

WILLOW LAKES

A.P. 16, Lot 3
New London Turnpike
Coventry, RI

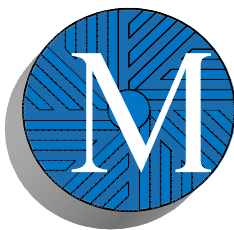
Project Narrative and Site Analysis

Prepared for:

WILLOW LAKES PROPERTIES, LLC



Prepared by:



**MILLSTONE
ENGINEERING, P.C.**

CIVIL ENGINEERING • LAND PLANNING

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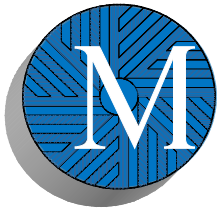
June 2019
Rev. 12/27/2021

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I. PROJECT DESCRIPTION

This Project Narrative is written in support of a Preliminary Plan Application for a site located on New London Turnpike in Coventry, Rhode Island. The subject property is located at the intersection of New London Turnpike and Tiffany Road and is identified as Assessor's Plat 16, Lot 3, see Appendix A. The site is currently vacant and was historically used as a gravel pit. The Town of Coventry approved an apartment complex with affordable components at this site in 2012, reference "Tiffany Village". The proposed development received Master Plan approval in September of 2019 and the Master Plan decision for Willow Lakes is recorded in the Town of Coventry Land Evidence Records in Book 2141, Page 680. A copy of this approval can be found in Appendix H.

The proposed site conditions will reflect the construction of an independent living community with assisted living and memory care facilities. A total of 202 units are proposed, including 25 affordable independent living units. Proposed access to the development will be made available through a single entrance on New London Turnpike with parking being proposed throughout the site.

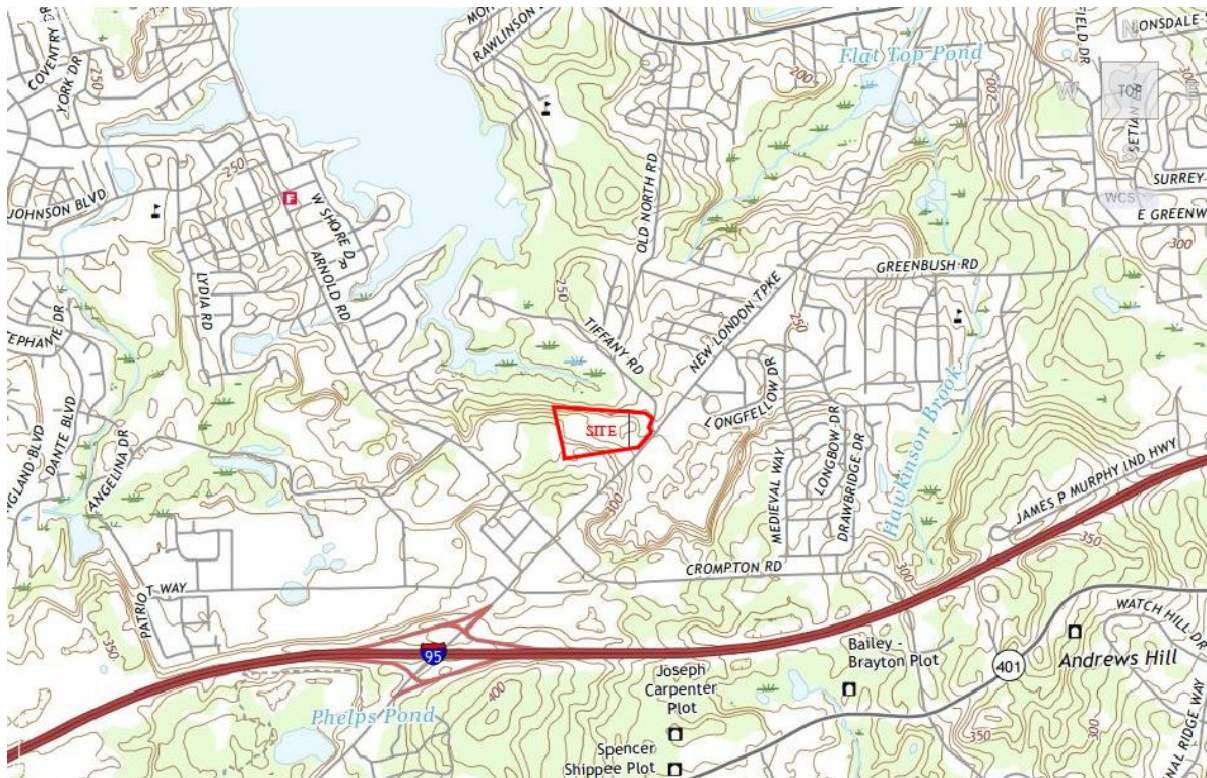
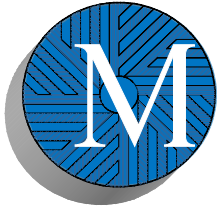


Figure 1: Locus Map

Reference: U.S.G.S. Quadrangle Map, Crompton, RI



II. LAND DISTURBING ACTIVITY

Requirement: Coventry Ordinance Chapter 200.11.B.1

The construction of the proposed development will include the following:

- Installation of soil erosion control measures such as a construction entrance, silt fence and staked hay bale lines
- Clearing, grubbing, and stockpiling of topsoil (if required)
- Excavation and placement of compacted fill in accordance with the grading plan
- Installation of the proposed storm drainage system, including water quality Best Management Practices (BMPs)
- Installation of utilities in accordance with the utility plan
- Building construction
- Installation of curbing and pavement
- Fine grading, spreading of topsoil and seeding to stabilize exposed earth

The construction activities shall be in accordance with applicable federal, state and local permits. The site will utilize soil erosion and sediment control techniques as required by the Town as well as the Rhode Island Department of Environmental Management (DEM)).

III. EXISTING SITE CONDITIONS AND EXISTING BUILDINGS

Requirement: Coventry Ordinance Chapter 139.6.O.2

The majority of the land associated with the site is part of a commercial gravel pit. The existing ground cover consists primarily of exposed gravel; portions of the property are vegetated with sparse brush. The existing terrain slopes generally to the east, although there are substantial variations in the topography due to the gravel operations at the site. There are no existing buildings on the site. There are no agricultural lands located on the property. The subject parcel is not listed on the National Historic Register. The site is situated within a Natural Heritage Area as determined by GIS data downloaded from the RIGIS website (URL: <http://www.edc.uri.edu/rigis/>).

The entire property is located in Zone X areas determined to be outside the 0.2% chance floodplain as indicated on National Flood Insurance Program Flood Insurance Rate Maps (FIRM) Kent County, Rhode Island, All Jurisdictions, Panel 116 of 251, Map Number 44003C0116H, Map Revised October 2, 2015.

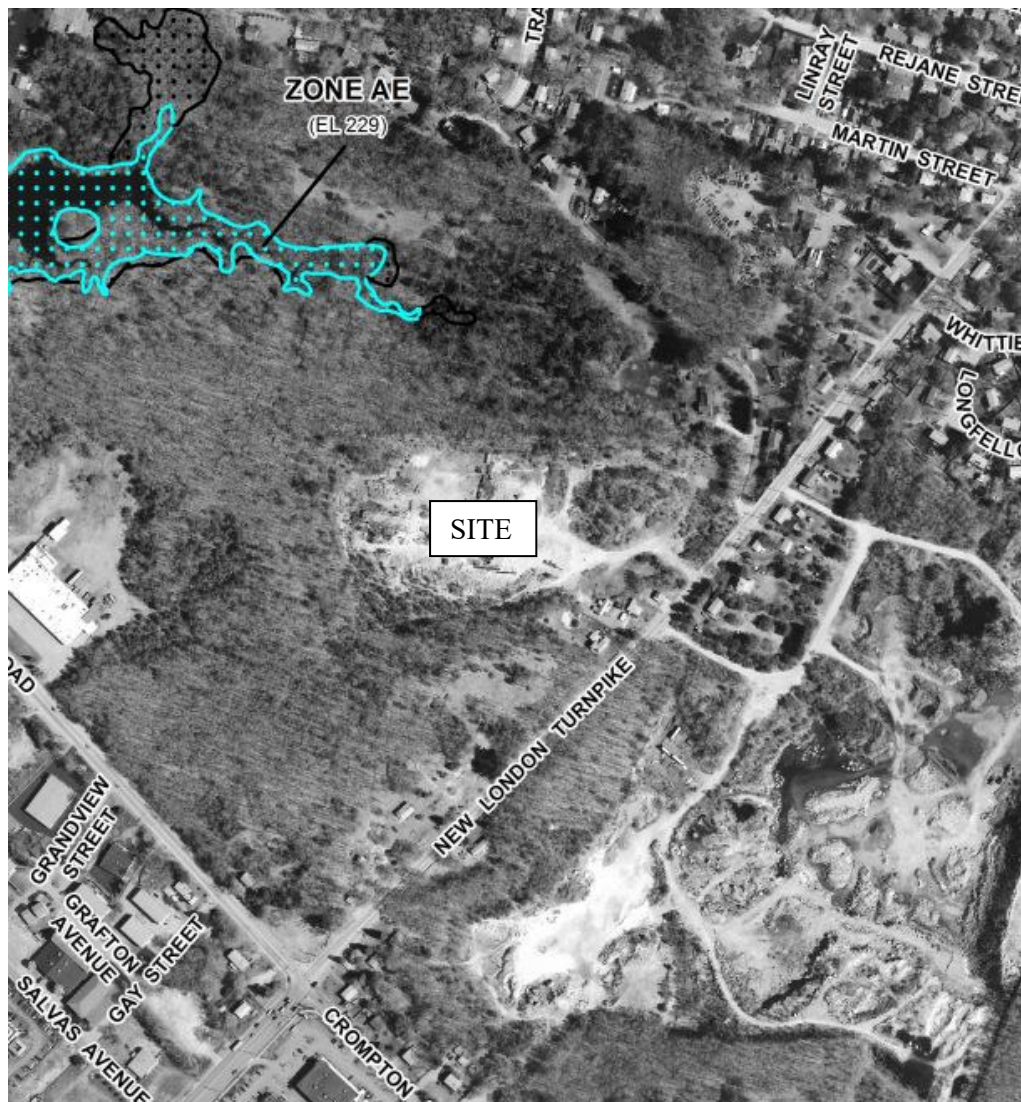
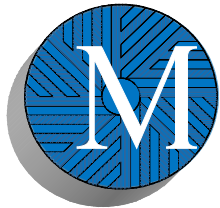
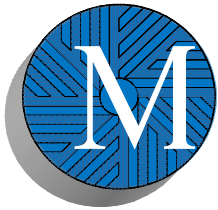


Figure 2: FEMA Map

Reference: Map Number 44003C0116H, Map Revised October 2, 2015.

There are no known wetlands on the subject property. However, riverbank wetlands and a swamp were determined to be located to the north of the site. Portions of the Rhode Island Department of Environmental Management jurisdictional setbacks are located on the site. The limits of the setbacks can be found on the development plans. No disturbance of the jurisdictional wetlands is proposed as part of the development. The project has received a wetland edge verification from the Rhode Island Department of Environmental Management (DEM), see Appendix D.



IV. CURRENT ZONING AND LAND USE

Requirement: Coventry Ordinance Chapter 139.6.O.1

The subject property encompasses approximately 12.4 acres and is further identified as Lot 3 on Assessor's Plat 16. The entire site lies within an R-20 Residential District Zone and has received a Special Use Permit for a multifamily use. The site is currently part of a commercial gravel pit.

V. USDA SOIL ANALYSIS

*Requirement: Coventry Ordinance Chapter 200.11.B.1
Coventry Ordinance Chapter 139.6.O.4*

The soils within the subject project as defined by the Soil Survey of Rhode Island are comprised of three (3) major soil classifications as shown in the table below. Sub-classifications of these soils further identify the slope range of the soil area. With the exception of steeply sloped areas and a Rhode Island Department of Environmental Management jurisdictional wetland setback, the majority of the site is classified as land suitable for community development. No water table or flooding problems are expected within the development area.

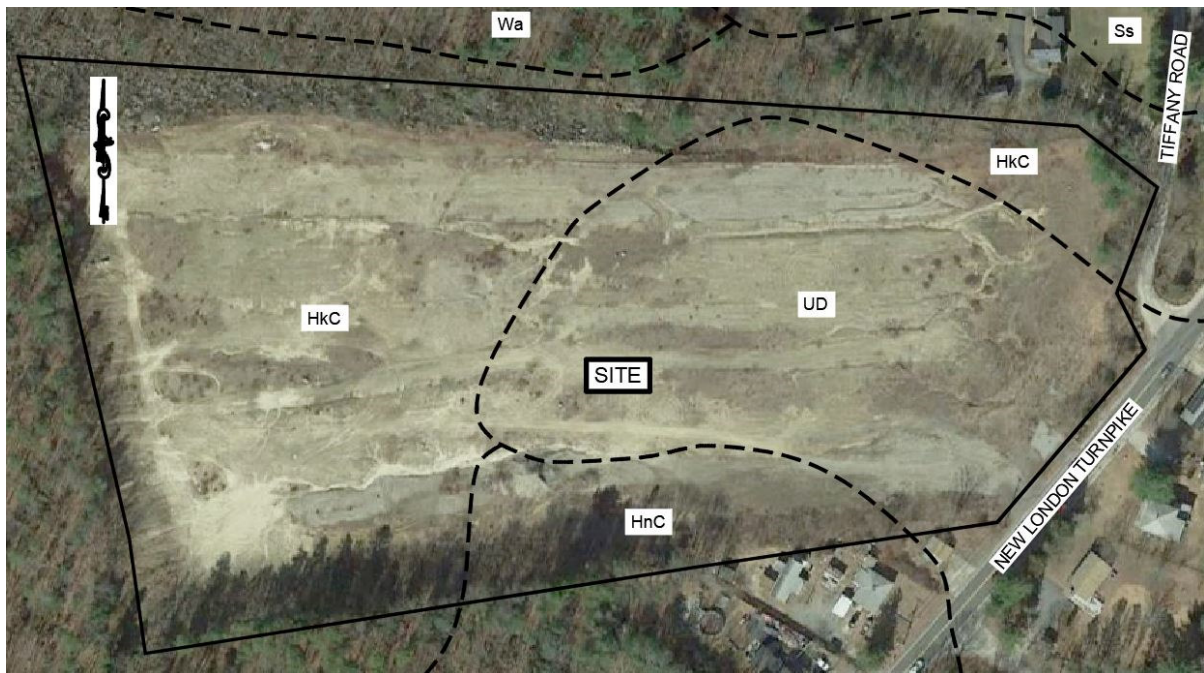
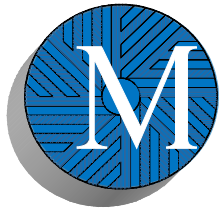


Figure 3: Soils Map

Reference: USDA Natural Resources Conservation Service Web Soil Survey for State of Rhode Island: Bristol, Kent, Providence, and Washington Counties.



Map Unit Symbol	Soil Name
HkC	Hinkley Loamy Sand, 8% to 15% slopes
HnC	Hinckley-Enfield complex, 3% to 15% slopes
UD	Udorthents-Urban land complex

Table 1: Soils Areas of Site

See Appendix I for USDA excerpted soil descriptions and technical information charts for each of the existing soils onsite.

VI. CHARACTER OF OPEN AREAS

Requirement: Coventry Ordinance Chapter 139.6.O.3

The entire property is located in Zone X areas determined to be outside the 0.2% chance floodplain as indicated on National Flood Insurance Program Flood Insurance Rate Maps (FIRM) Kent County, Rhode Island, All Jurisdictions, Panel 116 of 251, Map Number 44003C0116H, Map Revised October 2, 2015.

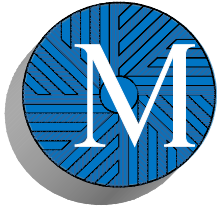
There are no known wetlands on the subject property. However, riverbank wetlands and a swamp were determined to be located to the north of the site. Portions of the Rhode Island Department of Environmental Management jurisdictional setbacks are located on the site. The limits of the setbacks can be found on the development plans. No disturbance of the jurisdictional wetlands is proposed as part of the development. The project has received a wetland edge verification from DEM, see Appendix D.

The site will be landscaped in accordance with Town requirements.

VII. PROPOSED BUILDINGS

Requirement: Coventry Ordinance Chapter 139.6.O.5

A three-story building is proposed with multiple wings containing independent living, assisted living, and memory care units along with support facilities such as office space and dining. 31 independent living units are proposed to be classified as low- or moderate-income housing. The proposed unit breakdown follows.



Independent Living (IL) Units

Market Rate IL Units:	93
Affordable IL Units:	31
Total IL units:	124 (25% Affordable)
Assisted Living (AL) Units:	48
Memory Care (MC) Units:	30
Total number of units proposed:	202

See Appendix B for the Letter of Eligibility from Rhode Island Housing.

VIII. STORMWATER MANAGEMENT MEASURES

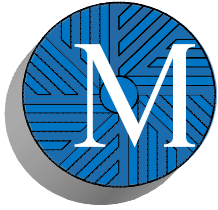
Requirement: Coventry Ordinance Chapter 200.11.B.1

The completed engineering design, including the stormwater management measures discussed in this section, can be found in the Project Narrative and Drainage Analysis for Willow Lakes. The proposed development utilizes a network of catch basins and pipes to collect stormwater runoff and convey it to a detention basin or underground infiltration chamber. The drainage conveyance has been sized to adequately handle the runoff generated by the 100-year storm per the Subdivision Regulations.

Water quality measures include infiltration chambers for rooftop runoff, sediment forebays to provide the required sediment storage and sand filters to provide the required water quality and recharge volume for the development. The water quality measures proposed comply with the standards of the Rhode Island Stormwater Design and Installation Standards Manual (RISDISM).

Environmental considerations will be made in developing this project so that water quality will be maintained both while the project is under construction and once the project is completed. Sedimentation and water quality goals will be met by a variety of measures throughout the life of the project. The stormwater treatment provided by the Best Management Practices proposed is in full accordance with the RISDISM.

Sedimentation and water quality goals will be met by a variety of measures throughout the life of the project. The storm water treatment provided by the Best Management Practices (BMPs) proposed shall be in full accordance with the RISDISM.



IX. CUT / FILL ANALYSIS

Requirement: Coventry Land Development Checklist E.66

The site will be graded in a manner typical for multifamily developments and is anticipated to be balanced within 3,000 cubic yards. Any excess material shall be transported off-site upon completion of the project.

X. IMPERVIOUS AREA

Requirement: Coventry Ordinance Chapter 139.6.O.5

Under proposed conditions, the ground surface will consist of pavement, rooftops and formal landscaped areas. The vegetation and stormwater control measures proposed for the development will not significantly increase the rate of stormwater runoff to the surrounding land.

There are approximately 5.7 acres of impervious surface proposed for the development, or about 46% of the project site. Please see the Project Narrative and Stormwater Drainage Analysis for more detailed information of the stormwater treatment.

XI. PROPOSED SEWAGE DISPOSAL AND WATER SERVICE

Requirement: Coventry Ordinance Chapter 139.6.O.7

The project will be serviced by public sanitary sewer and public water utilities. The previously approved Tiffany Village development has obtained approval from the Kent County Water Authority as well as the Coventry Sewer Subcommittee and RIDEM. The proposed sewer and water will connect to existing infrastructure in New London Turnpike.

XII. POPULATION

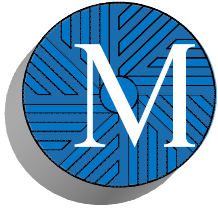
Requirement: Coventry Ordinance Chapter 139.6.O.6

See the Fiscal Impact Study prepared by JDL Enterprises for the discussion on the population projection for the proposed development.

XIII. TRAFFIC ASSESSMENT

Requirement: Coventry Ordinance Chapter 139.6.O.8

A Traffic Impact Analysis has been submitted for the previously approved multifamily use (Sherwood Village). A Trip Generation letter has been prepared for the Willow Lakes development which shows that it will be less impactful than the Sherwood Village project can be found in Appendix M. (Checklist number 72)



XIV. VARIANCES, WAIVERS, SPECIAL PERMITS

Requirement: Coventry Ordinance Chapter 139.6.O.9

The project will require a Special Use Permit for “multifamily” use and/or “physical therapy and other health related services” use. See Appendix J for the List of Requested Relief.

XV. APPROVALS REQUIRED

Requirement: Coventry Ordinance Chapter 139.6.O.9

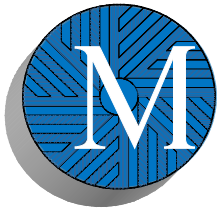
The following approvals/permits are anticipated to be required for this project:

- A. Master Plan (modification)
- B. Special Use Permit
- C. Comprehensive Permit (modification)
- D. Kent County Water Authority (modification)
- E. Sewer Subcommittee (modification)
- F. Central Coventry Fire District (modification)
- G. Rhode Island Pollutant Discharges Elimination System (RIPDES) Permit (modification)
- H. Preliminary Plan
- I. Final Plan

XVI. PROPOSED TIMETABLE FOR CONSTRUCTION

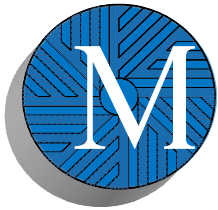
Requirement: RIGL 45-53-4 (1) iii
Coventry Ordinance Chapter 139.6.O.10

The project is currently planned to be permitted in one (1) phase. Construction is expected to begin in the summer of 2021 and be completed in June of 2022.



APPENDIX

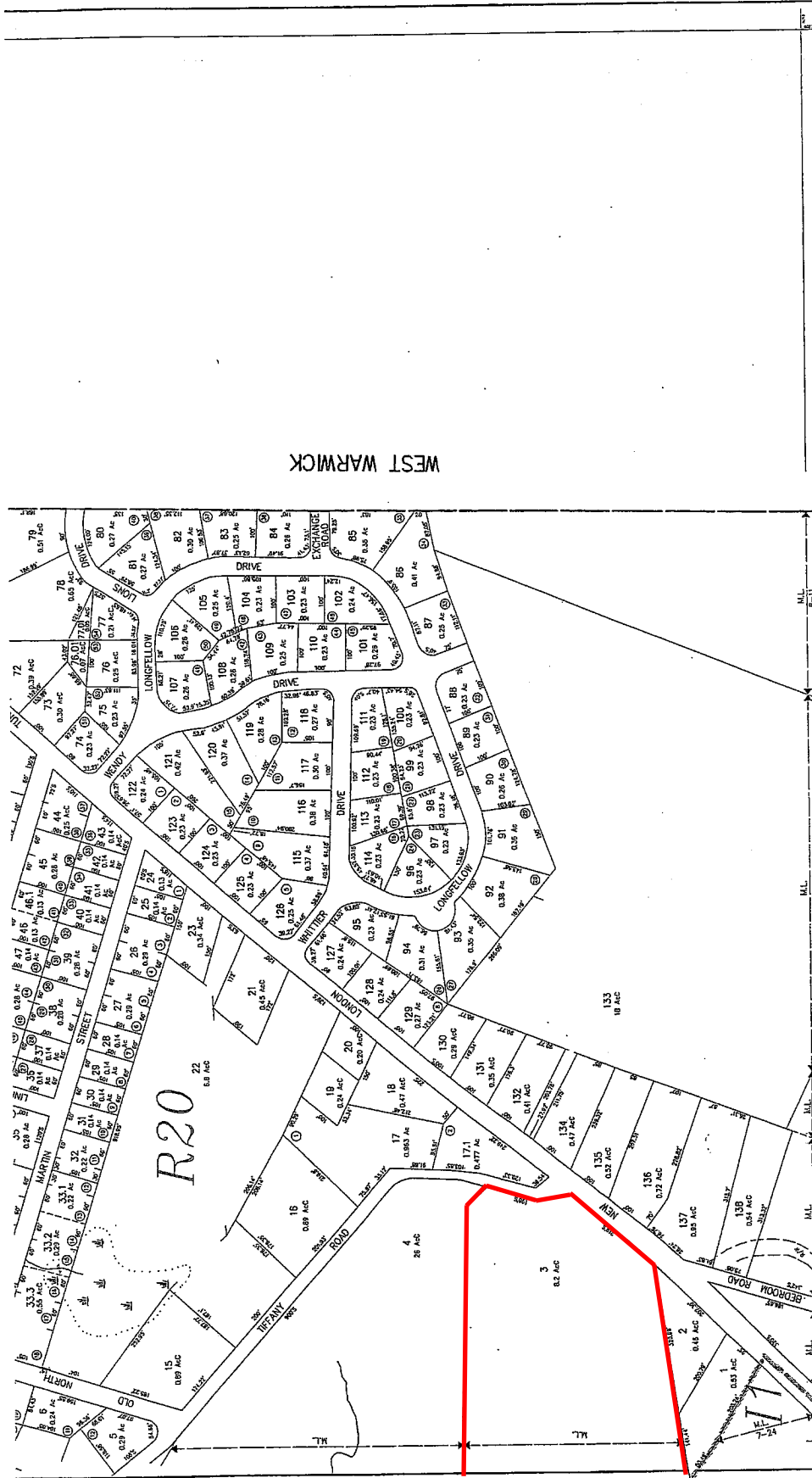
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- B. Letter of Eligibility from Rhode Island Housing
- C. Letter from Coventry Housing Authority
- D. RIDEM Approvals for Tiffany Village
- E. Kent County Water Authority Approvals for Tiffany Village
- F. Sewer Approvals for Tiffany Village
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- K. Plan Set (reduced)
- L. Sample Architectural Plans (reduced)
- M. Trip Generation letter from Bryant Associates



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX A

Town of Coventry Assessor's Map 16



WEST WARWICK

THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR ANY OTHER PURPOSES.
 THE HORIZONTAL DATA IS THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM.
 PHOTOGRAPHY DATE: MARCH 30, 1988
 COMPLETION DATE: JULY 29, 1989

PRODUCED BY
CARTOGRAPHIC ASSOCIATES, INC.
 MUNICIPAL MAPPING CONSULTANTS
 11 PLEASANT STREET, UPTON, RI 02881

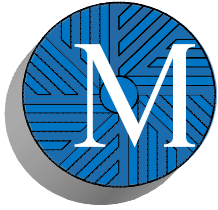
LEGEND
 AC CALCULATED
 AREA SURVEYED
 AC ON EXEMPT PROPERTY
 RECORD DIMENSION
 RIGHT OF WAY
 SUBDIVISION LOT NO.
 MATCH LINE
 WATER
 WETLANDS

SCALE 1" = 100'
 FEET
 METERS
 0 100 200 300
 0 30 60 90

INDEX DIAGRAM
 23 24
 15 16
 7 8
 16

PROPERTY MAPS
COVENTRY
 RHODE ISLAND

REVISED TO: JANUARY 1, 2007



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX B

Letter of Eligibility from Rhode Island Housing



RhodeIslandHousing
working together to bring you home

April 28, 2017

Barbara Sokoloff
Barbara Sokoloff Associates
101 A Dyer St
Providence, RI 02903

Dear Ms. Sokoloff:

This letter is in response to your recent inquiry regarding the status of the May 19, 2009 Letter of Eligibility (“LOE”) for “Sherwood Village,” a development to be located in Coventry, Rhode Island. You have informed us that there have been certain modifications to the original development proposal that have been agreed to by the town and the developer since the LOE was issued. You have asked whether a new or revised LOE is necessary.

The Comprehensive Permit process envisions that developers and municipalities may work together to refine the proposal to address the concerns of each party. This understanding was incorporated in the 2009 LOE, which provides that “Modifications to the development proposal resulting from local review do not require a revised letter of eligibility.”

If you have any questions, please contact Stacy Wasserman at swasserman@rihousing.com.

Thank you,

A handwritten signature in blue ink, appearing to read 'Eric Shorter', written over a faint background watermark of a person's silhouette.

Eric Shorter
Director of Development



RhodelslandHousing
working together to bring you home

May 19, 2009

Mr. Stephen A. Cardi, II
Sherwood Development, LLC
1400 Lincoln Avenue
Warwick, Rhode Island 02886

Comprehensive Permit, "Sherwood Village" A/P 16, Lot 3, New London Turnpike, Coventry.

Dear Mr. Cardi,

We have received your request for *an amended* letter of eligibility to pursue a comprehensive permit in the Town of Coventry to construct "Sherwood Village". This initiative is intended to create a total of 192 housing units. At least twenty-five percent of the total housing, 49 units, are intended to be affordable. To qualify as low and moderate income housing units, rental units must be priced to be affordable to households whose incomes do not exceed 80% of the area median income ("AMI") established by HUD for the Providence Metropolitan Statistical Area. Ownership condominiums must be priced to be affordable to households whose incomes do not exceed 100% AMI. Long term affordability of the affordable housing units will be ensured by deed restrictions for a minimum of 30 years. Compliance with affordability requirements will be ensured by contract with the Coventry Housing Authority or other Approved Monitoring Agent.

The low and moderate income rents and selling prices will provide affordable home opportunities to individuals and families whose incomes do not exceed 80% AMI for renters and 100 % AMI for owners and you affirm that these prices appear feasible within the overall projected development sources and uses.*

Based on the current Area Median Incomes at the time of this application, the maximum gross rents including utilities for the low and moderate income affordable units may not exceed:

\$1317. per month for a two bedroom unit at 80% AMI

\$1171. per month for a one bedroom unit at 80% AMI

Please note that these rental prices are maximums. Units may be rented for lower prices to accommodate local needs or ordinances, household income limits, or the requirements of future funding sources, if any. Maximum rental prices may change in the future but only as a factor of change in the AMI or utility allowances.

Stephen A. Cardi, II
May 19, 2009
Page Two

If units are sold as condominiums, based on current AMI's, maximum selling prices not exceed:

\$ 144,942. for a one bedroom condominium at 80% AMI

\$ 172,219. for a one bedroom condominium at 100% AMI

\$ 165,421. for a two bedroom condominium at 80% AMI

\$ 196,012. for a two bedroom condominium at 100% AMI

Maximum prices may change in the future but only as a result of change in the AMI, taxes, interest rates or insurance costs.

In addition to requirements for affordability and monitoring, under R.I.G.L. 45-53, the construction or rehabilitation of all qualifying low and moderate income housing units must be assisted by a state, federal or municipal subsidy program.

After a preliminary review of the plans and financial assumptions for this development located at A/P 16, Lot 3 in Coventry, Rhode Island Housing has determined that:

- This project is generally eligible for subsidies under the HOME and Building Homes Rhode Island subsidy programs. However, this is not a commitment for financing. Funding is awarded competitively.
- In conformance with R.I.G.L. 42-55-5.3 Rhode Island Housing performed an on-site inspection of the site on October 22, 2008 and has reviewed pertinent information supplied by the applicant.
- The initial project pro forma was reviewed and the project appears feasible on the basis of projected overall development costs.
- The applicant, Stephen A. Cardi II, controls the site.

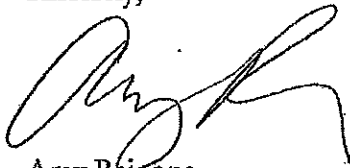
Based upon the review of the submitted information and supporting materials and based on the representations in your request, Sherwood Development, LLC is eligible to pursue a Comprehensive Permit application in the Town of Coventry to develop the proposed "Sherwood Village" housing at A/P 16, Lot 3 on New

Stephen A. Cardi, II
May 19, 2009
Page Three

London Turnpike in Coventry. Modifications to the development proposal resulting from local review do not require a revised letter of eligibility.

Thank you for your commitment to providing affordable housing opportunities to low and moderate income Rhode Island families.

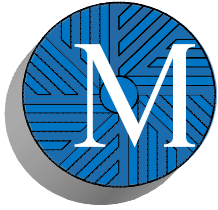
Sincerely,



Amy Rainone
Director of Policy

cc: Paul Sprague
Carol Ventura

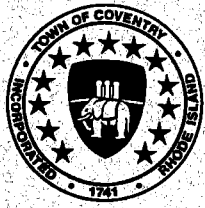
** In the event the Town of Coventry adopts a municipal housing subsidy ordinance prior to Final Approval of the subject comprehensive permit application, higher maximum unit selling prices may be permitted, up to that affordable to households at 120% AMI.*



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX C

Letter from Coventry Housing Authority



*Town of
Coventry Housing Authority*

*Robert A. DiPadua
Commissioner*

*Rebecca Parenteau
Resident Commissioner*

*Rosalie Jalbert
Commissioner*

*Scott Duckworth
Commissioner*

*R. David Jarvis
Commissioner*

*Julie A. Leddy
Executive Director*

February 16, 2017

Willow Lake Properties LLC
53 Greenwood Avenue
Darien, CT 06820

Thank you for the opportunity to serve as the Monitoring Agent for the affordable units proposed in the development, at A.P. 16, Lot 3 Coventry, Rhode Island and for assisting this community in achieving its affordable housing goals.

Coventry Housing Authority is an Approved Monitoring Agent for the State of Rhode Island and has been providing affordable housing opportunities for the community for over 50 years. We have been consistently been rated as a Higher Performer with the Department of Housing and Urban Development and our successful annual audits affirm the knowledge in compliance with federal regulations.

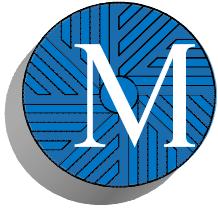
As the Monitoring Agent, we will monitor compliance and enforcement with the terms of the property's Deed Restriction and at a minimum, provide the following services:

- Determination of potential tenants eligibility with program requirements
- Determination of consistency of proposed rents with program restrictions
- Conduct initial and annual certification of compliance

Congratulations on this new development and we look forward to working with you.

Sincerely,

Julie A. Leddy
Executive Director



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX D

RIDEM Approvals for Tiffany Village

- Wetland Edge Verification – RIDEM #09-0184
- RIPDES Approval – RIDEM # RIR100854



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

February 27, 2012

Mr. Stephen Cardi
New London Turnpike Realty, LLC
400 Lincoln Avenue
Warwick, RI 02888

**RE: Rhode Island Storm Water General Permit for Construction Activity
Tiffany Village
RIPDES Application No. RIR100854**

Dear Mr. Cardi:

Enclosed is your final authorization to discharge storm water associated with construction activity under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Program. The Authorization to Discharge should be attached to your copy of the 2008 RIPDES General Permit for Storm Water Discharge Associated with Construction Activity (2008 Construction General Permit, which you already have on file), and be kept on-site as verification of authorization to discharge. All terms and conditions outlined in the 2008 Construction General Permit must be met. Any permit non-compliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, and is grounds for enforcement. For future references and inquiry, your permit authorization number is RIPDES No. RIR100854.

RIDEM strongly recommends that you obtain written assurances from contractors or subcontractors retained to undertake construction activity that they will comply with all applicable requirements.

This RIPDES permit will also serve as the UIC Program permit for this project, which has been assigned the UIC file number 001519 for any subsurface disposal of stormwater on the site. The following conditions are specific to this UIC Program Permit:

- 1) Any alterations or modifications to the disposal system from that approved herein, including permanent closure, must be reviewed and approved by the UIC Program prior to being effected.
- 2) Any inadvertent or deliberate discharge of waste oil or any other pollutant to the subsurface disposal system requires the immediate notification of the UIC Program.

Mr. Stephen Cardi
February 27, 2012
Page 2

- 3) The UIC Program must be provided the name and address of any new property owner in writing within thirty (30) days upon any future transfer of the property.

If you have any questions regarding the General Permit, you may contact Joseph Camara of the RIPDES Program staff at (401) 222-4700, Extension 7640.

Sincerely,



Eric A. Beck, P.E.
Supervising Sanitary Engineer
RIPDES Permitting Program

Enclosure

cc: Eric Beck, RIDEM
Traci Pena, RIDEM
Benjamin Caito, Millstone Engineering
Ernie Panciera, RIDEM
Annie McFarland, RIDEM

AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM
2008 General Permit for Storm Water Discharge Associated with Construction Activity

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

New London Turnpike Realty, LLC
400 Lincoln Avenue
Warwick, RI 02888

is authorized to discharge Storm Water Associated with Construction Activity from a facility located at

Tiffany Village
New London Turnpike & Tiffany Road
Coventry

to receiving waters named

Flat Top Pond, Hawkinson Brook

in accordance with the conditions and requirements set forth in the 2008 General Permit for Storm Water Discharge Associated with Construction Activity.

In accordance with Part I.C.2.c of the 2008 General Permit for Storm Water Discharge Associated with Construction Activity, coverage shall become effective on the date of signature.

Coverage under the General Permit for Storm Water Discharge Associated with Construction Activity and the authorization to discharge should expire at midnight, on September 25, 2013.

The issuance of this authorization does not relieve the permittee from compliance with any other applicable laws or regulations administered by the Department of Environmental Management or any other governmental entity.

Signed this 27 day of February, 2012.



Eric A. Beck, P.E.
Supervising Sanitary Engineer
RIPDES Permitting Program, Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 16, 2009

Stephen A. Cardi, II
Sherwood Development, LLC
400 Lincoln Avenue
Warwick, RI 02888

RE: Application No. 09-0184 in reference to the property located:

Approximately 560 feet south of Tiffany Road, approximately 630 feet west of the intersection of Tiffany Road and New London Turnpike, Assessor's Plat 16, Lot 3, Coventry, RI.

Dear Mr. Cardi:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your Request to verify the delineated edge of freshwater wetlands. This review included an inspection of the above referenced property ("subject property") as described by the site plans submitted with your application and received by the DEM on July 23, 2009.

Based upon the Program's observations and review, it is our determination that freshwater wetlands are present on or are in close proximity to the subject property. The freshwater wetlands that are regulated by this Department on the subject property include at least the following types:

- A Swamp (situated northerly of the subject property with the exception of flag A2 which is on the property line)
- Perimeter Wetland (that area of land within 50 feet of the edge of any Bog, Marsh, Swamp, or Pond)

The DEM has completed an inspection and review of the wetland edge delineated by you on-site. It is our determination that the wetland edges delineated on-site are accurate. These wetland edges have been shown on the site plan submitted with your application.

This letter does not constitute an approval or permit for any proposed project on the subject property. Pursuant to Section 2-1-21(a) of the Freshwater Wetlands Act and the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (Rules) a permit is required from this Program prior to the commencement of any activity which impacts or alters freshwater wetlands

This Program assumes that the edges of freshwater wetlands, as flagged or marked on site, have been accurately surveyed and portrayed on site plans submitted in support of your application. This Program makes no guarantee or representation that such survey is accurate.

In accordance with Rule 8.03(H) of the Rules, this verification of the delineated edge of freshwater wetlands is valid for a limited period of four (4) years from the date of issue.



Please contact Jane Kelly of this Office telephone: (401-222-6820, ext. 7420) should you have any questions regarding this letter.

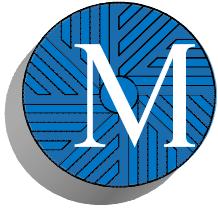
Sincerely,



Martin D. Wencek, Permitting Supervisor
Office of Water Resources
Freshwater Wetlands Program

MDW/JEK/jek

xc: John P. Caito, P.E., John P. Caito Corporation
Scott P. Rabideau, President, Natural Resource Services, Inc.

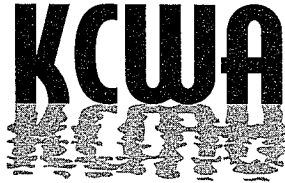


WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX E

Kent County Water Authority Approvals for Tiffany Village

- Water Service Conditional Approval (August 19, 2011)
- Technical Review Approval (August 30, 2011)



Kent County Water Authority

August 19, 2011

Mr. Benjamin J. Caito, P. E.
Senior Engineer
250 Centerville Road
Building E-12
Warwick, RI 02886

Re: Water Service Conditional Approval in lieu of Moratorium
Tiffany Village
Assessor's Plat 16, Lot 3
New London Turnpike
Coventry, Rhode Island

Dear Mr. Caito:

As you are aware through your attendance at the Kent County Water Authority Board meeting on August 18, 2011 that accelerated development has caused a deficient condition in the high service gradient that supplies water to this project. The Authority has been studying potential initiatives to increase water supply but these initiatives will take at least three to five years to be operative as long as adequate funding can be made available and construction can move forward without any delays including permitting. After considering these factors, the Kent County Water Authority Board has reviewed your request for service and all pertinent data presented at the August 18, 2011 Board meeting and based upon representations made by you and/or your representative at the Board Meeting and by certain findings by the Board at the August 18, 2011 Board meeting the Kent County Water Authority voted to conditionally approve your request for water supply to service the above commercial site with the following conditions in lieu of a moratorium:

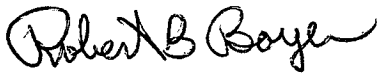
1. The Kent County Water Authority (KCWA) is not a guarantor of water supply for this or any other approval and KCWA can only supply water reasonably available to it and therefore any applicant/customer of KCWA understands that any third party commitments made by a applicant/customer are subject to the reasonable availability of water supply and limits of the existing infrastructure to support service.
2. A deficient condition associated with accelerated commercial and residential development exists in the area serviced by the KCWA, the KCWA is in the process of planning for

PO Box 192
West Warwick, RI 02893-0192
401-821-9300
www.kentcountywater.org

additional water supply and therefore delays or diminution in service may occur if the water supply is unavailable or unable to produce water sufficient to service the customers of KCWA.

3. Ventures, commitments or agreements are at the applicant's sole risk if supply or existing infrastructure is found to be insufficient to support service. The applicant may afford the Authority with system improvements to facilitate adequate service.
4. The applicant shall file a formal application with the necessary design drawings, flow calculations, including computer hydraulic modeling to fully evaluate this project supply availability and the potential impact on the existing public water supply system. The applicant/customer understands that any undetected error in any calculation or drawing or an increase or change in demand as proposed, which materially affects the ability to supply water to the project, will be the responsibility of the applicant/customer and not the KCWA.
5. Only conservation-wise plumbing fixtures are to be installed including but not limited to low flow shower heads, low flow toilets and low flow aerators on faucets.
6. If irrigation systems are installed, they must be supplied by a private well. Xeriscape landscaping technique and/or proper planting bed (high water holding capacity) soil preparation shall be employed throughout the project.

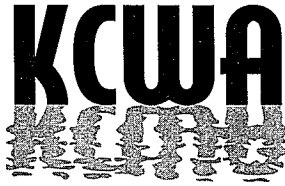
Very truly yours,
Kent County Water Authority



Robert B. Boyer
Chairman

cc: Joseph McGair, Attorney at Law
Board Members

RB/lms



Kent County Water Authority

August 30, 2011

Mr. Benjamin J. Caito, P. E.
Senior Engineer
Millstone Engineering, P. C.
250 Centerville Road, Building E-12
Warwick, RI 02886

Re: Tiffany Village, Assessor's Plat 16, Lot 3
New London Turnpike, Coventry, Rhode Island

Dear Mr. Caito:

We have reviewed your revised submission received in our office on August 23, 2011. Based on your professional engineer certification that the design complies with the Kent County Water Authority Regulations and will properly support future water service to this development, the technical review portion of the infrastructure design is acceptable to the staff and we, herewith, provide our approval for the installation. Any change in the design or property ownership made after this date requires a complete revised submission and review process prior to commencing construction on the water infrastructure.

All requirements of the Kent County Water Authority Regulations must be adhered to during construction. A copy of the plans and the Kent County Water Authority Regulations must be kept onsite while work is in progress. A letter from the property owner's attorney identifying the legal entity and/or property owner including point of contact and billing address must be provided to the Kent County Water Authority billing department prior to water service activation.

A complete set of as-built drawings must be received and approved by this office prior to final water service activation to the site. The owner and/or the developer is responsible to maintain all installation information and tie measurements necessary to produce finalized as-built drawings meeting the requirements of the Kent County Water Authority Regulations. Kent County Water Authority Regulations require that as-built drawings be prepared under the direct supervision of a professional engineer or professional land surveyor registered in the State of Rhode Island. As-built drawings will not be accepted with any disclaimers regarding measurements or location of appurtenances.

We require your construction contractor to notify us five days prior to construction commencement so that a field representative may be made available to observe work in progress. A \$5.00 per linear foot inspection fee must be paid in full prior to construction commencement. Measurements from the drawing show approximately 1,904 feet of infrastructure subject to the inspection fee resulting in a

PO Box 192

West Warwick, RI 02893-0192

401-821-9300

www.kentcountywater.org

total fee of \$9,520. We must emphasize that the owner is solely responsible to control their contractor in the progression of work to ensure the water infrastructure installation is accomplished in accordance with the requirements contained in the Kent County Water Authority Regulations and the accepted design.

A one-year warranty on all water lines and appurtenances is required upon completion acceptance by the Kent County Water Authority. All problems during the warranty period must be corrected at the developer's cost to the satisfaction of the Kent County Water Authority.

Compliance with the State Plumbing Code in reference to backflow prevention and service line disinfection must be verified by the plumbing inspector prior to water service activation to the building. Kent County Water Authority requires reduced pressure zone style backflow preventers for commercial installations of this nature. A copy of the bacteria sample test results and inspection confirmation letter from the plumbing inspector must be provided upon request for water service activation. Please be advised it is solely the responsibility of the owner or owner's representative to obtain the proper permits and coordinate with the plumbing inspector to complete all inspection requirements of the Rhode Island Plumbing Code.

Compliance with National Fire Protection Agency (NFPA) testing requirements for fire service is solely the responsibility of the owner or owner's representative to coordinate with the municipal fire authority or state fire marshal's office. NFPA pressure test may be accomplished in coordination with KCWA required testing, but KCWA shall not be responsible for conducting, verifying or documenting NFPA testing requirements.

If work has not begun construction on the water line within the six (6) months from the date of this letter a complete resubmission and/or request for an extension of this technical review consideration will be necessary prior to construction commencement. The owner and/or developer must request an extension prior to the six months expiration date of this letter.

Nothing in this letter relieves the responsible party from compliance with all applicable local, state and federal regulations in association with this water infrastructure installation. Any deficiency or requirement that may have been inadvertently overlooked in the course of this review is also subject to correction under the provision of the applicable code, regulation or law.

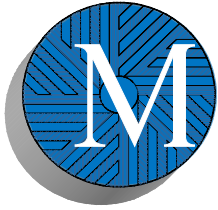
To continue to keep this file active we require written confirmation of receipt of this technical review letter along with tentative dates for construction commencement within ten (10) working days of receipt of this letter.

Please feel free to call us if you have any questions regarding this matter.

Very truly yours,
Kent County Water Authority



John Duchesneau
Director of Technical Services



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX F

Sewer Approvals for Tiffany Village

- RIDEM Order of Approval – OA #1610RIDEM #12-04
- Resolution of the Sewer Subcommittee No. # 2011-11
- Resolution of the Sewer Subcommittee No. # 2012-09
- Resolution of the Town Council No. 74-12-4267

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES**

In the Matter of the Application)
of Sherwood Development, LLC)
for Approval of a System or Means)
to Prevent Pollution)

No. 1610

ORDER OF APPROVAL

On the above entitled matter, wherein Sherwood Development, LLC, in the Town of Coventry, in Kent County, in the State of Rhode Island and Providence Plantations filed with the Department of Environmental Management contract documents marked "Construction Drawings for Tiffany Village A.P. 16, Lot 3 New London Turnpike Coventry, Rhode Island" on the 23rd day of April 2012, defining the proposed installation of approximately one thousand three hundred thirty-two linear feet (1,332 l.f.) of eight inch (8") PVC gravity sewer; and appurtenances, in the town of Coventry. The contract documents were prepared and signed by Millstone Engineering, P.C. for Sherwood Development, LLC LLC, describing a system or means to prevent pollution as described in Chapter 46-12 of the General Laws of 1956, as amended, which system or means New London Turnpike Realty, LLC desires to adopt in order to dispose of not more than fifty thousand nine hundred fifteen gallons per day (50,915 gpd) based on average daily flows.

Upon consideration thereof, the Department of Environmental Management approves this system or means to prevent pollution.

This Order of Approval shall remain in full force and effect as long as said system or means shall be operated and maintained in a condition satisfactory to the Department of Environmental Management.


The provisions of the Order of Approval shall apply to and be binding upon the owner, their agents, servants, employees, and all persons, firms and corporations acting under, through, and on behalf of them.

In the event of any change in control or ownership of facilities from which the authorized discharges originate, the owner shall notify the Department of Environmental Management with advanced written notice of such transfer. Succeeding owners shall be bound by all the conditions for this Order, unless a new or modified Order is obtained.

This Order shall be subject to modification, suspension or revocation in accordance with the law.

Entered as the Order of the Department of Environmental Management this
21st day of May 2012 A.D.

For the Director:


Angelo S. Liberti, P.E.
Chief of Surface Water Protection
Office of Water Resources
Department of Environmental Management

CONSTRUCTION DRAWINGS

REVIEWED AND APPROVED
IN ACCORDANCE WITH REQUIREMENTS OF THE
RHODE ISLAND DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

FOR:

TIFFANY VILLAGE

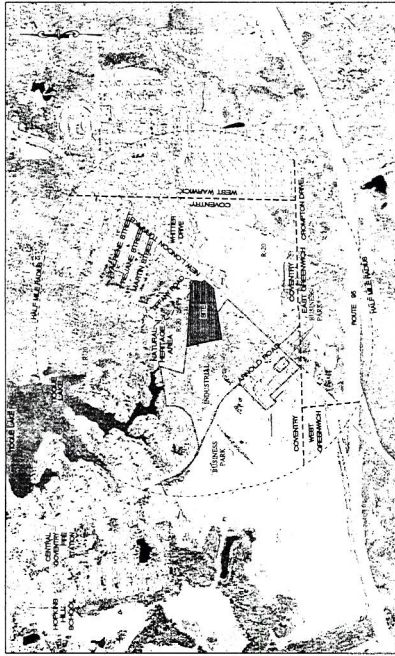
Per: *May 21, 2012*
Super: *Christy S. Liberty*

A.P. 16, LOT 3

NEW LONDON TURNPIKE
COVENTRY, RHODE ISLAND

Chief, Office of Water Resources

OA #1610 DEM f.k #12-04



AERIAL IMAGE
1" = 100'

PREPARED FOR: SHERWOOD DEVELOPMENT, LLC

PREPARED BY:



ILLSTONE
ENGINEERING, P.C.
CIVIL ENGINEERING LANDSCAPE ARCHITECTURE LAND PLANNING
256 CENTERVILLE ROAD, BUILDING #12, WARWICK, RHODE ISLAND 02886, P. (401) 921-3444 F. (401) 921-3303

JULY 2011

REVISED THROUGH 4/17/2012

REFERENCES:
1. 2008 CONSTRUCTION SPECIFICATIONS FOR ROAD AND
2. 2008 CONSTRUCTION SPECIFICATIONS FOR PAVEMENT
3. 2008 CONSTRUCTION SPECIFICATIONS FOR UTILITIES
4. 2008 CONSTRUCTION SPECIFICATIONS FOR EROSION CONTROL
5. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE
6. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE
7. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE
8. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE
9. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE
10. 2008 CONSTRUCTION SPECIFICATIONS FOR LANDSCAPE ARCHITECTURE

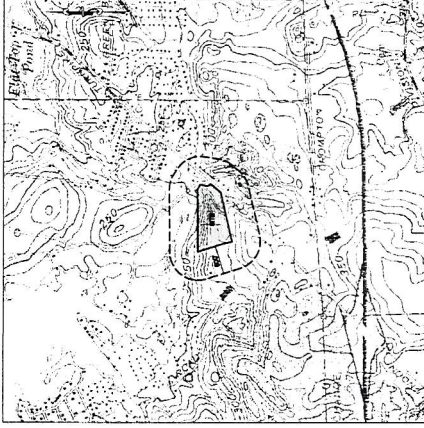


TABLE OF CONTENTS:

SHEET	DESCRIPTION	REVISED
1	COVER SHEET	4/17/2012
2	EXISTING CONDITIONS PLAN	12/15/2012
3	SITE LAYOUT PLAN	2/20/2012
4	GRADING AND DRAINAGE PLAN	3/16/2012
5	UTILITY PLAN	3/16/2012
6	PLAN AND PROFILE - 1	3/16/2012
7	PLAN AND PROFILE - 2	3/16/2012
8	SOIL EROSION AND SEDIMENT CONTROL PLAN	12/15/2012
9	LANDSCAPE PLAN	12/15/2012
10	LANDSCAPE DETAILS	12/15/2012
11	NOTES AND DETAILS	12/15/2012
12	DETAILS - 1	12/15/2012
13	DETAILS - 2	12/15/2012
14	DETAILS - 3	3/28/2012
15	DETAILS - 4	2/20/2012
16	DETAILS - 5	4/17/2012

CONSTRUCTION DRAWINGS
FOR
TIFFANY VILLAGE
A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI



JEFFREY C. HANSON
PROFESSIONAL ENGINEER
NO. 3538
SUPERVISION HAS BEEN
THOROUGHLY CHECKED

ARCHITECT:
SHERWOOD DEVELOPMENT, LLC
400 LINCOLN AVENUE
WARWICK, RI 02886
PHONE: (401) 739-8100
FAX: (401) 739-8100

OWNER:
NEW LONDON TURNPIKE
REALTY, LLC
150 CHESTNUT STREET
WARWICK, RI 02886
PHONE: (401) 921-8000

APPLICANT:
SHERWOOD DEVELOPMENT, LLC
400 LINCOLN AVENUE
WARWICK, RI 02886
PHONE: (401) 739-8100
FAX: (401) 739-8100

LEGAL COUNSEL:
CHARLES M. CHARLTON, ESQ.
928 PARK AVENUE
CRANSTON, RI 02910
PHONE: (401) 722-8197

ARCHITECT:
SHERWOOD DEVELOPMENT, LLC
400 LINCOLN AVENUE
WARWICK, RI 02886
PHONE: (401) 739-8100
FAX: (401) 739-8100

LANDSCAPE ARCHITECT:
ILLSTONE ENGINEERING, P.C.
256 CENTERVILLE ROAD
WARWICK, RI 02886
PHONE: (401) 921-3444

CONSTRUCTION DRAWINGS
FOR
TIFFANY VILLAGE
A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

Drawn By: B.J.C.
Checked By: J.C.H.
Sheet

1
of 16
REV. NO. 11.12.15



RESOLUTION
OF THE COVENTRY
SEWER SUBCOMMITTEE

NO. #2011 - 11

WHEREAS: The Town of Coventry recognizes that its municipal wastewater program holds a distinct importance to the citizens of Coventry, and

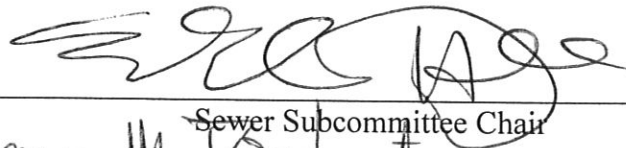
WHEREAS: the Coventry Sewer Subcommittee passes this resolution based on the information presented by a representative of Sherwood Development, LLC, on the 17th day of May, 2011, and

WHEREAS: this Conceptual Approval resolution does not constitute sewer tie-in approval

NOW THEREFORE BE IT RESOLVED: that the Coventry Sewer Subcommittee hereby agrees that the project is located on property that is serviced by the Coventry municipal wastewater system and the Town of Coventry has adequate reserve capacity in the West Warwick Regional Wastewater Treatment Facility to accept the proposed wastewater flow from Tiffany Village, AP 16, Lot 3

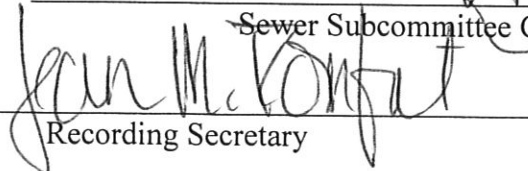
PASSED AND ADOPTED this 17th day of May 2011.

APPROVED

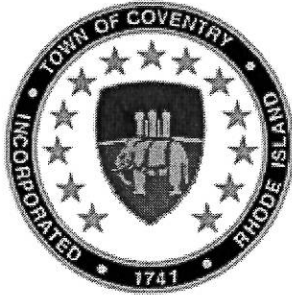


Sewer Subcommittee Chair

ATTEST:



Recording Secretary



RESOLUTION
OF THE
COVENTRY SEWER SUBCOMMITTEE
NO. #2012 - 09

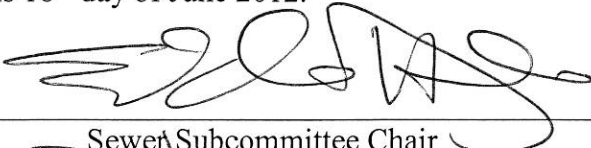
WHEREAS: Town staff has thoroughly examined the application, designs, plans, and all other submitted documentation, and

WHEREAS: the applicant shall sufficiently fulfill all the requirements necessary for sewer tie in approval

NOW THEREFORE BE IT RESOLVED: that the Coventry Sewer Subcommittee hereby recommends that the Town Council approve the sewer tie in application for Tiffany Village, Plat 16, Lot 3, New London Tpk.

PASSED AND ADOPTED this 18th day of June 2012.

APPROVED _____


Sewer Subcommittee Chair

ATTEST: _____


Recording Secretary

RESOLUTION
OF THE
TOWN COUNCIL

No. 74-12-4267

WHEREAS: the Coventry Sewer Subcommittee has recommended approval of the sewer tie-in.

WHEREAS: town staff has thoroughly examined the application, designs, plans, and all other submitted documentation, and

WHEREAS: the applicant shall sufficiently fulfill all the requirements necessary for sewer tie in approval.

NOW, THEREFORE, BE IT RESOLVED: That the Coventry Town Council approves the sewer tie in application for:

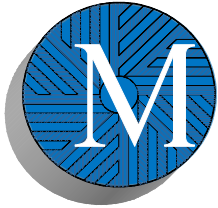
Tiffany Village, Plat 16, Lot 3, New London Tpk

Kaufman Building, 795-801 Tiogue Ave (D'Angelo's, Depetrillo's Pizza, All Booked Up, Tracy Ciccone Performing Arts, Auto Zone)

PASSED AND ADOPTED this 25th day of June, 2012.

APPROVED Key 2 M'See
President

ATTEST: Cheryl Aguirre
Town Clerk



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX G

Central Coventry Fire Department Approvals for Tiffany Village

- Letter marked “Received Sep 19, 2007”
- Letter Dated May 6, 2009
- Plan Approval

Office of the State Fire Marshal Approval Email



CENTRAL COVENTRY
FIRE DISTRICT

240 Arnold Rd
Coventry, RI 02816
(401) 615-5693

FIRE - RESCUE - EMS - PREVENTION

Town of Coventry
Department of Planning & Development
1675 Flat River Rd.
Coventry, 02816

RECEIVED

SEP 19 2007

JOHN P. CAITO
CORPORATION

Re: Sherwood Village
AP 16 Lot 3

I have reviewed this proposal and have no issues with the project. If this is to go forward I would require two fire hydrants on sight that the property owner would be responsible for. The buildings would be required to be sprinkled per NFPA and Rhode Island Fire Codes. I would also have National Grid install a street light at the entrance that the Central Coventry Fire District would be responsible for. Feel free to contact this office with any questions.

Thank you,

Scott F. Tucker Assistant Chief / Fire Marshal

RECEIVED
9-17-07



CENTRAL COVENTRY
FIRE DISTRICT

240 Arnold Rd
Coventry, RI 02816
(401) 615-5693

FIRE -- RESCUE -- EMS - PREVENTION

May 6, 2009

TO: John P. Caito Corporation
Attn: Ed Fratelli, Staff Engineer
141 James P. Murphy Highway
West Warwick, RI 02893

Re: Sherwood Village, AP 16 Lot 3, JPCC File 77.150A

Mr. Fratelli

This letter is in regards to our previous phone conversation regarding the referenced Sherwood Village project. After review of the documentation provided from your office, I do concur with the previous Central Coventry Fire Marshals determination regarding fire flow requirements as shown on the provided sheet. (See P.03 fax sheet). I also concur with requirements of two fire hydrants on site, each building to have sprinkler systems per NFPA and Rhode Island Fire Codes and also a street light at the entrance per documentation submitted to the Town of Coventry Department of Planning & Development by Marshal Scott F. Tucker. (See P.02 fax sheet).

If you have any questions feel free to contact this office at 401-825-7863.

Thank You

David A. Godin
Fire Marshal CCFD

RECEIVED

MAY 11 2009

JOHN P. CAITO
CORPORATION

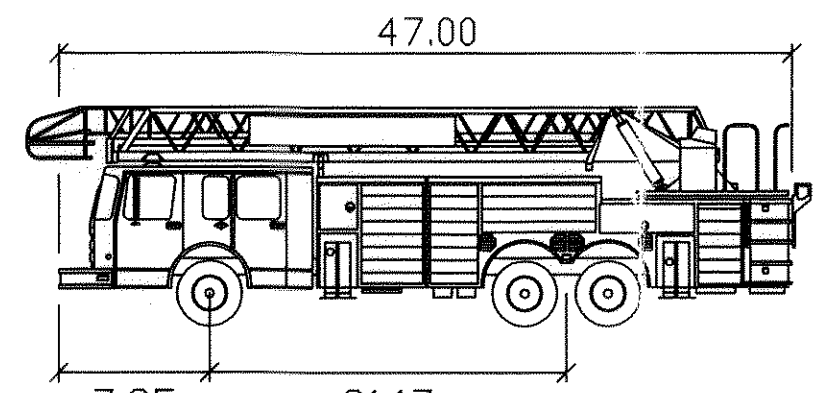
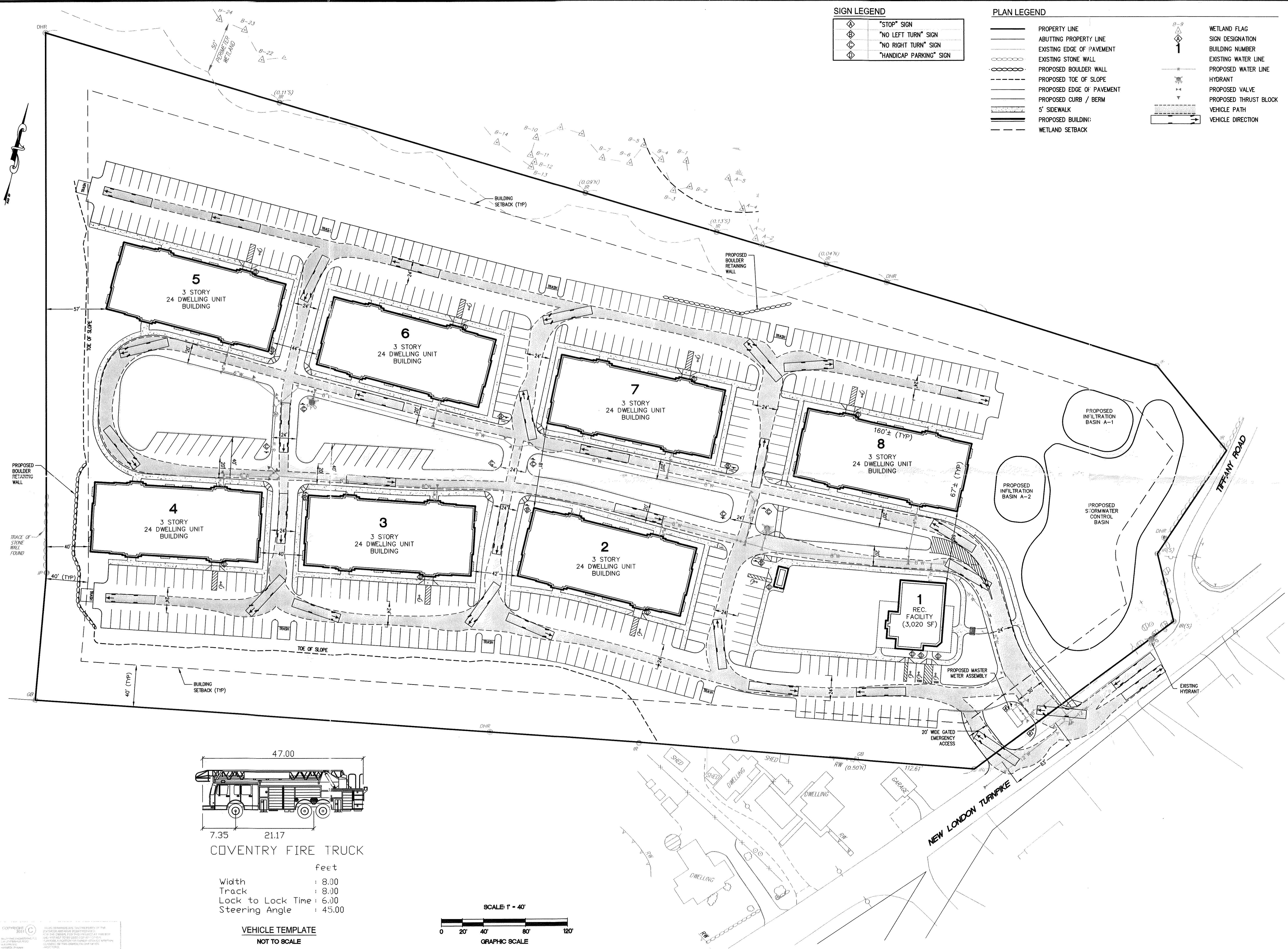
(5)

SIGN LEGEND

	"STOP" SIGN
	"NO LEFT TURN" SIGN
	"NO RIGHT TURN" SIGN
	"HANDICAP PARKING" SIGN

PLAN LEGEND

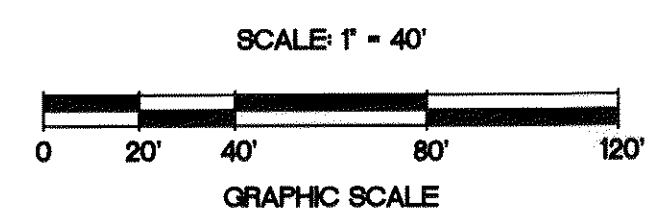
	PROPERTY LINE		WETLAND FLAG
	ABUTTING PROPERTY LINE		SIGN DESIGNATION
	EXISTING EDGE OF PAVEMENT		BUILDING NUMBER
	EXISTING STONE WALL		EXISTING WATER LINE
	PROPOSED BOULDER WALL		PROPOSED WATER LINE
	PROPOSED TOE OF SLOPE		HYDRANT
	PROPOSED EDGE OF PAVEMENT		PROPOSED VALVE
	PROPOSED CURB / BERM		PROPOSED THRUST BLOCK
	5' SIDEWALK		VEHICLE PATH
	PROPOSED BUILDING		VEHICLE DIRECTION
	WETLAND SETBACK		



COVENTRY FIRE TRUCK

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.00
Steering Angle	: 45.00

VEHICLE TEMPLATE
NOT TO SCALE



NO.	DATE	REVISION

Revised Approval for Planning
David G. ...
 11/11/11

MILLSTONE ENGINEERING, P.C.
 CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE • LAND PLANNING
 290 CENTREVILLE ROAD, BUILDING 112, WARWICK, RHODE ISLAND 02886. P. (401) 961-3944 F. (401) 961-3930

EMERGENCY VEHICLE CIRCULATION PLAN

TIFFANY VILLAGE

A.P. 16, LOT 3
 NEW LONDON TURNPIKE
 COVENTRY, RI

PREPARED FOR:
SHERWOOD DEVELOPMENT, LLC

1" = 40'
 SEPTEMBER 2011

Drawn By: B.J.C.
 Checked By: J.C.H.

Sheet

1
 of 1

FILE NO.: 11.12.15

Ben Caito

From: Charles Anderson <cw_anderson@verizon.net>
Sent: Tuesday, July 27, 2021 11:52 AM
To: Benjamin Caito
Subject: Fwd: Willow Lakes Assisted Living

Sent from my iPhone

Begin forwarded message:

From: Kurt Stenberg <kaspe518@hotmail.com>
Date: July 12, 2021 at 2:40:48 PM EDT
To: "Couture, Robert (DBR)" <Robert.Couture@dbr.ri.gov>, "Mahoney, Christopher (DBR)" <Christopher.Mahoney@dbr.ri.gov>
Cc: Paul Tierney <ptierney@bbuildllc.com>, Charles Anderson <cw_anderson@verizon.net>
Subject: Willow Lakes Assisted Living

Thank you once again for your assistance.

Kurt

From: Couture, Robert (DBR) <Robert.Couture@dbr.ri.gov>
Sent: Monday, July 12, 2021 2:18 PM
To: Kurt Stenberg <kaspe518@hotmail.com>; Mahoney, Christopher (DBR) <Christopher.Mahoney@dbr.ri.gov>
Cc: Paul Tierney <ptierney@bbuildllc.com>; Charles Anderson <cw_anderson@verizon.net>
Subject: RE: [EXTERNAL] : Willow Lakes Assisted Living

Ok thanks Kurt. Please let this email serve as preliminary approval for the water authority. If you need anything further let us know. Thanks.

From: Kurt Stenberg <kaspe518@hotmail.com>
Sent: Monday, July 12, 2021 12:26 PM
To: Couture, Robert (DBR) <Robert.Couture@dbr.ri.gov>; Mahoney, Christopher (DBR) <Christopher.Mahoney@dbr.ri.gov>
Cc: Paul Tierney <ptierney@bbuildllc.com>; Charles Anderson <cw_anderson@verizon.net>
Subject: [EXTERNAL] : Willow Lakes Assisted Living

Yes all is well with myself and family, thx for asking, hope the same for you and yours.

NFPA 13 will be utilized through the entire facility because although parts are Residential, there are multiple and Mixed "Fire Areas" as defined by both NFPA 1 and 101, Residential heads will be used in those areas approved by NFPA 13 for specific applications and areas.

In the third floors of both buildings I foresee the use of QR Extended coverage wet sidewalls (Residential heads provided calcs work) to eliminate freezing potentials and use dry sprinklers in pitched and vaulted non-conditioned areas. We will apply 250 GPM hose stream for the design and 0.1 gpm for the 1,500 Sq-ft for the Light Hazard Areas.

Those areas, (Storage and Utility types) will utilize the required 0.15 or 0.20 over the required sq-ft and provide those calculations as part of both the Initial Narrative and the Fire/Building Code Comprehensive Plan Review Document.

All required Fire Alarm devices required for the entire building will in accordance with NFPA 72 and RI State Fire Code, With NFPA 1 and 101 referenced Standards

The attached CC are Paul Tearney from Bentley Builders and Charles Anderson of the Willow Lakes Construction Team

Thank you for your assistance, we all realize how busy Public and Life Safety is in these challenging times.

Please contact any one of the three of us for any additional information you require.

Kurt A Stenberg, PE
Building/Fire Code Consulting Engineer
FP FA Engineer

From: Couture, Robert (DBR) <Robert.Couture@dbr.ri.gov>
Sent: Friday, July 9, 2021 9:37 AM
To: Kurt Stenberg <kaspe518@hotmail.com>
Cc: Mahoney, Christopher (DBR) <Christopher.Mahoney@dbr.ri.gov>
Subject: RE: [EXTERNAL] : Willow Lakes Assisted Living

Hi Kurt, hope all is well. What method of design are you using? On first look using the design curve at .1 1500 square feet would require 250gpm with hose stream. Are you taking any reductions? Are you using residential heads with there own listed design criteria. Thanks!

From: Kurt Stenberg <kaspe518@hotmail.com>
Sent: Friday, July 2, 2021 10:03 AM
To: Couture, Robert (DBR) <Robert.Couture@dbr.ri.gov>
Subject: [EXTERNAL] : Willow Lakes Assisted Living

Enclosed is the water consumption and Sprinkler fire flow estimates for a project that I believe has been assigned to you or will be due to its Health Care attributes as both Assisted and Acute Care residential facility.

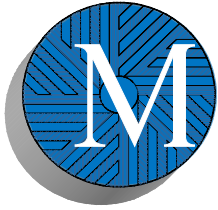
KCWA is seeking your approval of the water calculation in a "Will Serve" letter stating that the water is adequate to serve the intended occupancy.

It is my professional opinion as the eventual FP and Plumbing Engineer of Record that it Will Serve the intended Assisted and Acute Care Health Care Occupancy. A document barely that opinion and my stamp can be provided if required.

As part of the full submission package for Your review, will be a comprehensive Fire/Building Code Compliance report prepared by me to assist in the plan review process.

Thank you for your assistance

Kurt A Stenberg, PE
401.524.5301 508.269.4413



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX H

Approvals for Tiffany Village

- Master Plan Decision
- Preliminary Plan Decision
- Final Plan Recording

Approvals for Willow Lakes

- Master Plan Decision

DECISION

Master Plan

‘Tiffany Village’

DATE OF HEARING: May 26, 2010
APPLICANT: Sherwood Development, LLC
SITE LOCATION: New London Turnpike
AP 16, Lot 3
ZONING DISTRICT: R-20
TYPE OF PROJECT OR SUBDIVISION: Proposed 192 Multi-family Units Consisting of 8 Buildings with 24 Dwelling Units Each

This matter came before the Planning Commission for Master Plan Approval on developer’s application for issuance of a Comprehensive Permit pursuant to the Low and Moderate Income Housing Act (R.I.G.L. § 45-53-2 et seq) on December 9, 2009, January 13, 2010, January 28, 2010, February 24, 2010, March 24, 2010 and May 26, 2010.

The subject property is located on the westerly side of New London Turnpike near its intersection with Tiffany Road.

The property is part of a commercial gravel pit. There are no existing buildings on the site. It is 12.4 acres in area. It lies within an R-20 Zoning District.

The developer proposed to construct eight (8) multi-family buildings of twenty-four (24) dwelling units each for a total of one hundred ninety-two (192) dwelling units.

During the course of the hearings the applicant stipulated to provide 30% low & moderate income housing units and to place deed restrictions of ninety-nine (99) years with respect to said affordable units.

It was further agreed between the parties that the matter of waivers of sewer assessment and user fees would not be the subject of the Master Plan proceedings.

In its application the developer sought waivers and/or variances as to: Special Use permit to allow multi-family units; density; open space; impact fees; use of asphalt wheel blocks in lieu of concrete blocks; application fees; use of iron rods rather than granite bounds; building permit fees; site plan review & certification fees; inspection fees; sewer application fees; sewer connection fees; sewer assessment fees; recording fees;

stenographic fees; and deferment/abatement of real estate taxes until issuance of certificates of occupancy.

After hearing thereon and in consideration thereof as well as evidence and documents submitted by the applicant, Superintendent of Schools and Planning Department staff, the Planning Commission makes the following *Findings of Fact*:

1. The matter will proceed with three (3) stages of approval: Master or Conceptual Plan, Preliminary Plan and Final Plan. The Planning Commission reserves unto itself the authority to revise any conditions of approval if they are demonstrated to be feasible or infeasible at the time of Preliminary Plan and Final Plan approval. At the preliminary plan stage, the applicant will need to submit detailed engineering drawings and all required State and federal permits.
2. As of March 10, 2010 the Town had 5.33% low and moderate income housing stock. As such, the Town has not yet met the State mandate of a minimum of 10% affordable housing stock.
3. The proposal is consistent with local needs identified in the Town's Comprehensive Community Plan with particular emphasis on the Town's Affordable Housing Plan subject to conditions that are hereinafter set forth.
4. The proposed development is in compliance with the Town's Zoning Ordinance and where waivers are permitted by this Commission such relief is granted because the local needs do not outweigh the State & local needs for low and moderate income housing.
5. There will be no significant negative impact to the environment. This finding of fact is conditional upon an affirmative finding of the same by an Environmental Team Report as hereinafter more fully described.
6. Subject to further findings of fact hereinafter set forth respecting density, the proposal will not result in significant negative health and safety impacts to include pedestrian & vehicular traffic, emergency services, sewerage disposal and drainage on current or future residents of the community.
7. In order to provide greater site and building design the proposal for 192 units is too dense and inappropriate for the community. In reaching such a conclusion consideration has been given to public safety, impact to adjacent areas and the Commission's past practices with respect to comparable applications.
8. The proposal will support a balance of housing choices.
9. The project will be serviced by public water and sewers as stipulated to by the developer.
10. The request for waivers of fees for other than low and moderate income housing units is inconsistent with the Comprehensive Plan.
11. At this time, the Town as well as other communities is experiencing municipal fiscal distress which would thereby preclude waivers of fees other than those associated with low and moderate income housing. The Preliminary Plan stage is best suited for consideration of most of the fee waiver requests.
12. The development will not result in the creation of any individual lots with any physical constraints to development.

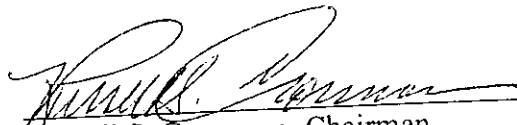
Based on the foregoing and other and further evidence adduced at the hearing and review of pertinent documents, upon motion by Member Caldwell as amended by Member Osenkowski, seconded by Member Florio, it is hereby *DECREED*:

- A. The applicant's petition for Master Plan Approval is granted subject to the conditions set forth herein;
- B. The applicant shall endeavor to acquire ownership of the adjacent parcel of land in order to provide for adequate open space and recreational opportunities detached from the proposed residential buildings;
- C. There shall be no greater than 168 residential units at the site of which 30% are affordable units subject to submission of a revised site plan for further review;
- D. The applicant shall secure a verification of wetlands respecting the northerly boundary of the site from the R.I. Department of Environmental Management;
- E. At the Preliminary Plan stage the applicant shall provide evidence of availability of public transportation to the site;
- F. The applicant shall provide an Environmental Review Team Report with respect to onsite and offsite traffic, pedestrian safety, proposed drainage plans & calculations, slope stability and maintenance requirements related thereto;
- G. The applicant shall provide for entrance & exit internal circulation and emergency access that will meet public safety standards and requirements of the Town's public safety authorities;
- H. Roof runoff infiltration systems shall be provided on all of the buildings;
- I. Preliminary and Final approvals will be rendered by the Planning Commission as required following hearings on the same;
- J. Fee waivers for the low and moderate income units determined by the Planning Commission to be appropriate as consistent with the Comprehensive Plan shall be determined at the Preliminary Plan stage of hearings;
- K. Approvals to connect to public water and sewers shall be secured prior to Preliminary Plan approval;
- L. All necessary approvals from RIDEM shall be secured prior to Preliminary Plan approval;
- M. Requested waivers respecting iron rod boundary markers, asphalt wheel blocks, drainage swales, stenographic and other fees are not approved at this stage pending evidence of the necessity for such waivers;
- N. Incorporated herein for guidance and rationale are the Planning Director's Report dated May 26, 2010 as well as other legal authority relating to the Low & Moderate Income Housing Act including, but not limited to, the Coventry Comprehensive Community Plan, Land Use Element of the Comprehensive Plan, Articles 4 & 14 of the Zoning Ordinance and the Coventry Subdivision and Land Development Regulations, as applicable.
- O. The applicant's petition for a Special Use permit to allow multi-family dwellings in the subject zoning district is granted;
- P. Per stipulation with the developer, the buildings shall not exceed 35' in height.

The following votes were cast on the matter:

Chairman Crossman
Vice-Chairperson Fagan
Member Florio
Member Caldow
Member Osenkowski
Member Daggett
Member Thibeault

Aye
Aye
Aye
Aye
Aye
Aye
Recuse


Russell S. Crossman, Chairman
Coventry Planning Commission

06/23/2010
Dated

TOWN OF COVENTRY, R.I.
Jun 24, 2010 11:35:27A
Cheryl A George, TOWN CLERK

DECISION
Preliminary Plan
"Tiffany Village"

DATE OF HEARING: February 22, 2012

APPLICANT: Sherwood Development, LLC

SITE LOCATION: New London Turnpike
AP 16 Lot 3

ZONING DISTRICT: R-20

**TYPE OF PROJECT OR
SUBDIVISION:** Proposed 168 Multi-family units with 30%
Affordable Housing

This matter came before the Planning Commission on February 22, 2012 for Preliminary Plan approval of developer's application for issuance of a Comprehensive Permit pursuant to the Low & Moderate Income Housing Act.

The applicant was represented by Attorney Mark Charleson.

On May 26, 2010 the Planning Commission granted the applicant's petition for Master Plan approval subject to certain conditions set forth in said decision.

After hearing thereon and in consideration thereof as well as review of documents and evidence submitted by the applicant, the Planning Commission makes the following Findings of Fact:

1. The proposed development is consistent with the Town's Comprehensive Community Plan and the Affordable Housing Production Plan. The applicant's proposal to construct 30% low and moderate income housing units will increase the Town's affordable housing stock.

2. By reason of the project's access to public water and sewers and its close proximity to an employment center, the site is suitable for higher density use and is consistent with the Town's Zoning Ordinance and Subdivision Regulations.

3. The proposed development should not have any significant negative impact on the environment.

RI DEM has verified the edge of the wetlands and no construction activity will take place within the wetlands or its 50' buffer. The project will be connected to public water and sewers. The applicant has incorporated Low Impact Development (LID) design to include roof runoff infiltration systems into its drainage design.

4. The developer was unsuccessful in its efforts to acquire an adjacent parcel for open space/recreational purposes.

5. RIPTA service is not available to the site. The developer is willing to provide private transit services for residents, at a fee comparable to that exacted by RIPTA providing such service is allowed by the Public Utilities Commission, Division of Public Utilities & Carriers or other appropriate State Agency.

Based upon the foregoing and other further evidence adduced at the hearing and review of other pertinent documents upon motion by Member Florio, seconded by Member Flynn, it is hereby DECREED:

1. The applicant's petition for Preliminary Plan approval is granted subject to the conditions set forth herein;

2. The proposed 3020 SF on-site recreational facility provides adequate recreational opportunities for the residents of the development and meets the requirements of the Master Plan decision;

3. The applicant shall provide private transit service to the development at a fee comparable to that exacted by RIPTA for similar service. The Planning Commission adopts the proposal of the developer set forth in its letter dated October 20, 2011; to wit, 'to provide a private shuttle service that will connect the development to the RIPTA line on Tiogue Avenue (RIPTA Route #7) as well as the Park and Ride located at the intersection of Hopkins Hill Road and Interstate 95 in West Greenwich. This shuttle will be available to tenants and their guests and will make a maximum of three (3) trips per day as demand warrants, excluding Sundays and holidays.'

In addition thereto, said shuttle services shall provide a drop off and pick up point within the Centre of New England Complex.

The aforementioned service is conditioned upon allowance by the appropriate State and federal agencies. In the event that such service is prohibited, the matter will be reviewed at the Final Plan stage of proceedings. In the event that RIPTA or similar public transportation service is available, the within requirement shall be abated upon commencement of such service in the vicinity of Tiffany Village;

4. The Planning Department's application filing fees for Final Plan submission, site plan review, soil erosion & sediment control (disturbance) review are waived;

5. The applicant's request to utilize iron rods and drill holes in lieu of granite bounds is granted;

6. The use asphalt/curb berms is deemed an "other suitable device" for wheel blocks and the applicant's request as relates to the same is granted;

7. The applicant's request to waive the Town's share of building permit fees (other than for out of pocket expenses and costs for independent contractors) for qualified low and moderate income housing units is granted;

8. The applicant's plans depict an excess of the number of parking spaces required in the Zoning Ordinance. The applicant's request to reduce the number of spaces (not less than 1.5 per unit) up to a maximum of 364 spaces as depicted in the Preliminary Plan submission is granted;

9. The applicant's Master Plan approval vested the developer with a waiver of the 40% open space requirement of the Zoning Ordinance;

10. The Planning Commission refers action on the developer's request for waivers of sewer assessments and connection & inspection fees to the Town Council;

11. The applicant withdrew its requests for waivers of recording and stenographic fees and therefore the requests for waivers are denied;

12. The applicant's request for deferment/abatement of the reassessment of real estate taxes assessed on each housing unit until such time as a Certificate of Occupancy is issued is referred to the Town Council;

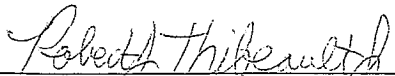
13. The applicant's request for a waiver to allow 2:1 slopes and allow walls in excess of four (4) feet is granted. The applicant shall install interlocking block walls along the southwesterly side of the site to the west of proposed Building 4;

14. The applicant's request to waive Fair Share Development (impact fees) Fees is granted as to those qualified low and moderate income housing units;

15. Final Plan approval may proceed administratively.

The following votes were cast on the matter:

Chairman Thibeault	Aye
Secretary Flynn	Aye
Member Capwell	Aye
Member Florio	Aye
Member Kalunian	Aye
Member Crowe	Aye



Chairman Robert J. Thibeault, Jr.

3/22/12
Dated

INST 1 00004631 1296

TOWN OF COVENTRY R.I.
Oct 02 2012 03:51:17
Cheryl R. Gardner, DMN-CLERK

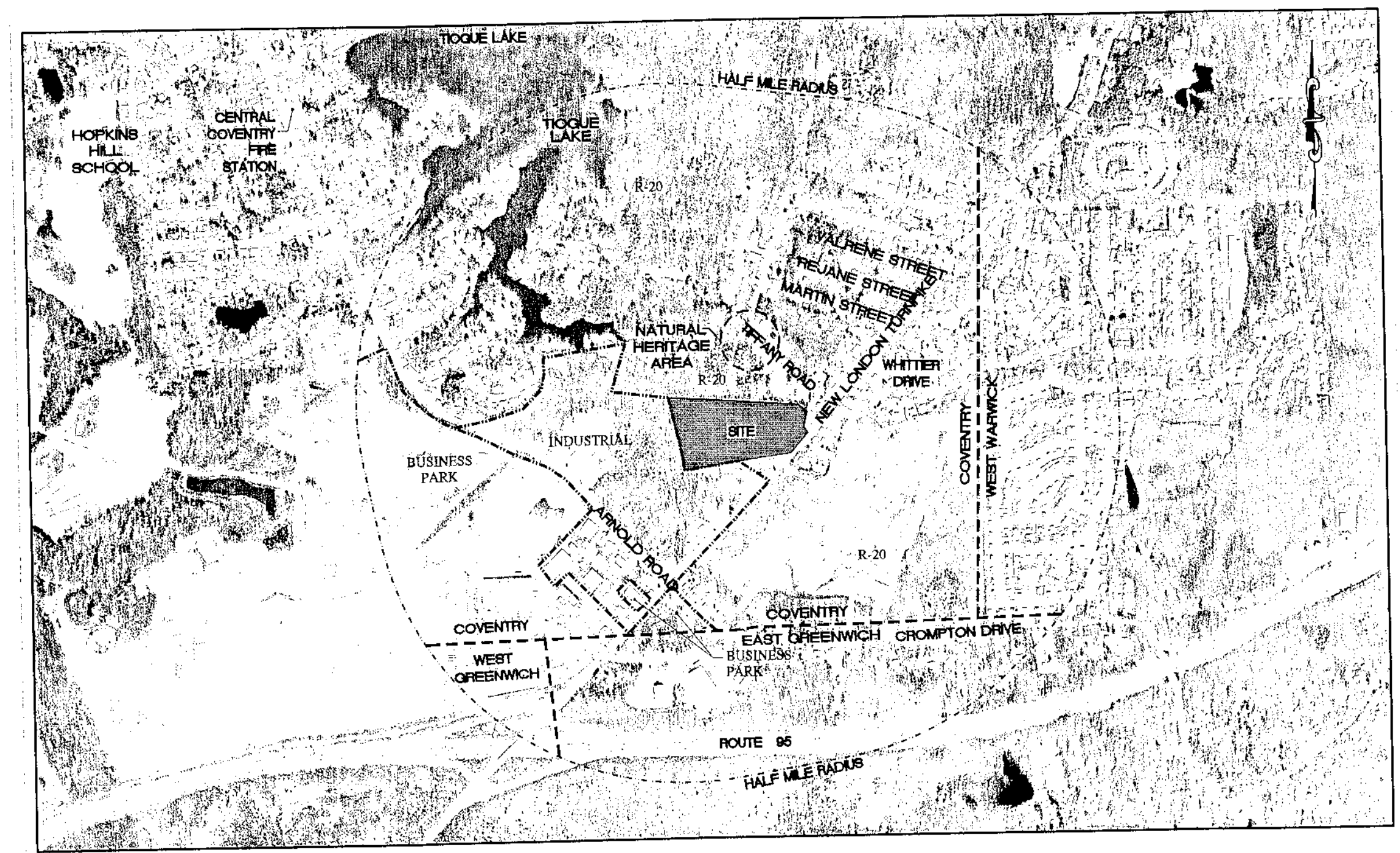
1073

FINAL CONSTRUCTION DRAWINGS

FOR:

TIFFANY VILLAGE

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RHODE ISLAND



AERIAL IMAGE
1" = 1,000'

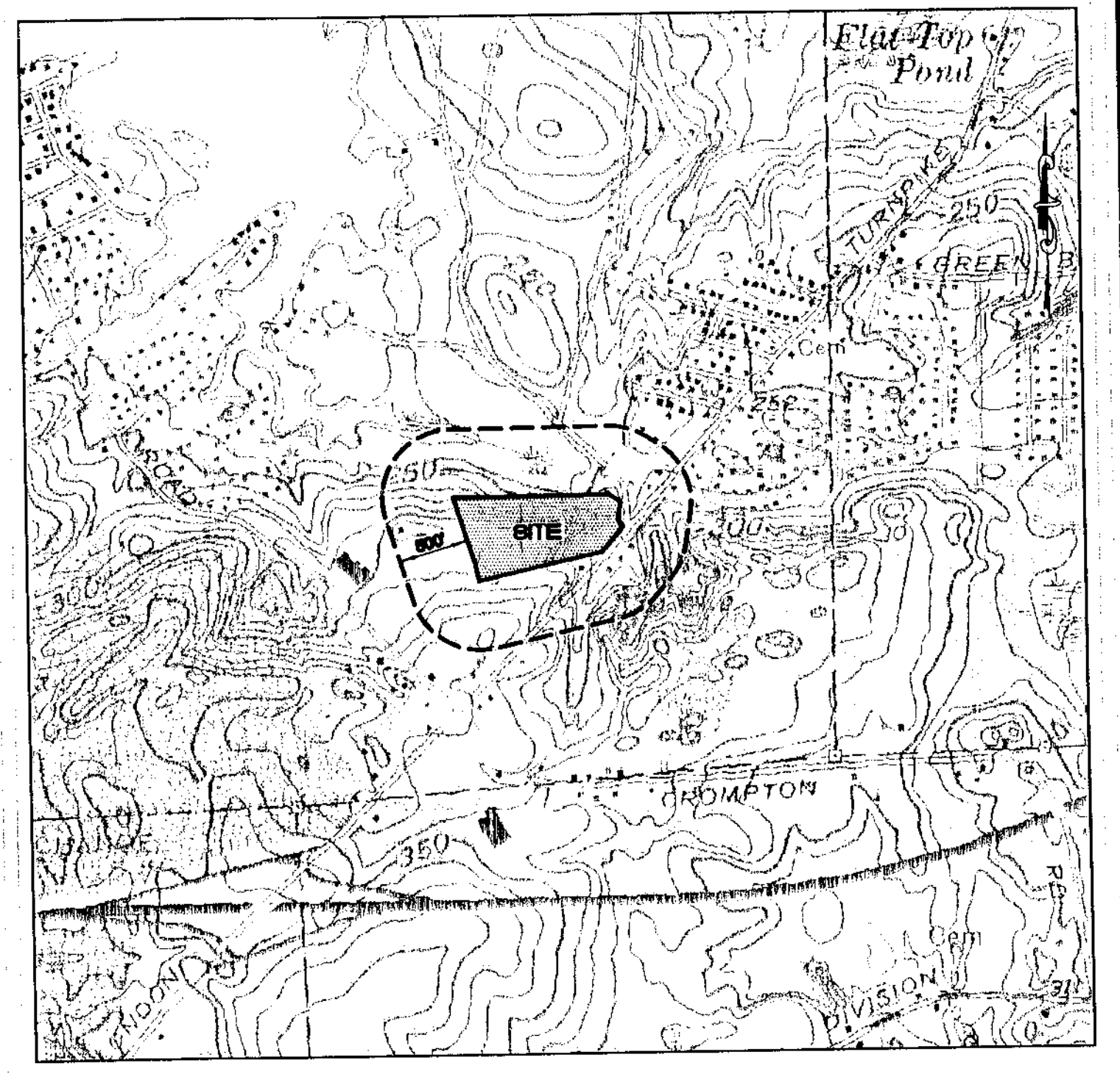
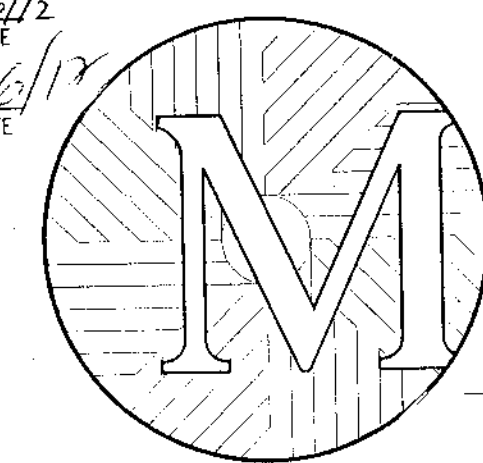


TABLE OF CONTENTS:

SHEET	DESCRIPTION	REVISED
1	COVER SHEET	
2	EXISTING CONDITIONS PLAN	
3	SITE LAYOUT PLAN	
4	GRADING AND DRAINAGE PLAN	
5	UTILITY PLAN	
6	PLAN AND PROFILE - 1	
7	PLAN AND PROFILE - 2	
8	SOIL EROSION AND SEDIMENT CONTROL PLAN	
9	LANDSCAPE PLAN	
10	LANDSCAPE DETAILS	
11	NOTES AND DETAILS	
12	DETAILS - 1	
13	DETAILS - 2	
14	DETAILS - 3	
15	DETAILS - 4	
16	DETAILS - 5	

PREPARED FOR: SHERWOOD DEVELOPMENT, LLC

PREPARED BY:



MILLSTONE ENGINEERING, P.C.

CIVIL ENGINEERING LANDSCAPE ARCHITECTURE LAND PLANNING

250 CENTERVILLE ROAD, BUILDING E12, WARWICK, RHODE ISLAND 02886, p. (401)921-3344 f. (401)921-3303

JULY 2012

REQUIRED SIGNATURES:

ADMINISTRATIVE OFFICER: _____ SIGN _____ PRINT NAME _____ DATE _____

PLANNING COMMISSION CHAIRPERSON: *Robert Thibault Jr.* SIGN _____ PRINT NAME *Robert Thibault Jr.* DATE *9/26/12*

PLANNING COMMISSION SECRETARY: *Cheryl R. Gardner* SIGN _____ PRINT NAME *Cheryl R. Gardner* DATE *9/26/12*

- REFERENCES:
1. AERIAL PHOTOGRAPH PROVIDED BY THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS) DATED APRIL 8, 2004. REFERENCE PHOTOGRAPH IDENTIFICATION NUMBERS 2_310210.TIF, 2_310220.TIF, 2_320210.TIF AND 2_320220.TIF.
 2. U.S.G.S. MAP QUADRANGLE CROMPTON, RI-MASS.
 3. PLANS ENTITLED "COMPREHENSIVE PERMIT FOR SHERWOOD VILLAGE: ASSESSOR'S PLAT 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND"; PREPARED FOR SHERWOOD DEVELOPMENT, LLC, PREPARED BY JOHN P. CAITO CORPORATION; DATED JUNE 2009; REVISED 8/17/09; SHEETS 1 - 8 OF 8.
 4. PLANS ENTITLED "CONSTRUCTION DRAWINGS FOR TIFFANY VILLAGE: A.P. 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND" PREPARED FOR SHERWOOD DEVELOPMENT, LLC; PREPARED BY MILLSTONE ENGINEERING, P.C. DATED JULY 2011; REVISED THROUGH 4/17/2012; SHEETS 1 - 16 OF 16.

OWNER:
NEW LONDON TURNPIKE
REALTY, LLC
400 LINCOLN AVENUE
WARWICK, RI 02888

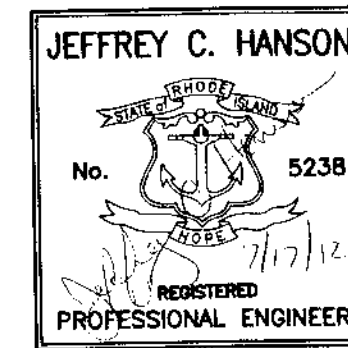
APPLICANT:
SHERWOOD DEVELOPMENT, LLC
400 LINCOLN AVENUE
WARWICK, RI 02888
PHONE: (401)739-8300
FAX: (401)739-8160

LEGAL COUNSEL:
MARK A. CHARLESON, ESQUIRE
CHARLESON & CHARLESON, LLP
928 PARK AVENUE
CRANSTON, RI 02910
PHONE: (401)272-8787

ARCHITECT:
BREWSTER THORNTON GROUP
ASSOCIATES, LLP
150 CHESTNUT STREET
PROVIDENCE, RI 02903
PHONE: (401)861-1600

LANDSCAPE ARCHITECT:
THE GIFFORD DESIGN GROUP
7096 MENDON ROAD
CUMBERLAND, RI 02864
PHONE: (401)671-6336

FINAL CONSTRUCTION DRAWINGS
TIFFANY VILLAGE
A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI



KCWA STATEMENT:
THE ATTACHED DRAWINGS,
NUMBERED 1 TO 16 HAVE BEEN
PREPARED UNDER MY DIRECT
SUPERVISION AND HAVE BEEN
THOROUGHLY CHECKED.

Jeffrey C. Hanson
JEFFREY C. HANSON, P.E. #5238

Drawn By: B.J.C.

Checked By: J.C.H.

Sheet

1

of 16

FILE NO.: 11.12.15

SIGN LEGEND

⬮	"STOP" SIGN
⬮	"NO LEFT TURN" SIGN
⬮	"NO RIGHT TURN" SIGN
♿	"HANDICAP PARKING" SIGN

PARKING REQUIREMENTS:

TYPE OF USE	MINIMUM PARKING SPACES REQUIRED	REQUIRED	PROPOSED
MULTI-FAMILY	2 SPACES PER DWELLING UNIT	336 SPACES	336 SPACES
RECREATIONAL FACILITY	3 + 1/250 SF OF FLOOR AREA	16 SPACES	16 SPACES
TOTAL	3 + 1/250 SF (3,020 SF) = 16 SPACES	352 SPACES	364 SPACES
ACCESSIBLE SPACES	301 - 400 SPACES = 8 SPACES*	8 SPACES	11 SPACES

* REFERENCE CODE REQUIREMENTS FOR HOUSING ACCESSIBILITY BY INTERNATIONAL CODE COUNCIL.

PLAN LEGEND

---	PROPERTY LINE
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING STONE WALL
---	NUMBER OF PARKING SPACES
---	TRAFFIC FLOW
---	PROPOSED BOULDER WALL
---	PROPOSED MODULAR BLOCK WALL
---	LIMIT OF DISTURBANCE
---	PROPOSED TOE OF SLOPE
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED CURB / BERM
---	HAYBALE LINE / SILT FENCE (OR SUITABLE ALTERNATIVE)
---	5' SIDEWALK
---	PROPOSED BUILDING
---	PROPOSED SAWCUT LINE
---	WETLAND SETBACK
---	WETLAND FLAG
---	SIGN DESIGNATION
---	BUILDING NUMBER
---	PROPOSED FENCE
---	SITE LIGHTING
---	REVISION

DIMENSIONAL REQUIREMENTS:

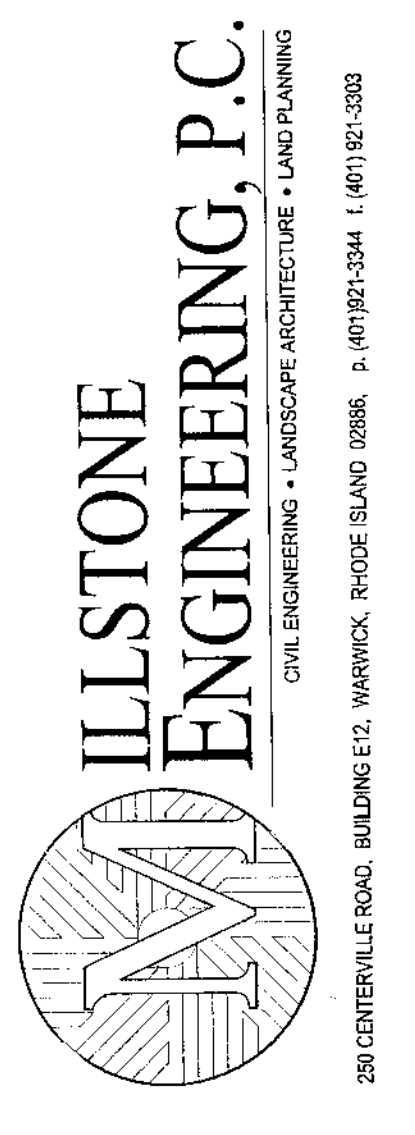
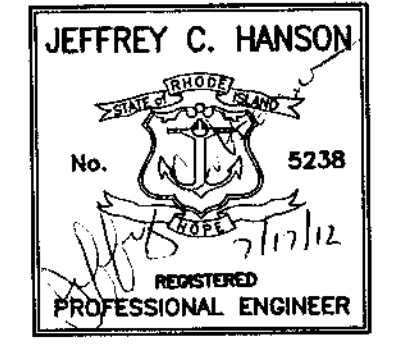
ZONE: R-20 - RESIDENTIAL DISTRICT	REQUIRED	A.P. 16 LOT 3
SECTION 1455 - MAXIMUM STRUCTURE HEIGHT	3 STORIES OR 35 FT.	35'
SECTION 1460 - STANDARDS FOR MULTI-FAMILY BUILDINGS:		
MINIMUM MULTI-FAMILY YARD DIMENSIONS:		
FRONT YARD	40 FT.	114 FT.
SIDE YARD	40 FT.	108 FT.
REAR YARD	40 FT.	40 FT.
MINIMUM DISTANCE BETWEEN MULTI-FAMILY BUILDINGS:		
PARALLEL	50 FT.	68 FT.
ABUTTING ENDS	40 FT.	40 FT.
SECTION 1480 - OPEN SPACE	40 %	50 %

REFERENCE:
DECISION OF PRELIMINARY PLAN FOR TIFFANY VILLAGE AS RECORDED IN THE COVENTRY LAND EVIDENCE RECORDS IN BOOK 1915, PAGE 614 AS INSTRUMENT NO. 00001798.
DATE OF HEARING: FEBRUARY 22, 2012.

NOTES:

- COORDINATE LOCATIONS AND DIMENSIONS OF WALKS, RAMPS AND STAIRS WITH ARCHITECTURAL DRAWINGS FOR ALL ENTRANCES TO ALL BUILDINGS.
- THE UNITS DEPICTED ON THIS PLAN ARE SUBJECT TO FAIR SHARE DEVELOPMENT FEES AS DETERMINED BY THE TOWN COUNCIL. THE FEES SHALL BE ASSESSED UPON THE ISSUANCE OF A BUILDING PERMIT AND COLLECTED IN FULL ON OR BEFORE THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

NO.	DATE	REVISION
		INST: 00006631 ENV: 1 HAP: 1297
		TOWN OF COVENTRY, R. Oct. 02, 2012 03:15:11 Cheryl A. Georger, TOWN CLERK
		pg 2 of 3



SITE LAYOUT PLAN

TIFFANY VILLAGE

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

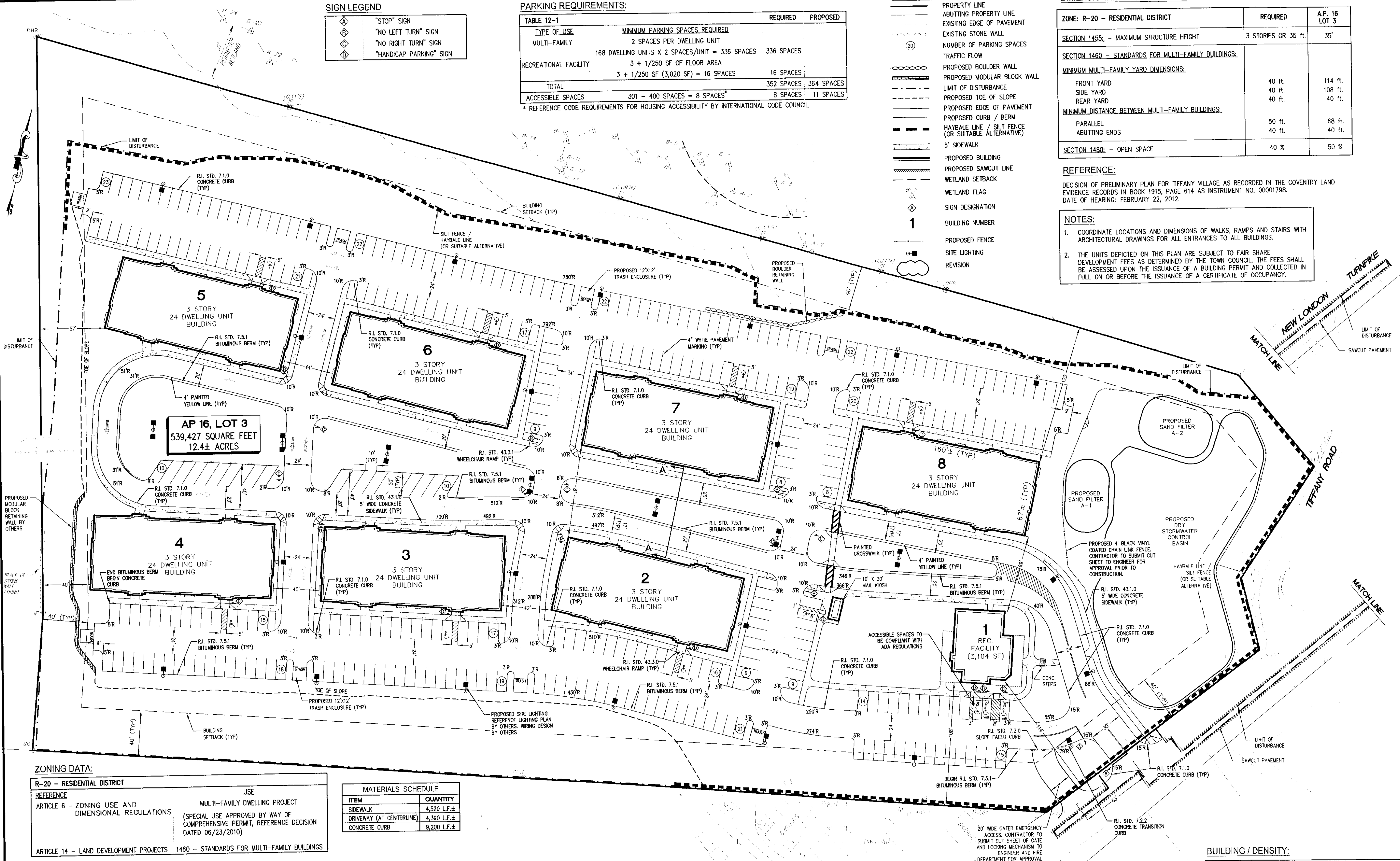
PREPARED FOR:
SHERWOOD DEVELOPMENT, LLC

1" = 40'
JULY 2012

Drawn By: B.J.C.
Checked By: J.C.H.

Sheet
3
of 16

FILE NO.: 11.12.15

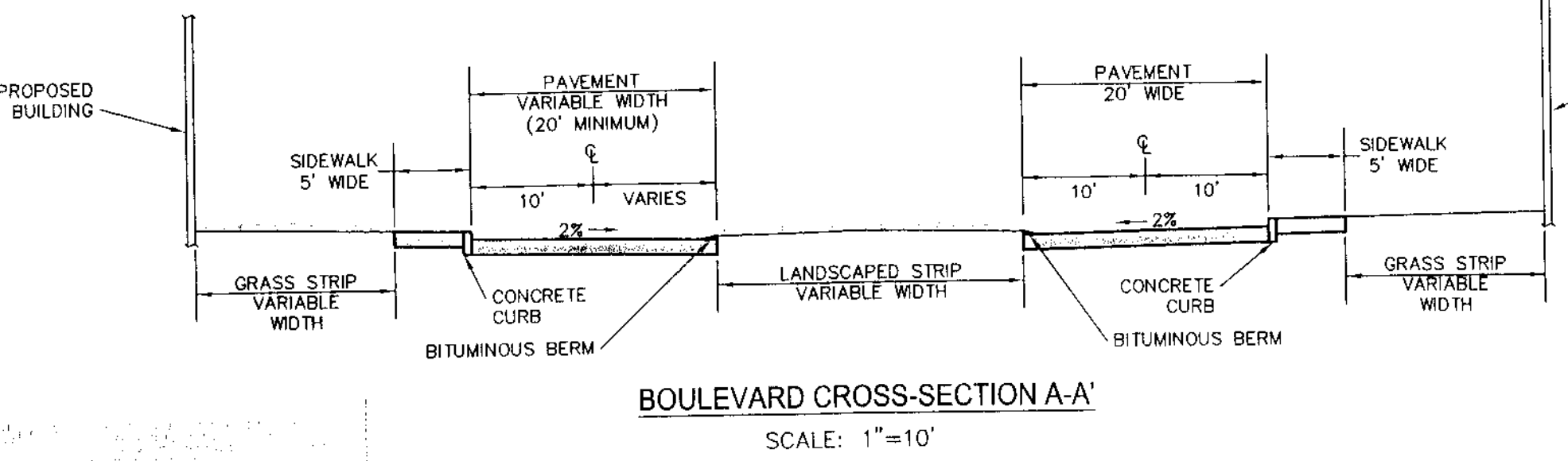


ZONING DATA:

R-20 - RESIDENTIAL DISTRICT	USE: MULTI-FAMILY DWELLING PROJECT
REFERENCE: ARTICLE 6 - ZONING USE AND DIMENSIONAL REGULATIONS	(SPECIAL USE APPROVED BY WAY OF COMPREHENSIVE PERMIT, REFERENCE DECISION DATED 06/23/2010)
ARTICLE 14 - LAND DEVELOPMENT PROJECTS	1460 - STANDARDS FOR MULTI-FAMILY BUILDINGS

MATERIALS SCHEDULE

ITEM	QUANTITY
SIDEWALK	4,520 LF.±
DRIVEWAY (AT CENTERLINE)	4,390 LF.±
CONCRETE CURB	9,200 LF.±

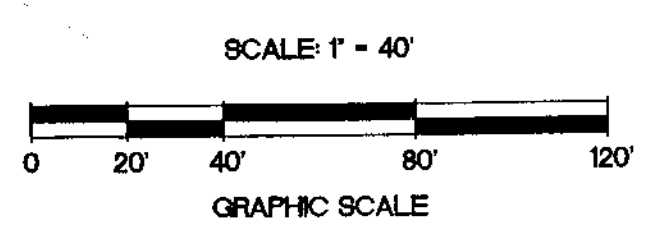


REQUIRED SIGNATURES:

ADMINISTRATIVE OFFICER: _____ DATE: _____

PLANNING COMMISSION CHAIRPERSON: *Robert J. Tibbault* DATE: 9/24/12

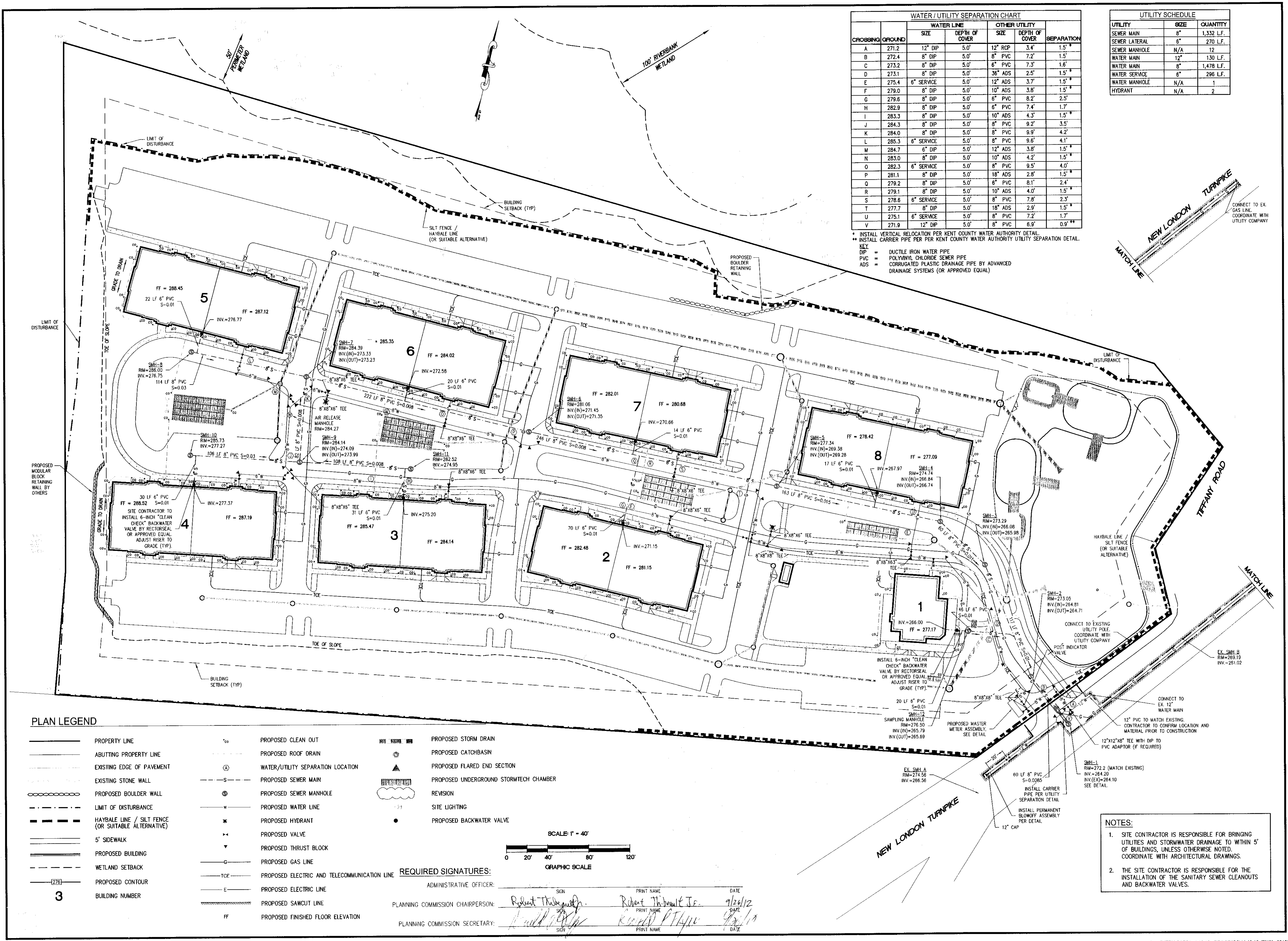
PLANNING COMMISSION SECRETARY: *Edward P. Dow* DATE: 9/24/12



BUILDING / DENSITY:

COUNT	TYPE	QUANTITY
- 8	DWELLING UNITS/FLOOR	
- 3	FLOORS/BUILDING	
7 BUILDINGS	24 DWELLING UNITS/BUILDING	168 UNITS
DENSITY:	168 UNITS/12.4 AC.±	13.5 D.U./AC.±
AFFORDABLE:	51 AFFORDABLE UNITS / 168 UNITS	= 30.4%
LOT COVERAGE:	50 % ²	

- MINIMUM 30% AFFORDABLE COMPONENT PER PLANNING BOARD DECISION DATED 06/23/2010.
- PER ZONING ORDINANCE, LOT COVERAGE INCLUDES BUILDINGS, ACCESSORY BUILDINGS AND IMPERVIOUS SURFACES



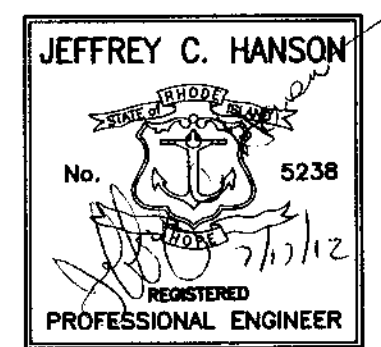
WATER / UTILITY SEPARATION CHART					
CROSSING	GROUND	WATER LINE		OTHER UTILITY	
		SIZE	DEPTH OF COVER	SIZE	DEPTH OF COVER
A	271.2	12" DIP	5.0'	12" RCP	3.4'
B	272.4	8" DIP	5.0'	8" PVC	7.2'
C	273.2	8" DIP	5.0'	6" PVC	7.3'
D	273.1	8" DIP	5.0'	36" ADS	2.5'
E	275.4	6" SERVICE	5.0'	12" ADS	3.7'
F	279.0	8" DIP	5.0'	10" ADS	3.8'
G	279.6	8" DIP	5.0'	6" PVC	8.2'
H	282.9	8" DIP	5.0'	6" PVC	7.4'
I	283.3	8" DIP	5.0'	10" ADS	4.3'
J	284.3	8" DIP	5.0'	8" PVC	9.2'
K	284.0	8" DIP	5.0'	8" PVC	9.9'
L	285.3	6" SERVICE	5.0'	8" PVC	9.6'
M	284.7	6" DIP	5.0'	12" ADS	3.8'
N	283.0	8" DIP	5.0'	10" ADS	4.2'
O	282.3	6" SERVICE	5.0'	8" PVC	9.5'
P	281.1	8" DIP	5.0'	18" ADS	2.8'
Q	279.2	8" DIP	5.0'	6" PVC	8.1'
R	279.1	8" DIP	5.0'	10" ADS	4.0'
S	278.6	6" SERVICE	5.0'	8" PVC	7.8'
T	277.7	8" DIP	5.0'	18" ADS	2.9'
U	275.1	6" SERVICE	5.0'	8" PVC	7.2'
V	271.9	12" DIP	5.0'	8" PVC	6.9'

UTILITY SCHEDULE		
UTILITY	SIZE	QUANTITY
SEWER MAIN	8"	1,332 L.F.
SEWER LATERAL	6"	270 L.F.
SEWER MANHOLE	N/A	12
WATER MAIN	12"	130 L.F.
WATER MAIN	8"	1,478 L.F.
WATER SERVICE	6"	296 L.F.
WATER MANHOLE	N/A	1
HYDRANT	N/A	2

NO.	DATE	REVISION

INSET: 00006631
ENY: 1 HAF: 1298

TOWN OF COVENTRY, R.I.
Oct 02-2012 03:15:17P
Cheryl A George TOWN CLERK



MILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE • LAND PLANNING
250 CENTERVILLE ROAD, BUILDING E1C, WARWICK, RHODE ISLAND 02886 P: (401)921-3344 F: (401)921-3303

UTILITY PLAN

TIFFANY VILLAGE

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

PREPARED FOR:
SHERWOOD
DEVELOPMENT, LLC

1" = 40'
JULY 2012

Drawn By: B.J.C.
Checked By: J.C.H.

Sheet

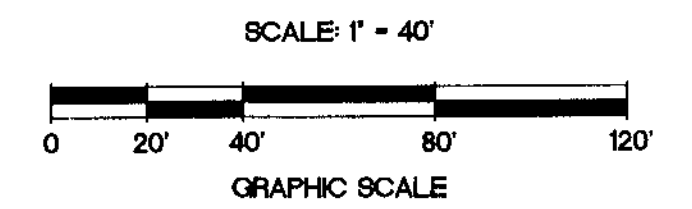
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of 16

FILE NO.: 11.12.15

PLAN LEGEND

- | | | | |
|---|---|---|--|
| — | PROPERTY LINE | — | PROPOSED CLEAN OUT |
| — | ABUTTING PROPERTY LINE | — | PROPOSED ROOF DRAIN |
| — | EXISTING EDGE OF PAVEMENT | — | WATER/UTILITY SEPARATION LOCATION |
| — | EXISTING STONE WALL | — | PROPOSED SEWER MAIN |
| — | PROPOSED BOULDER WALL | — | PROPOSED SEWER MANHOLE |
| — | LIMIT OF DISTURBANCE | — | PROPOSED WATER LINE |
| — | HAYBALE LINE / SILT FENCE (OR SUITABLE ALTERNATIVE) | — | PROPOSED HYDRANT |
| — | 5' SIDEWALK | — | PROPOSED VALVE |
| — | PROPOSED BUILDING | — | PROPOSED THRUST BLOCK |
| — | WETLAND SETBACK | — | PROPOSED GAS LINE |
| — | PROPOSED CONTOUR | — | PROPOSED ELECTRIC AND TELECOMMUNICATION LINE |
| — | BUILDING NUMBER | — | PROPOSED ELECTRIC LINE |
| | | — | PROPOSED SAWCUT LINE |
| | | — | PROPOSED FINISHED FLOOR ELEVATION |

- | | |
|---|--|
| — | PROPOSED STORM DRAIN |
| — | PROPOSED CATCHBASIN |
| — | PROPOSED FLARED END SECTION |
| — | PROPOSED UNDERGROUND STORMTECH CHAMBER |
| — | REVISION |
| — | SITE LIGHTING |
| — | PROPOSED BACKWATER VALVE |



REQUIRED SIGNATURES:

ADMINISTRATIVE OFFICER: _____
 PLANNING COMMISSION CHAIRPERSON: Robert Thibault Jr. 9/26/12
 PLANNING COMMISSION SECRETARY: _____

NOTES:

- SITE CONTRACTOR IS RESPONSIBLE FOR BRINGING UTILITIES AND STORMWATER DRAINAGE TO WITHIN 5' OF BUILDINGS, UNLESS OTHERWISE NOTED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- SITE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE SANITARY SEWER CLEANOUTS AND BACKWATER VALVES.

Bk: 2141 Pg: 680

**TOWN OF COVENTRY
PLANNING COMMISSION**

DECISION

**Master Plan / Comprehensive Permit
"Willow Lakes Independent Living"**

DATE OF HEARING: September 04, 2019

OWNER: New London Turnpike Realty, LLC

APPLICANT: Willow Lake Properties, LLC

SITE LOCATION: New London Turnpike
AP 16 Lot 3

ZONING DISTRICT: R-20

**TYPE OF PROJECT OR
SUBDIVISION:** Independent Living Community with Assisted
Living and Memory Care Facilities (202
Proposed Units) with 25% affordable
Independent Living Units.

This matter came before the Planning Commission for a Master Plan / Comprehensive Permit application pursuant to the Low & Moderate-Income Housing Act (RIGL § 45-53-1 *et seq.*) on September 04, 2019.

Attorney Patrick J. Dougherty, represented the applicant. As explained, this project is located on the site that was previously approved for the Sherwood Village development. This development was to consist of 168 units in 7 separate buildings with another building to house a recreation facility. Additionally, as this development was permitted through the Comprehensive Permit process pursuant to the Low and Moderate Income Housing Act, 30% of the units (51 total) were to be "affordable". Tiffany Village (formerly Sherwood Village) received Preliminary Plan approval from the Planning Commission in March of 2012 and Final Plan approval in September of 2015. To date, the development has not been built.

Fast forward to September, 2019 and the Planning Commission is presented with a new proposal for a Master Plan/Comprehensive Permit application entitled "Willow lakes Independent Living". The proposed project is to consist of 124 independent living units, of which 25% (31 living units) are to be deemed "affordable" under the Low and Moderate Income Housing Act. The development will also consist of an additional 48

Assisted Living Units. Completing the development will then be an additional 30 units in a memory care facility connected to the Assisted Living portion of the building. Also located on the site is a proposed 286 vehicle parking lot. The project will be serviced by public water and sewer and will have one access drive off of New London Turnpike.

Decision

Based upon the foregoing and other further evidence allowed at the hearing and review of other pertinent documents upon motion by Vice Chair Kalunian, seconded by Member Kenney, it is hereby DECREED:

The Conceptual Master Plan is approved as shown on the Plan Set entitled "Master Plan Submission for Willow Lakes Independent Living: AP 16, Lot 3: New London Turnpike, Coventry, Rhode Island; prepared by Millstone Engineering, P.C.; dated June 2019", subject to the following stipulations:

1. The Project Engineer should select stormwater BMP's for this project which maximize the treatment of bacteria. Lake Tiogue is impacted by high levels of bacteria during the summer months which contributes to the closing of Briar Point Beach. The Engineer should also reference the RIDEM TMDL for the Lake Tiogue Tributaries, 09/22/2011.
2. The Applicant should be required to extend sidewalks southerly to intersect with the existing sidewalks at Arnold Road.
3. Precast concrete curbs and concrete sidewalks, conforming to RIDOT Standards and Specifications should be installed along the westerly side of New London Turnpike from Tiffany Road south to AP 16, Lot 2 (Approximately 236 lf).
4. A stop sign shall be installed at the intersection of New London Turnpike and the proposed facility.
5. The Applicant shall submit an up to date Class I Boundary Survey for the subject property. The submitted plan was stamped and signed in 2003 and the Survey Certifications have changed per RI State Laws and need to be amended. This plan needs to be submitted at the Preliminary Plan Stage.
6. The planning Director's Report is incorporated into this Decision.

In issuing this Decision, the Planning Commission makes the following Findings of Fact:

- (A) The proposed development is consistent with local needs as identified in the local comprehensive community plan with particular emphasis on the community's

affordable housing plan and/or has satisfactorily addressed the issues where there may be inconsistencies. Coventry's affordable housing rate (by the State's definition) is 5.39%, compared with 8.36% in Rhode Island overall. The Town of Coventry and the CHA should continue to secure all available resources to provide housing for low-income groups, particularly senior citizens, the handicapped and disadvantaged families, including:

- Section 8 Certificates and Vouchers
- Section 8 Substantial Rehabilitation and Moderate Rehabilitation Programs
- Section 202/Section 8 Elderly Housing Program
- Section 202/Section 8 Handicapped Housing Program
- Permanent Housing for the Handicapped Program

The 2005 Affordable Housing Plan Goals states that "While Coventry does currently have housing for the elderly, families, single persons and special needs populations, there is a concern that new housing is focused mainly on single family homes out of the price range of most Coventry residents" (p. 34).

(B) The proposed development is in compliance with the standards and provisions of the municipality's zoning ordinance and subdivision regulations, and/or where expressly varied or waived local concerns that have been affected by the relief granted do not outweigh the state and local need for low and moderate income housing. The proposal was granted waivers on two Special Use Permits; for multifamily use and for "Physical Therapy and other Health Related Services" in the R-20 Zoning District.¹ The proposed density of dwelling units (1 unit per 2670 sf) exceeds the standard baseline density for the R-20 zone (one dwelling unit per 20,000 sf) as well as the absolute maximum development density permitted under the Zoning Ordinance for the R-20 zone for cluster/multi-family development (one dwelling unit per 10,000 ft.²).² The application also sought full waivers of many development fees, including fees applicable to market rate units as well as affordable units. A decision on all of the fee waivers was postponed until the Preliminary Plan Application.

(C) All low and moderate income housing units proposed are integrated throughout the development; are compatible in scale and architectural style to the market rate units within the project; and will be built and occupied prior to, or simultaneous with the construction and occupancy of any market rate units. The applicant has identified that the independent living units that will be low-moderate income, will be distributed throughout the independent living units and identical in all aspects to the "market rate" units.

¹ Coventry Zoning Ordinance, § 600, A Residential, Table 6-1.

² Coventry Zoning Ordinance, Art. 14, § 1440.A, and Art. 6, Table 6-8.

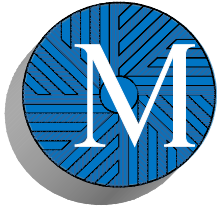
- (D) There will be no significant negative environmental impacts from the proposed development as shown on the final plan, with all required conditions for approval.
- (E) There will be no significant negative impacts on the health and safety of current or future residents of the community, in areas including, but not limited to, safe circulation of pedestrian and vehicular traffic, provision of emergency services, sewerage disposal, availability of potable water, adequate surface water run-off, and the preservation of natural, historical or cultural features that contribute to the attractiveness of the community.
- (F) All proposed land developments and all subdivisions lots will have adequate and permanent physical access to a public street in accordance with the requirements of § 45-23-60 (5).
- (G) The proposed development will not result in the creation of individual lots with any physical constraints to development that building on those lots according to pertinent regulations and building standards would be impracticable, unless created only as permanent open space or permanently reserved for a public purpose on the approved, recorded plans.

The following votes were cast on the matter:

Chairman Ronald Flynn	Aye
Vice Chair Richard Kalunian	Aye
Secretary Sandy Lucowicz	Aye
James Kenney, III	Aye
Carl Mattson	Aye
Glenn Anderson	Aye


Chairman Ronald Flynn

9-30-19
Dated



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX I

Soils Information

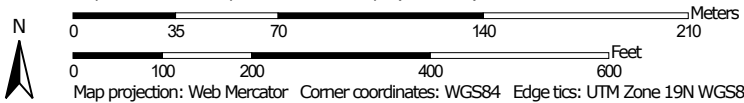
- USDA Soils excerpts from Soil Survey of Rhode Island
- Soil Evaluation Forms

Soil Map—State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties



Soil Map may not be valid at this scale.

Map Scale: 1:2,580 if printed on A landscape (11" x 8.5") sheet.




MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 14, 2010—Apr 1, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HkC	Hinckley loamy sand, 8 to 15 percent slopes	13.1	52.9%
HnC	Hinckley-Enfield complex, 3 to 15 percent slopes	3.4	13.6%
MU	Merrimac-Urban land complex, 0 to 8 percent slopes	0.1	0.2%
Sb	Scarboro mucky fine sandy loam, 0 to 3 percent slopes	0.0	0.1%
Ss	Sudbury sandy loam	1.1	4.3%
UD	Udorthents-Urban land complex	6.1	24.8%
Wa	Walpole sandy loam, 0 to 3 percent slopes	1.0	4.0%
Totals for Area of Interest		24.8	100.0%

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

HkC—Hinckley loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svm9

Elevation: 0 to 1,480 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hinckley and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Kame terraces, outwash plains, kames, eskers, moraines, outwash terraces, outwash deltas

Landform position (two-dimensional): Shoulder, toeslope, footslope, backslope

Landform position (three-dimensional): Nose slope, side slope, crest, head slope, riser

Down-slope shape: Linear, convex, concave

Across-slope shape: Convex, linear, concave

Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 8 inches: loamy sand

Bw1 - 8 to 11 inches: gravelly loamy sand

Bw2 - 11 to 16 inches: gravelly loamy sand

BC - 16 to 19 inches: very gravelly loamy sand

C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 99.90 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Sudbury

Percent of map unit: 5 percent
Landform: Outwash terraces, kame terraces, outwash plains, moraines, outwash deltas
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

Merrimac

Percent of map unit: 5 percent
Landform: Eskers, moraines, outwash terraces, outwash plains, kames
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest, riser
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent
Landform: Kame terraces, outwash plains, outwash terraces, outwash deltas, kames, eskers, moraines
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, riser
Down-slope shape: Linear, convex, concave
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

HnC—Hinckley-Enfield complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svlt

Elevation: 0 to 620 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hinckley and similar soils: 60 percent

Enfield and similar soils: 30 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Kame terraces, outwash plains, kames, eskers, moraines, outwash terraces, outwash deltas

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Nose slope, side slope, crest, head slope, tread, riser

Down-slope shape: Linear, convex, concave

Across-slope shape: Convex, linear, concave

Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

A - 0 to 8 inches: loamy sand

Bw1 - 8 to 11 inches: gravelly loamy sand

Bw2 - 11 to 16 inches: gravelly loamy sand

BC - 16 to 19 inches: very gravelly loamy sand

C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to very high (1.42 to 99.90 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Enfield

Setting

Landform: Outwash terraces, kames, moraines, kame terraces, outwash plains
Landform position (two-dimensional): Toeslope, backslope, shoulder, footslope, summit
Landform position (three-dimensional): Crest, nose slope, side slope, head slope, tread, riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Coarse-silty eolian deposits over sandy and gravelly glaciofluvial deposits derived from gneiss, granite, schist, and/or phyllite

Typical profile

Ap - 0 to 7 inches: silt loam
Bw1 - 7 to 16 inches: silt loam
Bw2 - 16 to 25 inches: silt loam
2C - 25 to 60 inches: stratified gravel to very gravelly sand

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 22 to 43 inches to strongly contrasting textural stratification
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Merrimac

Percent of map unit: 5 percent

Landform: Outwash deltas, kame terraces, outwash terraces
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Windsor

Percent of map unit: 2 percent
Landform: Outwash terraces, outwash deltas, kame terraces,
outwash plains
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear, convex, concave
Across-slope shape: Linear, concave, convex
Hydric soil rating: No

Tisbury

Percent of map unit: 2 percent
Landform: Depressions, outwash plains, outwash terraces, valley
trains, outwash deltas
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Bridgehampton

Percent of map unit: 1 percent
Landform: Outwash plains
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence,
and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

MU—Merrimac-Urban land complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2tyr9
Elevation: 0 to 820 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Merrimac and similar soils: 45 percent
Urban land: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merrimac

Setting

Landform: Kames, eskers, moraines, outwash terraces, outwash plains
Landform position (two-dimensional): Backslope, footslope, shoulder, summit
Landform position (three-dimensional): Side slope, crest, riser, tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

Typical profile

Ap - 0 to 10 inches: fine sandy loam
Bw1 - 10 to 22 inches: fine sandy loam
Bw2 - 22 to 26 inches: stratified gravel to gravelly loamy sand
2C - 26 to 65 inches: stratified gravel to very gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum in profile: 2 percent
Salinity, maximum in profile: Nonsaline (0.0 to 1.4 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Available water storage in profile: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: Unranked

Minor Components

Sudbury

Percent of map unit: 5 percent
Landform: Outwash plains, terraces, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Hinckley

Percent of map unit: 5 percent
Landform: Outwash plains, eskers, kames, deltas
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, rise
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent
Landform: Deltas, outwash plains, dunes, outwash terraces
Landform position (three-dimensional): Riser, tread

Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence,
and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Sb—Scarboro mucky fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svky
Elevation: 0 to 1,320 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Scarboro and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scarboro

Setting

Landform: Depressions, outwash terraces, outwash deltas, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope, tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial deposits derived from schist and/or sandy glaciofluvial deposits derived from gneiss and/or sandy glaciofluvial deposits derived from granite

Typical profile

Oe - 0 to 3 inches: mucky peat
A - 3 to 11 inches: mucky fine sandy loam
Cg1 - 11 to 21 inches: sand
Cg2 - 21 to 65 inches: gravelly coarse sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: About 0 to 2 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Minor Components

Swansea

Percent of map unit: 10 percent

Landform: Swamps, bogs

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Wareham

Percent of map unit: 5 percent

Landform: Depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Walpole

Percent of map unit: 5 percent

Landform: Outwash plains, depressions, outwash terraces, depressions, deltas

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Ss—Sudbury sandy loam

Map Unit Setting

National map unit symbol: 9lx8

Elevation: 0 to 810 feet

Mean annual precipitation: 44 to 50 inches

Mean annual air temperature: 48 to 50 degrees F

Frost-free period: 100 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Sudbury and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sudbury

Setting

Landform: Outwash plains, terraces

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Sandy and gravelly glaciofluvial deposits derived from granite and/or schist and/or gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 5 inches: sandy loam

Bw1 - 5 to 17 inches: gravelly sandy loam

Bw2 - 17 to 25 inches: sandy loam

2C - 25 to 60 inches: Error

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Hinckley

Percent of map unit: 3 percent
Landform: Eskers, kames, outwash plains, terraces
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Ninigret

Percent of map unit: 2 percent
Landform: Outwash plains, terraces
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Agawam

Percent of map unit: 1 percent
Landform: Outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Deerfield

Percent of map unit: 1 percent
Landform: Outwash plains, terraces
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Merrimac

Percent of map unit: 1 percent
Landform: Kames, outwash plains, terraces
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Walpole

Percent of map unit: 1 percent
Landform: Depressions on terraces, drainageways on terraces
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Windsor

Percent of map unit: 1 percent
Landform: Kames, outwash plains, terraces
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

UD—Udorthents-Urban land complex

Map Unit Setting

National map unit symbol: 9lxj
Mean annual precipitation: 44 to 50 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 120 to 211 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 70 percent
Urban land: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Human transported material

Typical profile

A - 0 to 12 inches: sandy loam
C1 - 12 to 25 inches: sandy loam
C2 - 25 to 60 inches: stratified sand to very gravelly coarse sand

Properties and qualities

Slope: 0 to 15 percent
Depth to restrictive feature: More than 80 inches
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 42 to 54 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.5 inches)

Description of Urban Land

Setting

Parent material: Human transported material

Typical profile

R - 0 to 6 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s

Hydric soil rating: No

Minor Components

Merrimac

Percent of map unit: 5 percent

Landform: Kames, outwash plains, terraces

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Quonset

Percent of map unit: 5 percent

Landform: Eskers, outwash terraces, terraces, outwash plains

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Wa—Walpole sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svkl

Elevation: 0 to 1,020 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 250 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Walpole and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Walpole

Setting

Landform: Deltas, depressions, outwash terraces, outwash plains, depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread, talf, dip

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy glaciofluvial deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

Oe - 0 to 1 inches: mucky peat

A - 1 to 7 inches: sandy loam

Bg - 7 to 21 inches: sandy loam

BC - 21 to 25 inches: gravelly sandy loam

C - 25 to 65 inches: very gravelly sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: About 0 to 4 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Hydric soil rating: Yes

Minor Components

Sudbury

Percent of map unit: 10 percent

Landform: Terraces, deltas, outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Scarboro

Percent of map unit: 10 percent

Landform: Outwash terraces, deltas, outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence,
and Washington Counties

Survey Area Data: Version 18, Dec 6, 2018

77150A



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
 Department of Environmental Management
 Office of Water Resources



Site Evaluation Form
 Part A - Soil Profile Description Application Number DRAINAGE

Property Owner: Cardi Corporation
 Property Location: New London Turnpike, AP Lot, Coventry
 Date of Test Hole: October 4, 2010
 Soil Evaluator: Kevin Fetzer License Number: D-4029
 Weather: Cloudy Shaded: Yes No Time: 0900




TH 1 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				
^C	.8-0	a	s	2.5Y 6/3					s	O - sg	loose	1
C	0-10	a	s	2.5Y 4/3					sil	pl - th	fr	7
2C	10-22	a	s	2.5Y 7/3					s	O - sg	loose	1
C'	22-28	a	s	2.5Y 5/3					vfsl	pl - th	fr	7
2C'	28-72	a	s	2.5Y 6/3					s	O - sg	loose	1
C''	72-120	a	s	2.5Y 5/3					vfsl	pl - th	fr	7
2C''	120-136	a	s	2.5Y 5/3					s	O - sg	loose	3
TH 2 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				
^C	3-0	a	s	10YR 4/6					sl	O - m	vfr	6
C	0-3	a	s	2.5Y 5/4					fsl	O - m	fr	7
C2	3-72	a	s	2.5Y 7/2					vfsl	O - m	fr	7
2C	23-52	a	w	2.5Y 5/3					lfs	O - m	fr	6
C2	72-153			2.5Y 7/2					s	O - sg	loose	1

U Class: Ice Contact Total Depth of each Test Hole: 144" - 156"
 Depth to Groundwater Seepage: - Depth to Impervious or Limiting Layer: -
 Estimated Seasonal High Water Table: 96" OG - 108" OG Comments: OG = Original Grade
 *Some lenses of sand within vfsl platy horizons. Fine material appears to be varves of silt/vfsl. Area has been excavated in the past.
 No redox features evident throughout test pit, no evidence of seasonal high water table.

Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator
 Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:	
	Approximate location of test holes
	Estimated gradient and direction of slope
	Approximate direction of due north

Relief and Slope: _____


2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES NO If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES NO If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES NO
6. Has soil been excavated from or fill deposited on site? YES NO If yes, locate on above sketch.
7. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
8. Landscape position: _____
9. Vegetation: _____
10. Indicate approximate location of property lines and roadways.

11. Additional comments, site constraints or additional information regarding site: _____

The soil evaluation results will provide soil texture and the estimated depth to the Seasonal High Water Table (SHWT) based upon qualitative field assessment techniques. No lab analysis of soil material is proposed to verify qualitative estimates in the field. To definitively determine the actual depth to the SHWT, it is necessary to install monitoring wells/pipes and record water level fluctuations over a long time period. No long-term monitoring is proposed. Original soil texture and SHWT estimates may need to be revised based upon additional information from other soil evaluations, excavations, and/or bottom inspections prior to the OWTS installation or drainage structure installation. Soil evaluations for drainage system design only, not for foundation elevation.

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by:  License # D-4029

Part B prepared by: _____ License # 0566

Signature License # Signature License #

FOR OFFICE USE ONLY

Decision: Approved Disclaimed

Comments: _____

Signature Authorized Agent _____ Date _____

77.150A



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
 Department of Environmental Management
 Office of Water Resources



Site Evaluation Form
 Part A - Soil Profile Description Application Number DRAINAGE

Property Owner: Cardi Corporation
 Property Location: New London Turnpike, AP Lot, Coventry
 Date of Test Hole: October 4, 2010
 Soil Evaluator: Kevin Fetzer License Number: D-4029
 Weather: Cloudy Shaded: Yes No Time: 0900

TH 3 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				
^C	3-0	a	s	10YR 4/6					sl	O - m	vfr	6
C	0-3	a	s	10YR 5/4					vfs	O - m	fr	7
C2	3-28	a	s	2.5Y 7/3					lvfs	O - m	fr	7
C3	38-50	a	s	2.5Y 7/2					vfs	pl - th	vfr	7
C4	50-156			2.5Y 4/3					sil	pl - th	fr	7
TH 4 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				
^C	108-72	a	s	10YR 4/4					fsl	O - m	vfr	4
^2C	72-36	a	s	10YR 4/6					sl	O - m	fr	6
^3C	36-0	a	s	10YR 3/6					gsl	O - m	fr	6m
C	0-48	a	s	2.5Y 5/3					cb_gcos	O - sg	loose	1m
C2	48-72	a	s	2.5Y 5/4					cos	O - sg	loose	1
C3	72-108			2.5Y 7/2					s	O - sg	loose	1




Soil Class: Fill over Ice Contact Total Depth of each Test Hole: 120" - 216"
 Depth to Groundwater Seepage: - - Depth to Impervious or Limiting Layer: - -
 Estimated Seasonal High Water Table: 96" OG - 72" OG Comments: OG = Original Grade
 Area has been excavated in the past.
 No redox features evident throughout test pit, no evidence of seasonal high water table.

Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator
 Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:

	Approximate location of test holes
	Estimated gradient and direction of slope
	Approximate direction of due north

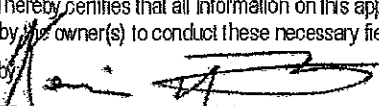
Relief and Slope: _____

2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES NO If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES NO If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES NO
6. Has soil been excavated from or fill deposited on site? YES NO If yes, locate on above sketch.
7. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
8. Landscape position: _____
9. Vegetation: _____
10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site: _____

The soil evaluation results will provide soil texture and the estimated depth to the Seasonal High Water Table (SHWT) based upon qualitative field assessment techniques. No lab analysis of soil material is proposed to verify qualitative estimates in the field. To definitively determine the actual depth to the SHWT, it is necessary to install monitoring wells/pipes and record water level fluctuations over a long time period. No long-term monitoring is proposed. Original soil texture and SHWT estimates may need to be revised based upon additional information from other soil evaluations, excavations, and/or bottom inspections prior to the OWTS installation or drainage structure installation. Soil evaluations for drainage system design only, not for foundation elevation.

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by:  License # D-4029

Part B prepared by: _____ License # 0566

<p>FOR OFFICE USE ONLY</p> <p>Decision: Approved <input type="checkbox"/> Disclaimed <input type="checkbox"/></p> <p>Comments: _____</p> <p>_____</p> <p>_____</p>	<p>Signature Authorized Agent _____</p> <p>Date _____</p>
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77150A



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
 Department of Environmental Management
 Office of Water Resources



Site Evaluation Form
 Part A - Soil Profile Description Application Number DRAINAGE

Property Owner: Cardi Corporation
 Property Location: New London Turnpike, AP Lot, Coventry
 Date of Test Hole: October 4, 2010
 Soil Evaluator: Kevin Fetzer License Number: D-4029
 Weather: Cloudy Shaded: Yes No Time: 0900

TH <u>5</u> Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				
<u>^C</u>	<u>84-0</u>	<u>a</u>	<u>s</u>	<u>2.5Y 4/4</u>					<u>cb_gls</u>	<u>O - sg</u>	<u>loose</u>	<u>1m</u>
<u>C</u>	<u>0-72</u>			<u>2.5Y 5/3</u>					<u>cb_gls</u>	<u>O - sg</u>	<u>loose</u>	<u>1m</u>
TH <u>2</u> Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Con.				




Soil Class: Ice Contact Total Depth of each Test Hole: 156"
 Depth to Groundwater Seepage: - Depth to Impervious or Limiting Layer: -
 Estimated Seasonal High Water Table: 60" OG Comments: OG = Original Grade
Some boulders in ^C horizon (<15%)
No redox features evident throughout test pit, no evidence of seasonal high water table.

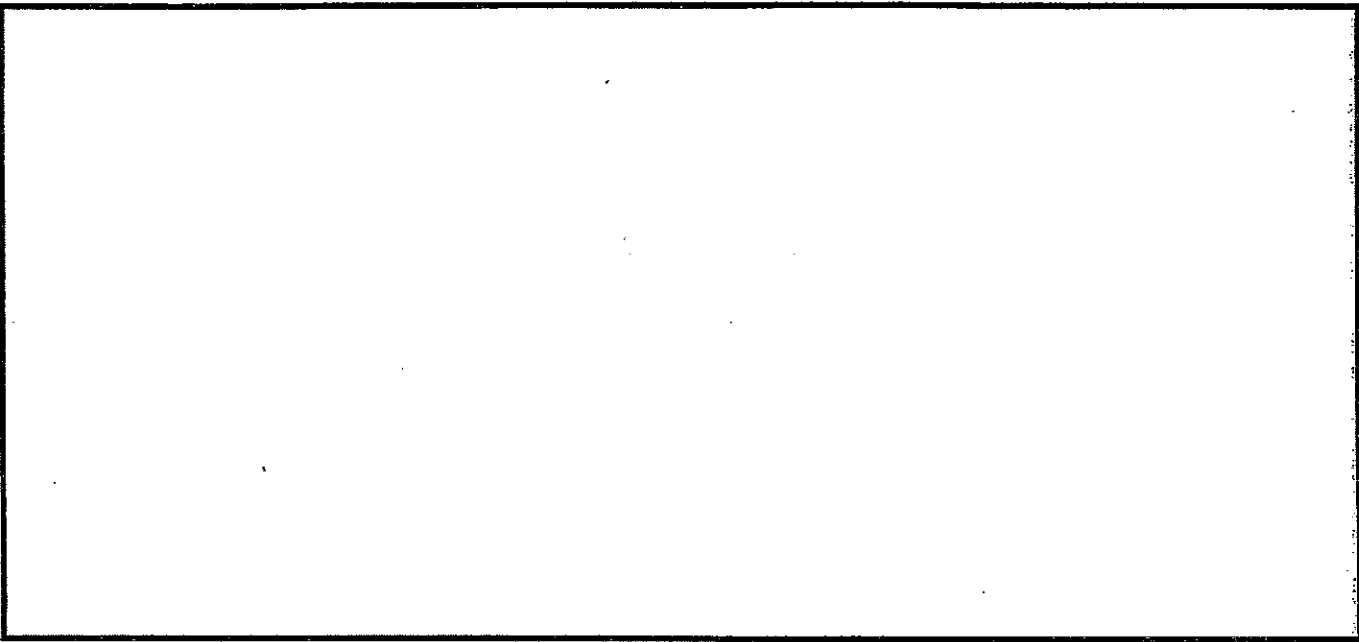
Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator
 Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:

	Approximate location of test holes
	Estimated gradient and direction of slope
	Approximate direction of due north

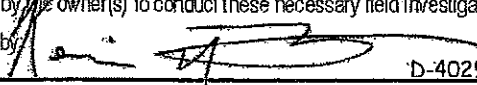


Relief and Slope: _____

2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES NO If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES NO If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES NO
6. Has soil been excavated from or fill deposited on site? YES NO If yes, locate on above sketch.
7. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
8. Landscape position: _____
9. Vegetation: _____
10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site: _____

The soil evaluation results will provide soil texture and the estimated depth to the Seasonal High Water Table (SHWT) based upon qualitative field assessment techniques. No lab analysis of soil material is proposed to verify qualitative estimates in the field. To definitively determine the actual depth to the SHWT, it is necessary to install monitoring wells/pipes and record water level fluctuations over a long time period. No long-term monitoring is proposed. Original soil texture and SHWT estimates may need to be revised based upon additional information from other soil evaluations, excavations, and/or bottom inspections prior to the OWTS installation or drainage structure installation. Soil evaluations for drainage system design only, not for foundation elevation.

Certification
 The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by:  License # D-4029

Part B prepared by: _____
 Signature _____ License # _____

FOR OFFICE USE ONLY	
Decision: Approved <input type="checkbox"/> Disclaimed <input type="checkbox"/>	
Comments: _____	

Signature Authorized Agent _____	Date _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management

Office of Water Resources



Site Evaluation Form
Part A - Soil Profile Description

Application Number DRAINAGE

Property Owner: Cardi Corp
Property Location: New London Turnpike, AP 16 Lot 1, 3, Coventry
Date of Test Hole: August 27, 2020
Soil Evaluator: Kevin Fetzer License Number: D-4029
Weather: Sunny, Warm Shaded: Yes [X] No [] Time: 0900

Table with columns: TH 2005 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox Description (Ab., S., Con.), Texture, Structure, Consistence, in/hr ft/min. Includes rows for TH 2005 and TH 2007 horizons.

Soil Class: HTM over Ice Contact Total Depth of each Test Hole: 156" - 156"
Depth to Groundwater Seepage: No Groundwater Seepage Encountered Depth to Impervious or Limiting Layer: No Ledge Encountered
Estimated Seasonal High Water Table: 60" OG 100" OG Comments: HTM = Fill Material ; IC = Ice Contact
OG = Original Grade


Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator

Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:



- Approximate location of test holes
- Estimated gradient and direction of slope
- Approximate direction of due north

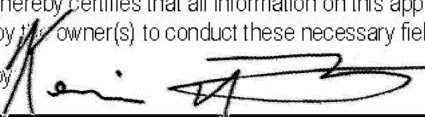


1. Relief and Slope: _____
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES NO If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES NO If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES NO
6. Has soil been excavated from or fill deposited on site? YES NO If yes, locate on above sketch
7. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
8. Landscape position: _____
9. Vegetation: _____
10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site: _____

The soil evaluation results will provide soil texture and the estimated depth to the Seasonal High Water Table (SHWT) based upon qualitative field assessment techniques. No lab analysis of soil material is proposed to verify qualitative estimates in the field. To definitively determine the actual depth to the SHWT, it is necessary to install monitoring wells/pipes and record water level fluctuations over a long time period. No long-term monitoring is proposed. Original soil texture and SHWT estimates may need to be revised based upon additional information from other soil evaluations, excavations, and/or bottom inspections prior to the OWTS installation or drainage structure installation. Soil evaluations for septic system design only, not for foundation elevation.

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by  License # D-4029

Part B prepared by: _____ Signature _____ License # _____

FOR OFFICE USE ONLY

Decision: Approved Disclaimed

Comments: _____

Signature Authorized Agent _____ Date _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management

Office of Water Resources



Site Evaluation Form
Part A - Soil Profile Description

Application Number DRAINAGE

Property Owner: Cardi Corp
Property Location: New London Turnpike, AP 16 Lot 1, 3, Coventry
Date of Test Hole: August 27, 2020
Soil Evaluator: Kevin Fetzer License Number: D-4029
Weather: Sunny, Warm Shaded: Yes [X] No [] Time: 0900

Table with 12 columns: TH 2010 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox Description (Ab., S., Con.), Texture, Structure, Consistence, in/hr ft/min. Includes data for horizons ^C, C, 2C, 3C, 4C and TH 2011 horizons ^C, C, C', 2C, C''.

Soil Class: HTM over Ice Contact/Lacustrine
Total Depth of each Test Hole: 180" - 168"
Depth to Groundwater Seepage: No Groundwater Seepage Encountered
Depth to Impervious or Limiting Layer: No Ledge Encountered
Estimated Seasonal High Water Table: 104" OG 131" OG
Comments: HTM = Fill Material ; IC = Ice Contact
OG = Original Grade




Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator

Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:

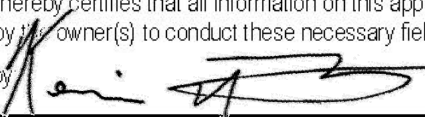
  	Approximate location of test holes Estimated gradient and direction of slope Approximate direction of due north
---	---

1. Relief and Slope: _____
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES NO If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES NO If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES NO
6. Has soil been excavated from or fill deposited on site? YES NO If yes, locate on above sketch
7. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
8. Landscape position: _____
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10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site: _____

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Part A prepared by:  License # D-4029

Part B prepared by: _____ Signature _____ License # _____

FOR OFFICE USE ONLY

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Comments: _____

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

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Site Evaluation Form
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Property Location: New London Turnpike, AP 16 Lot 1, 3, Coventry
Date of Test Hole: August 27, 2020
Soil Evaluator: Kevin Fetzer License Number: D-4029
Weather: Sunny, Warm Shaded: Yes [X] No [] Time: 0900

Table with columns: TH 2012 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox Description (Ab., S., Con.), Texture, Structure, Consistence, in/hr ft/min. Includes data for TH 2012 and TH 2013 horizons.

Soil Class: HTM over Ice Contact/Lacustrine
Total Depth of each Test Hole: 168" - 156"
Depth to Groundwater Seepage: No Groundwater Seepage Encountered
Depth to Impervious or Limiting Layer: No Ledge Encountered
Estimated Seasonal High Water Table: 78" OG 30" OG
Comments: HTM = Fill Material ; IC = Ice Contact
OG = Original Grade




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Please use the area below to locate:

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3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:

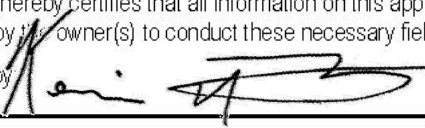
  	<p>Approximate location of test holes</p> <p>Estimated gradient and direction of slope</p> <p>Approximate direction of due north</p>
---	--

1. Relief and Slope: _____
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Part A prepared by:  License # D-4029

Part B prepared by: _____ Signature _____ License # _____

FOR OFFICE USE ONLY

Decision: Approved Disclaimed

Comments: _____

Signature Authorized Agent _____ Date _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management

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Weather: Sunny, Warm Shaded: Yes [X] No [] Time: 0900

Table with columns: TH 2014 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox Description (Ab., S., Con.), Texture, Structure, Consistence, in/hr ft/min. Includes rows for horizons B, C, 2C, ^C, ^2C, ^3C, and C.

HTM

Soil Class: HTM over Ice Contact Total Depth of each Test Hole: 144" - 156"
Depth to Groundwater Seepage: No Groundwater Seepage Encountered Depth to Impervious or Limiting Layer: No Ledge Encountered
Estimated Seasonal High Water Table: 96" 36" OG Comments: HTM = Fill Material ; IC = Ice Contact
OG = Original Grade


Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator

Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:



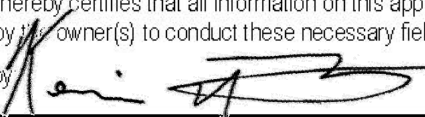
- Approximate location of test holes
- Estimated gradient and direction of slope
- Approximate direction of due north

1. Relief and Slope: _____
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES NO If yes, locate on above sketch.
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Part A prepared by:  License # D-4029

Part B prepared by: _____ Signature _____ License # _____

FOR OFFICE USE ONLY

Decision: Approved Disclaimed

Comments: _____

Signature Authorized Agent _____ Date _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management

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Site Evaluation Form
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Table with columns: TH 2008 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox Description (Ab., S., Con.), Texture, Structure, Consistence, in/hr ft/min. Includes data for horizons ^C, ^2C, Bb, Bw, C, TH 2009, and ^C, ^2C, C, 2C, 3C, 2C, 4C, 5C.

Soil Class: SE-8 = HTM over Ice Contact SE-9 = HTM over lacustrine/outwash
Total Depth of each Test Hole: 156" - 180"
Depth to Groundwater Seepage: No Groundwater Seepage Encountered
Depth to Impervious or Limiting Layer: No Ledge Encountered
Estimated Seasonal High Water Table: 24" OG 84" OG
Comments: HTM = Fill Material ; TC = Ice Contact
OG = Original Grade




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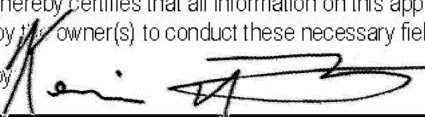
  	<p>Approximate location of test holes</p> <p>Estimated gradient and direction of slope</p> <p>Approximate direction of due north</p>
---	--

1. Relief and Slope: _____
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Part A prepared by:  License # D-4029

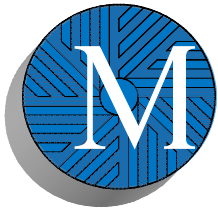
Part B prepared by: _____ Signature _____ License # _____

FOR OFFICE USE ONLY

Decision: Approved Disclaimed

Comments: _____

Signature Authorized Agent _____ Date _____



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX J

List of Requested Relief

ANTICIPATED RELIEF / WAIVER REQUESTS

**Willow Lakes
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
December 2021**

I. ZONING RELIEF

Reference “Zoning Ordinance; Town of Coventry; Adopted – December 19, 1994; Amended as of April 14, 2003”

<u>Section</u>	<u>Description</u>
A. Section 603.A	Residential Uses.
<i>Requested Relief:</i>	Item 05: Approval of a Special Use Permit allowing a multifamily use in an R20 zone is requested. <i>This relief request was granted as part of the Tiffany Village proposal.</i>
B. Section 603.E	Personal, Business & Professional Services
<i>Requested Relief:</i>	Item 1.05: Approval of a Special Use Permit allowing a ‘physical therapy and other health related services’ use in an R20 zone is requested.
C. Section 610, Table 6-7 & Section 1481	R20 Dimensional Regulations: Maximum Lot Coverage
<i>Requested Relief:</i>	<p>Approval of a maximum lot coverage exceeding 40%.</p> <p>A multifamily use is allowed in an R20 zone by Special Use Permit. Table 6-7 does not list a lot coverage maximum for a multifamily use. Section 603, Table 6-1 indicates that Article 14 of the Zoning Ordinance shall be consulted for a multifamily dwelling project. Article 14, also, does not address lot coverage maximum for a multifamily use. It appears that the Zoning Ordinance does not address a lot coverage maximum for a multifamily use.</p> <p>Section 1481, Article 14 of the Zoning Ordinance does state that the minimum open space for a Land Development project shall be 40%. Therefore, a lot coverage exceeding 40%, for developments such as the Applicant’s proposal, is implicit within the Zoning Ordinance. In the event the Town determines that a multifamily use is considered an “other permitted use” pursuant to Table 6-7, then the Applicant requests a waiver from the 20% lot coverage maximum. If the latter position is adopted by the Town, then an extension of the 20% lot coverage maximum is requested, by 30%, to permit a maximum lot coverage of 50%. Notably, an extension to the Applicant allowing 50% lot coverage for the proposed development is still less than that allowed through Section 1481, Article 14 of the Zoning Ordinance.</p> <p>A maximum lot coverage of 50% will not impact health, safety or environmental standards, which is supported by the maximum lot coverages</p>

of the other zones within the Town that allow a multifamily use by Special Use Permit (see Table 6-3):

- Rural Village Commercial (55% maximum lot coverage)
- Main Street Village Commercial (60% maximum lot coverage)
- Business Park (80-100% maximum lot coverage)

D. Section 1208

Wheel Blocks. When a parking lot extends to a property line, sidewalk, or street right-of-way, or landscape buffer, wheel blocks or other suitable devices shall be installed to prevent any part of a parked vehicle from extending beyond the parking facility setback line.

Requested Relief: The Applicant requests that concrete curb / asphalt berm as proposed be considered “other suitable device.” ***This relief request was granted as part of the Tiffany Village proposal.***

E. Section 1440

Intensity Regulations

Requested Relief: Underlying zone (R-20) provides a density of 1 unit per 20,000 SF or 2.18 units per acre.

Current plan seeks 202 units on 12.4 acres, which is approximately 16.3 units per acre or 1 unit per 2,670 square feet. ***A similar relief request was granted as part of the Tiffany Village proposal.***

F. Section 920 B

General Development Regulations

Requested Relief: In front yards, the maximum height of walls and fences shall be four feet.
 A 6’ fence is proposed between the proposed stormwater facilities and the proposed sidewalk, a Department of Public Works request.

II. SUBDIVISION REGULATION RELIEF

Reference “Subdivision and Land Development Regulations; Town of Coventry; Adopted – December 13, 1995” Amended through September 13, 2000

<u>Article</u>	<u>Description</u>
<p>A. Article XLC.3.c</p> <p><i>Requested Relief:</i></p>	<p>Major Land Development Preliminary: (\$250 + \$20 per unit)</p> <p>The Applicant requests a waiver of any and all Preliminary application fees.</p> <p>Estimated fee: (\$250) + (202 units * \$20 per unit) = \$4,290.00</p>
<p>B. Article XLC.3.d</p> <p><i>Requested Relief:</i></p>	<p>Major Land Development Final: (\$500 + \$20 per unit)</p> <p>The Applicant requests a waiver of any and all Final application fees.</p> <p>Estimated fee: (\$500) + (202 units * \$20 per unit) = \$4,540.00</p>
<p>C. Article XIII.B.15</p>	<p>Monuments. Monuments (granite boundary markers) shall be of the type described below and placed by a Registered Land Surveyor at every corner and angle point on the boundary line of the subdivision and at</p>

every point of curvature on the proposed street rights-of-way and be installed at all points indicated on the final plat.

Requested Relief: The Applicant requests that sufficient boundary markers be provided in accordance with the “Rules and Regulations for Professional Land Surveying in the State of Rhode Island”, as published by the State of Rhode Island and Providence Plantations Department of Business Regulation Division of Design Professionals. This can include granite bounds, iron rods, drill holes or other suitable markers placed at a frequency acceptable to the referenced Rules and Regulations. ***This relief request was granted as part of the Tiffany Village proposal.***

D. **Article XIV.F.2** **Slopes: Slopes created in a subdivision, building lot, detention pond, etc. shall not be greater than three (3) to one (1). The maximum height of all walls shall be four (4) feet.**

Requested Relief: The Applicant requests a waiver of the maximum allowable slope. The subject parcel is part of a gravel pit and there are existing slopes that are two to one (2:1), or steeper, throughout the property. The proposed design may suggest 2:1 slopes in places to match or reduce the existing steep slopes. Any steep slopes shall be reinforced with jute mesh and/or rip rap to prevent erosion. The maximum proposed slope is 2:1.

The Applicant requests a waiver of the maximum wall height. And proposes that any walls greater than 4 feet in height shall be engineered and obtain approval from the Town.

III. AFFORDABLE HOUSING RELIEF

Reference “Town of Coventry Affordable Housing Production Plan” November 2004, Revised June 2005

<u>Section</u>	<u>Description</u>
A. Section V, Ordinance Sec. 106-6	Fair Share Development Fee: Coventry requires all new housing developments to pay a Fair Share Development Fee (FSDF). The FSDF is intended to help pay for the infrastructure demands created by new development, including schools, roads and recreational facilities. The FSDF is currently \$7,596 per housing unit. Eleven Rhode Island communities have impact fees similar to the FSDF, and three of these communities exempt affordable housing from impact fees. At one time Coventry exempted affordable units from the FSDF, but in May 2002 the Town passed a resolution requiring all new housing to pay the FSDF.
<i>Requested Relief:</i>	The Applicant requests a waiver of any and all Fair Share Development Fees (FSDF). Estimated fee: 202 units * \$7,596 per unit = \$1,534,392.00 <i>A similar relief request was granted as part of the Tiffany Village proposal.</i>

IV. ORDINANCE OF THE TOWN OF COVENTRY RELIEF

Reference “Ordinance of the Town of Coventry, Rhode Island” as amended

<u>Section</u>	<u>Description</u>
A.	<p>Section 106-4 “Schedule of Fees As filed in the Building Official’s Office”</p> <p>“Building Permits” (\$1,705.00 + \$2.00 for every \$1,000.00 over \$500,000.00 building cost).</p> <p><i>Requested Relief:</i> The Applicant requests a waiver of any and all Building Permit Fees. Estimated fee: to be determined by architect <i>A similar relief request was granted as part of the Tiffany Village proposal.</i></p>
B.	<p>Section 122-2</p> <p>Soil Erosion and Sediment Control Review and certification fee: 11 ac – 20.9 ac. = \$650.00</p> <p><i>Requested Relief:</i> The Applicant requests waiver of any and all Site Plan Review and Certification Fee. Estimated fee: \$650.00 <i>This relief request was granted as part of the Tiffany Village proposal.</i></p>
C.	<p>Section 122-2</p> <p>Soil Erosion and Sediment Control Inspection fee: 5,000 sf – 1 ac. = \$150.00; \$90.00/acre for each additional disturbed acre (rounded to the nearest full acre beyond the one (1) acre).</p> <p><i>Requested Relief:</i> The Applicant requests a waiver of any and all Inspection Fees. Estimated fee: (\$150) + (12.4 acres * \$90 per acre) = \$1,266.00 <i>This similar relief request was granted as part of the Tiffany Village proposal.</i></p>
D.	<p>Section 122-2</p> <p>Sewer Assessment fee (multifamily): \$6,660.00 per unit</p> <p><i>Requested Relief:</i> The Applicant requests a waiver of any and all Sewer Assessment Fees. Estimated fee: 202 units * \$6,600 per unit = \$1,333,200.00 <i>A similar relief request was granted as part of the Tiffany Village proposal.</i></p>

V. MISCELLANEOUS RELIEF

A.	<p>Sewer Connection Application Fee per Town of Coventry Department of Public Works Application for Sewer Connection – Residential: \$100.00.</p> <p><i>Requested Relief:</i> The Applicant requests waiver of Sewer Application Fee. Estimated fee: \$100.00 <i>This relief request was granted as part of the Tiffany Village proposal.</i></p>
B.	<p>Sewer Connection Inspection Fee per Town of Coventry Department of Public Works Application for Sewer Connection – Residential: \$200.00.</p>

Requested Relief: The Applicant requests a waiver of Sewer Connection Inspection Fees.
Estimated fee: \$200.00
This relief request was granted as part of the Tiffany Village proposal.

C. **Recording Fees**

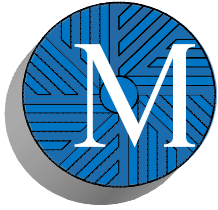
Requested Relief: The Applicant requests a waiver of any and all Recording Fees. ***This relief request was granted as part of the Tiffany Village proposal.***

D. **Stenographer Fees**

Requested Relief: The Applicant requests a waiver of any and all Stenographer Fees. ***This relief request was granted as part of the Tiffany Village proposal.***

E. **Real Estate Taxes**

Requested Relief: The Applicant requests that the Town of Coventry defer or abate the reassessment of real estate taxes assessed on each housing unit until a Certificate of Occupancy is issued.



WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX K

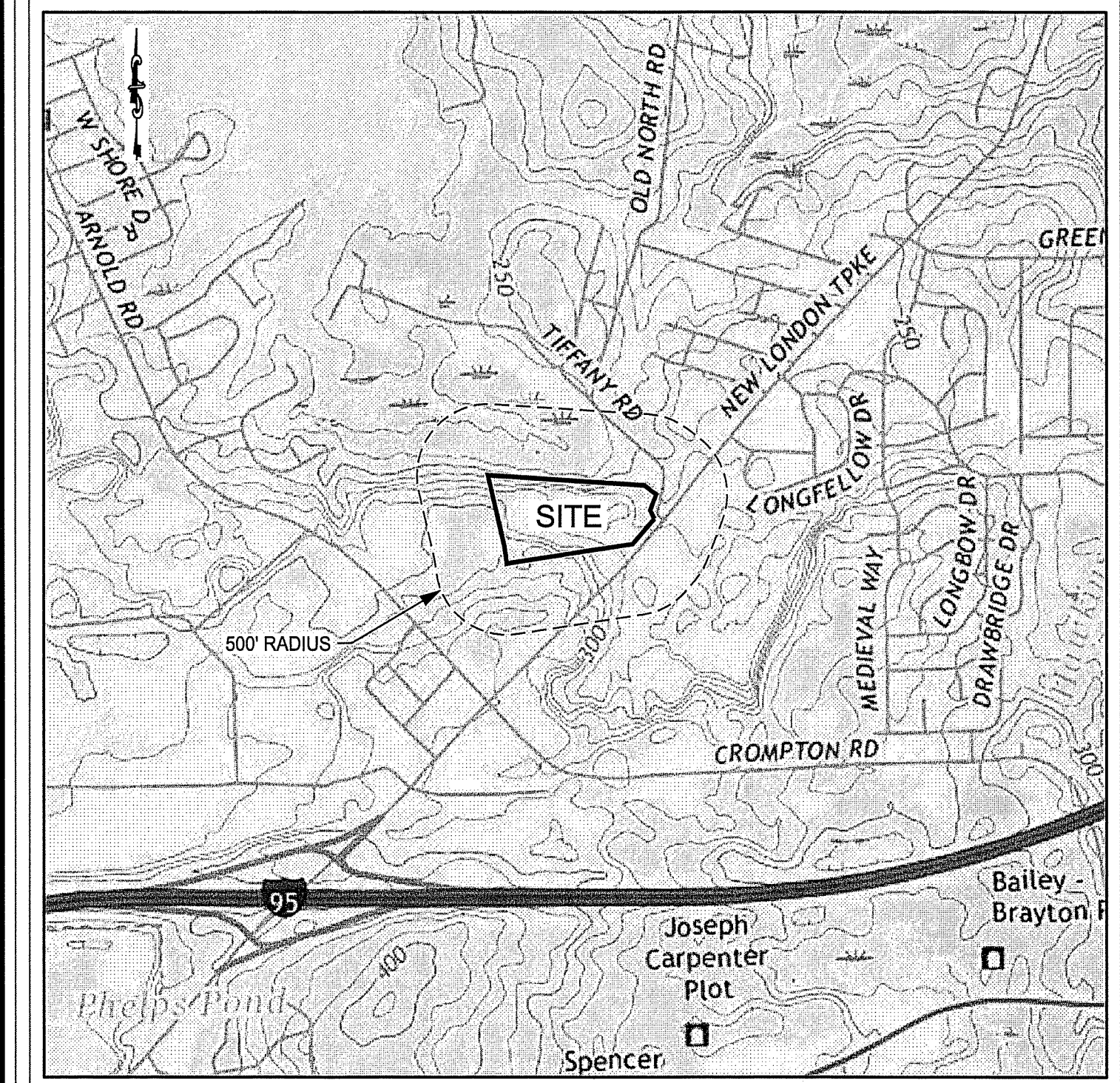
Plan Set (reduced)

PRELIMINARY SUBMISSION

FOR:

WILLOW LAKES INDEPENDENT LIVING

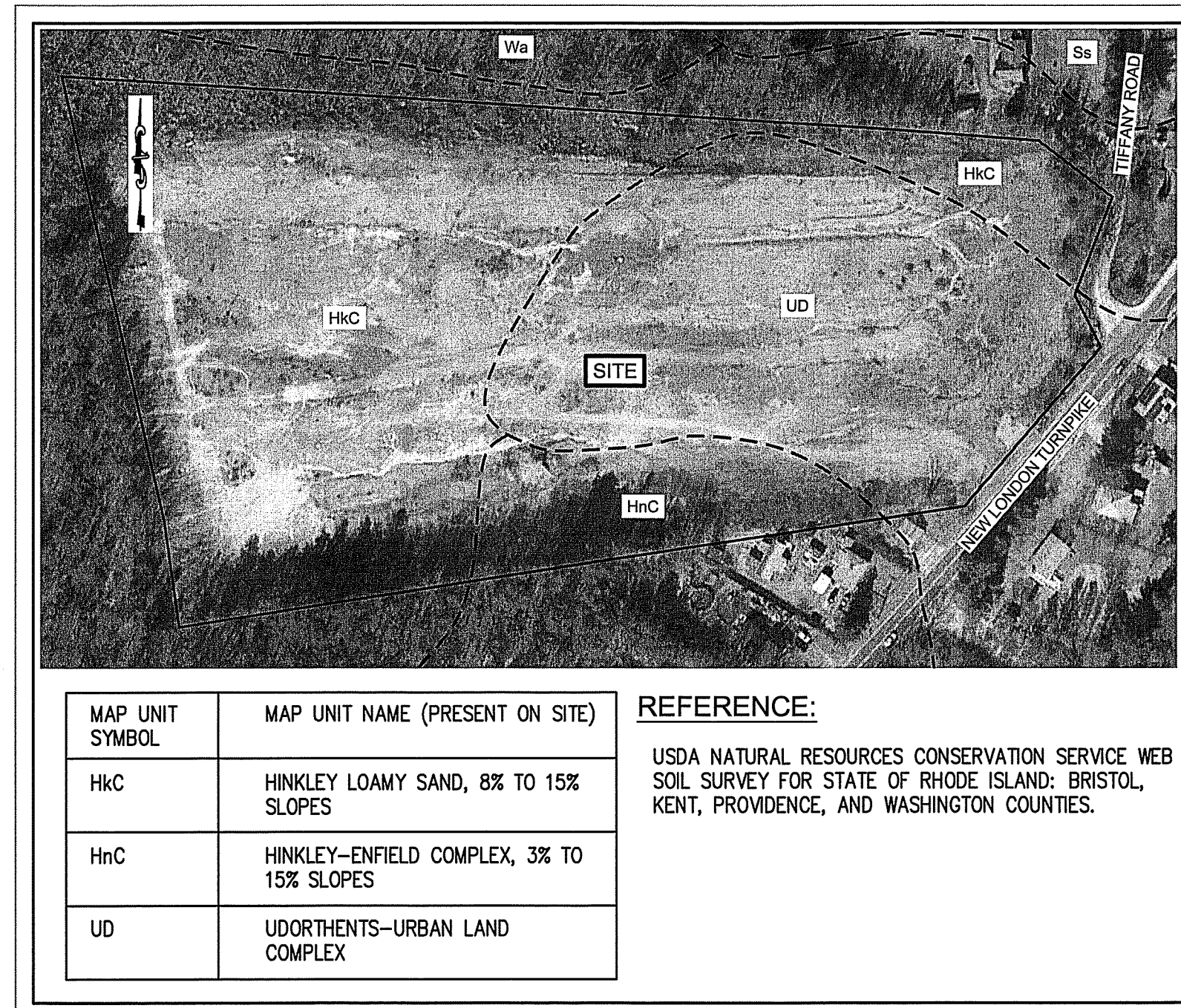
A.P. 16 LOT 3
NEW LONDON TURNPIKE
COVENTRY, RHODE ISLAND



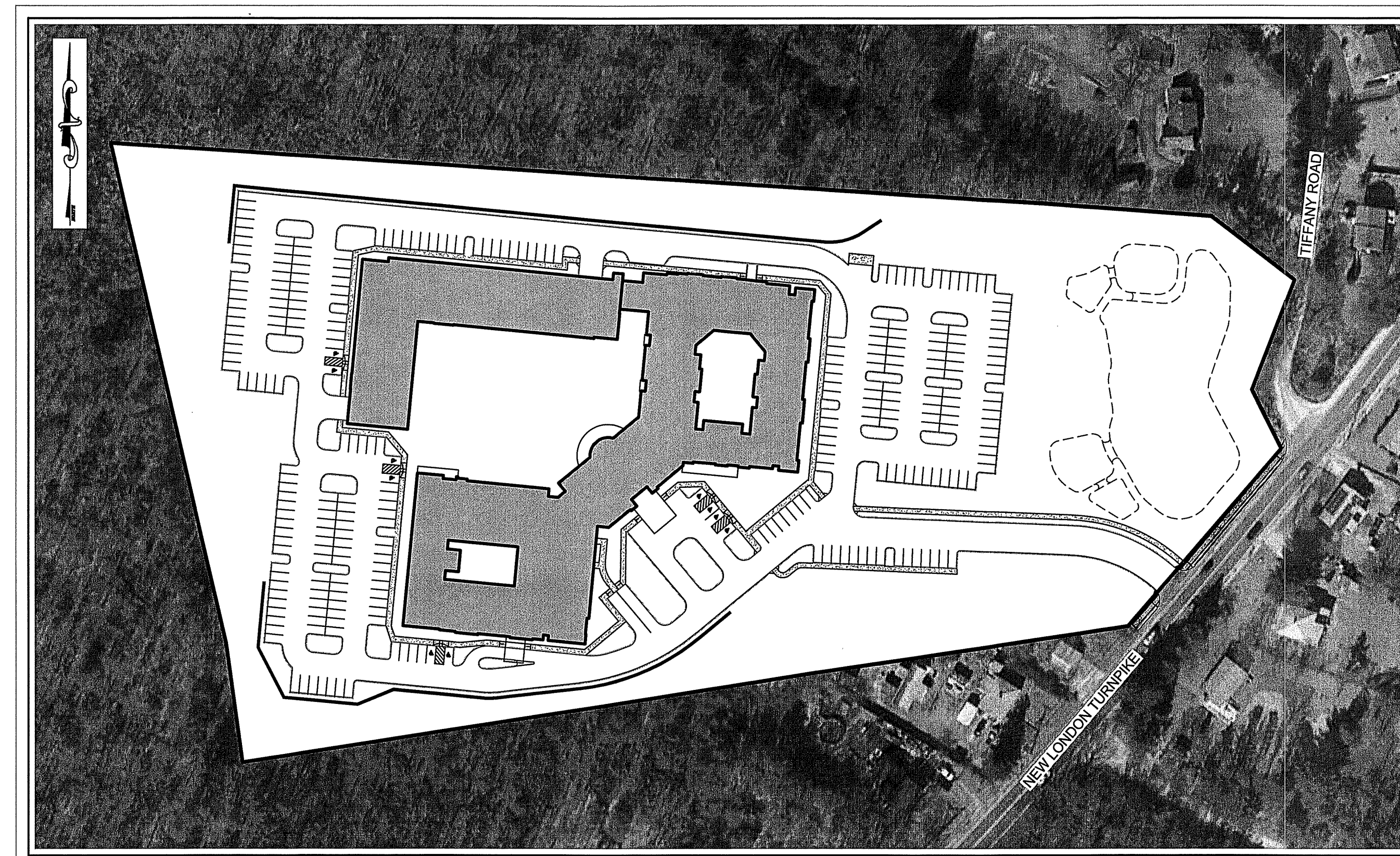
LOCUS
1" = 1,000'

TABLE OF CONTENTS:

SHEET	DESCRIPTION	REVISED
1	COVER SHEET	12/27/2021
2	EXISTING CONDITIONS PLAN	12/27/2021
3	SITE LAYOUT PLAN	12/27/2021
4	GRADING AND DRAINAGE PLAN	12/27/2021
5	UTILITY PLAN	12/27/2021
6	SOIL EROSION AND SEDIMENT CONTROL PLAN	12/27/2021
7	SOIL EROSION AND SEDIMENT CONTROL PLAN - 2	
8	NOTES AND DETAILS	12/27/2021
9	DETAILS - 1	
10	DETAILS - 2	
11	DETAILS - 3	
12	DETAILS - 4	



SOILS MAP
NOT TO SCALE



AERIAL IMAGE
SCALE: 1" = 100'

PREPARED BY:



250 Centerville Road, Building E-12
Warwick, Rhode Island 02886
www.MillstoneEng.com
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FEBRUARY 2021

KCWA STATEMENT:
THE ATTACHED DRAWINGS NUMBERED 1 - 12 HAVE BEEN PREPARED UNDER MY DIRECT SUPERVISION AND HAVE BEEN THOROUGHLY CHECKED.

Jeffrey C. Hanson
JEFFREY C. HANSON, P.E. (RI P.E. # 5238)

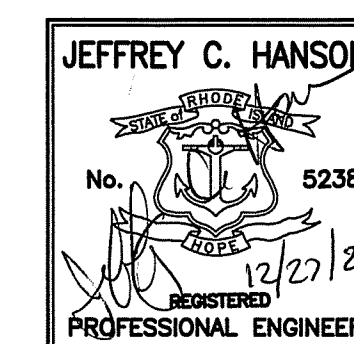
OWNER:
NEW LONDON TURNPIKE REALTY, LLC
400 LINCOLN AVENUE
WARWICK, RI 02888
(401) 739-8300
PRESIDENT: ANTONIO B. CARDI
SECRETARY: STEPHEN A. CARDI, SR.

ENGINEER / SURVEYOR:
MILLSTONE ENGINEERING, P.C.
250 CENTERVILLE ROAD, BLDG. E-12
WARWICK, RI 02866
(401) 921-3344

APPLICANT:
WILLOW LAKE PROPERTIES, LLC
53 GREENWOOD AVE.
DARIEN, CT 06820
(203) 715-3440

ATTORNEY:
PATRICK J. DOUGHERTY
887 BOSTON NECK ROAD, SUITE #1
NARRAGANSETT, RI 02882
(401) 789-8400

WILLOW LAKES
INDEPENDENT LIVING
A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI



Drawn By: BJC

Checked By: JCH

Sheet

1

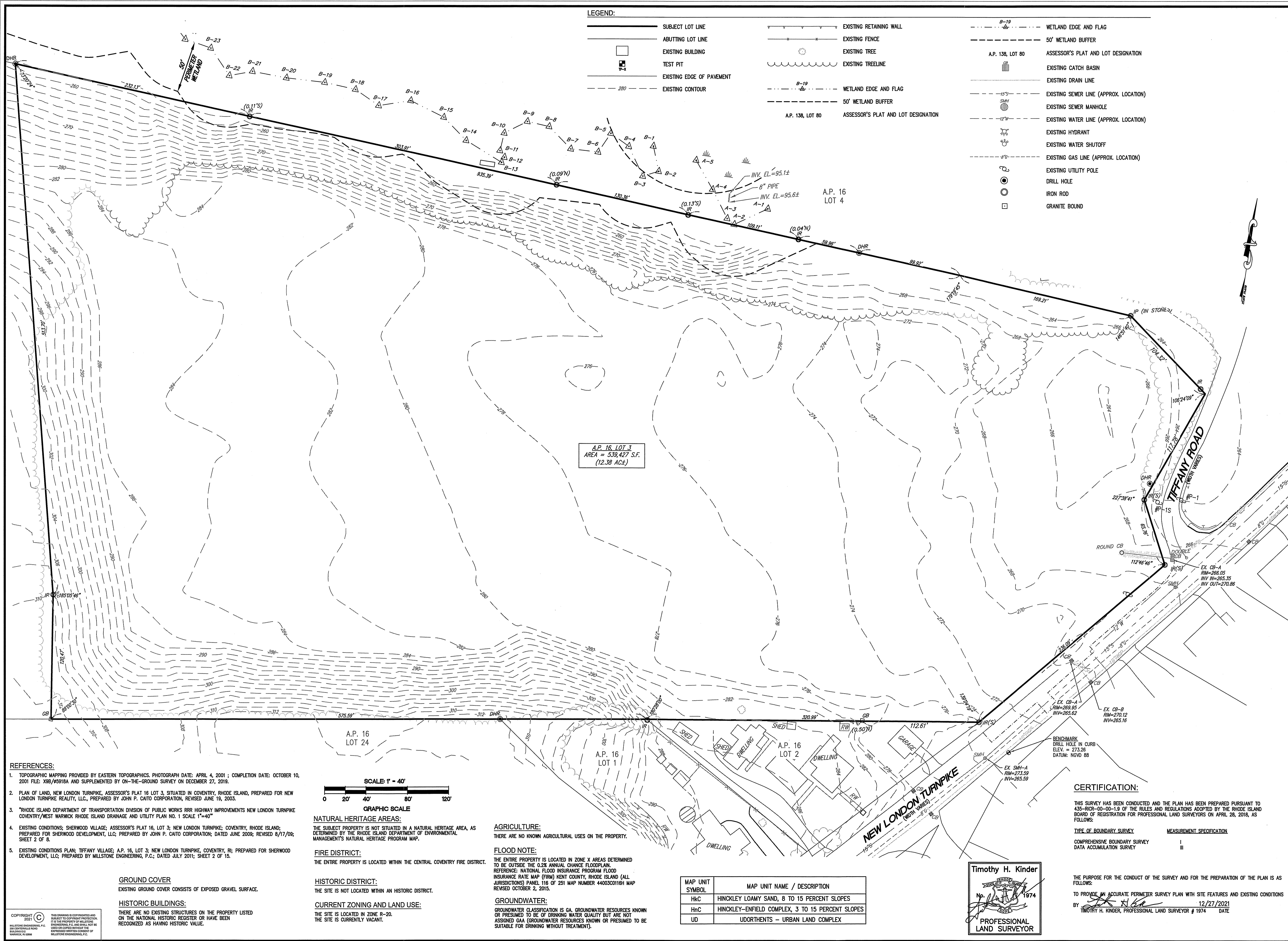
of 12

FILE NO.: 17.276.403

REFERENCES:
1. AERIAL PHOTOGRAPH TAKEN FROM GOOGLE EARTH.
2. LOCUS MAP USGS, CROMPTON QUADRANGLE.

NO.	DATE	REVISION
1	12/27/21	TOWN COMMENTS

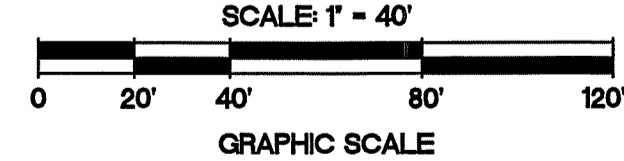
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LEGEND:

- | | | | | | |
|--|---------------------------|--|-------------------------------------|--|--|
| | SUBJECT LOT LINE | | EXISTING RETAINING WALL | | WETLAND EDGE AND FLAG |
| | ABUTTING LOT LINE | | EXISTING FENCE | | 50' WETLAND BUFFER |
| | EXISTING BUILDING | | EXISTING TREE | | ASSESSOR'S PLAT AND LOT DESIGNATION |
| | TEST PIT | | EXISTING TREELINE | | EXISTING CATCH BASIN |
| | EXISTING EDGE OF PAVEMENT | | WETLAND EDGE AND FLAG | | EXISTING DRAIN LINE |
| | EXISTING CONTOUR | | 50' WETLAND BUFFER | | EXISTING SEWER LINE (APPROX. LOCATION) |
| | | | ASSESSOR'S PLAT AND LOT DESIGNATION | | EXISTING SEWER MANHOLE |
| | | | | | EXISTING WATER LINE (APPROX. LOCATION) |
| | | | | | EXISTING HYDRANT |
| | | | | | EXISTING WATER SHUTOFF |
| | | | | | EXISTING GAS LINE (APPROX. LOCATION) |
| | | | | | EXISTING UTILITY POLE |
| | | | | | DRILL HOLE |
| | | | | | IRON ROD |
| | | | | | GRANITE BOUND |

A.P. 16, LOT 3
AREA = 539,427 S.F.
(12.38 AC±)



NATURAL HERITAGE AREAS:
THE SUBJECT PROPERTY IS NOT SITUATED IN A NATURAL HERITAGE AREA, AS DETERMINED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT'S NATURAL HERITAGE PROGRAM MAP.

FIRE DISTRICT:
THE ENTIRE PROPERTY IS LOCATED WITHIN THE CENTRAL COVENTRY FIRE DISTRICT.

HISTORIC DISTRICT:
THE SITE IS NOT LOCATED WITHIN AN HISTORIC DISTRICT.

CURRENT ZONING AND LAND USE:
THE SITE IS LOCATED IN ZONE R-20.
THE SITE IS CURRENTLY VACANT.

AGRICULTURE:
THERE ARE NO KNOWN AGRICULTURAL USES ON THE PROPERTY.

FLOOD NOTE:
THE ENTIRE PROPERTY IS LOCATED IN ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
REFERENCE: NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP (FIRM) KENT COUNTY, RHODE ISLAND (ALL JURISDICTIONS) PANEL 116 OF 251 MAP NUMBER 44003C0116H MAP REVISED OCTOBER 2, 2015.

GROUNDWATER:
GROUNDWATER CLASSIFICATION IS G1. GROUNDWATER RESOURCES KNOWN OR PRESUMED TO BE OF DRINKING WATER QUALITY BUT ARE NOT ASSIGNED GAA (GROUNDWATER RESOURCES KNOWN OR PRESUMED TO BE SUITABLE FOR DRINKING WITHOUT TREATMENT).

MAP UNIT SYMBOL	MAP UNIT NAME / DESCRIPTION
HkC	HINCKLEY LOAMY SAND, 8 TO 15 PERCENT SLOPES
HnC	HINCKLEY-ENFIELD COMPLEX, 3 TO 15 PERCENT SLOPES
UD	UDORTHERENTS - URBAN LAND COMPLEX

Timothy H. Kinder
No. 1974
PROFESSIONAL LAND SURVEYOR

CERTIFICATION:

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-R03-10-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON APRIL 28, 2018, AS FOLLOWS:

TYPE OF BOUNDARY SURVEY	MEASUREMENT SPECIFICATION
COMPREHENSIVE BOUNDARY SURVEY	I
DATA ACCUMULATION SURVEY	III

THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS:

TO PROVIDE AN ACCURATE PERIMETER SURVEY PLAN WITH SITE FEATURES AND EXISTING CONDITIONS
BY *Timothy H. Kinder* 12/27/2021
TIMOTHY H. KINDER, PROFESSIONAL LAND SURVEYOR # 1974 DATE

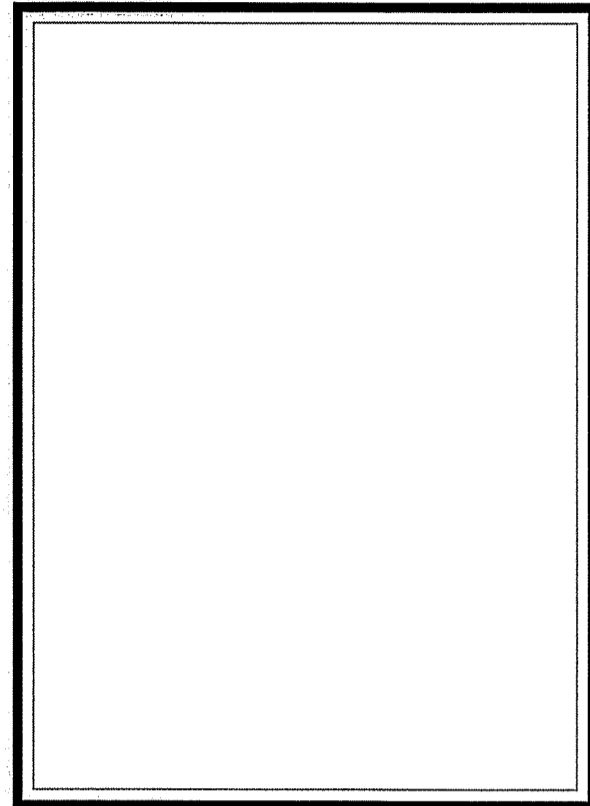
- REFERENCES:**
1. TOPOGRAPHIC MAPPING PROVIDED BY EASTERN TOPOGRAPHICS. PHOTOGRAPH DATE: APRIL 4, 2001 ; COMPLETION DATE: OCTOBER 10, 2001 FILE: X98/45918A AND SUPPLEMENTED BY ON-THE-GROUND SURVEY ON DECEMBER 27, 2019.
 2. PLAN OF LAND, NEW LONDON TURNPIKE, ASSESSOR'S PLAT 16 LOT 3, SITUATED IN COVENTRY, RHODE ISLAND, PREPARED FOR NEW LONDON TURNPIKE REALTY, LLC, PREPARED BY JOHN P. CATO CORPORATION, REVISED JUNE 19, 2003.
 3. "RHODE ISLAND DEPARTMENT OF TRANSPORTATION DIVISION OF PUBLIC WORKS RRR HIGHWAY IMPROVEMENTS NEW LONDON TURNPIKE COVENTRY/WEST WARWICK RHODE ISLAND DRAINAGE AND UTILITY PLAN NO. 1 SCALE 1"=40"
 4. EXISTING CONDITIONS, SHERWOOD VILLAGE, ASSESSOR'S PLAT 16, LOT 3, NEW LONDON TURNPIKE, COVENTRY, RHODE ISLAND; PREPARED FOR SHERWOOD DEVELOPMENT, LLC, PREPARED BY JOHN P. CATO CORPORATION, DATED JUNE 2009; REVISED 8/17/09; SHEET 2 OF 8.
 5. EXISTING CONDITIONS PLAN, TIFFANY VILLAGE, A.P. 16, LOT 3, NEW LONDON TURNPIKE, COVENTRY, RI; PREPARED FOR SHERWOOD DEVELOPMENT, LLC; PREPARED BY MILLSTONE ENGINEERING, P.C.; DATED JULY 2011; SHEET 2 OF 15.

GROUND COVER
EXISTING GROUND COVER CONSISTS OF EXPOSED GRAVEL SURFACE.

HISTORIC BUILDINGS:
THERE ARE NO EXISTING STRUCTURES ON THE PROPERTY LISTED ON THE NATIONAL HISTORIC REGISTER OR HAVE BEEN RECOGNIZED AS HAVING HISTORIC VALUE.

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EXISTING CONDITIONS PLAN

WILLOW LAKES

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

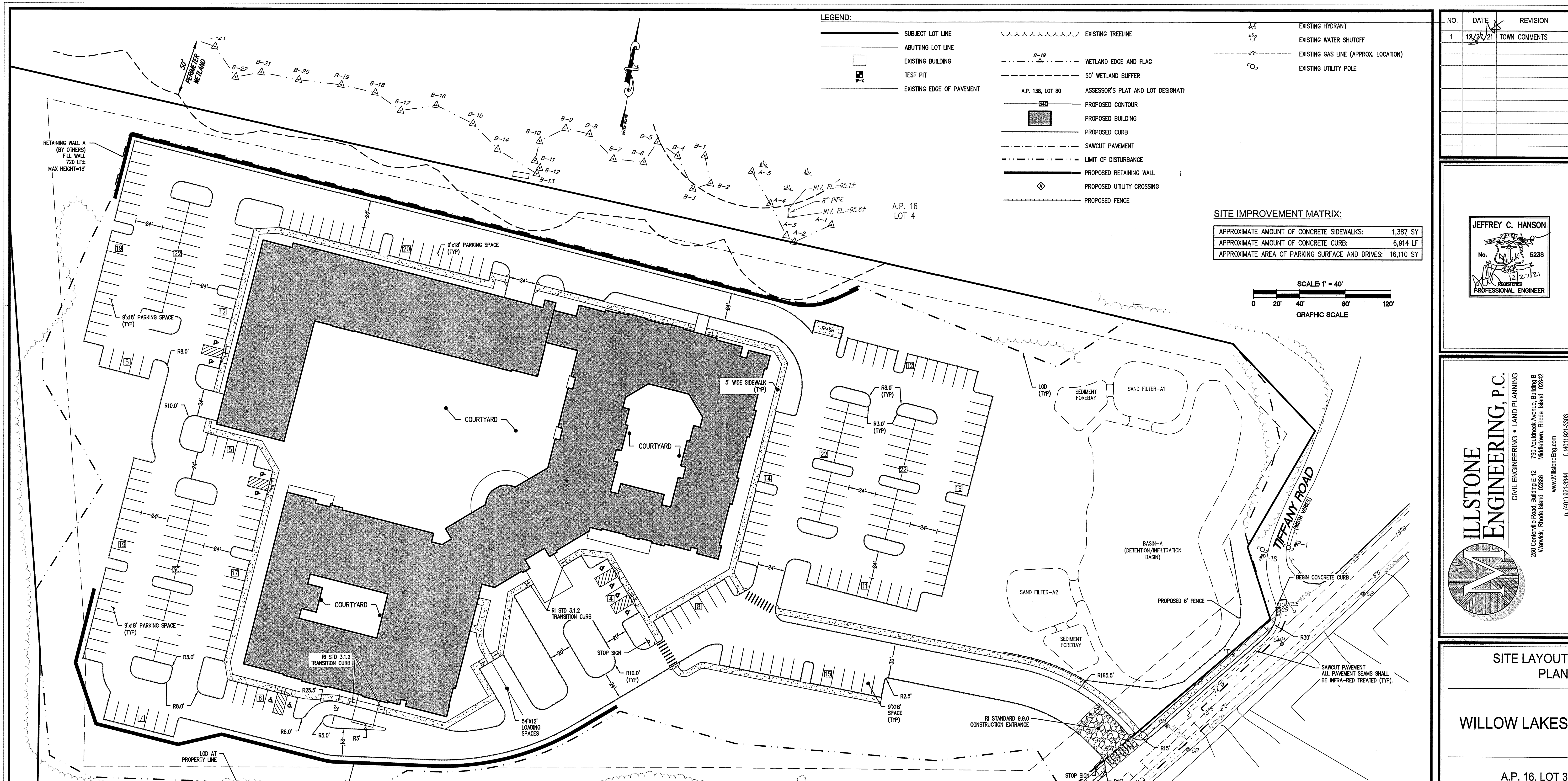
PREPARED FOR:
WILLOW LAKE
PROPERTIES, LLC

1" = 40'
FEBRUARY 2021

Drawn By: J.S.C.
Checked By: J.C.H.

Sheet
2
of 12

FILE NO.: 17.276.403



NO.	DATE	REVISION
1	12/21/21	TOWN COMMENTS

JEFFREY C. HANSON
 No. 5238
 12/21/21
 REGISTERED PROFESSIONAL ENGINEER

MILLSTONE ENGINEERING, P.C.
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 F. (401) 921-3303

SITE LAYOUT PLAN

WILLOW LAKES

A.P. 16, LOT 3
 NEW LONDON TURNPIKE
 COVENTRY, RI

PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

1" = 40'
 FEBRUARY 2021

PARKING REQUIREMENTS:

TABLE 12-1	TYPE OF USE	CODE DESCRIPTION	MINIMUM PARKING SPACES REQUIRED	REQUIRED	PROPOSED
	INDEPENDENT LIVING	MULTI-FAMILY	(124 STANDARD UNITS) X (2 SPACES / UNIT) = 248	248 SPACES	
	ASSISTED LIVING	HOME FOR THE AGED	(48 BEDS) X (1 SPACE / 4 BEDS) = 12	12 SPACES	
	MEMORY CARE	NURSING HOME	(14 EMPLOYEES) * (1 SPACE / 2 EMPLOYEES) = 7	7 SPACES	
			(30 BEDS) X (1 SPACE / 4 BEDS) = 7.5	8 SPACES	
			(8 EMPLOYEES) * (1 SPACE / 2 EMPLOYEES) = 4	4 SPACES	
	TOTAL			279 SPACES	289 SPACES
	ACCESSIBLE SPACES	ACCESSIBLE SPACES	201 - 300 SPACES = 7 SPACES ⁽¹⁾	7 SPACES	10 SPACES

NOTES:

- REFERENCE CODE REQUIREMENTS FOR HOUSING ACCESSIBILITY BY INTERNATIONAL CODE COUNCIL.

ZONING DATA TABLE: CURRENT ZONE: R-20

MULTIFAMILY REGULATIONS	REQUIRED	A.P. 16, LOT 3
SECTION 1455: - MAXIMUM STRUCTURE HEIGHT	3 STORIES OR 35 ft.	35'
SECTION 1460 - STANDARDS FOR MULTI-FAMILY BUILDINGS:		
MINIMUM MULTI-FAMILY YARD DIMENSIONS:		
FRONT YARD	40 ft.	>40 ft.
SIDE YARD	40 ft.	>40 ft.
REAR YARD	40 ft.	>40 ft.
MINIMUM DISTANCE BETWEEN MULTI-FAMILY BUILDINGS:		
PARALLEL	50 ft.	N/A
ABUTTING ENDS	40 ft.	N/A
SECTION 1480: - OPEN SPACE	40%	59% ±
LOT COVERAGE (IMPERVIOUS)	NONE ^(D)	41% ±
LAND SUITABLE FOR DEVELOPMENT	NONE ^(D)	9.7 AC ^(D)

NOTES:

- NO STANDARD IN MULTIFAMILY SECTION
- UNSUITABLE LAND CALCULATION:

SITE AREA:	539,427 SF
- WETLANDS (INCLUDING PERIMETER):	12,255 SF
FLOOD ZONE A:	NONE
STEEP SLOPES (EXCLUDING STOCKPILES):	94,703 SF
STREET ALLOWANCE:	10,080 SF
EXISTING EASEMENTS:	NONE
CEMETERIES:	422,389 SF (9.7 AC)

REQUIRED APPROVALS:

THIS PROJECT WAS PREVIOUSLY APPROVED AS "TIFFANY VILLAGE" (SEE REFERENCED PLANS). AT A MINIMUM, THE FOLLOWING APPROVALS/PERMITS WILL REQUIRE MODIFICATION:

- MASTER PLAN
- SPECIAL USE PERMIT FOR MULTIFAMILY USE
- COMPREHENSIVE PERMIT
- KENT COUNTY WATER AUTHORITY
- COVENTRY SEWER
- CENTRAL COVENTRY FIRE DISTRICT
- RHODE ISLAND POLLUTANT DISCHARGES ELIMINATION SYSTEM (RPDES) PERMIT
- EAST GREENWICH PHASE II STORMWATER PERMIT
- COVENTRY SEDIMENT CONTROL ORDINANCE PERMIT
- ROAD OPENING PERMIT - EAST GREENWICH
- ROAD OPENING PERMIT - WEST WARWICK
- PRELIMINARY PLAN
- FINAL PLAN

REFERENCE:

PLANS ENTITLED "CONSTRUCTION DRAWINGS FOR TIFFANY VILLAGE; A.P. 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND"; PREPARED FOR SHERWOOD DEVELOPMENT, LLC, PREPARED BY MILLSTONE ENGINEERING, P.C. DATED JULY 2011; SHEETS 1-16 OF 16 REVISED THROUGH 2/20/2021.

NOTES:

- SITE CONTRACTOR IS RESPONSIBLE FOR BRINGING UTILITIES WITHIN 5 FEET OF THE BUILDING.
- COORDINATE WITH ARCHITECTURAL DRAWINGS FOR BUILDING UTILITY CONNECTION POINTS.
- RETAINING WALLS SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE TOWN ENGINEER.

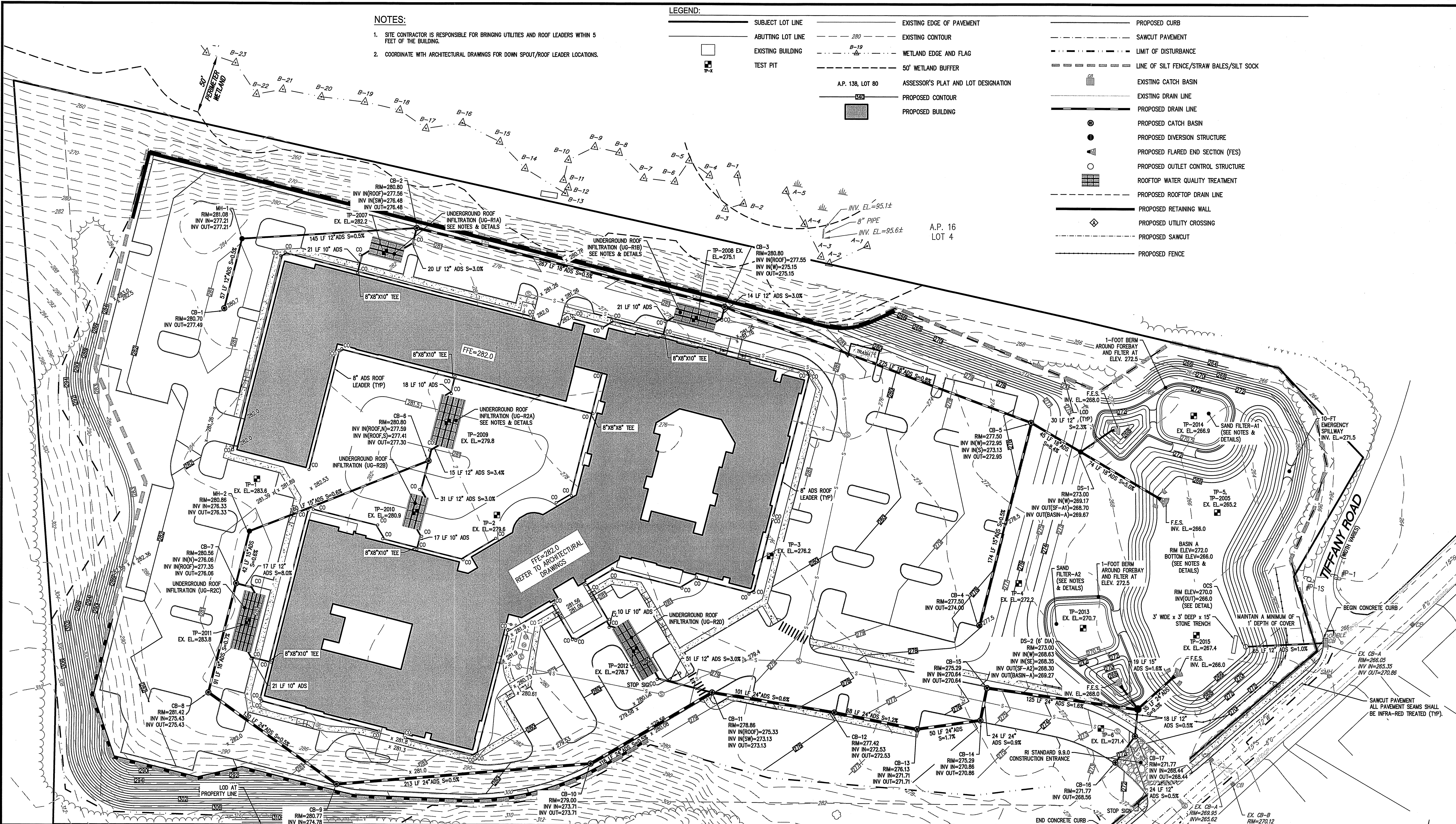
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NOTES:

- SITE CONTRACTOR IS RESPONSIBLE FOR BRINGING UTILITIES AND ROOF LEADERS WITHIN 5 FEET OF THE BUILDING.
- COORDINATE WITH ARCHITECTURAL DRAWINGS FOR DOWN SPOUT/ROOF LEADER LOCATIONS.

LEGEND:

- SUBJECT LOT LINE
- ABUTTING LOT LINE
- EXISTING BUILDING
- TEST PIT
- EXISTING EDGE OF PAVEMENT
- EXISTING CONTOUR
- WETLAND EDGE AND FLAG
- 50' WETLAND BUFFER
- A.P. 138, LOT 80
- PROPOSED CONTOUR
- PROPOSED BUILDING
- PROPOSED CURB
- SAWCUT PAVEMENT
- LIMIT OF DISTURBANCE
- EXISTING CATCH BASIN
- EXISTING DRAIN LINE
- PROPOSED DRAIN LINE
- PROPOSED CATCH BASIN
- PROPOSED DIVERSION STRUCTURE
- PROPOSED FLARED END SECTION (FES)
- PROPOSED OUTLET CONTROL STRUCTURE
- ROOFTOP WATER QUALITY TREATMENT
- PROPOSED ROOFTOP DRAIN LINE
- PROPOSED RETAINING WALL
- PROPOSED UTILITY CROSSING
- PROPOSED SAWCUT
- PROPOSED FENCE



TEST HOLE DATA

TEST HOLE	EXISTING GRADE	DEPTH TO SHOWT	SHOWT ELEV.	DEPTH TO LEDGE	LEDGE ELEV.	HOLE DEPTH	BOTTOM ELEV.
1	283.6	8.0'	275.6	NONE FOUND	N/A	12.0'	271.6
2	279.6	9.0'	270.6	NONE FOUND	N/A	13.0'	266.6
3	276.2	8.0'	268.2	NONE FOUND	N/A	10.0'	266.2
4	272.2	6.0'	266.2	NONE FOUND	N/A	18.0'	254.2
5, 2005	265.2	5.0'	260.2	NONE FOUND	N/A	13.0'	252.2
2007	282.2	11.0'	271.2	NONE FOUND	N/A	13.0'	269.2
2008	275.1	11.0'	264.1	NONE FOUND	N/A	13.0'	262.1
2009	279.8	9.0'	270.8	NONE FOUND	N/A	15.0'	264.8
2010	280.9	10.0'	270.9	NONE FOUND	N/A	15.0'	265.9
2011	283.8	12.0'	271.8	NONE FOUND	N/A	14.0'	269.8
2012	278.7	8.0'	270.7	NONE FOUND	N/A	14.0'	264.7
2013	270.7	10.7'	260.0	NONE FOUND	N/A	13.0'	257.7
2014	266.9	8.0'	258.9	NONE FOUND	N/A	12.0'	254.9
2015	267.4	8.0'	259.4	NONE FOUND	N/A	13.0'	254.4

* NO SHOWT FOUND - ASSUMED TO BE 2' ABOVE BOTTOM OF TEST HOLE

STORMWATER MATRIX:

LENGTH OF 8" ADS DRAIN LINE:	2,130 LF
LENGTH OF 10" ADS DRAIN LINE:	87 LF
LENGTH OF 12" ADS DRAIN LINE:	422 LF
LENGTH OF 15" ADS DRAIN LINE:	395 LF
LENGTH OF 18" ADS DRAIN LINE:	752 LF
LENGTH OF 24" ADS DRAIN LINE:	862 LF
NUMBER OF CATCH BASINS:	17
NUMBER OF DRAIN MANHOLES:	4

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NO.	DATE	REVISION
1	12/23/20	TOWN COMMENTS

JEFFREY C. HANSON
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GRADING AND DRAINAGE PLAN

WILLOW LAKES

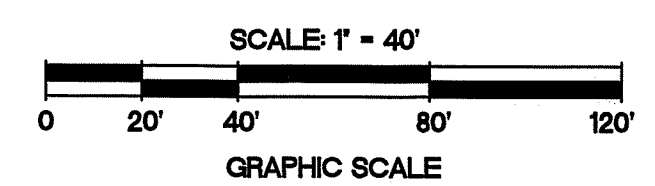
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NEW LONDON TURNPIKE
COVENTRY, RI

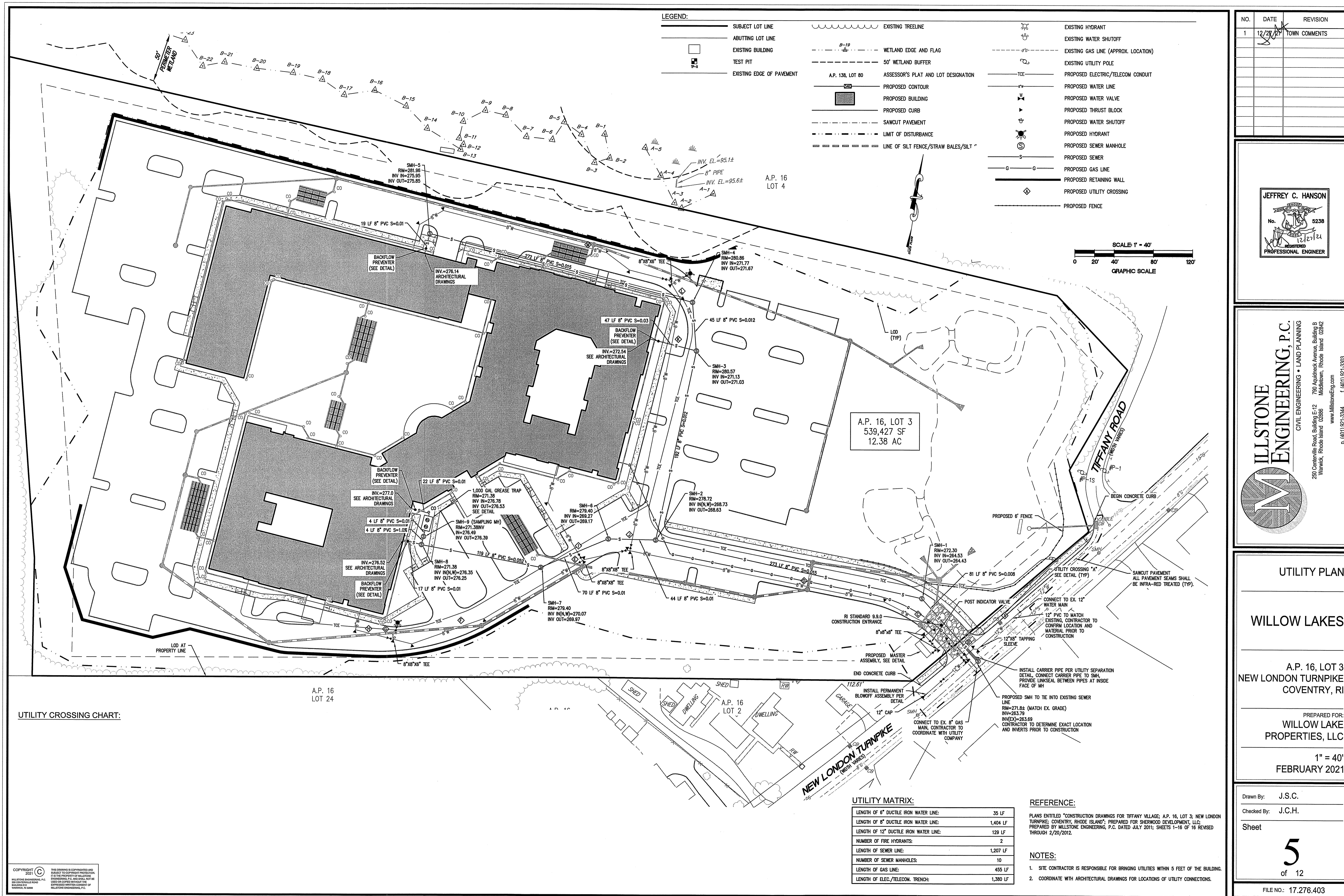
PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

1" = 40'
FEBRUARY 2021

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Checked By: J.C.H.
Sheet
4
of 12
FILE NO.: 17.276.403

REFERENCE:
PLANS ENTITLED "CONSTRUCTION DRAWINGS FOR TIFFANY VILLAGE; A.P. 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND"; PREPARED FOR SHERWOOD DEVELOPMENT, LLC; PREPARED BY MILLSTONE ENGINEERING, P.C. DATED JULY 2011; SHEETS 1-16 OF 16 REVISED THROUGH 2/20/2021.





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JEFFREY C. HANSON
 No. 5238
 12/21/21
 REGISTERED PROFESSIONAL ENGINEER

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UTILITY PLAN

WILLOW LAKES

A.P. 16, LOT 3
 NEW LONDON TURNPIKE
 COVENTRY, RI

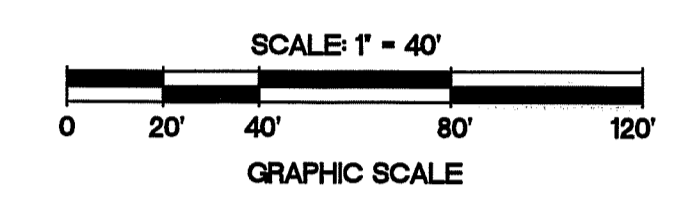
PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

1" = 40'
 FEBRUARY 2021

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 Checked By: J.C.H.
 Sheet
5
 of 12
 FILE NO.: 17.276.403

LEGEND:

- SUBJECT LOT LINE
- ABUTTING LOT LINE
- EXISTING BUILDING
- TEST PIT
- EXISTING EDGE OF PAVEMENT
- EXISTING TREELINE
- WETLAND EDGE AND FLAG
- 50' WETLAND BUFFER
- ASSASSOR'S PLAT AND LOT DESIGNATION
- PROPOSED CONTOUR
- PROPOSED BUILDING
- PROPOSED CURB
- SAWCUT PAVEMENT
- LIMIT OF DISTURBANCE
- LINE OF SILT FENCE/STRAW BALES/SILT
- EXISTING HYDRANT
- EXISTING WATER SHUTOFF
- EXISTING GAS LINE (APPROX. LOCATION)
- EXISTING UTILITY POLE
- PROPOSED ELECTRIC/TELECOM CONDUIT
- PROPOSED WATER LINE
- PROPOSED WATER VALVE
- PROPOSED THRUST BLOCK
- PROPOSED WATER SHUTOFF
- PROPOSED HYDRANT
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER
- PROPOSED GAS LINE
- PROPOSED RETAINING WALL
- PROPOSED UTILITY CROSSING
- PROPOSED FENCE



UTILITY CROSSING CHART:

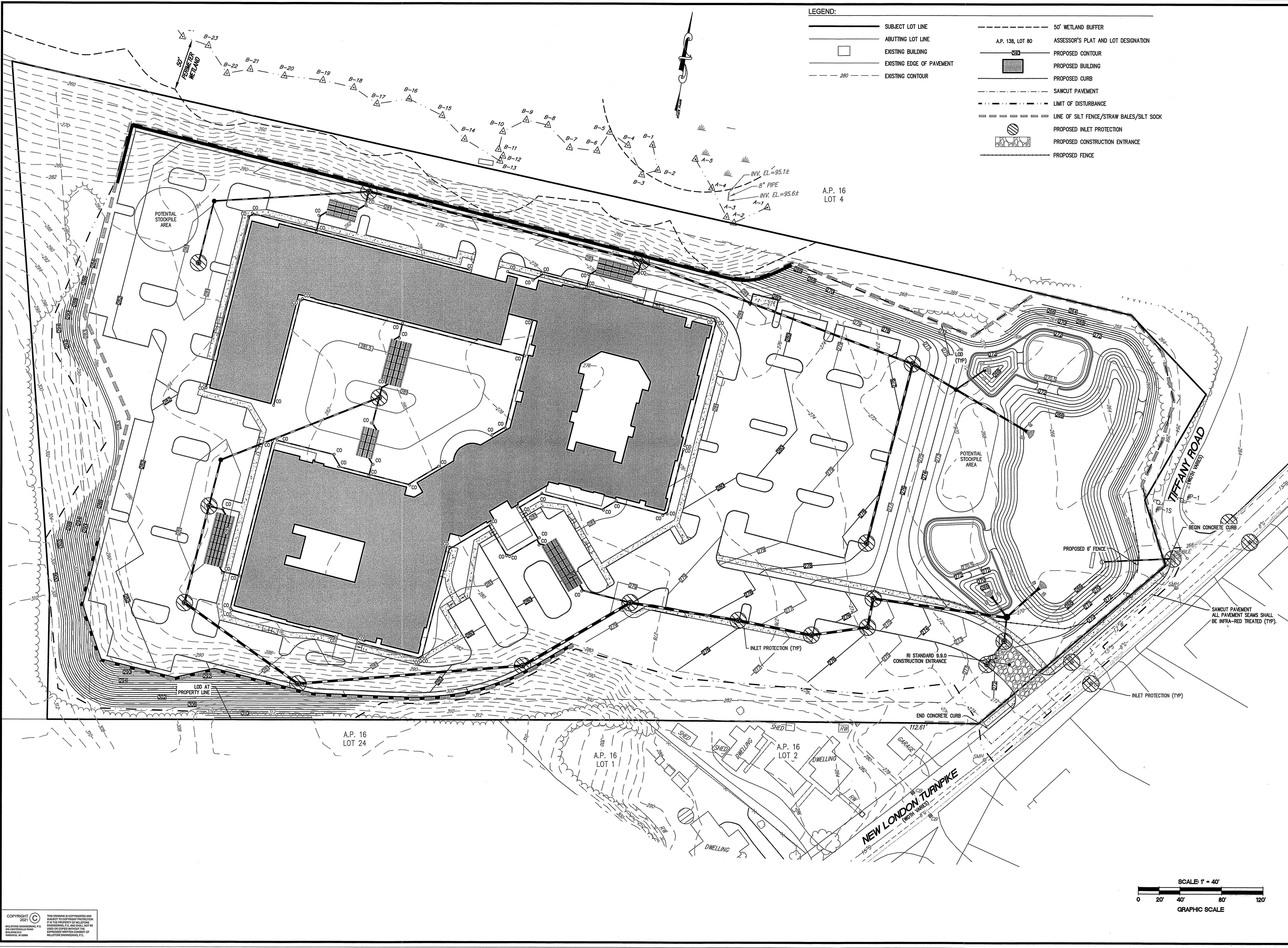
UTILITY MATRIX:

LENGTH OF 6" DUCTILE IRON WATER LINE:	35 LF
LENGTH OF 8" DUCTILE IRON WATER LINE:	1,404 LF
LENGTH OF 12" DUCTILE IRON WATER LINE:	129 LF
NUMBER OF FIRE HYDRANTS:	2
LENGTH OF SEWER LINE:	1,207 LF
NUMBER OF SEWER MANHOLES:	10
LENGTH OF GAS LINE:	455 LF
LENGTH OF ELEC./TELECOM. TRENCH:	1,380 LF

REFERENCE:
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NOTES:
 1. SITE CONTRACTOR IS RESPONSIBLE FOR BRINGING UTILITIES WITHIN 5 FEET OF THE BUILDING.
 2. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF UTILITY CONNECTIONS.

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- LEGEND:**
- SUBJECT LOT LINE
 - ABUTTING LOT LINE
 - EXISTING BUILDING
 - EXISTING EDGE OF PAVEMENT
 - EXISTING CONTOUR
 - 50' WETLAND BUFFER
 - A.P. 138, LOT 80
 - ASSESSOR'S PLAT AND LOT DESIGNATION
 - PROPOSED CONTOUR
 - PROPOSED BUILDING
 - PROPOSED CURB
 - SAWCUT PAVEMENT
 - LIMIT OF DISTURBANCE
 - LINE OF SILT FENCE/STRAW BALES/SILT SOCK
 - PROPOSED INLET PROTECTION
 - PROPOSED CONSTRUCTION ENTRANCE
 - PROPOSED FENCE

NO.	DATE	REVISION
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SOIL EROSION AND SEDIMENT CONTROL PLAN

WILLOW LAKES

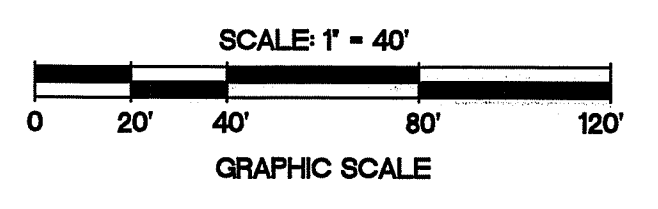
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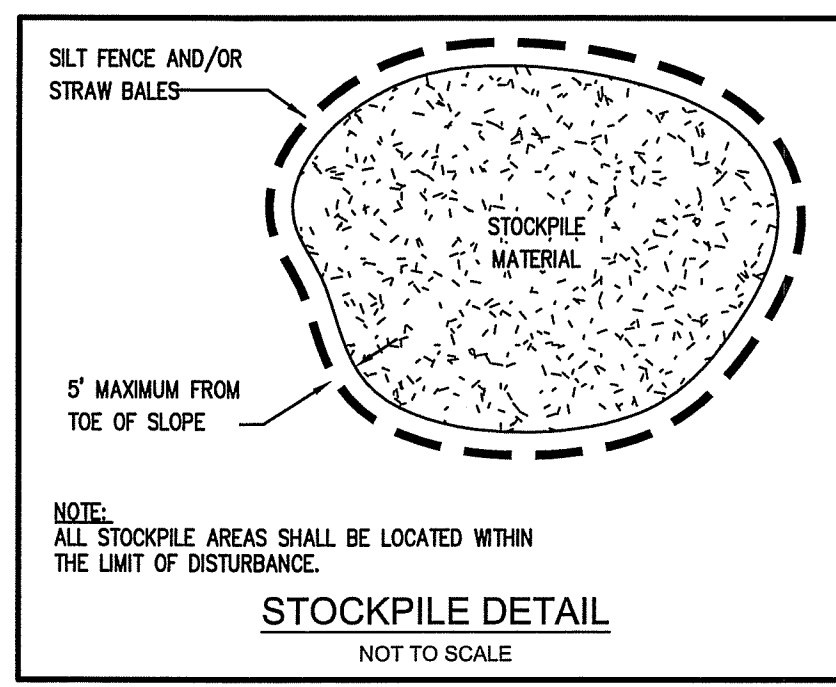
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1" = 40'
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SEDIMENTATION CONTROL PROGRAM:

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUN-OFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
- CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORMWATER FLOWAGE.
- SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION.
- EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED INCLUDING:
 - THE INSTALLATION OF A CONTINUOUS LINE OF STAKED STRAWBALES, SILT FENCE, OR SIMILAR IN ALL LOCATIONS SHOWN ON THE APPROVED SITE PLANS AND WHERE OTHERWISE NECESSARY TO PREVENT SEDIMENTS FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
 - ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER PRIOR TO THE COMPLETION OF THE PROJECT. AREAS EXPOSED FOR EXTENDED PERIODS ARE TO BE COMPLETELY COVERED WITH SPREAD HAY MULCH.
 - CATCH BASINS SHALL BE PROTECTED WITH STRAWBALE OR SILT SOCK FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT.
 - OUTFALLS SHALL BE PROTECTED BY STRAWBALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.
 - ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REMAIN TOTALLY UNDISTURBED.
- IF AREAS OF 1-5 ACRES ARE TO BE DISTURBED AT ONE TIME, A TEMPORARY SEDIMENT TRAP SHALL BE DESIGNED AND SITED IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, SECTION 6 AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO LAND DISTURBANCE.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM:

- DENuded SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS THE INACTIVE WINTER SEASONS.
- TEMPORARY TREATMENTS SHALL CONSIST OF STRAW, FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
- ALL STRAWBALES OR TEMPORARY PROTECTION SHALL REMAIN IN-PLACE UNTIL AN ACCEPTABLE STAND OF GRASS, RIP-RAP OR APPROVED GROUND COVER IS ESTABLISHED.
- THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND STANDARD SPECIFICATION M.18.02.
- THE DESIGN MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT
CREeping RED FESCUE	70
ASTORIA BENTGRASS	5
BIRDFOOT TREFOIL	15
PERENNIAL RYEGRASS	10
APPLICATION RATE	100 LBS/ACRE
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR, AND SHALL DO SO AT NO ADDITIONAL EXPENSE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
- STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%), SHALL ALSO BE SEEDED AND/OR STABILIZED AND SHALL BE COMPLETELY ENCLOSED WITH STAKED HAY BALES AND/OR SILT FENCE. (SEE DETAIL.)
- ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
- AREAS TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
- ALL PROPOSED PLANTINGS AND PLACEMENT OF RIP-RAP MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
- ALL DISTURBED AREAS MUST BE SEEDED, PLANTED OR RIP-RAPPED WITHIN THE CONSTRUCTION SEASON.
- TEMPORARY SEEDING MUST BE COMPLETED WITHIN ONE (1) MONTH AFTER DISTURBANCE.
- ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDED, PLANTED OR RIP-RAPPED BEFORE OCTOBER 1ST, IF NOT THEY MUST BE TEMPORARILY SEEDED.

BMP CONSTRUCTION SEQUENCES:

- GENERAL:**
- GREAT CARE SHALL BE GIVEN TO THE AREAS WHERE STRUCTURES WHICH REQUIRE INFILTRATION AS A MECHANISM FOR STORMWATER TREATMENT AND/OR DISPOSAL ARE PROPOSED PRIOR TO THEIR CONSTRUCTION. NO INFILTRATION STRUCTURE SHALL BE CONSTRUCTED NOR ACCEPT RUNOFF UNTIL ALL UP-GRADING AREAS OF THE "DISTURBED" HAVE BEEN BUILT AND FULLY STABILIZED SO AS TO HAVE NO POTENTIAL FOR SEDIMENT OR SILT DEPOSITION. ALSO, ONCE THE ENTIRE SITE IS STABILIZED ALL SEED MEASURES SHALL BE REMOVED.
 - THE DESIGN SEED MIX FOR ALL PERMANENT STORMWATER BASINS SHALL BE COMPRISED OF THE FOLLOWING AND PLANTED IN A MINIMUM OF A 6" DEPTH OF SANDY LOAM FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS:

TYPE	% BY WEIGHT
CREeping RED FESCUE	70
KENTUCKY BLUEGRASS	15
TALL FESCUE	15
 - APPLICATION RATE 100 LBS/ACRE
 - LIMING AND FERTILIZING AS REQUIRED TO COMPLEMENT OR UPGRADE EXISTING CONDITIONS.
- SAND FILTERS:**
- EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
 - INSTALL 4" OF SAND AND ROTO-TILL TO MIX INTO THE SUBSOIL INTERFACE
 - SAND FILTER SAND SHALL BE ASTM C33 CONCRETE SAND
 - INSTALL REMAINDER OF SAND
 - INSTALL NON-WOVEN GEOTEXTILE
 - INSTALL 6" WASHED CRUSHED STONE & PERFORATED DISBURSAL PIPING
 - INSTALL NON-WOVEN GEOTEXTILE
 - LOAM AND SEED PER DETAILS WITH PERMANENT SEED MIXTURE & DRAINS
- DEFENTION / INFILTRATION BASIN:**
- EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
 - INSTALL CURBING SET LEVEL
 - LOAM AND SEED ACCORDINGLY WITH PERMANENT SEED MIXTURE
- LEVEL SPREADER:**
- EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
 - INSTALL CURBING SET LEVEL
 - LOAM AND SEED PER DETAILS WITH PERMANENT SEED MIXTURE
- ROOFTOP UNDERGROUND INFILTRATION:**
- EXCAVATE TO THE LINES AND GRADES OF THE DESIGN AND PREPARE SUBGRADE PER PLANS.
 - PLACE NON-WOVEN GEOTEXTILE OVER PREPARED SOILS AND UP EXCAVATION WALLS.
 - PLACE CLEAN, CRUSHED, ANGULAR STONE FOUNDATION.
 - COMPACT TO ACHIEVE A FLAT SURFACE.
 - INSTALL MANIFOLDS AND LAY OUT WOVEN SCOUR GEOTEXTILE AT INLET ROWS.
 - ALIGN THE FIRST CHAMBER AND END CAP OF EACH ROW WITH INLET PIPE.
 - CONSTRUCT CHAMBER BED BY OVERLAPPING CHAMBERS LENGTHWISE IN ROWS. ATTACH CHAMBERS BY OVERLAPPING END OF CORRUGATION OF ONE CHAMBER ON TO THE END OF CORRUGATION OF THE LAST CHAMBER IN THE ROW.
 - LIFT THE END OF THE CHAMBER A FEW INCHES OFF GROUND AND ATTACH END CAP.
 - DRAPE A STRIP OF ADS NON-WOVEN GEOTEXTILE OVER THE ROW OF CHAMBERS.
 - BACKFILL CHAMBERS EVENLY UNTIL STONE REACHES TOP OF CHAMBERS.
 - INSTALL NON-WOVEN GEOTEXTILE OVER STONE. COMPACT EACH LIFT OF BACKFILL AS SPECIFIED IN PLANS.

LONG-TERM MAINTENANCE SCHEDULE (O&M):

LONG-TERM MAINTENANCE OF THE DRAINAGE SYSTEM SHALL BE COMPLETED BY THE APPLICANT/OPERATOR UNDER A LEGALLY BINDING AND ENFORCEABLE MAINTENANCE AGREEMENT. THE TOWNS OF COVENTRY AND EAST GREENWICH ARE NOT MAINTAINERS FOR MAINTENANCE OF THE BMP'S.

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THE CONTRACTOR / OPERATOR SHALL MAINTAIN ALL DRAINAGE COMPONENTS DURING AND DIRECTLY AFTER CONSTRUCTION. ALL PERMANENT MAINTENANCE REQUIREMENTS WILL BE RECORDED ON THE TITLE.

OPERATOR / CONTRACTOR: DEFAULTS TO OWNER UNTIL HOMEOWNERS' ASSOCIATION HAS BEEN CREATED

THE ENTIRE STORMWATER SYSTEM SHALL BE INSPECTED THROUGHOUT THE CONSTRUCTION PROCESS AND REPORTED ON THE ATTACHED CONSTRUCTION INSPECTION REPORTING FORMS.

THE ENTIRE STORMWATER MANAGEMENT SYSTEM SHALL BE INSPECTED ON A BI-ANNUAL BASIS FOR GENERAL PROBLEMS AND TO ENSURE PROPER FUNCTION AND AFTER STORM EVENTS GREATER THAN OR EQUAL TO THE 1-YR, 24-HR TYPE III PRECIPITATION EVENT (2.7"). THESE INSPECTIONS SHALL BE REPORTED ON THE ATTACHED O&M INSPECTION REPORTING FORMS.

ALL INSPECTIONS REPORTS SHALL BE KEPT ON FILE WITH THE STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PLAN.

SEDIMENT FOREBAY:

- THE SLOPES SHOULD BE INSPECTED FOR EROSION AND GULLING
- RIPRAP SHOULD BE REINFORCED IF EROSION IS PRESENT AT OUTFALLS OR IF IT HAS BEEN COMPROMISED
- INSPECT ALL STRUCTURAL COMPONENTS SUCH AS TRASH RACKS, ACCESS GATES, VALVES, PIPES, WEIRS, WALLS, ORFICE STRUCTURES AND SPILLWAY STRUCTURES FOR DEFECTS AND ANY MUST BE REPAIRED IMMEDIATELY
- INSPECT FOR SEDIMENT ACCUMULATION AND IT SHOULD BE REMOVED IF IT REACHES 9" OR 25% OF THE STORAGE VOLUME
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF AND MOW IMMEDIATELY SHOULD IT REACH 10". ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHOULD EVER BE ALLOWED TO REMAIN IN AND AROUND THE FOREBAY
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY INLETS AND OUTLETS SHALL BE CLEARED OF DEBRIS AS NEEDED

SAND FILTER:

- THE FACILITY SHOULD BE INSPECTED ANNUALLY TO ENSURE INFILTRATION RATES ARE BEING MET. IF STANDING WATER IS OBSERVED FOR MORE THAN 48 HRS AFTER A RAIN EVENT, THE TOP 6" SHOULD BE ROTOILLED AND ANY COMPACTED REMOVED. IF THIS DOESN'T SOLVE THE PROBLEM, THE TOP 6" OF THE SAND FILTER SHALL BE REMOVED AND REPLACED.
- RIPRAP SHOULD BE REINFORCED IF EROSION IS PRESENT AT OUTFALLS OR IF IT HAS BEEN COMPROMISED
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF, ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHOULD EVER BE ALLOWED TO REMAIN IN AND AROUND THE FOREBAYS
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY
- INLETS AND OUTLETS SHALL BE CLEARED OF DEBRIS AS NEEDED

ROOFTOP UNDERGROUND INFILTRATION:

- THE SYSTEM SHOULD BE INSPECTED AT A MINIMUM OF ONE TIME A YEAR OR AFTER MAJOR RAIN EVENTS IF NECESSARY.
- LOCATE THE RISER SECTION OF THE SYSTEM AND REMOVE THE LID FROM THE RISER.
- MEASURE THE SEDIMENT BUILDUP AT EACH RISER AND CLEANOUT LOCATION. ONLY CERTIFIED CONFINED SPACE ENTRY PERSONNEL HAVING APPROPRIATE EQUIPMENT SHOULD BE PERMITTED TO ENTER THE SYSTEM.
- INSPECT EACH MANIFOLD, ALL LATERALS, AND OUTLET PIPES FOR SEDIMENT BUILD UP, OBSTRUCTIONS OR OTHER PROBLEMS.
- IF MEASURED SEDIMENT BUILD UP IS BETWEEN 5%-20% OF THE PIPE DIAMETER, CLEANING SHOULD BE CONSIDERED; IF SEDIMENT BUILD UP EXCEEDS 20%, CLEANING SHOULD BE PERFORMED AT THE EARLIEST OPPORTUNITY. A THOROUGH CLEANING OF THE SYSTEM (MANIFOLDS AND LATERALS) SHALL BE PERFORMED BY EITHER MANUAL METHODS OR BY A VACUUM TRUCK.

DEFENTION / INFILTRATION BASIN:

- THE FACILITY SHOULD BE INSPECTED ANNUALLY TO ENSURE INFILTRATION RATES ARE BEING MET. IF STANDING WATER IS OBSERVED FOR MORE THAN 48 HRS AFTER A RAIN EVENT, THE TOP 6" SHOULD BE ROTOILLED AND ANY COMPACTED REMOVED. IF THIS DOESN'T SOLVE THE PROBLEM, THE TOP 6" OF THE BASIN SHALL BE REMOVED AND REPLACED.
- THE FACILITY SHOULD BE INSPECTED ANNUALLY FOR EROSION, GULLING OR DAMAGE AND CLEANED OF DEBRIS AND TRASH
- RIPRAP SHOULD BE REINFORCED IF EROSION IS PRESENT AT OUTFALLS OR IF IT HAS BEEN COMPROMISED
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF, ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHOULD EVER BE ALLOWED TO REMAIN IN AND AROUND THE FOREBAYS
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY
- INLETS AND OUTLETS SHALL BE CLEARED OF DEBRIS AS NEEDED

CATCH BASINS AND DRAINAGE SYSTEM:

- ALL CATCH BASINS AND STORM DRAIN PIPES SHALL BE ANNUALLY CHECKED FOR SEDIMENT AND DEBRIS AND CLEANED / JETTED AS NECESSARY.
- ALL COSTS INCURRED FOR MAINTENANCE, CLEANING, AND INSPECTION ARE THE RESPONSIBILITY OF THE PROPERTY OWNER UPON ACCEPTANCE.
- PAVEMENT SWEEPING SHALL BE PERFORMED ANNUALLY, PREFERABLY IN THE SPRING, AFTER ROADWAY SANDING IS COMPLETED FOR THE SEASON.

ESTIMATED O&M BUDGET & FUNDING SOURCE:

- THE PROJECT OPERATOR WILL BE THE OWNER, WHO SHALL BE RESPONSIBLE FOR FUNDING THE O&M BUDGET.

ESTIMATE OF O&M BUDGET:

BI-ANNUAL INSPECTIONS:	\$1000 EA x 2	\$2,000
BI-WEEKLY MOWING:	\$200 EA x 13	\$2,600
MISC. REPAIRS:	\$1,000	\$1,000
PAVEMENT SWEEPING:	\$1,000	\$1,000
ADDITIONAL INSPECTIONS:	\$1,000 EA x 2	\$2,000
TOTAL ESTIMATE:		\$8,600 / YR

CONSTRUCTION MAINTENANCE:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE AND REPAIR TO ALL DRAINAGE STRUCTURES AND RELATED APPURTENANCES ON THE SITE DURING CONSTRUCTION AND FOR A MAXIMUM OF ONE (1) YEAR FOLLOWING COMPLETION OF CONSTRUCTION, AT WHICH TIME THE DRAINAGE STRUCTURES AND APPURTENANCES ARE TO BE ACCEPTED BY THE ENGINEER AND THE OWNER, AS FOLLOWS:
- ALL CATCH BASINS AND STORM DRAIN PIPES SHALL BE CLEANED OF SEDIMENT, STORMWATER BASINS SHALL BE CLEANED OF SEDIMENT TO THE DESIGN GRADES INDICATED ON THE CONSTRUCTION DRAWINGS.
 - INSPECTION OF THE BASINS AND ALL INLET AND OUTLET STRUCTURES SHALL BE PERFORMED ON A WEEKLY BASIS, PREFERABLY DURING A STORM EVENT TO INSPECT FOR PROPER FUNCTIONALITY OF THE FACILITY.
 - GRASSES MUST BE PLANTED AROUND AND WITHIN THE STORMWATER BASIN IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE THE SLOPES AND PREVENT EROSION.
 - SEDIMENTS SHALL BE REMOVED FROM DRAINAGE STRUCTURES AND THE STORMWATER BASINS IMMEDIATELY FOLLOWING SITE STABILIZATION AND DURING THE FIRST (INITIAL) YEAR OF OPERATION.
 - ALL COSTS INCURRED FOR MAINTENANCE, CLEANING, AND INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION AND THE PROPERTY OWNER UPON ACCEPTANCE.
 - ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION OF THE RIDEM.
 - ALL TRASH AND LITTER AND OTHER DEBRIS SHALL BE REMOVED FROM ANY STORMWATER FACILITY DAILY, INCLUDING INLET AND OUTLET STRUCTURES.
 - REPAIRS OR REPLACEMENT OF INLET/OUTLET STRUCTURES, RIP-RAP CHANNELS, FENCES, OR OTHER ELEMENTS OF THE FACILITY DURING CONSTRUCTION SHALL BE DONE WITHIN 30 DAYS OF DEFICIENCY REPORTS.
 - PAVEMENT SWEEPING SHALL BE PERFORMED UPON COMPLETION OF THE PROJECT.
 - WATER SHALL BE USED TO MOISTEN EXPOSED SOIL SURFACES PERIODICALLY. AN ADEQUATE AMOUNT SHOULD BE USED TO CONTROL DUST.

POLLUTION PREVENTION PLAN:

GENERAL:

LONG-TERM MANAGEMENT OF THE POLLUTION PREVENTION PLAN SHALL BE THE RESPONSIBILITY OF THE OWNER / OPERATOR.

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THE CONTRACTOR SHALL MANAGE THE POLLUTION PREVENTION PLAN DURING THE CONSTRUCTION PROCESS.

CONTRACTOR: TBD

SOLID WASTE CONTAINMENT:

- TRASH RACKS WHERE PRACTICAL SHALL BE INSTALLED AND MAINTAINED ON ALL INLET STRUCTURES WITHIN THE DRAINAGE SYSTEM. INSPECTIONS FOR TRASH SHOULD BE ON A WEEKLY BASIS.
- TRASH RECEPTACLES SHALL BE PROVIDED WHERE APPROPRIATE.
- STREET SWEEPING SHALL BE PERFORMED ON AN ANNUAL BASIS.
- PET WASTE DISPOSAL STATIONS SHALL BE PROVIDED WHERE APPLICABLE.

SNOW DISPOSAL AND DEICING:

- NO SAND AND DEICING MATERIALS SHALL BE STORED ON THE SITE
- SNOW REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH RIDEM'S SNOW DISPOSAL POLICY.

DRIVEWAY AND PARKING LOT SEALANTS:

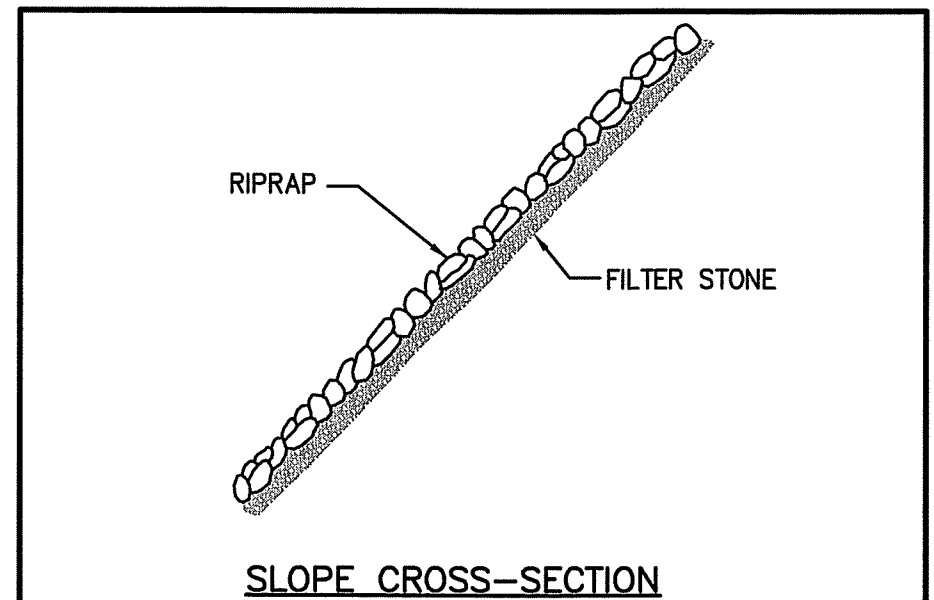
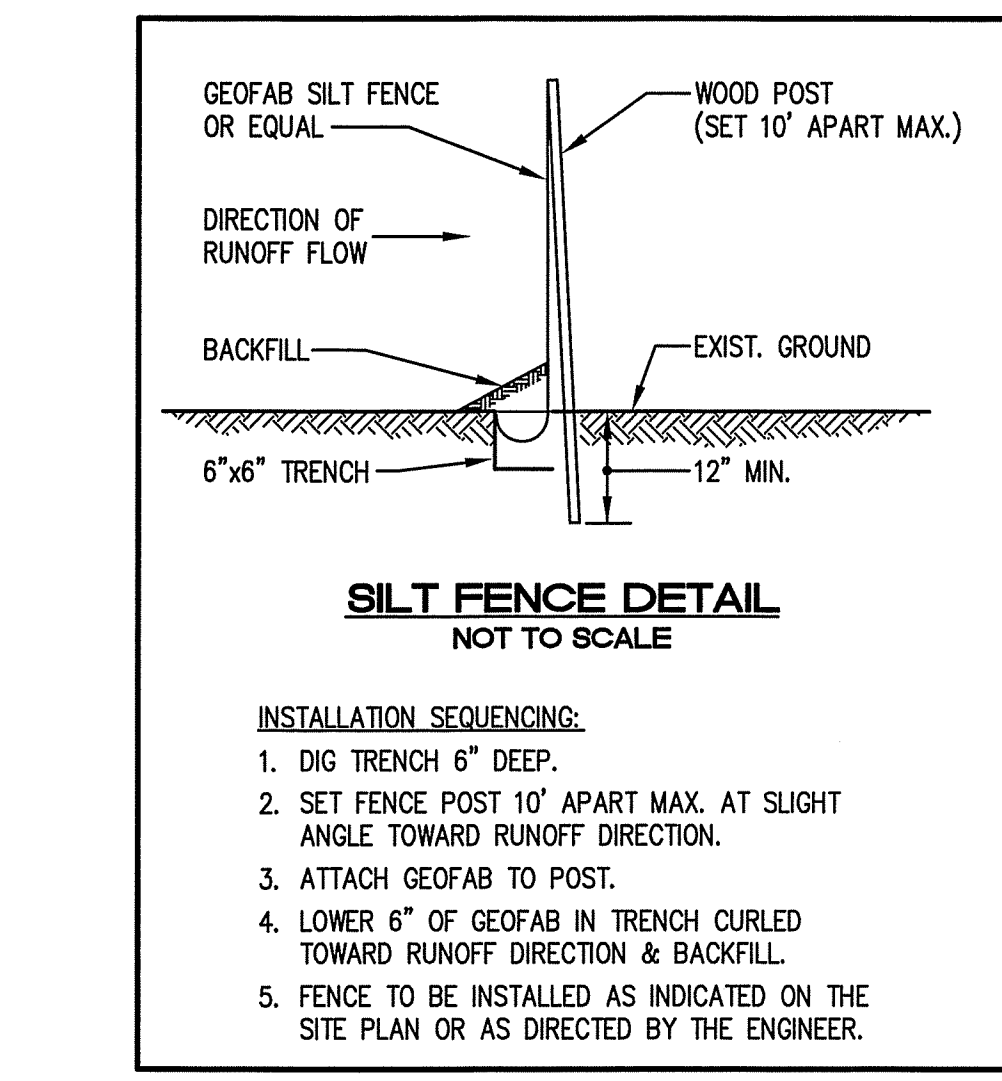
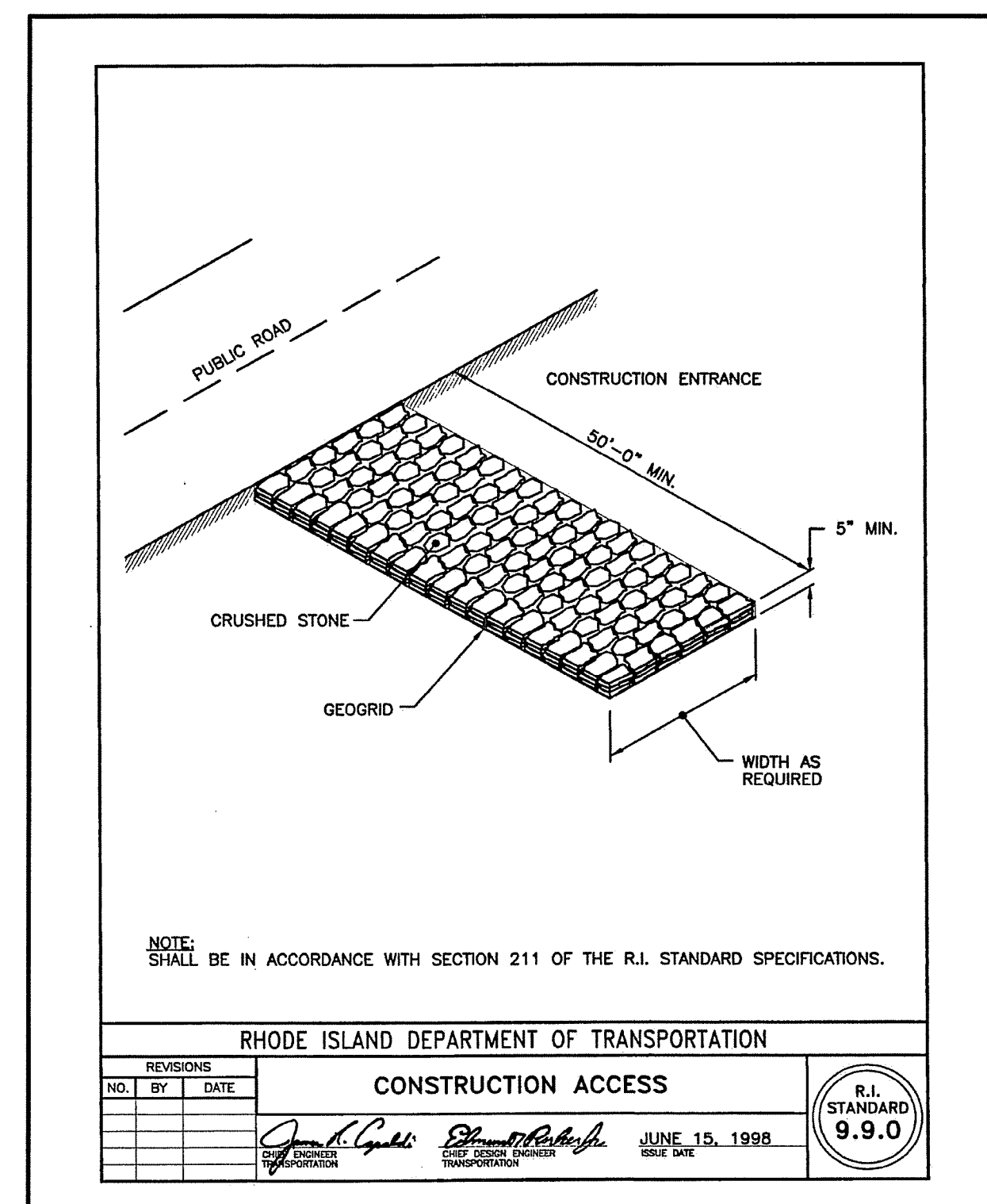
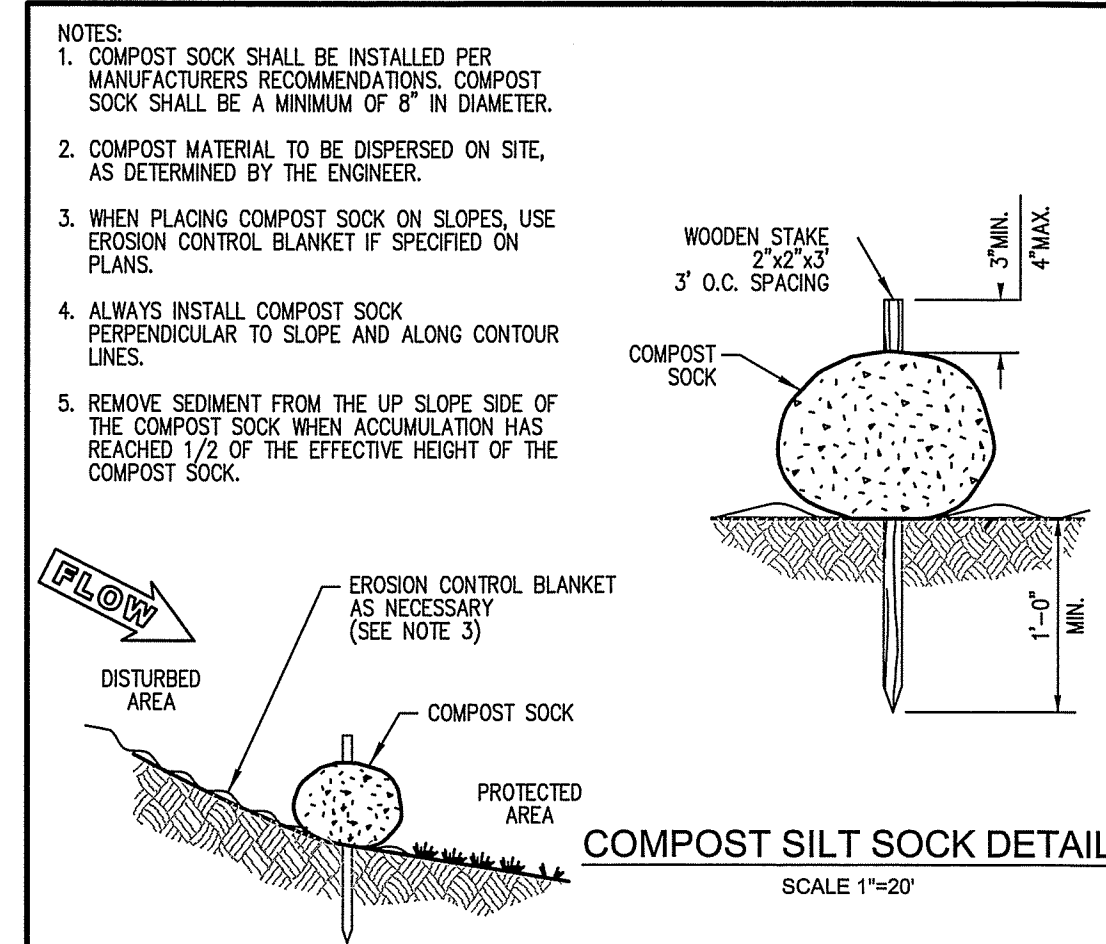
- ON STANDARD ASPHALT AREAS, ONLY ASPHALT BASED SEALANTS ARE ALLOWED, NO COAL-TAR BASED SEALANTS SHALL BE USED ON THIS SITE.

HAZARDOUS MATERIALS CONTAINMENT:

- NO HAZARDOUS MATERIALS SHALL BE STORED OUTSIDE TO AVOID EXPOSURE TO STORMWATER.

LANDSCAPE MANAGEMENT:

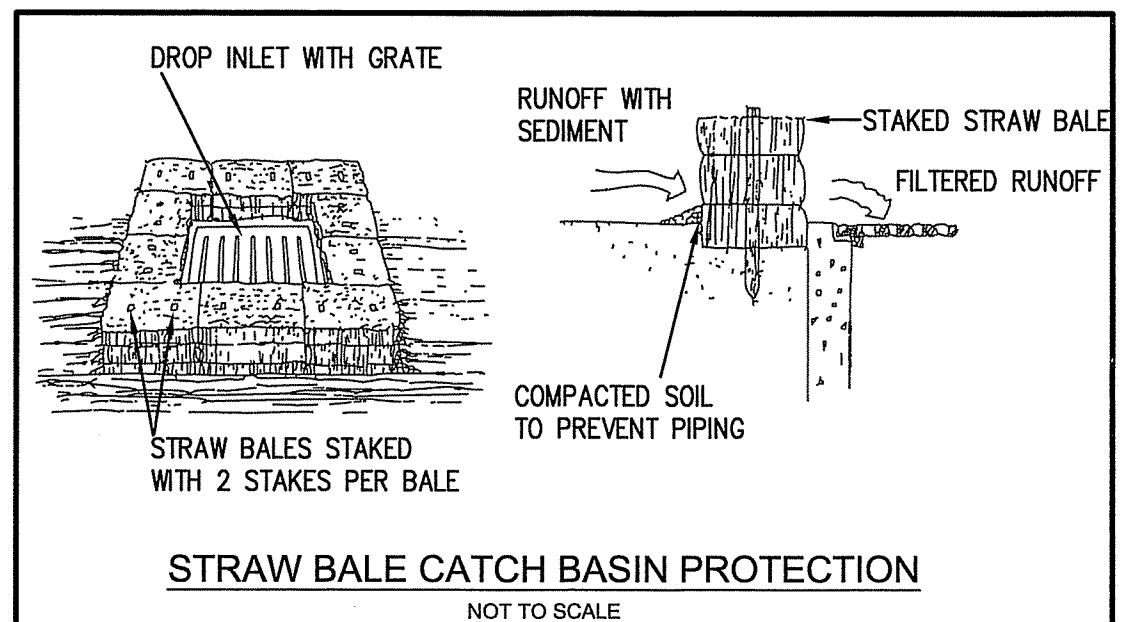
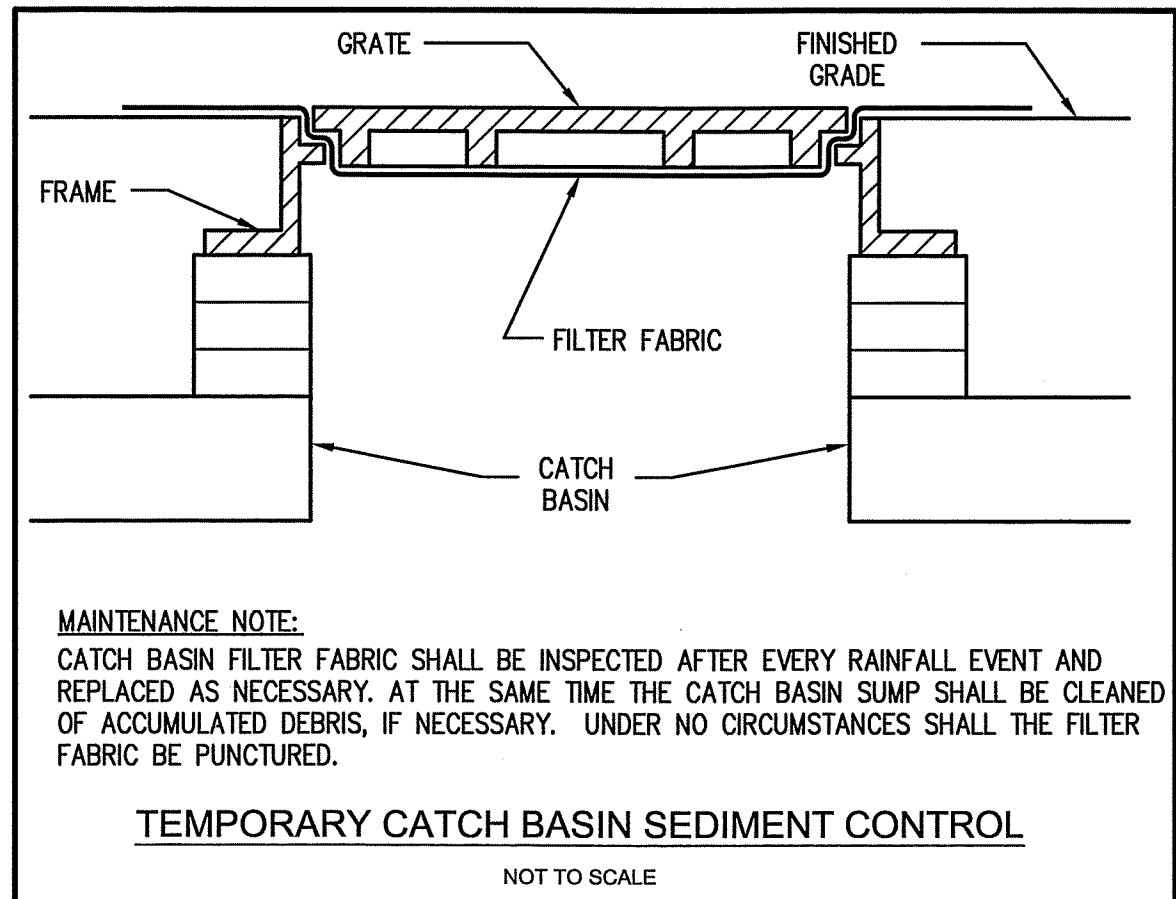
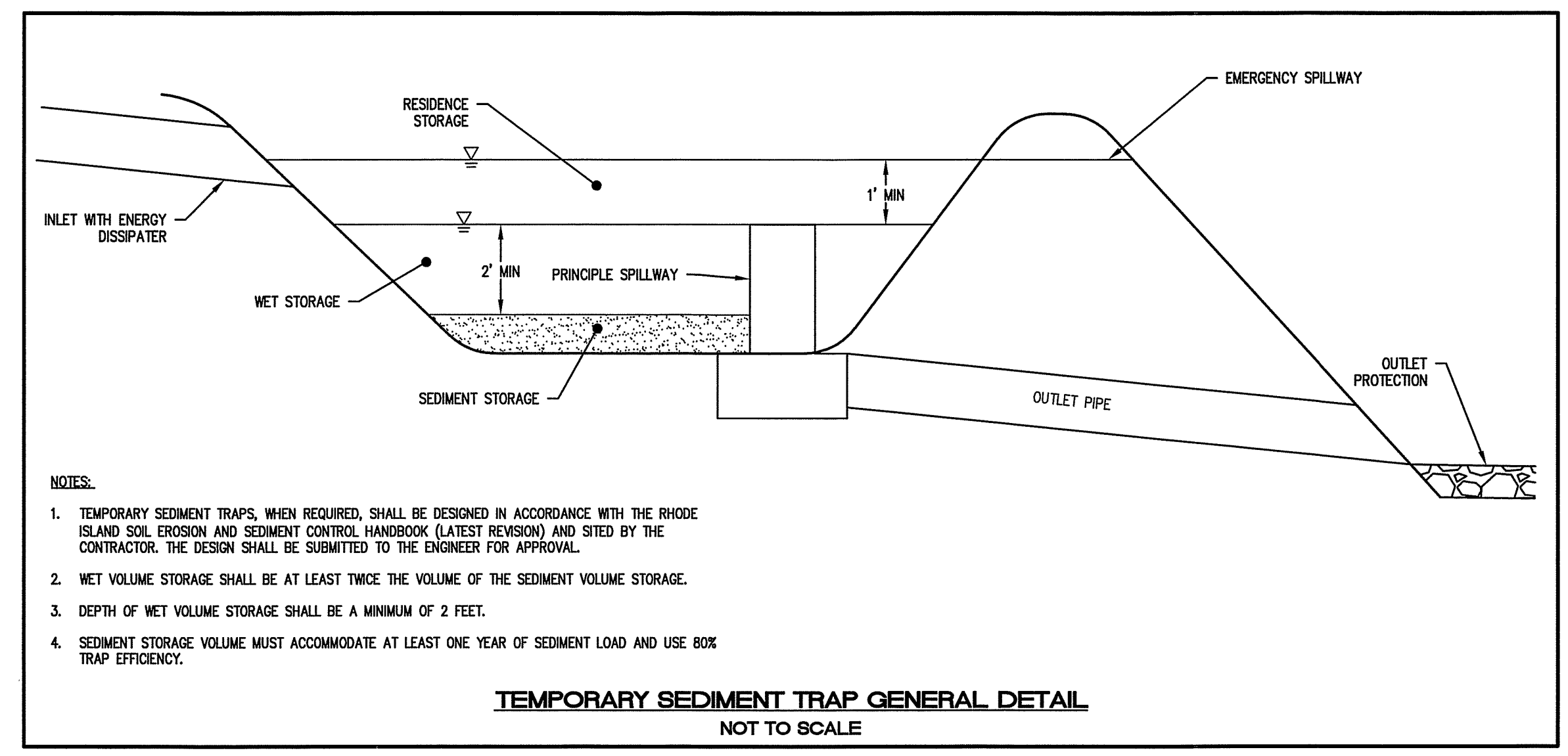
- GRASS CLIPPINGS FROM LAWN CARE PROCEDURES IN AND AROUND THE STORMWATER FACILITY MUST BE COLLECTED AND DISPOSED OF OFF SITE.
- LAWN HEIGHTS WITHIN THE BMP'S SHALL BE KEPT AT A 4-6" HEIGHT.
- FERTILIZER AND WATERING DEMANDS SHOULD BE HAVE PROFESSIONAL OVERSIGHT AND BOTH USES MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL.



- NOTES:**
- SEE SITE PLAN FOR CLASS OF RIP-RAP TO BE USED
 - SEE FILTER STONE CHART FOR APPROPRIATE FILTER STONE TYPE AND DEPTH
 - DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS.
 - UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED.

FILTER STONE CHART

RIPRAP	FILTER STONE	DEPTH
R-1	FS-1	6"
R-2	FS-2	6"
R-3	FS-2	6"
R-4	FS-3	7.5"
R-5	FS-3	7.5"
R-6	FS-2 and R-2	6" / 6"
R-7	FS-3 and R-4	7.5" / 21"
R-8	FS-3 and R-4	7.5" / 21"



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NO.	DATE	REVISION

JEFFREY C. HANSON
No. 5238
3/2/21
PROFESSIONAL ENGINEER

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SOIL EROSION AND SEDIMENT CONTROL PLAN - 2

WILLOW LAKES

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

SCALE AS NOTED
FEBRUARY 2021

Drawn By: J.S.C.
Checked By: J.C.H.

Sheet
7
of 12

FILE NO: 17.276.403

GENERAL NOTES:

- 1. THE MOST CURRENT EDITION OF THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO...

WATER NOTES:

- 1. THE KENT COUNTY WATER AUTHORITY REQUIREMENTS FOR SERVICE AND MAIN INSTALLATION ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO...

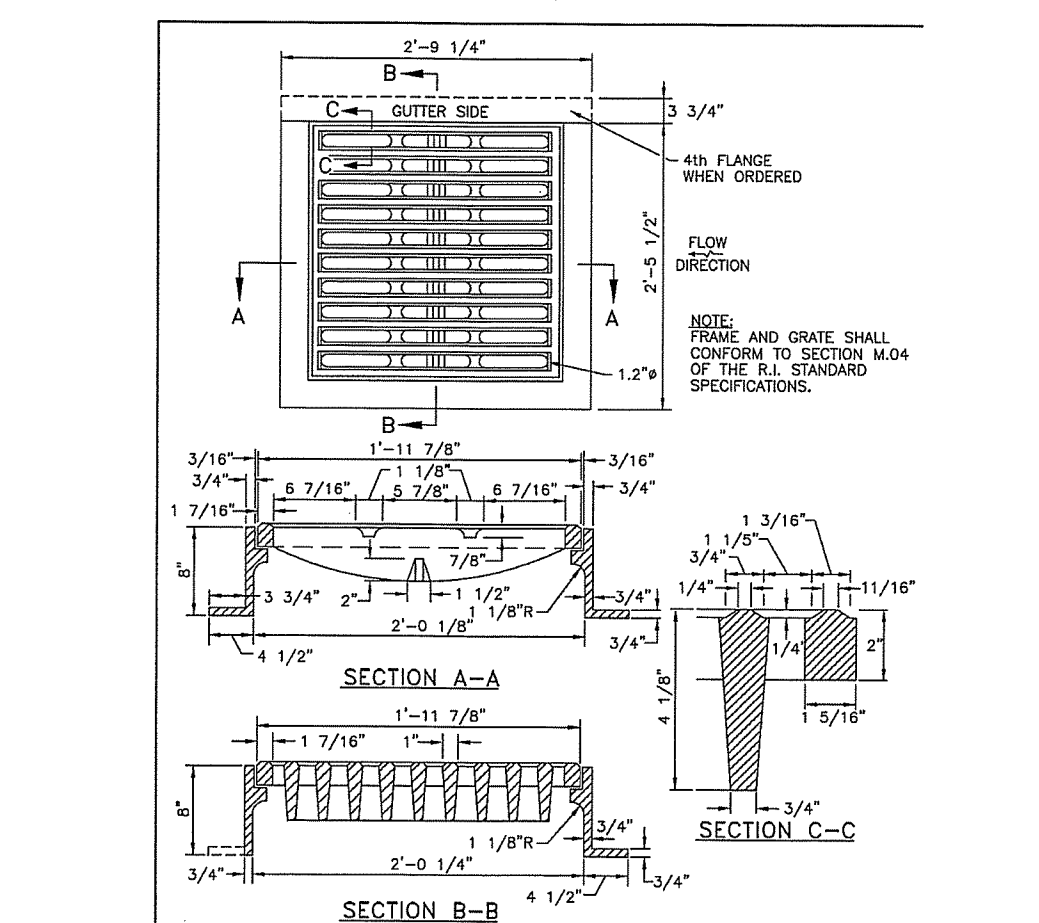
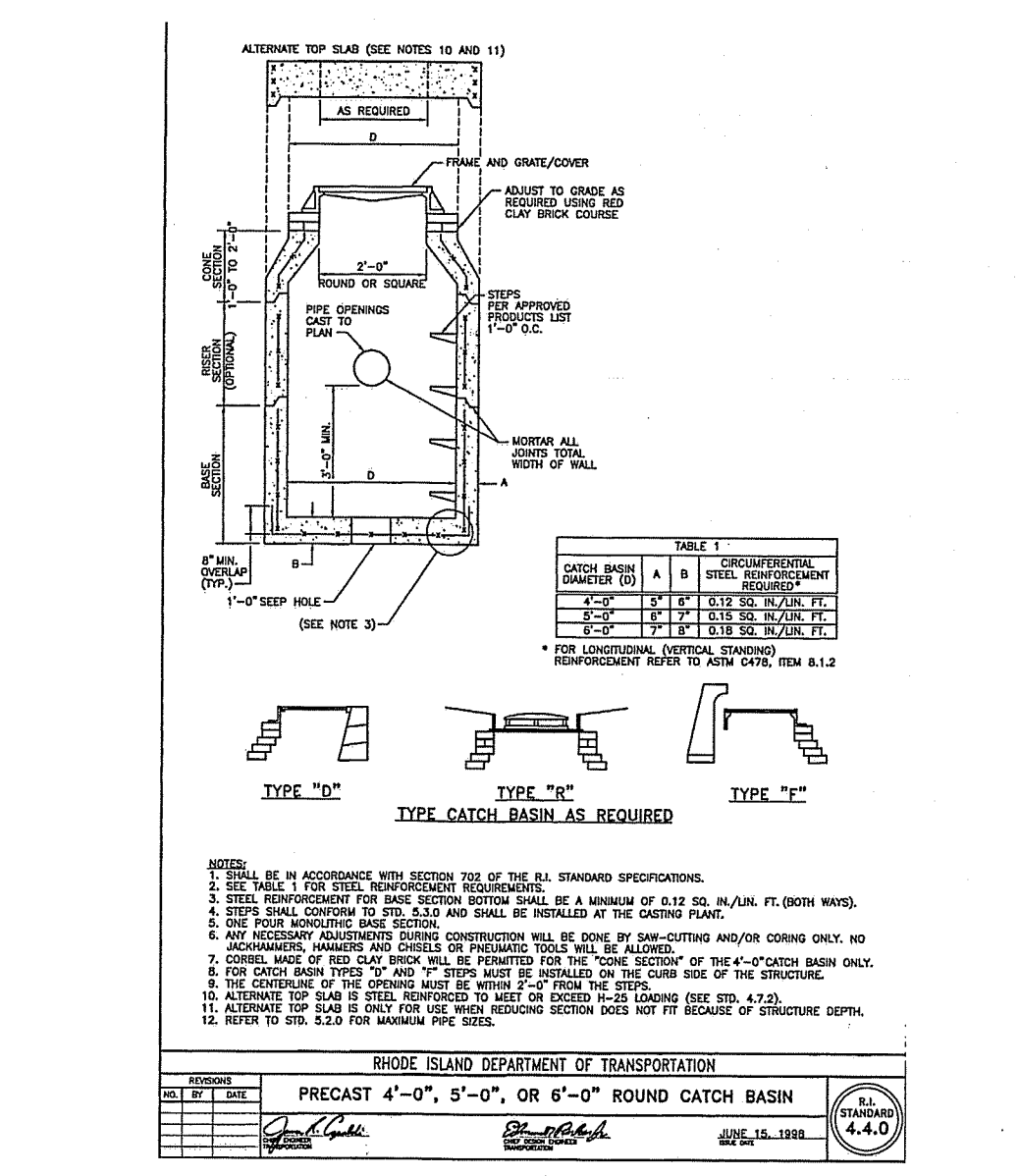
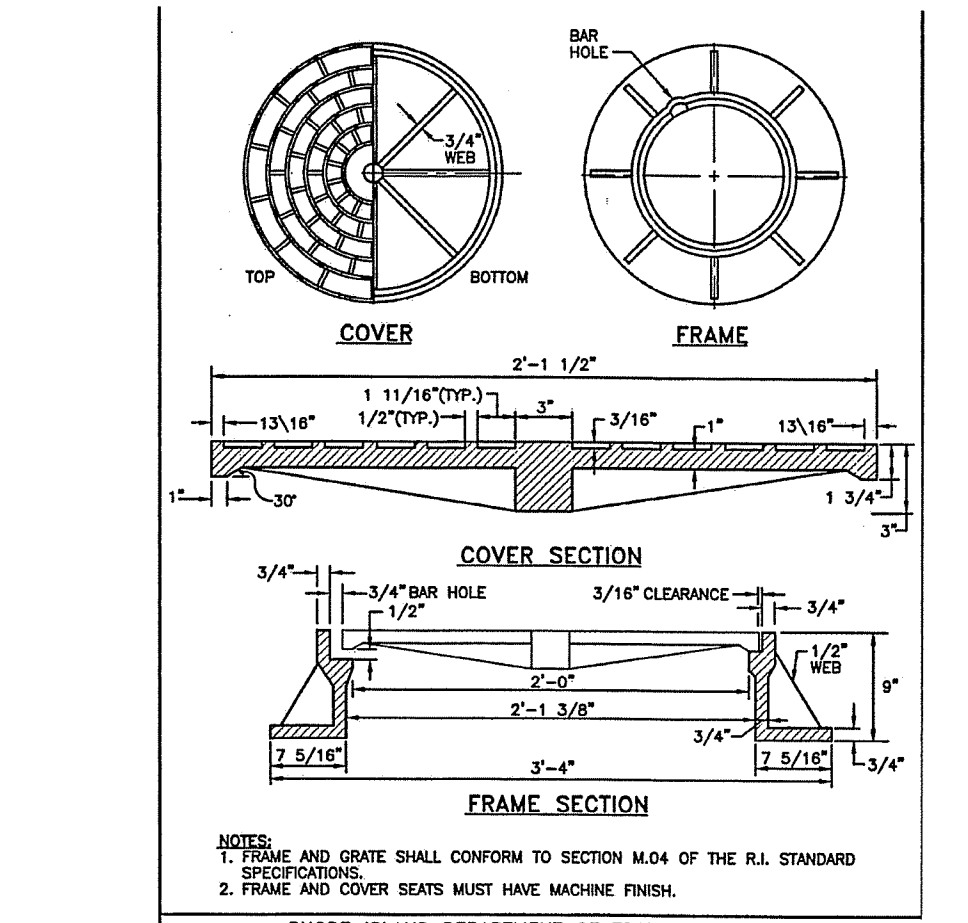
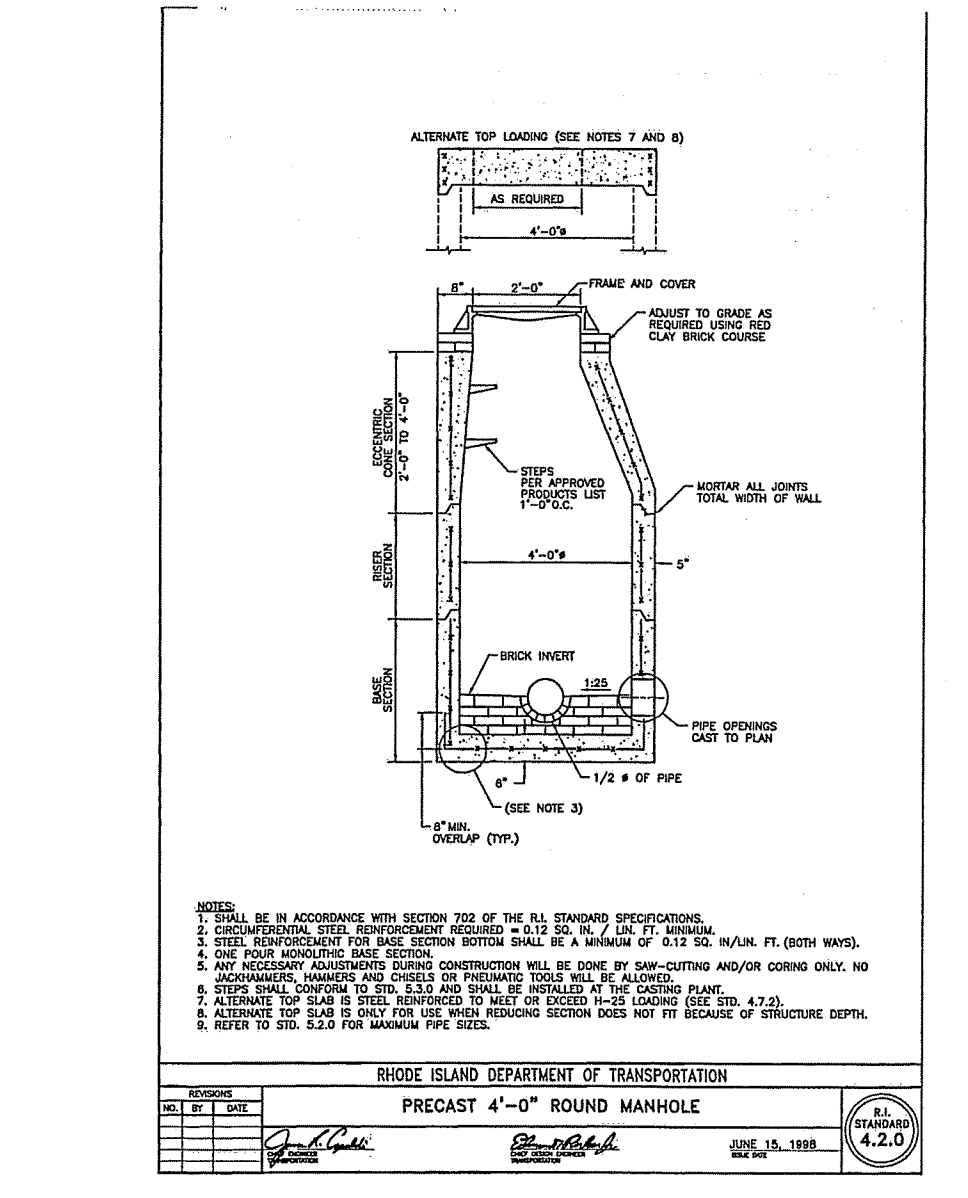
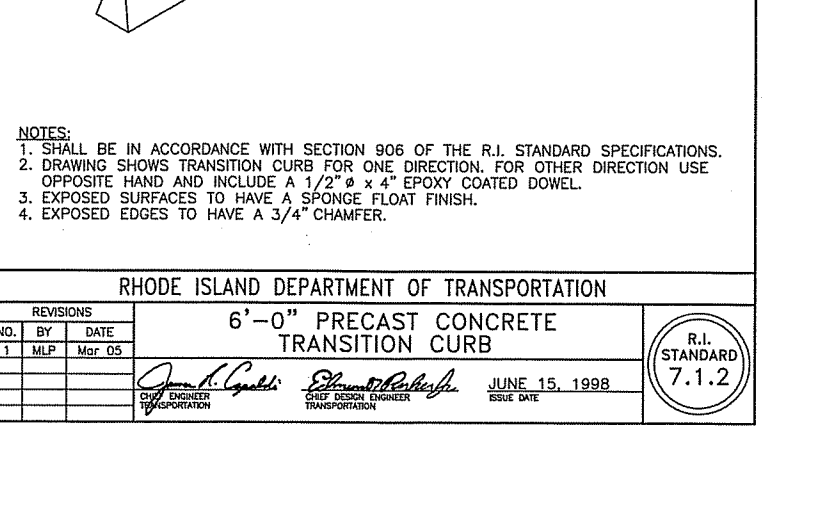
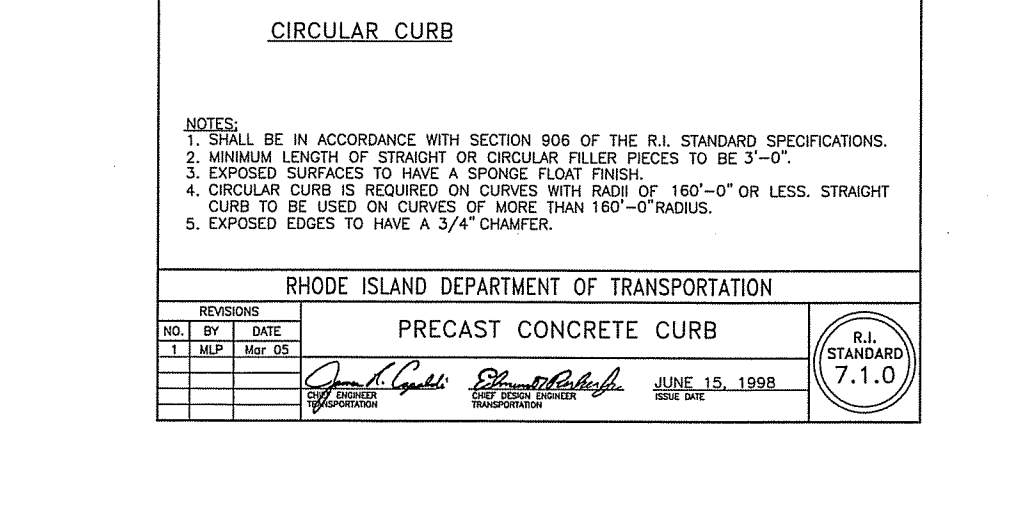
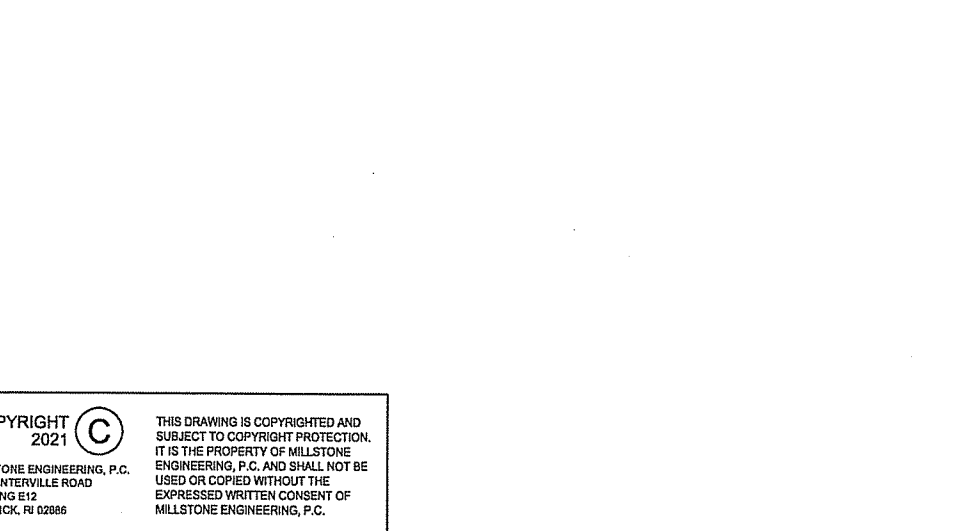
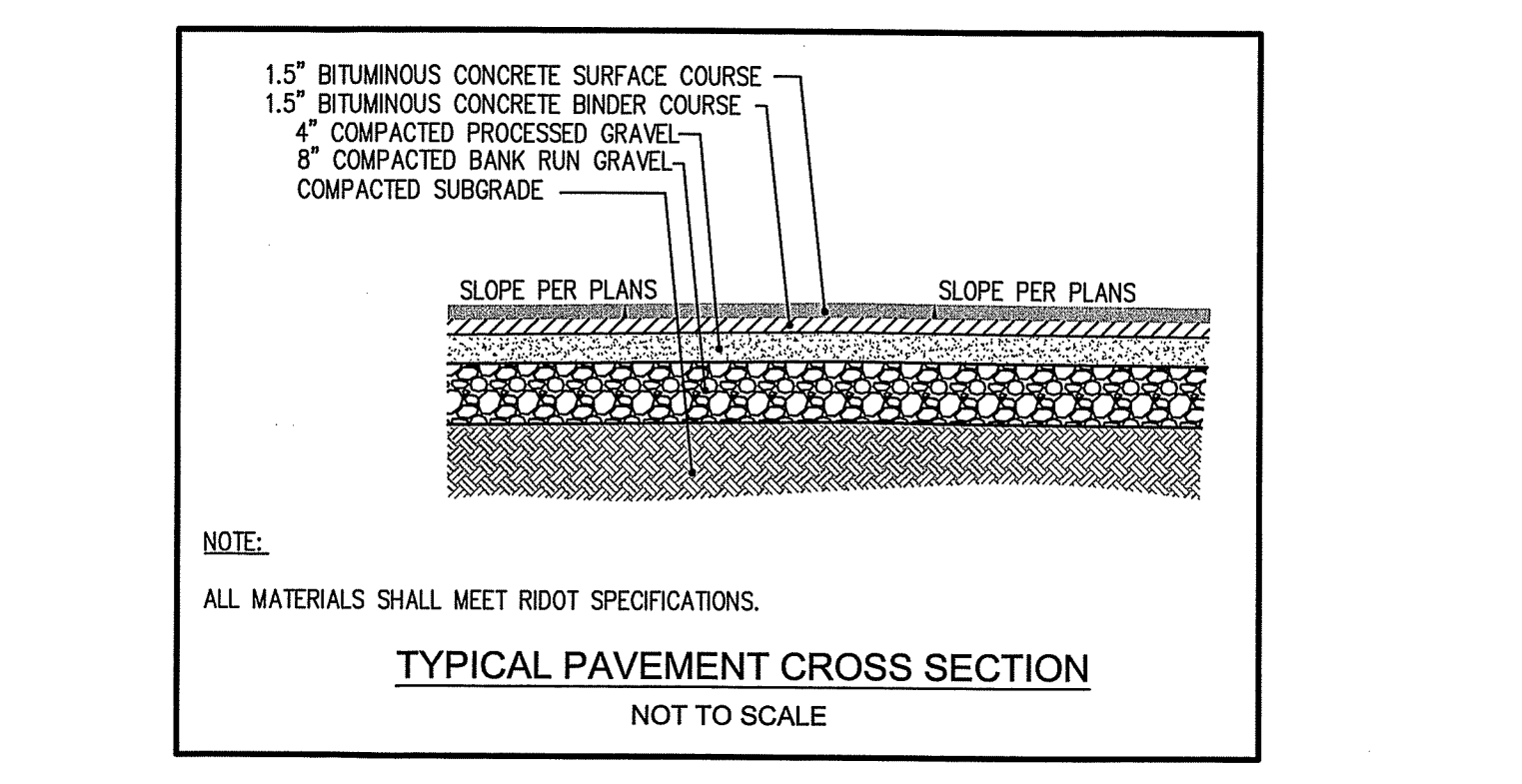
CONSTRUCTION SEQUENCE / NARRATIVE

- 1. OBTAIN APPLICABLE PERMITS.
2. NOTIFY ALL APPROPRIATE STATE, REGIONAL AND TOWN DEPARTMENTS PRIOR TO THE START OF CONSTRUCTION.
3. BEGIN CONSTRUCTION.

SEWER NOTES:

- 1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN COMPLETE CONFORMANCE WITH THE STANDARD SANITARY SEWER REQUIREMENTS OF THE TOWN OF COVENTRY AND THE STANDARD SANITARY SEWER REQUIREMENTS OF THE WEST WARWICK SEWER COMMISSION (LATEST EDITION).

Department of Environmental Management Division of Water Resources (OWR) SEWER LINE/WATER LINE SEPARATION POLICY FOR DESIGN OF SANITARY SEWERS. A. Lateral placement of sewers and water lines. B. Sewers crossing water lines.



TRENCH INSTALLATION DETAIL. TYPICAL TRENCH CROSS-SECTION (N.T.S.). NOTES: 1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER...

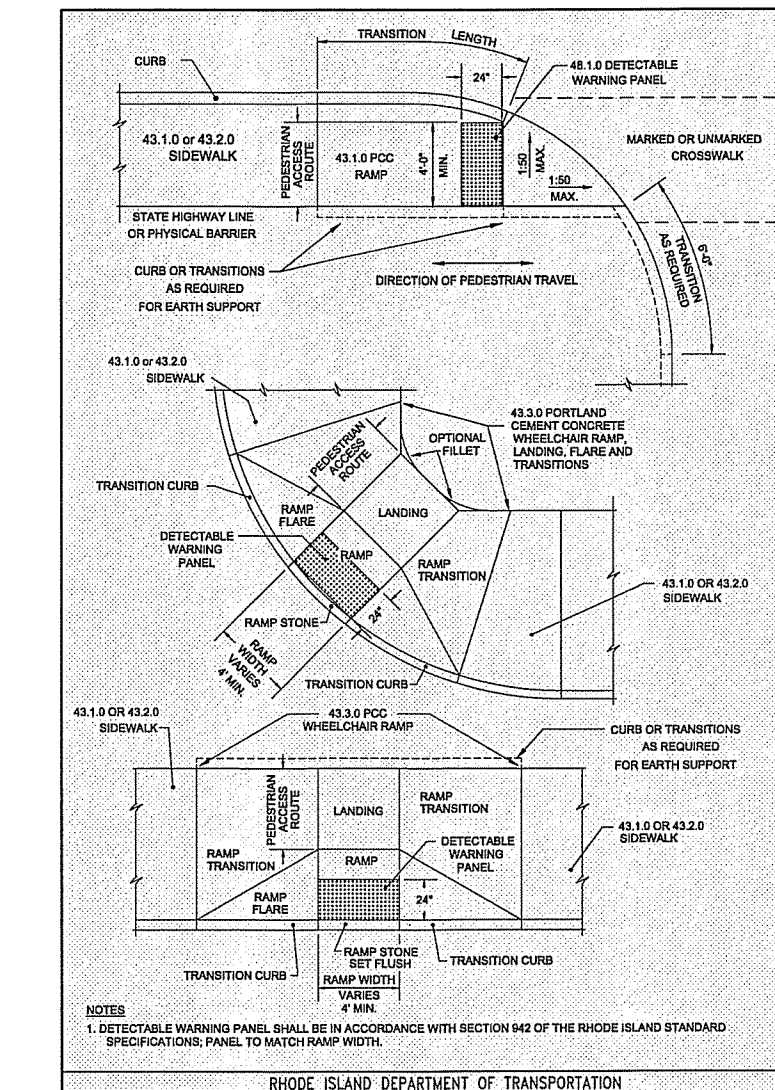
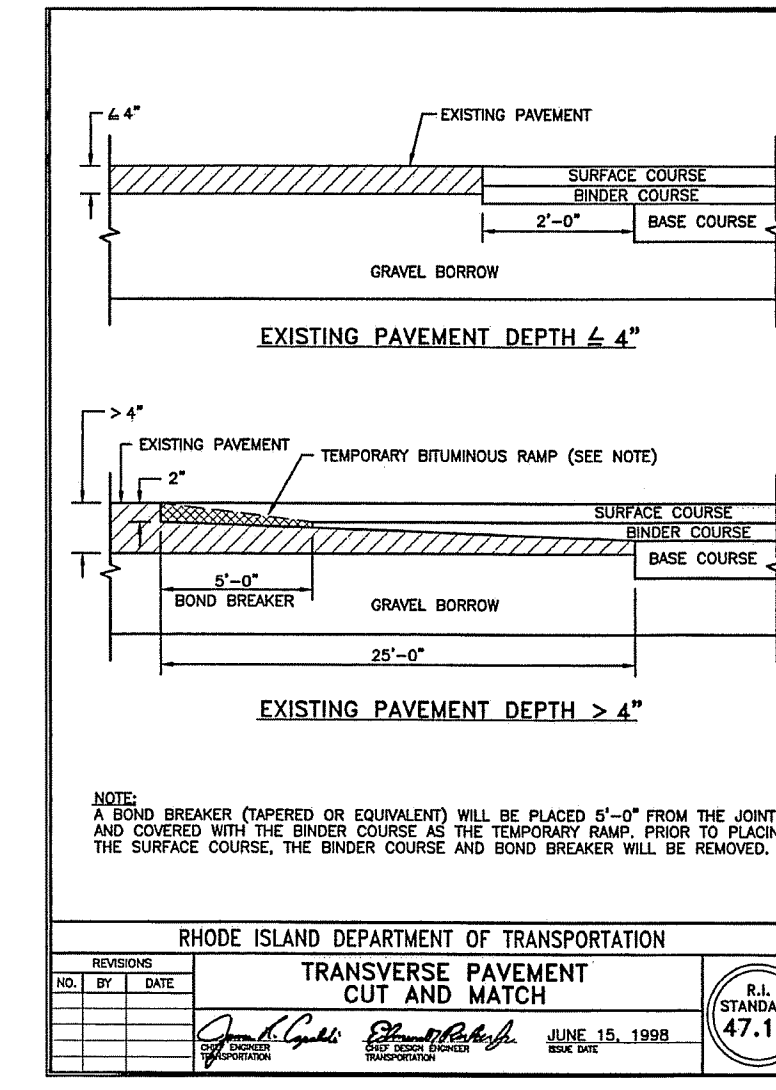
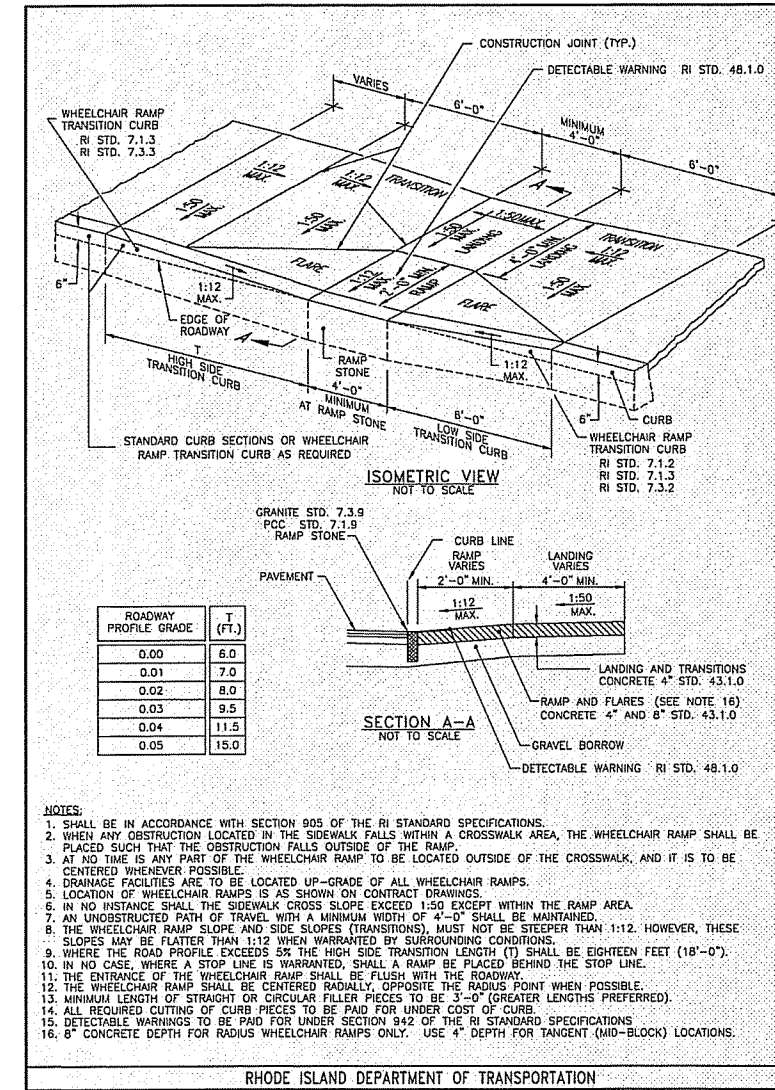
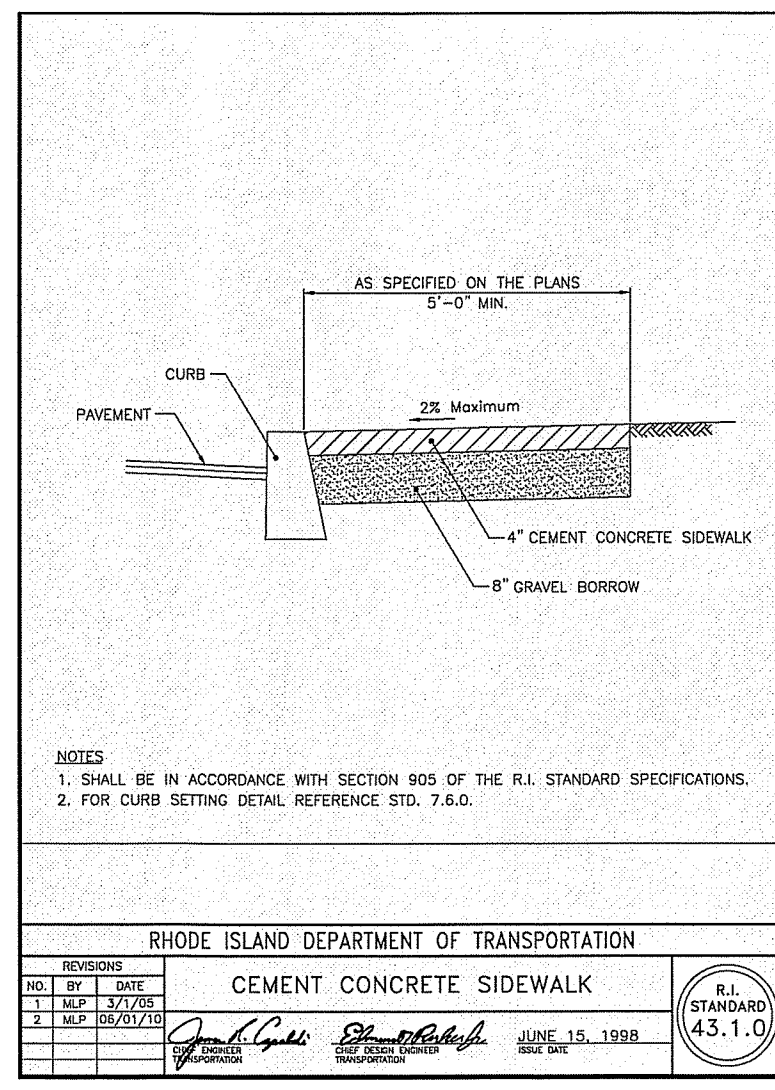
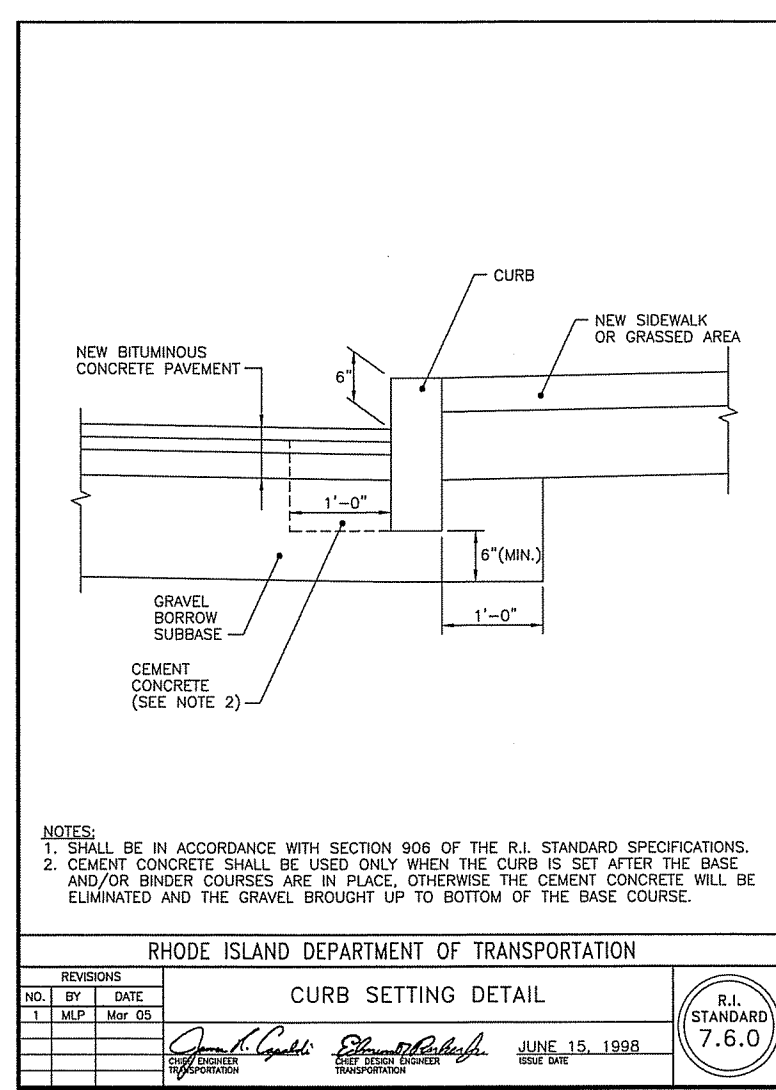
NO. DATE REVISION. 1 12/20/21 TOWN COMMENTS.

JEFFREY C. HANSON. No. 5238. REGISTERED PROFESSIONAL ENGINEER.

ILLSTONE ENGINEERING, P.C. CIVIL ENGINEERING • LAND PLANNING. 750 Aquidneck Avenue, Building B, Middletown, Rhode Island 02886.

NOTES & DETAILS. WILLOW LAKES. A.P. 16, LOT 3 NEW LONDON TURNPIKE COVENTRY, RI. PREPARED FOR: WILLOW LAKE PROPERTIES, LLC. SCALE AS NOTED FEBRUARY 2021.

Drawn By: J.S.C. Checked By: J.C.H. Sheet 8 of 12. FILE NO.: 17.276.403.



ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO M35 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
1	FILL MATERIAL FOR LAYER 12 STARTS FROM THE TOP OF THE 12" LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISH GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THIS LAYER.	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRENGTHENING MATERIAL AND PREPARATION REQUIREMENTS.
2	FILL MATERIAL FOR LAYER 13 STARTS FROM THE TOP OF THE SUBGRADE STONE (8" LAYER) TO 18" (457 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THIS LAYER.	3.351, 4.467, 5.06, 6.07, 6.8, 7.64, 8.5, 9.5	BEGIN COMPACTION AFTER 12" (305 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 4" (102 mm) LIFTS TO A MIN. 95% STANDARD PROCTOR DENSITY. COLLIER-GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LB (5,443 kg). DYNAMIC FORCE NOT TO EXCEED 30.0 kN PER M².
3	EMBEDMENT STONE SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (8" LAYER) TO THE TOP OF THE CHAMBER.	3.352, 4.467, 5.06, 6.07	NO COMPACTION REQUIRED.
4	FOUNDATION STONE BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	3.35, 4.467, 5.06, 6.07	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY.

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M35) STONE."
 2. AS AN ALTERNATE TO PROCTOR TESTING AND FIELD DENSITY MEASUREMENTS ON OPEN GRADED STONE, STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 1" LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 4" (102 mm) LIFTS USING TWO FULL COVERAGES WITH AN APPROPRIATE COMPACTOR.

STORMTECH ACCEPTABLE FILL MATERIALS

- ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
- THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND LOAD FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

STORMTECH CHAMBER NOTES

THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

CHAMBERS SHALL MEET ASTM F 2418-05 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

GRANULAR WELL GRADED SOIL/AGGREGATE MIXTURES, <35% FINES. COMPACT IN 6" LIFTS TO 95% PROCTOR DENSITY. SEE THE TABLE OF ACCEPTABLE FILL MATERIALS.

3/4" - 2" (19 mm - 51 mm) CLEAN, CRUSHED, ANGULAR STONE

SC-310 STANDARD CROSS SECTION

DESIGN ENGINEER IS RESPONSIBLE FOR ENSURING THE REQUIRED BEARING CAPACITY OF SUBGRADE SOILS*

INSPECTION PORT WITH SCREW-IN CAP

CLASS "C" CONCRETE

ADS 601 GEOTEXTILE OR EQUAL

4" PVC RISER

SC-310 CHAMBER

ADS 601 GEOTEXTILE OR EQUAL

INSPECTION PORT TO BE ATTACHED THROUGH KNOCK-OUT LOCATED AT CENTER OF CHAMBER

SC-310 TECHNICAL SPEC.

PART #	CHAMBER	PIPE SIZE	A	B	C
SC310EP08T	SC-310	8" (203 mm)	10.00" [254 mm]	18.50" [470 mm]	N/A
SC310EP08B	SC-310	8" (203 mm)	10.00" [254 mm]	N/A	0.50" [13 mm]
SC310EP10T	SC-310	10" (254 mm)	12.20" [310 mm]	16.50" [419 mm]	N/A
SC310EP10B	SC-310	10" (254 mm)	12.20" [310 mm]	N/A	0.60" [15 mm]
SC310EP12T	SC-310	12" (305 mm)	14.70" [373 mm]	14.50" [368 mm]	N/A
SC310EP12B	SC-310	12" (305 mm)	14.70" [373 mm]	N/A	1.20" [30 mm]
SC310EP15T	SC-310	15" (375 mm)	18.40" [467 mm]	9.00" [229 mm]	N/A
SC310EP15B	SC-310	15" (375 mm)	18.40" [467 mm]	N/A	1.30" [33 mm]
SC310EP18T	SC-310	18" (457 mm)	19.70" [500 mm]	5.00" [127 mm]	N/A
SC310EP18B	SC-310	18" (457 mm)	19.70" [500 mm]	N/A	1.60" [41 mm]
SC310EP24B	SC-310	24" (600 mm)	18.50" [470 mm]	N/A	0.10" [3 mm]

* FOR THE SC310EP12B THE 12" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

STORMTECH SC-310 CHAMBER DETAILS (FOR UG-R2C)
 NOT TO SCALE

CHAMBERS SHALL MEET ASTM F 2418-09 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

3/4" - 2" (19 mm - 51 mm) CLEAN, CRUSHED, ANGULAR STONE

GRANULAR WELL GRADED SOIL/AGGREGATE MIXTURES, <35% FINES. COMPACT IN 6" LIFTS TO 95% PROCTOR DENSITY. SEE THE TABLE OF ACCEPTABLE FILL MATERIALS.

SC-740 STANDARD CROSS SECTION

DESIGN ENGINEER RESPONSIBLE FOR ENSURING THE REQUIRED BEARING CAPACITY OF SUBGRADE SOILS*

INSPECTION PORT WITH SCREW-IN CAP

CONCRETE COLLAR

PAVEMENT

SC-740 CHAMBER

AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE

INSPECTION PORT TO BE CONNECTED THROUGH KNOCK-OUT LOCATED AT CENTER OF CHAMBER

ALL FITTINGS TO BE SOLVENT CEMENTED.

SC-740 TECHNICAL SPEC.

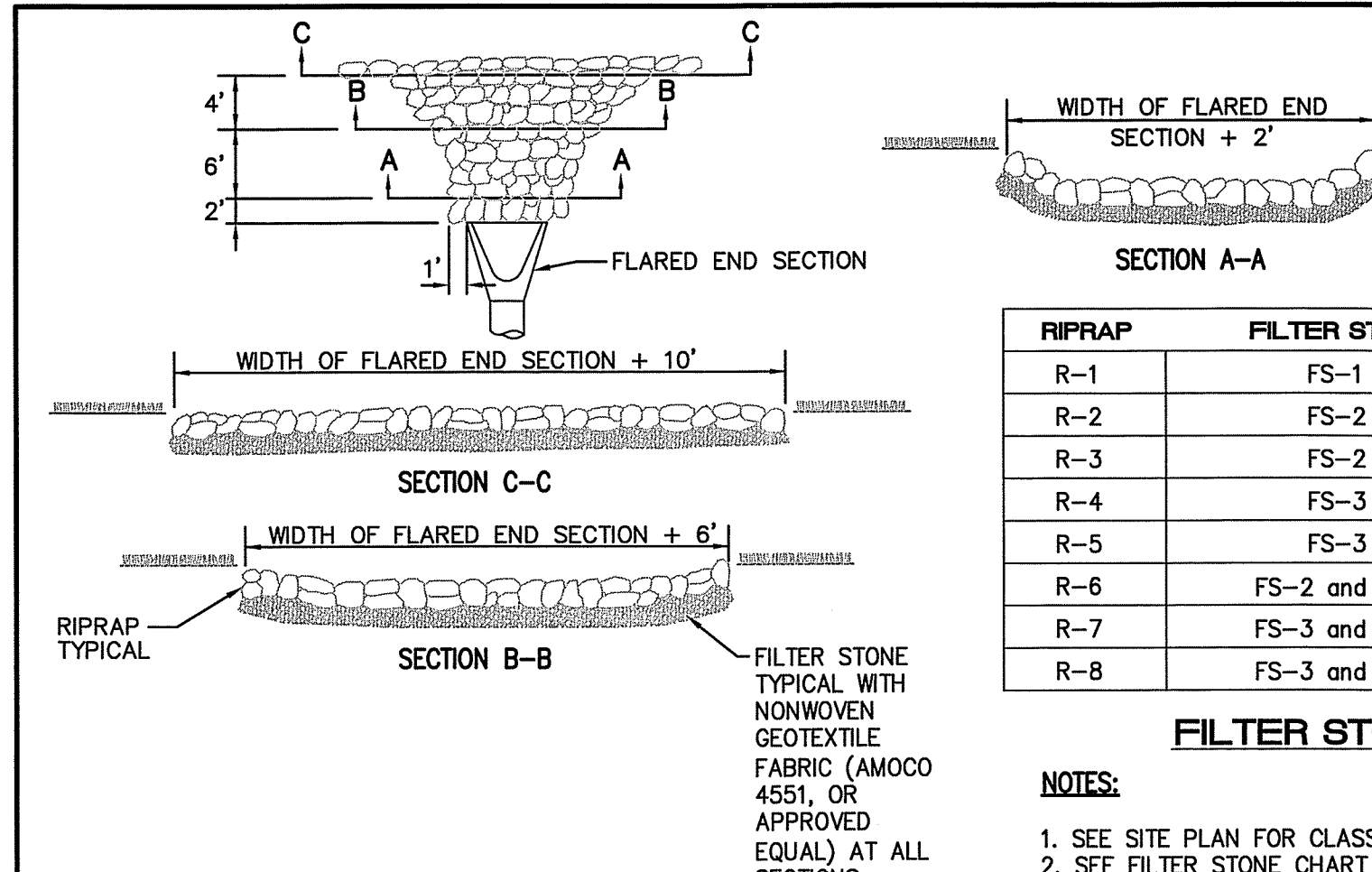
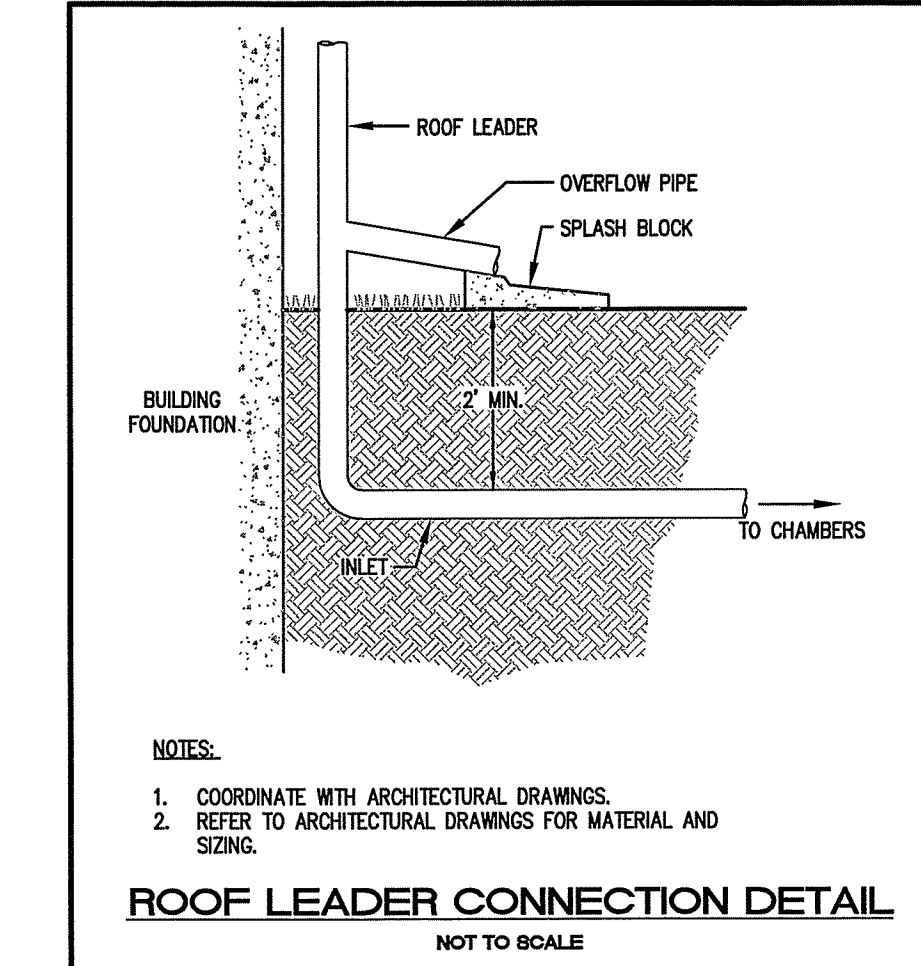
PART#	STUB	A	B	C
SC740EP08T	6" [150 mm]	10.90" [277 mm]	18.50" [470 mm]	N/A
SC740EP08B	6" [150 mm]	10.90" [277 mm]	N/A	0.50" [13 mm]
SC740EP10T	8" [200 mm]	12.20" [310 mm]	16.50" [419 mm]	N/A
SC740EP10B	8" [200 mm]	12.20" [310 mm]	N/A	0.60" [15 mm]
SC740EP12T	10" [250 mm]	13.40" [340 mm]	14.50" [368 mm]	N/A
SC740EP12B	10" [250 mm]	13.40" [340 mm]	N/A	0.70" [18 mm]
SC740EP15T	12" [300 mm]	14.70" [373 mm]	12.50" [318 mm]	N/A
SC740EP15B	12" [300 mm]	14.70" [373 mm]	N/A	1.20" [30 mm]
SC740EP18T	15" [375 mm]	18.40" [467 mm]	9.00" [229 mm]	N/A
SC740EP18B	15" [375 mm]	18.40" [467 mm]	N/A	1.30" [33 mm]
SC740EP24B	24" [600 mm]	18.50" [470 mm]	N/A	0.10" [3 mm]

* ALL DIMENSIONS ARE NOMINAL.

ALL STUBS, EXCEPT FOR THE SC740EP24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EP24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

STORMTECH SC-740 CHAMBER DETAILS (FOR UG-R1A, UG-R1B, UG-R2A, UG-R2B, UG-R2D)
 NOT TO SCALE

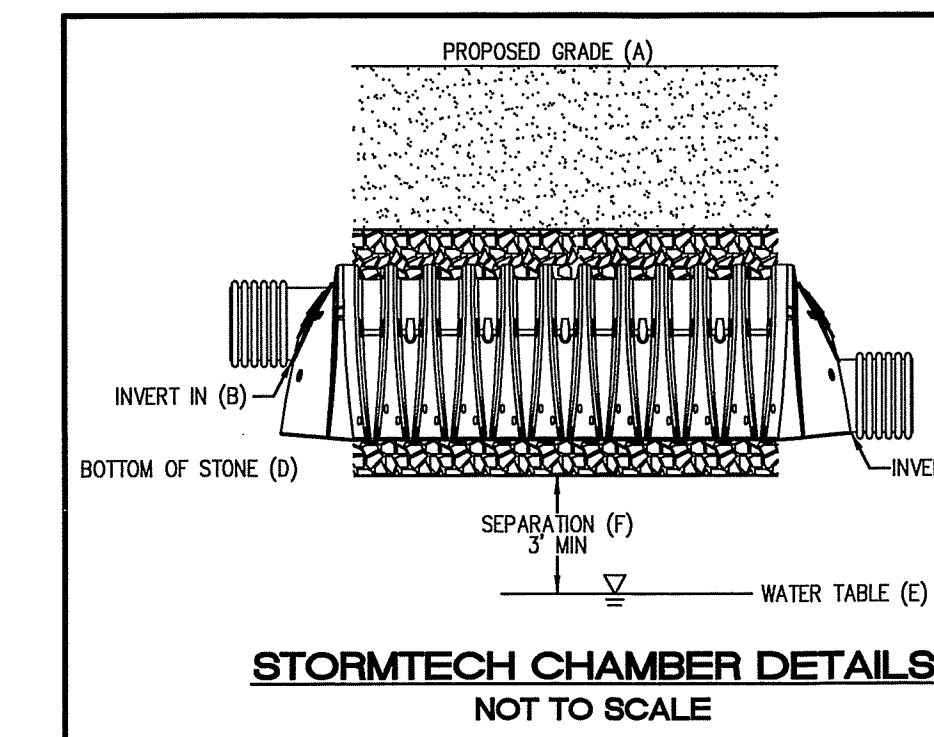


FILTER STONE CHART

RIPRAP	FILTER STONE	DEPTH
R-1	FS-1	6"
R-2	FS-2	6"
R-3	FS-2	6"
R-4	FS-3	7.5"
R-5	FS-3	7.5"
R-6	FS-2 and R-2	6" / 6"
R-7	FS-3 and R-4	7.5" / 21"
R-8	FS-3 and R-4	7.5" / 21"

NOTES:

- SEE SITE PLAN FOR CLASS OF RIP-RAP TO BE USED.
- SEE FILTER STONE CHART FOR APPROPRIATE FILTER STONE TYPE AND DEPTH.
- DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS.
- UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED.



CHAMBER ID	PIT #	PROPOSED GRADE @ LOWEST POINT (A)	INVERT IN (B)	INVERT OUT (C)	BOTTOM OF STONE ELEV (D)	SGHW ELEV (E)	SEPARATION FROM GROUNDWATER (F)
UG-R1a	2007	281.12	278.33	278.16	276.12	271.20	4.92
UG-R1b	2008	280.93	278.14	277.97	275.93	264.10	11.83
UG-R2a	2009	281.06	278.27	278.10	276.06	270.80	5.26
UG-R2b	2010	281.30	278.51	278.34	276.30	270.90	5.40
UG-R2c	2011	280.50	278.88	278.71	277.17	271.80	5.37
UG-R2d	2012	279.82	277.03	276.86	274.82	270.70	4.12

NOTES:

- UG-R2A: CONTRACTOR TO REMOVE AND REPLACE THE MATERIAL WITHIN THE LIMITS OF THE UNDERGROUND STORAGE AREA FROM ELEVATION 276.06 (BOTTOM OF STONE) TO ELEVATION 272.38. EXISTING MATERIAL TO BE REPLACED WITH SAND, MEETING USDA SOIL TEXTURE SPECIFICATIONS AND HAVING A DESIGN INFILTRATION RATE OF 8.27 IN/HR.

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NO. DATE REVISION

JEFFREY C. HANSON
 No. 5238
 PROFESSIONAL ENGINEER

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 250 Canterbury Road, Building E-12
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 F. (401) 921-3303

WILLOW LAKES

A.P. 16, LOT 3
 NEW LONDON TURNPIKE
 COVENTRY, RI

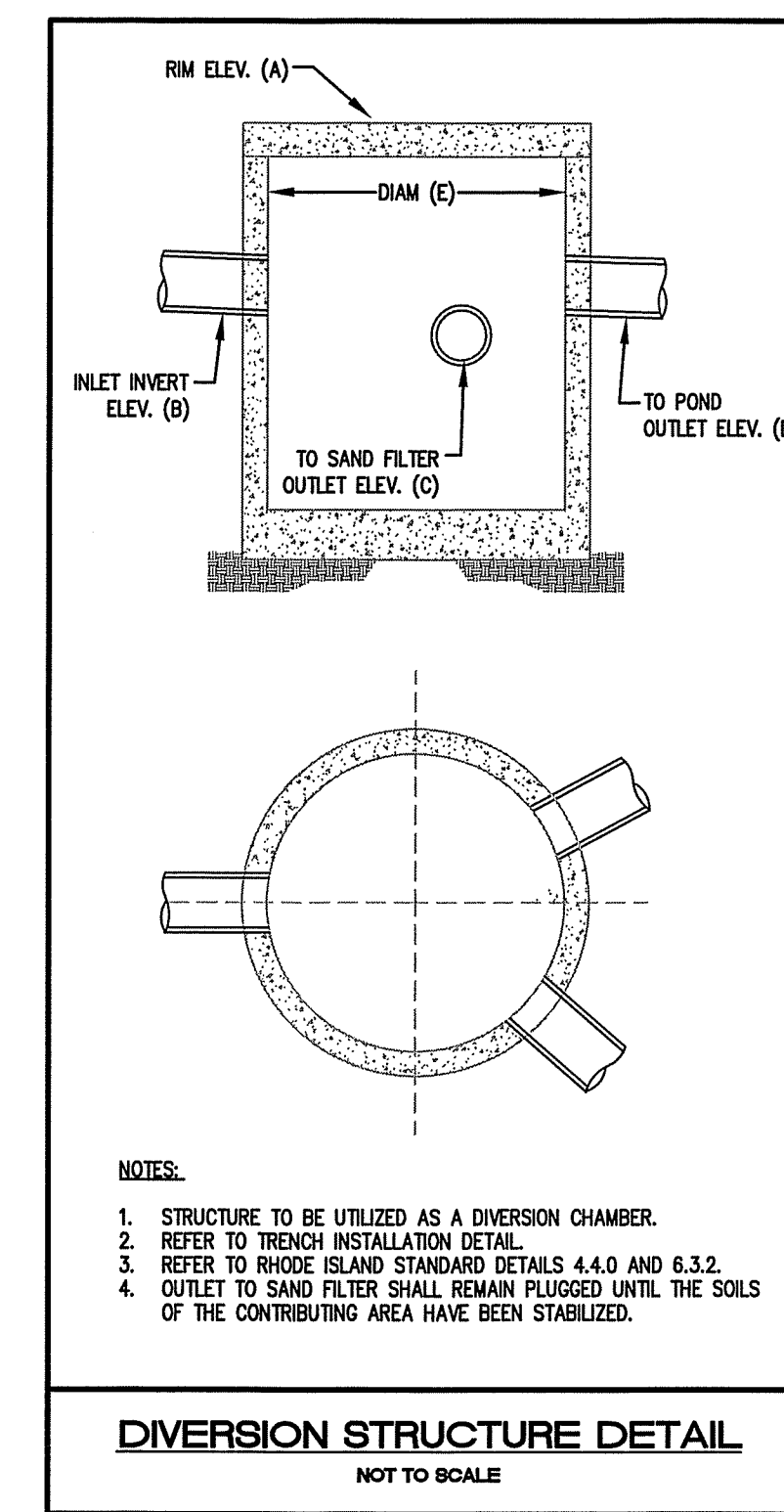
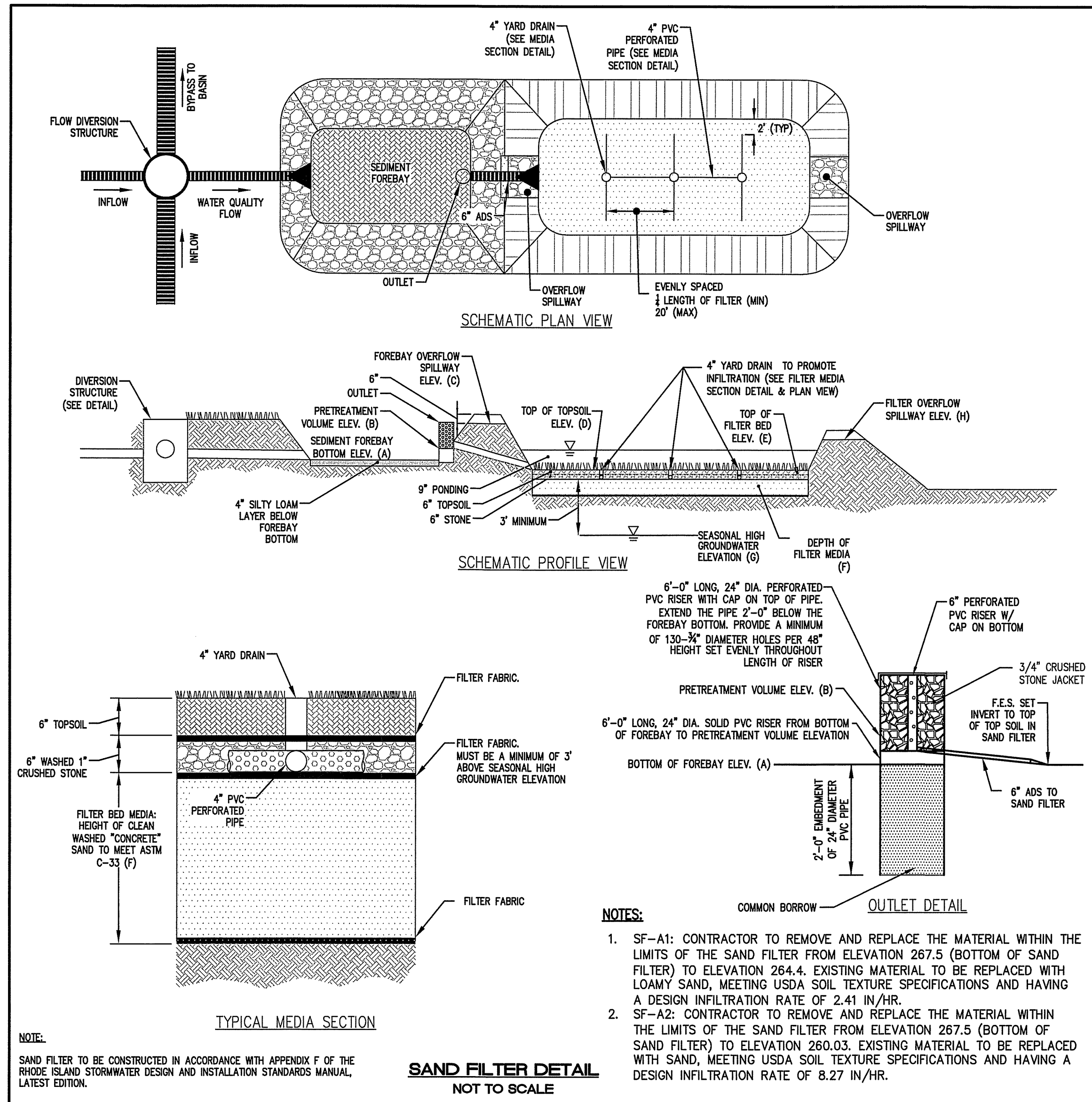
PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

SCALE AS NOTED
 FEBRUARY 2021

Drawn By: J.S.C.
 Checked By: J.C.H.
 Sheet

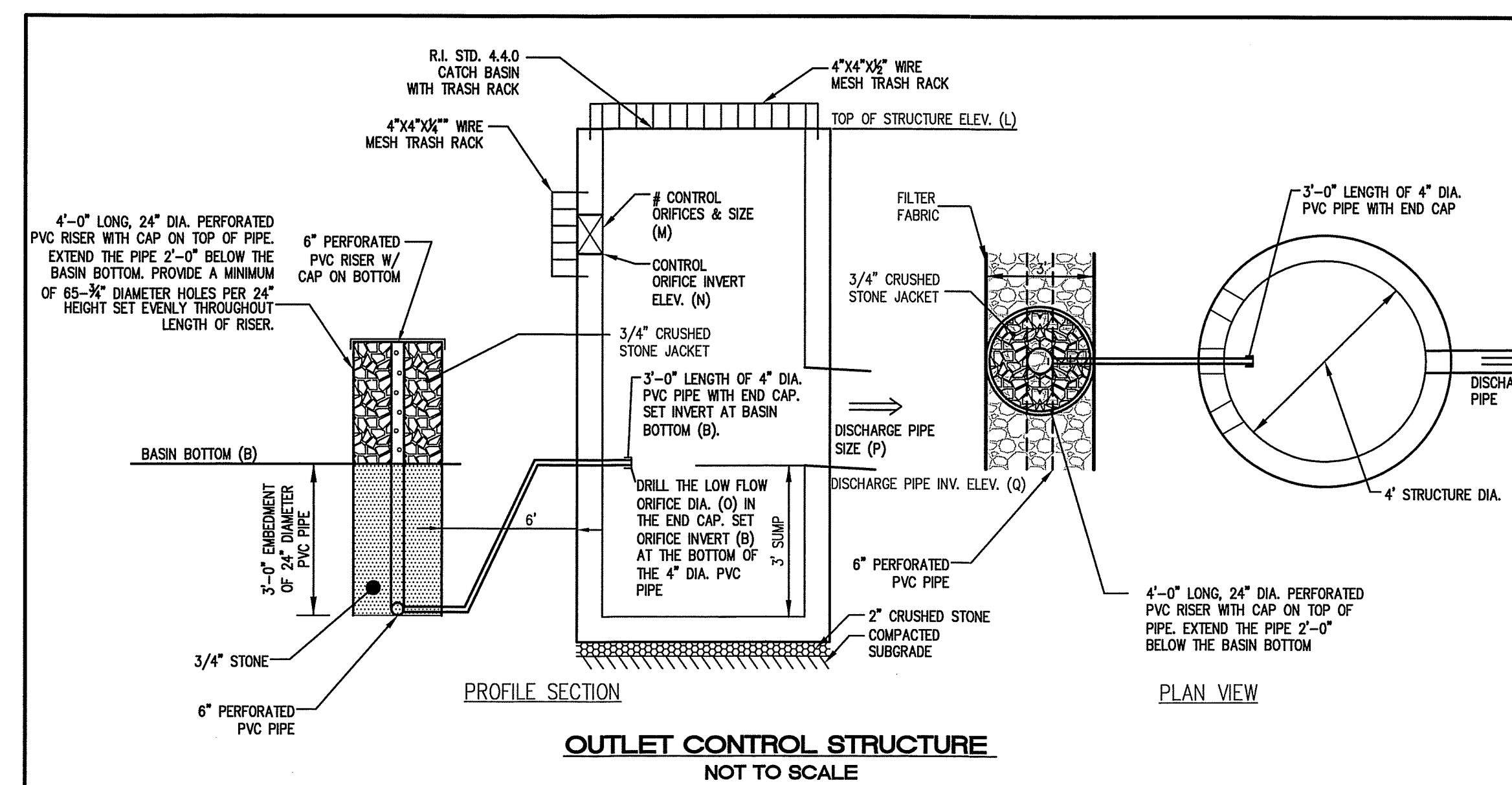
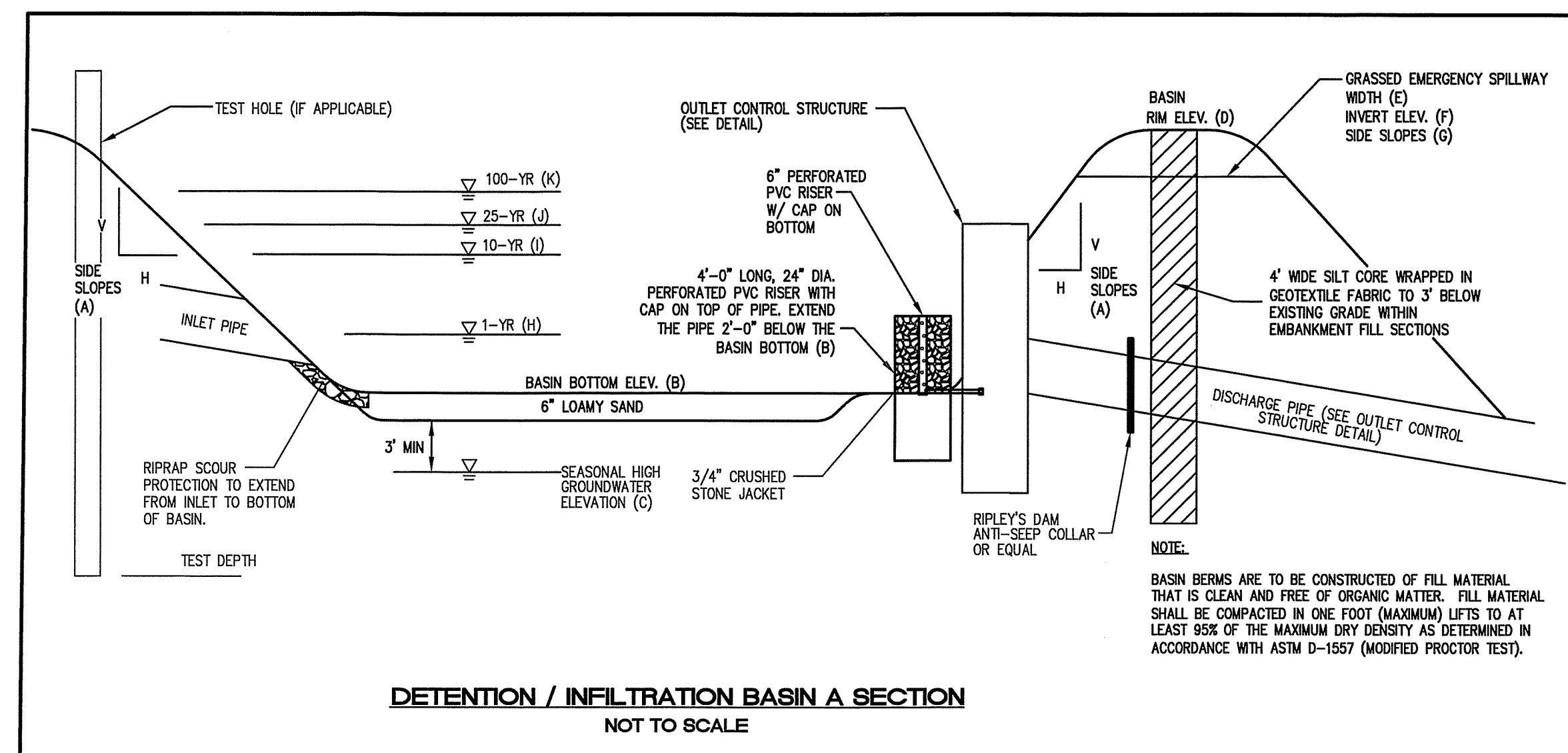
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FILE NO: 17.276.403



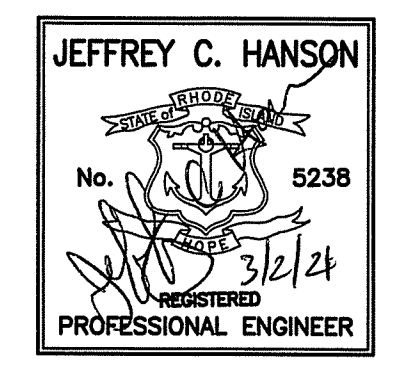
ID	RIM ELEV. (A)	INLET INVERT ELEV. (B)	INVERT ELEV. TO SAND FILTER (C)	INVERT ELEV. TO POND (D)	DIAM. OF STRUCTURE (E)
DS-1	273.00	269.17	268.70	269.67	4.0'
DS-2	273.00	268.63, 268.35	268.30	269.27	6.0'

ID	FOREBAY BOTTOM ELEV. (A)	FOREBAY PRETREATMENT VOLUME ELEV. (B)	FOREBAY OVERFLOW SPILLWAY INV. ELEV. (C)	TOP OF TOPSOIL ELEV. (D)	TOP OF FILTER BED ELEV. (E)	FILTER BED DEPTH IN FT. (F)	SHGWT ELEV. (G)	FILTER OVERFLOW SPILLWAY ELEV. (H)
SF-A1	268.00	271.10	271.50	270.50	269.50	2.00	258.90	271.25
SF-A2	268.00	271.30	271.50	270.50	269.50	2.00	260.03	271.25



ID	SIDE SLOPES (A)	BASIN BOTTOM ELEV. (B)	TEST PIT #	SHGWT ELEV. (C)	BASIN RIM ELEV. (D)	SPILLWAY				POND ELEVATION				OUTLET STRUCTURE				
						WIDTH IN FT. (E)	INVERT ELEV. (F)	SIDE SLOPES (G)	1-YR (H)	10-YR (I)	25-YR (J)	100-YR (K)	TOP OF STRUCTURE ELEV. (L)	# CONTROL ORIFICES & SIZE (M)	CONTROL ORIFICE ELEV. (N)	LOW FLOW ORIFICE DIAM IN INCHES (O)	DISCHARGE PIPE SIZE IN INCHES (P)	DISCHARGE PIPE INV. ELEV. (Q)
BASIN-A	3:1	266.00	2015	259.40	272.00	10.00	271.50	3:1	266.31	267.47	268.56	270.42	270.00	1, 8-INCH	266.50	3	12	266.00

NO.	DATE	REVISION



MILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING

250 Centerville Road, Building E-12
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www.MillstoneEng.com

790 Aquinneck Avenue, Building B
Middletown, Rhode Island 02842
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f. (401) 921-3344
p. (401) 921-3303

DETAILS - 2

WILLOW LAKES

A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

PREPARED FOR:
WILLOW LAKE PROPERTIES, LLC

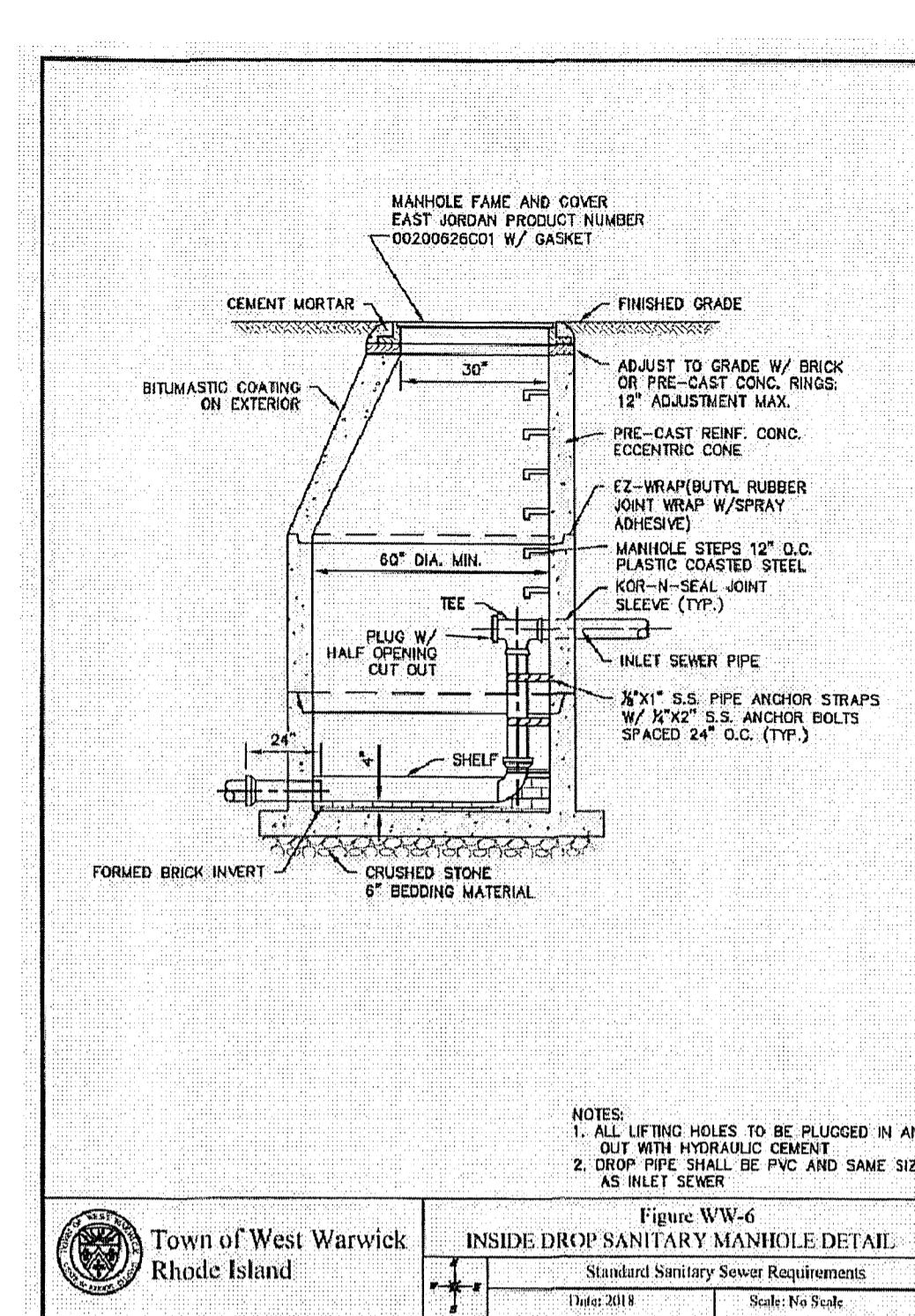
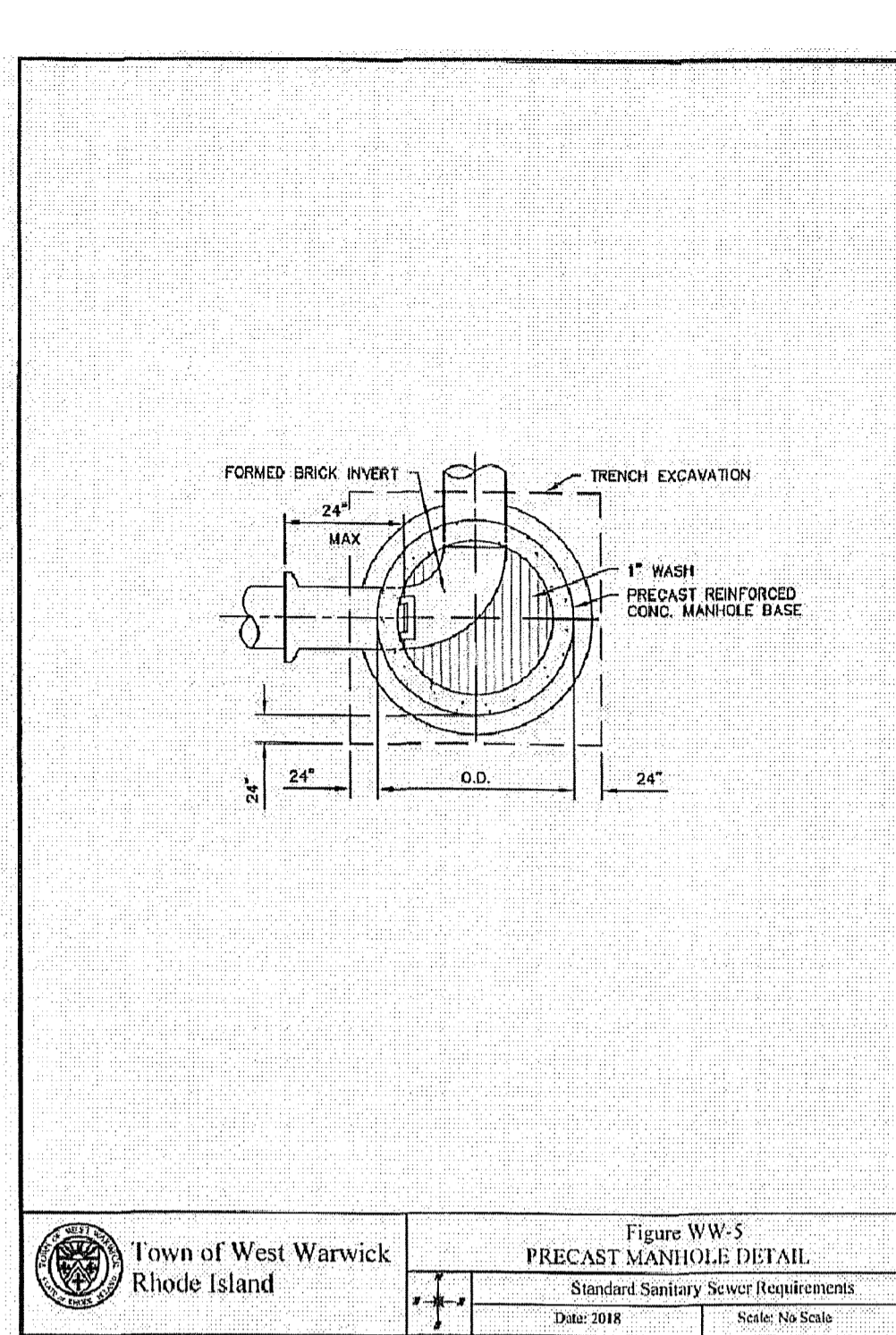
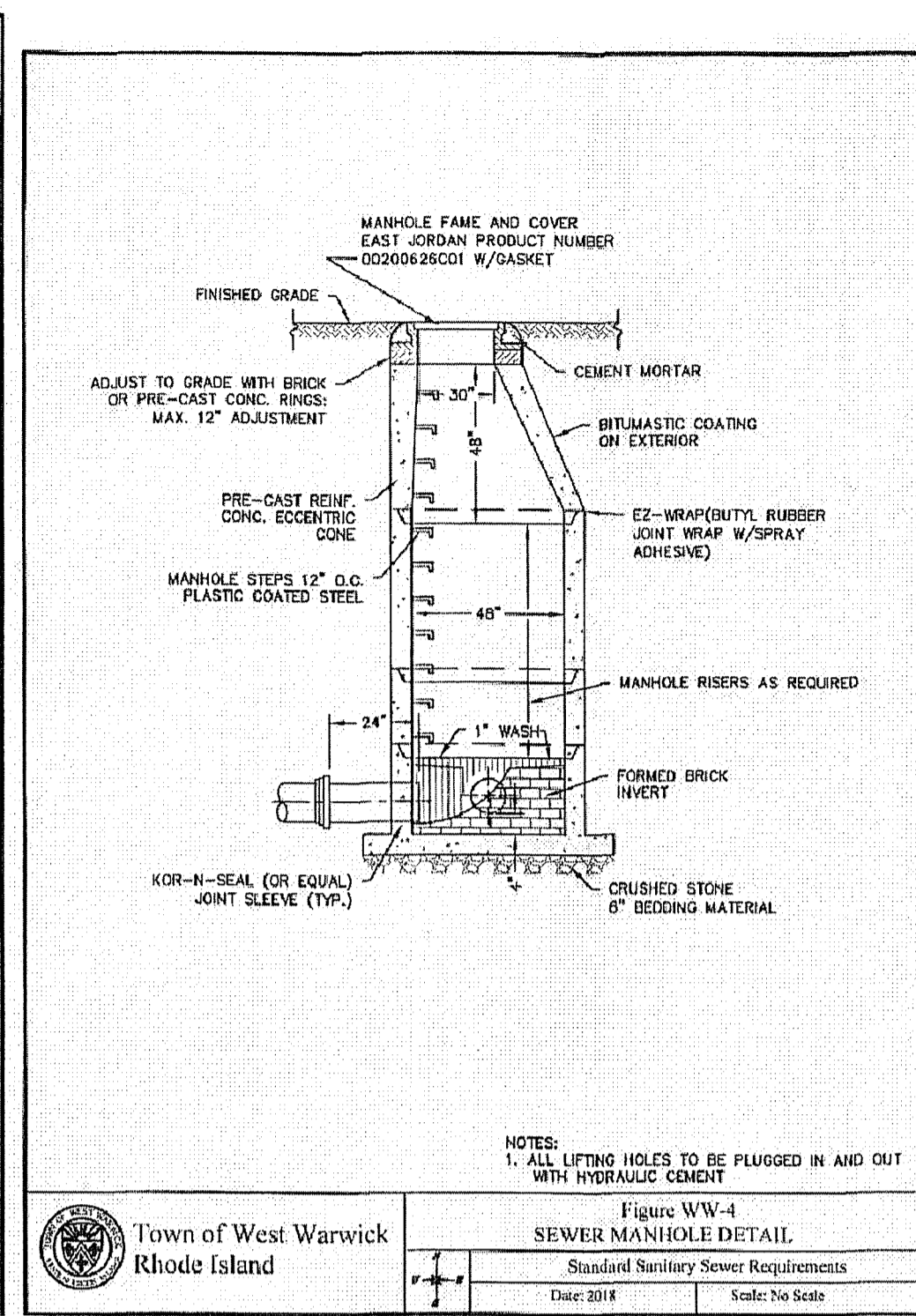
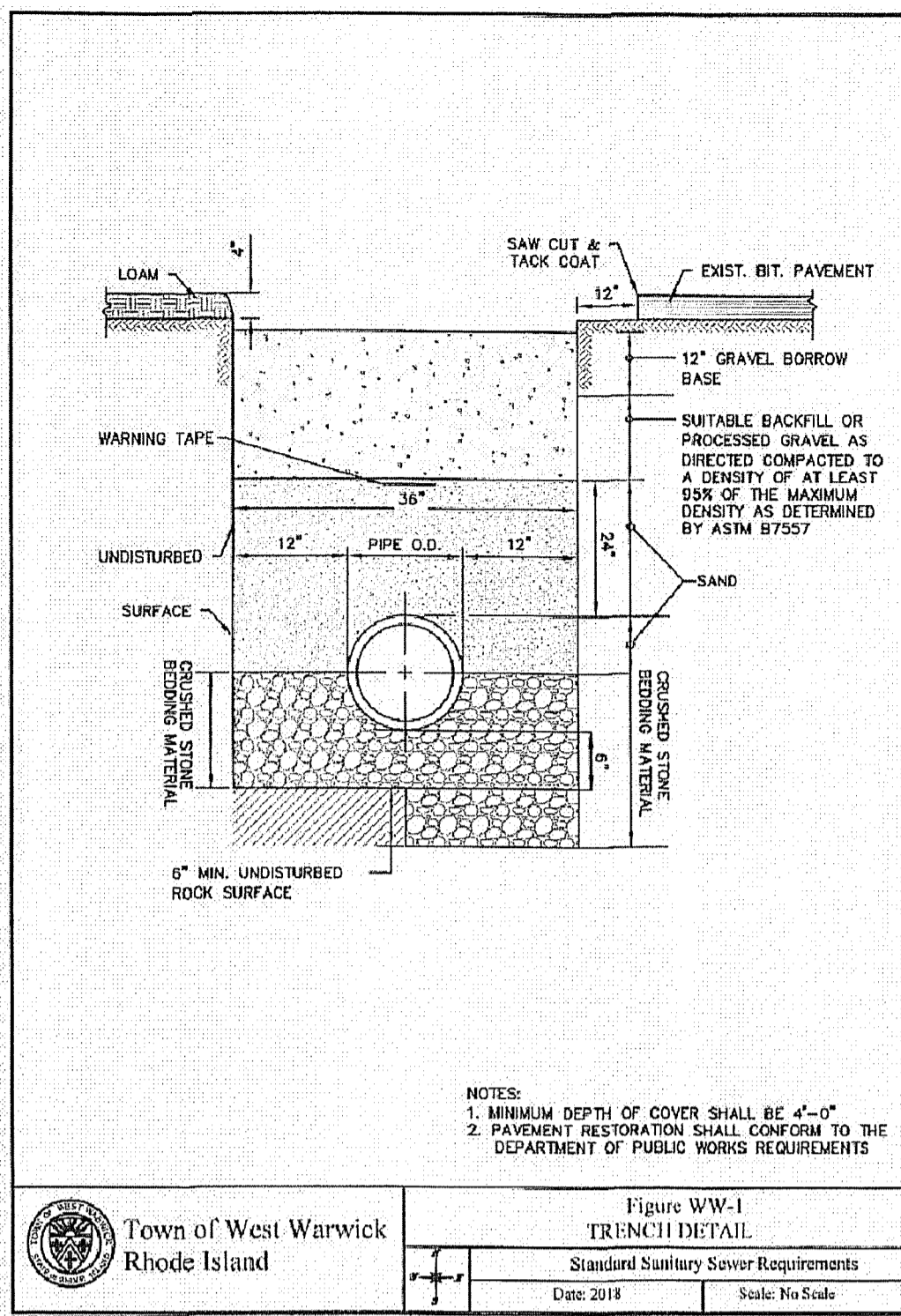
SCALE AS NOTED
FEBRUARY 2021

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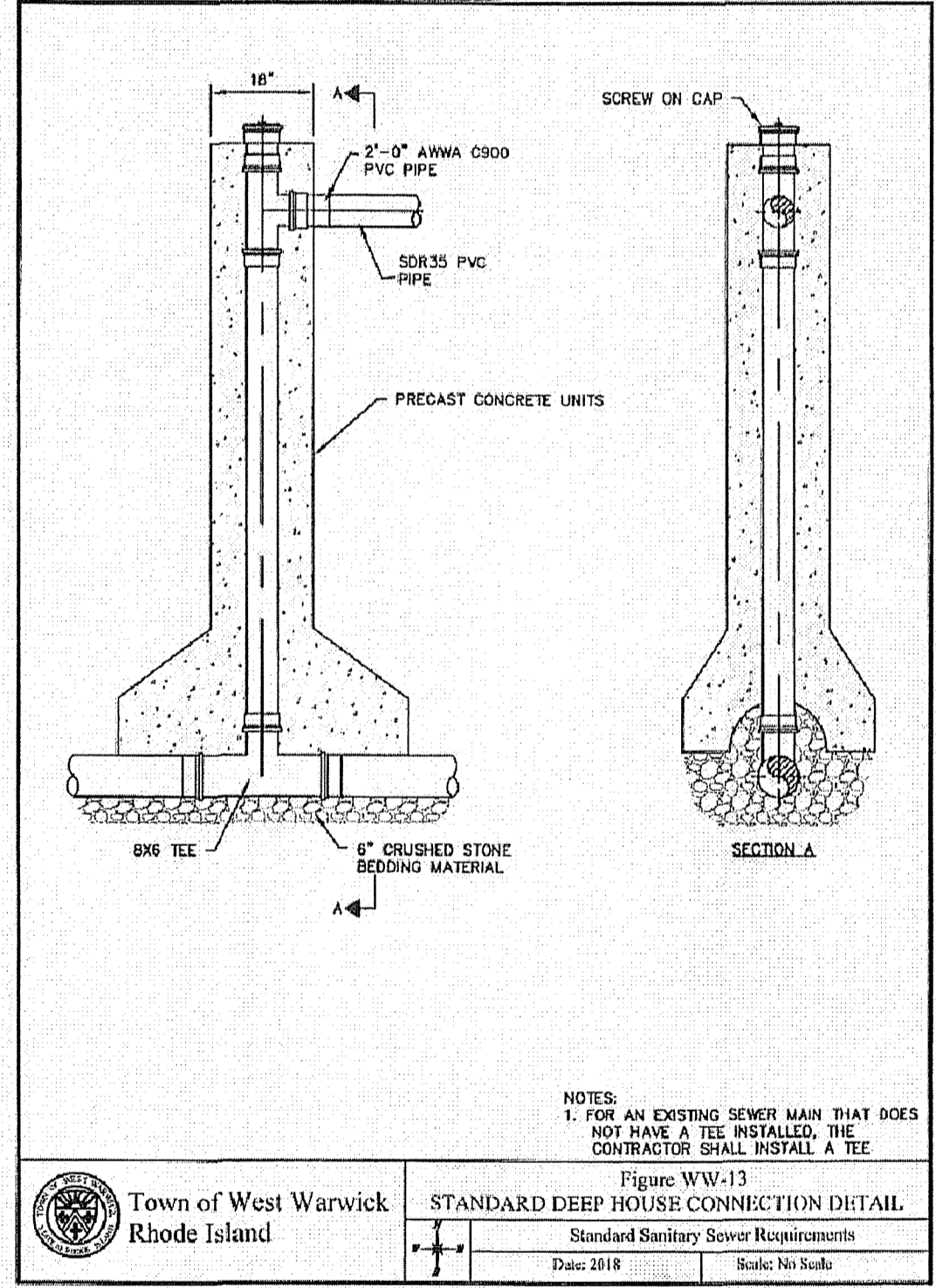
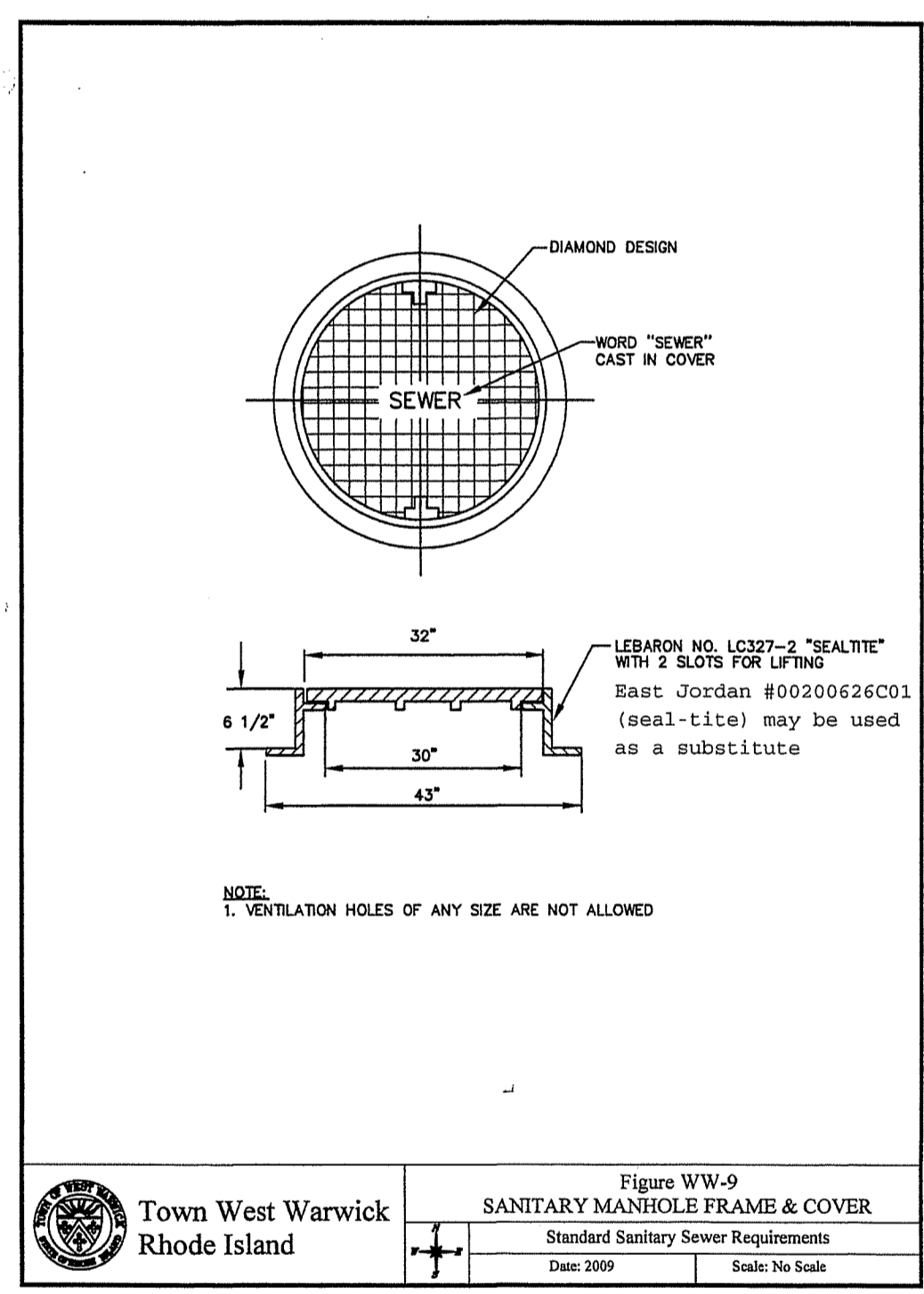


6' X 6' 1,000 GALLON GREASE TRAP

DESIGN NOTES:
1. CONCRETE 5,000 PSI @ 28 DAYS
2. REINFORCEMENT ASTM A-615 GRADE 60, 1" MIN. COVER
3. DESIGNED FOR 11-20 LOADING
4. CONSTRUCTION JOINT SEALED WITH 1" BUTYL RUBBER OR EQUAL

	FLOOR	VERT. FT.	COVER
WEIGHT	3,800 lbs.	1,800 lbs.	3,800 lbs.
VOLUME	270 gal.		

SCITUATE COMPANIES
CONTRACTOR: JOB NAME:
DATE: DRAWING: SRP-071008 DRAWING BY: C. J. SCOTT

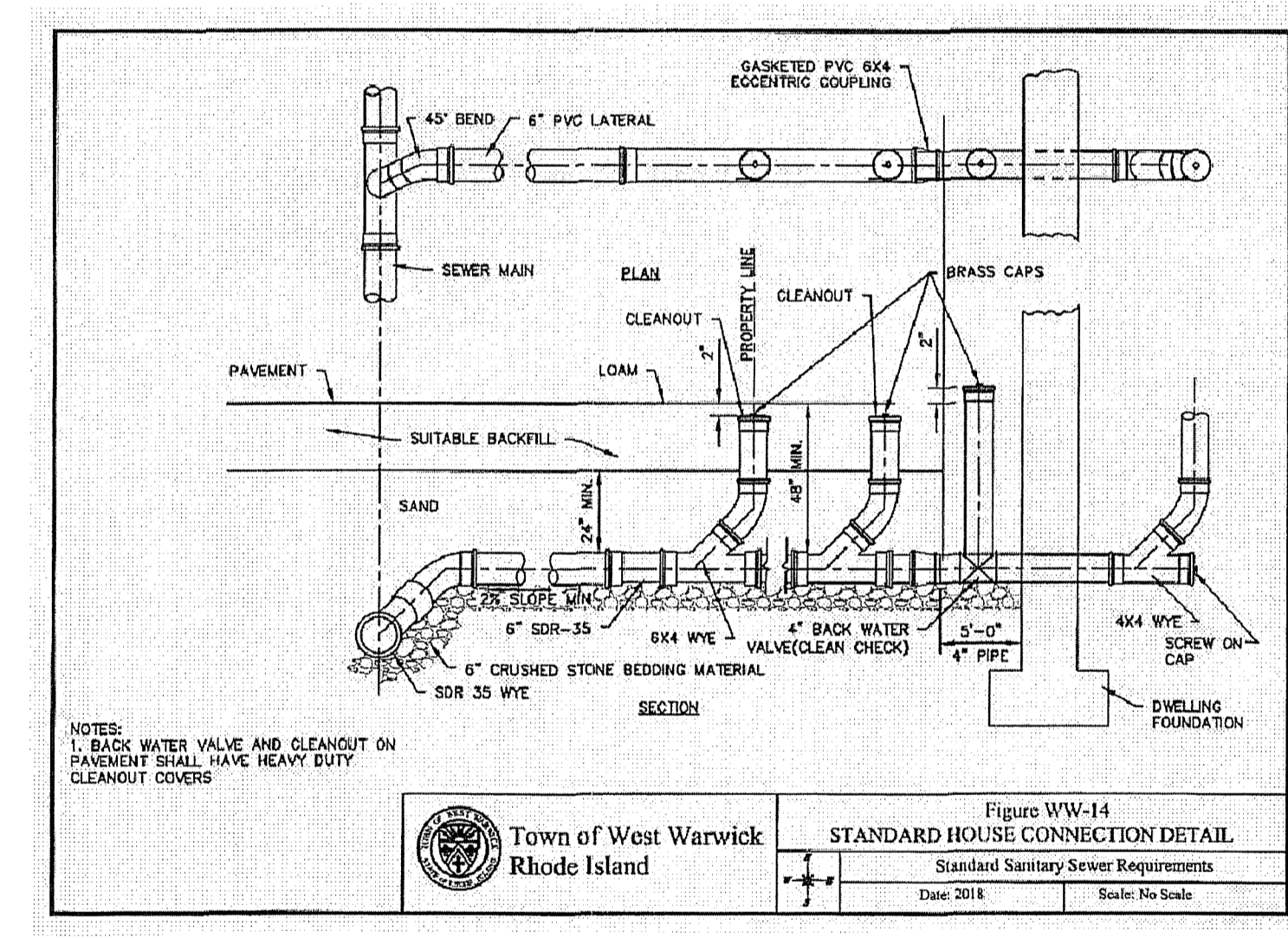


RECTORSEAL

Job Name: CCASMBLY

Notes:
1. CONTRACTOR TO SUBMIT SHOP DRAWING TO ENGINEER FOR APPROVAL.
2. REFER TO PRODUCT CATALOGUE FOR ADDITIONAL DETAIL.
3. "CLEAN CHECK" BACKWATER VALVE TO BE INSTALLED OUTSIDE OF EACH UNIT.

RECTORSEAL CORPORATION 2601 SPENWICK HOUSTON, TX 77055 (800) 231-3345 FAX (800) 452-2824



NO.	DATE	REVISION

JEFFREY C. HANSON
No. 5238
3/2/21
REGISTERED PROFESSIONAL ENGINEER

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DETAILS - 4

WILLOW LAKES

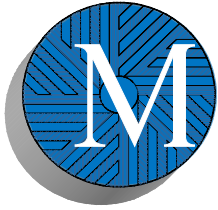
A.P. 16, LOT 3
NEW LONDON TURNPIKE
COVENTRY, RI

PREPARED FOR:
WILLOW LAKE
PROPERTIES, LLC

SCALE AS NOTED
FEBRUARY 2021

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Checked By: J.C.H.
Sheet
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of 12
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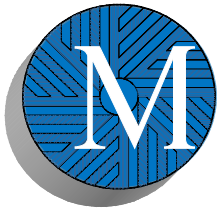


WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX L

Sample Architectural Plans (reduced)





WILLOW LAKES
A.P. 16, Lot 3
New London Turnpike
Coventry, RI
June 2019, Rev. 12/27/2021

APPENDIX M

Trip Generation letter from Bryant Associates

July 17, 2019
BAI #219065

Mr. Lawrence LaBonte
Willow Lake Properties, LLC
53 Greenwood Avenue
Darien, CT 06820

REFERENCE: **Willow Lakes Independent Living**
New London Turnpike (Assessor's Plat 16 - Lot 3)
Coventry, Rhode Island
Trip Generation

Dear Mr. LaBonte:

Bryant Associates, Inc. (Bryant) has been retained by Willow Lake Properties, LLC to provide a trip generation memorandum in regards to their proposed development to construct a multifaceted care residential facility on Assessor's Plat 16, Lot 3, on the west side of New London Turnpike in Coventry, Rhode Island. The development is expected to include 124 independent living units, 48 assisted living units, and 30 memory care units. Bryant previously prepared the *Sherwood Village Traffic Impact Analysis (TIA)* report, dated April 2009 and revised August 2009, for the Sherwood Development, LLC's proposed development of 192 apartments units on the same parcel (Assessor's Plat 16, Lot 3). The Sherwood Village project was subsequently renamed as Tiffany Village.

To evaluate the traffic impacts of the proposed Willow Lakes project, it is necessary to determine the amount of traffic expected to be generated by the proposed development. The trip generation calculations are based on data compiled in Trip Generation (10th edition), an informational report published by the Institute of Transportation Engineers (ITE). Trip Generation is a tool for planners, transportation professionals, zoning boards, and others who are interested in estimating the number of vehicle trips generated by a proposed development or land use. This document is based on thousands of trip generation studies submitted to the Institute by public agencies, developers, consulting firms, and associations.

The number of trips anticipated to be generated by the proposed 202 dwelling units (124 independent living units, 48 assisted living units, and 30 memory care units) was estimated using ITE Trip Generation Land Use Code 255, Continuing Care Retirement Community, which sets forth trips generated at facilities similar to the proposed use. Trip Generation defines a continuing care retirement community as a land use that provides multiple elements of adult living and combine aspects of independent living with increased care that is aimed at allowing the residents to live in one community as their medical needs change. Trip Generation also indicates that this land use is

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typically a self-contained village that may also contain special services such as medical, dining, and recreational, etc. for residents. The number of trips anticipated to be generated by the proposed Willow Lakes development, as well as the number of trips as presented in the previously proposed Sherwood Village development TIA, during the A.M. and P.M. peak hours are shown in Table No. 1.

Table No. 1
Trip Generation Summary and Comparison
Total New Trips

Time Period	Direction	Willow Lakes Residential Development (Land Use Code 225) 202 Units	Sherwood Village Apartment Development (Land Use Code 220) 192 Apartments
A.M. Peak Hour	Enter	31	20
	Exit	17	78
	TOTAL	48	98
P.M. Peak Hour	Enter	34	80
	Exit	51	43
	TOTAL	85	123

The highest total trips in any hour of the day anticipated to be generated by the proposed Willow Lakes development is 85 trips (entering and exiting) during the P.M. peak hour. It is anticipated that the proposed Willow Lakes development will generate fewer trips during the peak hours than the previously proposed 192 unit apartment development.

It is recommended that a full traffic study be completed to determine the expected traffic operations with the proposed development and the anticipated impacts resulting from the development, if any.

We are prepared to review the results of this analysis with you at your convenience. Should you have any questions or comments, please do not hesitate to contact me at (401) 834-1063 or tbrayton@bryant-engrs.com.

Very truly yours,
BRYANT ASSOCIATES, INC.



Todd E. Brayton, P.E.
Director of Operations – Rhode Island
Transportation Director

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