## MAJOR LAND DEVELOPMENT PRELIMINARY PLAN APPLICATION

1200 & 1202 HOPE STREET

Assessors Map 103, Parcel 2 & 14

Bristol, Rhode Island

MARCH 6, 2023 REVISED: APRIL 5, 2023

## CIVIL ENGINEER

LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC. 680 AQUIDNECK AVENUE MIDDLETOWN, RI 02842 (401) 354-2050

## LAND SURVEYOR

LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC. 680 AQUIDNECK AVENUE MIDDLETOWN, RI 02842 (401) 354-2050

## LANDSCAPE ARCHITECT

VERDE DESIGN + HORTICULTURE 6 DEBLOIS STREET NEWPORT, RI 02840 (401) 619-0562

## **CURRENT OWNER**

M1 1200 HOPE ST., LLC 133 TOWERHILL RD. SUITE 1, WAKEFIELD RI 02879 1202 HOPE ST. INVESTMENTS, LLC.

P.O. BOX 246, WARREN RI 02885

## PERMIT REFERENCES

DOT APPROVAL: PHYSICAL ALTERATIONS PERMIT APPLICATION# 190510 **RIDEM APPROVAS:** WGC 19-100, FWW# 19-0149 UIC# 001920, RIR# 101910

ALL WORK WITHIN THE STATE'S ROW WILL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, Amended August 2013 and STANDARD DETAILS, June 15, 1998, as amended by revision.



## PLAN INDEX

<u>TITLE</u>	SHEET NO.
COVER SHEET	1
EXISTING CONDITIONS PLAN	2
LOTTING PLAN	3
SITE LAYOUT PLAN	4
GRADING & DRAINAGE PLAN	5
UTILITY PLAN	6
EROSION CONTROL PLAN	7
LANDSCAPING PLAN	8
CONSTRUCTION DETAILS	9

	<u>D</u>

LDEC
Land Development Engineering & Consulting, LLC  207 High Point Avenue, Unit 6
Portsmouth, RI 02871 T:401-354-2050 F: 401-369-9775 WWW.SDE-LDEC.COM

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								MER	MER	APPROVED
								GENERAL REVISIONS PER TOWN COMMENTS	MODIFIED DRIVEWAY LOCATIONS	DESCRIPTION
								4/5/2023	3/15/2023	DATE
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LAND

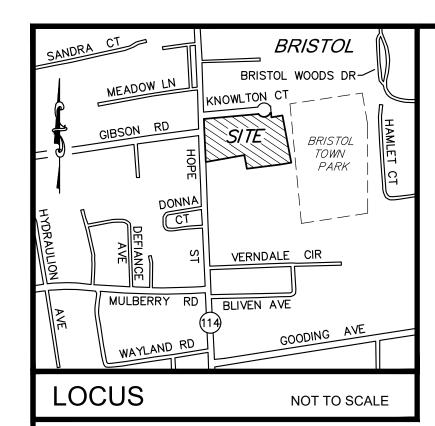
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DRAWING TITLE:

**COVER** 

NTS

OF 9



## NOTES:

- 1. EXISTING CONDITIONS INFORMATION WAS COMPILED FROM AN ACTUAL ON THE GROUND SURVEY PERFORMED BY LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC BETWEEN AUGUST 3, 2018 AND APRIL 18, 2022.
- 2. ELEVATIONS ARE REFERENCED TO NAVD88.
- 3. THE SITE IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS AS DETERMINED FROM THE TOWN OF BRISTOL FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 445393 0011 H (MAP EFFECTIVE DATE JULY 7, 2014).
- 4. THIS PLAN AND ANY ACCOMPANYING CERTIFICATIONS DO NOT CONSTITUTE A CERTIFICATION OF TITLE TO THE PROPERTY DISPLAYED HEREON. THE OWNER OF LOCUS AND ABUTTING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.
- 5. EXISTING UTILITY LINES SHOWN ON THIS PLAN ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER PUBLIC UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED.
- 6. THE DELINEATION OF WETLAND FLAGS WF-A1 THROUGH WF-A6 WAS PERFORMED BY NATURAL RESOURCE SERVICES, INC. ON MARCH 15, 2019 AND WETLAND FLAGS A-3 THROUGH A-16 ARE AS SHOWN ON AN APPROVED MASTER SUBDIVISION PLAN BY SITE ENGINEERING, INC.
- 7. MAP 103, PARCEL 14 (SHOWN AS LOT 5 OF PLAN REFERENCE 1 BELOW) IS SUBJECT TO THE FOLLOWING CONDITIONS: NO PART OF LOT 5 AS SHOWN ON THE REFERENCED SUBDIVISION PLAN MAY BE DEVELOPED WITH DWELLING UNITS. SUBJECT TO RECEIVING FUTURE APPROVAL FROM THE PLANNING BOARD, PART OF LOT 5 MAY POSSIBLY BE USED FOR ACCESS, PARKING OR OPEN SPACE FOR ABUTTING PROPERTY AND PROVIDED FURTHER THAT NO PART OF THIS SUBDIVISION MAY BE USED IN THE DENSITY CALCULATION FOR ANY OTHER PROPERTY. THIS CONDITION SHALL BE A CONDITION OF THE DECISION TO BE ALSO PLACED ON THE PLANS AND SHALL ALSO BE A DEED RESTRICTION RECORDED IN THE LAND EVIDENCE RECORDS RUNNING TO THE BENEFIT OF THE TOWN.

## PLAN REFERENCES:

- 1. "PRELIMINARY PLAN FOR ELIZABETH COURT, AP 103 LOT 14, HOPE STREET IN BRISTOL, RHODE ISLAND", PREPARED FOR 1202 HOPE STREET INVESTMENT, LLC BY PRINCIPE COMPANY, INC., DATED APRIL 12, 2021 (REV. 7/27/21) WHICH IS TO BE RECORDED AT THE TOWN OF BRISTOL LAND EVIDENCE RECORDS OFFICE.
- 2. "EXISTING CONDITIONS PLAN OF LAND, 1202 HOPE STREET, BRISTOL, RI", PREPARED FOR JOSEPH GARIES BY TURNING POINT SURVEY COMPANY, INC., DATED AUGUST, 5, 2020.

CURRENT OWNE	TRS AND APPLICANTS
MI 1200 HOPE ST, LLC	1202 HOPE STREET INVESTMENTS, LLC
PO BOX 572	PO BOX 246
WARREN, RI 02885	WARREN, RI 02885
TITLE REFERENCE:	TITLE REFERENCE;
DEED BK.2173/PG.176	DEED BK.1990/PG.179
SITE LOCATION:	SITE LOCATION:
1200 HOPE STREET	1202 HOPE STREET
BRISTOL, RHODE ISLAND	BRISTOL, RHODE ISLAND
ASSESSORS REFERENCE:	ASSESSORS REFERENCE:
MAP 103 PARCEL 2	MAP 103 PARCEL 14

## CERTIFICATION

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS BETWEEN AUGUST 3, 2018 AND MARCH 7, 2023, AS FOLLOWS:

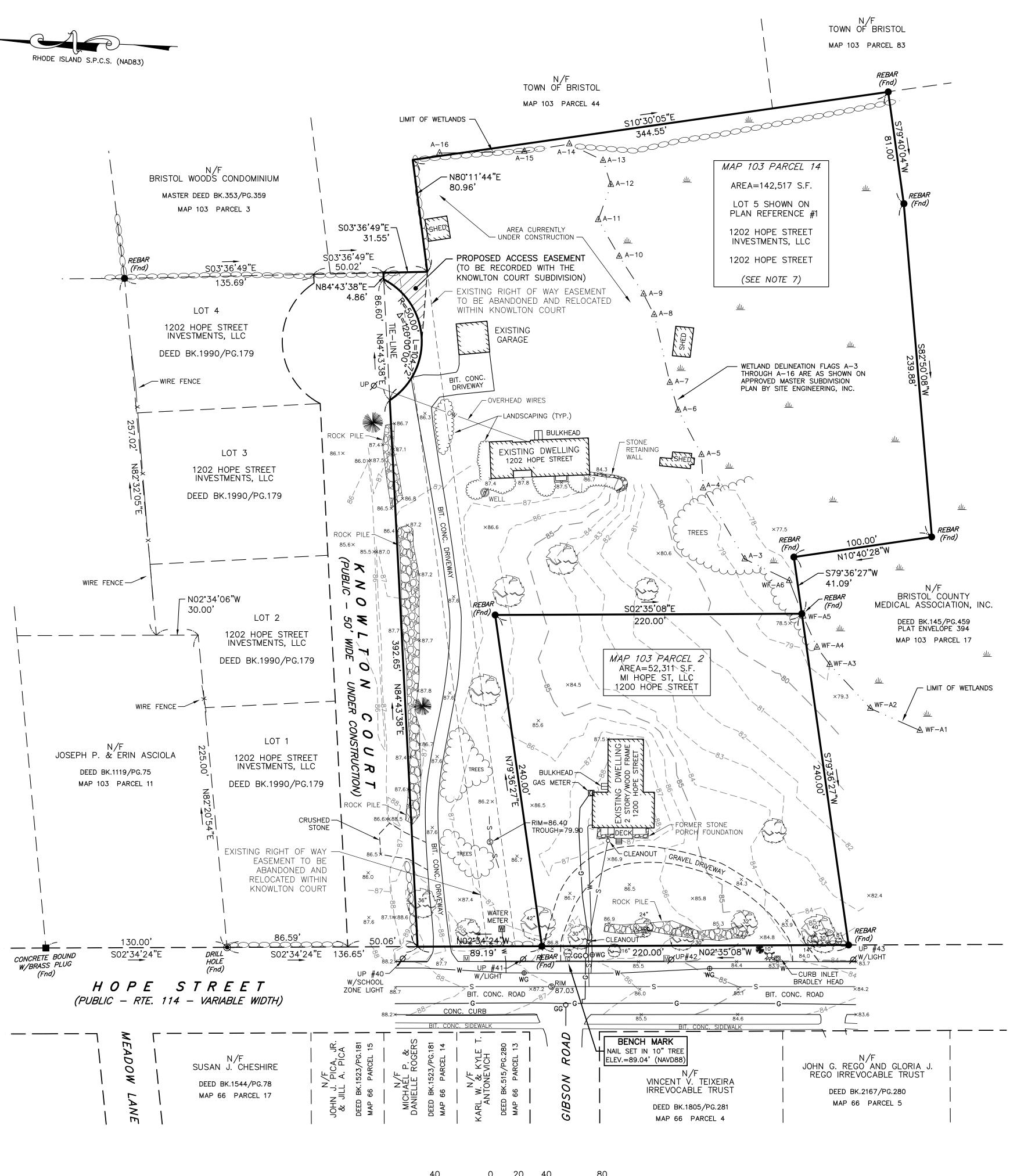
COMPREHENSIVE BOUNDARY SURVEY
DATA ACCUMULATION SURVEY
TOPOGRAPHIC SURVEY ACCURACY

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

CLASS III

TO PROVIDE AN EXISTING CONDITIONS PLAN TO ACCOMPANY AN ADMINISTRATIVE SUBDIVISION FILING.

ROBERT L. MASON, PROFESSIONAL LAND SURVEYOR, LICENSE NO. 2001, COA NO. LS.000A533-COA



SCALE: 1 INCH = 40 FEET

## <u>LEGEND</u>

DRAIN MANHOLE
 FIRE HYDRANT
 GG GAS GATE
 MAIL BOX
 SEWER MANHOLE

SPOT ELEVATION

STONE WALL

TREE

TREE LINE

WETLANDS

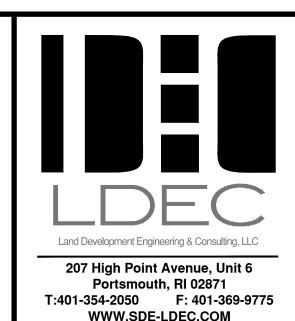
WETLAND FLAG

— G — UNDERGROUND GAS— S — UNDERGROUND SEWER— W — UNDERGROUND WATER

RESIDENTIAL 10 ZONING DIST	
REGULATION	REQUIREMENT
MIN. LOT AREA	10,000 S.F.
LOT FRONTAGE	80'
FRONT SETBACK	30'
SIDE SETBACK	15'
REAR SETBACK	30'
MAX. BUILDING HEIGHT	35'
MAX. LOT COVERAGE	25%

1200 HOPE STREET (MAP 103, PARCEL 2)
IS LOCATED IN THE BRISTOL HISTORIC DISTRICT

PLANNING BOARD/DESIGNEE SIGNATURES



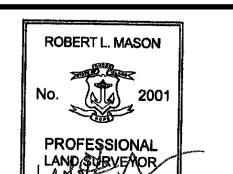
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						RLM	RLM	RLM	40000
						REVISIONS PER TOWN REVIEW COMMENTS	8/23/22 REVISIONS PER TOWN REVIEW COMMENTS	8/23/22 UPDATE CURRENT OWNERS	NOITGIGOOGIG
						3/7/23	8/23/22	8/23/22	L F
						3	2	<b>-</b>	
		PLAI	N RE	VIS	ION	S			
DATE	Ξ: /	APR	IL 2	6, 2	2022	2			
DRAW	/N BY:	С	OMF	S. E	3Y:	CH	IECI	K BY	<b>/</b> :

DRAWN BY: COMPS. BY: RLM RLM/MER

PROJECT NO. 22024

ISSUED FOR:

APPROVAL



# UBDIVISION STREET ISLAND RCELS 2 & 14

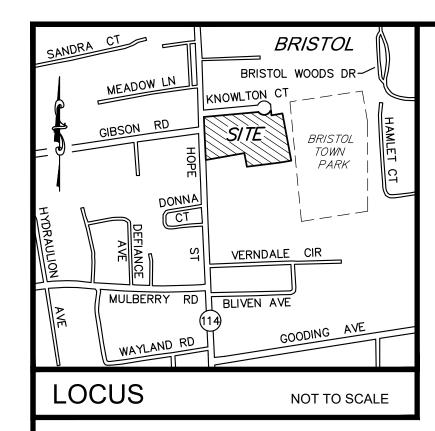
ADMINISTRATIVE SUBDIVIS
1200 & 1202 HOPE STREET
BRISTOL, RHODE ISLAND
ASSESSORS MAP 103, PARCELS 2 & 14

DRAWING TITLE:

EXISTING CONDITIONS

SCALE: 1" = 40'
SHEET NO.

2 of 9



## <u>NOTES:</u>

- 1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE THE EXISTING TWO PARCELS (MAP 103, PARCELS 2 & 14) TO CREATE LOTS 2 AND 14 AS SHOWN. THIS PLAN REPRESENTS A RE-SUBDIVISION OF EXISTING LOTS WHERE NO ADDITIONAL LOTS HAVE BEEN CREATED.
- 2. PARCEL A BY ITSELF IS NOT TO BE CONSIDERED AS A BUILDABLE LOT.
- 3. PARCEL A (TAKEN FROM MAP 103 PARCEL 14) IS TO BE CONVEYED TO AND COMBINED WITH ABUTTING LAND OF MI 1200 HOPE ST, LLC TO CREATE LOT 2 (HAVING A TOTAL LOT AREA OF 76,705 S.F) AS SHOWN.

RHODE ISLAND S.P.C.S. (NAD83)

BRISTOL WOODS CONDOMINIUM

MASTER DEED BK.353/PG.359

MAP 103 PARCEL 3

LOT 4

1202 HOPE STREET

INVESTMENTS, LLC

DEED BK.1990/PG.179

WIRE FENCE

WIRE FENCE -

JOSEPH P. & ERIN ASCIOLA

DEED BK.1119/PG.75 MAP 103 PARCEL 11

S02<u>\*34</u>'24"E

D

0

HOPE STREET

(PUBLIC - RTE. 114 - VARIABLE WIDTH)

SUSAN J. CHESHIRE

DEED BK.1544/PG.78

MAP 66 PARCEL 17

CONCRETE BOUND W/BRASS PLUG

S03°36'49"E

135.69

LOT 3

1202 HOPE STREET

INVESTMENTS, LLC

DEED BK.1990/PG.179

1202 HOPE STREET

INVESTMENTS, LLC

DEED BK.1990/PG.179

1202 HOPE STREET INVESTMENTS, LLC

DEED BK.1990/PG.179

EXISTING RIGHT OF WAY

EASEMENT TO BE

ABANDONED AND

RELOCATED WITHIN KNOWLTON COURT

EXISTING DRIVEWAY TO BE ABANDONED (ACCESS LOT 14 FROM KNOWLTON COURT)

S02°34'24"E 136.65'

N J. PIC

- N02°34'06"W

30.00'

WIRE FENCE -

- 4. THE SITE IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS AS DETERMINED FROM THE TOWN OF BRISTOL FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 445393 0011 H (MAP EFFECTIVE DATE JULY 7, 2014).
- 5. THIS PLAN AND ANY ACCOMPANYING CERTIFICATIONS DO NOT CONSTITUTE A CERTIFICATION OF TITLE TO THE PROPERTY DISPLAYED HEREON. THE OWNER OF LOCUS AND ABUTTING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.
- . THE DELINEATION OF WETLAND FLAGS WF-A1 THROUGH WF-A6 WAS PERFORMED BY NATURAL RESOURCE SERVICES, INC. ON MARCH 15, 2019 AND WETLAND FLAGS A-3 THROUGH A-16 ARE AS SHOWN ON AN APPROVED MASTER SUBDIVISION PLAN BY SITE ENGINEERING, INC.
- . PARCEL A (BEING A PORTION OF MAP 103, PARCEL 14 AND ALSO BEING A PORTION OF LOT 5 OF PLAN REFERENCE 1 BELOW) IS SUBJECT TO THE FOLLOWING CONDITIONS PERTAINING TO LOT 5: NO PART OF LOT 5 AS SHOWN ON THE REFERENCED SUBDIVISION PLANS MAY BE DEVELOPED WITH DWELLING UNITS. SUBJECT TO RECEIVING FUTURE APPROVAL FROM THE PLANNING BOARD, PART OF LOT 5 MAY POSSIBLY BE USED FOR ACCESS, PARKING OR OPEN SPACE FOR ABUTTING PROPERTY AND PROVIDED FURTHER THAT NO PART OF THIS SUBDIVISION MAY BE USED IN THE DENSITY CALCULATION FOR ANY OTHER PROPERTY. THIS CONDITION SHALL BE A CONDITION OF THE DECISION TO BE ALSO PLACED ON THE PLANS AND SHALL ALSO BE A DEED RESTRICTION RECORDED IN THE LAND EVIDENCE RECORDS RUNNING TO THE BENEFIT OF THE TOWN.

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BRISTOL, RHODE ISLAND	BRISTOL, RHODE ISLAND					
ASSESSORS REFERENCE:	ASSESSORS REFERENCE:					
MAP 103 PARCEL 2	MAP 103 PARCEL 14					

## **CERTIFICATION**

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COMPREHENSIVE BOUNDARY SURVEY DATA ACCUMULATION SURVEY

CLASS II

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

TO ESTABLISH THE PROPERTY LINES OF THE EXISTING PARCELS (ASSESSORS MAP 103, PARCEL 2 & 14) AND TO RECONFIGURE THEIR PROPERTY LINES TO CREATE LOTS 2 AND 14 AS SHOWN. BY hole & M

ROBERT L. MASON, PROFESSIONAL LAND SURVEYOR, LICENSE NO. 2001, COA NO. LS.000A533-COA



TOWN OF BRISTOL

MAP 103 PARCEL 83

— S79**°**36'27"W

BRISTOL' COUNTY

MEDICAL ASSOCIATION, INC.

DEED BK.145/PG.459 PLAT ENVELOPE 394

MAP 103 PARCEL 17

- LIMIT OF WETLANDS

REBAR 20.90'

. ⋒WF-A4

←CURB INLET BRADLEY HEAD

JOHN G. REGO'AND GLORIA J.

REGO IRREVOCABLE TRUST

DEED BK.2167/PG.280

MAP 66 PARCEL 5

**№**WF-A3

REBAR

4-13

WETLAND DELINEATION FLAGS A-3

APPROVED MASTER SUBDIVISION

PLAN BY SITE ENGINEERING, INC.

THROUGH A-16 ARE AS SHOWN ON

N/F TOWN OF BRISTOL

MAP 103 PARCEL 44

- PROPOSED ACCESS EASEMENT

KNOWLTON COURT SUBDIVISION)

- EXISTING RIGHT OF WAY EASEMENT

-OVERHEAD WIRES

EXISTING DWELLING

1202 HOPE STREET

TO BE ABANDONED AND RELOCATED

AREA=118,123 S.F.

(2.71 ACRES)

UPLAND AREA

58,862± S.F.

MAP 103 PARCEL 14

—STEP/DECK <sup>⟨</sup>

EXISTING DRIVEWAY TO BE ABANDONED

(ACCESS LOT 14 FROM KNOWLTON COURT)

S02°35'08"E

BULKHEAD -

PARCEL

BIT. CONC. ROAD

SCALE: 1 INCH = 40 FEET

. 66

24,394 S.F.\

(SEE NOTE 7)

DECK CO

RETAINING

EXISTING PROPERTY LINE TO BE REMOVED

LOT 2

(INCLUDES PARCEL A)

AREA=76,705 S.F.

(1.76 ACRES)

MAP 103 PARCEL 2

FORMER STONE PORCH FOUNDATION

UP #42 N02°35'08"W

VINCENT V. TEIXEIRA

IRREVOCABLE TRUST

DEED BK.1805/PG.281

MAP 66 PARCEL 4

BIT. CONC. ROAD

(TO BE RECORDED WITH THE

WITHIN KNOWLTON COURT

GARAGE

LIMIT OF WETLANDS -

S03°36'49"E-

S03°36'49"E

50.02

′N84°43'38"E*一* 

4.86'

**5 7**0

HOLE (Set)

31.55

- N80°11'44"E

80.96

DRAIN MANHOLE FIRE HYDRANT GAS GATE SEWER CLEAN OUT SEWER MANHOLE

STONE WALL UTILITY POLE

WATER GATE WATER METER WETLANDS WETLAND FLAG

——s— UNDERGROUND SEWER 

MIN. FRONT SIDE REAR MAX.

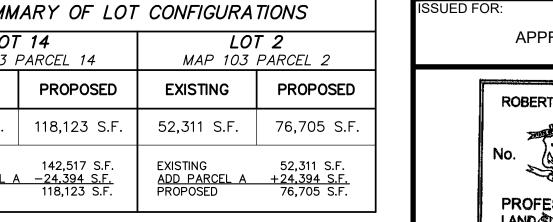
## SUMMARY OF LOT CONFIGURATIONS LOT 14 MAP 103 PARCEL 2 MAP 103 PARCEL 14 **EXISTING** PROPOSED **EXISTING** 142,517 S.F. | 118,123 S.F. 52,311 S.F. MINUS PARCEL A -24.394 S.F. PROPOSED 118,123 S.F

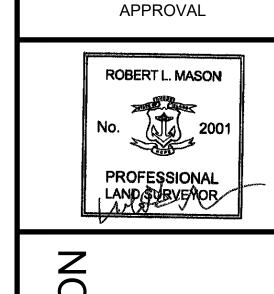
PLANNING BOARD/DESIGNEE SIGNATURES

## Land Development Engineering & Consulting, LLC 207 High Point Avenue, Unit 6 Portsmouth, RI 02871 T:401-354-2050 F: 401-369-9775 WWW.SDE-LDEC.COM

RESIDENTIAL 10 (R-10) ZONING DISTRICT				
REGULATION	REQUIREMENT			
LOT AREA	10,000 S.F.			
FRONTAGE	80'			
T SETBACK	30'			
SETBACK	15'			
SETBACK	30'			
BUILDING HEIGHT	35'			
LOT COVERAGE	25%			
) HOPE STREET (MAP	103, PARCEL 2)			

1200 HOPE STREET (MAP 103, PARCEL 2) IS LOCATED IN THE BRISTOL HISTORIC DISTRICT





PLAN REVISIONS

RLM

COMPS. BY: CHECK BY:

RLM/MER

DATE: APRIL 26, 2022

PROJECT NO. 22024

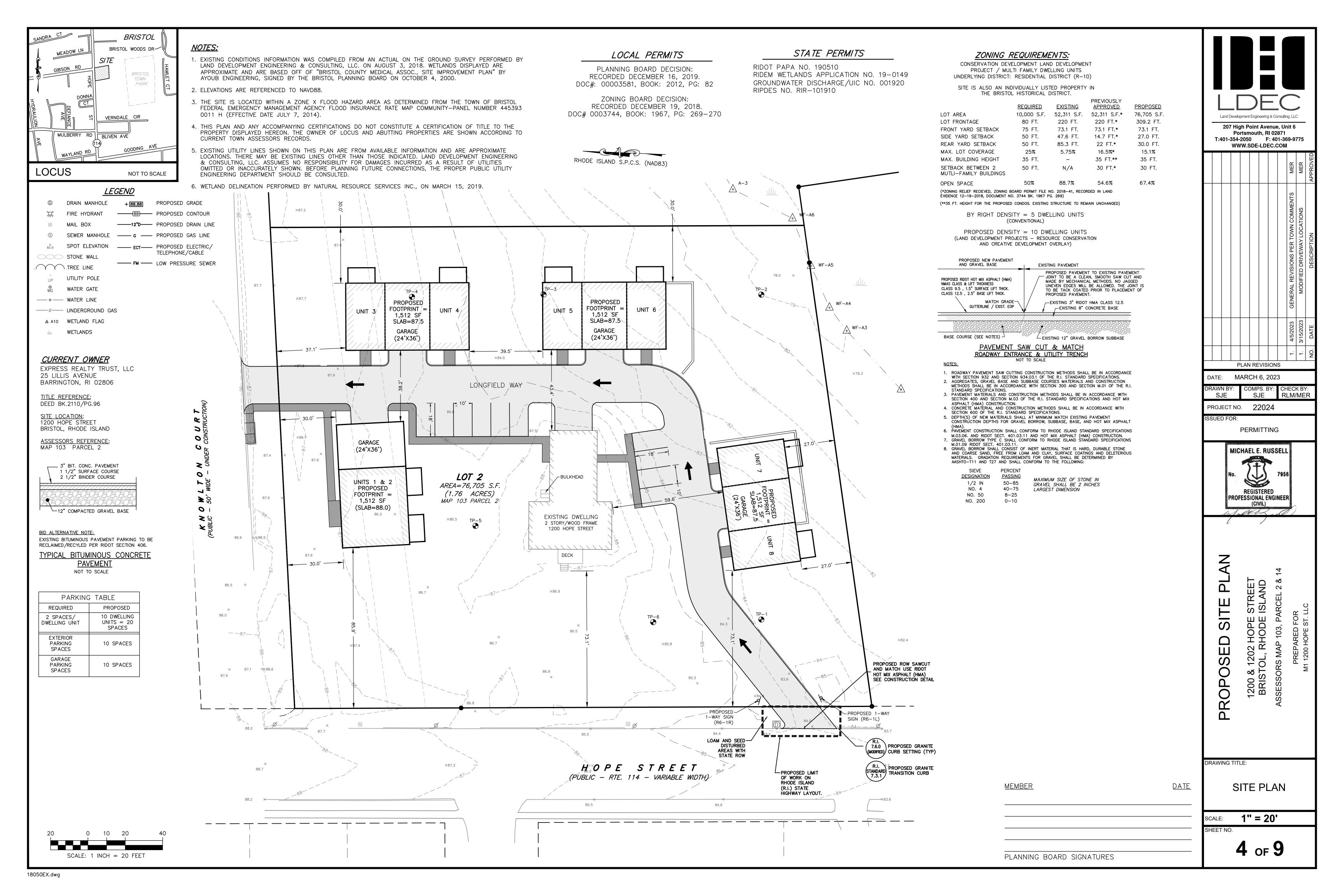
**UBDIVISION** S **ADMINISTRATIVE** 1200 8 BRIS<sup>-</sup>

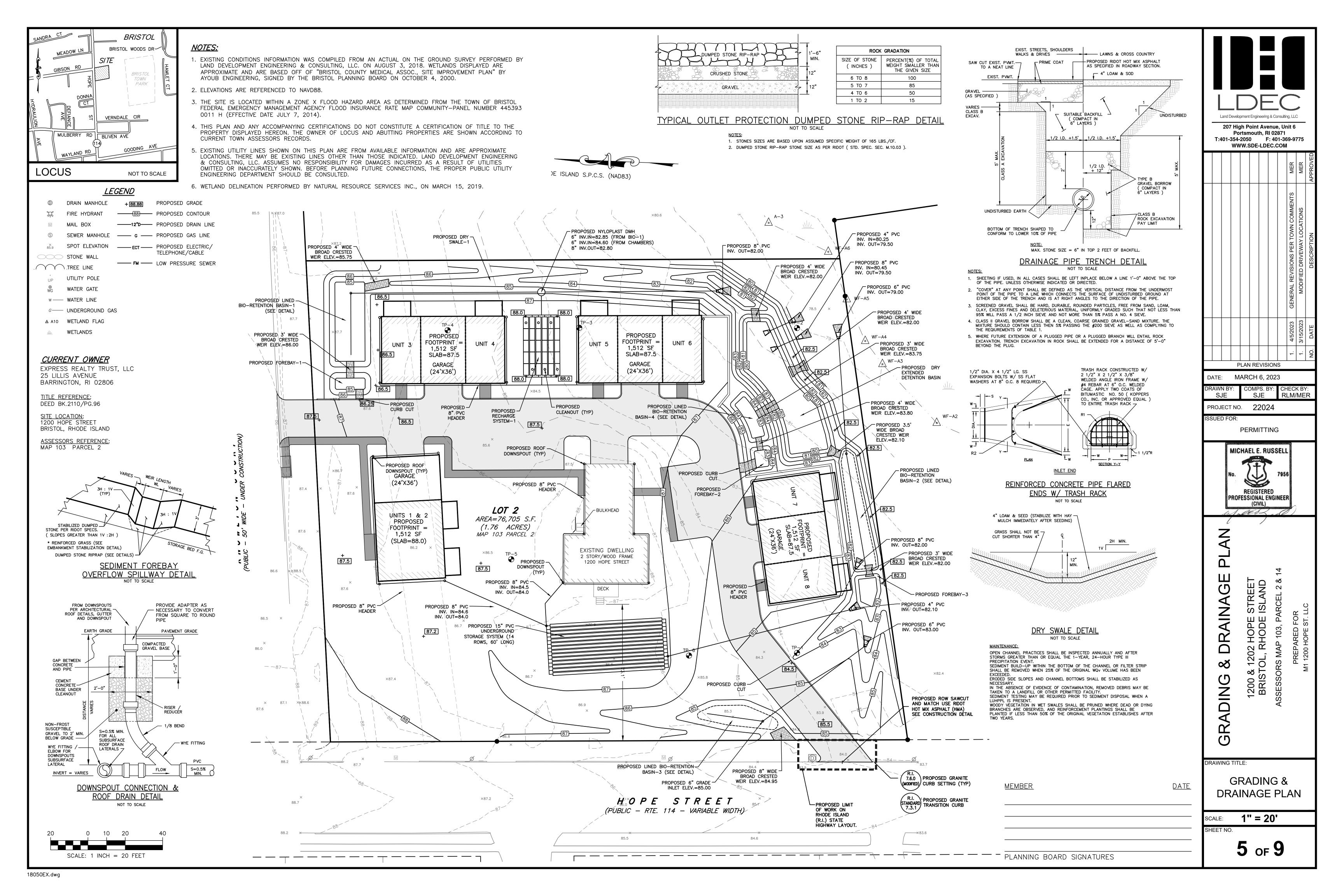
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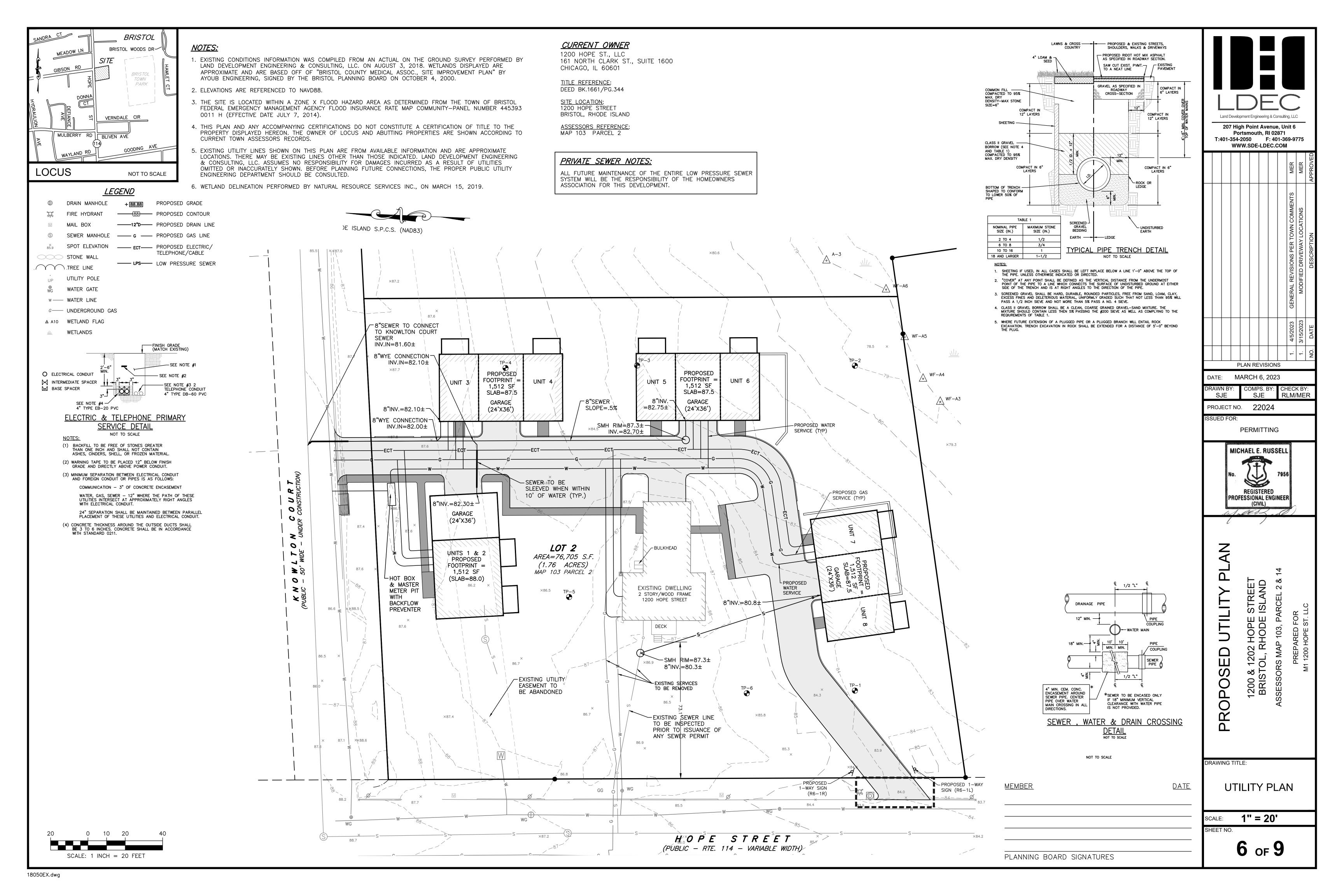
LOTTING PLAN

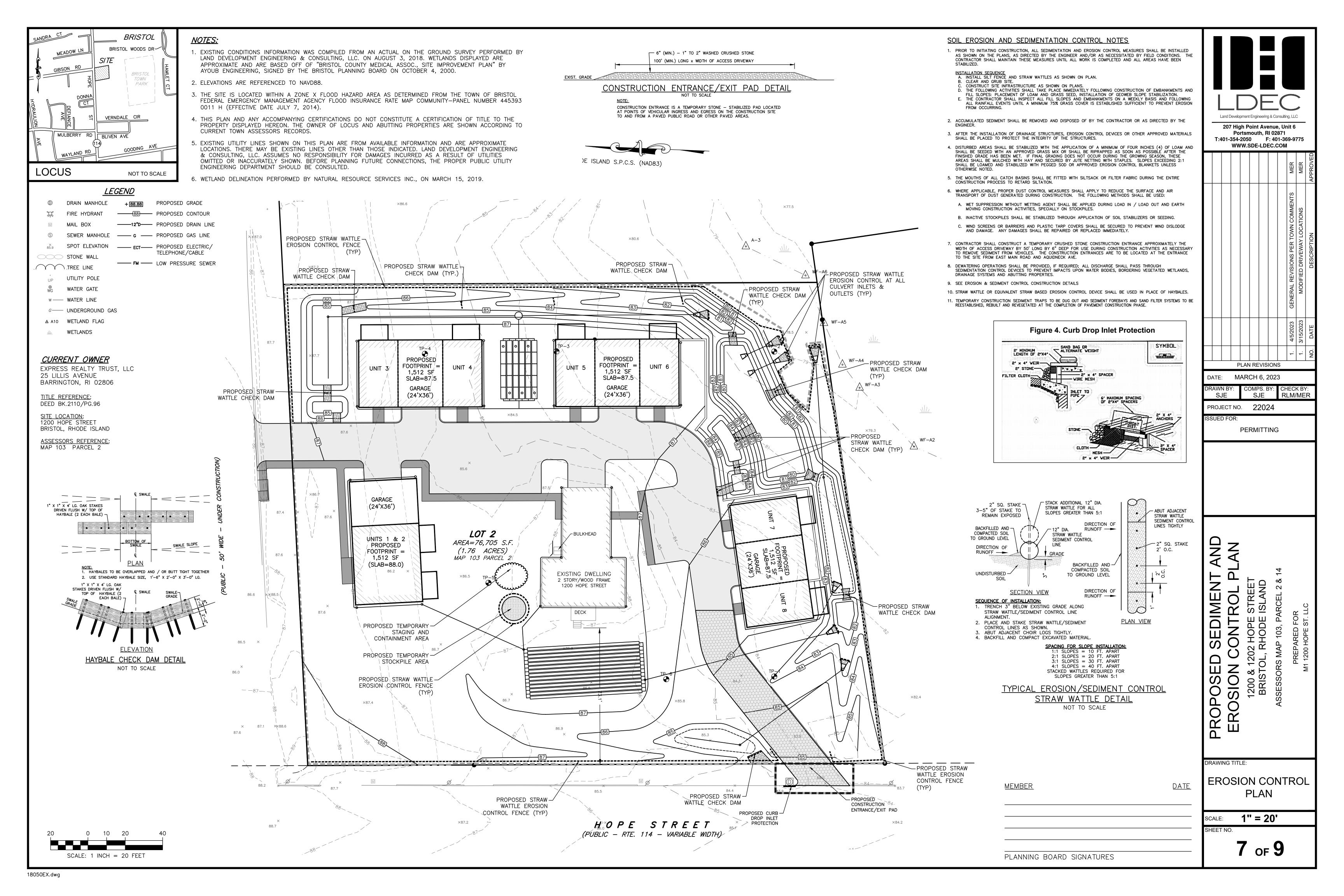
1" = 40' SHEET NO.

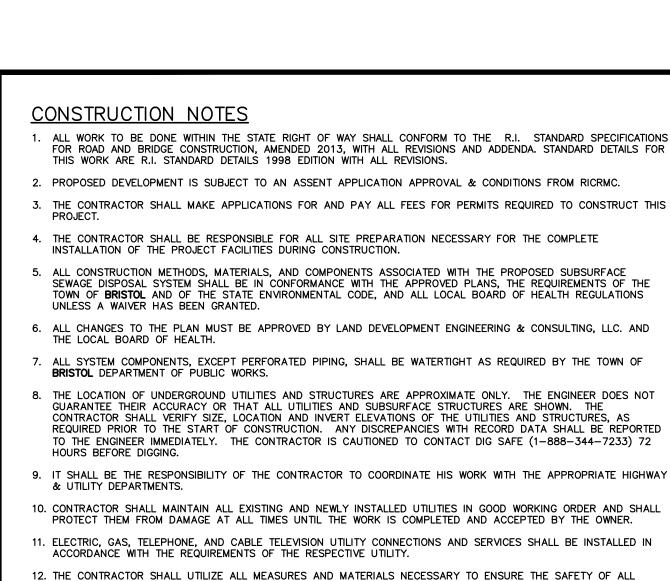
3 of 9











PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT

ENCASED IN CONCRETE FOR A MINIMUM OF TEN (10) FEET FROM THE CROSSING POINT. WHERE SEWER LINES PASS

13. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHENEVER SANITARY SEWERS PASS BELOW WATER

. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL

STORMWATER FACILITIES UNTIL SUCH TIME AS THE DEVELOPMENT AND ASSOCIATED UTILITIES ARE

2. ALL STORMWATER FACILITIES SHOULD BE INSPECTED AFTER EVERY MAJOR RAINFALL EVENT FOR THE

FIRST 3 MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND CONSTRUCTION.

3. THE CONTRACTOR SHALL INSPECT AND CLEAN ALL FACILITIES OF SEDIMENT AND DEBRIS PRIOR TO

4. ACCUMULATED SILT AND SEDIMENT SHOULD BE REMOVED FROM ALL FACILITIES AT LEAST ONCE A

YEAR OR MORE FREQUENTLY IF ACCUMULATED DEPTH OF SEDIMENT EXCEEDS THREE INCHES.

5. THE SIDE SLOPES AND BOTTOMS OF ALL DRAINAGE SWALES SHOULD BE MOWED TO A MINIMUM

BOARD OF HEALTH. TRANSPORTATION AND DISPOSAL OF SEDIMENTS SHALL COMPLY WITH ALL

B. FOLLOW MANDATE PROGRAM AND SCHEDULE FOR EXISTING STORMWATER MANAGEMENT SYSTEM AS

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND

INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.

2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION

3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN

4. <u>FILTER FABRIC:</u> A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.

FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING

BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS

INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6' ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE

AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE

REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE

MINIMUM COVER: MINIMUM COVER OVER ALL RETNETION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS

SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

APPROVED BY THE TOWN OF BRISTOL AND THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL

SHOULD BE REMOVED FROM ALL DRAINAGE WAYS AND WETLAND BUFFER ZONES.

APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.

HEIGHT OF FOUR INCHES AT LEAST TWICE A YEAR. ALL GRASS CLIPPINGS AND ORGANIC MATTER

6. ALL REMOVED SEDIMENTS ARE TO BE PROPERLY DISPOSED AT A LOCATION TO BE APPROVED BY THE

ANY DEFICIENCIES NOTED DURING MAINTENANCE SHALL BE REPORTED TO THE OWNER AND CORRECTED

MAINS OR DRAIN LINES. OTHERWISE, WATER SERVICE, DRAIN LINES AND SEWER LINES SHALL BE CAREFULLY

ABOVE WATER OR DRAIN LINES, THEY SHALL ALL BE ENCASED IN CONCRETE REGARDLESS OF CLEARANCE.

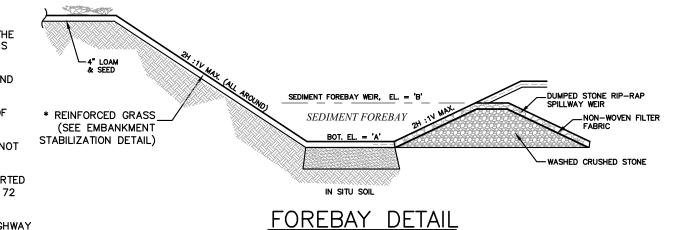
STORMWATER FACILITY OPERATION AND MAINTENANCE

ACCEPTED BY THE OWNER.

THE OWNER'S ACCEPTANCE.

IMMEDIATELY.

MANAGEMENT.



87.5

82.0

8" PVC OUTLET EL. T =80.45 (VOL.=699 CF , AREA=1,640 SF)

TH-2

NOT TO SCALE

**ELEVATION TABLE** 

TH-1 82.3 80.3 80.5

30T. EL. = 80.00 ( AREA=1,465 SF )

REMOVE AND REPLACE EXISTING UNSUITABLE

MATERIAL WITH CLEAN FILL

DRY EXTENDED DETENTION BASIN

NOT TO SCALE 1. REFER TO PROJECT DRAINAGE REPORT HYDROCAD® CALCULATIONS FOR ADDITIONAL INFORMATION.

| TH-# | EXISTING | SHGW | BOTTOM OF OUTLET WEIR

OUTLET WEIR / SPILLWAY EL. T =82.00 (VOL.=3,721 CF , AREA=2,270 SF) -

85.5

81.0

| ELEV. | BASIN 'A' | ELEV. 'B'

85.0

83.0

83.8

82.0

### ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY (ROW) SHALL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUGUST 2013 AND STANDARD DETAILS, JUNE 15, 1988, AS 2. UTILITY WORK SHOWN IS FOR REFERENCE. THIS WORK NEEDS TO BE PERMITTED THROUGH A UTILITY PHYSICAL UTILITY PERMIT (PUP) WITH RIDOT'S DIVISION OF MAINTENANCE. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF MANUAL OF UNIFORM 4. CONTRACTOR TO PROVIDE TEMPORARY EROSION CONTROLS TO PROTECT THE STATE ROW DURING THE DEMOLITION OF EXISTING DRIVEWAY AND CONSTRUCTION OF NEW DRIVEWAY. FULL-DEPTH SAWCUT =3" CLASS 9.5 HMA SURFACE COURSE TO MATC TACK COAT VERT. FACE OF EXISTING (PLACED IN TWO 1.5" LIFTS) SAWCUT PRIOR TO PAVEMENT 3" BITUMINOUS CONCRETE-S = 2% TYP. DRIVEWAY ≥1.5" CLASS 9.5 HMA SURFACE COURSE, TYPE 1-EXISTING SLOPE EXISTING/ MARKET STATE 8" CONCRETE BASE EXISTING ROADWAY. -2.25" CLASS 12.5 HM 12" GRAVEL BORROW 8" GRAVEL BORROW 8" REINFORCED CONCRETE BASE TO MATCH EXISTING COMPACTED 12" GRAVEL BORROW COMPACTED OR SUBBASE TO SAWCUT LINE 2'-0" 5'-0" UNDISTURBED SUBGRADE MINIMUM COMPACTION FOR GRAVEL SUB-BASE OR SUBGRADE: 95% MODIFIED PROCTOR. 2. NO WORK SHOULD BE DONE OUTSIDE OF THE PROJECT SITE. PAVEMENT SHOULD MATCH WHERE NOTED ON THE SITE PLANS. 3. WHEN MATCHING EXISTING PAVEMENT, THE LONGITUDINAL CUT AND MATCH SECTION

SHOULD NOT EXCEED PAST THE SHOULDER STRIPING.

DUMPED STONE RIP-RAP

ELEV.

80.0

CHECKDAM SEE DETAIL

GROUND WATER ELEVATION

ELEV.

81.0

— OUTLET WEIR/SPILLWAY

- 30MIL IMPERVIOUS BARRIER/LINER

TH-2

(TO CONFORM TO RISDISM

APPENDIX F TABLE F-16)

WEIR LENGTH WL = 2-FT.

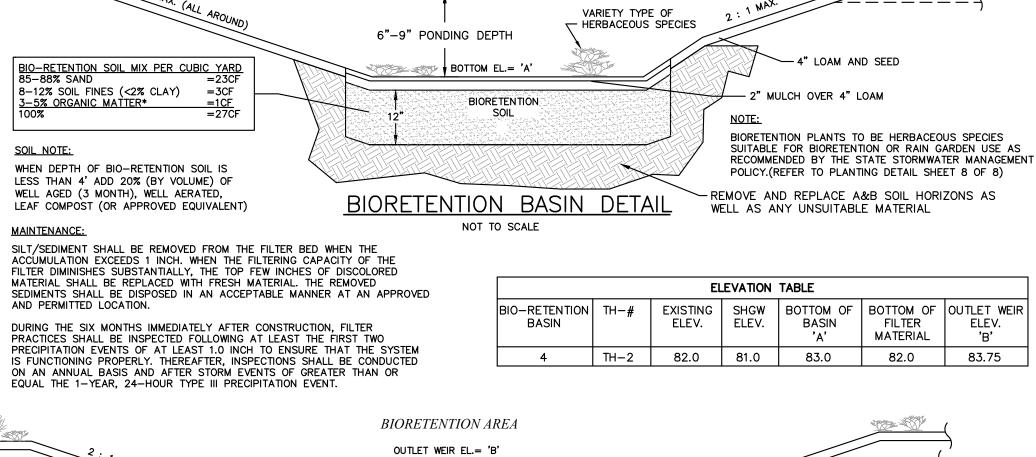
ROW SAWCUT AND MATCH DETAIL

- MATCH EXISTING GRADE

BOTTOM OF

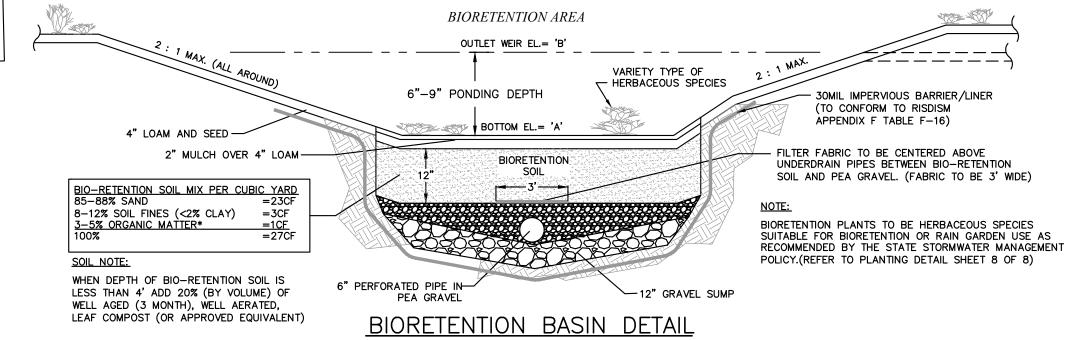
BASIN

NOT TO SCALE



**BIORETENTION AREA** 

OUTLET WEIR EL.= 'B'



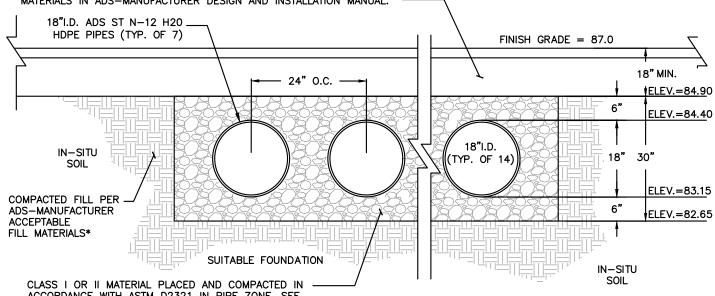
MAINTENANCE:	_
SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS 1 INCH. WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTABLE MANNER AT AN APPROVED	E
AND PERMITTED LOCATION.	
DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION FILTER	г

AND DEDMITTED LOCATION	L
AND PERMITTED LOCATION.	L
	L
DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, FILTER	L
PRACTICES SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO	H
PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM	ı
IS FUNCTIONING PROPERLY. THEREAFTER, INSPECTIONS SHALL BE CONDUCTED	L
ON AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR	
EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT.	

	ELEVATION TABLE								
RETENTION BASIN	TH-#	EXISTING ELEV.	SHGW ELEV.	BOTTOM OF BASIN 'A'	BOTTOM OF FILTER MATERIAL	OUTLET WEIR ELEV. 'B'	UNDERDRAIN PIPE ELEV.		
1	TH-4	87.5	85.5	85.0	83.0	85.75	83.75		
2	TH-2	82.0	81.0	81.35	80.35	82.10	80.60		
3	TH-6	85.3	82.7	84.4	83.4	84.90	83.65		

## SIZES WITH NO MORE THAN 12% PASSING THE #200 SIEVE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR DENSITY. SEE RECOMMENDED ACCEPTABLE FILL MATERIALS IN ADS-MANUFACTURER DESIGN AND INSTALLATION MANUAL. 18"I.D. ADS ST N-12 H20 \_\_\_\_ HDPE PIPES (TYP. OF 7)

WELL GRADED GRANULAR BACKFILL WHICH CONTAIN AN EVEN DISTRIBUTION OF PARTICLE

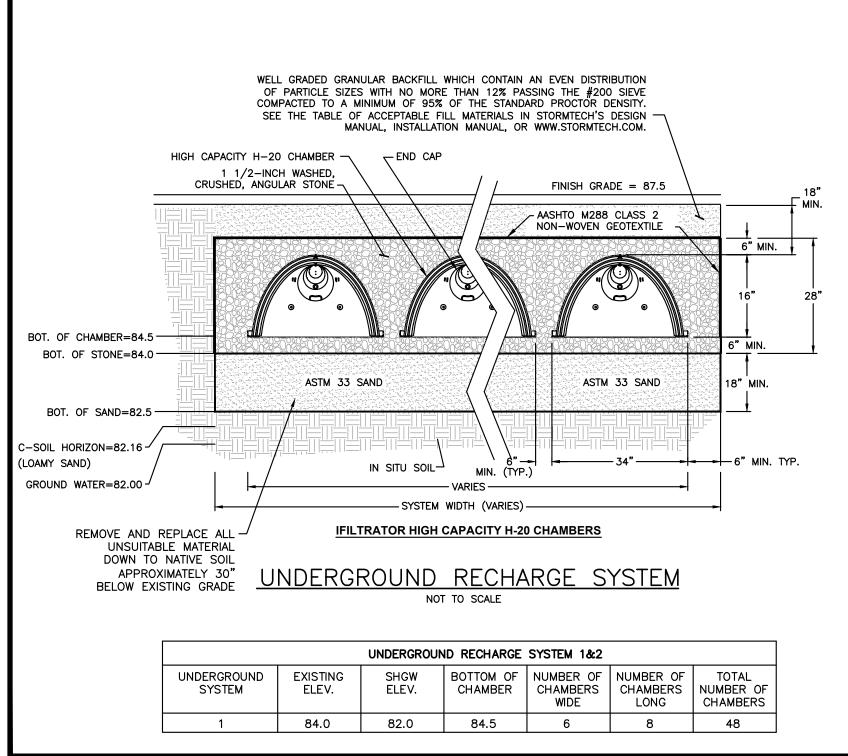


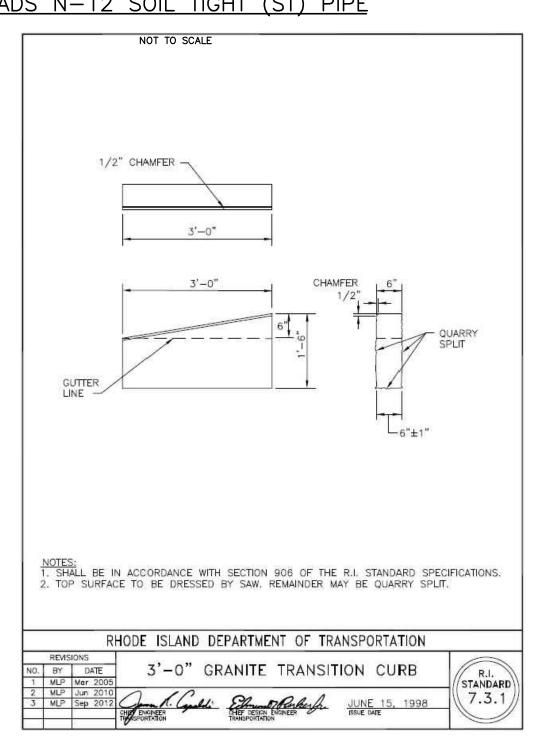
CLASS I OR II MATERIAL PLACED AND COMPACTED IN ACCORDANCE WITH ASTM D2321 IN PIPE ZONE. SEE RECOMMENDED ACCEPTABLE FILL MATERIALS IN ADS-MANUFACTURER DESIGN AND INSTALLATION MANUAL. SECTION A-A

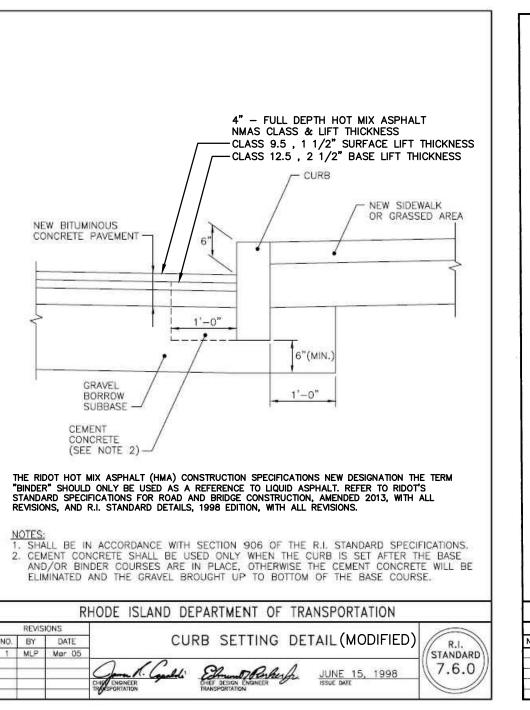
## BIORETENTION BASIN FILTER SIZING CALCULATIONS

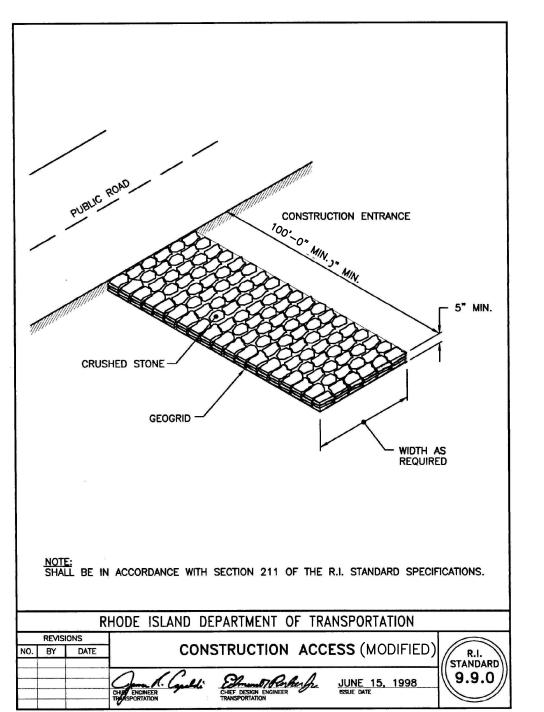
DIOTERIATION DISTRICTED SIZINO OF LOOP (11014)										
ETENTION FILTER BED SIZING CALCULATIONS: ON 8.23.D.6 OF RISDISM) = (WQv)(df) / [(k)(hf+df)(tf)]	SIZING TABLE									
	BIO-RETENTION BASIN	WQ∨	df	k	hf	tf	REQUIRED FILTER BED SIZE	PROVIDED FILTER BED SIZE		
MIN SURFACE AREA OF FILTER BED (SF)							SIZL	SIZL		
FILTER BED DEPTH COEFFICIENT OF PERMEABILITY (1.0 FOR BIO—RETENTION) AVERAGE HEIGHT OF WATER ABOVE SURFACE OF PRACTICE DESIGN FILTER BED DRAIN TIME (2—DAYS MAX)  (WQv)(1) / [(1)(hf+1)(2)]	1	331	1'	1'	0.75'	2	95 SF	678 SF		
	2	805	1'	1'	0.75'	2	230 SF	563 SF		
	3	10	1'	1'	0.5'	2	3 SF	374 SF		
	4	187	1'	1'	0.75'	2	54 SF	157 SF		

## PLASTIC UNDERGROUND STORAGE SYSTEM ADS N-12 SOIL TIGHT (ST) PIPE









MEMBER DATE	<del>-</del>
	- -
PLANNING BOARD SIGNATURES	-



WWW.SDE-LDEC.COM											
									MER	MER	
									GENERAL REVISIONS PER TOWN COMMENTS	MODIFIED DRIVEWAY LOCATIONS	
									4/5/2023	3/15/2023	
									1.	1.	
			Р	LAN	l RE	VIS	ION	S			
DATE: MARCH 6, 2023											
DRAWN BY: SJE			COMPS. BY: SJE				CHECK BY: RLM/MER				

MICHAEL E. RUSSELL REGISTERED ROFESSIONAL ENGINEER (CIVIL) 1.0882

**PERMITTING** 

PROJECT NO. 22024

SSUED FOR:

LOPMEN <u>O</u>E DE LAND 20,

DRAWING TITLE: CONSTRUCTION **DETAILS** 

1" = 20'

OF **9** 

18050EX.dwg