
| 8'-0"  | I                         |          |  |
| 8'-6"  |                           |          |  |
| 9'-0"  | Total Depth = 86"         |          |  |
| 9'-6"  |                           |          |  |
| 10'-0" |                           |          |  |

| WAS GROUND | WATER | ENCOUNTERED? | No |
|------------|-------|--------------|----|
|            |       |              |    |

INDICATE LEVEL AT WHICH GROUND WATER WAS ENCOUNTERED: N/A

INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED: N/A

DEEP TEST MADE BY: <u>DTS Provident Design Engineering, LLP</u>

DATE OF DEEP TESTS: **4/12/22** 

Design Professional Name: **Peter J. Gregory, PE**Address: **One North Broadway**Signature: <u>Peter Gregory</u>

White Plains, New York 10601 Seal:



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# APPENDIX B STORM WATER MANAGEMENT CALCULATIONS



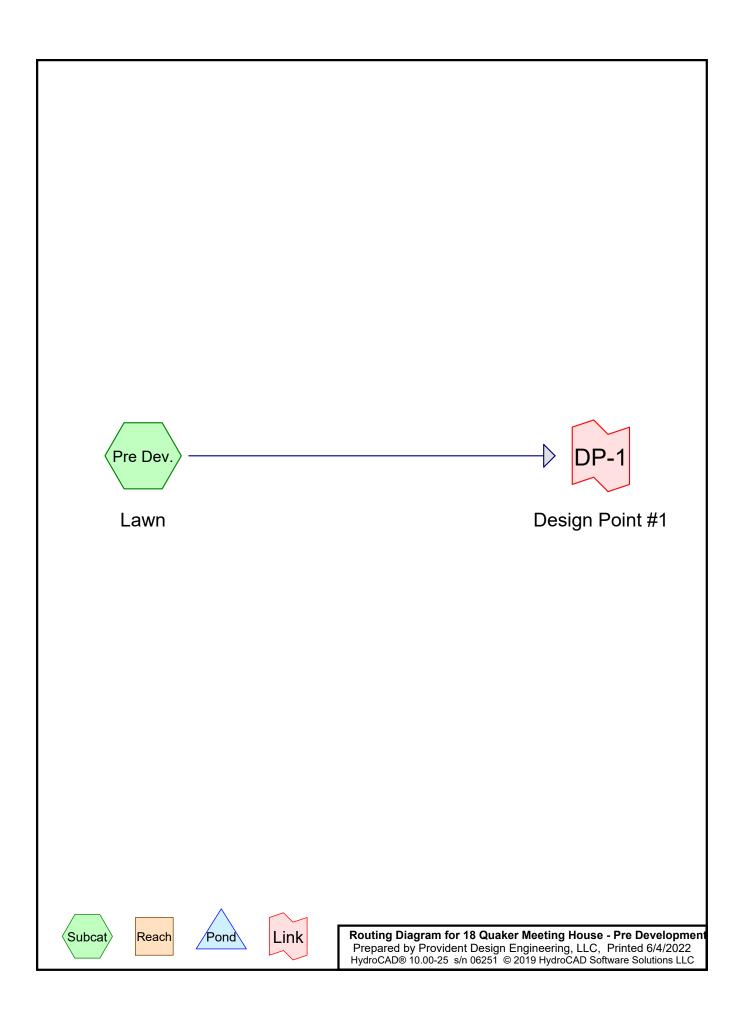
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#### **APPENDIX B-1**

STORMWATER MITIGATION SYSTEM HYDROLOGIC CALCULATIONS



## **18 Quaker Meeting House - Pre Development**Prepared by Provident Design Engineering, LLC

Type III 24-hr 25-yr Rainfall=6.44"
Printed 6/4/2022

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Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment Pre Dev.: Lawn Runoff Area=1,000 sf 0.00% Impervious Runoff Depth=2.31"

Flow Length=50' Tc=6.0 min CN=61 Runoff=0.06 cfs 192 cf

Link DP-1: Design Point #1 Inflow=0.06 cfs 192 cf
Primary=0.06 cfs 192 cf

Total Runoff Area = 1,000 sf Runoff Volume = 192 cf Average Runoff Depth = 2.31" 100.00% Pervious = 1,000 sf 0.00% Impervious = 0 sf

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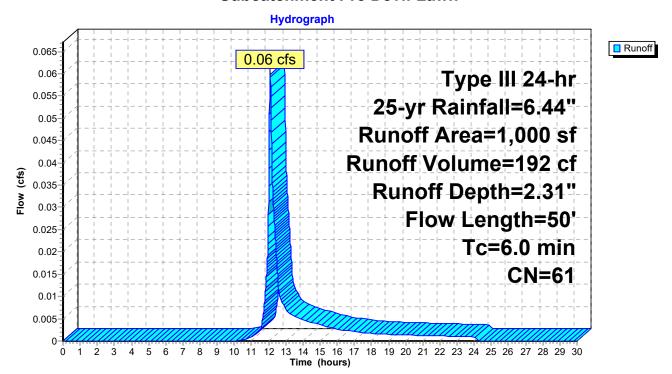
#### **Summary for Subcatchment Pre Dev.: Lawn**

Runoff = 0.06 cfs @ 12.09 hrs, Volume= 192 cf, Depth= 2.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs Type III 24-hr 25-yr Rainfall=6.44"

| _ | Α     | rea (sf) | CN E    | Description                   |             |                         |  |  |  |
|---|-------|----------|---------|-------------------------------|-------------|-------------------------|--|--|--|
|   |       | 1,000    | 61 >    | >75% Grass cover, Good, HSG B |             |                         |  |  |  |
|   |       | 1,000    | 1       | 00.00% Pe                     | ervious Are | a                       |  |  |  |
|   | Тс    | Lenath   | Slone   | Valocity                      | Capacity    | Description             |  |  |  |
|   | (min) | (feet)   | (ft/ft) | (ft/sec)                      | (cfs)       | Description             |  |  |  |
| • | 6.0   | 50       | •       | 0.14                          | , ,         | Direct Entry, Lawn Area |  |  |  |

#### **Subcatchment Pre Dev.: Lawn**



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#### Summary for Link DP-1: Design Point #1

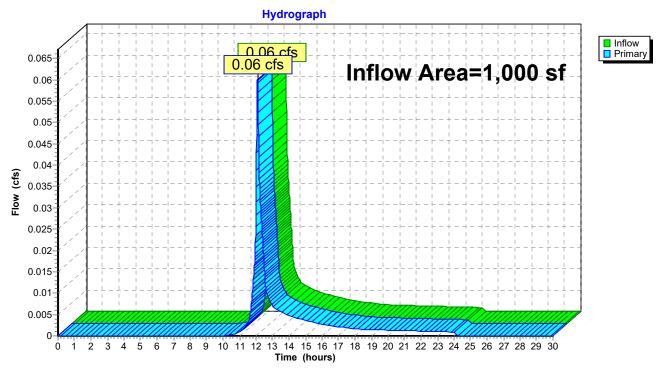
1,000 sf, 0.00% Impervious, Inflow Depth = 2.31" for 25-yr event Inflow Area =

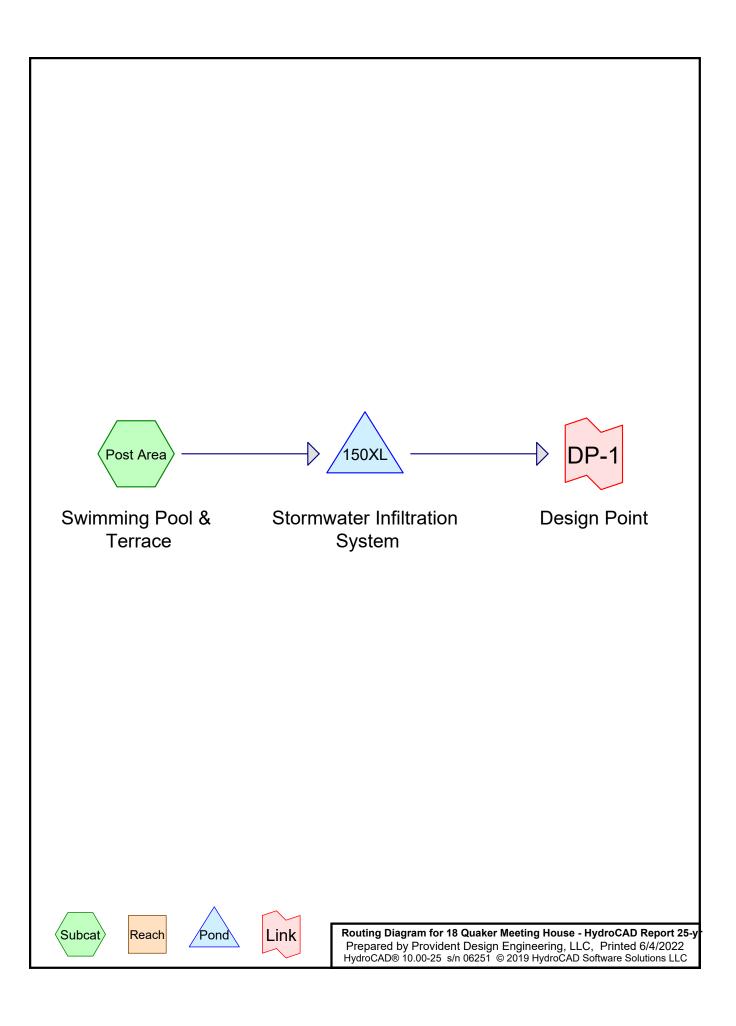
0.06 cfs @ 12.09 hrs, Volume= Inflow 192 cf

0.06 cfs @ 12.09 hrs, Volume= 192 cf, Atten= 0%, Lag= 0.0 min Primary

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

#### Link DP-1: Design Point #1





18 Quaker Meeting House - HydroCAD Report 25-yr

Type III 24-hr 25-yr Rainfall=6.44"

Prepared by Provident Design Engineering, LLC

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Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment Post Area: Swimming Pool & Runoff Area=989 sf 100.00% Impervious Runoff Depth=6.20" Flow Length=50' Tc=6.0 min CN=98 Runoff=0.14 cfs 511 cf

Pond 150XL: Stormwater Infiltration System Peak Elev=497.62' Storage=143 cf Inflow=0.14 cfs 511 cf Discarded=0.02 cfs 498 cf Primary=0.02 cfs 13 cf Outflow=0.03 cfs 511 cf

Link DP-1: Design Point Inflow=0.02 cfs 13 cf
Primary=0.02 cfs 13 cf

Total Runoff Area = 989 sf Runoff Volume = 511 cf Average Runoff Depth = 6.20" 0.00% Pervious = 0 sf 100.00% Impervious = 989 sf Prepared by Provident Design Engineering, LLC
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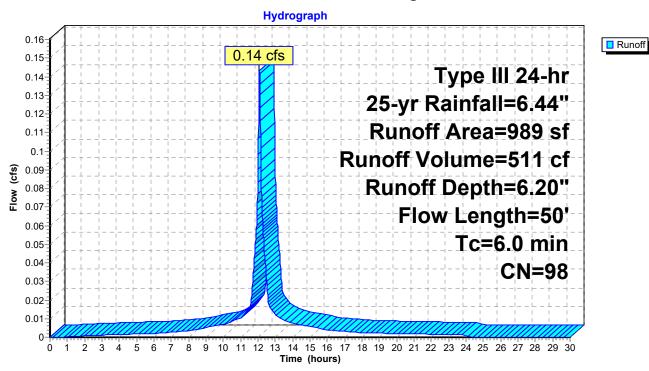
## Summary for Subcatchment Post Area: Swimming Pool & Terrace

Runoff = 0.14 cfs @ 12.08 hrs, Volume= 511 cf, Depth= 6.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs Type III 24-hr 25-yr Rainfall=6.44"

| _ | Α           | rea (sf)         | CN              | Description          |                    |                                   |  |  |  |  |
|---|-------------|------------------|-----------------|----------------------|--------------------|-----------------------------------|--|--|--|--|
| * |             | 480              | 98              | Proposed Pool, HSG B |                    |                                   |  |  |  |  |
| * |             | 96               | 98              | Pool Coping          | Pool Coping, HSG B |                                   |  |  |  |  |
| * |             | 413              | 98              | Pool Terrace, HSG B  |                    |                                   |  |  |  |  |
|   |             | 989              | 98              | Weighted A           | verage             |                                   |  |  |  |  |
|   |             | 989              |                 | 100.00% Im           | npervious A        | rea                               |  |  |  |  |
| _ | Tc<br>(min) | Length<br>(feet) | Slope<br>(ft/ft | ,                    | Capacity<br>(cfs)  | Description                       |  |  |  |  |
|   | 6.0         | 50               |                 | 0.14                 |                    | Direct Entry, Pool Area to System |  |  |  |  |

#### **Subcatchment Post Area: Swimming Pool & Terrace**



Type III 24-hr 25-yr Rainfall=6.44"

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#### **Summary for Pond 150XL: Stormwater Infiltration System**

Inflow Area = 989 sf,100.00% Impervious, Inflow Depth = 6.20" for 25-yr event

Inflow = 0.14 cfs @ 12.08 hrs, Volume= 511 cf

Outflow = 0.03 cfs @ 12.47 hrs, Volume= 511 cf, Atten= 77%, Lag= 23.4 min

Discarded = 0.02 cfs @ 11.63 hrs, Volume= 498 cf

Primary = 0.02 cfs @ 12.47 hrs, Volume= 13 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs Peak Elev= 497.62' @ 12.47 hrs Surf.Area= 136 sf Storage= 143 cf

Plug-Flow detention time= 45.9 min calculated for 511 cf (100% of inflow) Center-of-Mass det. time= 45.9 min (790.0 - 744.1)

| Volume | Invert  | Avail.Storage | Storage Description   |
|--------|---------|---------------|---|
| #1A    | 495.88' | 77 cf         | 8.00'W x 17.00'L x 2.04'H Field A                             |
|        |         |               | 278 cf Overall - 85 cf Embedded = 193 cf x 40.0% Voids        |
| #2A    | 496.38' | 85 cf         | <b>Cultec R-150</b> x 4 Inside #1                             |
|        |         |               | Effective Size= 29.8"W x 18.0"H => 2.65 sf x 7.50'L = 19.9 cf |
|        |         |               | Overall Size= 33.0"W x 18.5"H x 8.50'L with 1.00' Overlap     |
|        |         |               | Row Length Adjustment= +1.00' x 2.65 sf x 2 rows              |
|        |         | 100.5         | =   |

162 cf Total Available Storage

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices  |
|--------|-----------|---------|---|
| #1     | Primary   | 497.52' | 4.0" Round Culvert  |
|        | •         |         | L= 5.0' CPP, square edge headwall, Ke= 0.500                      |
|        |           |         | Inlet / Outlet Invert= 497.52' / 497.50' S= 0.0040 '/' Cc= 0.900  |
|        |           |         | n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf       |
| #2     | Discarded | 495.88' | 5.500 in/hr Exfiltration over Surface area from 495.38' - 495.88' |
|        |           |         | Excluded Surface area = 0 sf Phase-In= 0.01'                      |

**Discarded OutFlow** Max=0.02 cfs @ 11.63 hrs HW=495.90' (Free Discharge) **2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.02 cfs @ 12.47 hrs HW=497.62' TW=0.00' (Dynamic Tailwater) 1=Culvert (Barrel Controls 0.02 cfs @ 1.00 fps)

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#### Pond 150XL: Stormwater Infiltration System - Chamber Wizard Field A

Chamber Model = Cultec R-150 (Cultec Recharger® 150HD - DISCONTINUED, Not for new designs)

Effective Size= 29.8"W x 18.0"H => 2.65 sf x 7.50'L = 19.9 cf Overall Size= 33.0"W x 18.5"H x 8.50'L with 1.00' Overlap Row Length Adjustment= +1.00' x 2.65 sf x 2 rows

33.0" Wide + 6.0" Spacing = 39.0" C-C Row Spacing

2 Chambers/Row x 7.50' Long +1.00' Row Adjustment = 16.00' Row Length +6.0" End Stone x 2 = 17.00' Base Length

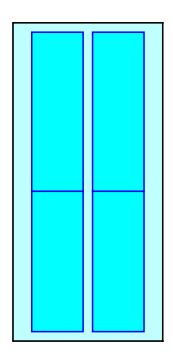
2 Rows x 33.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 8.00' Base Width 6.0" Base + 18.5" Chamber Height = 2.04' Field Height

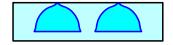
4 Chambers x 19.9 cf +1.00' Row Adjustment x 2.65 sf x 2 Rows = 84.8 cf Chamber Storage

277.7 cf Field - 84.8 cf Chambers = 192.9 cf Stone x 40.0% Voids = 77.2 cf Stone Storage

Chamber Storage + Stone Storage = 161.9 cf = 0.004 af Overall Storage Efficiency = 58.3% Overall System Size = 17.00' x 8.00' x 2.04'

4 Chambers 10.3 cy Field 7.1 cy Stone

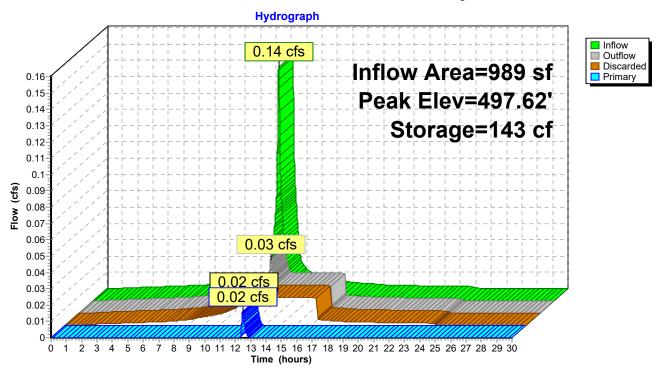




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### Pond 150XL: Stormwater Infiltration System



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#### **Summary for Link DP-1: Design Point**

Inflow Area = 989 sf,100.00% Impervious, Inflow Depth = 0.16" for 25-yr event

Inflow = 0.02 cfs @ 12.47 hrs, Volume= 13 cf

Primary = 0.02 cfs @ 12.47 hrs, Volume= 13 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

### Link DP-1: Design Point

