

# MAJOR LAND DEVELOPMENT PRELIMINARY PLAN APPLICATION

# 1200 & 1202 HOPE STREET

## Assessors Map 103 , Parcel 2 & 14

# Bristol, Rhode Island

MARCH 6, 2023  
REVISED: MARCH 15, 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

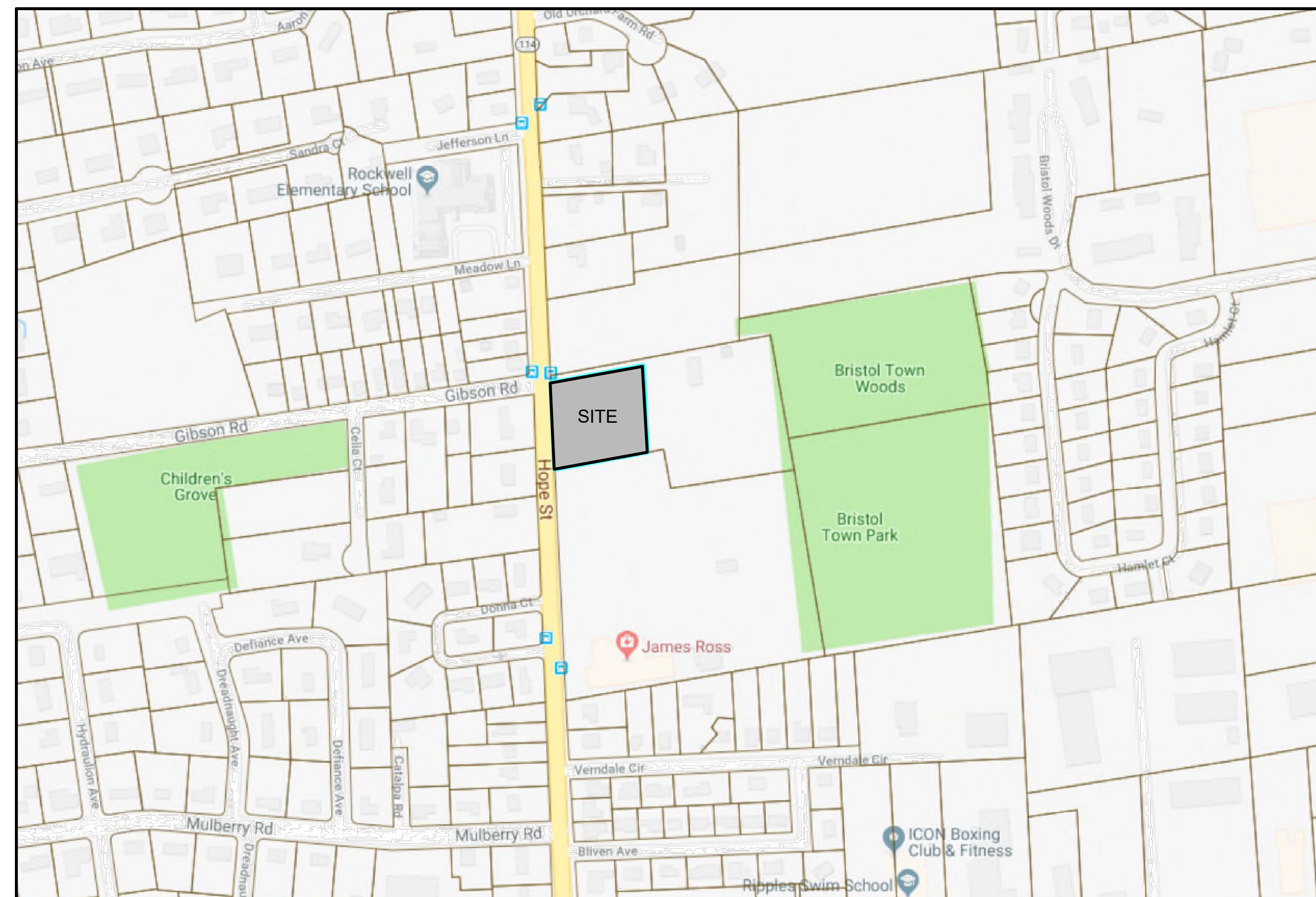
VERDE DESIGN + HORTICULTURE  
6 DEBLOIS STREET  
NEWPORT, RI 02840  
(401) 619-0562

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



LOCUS MAP

## PLAN INDEX

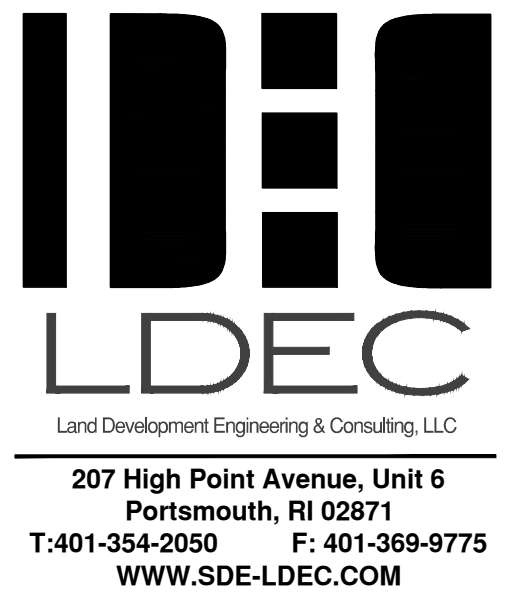
<u>TITLE</u>	<u>SHEET NO.</u>
COVER SHEET	1
EXISTING CONDITIONS PLAN	2
LOTING PLAN	3
SITE LAYOUT PLAN	4
GRADING & DRAINAGE PLAN	5
UTILITY PLAN	6
EROSION CONTROL PLAN	7
LANDSCAPING PLAN	8
CONSTRUCTION DETAILS	9

MEMBER

DATE \_\_\_\_\_

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PLANNING BOARD SIGNATURES

[illegible]

PLAN REVISIONS
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DATE: MARCH 6, 2023

DRAWN BY: SJE	DESIGN BY: SJE	CHECK BY: MER
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PROJECT NO.	22024
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ISSUED FOR:  
PERMITTING



**MAJOR LAND DEVELOPMENT  
FINAL PLAN APPLICATION**

1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCEL 2 & 14

DRAWING TITLE:

COVER

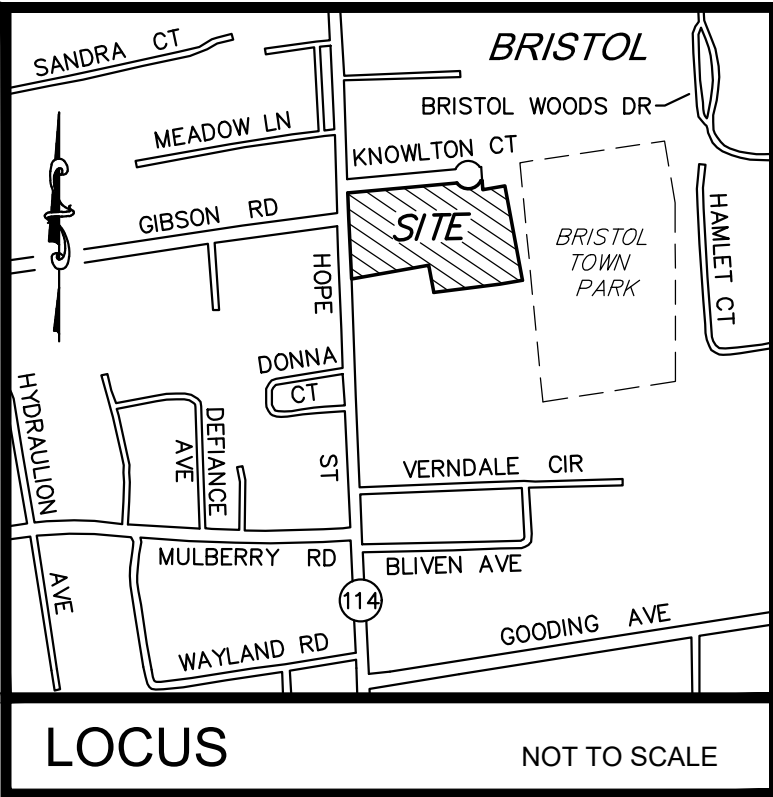
SCALE: **NTS**

SHEET NO.

1 of 9

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.





- NOTES:**
- 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.
  - ELEVATIONS ARE REFERENCED TO NAVD88.
  - 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).
  - 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.
  - 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.
  - 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.
  - 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:**
- "PRELIMINARY PLAN FOR ELIZABETH COURT, AP 103 LOT 14, HOPE STREET IN BRISTOL, RHODE ISLAND", PREPARED FOR 1202 HOPE STREET INVESTMENT, LLC BY PRINCIPLE COMPANY, INC., DATED APRIL 12, 2021 (REV. 7/27/21) WHICH IS TO BE RECORDED AT THE TOWN OF BRISTOL LAND EVIDENCE RECORDS OFFICE.
  - "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 OWNERS AND APPLICANTS	
MI 1200 HOPE ST, LLC PO BOX 572 WARREN, RI 02885 <b>TITLE REFERENCE:</b> DEED BK.2173/Pg.176 <b>SITE LOCATION:</b> 1200 HOPE STREET BRISTOL, RHODE ISLAND <b>ASSESSORS REFERENCE:</b> MAP 103 PARCEL 2	1202 HOPE STREET INVESTMENTS, LLC PO BOX 246 WARREN, RI 02885 <b>TITLE REFERENCE:</b> DEED BK.1990/Pg.179 <b>SITE LOCATION:</b> 1202 HOPE STREET BRISTOL, RHODE ISLAND <b>ASSESSORS REFERENCE:</b> 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:

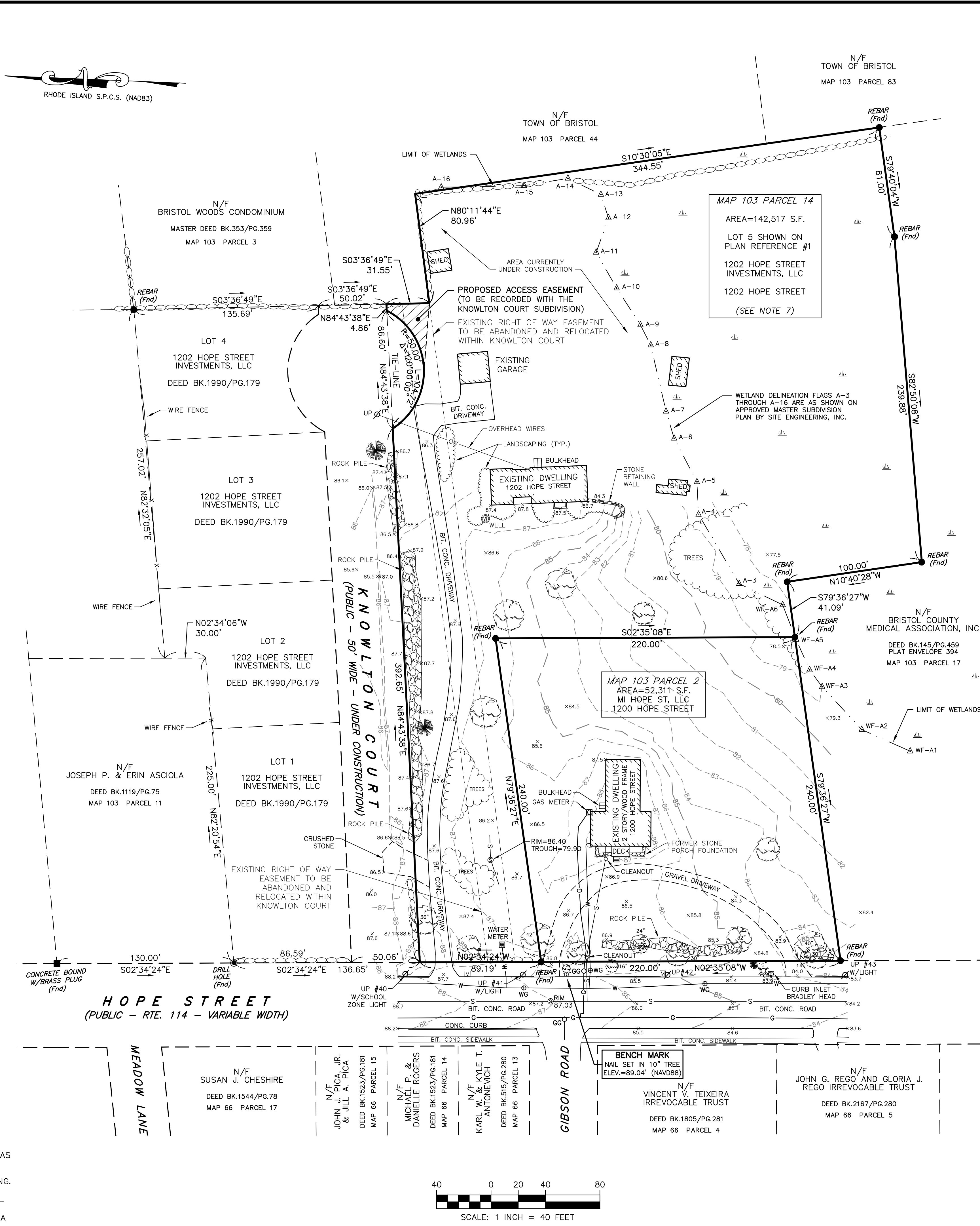
COMPREHENSIVE BOUNDARY SURVEY CLASS I  
DATA ACCUMULATION SURVEY CLASS III  
TOPOGRAPHIC SURVEY ACCURACY T-1

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

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

BY Robert L. Mason

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



**LEGEND**

- ① DRAIN MANHOLE
- ⚡ FIRE HYDRANT
- ⊕ GAS GATE
- ☐ MAIL BOX
- ⊙ SEWER MANHOLE
- 85.9 SPOT ELEVATION
- STONE WALL
- TREE
- TREE LINE
- UTILITY POLE
- WATER GATE
- WETLANDS
- WETLAND FLAG
- UNDERGROUND GAS
- UNDERGROUND SEWER
- UNDERGROUND WATER

**RESIDENTIAL 10 (R-10) ZONING DISTRICT**

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

**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

NO.	DATE	DESCRIPTION
1	8/23/22	UPDATE CURRENT OWNERS
2	8/23/22	REVISIONS PER TOWN REVIEW COMMENTS
3	3/7/23	REVISIONS PER TOWN REVIEW COMMENTS

PLAN REVISIONS

DATE: APRIL 26, 2022

DRAWN BY: RLM COMPS. BY: RLM CHECK BY: RLM/MER

PROJECT NO. 22024

ISSUED FOR:

APPROVAL

ROBERT L. MASON  
No. 2001  
PROFESSIONAL LAND SURVEYOR

**ADMINISTRATIVE SUBDIVISION**  
1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCELS 2 & 14  
PREPARED FOR  
MI 1200 HOPE ST, LLC

DRAWING TITLE:

**EXISTING CONDITIONS**

SCALE: 1" = 40'

SHEET NO. 2 OF 9



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 ADJUTING LAND OF MI 1200 HOPE ST, LLC TO CREATE LOT 2 (HAVING A TOTAL LOT AREA OF 76,705 S.F) AS SHOWN.
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 DISCLOSED HEREON. THE OWNER OF LOCUS AND ADJUTING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.
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. 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 ADJUTING PROPERTY AND PROVIDED FURTHER THAT NO PART OF THIS SUBDIVISION MAY BE USED IN ANY 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.

1. "PRELIMINARY PLAN FOR ELIZABETH COURT, AP 103 LOT 14, HOPE STREET IN BRISTOL, RHODE ISLAND", PREPARED FOR 1202 HOPE STREET INVESTMENT, LLC BY PRINCIPLE COMPANY, INC., DATED APRIL 12, 2021 (REV. 7/27/21) WHICH IS TO BE RECORDED AT THE TOWN OF BRISTOL LAND EVIDENCE RECORDS OFFICE.
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CERTIFICATION

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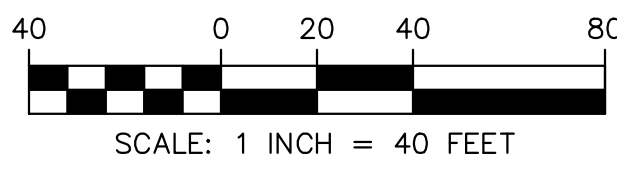
COMPREHENSIVE BOUNDARY SURVEY	CLASS I
DATA ACCUMULATION SURVEY	CLASS III

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 


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



SUMMARY OF LOT CONFIGURATIONS			
LOT 14 MAP 103 PARCEL 14		LOT 2 MAP 103 PARCEL 2	
EXISTING	PROPOSED	EXISTING	PROPOSED
142,517 S.F.	118,123 S.F.	52,311 S.F.	76,705 S.F.
EXISTING MINUS PARCEL A PROPOSED	142,517 S.F. - 24,394 S.F. = 118,123 S.F.	EXISTING ADD PARCEL A PROPOSED	52,311 S.F. + 24,394 S.F. = 76,705 S.F.

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ROBERT L. MASON

No.  2001

PROFESSIONAL  
LAND SURVEYOR

DRAWING TITLE:

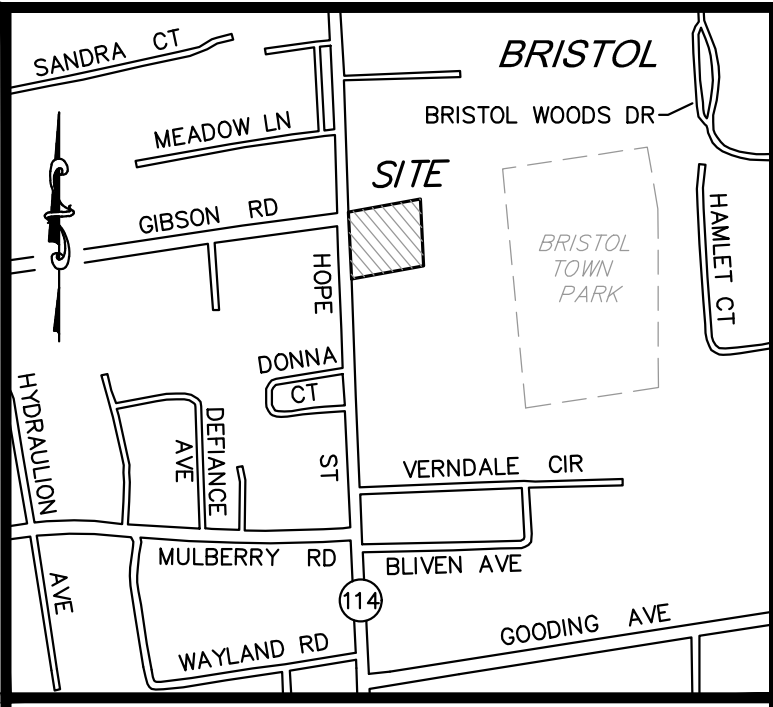
LOTTING PLAN

SCALE: 1" = 40'

SHEET NO.

3 OF 9





LOCUS NOT TO SCALE

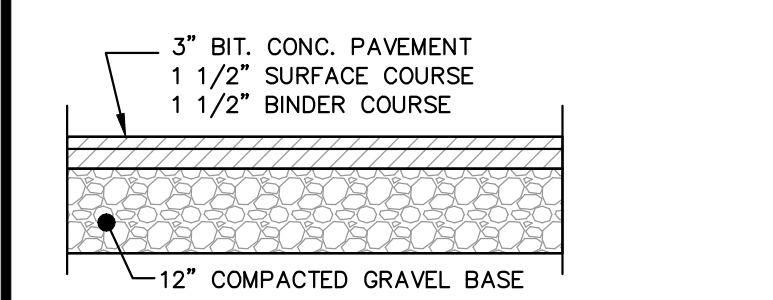
- LEGEND**
- ⊙ DRAIN MANHOLE
  - ⊙ FIRE HYDRANT
  - ⊙ MAIL BOX
  - ⊙ SEWER MANHOLE
  - ⊙ SPOT ELEVATION
  - STONE WALL
  - TREE LINE
  - UTILITY POLE
  - WATER GATE
  - W WATER LINE
  - G UNDERGROUND GAS
  - Δ A10 WETLAND FLAG
  - WETLANDS
- PROPOSED GRADE**
- PROPOSED CONTOUR**
- PROPOSED DRAIN LINE**
- PROPOSED GAS LINE**
- PROPOSED ELECTRIC/ TELEPHONE/CABLE**
- LOW PRESSURE SEWER**

**CURRENT OWNER**  
EXPRESS REALTY TRUST, LLC  
25 LILLIS AVENUE  
BARRINGTON, RI 02806

**TITLE REFERENCE:**  
DEED BK.2110/PG.96

**SITE LOCATION:**  
1200 HOPE STREET  
BRISTOL, RHODE ISLAND

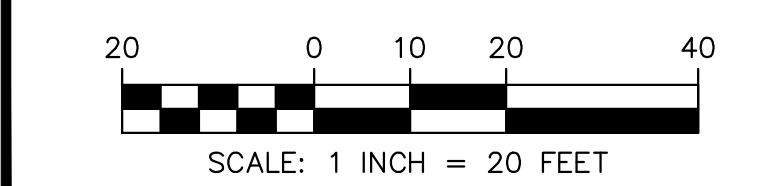
**ASSESSORS REFERENCE:**  
MAP 103 PARCEL 2



**BID ALTERNATIVE NOTE:**  
EXISTING BITUMINOUS PAVEMENT PARKING TO BE RECLAIMED/RECYCLED PER RIDOT SECTION 406.

**TYPICAL BITUMINOUS CONCRETE PAVEMENT**  
NOT TO SCALE

PARKING TABLE	
REQUIRED	PROPOSED
2 SPACES/ DWELLING UNIT	10 DWELLING UNITS = 20 SPACES
EXTERIOR PARKING SPACES	10 SPACES
GARAGE PARKING SPACES	10 SPACES



**NOTES:**

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- ELEVATIONS ARE REFERENCED TO NAVD88.
- THE SITE IS LOCATED WITHIN A ZONE X FLOOD HAZARD AREA AS DETERMINED FROM THE TOWN OF BRISTOL FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 445393 0011 H (EFFECTIVE DATE JULY 7, 2014).
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- WETLAND DELINEATION PERFORMED BY NATURAL RESOURCE SERVICES INC., ON MARCH 15, 2019.

**LOCAL PERMITS**

PLANNING BOARD DECISION:  
RECORDED DECEMBER 16, 2019.  
DOC#: 00003581, BOOK: 2012, PG: 82

ZONING BOARD DECISION:  
RECORDED DECEMBER 19, 2018.  
DOC# 0003744, BOOK: 1967, PG: 269-270

**STATE PERMITS**

RIDOT PAPA NO. 190510  
RIDEM WETLANDS APPLICATION NO. 19-0149  
GROUNDWATER DISCHARGE/UIC NO. 001920  
RIPDES NO. RIR-101910

**ZONING REQUIREMENTS:**

CONSERVATION DEVELOPMENT LAND DEVELOPMENT  
PROJECT / MULTI FAMILY DWELLING UNITS  
UNDERLYING DISTRICT: RESIDENTIAL DISTRICT (R-10)

SITE IS ALSO AN INDIVIDUALLY LISTED PROPERTY IN THE BRISTOL HISTORICAL DISTRICT.

	REQUIRED	EXISTING	PROPOSED
LOT AREA	10,000 S.F.	52,311 S.F.	52,311 S.F.
LOT FRONTAGE	80 FT.	220 FT.	220 FT.
FRONT YARD SETBACK	75 FT.	73.1 FT.	73.1 FT.*
SIDE YARD SETBACK	50 FT.	47.6 FT.	14.7 FT.*
REAR YARD SETBACK	50 FT.	85.3 FT.	22 FT.*
MAX. LOT COVERAGE	25%	5.75%	16.5%
MAX. BUILDING HEIGHT	35 FT.	—	35 FT.**
SETBACK BETWEEN 2 MULTI-FAMILY BUILDINGS	50 FT.	N/A	30 FT.*

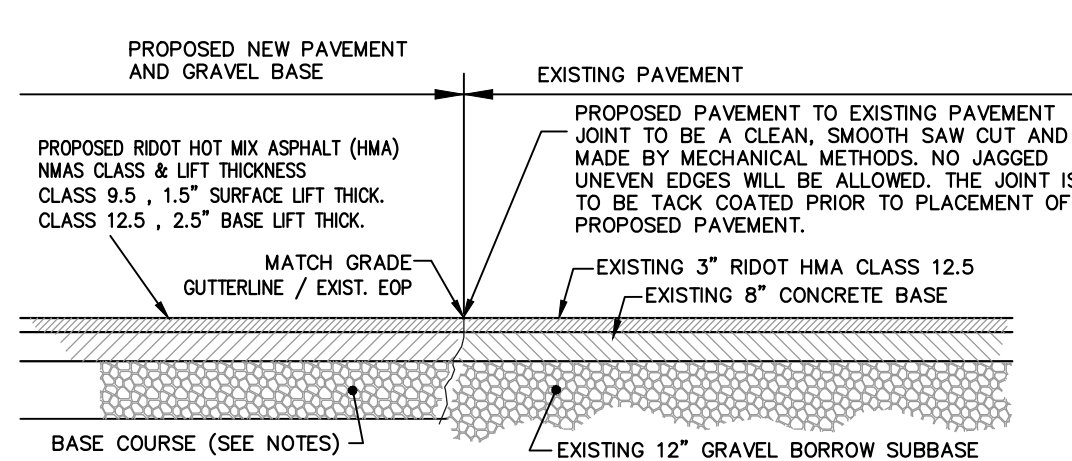
OPEN SPACE 50% 88.7% 54.6%

(\*ZONING RELIEF RECEIVED, ZONING BOARD PERMIT FILE NO. 2018-41, RECORDED IN LAND EVIDENCE 12-19-2018, DOCUMENT NO. 3744 BK. 1967 PG. 269)

(\*\*35 FT. HEIGHT FOR THE PROPOSED CONDOS. EXISTING STRUCTURE TO REMAIN UNCHANGED)

BY RIGHT DENSITY = 5 DWELLING UNITS  
(CONVENTIONAL)

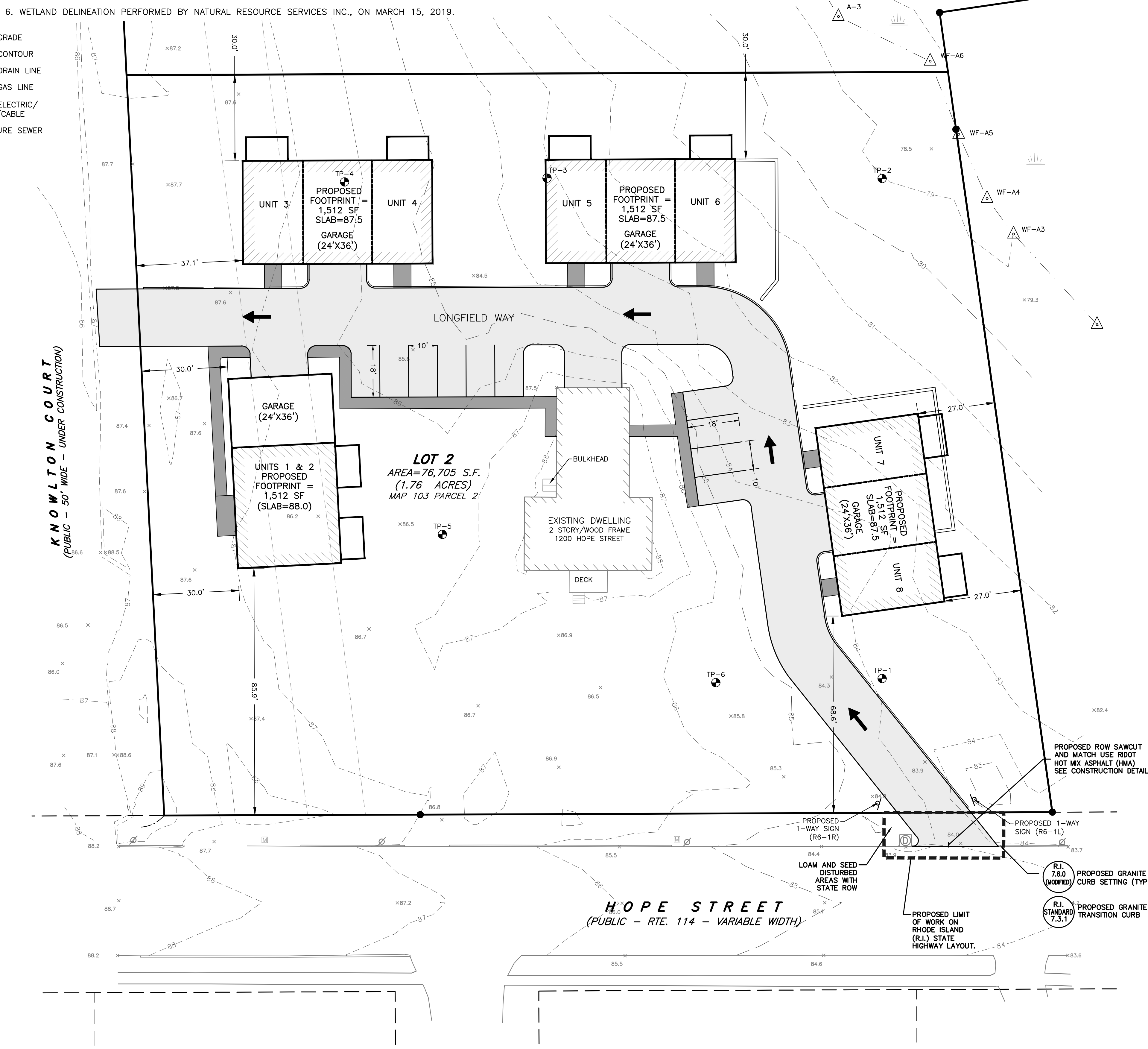
PROPOSED DENSITY = 10 DWELLING UNITS  
(LAND DEVELOPMENT PROJECTS - RESOURCE CONSERVATION AND CREATIVE DEVELOPMENT OVERLAY)



**PAVEMENT SAW CUT & MATCH ROADWAY ENTRANCE & UTILITY TRENCH**  
NOT TO SCALE

- NOTES:**
- ROADWAY PAVEMENT SAW CUTTING CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 932 AND SECTION 934.03.1 OF THE R.I. STANDARD SPECIFICATIONS.
  - AGGREGATES, GRAVEL BASE AND SUBBASE COURSES MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 300 AND SECTION M.01 OF THE R.I. STANDARD SPECIFICATIONS.
  - PAVEMENT MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 400 AND SECTION M.03 OF THE R.I. STANDARD SPECIFICATIONS AND HOT MIX ASPHALT (HMA) CONSTRUCTION.
  - CONCRETE MATERIAL AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 600 OF THE R.I. STANDARD SPECIFICATIONS.
  - DEPTH(S) OF NEW MATERIALS SHALL AT MINIMUM MATCH EXISTING PAVEMENT CONSTRUCTION DEPTHS FOR GRAVEL BORROW, SUBBASE, BASE, AND HOT MIX ASPHALT (HMA).
  - PAVEMENT CONSTRUCTION SHALL CONFORM TO RHODE ISLAND STANDARD SPECIFICATIONS M.03.06. AND RIDOT SECT. 401.03.11 AND HOT MIX ASPHALT (HMA) CONSTRUCTION.
  - GRAVEL BORROW TYPE C SHALL CONFORM TO RHODE ISLAND STANDARD SPECIFICATIONS M.01.09 RIDOT SECT. 401.03.11.
  - GRAVEL BORROW SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND COARSE SAND, FREE FROM LOAM AND CLAY, SURFACE COATINGS AND DELETERIOUS MATERIALS. GRADATION REQUIREMENTS FOR GRAVEL SHALL BE DETERMINED BY AASHTO-T11 AND T27 AND SHALL CONFORM TO THE FOLLOWING:

SIEVE DESIGNATION	PERCENT PASSING	MAXIMUM SIZE OF STONE IN GRAVEL SHALL BE 2 INCHES LARGEST DIMENSION
1/2 IN	50-85	
NO. 4	40-75	
NO. 50	8-25	
NO. 200	0-10	



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

NO.	DATE	DESCRIPTION
1.	3/15/2023	MODIFIED DRIVEWAY LOCATIONS

PLAN REVISIONS

DATE: MARCH 6, 2023

DRAWN BY: SJE COMPS. BY: SJE CHECK BY: RLM/MER

PROJECT NO. 22024

ISSUED FOR: PERMITTING



**PROPOSED SITE PLAN**

1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCEL 2 & 14

PREPARED FOR  
PREFERRED REALTY SERVICES, LLC

DRAWING TITLE:

**SITE PLAN**

SCALE: 1" = 20'

SHEET NO.

**4 OF 9**

MEMBER \_\_\_\_\_ DATE \_\_\_\_\_

PLANNING BOARD SIGNATURES \_\_\_\_\_





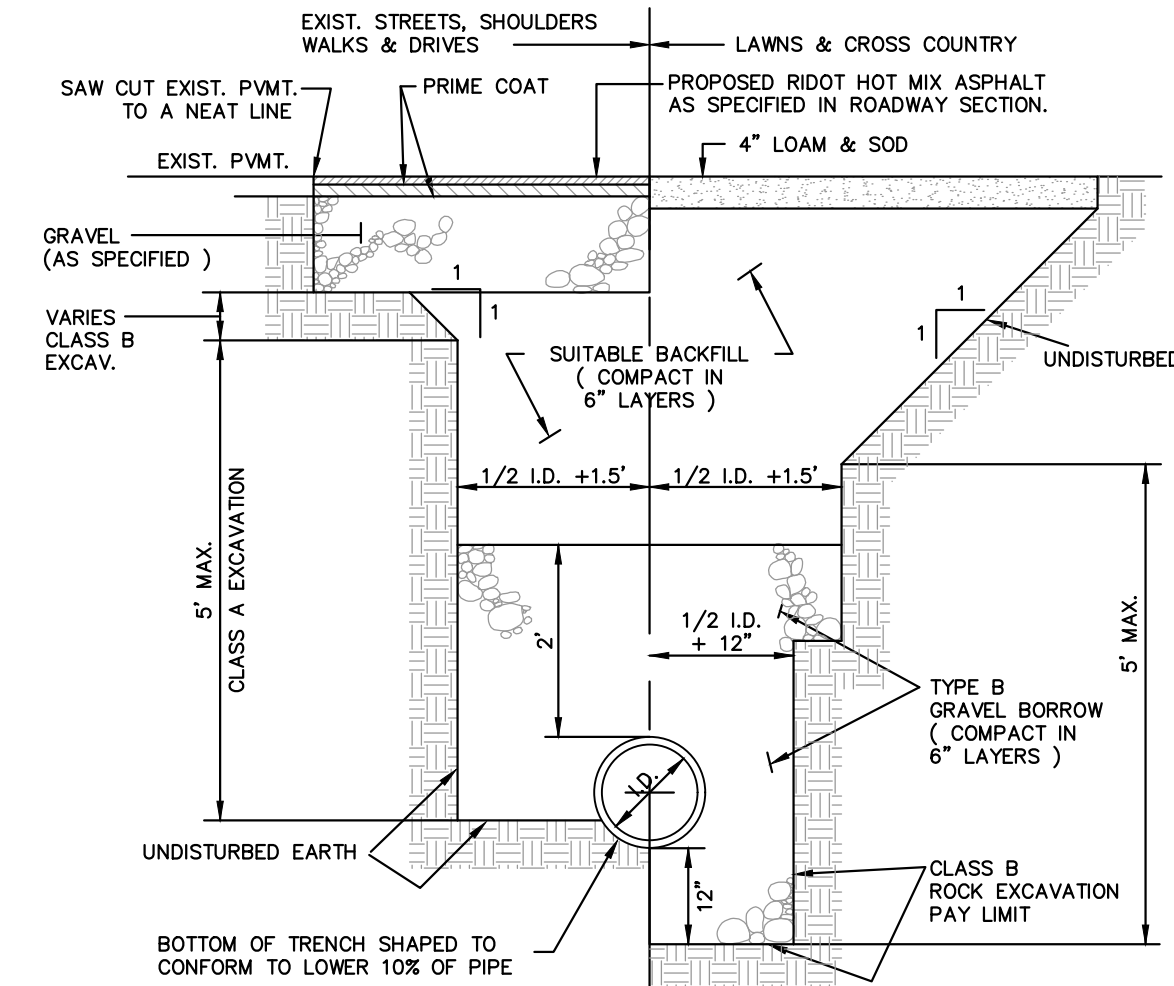
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2. ELEVATIONS ARE REFERENCED TO NAVD88.
3. THE SITE IS LOCATED WITHIN A ZONE X FLOOD HAZARD AREA AS DETERMINED FROM THE TOWN OF BRISTOL FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 445393 0011 H (EFFECTIVE DATE JULY 7, 2014).
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6. WETLAND DELINEATION PERFORMED BY NATURAL RESOURCE SERVICES INC., ON MARCH 15, 2019.



ROCK GRADATION	
SIZE OF STONE ( INCHES )	PERCENT(%) OF TOTAL WEIGHT SMALLER THAN THE GIVEN SIZE
6 TO 8	100
5 TO 7	85
4 TO 6	50
1 TO 2	15

**NOTES:**

1. STONES SIZES ARE BASED UPON ASSUMED SPECIFIC WEIGHT OF 165 LBS./CF.
2. DUMPED STONE RIP-RAP STONE SIZE AS PER RIDOT ( STD. SPEC. SEC. M.10.03 ).

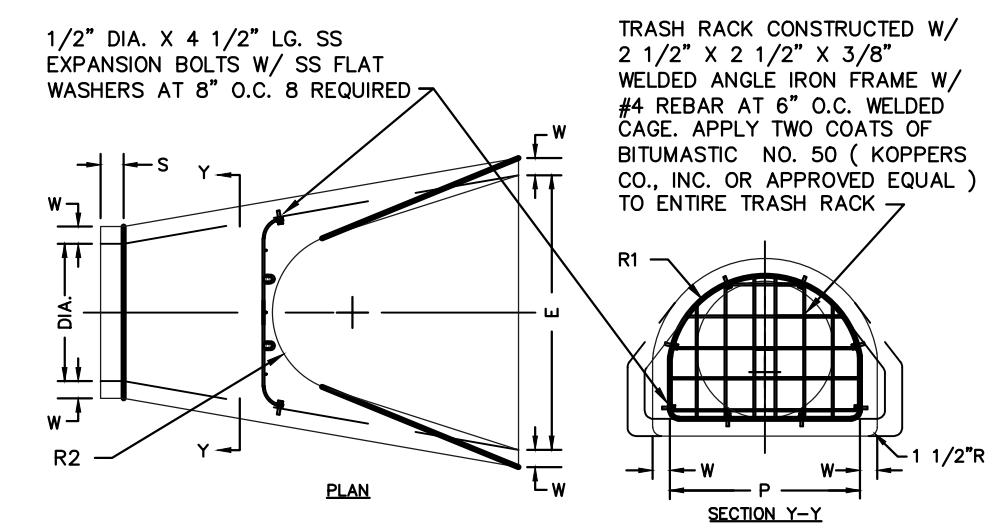


NOTE:  
MAX. STONE SIZE = 6" IN TOP 2 FEET OF BACKFILL.

### DRAINAGE PIPE TRENCH DETAIL

NOTES:

1. SHEETING IF USED, IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE 1' 0" ABOVE THE TOP OF THE PIPE, UNLESS OTHERWISE INDICATED OR DIRECTED.
2. "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE UNDERMOST POINT OF THE PIPE TO THE LINE WHICH CONTAINS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
3. SPORENEED GRAVEL SHALL BE HARD, DURABLE, ROUNDED PARTICLES, FREE FROM SAND, LOAM, CLAY, EXCESS FINES AND DELETERIOUS MATERIAL, UNIFORMLY GRADED SUCH THAT NOT LESS THAN 80% WILL PASS A 1/2" HOLE SIZE AND NOT MORE THAN 4% PASS A NO. 4 SIEVE.
4. CLASS II GRAVEL BORROW SHALL BE A CLEAN, COARSE GRAINED GRAVEL-SAND MIXTURE, THE MIXTURE SHOULD CONTAIN LESS THAN 5% PASSING THE #200 SIEVE AS WELL AS COMPLYING TO THE REQUIREMENTS OF TABLE 1.
5. WHERE FURTHER EXTENSION OF A PLUGGED PIPE OR A PLUGGED BRANCH WILL ENTER ROCK, EXCAVATION TRENCH EXCAVATION IN ROCK SHALL BE EXTENDED FOR A DISTANCE OF 5'-0" BEYOND THE PLUG.



REINFORCED CONCRETE PIPE FLARED  
ENDS W/ TRASH RACK

4" LOAM & SEED (STABILIZE WITH HAY MULCH IMMEDIATELY AFTER SEEDING)

GRASS SHALL NOT BE CUT SHORTER THAN 4"

12" MIN.

2H MIN.

1V

The diagram illustrates a V-shaped ditch cross-section. The ditch is filled with a cross-hatched pattern representing grass. A horizontal line represents the ground surface. A vertical line from the surface to the bottom of the ditch is labeled "12" MIN.". A horizontal line from the vertical line to the ditch wall is labeled "1V". A horizontal line from the ditch wall to the ditch bottom is labeled "2H MIN.". A horizontal line from the ditch bottom to the ditch wall is labeled "4" LOAM & SEED (STABILIZE WITH HAY MULCH IMMEDIATELY AFTER SEEDING)". A horizontal line from the ditch wall to the ditch bottom is labeled "GRASS SHALL NOT BE CUT SHORTER THAN 4\"".

### DRY SWALE DETAIL

**MAINTENANCE.**

OPEN CHANNEL PRACTICES SHALL BE INSPECTED ANNUALLY AND AFTER STORMS GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT.

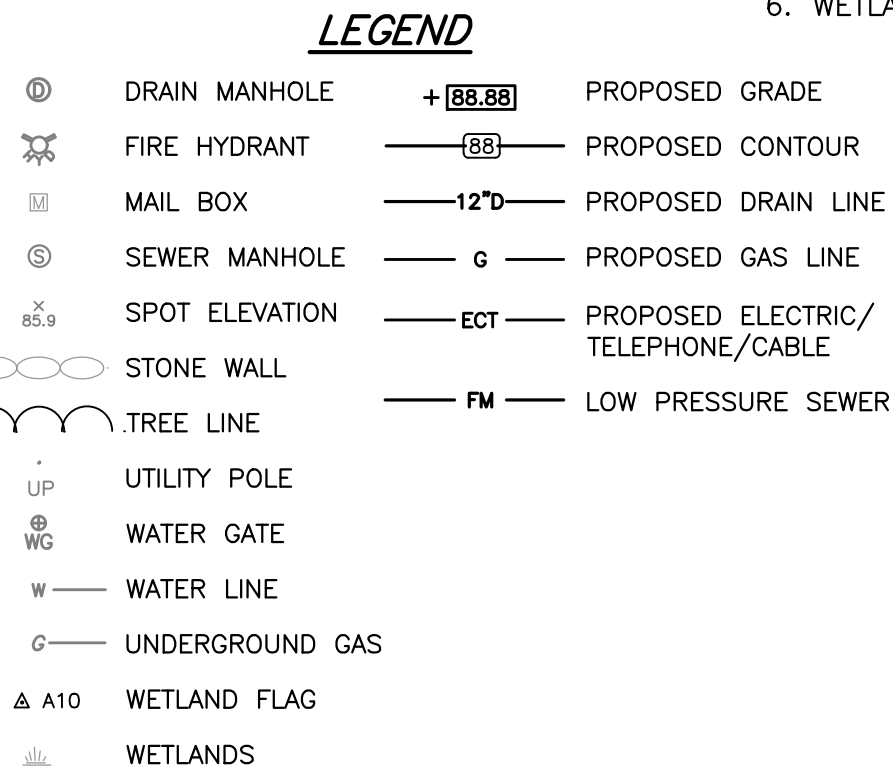
SEDIMENT BUILD-UP WITHIN THE BOTTOM OF THE CHANNEL OR FILTER STRIP SHALL BE REMOVED WHEN 25% OF THE ORIGINAL WQV VOLUME HAS BEEN EXPOSED.

ERODED SLOPES AND CHANNEL BOTTOMS SHALL BE STABILIZED AS NECESSARY.

IN THE PRESENCE OF EVIDENCE OF CONTAMINATION, REMOVED DEBRIS MAY BE TAKEN TO A LANDFILL OR OTHER PERMITTED FACILITY.

SEDIMENT TESTING MAY BE REQUIRED PRIOR TO SEDIMENT DISPOSAL WHEN A LIQUIDITY INDEX IS DETERMINED TO BE GREATER THAN 1.

WOODY VEGETATION IN WET SCALES SHALL BE PRUNED WHERE DEAD OR DYING BRANCHES ARE OBSERVED, AND REINFORCEMENT PLANTINGS SHALL BE PLANTED AT A RATE LESS THAN 50% OF THE ORIGINAL VEGETATION ESTABLISHES AFTER TWO YEARS.

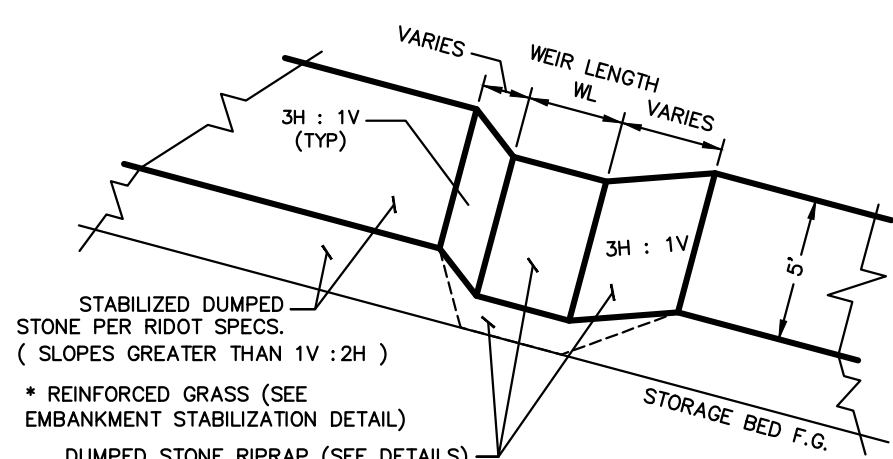


EXPRESS REALTY TRUST, LLC  
25 LILLIS AVENUE  
BARRINGTON, RI 02806

TITLE REFERENCE:  
DEED BK.2110/PG.96

SITE LOCATION:  
1200 HOPE STREET  
BRISTOL, RHODE ISLAND

ASSESSORS REFERENCE:  
MAP 103 PARCEL 2



SEDIMENT FOREBAY  
OVERFLOW SPILLWAY DETAIL

Diagram illustrating the connection of a roof drain assembly to a storm sewer. The assembly includes a riser/reducer, a 1/8 bend, and a wye fitting, all installed within a compacted gravel base. The diagram shows the transition from earth grade to pavement grade and the placement of concrete and gravel layers.

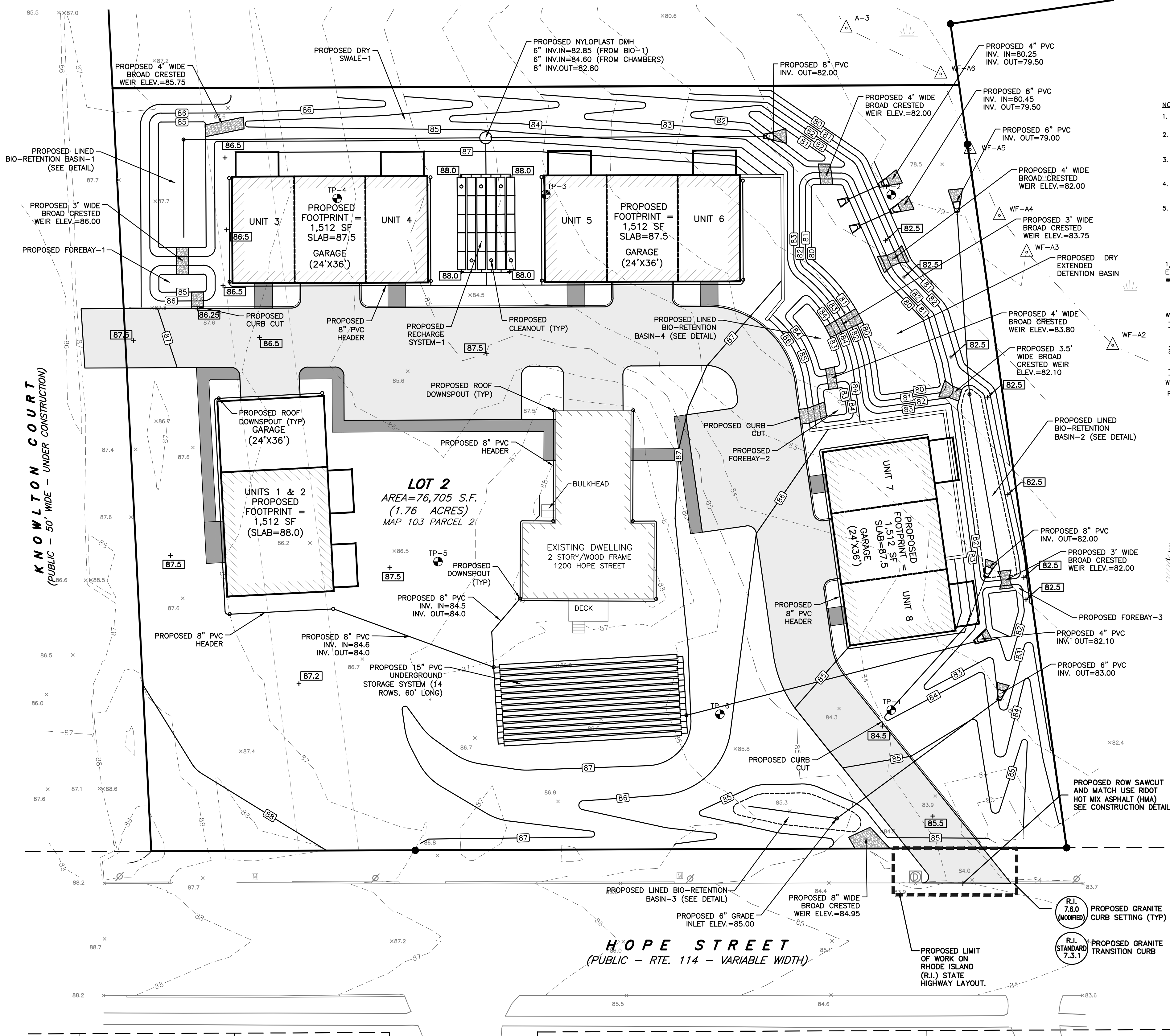
Labels and dimensions:

- FROM DOWNSPOUTS PER ARCHITECTURAL ROOF DETAILS, GUTTER AND DOWNSPOUT
- PROVIDE ADAPTER AS NECESSARY TO CONVERT FROM SQUARE TO ROUND PIPE
- PAVEMENT GRADE
- EARTH GRADE
- COMPACTED GRAVEL BASE
- GAP BETWEEN CONCRETE AND PIPE
- CEMENT CONCRETE BASE UNDER CLEANOUT
- 2'-0"
- RISER / REDUCER
- 1/8 BEND
- WYE FITTING
- PVC
- FLOW
- S=0.5% MIN. FOR ALL SUBSURFACE ROOF DRAIN LATERALS
- S=0.5% MIN.
- NON-FROST SUSCEPTIBLE GRAVEL 10 TO 2" BELOW GRADE
- WYE FITTING / ELBOW FOR DOWNSPOUTS SUBSURFACE LATERAL
- INVERT = VARIES
- DISTANCE VARIES

### DOWNSPOUT CONNECTION & ROOF DRAIN DETAIL

20 0 10 20 40

SCALE: 1 INCH = 20 FEET



MEMBER

DATE \_\_\_\_\_

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PLANNING BOARD SIGNATURES

[illegible]

## PLAN REVISIONS

DATE: MARCH 6, 2023

DRAWN BY: SJE	COMPS. BY: SJE	CHECK BY: RLM/MER
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PROJECT NO. 22024

ISSUED FOR:

## PERMITTING



# GRADING & DRAINAGE PLAN

1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCEL 2 & 14

PREPARED FOR  
PREFERRED REALTY SERVICES, LLC

DRAWING TITLE:

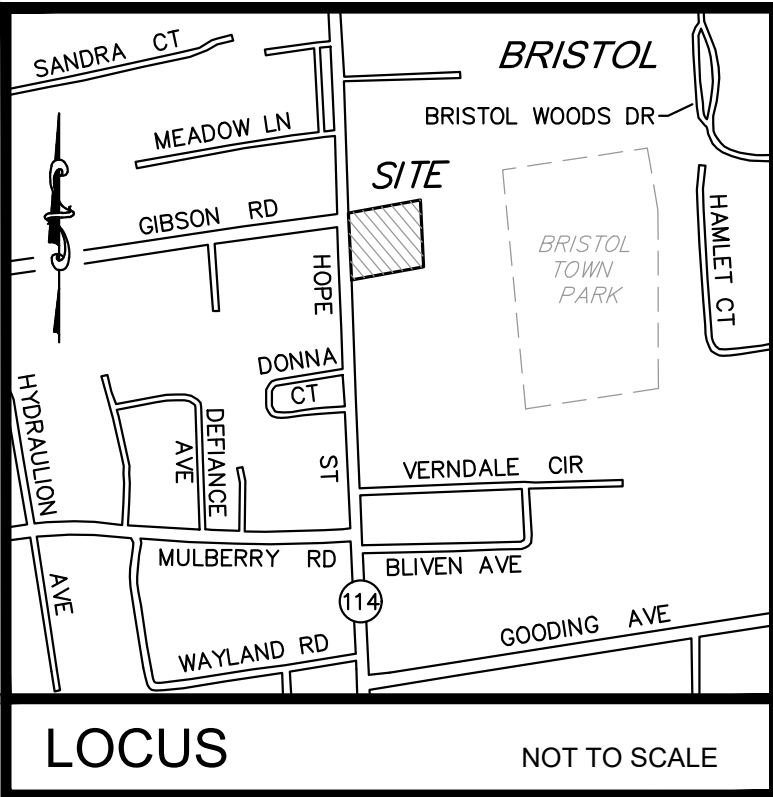
## GRADING & DRAINAGE PLAN

SCALE: **1" = 20'**

SHEET NO.

5 OF 9





#### NOTES:

- EXISTING CONDITIONS INFORMATION WAS COMPILED FROM AN ACTUAL ON THE GROUND SURVEY PERFORMED BY LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC. ON AUGUST 3, 2018. WETLANDS DISPLAYED ARE APPROXIMATE AND ARE BASED OFF OF "BRISTOL COUNTY MEDICAL ASSOC., SITE IMPROVEMENT PLAN" BY AYOUB ENGINEERING, SIGNED BY THE BRISTOL PLANNING BOARD ON OCTOBER 4, 2000.
- ELEVATIONS ARE REFERENCED TO NAVD88.
- THE SITE IS LOCATED WITHIN A ZONE X FLOOD HAZARD AREA AS DETERMINED FROM THE TOWN OF BRISTOL FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 445393 0011 H (EFFECTIVE DATE JULY 7, 2014).
- 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.
- 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.
- WETLAND DELINEATION PERFORMED BY NATURAL RESOURCE SERVICES INC., ON MARCH 15, 2019.

#### CURRENT OWNER

1200 HOPE ST., LLC  
161 NORTH CLARK ST., SUITE 1600  
CHICAGO, IL 60601

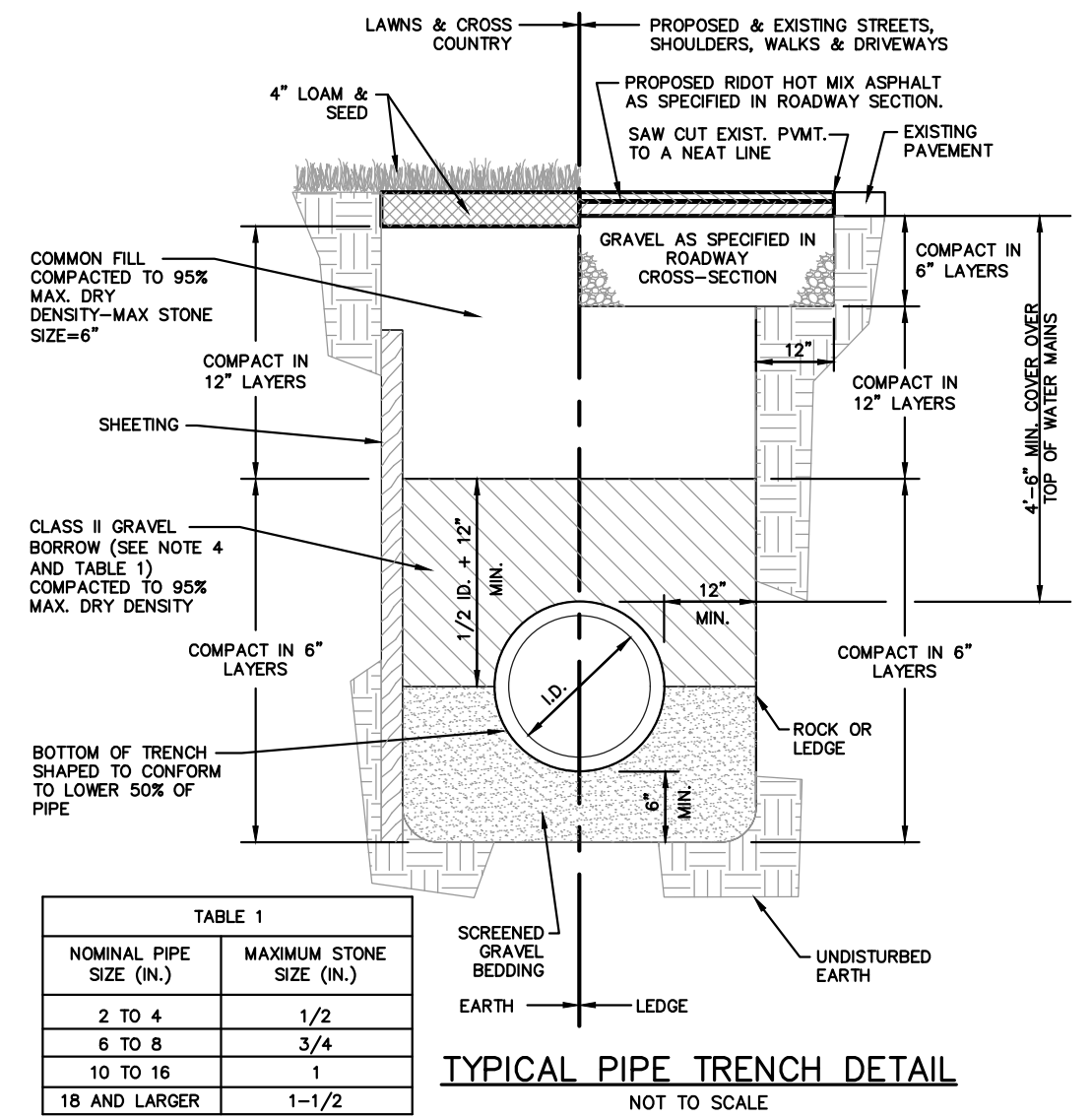
TITLE REFERENCE:  
DEED BK.1661/PG.344

SITE LOCATION:  
1200 HOPE STREET  
BRISTOL, RHODE ISLAND

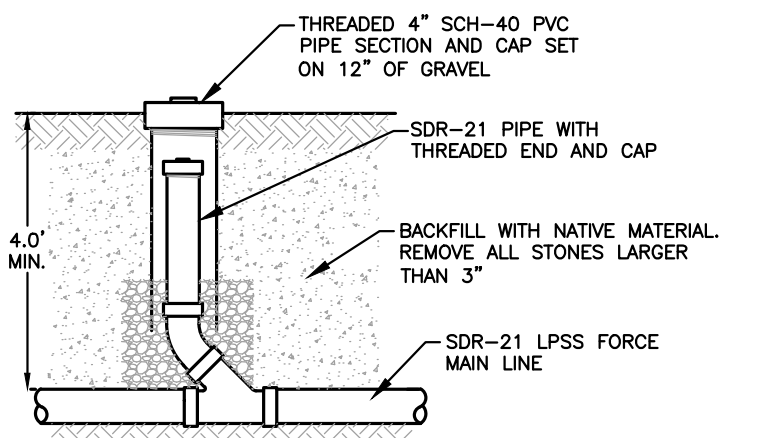
ASSESSORS REFERENCE:  
MAP 103 PARCEL 2

#### PRIVATE SEWER NOTES:

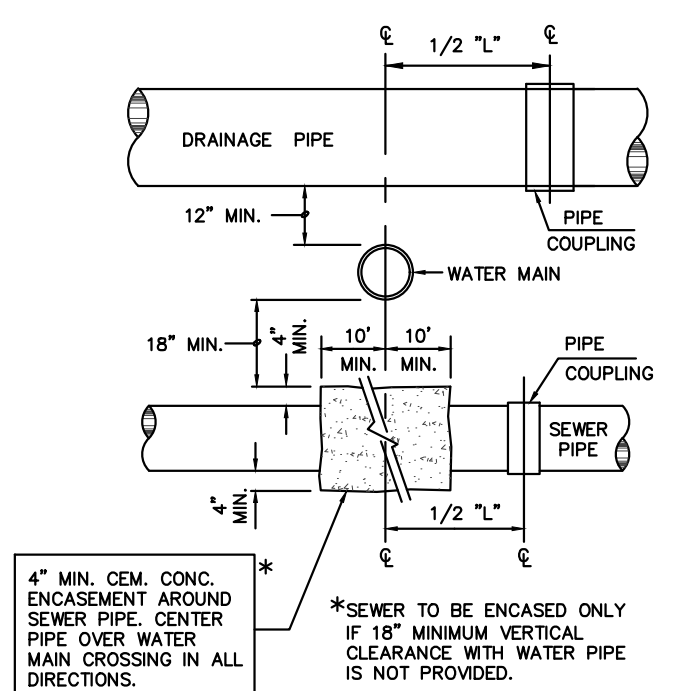
ALL FUTURE MAINTENANCE OF THE ENTIRE LOW PRESSURE SEWER SYSTEM WILL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION FOR THIS DEVELOPMENT.



- NOTES:
- SHEETING IF USED, IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE 1'-0" ABOVE THE TOP OF THE PIPE, UNLESS OTHERWISE INDICATED OR DIRECTED.
  - "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE UNDERMOST POINT OF THE PIPE TO A LINE WHICH CONNECTS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
  - SCREENED GRAVEL SHALL BE HARD, DURABLE, ROUNDED PARTICLES, FREE FROM SAND, LOAM, CLAY, EXCESS FINES AND DELETERIOUS MATERIAL, UNIFORMLY GRADED SUCH THAT NOT LESS THAN 95% WILL PASS A 1/2 INCH SIEVE AND NOT MORE THAN 5% PASS A NO. 4 SIEVE.
  - CLASS II GRAVEL BORROW SHALL BE A CLEAN, COARSE GRAINED GRAVEL-SAND MIXTURE. THE MIXTURE SHOULD CONTAIN LESS THAN 5% PASSING THE #200 SIEVE AS WELL AS COMPLYING TO THE REQUIREMENTS OF TABLE 1.
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CLEANOUT & VACUUM CONNECTOR DETAIL  
(C.O./V.C.)  
NOT TO SCALE

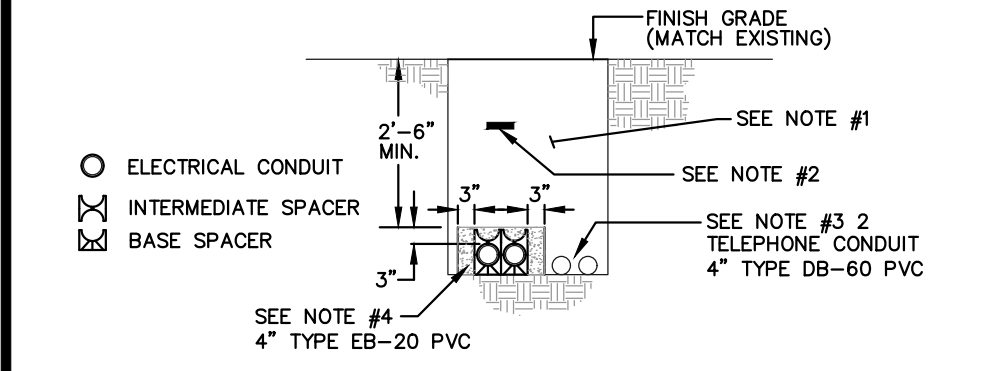
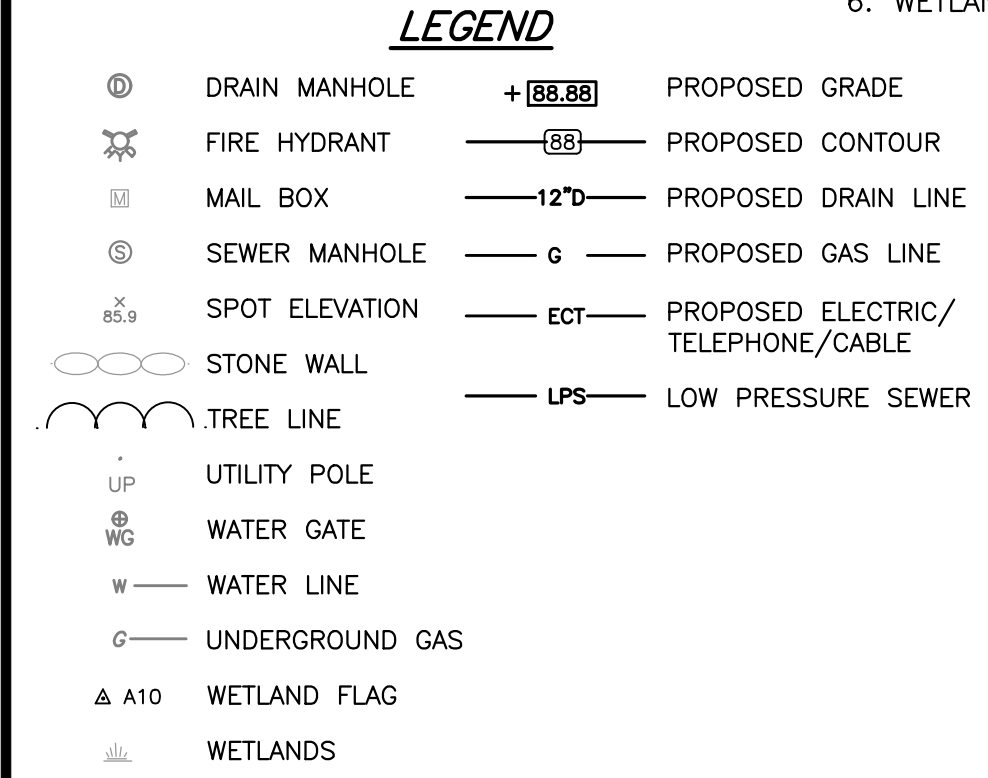


SEWER, WATER & DRAIN CROSSING  
DETAIL  
NOT TO SCALE

MEMBER

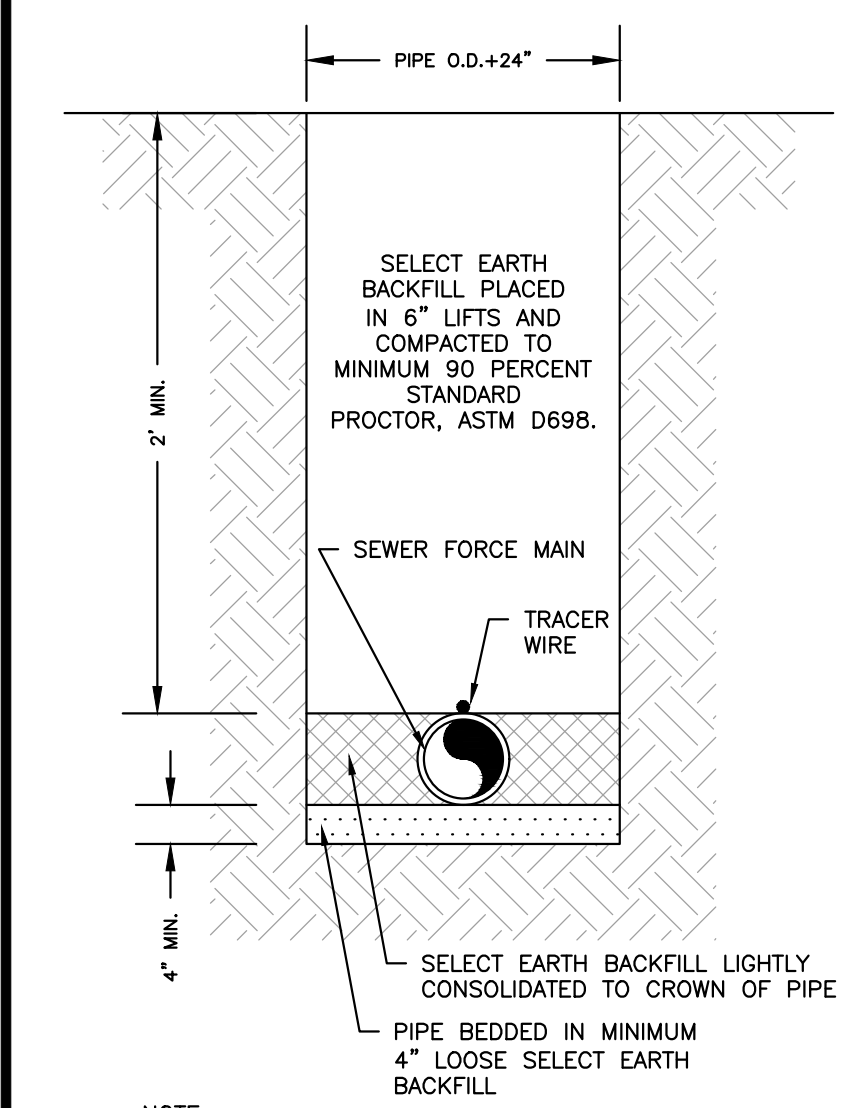
DATE

PLANNING BOARD SIGNATURES



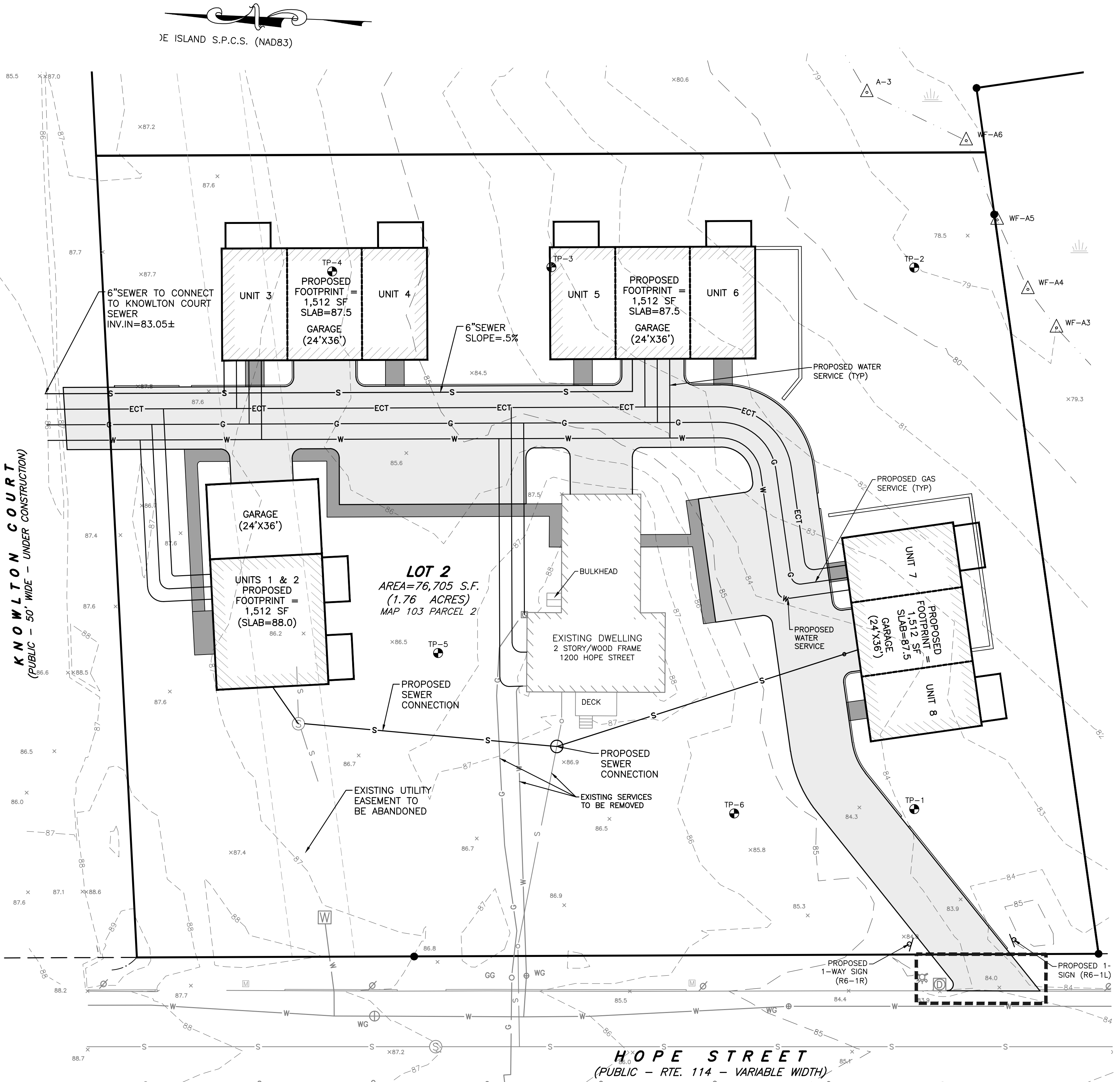
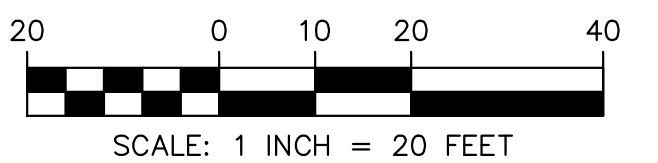
#### NOTES:

- BACKFILL TO BE FREE OF STONES GREATER THAN ONE INCH AND SHALL NOT CONTAIN ASHES, CHIPPERS, SHELL, OR FROZEN MATERIAL.
- WARNING TAPE TO BE PLACED 12" BELOW FINISH GRADE AND DIRECTLY ABOVE POWER CONDUIT.
- MINIMUM SEPARATION BETWEEN ELECTRICAL CONDUIT AND FOREIGN CONDUIT OR PIPES IS AS FOLLOWS:  
COMMUNICATION - 3" OF CONCRETE ENCASUREMENT  
WATER, GAS, SEWER - 12" WHERE THE PATH OF THESE UTILITIES INTERSECT AT APPROXIMATELY RIGHT ANGLES WITH ELECTRICAL CONDUIT.  
24" SEPARATION SHALL BE MAINTAINED BETWEEN PARALLEL PLACEMENT OF THESE UTILITIES AND ELECTRICAL CONDUIT.
- CONCRETE THICKNESS AROUND THE OUTSIDE DUCTS SHALL BE 3 TO 6 INCHES. CONCRETE SHALL BE IN ACCORDANCE WITH STANDARD 0211.



NOTE:  
PIPING LESS THAN 4'-FEET BELOW THE PROPOSED GROUND ELEVATION SHALL BE INSULATED.

PVC SANITARY SEWAGE  
FORCE MAIN TRENCH DETAIL  
NOT TO SCALE



HOPE STREET  
(PUBLIC - RTE. 114 - VARIABLE WIDTH)

**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

NO.	DATE	DESCRIPTION	APPROVED
1.	3/15/2023	MODIFIED DRIVEWAY LOCATIONS	MER

#### PLAN REVISIONS

DATE: MARCH 6, 2023  
DRAWN BY: SJE COMPS. BY: SJE CHECK BY: RLM/MER

PROJECT NO. 22024  
ISSUED FOR: PERMITTING

**MICHAEL E. RUSSELL**  
No. 7956  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

## PROPOSED UTILITY PLAN

1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCEL 2 & 14  
PREPARED FOR  
PREFERRED REALTY SERVICES, LLC

DRAWING TITLE:

UTILITY PLAN

SCALE: 1" = 20'

SHEET NO.

6 OF 9

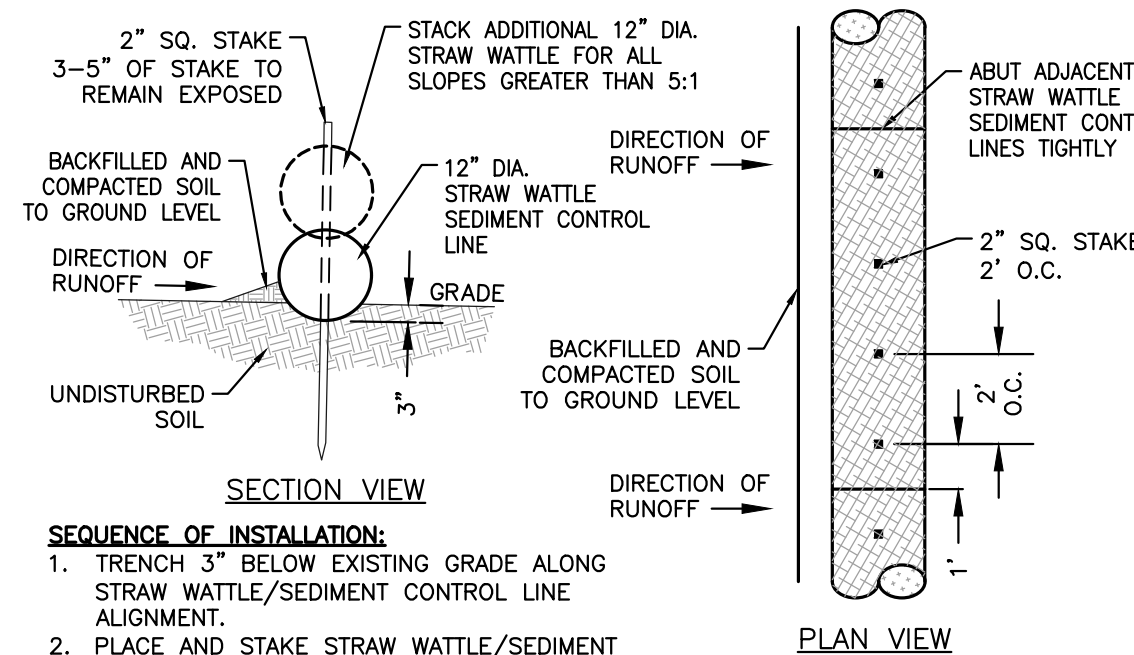




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6. WETLAND DELINEATION PERFORMED BY NATURAL RESOURCE SERVICES INC., ON MARCH 15, 2019.



1. PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND/EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS NECESSITATED BY FIELD CONDITIONS. THE CONTRACTOR SHALL MAINTAIN THESE MEASURES UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN STABILIZED.
1. INSTALLATION SEQUENCE
  - A. INSTALL SILT FENCE AND STRAW WATTLES AS SHOWN ON PLAN.
  - B. CLEAR AND GRUB SITE.
  - C. CONSTRUCT SITE INFRASTRUCTURE AS SHOWN ON PLANS.
  - D. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMMEDIATELY FOLLOWING CONSTRUCTION OF EMBANKMENTS AND FILL SLOPES: PLACEMENT OF LOAM AND GRASS SEED, INSTALLATION OF GEOWEB SLOPE STABILIZATION.
  - E. THE CONTRACTOR SHALL INSPECT ALL FILL SLOPES AND EMBANKMENTS ON A WEEKLY BASIS AND FOLLOWING ALL RAINFALL EVENTS UNTIL A 75% GRASS COVER IS ESTABLISHED SUFFICIENT TO PREVENT EROSION FROM OCCURRING.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OR AS DIRECTED BY THE ENGINEER.
3. AFTER THE INSTALLATION OF DRAINAGE STRUCTURES, EROSION CONTROL DEVICES OR OTHER APPROVED MATERIALS SHALL BE PLACED TO PROTECT THE INTEGRITY OF THE STRUCTURES.
4. DISTURBED AREAS SHALL BE STABILIZED WITH THE APPLICATION OF A MINIMUM OF FOUR INCHES (4) OF LOAM AND SHALL BE SEEDDED WITH AN APPROVED GRASS MIX OR SHALL BE RIPPERED AS SOON AS POSSIBLE AFTER THE DISTURBED AREA HAS BEEN STABILIZED. FINE GRAINED SOILS SHALL BE SEEDDED IMMEDIATELY. DISTURBED AREAS SHALL BE MULCHED WITH HAY AND SECURED BY JUTE NETTING WITH STAPLES. SLOPES EXCEEDING 2:1 SHALL BE LOAMED AND STABILIZED WITH PEGGED SOO OR APPROVED EROSION CONTROL BLANKETS UNLESS OTHERWISE NOTED.
5. THE MOUTHS OF ALL CATCH BASINS SHALL BE FITTED WITH SILTSACK OR FILTER FABRIC DURING THE ENTIRE CONSTRUCTION PROCESS TO RETARD SILTATION.
6. WHERE APPLICABLE, PROPER DUST CONTROL MEASURES SHALL APPLY TO REDUCE THE SURFACE AND AIR TRANSPORT OF DUST GENERATED DURING CONSTRUCTION. THE FOLLOWING METHODS SHALL BE USED:
  - A. WET SUPPRESSION WITHOUT WETTING AGENT SHALL BE APPLIED DURING LOAD IN / LOAD OUT AND EARTH MOVING CONSTRUCTION ACTIVITIES, SPECIALLY ON STOCKPILES.
  - B. INACTIVE STOCKPILES SHALL BE STABILIZED THROUGH APPLICATION OF SOIL STABILIZERS OR SEEDING.
  - C. WIND SREENS OR BARRIERS AND PLASTIC TARP COVERS SHALL BE SECURED TO PREVENT WIND DISLOGE AND DAMAGE. ANY DAMAGES SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
7. CONTRACTOR SHALL CONSTRUCT A LONG CURVED DUST CONTROL ENTRANCE APPROXIMATELY THE WIDTH OF ACCESS DRIVEWAY BY 50' LONG BY 4' DEEP FOR USE DURING CONSTRUCTION ACTIVITIES AS NECESSARY TO REMOVE SEDIMENT FROM VEHICLES. THE CONSTRUCTION ENTRANCES ARE TO BE LOCATED AT THE ENTRANCE TO THE SITE FROM EAST MAIN ROAD AND AQUEDUCT AVE.
8. DEWATERING OPERATIONS SHALL BE PROVIDED, IF REQUIRED; ALL DISCHARGE SHALL PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ADJUTING PROPERTIES.
9. SEE EROSION & SEDIMENT CONTROL CONSTRUCTION DETAILS
10. STRAW WATTLE OR EQUIVALENT STRAW BASED EROSION CONTROL DEVICE SHALL BE USED IN PLACE OF HAYBALES.
11. TEMPORARY CONSTRUCTION SEDIMENT TRAPS TO BE DUG OUT AND SEDIMENT FOREBAYS AND SAND FILTER SYSTEMS TO BE REESTABLISHED, REBUILT AND REVEGETATED AT THE COMPLETION OF PAVEMENT CONSTRUCTION PHASE.



**SEQUENCE OF INSTALLATION:**

1. TRENCH 3" BELOW EXISTING GRADE ALONG STRAW WATTLE/SEDIMENT CONTROL LINE ALIGNMENT.
2. PLACE AND STAKE STRAW WATTLE/SEDIMENT CONTROL LINES AS SHOWN.
3. ABUT ADJACENT CHOIR LOGS TIGHTLY.
4. BACKFILL AND COMPACT EXCAVATED MATERIAL.

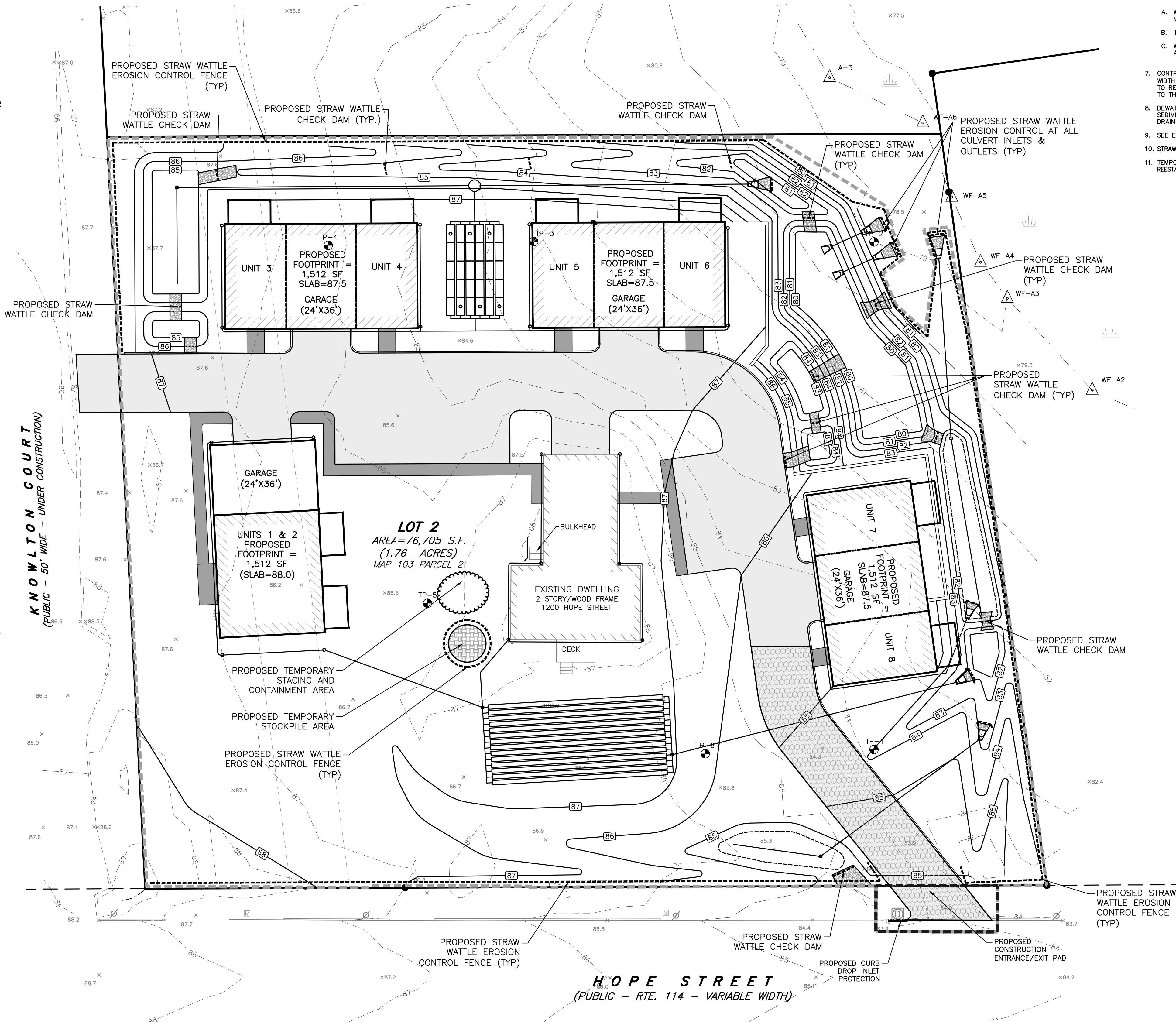
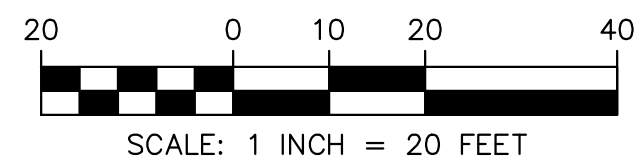
**SPACING FOR SLOPE INSTALLATION**  
 1:1 SLOPES = 10 FT. APART  
 2:1 SLOPES = 20 FT. APART  
 3:1 SLOPES = 30 FT. APART  
 4:1 SLOPES = 40 FT. APART  
 STACKED WATTLES REQUIRED FOR  
 SLOPES GREATER THAN 5:1

TYPICAL EROSION/SEDIMENT CONTROL  
STRAW WATTLE DETAIL  
NOT TO SCALE

DATE \_\_\_\_\_

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PLANNING BOARD SIGNATURES



SCALE: 1" = 20'

SHEET NO. 7 OF 9





PROPOSED PLANTING LEGEND				
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY	SIZE
SHADE TREES				
ACE RUB	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2	4" CAL.
ACE FRE	ACER X FREEMANI 'JEFFSRED'	AUTUMN BLAZE MAPLE	1	4" CAL.
QUE PAL	QUERCUS PALUSTRIS	PIN OAK	1	4" CAL.
TC	TILIA CORDATA 'GREENSPIRE'	LITTLE LEAF LINDEN	2	4" CAL.
FLOWERING TREES				
AME CAN	AMELANCHIER CANADENSIS 'AUTUMN BRILLANCE'	AUTUMN BRILLANCE SHADBLOW	3	8/10' CLUMP
MAG GRA	MAGNOLIA GRANDIFLORA 'BRACKEN'S BROWN BEAUTY'	BRACKEN'S BROWN BEAUTY MAGNOLIA	3	8/10" B&B
STE PSE	STEWARTIA PSEUDOCAMELLIA	JAPANESE STEWARTIA	1	4" CAL.
EVERGREEN TREES				
CRY JAP	CRYPTOMERIA JAPONICA 'YOSHINO'	YOSHINO JAPANESE CEDAR	5	7/8' B&B
ILE NEL	ILEX X 'NELLIE STEVENS'	NELLIE STEVENS HOLLY	6	6/7' B&B
JUN HET	JUNIPERUS CHINENSIS 'HETZII'	HETZ COLUMNAR JUNIPER	6	7/8' B&B
JUN VIR	JUNIPERUS VIRGINIANA 'CUPRESSIFOLIA'	EASTERN REDCEDAR	10	8/10' B&B
TOTAL TREES			40	
LAWN				
EXISTING TREES IN GOOD CONDITION TO REMAIN (BLUE MARKING TAPE)				
EXISTING TREES IN FAIR CONDITION TO BE DETERMINED, TREES SHOULD BE VIEWED BY ARBORIST TO DETERMINE HEALTH AND VALUE (YELLOW MARKING TAPE)				
EXISTING TREES IN POOR CONDITION TO BE REMOVED (ORANGE AND WHITE STRIPED MARKING TAPE)				

#### GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND UTILITIES AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES BY NOTIFYING DIG-SAFE AT 1-800-322-4844 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL CONDUCT PRELIMINARY INVESTIGATIONS INCLUDING ALL NECESSARY EXCAVATION TO DETERMINE IF THE WORK CAN BE DONE AS SHOWN ON THE PLANS. CHANGES MAY BE MADE AS REQUIRED BY FIELD CONDITIONS AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THE DRAWING. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE OF ALL UNDERGROUND UTILITIES AND FOR PROTECTING ALL LINES DURING CONSTRUCTION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.

#### PLANTING NOTES

- LANDSCAPE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO BECOME COMPLETELY FAMILIAR WITH SITE CONDITIONS.
- NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- CONTRACTOR TO VERIFY ALL UTILITIES ON PROPERTY AND TO PROTECT ALL UTILITIES DURING EXCAVATION.
- IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER OF PLANTS SHOWN IN THE PLANT LIST, THE NUMBER OF PLANTS SHOWN ON THE LIST WILL TAKE PRECEDENCE.
- ALL CONTAINER MATERIAL TO BE GROWN IN CONTAINER A MINIMUM OF SIX MONTHS.
- ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ACCORDING TO THE AMERICAN ASSOCIATION OF NURSERYMEN.
- CONTRACTOR SHALL REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
- CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM TIME OF PROVISIONAL ACCEPTANCE.
- ALL PROPOSED PLANTS SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS AND THE PLACEMENT SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE THE INSTALLATION.
- ALL DISTURBED AREAS NOT TO BE PAVED OR PLANTED SHALL BE LOAMED AND SEEDED AS SHOWN. SEE SPECIFICATIONS FOR SOIL PREPARATION AND SEED MIX.
- TWO INCH (2") DEEP, FINELY SHREDDED BARK MULCH WILL BE INSTALLED AROUND ALL TREES AND SHRUBS THAT ARE ISOLATED FROM GROUNDCOVER AREAS AND GENERAL SHRUB MASSES.
- ALL PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION. THE LANDSCAPE ARCHITECT WILL TAG ALL TREES AT THE NURSERY AND INSPECT THEM AFTER DELIVERY TO THE SITE. SEE SPECIFICATIONS FOR TAGGING, INSPECTION, AND ACCEPTANCE OF PLANT MATERIAL.
- LANDSCAPE ARCHITECT SHALL CONFIRM PLANT LIST AND APPROVE SUBSTITUTIONS OF PLANT VARIETIES PRIOR TO ORDERING OF MATERIAL.
- SOIL MIX: 1/3 PEAT MOSS, 1/3 SCREENED LOAM, 1/3 DEHYDRATED MANURE.
- THE OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANT SELECTIONS WITH PLANTS OF SIMILAR CHARACTERISTICS IF THE SPECIFIED PLANTS ARE NOT AVAILABLE IN ACCEPTABLE QUANTITIES OR CONDITIONS.



LOCUS MAP

## LONGFIELD PROJECT

1200 HOPE STREET  
BRISTOL, RI

PROJECT NUMBER: 19.029  
DRAWN BY: PR  
CHECKED BY: PR  
SCALE: 1"=20'-0"  
DATE: 11.23.2021

PERMIT PRINT  
NOT FOR  
CONSTRUCTION

## LANDSCAPE PLAN



L1.0



CONSTRUCTION NOTES

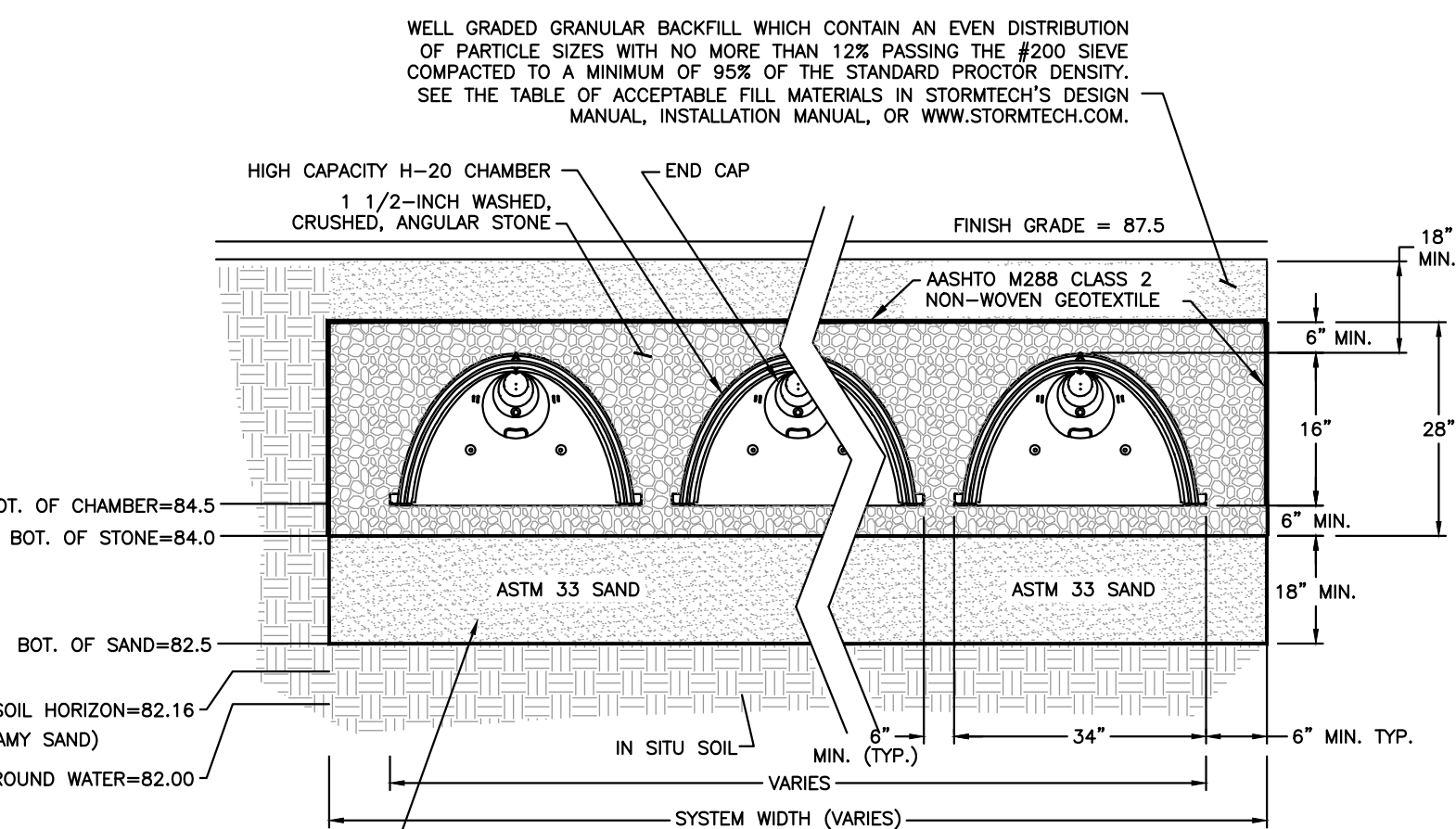
- ALL WORK TO BE DONE WITHIN THE STATE RIGHT OF WAY SHALL CONFORM TO THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2013, WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
- PROPOSED DEVELOPMENT IS SUBJECT TO AN ASSENT APPLICATION APPROVAL & CONDITIONS FROM RIGRCM.
- THE CONTRACTOR SHALL MAKE APPLICATIONS FOR AND PAY ALL FEES FOR PERMITS REQUIRED TO CONSTRUCT THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE PREPARATION NECESSARY FOR THE COMPLETE INSTALLATION OF THE PROJECT FACILITIES DURING CONSTRUCTION.
- ALL CONSTRUCTION METHODS, MATERIALS, AND COMPONENTS ASSOCIATED WITH THE PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL BE IN CONFORMANCE WITH THE APPROVED PLANS, THE REQUIREMENTS OF THE TOWN OF BRISTOL AND OF THE STATE ENVIRONMENTAL CODE, AND ALL LOCAL BOARD OF HEALTH REGULATIONS UNLESS A WAIVER HAS BEEN GRANTED.
- ALL CHANGES TO THE PLAN MUST BE APPROVED BY LAND DEVELOPMENT ENGINEERING & CONSULTING, LLC. AND THE LOCAL BOARD OF HEALTH.
- ALL SYSTEM COMPONENTS, EXCEPT PERFORATED PIPING, SHALL BE WATERTIGHT AS REQUIRED BY THE TOWN OF BRISTOL, DEPARTMENT OF PUBLIC WORKS.
- THE LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES ARE APPROXIMATE ONLY. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR IS CAUTIONED TO CONTACT DIG SAFE (1-888-344-7233) 72 HOURS BEFORE DIGGING.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING AND NEWLY INSTALLED UTILITIES IN GOOD WORKING ORDER AND SHALL PROTECT THEM FROM DAMAGE AT ALL TIMES UNTIL THE WORK IS COMPLETED AND ACCEPTED BY THE OWNER.
- ELECTRIC, GAS, TELEPHONE, AND CABLE TELEVISION UTILITY CONNECTIONS AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY.
- THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.
- A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHENEVER SANITARY SEWERS PASS BELOW WATER MAINS OR DRAIN LINES. OTHERWISE, WATER SERVICE, DRAIN LINES AND SEWER LINES SHALL BE CAREFULLY ENCASED IN CONCRETE FOR A MINIMUM OF TEN (10) FEET FROM THE CROSSING POINT WHERE SEWER LINES PASS ABOVE WATER OR DRAIN LINES, THEY SHALL ALL BE ENCASED IN CONCRETE REGARDLESS OF CLEARANCE.

STORMWATER FACILITY OPERATION AND MAINTENANCE

- 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 ACCEPTED BY THE OWNER.
- ALL STORMWATER FACILITIES SHOULD BE INSPECTED AFTER EVERY MAJOR RAINFALL EVENT FOR THE FIRST 3 MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND CONSTRUCTION.
- THE CONTRACTOR SHALL INSPECT AND CLEAN ALL FACILITIES OF SEDIMENT AND DEBRIS PRIOR TO THE OWNER'S ACCEPTANCE.
- 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.
- THE SIDE SLOPES AND BOTTOMS OF ALL DRAINAGE SWALES SHOULD BE MOWED TO A MINIMUM HEIGHT OF FOUR INCHES AT LEAST TWICE A YEAR. ALL GRASS CLIPPINGS AND ORGANIC MATTER SHOULD BE REMOVED FROM ALL DRAINAGE WAYS AND WETLAND BUFFER ZONES.
- ALL REMOVED SEDIMENTS ARE TO BE PROPERLY DISPOSED AT A LOCATION TO BE APPROVED BY THE BOARD OF HEALTH. TRANSPORTATION AND DISPOSAL OF SEDIMENTS SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- ANY DEFICIENCIES NOTED DURING MAINTENANCE SHALL BE REPORTED TO THE OWNER AND CORRECTED IMMEDIATELY.
- FOLLOW MANDATE PROGRAM AND SCHEDULE FOR EXISTING STORMWATER MANAGEMENT SYSTEM AS APPROVED BY THE TOWN OF BRISTOL AND THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.

NOTES:

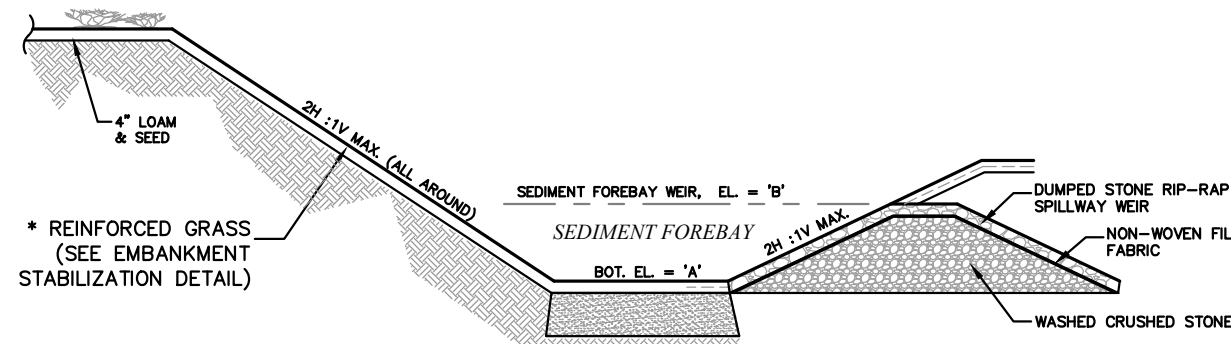
- ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
- MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL WHEN REQUIRED. SEE ASTM D2321.
- FILTER FABRIC:** 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.
- FOUNDATIONS:** 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 A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO THE ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
- 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.
- MINIMUM COVER:** MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



UNDERGROUND RECHARGE SYSTEM

NOT TO SCALE

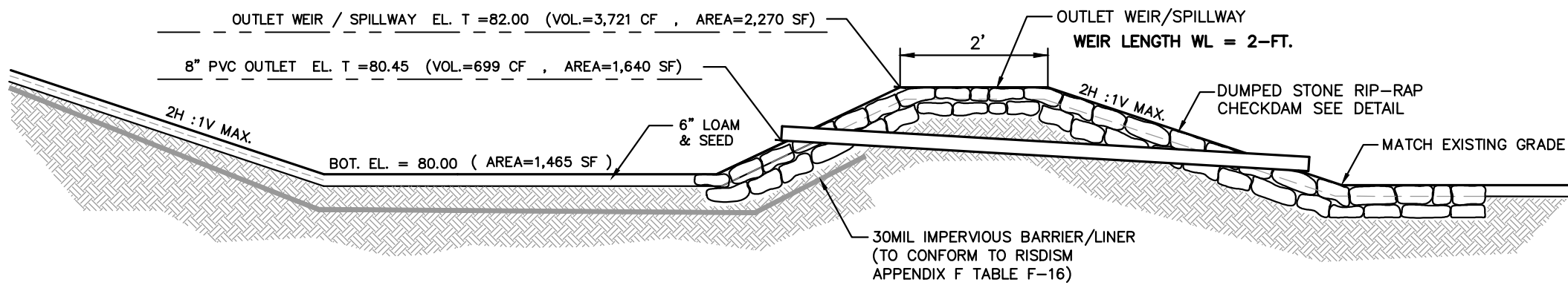
UNDERGROUND RECHARGE SYSTEM 1&2					
UNDERGROUND SYSTEM	EXISTING ELEV.	SHGW ELEV.	BOTTOM OF CHAMBER	NUMBER OF CHAMBERS WIDE	NUMBER OF CHAMBERS LONG
1	84.0	82.0	84.5	6	8
				TOTAL NUMBER OF CHAMBERS	
				48	



FOREBAY DETAIL

NOT TO SCALE

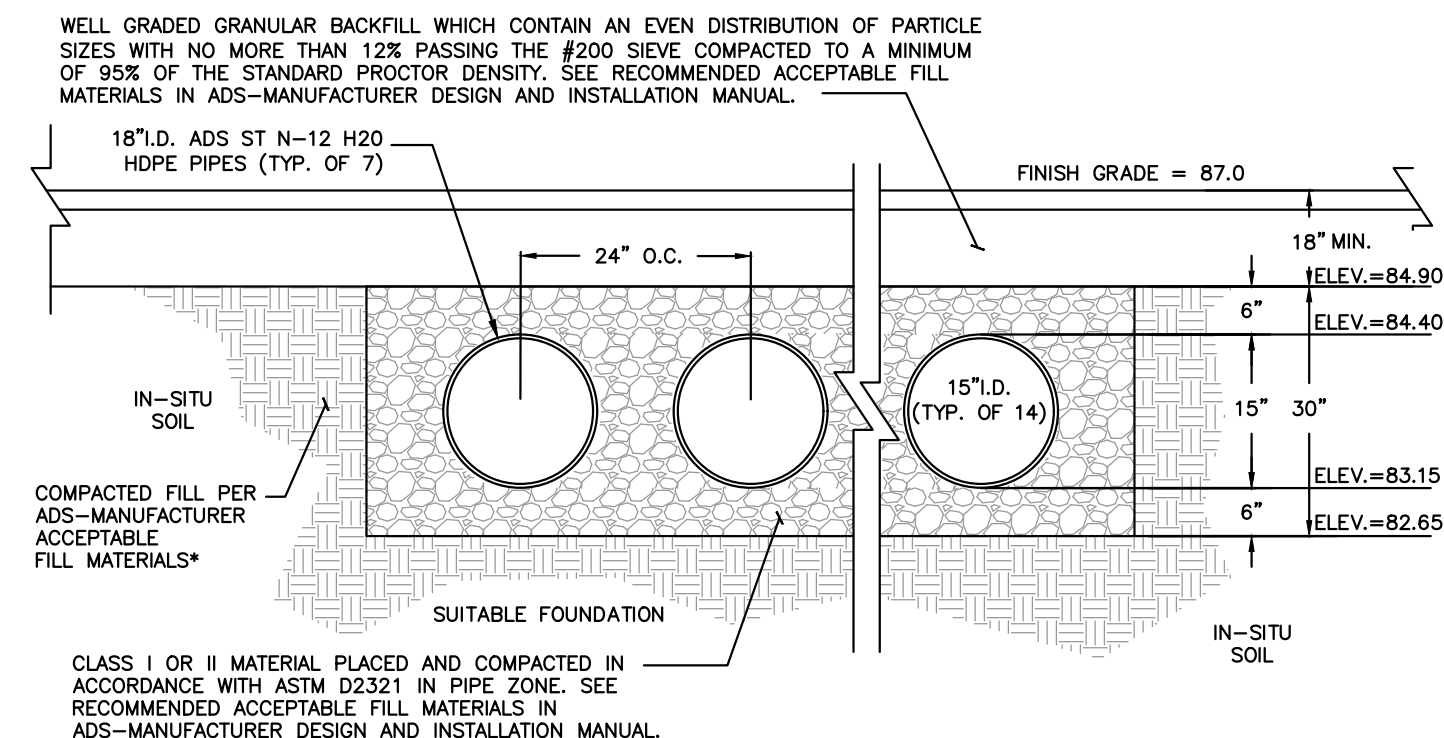
ELEVATION TABLE					
FOREBAY	TH-#	EXISTING ELEV.	SHGW ELEV.	BOTTOM OF BASIN 'A'	OUTLET WEIR ELEV. 'B'
1	TH-4	87.5	85.5	85.0	86.0
2	TH-2	82.0	81.0	83.0	83.8
3	TH-1	82.3	80.3	80.5	82.0



DRY EXTENDED DETENTION BASIN

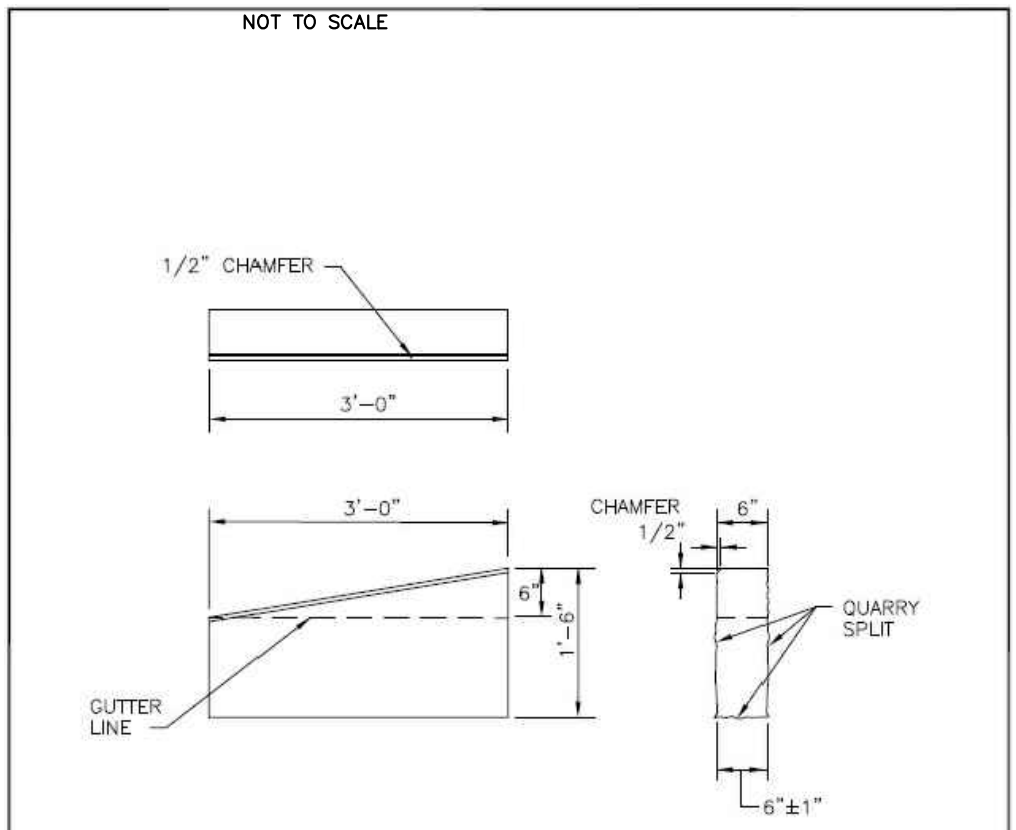
NOT TO SCALE

- NOTES:
- REFER TO PROJECT DRAINAGE REPORT HYDROCAD® CALCULATIONS FOR ADDITIONAL INFORMATION.



SECTION A-A

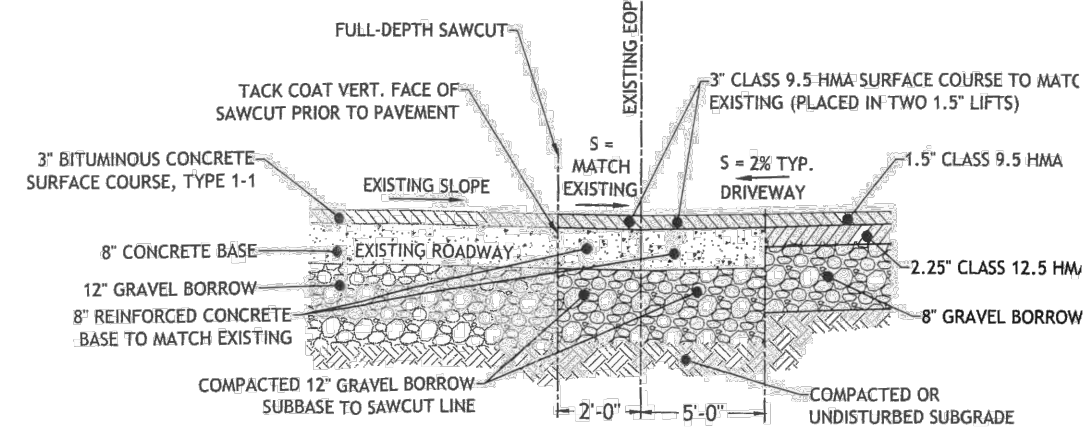
PLASTIC UNDERGROUND STORAGE SYSTEM  
ADS N-12 SOIL TIGHT (ST) PIPE



- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION 908 OF THE R.I. STANDARD SPECIFICATIONS.
  - TOP SURFACE TO BE DRESSED BY SAW. REMAINDER MAY BE QUARRY SPLIT.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION					
3'-0" GRANITE TRANSITION CURB					
NO.	BY	DATE			
1	MJP	Mar. 2008			
2	MJP	Mar. 2010			
3	MJP	Mar. 2012			
			JUNE 15, 1998		
			R.I. STANDARD 7.3.1		

- NOTES:
- 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 AMENDED BY REVISION.
  - 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.
  - 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 TRAFFIC CONTROL DEVICES (MUTCD).
  - CONTRACTOR TO PROVIDE TEMPORARY EROSION CONTROLS TO PROTECT THE STATE ROW DURING THE DEMOLITION OF EXISTING DRIVEWAY AND CONSTRUCTION OF NEW DRIVEWAY.

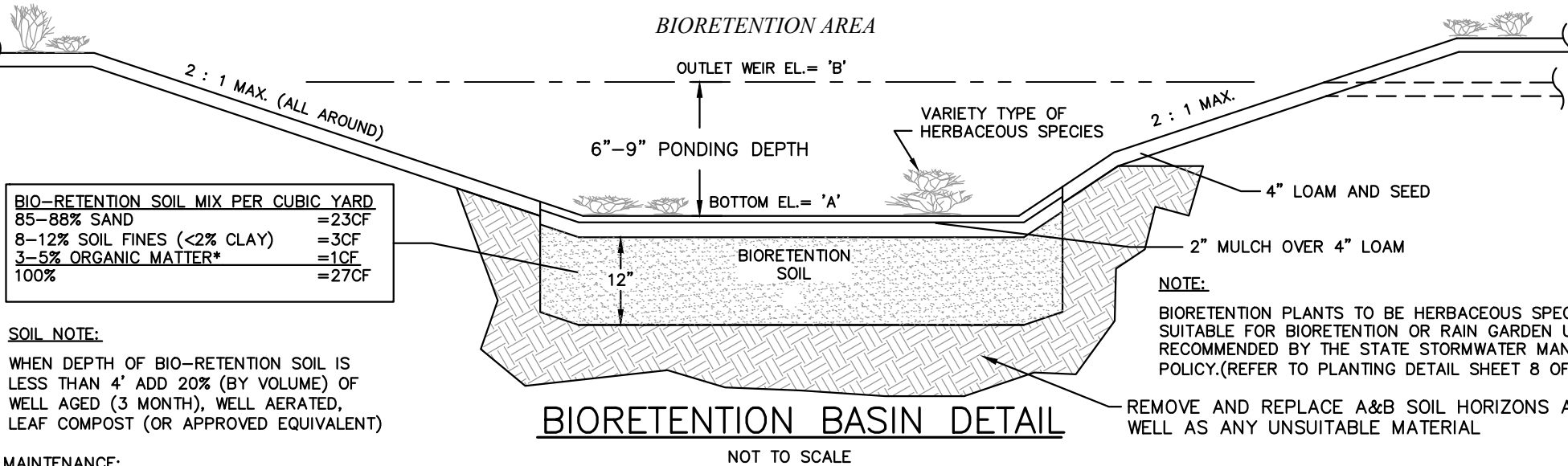


- NOTES:
- MINIMUM COMPACTION FOR GRAVEL SUB-BASE OR SUBGRADE: 95% MODIFIED PROCTOR.
  - NO WORK SHOULD BE DONE OUTSIDE OF THE PROJECT SITE. PAVEMENT SHOULD MATCH WHERE NOTED ON THE SITE PLANS.
  - WHEN MATCHING EXISTING PAVEMENT, THE LONGITUDINAL CUT AND MATCH SECTION SHOULD NOT EXCEED PAST THE SHOULDER STRIPING.

ROW SAWCUT AND MATCH DETAIL

NOT TO SCALE

GROUND WATER ELEVATION			
TH-#	EXISTING ELEV.	SHGW ELEV.	BOTTOM OF BASIN
TH-2	81.0	80.0	80.00



BIO-RETENTION SOIL MIX PER CUBIC YARD			
85-85% SAND	=23CF		
8-12% SOIL FINES (<2% CLAY)	=3CF		
3-5% ORGANIC MATTER*	=1CF		
100%	=27CF		

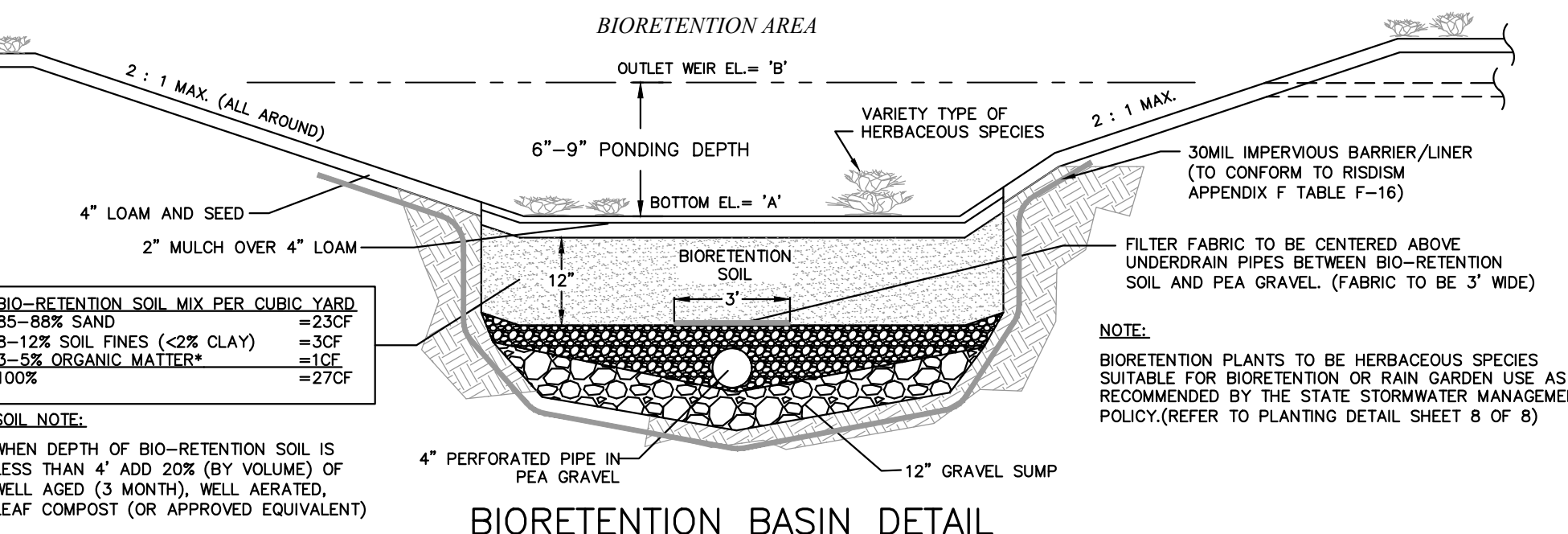
SOIL NOTE:

WHEN DEPTH OF BIO-RETENTION SOIL IS LESS THAN 4" ADD 20% (BY VOLUME) OF WELL AGED (3 MONTH), WELL AERATED, LEAF COMPOST (OR APPROVED EQUIVALENT)

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 AND PERMITTED LOCATION.

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



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BIORETENTION BASIN FILTER SIZING CALCULATIONS

BIO-RETENTION FILTER BED SIZING CALCULATIONS:  
(SECTION 8.23.D.6 OF RISDSM)

$A_f = (WQv)(dt) / [(k)(h_f + d)(t_f)]$

$A_f$  = MIN SURFACE AREA OF FILTER BED (SF)  
 $dt$  = FILTER BED DEPTH  
 $k$  = COEFFICIENT OF PERMEABILITY (1.0 FOR BIO-RETENTION)  
 $h_f$  = AVERAGE HEIGHT OF WATER ABOVE SURFACE OF PRACTICE  
 $t_f$  = DESIGN FILTER BED DRAIN TIME (2-DAYS MAX)  
 $A_f = (WQv)(t_f) / [(1)(h_f + 1)(2)]$

SIZING TABLE						
BIO-RETENTION BASIN	WQv	df	k	hf	tf	PROVIDED FILTER BED SIZE
1	331	1'	1'	0.75'	2	95 SF
2	805	1'	1'	0.75'	2	230 SF
3	10	1'	1'	0.5'	2	3 SF
4	187	1'	1'	0.75'	2	54 SF

MEMBER

DATE

CONSTRUCTION DETAILS

SCALE: 1" = 20'

SHEET NO.

9 OF 9

PLANNING BOARD SIGNATURES

DATE: MARCH 6, 2023

DRAWN BY: SJE  
COMPS. BY: SJE  
CHECK BY: RLM/MER

PROJECT NO. 22024

ISSUED FOR:

PERMITTING



MAJOR LAND DEVELOPMENT  
FINAL PLAN APPLICATION

1200 & 1202 HOPE STREET  
BRISTOL, RHODE ISLAND  
ASSESSORS MAP 103, PARCEL 2 & 14

PREPARED FOR  
PREFERRED REALTY SERVICES, LLC

DRAWING TITLE:

SHEET NO.