

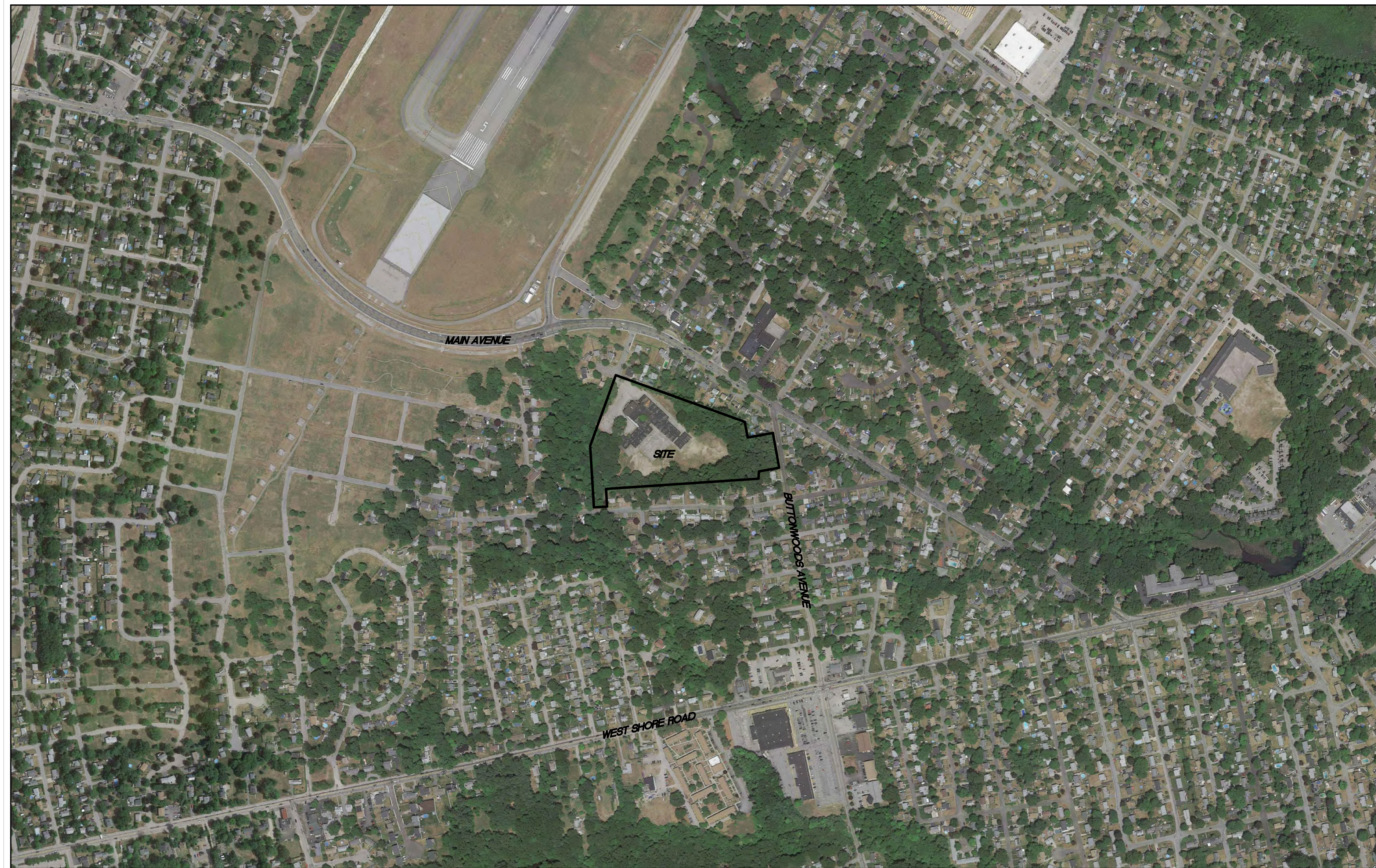
PRELIMINARY PLAN

40 WICKES WAY

ASSESSOR'S PLAT 347, LOT 476

50 CHILD LANE

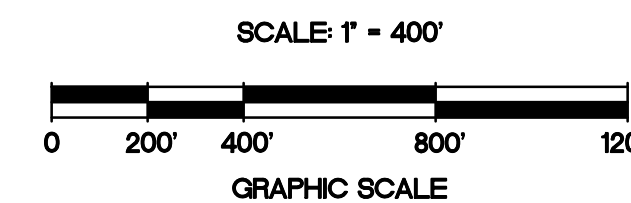
WARWICK, RHODE ISLAND



AERIAL PHOTOGRAPH

REFERENCES: 1. AERIAL PHOTOGRAPH PROVIDED BY GOOGLE PRO
IMAGE DATE: JUNE 2022

PREPARED FOR:
40 WICKES WAY, LLC
JULY 2023



NO.	DATE	REVISION
1	9/5/23	RIDEM COMMENTS
2	10/24/23	RIDEM COMMENTS
3	11/10/23	RIDEM COMMENTS
4	12/23/23	SEWER TIE-IN



VICINITY MAP
NOT TO SCALE

TABLE OF CONTENTS:

SHEET	DESCRIPTIONS	REVISED
1	COVER SHEET	12/27/23
2	EXISTING CONDITIONS / SITE PREPARATION PLAN	10/24/23
3	SUBDIVISION PLAN	12/27/23
4	SITE LAYOUT & UTILITY PLAN	12/27/23
5	SITE GRADING & DRAINAGE PLAN	9/5/23
6	PLAN & PROFILE PLAN - ROAD A	
7	PLAN & PROFILE PLAN - ROAD B	12/27/23
8	NOTES & DETAILS	11/10/23
9	DETAILS - 1	12/27/23
10	DETAILS - 2	10/24/23

PREPARED BY:

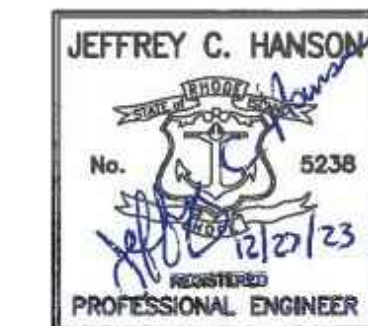
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CIVIL ENGINEERING LAND PLANNING
250 Centerville Road, Building E-12, Warwick, Rhode Island 02886
790 Aquidneck Avenue, Rear Entrance, Middletown, Rhode Island 02842
p. (401) 921-3344
f. (401) 921-3303
www.MillstoneEng.com

OWNER:

40 WICKES WAY, LLC
144 METRO CENTER BLVD., UNIT F
WARWICK, RI 02886

APPLICANT:

40 WICKES WAY, LLC
144 METRO CENTER BLVD., UNIT F
WARWICK, RI 02886



Drawn By: MJV

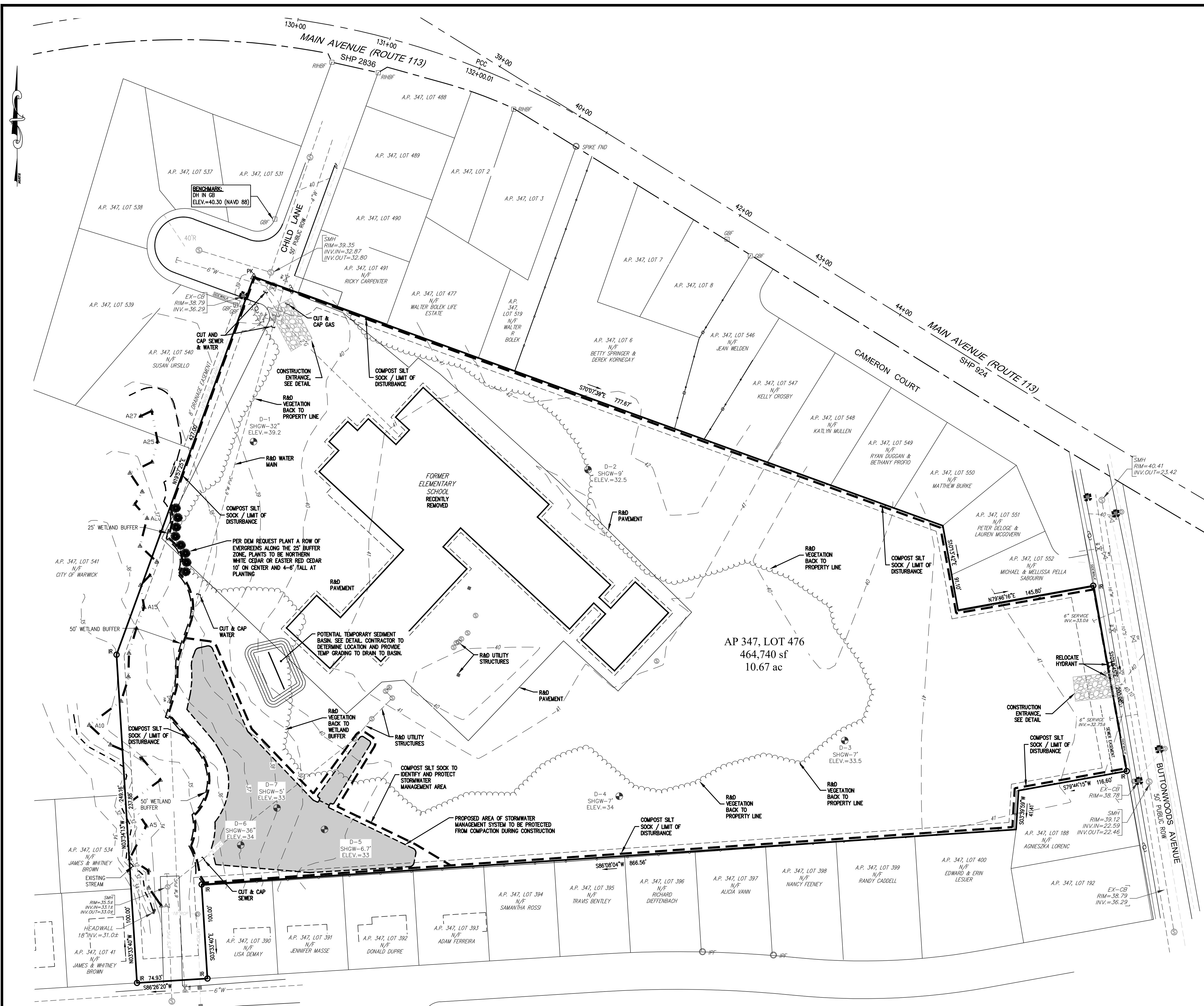
Checked By: JCH

Sheet

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FILE NO.: 21.345.691



LEGEND:

- SUBJECT PROPERTY LINE
- STATE HIGHWAY BASE LINE
- EXISTING STATE HIGHWAY LINE
- ABUTTING PROPERTY LINE
- EXISTING FENCE (CHAIN LINK)
- EXISTING FENCE (WOODEN)
- EXISTING EDGE OF VEGETATION
- RHODE ISLAND HIGHWAY BOUND FOUND
- RHBF
- IRF
- DHF
- GBF
- IR
- △ PK
- FW FLAG / EDGE
- FW BUFFER LINE
- PROPOSED LOD (LIMIT OF DISTURBANCE)

ZONING DATA:

AP 347, LOT 476
CONDITION: VACANT ELEMENTARY SCHOOL (RAZED)

DIMENSIONAL REQUIREMENTS:

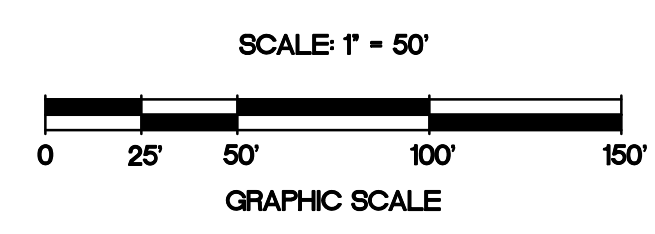
A-7	REQUIRED
MINIMUM LOT SIZE	7,000 S.F.
LOT WIDTH	70'
SETBACKS - PRINCIPAL BUILDING:	
FRONT YARD	25'
REAR YARD	20'
SIDE YARD	8'
MAX. STRUCTURE HEIGHT	35'

- REFERENCE:**
- CITY OF WARWICK ASSESSOR'S PLAT 347
 - PROPERTY LINE AND EXISTING CONDITIONS TAKEN FROM THAT PLAN ENTITLED: "PLAN OF LAND ASSESSOR'S PLAT 347, LOT 476 CHILD LANE / BUTTONWOODS AVENUE / VERA STREET WARWICK, RHODE ISLAND PREPARED FOR LINK COMMERCIAL PROPERTIES PREPARED BY MILLSTONE ENGINEERING, P.C." DATED 7-14-2022
 - WETLANDS FLAGGED BY NATURAL RESOURCE SERVICES, INC. ON JUNE 14, 2022
 - THOSE AS-BUILT PLANS ENTITLED: "CITY OF WARWICK, RHODE ISLAND WARWICK SEWER AUTHORITY MAIN AVENUE AND STRAWBERRY FIELD ROAD SEWER PROJECT" SHEETS 39, 41 & 47 OF 70, LAST REVISED JANUARY 2006.

FLOOD NOTE:
 THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN BASED UPON INFORMATION PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR KENT COUNTY COMMUNITY PANEL NUMBER 4400300133H, MAP REVISED SEPTEMBER 18, 2013.

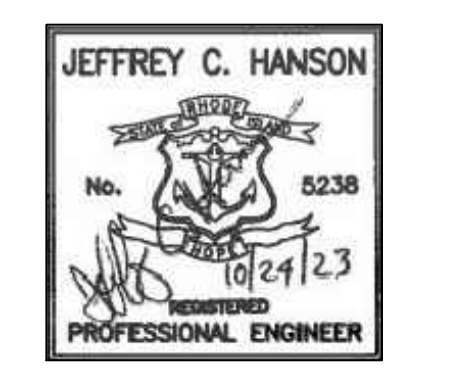
PROJECT STATISTICS

PROPOSED BUILDABLE LOTS:	39
ROADWAY LENGTHS:	ROAD A: 1,135 FEET ROAD B: 830 FEET



EXISTING CONDITIONS / SITE PREPARATION PLAN
 SCALE: 1"=50'

NO.	DATE	REVISION
2	10/24/23	RIDEM COMMENTS



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EXISTING CONDITIONS / SITE PREPARATION PLAN
40 WICKES WAY

A.P. 347, LOT 476
 50 CHILD LANE
 WARWICK, RI

PREPARED FOR:
40 WICKES WAY, LLC

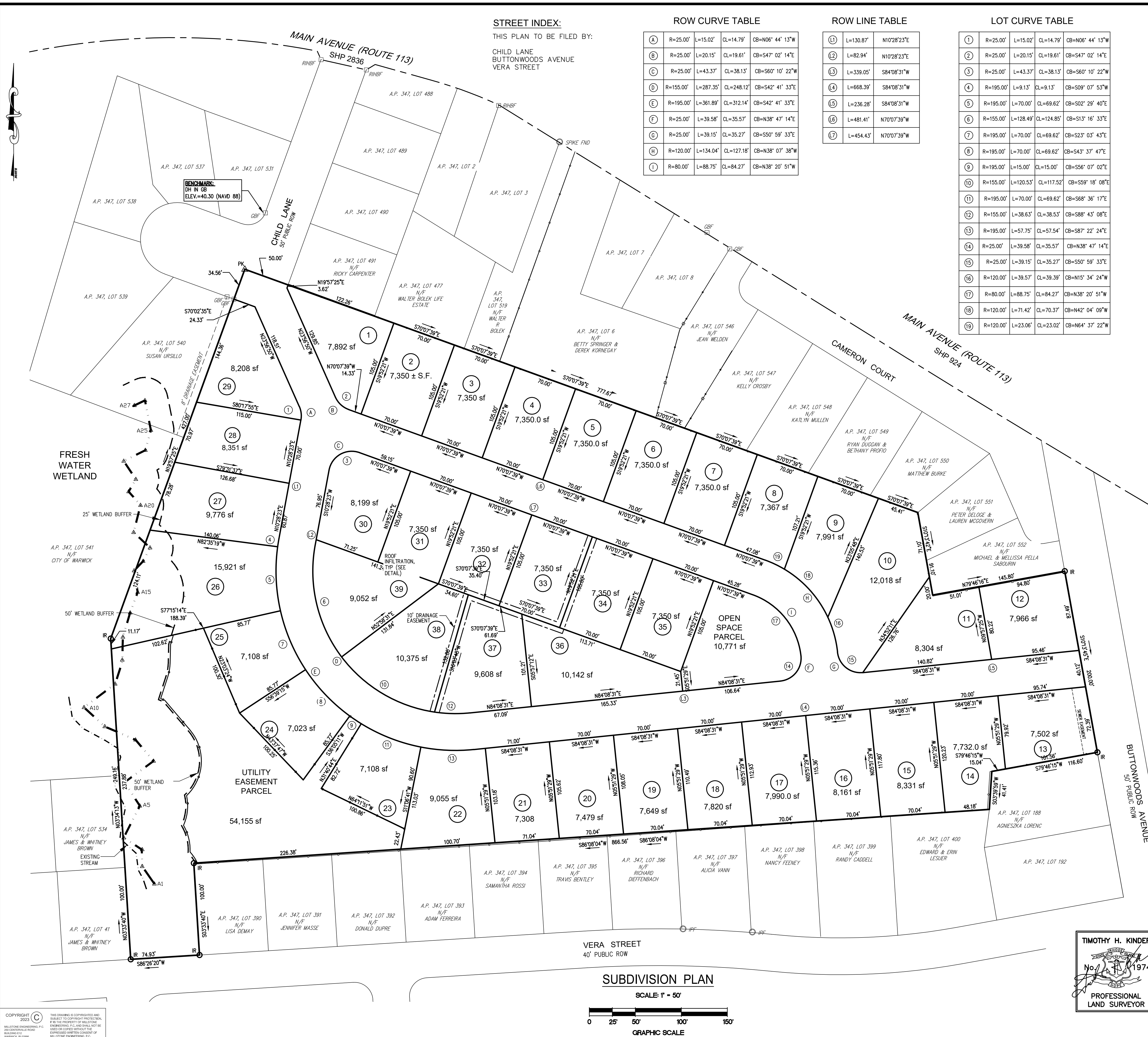
SCALE: 1"=50'
 JULY 2023

Drawn By: MJV
 Checked By: JCH
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FILE NO.: 21.345.691

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STREET INDEX:

THIS PLAN TO BE FILED BY:
CHILD LANE
BUTTONWOODS AVENUE
VERA STREET

ROW CURVE TABLE

(A)	R=25.00'	L=15.02'	CL=14.79'	CB=N06° 44' 13"W
(B)	R=25.00'	L=20.15'	CL=19.61'	CB=S47° 02' 14"E
(C)	R=25.00'	L=43.37'	CL=38.13'	CB=S60° 10' 22"W
(D)	R=155.00'	L=287.35'	CL=248.12'	CB=S42° 41' 33"E
(E)	R=195.00'	L=361.89'	CL=312.14'	CB=S42° 41' 33"E
(F)	R=25.00'	L=39.58'	CL=35.57'	CB=N38° 47' 14"E
(G)	R=25.00'	L=39.15'	CL=35.27'	CB=S50° 59' 33"E
(H)	R=120.00'	L=134.04'	CL=127.18'	CB=N38° 07' 38"W
(I)	R=80.00'	L=88.75'	CL=84.27'	CB=N38° 20' 51"W

ROW LINE TABLE

(1)	L=130.87'	N10°28'23"E
(2)	L=82.94'	N10°28'23"E
(3)	L=339.05'	S84°08'31"W
(4)	L=668.39'	S84°08'31"W
(5)	L=236.28'	S84°08'31"W
(6)	L=481.41'	N70°07'39"W
(7)	L=454.43'	N70°07'39"W

LOT CURVE TABLE

(1)	R=25.00'	L=15.02'	CL=14.79'	CB=N06° 44' 13"W
(2)	R=25.00'	L=20.15'	CL=19.61'	CB=S47° 02' 14"E
(3)	R=25.00'	L=43.37'	CL=38.13'	CB=S60° 10' 22"W
(4)	R=195.00'	L=9.13'	CL=9.13'	CB=S09° 07' 53"W
(5)	R=195.00'	L=70.00'	CL=69.62'	CB=S02° 29' 40"E
(6)	R=155.00'	L=128.49'	CL=124.85'	CB=S13° 16' 33"E
(7)	R=195.00'	L=70.00'	CL=69.62'	CB=S23° 03' 43"E
(8)	R=195.00'	L=70.00'	CL=69.62'	CB=S43° 37' 47"E
(9)	R=195.00'	L=15.00'	CL=15.00'	CB=S56° 07' 02"E
(10)	R=155.00'	L=120.53'	CL=117.52'	CB=S59° 18' 08"E
(11)	R=195.00'	L=70.00'	CL=69.62'	CB=S68° 36' 17"E
(12)	R=155.00'	L=38.63'	CL=38.53'	CB=S88° 43' 08"E
(13)	R=195.00'	L=57.75'	CL=57.54'	CB=S87° 22' 24"E
(14)	R=25.00'	L=39.58'	CL=35.57'	CB=N38° 47' 14"E
(15)	R=25.00'	L=39.15'	CL=35.27'	CB=S50° 59' 33"E
(16)	R=120.00'	L=39.57'	CL=39.39'	CB=N15° 34' 24"W
(17)	R=80.00'	L=88.75'	CL=84.27'	CB=N38° 20' 51"W
(18)	R=120.00'	L=71.42'	CL=70.37'	CB=N42° 04' 09"W
(19)	R=120.00'	L=23.06'	CL=23.02'	CB=N64° 37' 22"W

LEGEND:

- SUBJECT PROPERTY LINE
- STATE HIGHWAY BASE LINE
- EXISTING STATE HIGHWAY LINE
- ABUTTING PROPERTY LINE
- EXISTING FENCE (CHAIN LINK)
- EXISTING FENCE (WOODEN)
- EXISTING EDGE OF VEGETATION
- RHODE ISLAND HIGHWAY BOUND FOUND
- RHIBF
- IRF
- DHF
- GBF
- IR
- PK
- FWM FLAG / EDGE
- FWM BUFFER LINE
- PROPOSED LOD (LIMIT OF DISTURBANCE)

ZONING DATA:

AP 347, LOT 476
CONDITION: VACANT ELEMENTARY SCHOOL (RAZED)

DIMENSIONAL REQUIREMENTS:

A-7	REQUIRED
MINIMUM LOT SIZE	7,000 S.F.
LOT WIDTH	70'
SETBACKS - PRINCIPAL BUILDING:	
FRONT YARD	25'
REAR YARD	20'
SIDE YARD	8'
MAX. STRUCTURE HEIGHT	35'

REFERENCE:

- CITY OF WARWICK ASSESSOR'S PLAT 347
- PROPERTY LINE INFORMATION TAKEN FROM THAT PLAN ENTITLED "PLAN OF LAND ASSESSOR'S PLAT 347, LOT 476 CHILD LANE / BUTTONWOODS AVENUE / VERA STREET WARWICK, RHODE ISLAND PREPARED FOR LINK COMMERCIAL PROPERTIES PREPARED BY MILLSTONE ENGINEERING, P.C." DATED 7-14-2022
- WETLANDS FLAGGED BY NATURAL RESOURCE SERVICES, INC. ON JUNE 14, 2022

FLOOD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN BASED UPON INFORMATION PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR KENT COUNTY COMMUNITY PANEL NUMBER 44003C0133H, MAP REVISED SEPTEMBER 18, 2013.

PROJECT STATISTICS

TOTAL LOT AREA:	464,740 sf ~ 10.67 ac
PROPOSED BUILDABLE LOTS:	39
ROADWAY LENGTHS:	ROAD A: 1,135 ft ROAD B: 830 ft
PROPOSED ROW AREA:	77,612 sf
PROPOSED OPA:	10,771 sf
PROPOSED DRAINAGE / UTILITY AREA:	54,155 sf
TOTAL PROPOSED LOTS AREA:	322,202 sf
TOTAL AREA:	464,740 sf ~ 10.67 ac

CERTIFICATION:

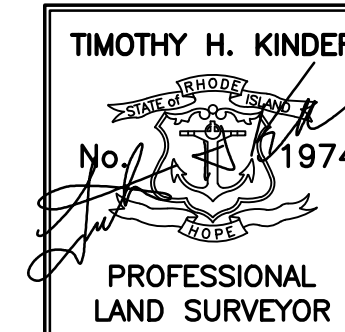
THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON APRIL 28, 2018, AS FOLLOWS:

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 PROPOSE A MAJOR RESIDENTIAL SUBDIVISION.

BY: 12/27/2023
TIMOTHY H. KINDER, PLS LICENSE NO. 1974 COA. NO. A-534 DATE



SUBDIVISION PLAN

SCALE: 1" = 50'



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TEL: (401) 921-3303

NO.	DATE	REVISION
4	12/27/23	SEWER EASEMENT

AP 347, LOT 476	
CONDITION: VACANT ELEMENTARY SCHOOL (RAZED)	

A-7	REQUIRED
MINIMUM LOT SIZE	7,000 S.F.
LOT WIDTH	70'
SETBACKS - PRINCIPAL BUILDING:	
FRONT YARD	25'
REAR YARD	20'
SIDE YARD	8'
MAX. STRUCTURE HEIGHT	35'

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SUBDIVISION PLAN

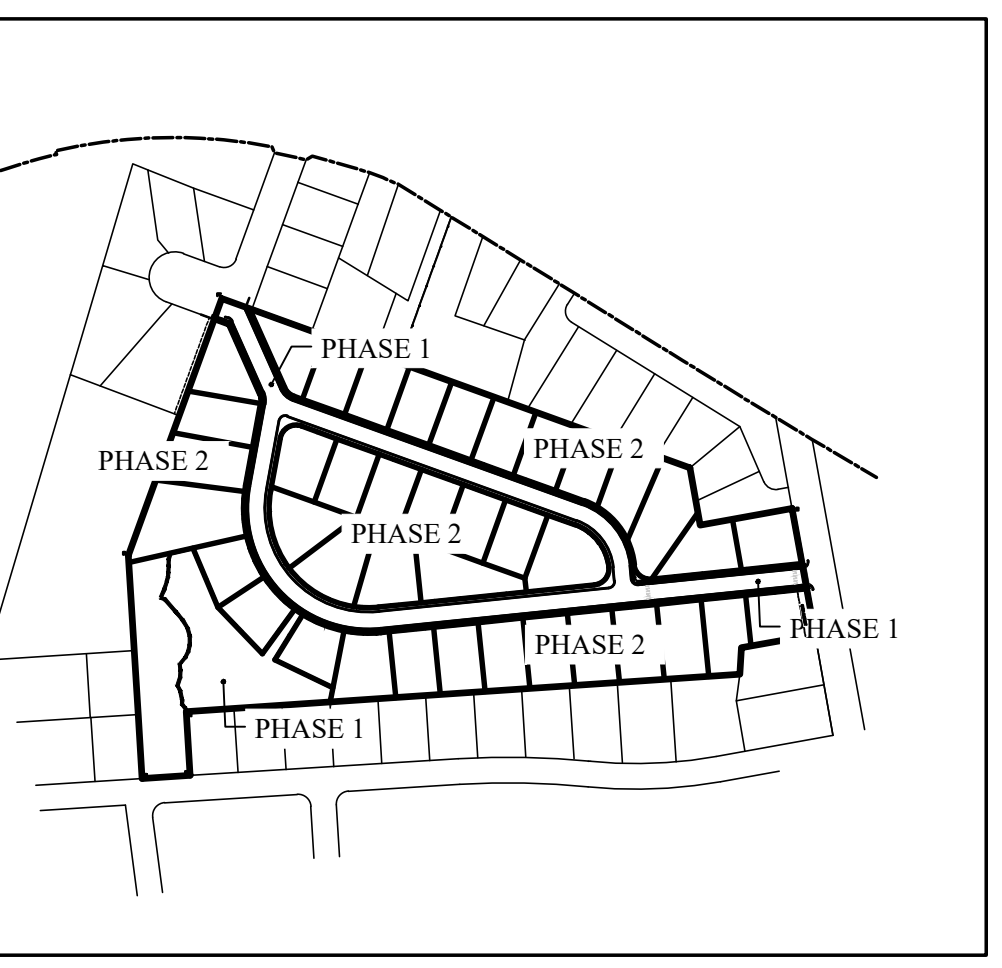
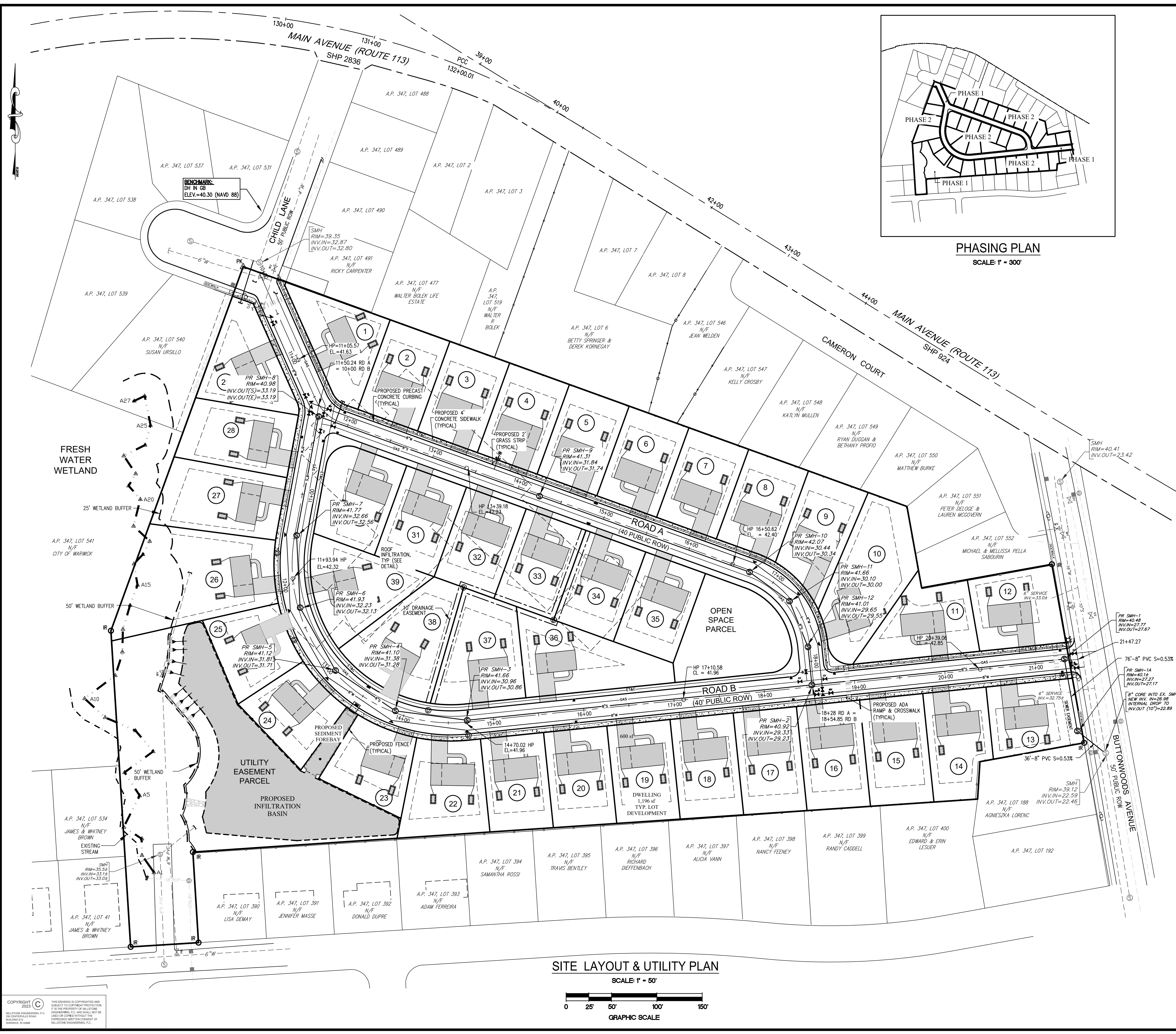
40 WICKES WAY

A.P. 347, LOT 476
50 CHILD LANE
WARWICK, RI

PREPARED FOR:
40 WICKES WAY, LLC

SCALE: 1"=50'
JULY 2023

Drawn By: MJV
Checked By: THK
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of 10
FILE NO.: 21.345.691



PHASING PLAN
SCALE: 1" = 300'

LEGEND:

- SUBJECT PROPERTY LINE
- STATE HIGHWAY BASE LINE
- EXISTING STATE HIGHWAY LINE
- ABUTTING PROPERTY LINE
- EXISTING FENCE (CHAIN LINK)
- EXISTING FENCE (WOODEN)
- EXISTING EDGE OF VEGETATION
- RHODE ISLAND HIGHWAY BOUND FOUND
- R/WBF
- IRF
- DHF
- GBF
- IR
- △ PK
- AI
- FWW FLAG / EDGE
- FWW BUFFER LINE

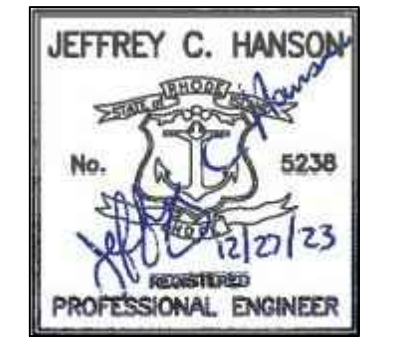
ZONING DATA:

AP 347, LOT 476
CONDITION: VACANT ELEMENTARY SCHOOL (RAZED)

DIMENSIONAL REQUIREMENTS:

A-7	REQUIRED
MINIMUM LOT SIZE	7,000 S.F.
LOT WIDTH	70'
SETBACKS - PRINCIPAL BUILDING:	
FRONT YARD	25'
REAR YARD	20'
SIDE YARD	8'
MAX. STRUCTURE HEIGHT	35'

NO.	DATE	REVISION
2	10/24/23	RIDEM COMMENTS
4	12/19/23	SEWER TIE-IN



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SITE LAYOUT & UTILITY PLAN

40 WICKES WAY

A.P. 347, LOT 476
 50 CHILD LANE
 WARWICK, RI

PROPOSED FOR:
40 WICKES WAY, LLC

SCALE: 1"=50'
 JULY 2023

LANDSCAPE NOTE:
 STREET TREES SHALL BE PLANTED IN FRONT YARDS AREAS ALONG THE PROPOSED RIGHT-OF-WAY AT A MAXIMUM SPACING OF 50 FT ON-CENTER, AS MEASURED ON THE PROPERTY LINE. A MINIMUM OF THREE (3) TREE SPECIES SHALL BE UTILIZED. TREES SHALL BE 8"-10" STANDARD MINIMUM SIZE AT INSTALLATION. SUGGESTED TREE VARIETIES INCLUDE:
 RED MAPLE (ACER RUBRUM)
 SUGAR MAPLE (ACER SACCHARUM)
 TUPELO (NYSSA SYLVATICA)

FLOOD NOTE:
 THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN BASED UPON INFORMATION PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR KENT COUNTY COMMUNITY PANEL NUMBER 44003C0133H, MAP REVISED SEPTEMBER 18, 2013.

PROJECT STATISTICS

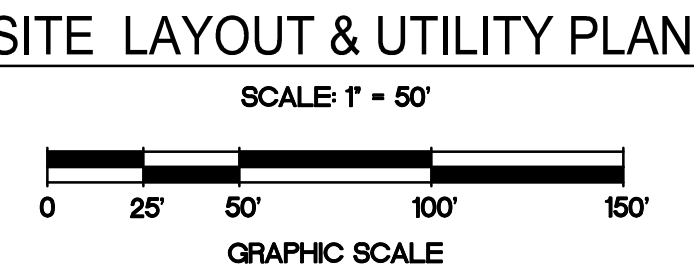
PROPOSED BUILDABLE LOTS:	39
ROADWAY LENGTHS:	ROAD A: 1,135 FEET ROAD B: 830 FEET

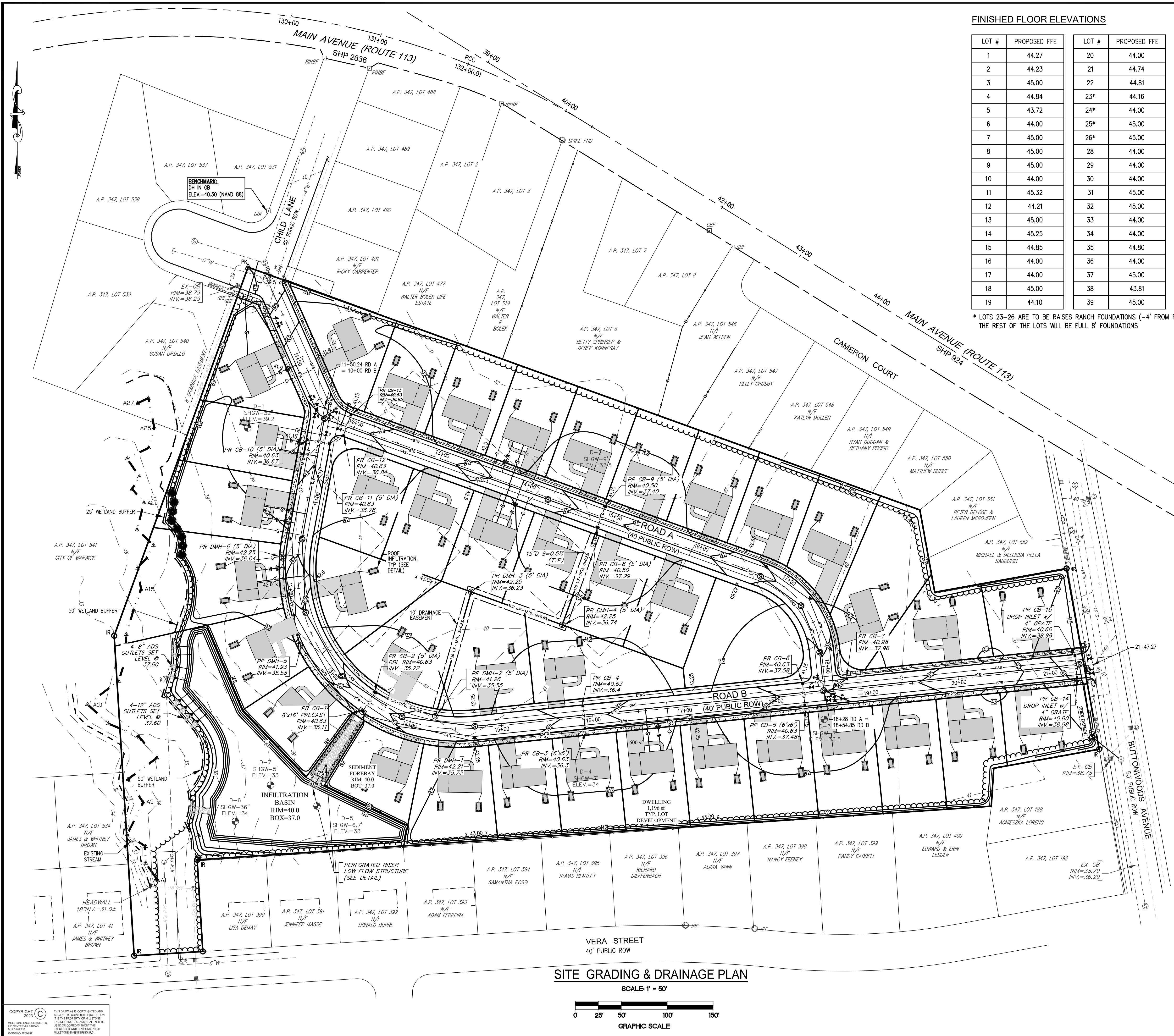
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FILE NO.: 21.345.691

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FINISHED FLOOR ELEVATIONS

LOT #	PROPOSED FFE	LOT #	PROPOSED FFE
1	44.27	20	44.00
2	44.23	21	44.74
3	45.00	22	44.81
4	44.84	23*	44.16
5	43.72	24*	44.00
6	44.00	25*	45.00
7	45.00	26*	45.00
8	45.00	28	44.00
9	45.00	29	44.00
10	44.00	30	44.00
11	45.32	31	45.00
12	44.21	32	45.00
13	45.00	33	44.00
14	45.25	34	44.00
15	44.85	35	44.80
16	44.00	36	44.00
17	44.00	37	45.00
18	45.00	38	43.81
19	44.10	39	45.00

* LOTS 23-26 ARE TO BE RAISES RANCH FOUNDATIONS (-4' FROM FF) THE REST OF THE LOTS WILL BE FULL 8' FOUNDATIONS

LEGEND:

- SUBJECT PROPERTY LINE
- - - STATE HIGHWAY BASE LINE
- - - EXISTING STATE HIGHWAY LINE
- - - ABUTTING PROPERTY LINE
- - - EXISTING FENCE (CHAIN LINK)
- - - EXISTING FENCE (WOODEN)
- - - EXISTING EDGE OF VEGETATION
- RHBF RHODE ISLAND HIGHWAY BOUND FOUND
- IRF IRON ROD FOUND
- DHF DRILL HOLE FOUND
- GBF GRANITE BOUND FOUND
- IR IRON ROD TO BE SET
- △ PK SURVEY NAIL TO BE SET
- - - FFW FLAG / EDGE
- - - FFW BUFFER LINE

ZONING DATA:

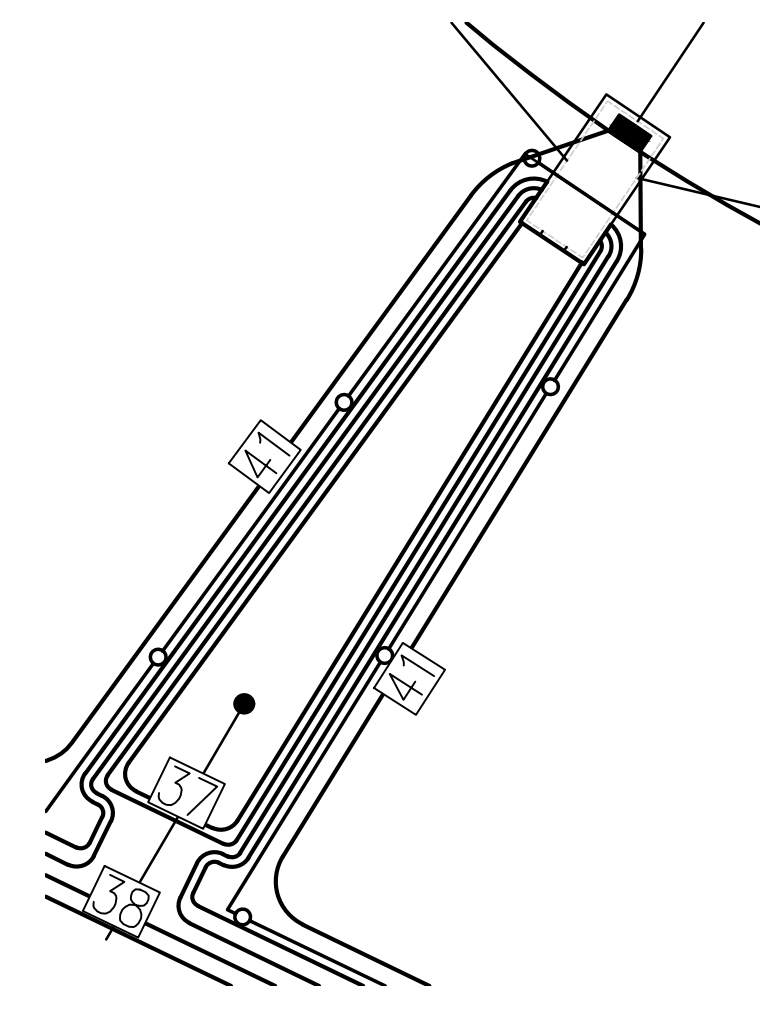
AP 347, LOT 476
 CONDITION: VACANT ELEMENTARY SCHOOL (RAZED)

DIMENSIONAL REQUIREMENTS:

A-7	REQUIRED
MINIMUM LOT SIZE	7,000 S.F.
LOT WIDTH	70'
SETBACKS - PRINCIPAL BUILDING:	
FRONT YARD	25'
REAR YARD	20'
SIDE YARD	8'
MAX. STRUCTURE HEIGHT	35'

FLOOD NOTE:
 THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN BASED UPON INFORMATION PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR KENT COUNTY COMMUNITY PANEL NUMBER 44003C0133H, MAP REVISED SEPTEMBER 18, 2013.

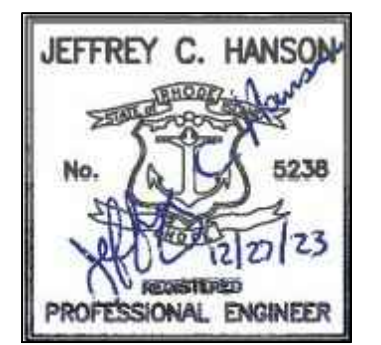
DEVELOPMENT NOTE:
 EACH LOT WILL BE DEVELOPED WITH A HOUSE, DRIVEWAY AND UTILITY CONNECTIONS WITH AN AVERAGE DRIVEWAY AREA OF 600 SQUARE FEET AND AN AVERAGE DWELLING AREA OF 1,196 SQUARE FEET.



SEDIMENT FOREBAY
 SCALE: 1" = 20'

SITE GRADING & DRAINAGE PLAN
 SCALE: 1" = 50'

NO.	DATE	REVISION
1.	9/5/2023	RIDEM REVIEW COMMENTS
2.	10/12/23	RIDEM COMMENTS
3.	11/10/23	RIDEM COMMENTS
4.	12/17/23	SEWER EASEMENT



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SITE GRADING & DRAINAGE PLAN

40 WICKES WAY

A.P. 347, LOT 476
 50 CHILD LANE
 WARWICK, RI

PREPARED FOR:
40 WICKES WAY, LLC

SCALE: 1"=50'
 JULY 2023

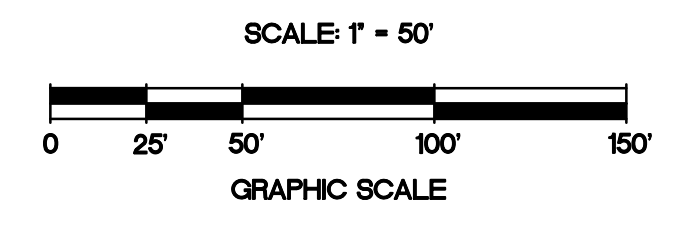
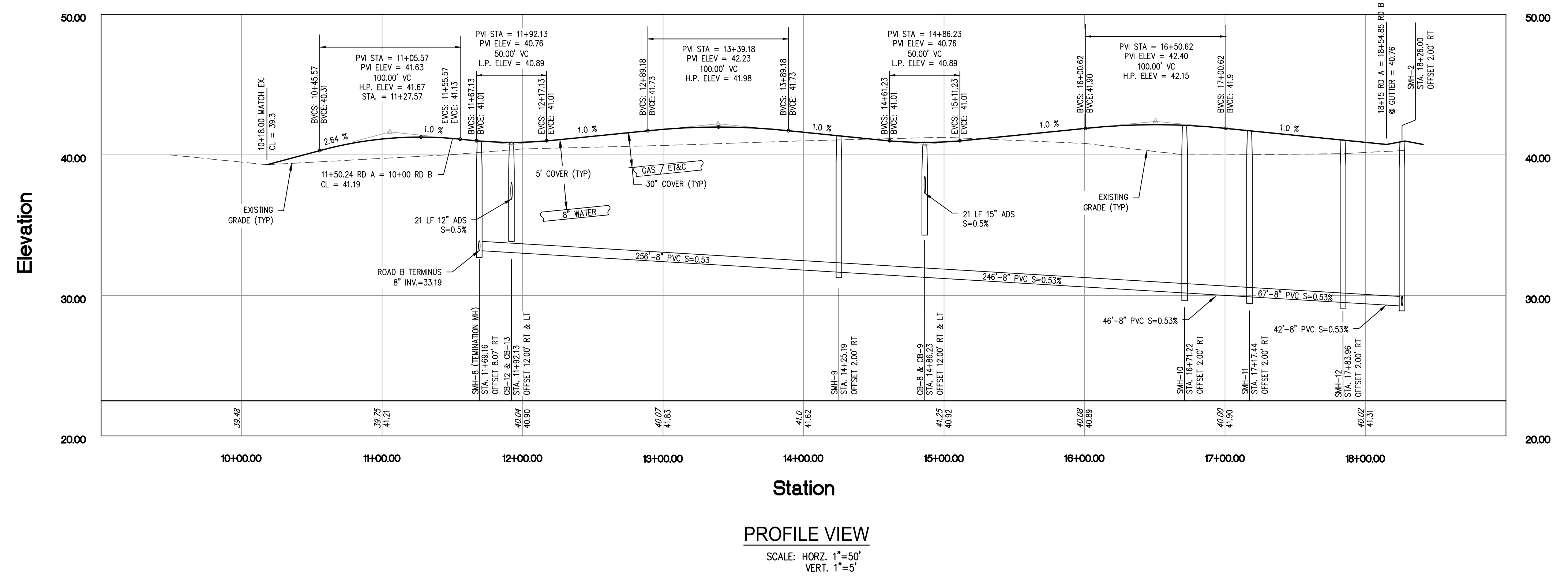
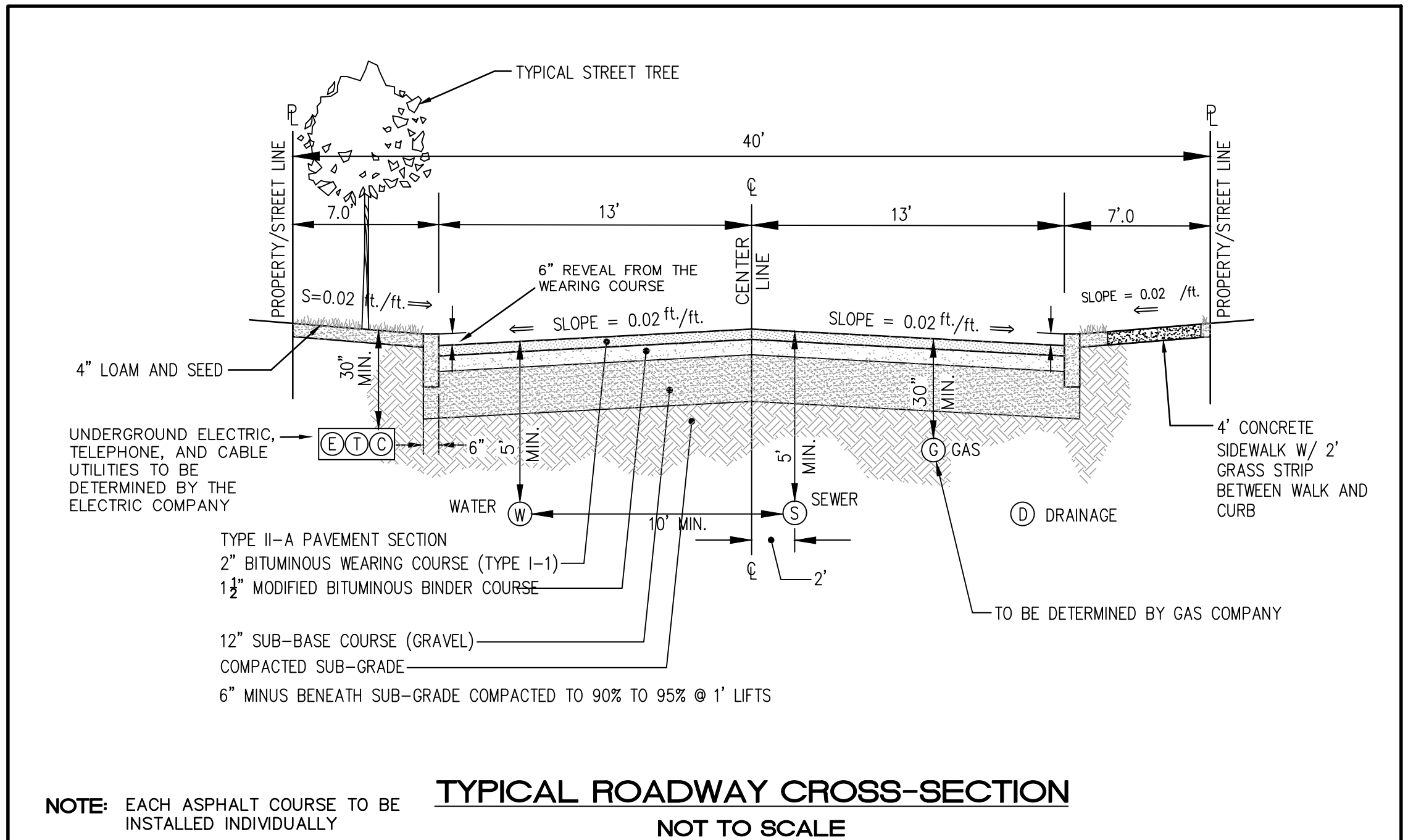
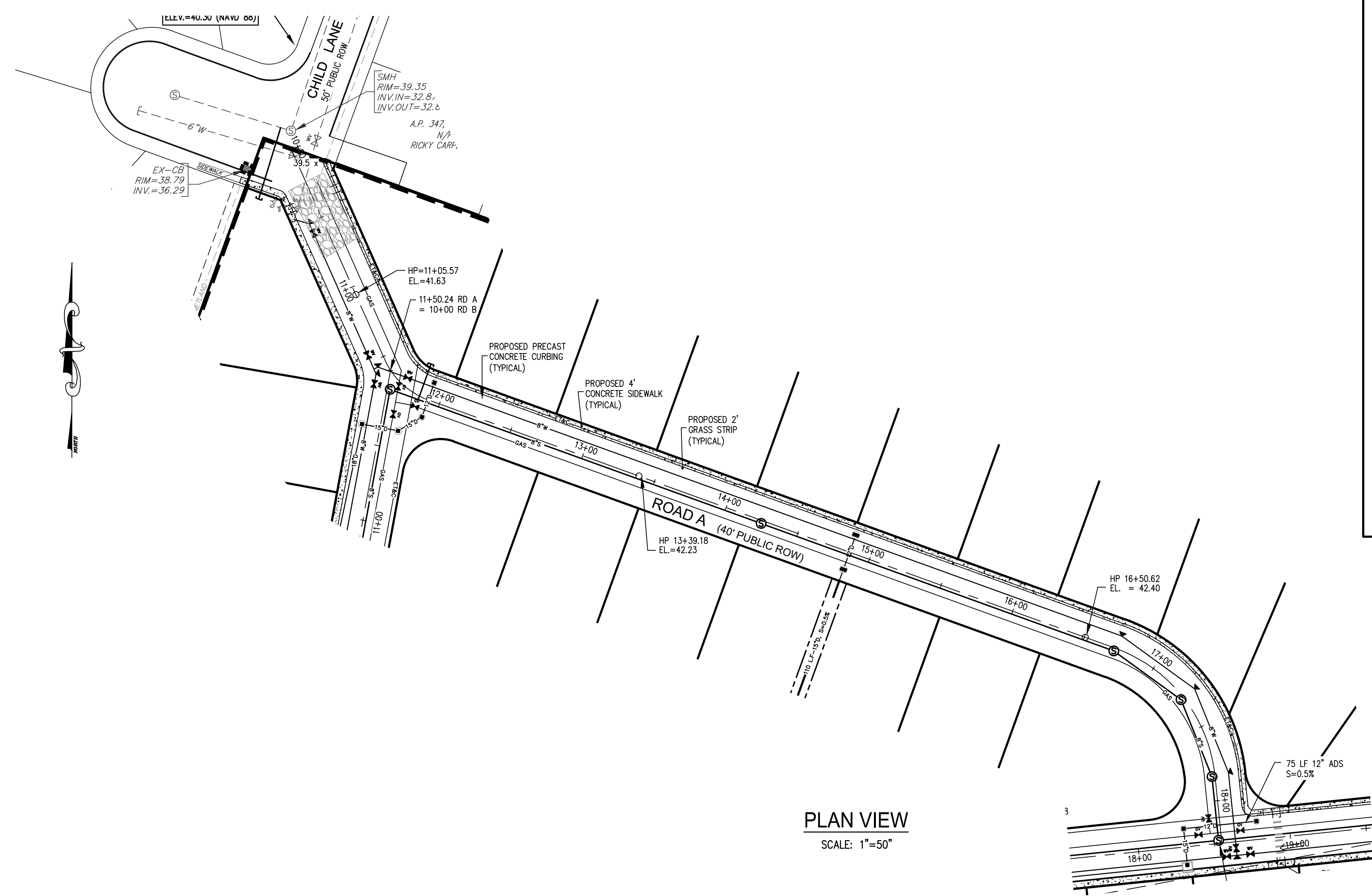
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NO.	DATE	REVISION



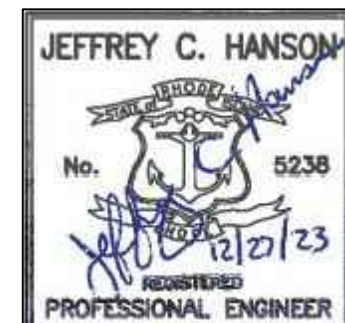
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Warwick, Rhode Island 02886
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PLAN & PROFILE ROAD A
40 WICKES WAY
A.P. 347, LOT 476
50 CHILD LANE
WARWICK, RI
PREPARED FOR:
40 WICKES WAY, LLC
SCALE: AS NOTED
JULY 2023

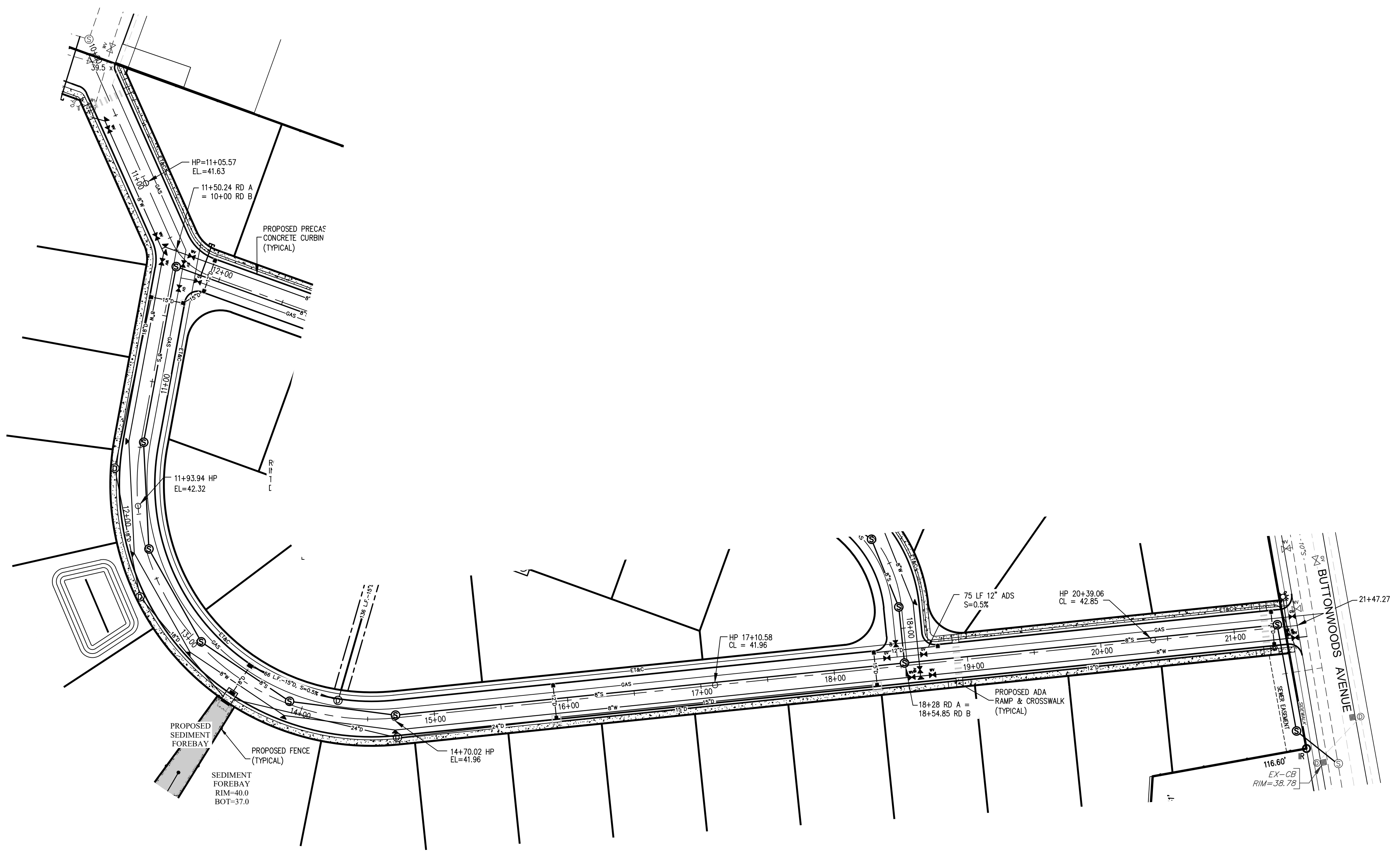
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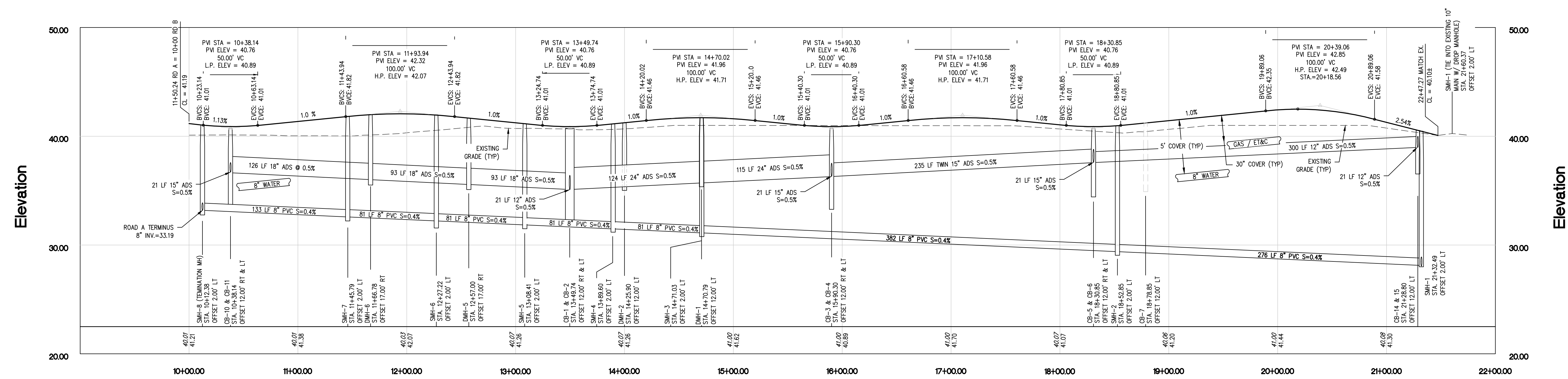
NO.	DATE	REVISION
4	12/21/23	SEWER TIE-IN



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PLAN VIEW
 SCALE: 1"=50'



PROFILE VIEW
 SCALE: HORIZ. 1"=50'
 VERT. 1"=5'

PLAN & PROFILE
 ROAD B

40 WICKES WAY

A.P. 347, LOT 476
 50 CHILD LANE
 WARWICK, RI

PREPARED FOR:
 40 WICKES WAY, LLC

SCALE: AS NOTED
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CONSTRUCTION SEQUENCE / NARRATIVE

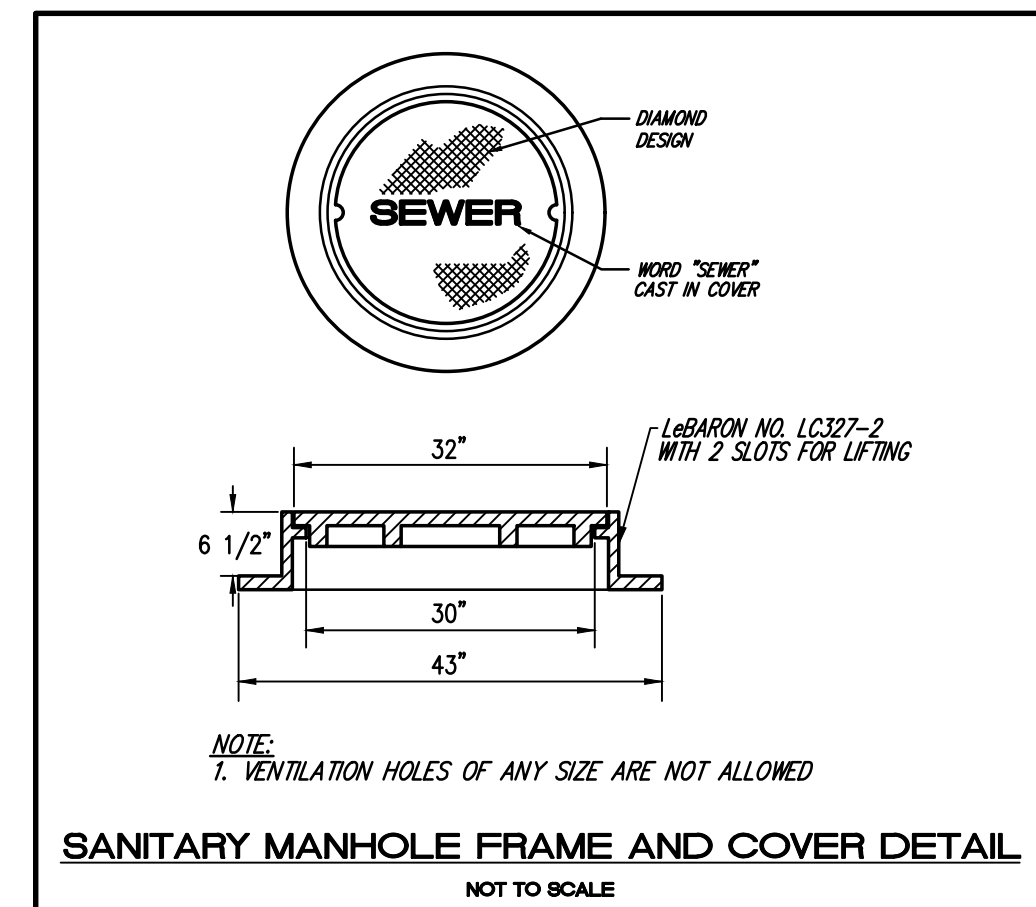
- OBTAIN APPLICABLE PERMITS.
- NOTIFY ALL APPROPRIATE STATE, REGIONAL AND TOWN DEPARTMENTS PRIOR TO THE START OF CONSTRUCTION.
- BEGIN CONSTRUCTION.
- CONSTRUCT RI STD 9.9.0 CONSTRUCTION ACCESS (ES).
- INSTALL SILT FENCE / SILT SOCK / STAKED STRAMBLE LINE.
- CLEAN, GRUB, AND STOCKPILE TOPSOIL (IF REQUIRED).
- 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 FOR THE CITY OF WARWICK.
- ALL GRAVITY SEWER PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3034, SDR 35.
- LOW PRESSURE PIPES AND FITTINGS SHALL BE CLASS 2200 PVC AND SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATIONS D3139 AND F477.
- 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 SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS VALVES, PIPES, PUMPS, GUIDE RAILS, VAULTS, HATCHES AND CONTROLS SHALL BE SUBMITTED TO 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 CITY OF WARWICK REQUIREMENTS.

WATER NOTES:

- THE WARWICK WATER DIVISION REQUIREMENTS 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. PIPE SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C151/A21.51. JOINTS SHALL MEET THE REQUIREMENTS OF ANSI/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 ANSI/AWWA C153/A21.53. MECHANICAL JOINTS SHALL MEET THE REQUIREMENTS OF ANSI/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 ANSI/AWWA C104/A21.4.
- ANY INSTALLATION, JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, WARWICK WATER DIVISION 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 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' SEPARATION VERTICALLY (UNLESS A CARRIER PIPE IS APPROVED BY THE ENGINEER).
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS GATE VALVES, PIPE, THRUST BLOCKS, FITTINGS, AIR RELEASE ASSEMBLIES, CASTINGS, ETC., SHALL BE SUBMITTED TO 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 WARWICK WATER DIVISION TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK ASSOCIATED WITH THE WATER DISTRIBUTION SYSTEM.
- A MASTER WATER METER SHALL BE INSTALLED IN A HEATED ENCLOSURE UPON CONNECTION TO THE LINCOLN WATER DEPARTMENT DISTRIBUTION SYSTEM.
- 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 STRAMBLE 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.
- CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF WATER SYSTEM.



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

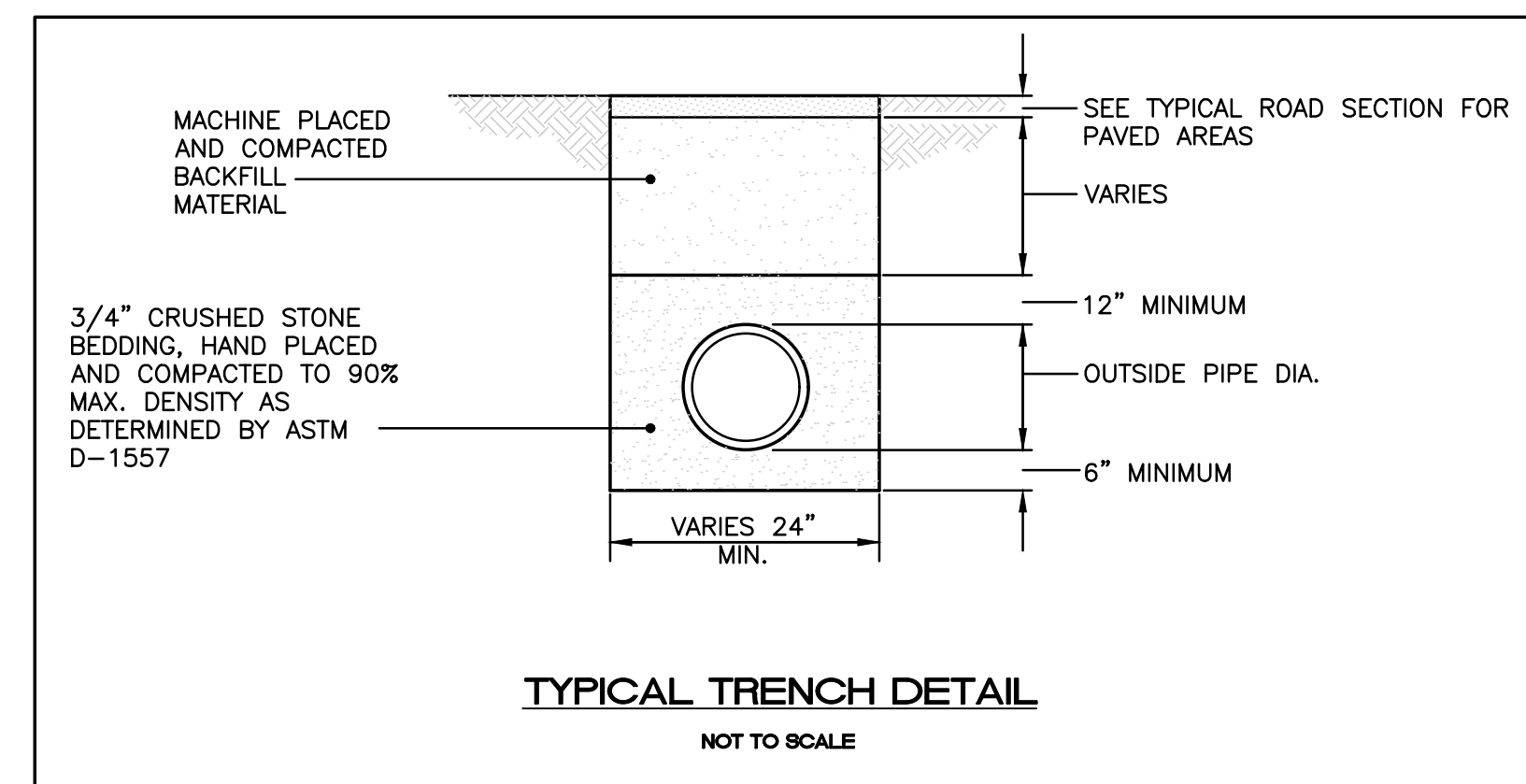
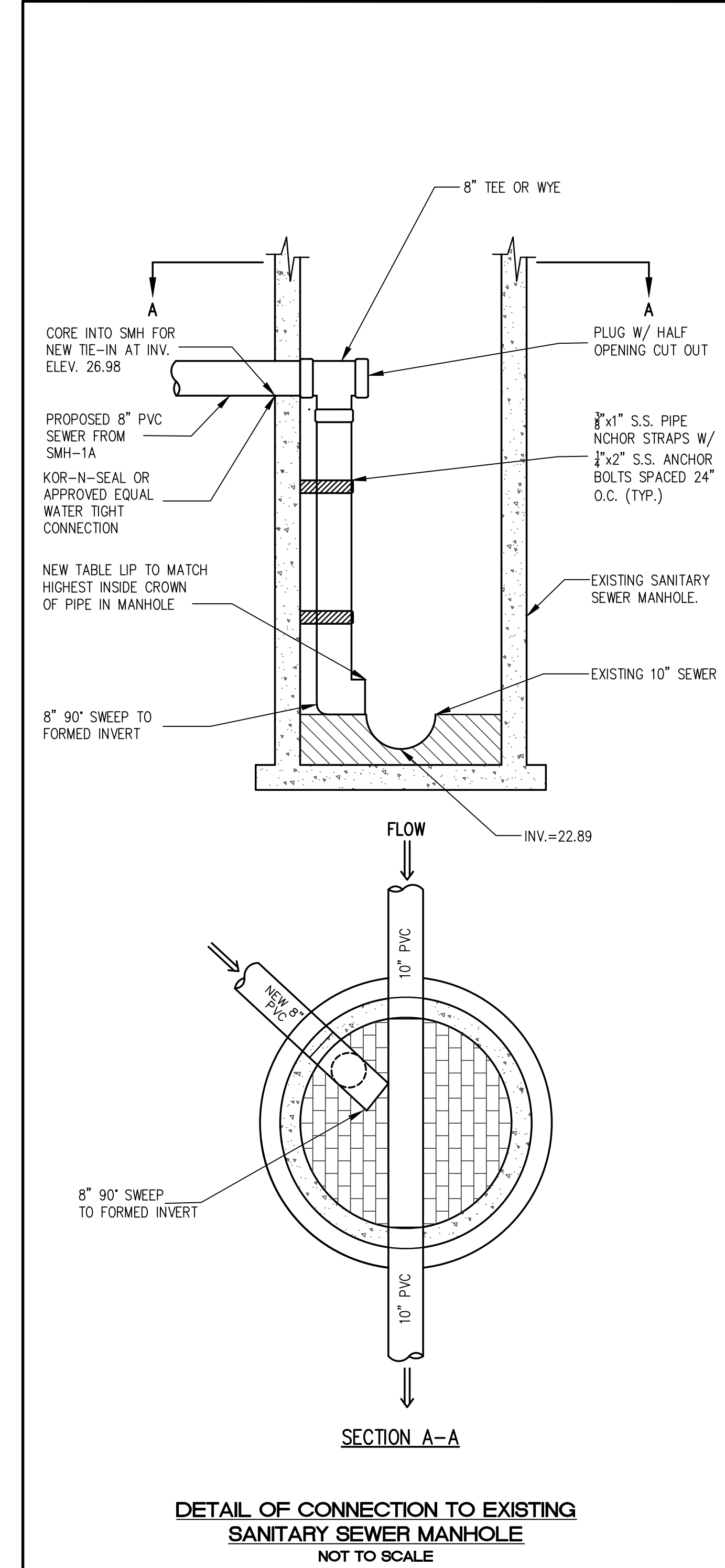
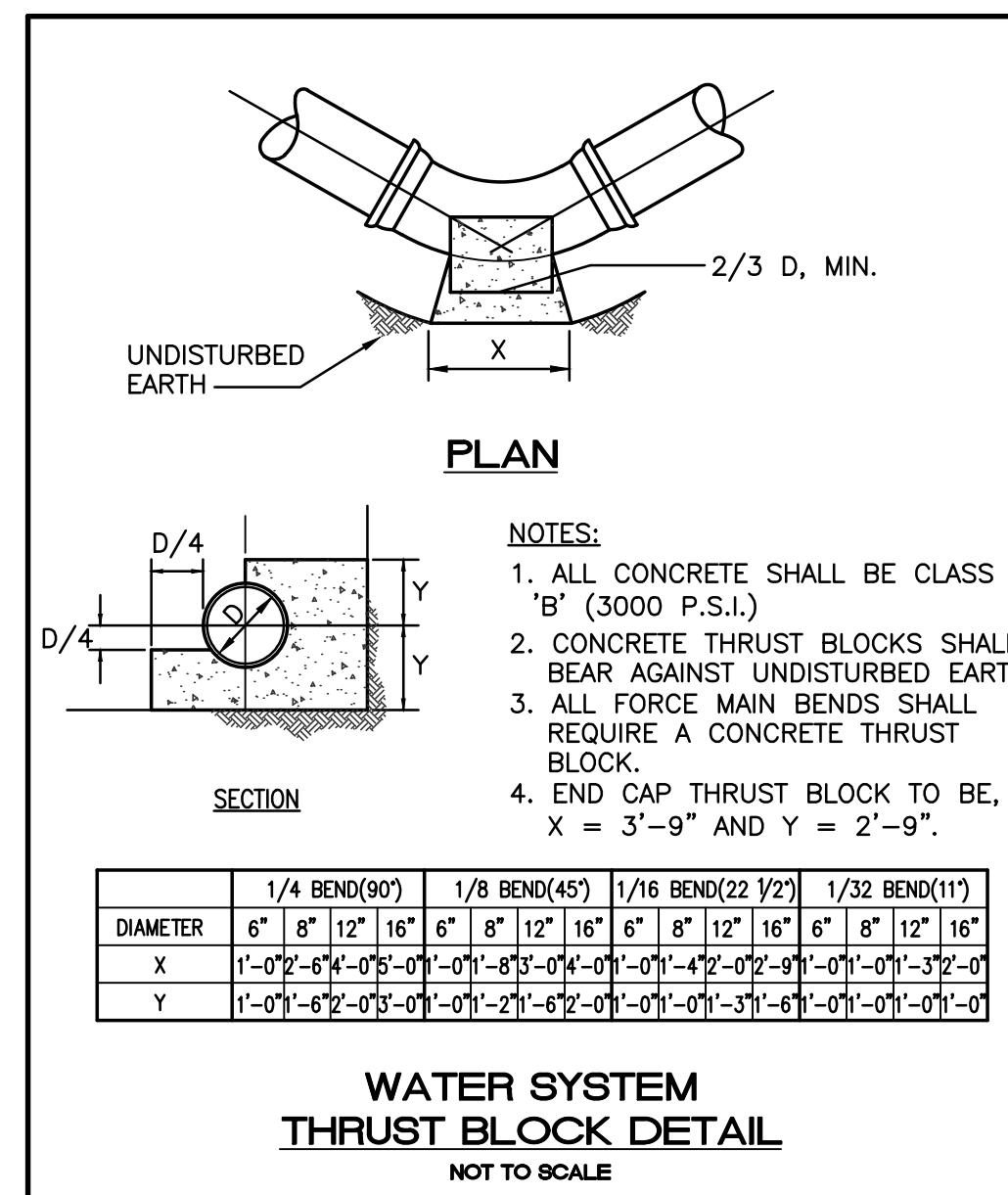
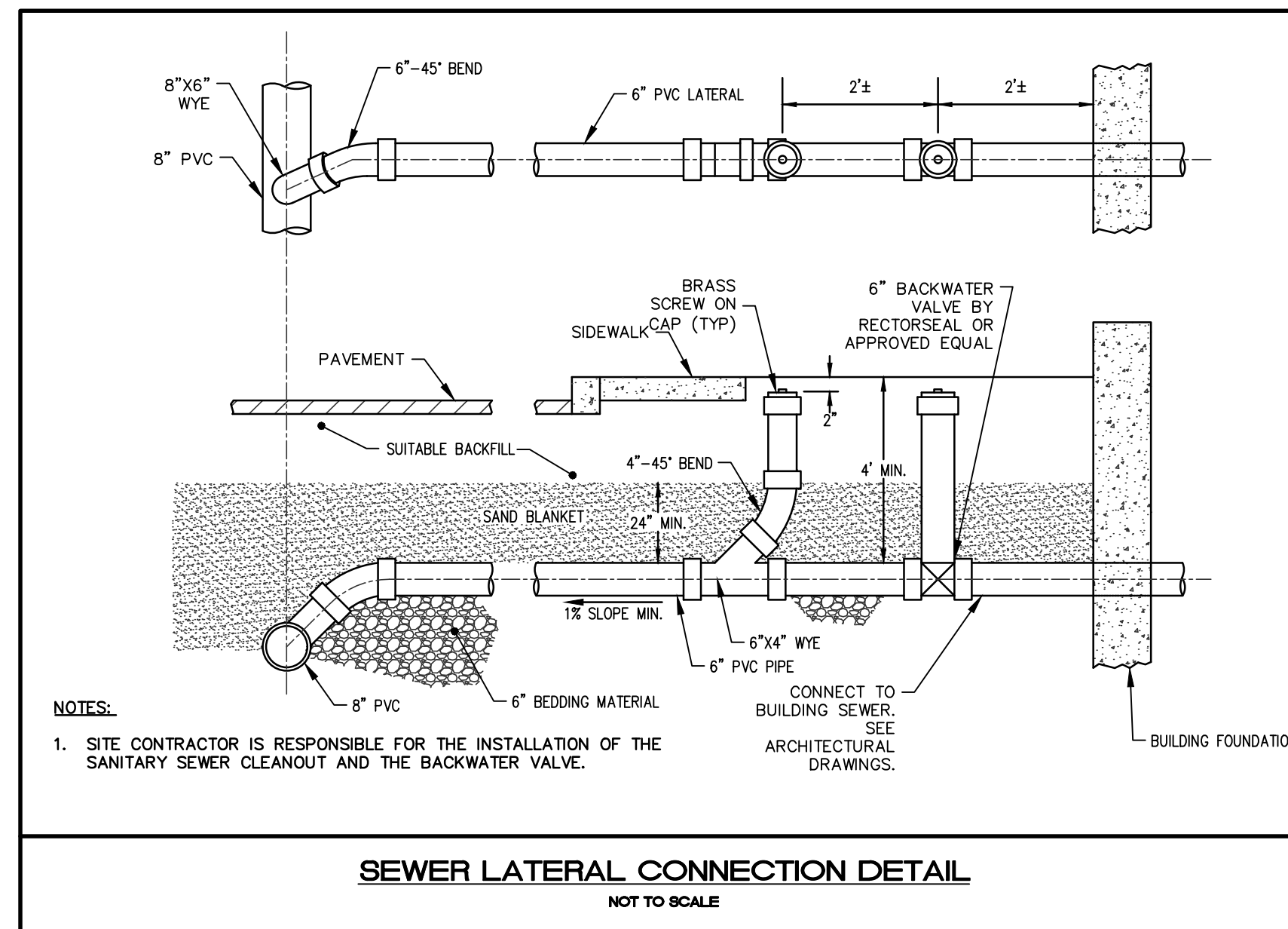
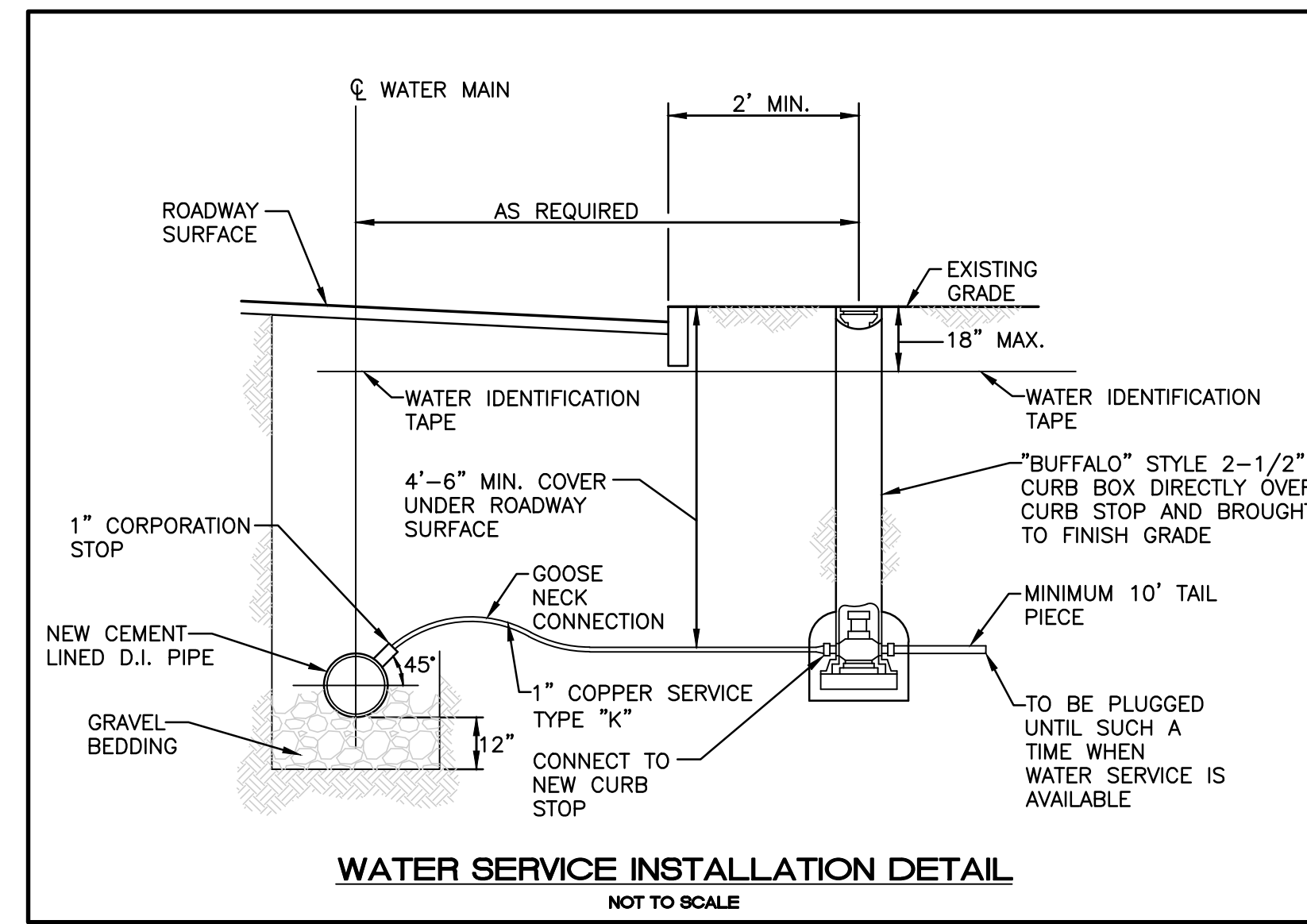
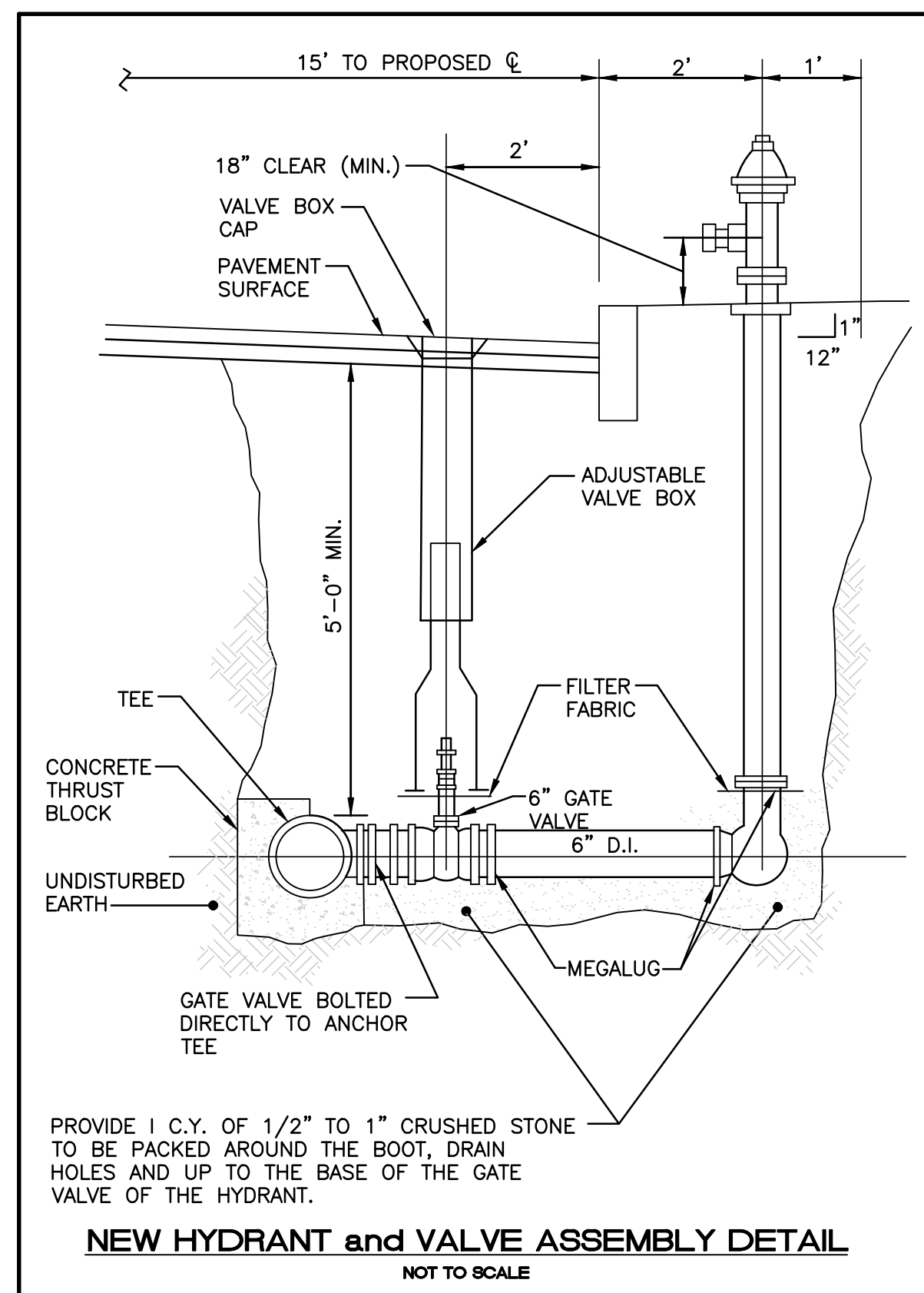
Sewers crossing over water lines should be avoided, but if conditions warrant this situation, then adequate structural support shall be provided for the sewer to maintain line and grade. Sewers crossing under water lines shall be laid to provide a minimum vertical separation of 18 inches between the 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:

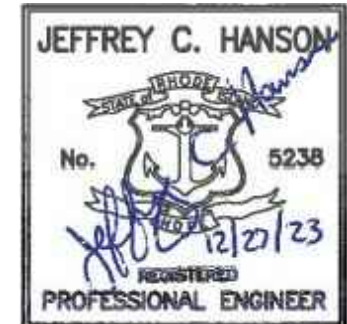
- The design and construction of the sewer must meet the requirements applicable to water lines (any AWWA-approved material for potable water conveyance) for a distance of 10 feet on each side of the crossing, measured perpendicular to the water line and pressure tested in accordance with AWWA specifications, 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.

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

10/96 (rev. 5/01)



NO.	DATE	REVISION
4	12/21/23	SEWER TIE-IN



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DETAILS - 1

40 WICKES WAY

A.P. 347, LOT 476
50 CHILD LANE
WARWICK, RI

PREPARED FOR:
40 WICKES WAY, LLC

NOT TO SCALE
JULY 2023

Drawn By: MBV

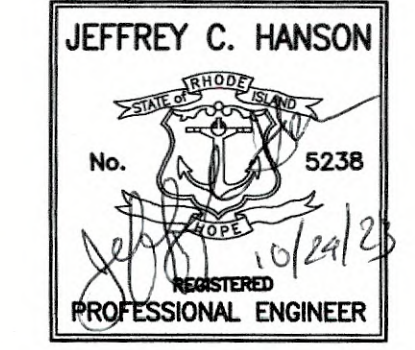
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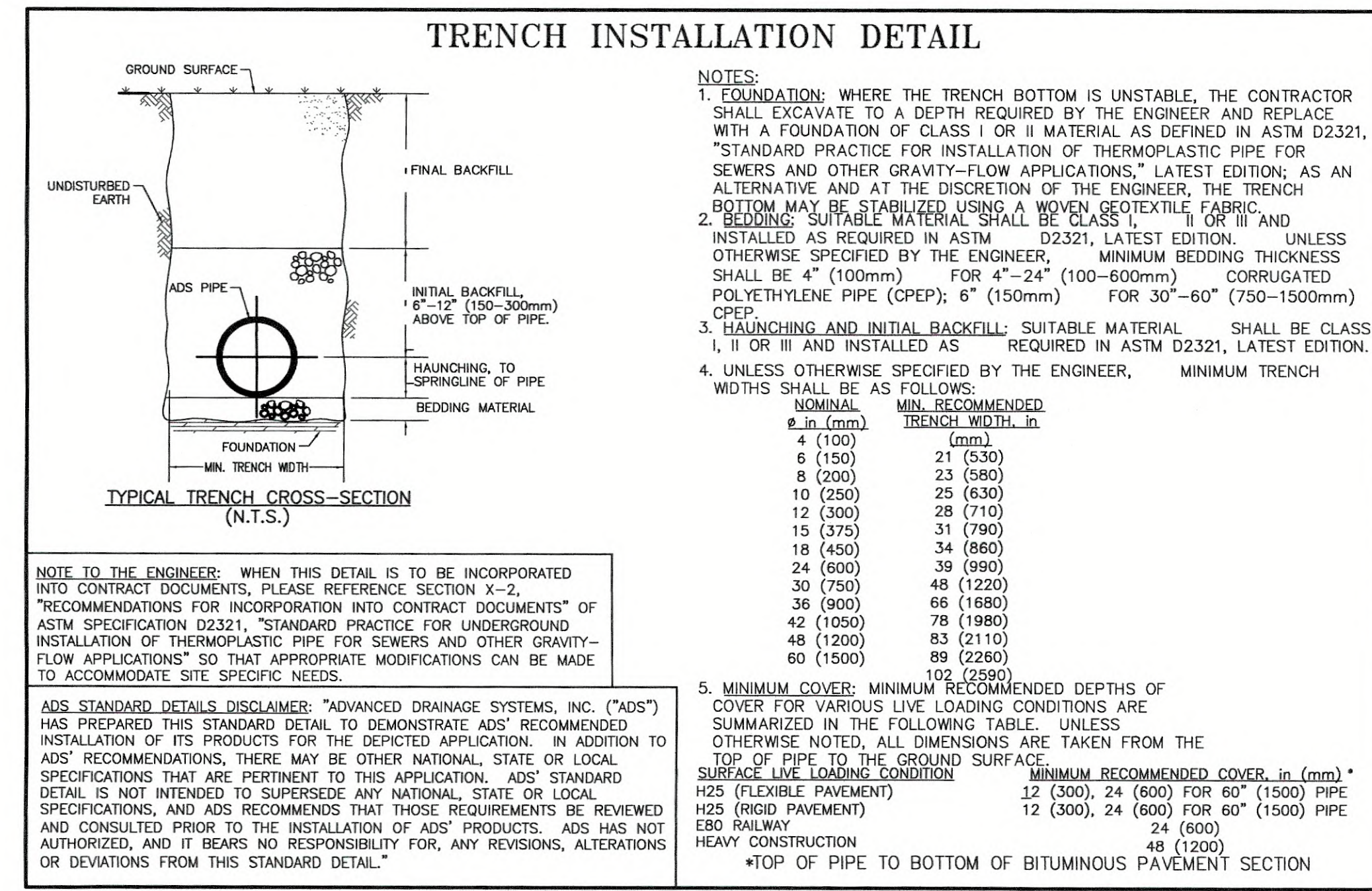
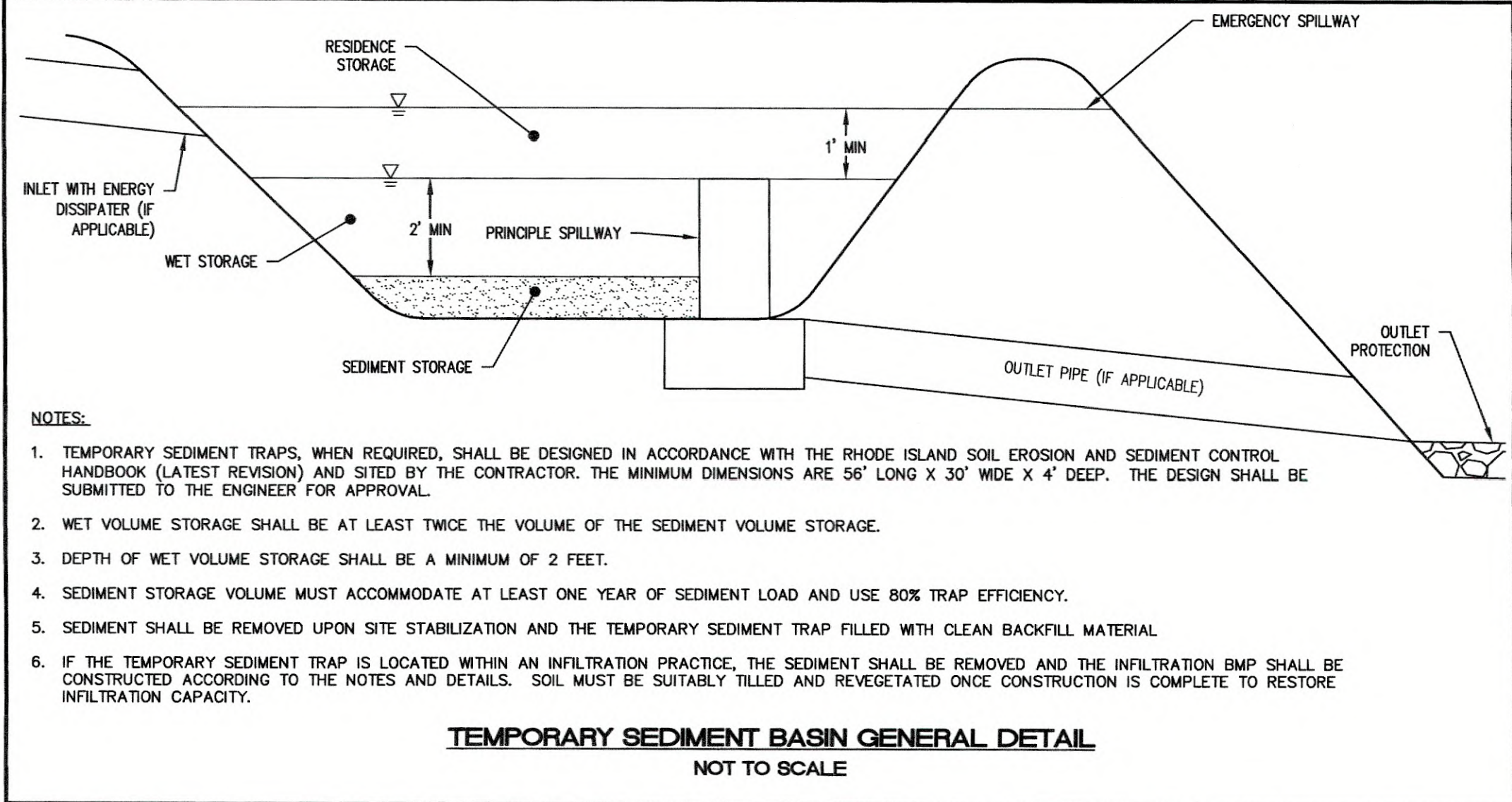
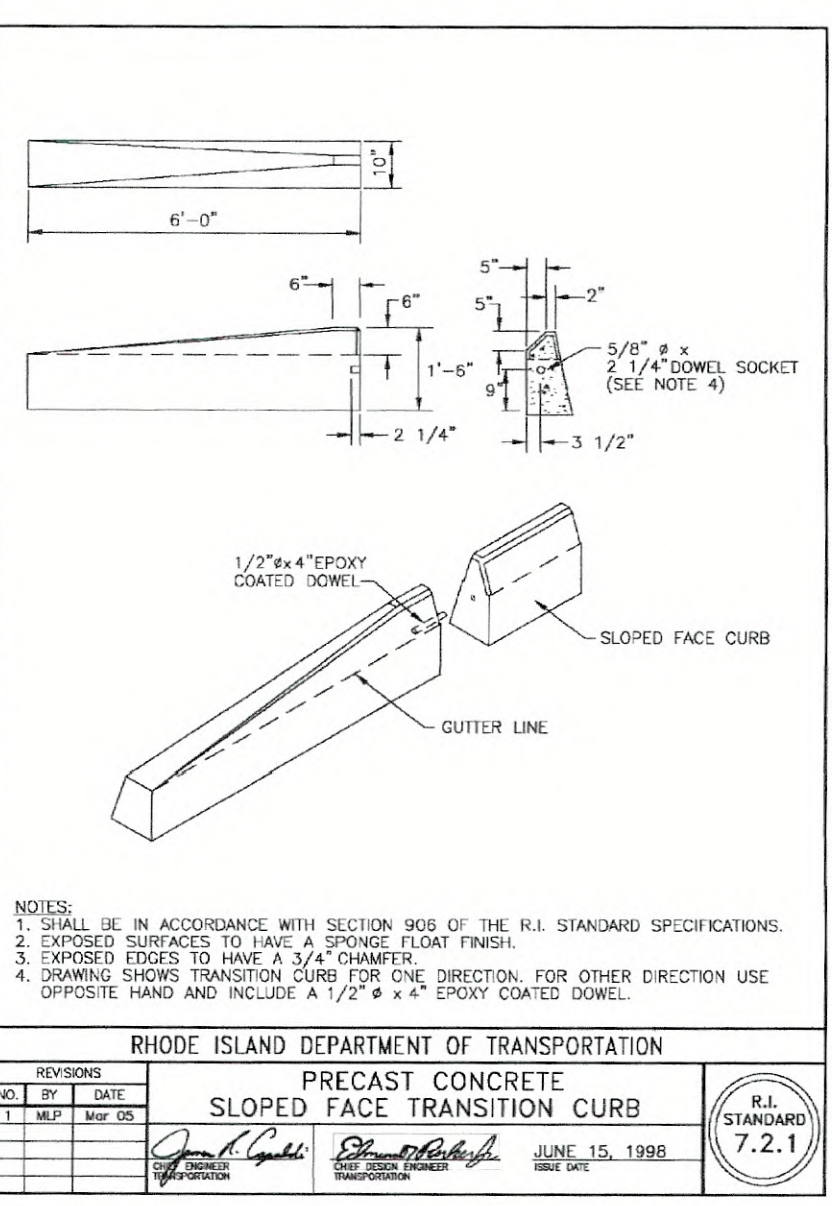
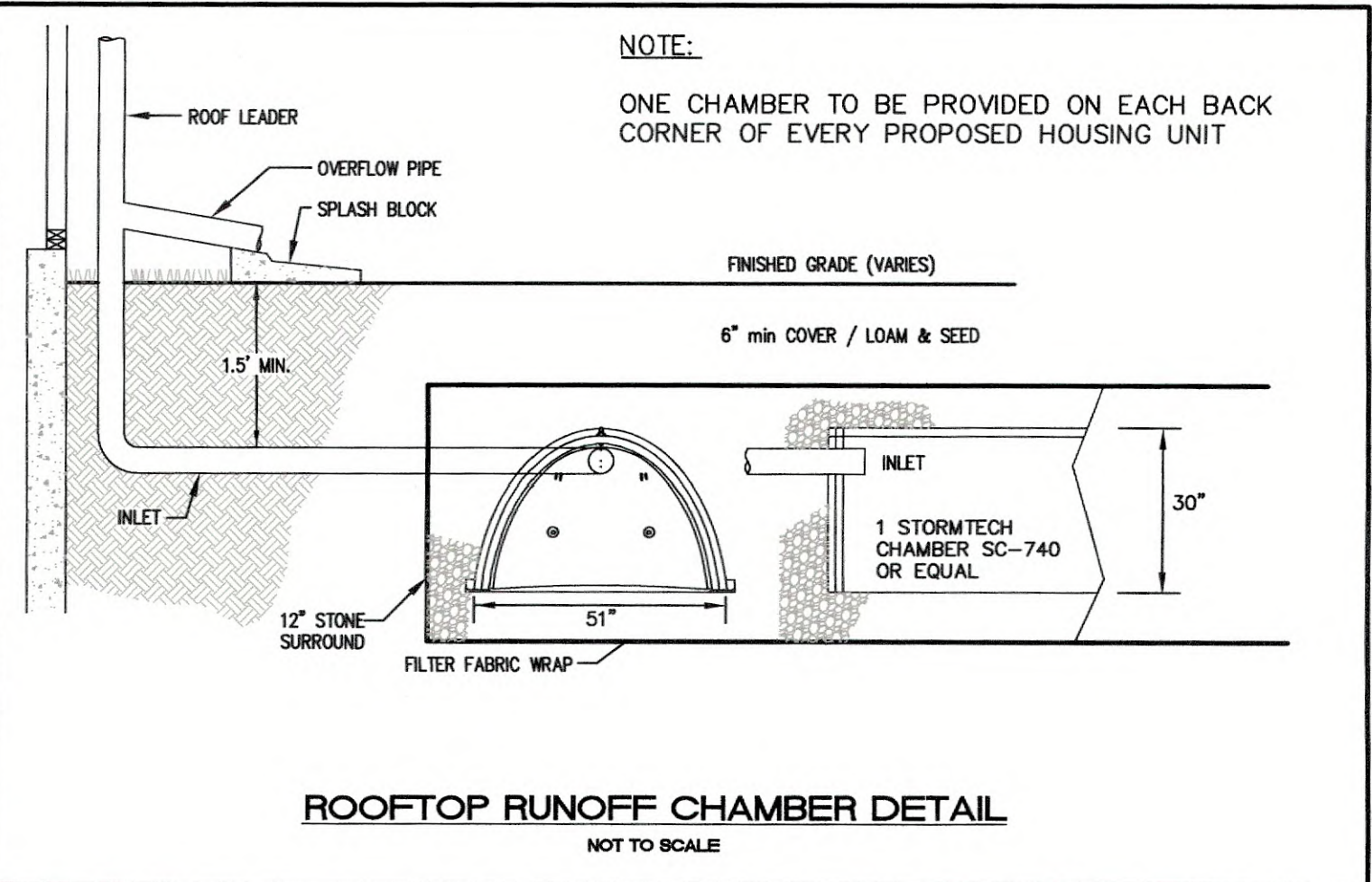
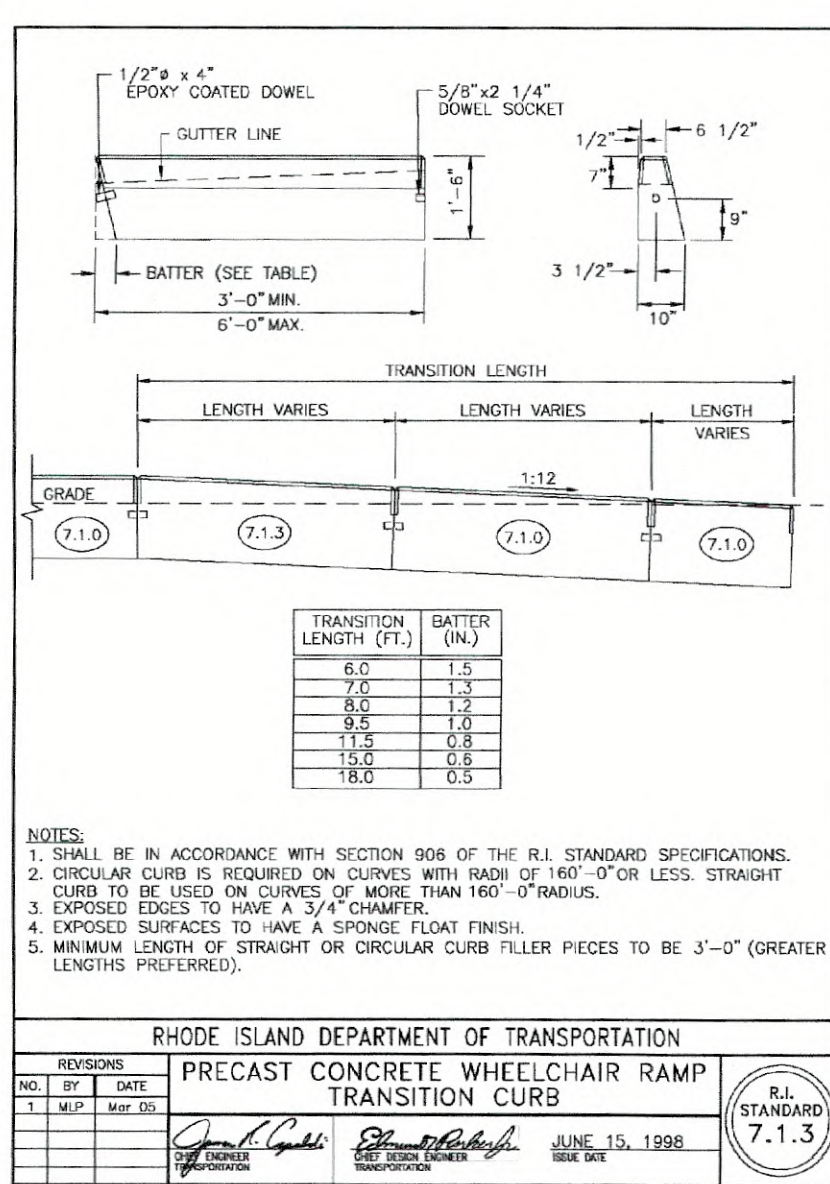
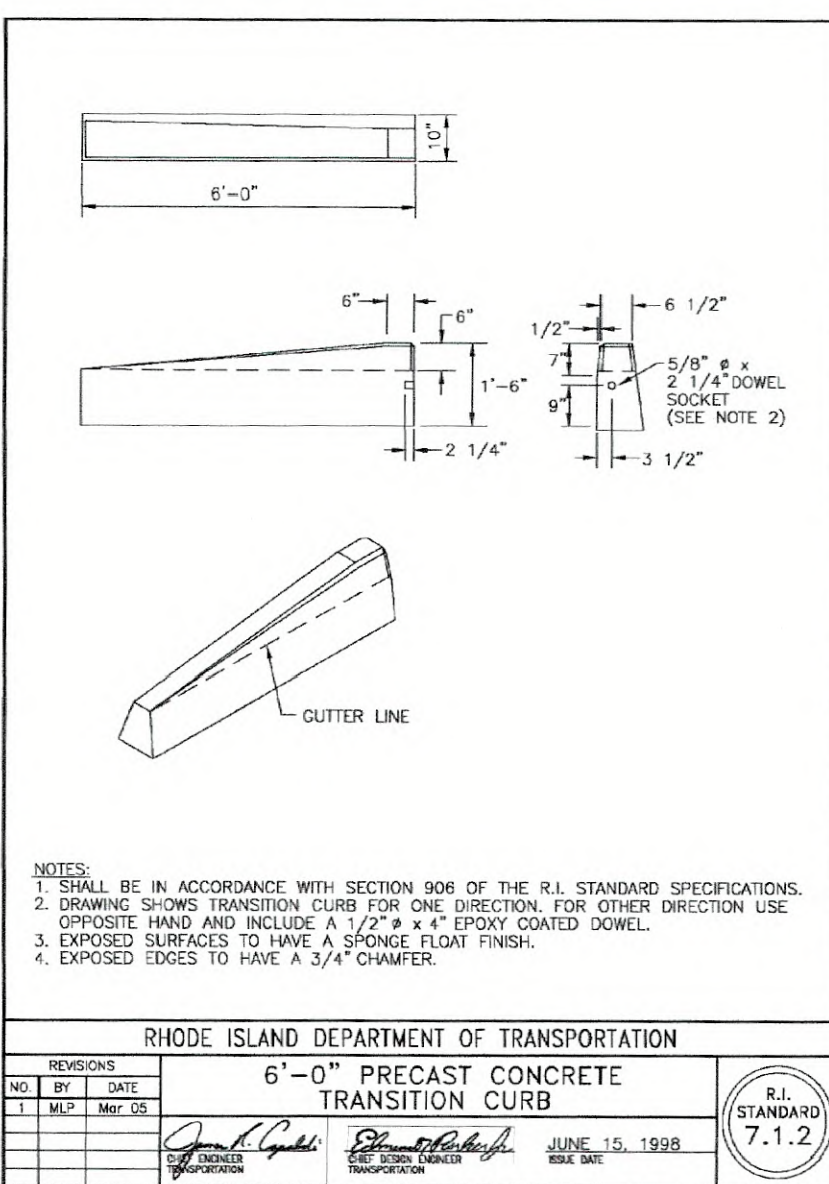
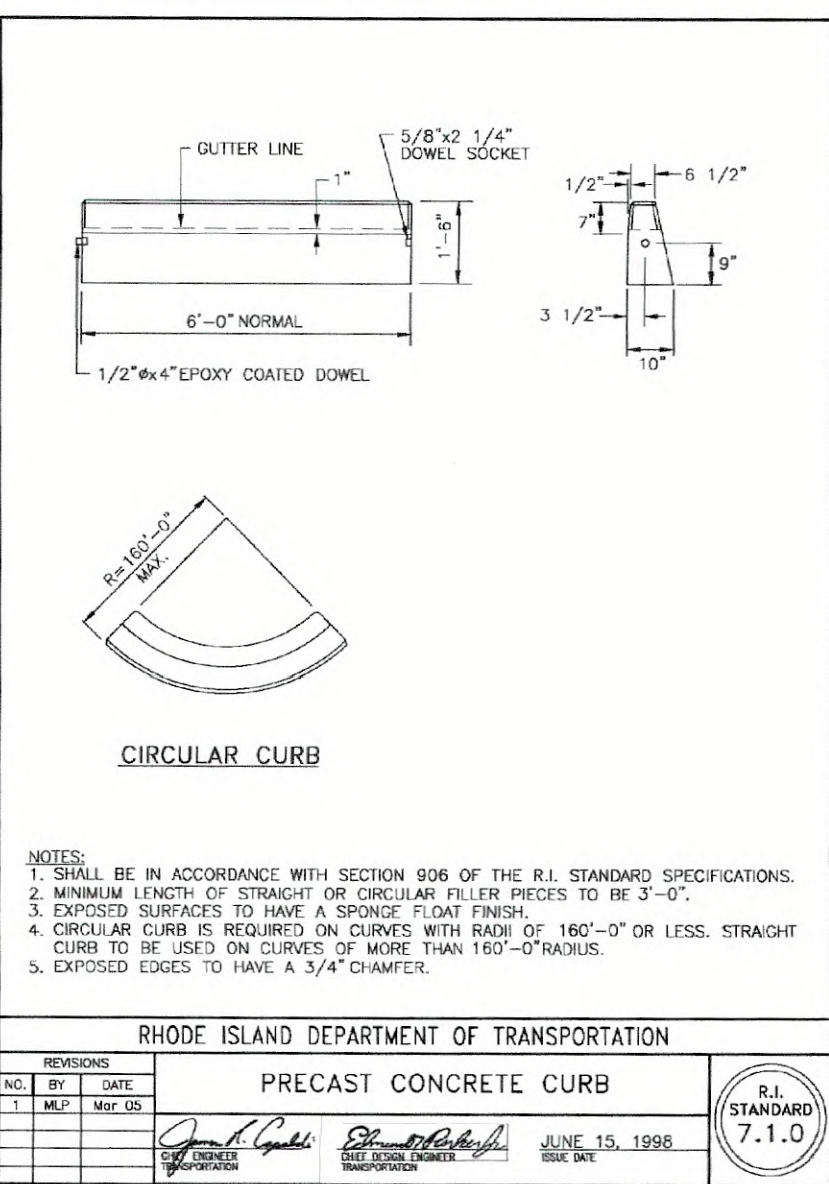
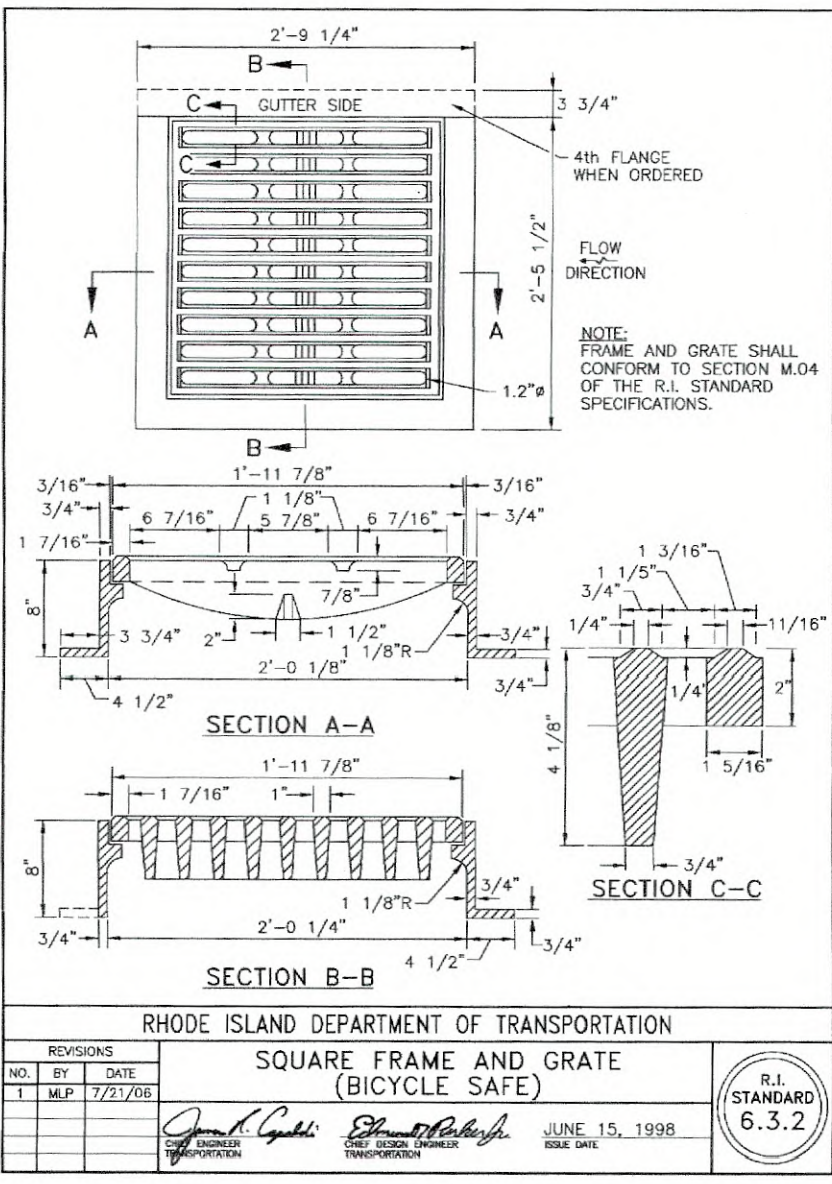
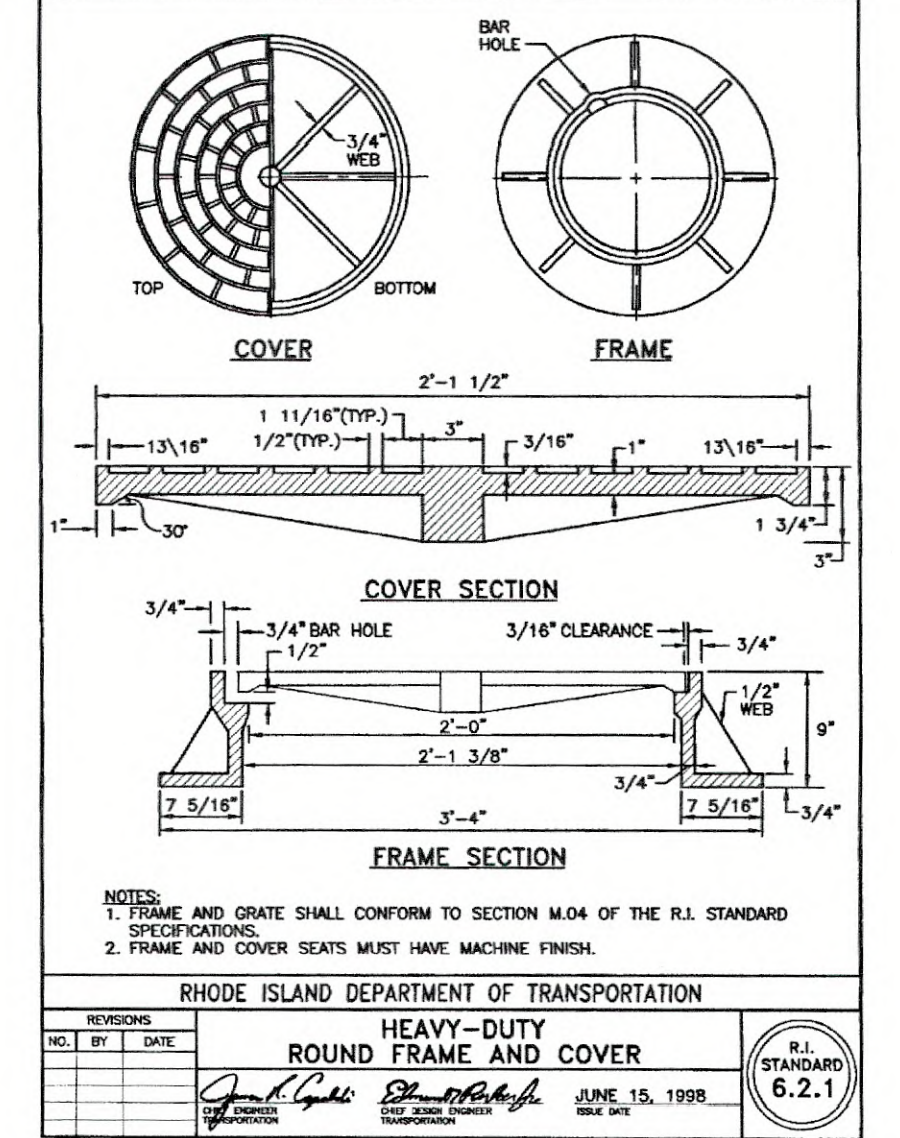
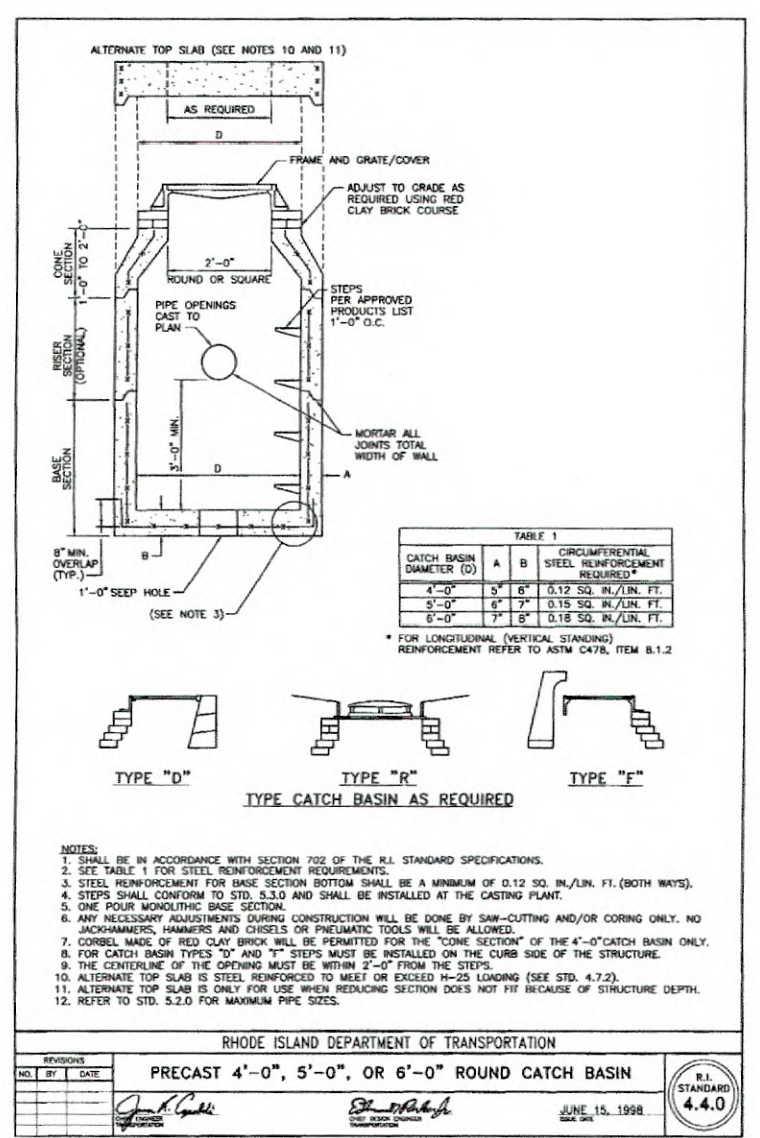
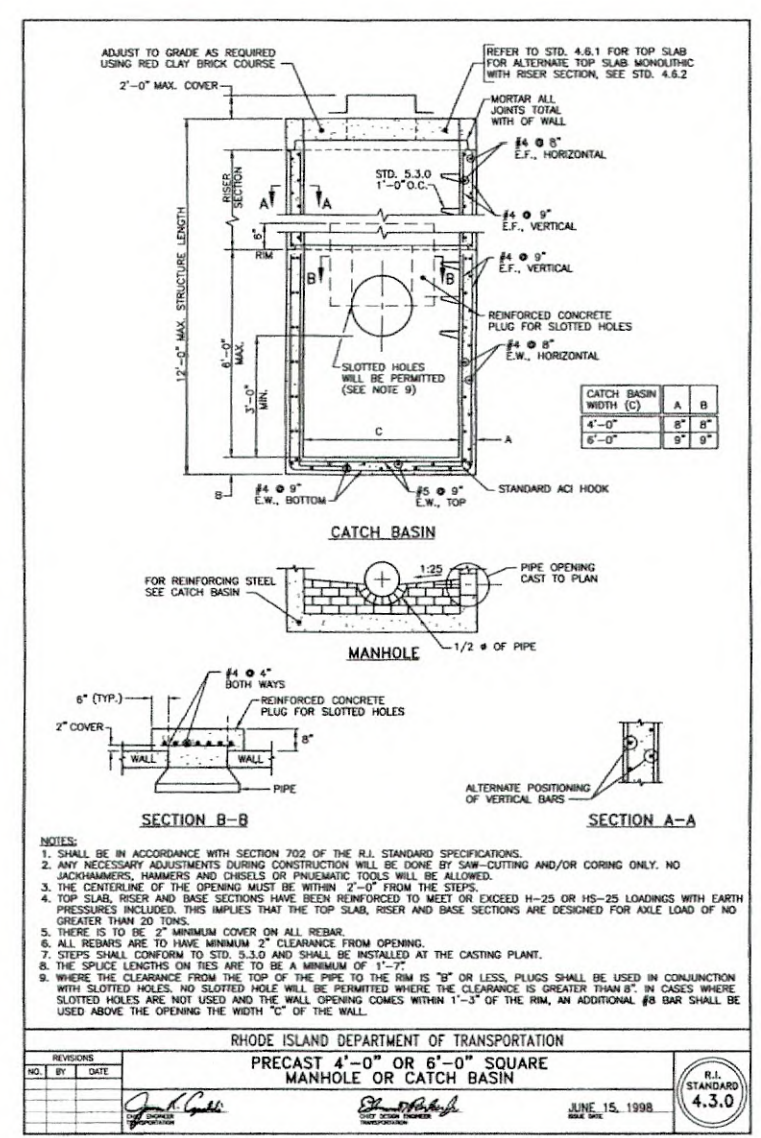
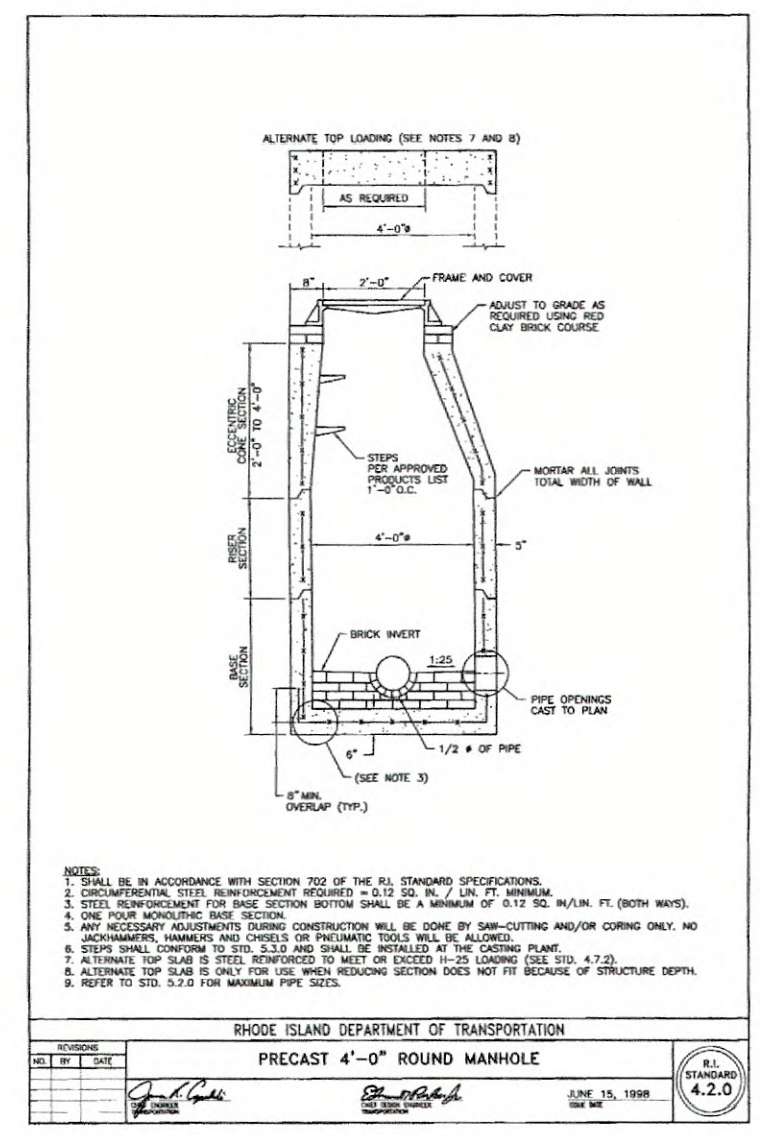
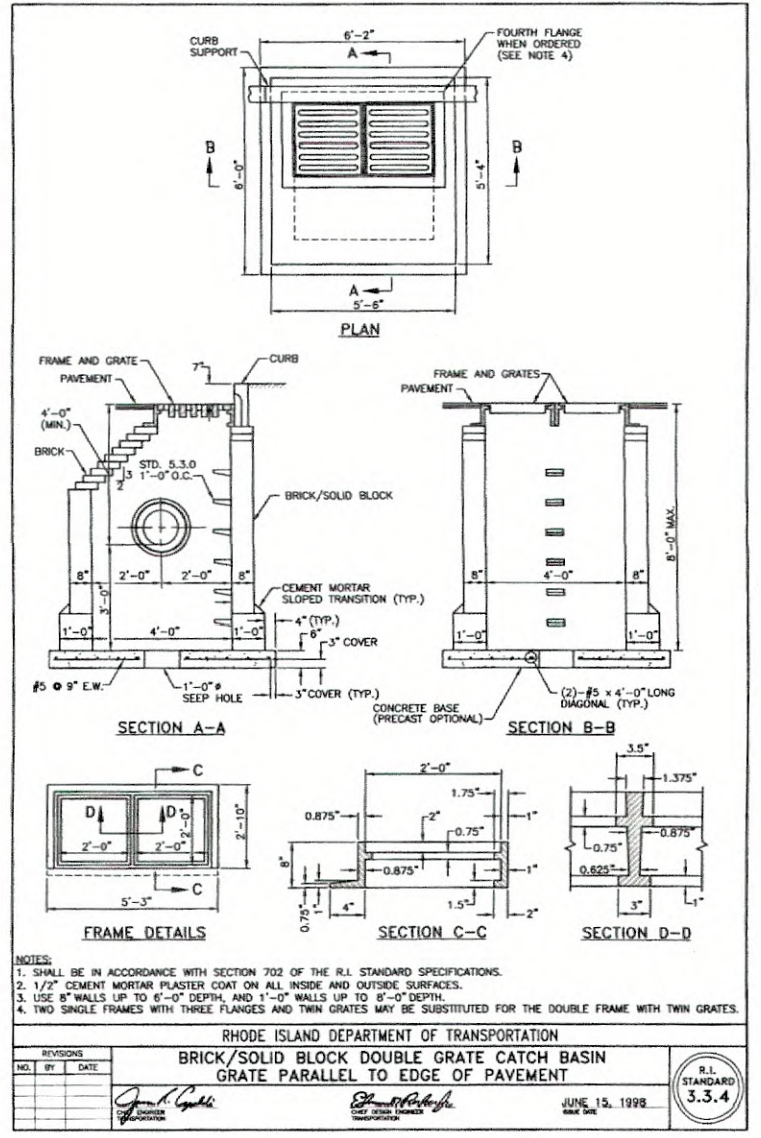
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2	10/24/23	RIDEM COMMENTS



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