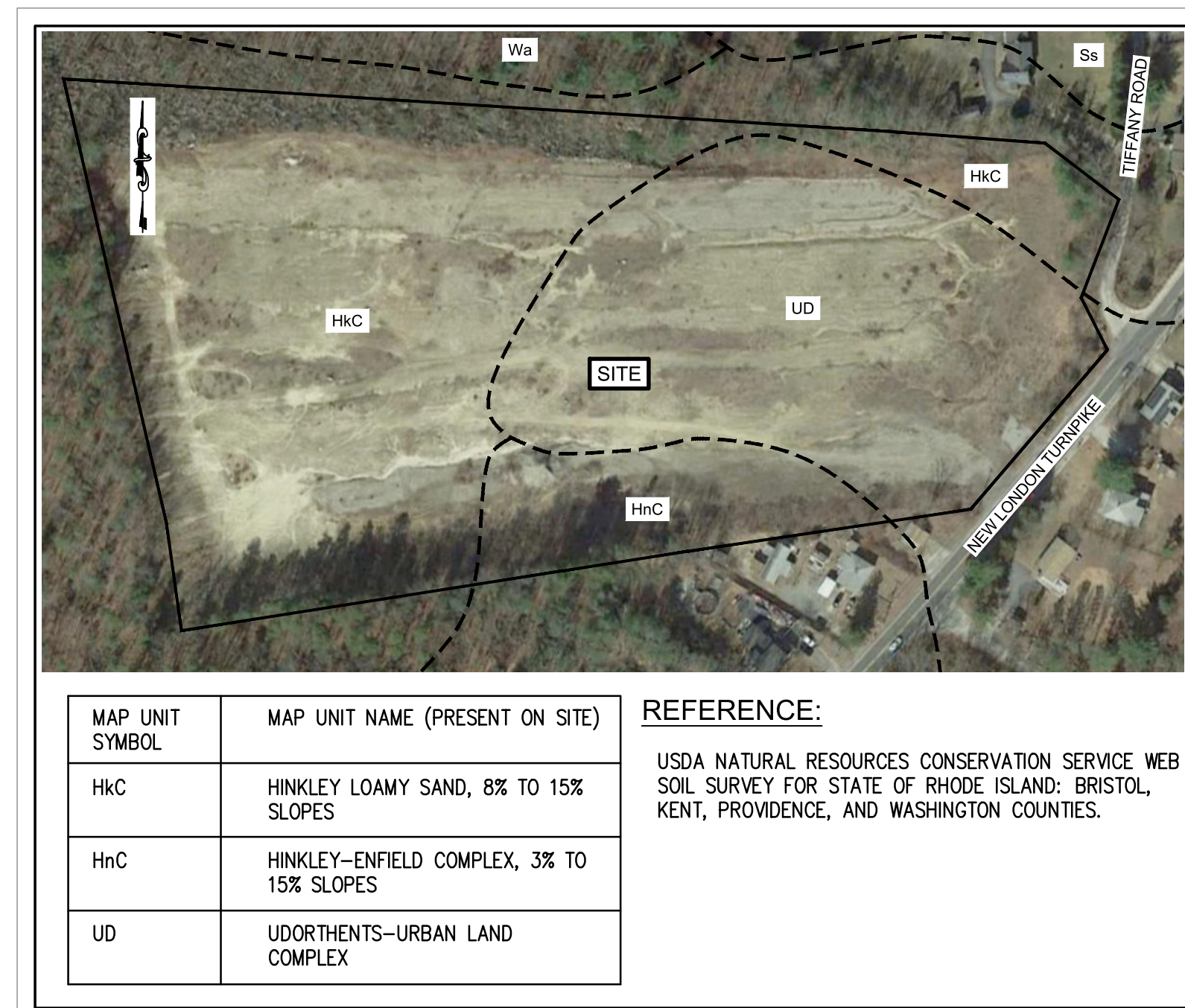


# CONSTRUCTION DRAWINGS

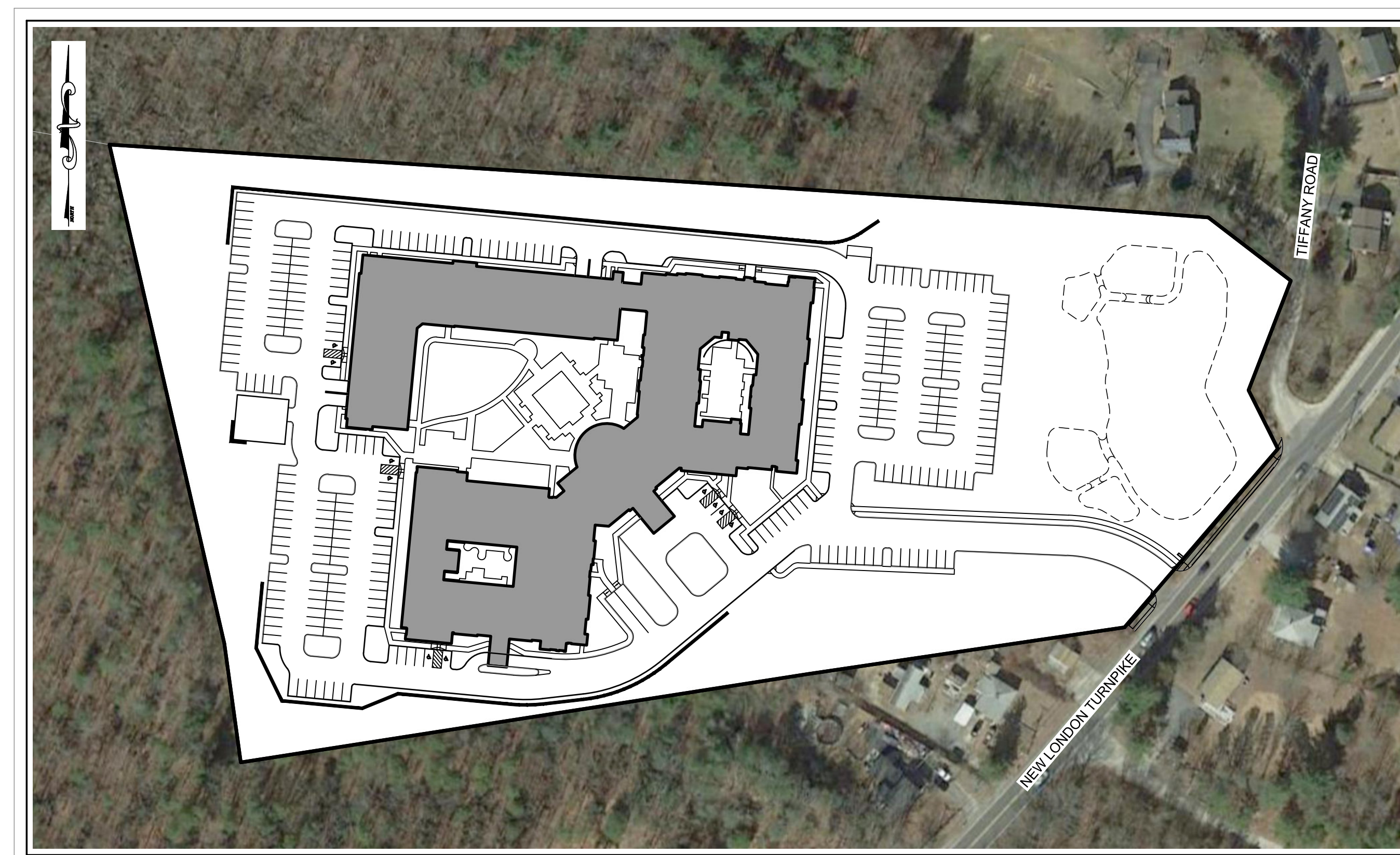
FOR:

## WILLOW LAKES INDEPENDENT LIVING

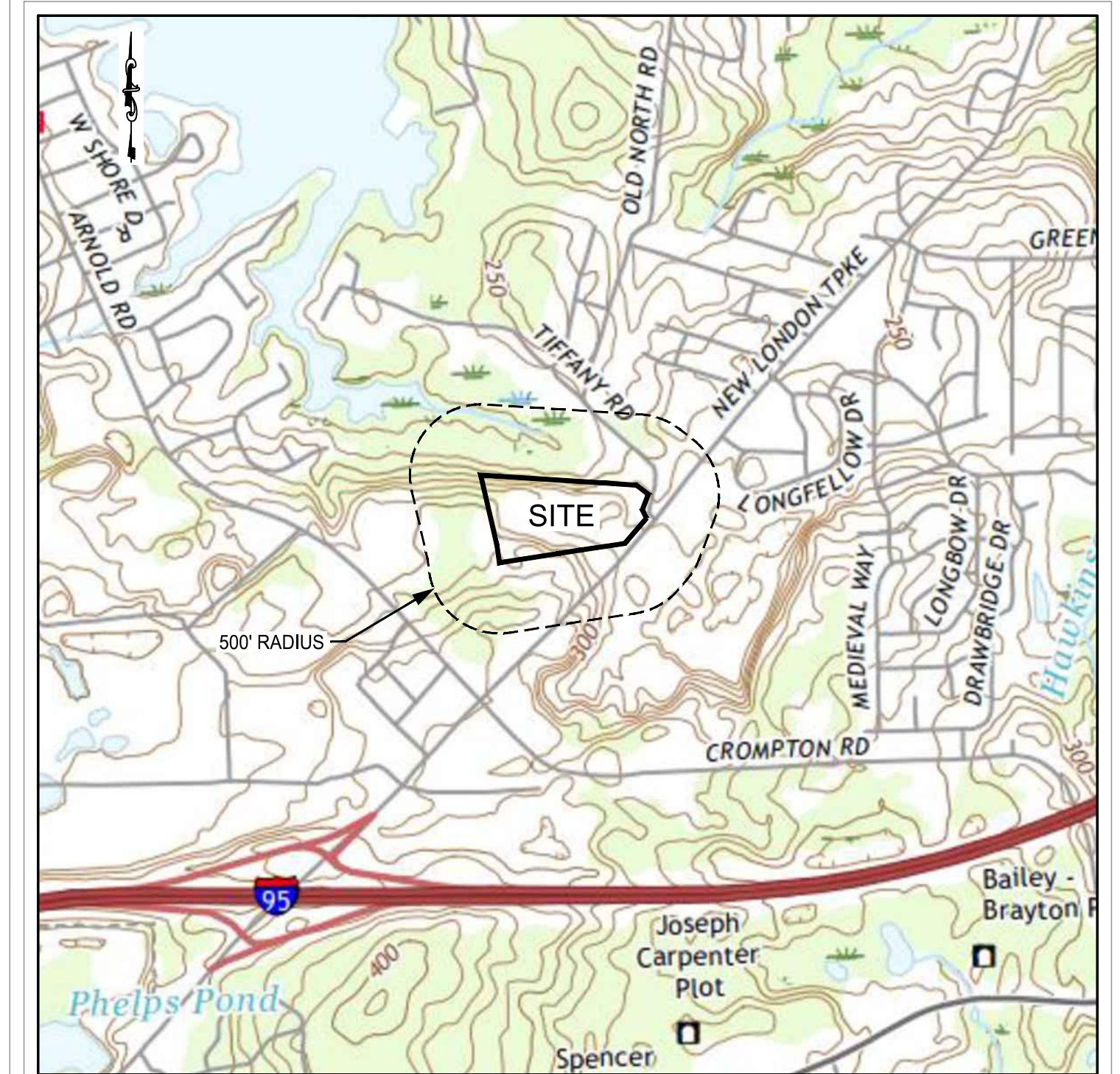
A.P. 16 LOT 3  
NEW LONDON TURNPIKE  
COVENTRY, RHODE ISLAND



SOILS MAP  
NOT TO SCALE



AERIAL IMAGE  
SCALE: 1"=100'



LOCUS  
1" = 1,000'

### TABLE OF CONTENTS:

SHEET	DESCRIPTION	REVISED
1	COVER SHEET	3/24/26
2	EXISTING CONDITIONS PLAN	5/9/25
3	SITE LAYOUT PLAN	3/24/26
4	GRADING AND DRAINAGE PLAN	3/24/26
5	UTILITY PLAN	7/2/25
6	SOIL EROSION AND SEDIMENT CONTROL PLAN	3/24/26
7	SOIL EROSION AND SEDIMENT CONTROL PLAN - 2	3/24/26
8	NOTES AND DETAILS	3/24/26
9	DETAILS - 1	5/9/25
10	DETAILS - 2	3/24/26
11	DETAILS - 3	5/9/25
12	DETAILS - 4	5/9/25

### PREPARED BY:



250 Centerville Road, Building E-12 | 790 Aquidneck Avenue, Building B  
Warwick, RI 02886 | Middletown, RI 02842

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**MAY 2025**

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

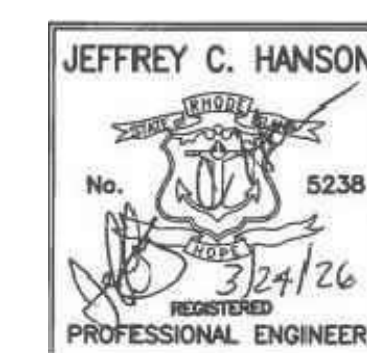
*Jeffrey C. Hanson*  
JEFFREY C. HANSON, P.E. (RI P.E. # 5238)

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

ATTORNEY:  
MICHAEL D. RESNICK  
128 DORRANCE STREET, SUITE 300  
PROVIDENCE, RI 02903  
(401) 490-7334

OWNER/APPLICANT:  
LRT NEW LONDON AVE DEVELOPMENT, LLC  
110 TRADERS CROSS  
BLUFFTON, SC 29909  
PRINCIPAL: CHARLES ANDERSON  
(401) 935-9263

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



Drawn By: BJC

Checked By: JCH

Sheet

**1**

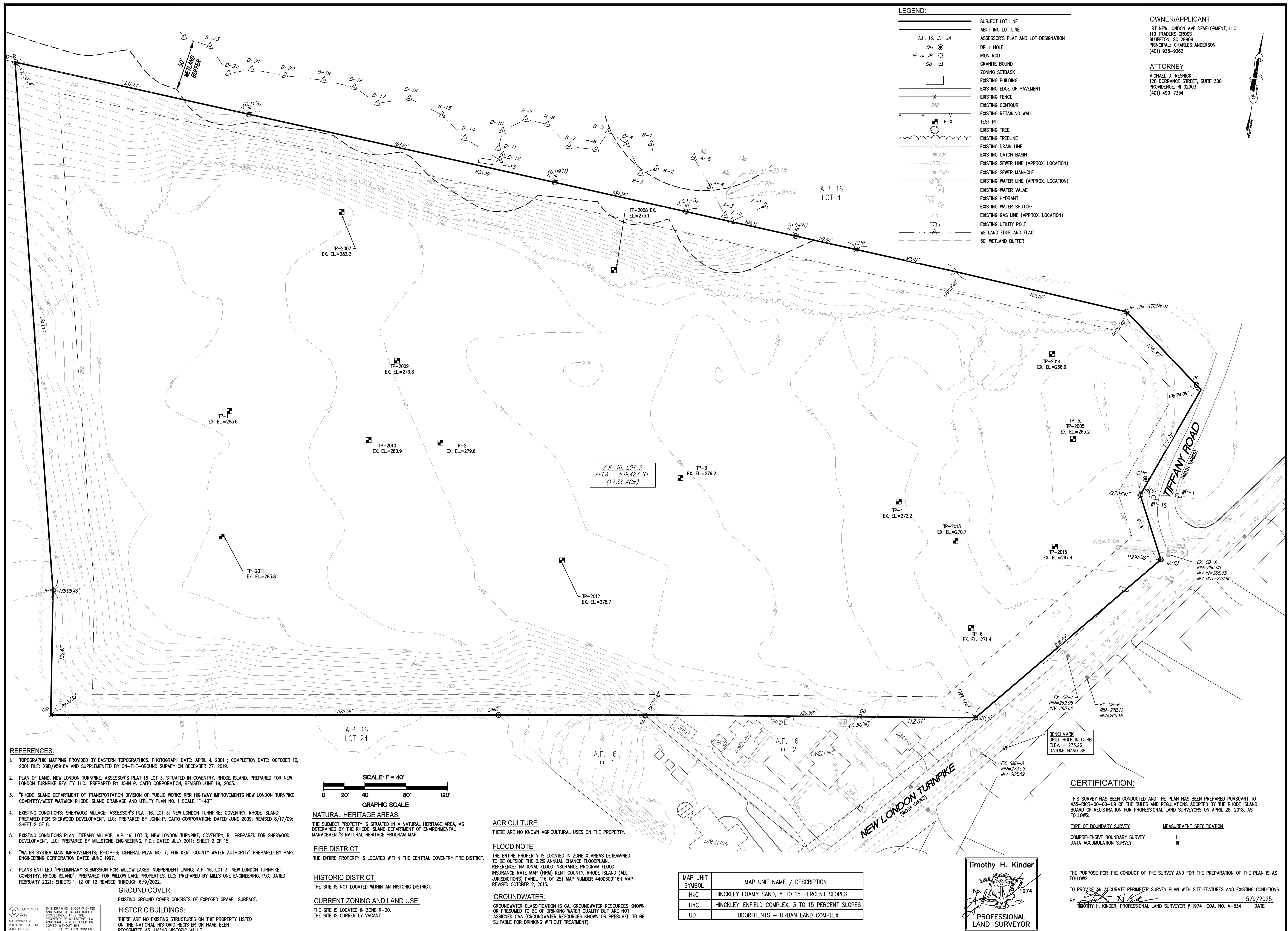
of 12

FILE NO.: 17.276.403

- REFERENCES:
- AERIAL PHOTOGRAPH TAKEN FROM GOOGLE EARTH.
  - LOCUS MAP USGS, CROMPTON QUADRANGLE.
  - PLANS ENTITLED "PRELIMINARY SUBMISSION FOR WILLOW LAKES INDEPENDENT LIVING: A.P. 16, LOT 3, NEW LONDON TURNPIKE, COVENTRY, RHODE ISLAND", PREPARED FOR WILLOW LAKE PROPERTIES, LLC, PREPARED BY MILLSTONE ENGINEERING, P.C. DATED FEBRUARY 2021; SHEETS 1-12 OF 12 REVISED THROUGH 6/9/2022.

NO.	DATE	REVISION
1	5/9/25	ISSUED FOR PERMIT
2	7/2/25	TOWN COMMENTS
3	3/24/26	TOWN COMMENTS

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**LEGEND:**

AP. 16, LOT 24	SUBJECT LOT LINE	OWNER/APPLICANT
DH	ABUTTING LOT LINE	LRT NEW LONDON AVE DEVELOPMENT, LLC
IR or IP	ASSESSOR'S PLAT AND LOT DESIGNATION	110 TRADERS CROSS
GB	DRILL HOLE	BLUFFTON, SC 29909
	IRON ROD	PRINCIPAL: CHARLES ANDERSON
	GRANITE BOUND	(401) 935-9263
	ZONING SETBACK	ATTORNEY
	EXISTING BUILDING	MICHAEL D. RESNICK
	EXISTING EDGE OF PAVEMENT	128 DORRANCE STREET, SUITE 300
	EXISTING FENCE	PROVIDENCE, RI 02903
	EXISTING CONTOUR	(401) 490-7334
	EXISTING RETAINING WALL	
	TEST PIT	
	EXISTING TREE	
	EXISTING TREELINE	
	EXISTING DRAIN LINE	
	EXISTING CATCH BASIN	
	EXISTING SEWER LINE (APPROX. LOCATION)	
	EXISTING SEWER MANHOLE	
	EXISTING WATER LINE (APPROX. LOCATION)	
	EXISTING WATER VALVE	
	EXISTING HYDRANT	
	EXISTING WATER SHUTOFF	
	EXISTING GAS LINE (APPROX. LOCATION)	
	EXISTING UTILITY POLE	
	WETLAND EDGE AND FLAG	
	50' WETLAND BUFFER	

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT

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**EXISTING CONDITIONS PLAN**

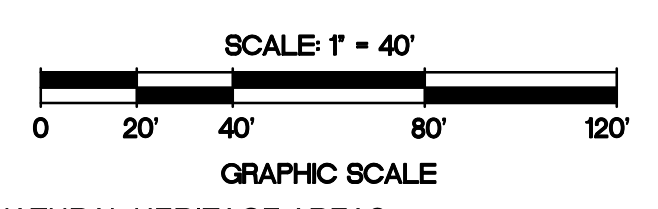
**WILLOW LAKES**

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

PREPARED FOR:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**

1" = 40'  
 MAY 2025

- REFERENCES:**
- TOPOGRAPHIC MAPPING PROVIDED BY EASTERN TOPOGRAPHICS. PHOTOGRAPH DATE: APRIL 4, 2001 ; COMPLETION DATE: OCTOBER 10, 2001. FILE: X98/65918A AND SUPPLEMENTED BY ON-THE-GROUND SURVEY ON DECEMBER 27, 2019.
  - 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, DATED JUNE 2009; REVISED JUNE 19, 2003.
  - "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"
  - 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.
  - 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.
  - "WATER SYSTEM MAIN IMPROVEMENTS; R-CIP-6; GENERAL PLAN NO. 7; FOR KENT COUNTY WATER AUTHORITY" PREPARED BY PARE ENGINEERING CORPORATION DATED JUNE 1997.
  - PLANS ENTITLED "PRELIMINARY SUBMISSION FOR WILLOW LAKES INDEPENDENT LIVING; A.P. 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND"; PREPARED FOR WILLOW LAKE PROPERTIES, LLC; PREPARED BY MILLSTONE ENGINEERING, P.C. DATED FEBRUARY 2021; SHEETS 1-12 OF 12 REVISED THROUGH 6/9/2022.



**NATURAL HERITAGE AREAS:**  
 THE SUBJECT PROPERTY IS 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 GA. 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
HnC	HINCKLEY LOAMY SAND, 8 TO 15 PERCENT SLOPES
HnC	HINCKLEY-ENFIELD COMPLEX, 3 TO 15 PERCENT SLOPES
UD	UDORTHERNTS - 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-ROR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON APRIL 28, 2016, 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, PROFESSIONAL LAND SURVEYOR # 1974 COA. NO. A-534 DATE 5/9/2025

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**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.

**REQUIRED APPROVALS:**

THIS PROJECT WAS PREVIOUSLY APPROVED AS "TIFFANY VILLAGE" (SEE REFERENCED PLANS). THE PROJECT CURRENTLY HAS OBTAINED, OR WILL REQUIRE THE FOLLOWING PERMITS:

1. MASTER PLAN
2. SPECIAL USE PERMIT FOR MULTIFAMILY USE
3. COMPREHENSIVE PERMIT
4. KENT COUNTY WATER AUTHORITY
5. COVENTRY SEWER
6. CENTRAL COVENTRY FIRE DISTRICT
7. RHODE ISLAND POLLUTANT DISCHARGES ELIMINATION SYSTEM (RIDDES) PERMIT
8. COVENTRY SOIL EROSION PERMIT
9. PRELIMINARY PLAN
10. FINAL PLAN

**TOWN SIGNATURE BLOCK:**

ADMINISTRATIVE OFFICER	DATE
PLANNING COMMISSION CHAIRMAN	DATE
PLANNING DIRECTOR	DATE

**OWNER/APPLICANT**

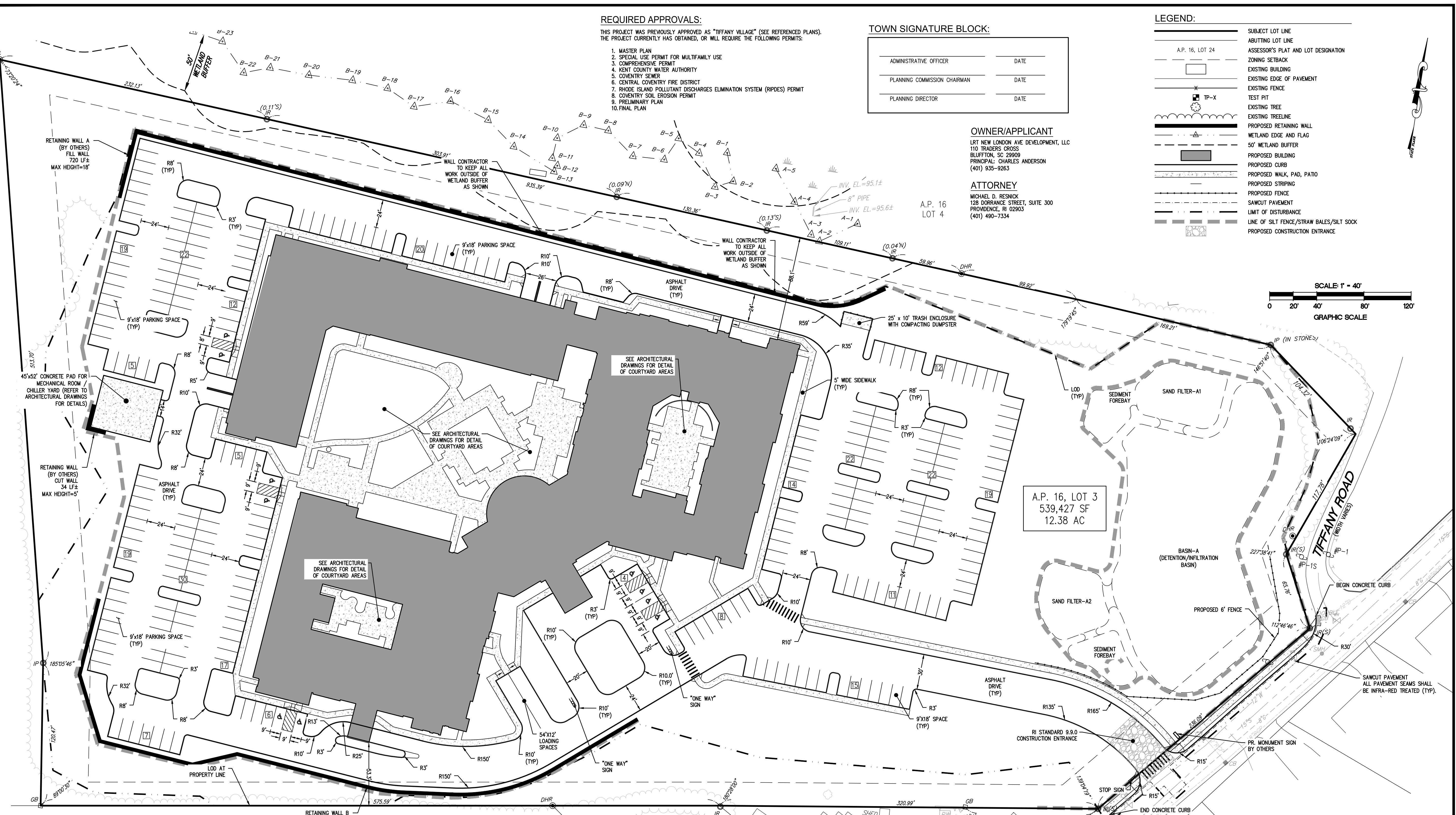
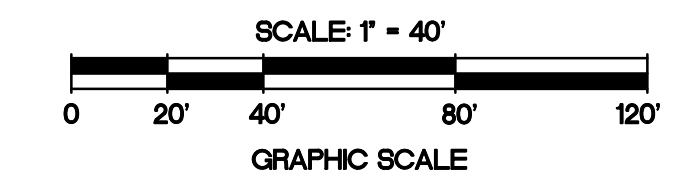
LRT NEW LONDON AVE DEVELOPMENT, LLC  
110 TRADERS CROSS  
BLUFFTON, SC 29909  
PRINCIPAL: CHARLES ANDERSON  
(401) 935-9263

**ATTORNEY**

MICHAEL D. RESNIK  
128 BORDEN STREET, SUITE 300  
PROVIDENCE, RI 02903  
(401) 490-7334

**LEGEND:**

	SUBJECT LOT LINE
	ABUTTING LOT LINE
	ASSESSOR'S PLAT AND LOT DESIGNATION
	ZONING SETBACK
	EXISTING BUILDING
	EXISTING EDGE OF PAVEMENT
	EXISTING FENCE
	TEST PIT
	EXISTING TREE
	EXISTING TREE LINE
	PROPOSED RETAINING WALL
	WETLAND EDGE AND FLAG
	50' WETLAND BUFFER
	PROPOSED BUILDING
	PROPOSED CURB
	PROPOSED WALK, PAD, PATIO
	PROPOSED STRIPING
	PROPOSED FENCE
	SAWCUT PAVEMENT
	LIMIT OF DISTURBANCE
	LINE OF SILT FENCE/STRAW BALES/SILT SOCK
	PROPOSED CONSTRUCTION ENTRANCE



**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	
	<b>TOTAL</b>			279 SPACES	286 SPACES <sup>(2)</sup>
	ACCESSIBLE SPACES	ACCESSIBLE SPACES	201 - 300 SPACES = 7 SPACES <sup>(1)</sup>	7 SPACES	10 SPACES <sup>(2)</sup>

- NOTES:**
1. REFERENCE CODE REQUIREMENTS FOR HOUSING ACCESSIBILITY BY INTERNATIONAL CODE COUNCIL.
  2. PARKING COUNT DOES NOT INCLUDE GARAGE SPACES (50 TOTAL, 2 ADA). TOTAL COUNT IS 336 SPACES.

**SITE IMPROVEMENT MATRIX:**

APPROXIMATE AMOUNT OF CONCRETE SIDEWALKS / PATIOS:	3,735 SY
APPROXIMATE AMOUNT OF CONCRETE CURB:	7,420 LF
APPROXIMATE AREA OF PARKING SURFACE AND DRIVES:	15,450 SY

**ZONING DATA TABLE:**

MULTIFAMILY REGULATIONS	REQUIRED	A.P. 16, LOT 3
SECTION 1455: - MAXIMUM STRUCTURE HEIGHT	3 STORIES OR 35 FT.	60'
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%	52% ±
LOT COVERAGE (IMPERVIOUS)	20%	48% ± <sup>(2)</sup>
LAND SUITABLE FOR DEVELOPMENT	NONE <sup>(1)</sup>	9.7 AC <sup>(2)</sup>

**NOTES:**

1. NO STANDARD IN MULTIFAMILY SECTION
2. VARIANCE GRANTED BY PLANNING COMMISSION
3. UNSUITABLE LAND CALCULATION:

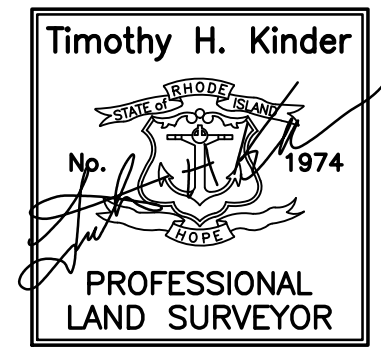
SITE AREA:	539,427 SF
- WETLANDS (INCLUDING PERIMETER):	12,255 SF
FLOOD ZONE A:	NONE
STEEP SLOPES (EXCLUDING STOCKPILES):	94,703 SF
STREET ALLOWANCE:	10,080 SF
EXISTING EASEMENTS:	NONE
CEMETERIES:	NONE
	422,389 SF (9.7 AC)

**NOTES:**

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

**REFERENCES:**

1. 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 2/20/2012.
2. PLANS ENTITLED "PRELIMINARY SUBMISSION FOR WILLOW LAKES INDEPENDENT LIVING; A.P. 16, LOT 3; NEW LONDON TURNPIKE; COVENTRY, RHODE ISLAND"; PREPARED FOR WILLOW LAKE PROPERTIES, LLC; PREPARED BY MILLSTONE ENGINEERING, P.C. DATED FEBRUARY 2021; SHEETS 1-12 OF 12 REVISED THROUGH 6/9/2022.



**CERTIFICATION:**

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-19 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.  
BY: *[Signature]* 3/24/2026  
TIMOTHY H. KINDER, PROFESSIONAL LAND SURVEYOR # 1974 COA. NO. 786 DATE

NO.	DATE	REVISION
1	5/9/25	ISSUED FOR PERMIT
2	7/2/25	TOWN COMMENTS
3	3/24/26	TOWN COMMENTS



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**SITE LAYOUT PLAN**

**WILLOW LAKES**

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

PREPARED FOR:  
LRT NEW LONDON AVE  
DEVELOPMENT, LLC

1" = 40'  
MAY 2025

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

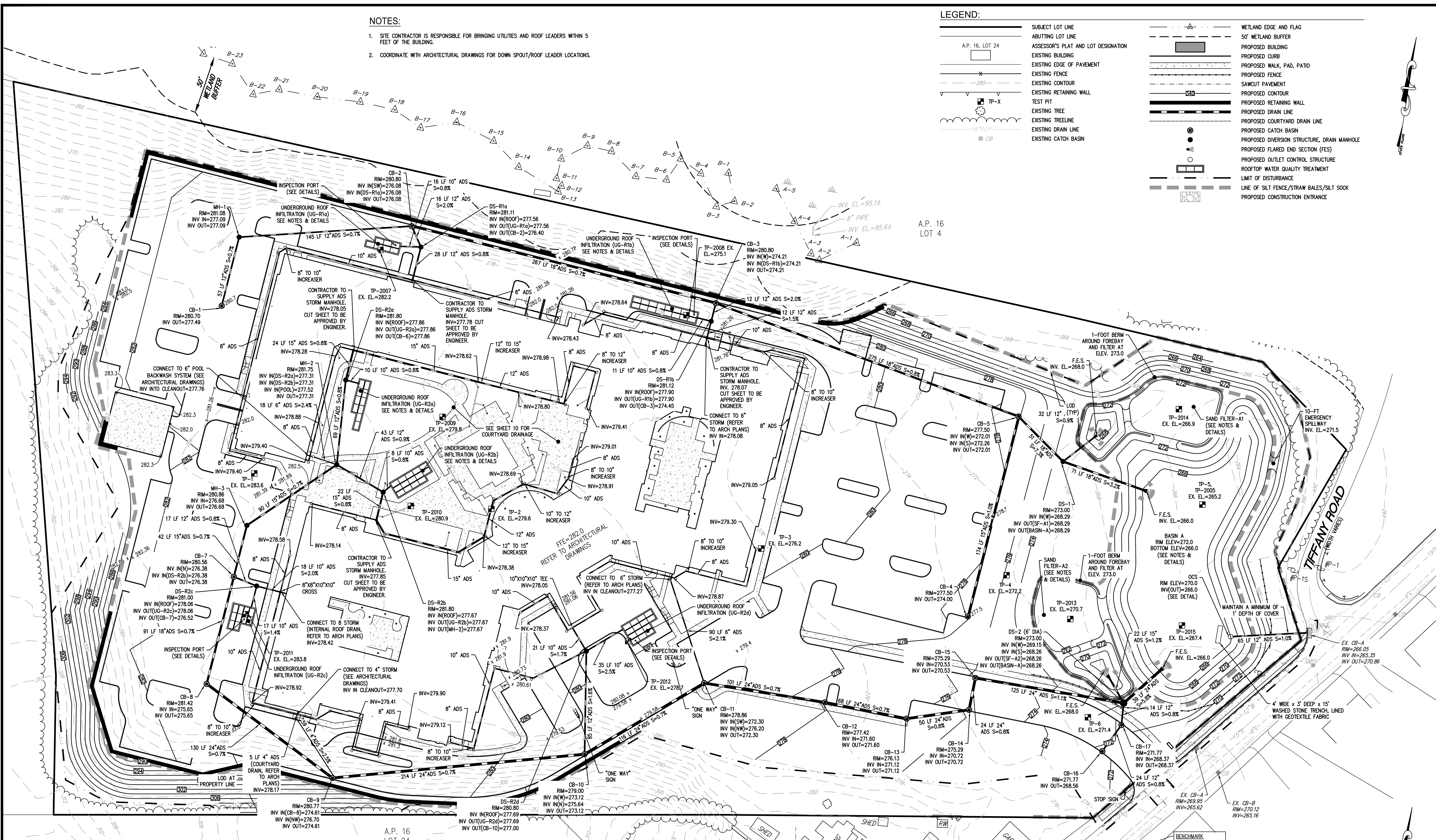
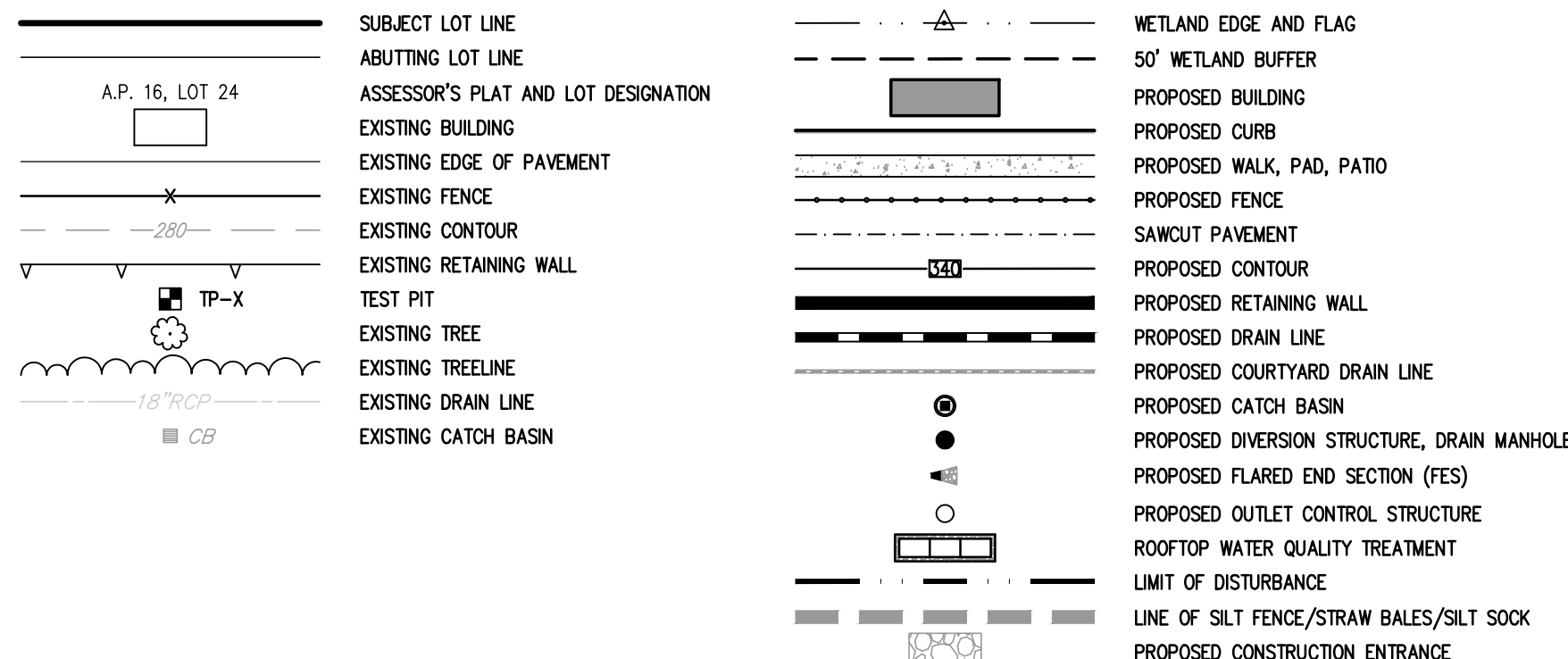
**3**  
of 12

FILE NO.: 17.276.403

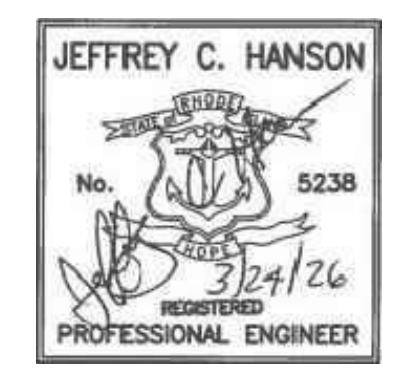
**NOTES:**

- 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:**



NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT
2	3/24/26	TOWN COMMENTS



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**GRADING AND DRAINAGE PLAN**  
**WILLOW LAKES**  
 A.P. 16, LOT 3  
 NEW LONDON TURNPIKE  
 COVENTRY, RI

PREPARED FOR:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**  
 1" = 40'  
 MAY 2025

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

**4**  
 of 12

FILE NO.: 17.276.403

**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 4" ADS DRAIN LINE:	59 LF
LENGTH OF 6" ADS DRAIN LINE:	305 LF
LENGTH OF 8" ADS DRAIN LINE:	1,302 LF
LENGTH OF 10" ADS DRAIN LINE:	771 LF
LENGTH OF 12" ADS DRAIN LINE:	754 LF
LENGTH OF 15" ADS DRAIN LINE:	588 LF
LENGTH OF 18" ADS DRAIN LINE:	755 LF
LENGTH OF 24" ADS DRAIN LINE:	867 LF
NUMBER OF CATCH BASINS:	16
NUMBER OF DRAIN MANHOLES:	11

**NOTES:**

- SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLING EXTERNAL ROOF LEADER COLLECTION SYSTEM AND CONNECTING ALL DOWNSPOUTS. MINIMUM SLOPE OF REEF LEADER COLLECTION SYSTEM SHALL BE 0.5%. CONTRACTOR TO PROVIDE CLEANOUTS AT ALL BENDS GREATER THAN 45 DEGREES.
- COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF DOWNSPOUT, INTERNAL COURTYARD, AND POLL BACKWASH CONNECTIONS.

**REFERENCES:**

- 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 2/20/2012.
- PLANS ENTITLED "PRELIMINARY SUBMISSION FOR WILLOW LAKES INDEPENDENT LIVING, A.P. 16, LOT 3, NEW LONDON TURNPIKE, COVENTRY, RHODE ISLAND", PREPARED FOR WILLOW LAKE PROPERTIES, LLC, PREPARED BY MILLSTONE ENGINEERING, P.C. DATED FEBRUARY 2021; SHEETS 1-12 OF 12 REVISED THROUGH 6/9/2022.

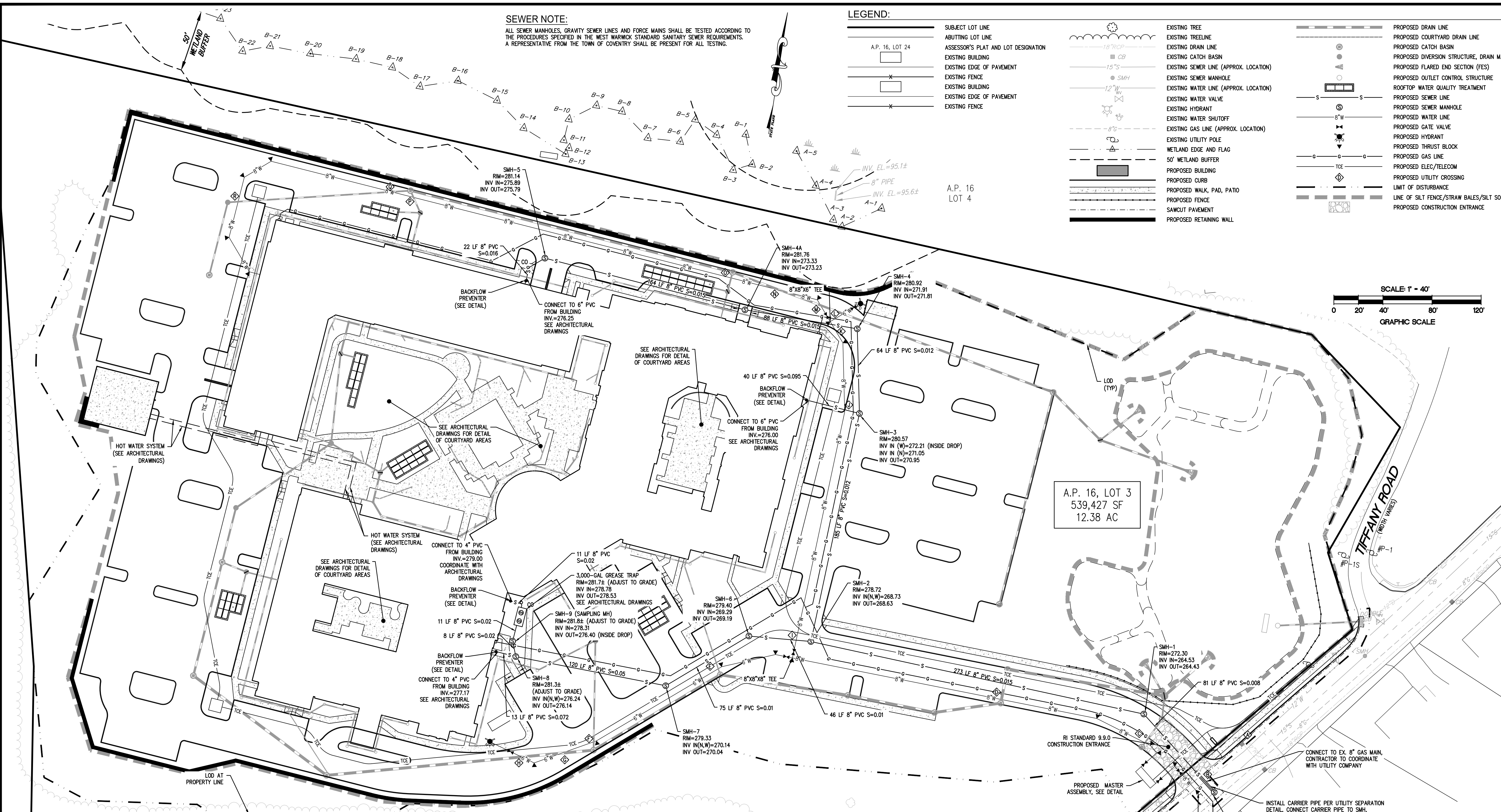
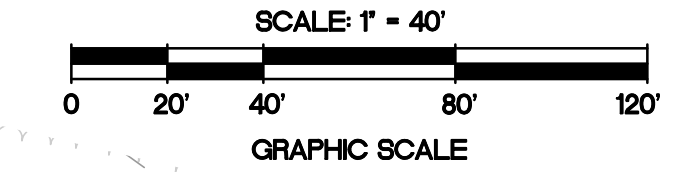
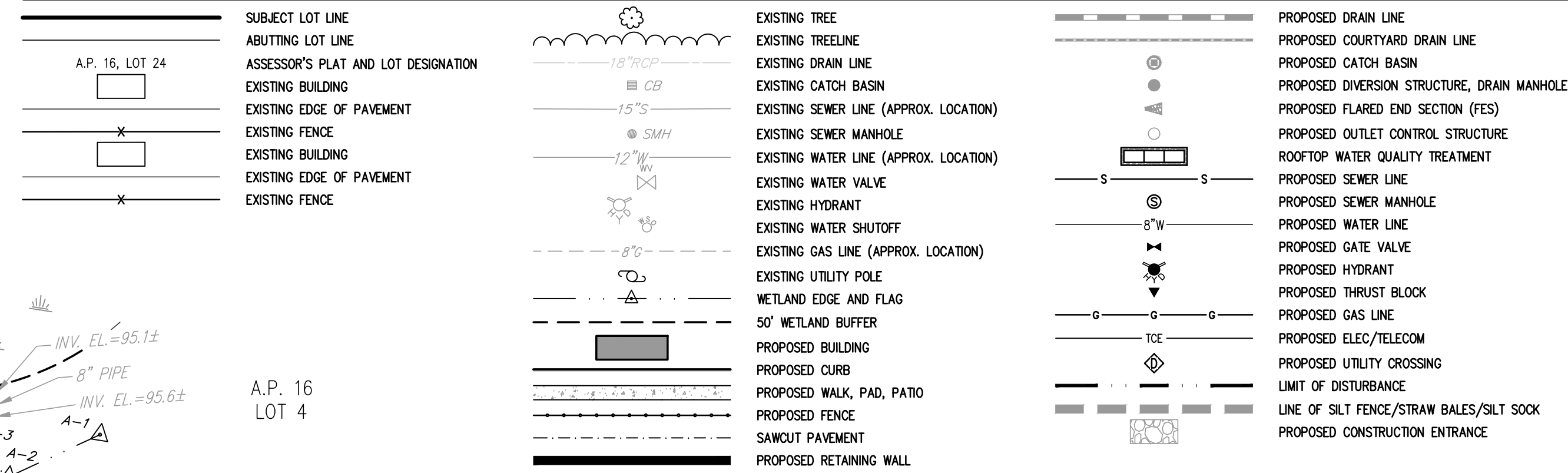
**OWNER/APPLICANT**  
 LRT NEW LONDON AVE DEVELOPMENT, LLC  
 110 TRADERS CROSS  
 BLUFFTON, SC 29909  
 PRINCIPAL: CHARLES ANDERSON  
 (401) 935-9263

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**SEWER NOTE:**  
 ALL SEWER MANHOLES, GRAVITY SEWER LINES AND FORCE MAINS SHALL BE TESTED ACCORDING TO THE PROCEDURES SPECIFIED IN THE WEST WARWICK STANDARD SANITARY SEWER REQUIREMENTS. A REPRESENTATIVE FROM THE TOWN OF COVENTRY SHALL BE PRESENT FOR ALL TESTING.

**LEGEND:**



**UTILITY CROSSING CHART:**

CROSSING	SURFACE GRADE	SIZE	WATER LINE			OTHER UTILITY			SEPARATION (FT)	UPPER UTILITY	NOTE	
			DEPTH OF COVER (FT)	TOP OF PIPE ELEV.	BOTTOM OF PIPE ELEV.	SIZE	INVERT ELEV.	TOP OF PIPE ELEV.				BOTTOM OF PIPE ELEV.
A	270.01	12" PVC	5	265.01	263.95	12" RCP	265.55	266.74	265.36	1.60	DRAIN	OK
B	271.08	12" PVC	5	266.08	265.02	8" PVC SEWER	263.86	264.54	263.84	0.47	WATER	CARRIER PIPE
C	271.89	8" DI	5	266.89	266.14	12" ADS STORM	268.54	269.64	268.44	1.55	DRAIN	OK
D	275.33	8" DI	6.29	269.04	268.29	24" ADS STORM	270.71	272.88	270.54	1.50	DRAIN	WATER MAIN DROP 1.29 FT MIN.
E	278.96	8" DI	5	273.96	273.21	6" ADS STORM	276.26	276.84	276.19	2.23	DRAIN	OK
F	279.11	8" DI	5	274.11	273.36	12" ADS STORM	275.72	276.82	275.62	1.51	DRAIN	OK
G	279.35	8" DI	7.73	271.62	270.87	24" ADS STORM	273.29	275.46	273.12	1.50	DRAIN	WATER MAIN DROP 2.73 FT MIN.
H	279.79	8" DI	7.94	271.85	271.10	24" ADS STORM	273.52	275.69	273.35	1.50	DRAIN	WATER MAIN DROP 2.94 FT MIN.
I	278.88	8" DI	5	273.88	273.13	8" PVC SEWER	268.83	269.51	268.81	3.61	WATER	OK
J	280.74	8" DI	5	275.74	274.99	8" PVC SEWER	272.16	272.84	272.14	2.14	WATER	OK
K	281.00	8" DI	5	276.00	275.25	8" PVC SEWER	273.06	273.74	273.04	1.50	WATER	OK
L	280.90	8" DI	9.12	271.78	271.03	18" ADS STORM	273.45	275.12	273.28	1.50	DRAIN	OK 4.12 FT MIN.
M	280.88	8" DI	8.94	271.94	271.19	18" ADS STORM	273.61	275.28	273.44	1.50	DRAIN	OK 3.94 FT MIN.
N	280.84	8" DI	8.63	272.21	271.46	18" ADS STORM	273.88	275.55	273.71	1.50	DRAIN	OK 3.63 FT MIN.
O	280.89	8" DI	8.23	272.66	271.91	12" ADS STORM	274.26	275.36	274.16	1.50	DRAIN	OK 3.23 FT MIN.
P	280.89	8" DI	6.33	274.56	273.81	12" ADS STORM	276.16	277.26	276.06	1.50	DRAIN	OK 1.33 FT MIN.
Q	280.83	8" DI	6.26	274.57	273.82	12" ADS STORM	276.17	277.27	276.07	1.50	DRAIN	OK 1.26 FT MIN.
R	281.05	8" DI	5.6	275.45	274.70	12" ADS STORM	277.05	278.15	276.95	1.50	DRAIN	OK 0.6 FT MIN.

**REFERENCES:**

- 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 2/20/2012.
- PLANS ENTITLED "PRELIMINARY SUBMISSION FOR WILLOW LAKES INDEPENDENT LIVING, A.P. 16, LOT 3, NEW LONDON TURNPIKE, COVENTRY, RHODE ISLAND", PREPARED FOR WILLOW LAKE PROPERTIES, LLC, PREPARED BY MILLSTONE ENGINEERING, P.C. DATED FEBRUARY 2021; SHEETS 1-12 OF 12 REVISED THROUGH 6/9/2022.

**UTILITY MATRIX:**

LENGTH OF 6" DUCTILE IRON WATER LINE:	291 LF
LENGTH OF 8" DUCTILE IRON WATER LINE:	1,257 LF
NUMBER OF FIRE HYDRANTS:	2
LENGTH OF SEWER LINE:	1,256 LF
NUMBER OF SEWER MANHOLES:	11
LENGTH OF GAS LINE:	1,413 LF
LENGTH OF ELEC./TELECOM. TRENCH:	1,655 LF

**NOTES:**

- SITE CONTRACTOR IS RESPONSIBLE FOR CONNECTING BUILDING UTILITIES WITHIN 5 FEET OF THE BUILDING.
- COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF UTILITY CONNECTIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7333) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.

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NO.	DATE	REVISION
1	5/9/24	ISSUED FOR PERMIT
2	7/2/25	TOWN COMMENTS



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 Warwick, RI 02886 | Middletown, RI 02842  
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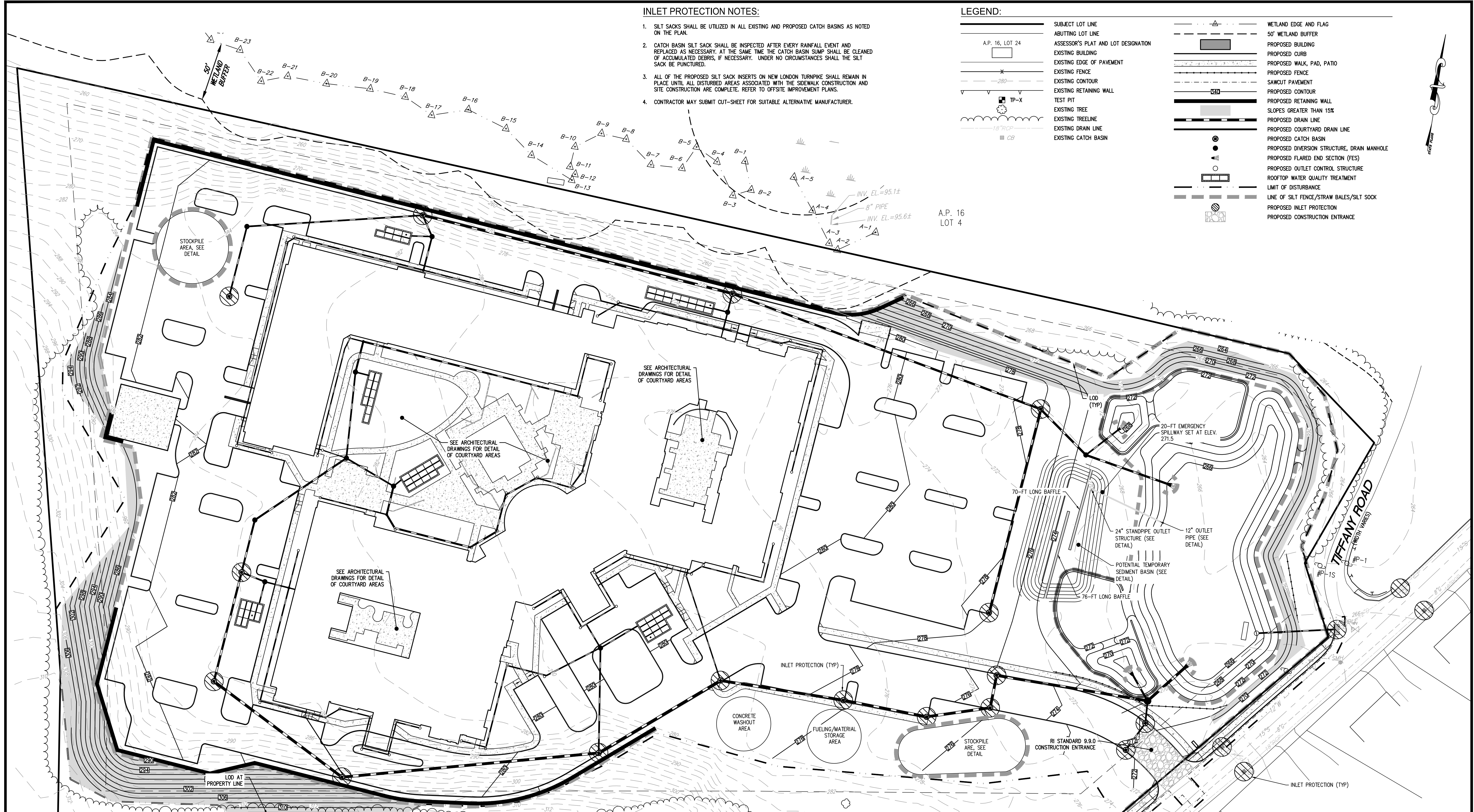
**UTILITY PLAN**  
**WILLOW LAKES**  
 A.P. 16, LOT 3  
 NEW LONDON TURNPIKE  
 COVENTRY, RI

PREPARED FOR:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**  
 1" = 40'  
 MAY 2025

OWNER/APPLICANT  
 LRT NEW LONDON AVE DEVELOPMENT, LLC  
 110 TRADERS CROSS  
 BLUFFTON, SC 29909  
 PRINCIPAL: CHARLES ANDERSON  
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Drawn By: J.S.C.  
 Checked By: J.C.H.  
 Sheet 5 of 12  
 FILE NO.: 17.276.403



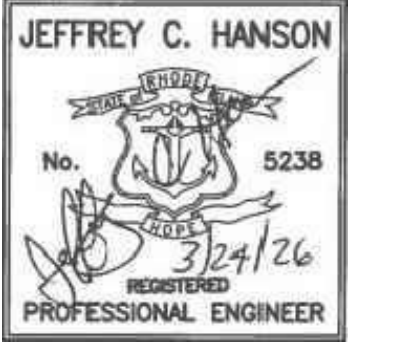
**INLET PROTECTION NOTES:**

- SILT SACKS SHALL BE UTILIZED IN ALL EXISTING AND PROPOSED CATCH BASINS AS NOTED ON THE PLAN.
- CATCH BASIN SILT SACK SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPLACED AS NECESSARY. AT THE SAME TIME THE CATCH BASIN SUMP SHALL BE CLEANED OF ACCUMULATED DEBRIS, IF NECESSARY. UNDER NO CIRCUMSTANCES SHALL THE SILT SACK BE PUNCTURED.
- ALL OF THE PROPOSED SILT SACK INSERTS ON NEW LONDON TURNPIKE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ASSOCIATED WITH THE SIDEWALK CONSTRUCTION AND SITE CONSTRUCTION ARE COMPLETE. REFER TO OFFSITE IMPROVEMENT PLANS.
- CONTRACTOR MAY SUBMIT CUT-SHEET FOR SUITABLE ALTERNATIVE MANUFACTURER.

**LEGEND:**

- |  |                                     |  |   |
|--|-------------------------------------|--|---|
|  | SUBJECT LOT LINE                    |  | WETLAND EDGE AND FLAG                       |
|  | ABUTTING LOT LINE                   |  | 50' WETLAND BUFFER                          |
|  | ASSESSOR'S PLAT AND LOT DESIGNATION |  | PROPOSED BUILDING                           |
|  | EXISTING EDGE OF PAVEMENT           |  | PROPOSED CURB                               |
|  | EXISTING FENCE                      |  | PROPOSED WALK, PAD, PATIO                   |
|  | EXISTING CONTOUR                    |  | PROPOSED FENCE                              |
|  | EXISTING RETAINING WALL             |  | SAWCUT PAVEMENT                             |
|  | TEST PIT                            |  | PROPOSED CONTOUR                            |
|  | EXISTING TREE                       |  | PROPOSED RETAINING WALL                     |
|  | EXISTING TREE LINE                  |  | SLOPES GREATER THAN 15%                     |
|  | EXISTING DRAIN LINE                 |  | PROPOSED DRAIN LINE                         |
|  | EXISTING CATCH BASIN                |  | PROPOSED COURTYARD DRAIN LINE               |
|  |                                     |  | PROPOSED CATCH BASIN                        |
|  |                                     |  | PROPOSED DIVERSION STRUCTURE, DRAIN MANHOLE |
|  |                                     |  | PROPOSED FLARED END SECTION (FES)           |
|  |                                     |  | PROPOSED OUTLET CONTROL STRUCTURE           |
|  |                                     |  | ROOFTOP WATER QUALITY TREATMENT             |
|  |                                     |  | LIMIT OF DISTURBANCE                        |
|  |                                     |  | LINE OF SILT FENCE/STRAW BALES/SILT SOCK    |
|  |                                     |  | PROPOSED INLET PROTECTION                   |
|  |                                     |  | PROPOSED CONSTRUCTION ENTRANCE              |

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT
2	3/24/26	TOWN COMMENTS



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**SOIL EROSION AND SEDIMENT CONTROL PLAN**

**WILLOW LAKES**

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

PREPARED FOR:  
 LRT NEW LONDON AVE  
 DEVELOPMENT, LLC

1" = 40'  
 MAY 2025

Drawn By: J.S.C.

Checked By: J.C.H.

Sheet

**6**  
 of 12

FILE NO.: 17.276.403

**TEMPORARY SEDIMENT BASIN VOLUME CALCULATIONS**

$$V = \frac{[(DA)(A)(DR)(TE)(1/Y)(2000 \text{ lbs./ton})] / [43560 \text{ SF/AC}]}$$

where:  
 V = volume of sediment in ac.ft./yr  
 DA = drainage area in acres  
 A = average erosion in tons/ac./yr. (see Table 6D-1)  
 DR = delivery ratio (see Figure 6D-1)  
 TE = trap efficiency (from page 6-31)  
 Y = sediment density in lbs/cu.ft. (see Table 6D-2)

DA = drainage area in acres	8.25	V =	0.12 AC-FT/YR
A = average erosion in tons/ac./yr. (see Table 6D-1)	1	Required Sed Storage Vol =	5,282 CF/YR
DR = delivery ratio (see Figure 6D-1)	38	Provided Sed Storage Vol =	5,282 CF
TE = trap efficiency (from page 6-31)	0.80	Required Wet Storage Vol (2xSV) =	10,564 CF/YR
Y = sediment density in lbs/cu.ft. (see Table 6D-2)	95	Provided Wet Storage Vol (in temp basin) =	2,353 CF
		Provided Wet Storage Vol (in Basin A) =	65,294 CF
		Total Volume Provided =	67,647 CF

Determine minimum basin width in feet:  $W = 10 * (Q_p)^{1/2}$   
 where:  
 Q<sub>p</sub> = peak flowrate from 5-year storm 27.00 cfs  
 W<sub>s</sub> = 52 ft

Effective flow length must be 2 x effective flow width

Flow length <sub>s</sub> =	104 ft
Flow length provided =	109 ft

REFERENCE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

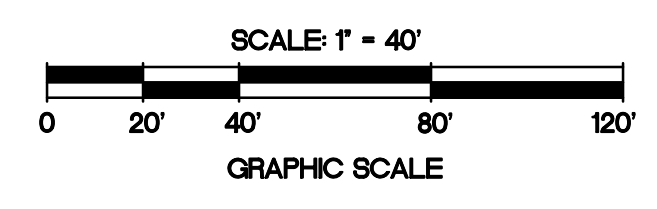
**BMP INFILTRATION NOTE:**

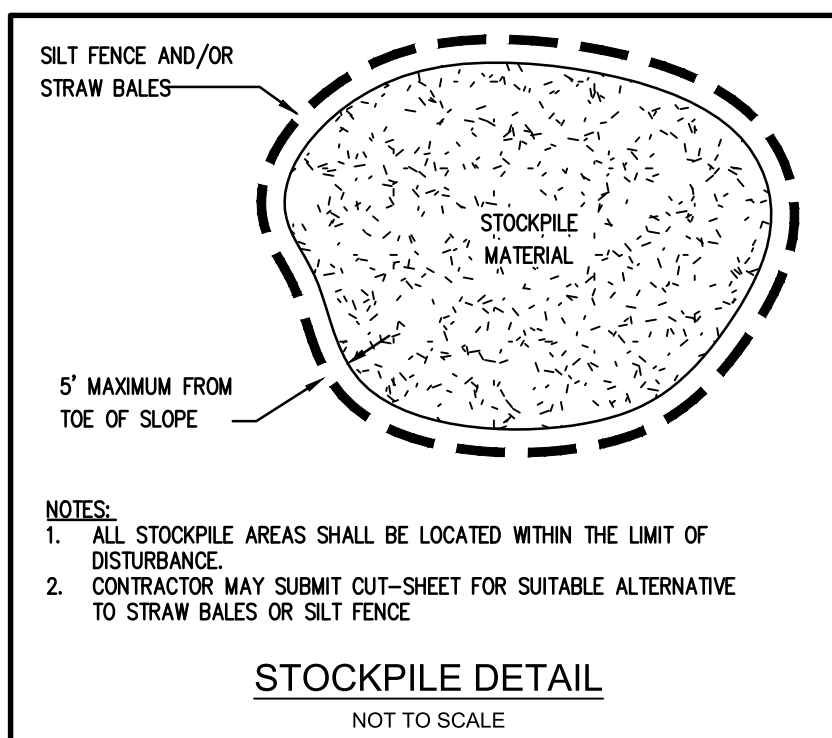
- CONSTRUCTION VEHICLES SHALL NOT BE ALLOWED TO DRIVE OVER THE BMPs OR BMP AREAS DURING CONSTRUCTION. IF ANY OF THE AREAS THAT ARE DESIGNATED FOR BMP INFILTRATION PRACTICES BECOME COMPACTED DURING CONSTRUCTION, THE SOIL MUST SUITABLY BE AMENDED AND TILLED, AS APPROPRIATE, TO RESTORE INFILTRATION CAPACITY.

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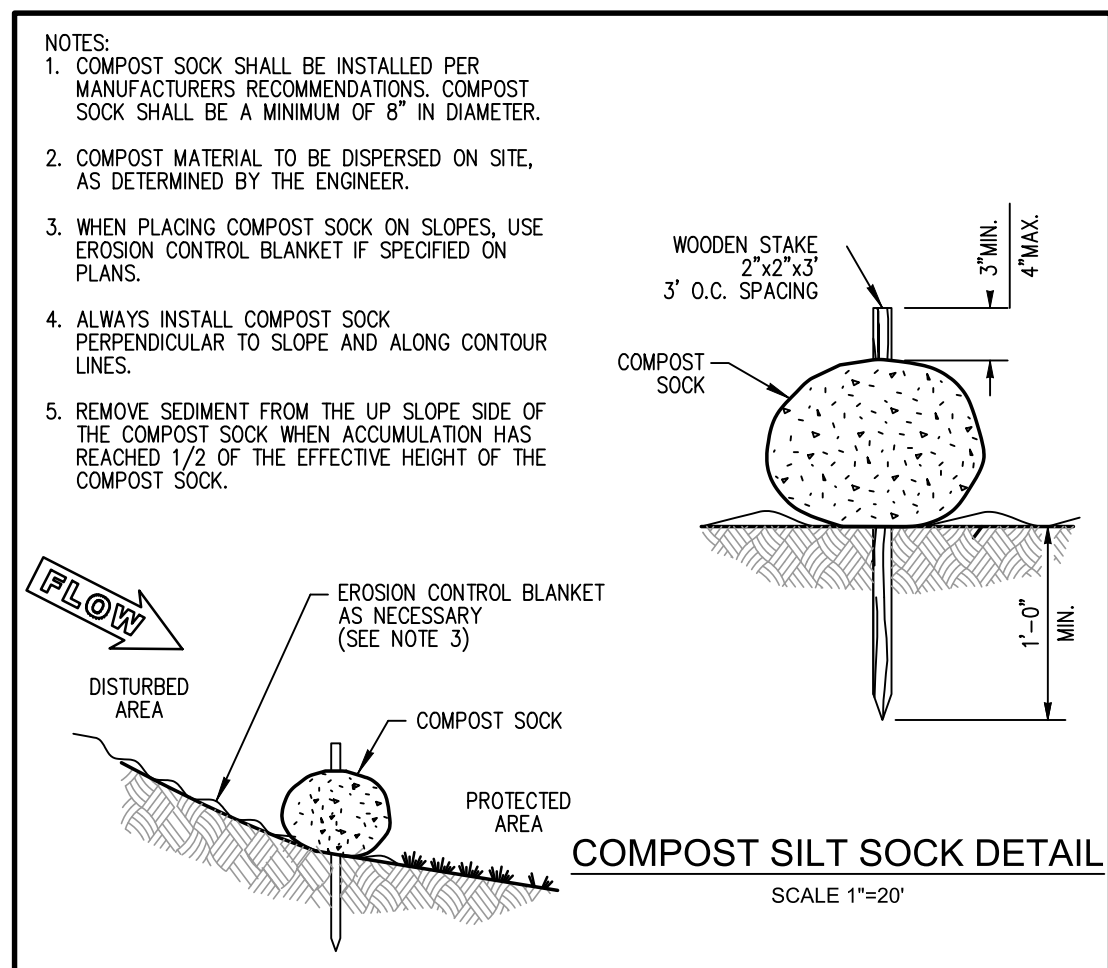
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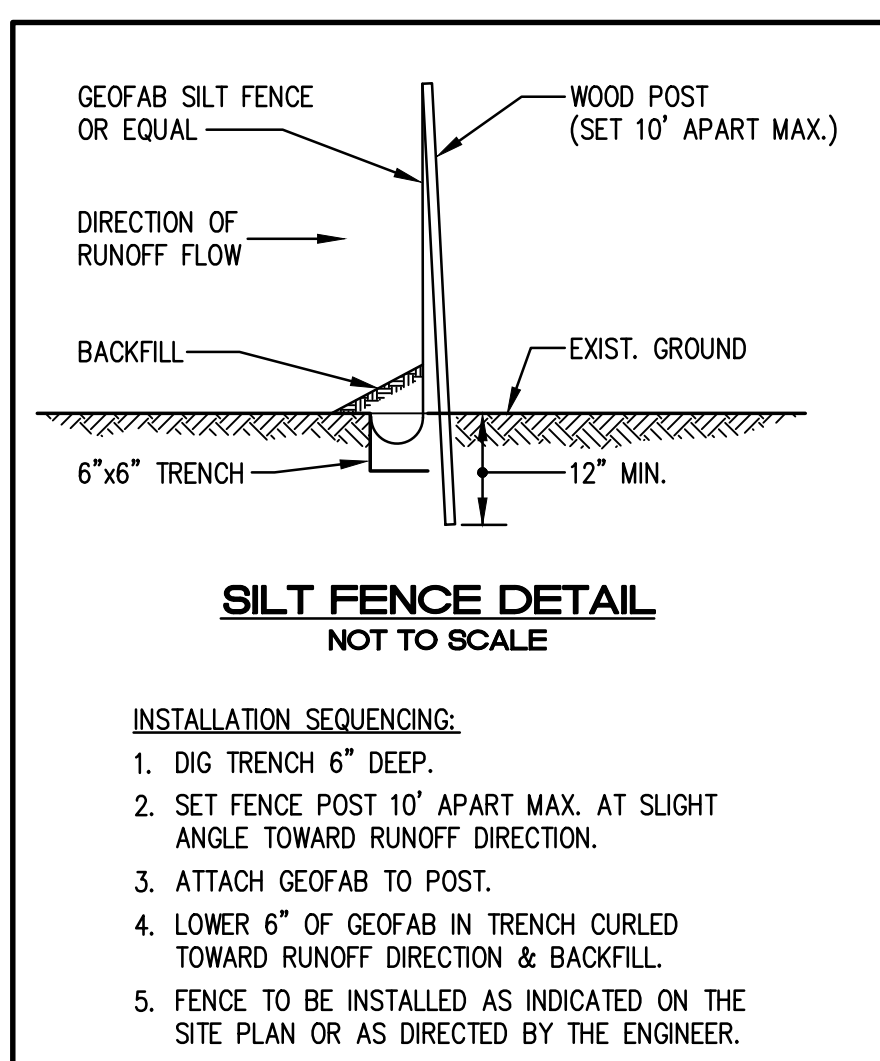
- NOTES:**
1. ALL STOCKPILE AREAS SHALL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.
  2. CONTRACTOR MAY SUBMIT OUT-SHEET FOR SUITABLE ALTERNATIVE TO STRAW BALES OR SILT FENCE.

**STOCKPILE DETAIL**  
NOT TO SCALE



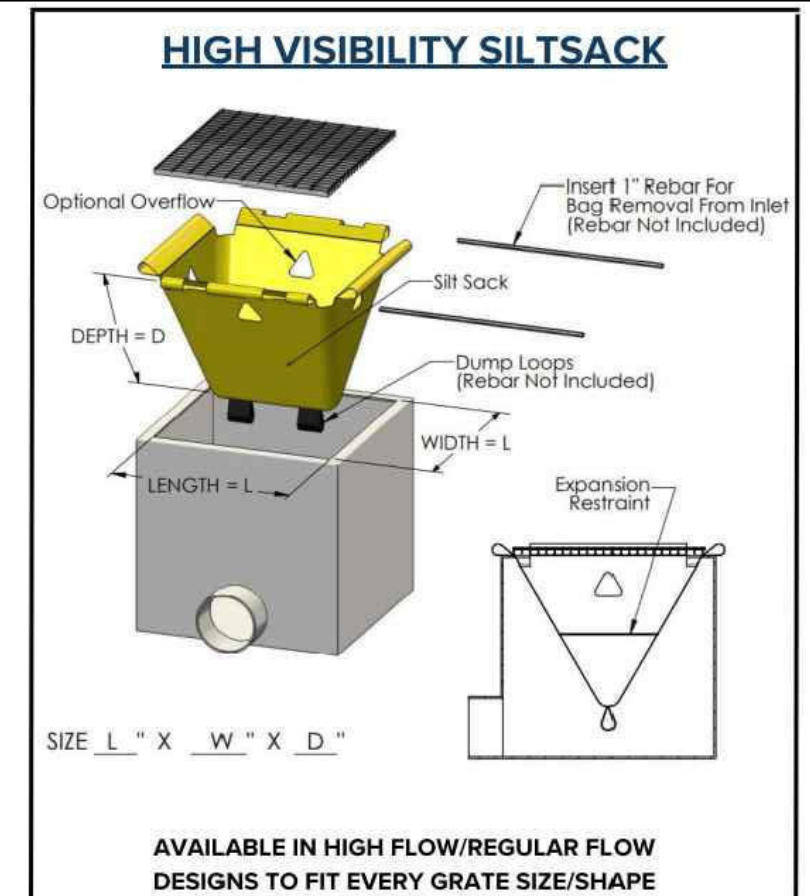
- NOTES:**
1. COMPOST SOCK SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. COMPOST SOCK SHALL BE A MINIMUM OF 8" IN DIAMETER.
  2. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
  3. WHEN PLACING COMPOST SOCK ON SLOPES, USE EROSION CONTROL BLANKET AS SPECIFIED ON PLANS.
  4. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR LINES.
  5. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK.

**COMPOST SILT SOCK DETAIL**  
SCALE 1"=20"



- INSTALLATION SEQUENCING:**
1. DIG TRENCH 6" DEEP.
  2. SET FENCE POST 10' APART MAX. AT SLIGHT ANGLE TOWARD RUNOFF DIRECTION.
  3. ATTACH GEOFAB TO POST.
  4. LOWER 6" OF GEOFAB IN TRENCH CURLED TOWARD RUNOFF DIRECTION & BACKFILL.
  5. FENCE TO BE INSTALLED AS INDICATED ON THE SITE PLAN OR AS DIRECTED BY THE ENGINEER.

**SILT FENCE DETAIL**  
NOT TO SCALE



**AVAILABLE IN HIGH FLOW/REGULAR FLOW DESIGNS TO FIT EVERY GRATE SIZE/SHAPE**

**ACF SILTSACK**

FERGUSON WATERWORKS

FOR ADDITIONAL INFORMATION PLEASE CONTACT FERGUSON SALES INFO@FERGUSON.COM OR VISIT WWW.FERGUSON.COM

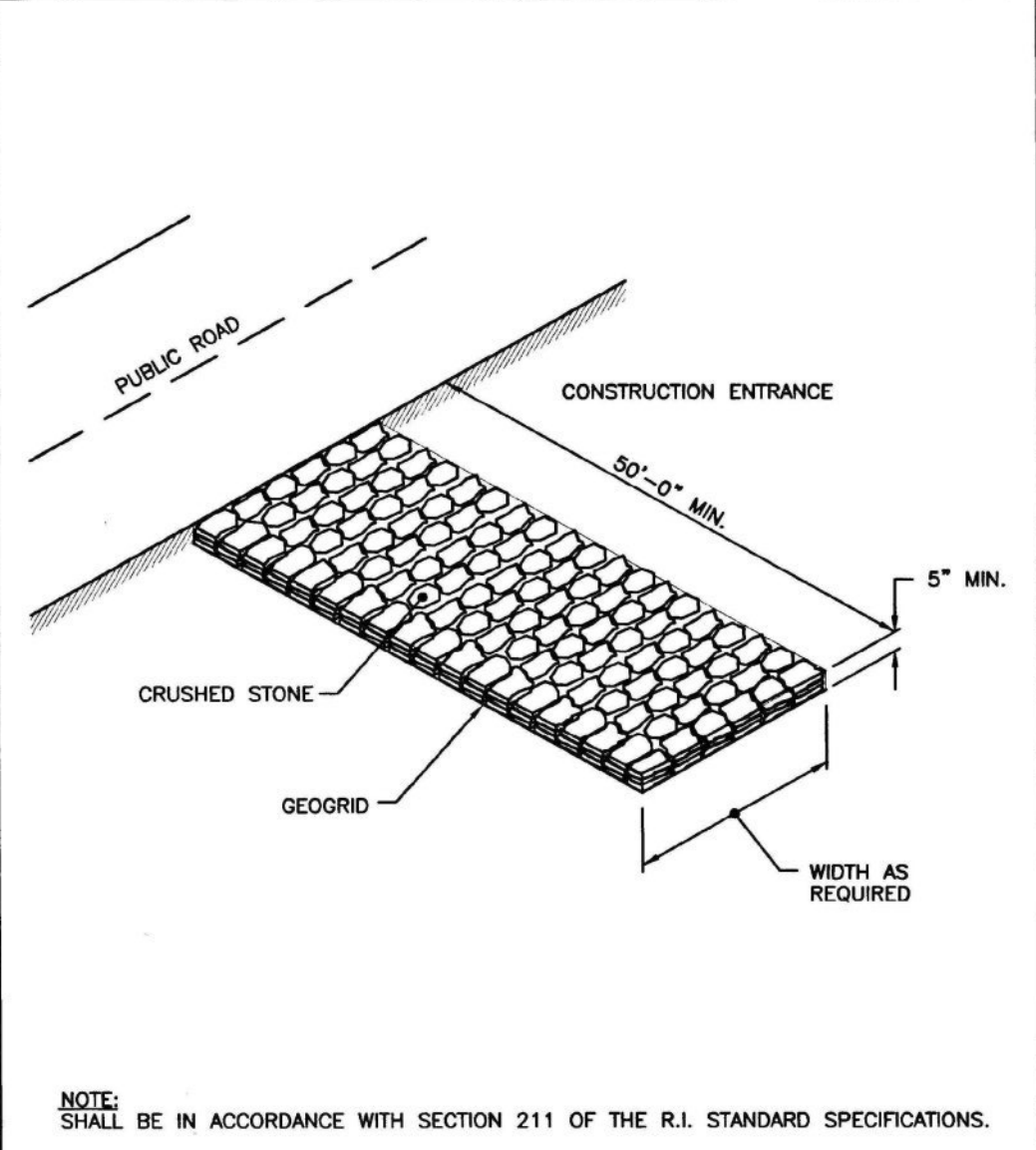
- NOTES:**
1. FOR USE IN ALL EXISTING AND PROPOSED CATCH BASINS AS NOTED ON THE PLAN.
  2. CATCH BASIN SILT SACK SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPLACED AS NECESSARY AT THE SAME TIME THE CATCH BASIN SLUMP SHALL BE CLEANED OF ACCUMULATED DEBRIS, IF NECESSARY. UNDER NO CIRCUMSTANCES SHALL THE SILT SACK BE PUNCTURED.
  3. ALL OF THE PROPOSED SILT SACK INSERTS ON NEW LONDON TURNPIKE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ASSOCIATED WITH THE SIDEWALK CONSTRUCTION AND SITE CONSTRUCTION ARE COMPLETE. REFER TO OFFSITE IMPROVEMENT PLANS.
  4. CONTRACTOR MAY SUBMIT OUT-SHEET FOR SUITABLE ALTERNATIVE MANUFACTURER.

- SEDIMENTATION CONTROL PROGRAM:**
1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
  2. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUN-OFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
  3. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
  4. 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.
  5. SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION.
  6. 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:
    - A. 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.
    - B. 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.
    - C. CATCH BASINS SHALL BE PROTECTED WITH STRAWBALE OR SILT SACK FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT.
    - D. OUTFALLS SHALL BE PROTECTED BY STRAWBALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.
    - E. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
  7. 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.
  8. 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:**

1. DENuded SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS THE INACTIVE WINTER SEASONS.
2. TEMPORARY TREATMENTS SHALL CONSIST OF STRAW, FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
3. STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
4. ALL STRAWBALES OR TEMPORARY PROTECTION SHALL REMAIN IN-PLACE UNTIL AN ACCEPTABLE STAND OF GRASS, RIP-RAP OR APPROVED GROUND COVER IS ESTABLISHED.
5. 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.
6. 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 TREFFOIL	15
PERENNIAL RYEGRASS	10
APPLICATION RATE	100 LBS/ACRE
7. 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.
8. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
9. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
10. 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).
11. ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
12. TREES TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
13. 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.
14. ALL DISTURBED AREAS MUST BE SEEDED, PLANTED OR RIP-RAPPED WITHIN THE CONSTRUCTION SEASON.
15. TEMPORARY SEEDING MUST BE COMPLETED WITHIN ONE (1) MONTH AFTER DISTURBANCE.
16. ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDED, PLANTED OR RIP-RAPPED BEFORE OCTOBER 1ST, IF NOT THEY MUST BE TEMPORARILY SEEDED.



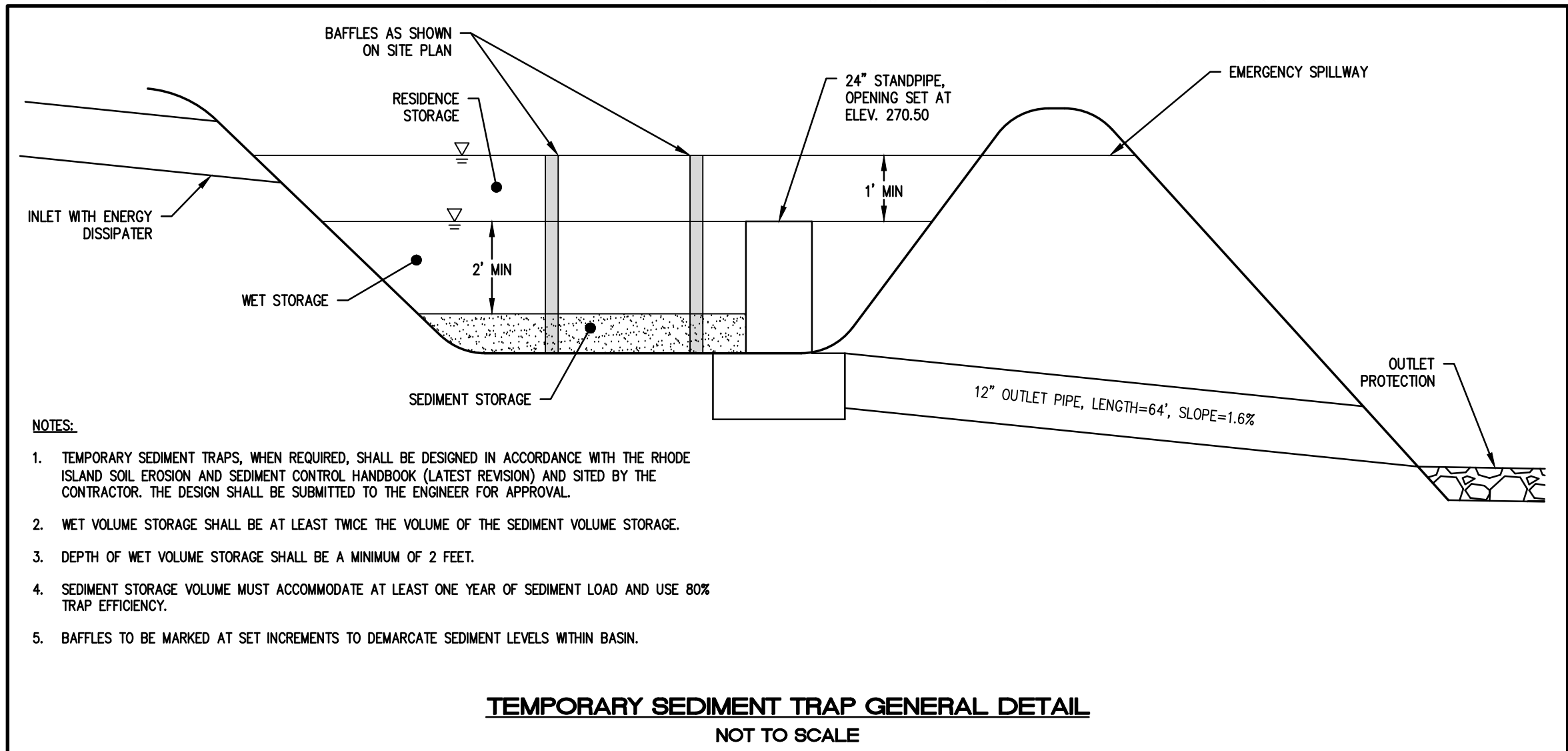
**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION ACCESS**

NO. BY DATE

JUNE 15, 1998

R.I. STANDARD 9.9.0



- NOTES:**
1. TEMPORARY SEDIMENT TRAPS, WHEN REQUIRED, SHALL BE DESIGNED IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) AND SITED BY THE CONTRACTOR. THE DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
  2. WET VOLUME STORAGE SHALL BE AT LEAST TWICE THE VOLUME OF THE SEDIMENT VOLUME STORAGE.
  3. DEPTH OF WET VOLUME STORAGE SHALL BE A MINIMUM OF 2 FEET.
  4. SEDIMENT STORAGE VOLUME MUST ACCOMMODATE AT LEAST ONE YEAR OF SEDIMENT LOAD AND USE 80% TRAP EFFICIENCY.
  5. Baffles TO BE MARKED AT SET INCREMENTS TO DEMARCATe SEDIMENT LEVELS WITHIN BASIN.

**TEMPORARY SEDIMENT TRAP GENERAL DETAIL**  
NOT TO SCALE

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**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-GRADIENT AREAS OF THE WATERSHED HAVE BEEN BUILT AND FULLY STABILIZED SO AS TO HAVE NO POTENTIAL FOR SEDIMENT OR SOLID DEPOSITION. ALSO, ONCE THE ENTIRE SITE IS STABILIZED ALL SEDIMENT 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 COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

**SAND FILTERS:**

1. EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
2. INSTALL CURBING SET LEVEL
3. SAND FILTER SAND SHALL BE ASTM C33 CONCRETE SAND
4. INSTALL REMAINDER OF SAND
5. INSTALL NON-WOVEN GEOTEXTILE
6. INSTALL 6" WASHED CRUSHED STONE & PERFORATED DISBURSAL PIPING
7. INSTALL NON-WOVEN GEOTEXTILE
8. LOAM AND SEED PER DETAILS WITH PERMANENT SEED MIXTURE & DRAINS

**DETENTION / INFILTRATION BASIN:**

1. EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
2. INSTALL OUTLET CONTROL STRUCTURE & LEVEL SPREADER
3. LOAM AND SEED ACCORDINGLY WITH PERMANENT SEED MIXTURE

**LEVEL SPREADER:**

1. EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
2. INSTALL CURBING SET LEVEL
3. LOAM AND SEED PER DETAILS WITH PERMANENT SEED MIXTURE

**ROOFTOP UNDERGROUND INFILTRATION:**

1. EXCAVATE TO THE LINES AND GRADES OF THE DESIGN AND PREPARE SUBGRADE PER PLANS.
2. PLACE NON-WOVEN GEOTEXTILE OVER PREPARED SOILS AND UP EXCAVATION WALLS.
3. PLACE CLEAN, CRUSHED, ANGULAR STONE FOUNDATION.
4. COMPACT TO ACHIEVE A FLAT SURFACE.
5. INSTALL MANIFOLDS AND LAY OUT WOVEN SCOUR GEOTEXTILE AT INLET ROWS.
6. ALIGN THE FIRST CHAMBER AND END CAP OF EACH ROW WITH INLET PIPE.
7. 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
8. LIFT THE END OF THE CHAMBER A FEW INCHES OFF GROUND AND ATTACH END CAP.
9. BRAPE A STRIP OF ADS NON-WOVEN GEOTEXTILE OVER THE ROW OF CHAMBERS.
10. BACKFILL CHAMBERS EVENLY UNTIL STONE REACHES TOP OF CHAMBERS.
11. INSTALL NON-WOVEN GEOTEXTILE OVER STONE. COMPACT EACH LIFT OF BACKFILL AS SPECIFIED IN PLANS.

**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:

1. ALL CATCH BASINS AND STORM DRAIN PIPES SHALL BE CLEANED OF SEDIMENT, STORMWATER BASINS SHALL BE CLEANED OF SEDIMENT TO THE DESIGN GRASSES INDICATED ON THE CONSTRUCTION DRAWINGS.
2. 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.
3. GRASSES MUST BE PLANTED AROUND AND WITHIN THE STORMWATER BASIN IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE THE SLOPES AND PREVENT EROSION.
4. SEDIMENTS SHALL BE REMOVED FROM DRAINAGE STRUCTURES AND THE STORMWATER BASINS IMMEDIATELY FOLLOWING SITE STABILIZATION AND DURING THE FIRST (INITIAL) YEAR OF OPERATION.
5. ALL COSTS INCURRED FOR MAINTENANCE, CLEANING, AND INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION AND THE PROPERTY OWNER UPON ACCEPTANCE.
6. ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION OF THE RIDEM.
7. ALL TRASH AND LITTER AND OTHER DEBRIS SHALL BE REMOVED FROM ANY STORMWATER FACILITY DAILY, INCLUDING INLET AND OUTLET STRUCTURES.
8. 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.
9. PAVEMENT SWEEPING SHALL BE PERFORMED UPON COMPLETION OF THE PROJECT.
10. 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.

OWNER: LRT NEW LONDON AVE DEVELOPMENT, LLC  
400 LINCOLN AVENUE  
WARWICK, RI 02886

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:**

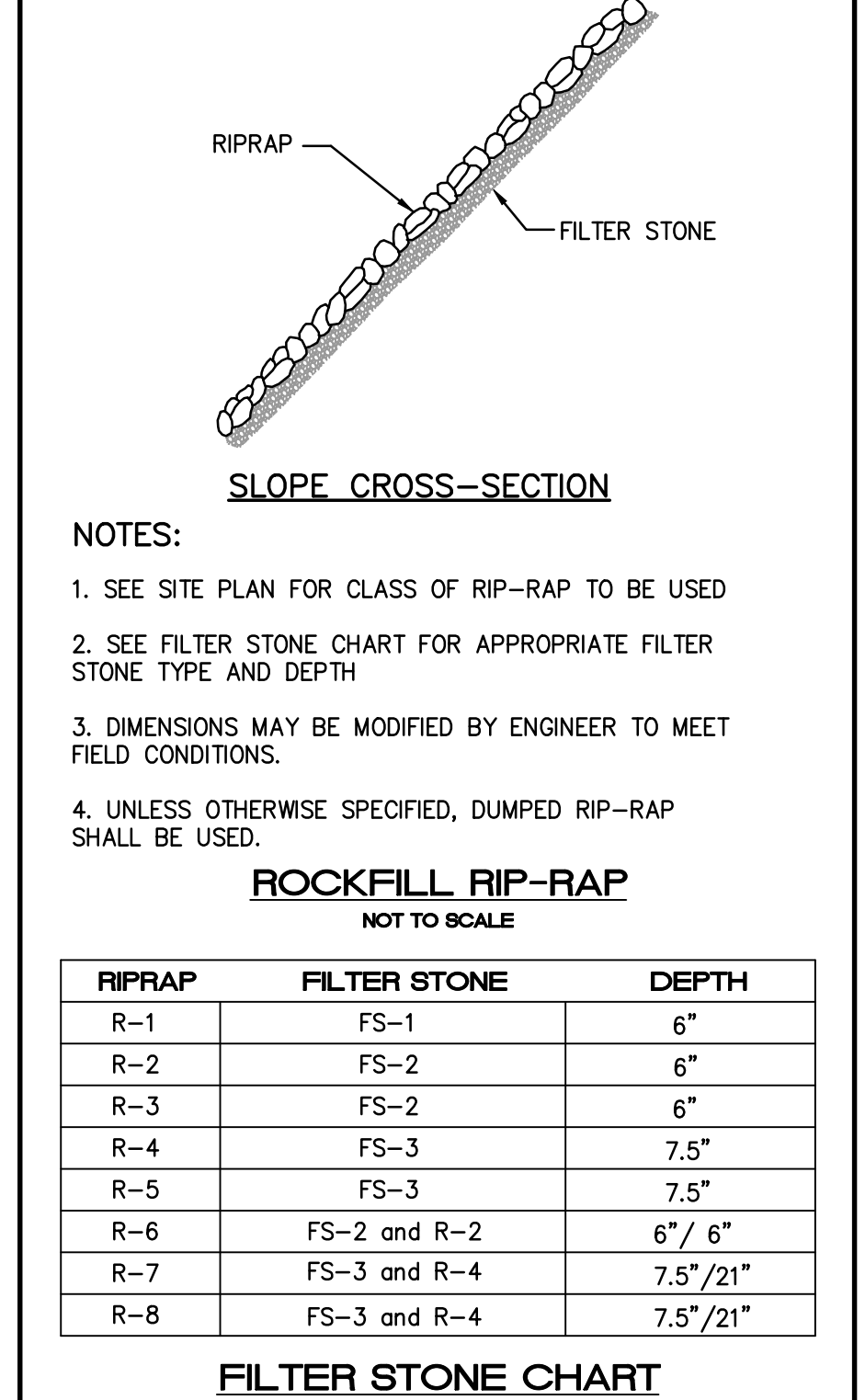
- ON STANDARD ASPHALT AREAS, ONLY ASPHALT BASED SEALANTS ARE ALLOWED, NO COAL-TAR BASED SEALANTS SHALL BE USED ON THIS SITE.

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

**ROCKFILL RIP-RAP**  
NOT TO SCALE

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"

**FILTER STONE CHART**

**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 RESPONSIBLE FOR MAINTENANCE OF THE BMP'S.

OWNER: LRT NEW LONDON AVE DEVELOPMENT, LLC  
110 TRADERS CROSS  
BLUFFTON, SC 29909

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

OPERATOR / CONTRACTOR: DEFAULTS TO OWNER

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, OFFICE 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 ROTOTILLED 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.

**DETENTION / 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 ROTOTILLED 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.

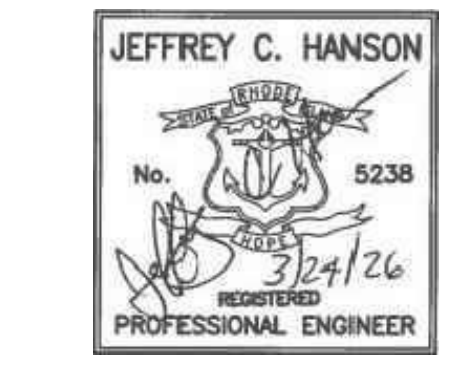
ESTIMATE OF O&M BUDGET:

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

**OWNER/APPLICANT**  
LRT NEW LONDON AVE DEVELOPMENT, LLC  
110 TRADERS CROSS  
BLUFFTON, SC 29909  
PRINCIPAL: CHARLES ANDERSON  
(401) 935-9263

**ATTORNEY**  
MICHAEL D. RESNICK  
128 DORRANCE STREET, SUITE 300  
PROVIDENCE, RI 02903  
(401) 490-7334

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT
2	3/24/26	TOWN COMMENTS



**Millstone LLC**

ENGINEERING • SURVEYING • PERMITTING

250 Centerville Road, Building E-12 | 790 Aquinneck Avenue, Building B  
Warwick, RI 02886 | Middletown, RI 02842

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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:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**

SCALE AS NOTED  
MAY 2025

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

**7**  
of 12

FILE NO.: 17.276.403

**GENERAL NOTES:**

- 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. THE CURRENT VERSION OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION, DIVISION OF PUBLIC WORKS. IN ADDITION, THE TOWN OF COVENTRY STANDARD SPECIFICATIONS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN ENGINEER. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN ENGINEER PRIOR TO ANY SUCH START OF CONSTRUCTION. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWINGS AND THE TOWN SPECIFICATIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72-WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND, FEDERAL GOVERNMENT, AND THE TOWN OF COVENTRY PRIOR TO COMMENCING ANY WORK.
- CONTRACTOR TO EXCAVATE TEST PITS TO CONFIRM LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS, WETLANDS, OR ADJACENT TO DRAINAGE STRUCTURES.
- ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWNSTREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- THERE ARE NO SPECIAL FLOOD HAZARD AREAS LOCATED ON THE SITE. THIS SITE LIES ENTIRELY WITHIN ZONE "X" - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON THE NATIONAL FLOOD INSURANCE RATE MAPS (FIRM), KENT COUNTY, RHODE ISLAND, ALL JURISDICTIONS, PANEL 116 OF 251, MAP NUMBER 440030016H, MAP REVISED OCTOBER 2, 2015.
- VERTICAL DATUM: NGVD 1988.
- WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS OR SPECIFICATIONS DOES NOT RELIEVE THE CONTRACTOR FROM FINISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE, AND THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS AS NECESSARY TO COMPLETE THE PROJECT, ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND ACCEPTABLE TO THE ENGINEER.
- CONTRACTOR SHALL RECORD AND PROVIDE AS-BUILT DRAWINGS IN ACCORDANCE WITH LOCAL UTILITY REQUIREMENTS FOR ALL NEW INFRASTRUCTURE AND PROVIDE THE TOWN OF COVENTRY WITH AS-BUILT DRAWINGS OF THE STORMWATER MANAGEMENT SYSTEM, SEWER SYSTEM, AND WATER SYSTEM.
- FOR UTILITY CUTS INTO EXISTING ROADWAY (NEW LONDON TURNPIKE), ALL SEAMS OF PAVEMENT PATCHES SHALL BE INGRA-RED TREATED.

**CONSTRUCTION SEQUENCE / NARRATIVE**

- OBTAIN APPLICABLE PERMITS.
- NOTIFY ALL APPROPRIATE STATE, REGIONAL AND TOWN DEPARTMENTS PRIOR TO THE START OF CONSTRUCTION.
- BEGIN CONSTRUCTION.
- CONSTRUCT RI STD 9.9.0 CONSTRUCTION ACCESS (E5).
- INSTALL SILT FENCE / SILT SOCK / STAKED STRAWBALE LINE.
- CLEAN, GRUB, AND STOCKPILE TOPSOIL (IF REQUIRED).
- EXCAVATE / PLACE COMPACTED FILL IN ACCORDANCE WITH THE GRADING PLAN.
- INSTALL PROPOSED STORM DRAINAGE SYSTEM, WORK DOWNSTREAM TO UPSTREAM. PLACE INLET PROTECTION WHERE REQUIRED.
- BEGIN ROADWAY CONSTRUCTION.
- INSTALL UTILITIES IN ACCORDANCE WITH THE UTILITY PLAN.
- INSTALL CURBING AND PAVEMENT.
- FINE GRADE, SPREAD TOPSOIL, SEED AND STABILIZE EXPOSED EARTH.
- CLEAN / FLUSH STORM DRAINAGE SYSTEM.
- ONCE SEEDS GERMINATE AND EARTH IS STABILIZED, REMOVE SILT FENCE / STRAW BALE LINE AND INLET PROTECTION.
- END CONSTRUCTION.

**SEWER NOTES:**

- 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).
- ALL GRAVITY SEWER PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3034, SDR 35.
- LOW PRESSURE PIPES, IF APPLICABLE, AND FITTINGS SHALL BE CLASS 2200 PVC AND SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATIONS D3139 AND F477.
- SCHEDULE 80 PVC PIPE AND FITTINGS SHALL MEET ASTM SPECIFICATION D1784.
- WATER OR LOW PRESSURE AIR TESTING SHALL BE CONDUCTED TO ASSURE LEAKAGE DOES NOT EXCEED 10 GALLONS/DAY/INCH DIAMETER/MILE OF PIPE. (GRAVITY).
- ALL MANHOLES, GRAVITY SEWER LINES, AND FORCE MAINS SHALL BE TESTED ACCORDING TO THE PROCEDURES SPECIFIED IN THE WEST WARWICK STANDARD SANITARY SEWER REQUIREMENTS. A REPRESENTATIVE FROM THE TOWN OF COVENTRY SHALL BE PRESENT FOR ALL TESTING.
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS VALVES, PIPES, PUMPS, GUIDE RAILS, VAULTS, HATCHES AND CONTROLS SHALL BE SUBMITTED TO THE WEST WARWICK REGIONAL WASTEWATER TREATMENT FACILITY AND THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF SEWER SYSTEM IN ACCORDANCE WITH THE TOWN OF COVENTRY AND WEST WARWICK REGIONAL WASTEWATER FACILITY REQUIREMENTS.
- DOOGHOUSE MANHOLES ARE NOT ALLOWED.

**OWNER/APPLICANT**

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110 TRADERS CROSS  
BLUFFTON, SC 29909  
PRINCIPAL: CHARLES ANDERSON  
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**ATTORNEY**

MICHAEL D. RESNICK  
128 DORRANCE STREET, SUITE 300  
PROVIDENCE, RI 02903  
(401) 490-7334

**WATER NOTES:**

- THE KENT COUNTY WATER AUTHORITY REQUIREMENTS FOR SERVICE AND MAIN INSTALLATION ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL DISTRIBUTION SYSTEM PIPING SHALL BE CLASS 52 DUCTILE IRON, DOUBLE CEMENT MORTAR LINES, PUSH ON STYLE JOINTS EXCEPT AS REQUIRED BY THE KENT COUNTY WATER AUTHORITY. PIPE SHALL MEET THE REQUIREMENTS OF ANS/AWWA C151/A21.51. JOINTS SHALL MEET THE REQUIREMENTS OF ANS/AWWA C111/A21.11.
- FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT CLASS 350 CEMENT MORTAR LINED COMPACT STYLE AMERICAN MANUFACTURED ONLY. FITTINGS SHALL MEET THE REQUIREMENTS OF ANS/AWWA C153/A21.53. MECHANICAL JOINTS SHALL MEET THE REQUIREMENTS OF ANS/AWWA C111/A21.11.
- COATINGS USED FOR BOTH PIPES AND FITTINGS SHALL BE APPROVED FOR WATER SERVICE BY THE AMERICAN WATER WORKS ASSOCIATION AND THE ENVIRONMENTAL PROTECTION AGENCY. COATINGS SHALL MEET THE REQUIREMENTS OF ANS/AWWA C104/A21.4.
- ANY INSTALLATION, JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, KENT COUNTY WATER AUTHORITY RECOMMENDATIONS, AWWA STANDARDS AND GOVERNMENTAL REQUIREMENTS.
- CONSTRUCTION SHALL INCLUDE ALL PIPE, JOINTS, BENDS, TEES, FITTINGS, THRUST BLOCKS, GATE VALVES, GATE BOXES AND ALL MISCELLANEOUS ITEMS REQUIRED TO CONSTRUCT THE PROPOSED SYSTEM.
- CONCRETE THRUST, ANCHOR OR BEARING BLOCKS SHALL BE INSTALLED IN LOCATIONS INDICATED AND AT ALL BENDS, FITTINGS, PLUGS, ETC. WHEN A THRUST BLOCK CANNOT BE PLACED AGAINST UNDISTURBED EARTH, A REACTION BLOCK SUBSTITUTE SHALL BE DESIGNED AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
- LEAKAGE TESTS AND THE CHLORINATION OF THE WATER DISTRIBUTION SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE TO AMERICAN WATER WORKS ASSOCIATION (AWWA) RECOMMENDATIONS, KENT COUNTY WATER AUTHORITY REQUIREMENTS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES ASSOCIATED WITH SAID TESTING.
- ALL GATE VALVES, FITTINGS, PIPE, JOINTS, ETC., SHALL BE DESIGNED FOR A CONSTANT WORKING PRESSURE OF NO LESS THAN 150 PSI.
- WATER PIPE SHALL TYPICALLY BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM SEWER PIPE AND AT A DEPTH OF COVER EQUAL TO 5'-0" AND SHALL MAINTAIN A MINIMUM 1.5' SEPARATION VERTICALLY (UNLESS A CARRIER PIPE IS APPROVED BY THE ENGINEER AND KCWA).
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS GATE VALVES, PIPE, THRUST BLOCKS, FITTINGS, AIR RELEASE ASSEMBLIES, CASTINGS, ETC., SHALL BE SUBMITTED TO THE KENT COUNTY WATER AUTHORITY AND THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- BEDDING FOR WATER UTILITY SHALL BE TYPE V AWWA BEDDING.
- THE CONTRACTOR SHALL NOTIFY THE KENT COUNTY WATER AUTHORITY TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK ASSOCIATED WITH THE WATER DISTRIBUTION SYSTEM.
- A WATER METER SHALL BE INSTALLED IN EACH INDIVIDUAL RESIDENCE FOR USE BY THE HOMEOWNERS ASSOCIATION. THE KENT COUNTY WATER AUTHORITY READS THE MASTER METER ONLY.
- WASTE CHLORINATION WATER USED TO DISINFECT THE POTABLE WATER SYSTEM SHALL BE DE-CHLORINATED PRIOR TO BEING DISCHARGED OVER LAND, AWAY FROM ANY STATE REGULATED FRESHWATER WETLANDS. POTENTIAL EROSION FROM SAID DISCHARGE SHALL BE CONTROLLED WITH A STRAWBALE CHECK.
- WATER LINE SHALL BE SEALED AT THE END OF EVERY WORK DAY WITH A SUITABLE CAP OR PLUG CONFIGURATION TO PREVENT DIRT AND/OR GROUNDWATER FROM ENTERING THE MAIN.
- SERVICE CONNECTIONS SHALL BE PER SECTION 3.18 OF THE KENT COUNTY WATER AUTHORITY'S REQUIREMENTS FOR SERVICE AND MAIN INSTALLATION. WATER SERVICE SHALL BE COPPER FROM THE MAIN TO THE CURB STOP. IF HOPE IS USED FROM THE CURB STOP TO THE RESIDENCE A 12-FOOT COPPER RHP MUST BE USED TO ENTER THE BUILDING.
- CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF WATER SYSTEM IN ACCORDANCE WITH KENT COUNTY WATER AUTHORITY REQUIREMENTS.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS OF MASTER METER ENCLOSURE TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- KCWA RULES AND REGULATIONS DO NOT ALLOW CONCRETE ENCASEMENT OF WATER LINES.

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**

Sewers shall be laid at least 10 feet horizontally from any existing or proposed water line. The distance shall be measured edge-to-edge. There is no minimum vertical separation required provided the 10 foot horizontal separation is maintained. Structures, other than pipelines or conduits, through which sanitary wastewater flows such as, but not limited to, manholes, valve vaults, meter pits and pump station wet wells shall also be constructed at least 10 feet horizontally from any existing or proposed water line, measured edge-to-edge.

In cases where it is not possible to maintain a 10 foot horizontal separation, the OWR may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the sewer pipelines and/or structures closer to a water line, provided that:

- The sewer pipeline and/or structures and water line are laid in separate trenches, or
- The sewer pipeline and/or structures and water line may be installed in the same trench with the water line placed on a bench of undisturbed earth, and
- In either case, the crown of the sewer pipeline shall be at least 18 inches below the invert of the water line.

In situations where it is impossible to obtain proper horizontal and vertical separation as stipulated above, the following protection shall be provided:

- Encasement of the sewer pipeline in concrete (min. 6 inch thickness) or a carrier pipe for at least 10 feet either side of the area not complying with the minimum horizontal and vertical separation, or
- The design and construction of the sewer pipeline must meet the requirements applicable to water lines (any AWWA-approved material for potable water conveyance), and pressure tested in accordance with AWWA specifications, or
- In instances of conflict with sanitary wastewater structures mentioned above, relocate the water line to achieve either a 10 foot horizontal or 18 inch vertical separation.

**B. Sewers crossing water lines**

Sewers crossing over water lines should be avoided, but if conditions warrant this situation, then adequate structural support shall be provided for the sewer to maintain line and grade. Sewers crossing under water lines shall be laid to provide a minimum vertical separation of 18 inches between the invert of the water line and the crown of the sewer. Relocation of an existing water line may be necessary to achieve this vertical separation. Relocated water lines shall be constructed of an AWWA-approved material for potable water conveyance and designed for the required water service pressure for a distance of 10 feet on each side of the crossing, measured perpendicular to the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water line joints.

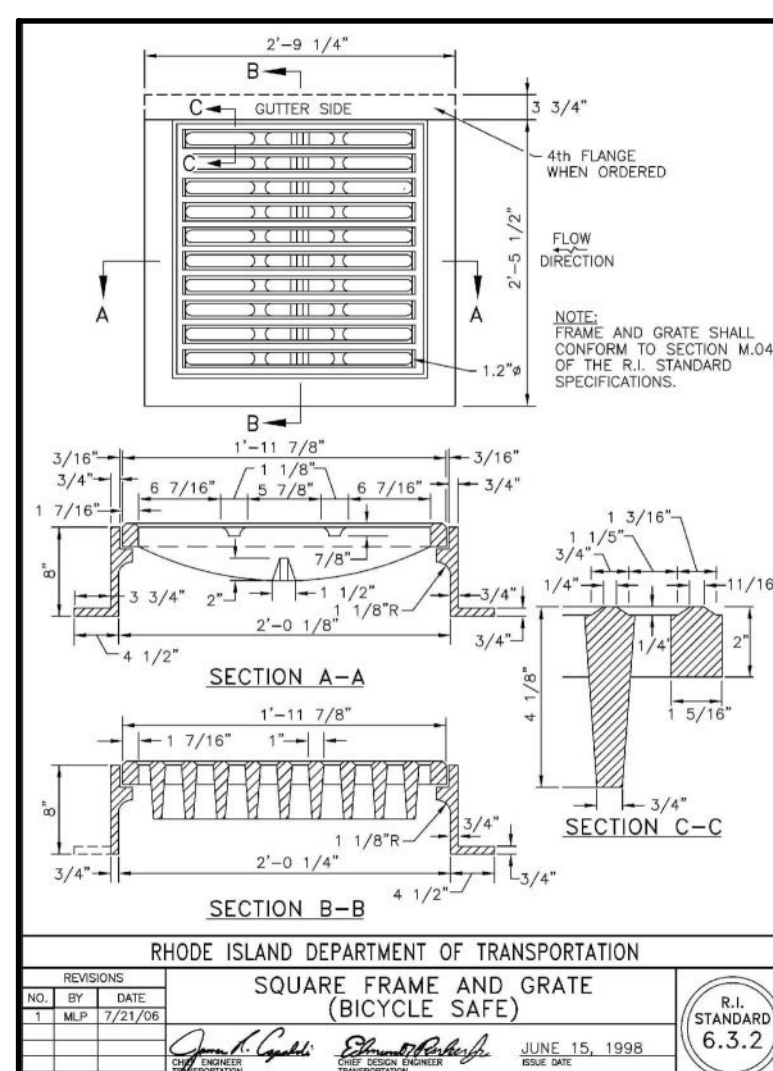
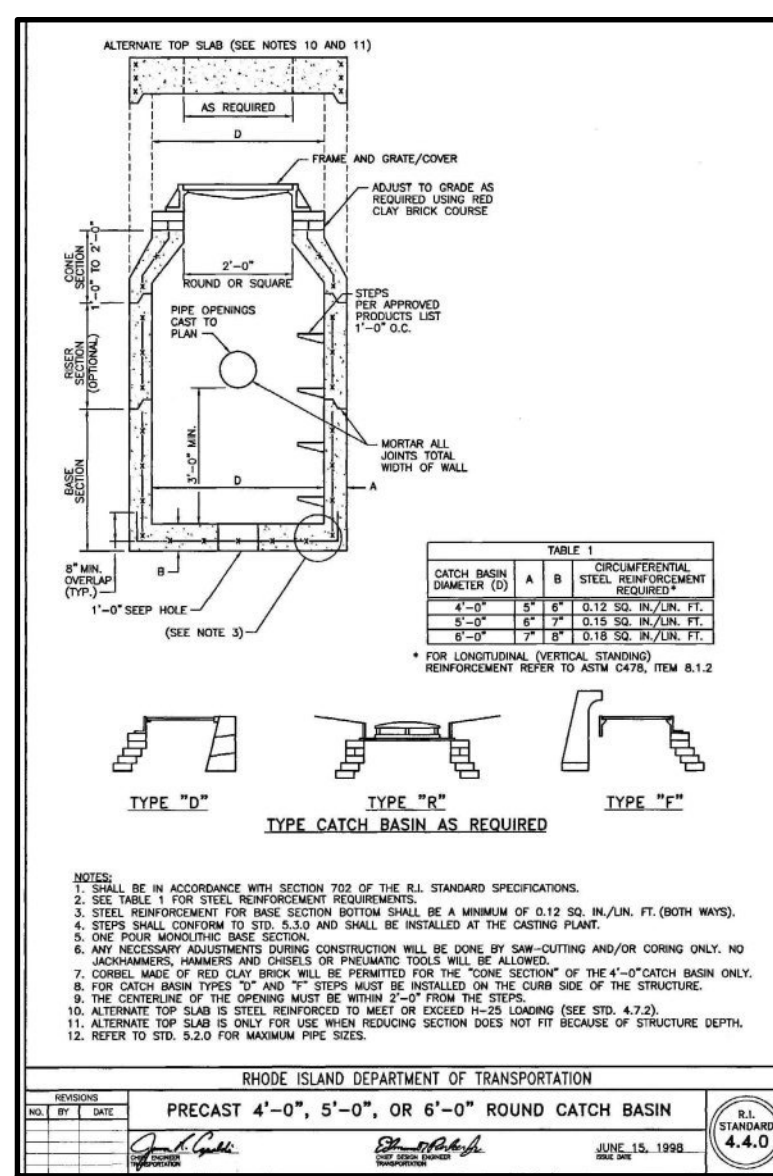
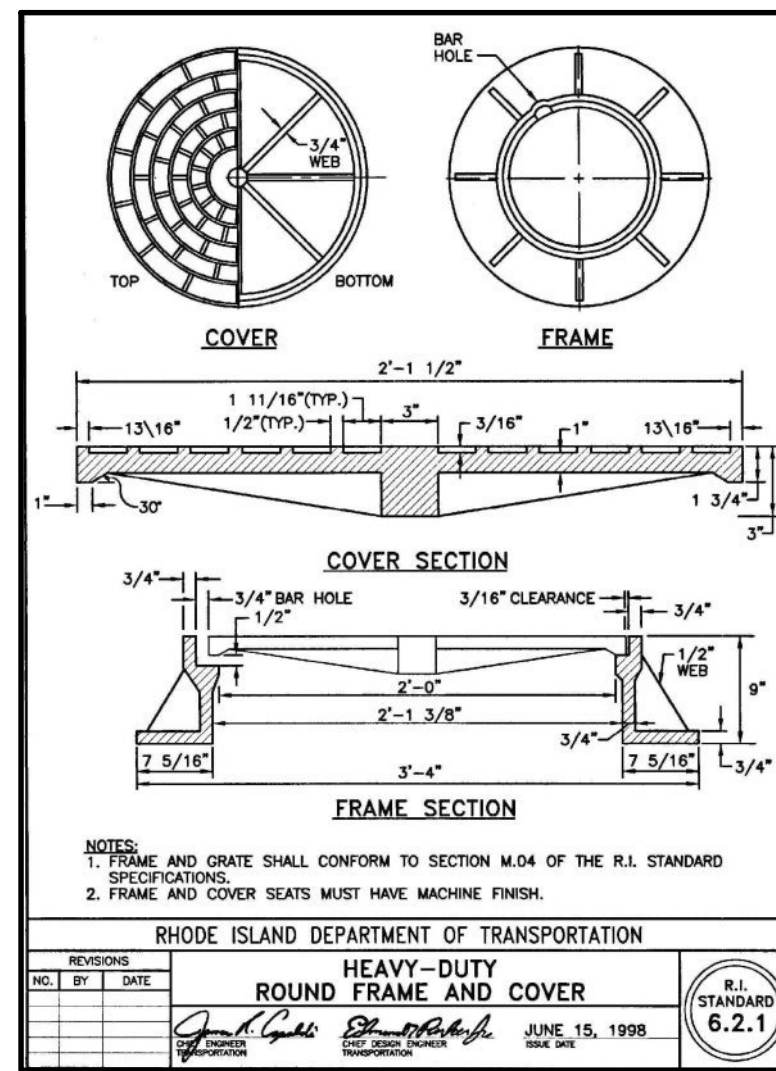
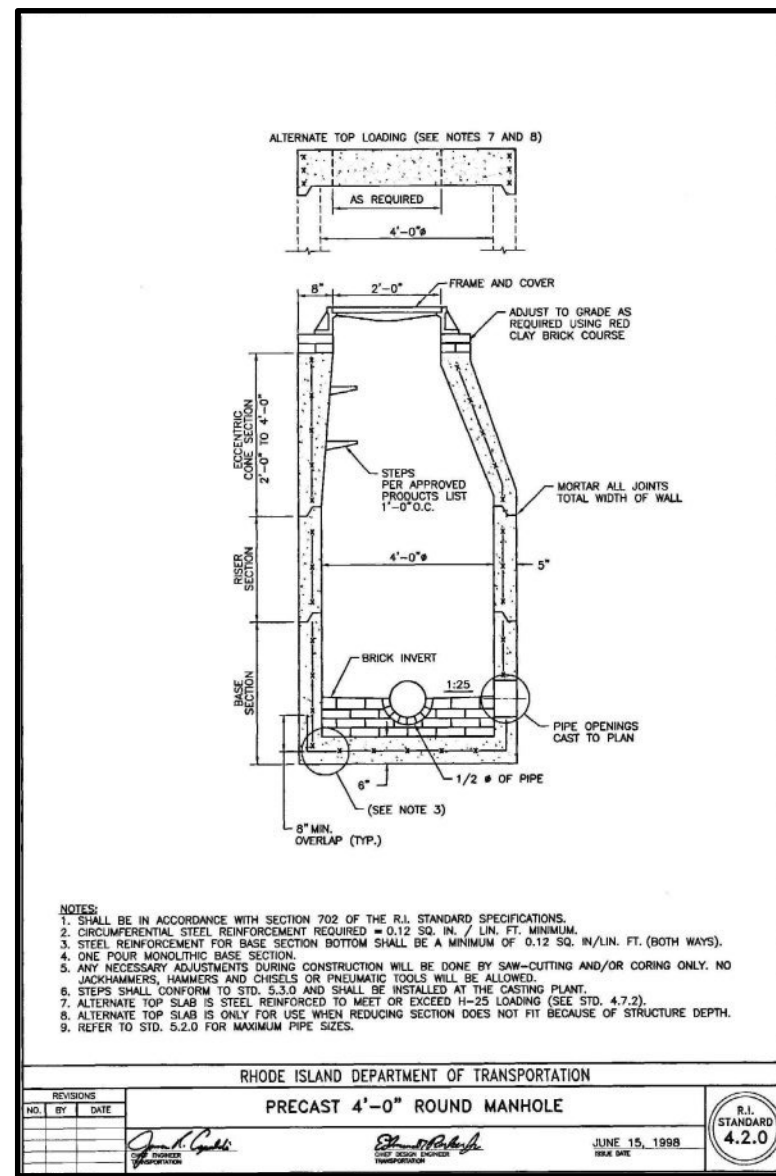
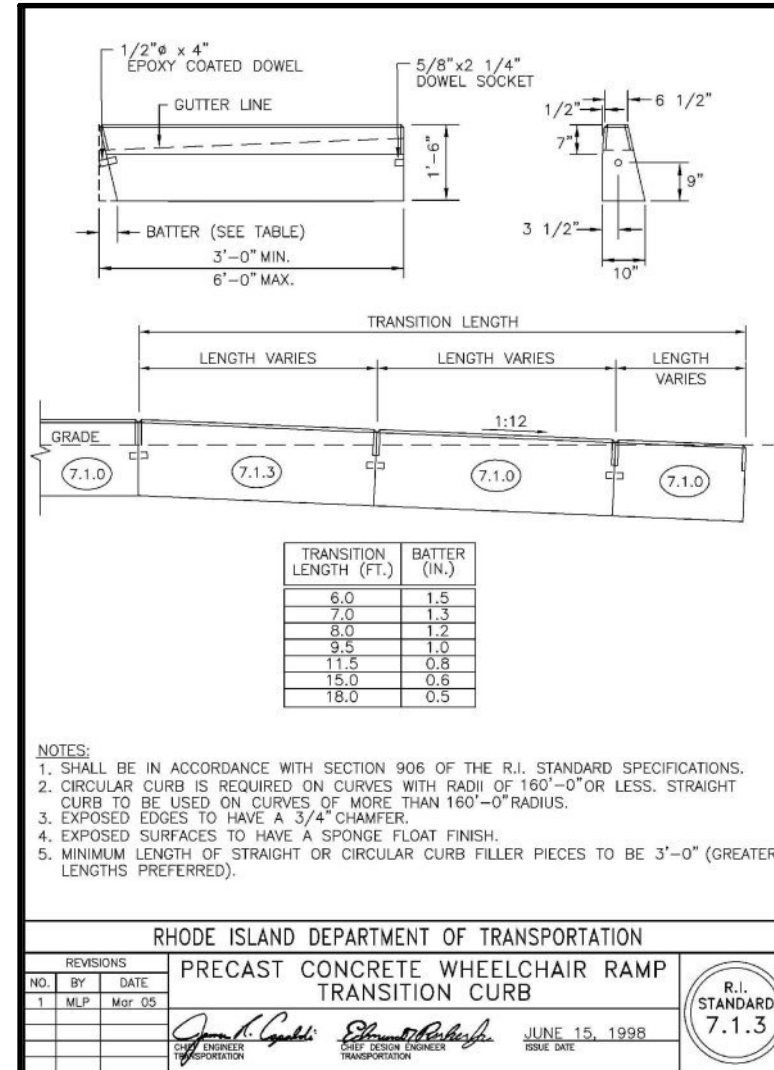
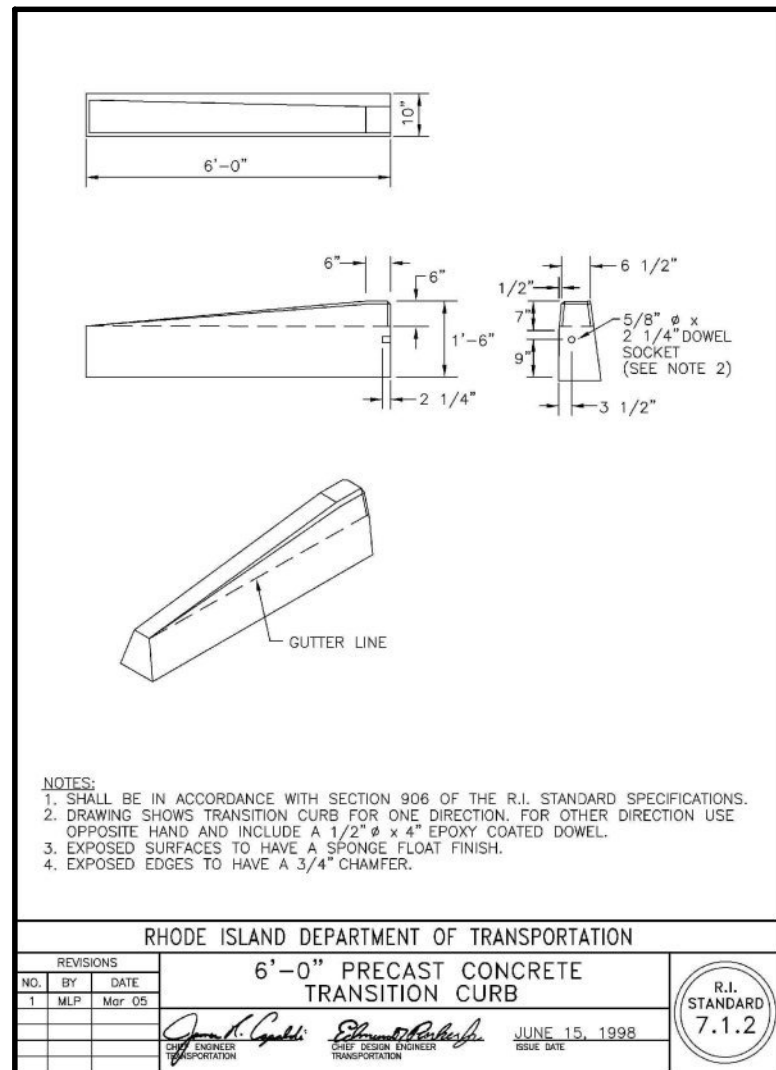
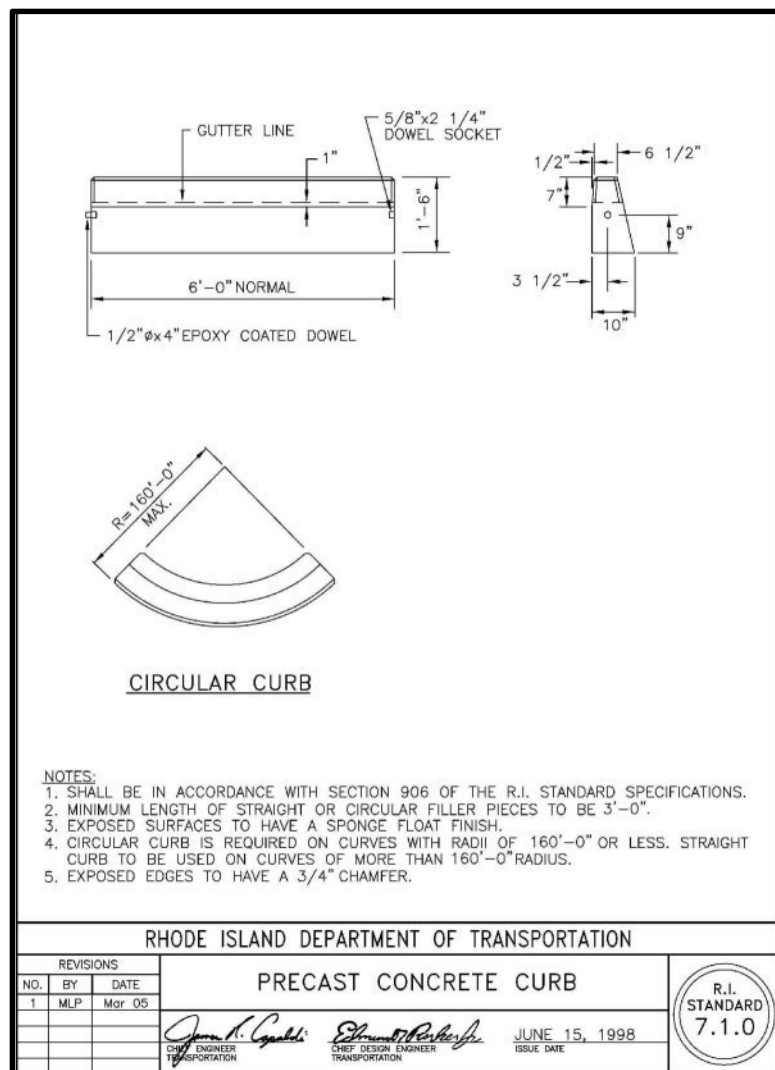
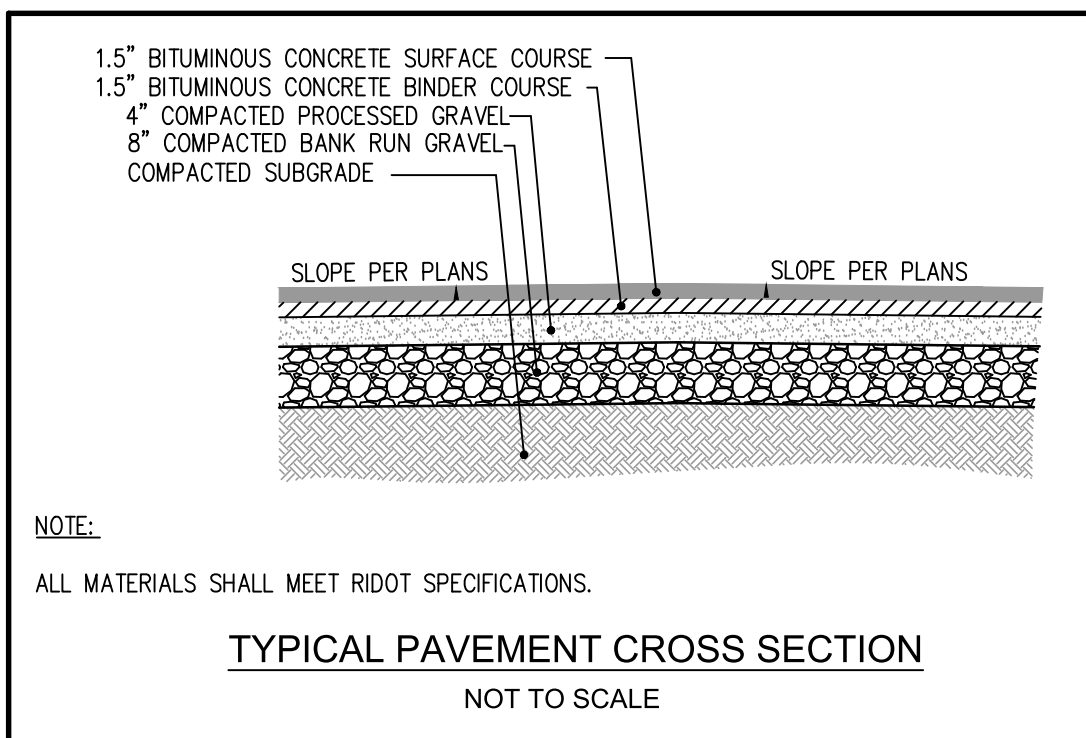
Where conditions prevent an 18 inch vertical separation from being maintained, the following methods shall be specified:

- The design and construction of the sewer must meet the requirements applicable to water lines (any AWWA-approved material for potable water conveyance) for a distance of 10 feet on each side of the crossing, measured perpendicular to the water line and pressure tested in accordance with AWWA specifications, or
- Either the water line or the sewer may be encased in concrete (min. 6 inch thickness) or a carrier pipe for a distance of 10 feet on each side of the crossing, measured perpendicular to the water line. The carrier pipe shall be designed and constructed of materials which are satisfactory to the OWR, or
- Any other methods, if supported by data from the design engineer, which ensure adequate watertightness and are satisfactory to the OWR.

<sup>1</sup>Water lines shall be defined as any conduits or pipelines that convey potable water.

10/96 (rev. 5/01)

<sup>1</sup> Kent County Water Authority and West Warwick Standard Sanitary Sewer Requirements do not allow for concrete encasement.



### TRENCH INSTALLATION DETAIL

**TYPICAL TRENCH CROSS-SECTION (N.T.S.)**

**NOTES:**

- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321. "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100-600mm) PIPE. CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150mm) FOR 30"-60" (750-1500mm) CPEP.
- HAUNCHING AND INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL Ø in (mm)	MIN. RECOMMENDED TRENCH WIDTH in (mm)
4 (100)	21 (530)
6 (150)	23 (580)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	39 (990)
24 (600)	48 (1220)
30 (750)	66 (1680)
36 (900)	78 (1980)
42 (1050)	83 (2110)
48 (1200)	89 (2260)
60 (1500)	102 (2590)

5. **MINIMUM COVER:** MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED COVER in (mm)
H25 (FLEXIBLE PAVEMENT)	12 (300), 24 (600) FOR 60" (1500) PIPE
H25 (RIGID PAVEMENT)	12 (300), 24 (600) FOR 60" (1500) PIPE
E80 RAILWAY	24 (600)
HEAVY CONSTRUCTION	48 (1200)
*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION	

**NOTE TO THE ENGINEER:** WHEN THIS DETAIL IS TO BE INCORPORATED INTO CONTRACT DOCUMENTS, PLEASE REFERENCE SECTION X-2, "RECOMMENDATIONS FOR INCORPORATION INTO CONTRACT DOCUMENTS" OF ASTM SPECIFICATION D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS" SO THAT APPROPRIATE MODIFICATIONS CAN BE MADE TO ACCOMMODATE SITE SPECIFIC NEEDS.

**ADS STANDARD DETAILS DISCLAIMER:** "ADVANCED DRAINAGE SYSTEMS, INC." ("ADS") HAS PREPARED THIS STANDARD DETAIL TO DEMONSTRATE ADS' RECOMMENDED INSTALLATION OF ITS PRODUCTS FOR THE DEPICED APPLICATION. IN ADDITION TO ADS' RECOMMENDATIONS, THERE MAY BE OTHER NATIONAL, STATE OR LOCAL SPECIFICATIONS THAT ARE PERTINENT TO THIS APPLICATION. ADS STANDARD DETAIL IS NOT INTENDED TO SUPERSEDE ANY NATIONAL, STATE OR LOCAL SPECIFICATIONS, AND ADS RECOMMENDS THAT THOSE REQUIREMENTS BE REVIEWED AND CONSULTED PRIOR TO THE INSTALLATION OF ADS' PRODUCTS. ADS HAS NOT AUTHORIZED, AND IT BEARS NO RESPONSIBILITY FOR, ANY REVISIONS, ALTERATIONS OR DEVIATIONS FROM THIS STANDARD DETAIL.

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT
2	3/24/26	TOWN COMMENTS

**JEFFREY C. HANSON**  
No. 5238  
3/24/26  
REGISTERED PROFESSIONAL ENGINEER

**Millstone LLC**  
ENGINEERING • SURVEYING • PERMITTING  
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Warwick, RI 02886 | Middletown, RI 02842  
www.MillstoneEng.com  
p. (401) 921-3303 f. (401) 921-3344

**NOTES & DETAILS**

**WILLOW LAKES**

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

PREPARED FOR:  
**LRT NEW LONDON AVE  
DEVELOPMENT, LLC**

SCALE AS NOTED  
MAY 2025

Drawn By: J.S.C.

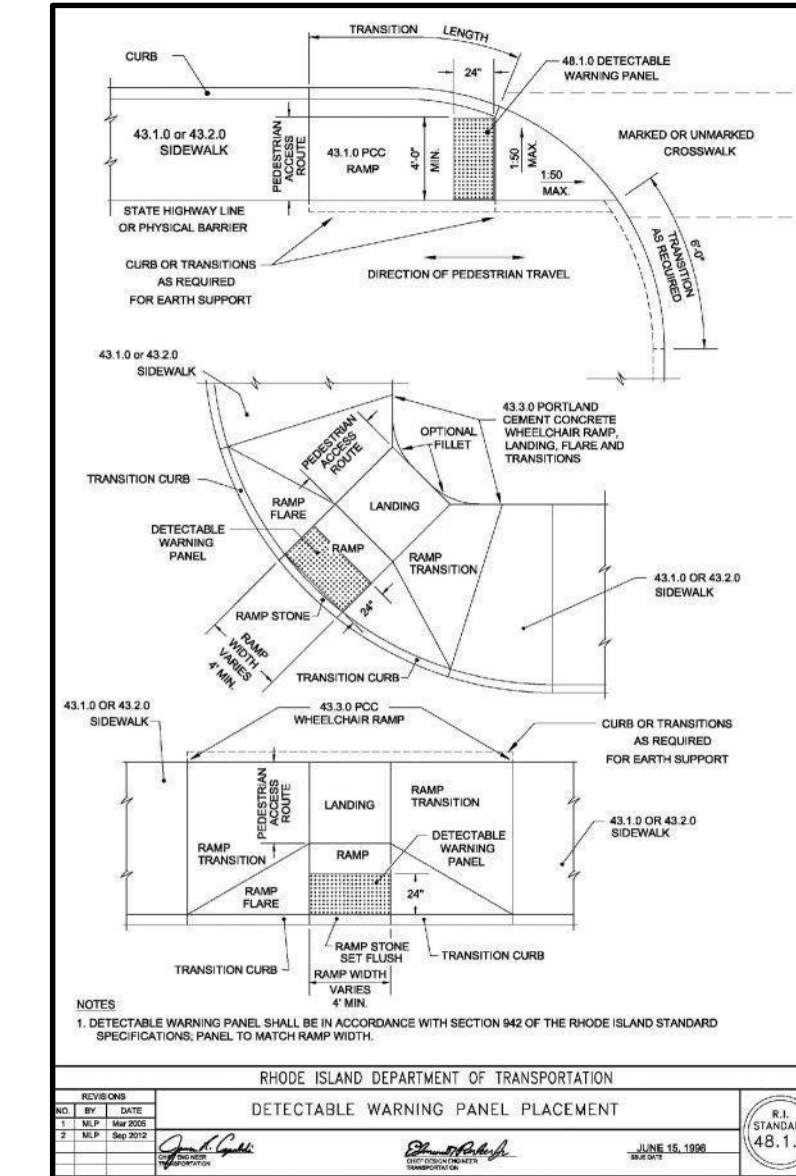
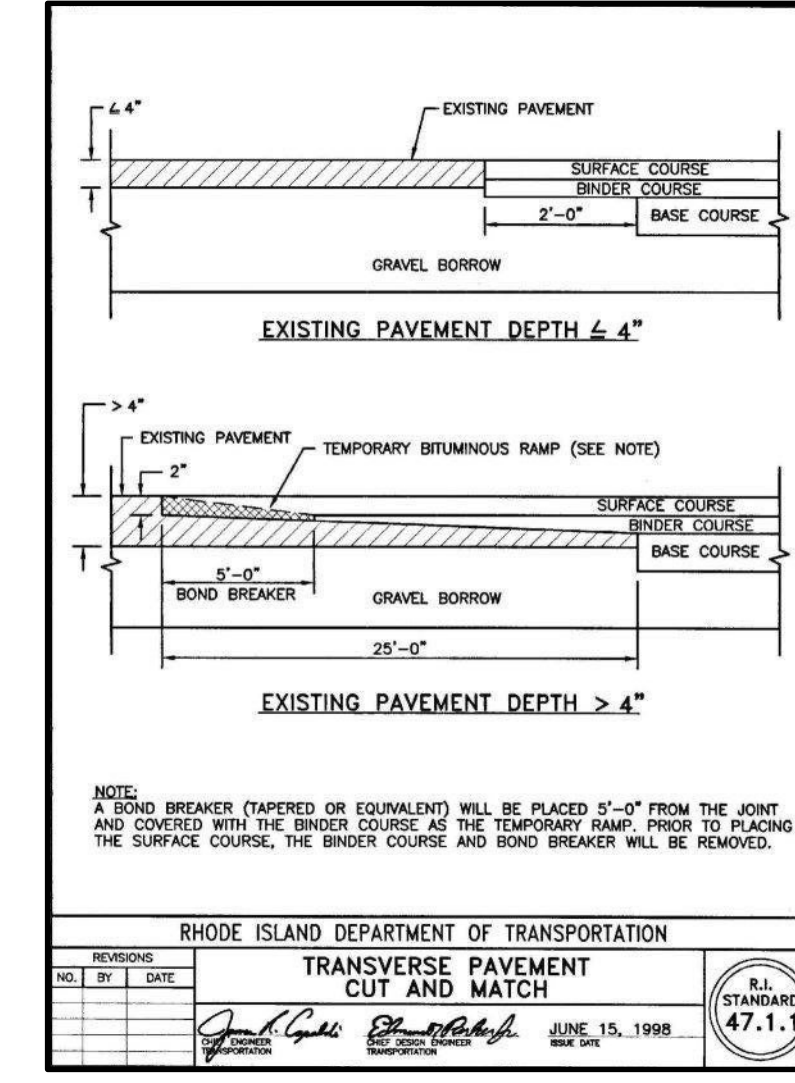
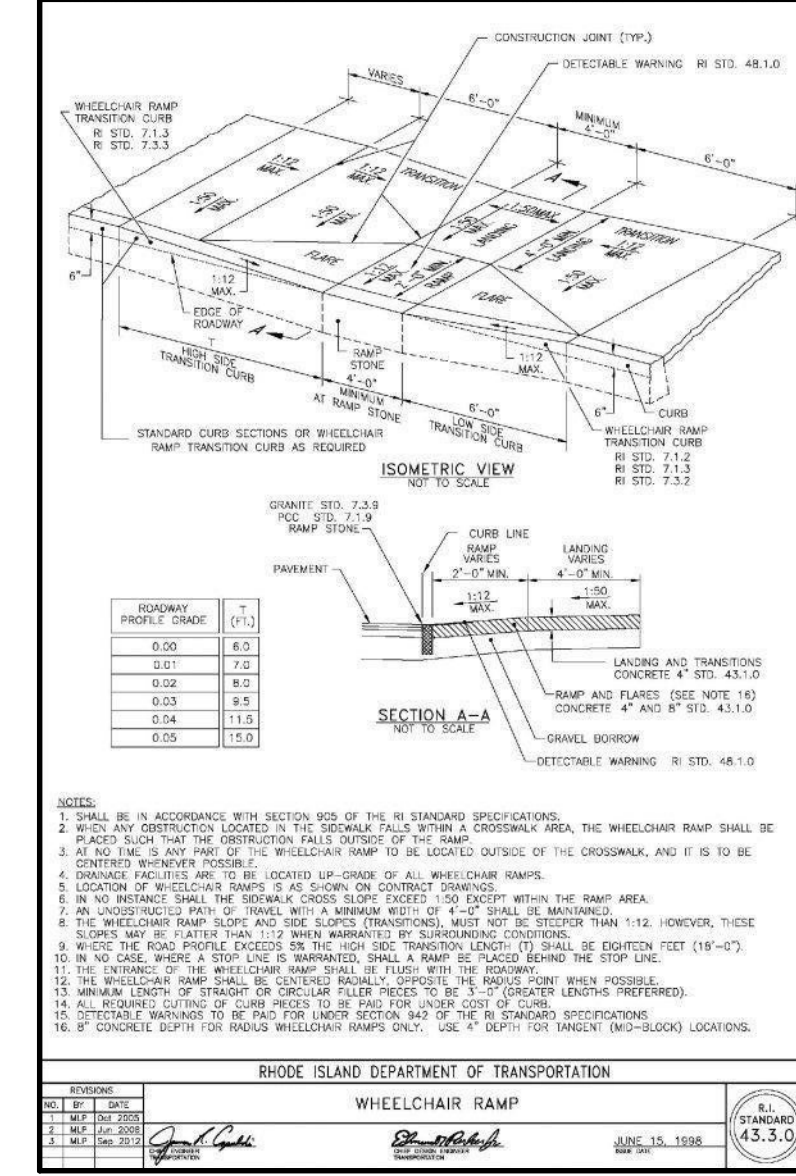
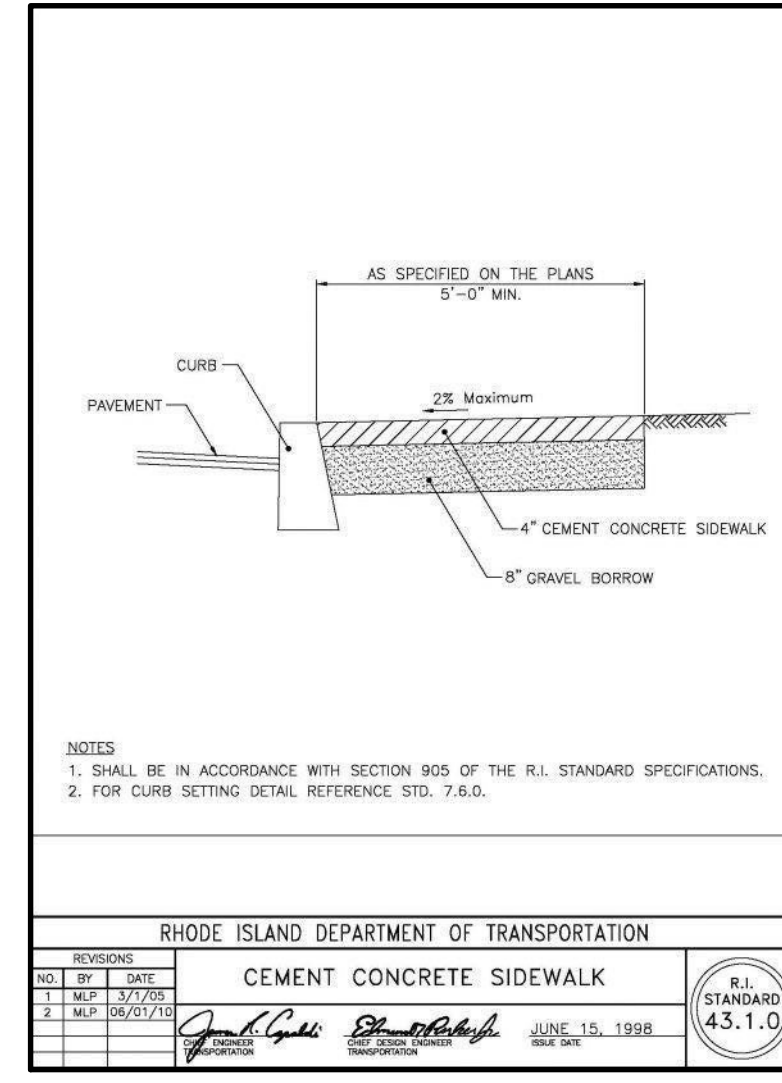
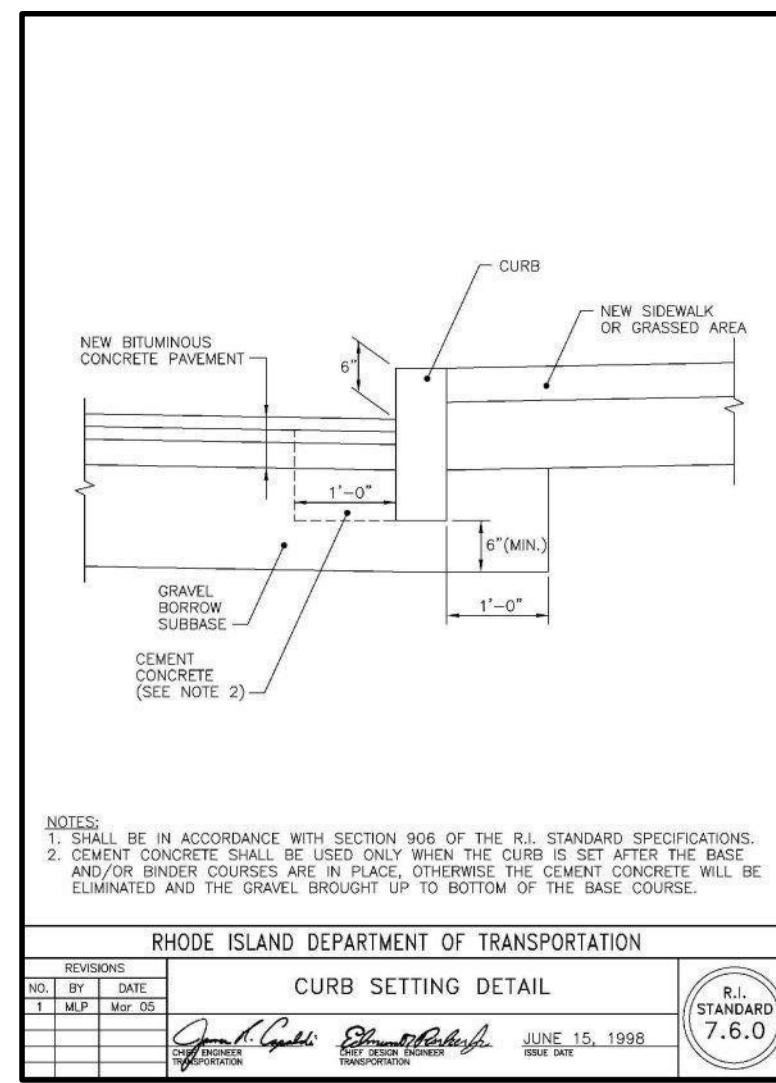
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FILE NO.: 17.276.403



**ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
1	FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF THE FLEXIBLE PAVEMENT OR UNPAVED FRESH GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THIS LAYER.	NA	PROPOSE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
2	FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBANKMENT STONE (IF LAYERS TO BE INSTALLED ABOVE THE TOP OF THE CHAMBER). NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THIS LAYER.	3.307.4, 407.5, 16.07, 6.87, 68.7, 78.8, 89.9, 10	BEGIN COMPACTION AFTER 1" (25 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ACCIDENTAL LAYERS IN 6" (152 mm) LIFTS TO A MIN. 90% STANDARD PROCTOR DENSITY. ADJUSTER GRADES VEHICLE WEIGHT NOT TO EXCEED 12,000 LB (5,443 kg) DYNAMIC FORCE NOT TO EXCEED 20,000 LB (9,072 kg).
3	EMBANKMENT STONE SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (IF LAYERS TO BE INSTALLED ABOVE THE TOP OF THE CHAMBER).	3.307.4, 407.5, 16.07, 6.87, 68.7, 78.8, 89.9, 10	NO COMPACTION REQUIRED.
4	FOUNDATION STONE BELOW CHAMBERS FROM THE SURGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	3.35.4, 407.5, 16.07, 6.87, 68.7, 78.8, 89.9, 10	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY.

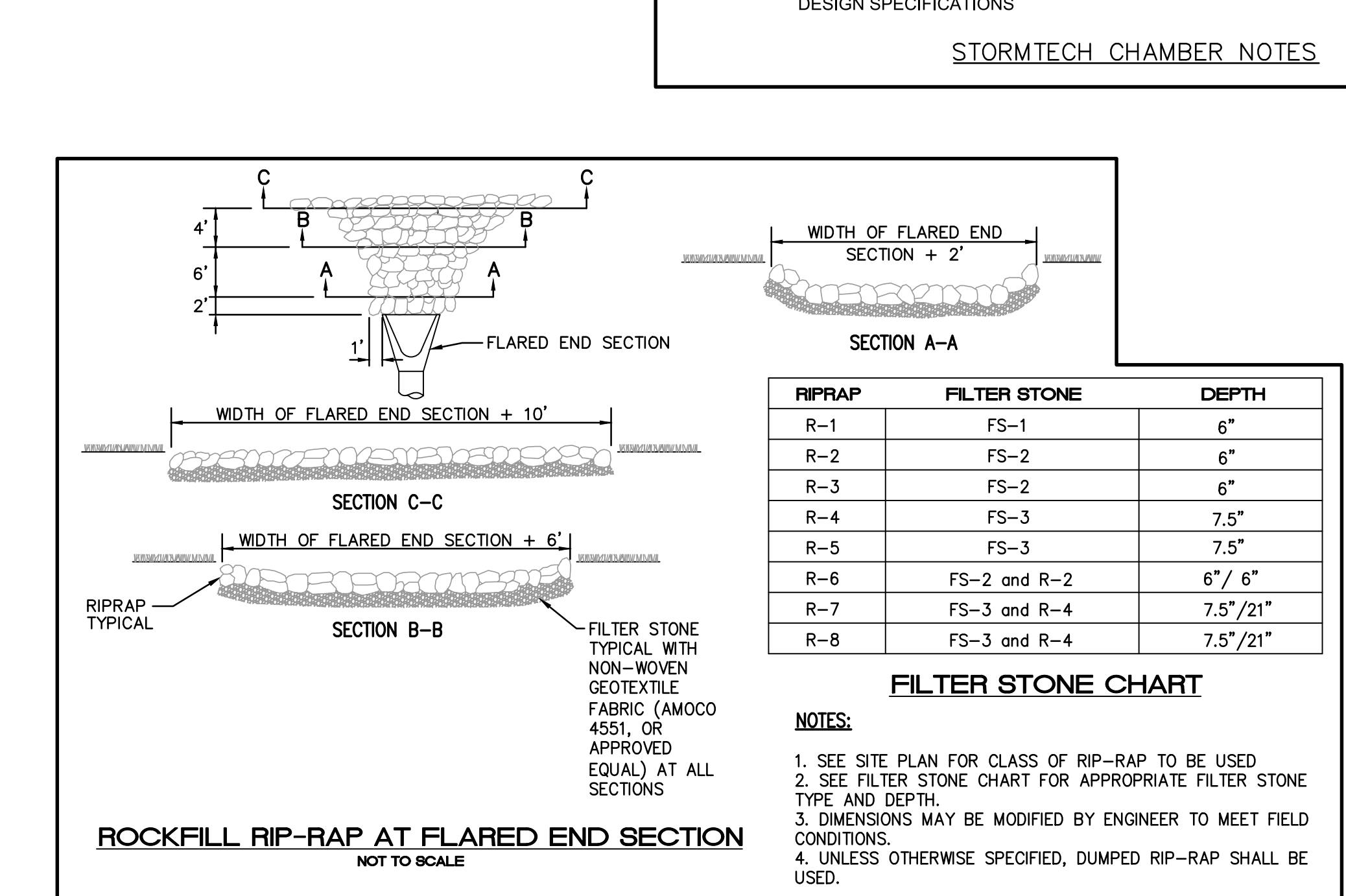
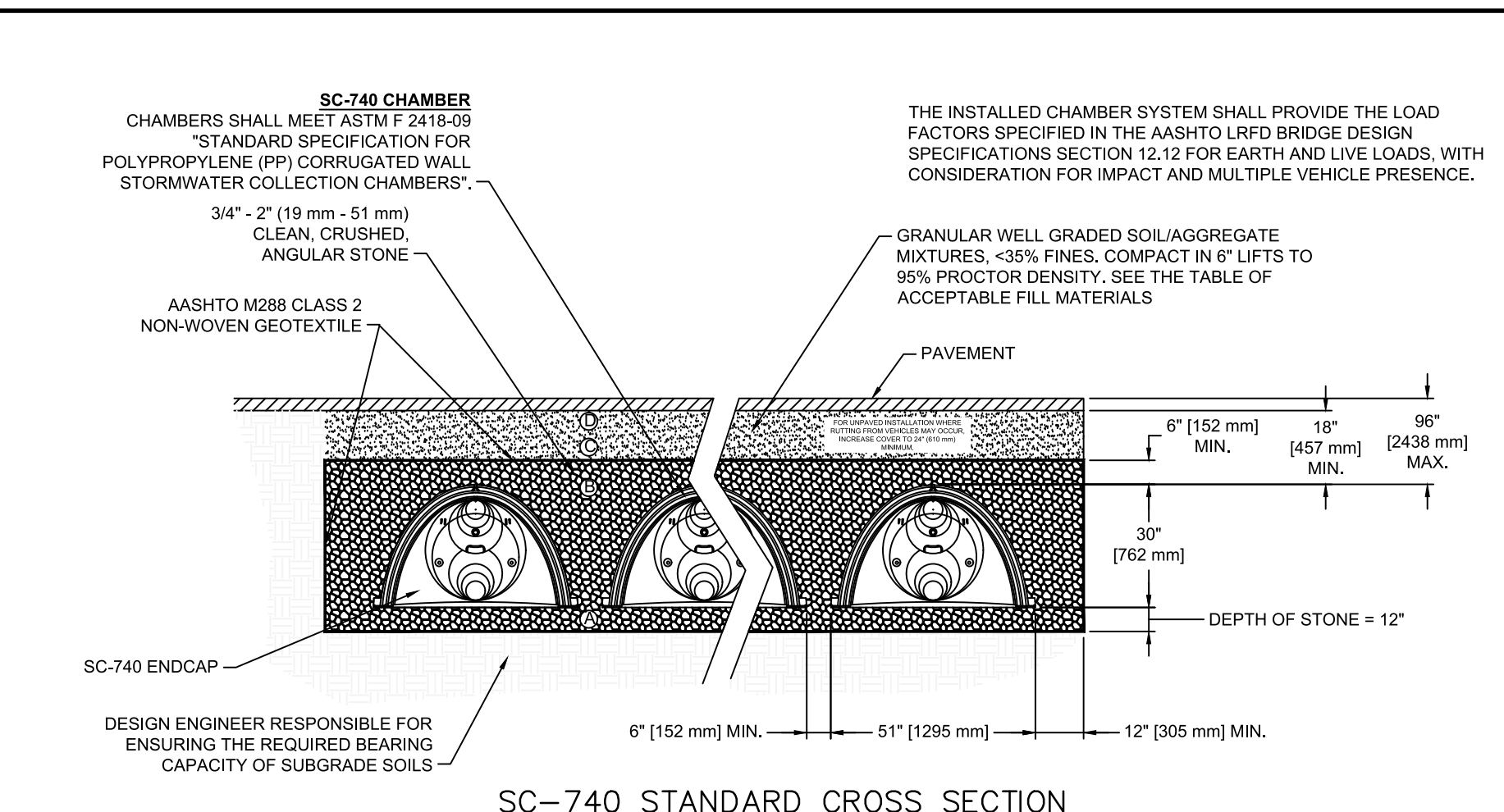
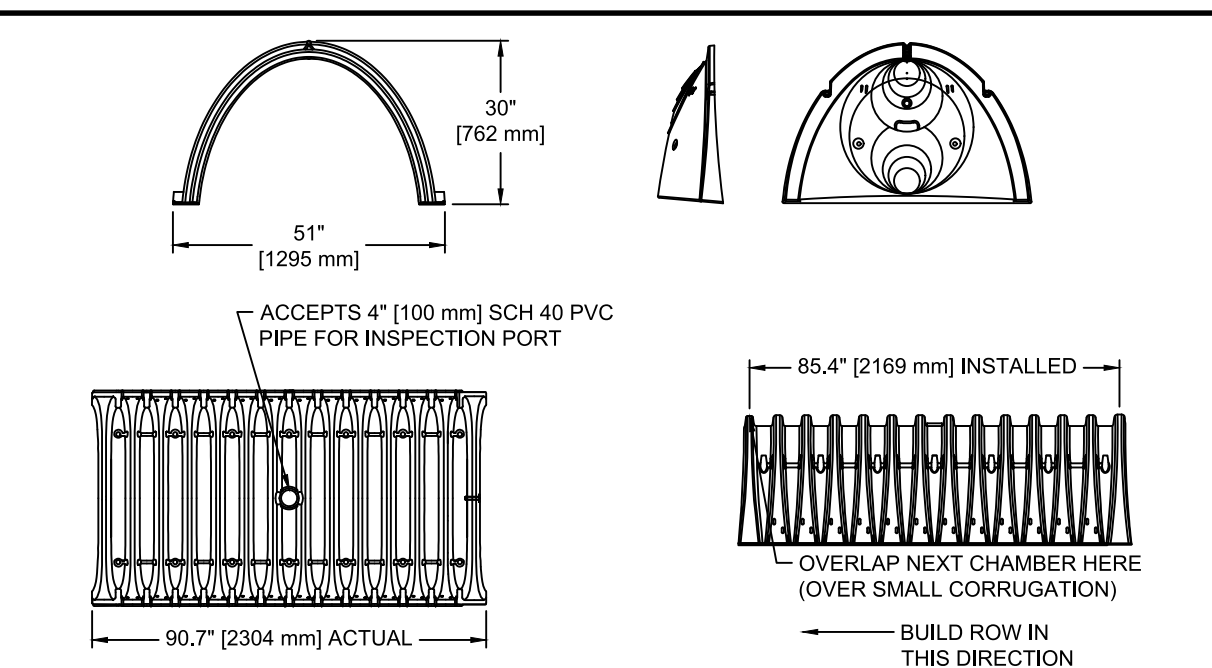
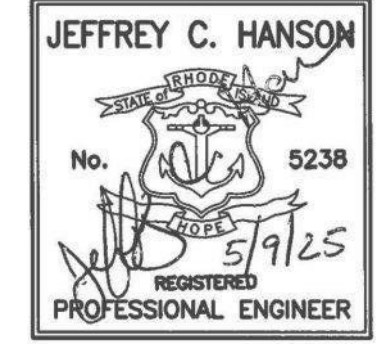
**PLEASE NOTE:**  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."  
 2. AS AN ALTERNATE TO PROCTOR TESTING AND FIELD DENSITY MEASUREMENTS ON OPEN GRADED STONE, STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (152 mm) MAX. 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 1-888-992-2664 OR VISIT [WWW.STORMTECH.COM](http://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**

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT



**FILTER STONE CHART**

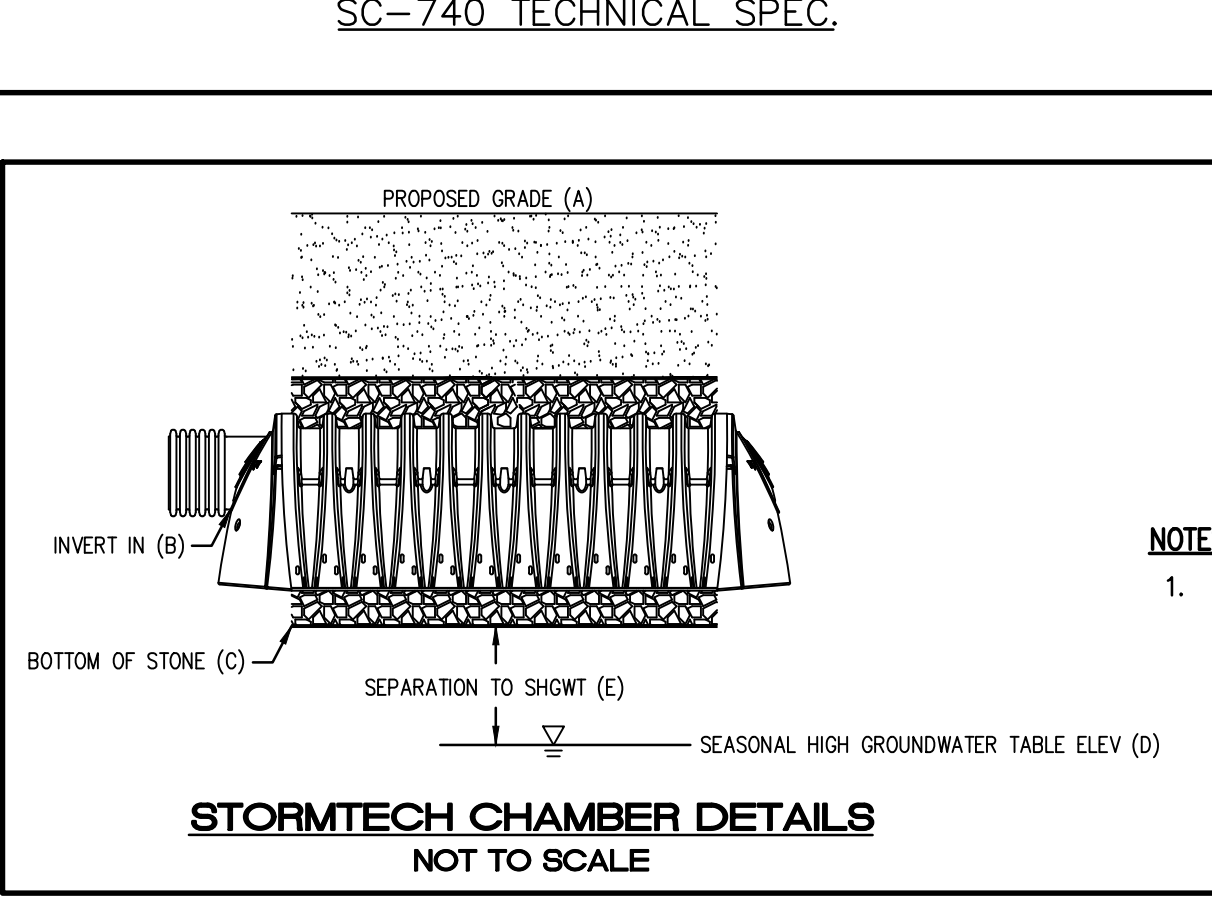
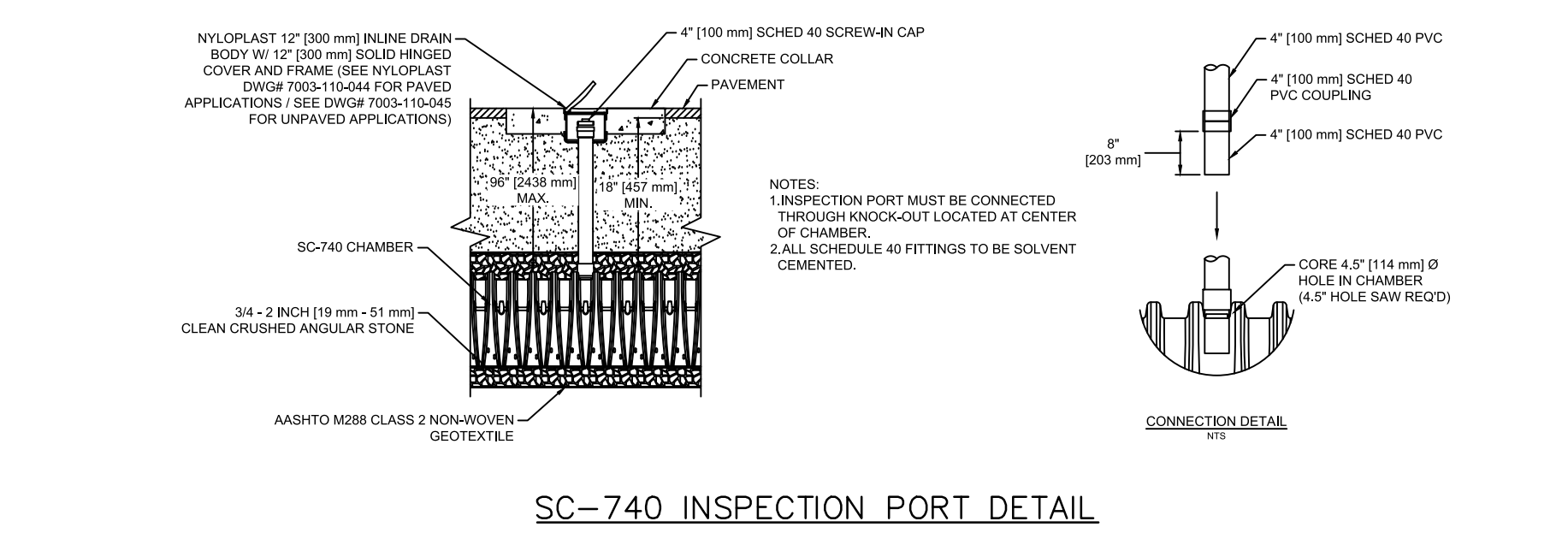
RIPRAP	FILTER STONE	DEPTH
R-1	FS-1	6"
R-2	FS-2	6"
R-3	FS-2	6"
R-4	FS-3	7.5"
R-5	FS-3	7.5"
R-6	FS-2 and R-2	6" / 6"
R-7	FS-3 and R-4	7.5" / 21"
R-8	FS-3 and R-4	7.5" / 21"

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

**STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"**  
**STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"**

PART#	STUB	A	B	C
SC740EPE06T	6" [150 mm]	10.90" [277 mm]	18.50" [470 mm]	N/A
SC740EPE06B	6" [150 mm]	10.90" [277 mm]	N/A	0.50" [13 mm]
SC740EPE08T	8" [200 mm]	12.20" [310 mm]	16.50" [419 mm]	N/A
SC740EPE08B	8" [200 mm]	12.20" [310 mm]	N/A	0.60" [15 mm]
SC740EPE10T	10" [250 mm]	13.40" [340 mm]	14.50" [368 mm]	N/A
SC740EPE10B	10" [250 mm]	13.40" [340 mm]	N/A	0.70" [18 mm]
SC740EPE12T	12" [300 mm]	14.70" [373 mm]	12.50" [318 mm]	N/A
SC740EPE12B	12" [300 mm]	14.70" [373 mm]	N/A	1.20" [30 mm]
SC740EPE15T	15" [375 mm]	18.40" [467 mm]	9.00" [229 mm]	N/A
SC740EPE15B	15" [375 mm]	18.40" [467 mm]	N/A	1.30" [33 mm]
SC740EPE18T	18" [450 mm]	19.70" [500 mm]	5.00" [127 mm]	N/A
SC740EPE18B	18" [450 mm]	19.70" [500 mm]	N/A	1.60" [41 mm]
*SC740EPE24B	24" [600 mm]	18.50" [470 mm]	N/A	0.10" [3 mm]

NOTE: ALL DIMENSIONS ARE NOMINAL  
 ALL STUBS, EXCEPT FOR THE SC740EPE24B 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 1-888-992-2664.  
 \*FOR THE SC740EPE24B 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.



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 BUILDING E12  
 WILLOW LAKE, RI 02868

**OWNER/APPLICANT**  
 LRT NEW LONDON AVE DEVELOPMENT, LLC  
 110 TRADERS CROSS  
 BLUFFTON, SC 29909  
 PRINCIPAL: CHARLES ANDERSON  
 (401) 935-9263

**ATTORNEY**  
 MICHAEL D. RESNICK  
 128 DORRANCE STREET, SUITE 300  
 PROVIDENCE, RI 02903  
 (401) 490-7334

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

**Millstone LLC**  
 ENGINEERING • SURVEYING • PERMITTING

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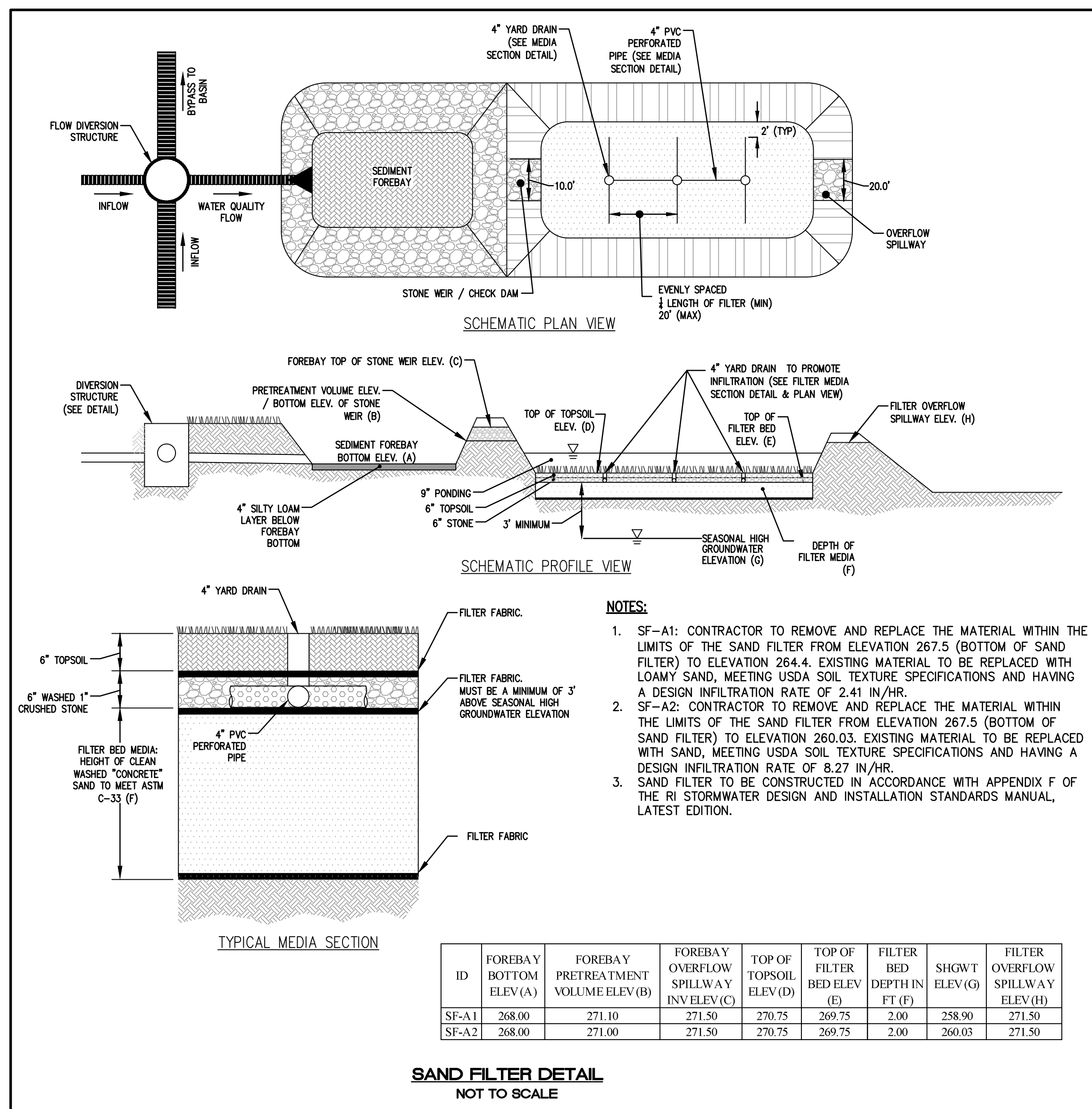
**DETAILS - 1**

**WILLOW LAKES**

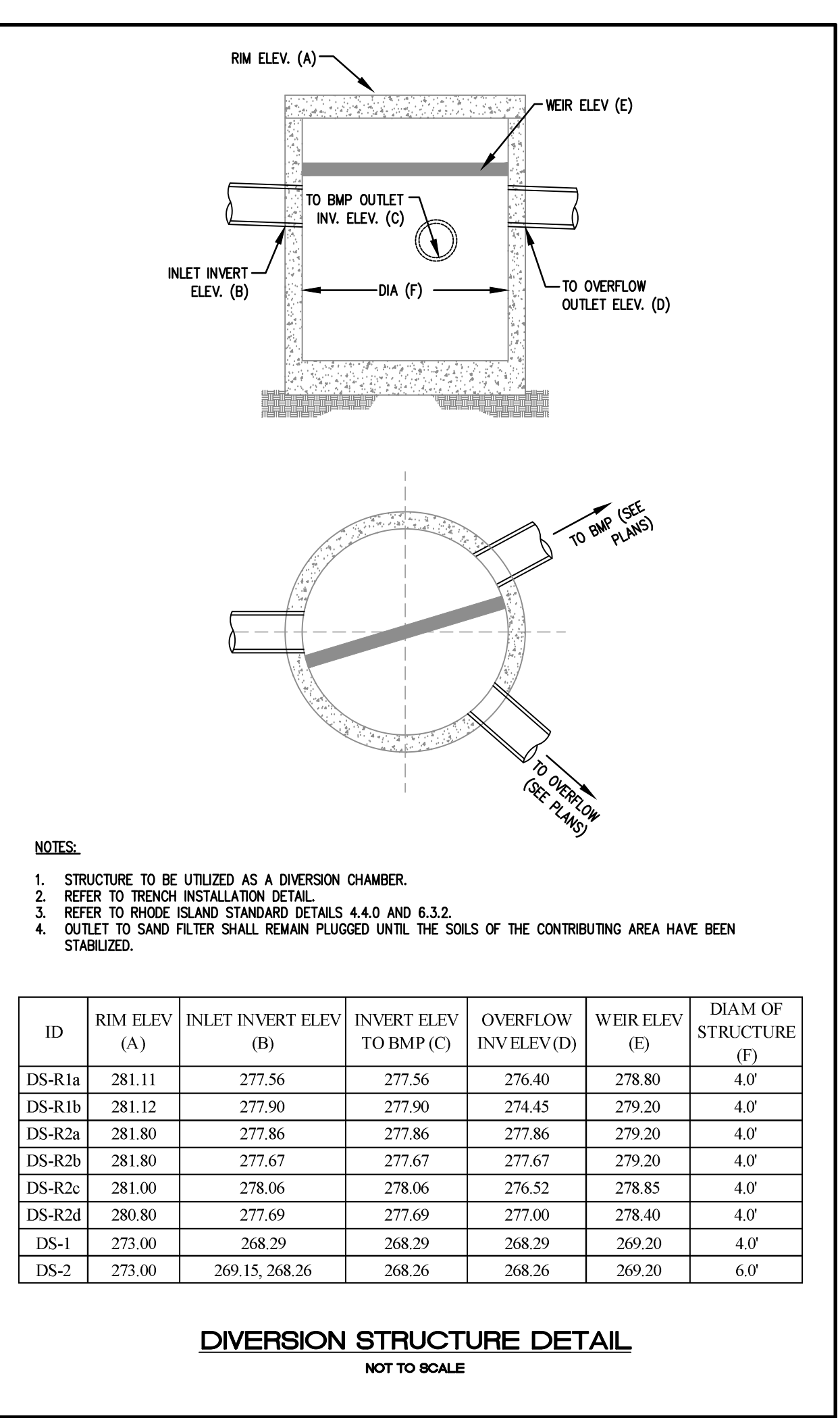
A.P. 16, LOT 3  
 NEW LONDON TURNPIKE  
 COVENTRY, RI

PREPARED FOR:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**

SCALE AS NOTED  
 MAY 2025

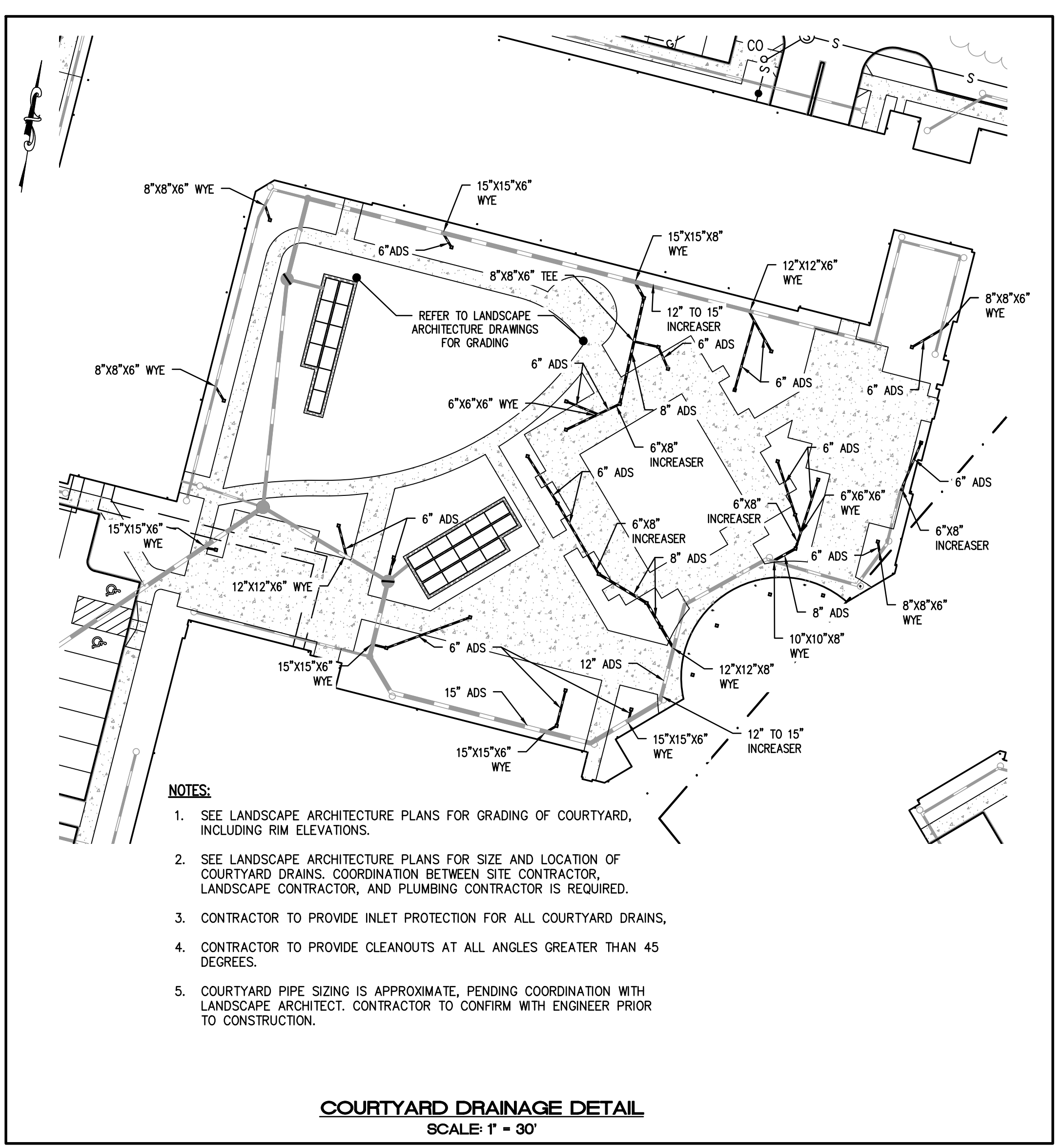


- NOTES:**
- SF-A1: CONTRACTOR TO REMOVE AND REPLACE THE MATERIAL WITHIN THE LIMITS OF THE SAND FILTER FROM ELEVATION 267.5 (BOTTOM OF SAND FILTER) TO ELEVATION 264.4. EXISTING MATERIAL TO BE REPLACED WITH LOAMY SAND, MEETING USDA SOIL TEXTURE SPECIFICATIONS AND HAVING A DESIGN INFILTRATION RATE OF 2.41 IN/HR.
  - SF-A2: CONTRACTOR TO REMOVE AND REPLACE THE MATERIAL WITHIN THE LIMITS OF THE SAND FILTER FROM ELEVATION 267.5 (BOTTOM OF SAND FILTER) TO ELEVATION 260.03. EXISTING MATERIAL TO BE REPLACED WITH SAND, MEETING USDA SOIL TEXTURE SPECIFICATIONS AND HAVING A DESIGN INFILTRATION RATE OF 8.27 IN/HR.
  - SAND FILTER TO BE CONSTRUCTED IN ACCORDANCE WITH APPENDIX F OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, LATEST EDITION.

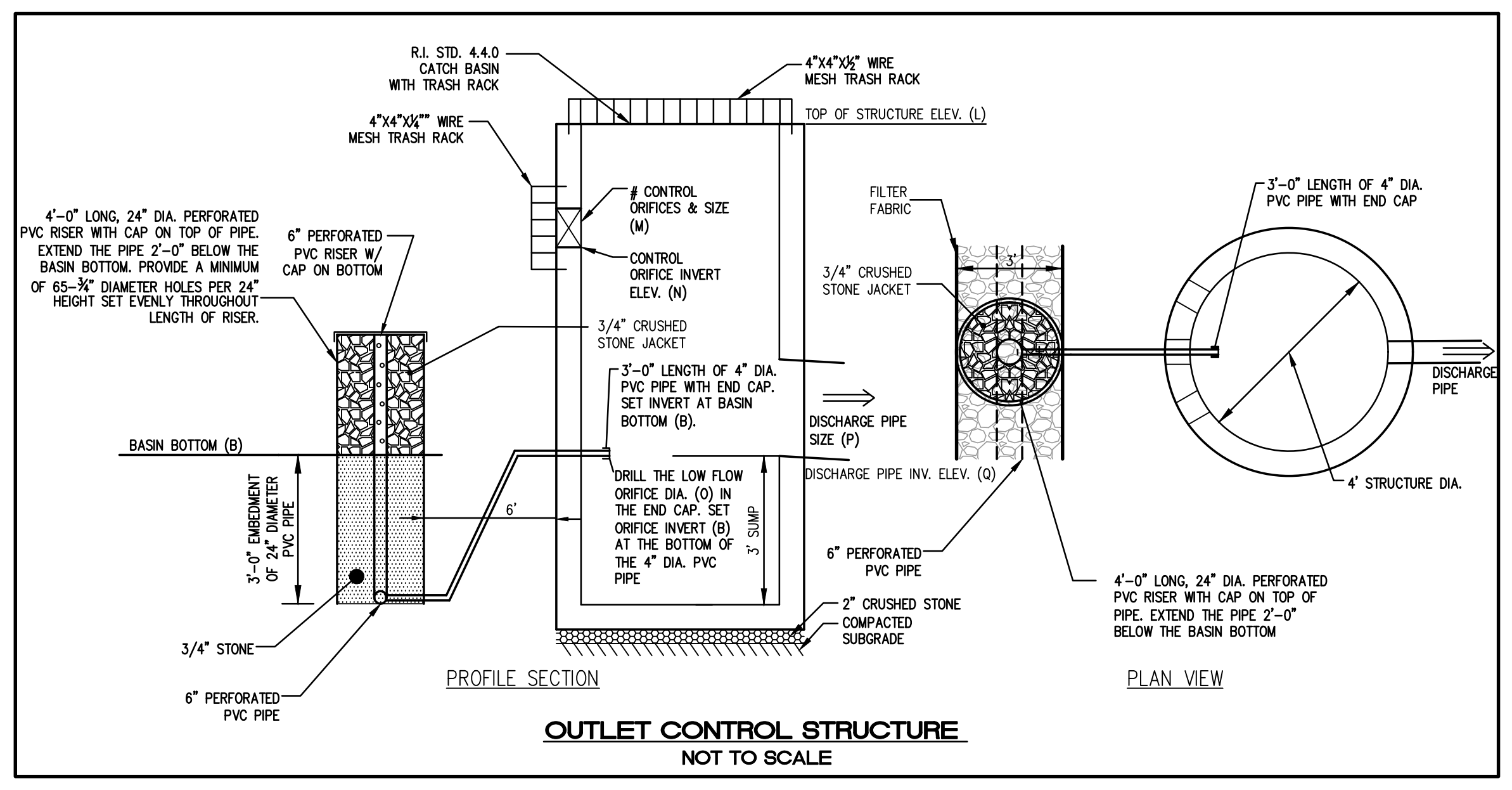
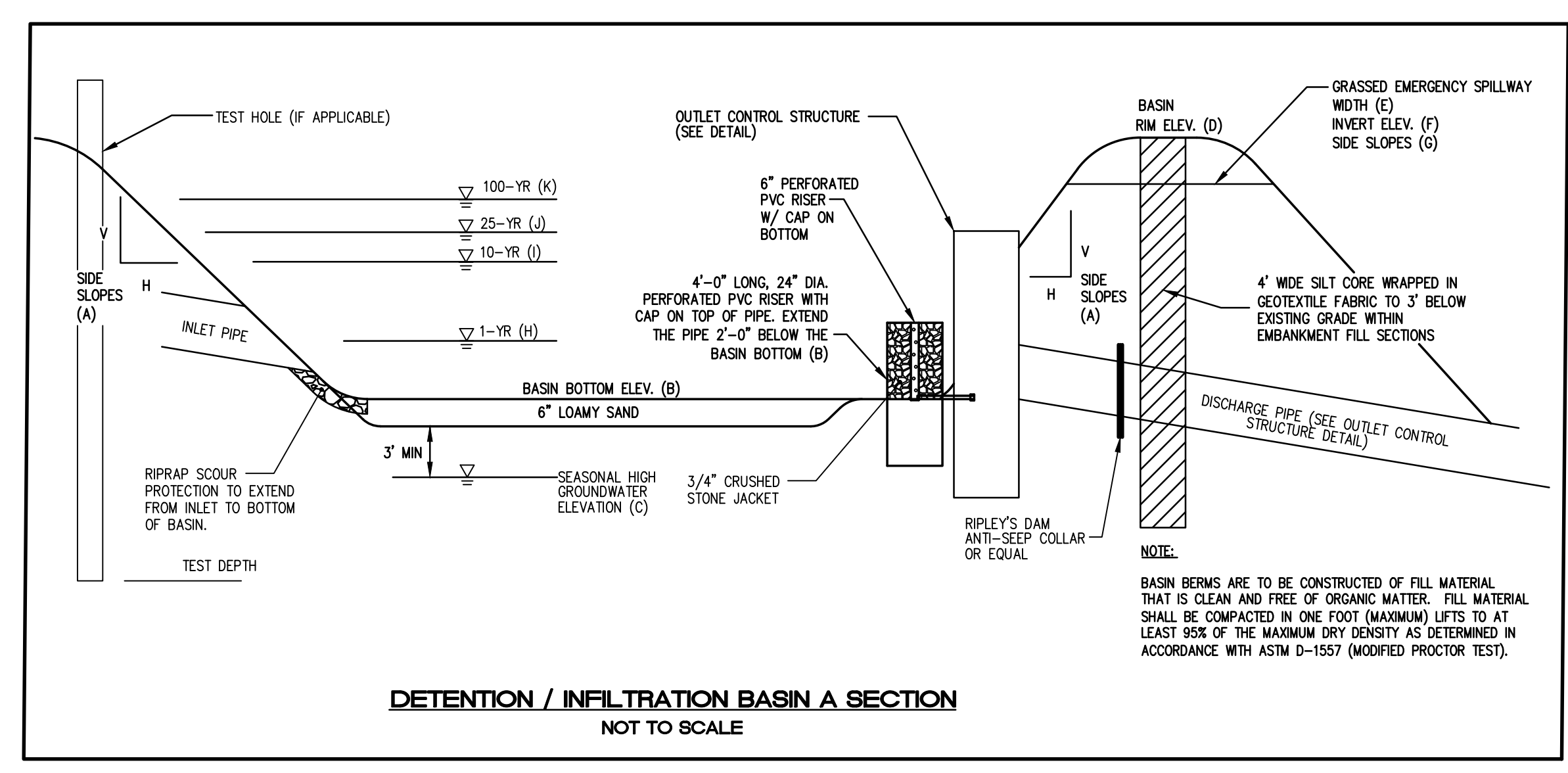


- NOTES:**
- STRUCTURE TO BE UTILIZED AS A DIVERSION CHAMBER.
  - REFER TO TRENCH INSTALLATION DETAIL.
  - REFER TO RHODE ISLAND STANDARD DETAILS 4.4.0 AND 6.3.2.
  - OUTLET TO SAND FILTER SHALL REMAIN PLUGGED UNTIL THE SOILS OF THE CONTRIBUTING AREA HAVE BEEN STABILIZED.

ID	RIM ELEV (A)	INLET INVERT ELEV (B)	INVERT ELEV TO BMP (C)	OVERFLOW INV ELEV (D)	WEIR ELEV (E)	DIAM OF STRUCTURE (F)
DS-R1a	281.11	277.56	277.56	276.40	278.80	4.0'
DS-R1b	281.12	277.90	277.90	274.45	279.20	4.0'
DS-R2a	281.80	277.86	277.86	277.86	279.20	4.0'
DS-R2b	281.80	277.67	277.67	277.67	279.20	4.0'
DS-R2c	281.00	278.06	278.06	276.52	278.85	4.0'
DS-R2d	280.80	277.69	277.69	277.00	278.40	4.0'
DS-1	273.00	268.29	268.29	268.29	269.20	4.0'
DS-2	273.00	269.15, 268.26	268.26	268.26	269.20	6.0'



- NOTES:**
- SEE LANDSCAPE ARCHITECTURE PLANS FOR GRADING OF COURTYARD, INCLUDING RIM ELEVATIONS.
  - SEE LANDSCAPE ARCHITECTURE PLANS FOR SIZE AND LOCATION OF COURTYARD DRAINS. COORDINATION BETWEEN SITE CONTRACTOR, LANDSCAPE CONTRACTOR, AND PLUMBING CONTRACTOR IS REQUIRED.
  - CONTRACTOR TO PROVIDE INLET PROTECTION FOR ALL COURTYARD DRAINS.
  - CONTRACTOR TO PROVIDE CLEANOUTS AT ALL ANGLES GREATER THAN 45 DEGREES.
  - COURTYARD PIPE SIZING IS APPROXIMATE, PENDING COORDINATION WITH LANDSCAPE ARCHITECT. CONTRACTOR TO CONFIRM WITH ENGINEER PRIOR TO CONSTRUCTION.

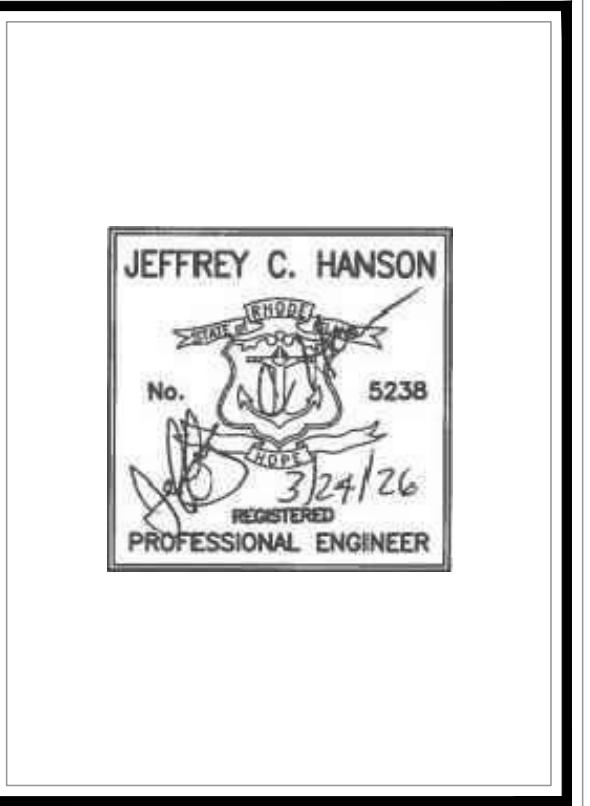


ID	SIDESLOPES (A)	BASIN BOTTOM ELEV (B)	TEST PIT #	SHGWT ELEV (C)	BASIN RIM ELEV (D)	SPILLWAY					POND ELEVATION					OUTLET STRUCTURE				
						WIDTH IN FT (E)	INVERT ELEV (F)	SIDE SLOPES (G)	1-YR (H)	10-YR (I)	25-YR (J)	100-YR (K)	TOP OF STRUCTURE ELEV (L)	# CONTROL ORIFICES & SIZE (M)	CONTROL ORIFICE ELEV (N)	LOW FLOW ORIFICE DIA. 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	266.16	267.38	268.50	270.40	270.00	1, 8-INCH	266.50	1.6	12	266.00		

**OWNER/APPLICANT**  
LRT NEW LONDON AVE DEVELOPMENT, LLC  
110 TRADERS CROSS  
BLUFFTON, SC 29909  
PRINCIPAL: CHARLES ANDERSON  
(401) 935-9283

**ATTORNEY**  
MICHAEL D. RESNICK  
128 DORRANCE STREET, SUITE 300  
PROVIDENCE, RI 02903  
(401) 490-7334

NO.	DATE	REVISION
1	5/09/25	ISSUED FOR PERMIT
2	3/24/26	TOWN COMMENTS



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Warwick, RI 02886 | Middletown, RI 02842  
www.millstoneeng.com  
p. (401) 921-3344 | f. (401) 921-3303

DETAILS - 2

**WILLOW LAKES**

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

PREPARED FOR:  
**LRT NEW LONDON AVE DEVELOPMENT, LLC**

SCALE AS NOTED  
MAY 2025

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

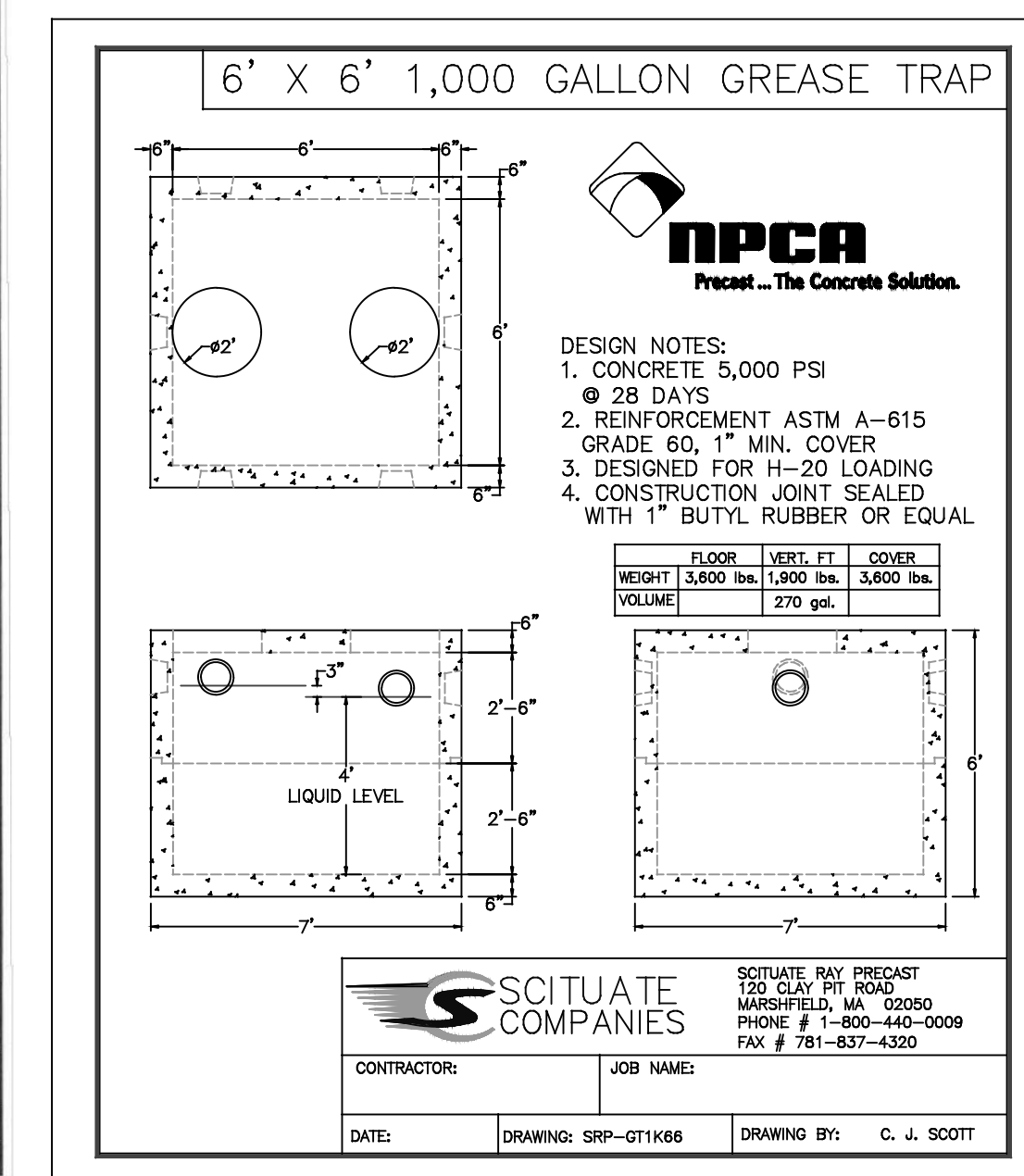
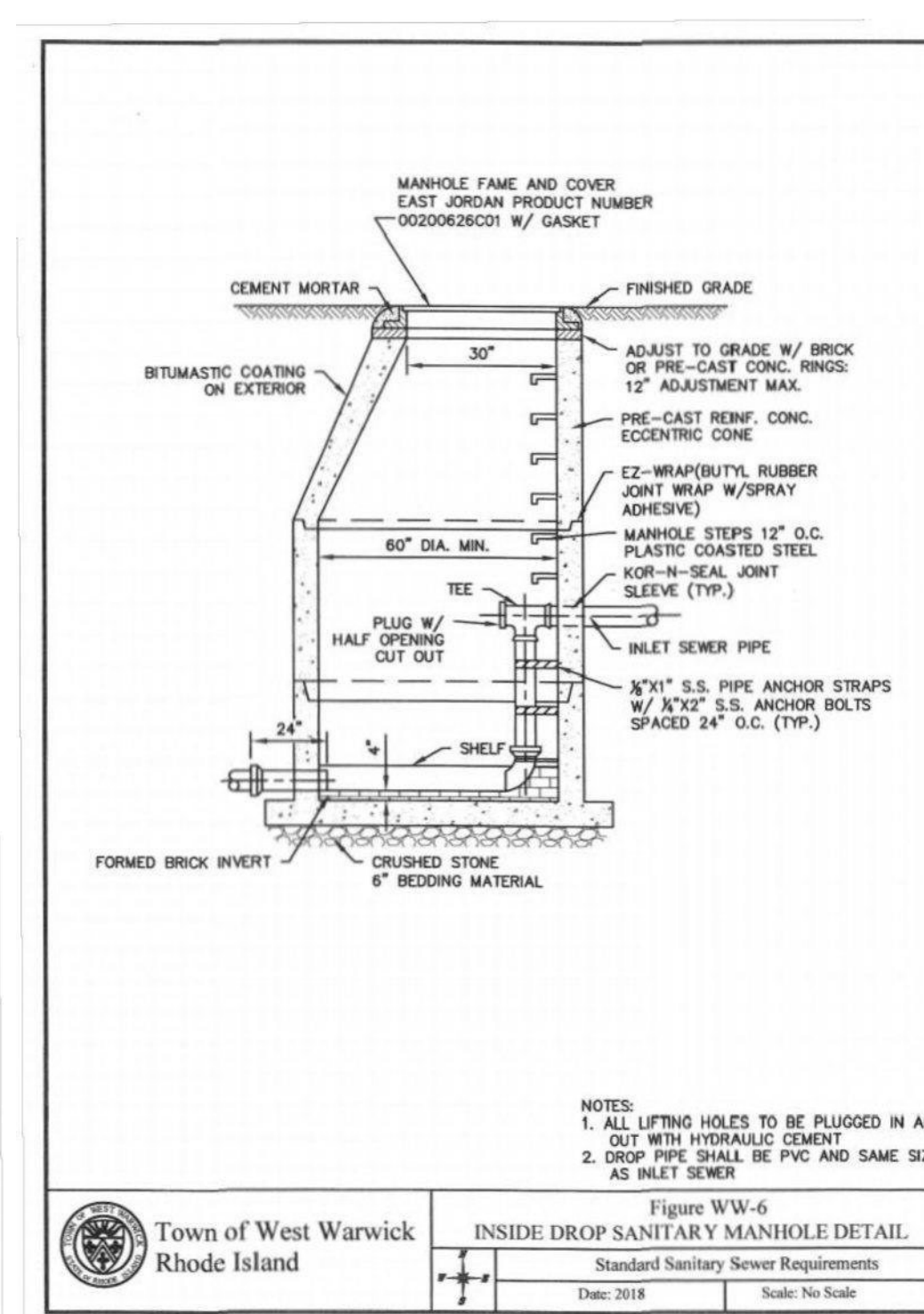
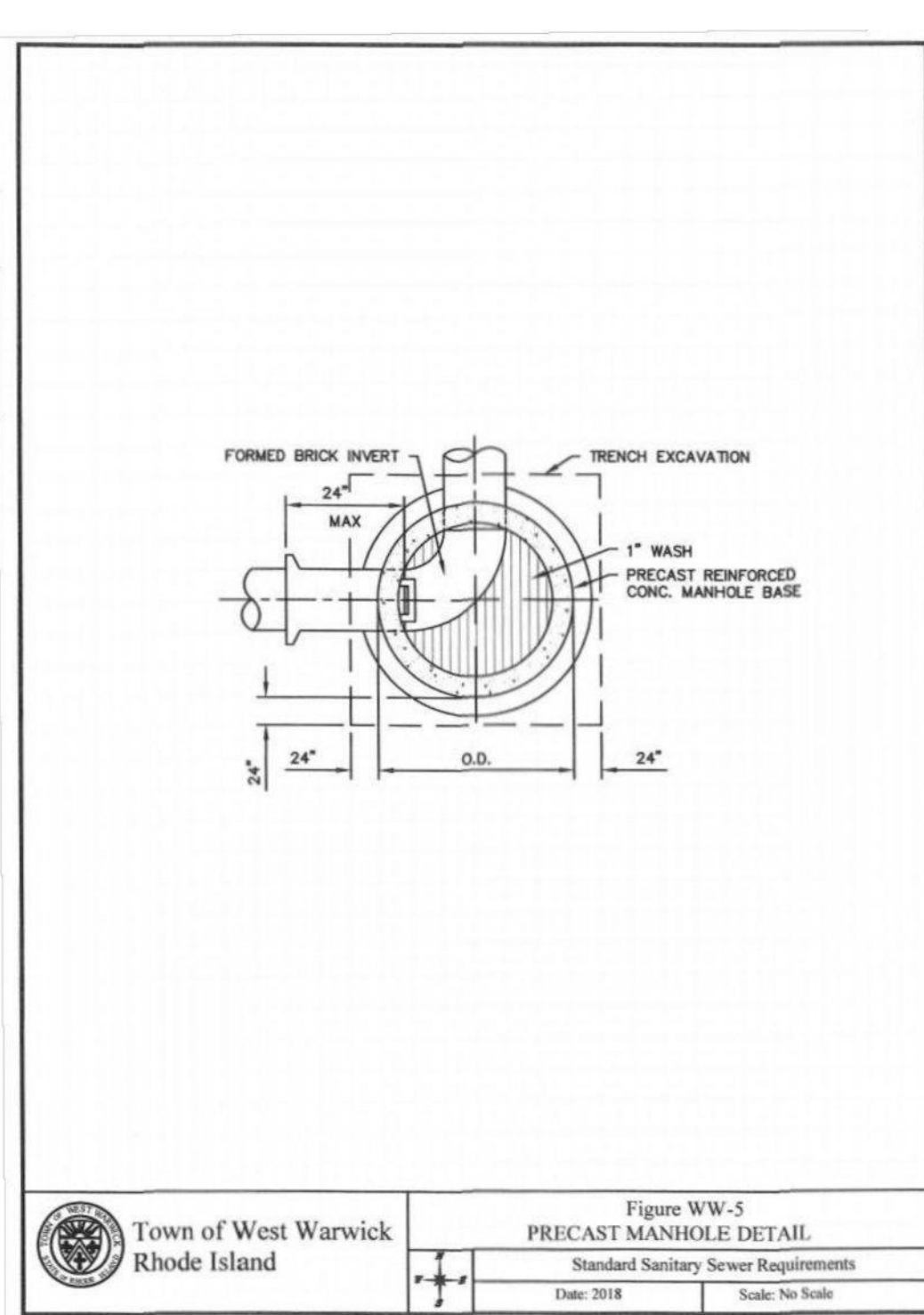
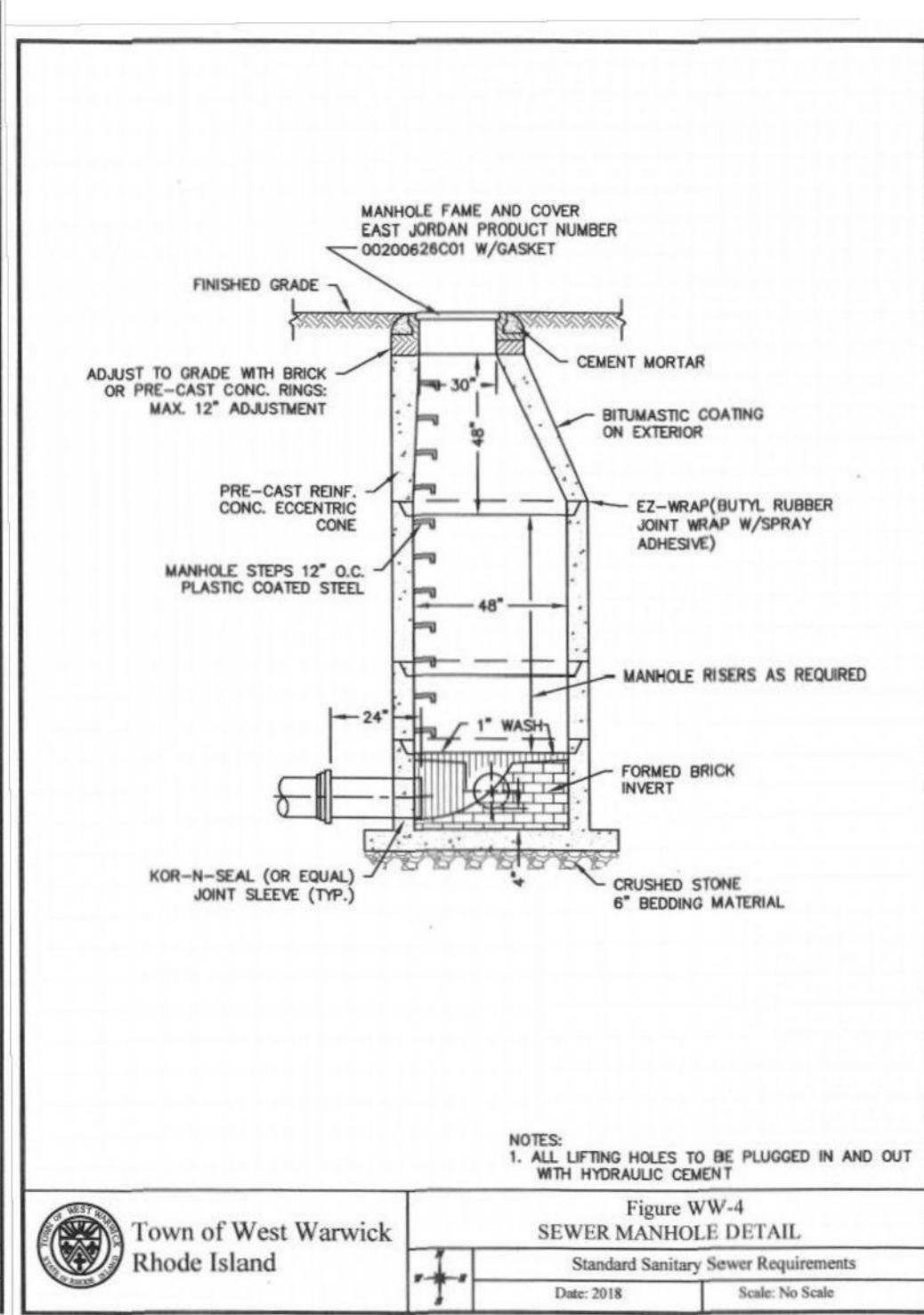
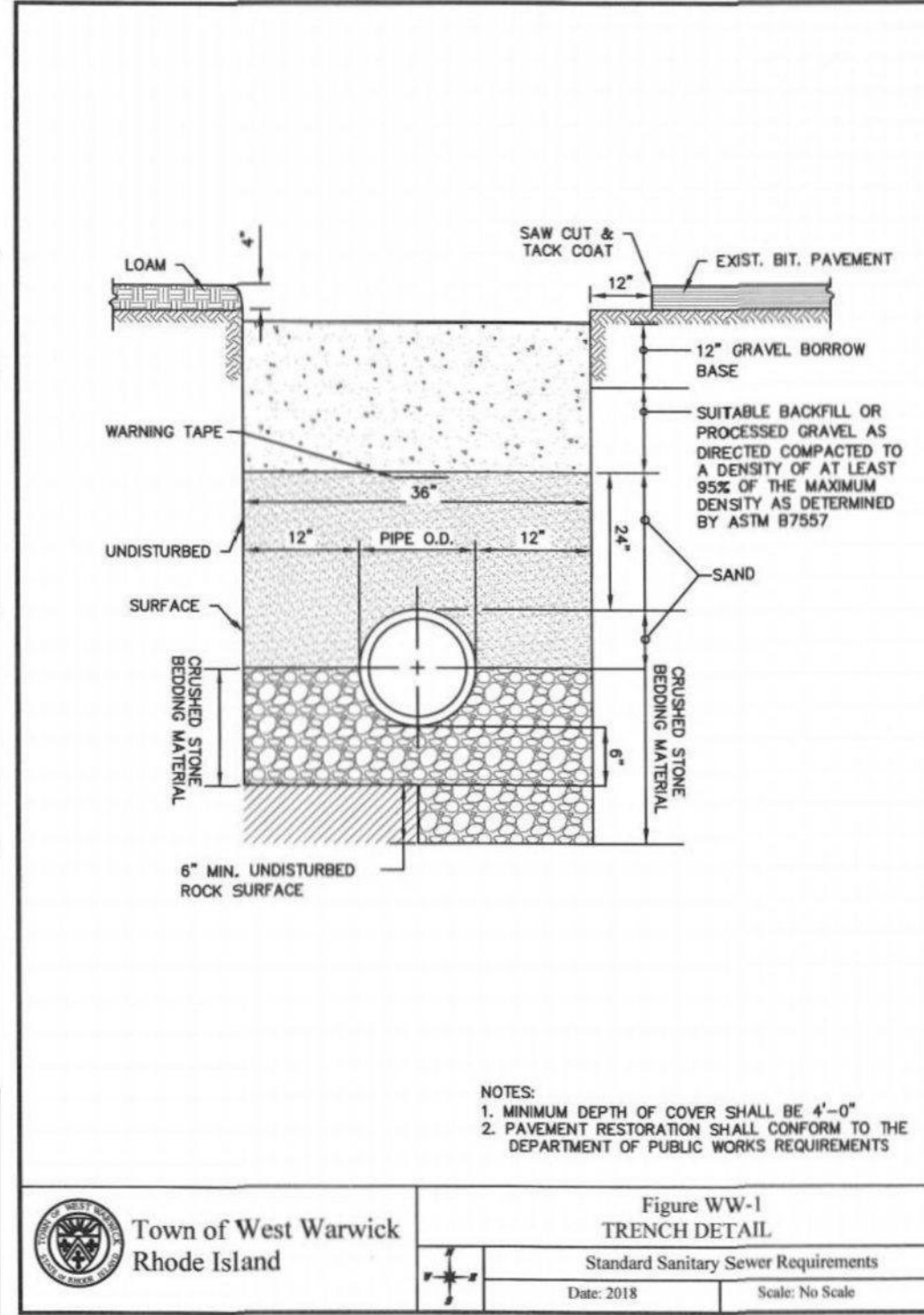
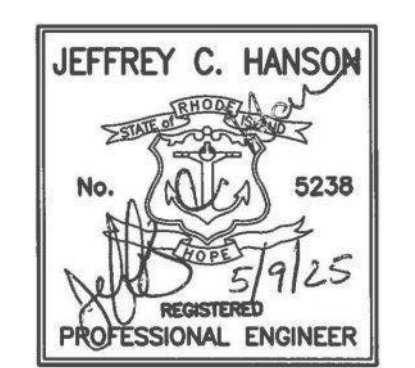
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1	5/09/25	ISSUED FOR PERMIT

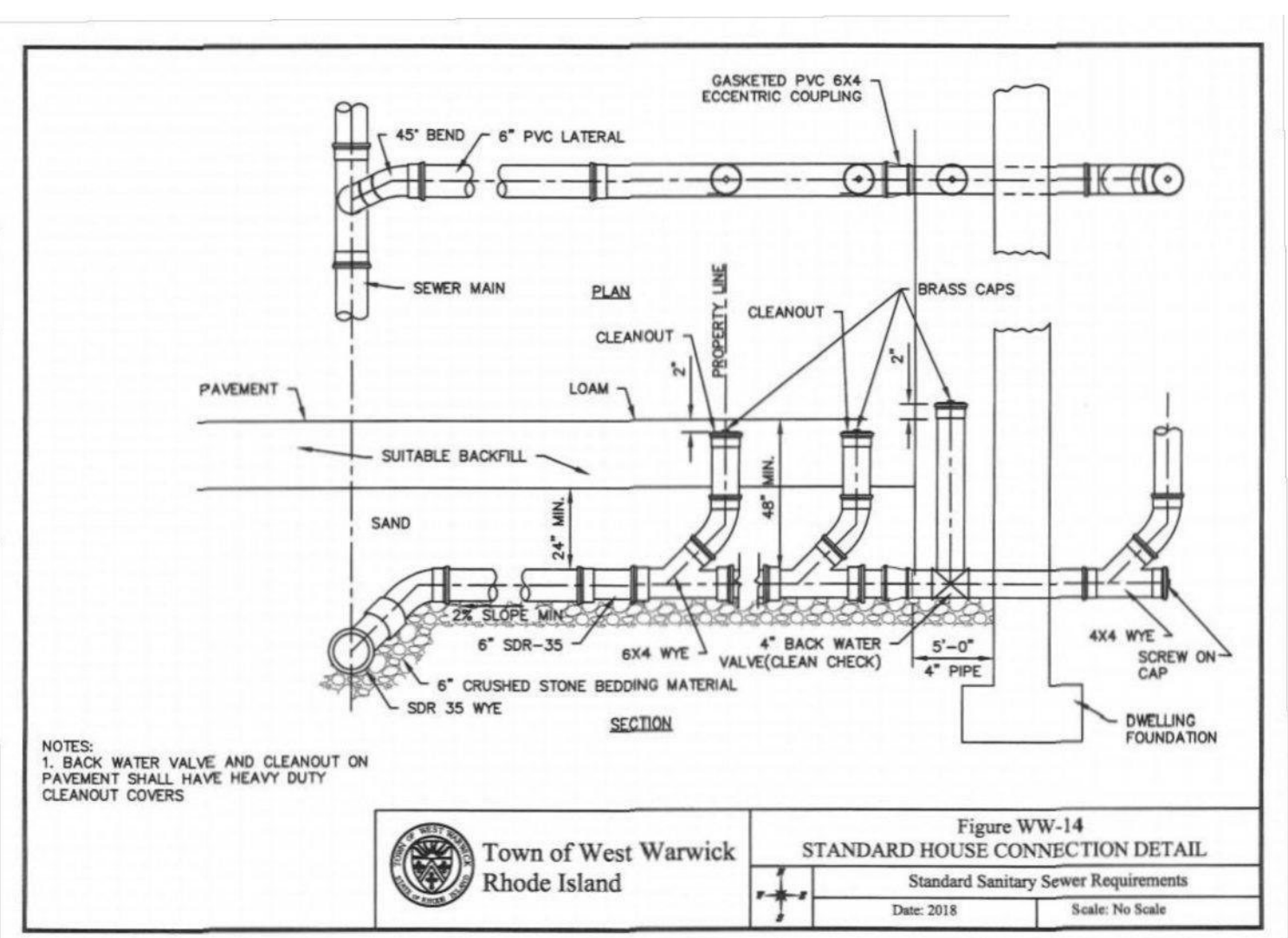
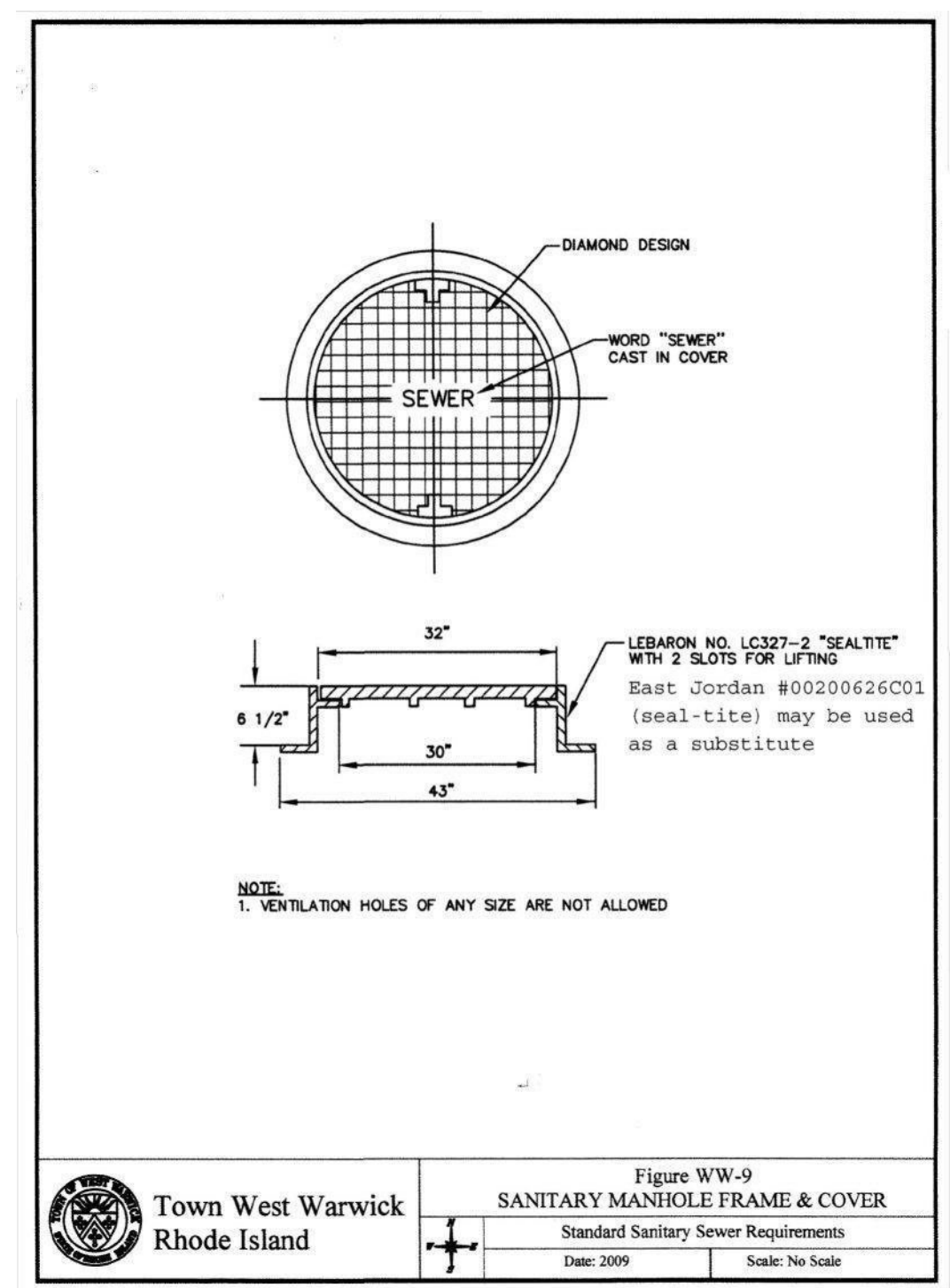
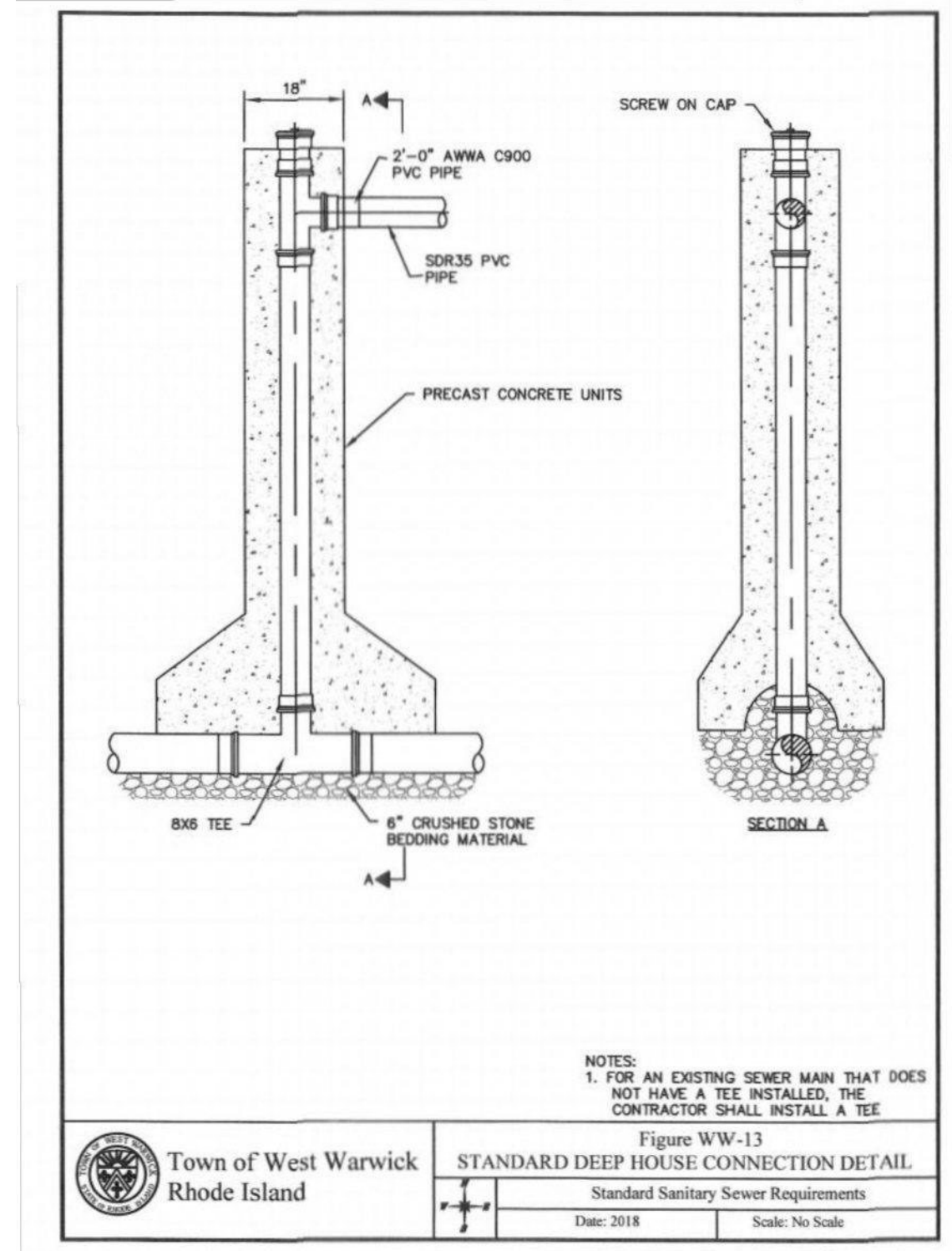
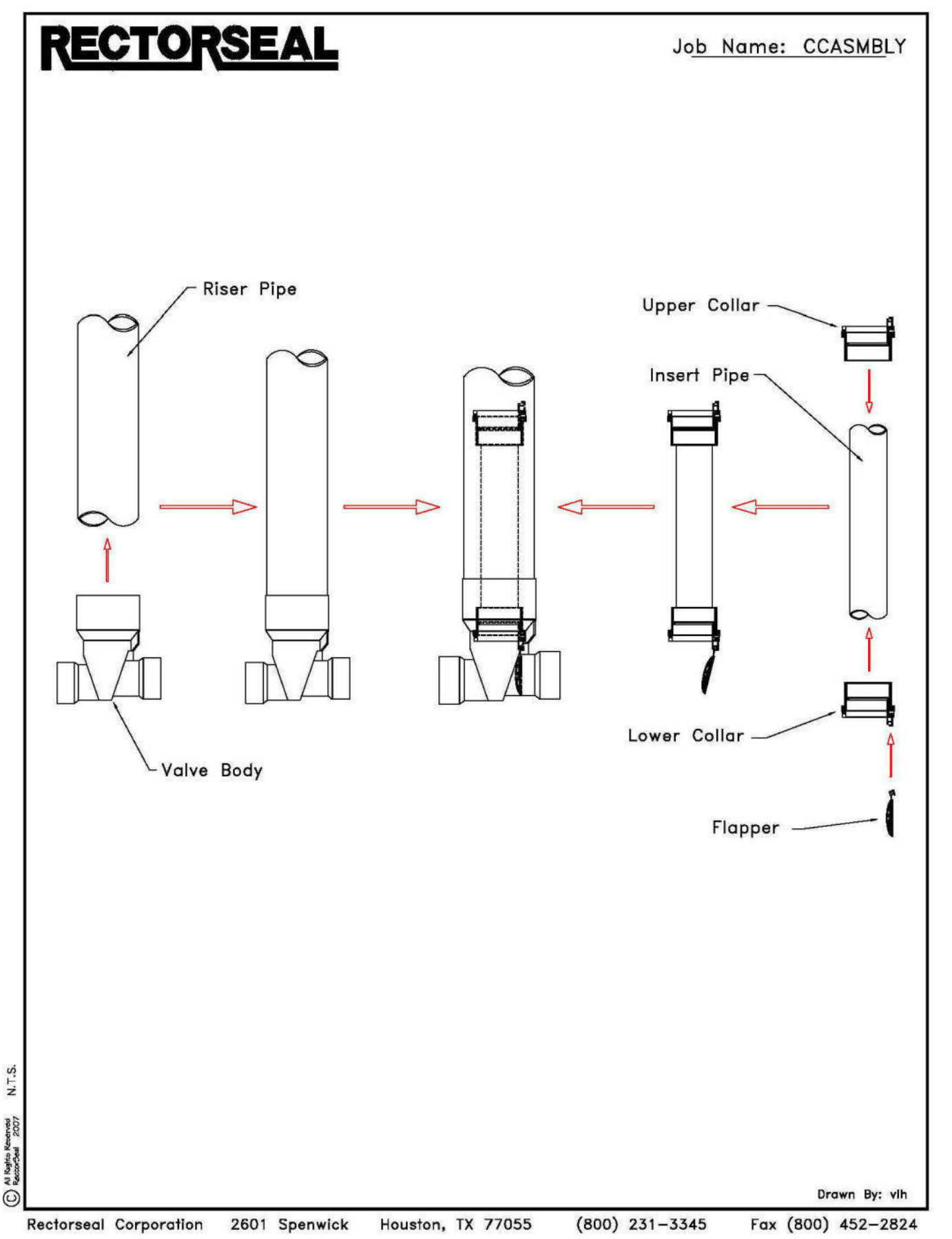


Town of West Warwick Rhode Island  
Figure WW-1  
TRENCH DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale

Town of West Warwick Rhode Island  
Figure WW-4  
SEWER MANHOLE DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale

Town of West Warwick Rhode Island  
Figure WW-5  
PRECAST MANHOLE DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale

Town of West Warwick Rhode Island  
Figure WW-6  
INSIDE DROP SANITARY MANHOLE DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale

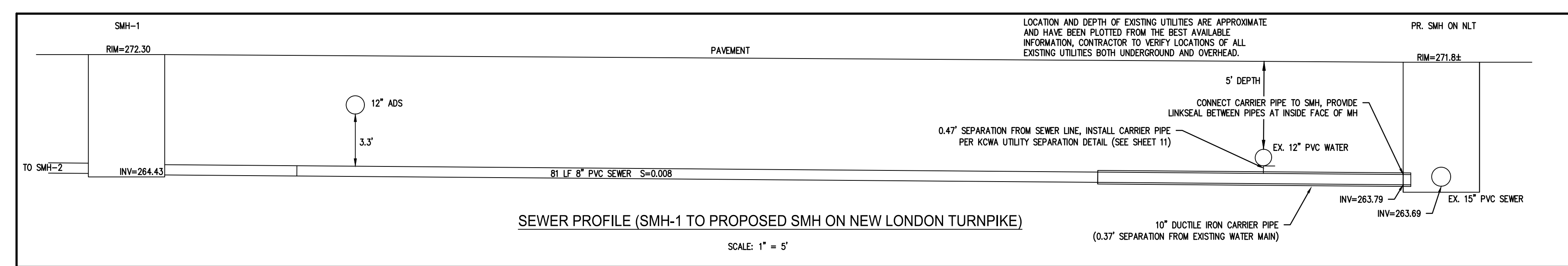


Rectorseal Corporation 2601 Spenwick Houston, TX 77055 (800) 231-3345 Fax (800) 452-2824  
Drawn By: vjh  
NOTES:  
1. CONTRACTOR TO SUBMIT SHOP DRAWING TO ENGINEER FOR APPROVAL.  
2. REFER TO PRODUCT CATALOGUE FOR ADDITIONAL DETAIL.  
3. "CLEAN CHECK" BACKWATER VALVE TO BE INSTALLED OUTSIDE OF EACH UNIT.

Town of West Warwick Rhode Island  
Figure WW-13  
STANDARD DEEP HOUSE CONNECTION DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale

Town of West Warwick Rhode Island  
Figure WW-9  
SANITARY MANHOLE FRAME & COVER  
Standard Sanitary Sewer Requirements  
Date: 2009 Scale: No Scale

Town of West Warwick Rhode Island  
Figure WW-14  
STANDARD HOUSE CONNECTION DETAIL  
Standard Sanitary Sewer Requirements  
Date: 2018 Scale: No Scale



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