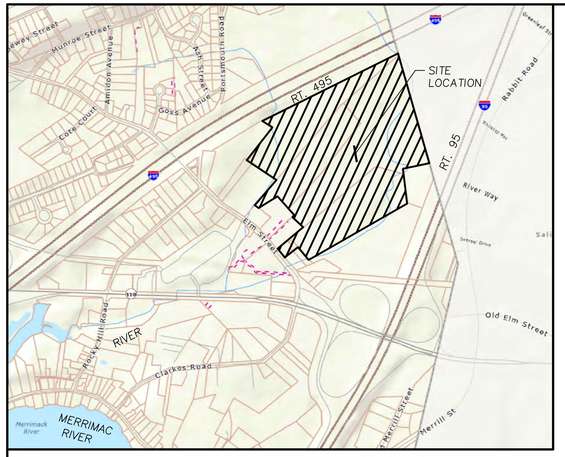


LOCUS MAP
N.T.S.

PROPOSED SITE PLAN REVIEW PLANS
ROCKY HILL MBTA COMMUNITY
AT ELM STREET
IN
AMESBURY, MA
AUGUST 2025

I CERTIFY:
THAT THIS PLAN CONFORMS
TO THE RULES AND REGULATIONS
OF THE REGISTER OF DEEDS.

DATE

FOR REGISTRY USE

AMESBURY PLANNING
BOARD APPROVAL

DATE

CITY OF AMESBURY
OFFICE OF THE CITY OF THE CLERK

THIS IS TO CERTIFY THAT ON _____
I RECEIVED FROM THE AMESBURY PLANNING BOARD CERTIFICATION OF ITS APPROVAL OF THIS PLAN AND THAT DURING THE (20) TWENTY DAYS NEXT FOLLOWING I HAVE RECEIVED NO NOTICE OF ANY APPEAL FROM SAID DECISION.

CLERK DATE

PLAN INDEX

SHEET NO.	TITLE
C-1.0	COVER SHEET
C-2.0	GENERAL NOTES & LEGEND
C-3.0 – C3.8	BOUNDARY & EXISTING CONDITIONS
C-4.0	OVERALL SITE KEY PLAN
C-5.0, 5.1, 5.2 & 5.3	SITE LAYOUT PLANS
C-6.0, 6.1, 6.2, 6.3, 6.4 & 6.5	SITE GRADING & DRAINAGE PLANS
C-7.0, 7.1, 7.2, 7.3 & 7.4	SITE UTILITIES PLANS
C-8.0, 8.1. 8.2, 8.3 & 8.4	ROADWAY AND UTILITY PROFILES
C-9.0, 9.1, 9.2 & 9.3	EROSION & SEDIMENTATION CONTROL PLANS
C-10.0 – C10.6	CONSTRUCTION DETAILS
L1_0 – L_3	LANDSCAPE STREET TREE PLANS
L2_0 – L2_4	LANDSCAPE COMMON AREAS ENLARGED PLANS (A-D)
L3_0 – L3_3	LANDSCAPE TYPICAL DETAILS



COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 25564
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

DATE: AUG. 11, 2025 | CALC. BY: J.T.M. | CHKD. BY: S.B.S. | PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

COVER SHEET

SHEET: C1.0

GENERAL NOTES

LEGEND

EXISTING	PROPOSED	
□	■CB	CATCH BASIN (OR GUTTER INLET, OR LEACHING BASIN)
⊓	■CBCI (OR GICI)	CATCH BASIN (OR GUTTER INLET) WITH CURB INLET
———	———	CURB (OR BERM) – TYPE NOTED
———	———	EDGE OF ROAD
— —109— —	—(108)—	CONTOUR
Ⓢ	Ⓢ	SEWER MANHOLE
Ⓓ	Ⓓ	DRAINAGE MANHOLE
GG		GAS GATE
WG	⋈	WATER GATE
		SEPTIC TANK
		HYDRANT
○ FA	● FA	FIRE ALARM BOX
☼	✱	POST MOUNTED PEDESTRIAN LIGHT
		UTILITY POLE
—— D ——	—— D ——	DRAIN PIPE
—— S ——	—— S ——	SEWER MAIN
—— S ——	———	SEWER FORCE MAIN
—— UE ——	—— UE ——	UNDERGROUND ELECTRIC
—— W ——	—— W ——	WATER MAIN
□ MB	■MB	MAIL BOX
		HIGHWAY GUARD (TYPE NOTED)
—— x —— x ——	—— x —— x ——	FENCE (SIZE AND TYPE NOTED)
		EASEMENT LINE
℄	℄	PROPERTY LINE
		100 FT BUFFER ZONE
8 N00°00'00"E +12.34	PC 8 N00°00'00"E +12.34	BASE OR SURVEY LINE / CONSTRUCTION BASELINE
		WHEELCHAIR RAMP (WCR)
		CONCRETE SIDEWALK
		HAND CORE
	—— SF ——	SILT SOCK
		WETLAND
		INFILTRATOR

SURVEY

120	WETLAND DELINEATION FLAG
⊡ C.B.	CONCRETE BOUND
⊡ S.B.	STONE BOUND
◉ D.H.	DRILL HOLE
PK	MASONRY NAIL
· I.P.	IRON PIPE
◉ I ROD	IRON ROD
FND.	FOUND
N/FND.	NOT FOUND
0/00	ASSESSORS MAP AND PARCEL

1. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS TO THE WORK SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND REGULATING CITY AND/OR STATE AGENCIES.
2. THE CONTRACTOR SHALL INSTALL ALL SYSTEM COMPONENTS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND ALL APPLICABLE ELECTRICAL, PLUMBING, AND SANITARY CODES.
3. ALL WORK SHALL CONFORM TO; THE AMESBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, AMESBURY CONSERVATION COMMISSION ORDER OF CONDITIONS, NPDES CONSTRUCTION GENERAL PERMIT; AND THESE PLANS.
4. THE LOCATION OF ALL UTILITIES, AS SHOWN ON THESE PLANS, ARE BASED UPON PLANS AND RECORD INFORMATION PROVIDED BY MUNICIPAL AND PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL NOT RELY ON THESE PLANS FOR SUCH INFORMATION AND WILL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY COMPANIES AND INDIVIDUALS, AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING "DIG-SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE TELEPHONE NUMBER: 1-888-344-7233.
6. THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE NEW WORK. HE/SHE SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.
7. ALL EXISTING STRUCTURES AND SURFACES, UNLESS OTHERWISE SHOWN, SHALL BE COMPLETELY REMOVED FROM THE AREAS OF WORK. ALL TREES SCHEDULED FOR REMOVAL SHALL BE FIELD MARKED AND APPROVED FOR REMOVAL BY THE OWNER PRIOR TO CUTTING OPERATIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PUBLIC, EMPLOYEES, AND ALL OTHER PERSONS ASSOCIATED WITH THE PROJECT. HE/SHE SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
9. IF REQUIRED BY THE CONTRACTOR, OVERHEAD LINES SHALL BE RELOCATED BY THE UTILITY COMPANY AT THE CONTRACTORS EXPENSE.
10. ALL SEWER MAINS AND SERVICES SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY OR 18 INCHES VERTICALLY FROM PROPOSED WATER MAINS AND SERVICES AND SHALL MAINTAIN 5 FEET OF COVER OVER THE TOP OF THE PIPING, UNLESS OTHERWISE SHOWN OR APPROVED. PIPES SHALL BE ENCASED IN CONCRETE WHERE THIS SEPARATION CANNOT BE OBTAINED.
11. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER OVER THE TOP OF THE PIPE, UNLESS OTHERWISE SHOWN OR APPROVED.
12. WHENEVER SEWER MAINS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS; A) JOINTS SHALL BE MECHANICAL TYPE WATER PRESSURE RATED WITH ZERO LEAKAGE WHEN TESTED AT 25 PSI FOR GRAVITY SEWERS AND 1.5 TIMES WORKING PRESSURE FOR FORCE MAINS AND JOINTS NOT TO BE LOCATED WITHIN 9 FEET OF THE CROSSING; B) SEWER SERVICES SHOULD BE INSTALLED A MINIMUM OF 18 INCHES BELOW WATER MAINS. IF SEPARATION IS LESS THAN 18 INCHES, SEWER SERVICE SHALL BE CONCRETE ENCASED OR CONSTRUCTED WITH PRESSURE CLASS PVC FOR A DISTANCE OF 10 FEET EACH SIDE OF THE WATER MAIN. 10-FOOT MINIMUM HORIZONTAL SEPARATION DISTANCE SHALL BE MAINTAINED.
13. INDIVIDUAL BUILDING OWNERS ARE RESPONSIBLE FOR MAINTENANCE OF THEIR SEWER SERVICE FROM THE BUILDING TO THE CONNECTION AT THE SEWER MAIN.
14. ALL STREET, WARNING, AND REGULATORY SIGNS SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD SPECIFICATIONS AND LATEST ADDENDA.
15. NO CONSTRUCTION SHALL TAKE PLACE UNTIL THE OWNER/DEVELOPER HAS RECEIVED WRITTEN APPROVAL OF THIS PLAN FROM THE CITY.
16. 14 DAYS PRIOR TO COMMENCING CONSTRUCTION, THE OWNER/DEVELOPER SHALL PRESENT A CONSTRUCTION SCHEDULE TO THE CITY.
17. TWO HARD COPIES OF AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF THE PROJECT. ONE SOFT COPY OF THE AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE TOWN WITHIN 30 CALENDAR DAYS OF RECEIVING ANY OCCUPANCY PERMIT FROM THE TOWN. SOFT COPIES SHALL BE PROVIDED ON A CD. AS-BUILTS SHALL INCLUDE ALL LANDSCAPE AND UTILITIES INFORMATION. ANY AND ALL CHANGES FROM THE PREVIOUSLY APPROVED PLANS AND SPECIFICATIONS SHOULD BE HIGHLIGHTED FOR EASE OF REVIEW.
18. COMPETENT SUPERVISION SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION ACTIVITIES.
19. ONSITE BURIAL OF STUMPS OR ANY OTHER DEBRIS IS PROHIBITED.
20. THE PROPERTY DOES NOT LIE WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO FEMA AND IT DOES NOT LIE WITHIN A ZONE II WELLHEAD PROTECTION AREA.
21. ALL ELEVATIONS ARE BASED ON N.A.V.D. 1988.

MATERIAL NOTES

ALL MATERIALS OF THE ELEMENTS IN THE SITE PLAN MUST CONFORM TO THE FOLLOWING STANDARDS:

- SPECIFICATIONS BY THE CITY OF AMESBURY AS SET FORTH IN THE RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND
- COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES
- AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- AMERICAN WATER WORKS ASSOCIATION (AWWA)
- 521 CMR RULES AND REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD (AAB) AND THE AMERICANS WITH DISABILITIES ACT (ADA)

ROADWAY NOTES

1.) ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED PAVEMENT GRADE.

2.) ROADWAY SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.

3.) GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.

4.) THE MINIMUM SLOPE FROM THE CROWN OF FINISHED BASE COURSE SHALL BE 1/4"PER FOOT UNLESS OTHERWISE SHOWN.

5.) ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.

6.) AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE ROADWAY WILL EFFECTIVELY BE DRAINED.

7.) THE CONTRACTOR SHALL REFER TO THE MERRIMAC RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, ARTICLE 5.

SIDEWALK NOTES

SIDEWALKS SHALL BE FIVE FEET IN WIDTH FOR THEIR ENTIRE LENGTH, WITH A 1% CROSS SLOPE (1.5% MAX).

SIDEWALKS SHALL BE CONSTRUCTED WITH A 1.5" TYPE I-1 BITUMINOUS CONCRETE FINISH COURSE, A 1.5" TYPE I-1 BITUMINOUS CONCRETE BINDER COURSE OVER A 12" GRAVEL BASE (MDOT M1.03.0 TYPE C).

WHERE SIDEWALKS TRAVERSE A DRIVEWAY, THE GRAVEL BASE SHALL BE 12" THICK.

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 24605
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

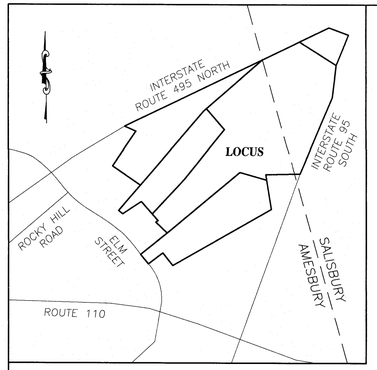
NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

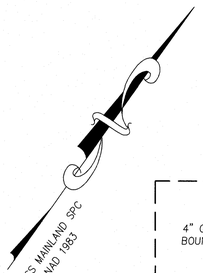
DATE: AUG. 11, 2025 | CALC. BY: J.T.M. | CHKD. BY: S.B.S. | PROJECT: M244407

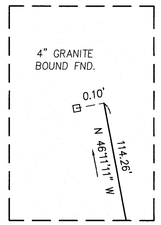
ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

TYPICAL SECTIONS/ LEGEND/ GENERAL NOTES
SHEET: C2.0

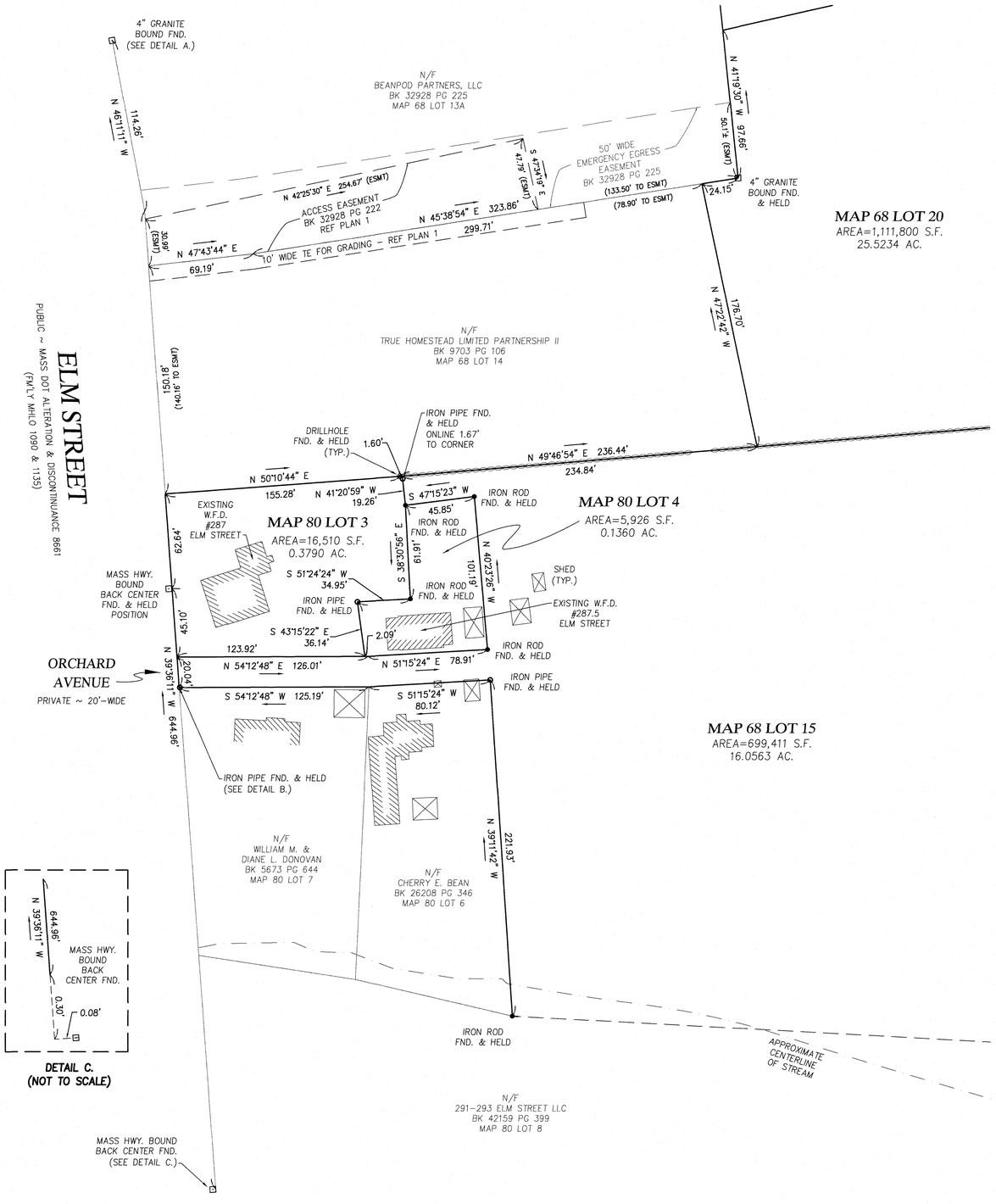


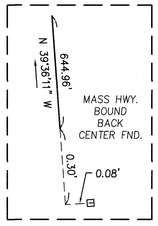
LOCUS MAP
N.T.S.



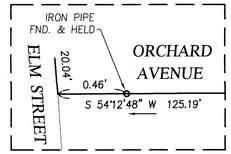


DETAIL A.
(NOT TO SCALE)





DETAIL C.
(NOT TO SCALE)



DETAIL B.
(NOT TO SCALE)

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS.

MICHAEL J. SERGI — 8/11/2025 DATE

DEED REFERENCES

1. SEE DEED FROM ERIC MANDERSON MAYNE AND GERALD R. MAYNE TO TRUE HOMESTEAD LIMITED PARTNERSHIP IV DATED 1/27/1999 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 15596 PAGE 174.
2. SEE DEED FROM VIRGINIA R. MILLIKEN TO TRUE HOMESTEAD LIMITED PARTNERSHIP I DATED 8/6/1999 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 15871 PAGE 553.
3. SEE DEED FROM STANLEY O. BEAN, JR. TO STANLEY O. BEAN JR. AND ALICE M. BEAN TRUSTEES OF THE 287 ½ ELM STREET REALTY TRUST DATED 10/5/1994 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12779 PAGE 376.
4. SEE DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP II TO TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 11/20/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12307 PAGE 510.
5. SEE DEED FROM HERBERT T. SEARS TO TRUE HOMESTEAD LIMITED PARTNERSHIP IV DATED 11/20/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12307 PAGE 508.
6. SEE DEED FROM STANLEY O. BEAN, JR AND ALICE M. BEAN TO STANLEY O. BEAN, JR AS TRUSTEE OF THE STANLEY O. BEAN, JR. REVOCABLE TRUST DATED 3/25/2005 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 24120 PAGE 288.
7. SEE DEED FROM MARTHA TRUE TO GERTRUDE NANCY SEARS AND ELIZABETH WARDWELL DATED 11/1/1956 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 4325 PAGE 48.
8. SEE DEED FROM SUSAN KEPNER AND PETER RANDALL TO TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 3/10/2015 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 34400 PAGE 366.
9. SEE DISCONTINUANCE OF STATE HIGHWAY FOR PORTIONS OF ELM STREET BY THE MASSACHUSETTS HIGHWAY COMMISSION ON BEHALF OF THE COMMONWEALTH OF MASSACHUSETTS DATED 2/19/2025 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 42586 PAGE 559.
10. SEE EASEMENT DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III TO TRUE HOMESTEAD LIMITED PARTNERSHIP I, TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 10/29/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 32928 PAGE 222.
11. SEE DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP I, TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III TO BEANPOD PARTNERS, LLC DATED 10/29/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 32928 PAGE 225.

PLAN REFERENCES

1. EASEMENT PLAN OF LAND PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY CAMMETT ENGINEERING. DATED 10/30/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 440 PLAN 26.
2. PLAN OF LAND PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY CAMMETT ENGINEERING. DATED 3/25/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 440 PLAN 27.
3. PLAN OF LAND IN AMESBURY, MA AND SALISBURY, MA PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY W.C. CAMMETT ENGINEERING, INC. DATED 02/24/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 283 PLAN 58.
4. PLAN TITLED "ORCHARD PARK. AMESBURY, MASS" PREPARED FOR WM. J. COUGHLIN, DRAWN BY JOHN T. DESMOND, CIVIL ENGINEER AND SURVEYOR, DATED JULY, 1900 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 1617 PLAN 600.
5. PLAN OF LAND AT #259 ELM STREET IN AMESBURY, MASSACHUSETTS PREPARED FOR SCOTT L. ARSENAULT. DRAWN BY ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC., DATED 6/28/1996 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 309 PLAN 93.
6. PLAN OF ROAD IN THE TOWN OF AMESBURY, ESSEX COUNTY, LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS HIGHWAY COMMISSION, DATED 10/30/1906. L.O. No.1090
7. PLAN OF ROAD IN THE TOWN OF AMESBURY, ESSEX COUNTY, LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS HIGHWAY COMMISSION, DATED 7/19/1907. L.O. No.1135
8. MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PLAN OF ROAD IN THE CITY OF AMESBURY, ESSEX COUNTY ALTERED AND LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION. DATED 4/10/2019. L.O. No.8622
9. MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PLAN OF ROAD IN THE CITY OF AMESBURY, ESSEX COUNTY ALTERED AND DISCONTINUED AS A STATE HIGHWAY BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION. DATED 2023. L.O. No.8661. *SEE ALSO REF. DEED 9.*

ASSESSOR REFERENCES

CITY OF AMESBURY ASSESSOR
MAP 68 LOTS 12,13,15 & 20
MAP 80 LOTS 3 & 4

TOWN OF SALISBURY ASSESSOR
MAP 10 LOTS 12 & 13

NOTES

1. ORIENTATION IS TO MASS MAINLAND SPC NAD 1983 BASED ON MULTIPLE GNSS RTK OBSERVATIONS.
2. STATUS OF RIGHT OF WAYS SHOWN AS PUBLIC OR PRIVATE ARE BASED ON REFERENCED DEEDS AND PLANS. NO WARRANTY IS EXPRESSED OR IMPLIED.
3. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO ESTABLISH THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES WHETHER EXPRESSED, IMPLIED OR PRESCRIPTIVE.

I CERTIFY THAT THE PROPERTY LINES SHOWN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIPS OR FOR NEW WAYS ARE SHOWN.

CHAPTER 41 SECTION 81X

COMMONWEALTH OF MASSACHUSETTS — MICHAEL J. SERGI No. 33191 — REGISTERED PROFESSIONAL LAND SURVEYOR

MICHAEL J. SERGI P.L.S. — 8/11/2025 DATE

THE CERTIFICATION SHOWN ABOVE IS INTENDED TO MEET REGISTRATION REQUIREMENTS AND IS NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN.OWNERSHIP OF ADJOINING PROPERTIES ARE ACCORDING TO ASSESSORS RECORDS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

BOUNDARY LINES

SHEET: C-3.0

INTERSTATE ROUTE 495

PUBLIC ~ MASS STATE HIGHWAY LAYOUTS 5385 & 5386

MASS MAINLAND SPC
NAD 1983

N 29°05'48" W
RADIAL

R = 1080.00'
Δ = 2°50'25"
L = 535.37'

N 63°44'37" E
1205.45'

MASS HWY.
BOUND
WITH DRILLHOLE
FND.
(SEE DETAIL D)

N 61°48'56" W
143.14'

N/F
SPARHAWK ENDEAVOR LLC
BK 36224 PG 160
MAP 68 LOT 7

IRON PIPE FND.

ANGLE IRON FND.

N 51°29'25" W
45.28'

S 37°13'22" W
51.40'

N 35°21'27" E
132.50'

N 37°22'14" E
79.13'

N 36°45'45" E
161.29'

N 34°27'44" E
61.15'

N/F
ROBERTA A. PILON
BK 25216 PG 150
MAP 68 LOT 8

N 51°17'39" W
115.52'

N 58°15'57" W
110.16'

N 56°18'50" W
162.46'

N/F
ROBERT W. & MARGARET M. PILON
BK 4775 PG 11
MAP 68 LOT 9

MAP 68 LOT 12
AREA=568,618 S.F.
13.0537 AC.

N 49°06'25" E
288.40'

N 36°57'54" E
762.71'

N 36°59'14" E
244.40'

N 49°32'59" E
77.97'

N 36°52'06" E
14.23'

N 52°37'37" E
85.13'

N 54°53'12" E
93.41'
83.53'

250.96'

N 50°56'18" E
128.97'

N 51°14'22" E
80.41'

9.88'

N 59°13'14" E
11.50'

N 49°34'01" E
179.75'

N 50°55'17" E
185.41'

N 51°36'45" E
87.59'

N 50°52'21" E
96.53'

N 06°09'33" E
8.00'

N 52°00'22" E
84.19'

N 49°18'53" W
316.82'

IRON ROD
FND.
DISTURBED

N 41°07'11" E
180.64'

MAP 68 LOT 13
AREA=467,406 S.F.
10.7302 AC.

DRILLHOLE
FND. & HELD
OR SET
(TYP.)

N 42°35'00" E
127.30'

N 41°35'12" E
130.50'

S 51°06'51" E
45.45'

4" GRANITE
BOUND FND.
& HELD

255.64'

S 56°04'29" W

N 53°31'17" W
53.47'

4" GRANITE
BOUND FND.
& HELD

N/F
GRAY REALTY TRUST
BK 29867 PG 241
MAP 68 LOT 11

N 41°19'30" W
193.58'

IRON PIPE
FND. & HELD

N 42°11'40" E
197.59'

N 42°20'27" E
222.26'

N 40°52'40" E
137.68'

N 43°26'48" E
131.26'

N 42°01'07" E
152.43'

N 42°54'32" E
60.36'

N 41°51'05" E
83.40'

4" GRANITE
BOUND FND.
& HELD

N/F
BEANPOD PARTNERS, LLC
BK 32928 PG 225
MAP 68 LOT 13A

EASEMENT AREA (SEE SHEET 1)

N 45°38'54" E
24.15'

N 47°22'42" W
176.70'

N/F
TRUE HOMESTEAD LIMITED PARTNERSHIP II
BK 9703 PG 106
MAP 68 LOT 14

234.84'

N 49°46'54" E
902.97'

668.13'

N 49°20'37" E
374.40'

N 48°22'50" E
107.31'

IRON PIPE
FND. & HELD

S 65°05'52" E
76.78'

S 69°18'49" E
58.16'

S 65°52'29" E
41.97'

S 70°03'59" E
82.38'

S 71°04'23" E
102.72'

3" CONC. BOUND
FND. & HELD

S 05°17'12" W
124.59'

S 08°07'23" W
119.21'

S 08°32'55" W
59.97'

S 05°30'01" W
68.11'

S 09°58'07" W
42.95'

S 30°04'49" W
16.55'

IRON ROD
FND. & HELD

S 47°56'53" W
125.65'

S 44°08'03" W
87'± FROM IRON ROD
TO CENTERLINE
OF STREAM

MAP 68 LOT 15
AREA=699,411 S.F.
16.0563 AC.

MAP 68 LOT 20
AREA=1,111,800 S.F.
25.5234 AC.

MAP 10 LOT 12
AREA=738,615 S.F.
16.9563 AC.

CITY OF AMESBURY / TOWN OF SALISBURY

MAP 80 LOTS 3, 4, 6 & 7
(SEE SHEET 1)

MASS HWY. BOUND
BACK CENTER
FND. & HELD
POSITION

N 39°11'42" W
221.93'

1170.91' SURVEY TIE LINE
S 57°33'56" W

APPROXIMATE
CENTERLINE
OF STREAM

N/F
291-293 ELM STREET LLC
BK 42159 PG 399
MAP 80 LOT 8

N/F
291-293 ELM STREET LLC
BK 42159 PG 399
MAP 80 LOT 9

N/F
291-293 ELM STREET LLC
BK 42159 PG 399
MAP 69 LOT 1

S 75°06'17" W
403.69'

208.41'

S 21°10'43" W
857.55'

IRON ROD
FND.
(SEE DETAIL E.)

INTERSTATE ROUTE 95

PUBLIC ~ MASS STATE HIGHWAY LAYOUTS
4039, 4046, 5551, 5559 & ALTERATION 8310

ELM STREET

PUBLIC ~ MASS DOT ALTERATION & DISCONTINUANCE 8661
(FMLY MHLO 1090 & 1135)

MASS HWY.
BOUND
WITH DRILLHOLE
FND.

N 63°44'37" E
792.33'

0.21'

DETAIL D.
(NOT TO SCALE)

S 75°06'17" W
403.69'

403.88'

0.19'

0.26'

IRON ROD
FND.

DETAIL E.
(NOT TO SCALE)

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS.

MICHAEL J. SERGI — 8/11/2025
DATE

I CERTIFY THAT THE PROPERTY LINES SHOWN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIPS OR FOR NEW WAYS ARE SHOWN.

CHAPTER 41 SECTION 81X

COMMONWEALTH OF MASSACHUSETTS
MICHAEL J. SERGI No. 33191
PROFESSIONAL LAND SURVEYOR

MICHAEL J. SERGI P.L.S. — 8/11/2025
DATE

THE CERTIFICATION SHOWN ABOVE IS INTENDED TO MEET REGISTRATION REQUIREMENTS AND IS NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERSHIP OF ADJOINING PROPERTIES ARE ACCORDING TO ASSESSORS RECORDS.

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100'

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

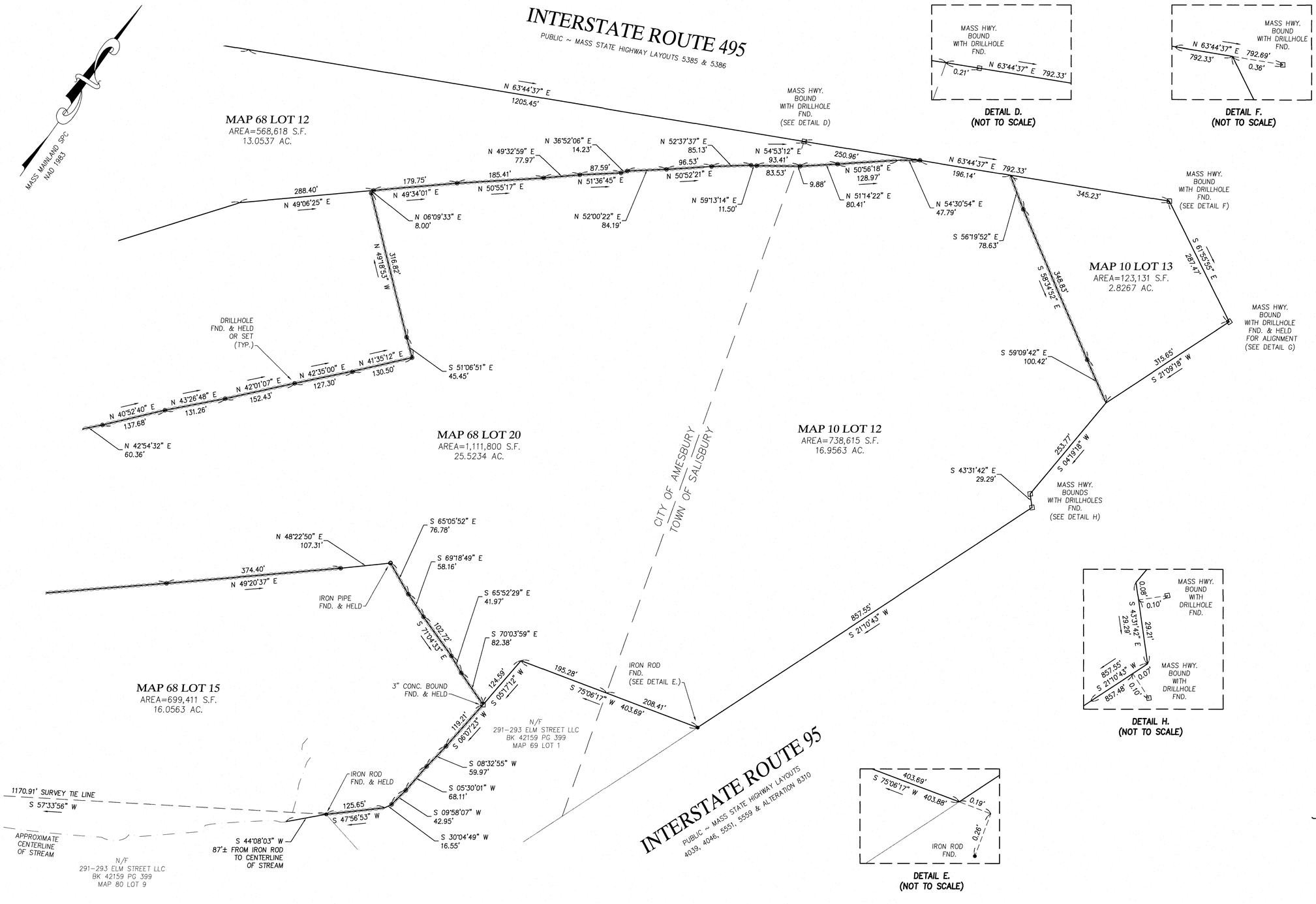
MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=100' | CALC. BY: A.W.M. | PROJECT: M244407
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

BOUNDARY LINES

SHEET: C-3.1



I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS.

MICHAEL J. SERGI — 8/11/2025 DATE

I CERTIFY THAT THE PROPERTY LINES SHOWN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIPS OR FOR NEW WAYS ARE SHOWN.

CHAPTER 41 SECTION 81X

COMMONWEALTH OF MASSACHUSETTS — MICHAEL J. SERGI No. 33191 — REGISTERED PROFESSIONAL LAND SURVEYOR

MICHAEL J. SERGI, P.L.S. — 8/11/2025 DATE

THE CERTIFICATION SHOWN ABOVE IS INTENDED TO MEET REGISTRATION REQUIREMENTS AND IS NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN.OWNERSHIP OF ADJOINING PROPERTIES ARE ACCORDING TO ASSESSORS RECORDS.

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100'

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=100' | CALC. BY: A.W.M. | DATE: AUG. 11, 2025 | CHKD. BY: M.J.S. | PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

BOUNDARY LINES

SHEET: C-3.2



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDERS
No. 24035
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

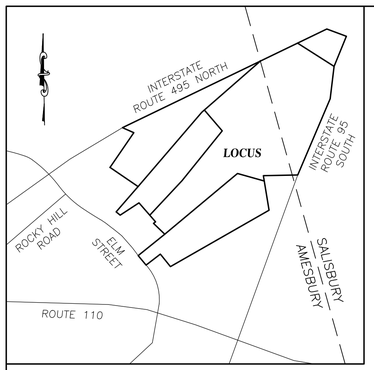
SCALE: 1"=40' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA

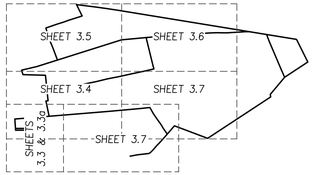
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

EXISTING CONDITIONS

SHEET: C-3.3



LOCUS MAP
N.T.S.



SHEET KEY

DEED REFERENCES

1. SEE DEED FROM ERIC MANDERSON MAYNE AND GERALD R. MAYNE TO TRUE HOMESTEAD LIMITED PARTNERSHIP IV DATED 1/27/1999 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 15596 PAGE 174.
2. SEE DEED FROM VIRGINIA R. MILLIKEN TO TRUE HOMESTEAD LIMITED PARTNERSHIP I DATED 8/6/1999 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 15871 PAGE 553.
3. SEE DEED FROM STANLEY O. BEAN, JR. TO STANLEY O. BEAN JR. AND ALICE M. BEAN TRUSTEES OF THE 287 ½ ELM STREET REALTY TRUST DATED 10/5/1994 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12779 PAGE 376.
4. SEE DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP II TO TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 11/20/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12307 PAGE 510.
5. SEE DEED FROM HERBERT T. SEARS TO TRUE HOMESTEAD LIMITED PARTNERSHIP IV DATED 11/20/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 12307 PAGE 508.
6. SEE DEED FROM STANLEY O. BEAN, JR AND ALICE M. BEAN TO STANLEY O. BEAN, JR AS TRUSTEE OF THE STANLEY O. BEAN, JR. REVOCABLE TRUST DATED 3/25/2005 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 24120 PAGE 288.
7. SEE DEED FROM MARTHA TRUE TO GERTRUDE NANCY SEARS AND ELIZABETH WARDWELL DATED 11/1/1956 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 4325 PAGE 48.
8. SEE DEED FROM SUSAN KEPNER AND PETER RANDALL TO TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 3/10/2015 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 34400 PAGE 366.
9. SEE DISCONTINUANCE OF STATE HIGHWAY FOR PORTIONS OF ELM STREET BY THE MASSACHUSETTS HIGHWAY COMMISSION ON BEHALF OF THE COMMONWEALTH OF MASSACHUSETTS DATED 2/19/2025 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 42586 PAGE 559.
10. SEE EASEMENT DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III TO TRUE HOMESTEAD LIMITED PARTNERSHIP I, TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III DATED 10/29/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 32928 PAGE 222.
11. SEE DEED FROM TRUE HOMESTEAD LIMITED PARTNERSHIP I, TRUE HOMESTEAD LIMITED PARTNERSHIP II AND TRUE HOMESTEAD LIMITED PARTNERSHIP III TO BEANPOD PARTNERS, LLC DATED 10/29/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS BOOK 32928 PAGE 225.

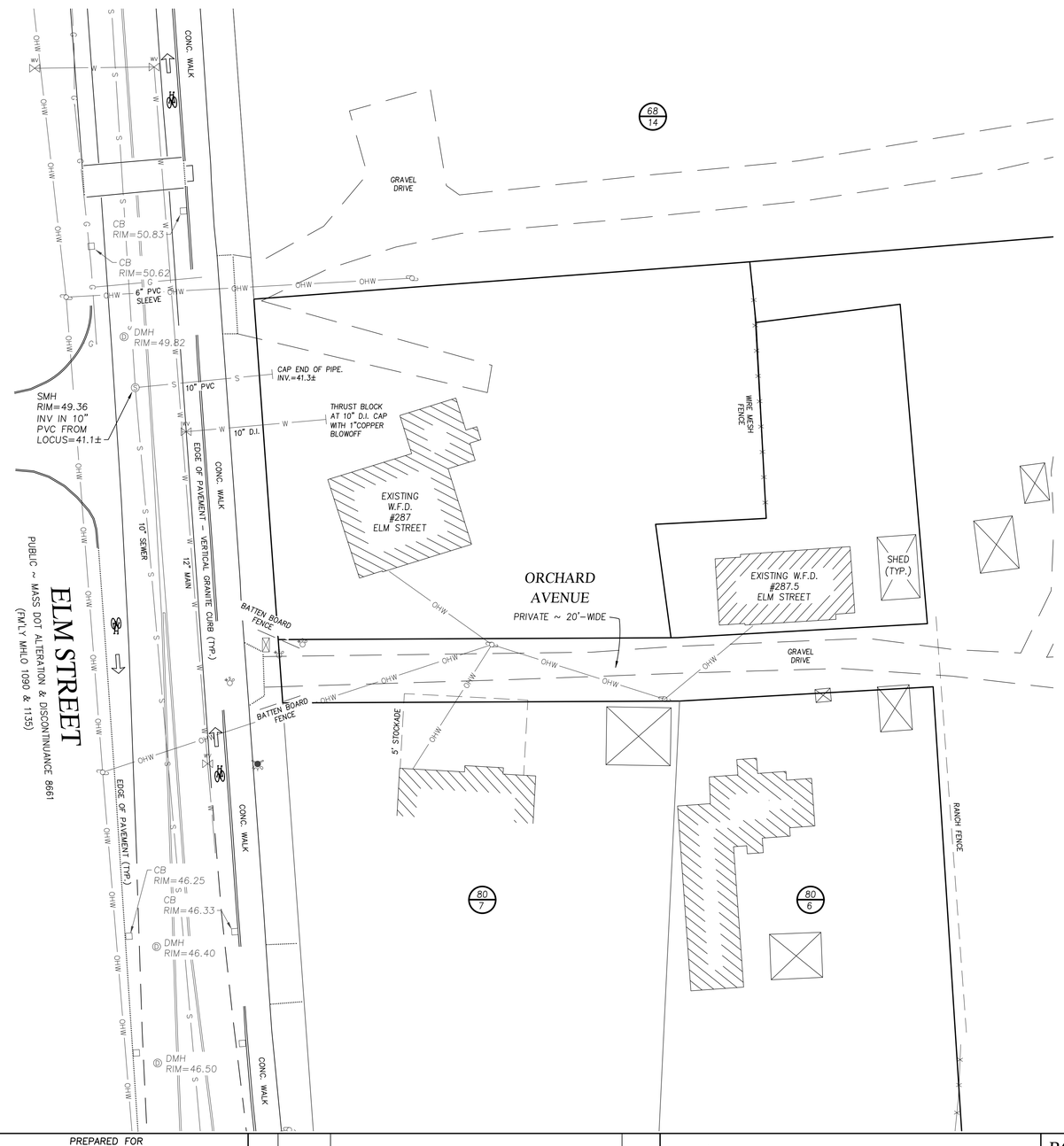
PLAN REFERENCES

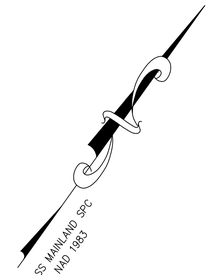
1. EASEMENT PLAN OF LAND PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY CAMMETT ENGINEERING. DATED 10/30/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 440 PLAN 26.
2. PLAN OF LAND PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY CAMMETT ENGINEERING. DATED 3/25/2013 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 440 PLAN 27.
3. PLAN OF LAND IN AMESBURY, MA AND SALISBURY, MA PREPARED FOR TRUE HOMESTEAD LIMITED PARTNERSHIP. DRAWN BY W.C. CAMMETT ENGINEERING, INC. DATED 02/24/1993 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 283 PLAN 58.
4. PLAN TITLED "ORCHARD PARK. AMESBURY, MASS" PREPARED FOR WM. J. COUGHLIN, DRAWN BY JOHN T. DESMOND, CIVIL ENGINEER AND SURVEYOR, DATED JULY, 1900 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 1617 PLAN 600.
5. PLAN OF LAND AT #259 ELM STREET IN AMESBURY, MASSACHUSETTS PREPARED FOR SCOTT L. ARSENAULT. DRAWN BY ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC., DATED 6/28/1996 AND RECORDED AT THE SOUTH ESSEX REGISTRY OF DEEDS PLAN BOOK 309 PLAN 93.
6. PLAN OF ROAD IN THE TOWN OF AMESBURY, ESSEX COUNTY, LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS HIGHWAY COMMISSION, DATED 10/30/1906. L.O. No.1090
7. PLAN OF ROAD IN THE TOWN OF AMESBURY, ESSEX COUNTY, LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS HIGHWAY COMMISSION, DATED 7/19/1907. L.O. No.1135
8. MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PLAN OF ROAD IN THE CITY OF AMESBURY, ESSEX COUNTY ALTERED AND LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION. DATED 4/10/2019. L.O. No.8622
9. MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PLAN OF ROAD IN THE CITY OF AMESBURY, ESSEX COUNTY ALTERED AND DISCONTINUED AS A STATE HIGHWAY BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION. DATED 2023. L.O. No.8661. *SEE ALSO REF. DEED 9.*

ASSESSOR REFERENCES

CITY OF AMESBURY ASSESSOR
MAP 68 LOTS 12,13,15 & 20
MAP 80 LOTS 3 & 4

TOWN OF SALISBURY ASSESSOR
MAP 10 LOTS 12 & 13





NOTES

1. ORIENTATION IS TO MASS MAINLAND SPC NAD 1983 BASED ON MULTIPLE GNSS RTK OBSERVATIONS.
2. VERTICAL DATUM IS BASED ON NAVD1988.
3. STATUS OF RIGHT OF WAYS SHOWN AS PUBLIC OR PRIVATE ARE BASED ON REFERENCED DEEDS AND PLANS. NO WARRANTY IS EXPRESSED OR IMPLIED.
4. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO ESTABLISH THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES WHETHER EXPRESSED, IMPLIED OR PRESCRIPTIVE.
5. DELINEATED WETLAND LINES, WATER FEATURES AND TOPOGRAPHY EXTENDING BEYOND THE RIGHT OF WAY OF ELM STREET SHOWN HEREON HAS BEEN PROVIDED TO M.E.I. BY GM2 ASSOCIATES, INC.
6. UTILITY INFORMATION SHOWN HEREON IS BASED ON VISIBLE SURFACE STRUCTURES AND INFORMATION PROVIDED TO M.E.I. BY GM2 ASSOCIATES, INC.

LEGEND

UPOLE	UTILITY POLE
D	DRAINAGE
W	WATER
S	SEWER
G	GAS
OHW	OVERHEAD WIRE
CB	CATCH BASIN
DMH	DRAIN MANHOLE
SMH	SEWER MANHOLE
EMH	ELECTRIC MANHOLE
WV	WATER SHUT OFF
WV	WATER VALVE
0/00	ASSESSORS MAP# PARCEL#

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20'

STEPHEN B. SAUNIER
CIVIL
No. 52425
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

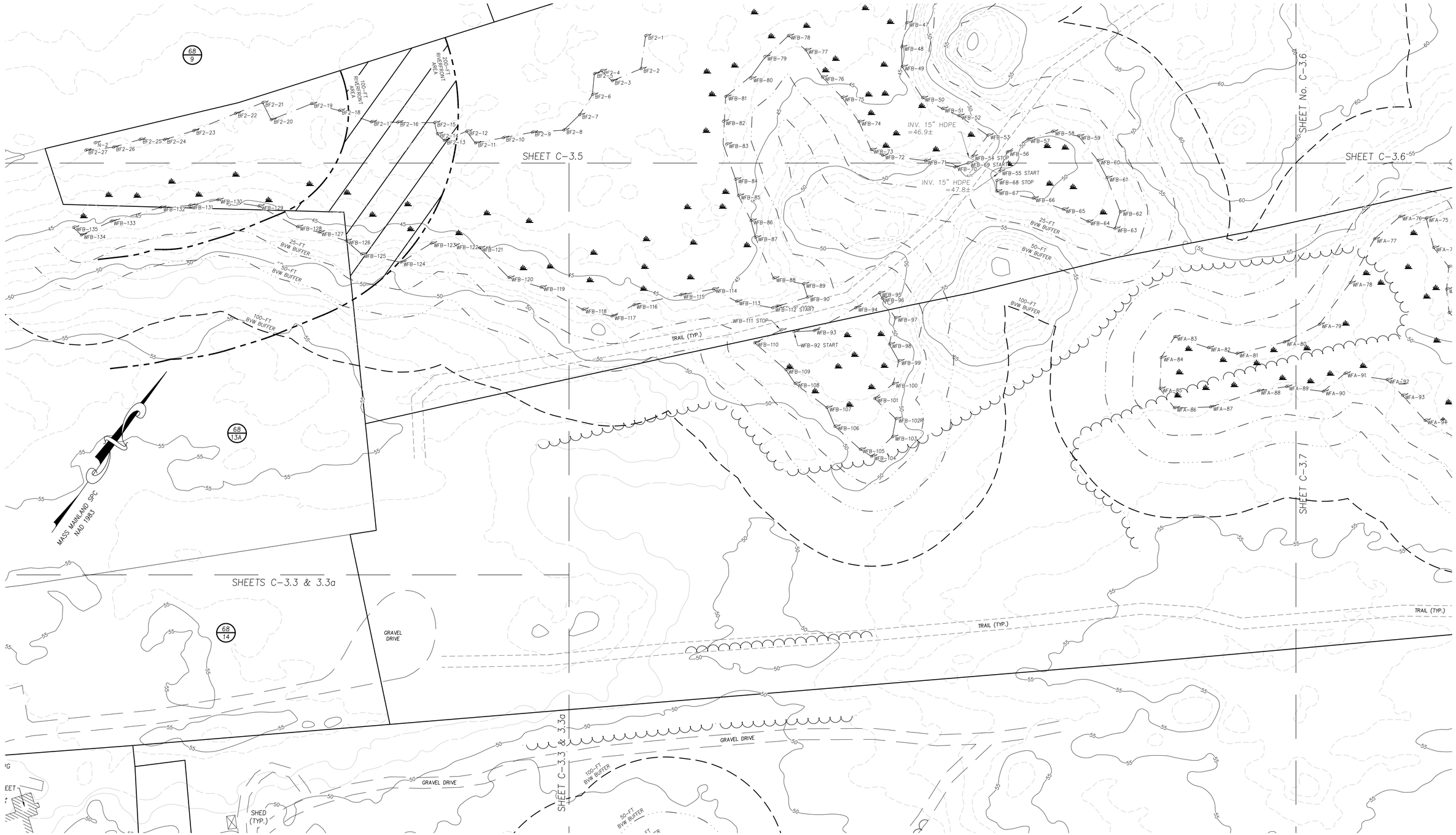
MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=20' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

EXISTING CONDITIONS

SHEET: C-3.3a



		COMMONWEALTH OF MASSACHUSETTS STEPHEN B. SAWYER 49403 REGISTERED PROFESSIONAL ENGINEER	PREPARED FOR **DALE DEVELOPMENT, LLC** 360 WASHINGTON STREET RYE, NH 03870	NO.	DATE	DESCRIPTION	BY	MEI MILLENNIUM ENGINEERING, INC. ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528	ROCKY HILL MBTA COMMUNITY IN AMESBURY, MA
								SCALE: 1"=40' CALC. BY: A.W.M. DATE: AUG. 11, 2025 CHKD. BY: M.J.S. PROJECT: M244407	SHOWING **EXISTING CONDITIONS** AT **ELM STREET**

EXISTING CONDITIONS

SHEET: C-3.4

MASS MAINLAND SPC
NAD 1983

68/7

68/8

68/9

TRAIL (TYP.)

25-FT BVW BUFFER

50-FT BVW BUFFER

100-FT BVW BUFFER

100-FT RIVERFRONT AREA

200-FT RIVERFRONT AREA

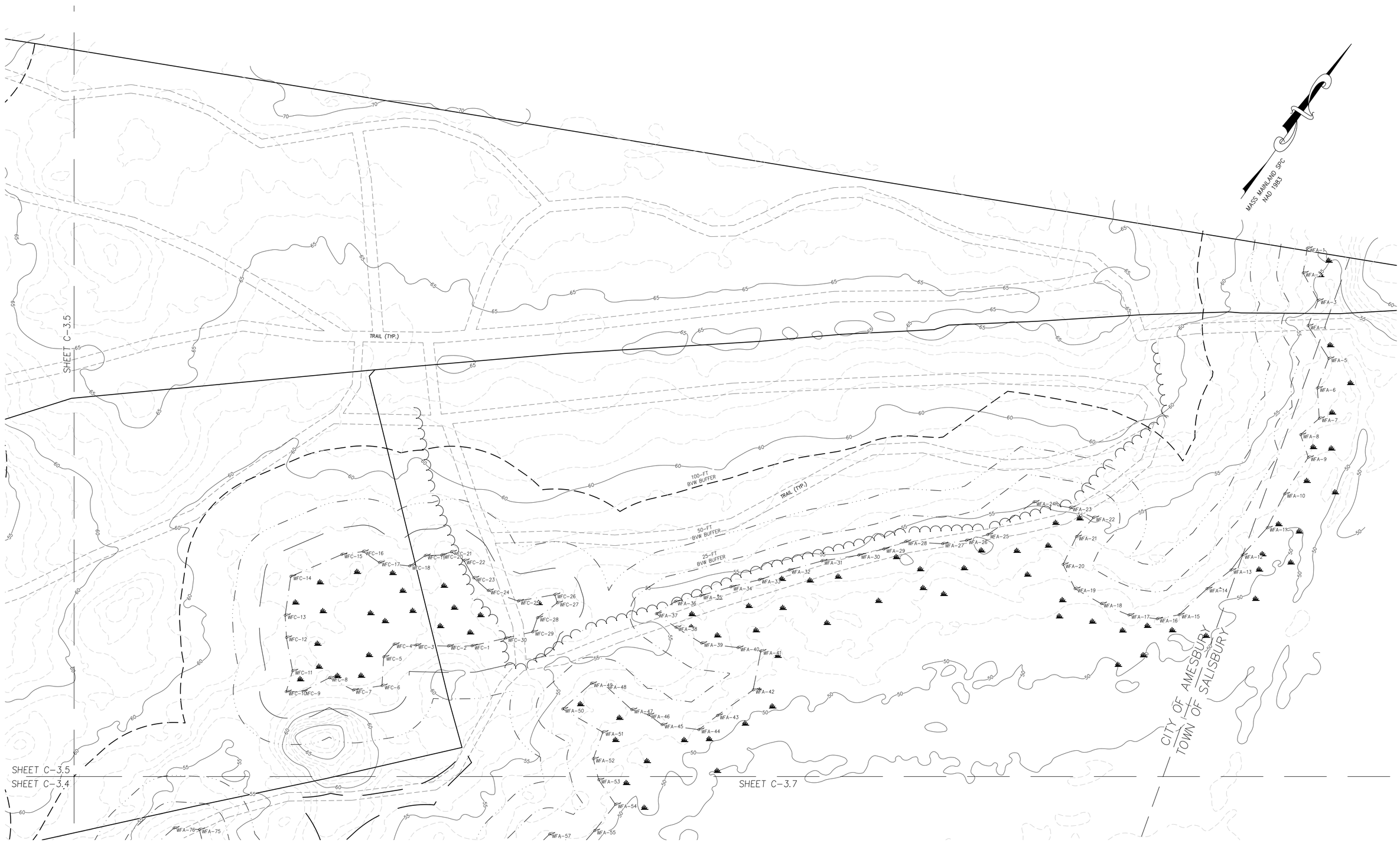
INV. 15" HDPE =46.9±

INV. 15" HDPE

SHEET C-3.5

SHEET No. C-3.6

SHEET C-3.6



PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

STEPHEN B. SAUNDERS, CIVIL, No. 24424, REGISTERED PROFESSIONAL ENGINEER, COMMONWEALTH OF MASSACHUSETTS

NO.	DATE	DESCRIPTION	BY

MEI **MILLENNIUM ENGINEERING, INC.**
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

EXISTING CONDITIONS

SHEET: C-3.6



PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

STEPHEN B. SAUNDERS CIVIL No. 024... REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

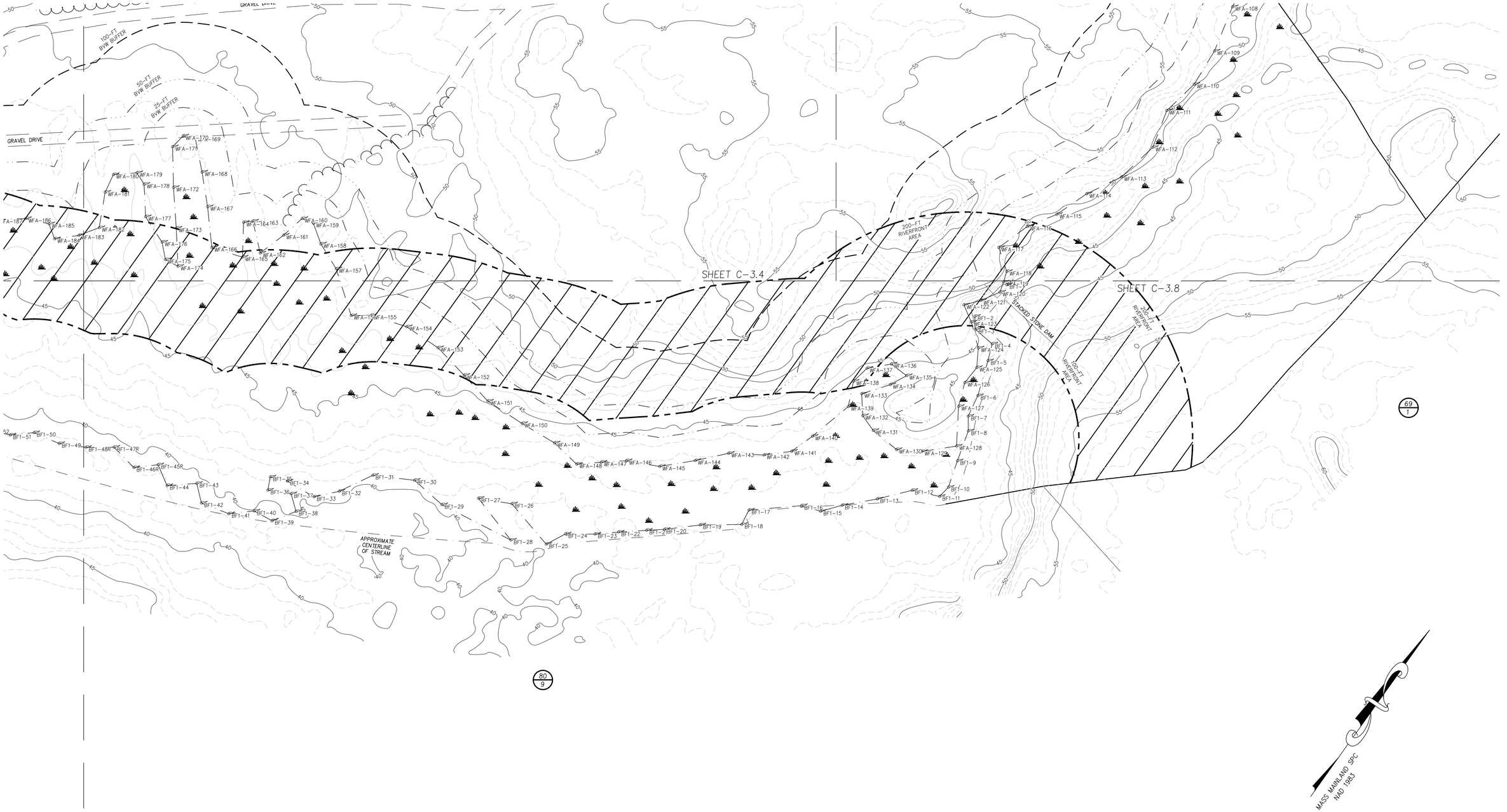
SCALE: 1"=40' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S. | PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA

SHOWING
EXISTING CONDITIONS
AT
ELM STREET

EXISTING CONDITIONS

SHEET: C-3.7



PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

STEPHEN B. SAWYER CIVIL REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: A.W.M.
DATE: AUG. 11, 2025 | CHKD. BY: M.J.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
SHOWING
EXISTING CONDITIONS
AT
ELM STREET

EXISTING CONDITIONS

SHEET: C-3.8

SHEET C5.2, 6.2, 7.2

SHEET C5.3, 6.3, 7.3

SHEET C5.0, 6.0, 7.0

SHEET C5.1, 6.1, 7.1

ROUTE 495

NORTH NEIGHBERHOOD

SOUTH NEIGHBERHOOD

ROAD "A"

ROAD "B"

ROAD "C"

ROAD "D"

COMMUNITY BUILDING

AMESBURY ANIMAL HOSPITAL

ELM STREET

CITY OF AMESBURY
TOWN OF SALISBURY

ROUTE 95

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)

1 inch = 80'

STEPHEN B. SAWYER CIVIL No. 52405 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=80' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

OVERALL SITE KEY PLAN

SHEET: C4.0

CURB SCHEDULE

MAIN BLVD. CURB (GRANITE TYPE VA4)

ALT. CURB TYPE (BELGIAN BLOCK, GRANITE TYPE VB, OR C.I.P. CONCRETE)

50' WIDE EMERGENCY EGRESS

ROW FOR ALL PURPOSES

20' WIDE EMERGENCY ACCESS

AMESBURY ANIMAL HOSPITAL

EXIST. SW BASIN

4" SWL EXISTING 5' BIKE LANE

RELOCATE EXISTING CROSSWALK

EXISTING 8' SIDEWALK

RELOCATED DRIVEWAY AND APRON FOR 283 ELM STREET

12" SWL 6' WIDE CROSSWALK

STOP SIGN

12" SWL STOP LINE

MAINTAIN EXISTING LIGHT POLE

12" CULVERT

8' WIDE PLANTED CENTER ISLAND SEE LANDSCAPE PLANS

ACCESS EASEMENT PROVIDED FROM ROCKY HILL SITE DRIVE

STORMWATER DETENTION AREA (TYP)

ROAD "A"

5' SIDEWALK SEE LANDSCAPE PLANS

EXISTING HOTEL ENTRANCE

PROPOSED DETACHED GARAGE

DEMOLISH ADDITION AND MAINTAIN EXISTING STRUCTURE

16' WIDE TRAVEL LANE

25' BUFFER

EDGE OF BVW

100-FT RIVERFRONT AREA

WALKING TRAILS

20' WIDE TRAVEL LANE

VISITOR AND TRAIL PARKING 7 SPACES

MOUNTABLE GRANITE CURB

STORMWATER DETENTION AREA (TYP)

THE COMMONS

5' SIDEWALK SEE LANDSCAPE PLANS

16' WIDE DRIVEWAY

4-SPACES

2-SPACES

3-SPACES

5-SPACES

#74 #73 #72 #71 #70 #69 #68 #67 #66 #65 #64 #63 #62 #61 #60 #59 #58 #57 #56 #55 #54 #53 #52 #51 #50 #49 #48 #47 #46 #45 #44 #43 #42 #41 #40 #39 #38 #37 #36 #35 #34 #33 #32 #31 #30 #29 #28 #27 #26 #25 #24 #23 #22 #21 #20 #19 #18 #12 #3 #2 #1 #76 #75 #77 #78 #79 #80 #82 #81 #83

BLDG. 1

BLDG. 2

COMMUNITY BLDG.

ROAD "B"

ROAD "C"

ROAD "D"

PARK

8' WIDE PLANTED CENTER ISLAND SEE LANDSCAPE PLANS

COBBLE APRON

CENTER ROUND-ABOUT

R=465

R=925

R=400 ±

R=200

R=200 ±

R=40

R=20

R=15

R=10

R=6

R=5

R=4

R=3

R=8

R=22

R=50

R=70

R=94

R=104

R=84

0+00

1+00

2+00

3+00

4+00

5+00

20.0'

14.0'

16.0'

5.0'

SOUTH NEIGHBORHOOD PARKING SUMMARY

83 FOR SALE DWELLING UNITS
154 GARAGED PARKING SPACES
49 DRIVEWAY LANE PARKING SPACES
24 SECONDARY ROAD PARKING SPACES
22 MAIN BOULEVARD PARKING SPACES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDERS
No. 24026
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE LAYOUT PLAN-1

SHEET: C5.0



SOUTH NEIGHBORHOOD PARKING SUMMARY

83 FOR SALE DWELLING UNITS
154 GARAGED PARKING SPACES
49 DRIVEWAY LANE PARKING SPACES
24 SECONDARY ROAD PARKING SPACES
22 MAIN BOULEVARD PARKING SPACES

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 52852
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
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62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
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DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE LAYOUT PLAN 2

SHEET: C5.1

CURB SCHEDULE

MAIN BLVD. CURB (GRANITE TYPE

ALT. CURB TYPE (BELGIAN BLOCK, GRANITE TYPE VB, OR C.I.P. CONCRETE)

TRASH & RECYCLING ENCLOSURE

TRASH & RECYCLING ENCLOSURE

PROPOSED TREELINE (TYP.)

5'WIDE CONC. SIDEWALK (TYP.)

PARKING BARN (TYP.)

TRASH & RECYCLING ENCLOSURE

RAISED CROSSWALK

VISITOR AND TRAIL PARKING
7 SPACES

APPROXIMATE EDGE OF RTE.495 BREAKDOWN LANE

80' WOODED BUFFER

PROPOSED TREELINE (TYP.)

5'WIDE CONC. SIDEWALK (TYP.)

8'x23' PARKING SPACE

5' MIN. PLANTING STRIP

ROAD "A"

ROAD "B"

24' WIDE DRIVEWAY

22' WIDE TRAVEL WAY

50' BUFFER

25' BUFFER

EDGE OF BVW

BVW BUFFER

25-FT BVW BUFFER

50-FT BVW BUFFER

BLDG. 1
BLDG. 2
BLDG. 3
BLDG. 4
BLDG. 5
BLDG. 6
BLDG. 7
BLDG. 8
BLDG. 9
BLDG. 10
BLDG. 11
BLDG. 12
BLDG. 13
BLDG. 14
BLDG. 20
BLDG. 21
BLDG. 22
BLDG. 23
BLDG. 24
BLDG. 25
BLDG. 26
BLDG. 27
BLDG. 28
BLDG. 29

CLUBHOUSE

GYM & BASKETBALL COURT

PICKLEBALL

NORTH NEIGHBORHOOD PARKING SUMMARY

296 RENTAL DWELLING UNITS
70 GARAGED PARKING SPACES
320 DRIVEWAY LANE PARKING SPACES
107 MAIN BOULEVARD PARKING SPACES
38 HC SPACES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDER
No. 23626
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
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MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S. | PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE LAYOUT PLAN 3

SHEET: C5.2

APPROXIMATE EDGE OF RTE.495
BREAKDOWN LANE

5'WIDE CONC. SIDEWALK (TYP.)

TRASH & RECYCLING
ENCLOSURE

RAISED CROSSWALK

80' WOODED BUFFER

PARKING BARN (TYP.)

TRASH & RECYCLING
ENCLOSURE

CURB SCHEDULE

MAIN BLVD. CURB (GRANITE TYPE VA4)

ALT. CURB TYPE (BELGIAN BLOCK, GRANITE TYPE VB, OR C.I.P. CONCRETE)

8'x23' PARKING
SPACE

5' MIN. PLANTING
STRIP

22' WIDE
ROADWAY

8'x23' PARKING
SPACE

TRASH & RECYCLING
ENCLOSURE

TRAIL

8'x23' PARKING
SPACE(TYP.)

ANTED CENTER ISLAND
SCAPE PLANS

CITY OF AMESBURY
TOWN OF SALISBURY

NORTH NEIGHBORHOOD PARKING SUMMARY

296 RENTAL DWELLING UNITS
70 GARAGED PARKING SPACES
320 DRIVEWAY LANE PARKING SPACES
107 MAIN BOULEVARD PARKING SPACES
38 HC SPACES

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNER
No. 52626
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

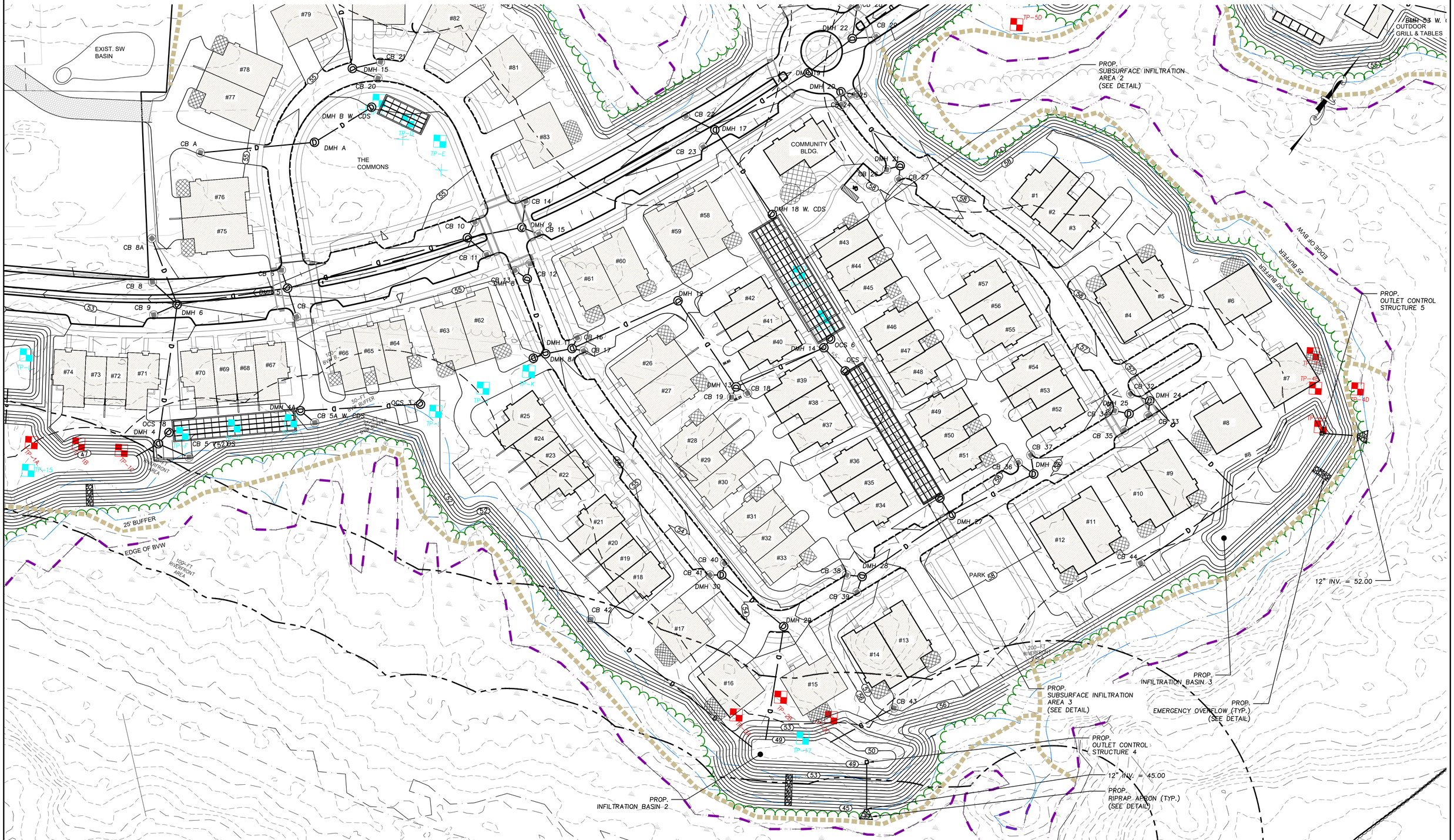
SCALE: 1"=40' | CALC. BY: J.T.M.
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PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE
LAYOUT
PLAN 4

SHEET: C5.3

PROP. INFILTRATION BASIN 4
EXIST. SW BASIN
PROP. SUBSURFACE INFILTRATION AREA 8 (SEE DETAIL)
PROP. RETAINING WALL T.O.W.= 54.0 B.O.W.=52.0
PROP. RETAINING WALL T.O.W.= VARIES B.O.W.=VARIES
PROP. CONSTRUCTED WETLAND 1
PROP. OUTLET CONTROL STRUCTURE 1
PROP. INFILTRATION BASIN 1
PROP. OUTLET CONTROL STRUCTURE 2
12" INV. = 43.50
PROP. LEVEL SPREADER (TYP.) (SEE DETAIL)
PROP. EMERGENCY OVERFLOW (TYP.) (SEE DETAIL)
PROP. SUBSURFACE INFILTRATION AREA 1A (SEE DETAIL)
PROP. SUBSURFACE INFILTRATION AREA 1B (SEE DETAIL)
THE COMMONS
COMMUNITY BLDG.
BLDG. 1
BLDG. 2
ELM STREET
25' BUFFER
EDGE OF BVW
50-FT BVW BUFFER
100-FT BVW BUFFER
DMH 16
DMH 15
DMH B W. CDS
DMH A
DMH 2 W. CDS
DMH 3
DMH 6
DMH 4
DMH 5A W. CDS
DMH 17
DMH 22
DMH 20
DMH 21
DMH 18 W. CDS
DMH 12
DMH 11
DMH 14
DMH 13
DMH 32
DMH 33
DMH 25
CB A
CB 3
CB 4
CB 8A
CB 8
CB 9
CB 5
CB 5A W. CDS
CB 20
CB 21
CB 23
CB 24
CB 25
CB 26
CB 27
CB 28
CB 29
CB 10
CB 11
CB 12
CB 13
CB 14
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CB 16
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CB 18
CB 19
CB 30
CB 31
CB 33 W. CDS
CB 45
CB 46
CB 37
CB 36
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R=1.5
R=1
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R=0.4
R=0.3
R=0.2
R=0.1
R=0.0
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R=-1.6
R=-1.7
R=-1.8
R=-1.9
R=-2.0
R=-2.1
R=-2.2
R=-2.3
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R=-2.5
R=-2.6
R=-2.7
R=-2.8
R=-2.9
R=-3.0
R=-3.1
R=-3.2
R=-3.3
R=-3.4
R=-3.5
R=-3.6
R=-3.7
R=-3.8
R=-3.9
R=-4.0



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

STEPHEN B. SAUNDER CIVIL No. 52035 REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

05/22/25
05/30/25
DATE: AUG. 11, 2025
CALC. BY: J.T.M.
CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

GRADING & DRAINAGE

SHEET: C-6.1


18" INV. = 52.50
PROP. OUTLET CONTROL STRUCTURE 10 (SEE DETAIL)
PROP. INFILTRATION BASIN 5
PROP. EMERGENCY OVERFLOW (TYP.) (SEE DETAIL)
PROP. RETAINING WALL (TO BE DESIGNED BY OTHER)
PROP. LEVEL SPREADER (TYP.) (SEE DETAIL)
12" INV. = 51.50
PROP. SUBSURFACE INFILTRATION AREA 4 (SEE DETAIL)
PROP. RETAINING WALL
EDGE OF BVW
50' BUFFER
25' BUFFER
BVW BUFFER
DMH 42
DMH 43
CB 58
CB 59
CB 56
DMH 41
CB 57
DMH 40
CB 55
DMH 39 W. CDS
CB 61
DMH 44
CB 60
DMH 45
CB 63
CB 62
DMH 38
CB 53
CB 54
DMH 37
DMH 36
CB 52
CB 64
CB 65
DMH 26
CB 49
DMH 35
CB 50
CB 51
DMH 34 W. CDS
CB 48
DMH 32
CB 45
CB 46
DMH 31
CB 30
DMH 33
CB 31
CB 68
CB 69
DMH 49
CB 70
DMH 50
CB 71
DMH 51
CB 66
DMH 47
DMH 48 W. CDS
CB 67
DMH 54 W. CDS
CB 72
CB 73
DMH 59
CB 81
CB 80
CB 75
CB 74
DMH 55
DMH 56
CB 77
CB 76
CB 79
CB 78
DMH 57
DMH 58 W. CDS
DMH 60
CB 83
DMH 61
CB 82
DMH 62
CB 84
DMH 63
CB 85
DMH 64
CB 86
DMH 65
CB 87
DMH 66
CB 88
DMH 67
CB 89
DMH 68
CB 90
DMH 69
CB 91
DMH 70
CB 92
DMH 71
CB 93
DMH

PROP. SUBSURFACE INFILTRATION AREA 6 (SEE DETAIL)

PROP. SUBSURFACE INFILTRATION AREA 7 (SEE DETAIL)

PROP. SUBSURFACE DETENTION AREA 1 (SEE DETAIL)

PROP. SUBSURFACE DETENTION AREA 2 (SEE DETAIL)

ROAD "A"

ROAD "B"

12" INV. = 57.00

PROP. SUBSURFACE INFILTRATION AREA 5 (SEE DETAIL)

18" INV. = 56.00

12" INV. = 57.00

24" INV. = 54.00

PROP. OUTLET CONTROL STRUCTURE 12 (SEE DETAIL)

PROP. CONSTRUCTED WETLAND 3

12" INV. = 54.00

PROP. OUTLET CONTROL STRUCTURE 11 (SEE DETAIL)

PROP. CONSTRUCTED WETLAND 2

PROP. RETAINING WALL T.O.W.= VARIES B.O.W.=61.0 (4' MAX. HEIGHT)

18" INV. = 53.00

18" INV. = 53.00

PROP. CONSTRUCTED WETLAND 4

PROP. EMERGENCY OVERFLOW (TYP.) (SEE DETAIL)

PROP. LEVEL SPREADER (TYP.) (SEE DETAIL)

18" INV. = 52.00

PROP. RETAINING WALL (TO BE DESIGNED BY OTHERS)

PROP. INFILTRATION BASIN 6 (SEE DETAIL)

PROP. OUTLET CONTROL STRUCTURE 19 (SEE DETAIL)

PROP. OUTLET CONTROL STRUCTURE 13 (SEE DETAIL)

CITY OF AMESBURY / TOWN OF SALISBURY

CLUBHOUSE

GYM & BASKETBALL COURT

PICKLEBALL

POOL

OUTDOOR GRILL & TABLES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

PREPARED FOR

DALE DEVELOPMENT, LLC

360 WASHINGTON STREET

RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI MILLENNIUM ENGINEERING, INC.

ENGINEERING AND LAND SURVEYING

62 ELM ST. SALISBURY, MA 01952 (978) 463-8980

13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.

DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.

PROJECT: M244407

ROCKY HILL MBTA COMMUNITY

IN

AMESBURY, MA

AT

ELM STREET

GRADING & DRAINAGE

SHEET: C-6.3

CATCH BASIN SCHEDULE	
STRUCTURE	DETAILS
CB 1	RIM = 49.42 INV. OUT (12") = 46.84 (DMH 1 W. CDS)
CB 2	RIM = 49.43 INV. OUT (12") = 46.81 (DMH 1 W. CDS)
CB 3	RIM = 50.13 INV. OUT (12") = 48.00 (DMH 3)
CB 4	RIM = 50.15 INV. OUT (12") = 48.00 (DMH 3)
CB 5 W. CDS	RIM = 53.00 INV. OUT (12") = 48.00 (DMH 4)
CB 5A W. CDS	RIM = 50.28 INV. OUT (12") = 48.40 (DMH 4A)
CB 6	RIM = 54.53 INV. OUT (12") = 49.82 (DMH 5)
CB 7	RIM = 54.21 INV. OUT (12") = 49.82 (DMH 5)
CB 8	RIM = 53.34 INV. OUT (12") = 50.40 (DMH 6)
CB 8A	RIM = 51.51 INV. OUT (12") = 49.63 (DMH 6)
CB 9	RIM = 53.41 INV. OUT (12") = 50.40 (DMH 6)
CB 10	RIM = 54.18 INV. OUT (12") = 50.79 (DMH 7)
CB 11	RIM = 54.17 INV. OUT (12") = 50.79 (DMH 7)
CB 12	RIM = 54.25 INV. OUT (12") = 51.25 (DMH 8)
CB 13	RIM = 54.24 INV. OUT (12") = 51.25 (DMH 8)
CB 14	RIM = 53.75 INV. OUT (12") = 51.05 (DMH 9)
CB 15	RIM = 53.74 INV. OUT (12") = 51.04 (DMH 9)
CB 16	RIM = 54.90 INV. OUT (12") = 51.90 (DMH 11)
CB 17	RIM = 54.90 INV. OUT (12") = 51.90 (DMH 11)
CB 18	RIM = 66.05 INV. OUT (12") = 53.25 (DMH 13)
CB 19	RIM = 66.05 INV. OUT (12") = 53.25 (DMH 13)
CB 20	RIM = 54.06 INV. OUT (12") = 51.10 (DMH 15)
CB 21	RIM = 54.02 INV. OUT (12") = 51.10 (DMH 15)
CB 22	RIM = 55.26 INV. OUT (12") = 52.30 (DMH 17)
CB 23	RIM = 55.26 INV. OUT (12") = 52.30 (DMH 17)
CB 24	RIM = 55.15 INV. OUT (12") = 53.60 (DMH 20)
CB 25	RIM = 55.15 INV. OUT (12") = 53.60 (DMH 20)
CB 26	RIM = 57.20 INV. OUT (12") = 54.60 (DMH 21)
CB 27	RIM = 57.20 INV. OUT (12") = 54.60 (DMH 21)
CB 28	RIM = 57.20 INV. OUT (12") = 53.12 (DMH 22)
CB 29	RIM = 57.20 INV. OUT (12") = 54.20 (DMH 22)
CB 30	RIM = 58.87 INV. OUT (12") = 55.90 (DMH 23)

CATCH BASIN SCHEDULE	
STRUCTURE	DETAILS
CB 31	RIM = 58.88 INV. OUT (12") = 55.90 (DMH 23)
CB 32	RIM = 56.35 INV. OUT (12") = 53.71 (DMH 24)
CB 33	RIM = 56.60 INV. OUT (12") = 53.71 (DMH 24)
CB 34	RIM = 55.74 INV. OUT (12") = 53.86 (DMH 25)
CB 35	RIM = 55.74 INV. OUT (12") = 53.86 (DMH 25)
CB 36	RIM = 56.33 INV. OUT (12") = 54.45 (DMH 26)
CB 37	RIM = 56.33 INV. OUT (12") = 54.45 (DMH 26)
CB 38	RIM = 56.54 INV. OUT (12") = 53.50 (DMH 28)
CB 39	RIM = 56.06 INV. OUT (12") = 53.50 (DMH 28)
CB 40	RIM = 53.55 INV. OUT (12") = 50.53 (DMH 30)
CB 41	RIM = 53.55 INV. OUT (12") = 50.53 (DMH 30)
CB 42	RIM = 54.50 INV. OUT (12") = 50.50 ()
CB 43	RIM = 57.20 INV. OUT (12") = 52.00 ()
CB 44	RIM = 57.10 INV. OUT (12") = 53.50 ()
CB 45	RIM = 61.41 INV. OUT (12") = 57.59 (DMH 31)
CB 46	RIM = 61.40 INV. OUT (12") = 57.59 (DMH 31)
CB 48	RIM = 58.30 INV. OUT (12") = −0.50 (DMH 33 W. CDS)
CB 49	RIM = 60.38 INV. OUT (12") = 58.50 (DMH 35)
CB 50	RIM = 61.55 INV. OUT (12") = 56.50 (DMH 35)
CB 51	RIM = 63.30 INV. OUT (12") = 60.30 (DMH 36)
CB 52	RIM = 63.30 INV. OUT (12") = 60.30 (DMH 36)
CB 53	RIM = 65.05 INV. OUT (12") = 60.76 (DMH 37)
CB 54	RIM = 64.10 INV. OUT (12") = 60.20 (DMH 38)
CB 55	RIM = 62.11 INV. OUT (12") = 60.23 (DMH 40)
CB 56	RIM = 64.80 INV. OUT (12") = 61.20 (DMH 41)
CB 57	RIM = 64.80 INV. OUT (12") = −0.50 (DMH 41)
CB 58	RIM = 66.10 INV. OUT (12") = 62.10 (DMH 43)
CB 59	RIM = 66.10 INV. OUT (12") = 62.10 (DMH 43)
CB 60	RIM = 66.32 INV. OUT (12") = 62.30 (DMH 44)
CB 61	RIM = 66.31 INV. OUT (12") = 62.30 (DMH 44)
CB 62	RIM = 67.82 INV. OUT (12") = 63.88 (DMH 45)
CB 63	RIM = 67.82 INV. OUT (12") = 63.88 (DMH 45)

CATCH BASIN SCHEDULE	
STRUCTURE	DETAILS
CB 64	RIM = 64.13 INV. OUT (12") = 61.10 (DMH 46)
CB 65	RIM = 64.13 INV. OUT (12") = 61.10 (DMH 46)
CB 66	RIM = 63.50 INV. OUT (12") = 60.50 (DMH 47)
CB 67	RIM = 63.60 INV. OUT (12") = 60.60 (DMH 47)
CB 68	RIM = 61.80 INV. OUT (12") = 58.90 (DMH 49)
CB 69	RIM = 61.80 INV. OUT (12") = 58.90 (DMH 49)
CB 70	RIM = 60.70 INV. OUT (12") = 58.20 (DMH 50)
CB 71	RIM = 60.70 INV. OUT (12") = 58.20 (DMH 50)
CB 72	RIM = 63.38 INV. OUT (12") = 61.50 (DMH 54 W. CDS)
CB 73	RIM = 63.38 INV. OUT (12") = 61.50 (DMH 54 W. CDS)
CB 74	RIM = 67.71 INV. OUT (12") = 64.50 (DMH 55)
CB 75	RIM = 67.71 INV. OUT (12") = 64.50 (DMH 55)
CB 76	RIM = 65.69 INV. OUT (12") = 62.65 (DMH 56)
CB 77	RIM = 65.69 INV IN. (12") = 62.65 (DMH 56)
CB 78	RIM = 64.42 INV. OUT (12") = 61.40 (DMH 57)
CB 79	RIM = 64.42 INV. OUT (12") = 61.40 (DMH 57)
CB 80	RIM = 64.87 INV. OUT (12") = 62.99 (DMH 59)
CB 81	RIM = 64.87 INV. OUT (12") = 62.99 (DMH 59)
CB 82	RIM = 64.51 INV. OUT (12") = 61.00 (DMH 60)
CB 83	RIM = 64.51 INV. OUT (12") = 61.00 (DMH 60)
CB 84	RIM = 65.54 INV. OUT (12") = 62.00 (DMH 63)
CB 85	RIM = 65.55 INV. OUT (12") = 62.00 (DMH 63)
CB 86	RIM = 64.50 INV. OUT (12") = 58.00 (DMH 65 W. CDS)
CB 87	RIM = 59.88 INV. OUT (12") = 58.00 (DMH 65 W. CDS)
CB 88	RIM = 63.83 INV. OUT (12") = 60.00 (DMH 66)
CB 89	RIM = 63.96 INV. OUT (12") = 60.00 (DMH 66)
CB 90	RIM = 61.70 INV. OUT (12") = 57.55 (DMH 67)
CB 91	RIM = 61.70 INV. OUT (12") = 57.55 (DMH 67)
CB 92	RIM = 64.20 INV. OUT (12") = 61.40 (DMH 69)
CB 93	RIM = 64.20 INV. OUT (12") = 61.40 (DMH 69)
CB 94	RIM = 61.30 INV. OUT (12") = 58.18 (DMH 70)
CB 95	RIM = 61.30 INV. OUT (12") = 58.18 (DMH 70)

CATCH BASIN SCHEDULE	
STRUCTURE	DETAILS
CB A	RIM = 54.50 INV. OUT (12") = 51.85 (DMH A)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
CIVIL
No. 52621
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

GRADING & DRAINAGE

SHEET: C-6.4

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
		18.00	39.25	10.19%	57.00	53.00	
	AD 1	12.00	15.25	6.56%	62.50	61.50	
	CB 1	12.00	28.17	0.46%	46.84	46.71	DMH 1 W. CDS
	CB 2	12.00	18.59	0.54%	46.81	46.71	DMH 1 W. CDS
	CB 3	12.00	35.88	1.39%	48.00	47.50	DMH 3
	CB 4	12.00	21.23	2.36%	48.00	47.50	DMH 3
	CB 5 W. CDS	12.00	31.96	0.47%	48.00	47.85	DMH 4
	CB 5A W. CDS	12.00	17.69	1.13%	48.40	48.20	DMH 4A
	CB 6	12.00	18.24	1.10%	49.82	49.62	DMH 5
	CB 7	12.00	28.56	0.70%	49.82	49.62	DMH 5
	CB 8	12.00	31.74	4.41%	50.40	49.00	DMH 6
	CB 8A	12.00	67.29	0.94%	49.63	49.00	DMH 6
	CB 9	12.00	24.37	5.75%	50.40	49.00	DMH 6
	CB 10	12.00	16.61	1.20%	50.79	50.59	DMH 7
	CB 11	12.00	24.44	0.82%	50.79	50.59	DMH 7
	CB 12	12.00	14.58	0.75%	51.25	51.14	DMH 8
	CB 13	12.00	14.23	0.70%	51.25	51.15	DMH 8
	CB 14	12.00	25.45	0.43%	51.05	50.94	DMH 9
	CB 15	12.00	17.51	0.57%	51.04	50.94	DMH 9
	CB 16	12.00	11.40	0.88%	51.90	51.80	DMH 11
	CB 17	12.00	11.28	0.89%	51.90	51.80	DMH 11
	CB 18	12.00	12.49	0.80%	53.25	53.15	DMH 13
	CB 19	12.00	10.80	0.93%	53.25	53.15	DMH 13
	CB 20	12.00	26.16	0.76%	51.10	50.90	DMH 15
	CB 21	12.00	27.49	0.73%	51.10	50.90	DMH 15

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	CB 22	12.00	30.71	0.49%	52.30	52.15	DMH 17
	CB 23	12.00	19.72	0.51%	52.30	52.20	DMH 17
	CB 24	12.00	12.35	0.81%	53.60	53.50	DMH 20
	CB 25	12.00	15.70	0.64%	53.60	53.50	DMH 20
	CB 26	12.00	13.41	0.75%	54.60	54.50	DMH 21
	CB 27	12.00	12.94	0.77%	54.60	54.50	DMH 21
	CB 28	12.00	30.61	0.77%	53.12	52.89	DMH 22
	CB 29	12.00	22.80	0.44%	54.20	54.10	DMH 22
	CB 30	12.00	14.05	0.71%	55.90	55.80	DMH 23
	CB 31	12.00	23.35	0.43%	55.90	55.80	DMH 23
	CB 32	12.00	19.32	0.52%	53.71	53.61	DMH 24
	CB 33	12.00	14.29	0.70%	53.71	53.61	DMH 24
	CB 34	12.00	14.34	0.70%	53.86	53.76	DMH 25
	CB 35	12.00	16.03	0.62%	53.86	53.76	DMH 25
	CB 36	12.00	18.28	0.55%	54.45	54.35	DMH 26
	CB 37	12.00	18.26	0.55%	54.45	54.35	DMH 26
	CB 38	12.00	14.83	0.67%	53.50	53.40	DMH 28
	CB 39	12.00	15.55	0.64%	53.50	53.40	DMH 28
	CB 40	12.00	11.36	0.88%	50.53	50.43	DMH 30
	CB 41	12.00	11.36	0.88%	50.53	50.43	DMH 30
	CB 42	12.00	195.16	0.77%	50.50	49.00	
	CB 43	12.00	68.52	4.38%	52.00	49.00	
	CB 44	12.00	107.22	0.47%	53.50	53.00	
	CB 45	12.00	15.06	0.66%	57.59	57.49	DMH 31
	CB 46	12.00	20.84	0.48%	57.59	57.49	DMH 31

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	CB 48	12.00	10.69	−9.82%	−0.50	0.55	DMH 33 W. CDS
	CB 49	12.00	12.99	0.77%	58.50	58.40	DMH 35
	CB 50	12.00	14.91	−7.04%	56.50	57.55	DMH 35
	CB 51	12.00	15.19	0.66%	60.30	60.20	DMH 36
	CB 52	12.00	15.58	0.64%	60.30	60.20	DMH 36
	CB 53	12.00	12.57	7.95%	60.76	59.76	DMH 37
	CB 54	12.00	10.34	7.74%	60.20	59.40	DMH 38
	CB 55	12.00	17.88	5.59%	60.23	59.23	DMH 40
	CB 56	12.00	13.96	0.72%	61.20	61.10	DMH 41
	CB 57	12.00	13.69	−6.94%	−0.50	0.45	DMH 41
	CB 58	12.00	15.62	0.64%	62.10	62.00	DMH 43
	CB 59	12.00	18.53	0.54%	62.10	62.00	DMH 43
	CB 60	12.00	16.33	0.61%	62.30	62.20	DMH 44
	CB 61	12.00	18.79	0.53%	62.30	62.20	DMH 44
	CB 62	12.00	15.51	0.64%	63.88	63.78	DMH 45
	CB 63	12.00	16.88	0.59%	63.88	63.78	DMH 45
	CB 64	12.00	29.93	0.67%	61.10	60.90	DMH 46
	CB 65	12.00	19.12	1.05%	61.10	60.90	DMH 46
	CB 66	12.00	24.39	0.82%	60.50	60.30	DMH 47
	CB 67	12.00	17.90	1.68%	60.60	60.30	DMH 47
	CB 68	12.00	14.82	0.67%	58.90	58.80	DMH 49
	CB 69	12.00	15.80	0.63%	58.90	58.80	DMH 49
	CB 70	12.00	24.44	0.82%	58.20	58.00	DMH 50
	CB 71	12.00	21.91	0.91%	58.20	58.00	DMH 50
	CB 72	12.00	8.01	7.49%	61.50	60.90	DMH 54 W. CDS

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	CB 73	12.00	13.94	4.31%	61.50	60.90	DMH 54 W. CDS
	CB 74	12.00	14.90	0.67%	64.50	64.40	DMH 55
	CB 75	12.00	15.12	0.66%	64.50	64.40	DMH 55
	CB 76	12.00	15.09	0.66%	62.65	62.55	DMH 56
	CB 77	12.00	14.80	−0.68%	62.65	62.55	DMH 56
	CB 78	12.00	23.15	0.43%	61.40	61.30	DMH 57
	CB 79	12.00	23.29	0.43%	61.40	61.30	DMH 57
	CB 80	12.00	19.62	0.51%	62.99	62.89	DMH 59
	CB 81	12.00	19.08	0.52%	62.99	62.89	DMH 59
	CB 82	12.00	13.88	0.72%	61.00	60.90	DMH 60
	CB 83	12.00	13.69	0.73%	61.00	60.90	DMH 60
	CB 84	12.00	13.46	0.74%	62.00	61.90	DMH 63
	CB 85	12.00	12.89	0.78%	62.00	61.90	DMH 63
	CB 86	12.00	12.09	2.07%	58.00	57.75	DMH 65 W. CDS
	CB 87	12.00	14.97	1.67%	58.00	57.75	DMH 65 W. CDS
	CB 88	12.00	19.88	5.03%	60.00	59.00	DMH 66
	CB 89	12.00	14.22	7.03%	60.00	59.00	DMH 66
	CB 90	12.00	8.89	1.13%	57.55	57.45	DMH 67
	CB 91	12.00	10.07	0.99%	57.55	57.45	DMH 67
	CB 92	12.00	26.44	0.57%	61.40	61.25	DMH 69
	CB 93	12.00	27.55	0.54%	61.40	61.25	DMH 69
	CB 94	12.00	14.34	0.70%	58.18	58.08	DMH 70
	CB 95	12.00	18.38	0.54%	58.18	58.08	DMH 70
	CB 96	12.00	11.34	0.88%	57.85	57.75	DMH 71
	CB A	12.00	108.97	0.49%	51.85	51.32	DMH A

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	DMH 1 W. CDS	12.00	68.01	0.49%	46.66	46.33	DMH 2 W. CDS
	DMH 2 W. CDS	18.00	56.12	0.50%	46.28	46.00	
	DMH 3	18.00	36.42	2.94%	47.40	46.33	DMH 2 W. CDS
	DMH 4	12.00	24.14	3.11%	47.75	47.00	
	DMH 4A	12.00	5.27	28.48%	49.35	47.85	
	DMH 5	12.00	106.23	0.49%	49.52	49.00	DMH 6
	DMH 6	18.00	133.75	0.79%	48.90	47.85	DMH 4
	DMH 7	12.00	177.59	0.49%	50.49	49.62	DMH 5
	DMH 8	12.00	73.50	0.48%	51.05	50.70	DMH 8A
	DMH 8A	12.00	12.43	1.00%	49.46	49.34	Structure – (261)
	DMH 9	12.00	52.66	0.47%	50.84	50.59	DMH 7
	DMH 11	18.00	25.59	1.02%	50.96	50.70	DMH 8A
	DMH 12	12.00	110.52	0.49%	51.60	51.06	DMH 11
	DMH 13	12.00	98.81	0.47%	52.16	51.70	DMH 12
	DMH 14	12.00	91.44	0.54%	52.65	52.16	DMH 13
	DMH 15	12.00	110.20	0.47%	50.80	50.28	DMH 16
	DMH 16	12.00	36.87	0.49%	50.18	50.00	
	DMH 17	18.00	97.30	0.51%	52.05	51.55	DMH 18 W. CDS
	DMH 19	18.00	104.03	0.94%	53.13	52.15	DMH 17
	DMH 20	12.00	36.19	0.47%	53.40	53.23	DMH 19
	DMH 21	12.00	90.04	1.00%	54.40	53.50	DMH 20
	DMH 22	12.00	53.23	1.35%	53.95	53.23	DMH 19
	DMH 23	12.00	145.32	1.14%	55.70	54.05	DMH 22
	DMH 24	18.00	113.44	0.49%	53.56	53.00	
	DMH 25	12.00	23.19	0.43%	53.71	53.61	DMH 24

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	DMH 26	12.00	87.85	1.65%	54.25	52.80	DMH 27
	DMH 27	12.00	19.55	0.51%	52.70	52.60	DMH 27A
	DMH 28	12.00	102.83	0.49%	53.30	52.80	DMH 27
	DMH 29	18.00	108.97	0.79%	49.86	49.00	
	DMH 30	12.00	76.70	0.48%	50.33	49.96	DMH 29
	DMH 31	18.00	77.84	0.92%	57.39	56.67	DMH 32
	DMH 32	18.00	78.42	2.38%	56.57	54.70	DMH 34
	DMH 35	12.00	85.26	4.22%	58.30	54.70	DMH 34
	DMH 36	12.00	70.19	0.48%	60.10	59.76	DMH 37
	DMH 37	12.00	52.82	0.49%	59.66	59.40	DMH 38
	DMH 38	12.00	95.01	0.49%	59.30	58.83	DMH 39
	DMH 39 W. CDS	24.00	69.86	2.48%	58.73	57.00	
	DMH 40	24.00	28.72	1.04%	59.13	58.83	DMH 39
	DMH 41	18.00	58.52	3.02%	61.00	59.23	DMH 40
	DMH 42	12.00	74.54	0.50%	61.47	61.10	DMH 41
	DMH 43	12.00	67.60	0.49%	61.90	61.57	DMH 42
	DMH 44	12.00	88.69	3.24%	62.10	59.23	DMH 40
	DMH 45	12.00	151.97	0.97%	63.68	62.20	DMH 44
	DMH 46	12.00	121.61	0.49%	60.80	60.20	DMH 47
	DMH 47	12.00	12.36	1.62%	60.10	59.90	DMH 48
	DMH 49	12.00	62.98	1.11%	58.70	58.00	DMH 50
	DMH 50	18.00	29.44	0.48%	57.90	57.76	DMH 51
	DMH 51	18.00	152.45	0.49%	57.66	56.91	DMH 52
	DMH 52	18.00	107.96	0.50%	56.81	56.27	DMH 53
	DMH 53 W. CDS	18.00	70.52	1.66%	56.17	55.00	

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	DMH 55	12.00	111.87	1.97%	64.30	62.10	DMH 56
	DMH 56	18.00	138.01	−0.65%	62.00	61.10	DMH 57
	DMH 57	24.00	77.06	0.58%	61.00	60.55	DMH 58 W. CDS
	DMH 59	18.00	139.59	0.49%	62.79	62.10	DMH 56
	DMH 60	18.00	112.18	0.80%	60.80	59.90	DMH 61
	DMH 61	18.00	139.77	1.07%	59.80	58.30	DMH 62
W. CDS	DMH 62	18.00	86.88	0.63%	58.20	57.65	DMH 64 W. CDS
W. CDS	DMH 63	12.00	107.21	3.26%	61.80	58.30	DMH 62
	DMH 66	18.00	162.66	0.62%	58.46	57.45	DMH 67
	DMH 67	24.00	16.78	0.60%	57.35	57.25	DMH 72
W. CDS	DMH 69	18.00	141.86	0.49%	59.26	58.56	DMH 66
	DMH 70	12.00	48.63	0.47%	57.98	57.75	DMH 71
W. CDS	DMH 71	12.00	77.85	0.51%	57.65	57.25	DMH 72
	DMH 72	12.00	37.04	−53.51%	37.18	57.00	
	DMH A	12.00	63.80	0.53%	51.27	50.93	DMH B W. CDS
	OCS 3	12.00	114.32	2.89%	51.50	48.20	DMH 4A
	OCS 6	18.00	10.40	0.96%	52.75	52.65	DMH 14
	OCS 7	12.00	30.00	1.17%	54.00	53.65	DMH 14
	OCS 8	12.00	56.77	4.40%	54.00	51.50	
W. CDS	OCS 9	12.00	41.97	5.96%	54.00	51.50	
	OCS 13	12.00	68.26	3.37%	59.30	57.00	
	OCS 14	12.00	107.79	3.71%	61.00	57.00	
	OCS 15	12.00	52.13	6.14%	60.20	57.00	
	OCS 16	18.00	37.65	13.28%	60.00	55.00	
	OCS 17	18.00	31.43	14.32%	57.50	53.00	

PIPE TABLE

PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	OCS 18	12.00	14.76	1.02%	48.00	47.85	DMH 4
	Structure – (105)	12.00	0.27	0.00%	−0.50	−0.50	Structure – (106)
	Structure – (112)	12.00	0.33	0.00%	−0.50	−0.50	Structure – (113)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDER
CIVIL
No. 52435
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

GRADING & DRAINAGE

SHEET: C-6.5

DRAIN MANHOLE SCHEDULE

STRUCTURE	DETAILS
DMH 1 W. CDS	RIM = 51.08 INV IN. (12") = 46.71 (CB 2) INV IN. (12") = 46.71 (CB 1) INV. OUT (12") = 46.66 (DMH 2 W. CDS)
DMH 2 W. CDS	RIM = 50.73 INV IN. (18") = 46.33 (DMH 3) INV IN. (12") = 46.33 (DMH 1 W. CDS) INV. OUT (18") = 46.28 ()
DMH 3	RIM = 51.85 INV IN. (12") = 47.50 (CB 4) INV IN. (12") = 47.50 (CB 3) INV. OUT (18") = 47.40 (DMH 2 W. CDS)
DMH 4	RIM = 53.10 INV IN. (12") = 47.85 (OCS 18) INV IN. (18") = 47.85 (DMH 6) INV IN. (12") = 47.85 (CB 5 W. CDS) INV. OUT (12") = 47.75 ()
DMH 4A	RIM = 53.28 INV IN. (12") = 48.20 (OCS 3) INV IN. (12") = 48.20 (CB 5A W. CDS) INV. OUT (12") = 49.35 ()
DMH 5	RIM = 55.18 INV IN. (12") = 49.62 (CB 6) INV IN. (12") = 49.62 (CB 7) INV IN. (12") = 49.62 (DMH 7) INV. OUT (12") = 49.52 (DMH 6)
DMH 6	RIM = 54.00 INV IN. (12") = 49.00 (CB 9) INV IN. (12") = 49.00 (CB 8) INV IN. (12") = 49.00 (DMH 5) INV IN. (12") = 49.00 (CB 8A) INV. OUT (18") = 48.90 (DMH 4)
DMH 8	RIM = 55.03 INV IN. (12") = 51.15 (CB 13) INV IN. (12") = 51.14 (CB 12) INV. OUT (12") = 51.05 (DMH 8A)
DMH 8A	RIM = 55.10 INV IN. (12") = 50.70 (DMH 8) INV IN. (18") = 50.70 (DMH 11) INV. OUT (12") = 49.46 (Structure – (261))
DMH 9	RIM = 54.82 INV IN. (12") = 50.94 (CB 15) INV IN. (12") = 50.94 (CB 14) INV. OUT (12") = 50.84 (DMH 7)
DMH 11	RIM = 55.68 INV IN. (12") = 51.06 (DMH 12) INV IN. (12") = 51.80 (CB 17) INV IN. (12") = 51.80 (CB 16) INV. OUT (18") = 50.96 (DMH 8A)
DMH 12	RIM = 56.47 INV IN. (12") = 51.70 (DMH 13) INV. OUT (12") = 51.60 (DMH 11)
DMH 13	RIM = 66.35 INV IN. (12") = 53.15 (CB 19) INV IN. (12") = 53.15 (CB 18) INV IN. (12") = 52.16 (DMH 14) INV. OUT (12") = 52.16 (DMH 12)
DMH 14	RIM = 57.53 INV IN. (18") = 52.65 (OCS 6) INV IN. (12") = 53.65 (OCS 7) INV. OUT (12") = 52.65 (DMH 13)
DMH 15	RIM = 54.28 INV IN. (12") = 50.90 (CB 20) INV IN. (12") = 50.90 (CB 21) INV. OUT (12") = 50.80 (DMH 16)
DMH 16	RIM = 54.41 INV IN. (12") = 50.28 (DMH 15) INV. OUT (12") = 50.18 ()
DMH 17	RIM = 55.80 INV IN. (12") = 52.20 (CB 23) INV IN. (12") = 52.15 (CB 22) INV IN. (18") = 52.15 (DMH 19) INV. OUT (18") = 52.05 (DMH 18 W. CDS)
DMH 18 W. CDS	RIM = 55.48 INV IN. (18") = 51.55 (DMH 17)
DMH 19	RIM = 56.76 INV IN. (12") = 53.23 (DMH 22) INV IN. (12") = 53.23 (DMH 20) INV. OUT (18") = 53.13 (DMH 17)
DMH 20	RIM = 55.05 INV IN. (12") = 53.50 (CB 24) INV IN. (12") = 53.50 (CB 25) INV IN. (12") = 53.50 (DMH 21) INV. OUT (12") = 53.40 (DMH 19)

DRAIN MANHOLE SCHEDULE

STRUCTURE	DETAILS
DMH 21	RIM = 57.31 INV IN. (12") = 54.50 (CB 27) INV IN. (12") = 54.50 (CB 26) INV. OUT (12") = 54.40 (DMH 20)
DMH 22	RIM = 57.98 INV IN. (12") = 54.10 (CB 29) INV IN. (12") = 52.89 (CB 28) INV IN. (12") = 54.05 (DMH 23) INV. OUT (12") = 53.95 (DMH 19)
DMH 23	RIM = 59.09 INV IN. (12") = 55.80 (CB 30) INV IN. (12") = 55.80 (CB 31) INV. OUT (12") = 55.70 (DMH 22)
DMH 24	RIM = 57.80 INV IN. (12") = 53.61 (CB 32) INV IN. (12") = 53.61 (DMH 25) INV IN. (12") = 53.61 (CB 33) INV. OUT (18") = 53.56 ()
DMH 25	RIM = 56.33 INV IN. (12") = 53.76 (CB 34) INV IN. (12") = 53.76 (CB 35) INV. OUT (12") = 53.71 (DMH 24)
DMH 28	RIM = 56.46 INV IN. (12") = 53.40 (CB 38) INV IN. (12") = 53.40 (CB 39) INV. OUT (12") = 53.30 (DMH 27)
DMH 29	RIM = 54.58 INV IN. (12") = 49.96 (DMH 30) INV. OUT (18") = 49.86 ()
DMH 30	RIM = 53.75 INV IN. (12") = 50.43 (CB 41) INV IN. (12") = 50.43 (CB 40) INV. OUT (12") = 50.33 (DMH 29)
DMH 31	RIM = 61.28 INV IN. (12") = 57.49 (CB 45) INV IN. (12") = 57.49 (CB 46) INV. OUT (18") = 57.39 (DMH 32)
DMH 32	RIM = 61.50 INV IN. (18") = 56.67 (DMH 31) INV. OUT (18") = 56.57 (DMH 34 W. CDS)
DMH 33 W. CDS	RIM = 4.43 INV IN. (12") = 0.55 (CB 48)
DMH 34 W. CDS	RIM = 59.90 INV IN. (18") = 54.70 (DMH 32) INV IN. (12") = 54.70 (DMH 35)
DMH 35	RIM = 62.28 INV IN. (12") = 58.40 (CB 49) INV IN. (12") = 57.55 (CB 50) INV. OUT (12") = 58.30 (DMH 34 W. CDS)
DMH 36	RIM = 64.08 INV IN. (12") = 60.20 (CB 52) INV IN. (12") = 60.20 (CB 51) INV. OUT (12") = 60.10 (DMH 37)
DMH 37	RIM = 64.90 INV IN. (12") = 59.76 (DMH 36) INV IN. (12") = 59.76 (CB 53) INV. OUT (12") = 59.66 (DMH 38)
DMH 38	RIM = 64.30 INV IN. (12") = 59.40 (CB 54) INV IN. (12") = 59.40 (DMH 37) INV. OUT (12") = 59.30 (DMH 39 W. CDS)
DMH 39 W. CDS	RIM = 65.05 INV IN. (24") = 58.83 (DMH 40) INV IN. (12") = 58.83 (DMH 38) INV. OUT (24") = 58.73 ()
DMH 40	RIM = 65.40 INV IN. (18") = 59.23 (DMH 41) INV IN. (12") = 59.23 (CB 55) INV IN. (12") = 59.23 (DMH 44) INV. OUT (24") = 59.13 (DMH 39 W. CDS)
DMH 41	RIM = 64.98 INV IN. (12") = 61.10 (DMH 42) INV IN. (12") = 0.45 (CB 57) INV IN. (12") = 61.10 (CB 56) INV. OUT (18") = 61.00 (DMH 40)
DMH 42	RIM = 65.50 INV IN. (12") = 61.57 (DMH 43) INV. OUT (12") = 61.47 (DMH 41)

DRAIN MANHOLE SCHEDULE

STRUCTURE	DETAILS
DMH 43	RIM = 66.05 INV IN. (12") = 62.00 (CB 58) INV IN. (12") = 62.00 (CB 59) INV. OUT (12") = 61.90 (DMH 42)
DMH 44	RIM = 66.33 INV IN. (12") = 62.20 (CB 60) INV IN. (12") = 62.20 (CB 61) INV IN. (12") = 62.20 (DMH 45) INV. OUT (12") = 62.10 (DMH 40)
DMH 45	RIM = 67.87 INV IN. (12") = 63.78 (CB 63) INV IN. (12") = 63.78 (CB 62) INV. OUT (12") = 63.68 (DMH 44)
DMH 46	RIM = 64.10 INV IN. (12") = 60.90 (CB 64) INV IN. (12") = 60.90 (CB 65) INV. OUT (12") = 60.80 (DMH 47)
DMH 47	RIM = 63.80 INV IN. (12") = 60.30 (CB 66) INV IN. (12") = 60.30 (CB 67) INV IN. (12") = 60.20 (DMH 46) INV. OUT (12") = 60.10 (DMH 48 W. CDS)
DMH 48 W. CDS	RIM = 63.78 INV IN. (12") = 59.90 (DMH 47)
DMH 49	RIM = 62.68 INV IN. (12") = 58.80 (CB 69) INV IN. (12") = 58.80 (CB 68) INV. OUT (12") = 58.70 (DMH 50)
DMH 50	RIM = 61.88 INV IN. (12") = 58.00 (CB 71) INV IN. (12") = 58.00 (CB 70) INV IN. (12") = 58.00 (DMH 49) INV. OUT (18") = 57.90 (DMH 51)
DMH 51	RIM = 60.50 INV IN. (18") = 57.76 (DMH 50) INV. OUT (18") = 57.66 (DMH 52)
DMH 52	RIM = 60.79 INV IN. (18") = 56.91 (DMH 51) INV. OUT (18") = 56.81 (DMH 53 W. CDS)
DMH 53 W. CDS	RIM = 60.15 INV IN. (18") = 56.27 (DMH 52) INV. OUT (18") = 56.17 ()
DMH 54 W. CDS	RIM = 64.78 INV IN. (12") = 60.90 (CB 72) INV IN. (12") = 60.90 (CB 73)
DMH 55	RIM = 67.74 INV IN. (12") = 64.40 (CB 74) INV IN. (12") = 64.40 (CB 75) INV. OUT (12") = 64.30 (DMH 56)
DMH 56	RIM = 66.06 INV IN. (12") = 62.55 (CB 76) INV IN. (18") = 62.10 (DMH 59) INV IN. (18") = 62.00 (DMH 57) INV IN. (12") = 62.10 (DMH 55) INV. OUT (12") = 62.55 (CB 77)
DMH 57	RIM = 64.69 INV IN. (12") = 61.30 (CB 78) INV IN. (12") = 61.30 (CB 79) INV. OUT (18") = 61.10 (DMH 56) INV. OUT (24") = 61.00 (DMH 58 W. CDS)
DMH 58 W. CDS	RIM = 64.43 INV IN. (24") = 60.55 (DMH 57)
DMH 59	RIM = 6608.00 INV IN. (12") = 62.89 (CB 80) INV IN. (12") = 62.89 (CB 81) INV. OUT (18") = 62.79 (DMH 56)
DMH 60	RIM = 64.65 INV IN. (12") = 60.90 (CB 82) INV IN. (12") = 60.90 (CB 83) INV. OUT (18") = 60.80 (DMH 61)
DMH 61	RIM = 65.75 INV IN. (18") = 59.90 (DMH 60) INV. OUT (18") = 59.80 (DMH 62)
DMH 62	RIM = 65.86 INV IN. (12") = 58.30 (DMH 63) INV IN. (18") = 58.30 (DMH 61) INV. OUT (18") = 58.20 (DMH 64 W. CDS)

DRAIN MANHOLE SCHEDULE

STRUCTURE	DETAILS
DMH 63	RIM = 65.83 INV IN. (12") = 61.90 (CB 85) INV IN. (12") = 61.90 (CB 84) INV. OUT (12") = 61.80 (DMH 62)
DMH 64 W. CDS	RIM = 65.90 INV IN. (18") = 57.65 (DMH 62)
DMH 65 W. CDS	RIM = 64.60 INV IN. (12") = 57.75 (CB 86) INV IN. (12") = 57.75 (CB 87)
DMH 66	RIM = 64.28 INV IN. (12") = 59.00 (CB 89) INV IN. (12") = 59.00 (CB 88) INV IN. (18") = 58.56 (DMH 69) INV. OUT (18") = 58.46 (DMH 67)
DMH 67	RIM = 63.92 INV IN. (12") = 57.45 (CB 91) INV IN. (12") = 57.45 (CB 90) INV IN. (18") = 57.45 (DMH 66) INV. OUT (24") = 57.35 (DMH 72)
DMH 69	RIM = 65.13 INV IN. (12") = 61.25 (CB 92) INV IN. (12") = 61.25 (CB 93) INV. OUT (18") = 59.26 (DMH 66)
DMH 70	RIM = 63.78 INV IN. (12") = 58.08 (CB 95) INV IN. (12") = 58.08 (CB 94) INV. OUT (12") = 57.98 (DMH 71)
DMH 71	RIM = 60.70 INV IN. (12") = 57.75 (CB 96) INV IN. (12") = 57.75 (DMH 70) INV. OUT (12") = 57.65 (DMH 72)
DMH 72	RIM = 62.16 INV IN. (24") = 57.25 (DMH 67) INV IN. (12") = 57.25 (DMH 71) INV. OUT (12") = 37.18 ()
DMH A	RIM = 55.20 INV IN. (12") = 51.32 (CB A) INV. OUT (12") = 51.27 (DMH B W. CDS)
DMH B W. CDS	RIM = 54.81 INV IN. (12") = 50.93 (DMH A)
OCS 3	RIM = 54.70 INV. OUT (12") = 51.50 (DMH 4A)
OCS 6	RIM = 55.15 INV. OUT (18") = 52.75 (DMH 14)
OCS 7	RIM = 55.88 INV. OUT (12") = 54.00 (DMH 14)
OCS 8	RIM = 59.00 INV. OUT (12") = 54.00 ()
OCS 9	RIM = 55.88 INV. OUT (12") = 54.00 ()
OCS 13	RIM = 61.18 INV. OUT (12") = 59.30 ()
OCS 14	RIM = 62.88 INV. OUT (12") = 61.00 ()
OCS 15	RIM = 62.08 INV. OUT (12") = 60.20 ()
OCS 16	RIM = 62.40 INV. OUT (18") = 60.00 ()

DRAIN MANHOLE SCHEDULE

STRUCTURE	DETAILS
OCS 17	RIM = 59.38 INV. OUT (18") = 57.50 ()
OCS 18	RIM = 53.30 INV. OUT (12") = 48.00 (DMH 4)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 52857
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

GRADING & DRAINAGE

SHEET: C-6.6

PIPE MATERIALS:

SANITARY SEWER: 6",8" & 10" PVC ASTM D3034-SDR 35.

WATER MAINS: 10",8", 6" & 4" CLASS 52 CEMENT LINED DUCTILE IRON (POLYETHYLENE WRAP ENCASEMENT)
WATER SERVICE: 4" CLASS 52 C.L. DUCTILE IRON, 1" & 2" TYPE K COVER

DRAINAGE: SEE PLAN FOR DIAM. HDPE N-12

ALL WATER LINES SHALL HAVE A MINIMUM OF 5 FEET OF COVER.

PROPOSED 8" D.I.C.L. WATER MAIN

EXIST. SW BASIN

PROPOSED 10" D.I.C.L. WATER MAIN

EXISTING 10" PVC SEWER STUB

PROPOSED HYDRANT W/ 6" GATE VALVE AND V.A. TEE

PROPOSED 10"X10"X8" TEE

EXISTING 10" D.I.C.L. WATER MAIN STUB

PROPOSED HYDRANT W/ 6" GATE VALVE AND V.A. TEE

THE COMMONS

PROPOSED 10"X10"X8" TEE

PROPOSED 4" D.I.C.L. WATER MAIN

PROPOSED 8" D.I.C.L. WATER MAIN

ELM STREET

BLDG. 1

BLDG. 2

COMMUNITY BLDG.

PARK

25' BUFFER

EDGE OF BVW

25-FT BVW BUFFER

50-FT BVW BUFFER

100-FT BVW BUFFER

100-FT RIVERFRONT AREA

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDER
CIVIL
No. 52625
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
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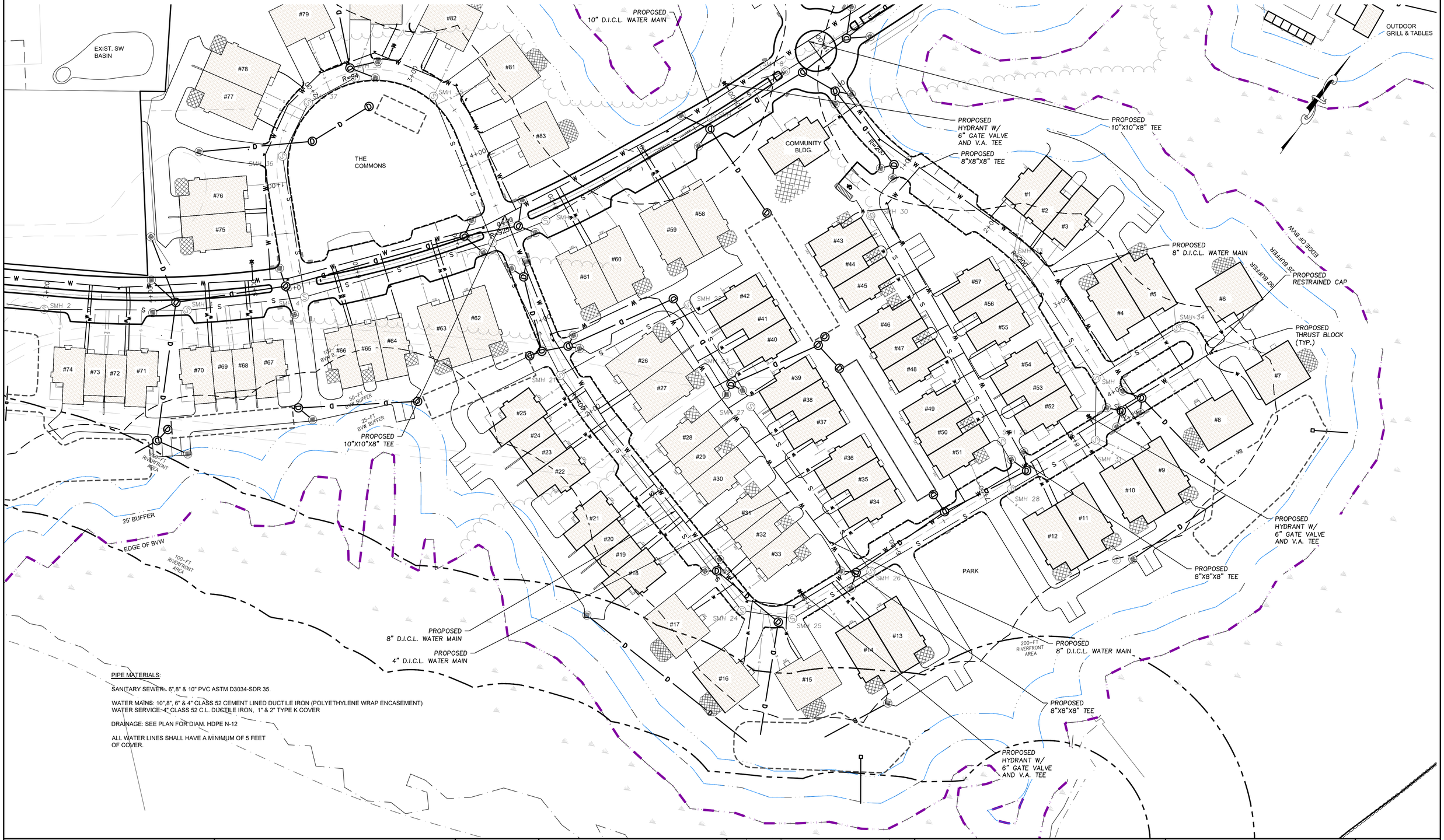
05/22/25
05/30/25
DATE: AUG. 11, 2025
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE UTILITIES

SHEET: C-7.0



PIPE MATERIALS:

SANITARY SEWER: 6",8" & 10" PVC ASTM D3034-SDR 35.

WATER MAINS: 10",8", 6" & 4" CLASS 52 CEMENT LINED DUCTILE IRON (POLYETHYLENE WRAP ENCASEMENT)
WATER SERVICE: 4" CLASS 52 C.L. DUCTILE IRON, 1" & 2" TYPE K COVER

DRAINAGE: SEE PLAN FOR DIAM. HDPE N-12

ALL WATER LINES SHALL HAVE A MINIMUM OF 5 FEET OF COVER.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
CIVIL
No. 52405
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

SOUTH NEIGHBORHOOD

NO.	DATE	DESCRIPTION	BY
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05/22/25
05/30/25
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CALC. BY: J.T.M.
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PROJECT: M244407

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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE UTILITIES

SHEET: C-7.1

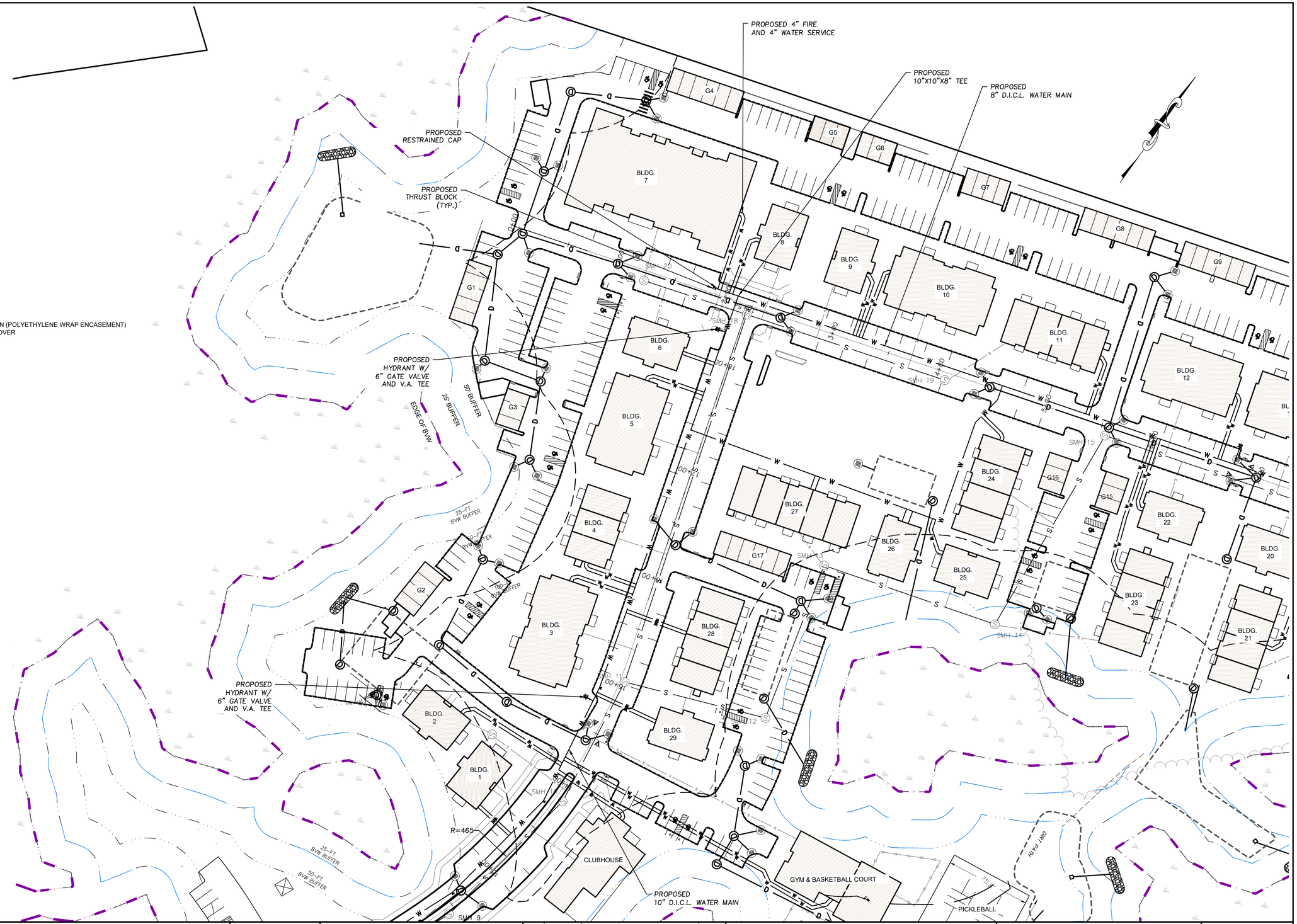
PIPE MATERIALS:

SANITARY SEWER: 6",8" & 10" PVC ASTM D3034-SDR 35.

WATER MAINS: 10",8", 6" & 4" CLASS 52 CEMENT LINED DUCTILE IRON (POLYETHYLENE WRAP ENCASEMENT)
WATER SERVICE: 4" CLASS 52 C.L. DUCTILE IRON, 1" & 2" TYPE K COVER

DRAINAGE: SEE PLAN FOR DIAM. HDPE N-12

ALL WATER LINES SHALL HAVE A MINIMUM OF 5 FEET OF COVER.



GRAPHIC SCALE
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(IN FEET)
1 inch = 40'

STEPHEN B. SAWYER — COMMONWEALTH OF MASSACHUSETTS — No. 52052 — REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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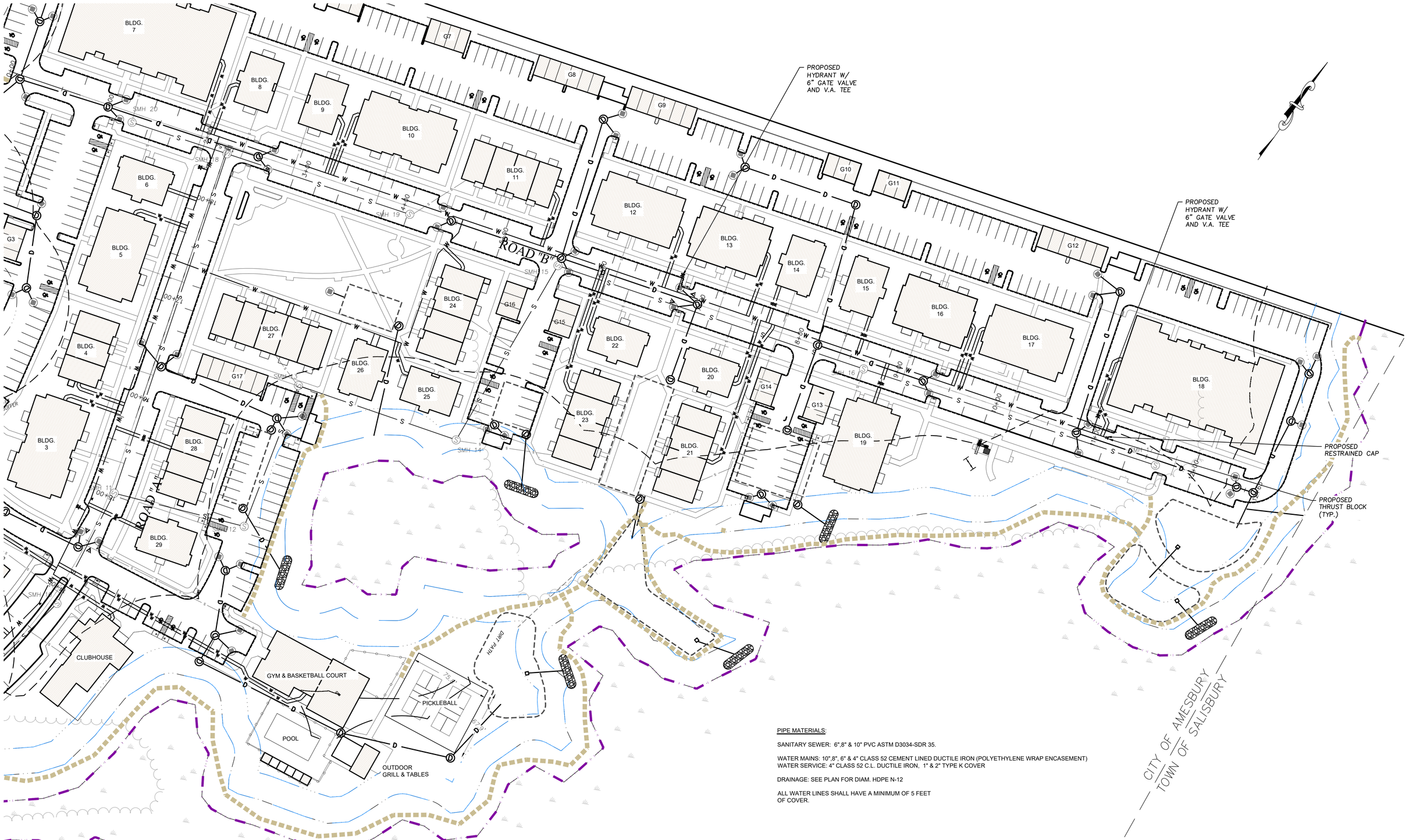
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SCALE: 1"=40' | CALC. BY: J.T.M. | PROJECT: M244407
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE UTILITIES

SHEET: C-7.2



PIPE MATERIALS:

SANITARY SEWER: 6",8" & 10" PVC ASTM D3034-SDR 35.

WATER MAINS: 10",8", 6" & 4" CLASS 52 CEMENT LINED DUCTILE IRON (POLYETHYLENE WRAP ENCASEMENT)
WATER SERVICE: 4" CLASS 52 C.L. DUCTILE IRON, 1" & 2" TYPE K COVER

DRAINAGE: SEE PLAN FOR DIAM. HDPE N-12

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GRAPHIC SCALE
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(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 52825
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE UTILITIES

SHEET: C-7.3

SEWER MANHOLE SCHEDULE	
STRUCTURE	DETAILS
SMH 1	RIM = 50.18 INV IN. (8") = 41.55 (SMH 2)
SMH 2	RIM = 51.92 INV IN. (8") = 43.02 (SMH 3) INV. OUT (8") = 43.00 (SMH 1)
SMH 3	RIM = 50.59 INV IN. (8") = 43.68 (SMH 4) INV. OUT (8") = 43.69 (SMH 2)
SMH 4	RIM = 51.40 INV IN. (8") = 44.52 (SMH 5) INV IN. (8") = 44.52 (SMH 36) INV. OUT (8") = 44.52 (SMH 3)
SMH 5	RIM = 53.37 INV IN. (8") = 45.44 (SMH 6) INV IN. (8") = 45.44 (SMH 35) INV IN. (8") = 45.44 (SMH 21) INV. OUT (8") = 45.44 (SMH 4)
SMH 6	RIM = 53.90 INV IN. (8") = 45.70 (SMH 7) INV. OUT (8") = 45.70 (SMH 5)
SMH 7	RIM = 56.23 INV IN. (8") = 46.77 (SMH 8) INV. OUT (8") = 46.77 (SMH 6)
SMH 8	RIM = 57.07 INV IN. (8") = 47.17 (SMH 9) INV. OUT (8") = 47.17 (SMH 7)
SMH 9	RIM = 58.78 INV IN. (8") = 48.12 (SMH 10) INV. OUT (8") = 48.12 (SMH 8)
SMH 10	RIM = 60.40 INV IN. (8") = 49.09 (SMH 11) INV. OUT (8") = 49.09 (SMH 9)
SMH 11	RIM = 62.23 INV IN. (8") = 49.74 (SMH 18) INV. OUT (8") = 49.69 (SMH 10) INV. OUT (8") = 50.32 (SMH 12)
SMH 12	RIM = 54.57 INV IN. (8") = 49.69 (SMH 11) INV. OUT (8") = 51.05 (SMH 13)
SMH 13	RIM = 55.36 INV IN. (8") = 50.32 (SMH 12) INV. OUT (8") = 51.84 (SMH 14)
SMH 14	RIM = 156.31 INV IN. (8") = 51.05 (SMH 13) INV. OUT (8") = 52.79 (SMH 15)
SMH 15	RIM = 65.92 INV IN. (8") = 51.84 (SMH 14) INV IN. (8") = 52.79 (SMH 16)
SMH 16	RIM = 66.03 INV IN. (8") = 54.32 (SMH 17) INV. OUT (8") = 54.32 (SMH 15)
SMH 17	RIM = 64.26 INV. OUT (8") = 55.82 (SMH 16)
SMH 18	RIM = 67.44 INV IN. (8") = 60.00 (SMH 19) INV IN. (8") = 60.00 () INV. OUT (8") = 60.00 (SMH 11)
SMH 19	RIM = 71.74 INV. OUT (8") = 61.00 (SMH 18)
SMH 20	RIM = 70.13

SEWER MANHOLE SCHEDULE	
STRUCTURE	DETAILS
SMH 21	RIM = 55.01 INV IN. (8") = 46.20 (SMH 24) INV IN. (8") = 46.20 (SMH 22) INV. OUT (8") = 46.20 (SMH 5)
SMH 22	RIM = 50.42 INV IN. (8") = 46.90 (SMH 23) INV. OUT (8") = 46.90 (SMH 21)
SMH 23	RIM = 50.79 INV. OUT (8") = 47.27 (SMH 22)
SMH 24	RIM = 53.98 INV IN. (8") = 47.75 (SMH 25) INV. OUT (8") = 47.65 (SMH 21)
SMH 25	RIM = 54.87 INV IN. (8") = 48.10 (SMH 26) INV. OUT (8") = 48.10 (SMH 24)
SMH 26	RIM = 56.63 INV IN. (8") = 48.52 (SMH 28) INV IN. (8") = 48.52 (SMH 27) INV. OUT (8") = 48.52 (SMH 25)
SMH 27	RIM = 53.04 INV. OUT (8") = 49.52 (SMH 26)
SMH 28	RIM = 57.39 INV IN. (8") = 49.26 (SMH 31) INV IN. (8") = 49.26 (SMH 29) INV. OUT (8") = 49.26 (SMH 26)
SMH 29	RIM = 53.00 INV IN. (8") = 49.48 (SMH 30) INV. OUT (8") = 49.48 (SMH 28)
SMH 30	RIM = 54.24 INV. OUT (8") = 50.72 (SMH 29)
SMH 31	RIM = 56.43 INV IN. (8") = 49.71 (SMH 32) INV. OUT (8") = 49.71 (SMH 28)
SMH 32	RIM = 56.64 INV IN. (8") = 50.00 (SMH 33) INV IN. (8") = 50.00 (SMH 34) INV. OUT (8") = 50.00 (SMH 31)
SMH 33	RIM = 58.06 INV. OUT (8") = 50.68 (SMH 32)
SMH 34	RIM = 53.96 INV. OUT (8") = 50.44 (SMH 32)
SMH 35	RIM = 48.19 INV. OUT (8") = 47.00 (SMH 5)
SMH 36	RIM = 47.81 INV IN. (8") = 46.62 (SMH 37) INV. OUT (8") = 46.62 (SMH 4)
SMH 37	RIM = 48.33 INV IN. (8") = 47.14 (SMH 38) INV. OUT (8") = 47.14 (SMH 36)
SMH 38	RIM = 48.88 INV. OUT (8") = 47.69 (SMH 37)

SEWER MAIN PIPE TABLE							
PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
		8.00	92.30	1.08%	61.00	60.00	SMH 18
	SMH 2	8.00	292.34	0.50%	43.00	41.55	SMH 1
	SMH 3	8.00	136.90	0.49%	43.69	43.02	SMH 2
	SMH 4	8.00	113.20	0.74%	44.52	43.68	SMH 3
	SMH 5	8.00	187.49	0.49%	45.44	44.52	SMH 4
	SMH 6	8.00	55.06	0.47%	45.70	45.44	SMH 5
	SMH 7	8.00	186.78	0.57%	46.77	45.70	SMH 6
	SMH 8	8.00	83.98	0.48%	47.17	46.77	SMH 7
	SMH 9	8.00	190.45	0.50%	48.12	47.17	SMH 8
	SMH 10	8.00	142.14	0.68%	49.09	48.12	SMH 9
	SMH 11	8.00	119.43	0.50%	49.69	49.09	SMH 10
	SMH 11	8.00	128.94	0.49%	50.32	49.69	SMH 12
	SMH 12	8.00	145.02	0.50%	51.05	50.32	SMH 13
	SMH 13	8.00	160.33	0.49%	51.84	51.05	SMH 14
	SMH 14	8.00	193.92	0.49%	52.79	51.84	SMH 15
	SMH 16	8.00	310.05	0.49%	54.32	52.79	SMH 15
	SMH 17	8.00	295.31	0.51%	55.82	54.32	SMH 16
	SMH 18	8.00	343.75	2.98%	60.00	49.74	SMH 11
	SMH 19	8.00	185.06	0.54%	61.00	60.00	SMH 18
	SMH 21	8.00	142.83	0.53%	46.20	45.44	SMH 5

SEWER MAIN PIPE TABLE							
PIPE LABEL	START STRUCT.	SIZE	LENGTH	SLOPE	START INVERT EL.	END INVERT EL.	END STRUCT.
	SMH 22	8.00	140.10	0.50%	46.90	46.20	SMH 21
	SMH 23	8.00	76.92	0.48%	47.27	46.90	SMH 22
	SMH 24	8.00	284.72	0.51%	47.65	46.20	SMH 21
	SMH 25	8.00	49.24	0.71%	48.10	47.75	SMH 24
	SMH 26	8.00	87.66	0.48%	48.52	48.10	SMH 25
	SMH 27	8.00	195.26	0.51%	49.52	48.52	SMH 26
	SMH 28	8.00	155.81	0.47%	49.26	48.52	SMH 26
	SMH 29	8.00	46.77	0.47%	49.48	49.26	SMH 28
	SMH 30	8.00	250.08	0.50%	50.72	49.48	SMH 29
	SMH 31	8.00	93.33	0.48%	49.71	49.26	SMH 28
	SMH 32	8.00	59.43	0.49%	50.00	49.71	SMH 31
	SMH 33	8.00	137.62	0.49%	50.68	50.00	SMH 32
	SMH 34	8.00	90.93	0.48%	50.44	50.00	SMH 32
	SMH 35	8.00	151.15	1.03%	47.00	45.44	SMH 5
	SMH 36	8.00	136.60	1.54%	46.62	44.52	SMH 4
	SMH 37	8.00	56.78	0.92%	47.14	46.62	SMH 36
	SMH 38	8.00	51.12	1.08%	47.69	47.14	SMH 37

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

STEPHEN B. SAWYER CIVIL No. 52857 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

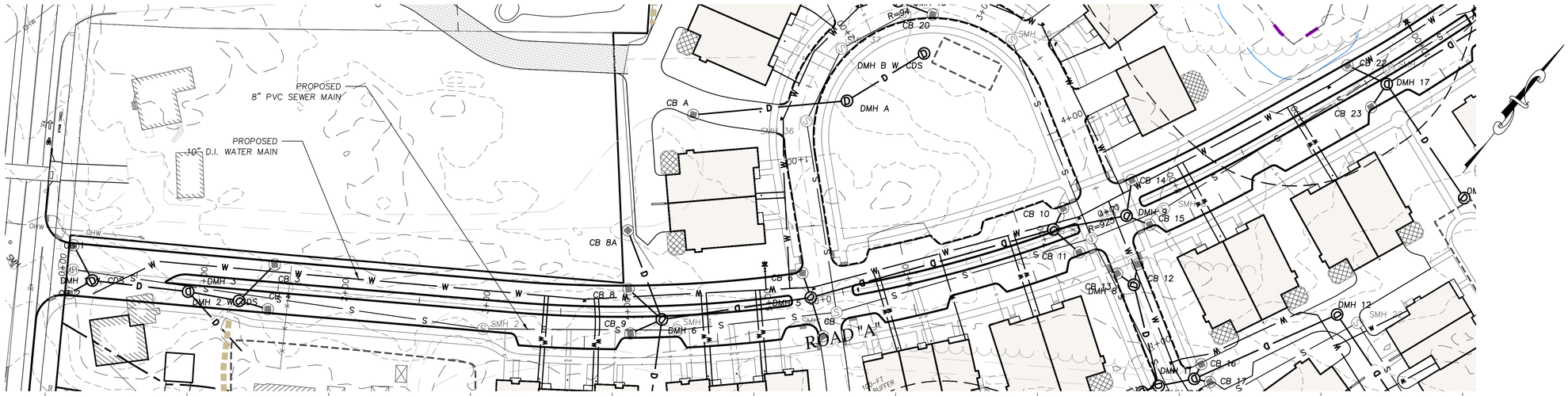
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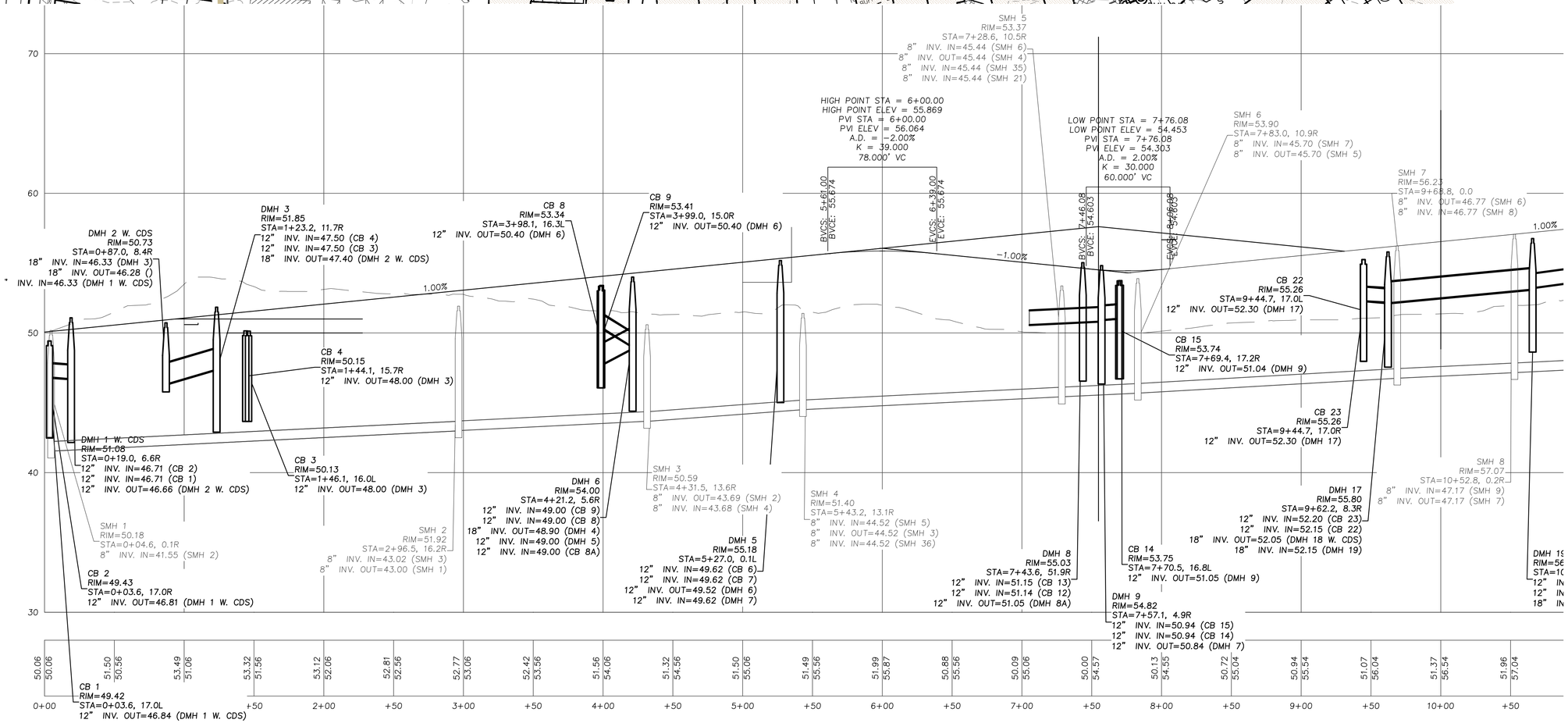
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

SITE UTILITIES

SHEET: C-7.4





GRAPHIC SCALE

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(IN FEET)

1 inch = 40'

STEPHEN B. SAWYER — CIVIL — No. 049xx — REGISTERED PROFESSIONAL ENGINEER — COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
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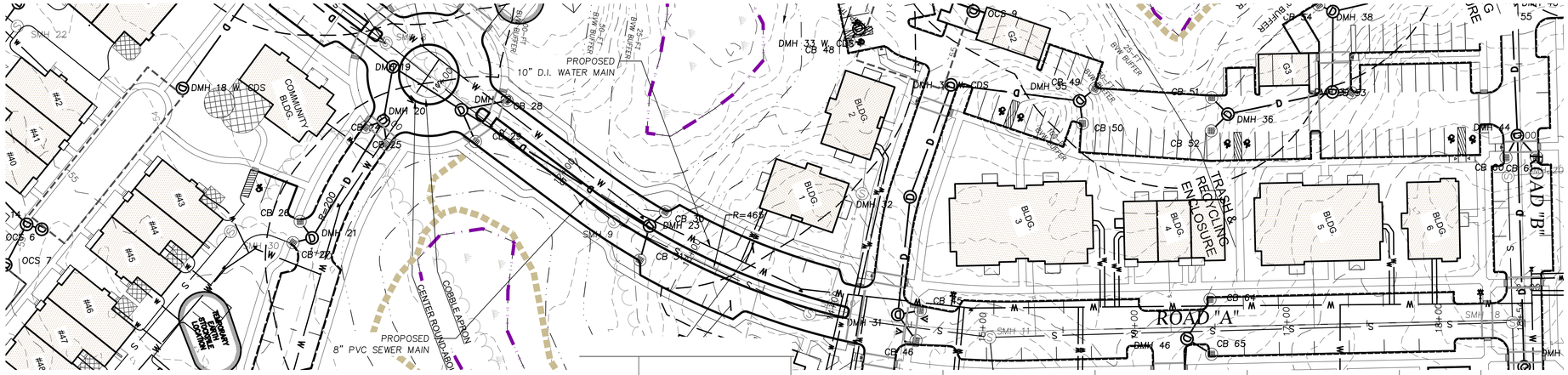
MILLENNIUM ENGINEERING, INC.
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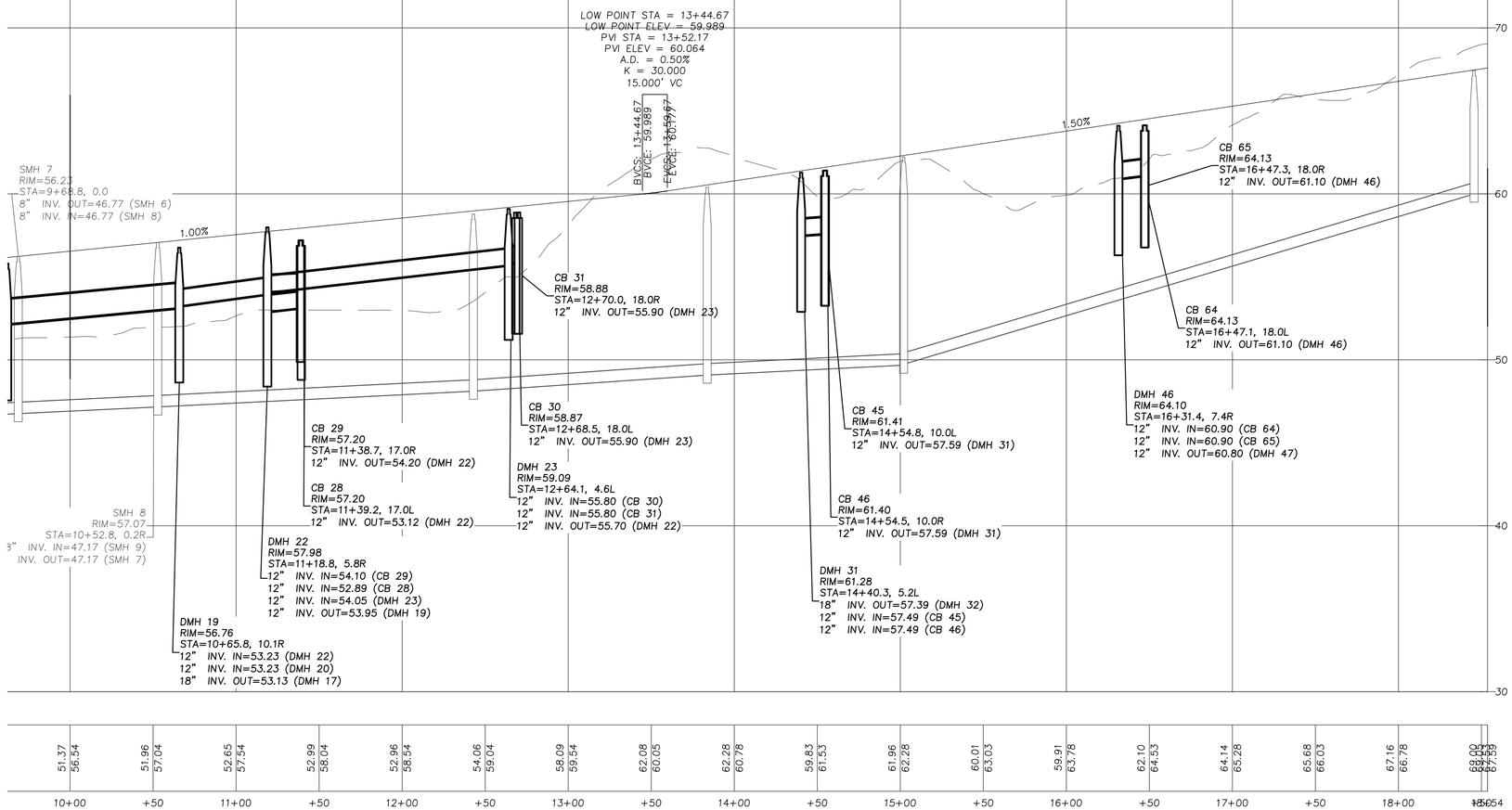
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

ROADWAY & UTILITY PROFILE

SHEET: C-8.0





GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAUNDER
CIVIL
No. 52035
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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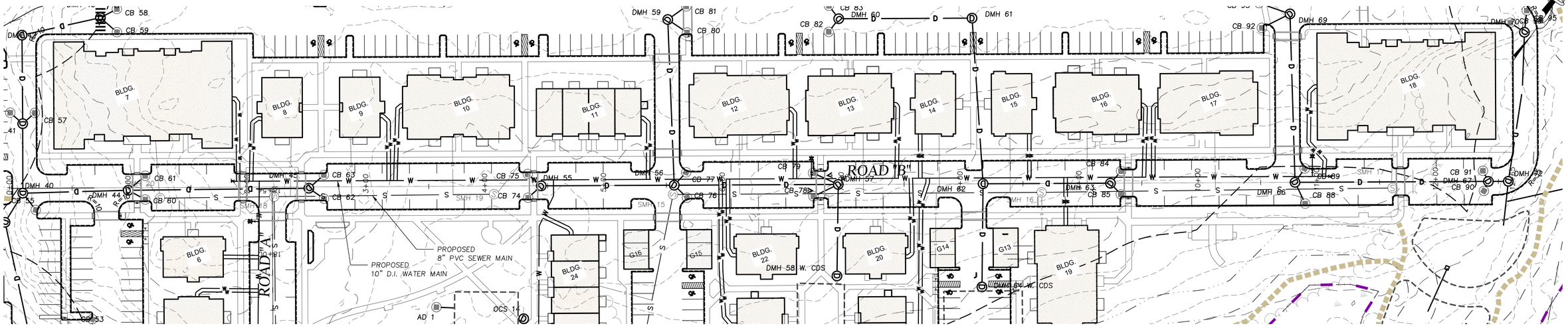
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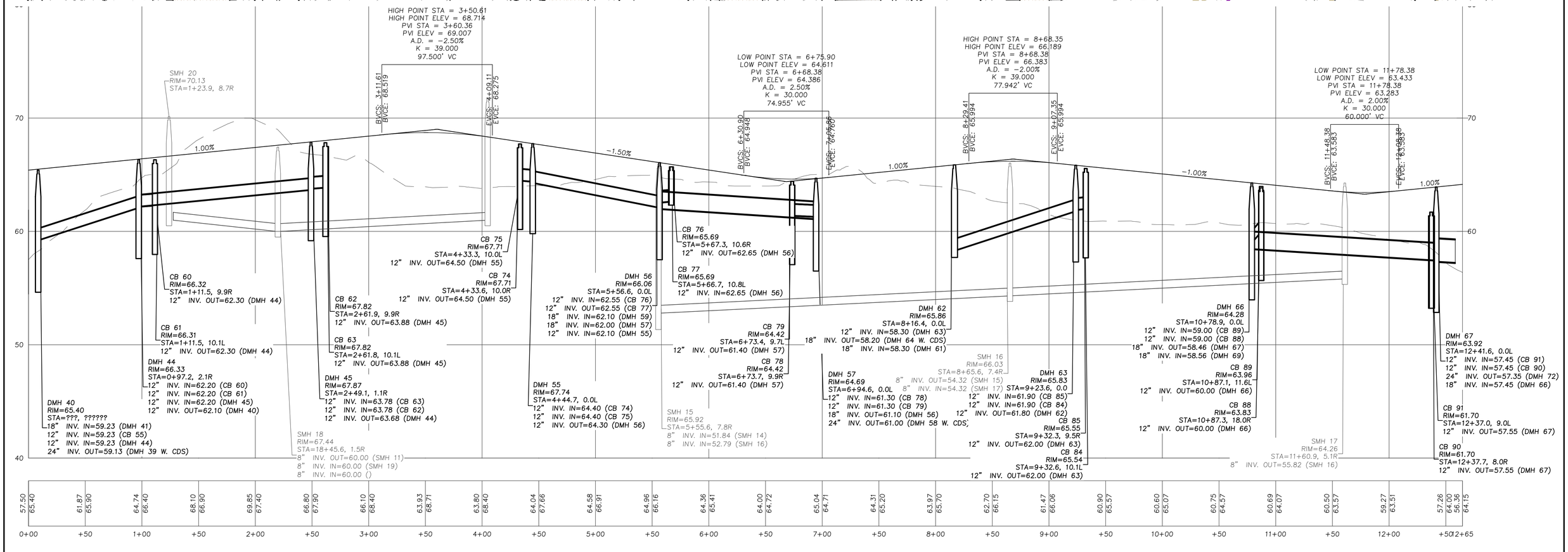
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

ROADWAY & UTILITY PROFILE

SHEET: C-8.1





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 39897
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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ROCKY HILL MBTA COMMUNITY
IN
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AT
ELM STREET

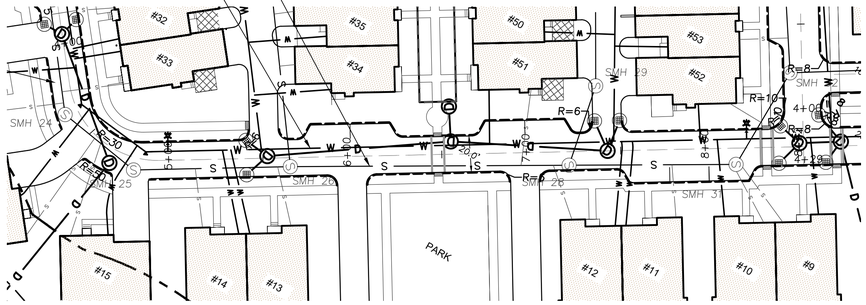
ROADWAY & UTILITY PROFILE

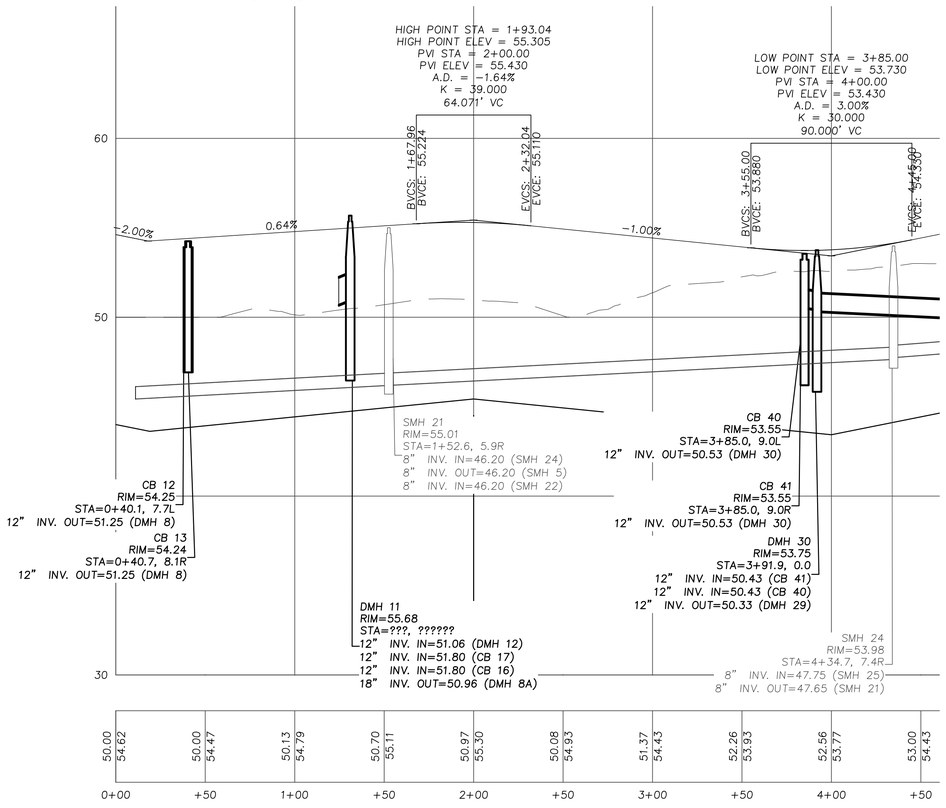
SHEET: C-8.2

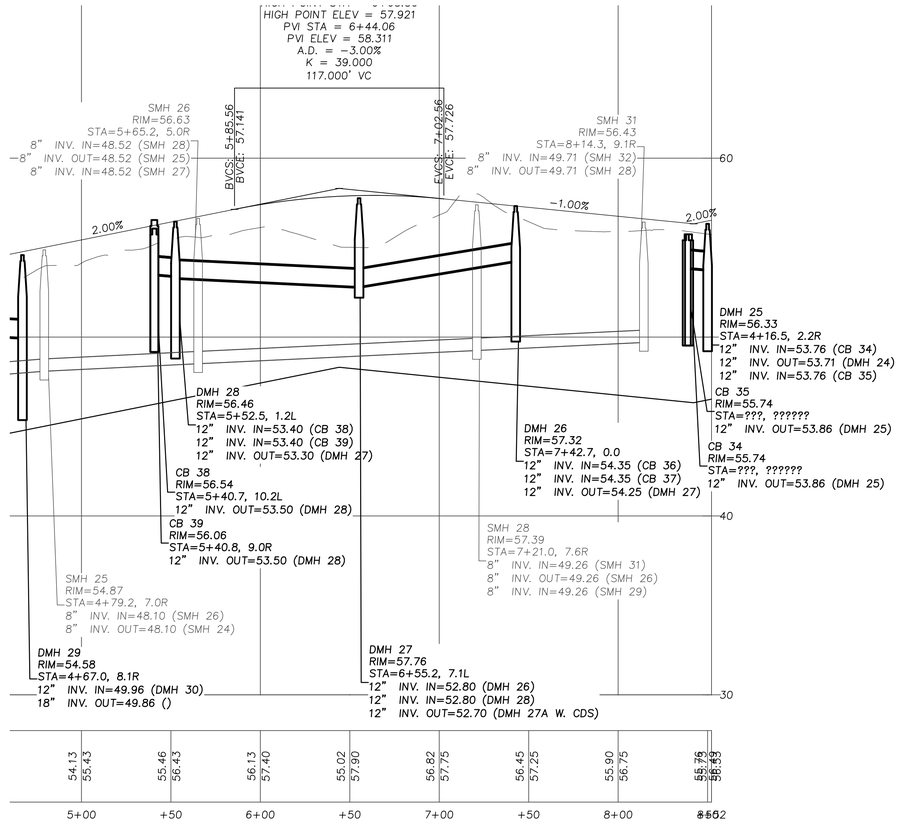


PROPOSED
8" PVC SEWER MAIN

PROPOSED
10" D.I. WATER MAIN







GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40'

STEPHEN B. SAWYER CIVIL No. 52621 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

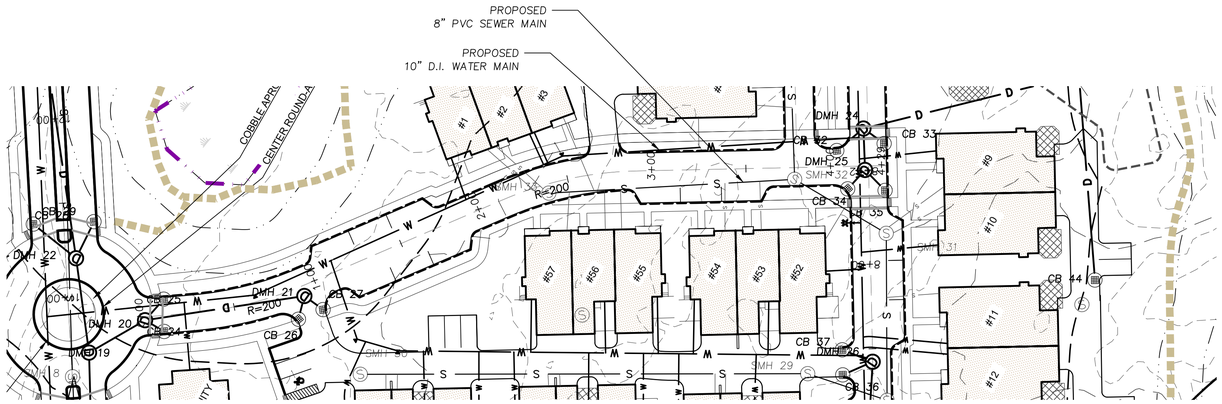
MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

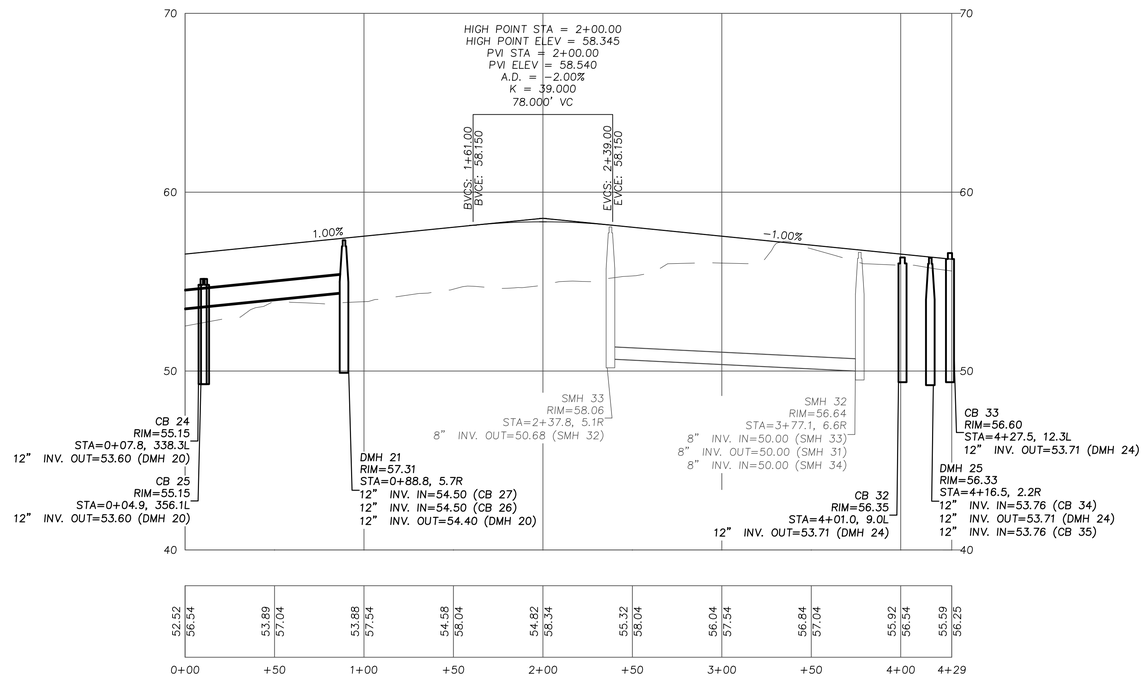
SCALE: 1"=40' | CALC. BY: J.T.M.
DATE: AUG. 11, 2025 | CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

ROADWAY & UTILITY PROFILE

SHEET: C-8.3





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

STEPHEN B. SAWYER
CIVIL
No. 52
REGISTERED
PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

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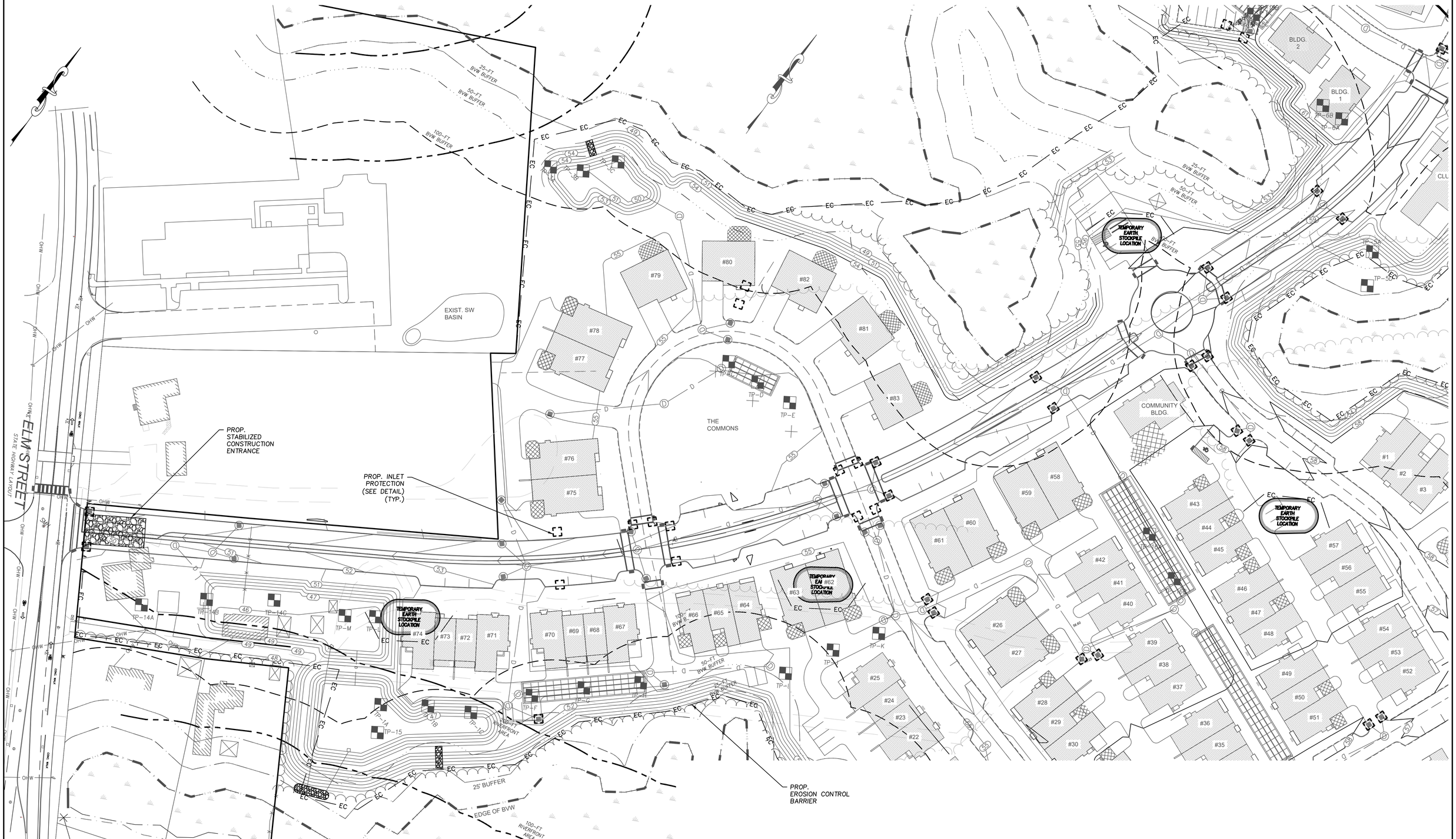
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: J.T.M.
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PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

ROADWAY & UTILITY PROFILE

SHEET: C-8.4



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
CIVIL
No. 52025
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

05/22/25
05/30/25
DATE: AUG. 11, 2025
CALC. BY: J.T.M.
CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

EROSION & SEDIMENTATION CONTROL PLAN

SHEET: C-9.0

EXIST. SW BASIN

THE COMMONS

COMMUNITY BLDG.

OUTDOOR GRILL & TABLES

TEMPORARY EARTH STOCKPILE LOCATION

TEMPORARY EARTH STOCKPILE LOCATION #62

TEMPORARY EARTH STOCKPILE LOCATION

PARK TEMPORARY EARTH STOCKPILE LOCATION

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 #15 #16 #17 #18 #19 #20 #21 #22 #23 #24 #25 #26 #27 #28 #29 #30 #31 #32 #33 #34 #35 #36 #37 #38 #39 #40 #41 #42 #43 #44 #45 #46 #47 #48 #49 #50 #51 #52 #53 #54 #55 #56 #57 #58 #59 #60 #61 #63 #64 #65 #66 #67 #68 #69 #70 #71 #72 #73 #74 #75 #76 #77 #78 #79 #81 #82 #83

TP-1A TP-1B TP-1C TP-1D TP-1E TP-1F TP-1G TP-1H TP-1I TP-1J TP-1K TP-1L TP-1M TP-1N TP-1O TP-1P TP-1Q TP-1R TP-1S TP-1T TP-1U TP-1V TP-1W TP-1X TP-1Y TP-1Z TP-15 TP-16 TP-17 TP-18 TP-19 TP-20 TP-21 TP-22 TP-23 TP-24 TP-25 TP-26 TP-27 TP-28 TP-29 TP-30 TP-31 TP-32 TP-33 TP-34 TP-35 TP-36 TP-37 TP-38 TP-39 TP-40 TP-41 TP-42 TP-43 TP-44 TP-45 TP-46 TP-47 TP-48 TP-49 TP-50 TP-51 TP-52 TP-53 TP-54 TP-55 TP-56 TP-57 TP-58 TP-59 TP-60 TP-61 TP-62 TP-63 TP-64 TP-65 TP-66 TP-67 TP-68 TP-69 TP-70 TP-71 TP-72 TP-73 TP-74 TP-75 TP-76 TP-77 TP-78 TP-79 TP-80 TP-81 TP-82 TP-83

EC

25' BUFFER

50' BUFFER

EDGE OF BVW

100-FT RIVERFRONT AREA

200-FT RIVERFRONT AREA

100' BVW BUFFER

50-FT BVW BUFFER

PROP. EROSION CONTROL BARRIER

PROP. INLET PROTECTION (SEE DETAIL) (TYP.)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

STEPHEN B. SAWYER CIVIL No. 52035 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

SOUTH NEIGHBORHOOD

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

05/22/25
05/30/25
DATE: AUG. 11, 2025

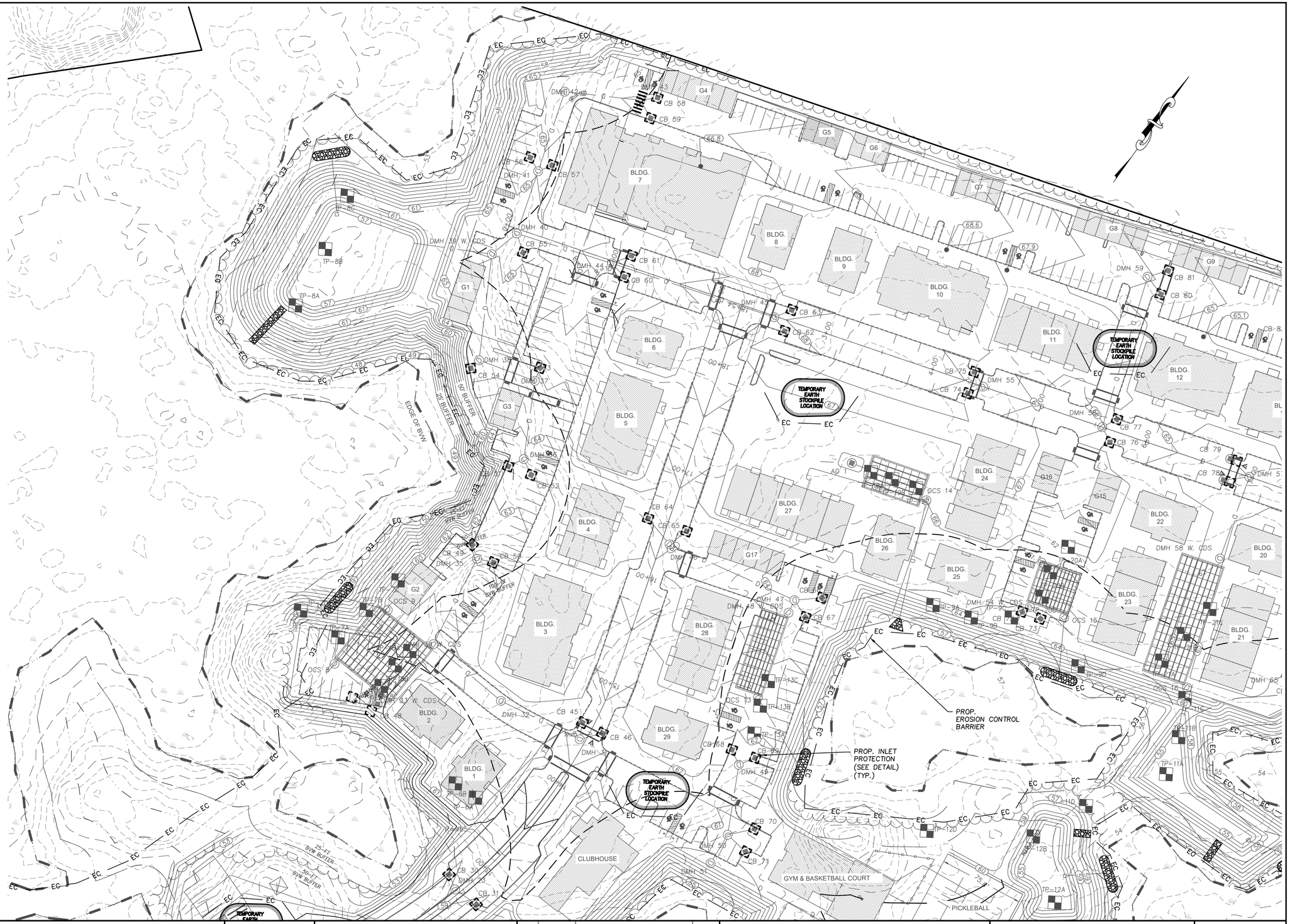
CALC. BY: J.T.M.
CHKD. BY: S.B.S.

PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

EROSION & SEDIMENTATION CONTROL PLAN

SHEET: C-9.1



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
CIVIL
No. 52405
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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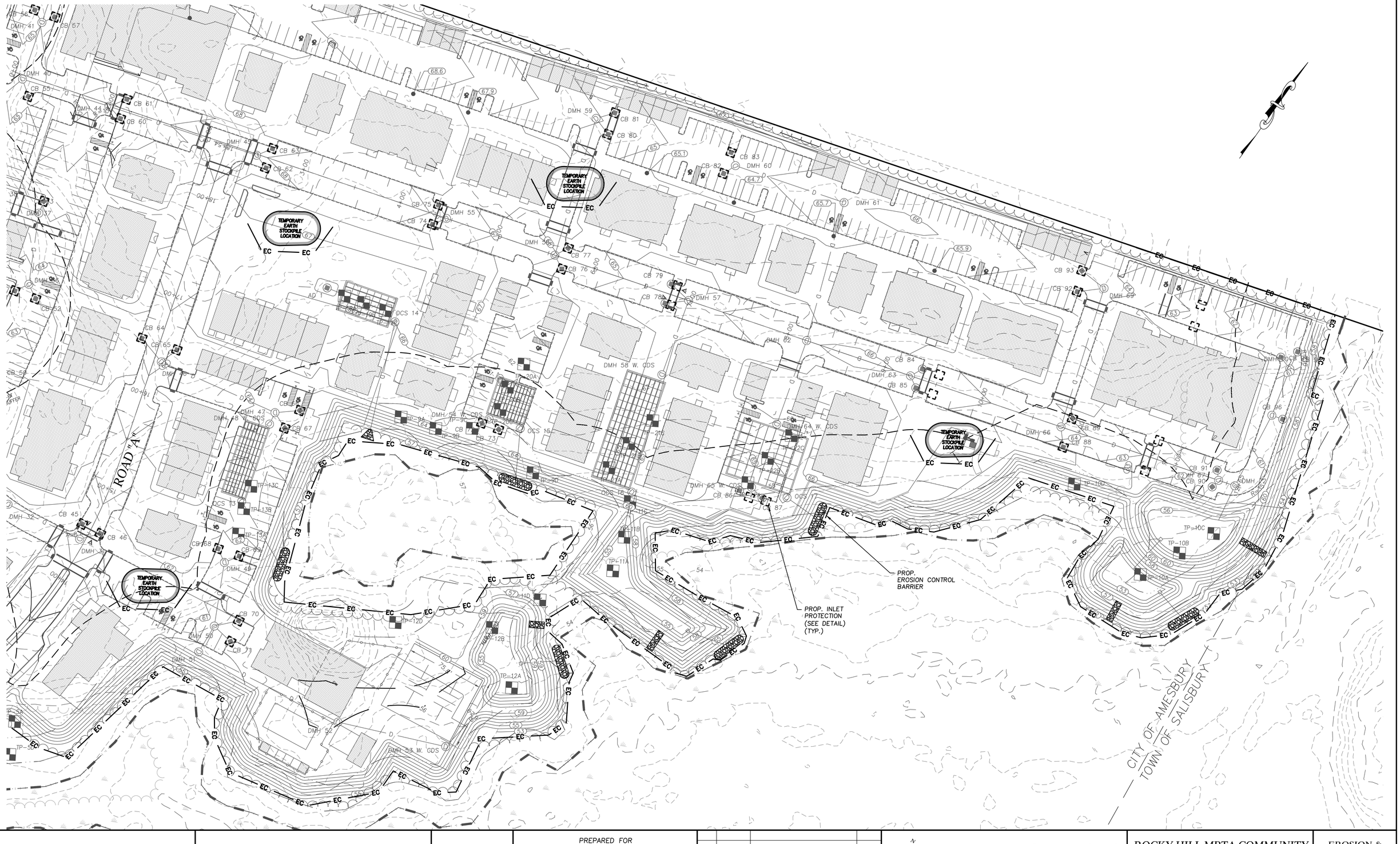
MEI
MILLENNIUM ENGINEERING, INC.
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

EROSION & SEDIMENTATION CONTROL PLAN

SHEET: C-9.2



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40'

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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PROJECT: M244407

ROCKY HILL MBTA COMMUNITY

IN

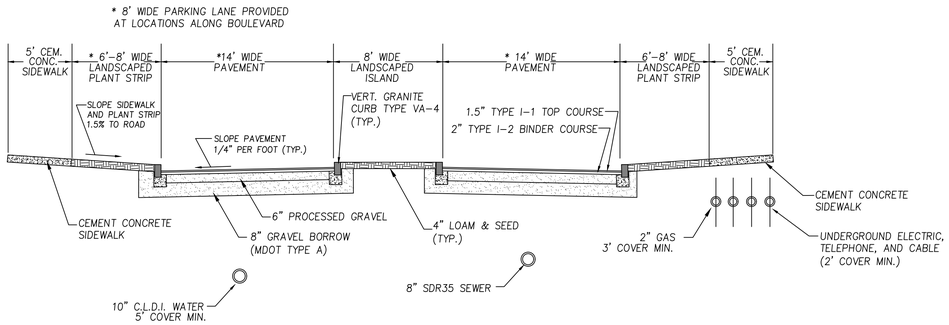
AMESBURY, MA

AT

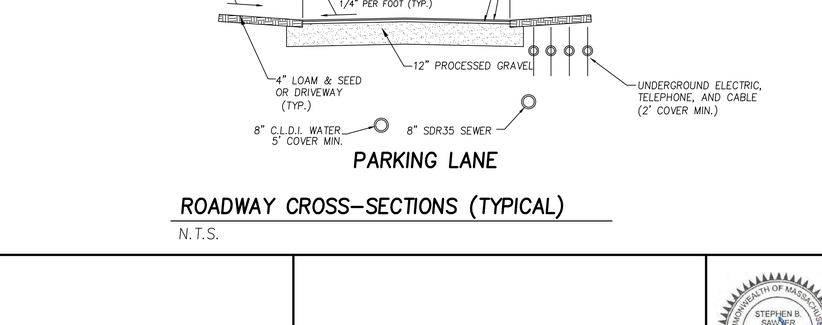
ELM STREET

EROSION & SEDIMENTATION CONTROL PLAN

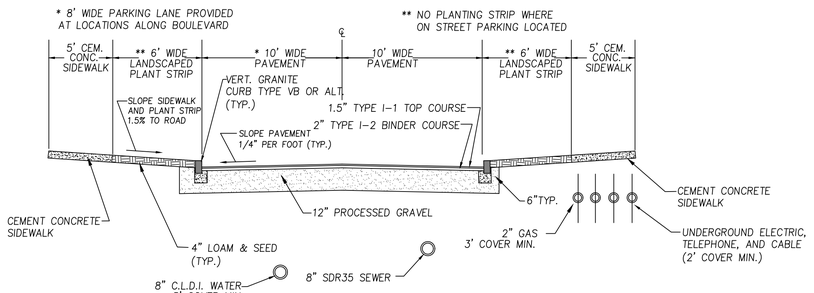
SHEET: C-9.3



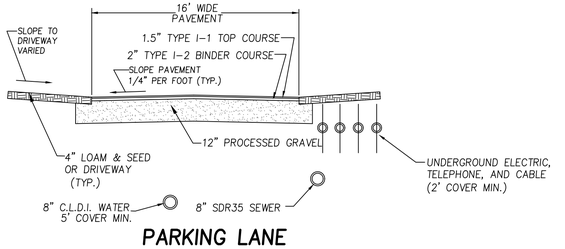
CENTRAL BOULEVARD



MAIN ACCESS ROAD TWO-WAY



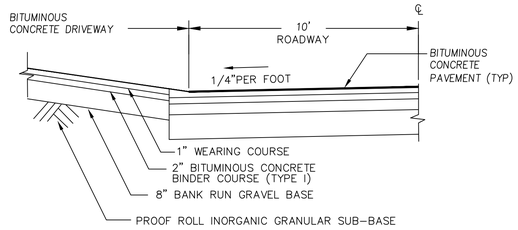
LOCAL STREET TWO-WAY



PARKING LANE

ROADWAY CROSS-SECTIONS (TYPICAL)

N.T.S.

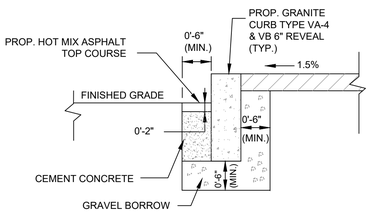


NOTES:

1. ALL DRIVEWAY APRONS WILL BE CONSTRUCTED AND PAVED AT THE SAME TIME AS THE ROADWAY PAVEMENT

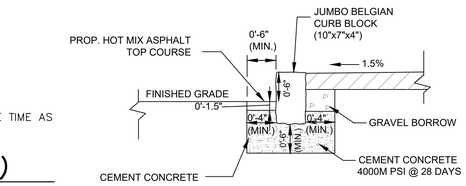
DRIVEWAY CROSS-SECTIONS (TYPICAL)

N.T.S.



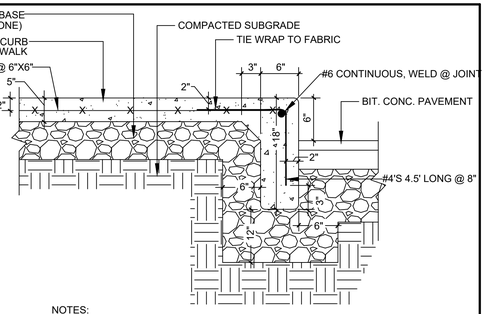
GRANITE CURB TYPE VA-4 & VB

N.T.S.



ALT. CURB TYPE A

N.T.S.

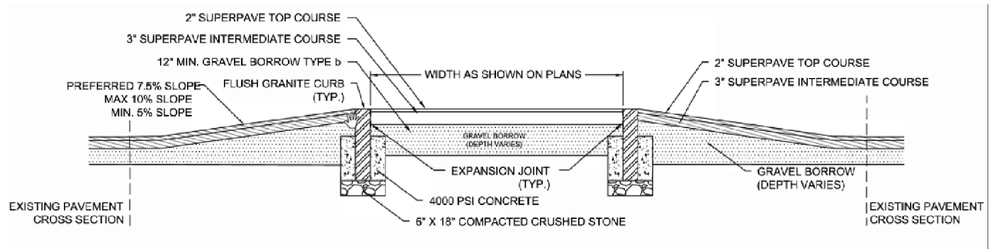


NOTES:

1. PROVIDE ¾" CONSTRUCTION CONTROL JOINT WITH PREFORMED EXPANSION MATERIAL EVERY 10'-0" O.C. MAX.
2. PROVIDE A TOOLED DUMMY JOINT ¼"W x ½"D AS NEEDED TO PROVIDE SYMMETRY.
3. f'c=4,000 psi; fy=60,000 psi

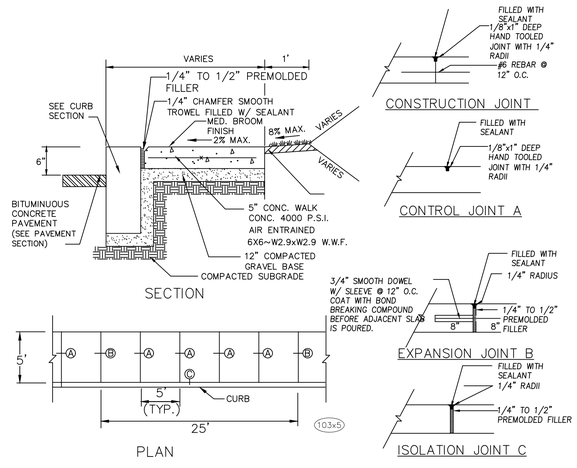
ALT. CURB TYPE B

N.T.S.



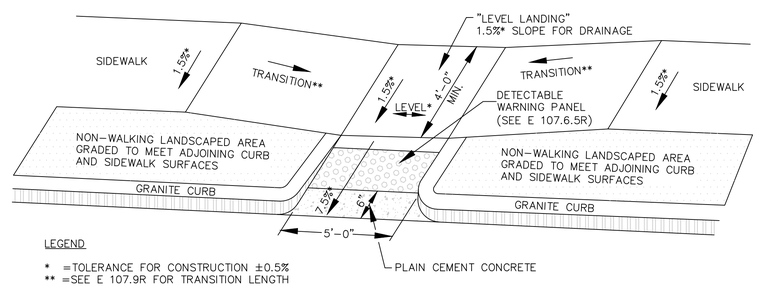
RAISED CROSSWALK SECTION

N.T.S.



CONCRETE SIDEWALK

N.T.S.



LEGEND

* =TOLERANCE FOR CONSTRUCTION ±0.5%
** =SEE E 107.9R FOR TRANSITION LENGTH

WHEELCHAIR RAMP WITH LANDSCAPING STRIP

N.T.S.

COMMONWEALTH OF MASSACHUSETTS — STEPHEN B. SAWYER — CIVIL — NO. 049... — REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

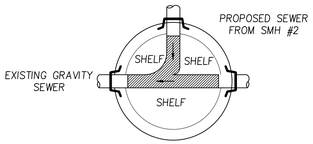
MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

DATE: AUG. 11, 2025 | CALC. BY: J.T.M. | CHKD. BY: S.B.S. | PROJECT: M244407

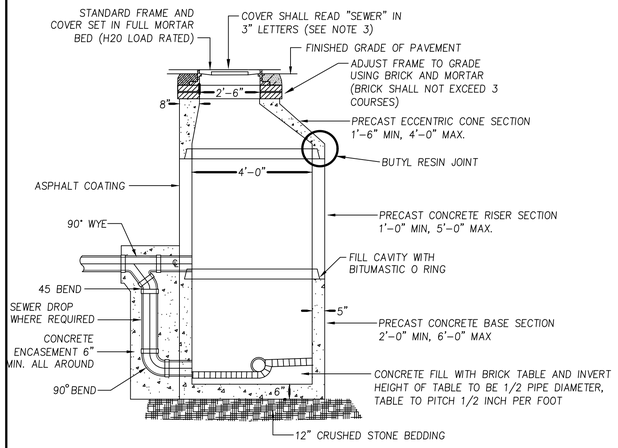
ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - ROADWAY

SHEET: C10.0



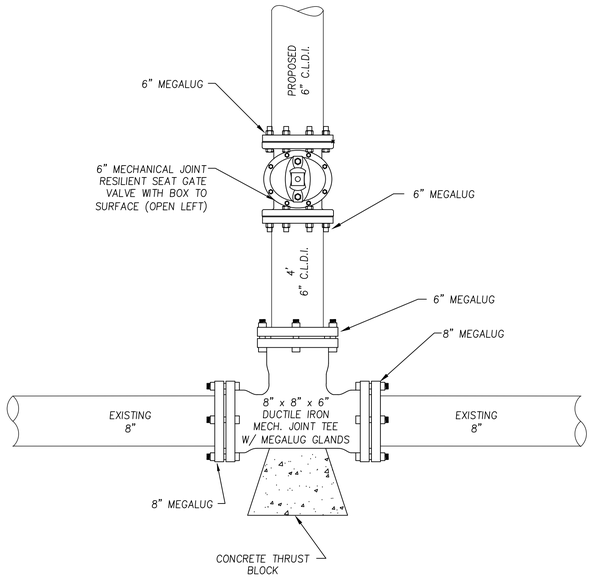
SMH #1 PLAN VIEW



NOTES: 1) SEWER MANHOLES SHALL CONFORM TO ASTM C478 AND ASTM C185
2) STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEPS SHALL CONFORM TO LATEST ASTM C478 SPEC.
3) COVER SHALL BE LEBARON FOUNDRY (MODEL NO. LA246), MECHANICS IRON FOUNDRY, NEEHAN FOUNDRY, OR EQUAL.
4) ALL PENETRATIONS IN THE MANHOLE FOR INSERTION OF PIPING SHALL BE SEALED WITH KOR-N-SEAL FLEXIBLE PIPE CONNECTION.
5) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
6) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST SEWER DETAIL

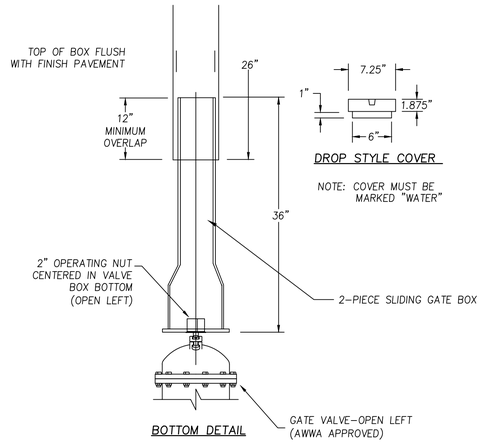
N.T.S.



NOTES: 1) TIE IN SHALL BE COORDINATED WITH THE WATER DEPARTMENT.
2) THE CONTRACTOR IS RESPONSIBLE FOR ALL OFF-SITE NOTIFICATIONS TO IMPACTED PROPERTIES.

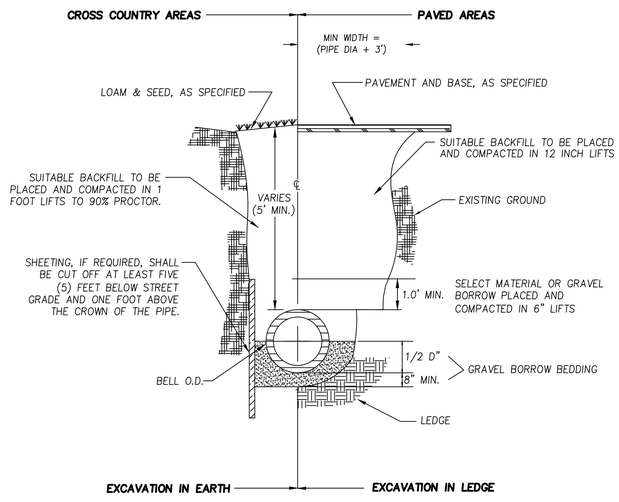
WATER MAIN CONNECTION DETAIL

N.T.S.



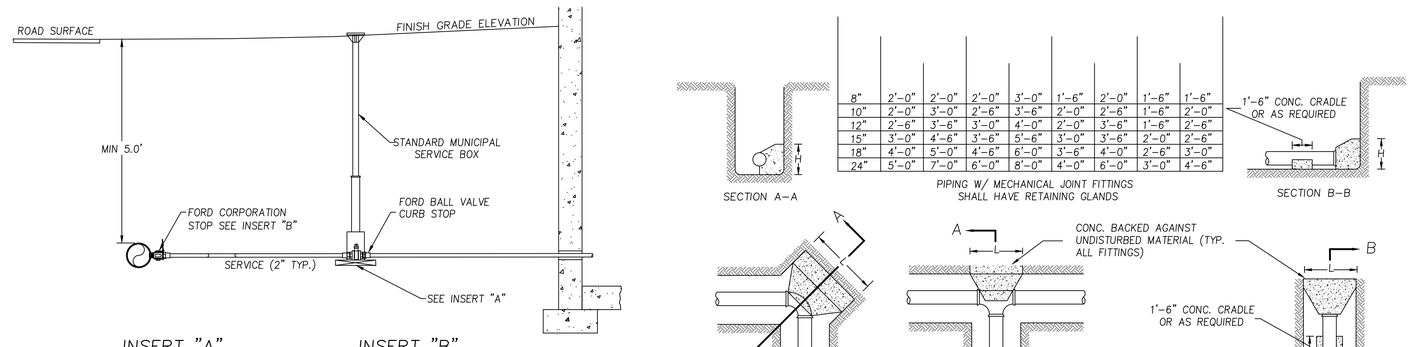
TYPICAL GATE VALVE BOX DETAIL

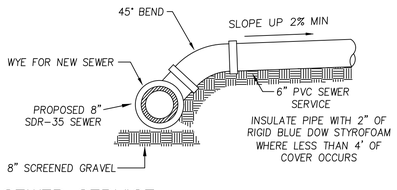
N.T.S.



TYPICAL TRENCH DETAIL

N.T.S.





SEWER SERVICE DETAIL

N.T.S.

TYPICAL SERVICE CONNECTION

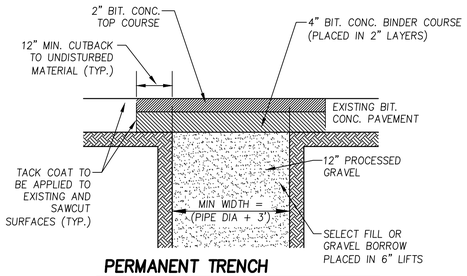
N.T.S.

NOTES

1. VALUES SHOWN ARE FOR TEST PRESSURE OF 150 PSI WITH A 100 PSI SURGE ALLOWANCE.
2. THRUST BLOCKS SHALL NOT BE PLACED AGAINST THE FOLLOWING SOILS: PEAT, ORGANIC SILT AND ORGANIC SOILS, SOFT CLAY, RUBBISH FILL AND OTHER UNSUITABLE ARTIFICIAL FILL, SHATTERED SHALE, INORGANIC SILT AND VERY FINE SANDS.
3. POURED CONCRETE THRUST BLOCKS SHALL NOT COVER ANY JOINTS, CLAMPS, NUTS, BOLTS, ETC.

THRUST BLOCK DETAILS

N.T.S.



PERMANENT TRENCH PATCH DETAIL

N.T.S.

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
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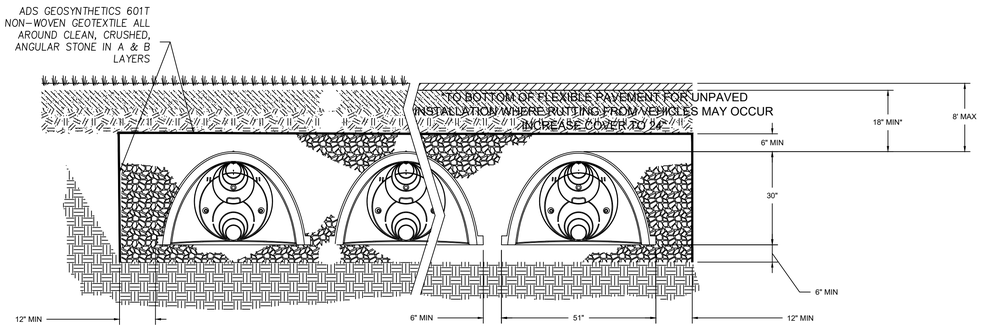
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
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ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
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ELM STREET

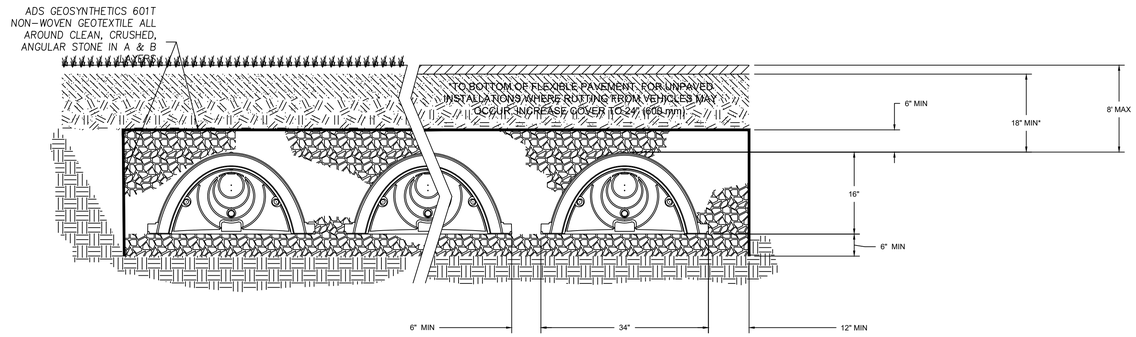
CONSTRUCTION DETAILS - WATER & SEWER

SHEET: C10.1



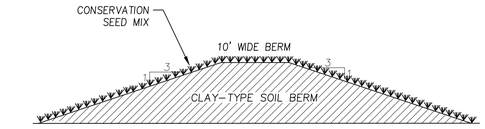
SUBSURFACE AREA	BOT. STONE ELEV.	BOT. CHAMBER ELEV.	TOP CHAMBER ELEV.	TOP STONE ELEV.	100 YR STORM ELEV.
SUB. INF. 1A	47.50	48.00	50.50	51.00	50.31
SUB. INF. 1B	50.00	50.50	53.00	53.50	53.34
SUB. INF. 2	51.00	51.50	54.00	54.50	54.00
SUB. INF. 3	52.00	52.50	55.00	55.50	54.79
SUB. INF. 4	54.00	54.50	57.00	57.50	57.27
SUB. INF. 6	61.00	61.50	64.00	64.50	63.83
SUB. INF. 8	50.33	50.83	53.33	53.83	52.51

STORMTECH SC 740
INFILTRATION CHAMBER
N.T.S.

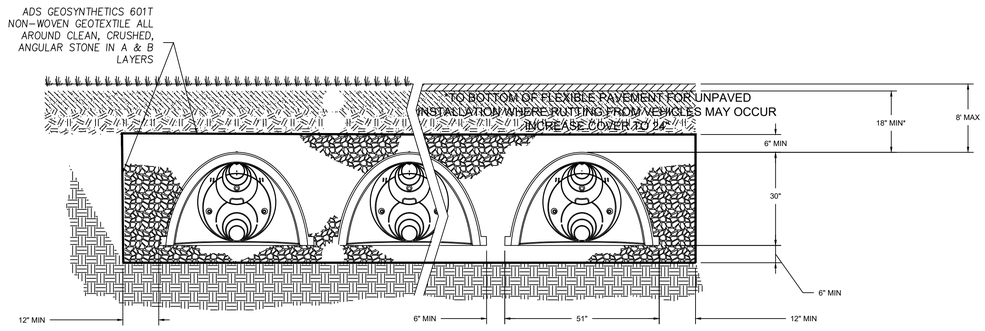


SUBSURFACE AREA	BOT. STONE ELEV.	BOT. CHAMBER ELEV.	TOP CHAMBER ELEV.	TOP STONE ELEV.	100 YR STORM ELEV.
SUB. INF. 5	59.30	59.80	61.13	61.63	61.65
SUB. INF. 7	60.20	60.70	62.03	62.53	62.45

STORMTECH SC 310
INFILTRATION CHAMBER
N.T.S.

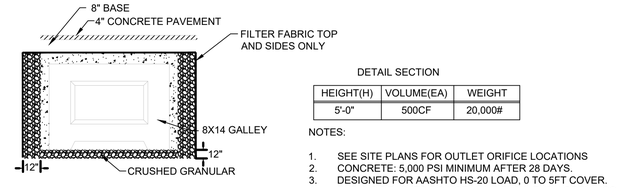


INFILTRATION BASIN
BERM DETAIL
N.T.S.



SUBSURFACE AREA	BOT. STONE ELEV.	BOT. CHAMBER ELEV.	TOP CHAMBER ELEV.	TOP STONE ELEV.	100 YR STORM ELEV.
SUB. DET. 1	60.00	60.50	63.00	63.50	63.25

STORMTECH SC 740
DETENTION CHAMBER
N.T.S.

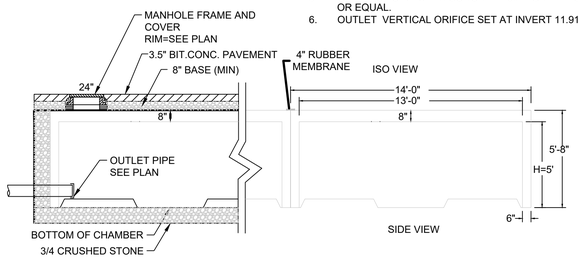


DETAIL SECTION

HEIGHT(H)	VOLUME(EA)	WEIGHT
5'-0"	500CF	20,000#

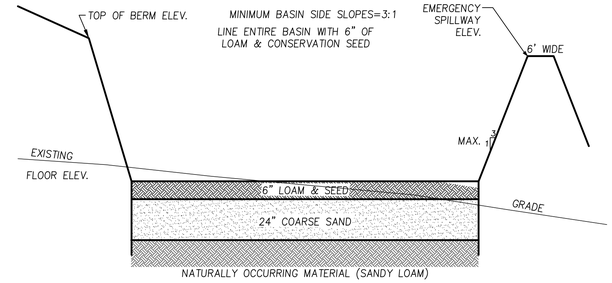
NOTES:

1. SEE SITE PLANS FOR OUTLET ORIFICE LOCATIONS
2. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
3. DESIGNED FOR AASHTO HS-20 LOAD, 0 TO 5FT COVER.
4. END & SIDE UNITS DO NOT HAVE FLOW-THRU OPENINGS.
5. GALLEYS TO BE SHEA CONCRETE 8x14 GALLEY CHAMBERS OR EQUAL.
6. OUTLET VERTICAL ORIFICE SET AT INVERT 11.91.



SUBSURFACE AREA	BOT. STONE ELEV.	BOT. CHAMBER ELEV.	TOP CHAMBER ELEV.	100 YR STORM ELEV.
SUB. DET. 2	57.00	57.50	63.17	62.49
SUB. DET. 3	56.50	57.00	62.67	61.63

SHEA 8'x14'CONCRETE
DETENTION CHAMBER
N.T.S.



INF. BASIN	BOT. BASIN ELEV.	TOP OF BERM ELEV.	EMERGENCY SPILL WAY ELEV.	100 YR STORM ELEV.
INF. BASIN 1	47.00	51.00	50.50	50.29
INF. BASIN 2	49.00	53.00	52.50	52.13
INF. BASIN 3	53.00	57.00	56.50	56.40
INF. BASIN 4	50.00	54.00	53.50	52.54
INF. BASIN 5	57.00	61.00	60.50	60.48
INF. BASIN 6	56.00	60.00	59.60	59.53

INFILTRATION BASIN
TYP. CROSS-SECTION
HORIZ. SCALE: N.T.S.
VERT. SCALE: 1"=2'

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 39606
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

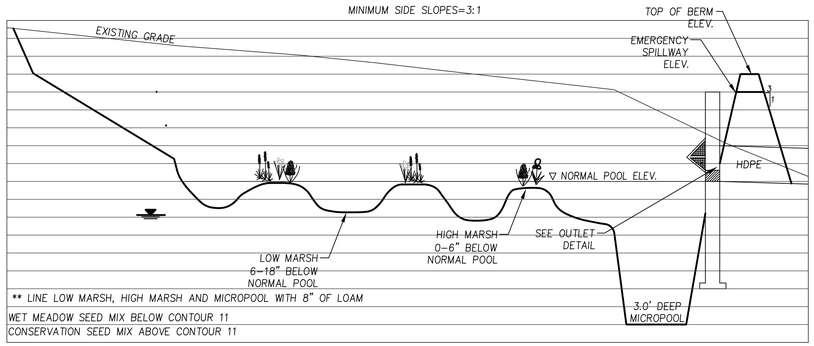
MEI MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST, SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

DATE: AUG. 11, 2025
CALC. BY: J.T.M.
CHKD. BY: S.B.S.
PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - DRAINAGE

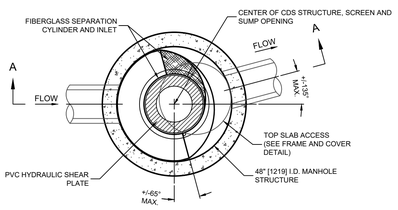
SHEET: C10.2



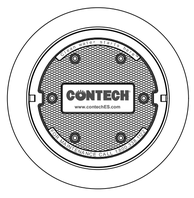
CONSTRUCTED WETLAND	POOL ELEV.	TOP OF BERM ELEV.	EMERGENCY SPILLWAY ELEV.	100 YR STORM ELEV.
CONS. WET. 1	46.00	49.00	48.50	47.43
CONS. WET. 2	55.00	59.00	58.50	58.45
CONS. WET. 3	55.00	58.00	57.50	56.76
CONS. WET. 4	53.00	57.00	56.50	56.46

CONSTRUCTED WETLAND PROFILE VIEW

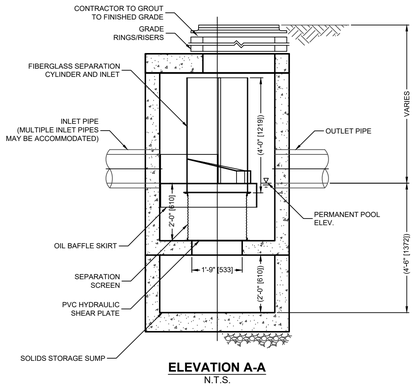
HORIZ. SCALE: N.T.S.
VERT. SCALE: 1"=2'



PLAN VIEW B-B
N.T.S.



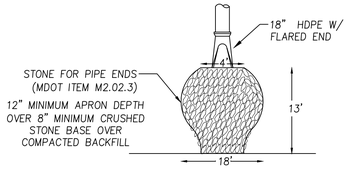
FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



ELEVATION A-A
N.T.S.

CONTECH CDS2015-4-C-DTL DETAIL

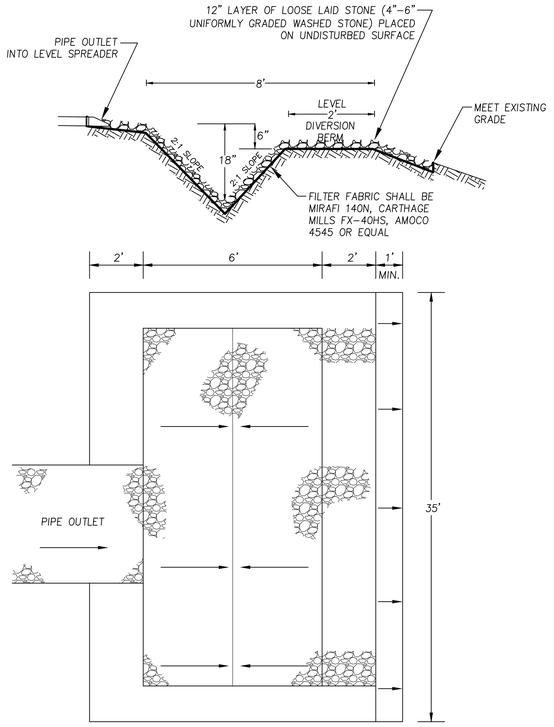
N.T.S.



NOTE: GEOSYNTHETIC EROSION CONTROL MAT SHALL BE UNDER ALL RIP-RAP

TYPICAL RIP-RAP APRON DETAIL

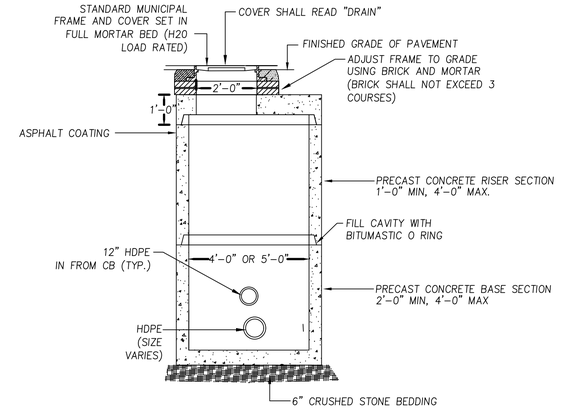
N.T.S.



NOTES:
1. CONSTRUCT BOTTOM AT 0% GRADE TO ENSURE UNIFORM SHEET FLOW. SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL.
2. PLACE 12" LAYER OF UNIFORMLY GRADED STONE 4" TO 6" IN DIAMETER. RAKE TO FORM SMOOTH UNIFORM SURFACE. DO NOT FILL IN VOIDS IN STONE.
3. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.

LEVEL SPREADER DETAIL

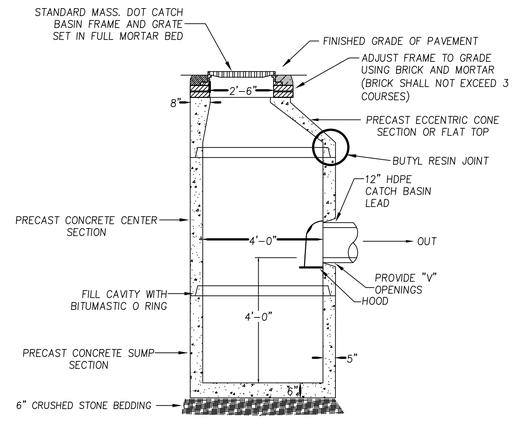
N.T.S.



NOTES: 1) DRAIN MANHOLES SHALL CONFORM TO ASTM C478 AND ASTM C185
2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE AND FOR ADDITIONAL CLEARANCE TO EXISTING UTILITIES.

PRECAST DRAIN MANHOLE DETAIL

N.T.S.



NOTES: 1) CATCH BASINS SHALL CONFORM TO ASTM C478 AND ASTM C185
2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST DEEP SUMP CATCH BASIN DETAIL

N.T.S.

COMMONWEALTH OF MASSACHUSETTS — STEPHEN B. SAWYER — CIVIL — No. 52400 — REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

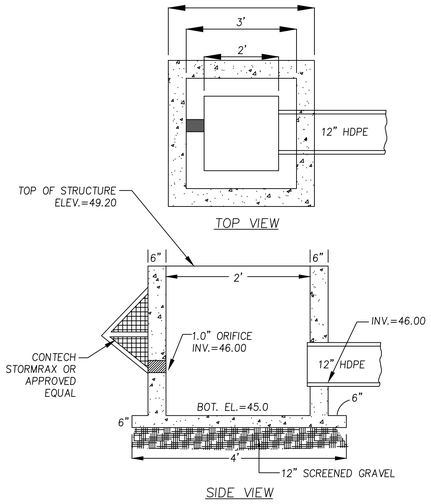
MEI — MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

DATE: AUG. 11, 2025 | CALC. BY: J.T.M. | CHKD. BY: S.B.S. | PROJECT: M244407

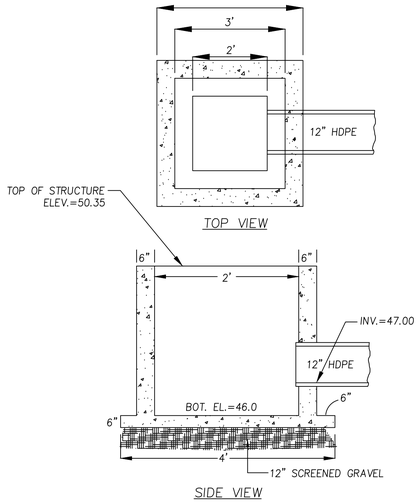
ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - DRAINAGE

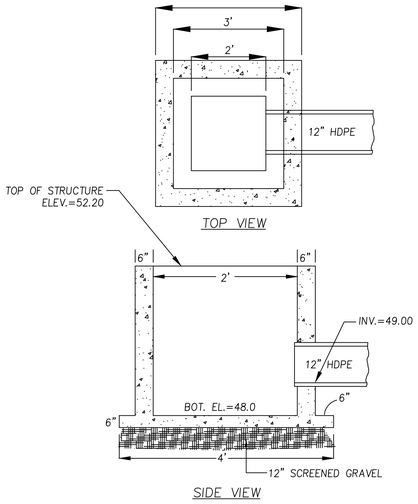
SHEET: C10.3



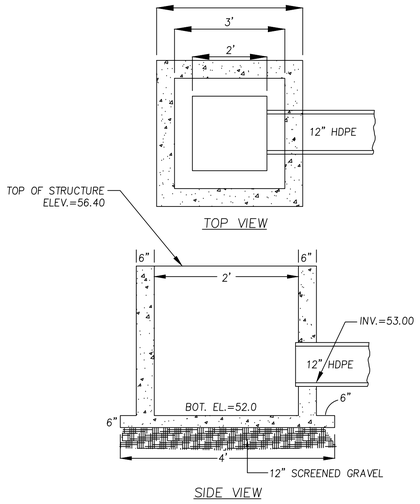
OUTLET CONTROL STRUCTURE 1
DETAIL N.T.S.



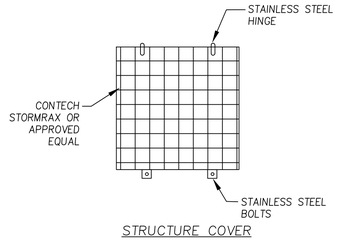
OUTLET CONTROL STRUCTURE 2
DETAIL N.T.S.



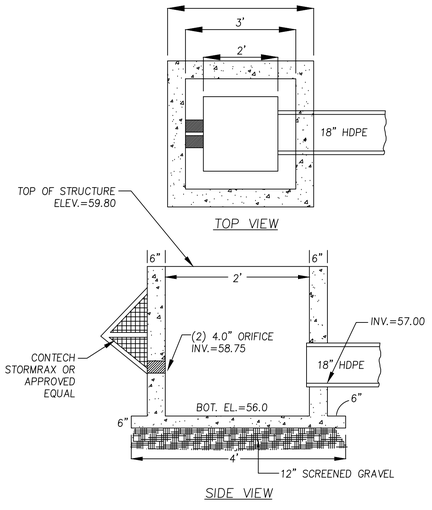
OUTLET CONTROL STRUCTURE 4
DETAIL N.T.S.



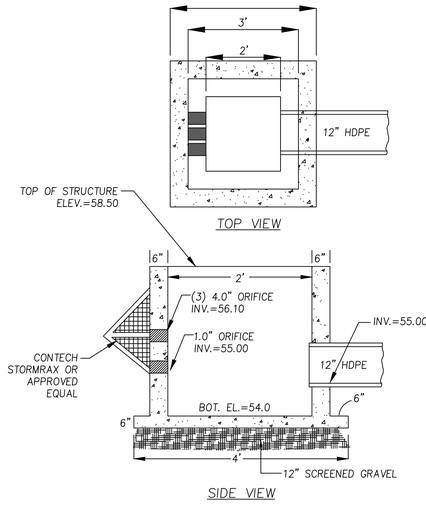
OUTLET CONTROL STRUCTURE 5
DETAIL N.T.S.



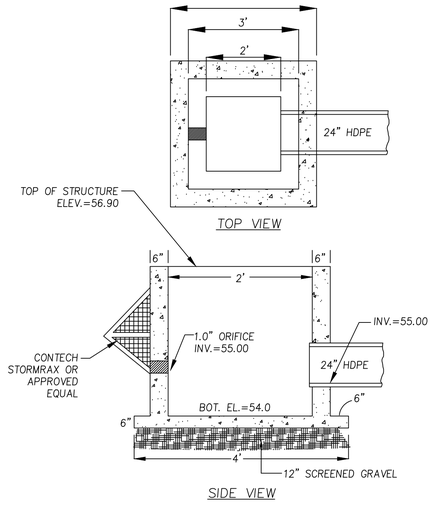
STRUCTURE COVER



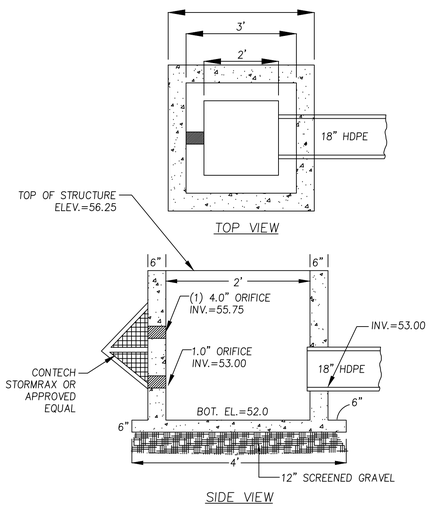
OUTLET CONTROL STRUCTURE 10
DETAIL N.T.S.



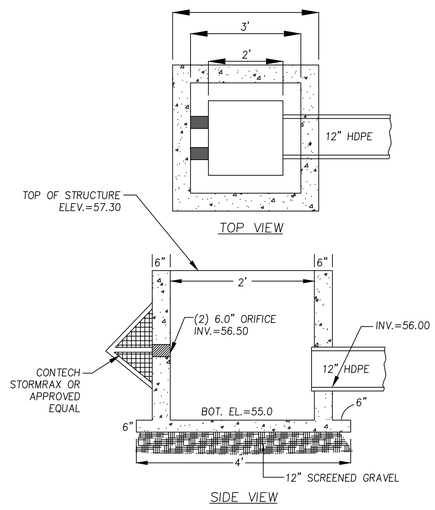
OUTLET CONTROL STRUCTURE 11
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 12
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 13
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 19
DETAIL N.T.S.

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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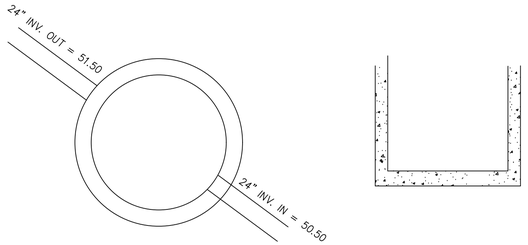
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

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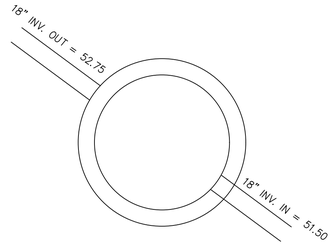
ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - DRAINAGE

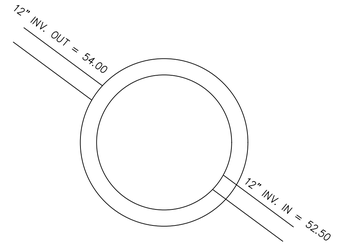
SHEET: C10.4



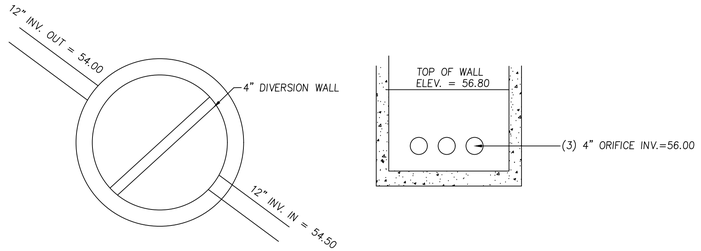
OUTLET CONTROL STRUCTURE 3
DETAIL N.T.S.



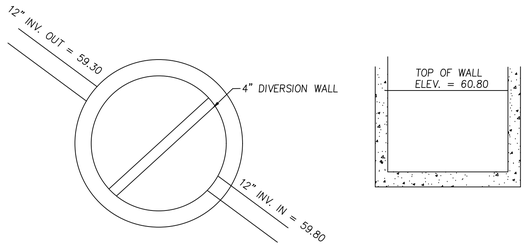
OUTLET CONTROL STRUCTURE 6
DETAIL N.T.S.



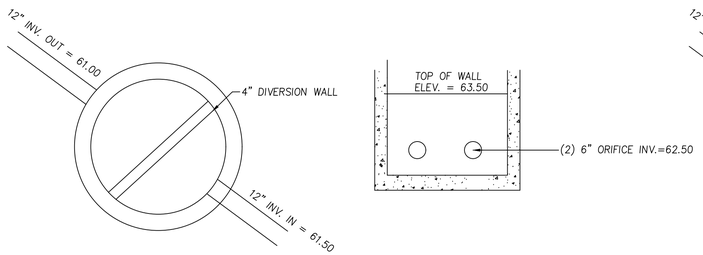
OUTLET CONTROL STRUCTURE 7
DETAIL N.T.S.



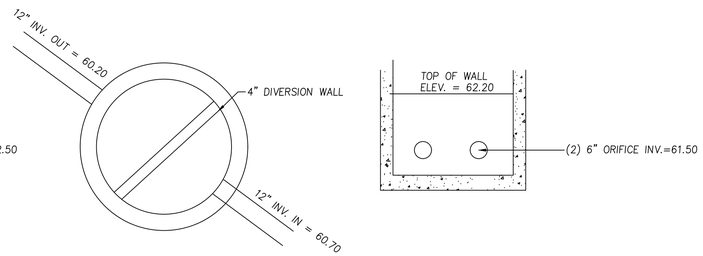
OUTLET CONTROL STRUCTURE 8 & 9
DETAIL N.T.S.



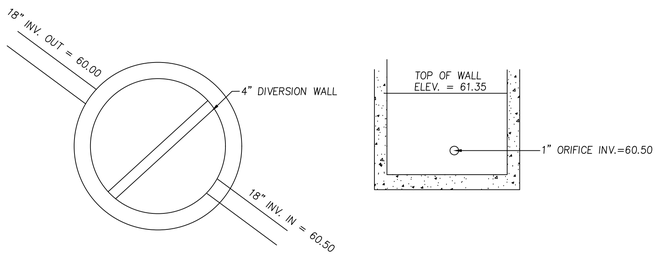
OUTLET CONTROL STRUCTURE 13
DETAIL N.T.S.



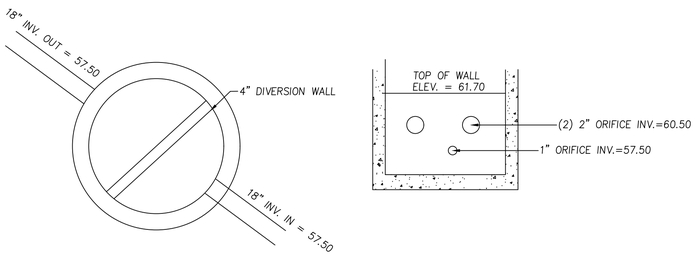
OUTLET CONTROL STRUCTURE 14
DETAIL N.T.S.



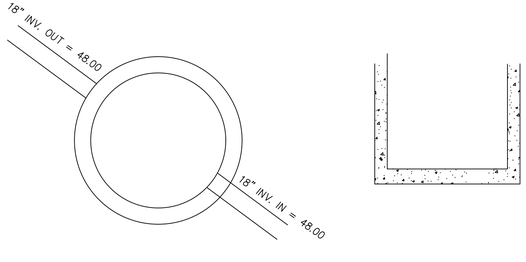
OUTLET CONTROL STRUCTURE 15
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 16
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 17
DETAIL N.T.S.



OUTLET CONTROL STRUCTURE 3
DETAIL N.T.S.

STEPHEN B. SAWYER CIVIL No. 53630 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

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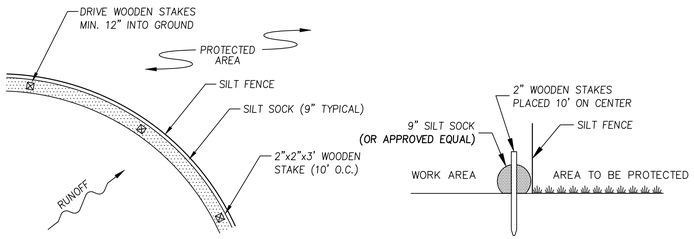
MILLENNIUM ENGINEERING, INC.
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CALC. BY: J.T.M.
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PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - DRAINAGE

SHEET: C10.5



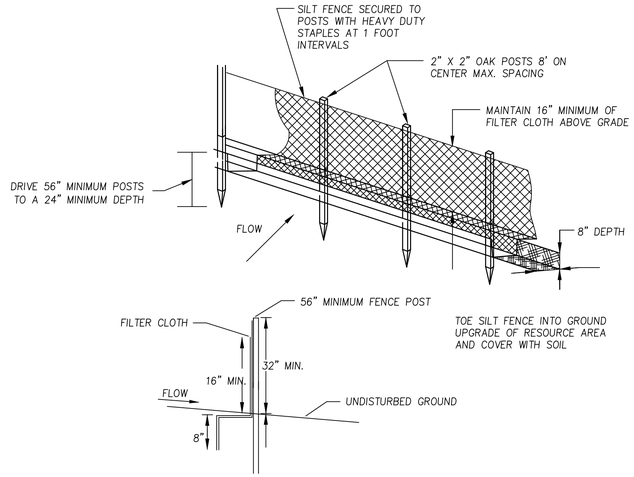
PLAN VIEW SECTION VIEW

NOTES

1. ALL MATERIAL SHALL MEET SPECIFICATIONS BY FILTREXX OR APPROVED EQUAL.
2. SILT SOCK SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
3. THE CONRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFECTIVE HEIGHT OF THE SILT SOCK.
4. SILT SOCK SHALL BE MAINTAINED UNTIL DISTURBED AREA ABOVE THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
5. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE SOCK HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT SOCK INSTALLATION DETAIL

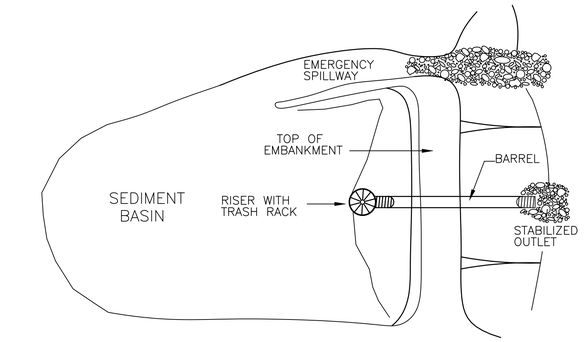
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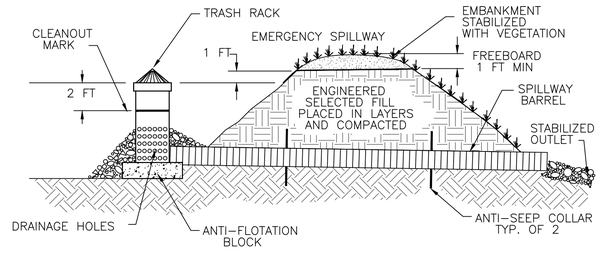
1. POSTS SHALL BE DOUBLED AND COUPLED AT FILTER CLOTH SEAMS.
2. FILTER CLOTH TO BE FASTENED SECURELY TO SUPPORT NETTING WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE INSTALLATION

N.T.S.



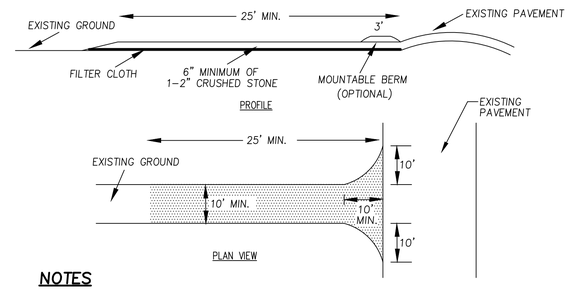
PLAN



SECTION

SEDIMENT BASIN DETAIL

N.T.S.

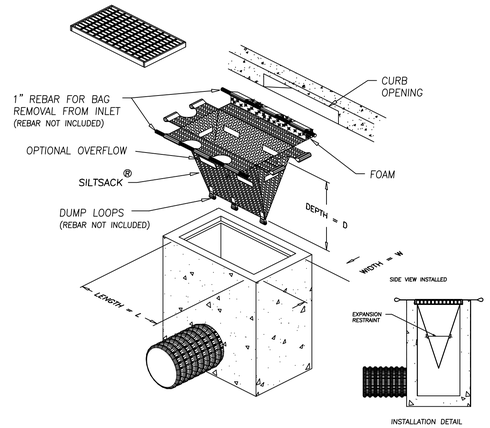


NOTES

1. STONE SHALL BE 1-1/2"-2" STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 25'.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6".
4. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP-DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.
7. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



NOTES

1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

SILT SACK DETAIL

N.T.S.

GENERAL EROSION CONTROL NOTES

1. ALL SILT FENCE SHALL BE INSTALLED BEFORE THE START OF CONSTRUCTION. SILT FENCE SHALL BE REMOVED UPON COMPLETION OF THE PROJECT AND STABILIZATION OF ALL SOIL.
2. ALL FILL SHALL BE FREE OF STUMPS AND LARGE STONES.
3. ANY STANDING BODIES OF WATER CREATED DURING EXCAVATION SHALL BE ELIMINATED.
4. EROSION CONTROL BARRIERS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL AND PROMPTLY REPAIRED OR REPLACED AS NECESSARY.
5. ACCUMULATED SEDIMENT DEPOSITS UPSTREAM OF BARRIERS SHALL BE PROPERLY DISPOSED OF ON A REGULAR BASIS.
6. AREAS OUTSIDE THE LIMITS OF WORK (EROSION CONTROL/SILT FENCE LOCATIONS) DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND/OR SEDIMENT CONTROLS DURING CONSTRUCTION. HE/SHE SHALL INSPECT CONTROLS WEEKLY AND AFTER ALL STORM EVENTS. REPAIRS, IF REQUIRED, SHALL BE MADE IMMEDIATELY.
8. TEMPORARY GROUND COVER SHALL BE ESTABLISHED IN AREAS OF CONSTRUCTION WHERE REQUIRED BY THE AMESBURY PLANNING BOARD AND CONSERVATION COMMISSION.
9. ANY DISTURBED AREAS OF THE SITE NOT USED FOR ROADWAY OR UTILITY CONSTRUCTION SHALL BE STABILIZED WITH LOAM AND SEED UNTIL FURTHER DISTURBANCE IS REQUIRED FOR BUILDING CONSTRUCTION.
10. THE CONTRACTOR SHALL IDENTIFY TO THE TOWN HIS/HER TOPSOIL STOCKPILING OPERATIONS AND LOCATIONS.
11. PROVIDE GRAVEL AND WIRE MESH SEDIMENT FILTER AT ALL CATCH BASINS.
12. A MINIMUM OF 6" OF LOAM SHALL BE INSTALLED ON ALL DISTURBED UNPAVED SURFACES.
13. SEED MIX SHALL BE NO LESS THAN 4 LBS./1000 S.F. OF LAND AREA. SEED SHALL CONSIST OF A MAXIMUM OF 10% RYE GRASS AND A MINIMUM OF 90% PERMANENT BLUEGRASS AND/OR FESCUE. LIME SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE.
14. NO MORE THAN 3 ACRES SHALL BE DISTURBED AT ONE TIME. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
15. WHERE PLACEMENT OF FILL IS REQUIRED FOR STORM WATER CONTROL, FILL SHALL BE PLACED IN AN UNFROZEN STATE UPON UNFROZEN GROUND. UNDER NO CIRCUMSTANCES SHALL FILL BE PLACED FROM NOVEMBER THROUGH JANUARY.
16. SILT SACKS SHALL BE INSTALLED IN ALL PROPOSED CATCH BASINS AND IN DOWNSTREAM CATCH BASINS IN BOSTON ROAD AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN.

COMMONWEALTH OF MASSACHUSETTS
STEPHEN B. SAWYER
No. 22606
REGISTERED PROFESSIONAL ENGINEER

PREPARED FOR

DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY
1	12/22/25	PLANNING BOARD UPDATE	J.T.M.

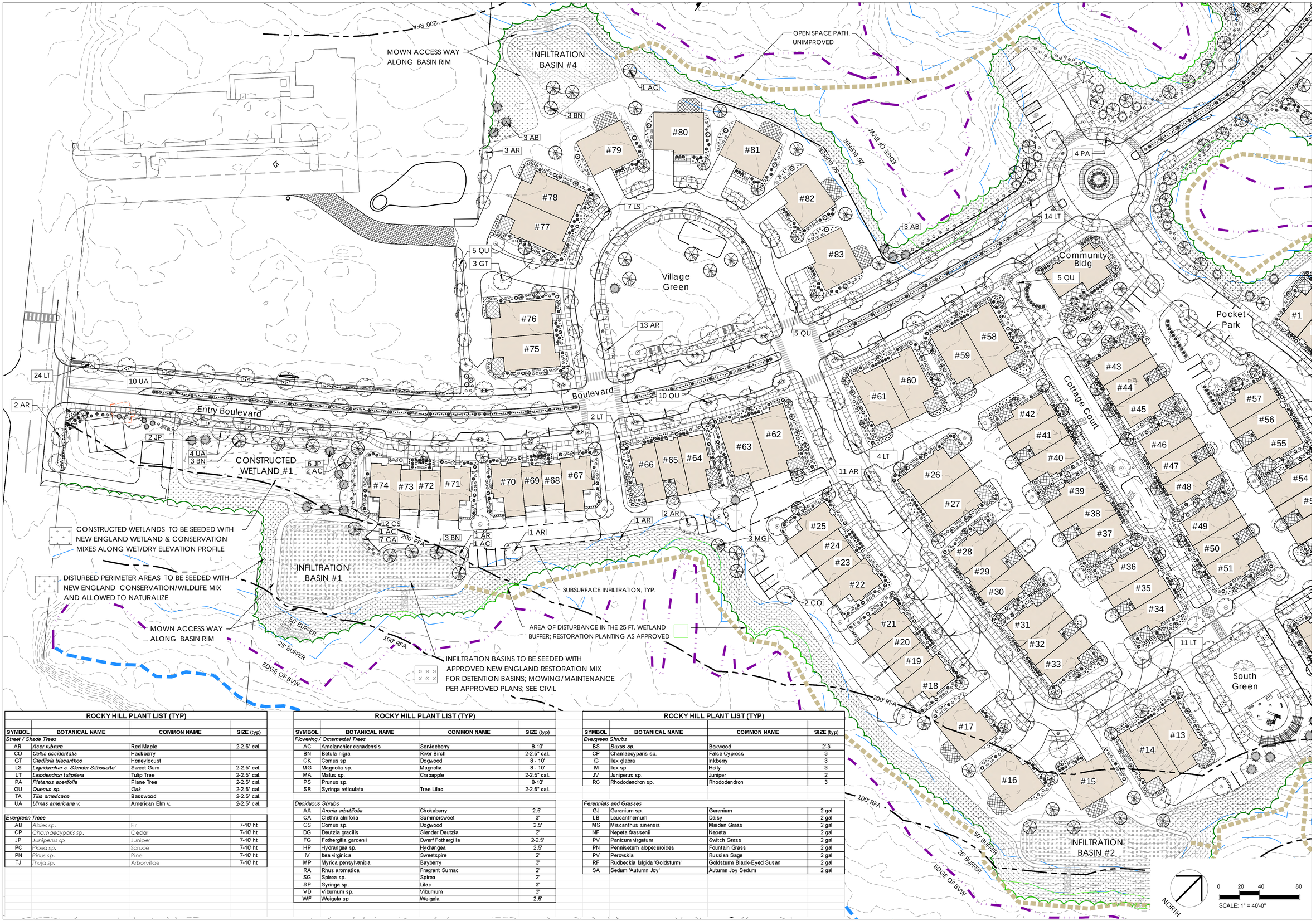
MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

DATE: AUG. 11, 2025 | CALC. BY: J.T.M. | CHKD. BY: S.B.S. | PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

CONSTRUCTION DETAILS - EROSION CONTROL

SHEET: C10.6



CONSTRUCTED WETLANDS TO BE SEEDED WITH NEW ENGLAND WETLAND & CONSERVATION MIXES ALONG WET/DRY ELEVATION PROFILE

DISTURBED PERIMETER AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AND ALLOWED TO NATURALIZE

SUBSURFACE INFILTRATION, TYP.

AREA OF DISTURBANCE IN THE 25 FT. WETLAND BUFFER; RESTORATION PLANTING AS APPROVED

INFILTRATION BASINS TO BE SEEDED WITH APPROVED NEW ENGLAND RESTORATION MIX FOR DETENTION BASINS; MOWING/MAINTENANCE PER APPROVED PLANS; SEE CIVIL

ROCKY HILL PLANT LIST (TYP)

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE (typ)
Street / Shade Trees			
AR	*Acer rubrum*	Red Maple	2-2.5" cal.
CO	*Celtis occidentalis*	Hackberry	
GT	*Gleditsia triacanthos*	Honeylocust	
LS	*Liquidambar s. Slender Silhouette'*	Sweet Gum	2-2.5" cal.
LT	*Liriodendron tulipifera*	Tulip Tree	2-2.5" cal.
PA	*Platanus acerfolia*	Plane Tree	2-2.5" cal.
QU	*Quecus sp.*	Oak	2-2.5" cal.
TA	*Tilia americana*	Basswood	2-2.5" cal.
UA	*Ulmas americana v.*	American Elm v.	2-2.5" cal.
Evergreen Trees			
AB	*Abies sp.*	Fir	7-10' ht
CP	*Chamaecyparis sp.*	Cedar	7-10' ht
JP	*Juniperus sp*	Juniper	7-10' ht
PC	*Picea sp.*	Spruce	7-10' ht
PN	*Pinus sp.*	Pine	7-10' ht
TJ	*Thuja sp.*	Arborvitae	7-10' ht

ROCKY HILL PLANT LIST (TYP)

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE (typ)
Flowering / Ornamental Trees			
AC	Amelanchier canadensis	Serviceberry	8-10'
BN	Betula nigra	River Birch	2-2.5" cal.
CK	Cornus sp	Dogwood	8 - 10'
MG	Magnolia sp.	Magnolia	8 - 10'
MA	Malus sp.	Crabapple	2-2.5" cal.
PS	Prunus sp.		8-10'
SR	Syringa reticulata	Tree Lilac	2-2.5" cal.
Deciduous Shrubs			
AA	*Aronia arbutifolia*	Chokeberry	2.5'
CA	Clethra alnifolia	Summersweet	3'
CS	Cornus sp.	Dogwood	2.5'
DG	Deutzia gracilis	Slender Deutzia	2'
FG	Fothergilla gardenii	Dwarf Fothergilla	2-2.5'
HP	Hydrangea sp.	Hydrangea	2.5'
IV	Itea virginica	Sweetspire	2'
MP	Myrica pensylvanica	Bayberry	3'
RA	Rhus aromatica	Fragrant Sumac	2'
SG	Spirea sp.	Spirea	2'
SP	Syringa sp.	Lilac	3'
VD	Viburnum sp.	Viburnum	3'
WF	Weigela sp	Weigela	2.5'

ROCKY HILL PLANT LIST (TYP)

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE (typ)
Evergreen Shrubs			
BS	*Buxus sp.*	Boxwood	2'-3'
CP	Chamaecyparis sp.	False Cypress	3'
IG	Ilex glabra	Inkberry	3'
IM	Ilex sp	Holly	3'
JV	Juniperus sp.	Juniper	2'
RC	Rhododendron sp.	Rhododendron	3'
Perennials and Grasses			
GJ	Geranium sp.	Geranium	2 gal
LB	Leucanthemum	Daisy	2 gal
MS	Miscanthus sinensis	Maiden Grass	2 gal
NF	Nepeta faassenii	Nepeta	2 gal
PV	Panicum virgatum	Switch Grass	2 gal
PN	Pennisetum alopecuroides	Fountain Grass	2 gal
PV	Perovskia	Russian Sage	2 gal
RF	Rudbeckia fulgicia 'Goldsturm'	Goldsturm Black-Eyed Susan	2 gal
SA	Sedum 'Autumn Joy'	Autumn Joy Sedum	2 gal

RYAN ASSOCIATES
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Waltham, MA 02453-3332
ph: 781 - 314 - 0401
www.ryan-assoc.com

Rocky Hill
Amesbury, MA

Landscape
- Street Tree Plan -

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1	08-14-25	Site Plan Review Submission
2	12-22-25	Site Plan Review Submission
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L1 _0

INFILTRATION BASIN #4
OPEN SPACE PATH, UNIMPROVED
EDGE OF BVM
25' BUFFER
50' BUFFER
Fieldhouse
Dog
Pool
3 BN
3 JP
1 PA
3 AC
3 AC
11 TA
3 BN
3 JP
2 AC
3 PN
OPEN SPACE PATH, UNIMPROVED
Community Bldg
7 GT
Pocket Park
10 LS
3 AB
3 BN
#80
#79
#81
#78
#77
#82
#83
Village Green
#76
#75
6 UA
Boulevard
4 PA
#74 #73 #72 #71 #70 #69 #68 #67
#66 #65 #64 #63 #62
#61 #60 #59 #58
#43 #44 #45 #46 #47 #48 #49 #50 #51 #52 #53 #54 #55 #56 #57
#42 #41 #40 #39 #38 #37 #36 #35 #34 #33 #32 #31 #30 #29 #28 #27 #26
#25 #24 #23 #22 #21 #20 #19 #18 #17 #16 #15 #14 #13
#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12
12 UA
11 QU
1 AC
3 CK
6 CO
4 QU
1 UA
14 PA
3 PN
1 QU
3 PN
3 MG
3 AC
INFILTRATION BASIN #3
INFILTRATION BASIN #2
INFILTRATION BASIN #1
50' BUFFER
25' BUFFER
EDGE OF BVM
SUBSURFACE INFILTRATION, TYP.
AREA OF DISTURBANCE IN THE 25 FT. WETLAND BUFFER; RESTORATION PLANTING AS APPROVED
200' RFA
100' RFA
DISTURBED PERIMETER AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AND ALLOWED TO NATURALIZE
MOWN ACCESS WAY ALONG BASIN RIM
INFILTRATION BASINS TO BE SEEDED WITH APPROVED NEW ENGLAND RESTORATION MIX FOR DETENTION BASINS; MOWING/MAINTENANCE PER APPROVED PLANS; SEE CIVIL
South Green
Cottage Court
OPEN SPACE PATH, UNIMPROVED
200' RFA
100' RFA
EDGE OF BVM
25' BUFFER
50' BUFFER
NORTH
0 20 40 80
SCALE: 1" = 40'-0"

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Waltham, MA 02453-3332
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Rocky Hill
Amesbury, MA

Landscape
- Street Tree Plan -

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INFILTRATION BASIN #5

50' BUFFER

25' BUFFER

EDGE OF BVM

MOWN ACCESS WAY ALONG BASIN RIM

INFILTRATION BASINS TO BE SEEDED WITH APPROVED NEW ENGLAND RESTORATION MIX FOR DETENTION BASINS; MOWING/MAINTENANCE PER APPROVED PLANS; SEE CIVIL

DISTURBED PERIMETER AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AND ALLOWED TO NATURALIZE

SUBSURFACE INFILTRATION, TYP.

Village Green

Play Lawn

Clubhouse

Fieldhouse

Dog

Pickleball

Pool

Community Bldg

Pocket Park

Bldg 1
Bldg 2
Bldg 3
Bldg 4
Bldg 5
Bldg 6
Bldg 8
Bldg 9
Bldg 10
Bldg 11
Bldg 12
Bldg 13
Bldg 14
Bldg 15
Bldg 16
Bldg 17
Bldg 19
Bldg 20
Bldg 21
Bldg 22
Bldg 23
Bldg 24
Bldg 25
Bldg 26
Bldg 27
Bldg 28
Bldg 29

G1 G2 G3 G8 G9 G10 G11 G13 G14 G15 G16 G17

2 BN 4 LT 2 LT 1 UA 1 UA 4 LT 3 UA 2 BN 6 LT 5 AR 2 AR 4 BN 4 CK 5 CO 4 CO 3 MG 3 LT 3 MG 3 BN 2 GT 2 BN 5 PA 3 AC 3 CK 3 AR 6 UA 13 LT 6 BN 1 AC 1 PA 3 AC 3 MG 3 AC 5 MG 4 AC

#1 #2 #3 #5 #43 #44 #57 #58 #59

AREA OF DISTURBANCE IN THE 25 FT. WETLAND BUFFER; RESTORATION PLANTING AS APPROVED

CONSTRUCTED WETLAND #3

CONSTRUCTED WETLAND #2

CONSTRUCTED WETLANDS TO BE SEEDED WITH NEW ENGLAND WETLAND & CONSERVATION MIXES ALONG WET/DRY ELEVATION PROFILE

DISTURBED PERIMETER AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AND ALLOWED TO NATURALIZE

OPEN SPACE PATH, UNIMPROVED

NORTH

0 20 40 80

SCALE: 1" = 40'-0"

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Landscape
- Street Tree Plan -

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L1 _2

FINAL PLANTING AND FINAL STABILIZATION NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
2. FINAL PLANTING TO BE REVIEWED BY OWNER OR OWNER'S REPRESENTATIVE.
3. ALL PLANTING BEDS TO BE MULCHED WITH AGED HARDWOOD BARK MULCH TO A DEPTH OF THREE (3) INCHES.
4. PLANT MATERIALS SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS THEY BORE TO GRADE IN THE NURSERY.
5. SPACE PLANTS AT SCALED DISTANCES SHOWN ON DRAWINGS UNLESS OTHERWISE REQUIRED IN FIELD DUE TO UTILITY OR DRIVEWAY CONFLICTS. REVISED LOCATIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
6. ALL DECIDUOUS TREES SHALL BE FITTED WITH TREE-WATERING BAGS (TREEGATOR© OR EQUAL) FOLLOWING COMPLETION OF PLANTING.
7. ANY PROPOSED SUBSTITUTION OF PLANT MATERIAL SPECIES OR SIZE SHALL ONLY BE MADE AFTER PRIOR APPROVAL OF LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
8. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR TWO YEARS FOLLOWING DATE OF FINAL WRITTEN ACCEPTANCE FROM THE OWNER OR OWNER'S REPRESENTATIVE.
9. CONTRACTOR SHALL PROTECT ALL EXISTING VEGETATION AT THE SITE THAT IS NOT REQUIRED TO BE REMOVED TO MAKE WAY FOR NEW CONSTRUCTION.
10. ALL WORK AND PLANTINGS WITHIN BUFFER AREAS TO COMPLY WITH CONSERVATION PLANS AND APPROVALS.

5 TJ
3 AB
4 AR
3 PC
8 QU
5 UA
2 AR
13 AR
3 LT
15 AR
2 PA
11 TJ
2 UA
2 LT
3 UA
1 PA
2 CK
13 PA
4 CO
4 LT
3 CK
3 AR
3 AC
3 MG
17 LT
G3
G4
G5
G6
G7
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G9
G10
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G12
G13
G14
G15
G16
G17
Bldg 1
Bldg 3
Bldg 4
Bldg 5
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Bldg 25
Bldg 26
Bldg 27
Bldg 28
Bldg 29
Trash / Recycling, Typ.
Village Green
Play Lawn
Clubhouse
Fieldhouse
Dog
Pickleball
Pool
SUBSURFACE INFILTRATION, TYP.
50' BUFFER
25' BUFFER
EDGE OF BVM
OPEN SPACE PATH, UNIMPROVED
MOWN ACCESS WAY ALONG BASIN RIM
CONSTRUCTED WETLAND #2
CONSTRUCTED WETLAND #3
CONSTRUCTED WETLAND #4
INFILTRATION BASIN #6
INFILTRATION BASINS TO BE SEEDED WITH APPROVED NEW ENGLAND RESTORATION MIX FOR DETENTION BASINS; MOWING/MAINTENANCE PER APPROVED PLANS; SEE CIVIL
CONSTRUCTED WETLANDS TO BE SEEDED WITH NEW ENGLAND WETLAND & CONSERVATION MIXES ALONG WET/DRY ELEVATION PROFILE
DISTURBED PERIMETER AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AND ALLOWED TO NATURALIZE

NORTH
0 20 40 80
SCALE: 1" = 40'-0"

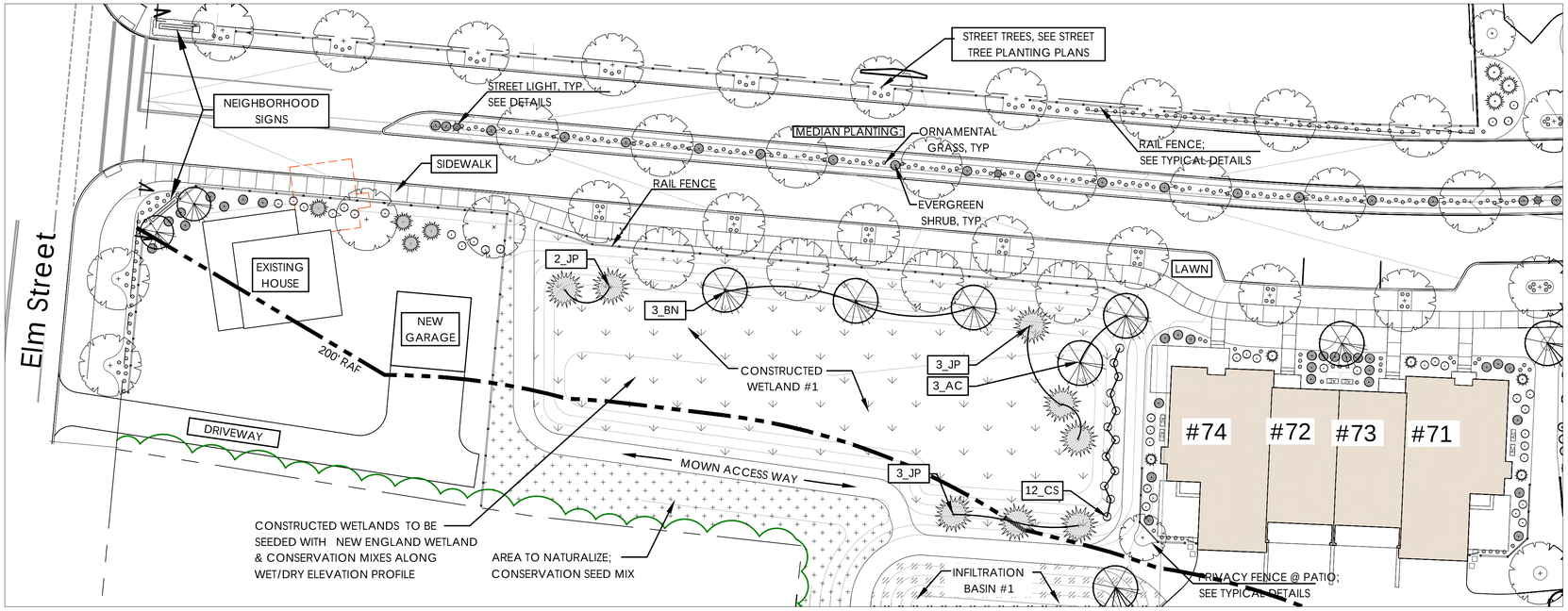
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Rocky Hill
Amesbury, MA

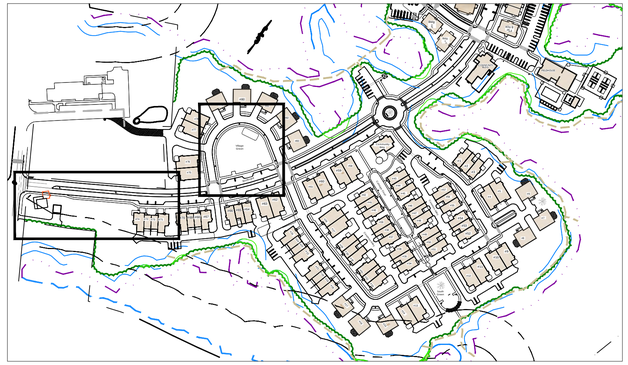
Landscape
- Street Tree Plan -

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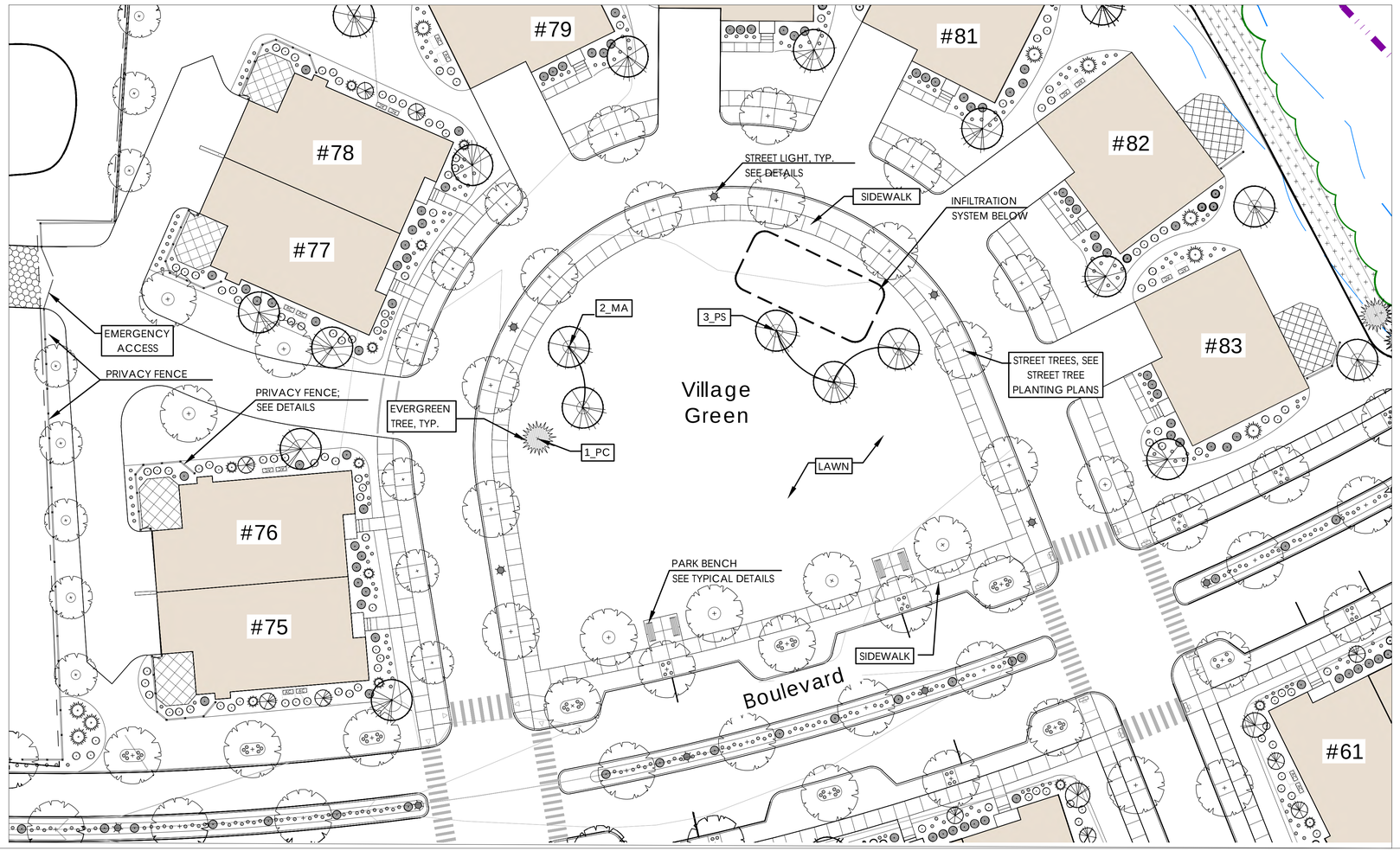
L1 _3



1 Entrance



Neighborhood -- Key Plan



2 Village Green _ South

Legend

- SPECIMEN TREE
- SHADE TREE
- FLOWERING / UNDER-STORY TREE
- EVERGREEN TREE
- COLUMNAR EVERGREEN
- SHRUBS & PERENNIALS
- SPECIALTY PAVING
- FENCING
- PICNIC TABLE
- BENCH
- SITE LIGHTING
- AC / HEAT PUMP CONDENSERS
- NATURALIZED AREA
- CONSTRUCTED WETLAND
- INFILTRATION BASIN

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

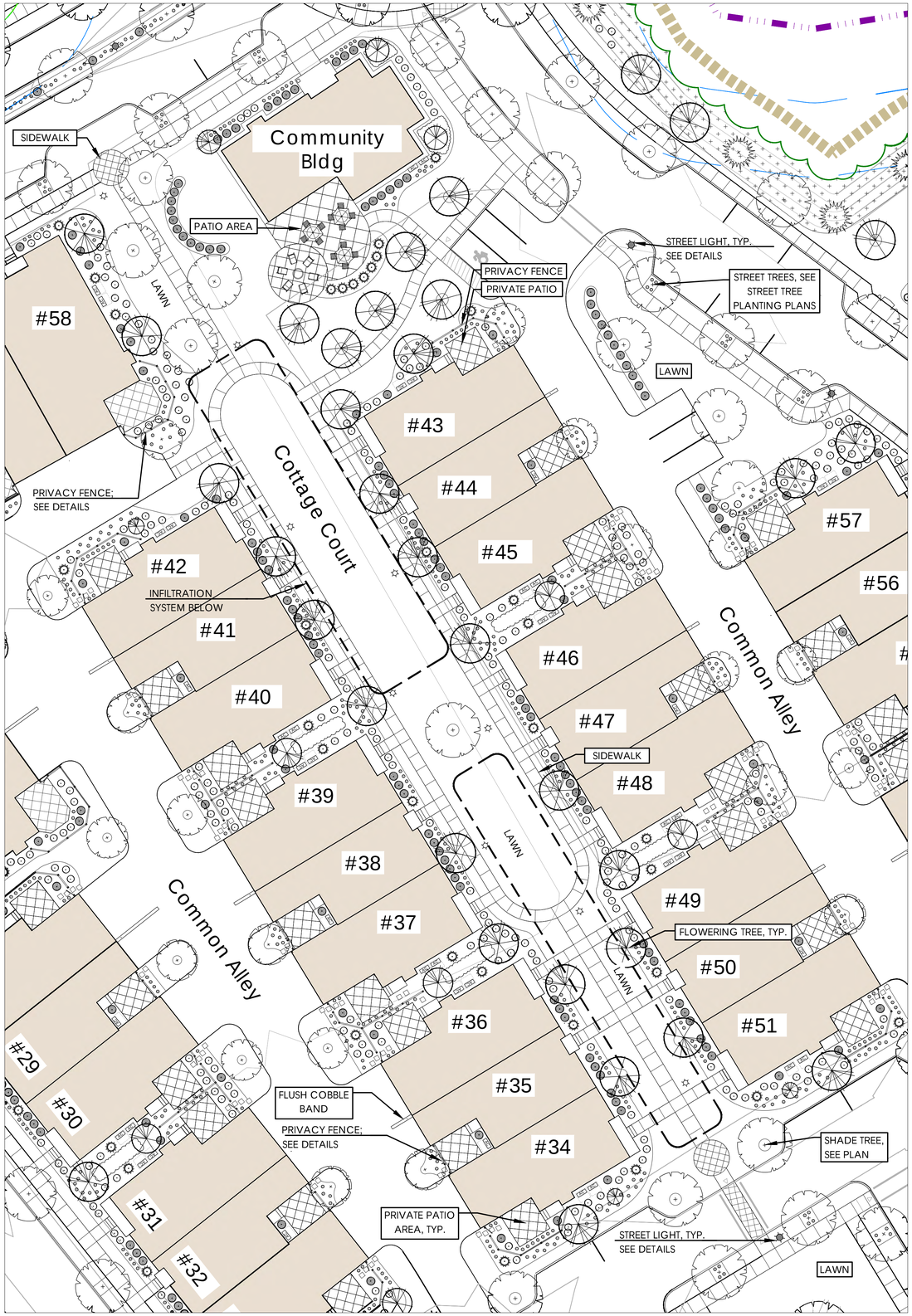
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LANDSCAPE ARCHITECTURE AND PLANNING
144 Moody Street, Building 4
Waltham, MA 02453-3332
ph: 781 - 314 - 0401
www.ryan-assoc.com

Rocky Hill
Amesbury, MA

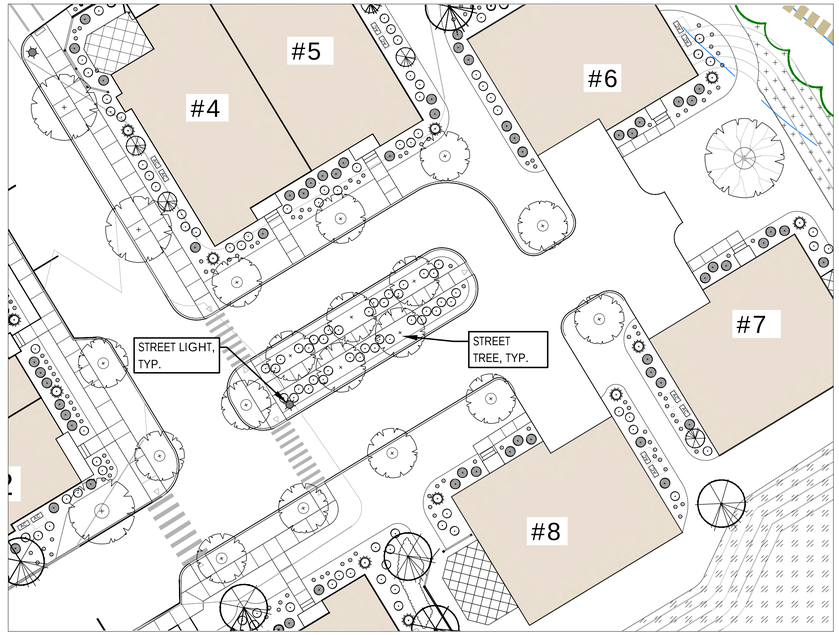
Landscape
Common Areas
-Enlargement A-

ISSUED		
1	08-14-25	Site Plan Review Submission
2	12-22-25	Site Plan Review Submission
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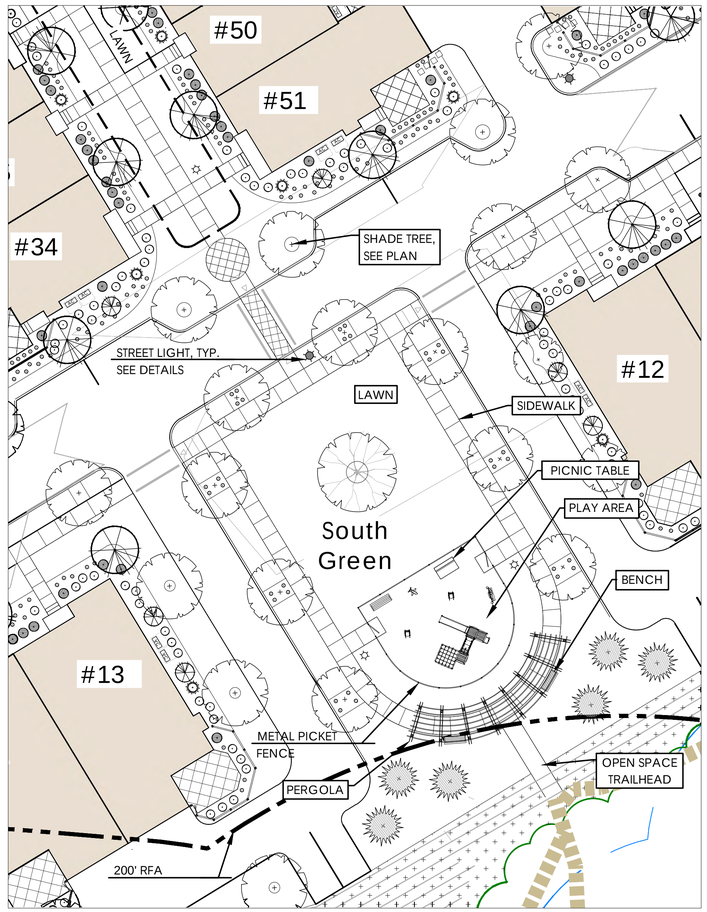
L 2_0



1 Cottage Court



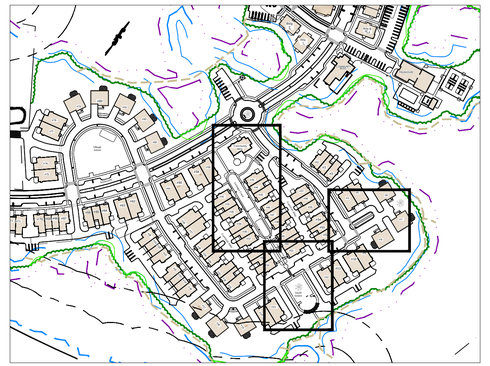
3 East Court



2 South Green

Legend

- SPECIMEN TREE
- SHADE TREE
- FLOWERING / UNDER-STORY TREE
- EVERGREEN TREE
- COLUMNAR EVERGREEN
- SHRUBS & PERENNIALS
- SPECIALTY PAVING
- FENCING
- PICNIC TABLE
- BENCH
- SITE LIGHTING
- AC / HEAT PUMP CONDENSERS
- NATURALIZED AREA
- CONSTRUCTED WETLAND
- INFILTRATION BASIN



Neighborhood -- Key Plan

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

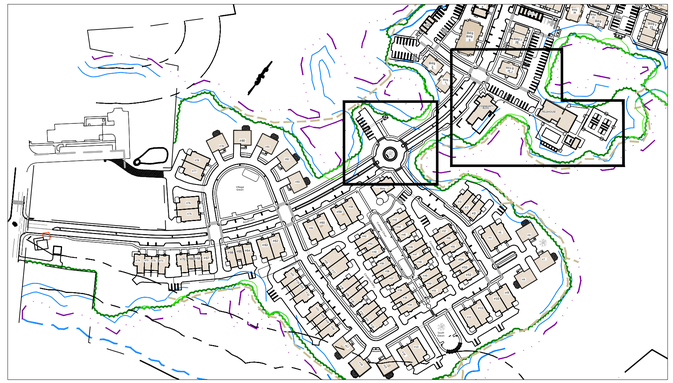
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Rocky Hill
Amesbury, MA

Landscape
Common Areas
-Enlargement B-

ISSUED		
1	08-14-25	Site Plan Review Submission
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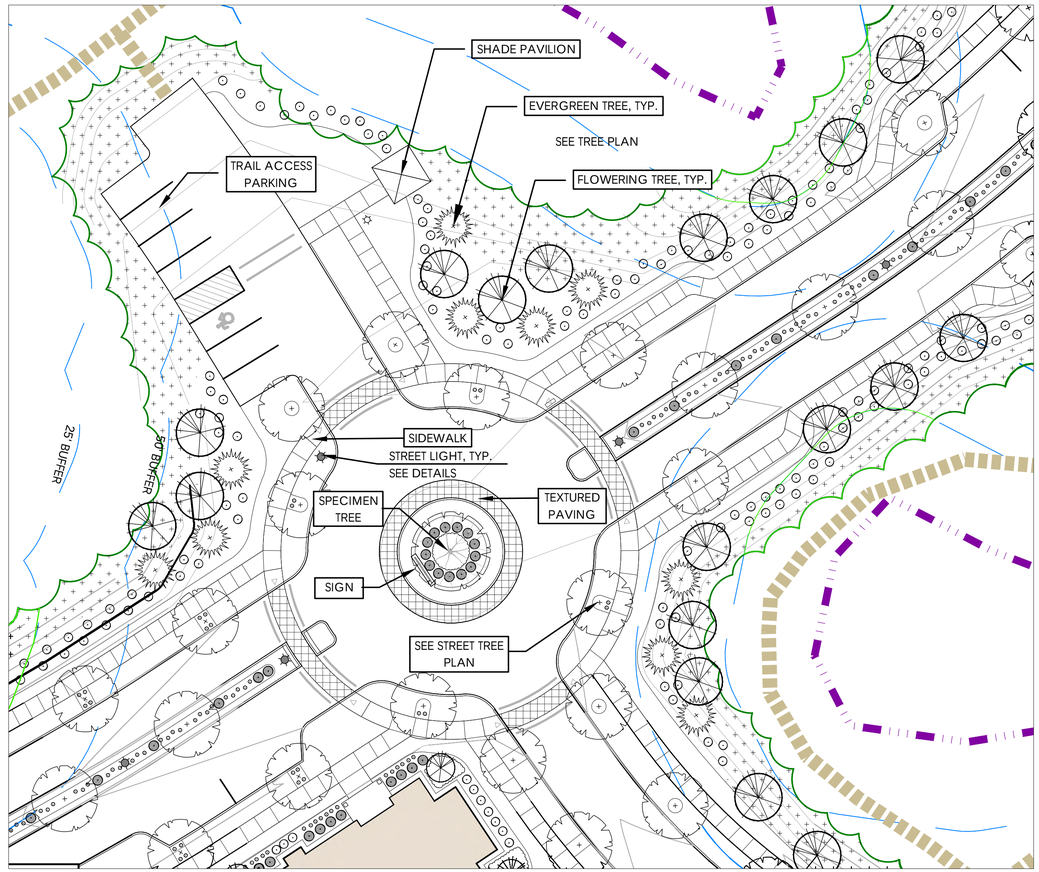
Neighborhood -- Key Plan

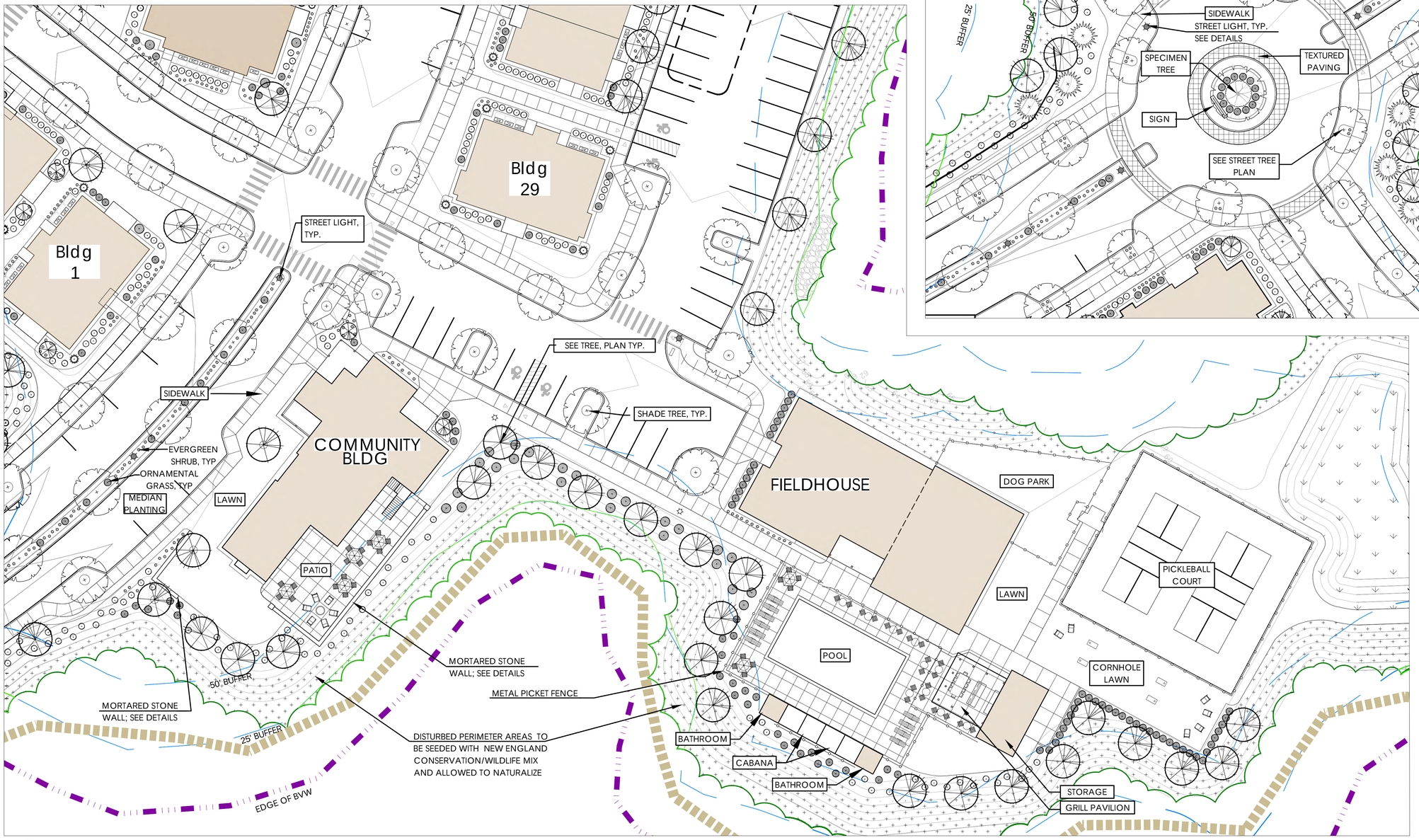
NORTH

0 10 20 40

SCALE: 1" = 20'-0"

1 Rotary Park





2 North Neighborhood Amenity Area

Legend

- SPECIMEN TREE
- SHADE TREE
- FLOWERING / UNDER-STORY TREE
- EVERGREEN TREE
- COLUMNAR EVERGREEN
- SHRUBS & PERENNIALS
- SPECIALTY PAVING
- FENCING
- PICNIC TABLE
- BENCH
- SITE LIGHTING
- AC / HEAT PUMP CONDENSERS
- NATURALIZED AREA
- CONSTRUCTED WETLAND
- INFILTRATION BASIN

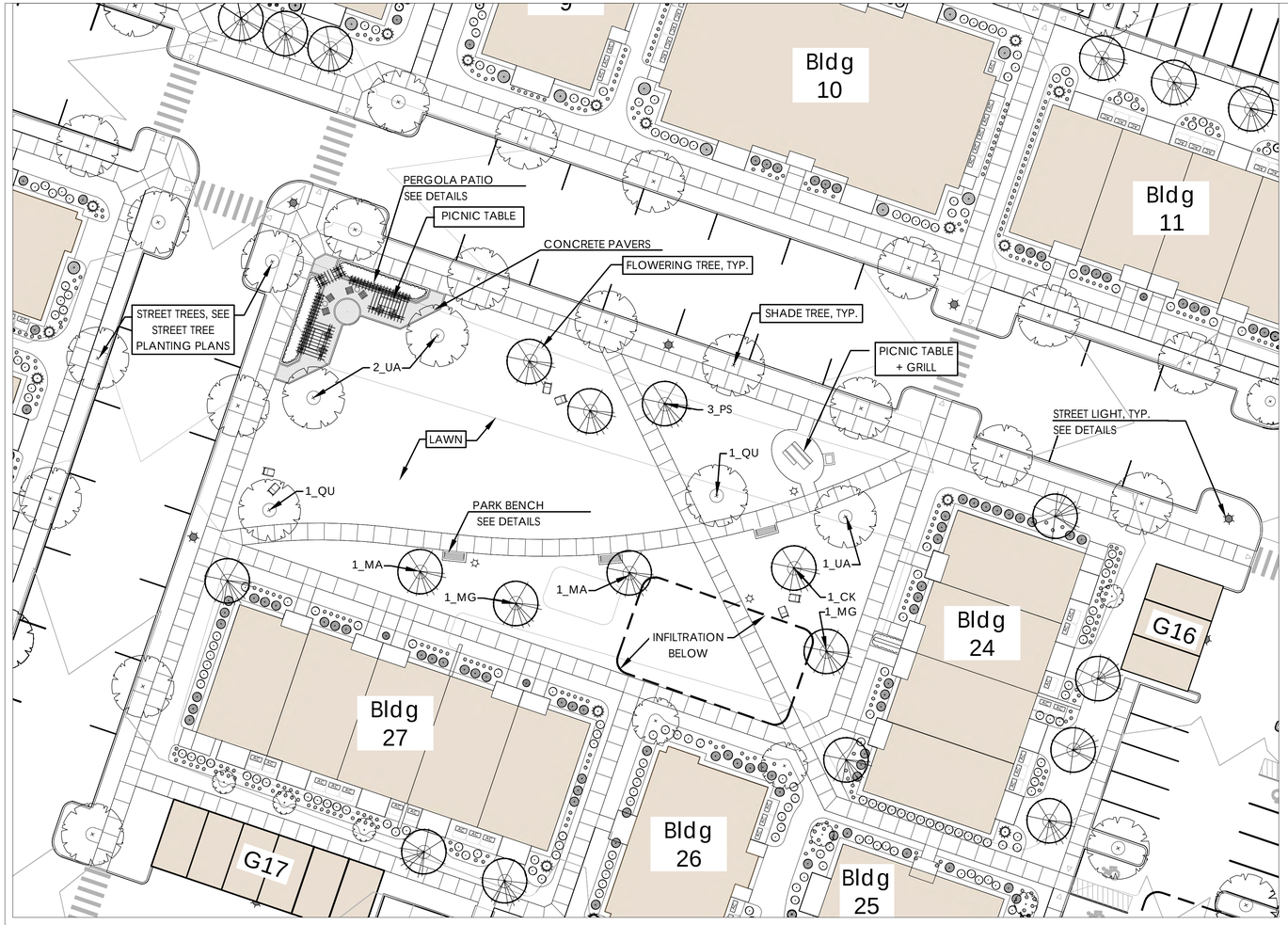
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Amesbury, MA

Landscape
Common Areas
-Enlargement C-

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1	08-14-25	Site Plan Review Submission
2	12-22-25	Site Plan Review Submission
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L 2_2



1 Village Green - North

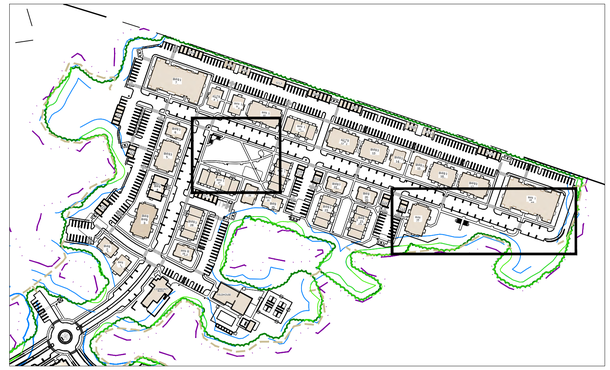
Legend

- SPECIMEN TREE
- SHADE TREE
- FLOWERING / UNDER-STORY TREE
- EVERGREEN TREE
- COLUMNAR EVERGREEN
- SHRUBS & PERENNIALS
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- FENCING
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- NATURALIZED AREA
- CONSTRUCTED WETLAND
- INFILTRATION BASIN

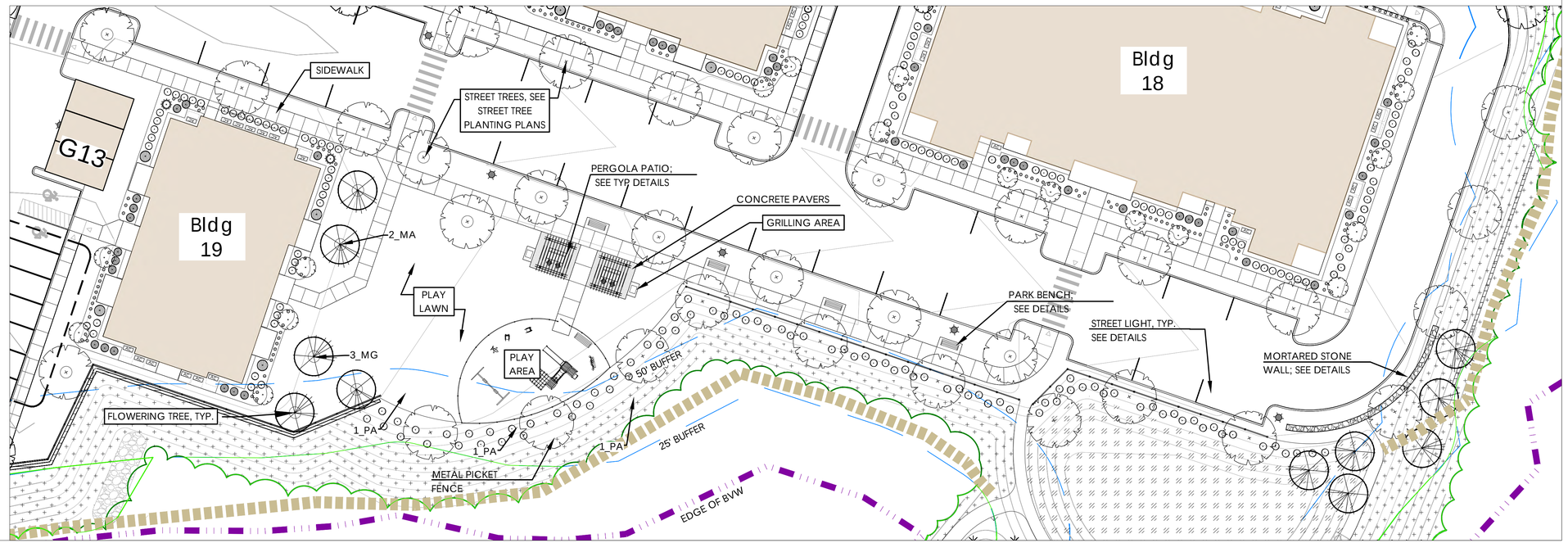
NORTH

0 10 20 40

SCALE: 1" = 20'-0"



Neighborhood -- Key Plan



2 Neighborhood Park - North

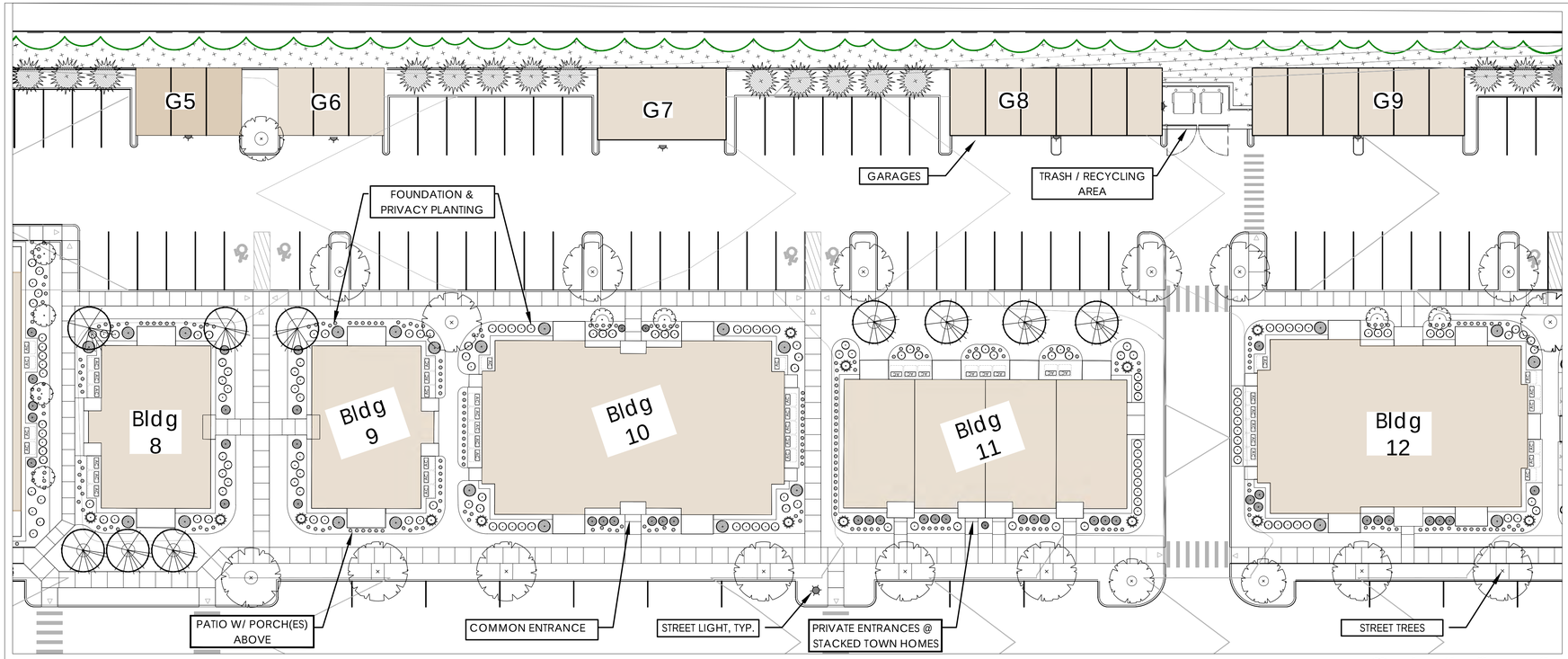
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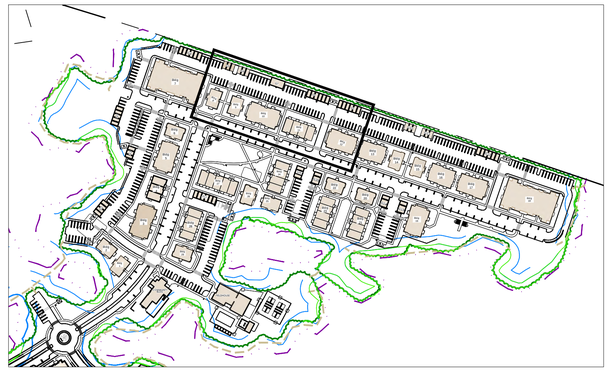
Landscape
Common Areas
-Enlargement D-

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2	12-22-25	Site Plan Review Submission
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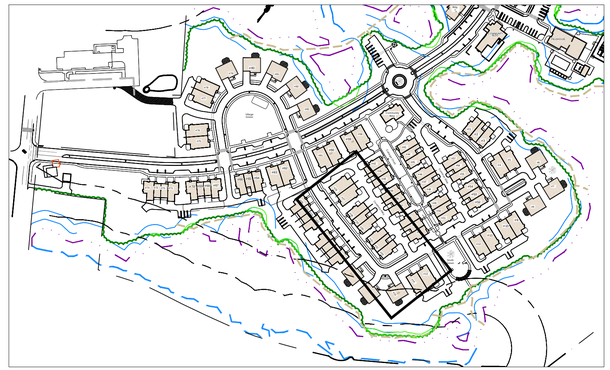
L 2_3



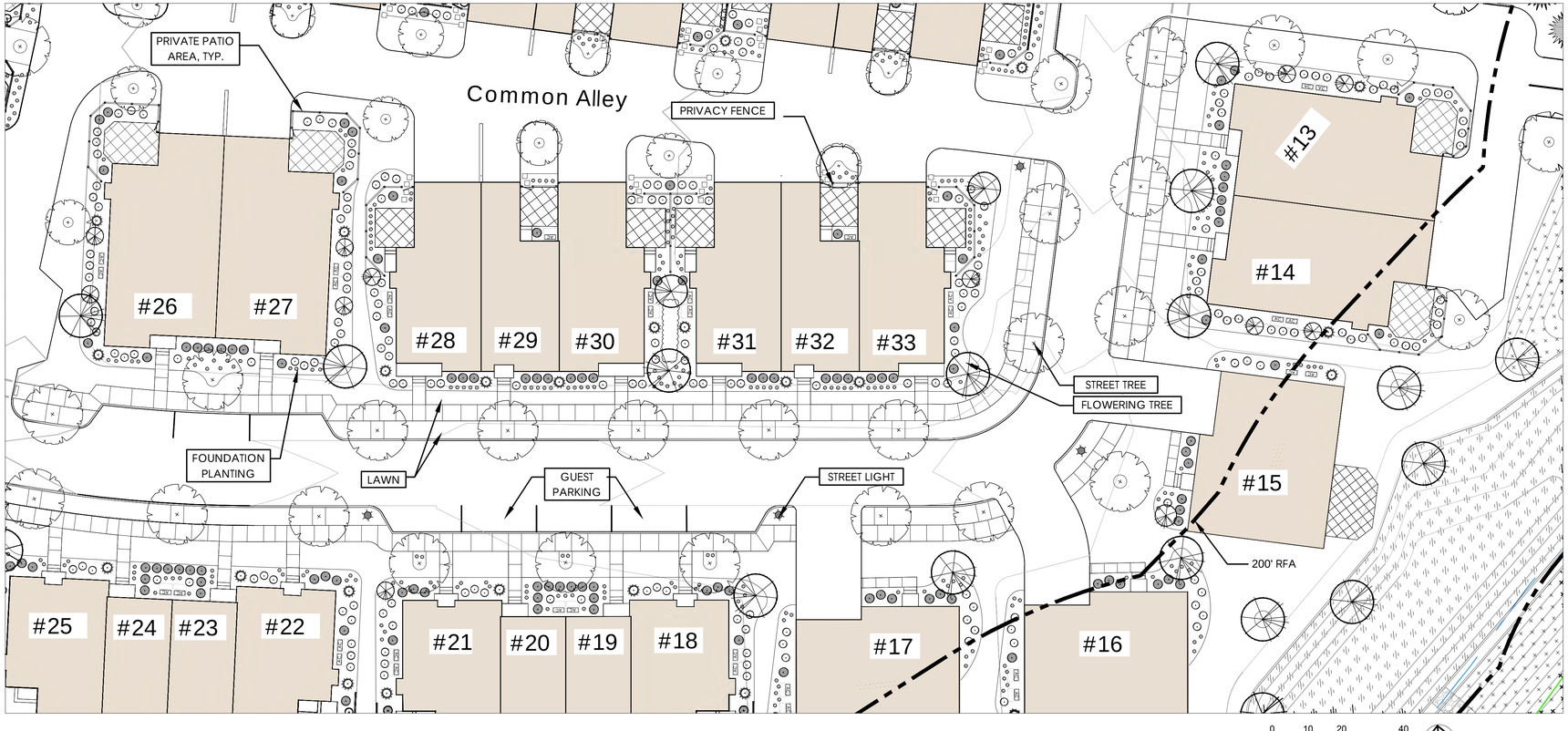
1 North Neighborhood -- Typical Buildings



North Neighborhood -- Key Plan



South Neighborhood -- Key Plan



2 South Neighborhood -- Typical Buildings

Legend

- SPECIMEN TREE
- SHADE TREE
- FLOWERING / UNDER-STORY TREE
- EVERGREEN TREE
- COLUMNAR EVERGREEN
- SHRUBS & PERENNIALS
- SPECIALTY PAVING
- FENCING
- PICNIC TABLE
- BENCH
- SITE LIGHTING
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- NATURALIZED AREA
- CONSTRUCTED WETLAND
- INFILTRATION BASIN

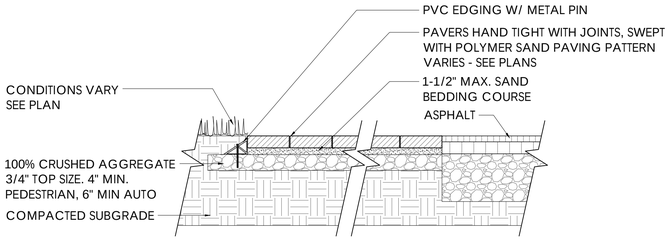
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Landscape
Common Areas
-Enlargement D-

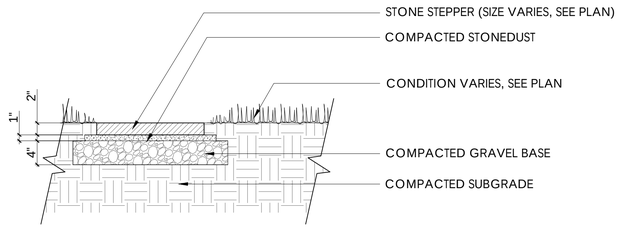
ISSUED		
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L 2_4



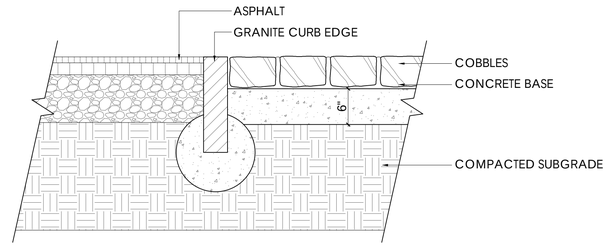
NOTE:
-- 4"x8" PAVERS TYPICAL. COLOR TO BE DETERMINED
-- SLOPE MIN. 1/4" PER FT. FOR DRAINAGE SLOPE MIN. 1/4" PER FT. FOR DRAINAGE

1 | CONCRETE PAVERS
L-3.0 | SCALE: 1" = 1'-0" | SECTION

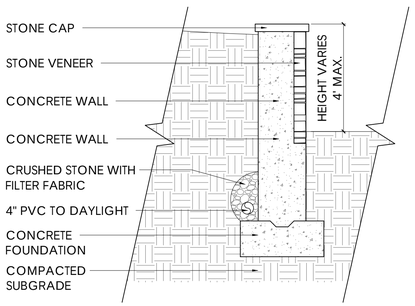


NOTE: COMPACT BASE FOR ENTIRE WALK, SET STONES & EXCAVATE BETWEEN STONES FOR PLANTING SOIL

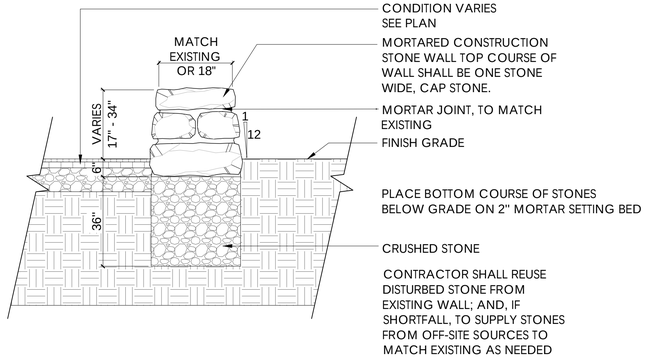
2 | STEPPING STONE
L-3.0 | SCALE: 1" = 1'-0" | SECTION



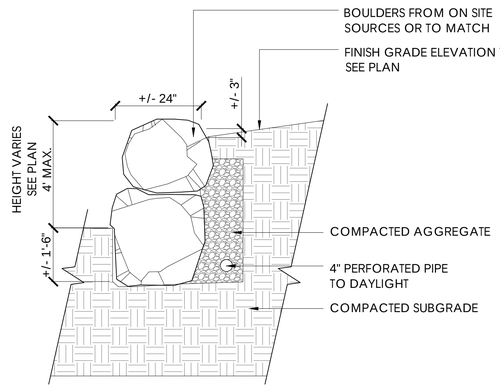
3 | COBBLE STRIP
L-3.0 | SCALE: 1" = 1'-0" | SECTION



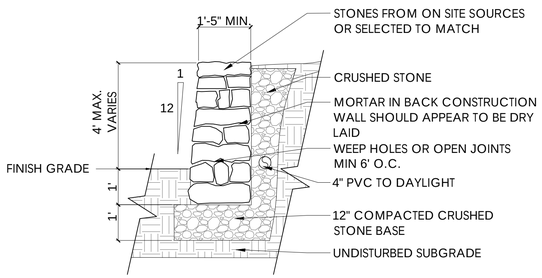
4 | LANDSCAPE WALL - CONCRETE W/ STONE VENEER
L-3.0 | SCALE: 1/2" = 1'-0" | SECTION



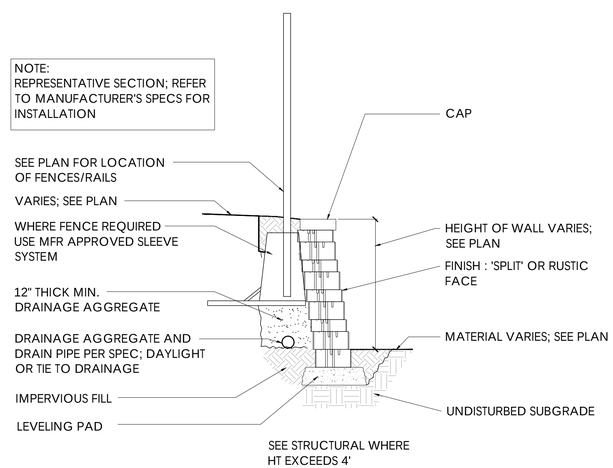
5 | MORTARED WALL - FREE STANDING
L-3.0 | SCALE: 1/2" = 1'-0" | SECTION



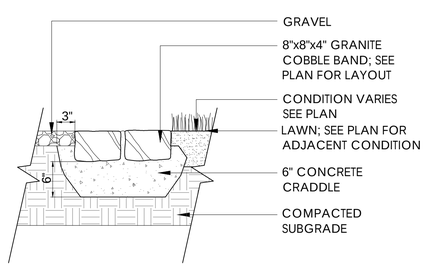
6 | LANDSCAPE WALL - DRY STACKED BOULDERS
L-3.0 | SCALE: 1/2" = 1'-0" | SECTION



7 | LANDSCAPE WALL - MORTAR WALL
L-3.0 | SCALE: 1/2" = 1'-0" | SECTION



8 | Modular Block Wall
L-3.0 | SCALE: 1/2" = 1'-0" | SECTION



9 | COBBLE EDGE
L-3.0 | SCALE: 1" = 1'-0" | SECTION

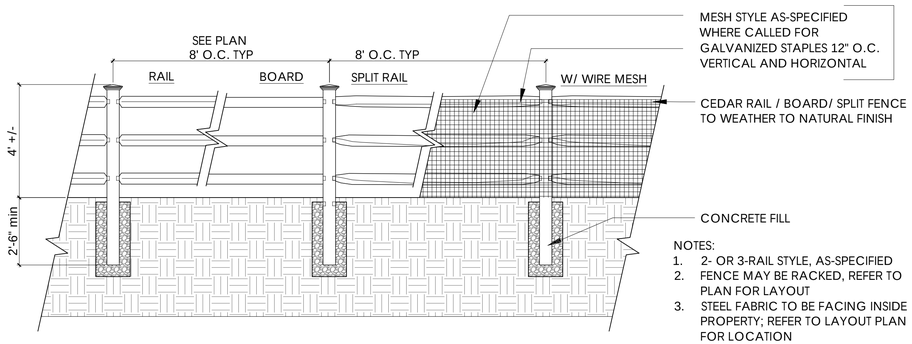
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Amesbury, MA

TYPICAL DETAILS
Landscape

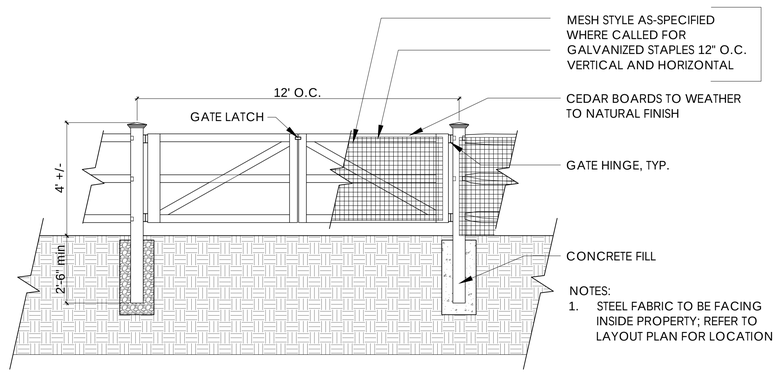
ISSUED		
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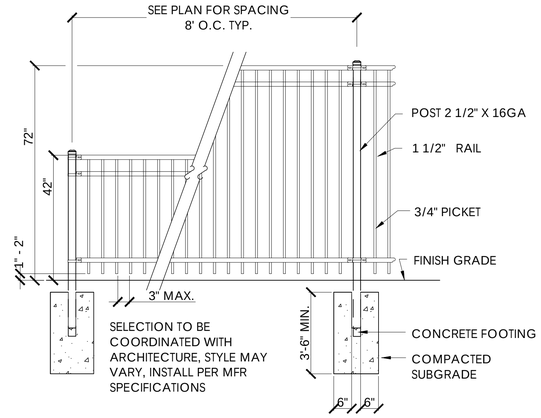
NOTES:
1. 2- OR 3-RAIL STYLE, AS-SPECIFIED
2. FENCE MAY BE RACKED, REFER TO PLAN FOR LAYOUT
3. STEEL FABRIC TO BE FACING INSIDE PROPERTY; REFER TO LAYOUT PLAN FOR LOCATION
4. ANGLE POINT OR END PANELS SHALL BE A MINIMUM 6' LENGTH.

1 RAIL FENCE
L-3.1 SCALE: 3/8" = 1'-0" SECTION

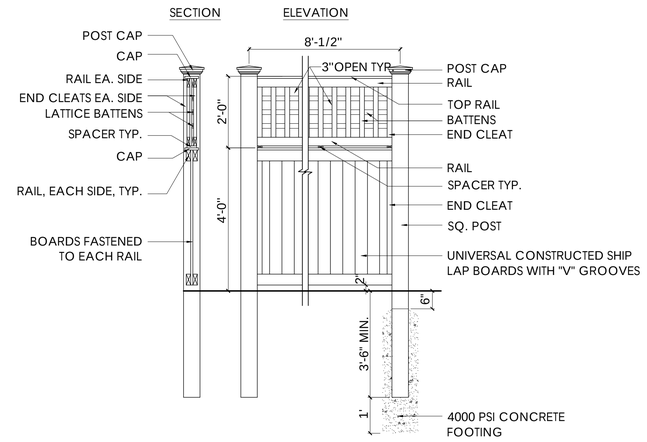


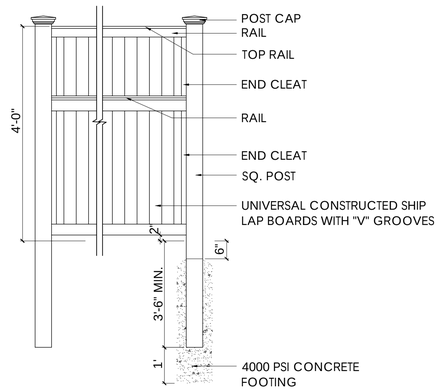
NOTES:
1. STEEL FABRIC TO BE FACING INSIDE PROPERTY; REFER TO LAYOUT PLAN FOR LOCATION

2 RAIL FENCE GATE
L-3.1 SCALE: 3/8" = 1'-0" SECTION

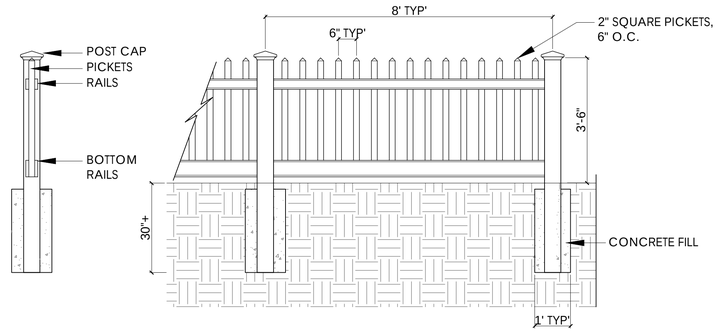


3 METAL PICKET FENCE
L-3.1 SCALE: 1/2" = 1'-0" SECTION





4 6 FT PRIVACY FENCE
L-3.1 SCALE: 1/2" = 1'-0" SECTION



5 SQUARE PICKET FENCE
L-3.1 SCALE: 1/2" = 1'-0" SECTION

Project		Catalog #	Type
Prepared by		Notes	Date



Streetworks
AVN Avenaire
Zero Uplight Decorative Post Top Luminaire

Product Certifications & Features

Interactive Menu
- **Ordering Information** page 2
- **Dimensional Details** page 3
- **Energy and Performance Data** page 4-13
- **Optical Distributions** page 13

Product Specifications

OPTICAL
- Choice of eight patented, high-efficiency AccuLEO
- Optiq™ technology options and four sweetstream optics
- Options are IP66 enclosure rated
- 8 Correlated Color Temperature (CCT) options:
  - 70 CRI: 2200K, 2700K, 3000K, 4000K, 5000K
  - 80 CRI: 3000K, 4000K
  - Amber for wildlife-friendly and observatory applications
- Optional field-installable shields for superior spill light control (discrete LEDs only):
  - Single-piece snap-on square shields
  - Multiple-piece configurable vertical perimeter shielding

ELECTRICAL
- 120-277V, 347-480V, 347V, and 480V; 50/60Hz
- Standard 0-10V dimming
- 105V and 258V surge protection options in series and parallel versions
- Standard 3-position terminal block
- Suitable for operation in -40°C to 40°C ambient environments

PHYSICAL CHARACTERISTICS
- Heavy-duty cast aluminum housing and removable door
- Tool-less access to wiring compartment via a single stainless steel quarter turn fastener
- Base casting slipfits over a standard 3" O.D. tenon and secured via four stainless steel allen head fasteners
- Aluminum components are finished in premium TGIC polyester powder coat paint, with 2.5-mil thickness for superior durability and fade resistance
- Standard colors include grey, black, bronze, dark platinum, graphite metallic, hartford green, and white. Additional RAL color numbers available

CONTROLS
- 3- and 7-pin photocell receptacle options
- DALI and D4i dimmer options
- Field Adjustable Dimming Control option for manual adjustment of power consumption and lumen output. Factory preset to highest output level
- Optional 4-pin Zhaga Book 18 receptacle for photocell and networked sensors with DALI- and D4i-enabled drivers
- Optional ANSI Antennaes (915MHz)

COMPLIANCE
- Meets ANSI C136.25 for IP66 Optical enclosure rating
- Safety listing - Wet Location UL 1598
- Meets ANSI C136.15 for luminaire field identification label standard
- Meets ANSI C136.22 internal label standard
- 3,000-hours per ASTM B117, with a scribe rating of 7 per ASTM D1654 for standard color finish
- Dark Sky compliant (CCTs up to 3000K)
- This luminaire configuration meets BAA requirements. See DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with BABA requirements, see DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

SHIPPING DATA
- Approximate Weight: 33lbs
- EPA: 2.01 sq ft
- Carton Size: 42.8" x 25.5" x 25.5"
- Pallet Size: 53" x 36"
- Cartons/Pallet: 2

WARRANTY
- Five-year limited warranty. Consult website for details, www.cooperlighting.com/legal

Dimensional Details



Dome Top
Round Trim
WITH MODERN FINIAL
See Dimensional Details for more detailed information.

COOPER Lighting Solutions
a Signify business

PS5066762SSN page 1
July 11, 2023 10:15 AM

6 STREET LIGHTS
L-3.1 SCALE:NTS

Streetworks AVN Avenaire

Ordering Information
SAMPLE NUMBER: **AVN-CLD-VA-100-730-U-WQ-OU-4-0-1-3-1-BK-PR7**

Product Family	Housing	Optic Type	Wattage (Nominal)[1]	Color Temperature[2]	Voltage	Optic	Uplight State	Uplight Density
AVN–Avenaire **BAA AVN**–Avenaire Buy America Compliant[3] **TAA-AVN**–Avenaire Trade Agreements Compliant[4] **BABA-AVN**–Avenaire Buy America Compliant[5]	**CLD**–Classical Base	**DL**–Discrete LED Module **VA**–Vocal Comfort (seventeen)	**30**–30W **40**–40W **50**–50W* **60**–60W **80**–80W* **90**–90W* **100**–100W **120**–120W* **150**–150W* **180**–180W* **210**–210W** **270**–270W**	**730**–3000K, 70CRI **727**–2700K, 70CRI **730**–3000K, 80CRI **740**–4000K, 80CRI **750**–5000K, 80CRI **830**–3000K, 90CRI **840**–4000K, 90CRI **AMB**–Amber, 590nm*	**U**–Universal[6] (120-277V) **H**–High Voltage (347-480V) **1**–120V **2**–208V **3**–240V **4**–277V **5**–480V **9**–347V	**TY**–Type V **T2R**–Type II Roadway* **T2S**–Type II Urban* **T3**–Type III* **T4W**–Type IV Wide* **T5W**–Type V Broad* **SWQ**–Type V Square Medium* **SWQ**–Type V Square Wide* **VS**–Streetscape Crossroadsmall* **WQ**–Streetscape Medium* **WY**–Streetscape Wide* **WTA**–Streetscape Type IV**	**No**–bowl only **OU**–unfaired lens	**0**–0 **4**–4

Tap	Finial Type	Trim Type	Trim Badge	Color
0–None **P**–Pendalux **R**–Ornate **C**–Classic	**0**–None **1**–w/Collar* **3**–Modern* **5**–Architectural* **4**–Nostalgic*	**R**–Round **C**–Round Inset* **2**–Fitted Mini* **5**–Fitted Mini*	**0**–none **1**–Avenaire badge*	**AP**–Grey **BZ**–Bronze **BK**–Black **2H**–dark Platinum **GM**–Graphite Metallic **HG**–Hartford Green (premium) **WH**–White **RALXXXX**–RAL Number (premium)

Options (Add as Suffix)	Controls	Accessories (Order Separately)
VHHP–Parallel 10KV SCI Surge Protective Device **10K**–Series 10KV UL 1449 Surge Protective Device **20KDP**–Parallel 20kV 6kV Surge Protective Device **20K**–Series 20kV UL 1449 Surge Protective Device **FSIR**–Fusing with Surge Protective Device w Spot Indicator **HSS**–House Side Shield* **RA-SC**–C Hdp Ambient Thermometer* **CC**–Coastal Construction **EBP-CBS**–Cold Weather Componsry Battery Pack, CEC Compliant Zendoor Temp, -30° to 40°C/-22°F to 104°F Dexxeo-ISOT Configuration - Coastal Dextrix Trees Dexxeo-Utility Configuration - Coastal Dextrix Trees	**PR**–NEMA 3 Pin Twistlock Photoelectrical Receptacle*+ **PR7**–NEMA 7 Pin Twistlock Photoelectrical Receptacle*+ **PRS**–Photoelectrical Blue Cap Multi-Tap Receptacle*+ **PSC**–Photoelectrical Blue Cap (not included)* **RPC**–NEMA Photocontrol, Multi-Tap, (included)* **LLPC**–Long Life Photoelectrical (included) * **FADC**–Field Adjustable Dimming Controller** **D4i**–Fully Addressable **D4-LS-0-10**–emit[6] **ZX-4**–pin DALI receptacle Zhaga Book* **BPEDX80**–WaveLinx Pro Wireless Xpress,7'-15' mounting height*+ **WPD48W**–WaveLinx Pro Wireless Sensor, 15'-40' mounting height*+ **WPD80W**–WaveLinx Pro Wireless Sensor, 30'-80' mounting height*+ **WLLWBW**–WaveLinx LLW Wireless Sensor with Bluetooth, 15'-40' mounting height* **ZSC**–Zhaga Book 18 receptacle cap **ANS**–NEMA Antennae (915MHz)[6]	**DA1ZCB**–10KV Surge Module* **FBHSS**–House Side Shield (Single) **FBPTS**–Perforated Fence Shield Kit (4 Pieces) **DA/MA1013**–Photocontrol Blurring Cap **DA/MA1014**–NEMA Photocontrol - 120V **DA/MA1016**–NEMA Photocontrol - Multi-Tap **DA/MA1027**–NEMA Twistlock Photocontrol - 480V

NOTES:
1. Not available with D4i option
2. Not available with 5K option
3. Not available with 347V option
4. Not available in amber and above 120W
5. Not available with 347V
6. Not available with Visor option (open)
7. Not available with trim options 5, 7, or 2
8. Not available with 347V or 480V
9. Most products are a 3-4 week lead time
10. Not available with D4i, PR, PR7, PRS, RPC, or LLPC (Multi-Tap configurable). Order RPC-PX7 and RPC7-120/208 for PoE injector/ power supply if needed. NEMA not required for CLS Bluetooth fixtures
11. Only available with 5K, 10K, 20K, VHHP, 1K, ZCBP or WLLWBW options
12. Only offered in 3K and 4K CCTs
13. Only offered with 1-10V dimming
14. Only offered with 1-10V, D4i or High Voltage(U) options
15. Not available with PR
16. Not available with PR7
17. Not available with PRS
18. Must select PR, PR7, PRS, RPC, or DMO option
19. SKU dimmable; performance options exceed DLC requirements. See DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information
20. FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with BABA requirements, see DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements
21. DARMA approved for 5000K SCCT and warrants, with exceeding options less than 10" of fill

Configuration Examples



Dome Top
Round Trim
Outward Curve - 4 Arm

Pedestal Top
Round Trim
Inward Curve - 4 Arm

Ornate Top
Finer Trim
Inward Curve - 4 Arm

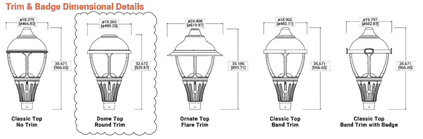
Classic Top
Band Trim with Badge
Outward Curve - 4 Arm

COOPER Lighting Solutions
a Signify business

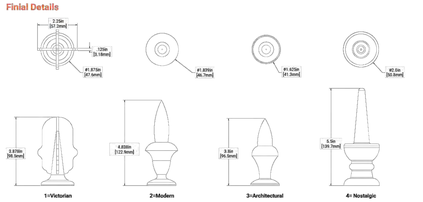
PS5066762SSN page 2
July 11, 2023 10:15 AM

Streetworks AVN Avenaire

Trim & Badge Dimensional Details



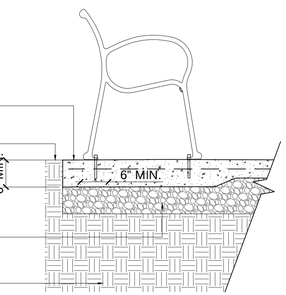
Finial Details



COOPER Lighting Solutions
a Signify business

PS5066762SSN page 3
July 11, 2023 10:15 AM

NOTE: BENCH SEAT TO BE LEVEL AND PLUMB INSTALL AS PER MANUFACTURER'S SPECS. SEE SPEC. FOR FURTHER INFORMATION. SHIM AS REQUIRED TO LEVEL.



7 PARK BENCH
L-3.1 SCALE: 3/4" = 1'-0" SECTION

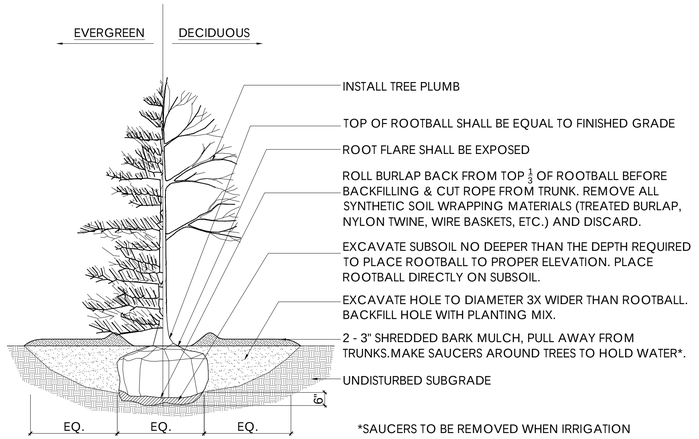
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TYPICAL DETAILS
Landscape

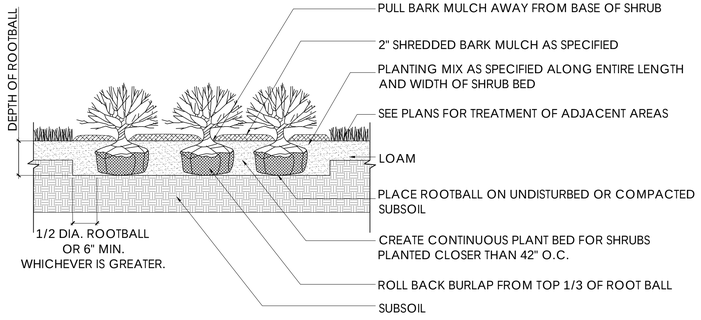
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2	12-22-25	Site Plan Review Submission
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L 3_1



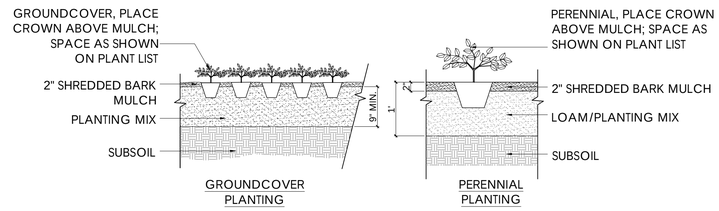
NOTE: STAKED/GUYED PER CONTRACTOR'S OPTION.

1 | TREES
L-3.2 SCALE: 3/8" = 1'-0" SECTION

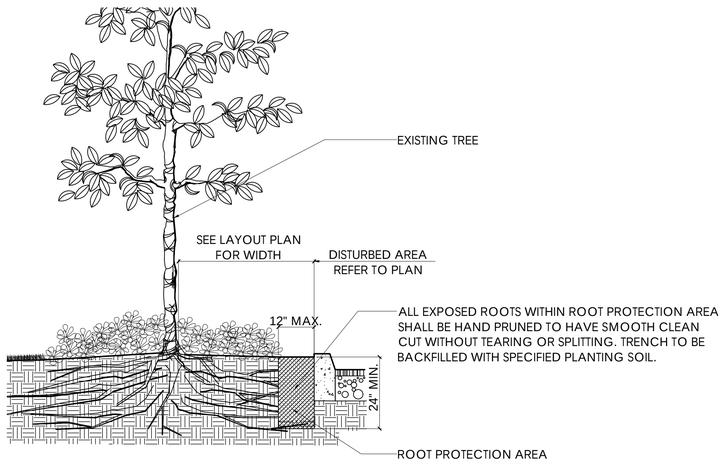


NOTE: SEE PLANTING PLAN FOR PLANT SPACING. PLANTS TO BEAR SAME RELATIONSHIP TO FINISHED GRADE AS TO PREVIOUS GRADE.

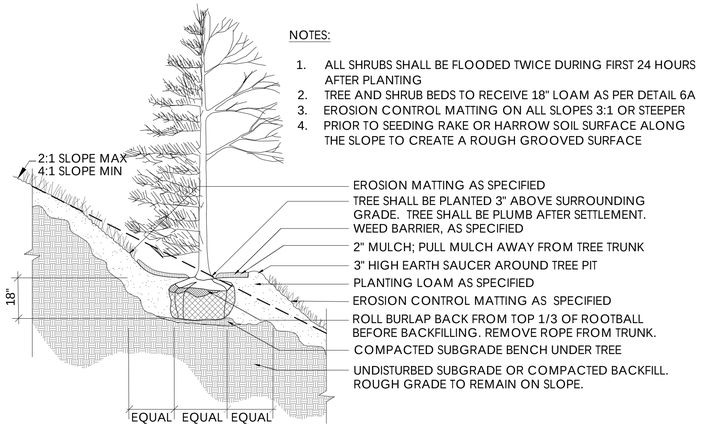
2 | SHRUBS
L-3.2 SCALE: 3/8" = 1'-0" SECTION



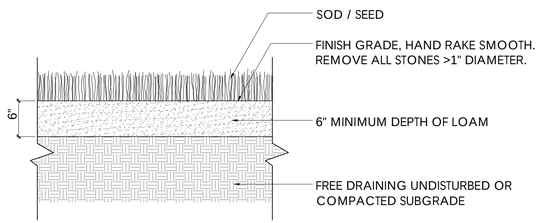
3 | GROUNDCOVER AND PERENNIALS
L-3.2 SCALE: 3/4" = 1'-0" SECTION



4 | EXCAVATION NEAR EXISTING TREE
L-3.2 SCALE: 1/2" = 1'-0" SECTION



5 | TREE ON SLOPE
L-3.2 SCALE: 3/8" = 1'-0" SECTION



SITE DAINAGE BASIN SEED MIX
NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES

SPECIES INCLUDE: RIVERBANK WILD RYE (ELYMUS RIPARIUS), CREEPING RED FESCUE (FESTUCA RUBRA), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), SWITCH GRASS (PANICUM VIRGATUM), UPLAND BENTGRASS (AGROSTIS PERENNANS), NODDING BUR MARIGOLD (BIDENS CERNUA), HOLLOW-STEM JOE PYE WEED (EUPATORIUM FISTULOSUM/EUTROCHIUM FISTULOSUM), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA), SOFT RUSH (JUNCUS EFFUSUS), WOOL GRASS (SCIRPUS CYPERINUS).

OPEN FIELD RESTORATION SEED MIX
NEW ENGLAND WILDFLOWER MIX

SPECIES INCLUDE: SPECIES: LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), RED FESCUE (FESTUCA RUBRA), INDIAN GRASS (SORGHASTRUM NUTANS), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), CANADA WILD RYE (ELYMUS CANADENSIS), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), BLUE VERVAIN (VERBENA HASTATA), BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA), NARROWLEAFED BLUE EYED GRASS (SISYRINCHIUM ANGUSTIFOLIUM), BLACK EYED SUSAN (RUDBECKIA HIRTA), NEW ENGLAND ASTER (SYMPHYOTRICHUM NOVAE-ANGLIAE), SPIKED GAYFEATHER/ MARSH BLAZING STAR (LIATRIS SPICATA), STARVED/CALICO ASTER (ASTER LATERIFLORUS/SYMPHYOTRICHUM LATERIFLORUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), HOLLOW-STEM JOE PYE WEED (EUPATORIUM FISTULOSUM/EUTROCHIUM FISTULOSUM)

6 | SOD/ SEED
L-3.2 SCALE: 1" = 1'-0" SECTION

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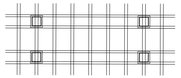
TYPICAL DETAILS
Landscape

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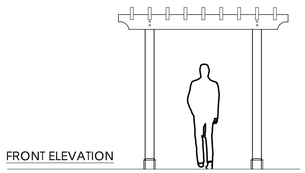
L 3_2

ARBOR

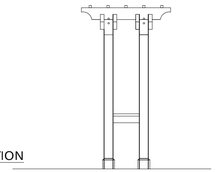
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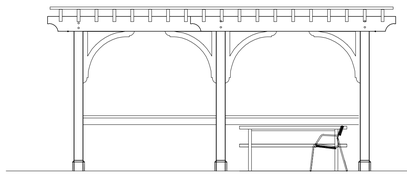
FRONT ELEVATION



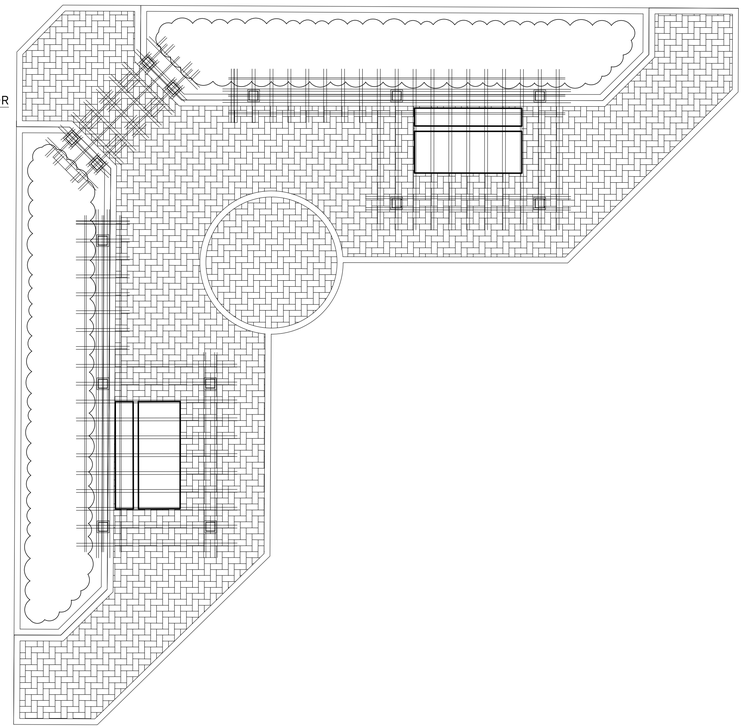
SIDE ELEVATION



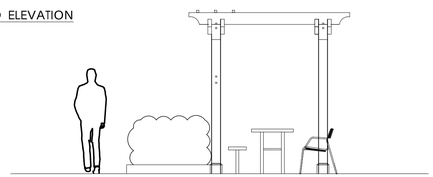
FRONT ELEVATION



ARBOR

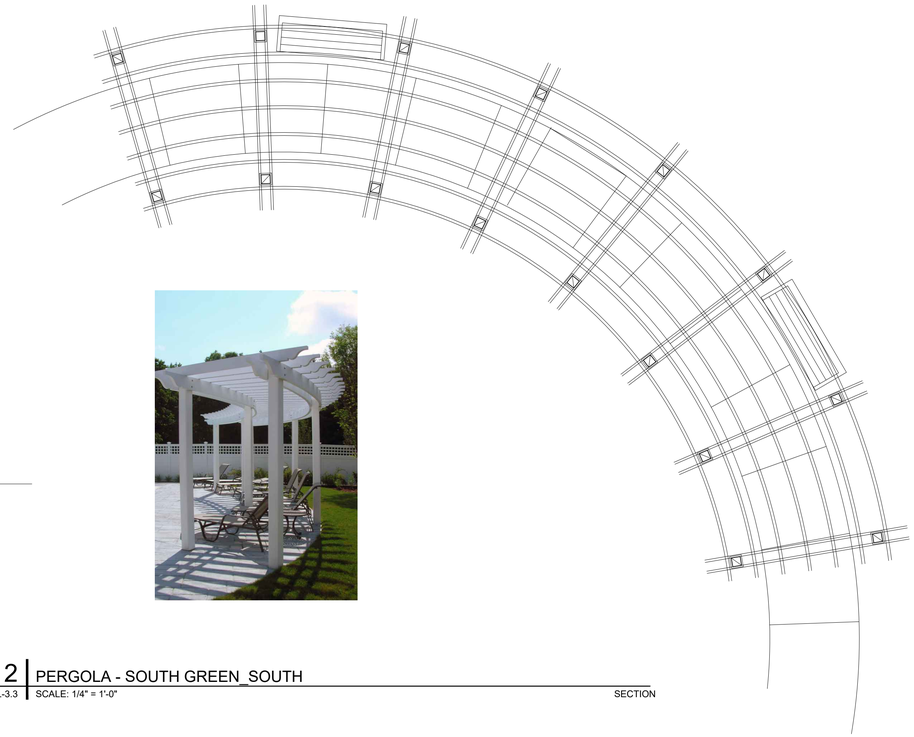


END ELEVATION



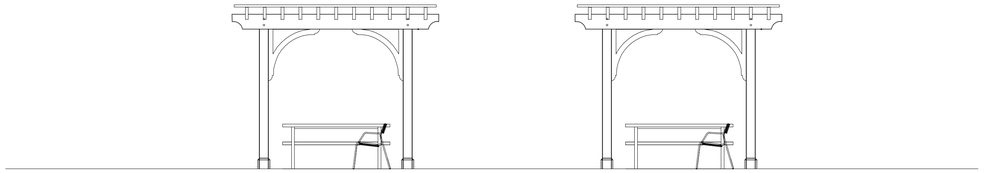
1 | PERGOLA & ARBOR - VILLAGE GREEN_NORTH

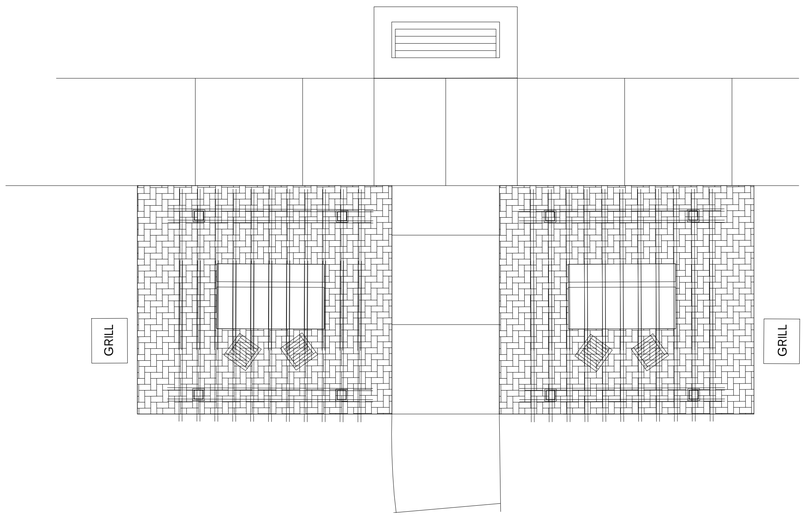
L-3.3 | SCALE: 1/4" = 1'-0" | SECTION



2 | PERGOLA - SOUTH GREEN_SOUTH

L-3.3 | SCALE: 1/4" = 1'-0" | SECTION





3 | PERGOLA - NEIGHBORHOOD PARK_NORTH

L-3.3 | SCALE: 1/4" = 1'-0" | SECTION

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