

PROPOSED INDUSTRIAL WAREHOUSE DEVELOPMENT

SITE PLANS

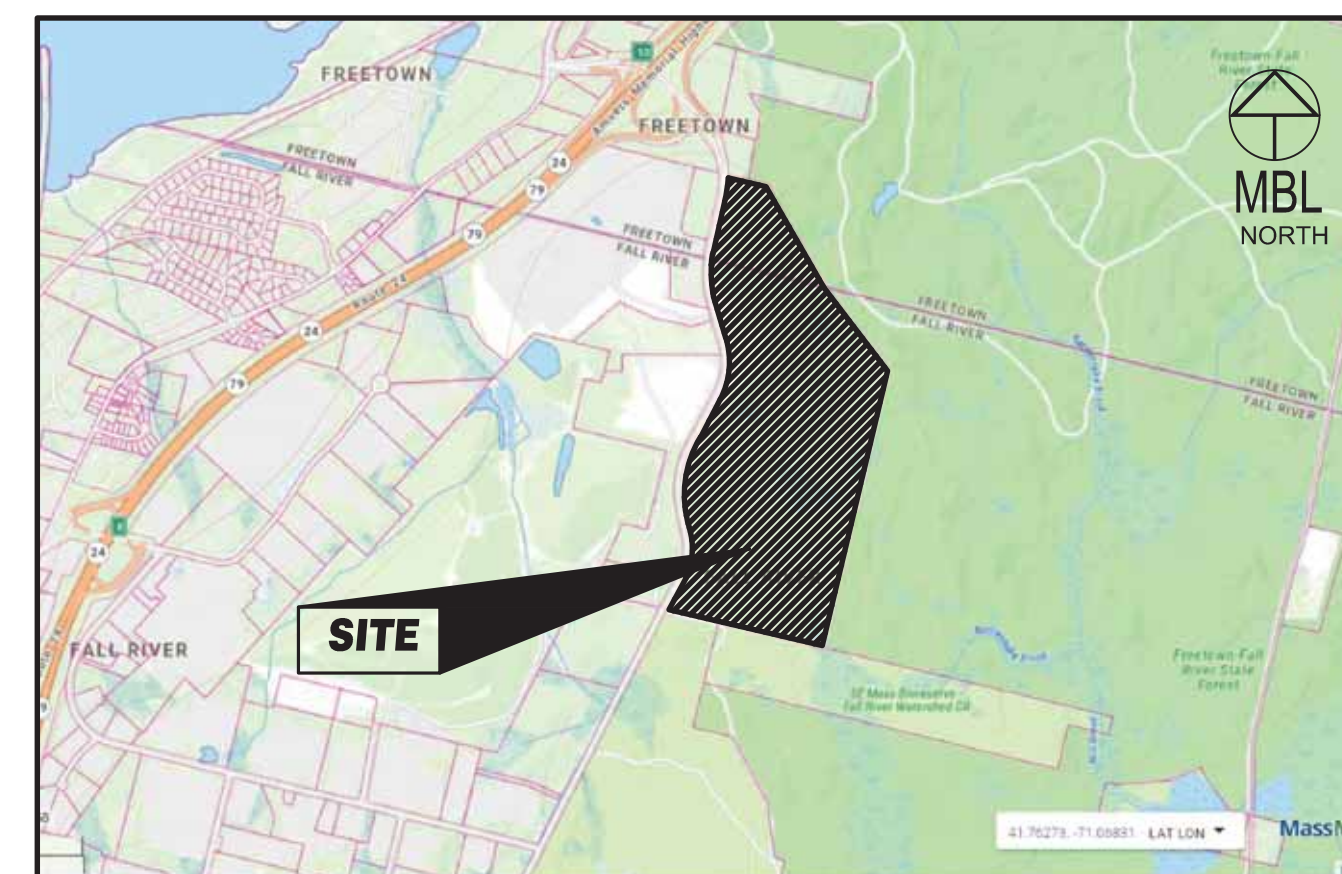
0 INNOVATION WAY
FALL RIVER - ASSESSORS MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
MASSACHUSETTS

JULY 25, 2022

REVISED THROUGH NOVEMBER 21, 2022

SHEET INDEX: SITE CIVIL

	<u>SHEET TITLE</u>
C-1.0	COVER SHEET
C-2.0	GENERAL NOTES & LEGEND
C-3.0 - 3.4	EXISTING CONDITIONS PLAN
C-4.0	PROPOSED INDEX PLAN
C-5.0 - 5.3	LAYOUT & MATERIALS PLAN
C-6.0 - 6.3	GRADING & DRAINAGE PLAN
C-7.0 - 7.3	UTILITY PLAN
C-8.0 - 8.3	EROSION CONTROL & DEMOLITION PLAN
C-9.0 - 9.14	DETAILS
C-10.0 - 10.1	TESTPIT LOGS
C-11.0 - 11.3	TRUCK TURNING PLAN
C-12.0 - 12.3	LANDSCAPING PLAN
C-13.0 - 13.1	PROPOSED EASEMENT LAYOUT PLAN
SE2.1 - SE2.4	SITE LIGHTING
SD0.0 - SD2.0	ARCHITECTURALS



LOCUS MAP
1"=2000'

PROJECT CONTACTS:

CIVIL ENGINEER/LAND SURVEYOR

MBL LAND DEVELOPMENT & PERMITTING, CORP.
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P.508.297.2746
BRIAN M. DUNN PRIMARY CONTACT
brian@mbllanddevelopment.com
website:www.MBLLandDevelopment.com

PLANS PREPARED FOR:

V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114
NORTH ANDOVER, MASSACHUSETTS

PLANS PREPARED BY:



MBL

LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MASSACHUSETTS 02375
P.508.297.2746
EMAIL: info@MBLLanddevelopment.com
WEBSITE: www.MBLLandDevelopment.com



PROJ. No.: 2021-036
DATE: JULY 25, 2022

C-1.0

LEGEND

Table with 2 columns: EXIST and PROP. Lists various symbols and line styles for property lines, building setbacks, wetland boundaries, and other site features.

ABBREVIATIONS

Table mapping abbreviations (e.g., ZND, APPROX, BFE) to their full names (e.g., SECONDARY BUILDING ACCESS, APPROXIMATE, BASEMENT FLOOR ELEVATION).

GENERAL NOTES

EXISTING CONDITIONS INFORMATION

- List of 13 numbered notes detailing existing site conditions, including property lines, wetland areas, and utility locations.

1. MATERIALS

- Material specifications for curbing, parking areas, and landscape areas, including surface and binder courses.

2. PARKING STALLS SHALL BE AS FOLLOWS:

STANDARD PARKING: 9' x 18' MINIMUM
ACCESSIBLE PARKING: 9' x 18' MINIMUM

3. SNOW STORAGE:

SNOW SHALL BE PLOWED TO THE AREAS INDICATED ON THE PLANS. NO SNOW IS TO BE STORED WITHIN THE 100-FOOT BUFFER ZONE.

4. UTILITIES:

- Notes regarding location and elevations of existing utilities, storm drainage, and water/sewer pipe installation.

GENERAL CONSTRUCTION REQUIREMENTS (CONT.)

- Continuation of construction requirements, including sections on curbing, parking areas, landscape areas, and utility installation.

GENERAL CONSTRUCTION REQUIREMENTS (CONT.)

- Continuation of construction requirements, including sections on erosion control, storm water maintenance, and good housekeeping.

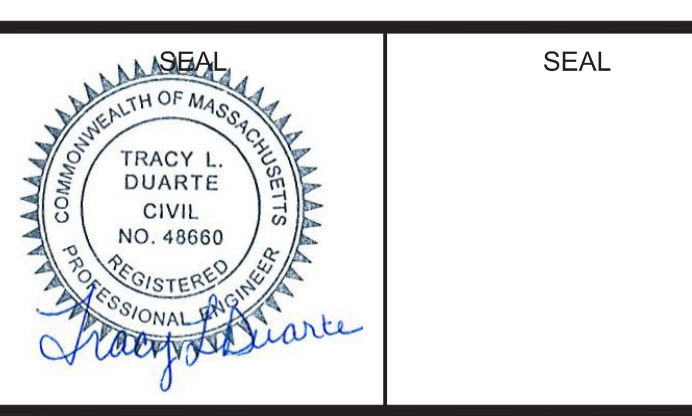
EROSION CONTROL AND GOOD HOUSEKEEPING NOTES

- Notes detailing erosion control measures and good housekeeping practices during construction.

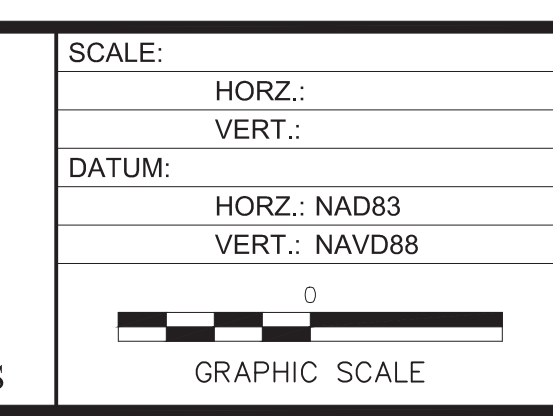


Vertical text on the left margin: UGCS, LMS VIEW, LMAN, CTB, and file path information.

Revision table with columns for No., DATE, DESCRIPTION, and BY.

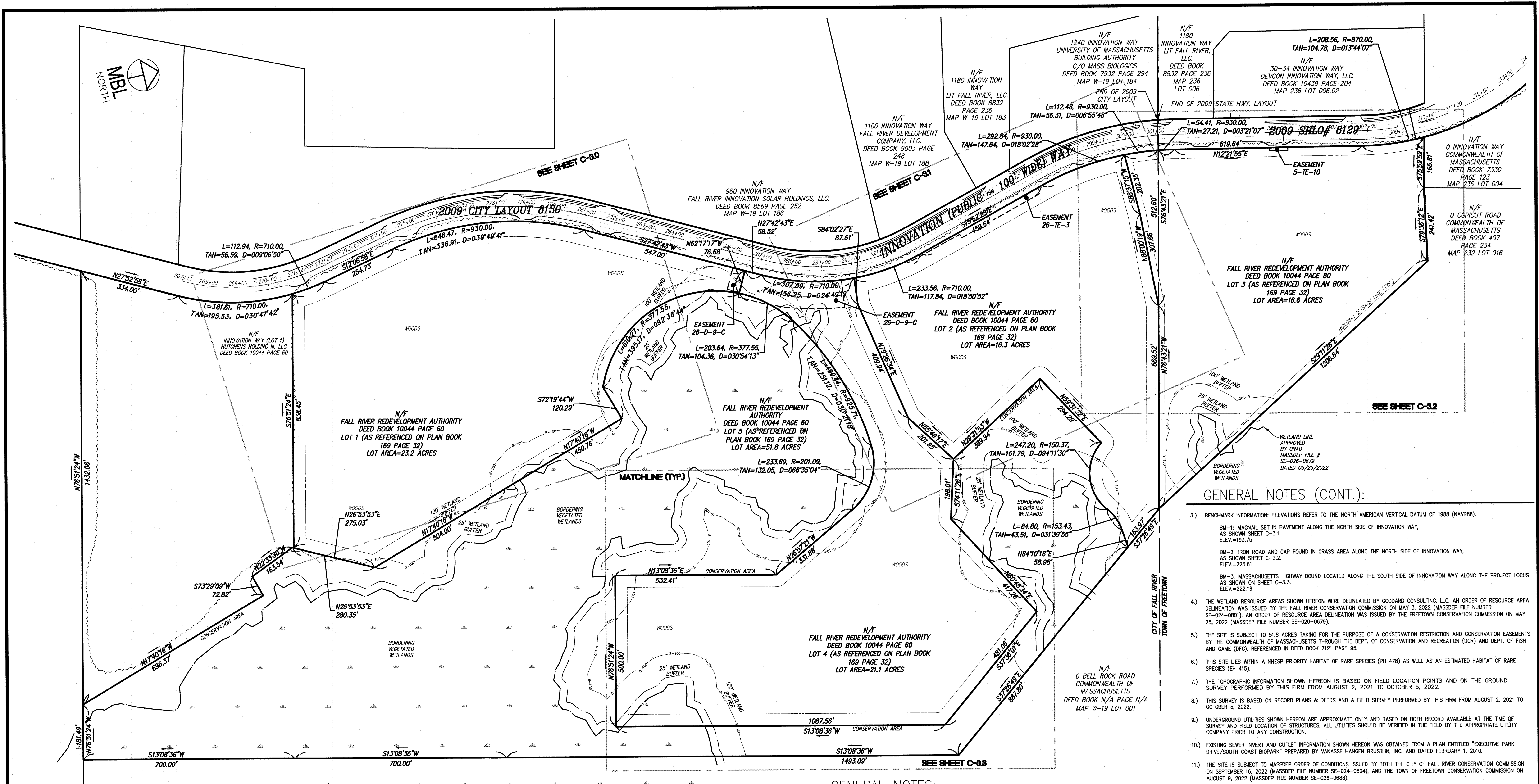


SEAL and PREPARED FOR V.M.D. COMPANIES, LLC 733 TURNPIKE STREET, ROUTE 114 NORTH ANDOVER MASSACHUSETTS



MBL LAND DEVELOPMENT & PERMITTING, CORP. logo and contact information.

PROPOSED WAREHOUSE DEVELOPMENT GENERAL NOTES & LEGEND 0 INNOVATION WAY FALL RIVER- MAP W-19 LOTS 185 & 189 FREETOWN - PARCEL ID 236-006.01 C-2.0 FALL RIVER/FREETOWN MASSACHUSETTS



- GENERAL NOTES (CONT.):**
- BENCHMARK INFORMATION: ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 - BM-1: MAGNAIL SET IN PAVEMENT ALONG THE NORTH SIDE OF INNOVATION WAY, AS SHOWN SHEET C-3.1. ELEV.=193.75
 - BM-2: IRON ROAD AND CAP FOUND IN GRASS AREA ALONG THE NORTH SIDE OF INNOVATION WAY, AS SHOWN SHEET C-3.2. ELEV.=223.61
 - BM-3: MASSACHUSETTS HIGHWAY BOUND LOCATED ALONG THE SOUTH SIDE OF INNOVATION WAY ALONG THE PROJECT LOCUS AS SHOWN ON SHEET C-3.3. ELEV.=222.16
 - THE WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY GODDARD CONSULTING, LLC. AN ORDER OF RESOURCE AREA DELINEATION WAS ISSUED BY THE FALL RIVER CONSERVATION COMMISSION ON MAY 3, 2022 (MASSDEP FILE NUMBER SE-024-0801). AN ORDER OF RESOURCE AREA DELINEATION WAS ISSUED BY THE FREETOWN CONSERVATION COMMISSION ON MAY 25, 2022 (MASSDEP FILE NUMBER SE-026-0679).
 - THE SITE IS SUBJECT TO 51.8 ACRES TAKING FOR THE PURPOSE OF A CONSERVATION RESTRICTION AND CONSERVATION EASEMENTS BY THE COMMONWEALTH OF MASSACHUSETTS THROUGH THE DEPT. OF CONSERVATION AND RECREATION (DOR) AND DEPT. OF FISH AND GAME (DFG), REFERENCED IN DEED BOOK 7121 PAGE 95.
 - THIS SITE LIES WITHIN A NHPSP PRIORITY HABITAT OF RARE SPECIES (PH 478) AS WELL AS AN ESTIMATED HABITAT OF RARE SPECIES (EH 415).
 - THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON FIELD LOCATION POINTS AND ON THE GROUND SURVEY PERFORMED BY THIS FIRM FROM AUGUST 2, 2021 TO OCTOBER 5, 2022.
 - THIS SURVEY IS BASED ON RECORD PLANS & DEEDS AND A FIELD SURVEY PERFORMED BY THIS FIRM FROM AUGUST 2, 2021 TO OCTOBER 5, 2022.
 - UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND BASED ON BOTH RECORD AVAILABLE AT THE TIME OF SURVEY AND FIELD LOCATION OF STRUCTURES. ALL UTILITIES SHOULD BE VERIFIED IN THE FIELD BY THE APPROPRIATE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.
 - EXISTING SEWER INVERT AND OUTLET INFORMATION SHOWN HEREON WAS OBTAINED FROM A PLAN ENTITLED "EXECUTIVE PARK DRIVE/SOUTH COAST BIOPARK" PREPARED BY VANASSE HANGEN BRUSTLIN, INC. AND DATED FEBRUARY 1, 2010.
 - THE SITE IS SUBJECT TO MASSDEP ORDER OF CONDITIONS ISSUED BY BOTH THE CITY OF FALL RIVER CONSERVATION COMMISSION ON SEPTEMBER 16, 2022 (MASSDEP FILE NUMBER SE-024-0804), AND THE TOWN OF FREETOWN CONSERVATION COMMISSION ON AUGUST 9, 2022 (MASSDEP FILE NUMBER SE-026-0688).
 - THE SITE IS SUBJECT TO THE TOWN OF FREETOWN PLANNING BOARD SITE PLAN REVIEW DECISION APPROVED ON OCTOBER 27, 2022.
 - THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF MBL LAND DEVELOPMENT & PERMITTING, CORP. ISSUED TO OUR CLIENT FOR PURPOSES RELATED DIRECTLY AND SOLELY TO MBL LAND DEVELOPMENT & PERMITTING, CORP.'S SCOPE OF SERVICES UNDER CONTRACT TO OUR CLIENT FOR THIS PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN CONSENT IS PROVIDED BY MBL LAND DEVELOPMENT & PERMITTING, CORP.

PLAN REFERENCES:
 BRISTOL COUNTY REGISTRY OF DEEDS
 PLAN BOOK 117 PAGE 81
 PLAN BOOK 117 PAGE 84
 PLAN BOOK 147 PAGE 35
 PLAN BOOK 150 PAGE 36
 PLAN BOOK 150 PAGE 78
 PLAN BOOK 154 PAGE 66
 PLAN BOOK 157 PAGE 79
 PLAN BOOK 164 PAGE 68

DEED REFERENCES (BRISTOL COUNTY NORTH REGISTRY OF DEEDS):
 BOOK 7124 PAGE 95
 BOOK 10044 PAGE 60

- GENERAL NOTES:**
- THE SITE IS COMPRISED OF LOTS 1-5 AS SHOWN ON THE APPROVAL NOT REQUIRED PLANS PREPARED BY MBL LAND DEVELOPMENT & PERMITTING, CORP. DATED NOVEMBER 2, 2022. APPROVED BY THE CITY OF FALL RIVER PLANNING BOARD ON NOVEMBER 9, 2022 AND THE TOWN OF FREETOWN PLANNING BOARD ON NOVEMBER 15, 2022. THE PLANS ARE RECORDED IN THE BRISTOL COUNTY FALL RIVER REGISTRY OF DEEDS PLAN BOOK 169 PAGES 32-33.
 - THE LOTS LIE WITHIN A "ZONE X", AN AREA OF MINIMAL FLOOD HAZARD, AS SHOWN ON FEMA F.I.R.M. MAP 200502630C HAVING AN EFFECTIVE DATE OF JULY 16, 2014 AND FEMA F.I.R.M. MAP 25050264F HAVING AN EFFECTIVE DATE OF JULY 7, 2009.

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE

SEAL
 NOV 21, 2022
 MICHAEL ROBERT KEOGHAN
 No. 33938
 PROFESSIONAL LAND SURVEYOR

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=150'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

GRAPHIC SCALE
 150 75 0 75 150

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

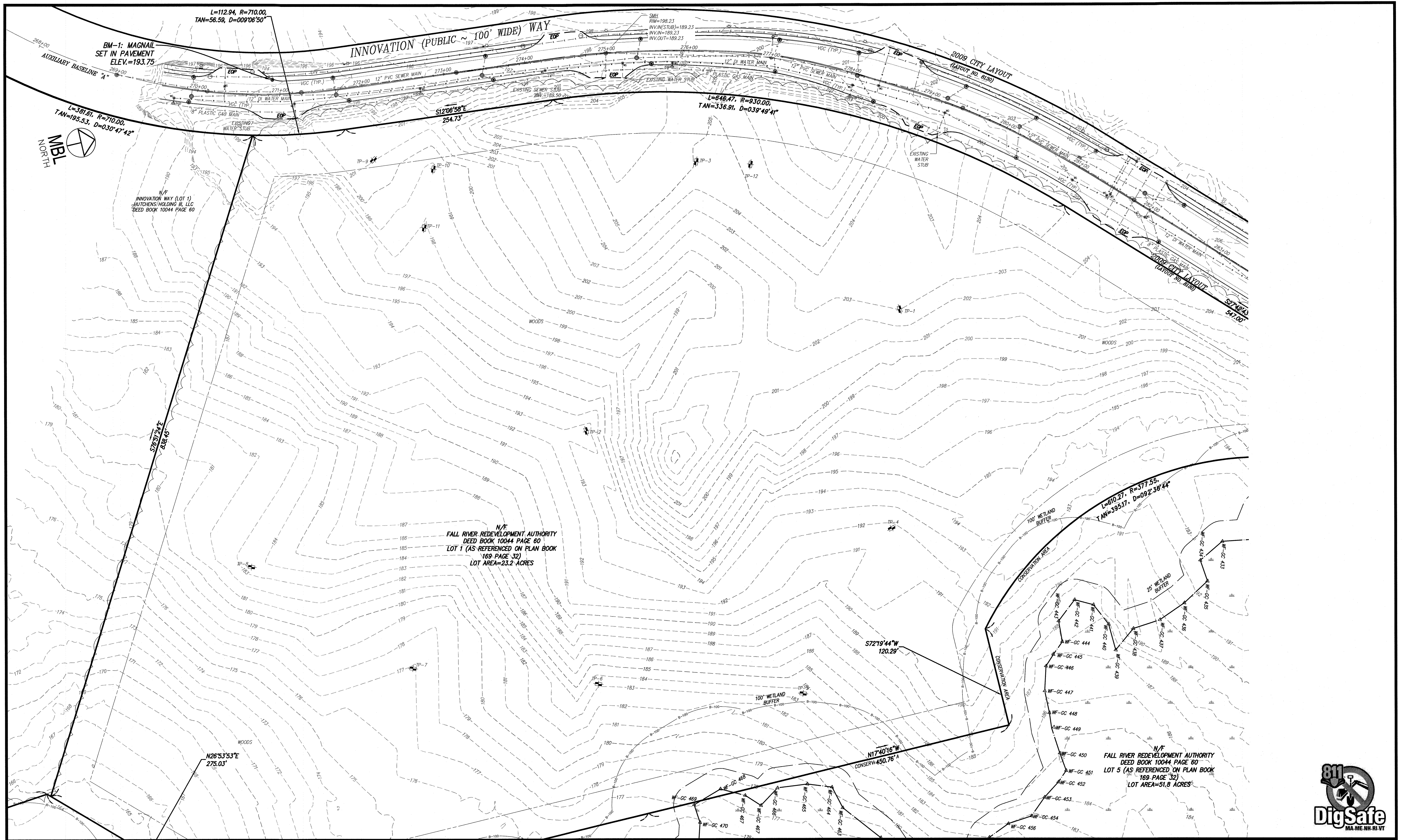
PROPOSED WAREHOUSE DEVELOPMENT
 EXISTING CONDITIONS INDEX SHEET
 0 INNOVATION WAY
 FALL RIVER - MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-3.0

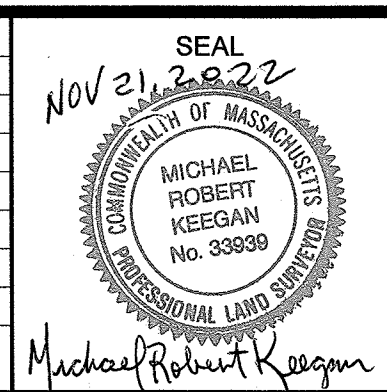


C.T.B. M.S.VIEW. L.M.A.N. L.C.S.



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/09/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
		REVISIONS	

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL
 NORTH ANDOVER
 MASSACHUSETTS

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER
 MASSACHUSETTS

SCALE:	HORIZ.: 1"=50'
	VERT.:
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88

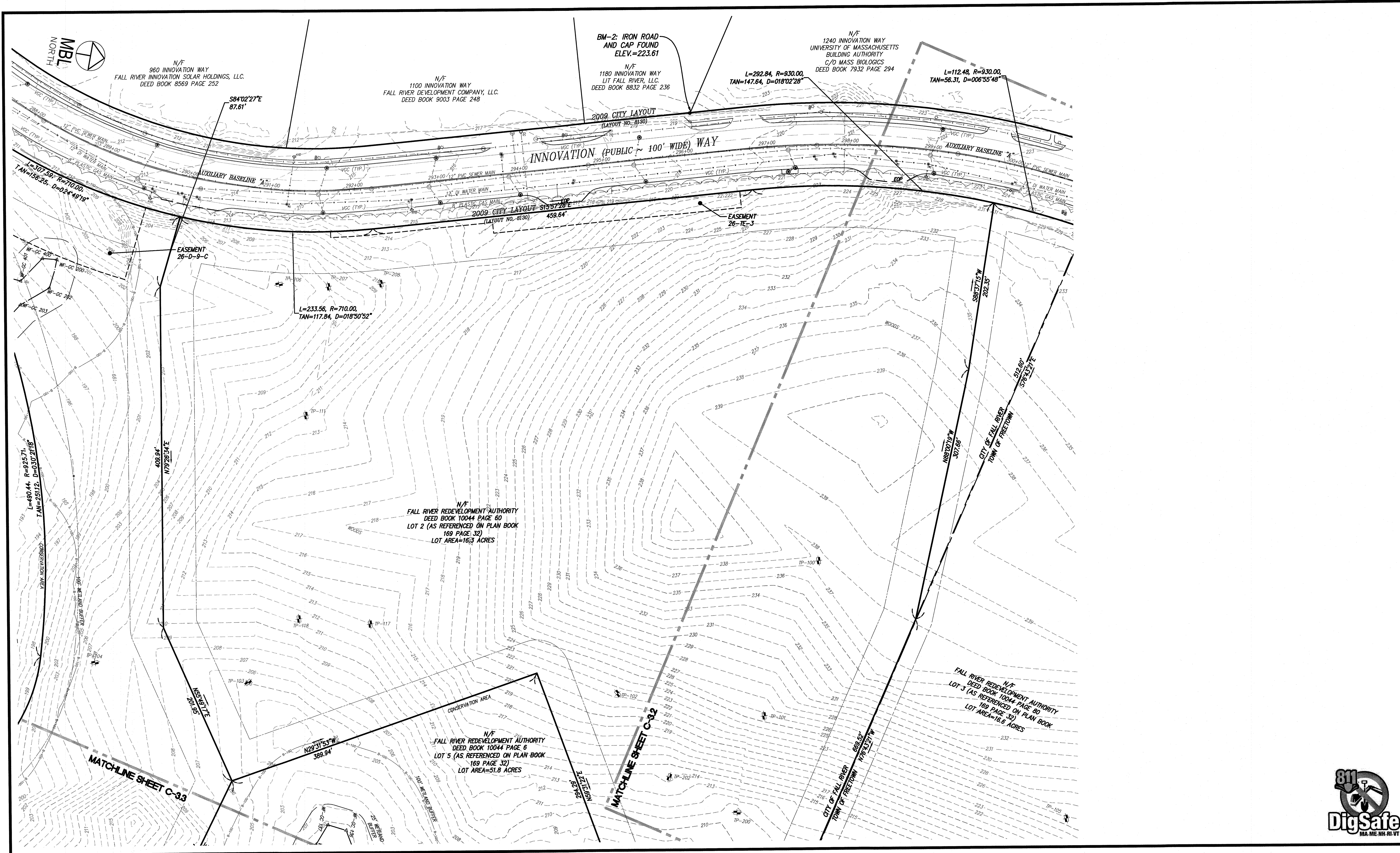
MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 EXISTING CONDITIONS PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN
 MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022
C-3.1

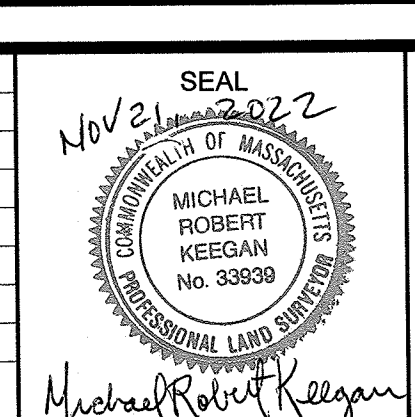


CTB: LMAN: IMS VIEW: LUGS:



No.	DATE	DESCRIPTION	BY	
4	11/21/2022	REVISION PER COMMENTS	JAW	
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW	
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW	
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW	
No.		DATE	DESCRIPTION	BY
REVISIONS				

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:	HORIZ: 1"=50'
	VERT: 1"=10'
DATUM:	HORIZ: NAD83
	VERT: NAVD88

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

EXISTING CONDITIONS PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01

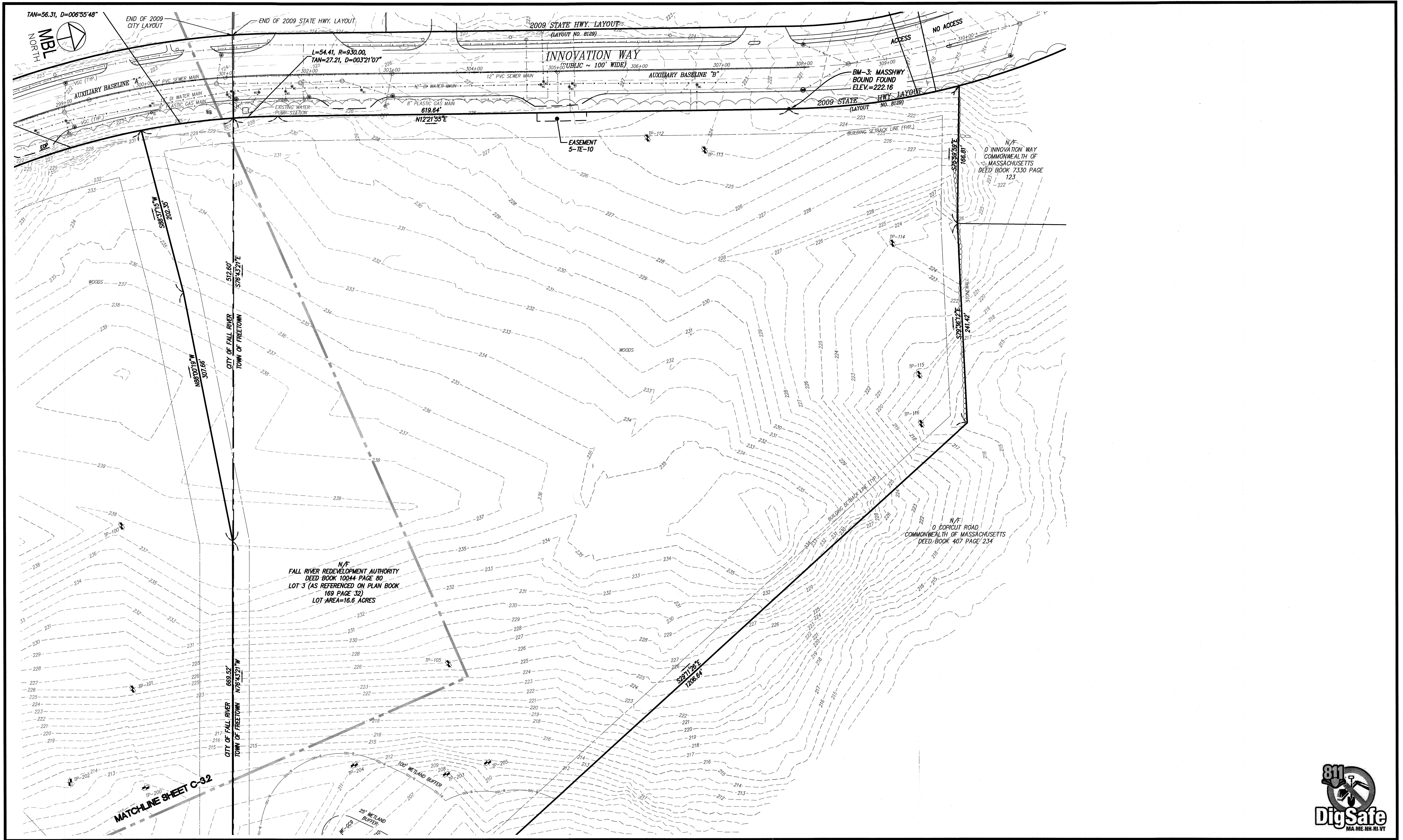
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-3.2



UCS: M5 VIEW: LMAN: CTB:

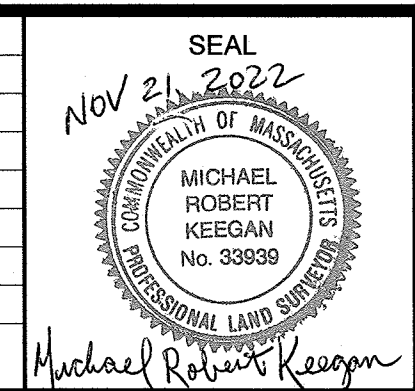


CTB
 LMAN
 IMS VIEW
 UCS



No.	DATE	REVISIONS	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS		JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS		JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS		JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER		JAW

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

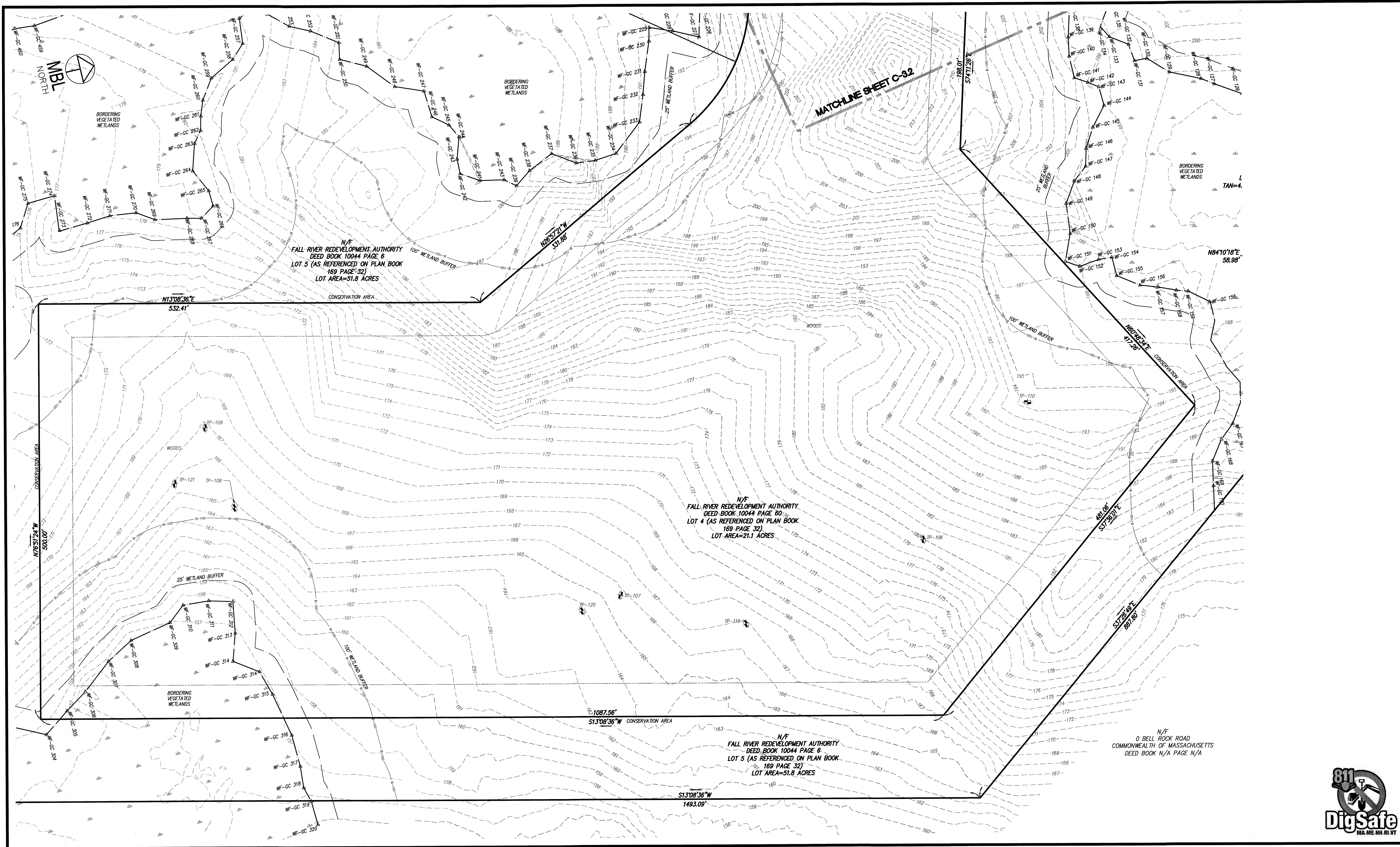
SCALE:	HORZ: 1"=50'
	VERT:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88
GRAPHIC SCALE	

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

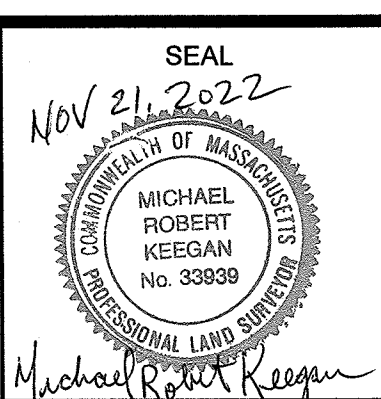
PROPOSED WAREHOUSE DEVELOPMENT
 EXISTING CONDITIONS PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-3.3



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

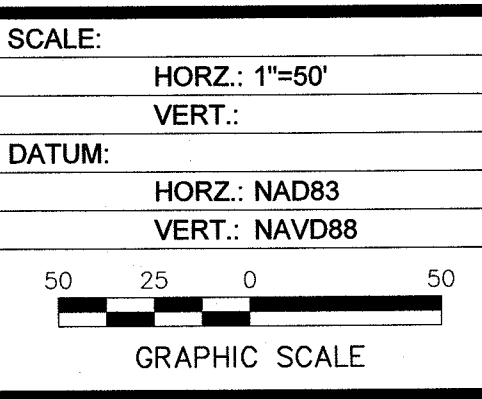
PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL
 PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

 GRAPHIC SCALE



LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P.508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

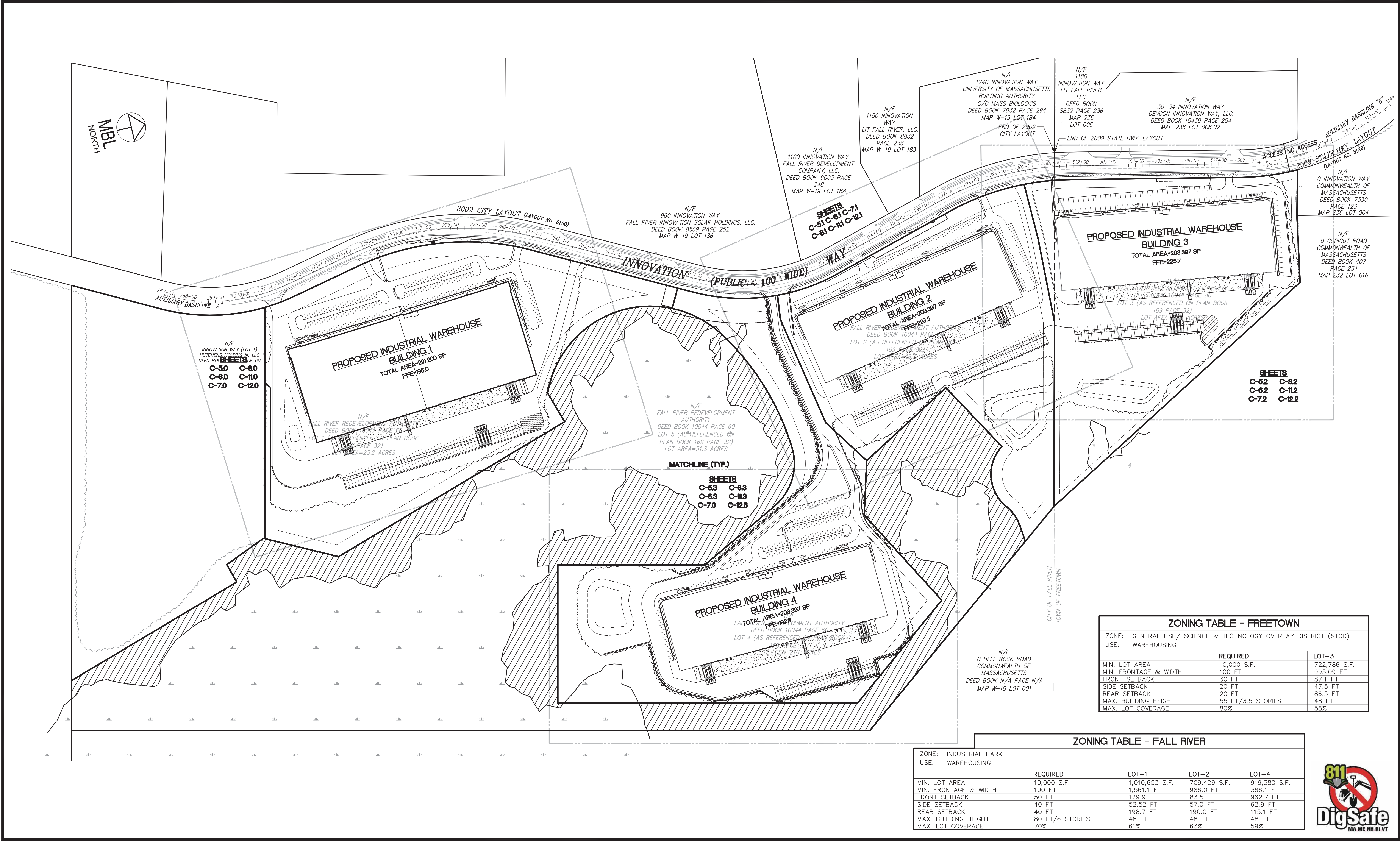
PROPOSED WAREHOUSE DEVELOPMENT
 EXISTING CONDITIONS PLAN
 0 INNOVATION WAY
 FALL RIVER - MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-3.4



CTB: MBL
 LMAN: MBL
 MS VIEW: MBL
 UCS: MBL

LUGS: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 11:52:25 AM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:



N/F
 INNOVATION WAY (LOT 1)
 HUTCHENS HOLDING II, LLC
 DEED BOOK 8832 PAGE 60
 MAP W-19 LOT 183
 C-50 C-80
 C-60 C-110
 C-70 C-120

**PROPOSED INDUSTRIAL WAREHOUSE
 BUILDING 1**
 TOTAL AREA=291,200 SF
 FFE=186.0

**PROPOSED INDUSTRIAL WAREHOUSE
 BUILDING 2**
 TOTAL AREA=203,397 SF
 FFE=223.5

**PROPOSED INDUSTRIAL WAREHOUSE
 BUILDING 3**
 TOTAL AREA=203,397 SF
 FFE=225.7

**PROPOSED INDUSTRIAL WAREHOUSE
 BUILDING 4**
 TOTAL AREA=203,397 SF
 FFE=192.8

MATCHLINE (TYP.)
 SHEETS
 C-53 C-83
 C-63 C-113
 C-73 C-123

ZONING TABLE - FREETOWN

ZONE:	GENERAL USE/ SCIENCE & TECHNOLOGY OVERLAY DISTRICT (STOD)	
USE:	WAREHOUSING	
	REQUIRED	LOT-3
MIN. LOT AREA	10,000 S.F.	722,786 S.F.
MIN. FRONTAGE & WIDTH	100 FT	995.09 FT
FRONT SETBACK	30 FT	87.1 FT
SIDE SETBACK	20 FT	47.5 FT
REAR SETBACK	20 FT	86.5 FT
MAX. BUILDING HEIGHT	55 FT/3.5 STORIES	48 FT
MAX. LOT COVERAGE	80%	58%

ZONING TABLE - FALL RIVER

ZONE:	INDUSTRIAL PARK			
USE:	WAREHOUSING			
	REQUIRED	LOT-1	LOT-2	LOT-4
MIN. LOT AREA	10,000 S.F.	1,010,653 S.F.	709,429 S.F.	919,380 S.F.
MIN. FRONTAGE & WIDTH	100 FT	1,561.1 FT	986.0 FT	366.1 FT
FRONT SETBACK	50 FT	129.9 FT	83.5 FT	962.7 FT
SIDE SETBACK	40 FT	52.52 FT	57.0 FT	62.9 FT
REAR SETBACK	40 FT	198.7 FT	190.0 FT	115.1 FT
MAX. BUILDING HEIGHT	80 FT/6 STORIES	48 FT	48 FT	48 FT
MAX. LOT COVERAGE	70%	61%	63%	59%

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=150'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

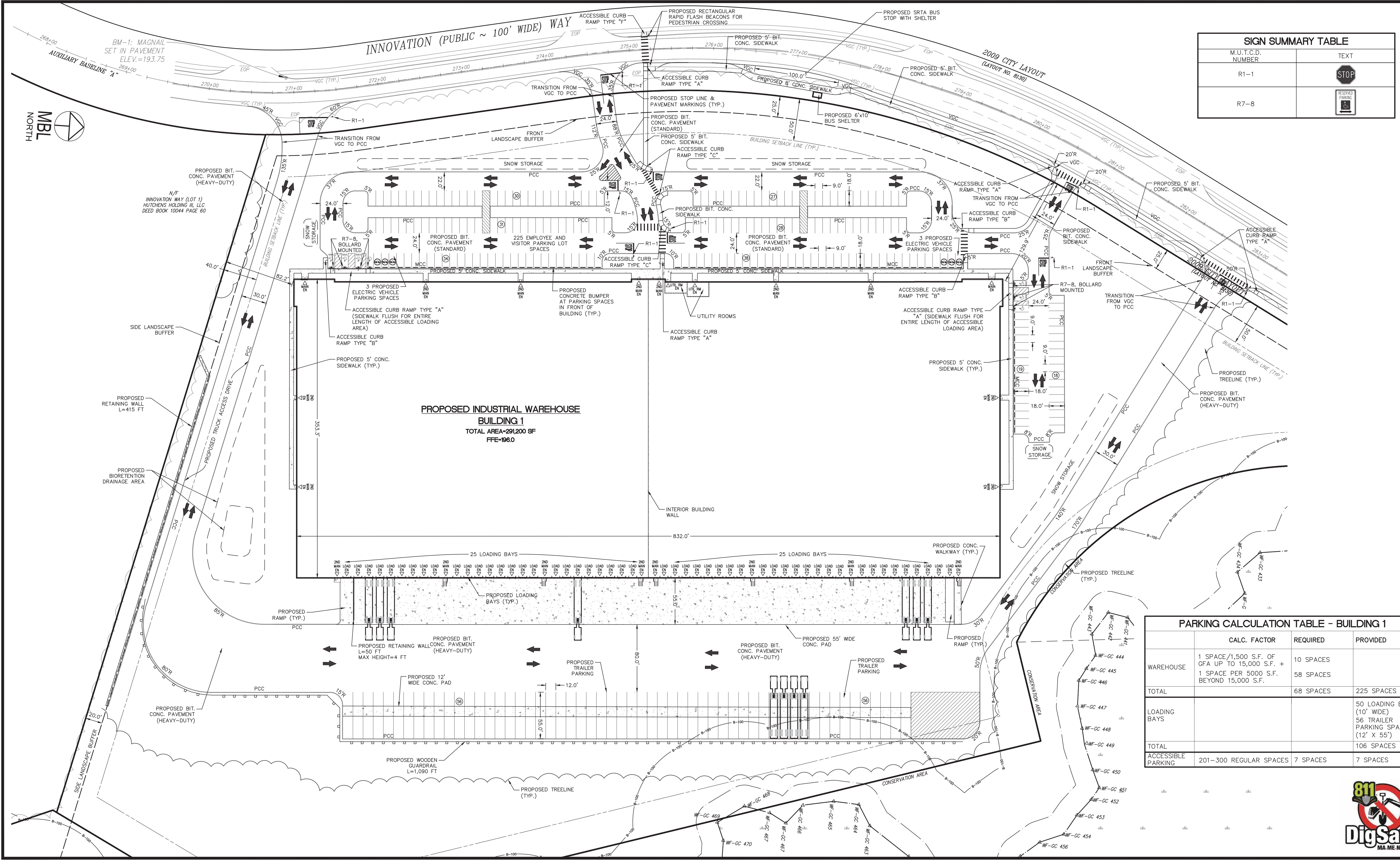
PROPOSED WAREHOUSE DEVELOPMENT
PROPOSED INDEX SHEET
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-4.0



X:\2021\036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 11:52:33 AM, DWG To PDF.pc3

LMS VIEW: LMAN: CTB:



SIGN SUMMARY TABLE	
M.U.T.C.D. NUMBER	TEXT
R1-1	STOP
R7-8	RESERVED PARKING

**PROPOSED INDUSTRIAL WAREHOUSE
BUILDING 1
TOTAL AREA=291,200 SF
FFE=196.0**

PARKING CALCULATION TABLE - BUILDING 1			
	CALC. FACTOR	REQUIRED	PROVIDED
WAREHOUSE	1 SPACE/1,500 S.F. OF GFA UP TO 15,000 S.F. + 1 SPACE PER 5000 S.F. BEYOND 15,000 S.F.	10 SPACES 58 SPACES	
TOTAL		68 SPACES	225 SPACES
LOADING BAYS			50 LOADING BAYS (10' WIDE) 56 TRAILER PARKING SPACES (12' X 55')
TOTAL			106 SPACES
ACCESSIBLE PARKING	201-300 REGULAR SPACES	7 SPACES	7 SPACES

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
CHIEF DESIGNER: MBL
REVIEWED BY: DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:

DATUM:
HORZ.: NAD83
VERT.: NAVD88

50 25 0 25 50
GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P. 508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

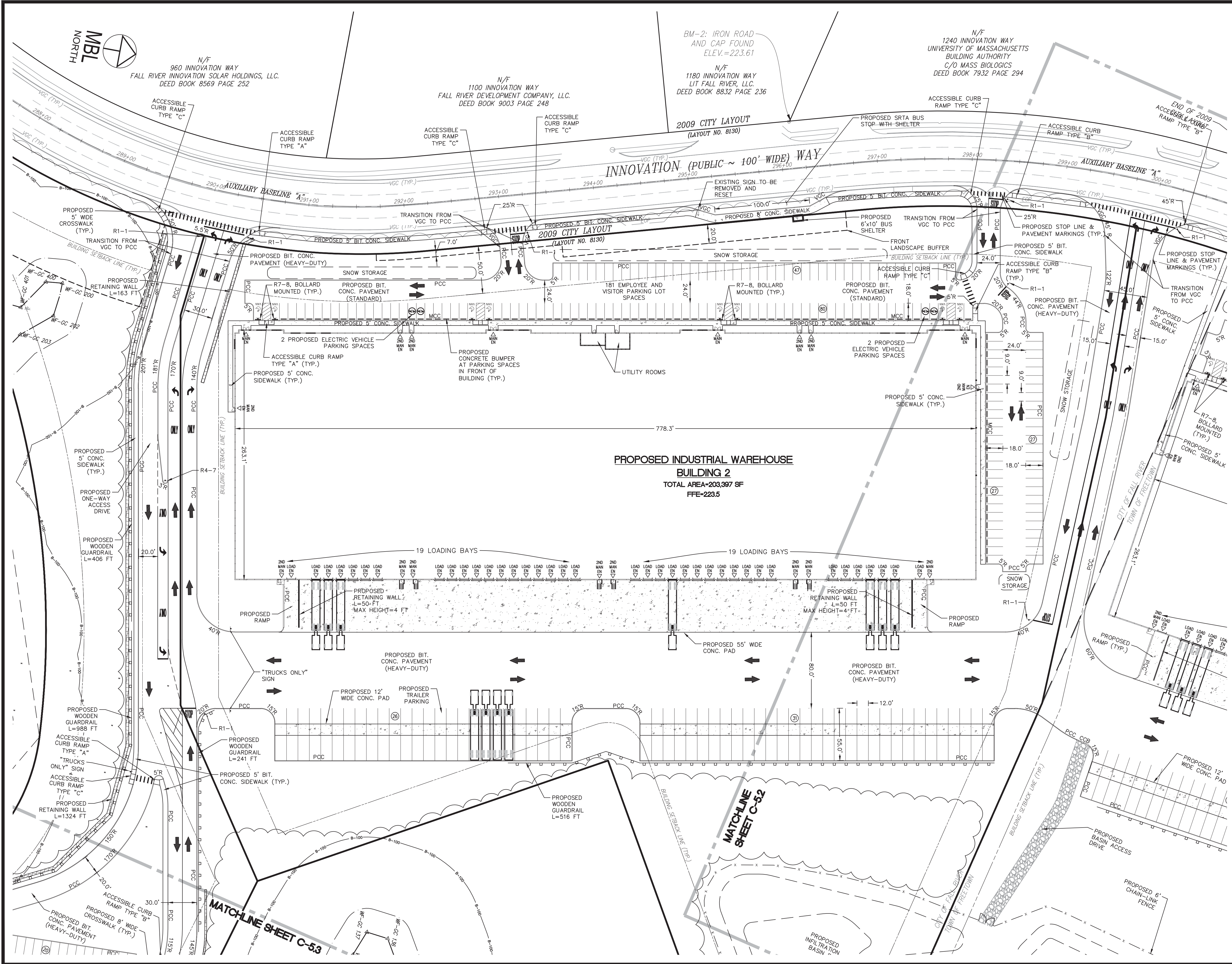
PROPOSED WAREHOUSE DEVELOPMENT
LAYOUT & MATERIALS PLAN
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022

C-5.0



LGS: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 11:52:41 AM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:



	CALC. FACTOR	REQUIRED	PROVIDED
WAREHOUSE	1 SPACE/1,500 S.F. OF GFA UP TO 15,000 S.F. + 1 SPACE PER 5000 S.F. BEYOND 15,000 S.F.	10 SPACES 38 SPACES	
TOTAL		48 SPACES	181 SPACES
LOADING BAYS			42 LOADING BAYS (10' WIDE) 57 TRAILER PARKING SPACES (12' X 55')
TOTAL			106 SPACES
ACCESSIBLE PARKING	101-200 REGULAR SPACES	6 SPACES	6 SPACES

M.U.T.C.D. NUMBER	TEXT
R1-1	
R7-8	

No.	DATE	REVISIONS	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS		JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS		JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS		JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER		JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

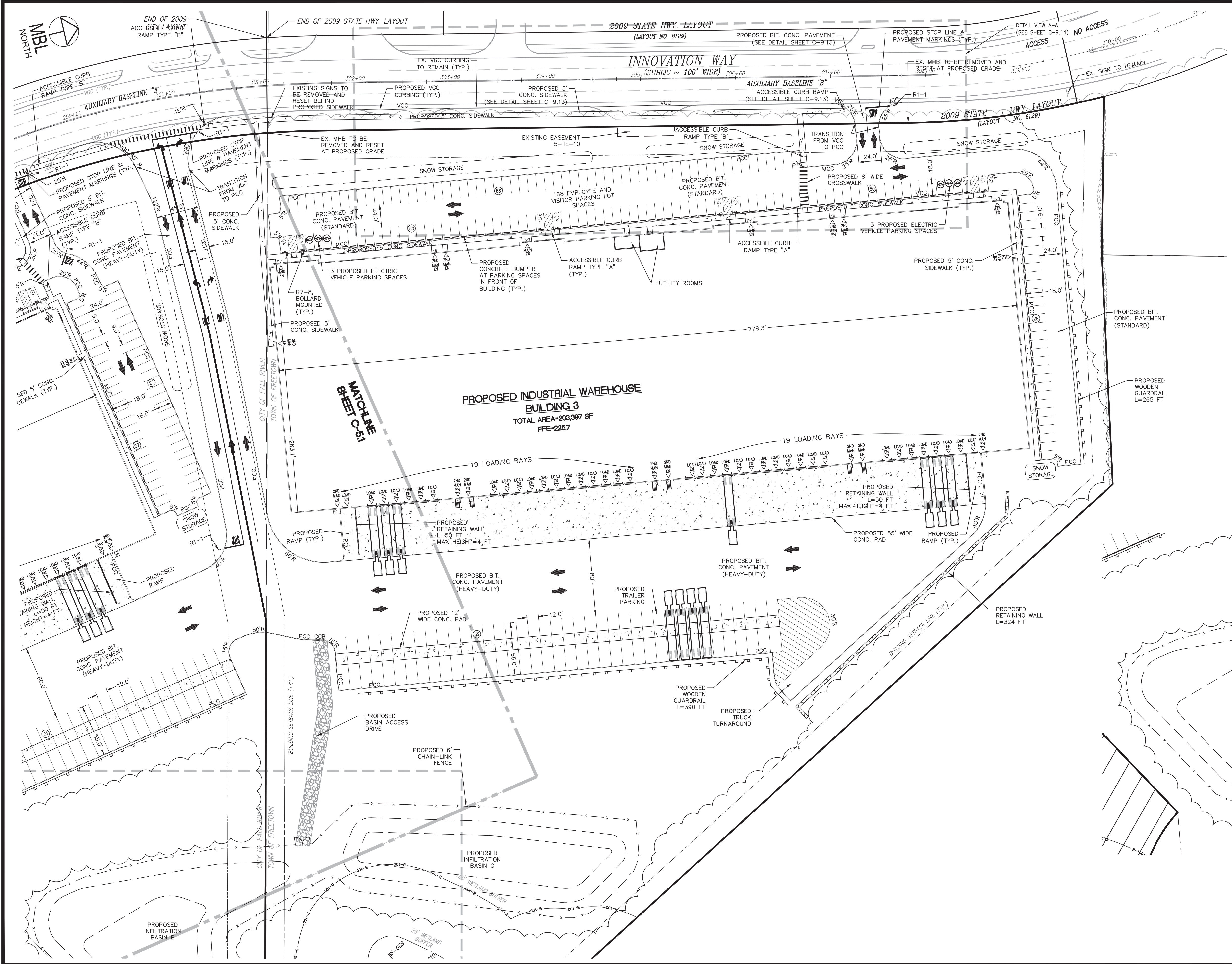
SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 LAYOUT & MATERIALS PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

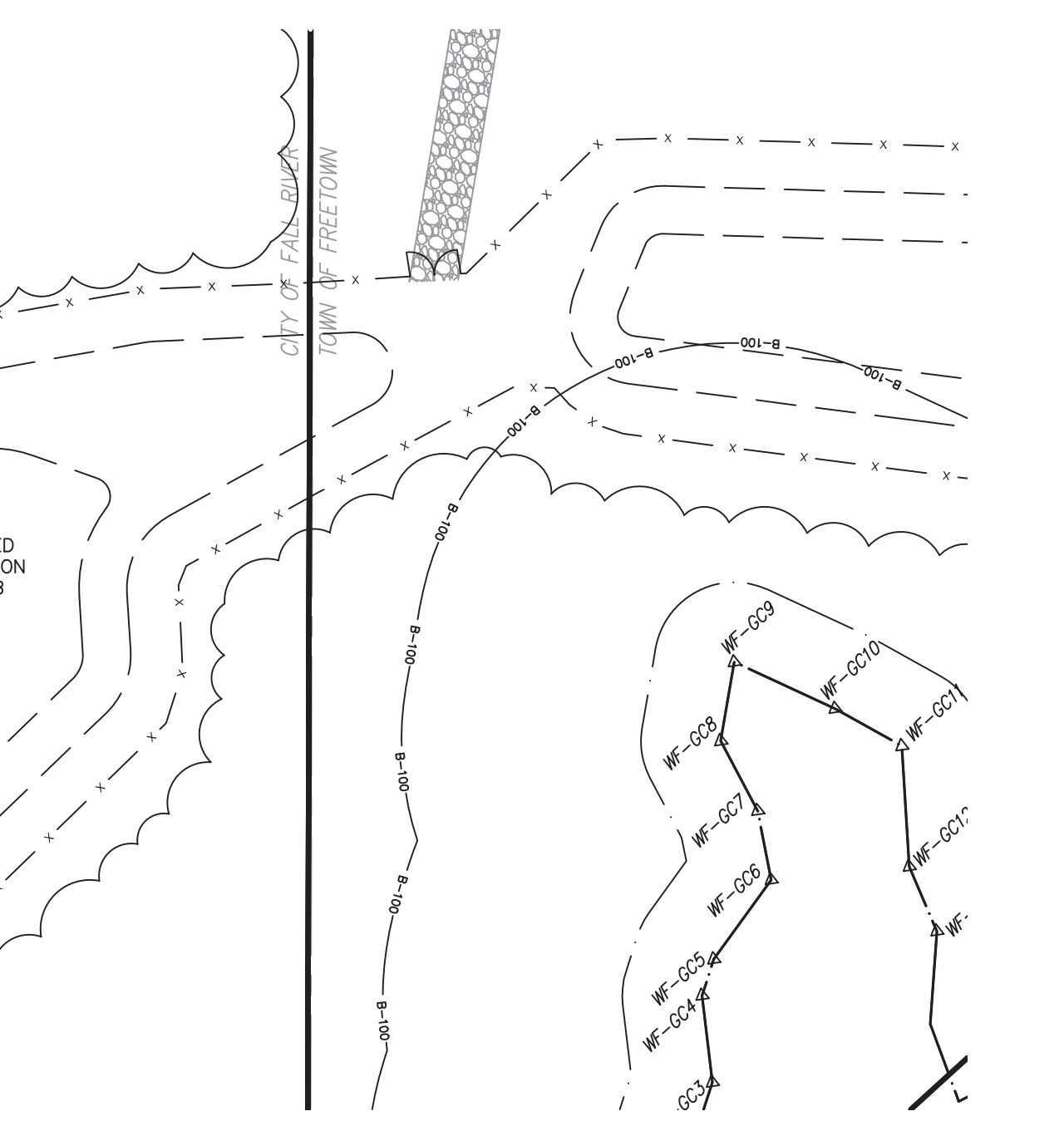
PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-5.1





	CALC. FACTOR	REQUIRED	PROVIDED
WAREHOUSE	1 SPACE/1,000 S.F. OF GFA	203 SPACES	
TOTAL		203 SPACES	168 SPACES*
LOADING BAYS			42 LOADING BAYS (10' WIDE) 39 TRAILER PARKING SPACES (12' X 55')
TOTAL			81 SPACES
ACCESSIBLE PARKING	101-200 REGULAR SPACES	6 SPACES	8 SPACES

M.U.T.C.D. NUMBER	TEXT
R1-1	
R7-8	



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORIZ.: 1"=50'
 VERT.:
 DATUM:
 HORIZ.: NAD83
 VERT.: NAVD88

50 25 0 50
 GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

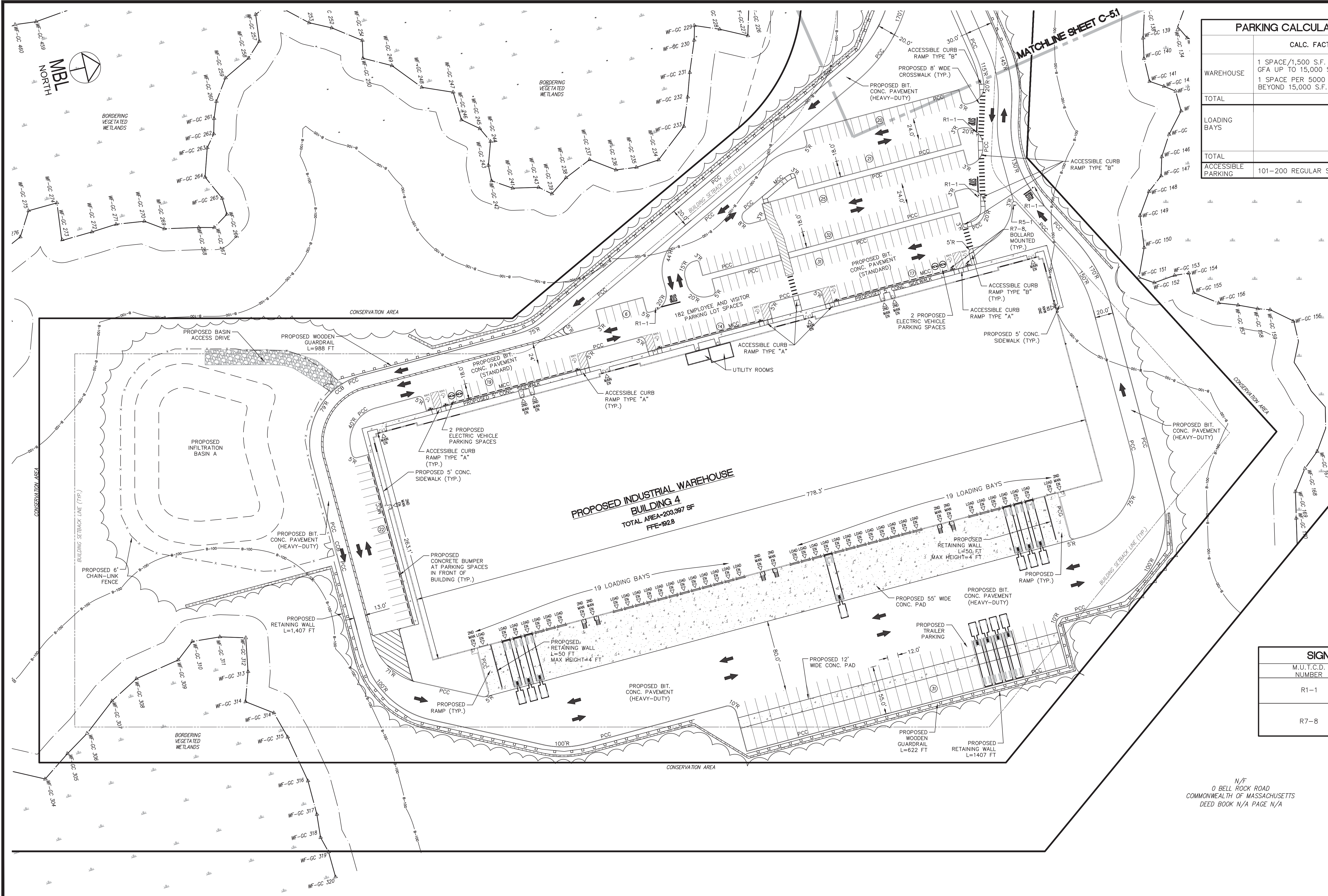
PROPOSED WAREHOUSE DEVELOPMENT

LAYOUT & MATERIALS PLAN
 0 INNOVATION WAY
 FALL RIVER - MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-5.2

LUGS: x:\2021\036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 11:52:49 AM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:



	CALC. FACTOR	REQUIRED	PROVIDED
WAREHOUSE	1 SPACE/1,500 S.F. OF GFA UP TO 15,000 S.F. + 1 SPACE PER 5,000 S.F. BEYOND 15,000 S.F.	10 SPACES 38 SPACES	207 SPACES
TOTAL		48 SPACES	207 SPACES
LOADING BAYS			42 LOADING BAYS (10' WIDE) 31 TRAILER PARKING SPACES (12' X 55')
TOTAL			73 SPACES
ACCESSIBLE PARKING	101-200 REGULAR SPACES	6 SPACES	8 SPACES

M.U.T.C.D. NUMBER	TEXT
R1-1	STOP
R7-8	RESERVED PARKING

N/F
0 BELL ROCK ROAD
COMMONWEALTH OF MASSACHUSETTS
DEED BOOK N/A PAGE N/A



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
CHIEF DESIGNER: MBL
REVIEWED BY: DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:

DATUM:
HORZ.: NAD83
VERT.: NAVD88

50 25 0 25 50
GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P-508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

LAYOUT & MATERIALS PLAN
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022

C-5.3

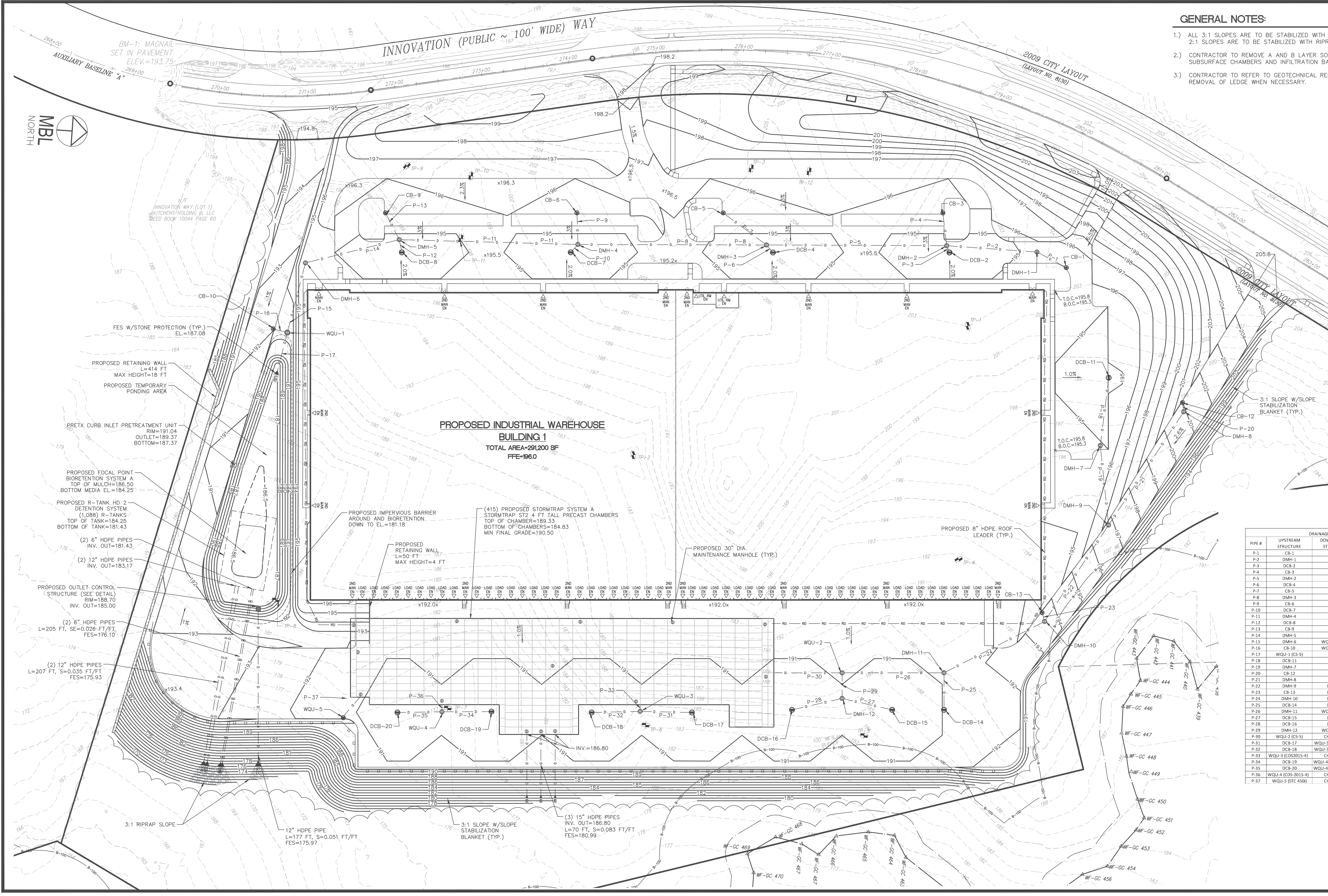
LUGS: LMS VIEW: LMAN: CTB: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 11:53:02 AM, DWG To PDF.pc3

GENERAL NOTES:

- 1.) ALL 3:1 SLOPES ARE TO BE STABILIZED WITH AN EROSION CONTROL BLANKET AND ALL 2:1 SLOPES ARE TO BE STABILIZED WITH RIPRAP.
- 2.) CONTRACTOR TO REMOVE A AND B LAYER SOILS PRIOR TO INSTALLATION OF SUBSURFACE CHAMBERS AND INFILTRATION BASINS.
- 3.) CONTRACTOR TO REFER TO GEOTECHNICAL REPORT BY GEOENGINEERS USA FOR REMOVAL OF LEDGE WHEN NECESSARY.

STRUCTURE #	RIM	INVERT IN	INVERT OUT
CB-1	195.53	-	192.02
DMH-1	195.12	191.85	191.85
DCB-2	194.36	-	191.36
CB-3	195.32	-	191.82
DMH-2	194.40	191.36 (DMH-1)	191.31
DCB-4	194.36	191.31 (DCB-3)	190.36
CB-5	195.32	-	191.32
DMH-3	194.40	190.31 (DMH-2)	190.28
DCB-6	195.32	-	190.82
DMH-4	194.40	189.23 (DMH-3)	189.86
DCB-8	194.36	189.54 (CB-6)	189.23
CB-9	195.32	-	188.36
DMH-5	194.4	188.23 (DMH-4)	189.32
DCB-10	194.4	188.25 (DCB-8)	188.23
DMH-6	195.2	187.7 (DMH-5)	187.70
CB-10	192.05	187.7 (DMH-5)	188.05
WQU-1 (CS-5)	192.5	187.69 (CB-10)	187.31
FES-1	-	-	187.08
DCB-11	194.36	-	191.86
DMH-7	195.10	191.49 (DCB-11)	191.49
CB-12	201.00	-	197.00
DMH-8	200.90	196.93 (CB-12)	196.43
DMH-9	196.9	191.05 (DMH-7)	191.05
CB-13	193.60	191.15 (DMH-8)	191.05
DMH-10	193.6	189.77 (DMH-9)	189.90
DCB-14	191.00	189.83 (CB-13)	189.77
DMH-11	191.21	188.39 (DMH-10)	188.31
DCB-15	190.50	187.46 (DCB-14)	188.00
DMH-12	190.85	187.46 (DCB-14)	187.46
WQU-2 (CS-5)	191.10	187.41 (DMH-11)	187.50
DCB-17	190.50	185.64 (DMH-12)	187.50
DCB-18	190.50	-	187.50
WQU-3	191.00	186.95 (DCB-16)	186.94
DCB-19	190.50	186.94 (DCB-17)	187.50
DCB-20	190.50	-	187.50
WQU-4	191.00	186.94 (DCB-18)	186.94
WQU-5 (CS-450)	191.30	187.04 (DCB-17)	187.80

PIPE #	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	PIPE SIZE & MATERIAL	LENGTH (FT)	SLOPE (%)
P-1	CB-1	DMH-1	12" RCP	24	0.5%
P-2	DMH-1	DMH-2	12" RCP	99	0.5%
P-3	DCB-2	DMH-2	12" RCP	5	1.0%
P-4	CB-3	DMH-2	12" RCP	32	1.5%
P-5	DMH-2	DMH-3	15" HDPE	201	0.5%
P-6	DCB-4	DMH-3	12" HDPE	8	1.0%
P-7	CB-5	DMH-3	12" HDPE	56	1.5%
P-8	DMH-3	DMH-4	18" RCP	211	0.5%
P-9	CB-6	DMH-4	12" HDPE	32	4.0%
P-10	DMH-4	DMH-5	12" HDPE	8	2.0%
P-11	DMH-4	DMH-5	21" HDPE	200	0.5%
P-12	DCB-8	DMH-5	12" HDPE	11	1.0%
P-13	CB-9	DMH-5	12" HDPE	29	3.5%
P-14	DMH-5	DMH-6	24" HDPE	106	0.5%
P-15	DMH-6	WQU-1 (CS-5)	24" HDPE	78	0.5%
P-16	CB-10	WQU-1 (CS-5)	12" HDPE	12	3.0%
P-17	WQU-1 (CS-5)	FES-1	24" HDPE	46	0.5%
P-18	DCB-11	DMH-7	12" RCP	74	0.5%
P-19	DMH-7	DMH-8	15" HDPE	88	0.5%
P-20	DCB-12	DMH-8	12" RCP	7	1.0%
P-21	DMH-8	DMH-9	12" HDPE	151	3.5%
P-22	DMH-9	DMH-10	12" HDPE	128	1.0%
P-23	CB-13	DMH-10	12" RCP	7	1.0%
P-24	DMH-10	DMH-11	15" HDPE	92	1.5%
P-25	DCB-14	DMH-11	12" RCP	38	0.5%
P-26	DMH-11	WQU-2 (CS-5)	18" HDPE	112	0.8%
P-27	DCB-15	DMH-12	12" RCP	54	1.0%
P-28	DCB-16	DMH-12	12" RCP	54	1.0%
P-29	DMH-12	WQU-2 (CS-5)	18" HDPE	26	7.0%
P-30	WQU-2 (CS-5)	CHAMBERS	18" HDPE	77	1.0%
P-31	DCB-17	WQU-3 (CS-2015-4)	12" HDPE	55	1.0%
P-32	DCB-18	WQU-3 (CS-2015-4)	12" HDPE	56	1.0%
P-33	WQU-3 (CS-2015-4)	CHAMBERS	15" HDPE	7	1.0%
P-34	DCB-19	WQU-4 (CS-2015-4)	12" HDPE	56	1.0%
P-35	DCB-20	WQU-4 (CS-2015-4)	12" HDPE	46	1.0%
P-36	WQU-4 (CS-2015-4)	CHAMBERS	15" HDPE	7	1.0%
P-37	WQU-5 (STC 450)	CHAMBERS	12" RCP	28	1.0%



PROPOSED INDUSTRIAL WAREHOUSE BUILDING 1
 TOTAL AREA=291,200 SF
 FFE=196.0

(415) PROPOSED STORMTRAP SYSTEM A
 STORMTRAP STZ 4 FT TALL PRECAST CHAMBERS
 TOP OF CHAMBER=189.33
 BOTTOM OF CHAMBERS=184.83
 MIN FINAL GRADE=190.50

PROPOSED 30" DIA. MAINTENANCE MANHOLE (TYP.)

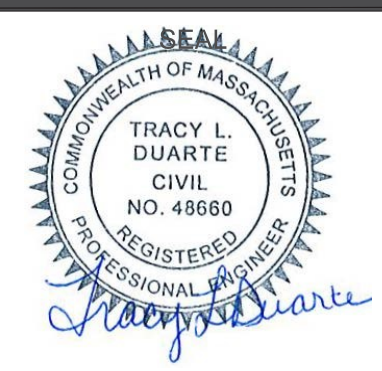
PROPOSED 8" HDPE ROOF LEADER (TYP.)

PROPOSED IMPERVIOUS BARRIER AROUND AND BIORETENTION DOWN TO EL=181.18

PROPOSED RETAINING WALL L=50 FT MAX HEIGHT=4 FT

12" HDPE PIPE L=177 FT, S=0.051 FT/FT FES=175.97

(3) 15" HDPE PIPES INV. OUT=186.80 L=70 FT, S=0.083 FT/FT FES=180.99



SEAL
 PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88
 GRAPHIC SCALE



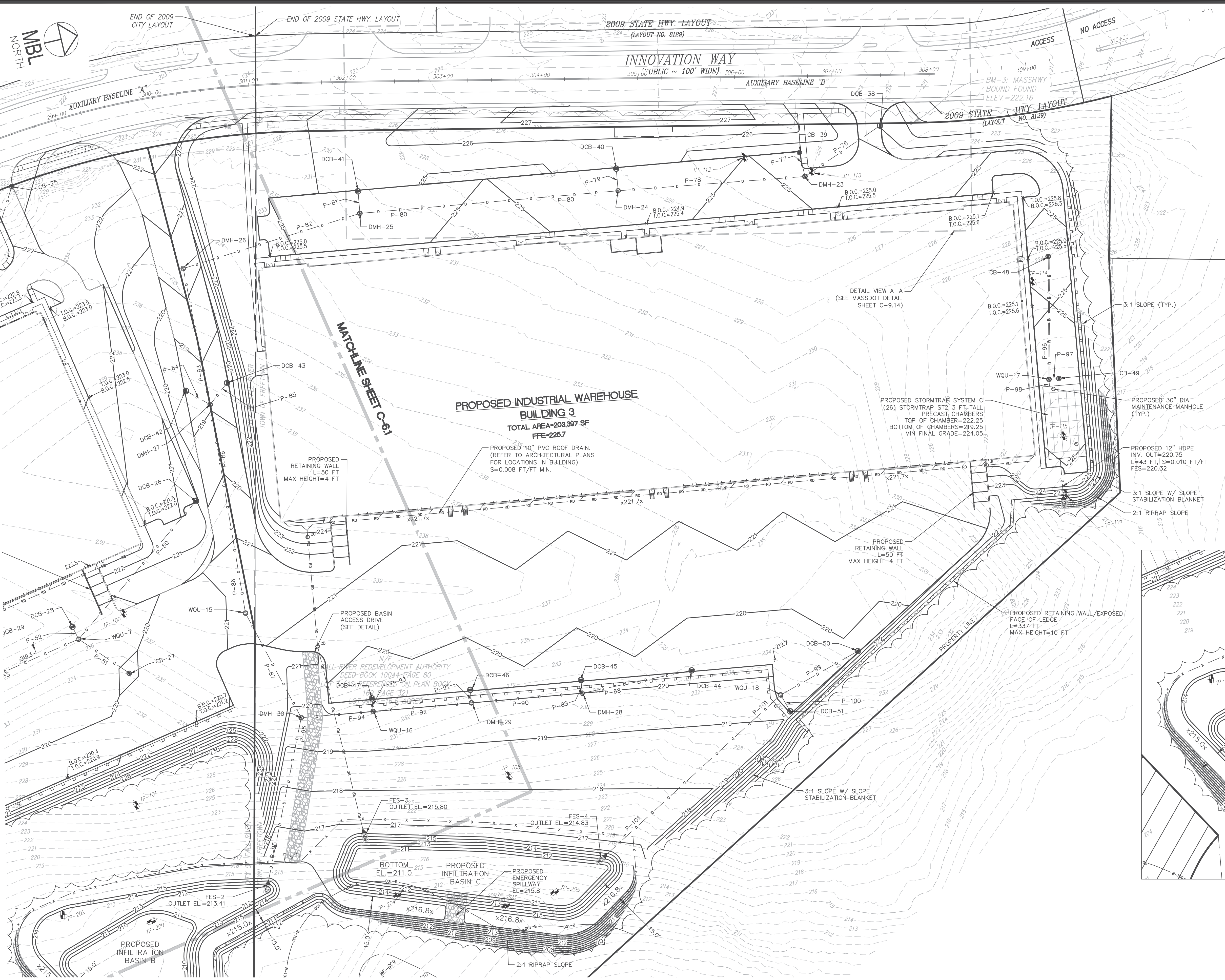
PROPOSED WAREHOUSE DEVELOPMENT
 GRADING & DRAINAGE PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS



PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-6.0

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.mxd - Master-CAO-UJI.dwg, 11/22/2022 12:53:02 PM, DWG To PDF.pc3
 LMAN: CTB:



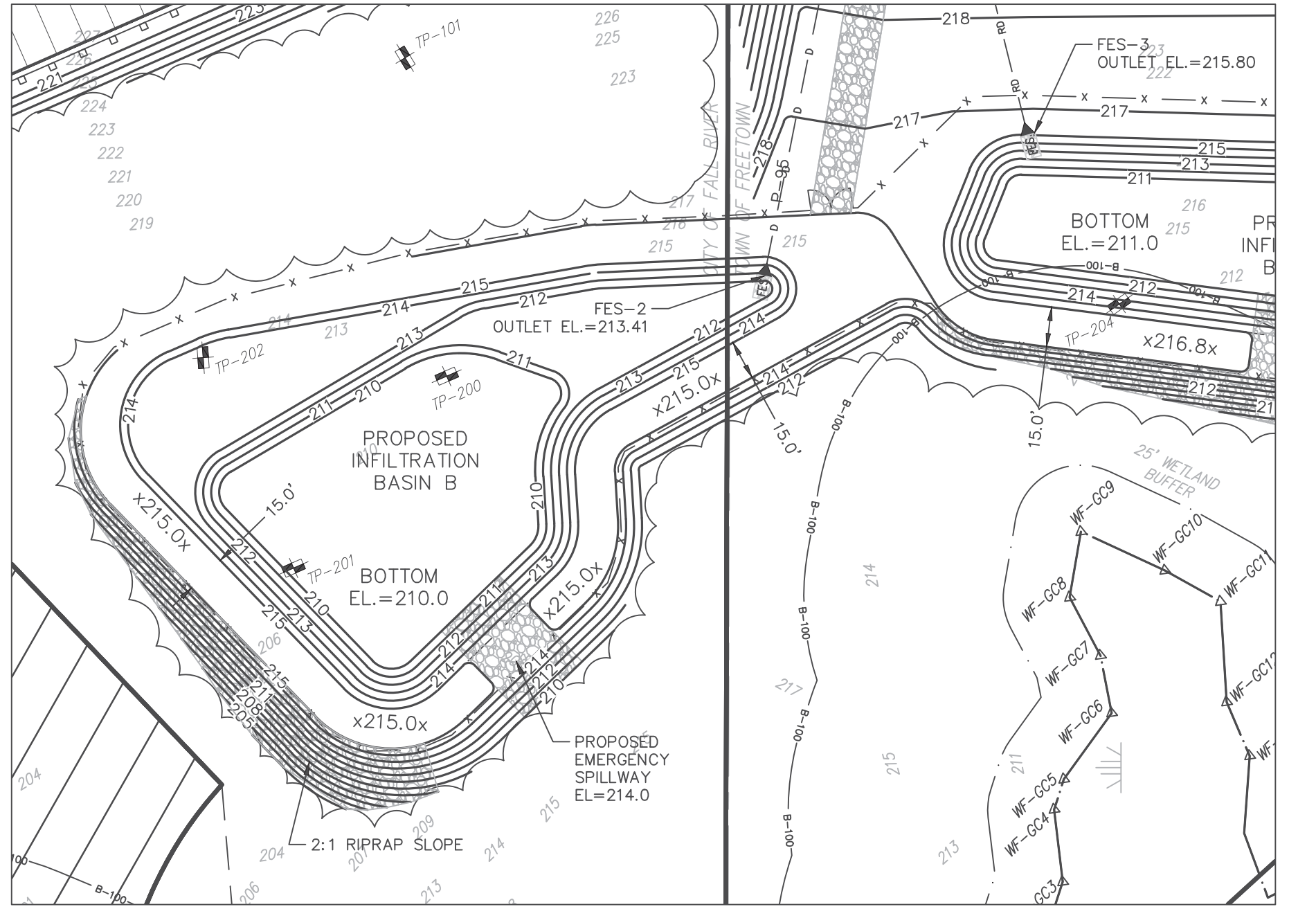
- GENERAL NOTES:**
- 1.) ALL 3:1 SLOPES ARE TO BE STABILIZED WITH AN EROSION CONTROL BLANKET AND ALL 2:1 SLOPES ARE TO BE STABILIZED WITH RIPRAP.
 - 2.) CONTRACTOR TO REMOVE A AND B LAYER SOILS PRIOR TO INSTALLATION OF SUBSURFACE CHAMBERS AND INFILTRATION BASINS.
 - 3.) CONTRACTOR TO REFER TO GEOTECHNICAL REPORT BY GEOENGINEERS USA FOR REMOVAL OF LEDGE WHEN NECESSARY.

DRAINAGE STRUCTURE TABLE - BUILDING 3

STRUCTURE #	RIM	INVERT IN	INVERT OUT
DCB-38	223.63	-	220.88
CB-39	224.50	-	220.50
DMH-23	224.80	220.17 (DCB-38)	220.17
DCB-40	224.40	219.52 (DCB-40)	219.90
DMH-24	224.60	219.22 (DMH-23)	219.22
DCB-41	224.40	-	218.40
DMH-25	224.60	218.02 (DCB-41)	217.91
DMH-26	220.20	216.98 (DMH-29)	216.98
DCB-42	218.70	-	216.20
DCB-43	218.70	-	216.20
DMH-27	218.9	215.96 (DCB-43)	215.96
WQU-15	225.00	214.89 (DMH-27)	214.89
DCB-44	219.60	-	216.80
DCB-45	219.60	-	216.30
DMH-28	220	215.71 (DCB-44)	215.91
DCB-46	219.60	-	215.80
DMH-29	220	215.71 (DCB-46)	215.36
DCB-47	219.60	-	215.30
WQU-16	219.9	215.21 (DCB-47)	214.87
DCB-48	219.60	-	214.87
DMH-30	219.7	214.29 (WQU-15)	214.29
FES-2	-	-	213.41
CB-48	224.60	-	222.40
CB-49	224.00	-	221.50
WQU-17 (STC 450)	224.10	221.79 (CB-48)	221.34
CHAMBERS C	-	-	221.24
DCB-50	219.80	-	217.00
DCB-51	219.00	-	216.20
WQU-18 (CDS2015-4)	219.10	216.13 (CB-48)	216.05
FES-4	-	-	214.83

DRAINAGE PIPE TABLE - BUILDING 3

PIPE #	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	PIPE SIZE & MATERIAL	LENGTH (FT)	SLOPE (%)
P-76	DCB-38	DMH-23	12" RCP	89	0.8%
P-77	CB-39	DMH-23	12" RCP	22	1.2%
P-78	DMH-23	DMH-24	12" HDPE	189	0.5%
P-79	DCB-40	DMH-24	12" HDPE	19	2.6%
P-80	DMH-24	DMH-25	15" HDPE	263	0.5%
P-81	DCB-41	DMH-25	12" HDPE	19	2.0%
P-82	DMH-25	DMH-26	15" HDPE	186	0.5%
P-83	DMH-26	DMH-27	15" HDPE	139	0.5%
P-84	DCB-42	DMH-27	12" RCP	24	1.0%
P-85	DCB-43	DMH-27	12" RCP	24	1.0%
P-86	DMH-27	WQU-15	15" RCP	214	0.5%
P-87	WQU-15	DMH-28	18" HDPE	120	0.5%
P-88	DCB-44	DMH-28	12" RCP	111	0.8%
P-89	DCB-45	DMH-28	12" HDPE	9	1.0%
P-90	DMH-28	DMH-29	18" HDPE	111	0.5%
P-91	DCB-46	DMH-29	12" HDPE	9	1.0%
P-92	DMH-29	WQU-16	18" HDPE	98	0.5%
P-93	DCB-47	WQU-16	12" HDPE	9	1.0%
P-94	WQU-16	DMH-30	18" HDPE	71	0.8%
P-95	DMH-30	FES-2	24" HDPE	176	0.5%
P-96	CB-48	WQU-17	DOUBLE 6" ADS-N-12	123	0.5%
P-97	CB-49	WQU-17	12" RCP	6	1.0%
P-98	WQU-17	CHAMBERS C	12" RCP	5	2.0%
P-99	DCB-50	WQU-18	12" RCP	87	1.0%
P-100	DCB-51	WQU-18	12" RCP	15	1.0%
P-101	WQU-18	FES-4	18" HDPE	245	0.5%



DETAIL BASIN B
1"=50'

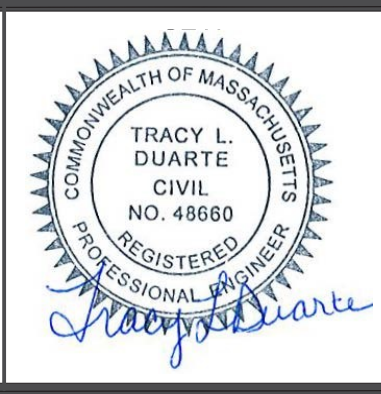


REVISIONS

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER: MBL
CHIEF DESIGNER: MBL
REVIEWED BY: DATE

SEAL



PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114
NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

MBL
LAND DEVELOPMENT & PERMITTING, CORP.
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P.508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

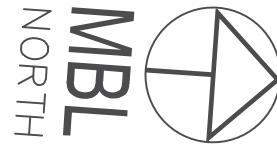
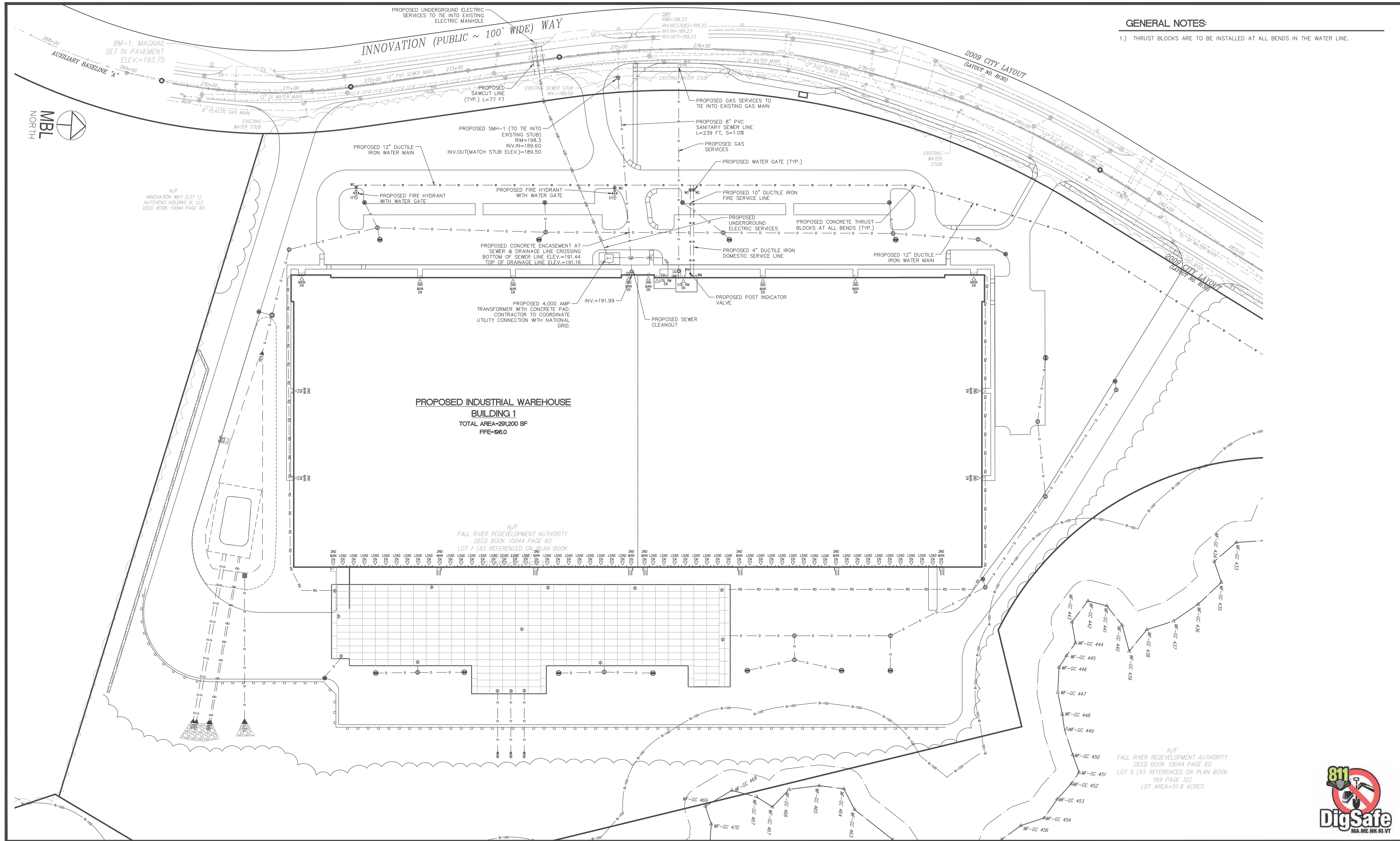
PROPOSED WAREHOUSE DEVELOPMENT
GRADING & DRAINAGE PLAN
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022
C-6.2

LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg - Master-CAO-UTL.dwg, 11/22/2022 12:53:16 PM, DWG To PDF.pc3

GENERAL NOTES:

1.) THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS IN THE WATER LINE.



N/F
INNOVATION WAY (LOT 1)
HUTCHENS HOLDING III, LLC
DEED BOOK 10044 PAGE 60

N/F
FALL RIVER REDEVELOPMENT AUTHORITY
DEED BOOK 10044 PAGE 60
LOT 1 (AS REFERENCED ON PLAN BOOK

N/F
FALL RIVER REDEVELOPMENT AUTHORITY
DEED BOOK 10044 PAGE 60
LOT 5 (AS REFERENCED ON PLAN BOOK
169 PAGE 32)
LOT AREA=51.8 ACRES



UGS: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:53:36 PM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL



PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

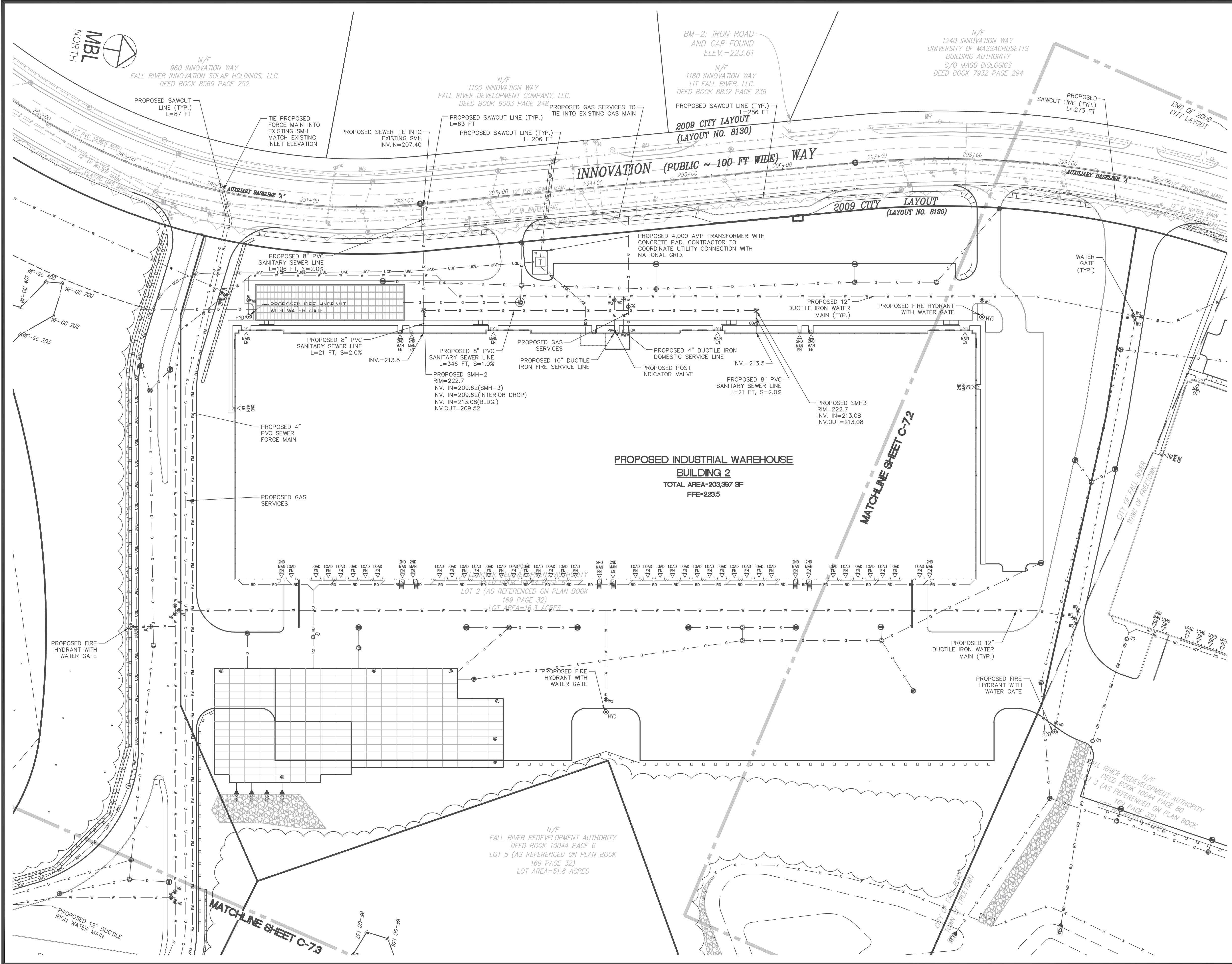
SCALE:	HORIZ.: 1"=50'
	VERT.:
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 UTILITY PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-7.0

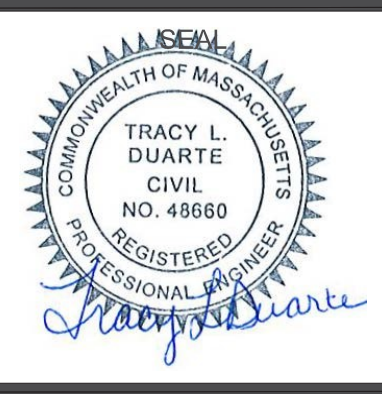
GENERAL NOTES:
 1.) THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS IN THE WATER LINE.



LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-CAO-UTIL.dwg, 11/22/2022 12:53:43 PM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:

No.	DATE	REVISIONS	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS		JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS		JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS		JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER		JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL
 PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

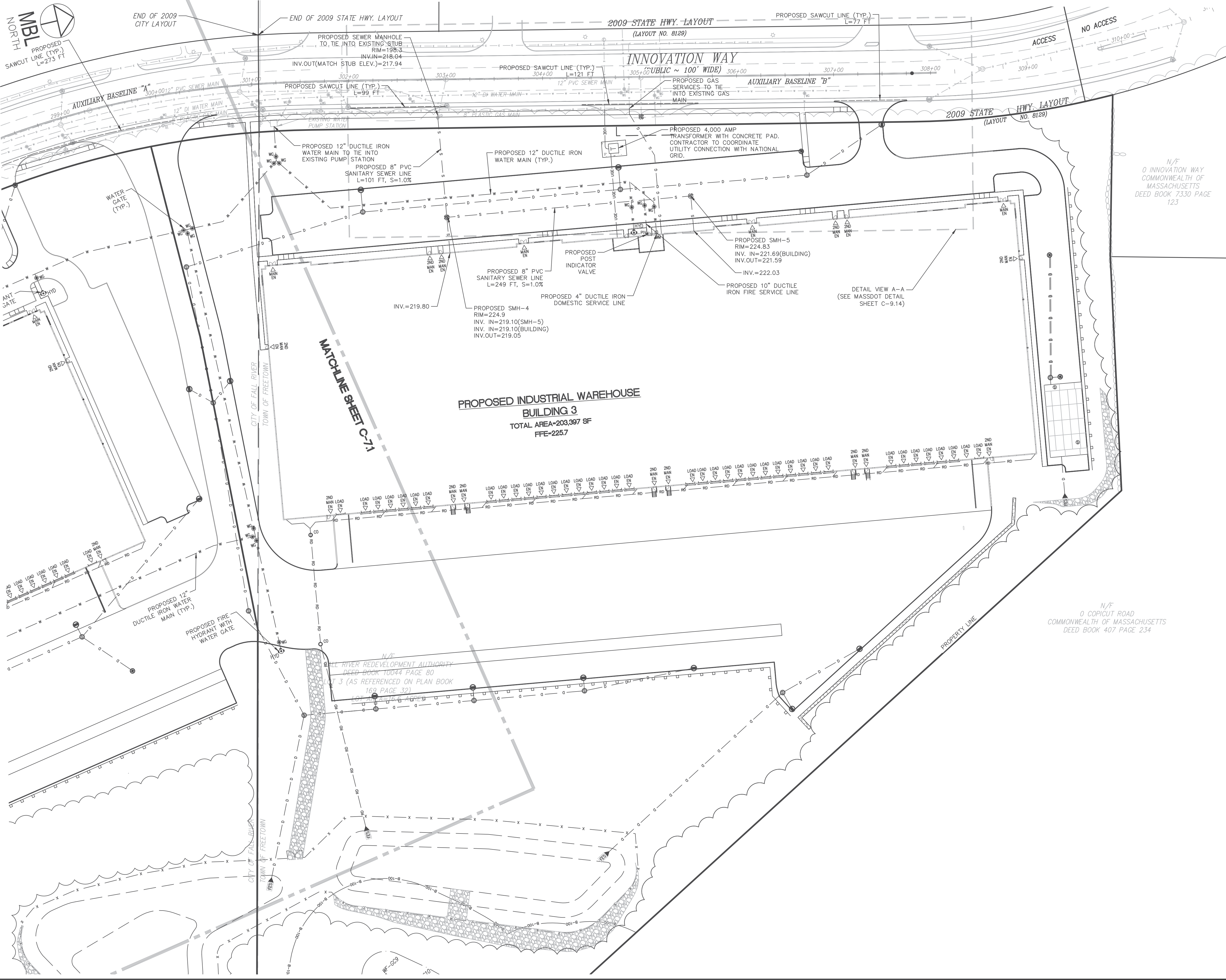
SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88
 GRAPHIC SCALE

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 UTILITY PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-7.1



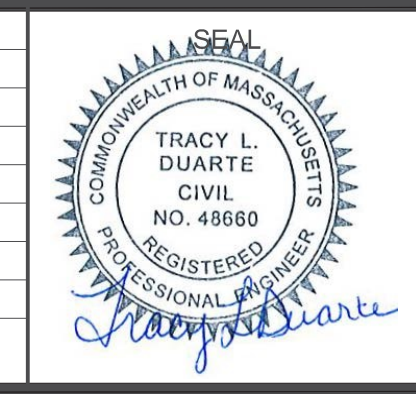


GENERAL NOTES:
 1.) THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS IN THE WATER LINE.

LUGS: \X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-CAO-UTIL.dwg, 11/22/2022 12:53:49 PM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

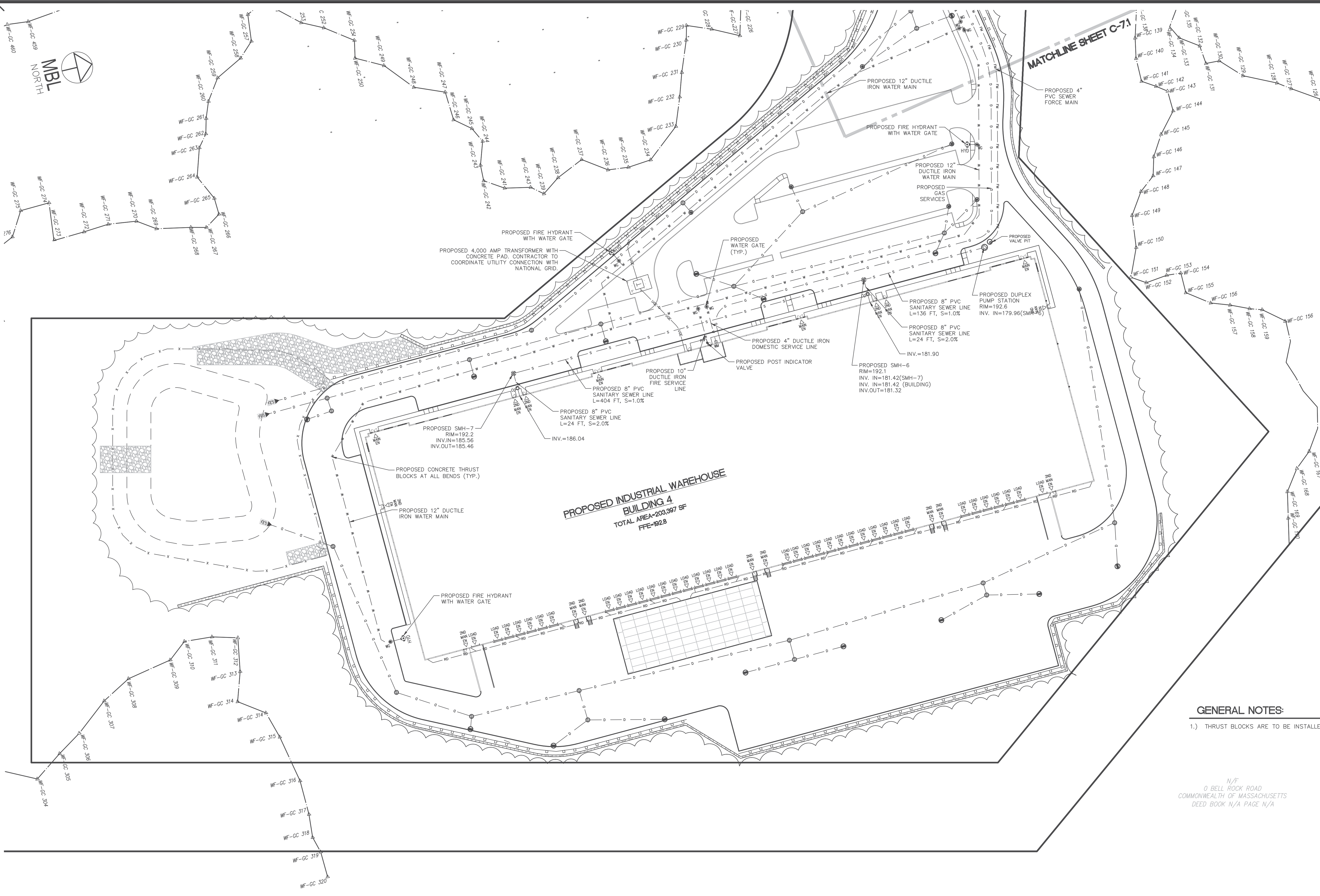
SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88
 GRAPHIC SCALE

MBL LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 UTILITY PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-7.2





GENERAL NOTES:

1.) THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS IN THE WATER LINE.

N/F
 0 BELL ROCK ROAD
 COMMONWEALTH OF MASSACHUSETTS
 DEED BOOK N/A PAGE N/A

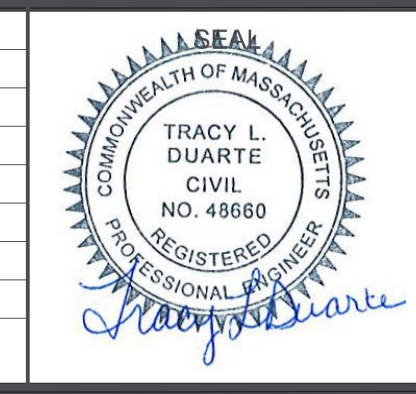


LUGS: LMAN: CTB: IMS VIEW:

X:\2021\036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-CAO-UTIL.dwg, 11/22/2022 12:53:56 PM, DWG To PDF.pc3

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
		REVISIONS	

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

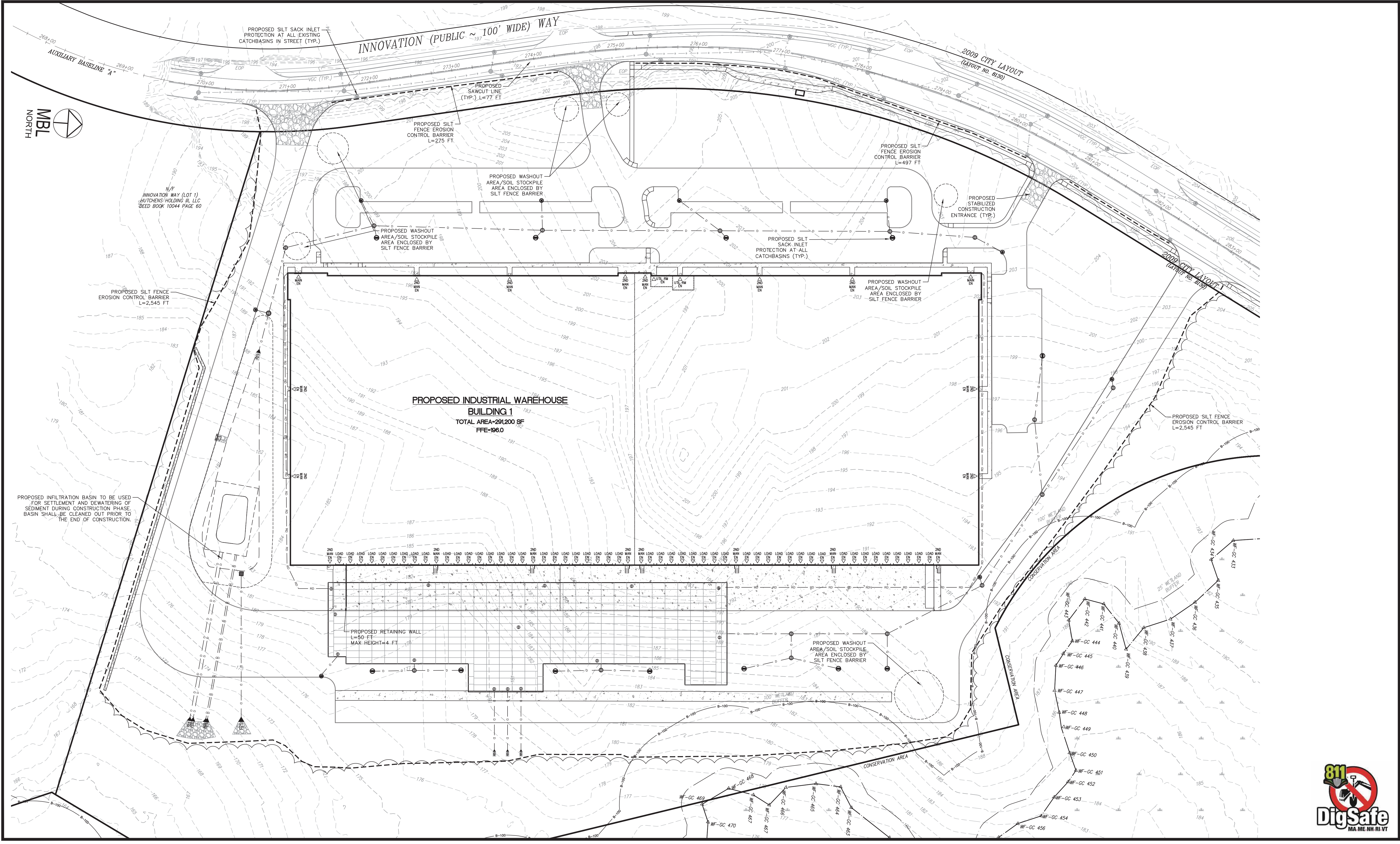
MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 UTILITY PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

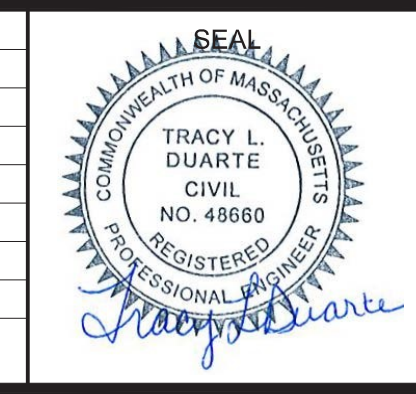
PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-7.3

LUGS: MBL
 LMAN: LMAN
 CTB: CTB
 X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 11:53:10 AM, DWG To PDF.pc3



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

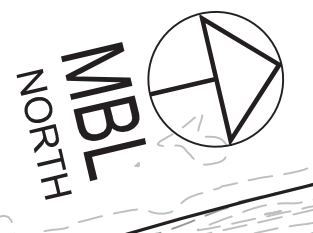
PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
EROSION CONTROL & DEMOLITION PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-8.0



END OF 2009 CITY LAYOUT

END OF 2009 STATE HWY. LAYOUT

2009 STATE HWY. LAYOUT (LAYOUT NO. 8129)

DETAIL VIEW A-A (SEE SHEET C-9.14)

NO ACCESS

ACCESS

INNOVATION WAY (PUBLIC ~ 100' WIDE)

PROPOSED STABILIZED CONSTRUCTION ENTRANCE (TYP.)

AUXILIARY BASELINE "B"

2009 STATE HWY. LAYOUT (LAYOUT NO. 8129)

PROPOSED SILT FENCE EROSION CONTROL BARRIER L=644 FT.

PROPOSED SILT SACK INLET PROTECTION AT ALL EXISTING CATCHBASINS IN STREET (TYP.)

PROPOSED SILT SACK INLET PROTECTION AT ALL CATCHBASINS (TYP.)

PROPOSED WASHOUT AREA/SOIL STOCKPILE AREA ENCLOSED BY SILT FENCE BARRIER

PROPOSED SILT FENCE EROSION CONTROL BARRIER L=650 FT.

PROPOSED WASHOUT AREA/SOIL STOCKPILE AREA ENCLOSED BY SILT FENCE BARRIER

MATCHLINE SHEET C-81

PROPOSED INDUSTRIAL WAREHOUSE BUILDING 3
TOTAL AREA=203,397 SF
FFE=225.7

PROPOSED WASHOUT AREA/SOIL STOCKPILE AREA ENCLOSED BY SILT FENCE BARRIER

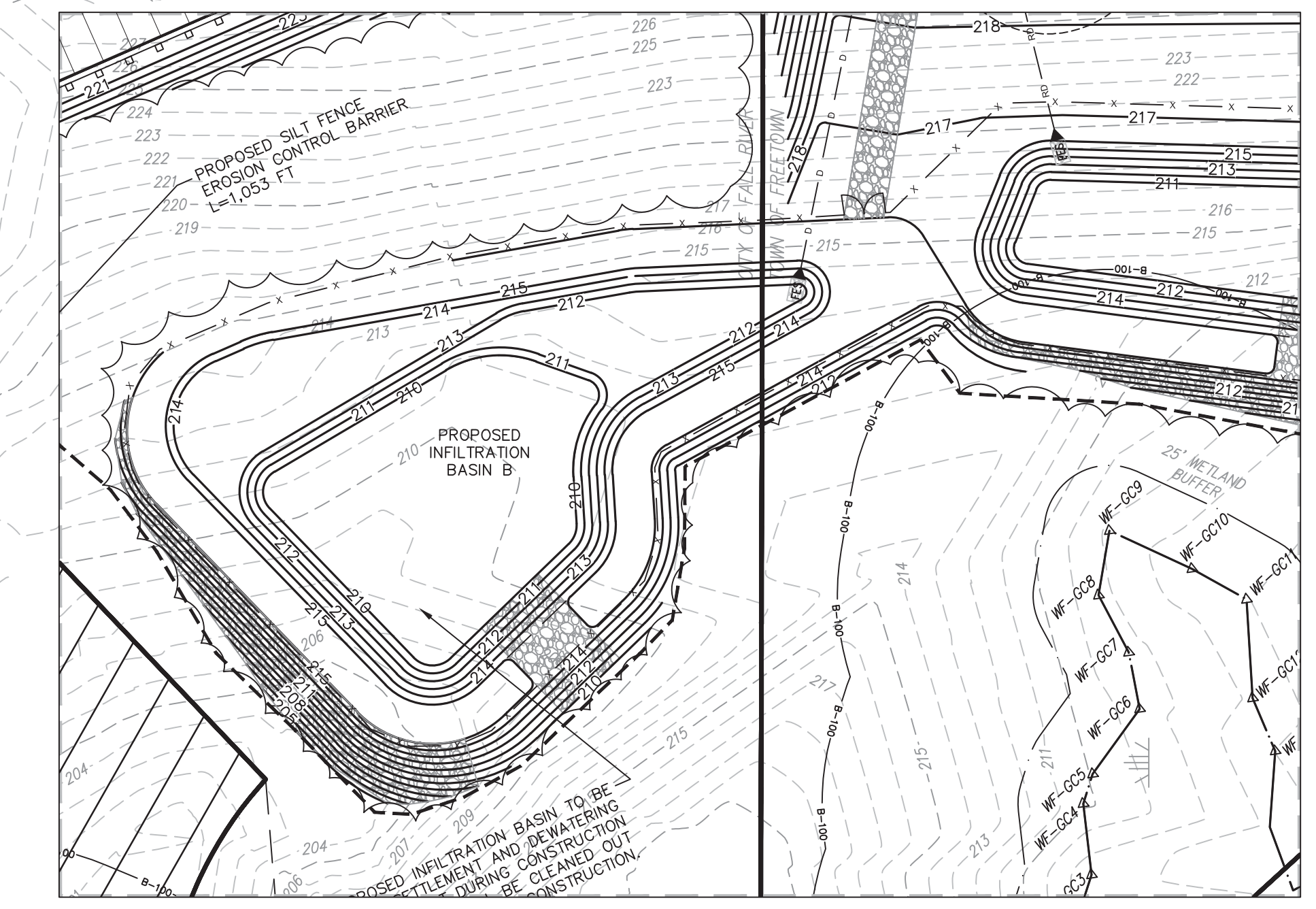
PROPOSED TEMP. SWALES WITH HAY BALE CHECK DAMS (SEE DETAIL)

PROPOSED WASHOUT AREA/SOIL STOCKPILE AREA ENCLOSED BY SILT FENCE BARRIER

PROPOSED HAY BALE CHECK DAMS (SEE DETAIL)

PROPOSED SILT FENCE EROSION CONTROL BARRIER L=1,053 FT.

PROPOSED INFILTRATION BASIN TO BE USED FOR SETTLEMENT AND DEWATERING OF SEDIMENT DURING CONSTRUCTION PHASE. BASIN SHALL BE CLEANED OUT PRIOR TO THE END OF CONSTRUCTION.



DETAIL VIEW B-B
1"=50'

LUGS: IMS VIEW: LMAN: CTB: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 11:53:29 AM, DWG To PDF.pcs

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114
NORTH ANDOVER MASSACHUSETTS

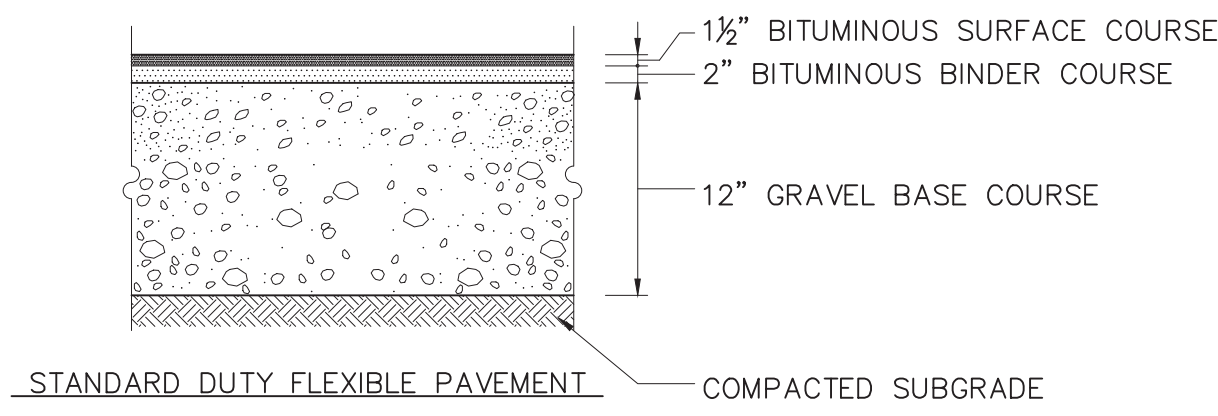
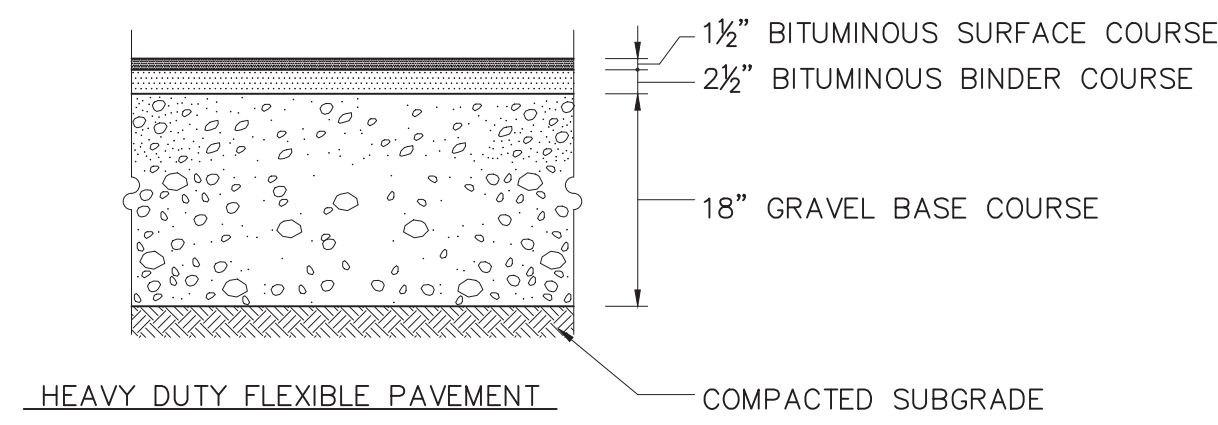
SCALE:	HORIZ.: 1"=50'
	VERT.: NAVD88
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88
50 25 0 25 50 GRAPHIC SCALE	

MBL
LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P.508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
EROSION CONTROL & DEMOLITION PLAN
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022
C-8.2





NOTES:

- PAVEMENT SECTIONS SHOWN FOLLOW GEOTECHNICAL ENGINEER REPORT RECOMMENDATIONS DEVELOPED BY GEOENGINEERS USA DATED SEPTEMBER 9, 2022
- SEE DETAIL ON SHEET C-9.13 FOR PAVEMENT SECTION WITHIN STATE HIGHWAY LAYOUT.

COMPOSITION AND COMPACTION ACCEPTANCE TESTS

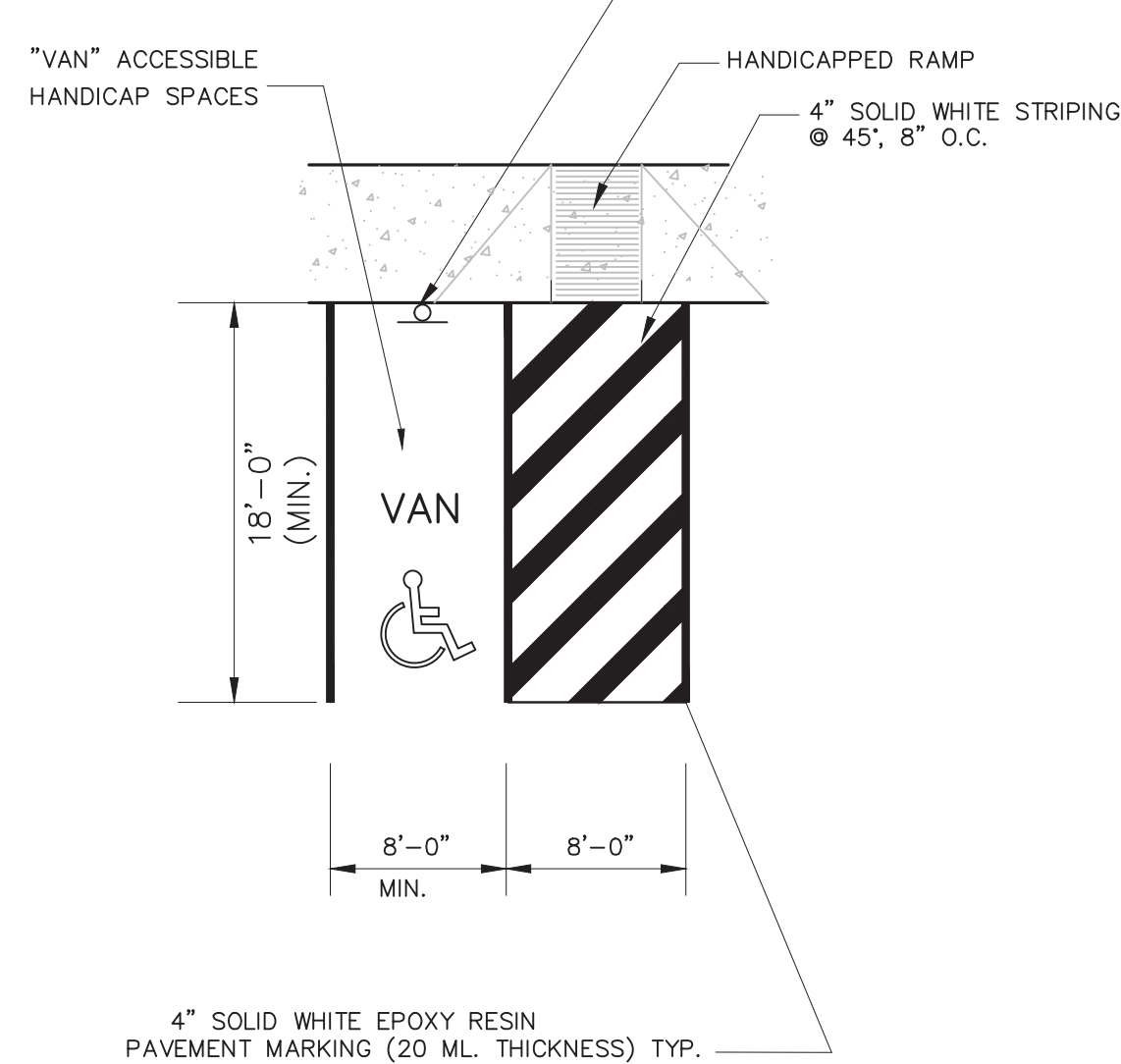
- OBTAIN SAMPLES FROM PLANT TO INDICATE CONFORMANCE WITH M3.13.0
- PAVEMENT DENSITY AS OUTLINED IN M3.06.0
- ALL SAMPLES TO BE TAKEN IN ACCORDANCE WITH AASHTO R97
- MATERIALS SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED IN SECTION M3. DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS

MINERAL AGGREGATE :M3.06.2 BITUMINOUS MATERIALS :M3.01.0
 MINERAL FILLER :M3.10.5 COMPOSITION OF BASE COURSE :M2.01.7

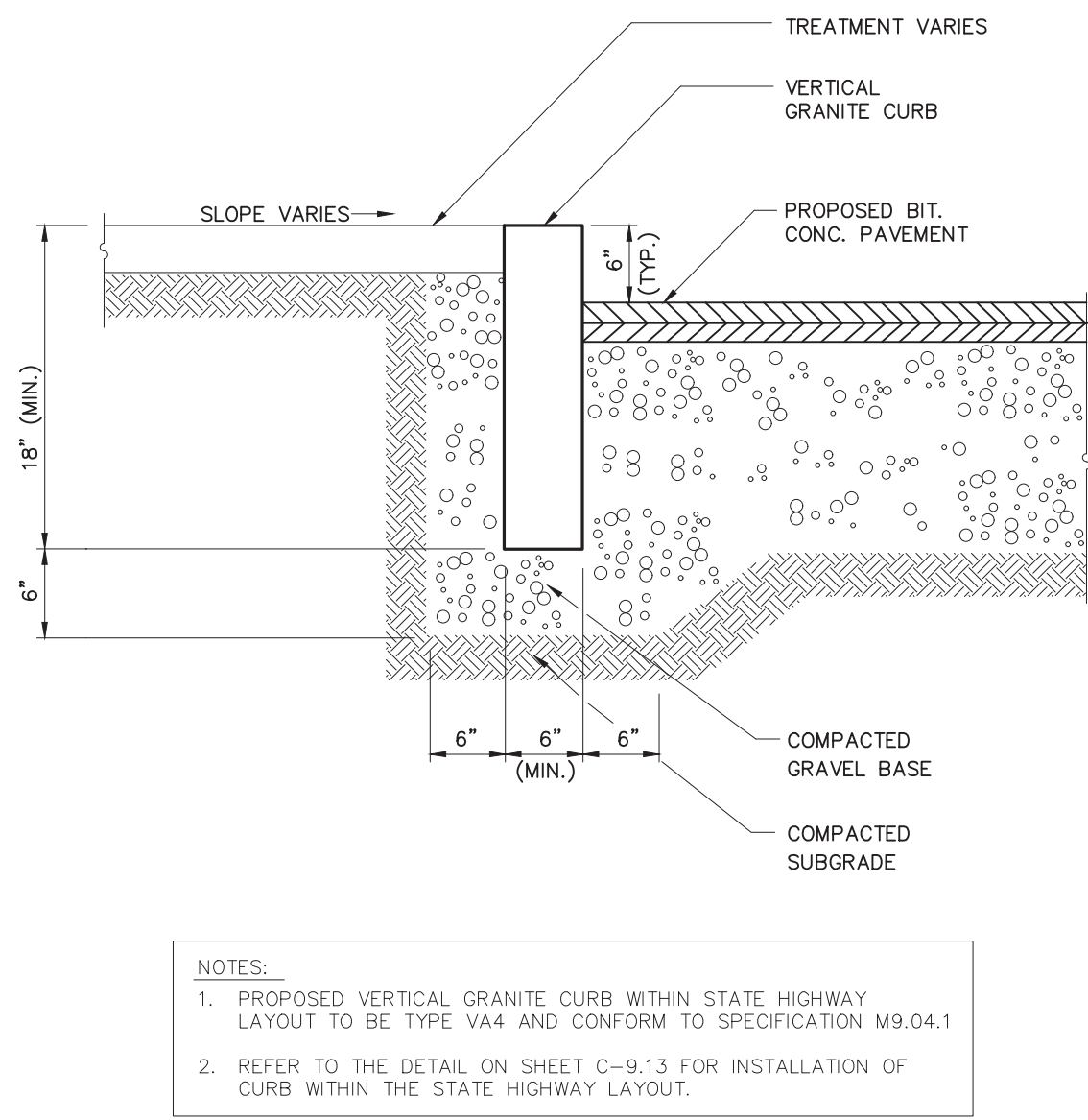
- THE BITUMINOUS CONCRETE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT SECTIONS/PROVISIONS OF SECTION 460 FOR CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1
- CLASS I BITUMINOUS PAVEMENT, TYPE I-1 REQUIRED THE SAME TESTING AS BASE COURSE AND SHALL HAVE A MINIMUM OF 95% COMPACTION. TESTING TO BE COMPLETED BY METHODS OUTLINED IN M3.13.0

BITUMINOUS CONCRETE PAVEMENT SECTIONS
NOT TO SCALE

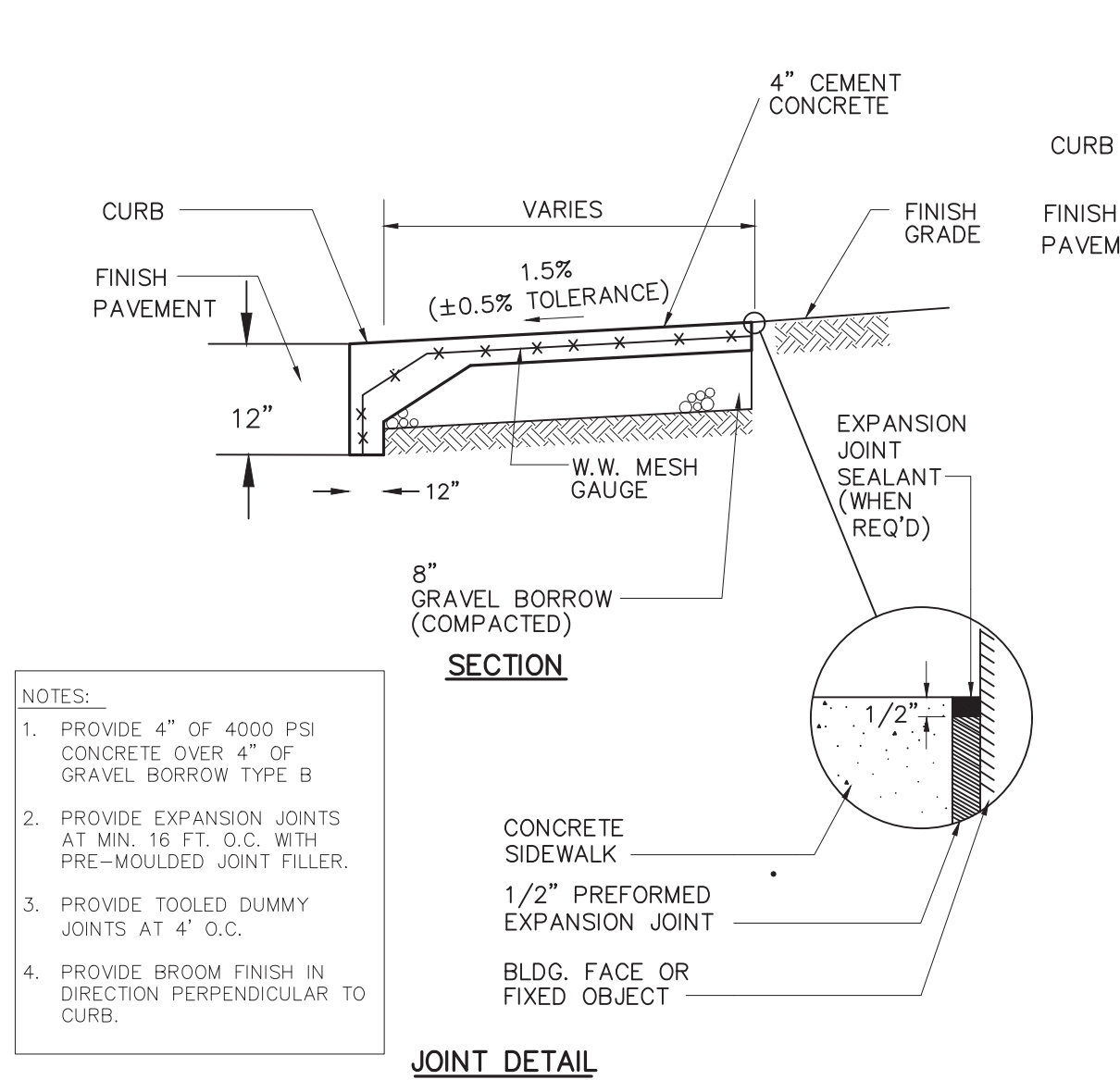
NOTE: ACCESSIBLE SPACE AND ACCESS AISLE SHALL BE GRADED TO BE 2% OR LESS IN ANY DIRECTION



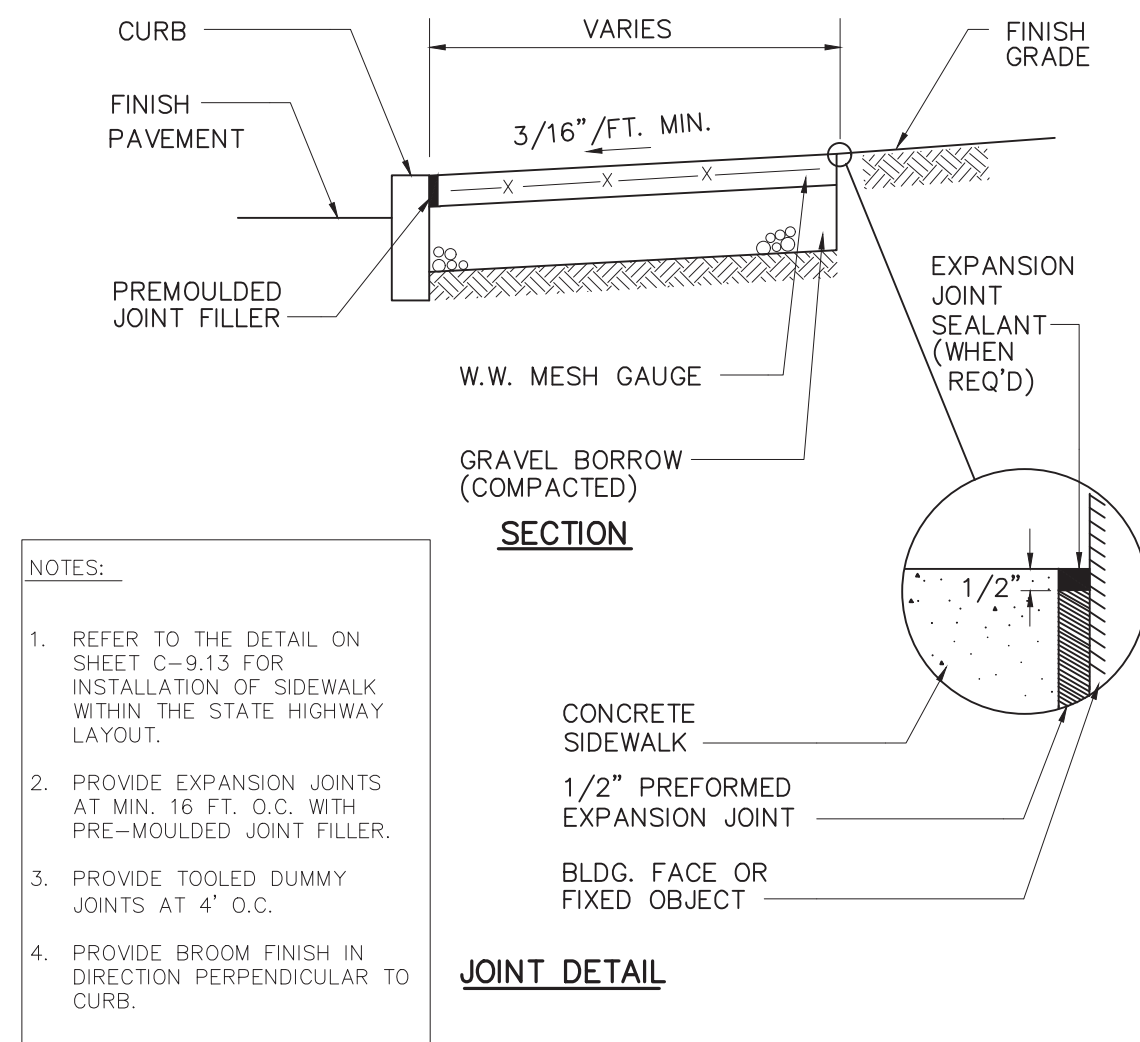
HANDICAP PARKING STALL LAYOUT
NOT TO SCALE



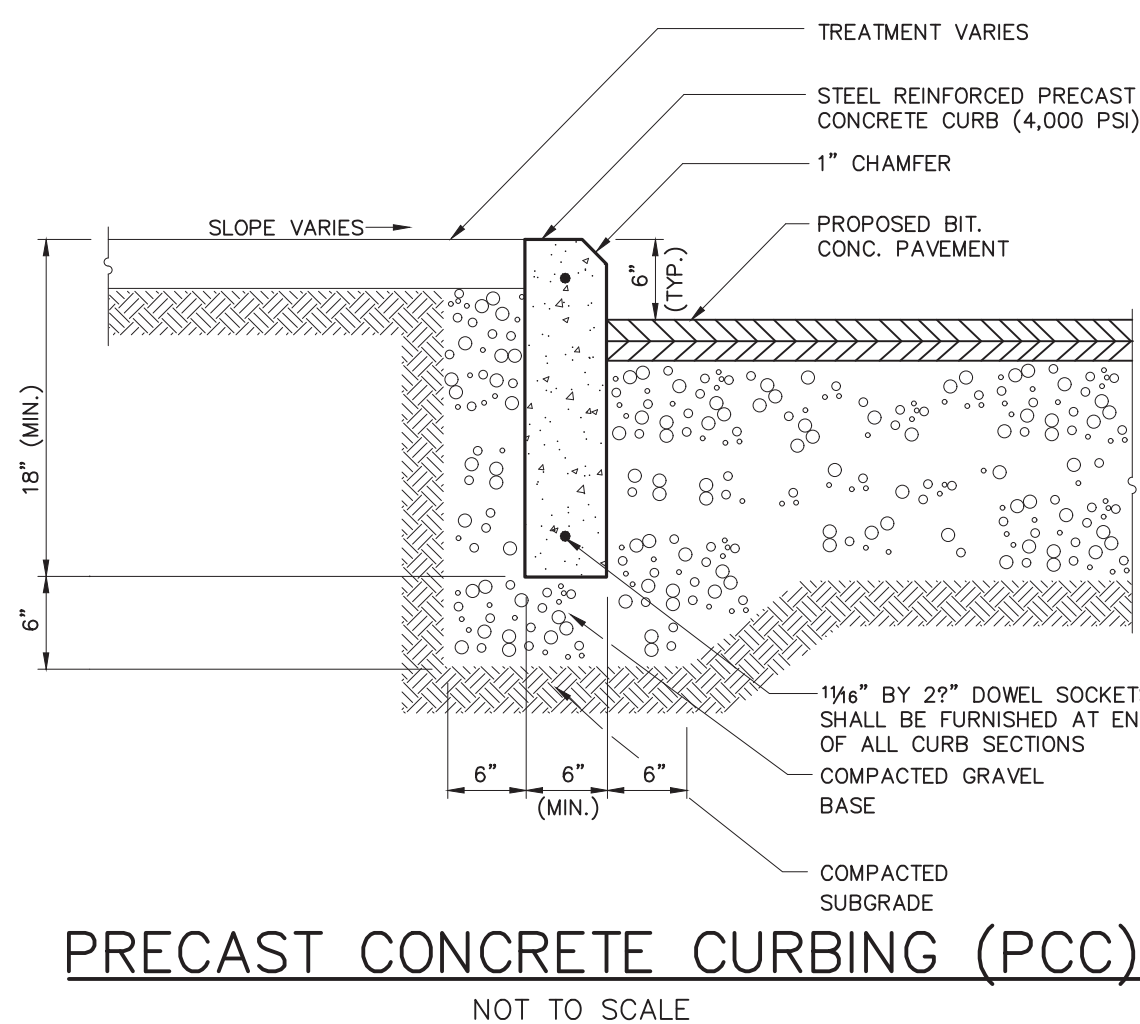
VERTICAL GRANITE CURB (VGC)
NOT TO SCALE



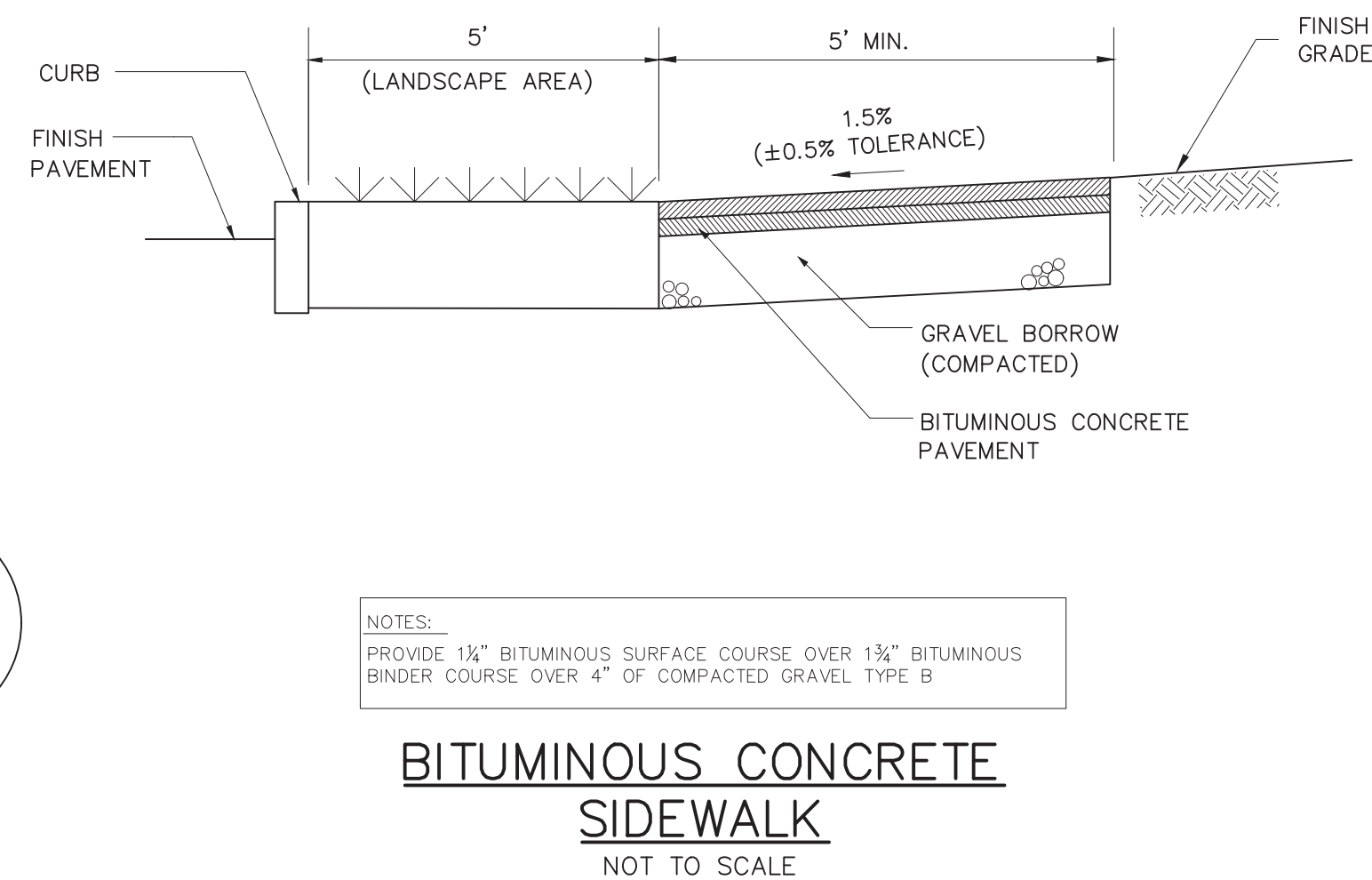
MONOLITHIC CONCRETE SIDEWALK AND CURB
NOT TO SCALE



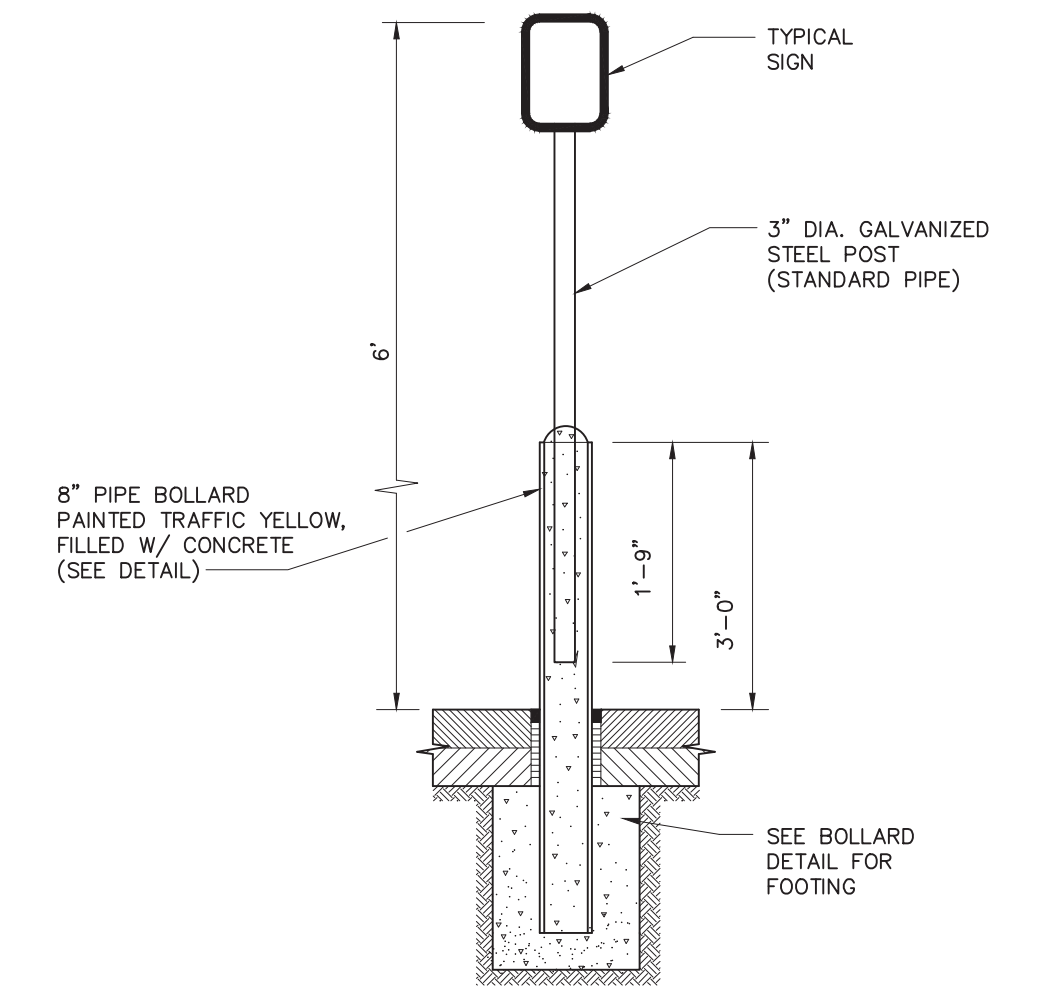
CONCRETE SIDEWALK (TYP.)
NOT TO SCALE



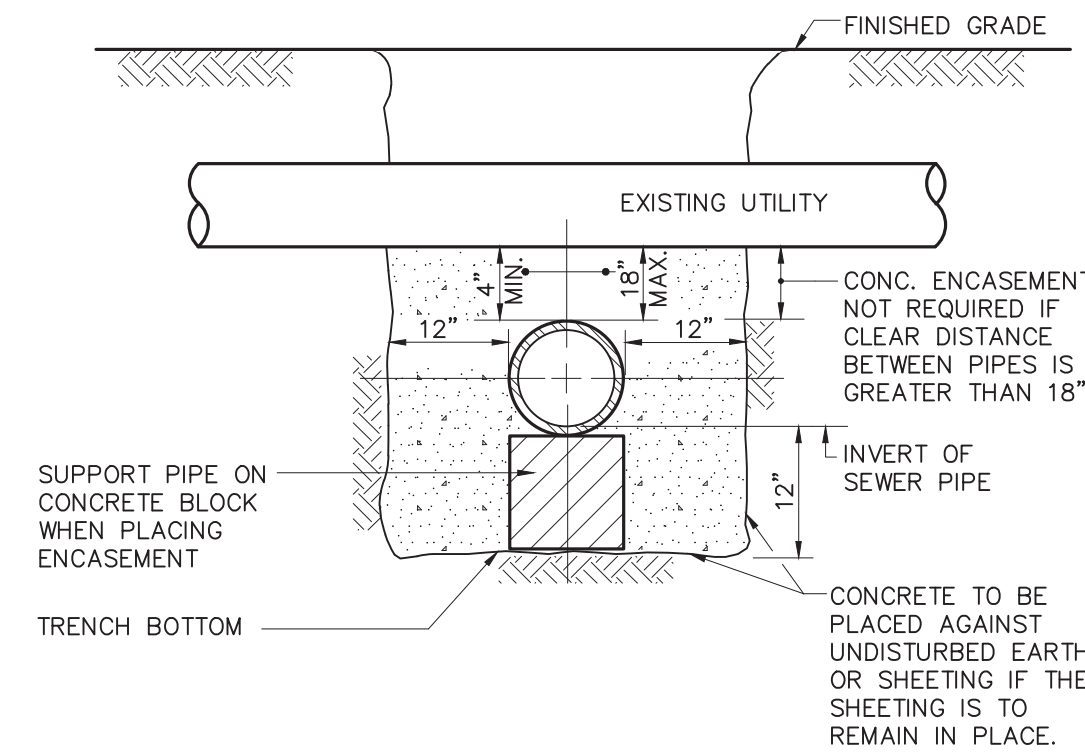
PRECAST CONCRETE CURBING (PCC)
NOT TO SCALE



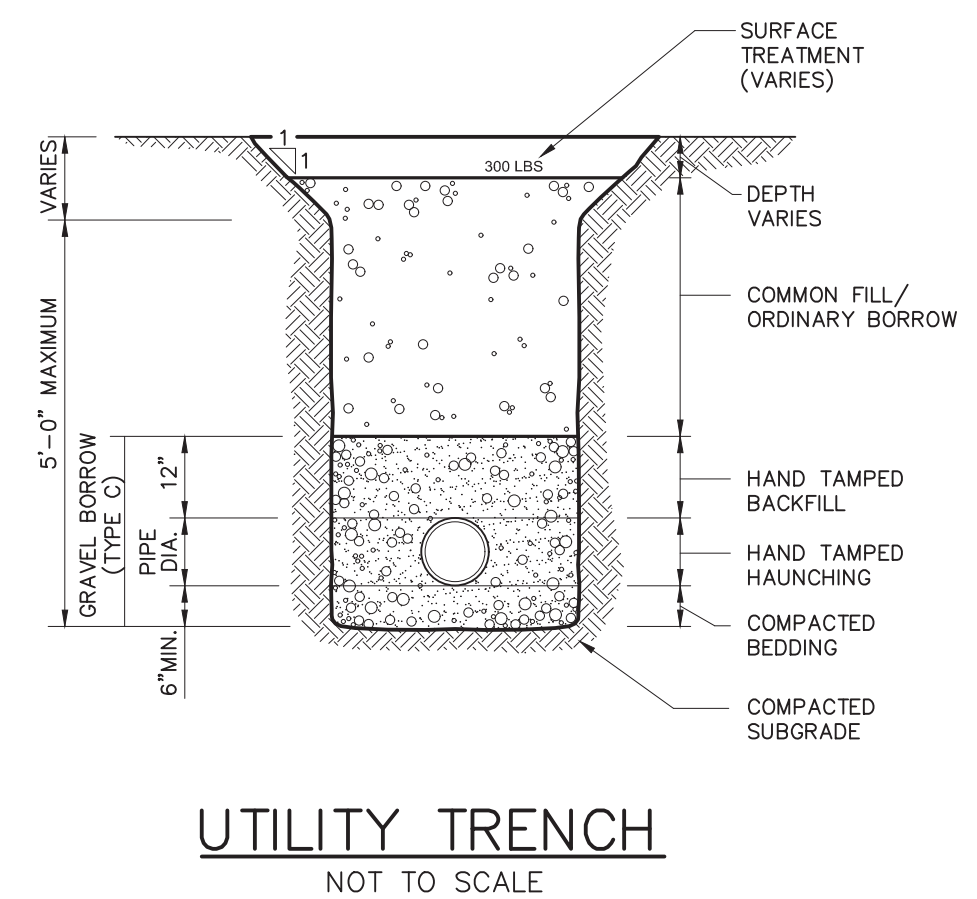
BITUMINOUS CONCRETE SIDEWALK
NOT TO SCALE



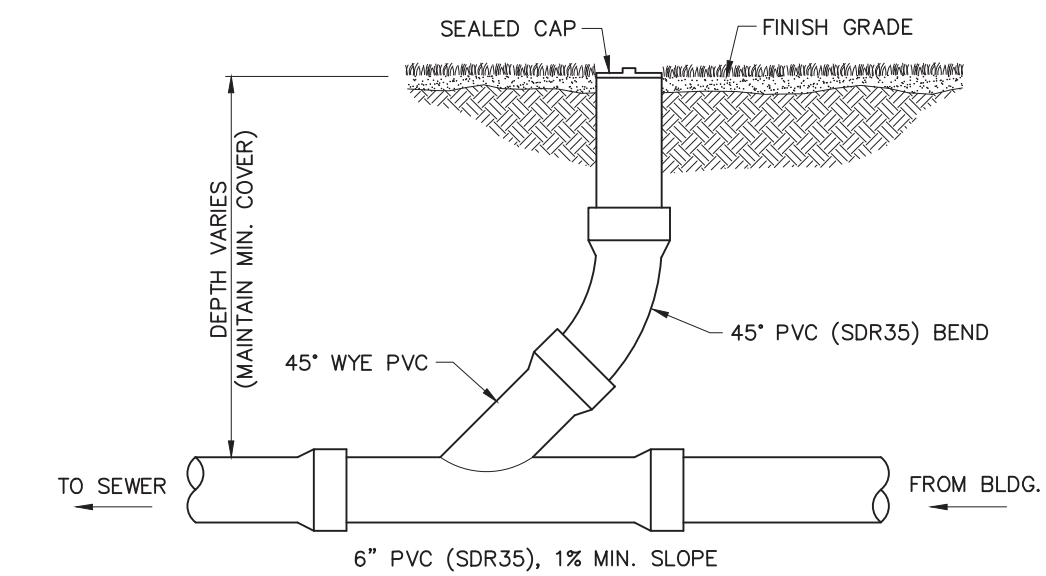
HANDICAP PARKING SIGN BASE (IN PAVED AREA)
NOT TO SCALE



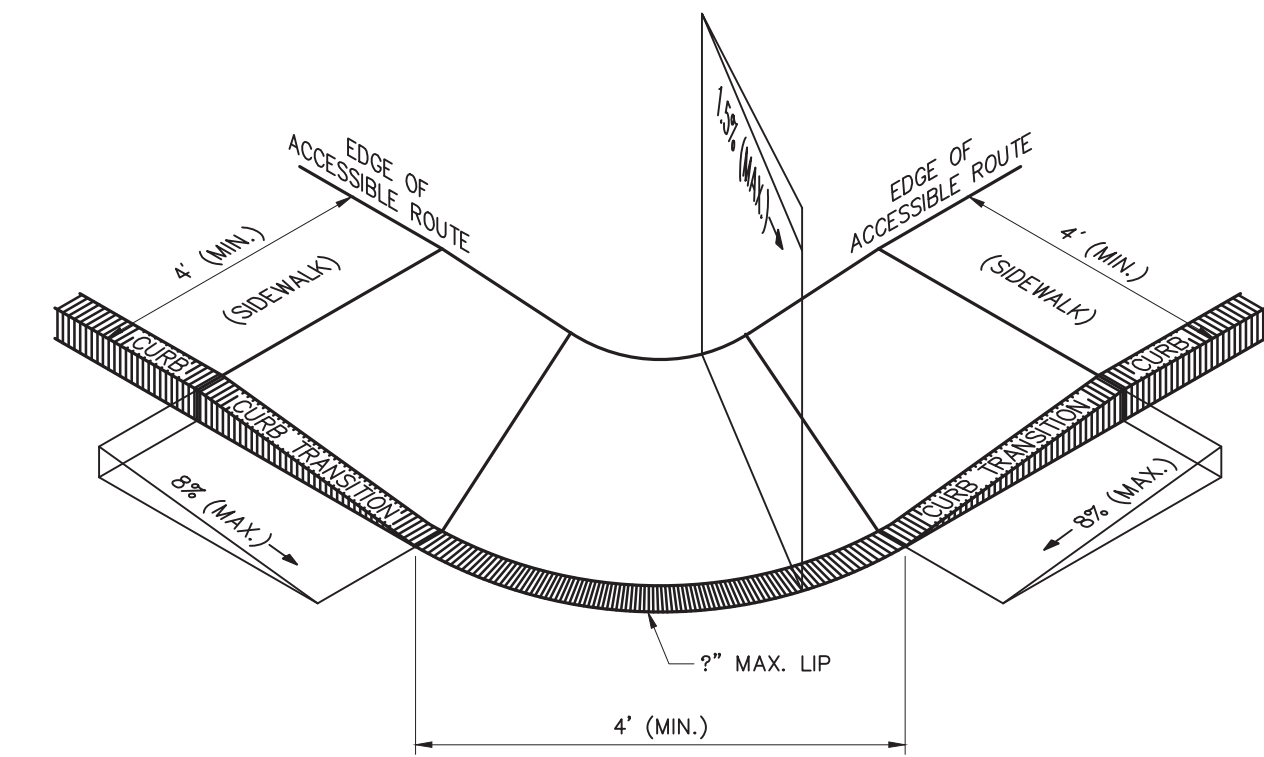
CONCRETE ENCASEMENT AT UTILITY CROSSING
NOT TO SCALE



UTILITY TRENCH
NOT TO SCALE



SEWER CLEANOUT
NOT TO SCALE



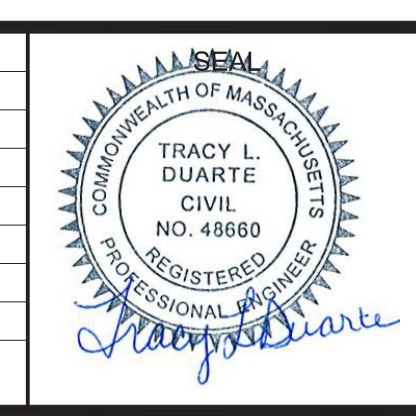
- NOTES:**
- THE MAXIMUM ALLOWABLE ROUTE (SIDEWALK) AND CURB RAMP CROSS SLOPES SHALL BE 1.5%
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMP SHALL BE 8%
 - A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
 - CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
 - BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
 - SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP - TYPE 'C'
NOT TO SCALE



LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:04:45 PM, DWG To PDF.pc3
 LMAN: CTB:
 MS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
		REVISIONS	



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.:
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P.508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

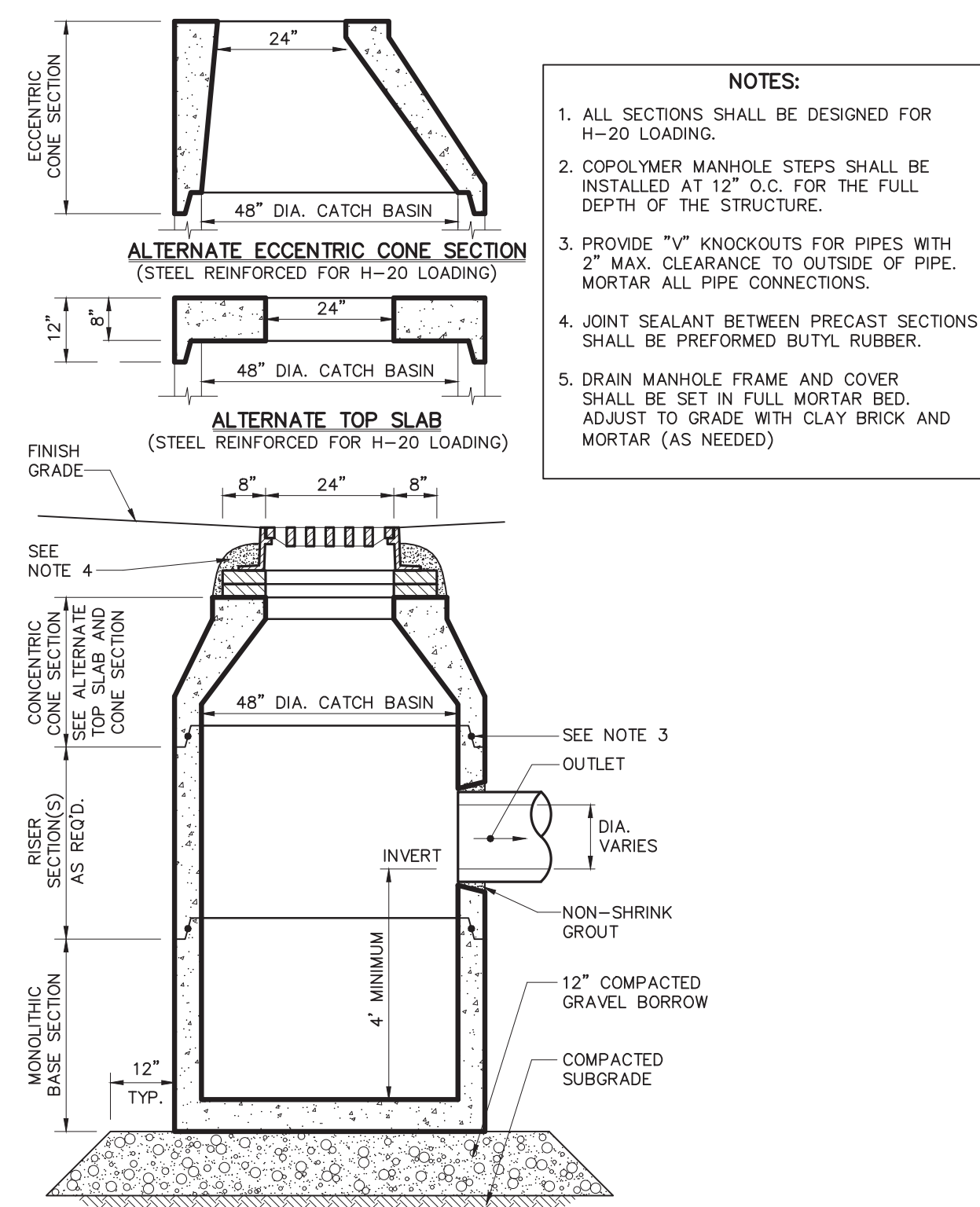
PROPOSED WAREHOUSE DEVELOPMENT

DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01

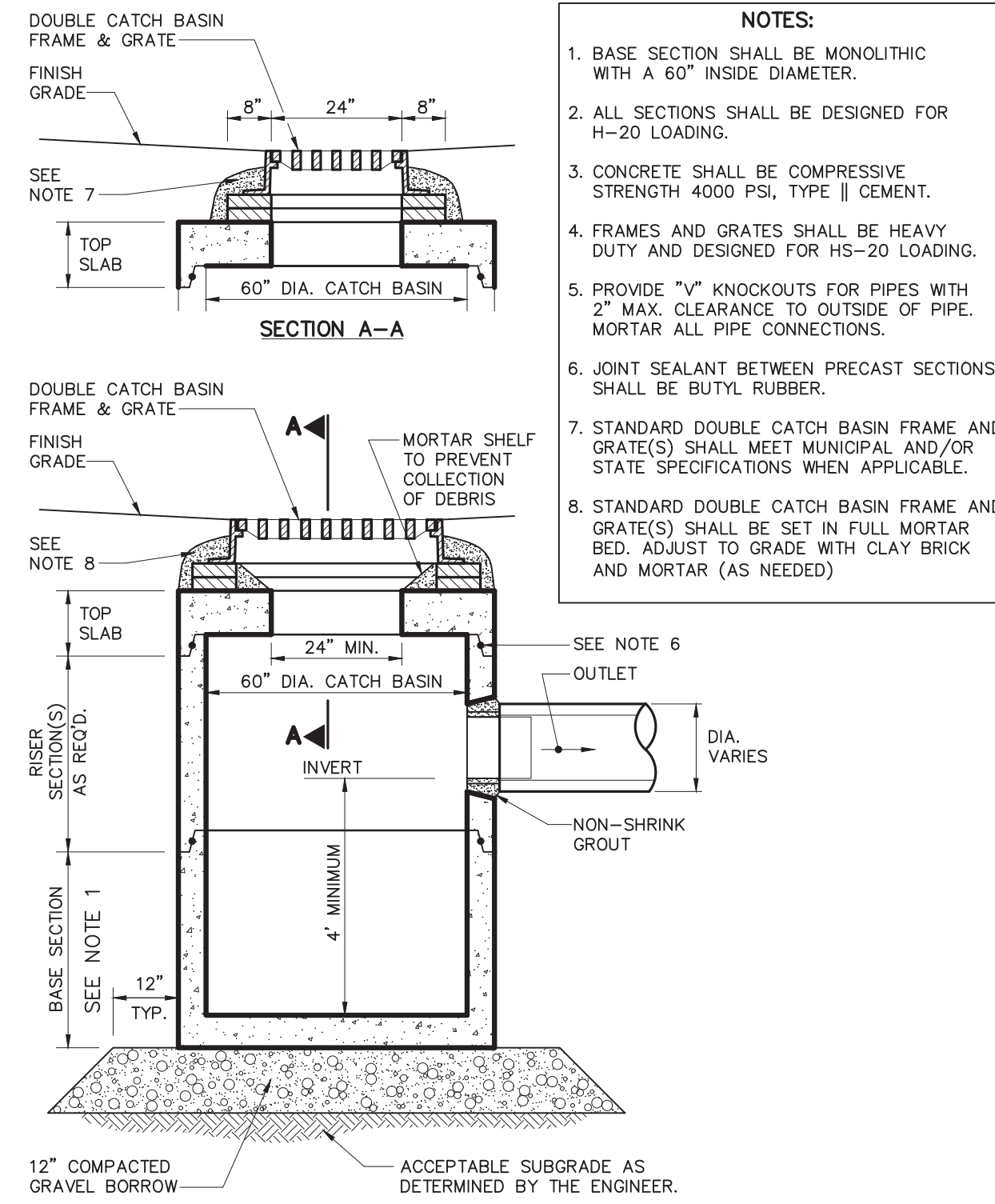
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

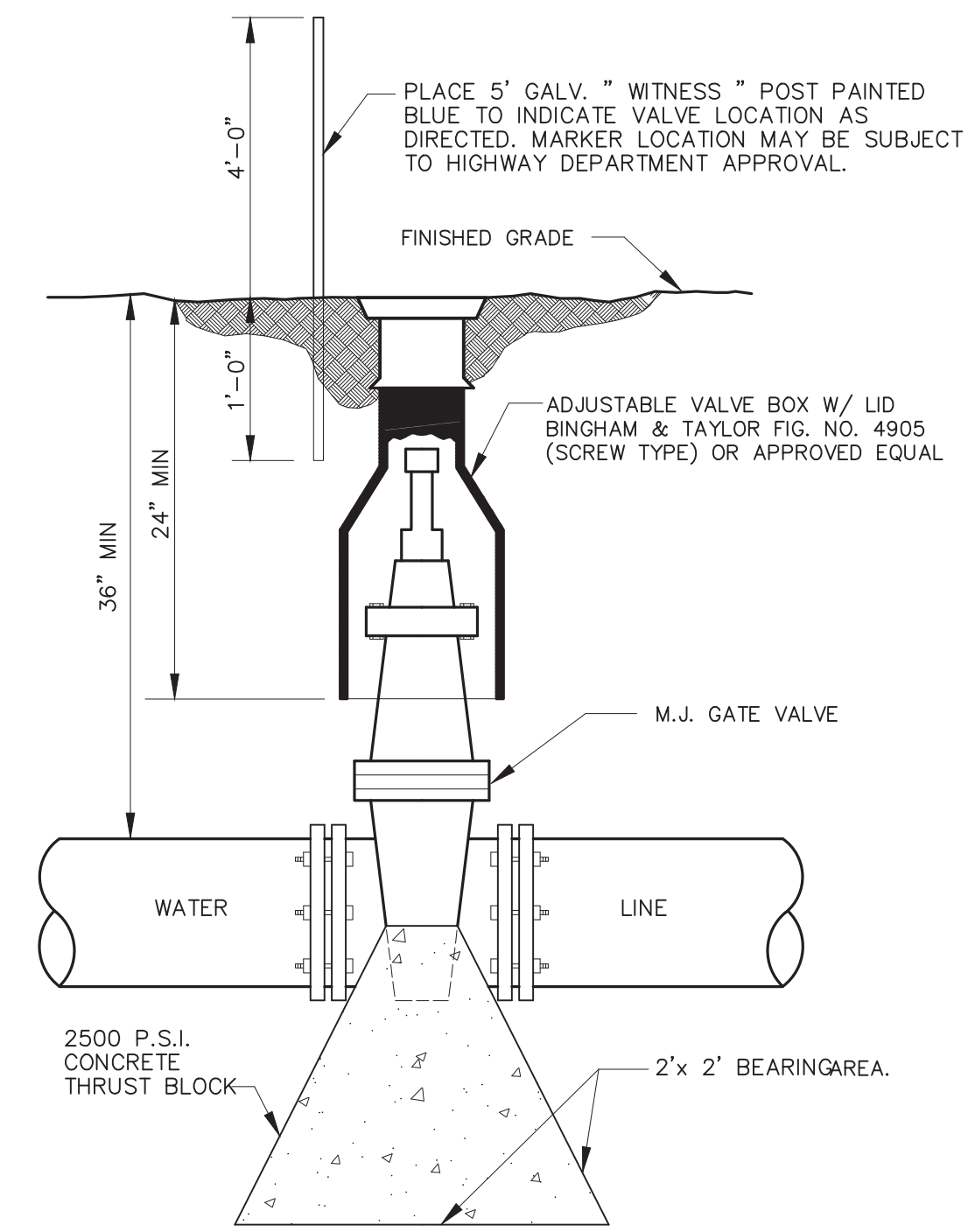
C-9.0



CATCH BASIN (CB)
NOT TO SCALE

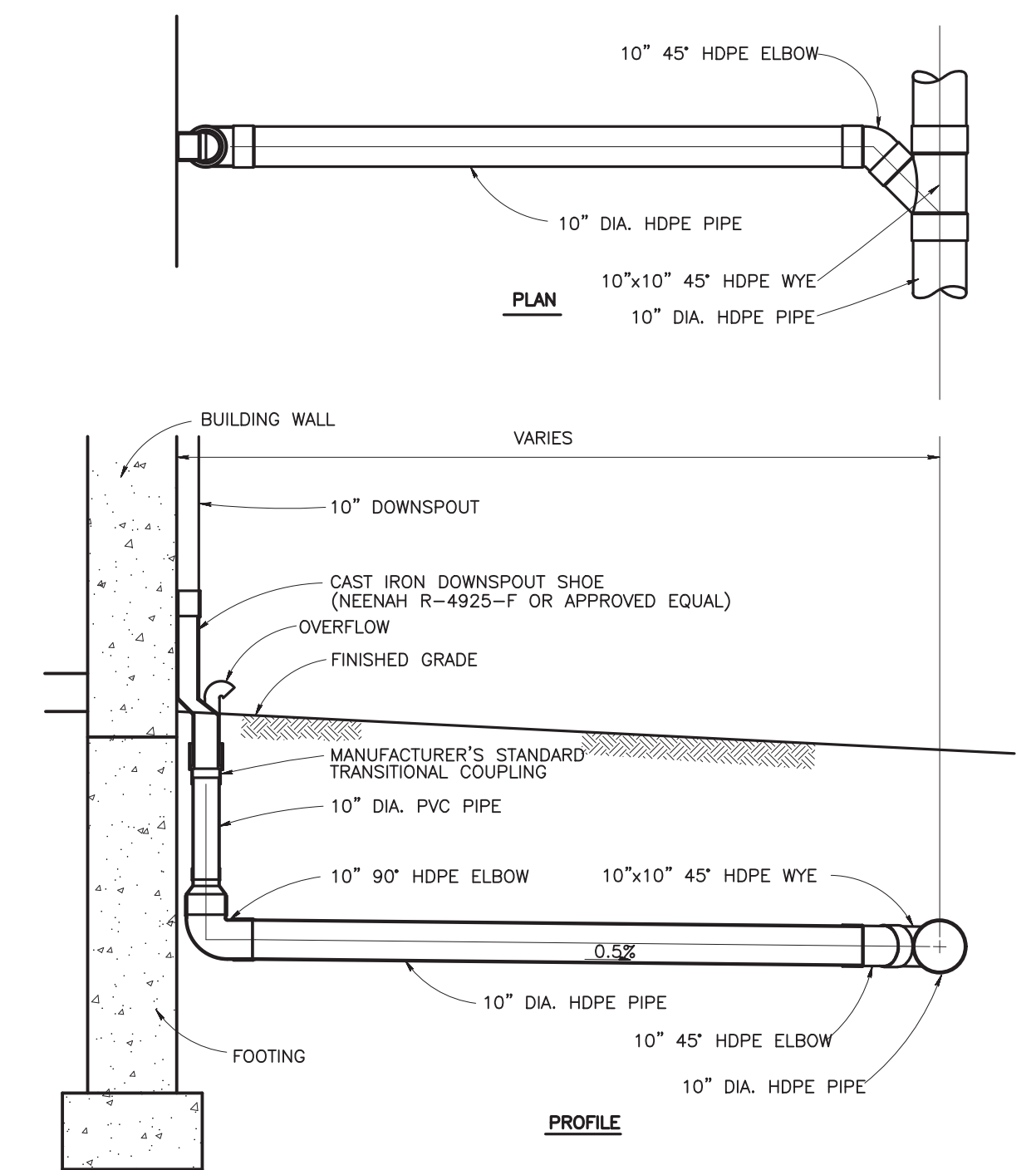


DOUBLE GRATE CATCH BASIN (DCB)
NOT TO SCALE

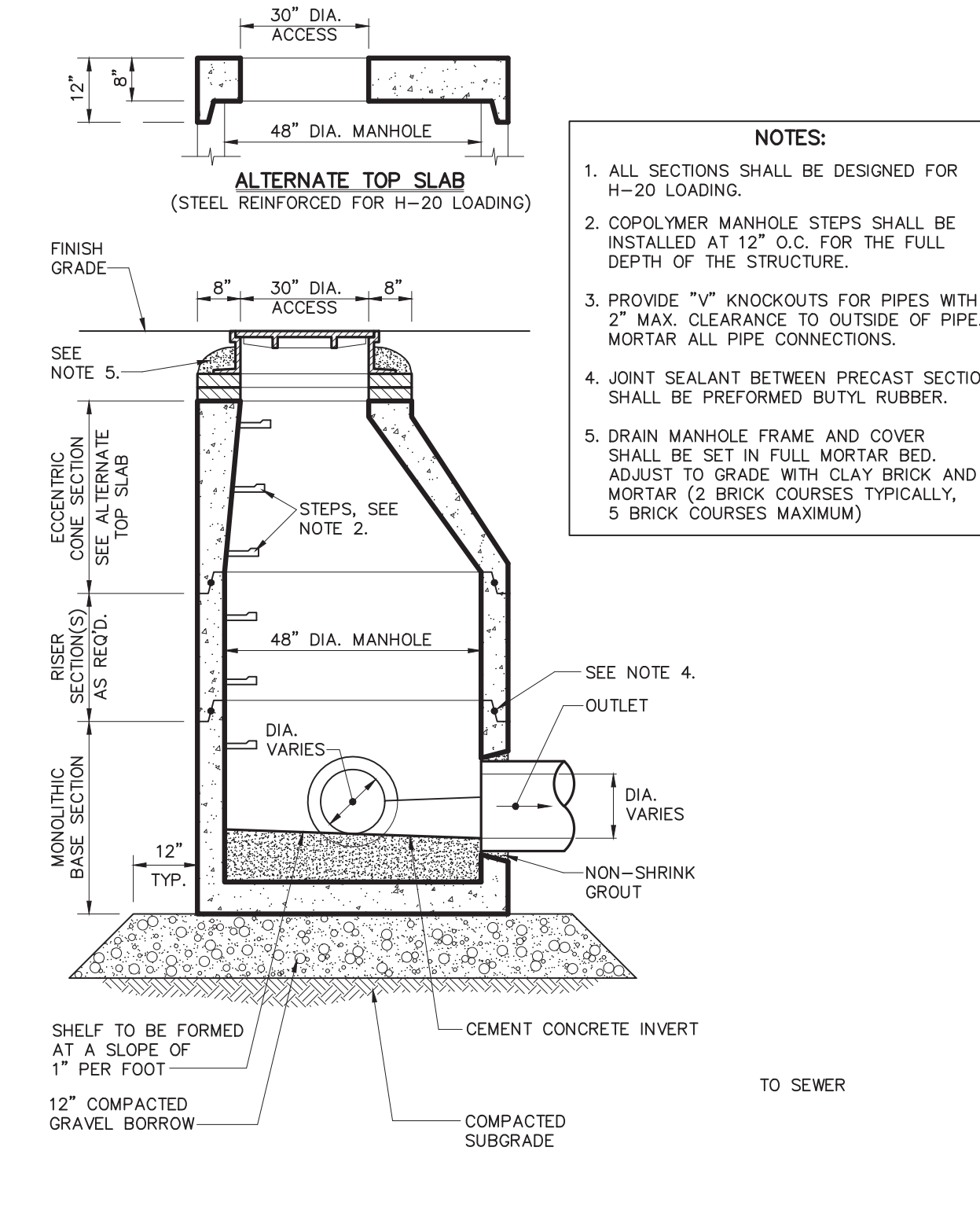


NOTE : IN REMOTE AREAS, VALVE BOXES SHALL EXTEND SIX (6) INCHES ABOVE GRADE.

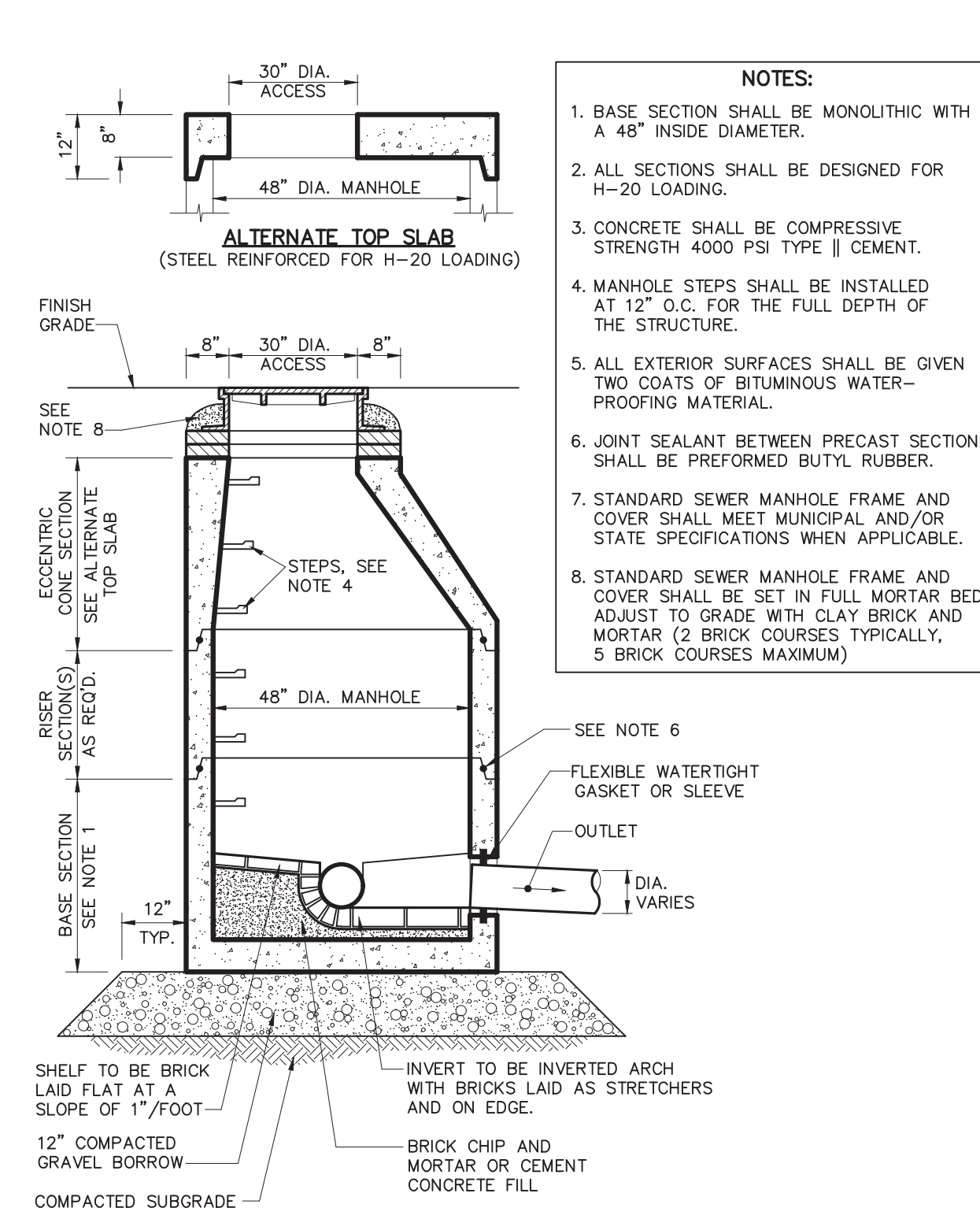
GATE VALVE
NOT TO SCALE



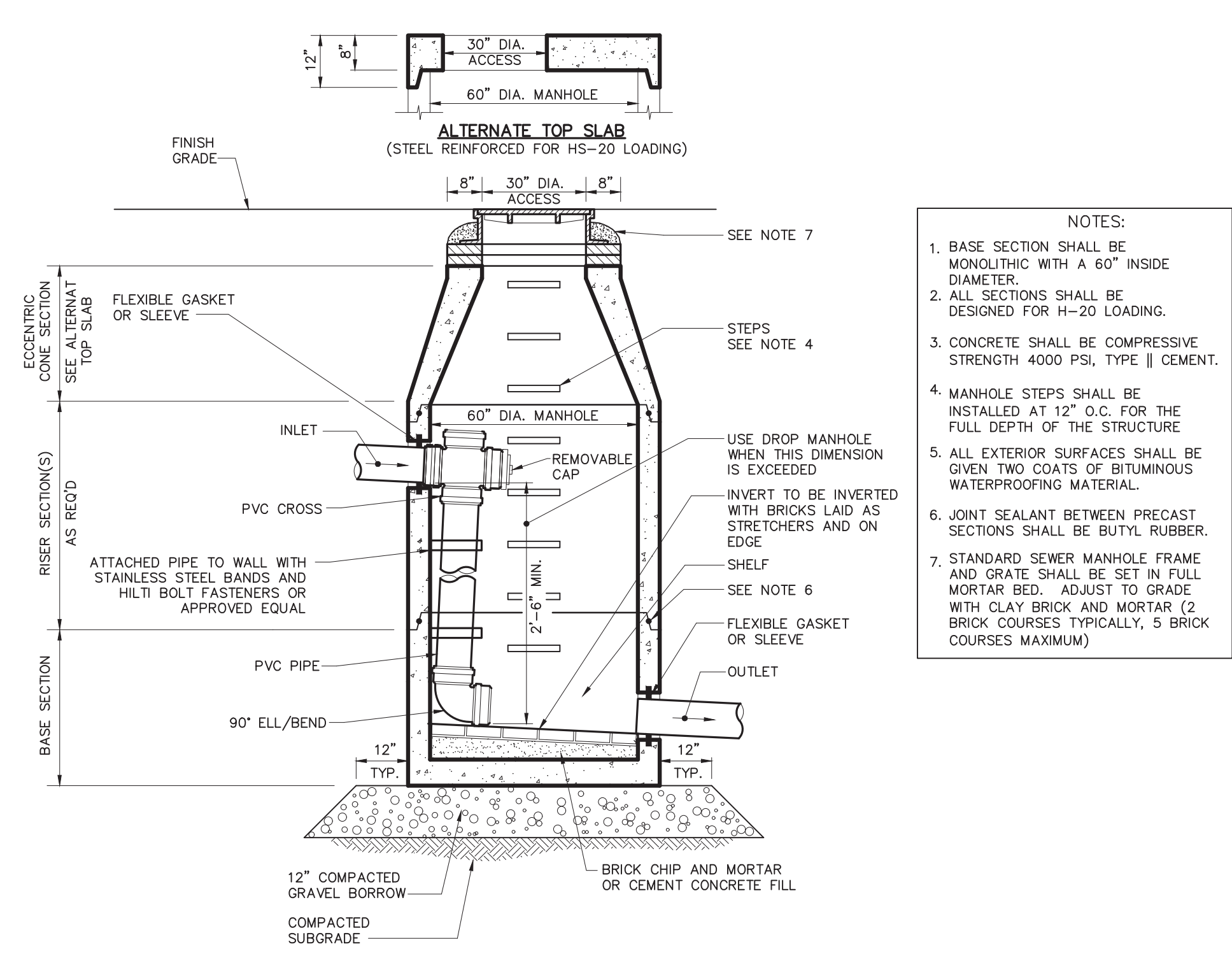
ROOF DRAIN DETAIL
NOT TO SCALE



DRAIN MANHOLE (DMH)
NOT TO SCALE



SEWER MANHOLE
NOT TO SCALE



INTERNAL SEWER DROP MANHOLE
N.T.S.

TABLE OF DIMENSIONS

BENDS	B	C	D	E	F	BENDS	B	C	D	E	F	
6"	11 1/4"	8"	15"	12"	24"	12"	6"	45"	8"	30"	12"	24"
6"	22 1/2"	-	19"	-	-	13"	6"	90"	-	30"	-	27"
8"	11 1/4"	-	20"	-	-	12"	8"	45"	-	30"	-	24"
8"	22 1/2"	-	22"	-	-	17"	8"	90"	-	38"	-	36"
12"	11 1/4"	-	30"	-	-	15"	12"	45"	-	40"	-	40"
12"	22 1/2"	-	35"	-	-	25"	12"	90"	-	60"	-	52"

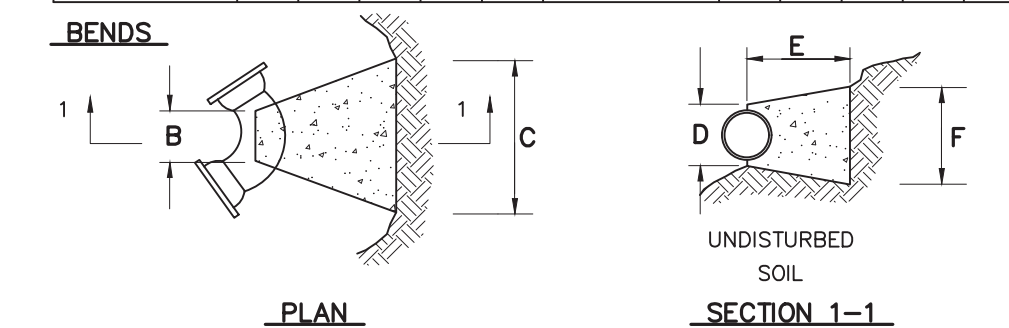
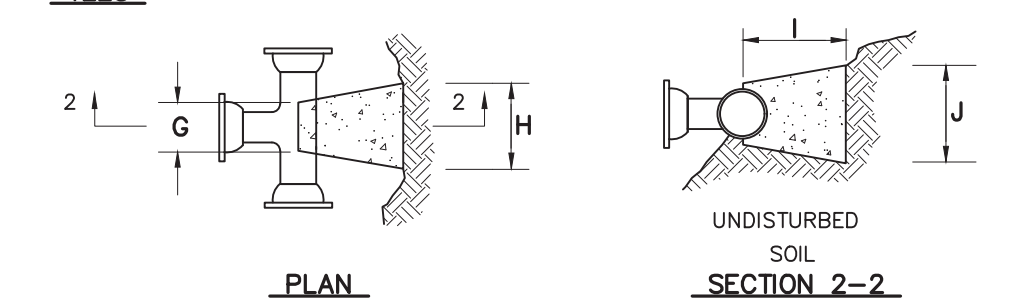


TABLE OF DIMENSIONS

TEES	G	H	I	J	TEES	G	H	I	J
6" x 6" x 6"	12"	24"	24"	18"	12" x 12" x 6"	12"	24"	24"	18"
8" x 8" x 6"	-	-	-	-	12" x 12" x 8"	-	-	-	-
8" x 8" x 8"	-	-	-	-	12" x 12" x 12"	-	-	-	-

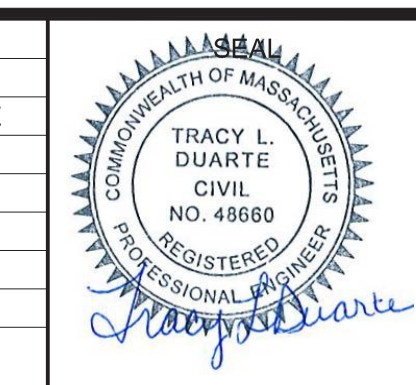


- NOTES:**
- PROVIDE BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAME SIZE AS REQUIRED FOR TEES). PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES.
 - CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING.

CONCRETE THRUST BLOCK
N.T.S.



No.	DATE	REVISIONS	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS		JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS		JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS		JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER		JAW
No.	DATE	REVISIONS	DESCRIPTION	BY



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:

HORIZ.:	
VERT.:	

DATUM:

HORIZ.:	NAD83
VERT.:	NAVD88

GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P-508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

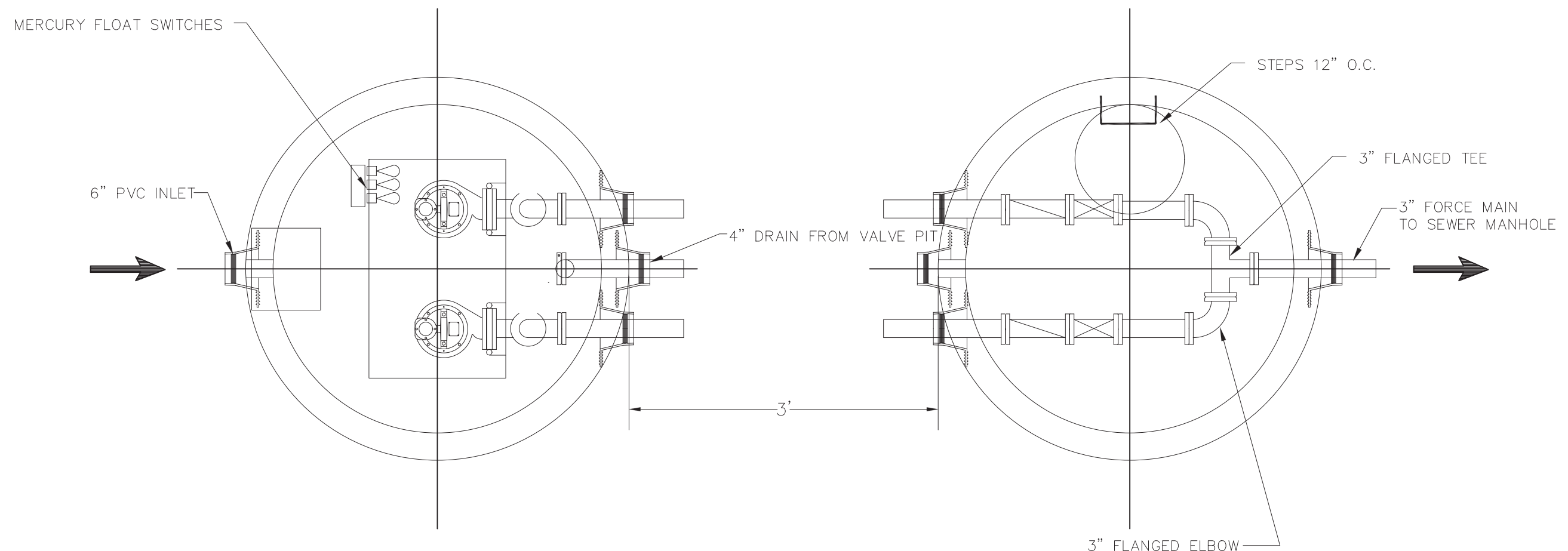
DETAILS
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01

FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022

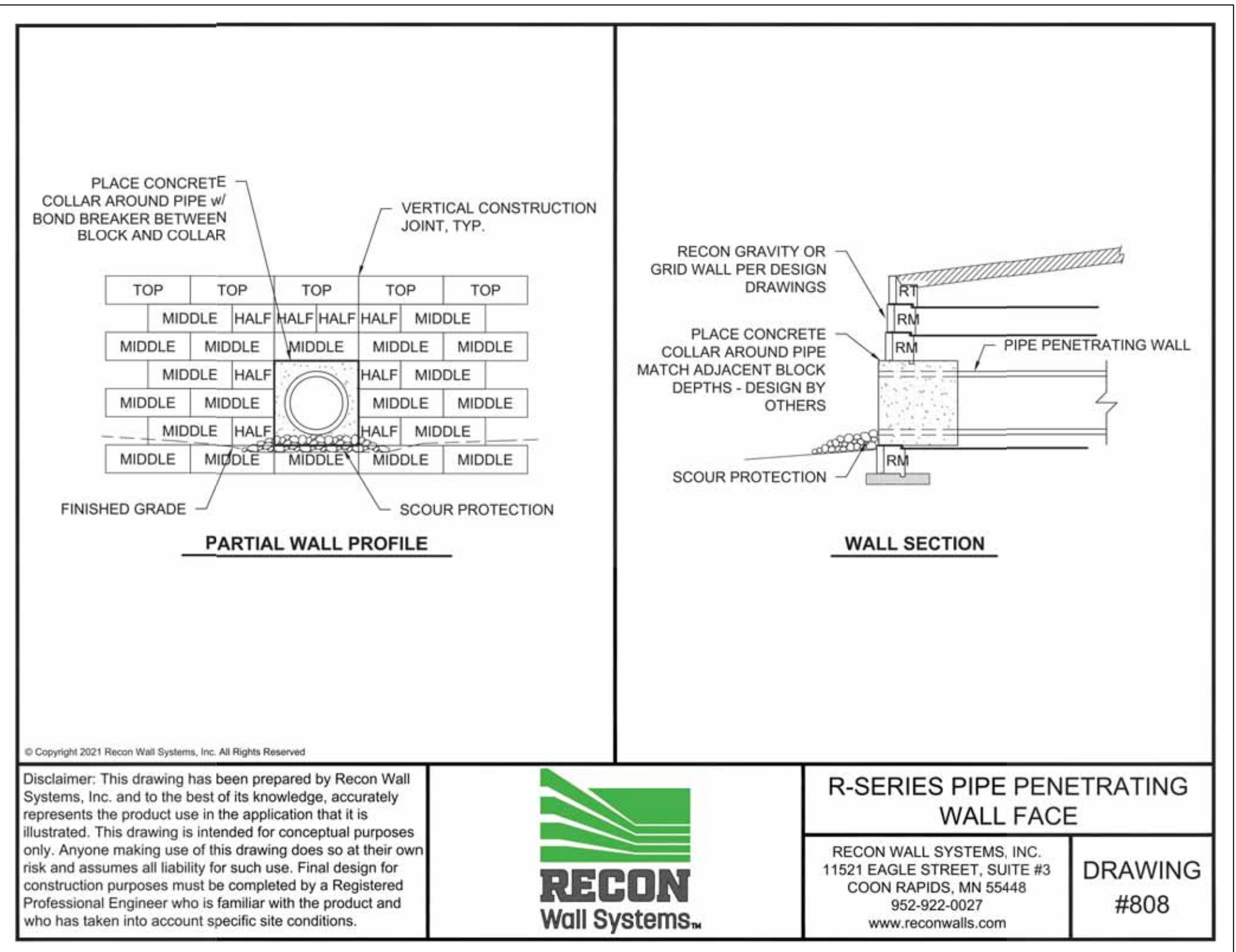
C-9.1

LUGS: x:\2021\036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:04:46 PM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:



PUMP STATION PLAN
N.T.S.

VALVE CHAMBER PLAN
N.T.S.



PARTIAL WALL PROFILE

WALL SECTION

© Copyright 2021 Recon Wall Systems, Inc. All Rights Reserved.

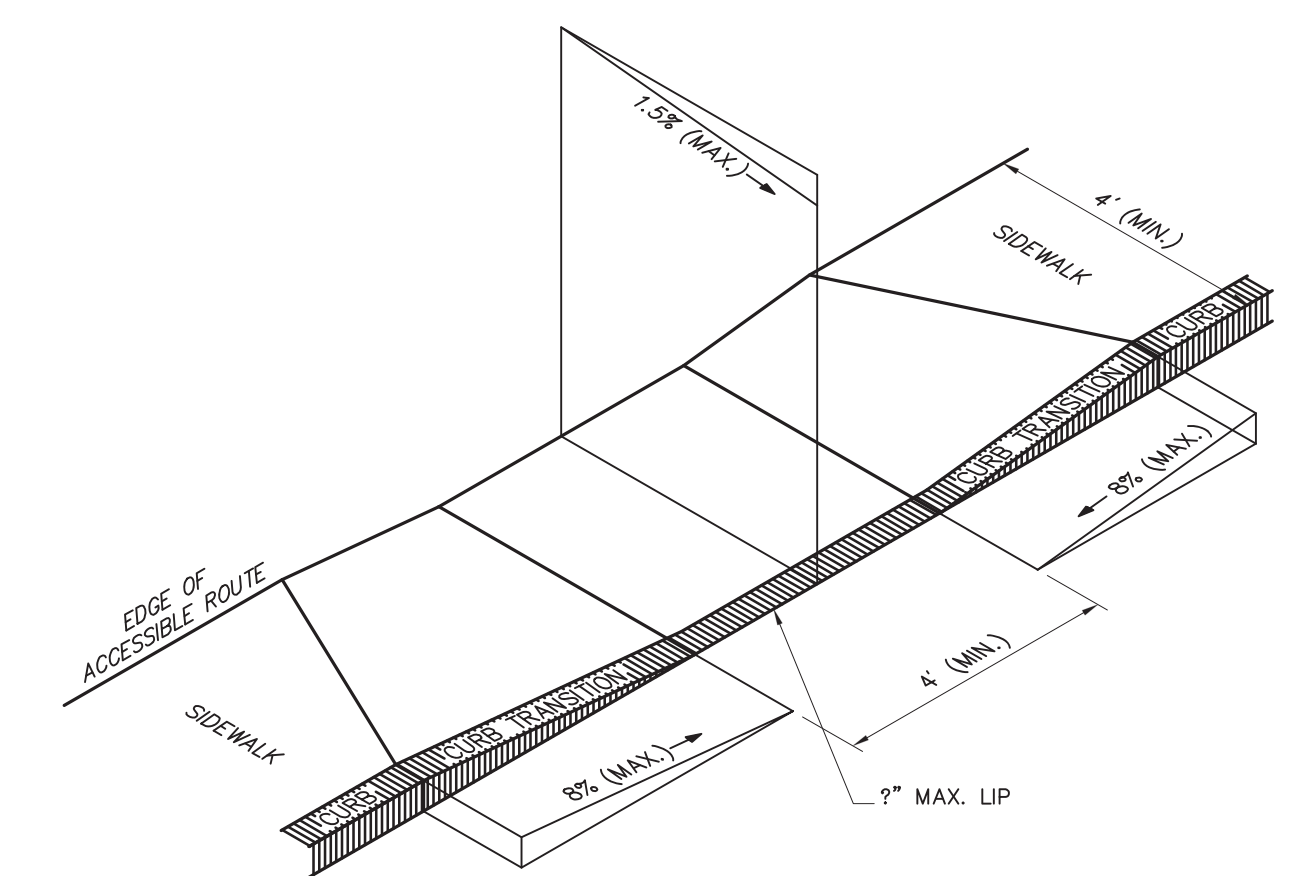
Disclaimer: This drawing has been prepared by Recon Wall Systems, Inc. and to the best of its knowledge, accurately represents the product use in the application that it is illustrated. This drawing is intended for conceptual purposes only. Anyone making use of this drawing does so at their own risk and assumes all liability for such use. Final design for construction purposes must be completed by a Registered Professional Engineer who is familiar with the product and who has taken into account specific site conditions.

RECON
Wall Systems, Inc.

R-SERIES PIPE PENETRATING WALL FACE

RECON WALL SYSTEMS, INC.
11521 EAGLE STREET, SUITE #3
COON RAPIDS, MN 55448
952-922-0027
www.reconwalls.com

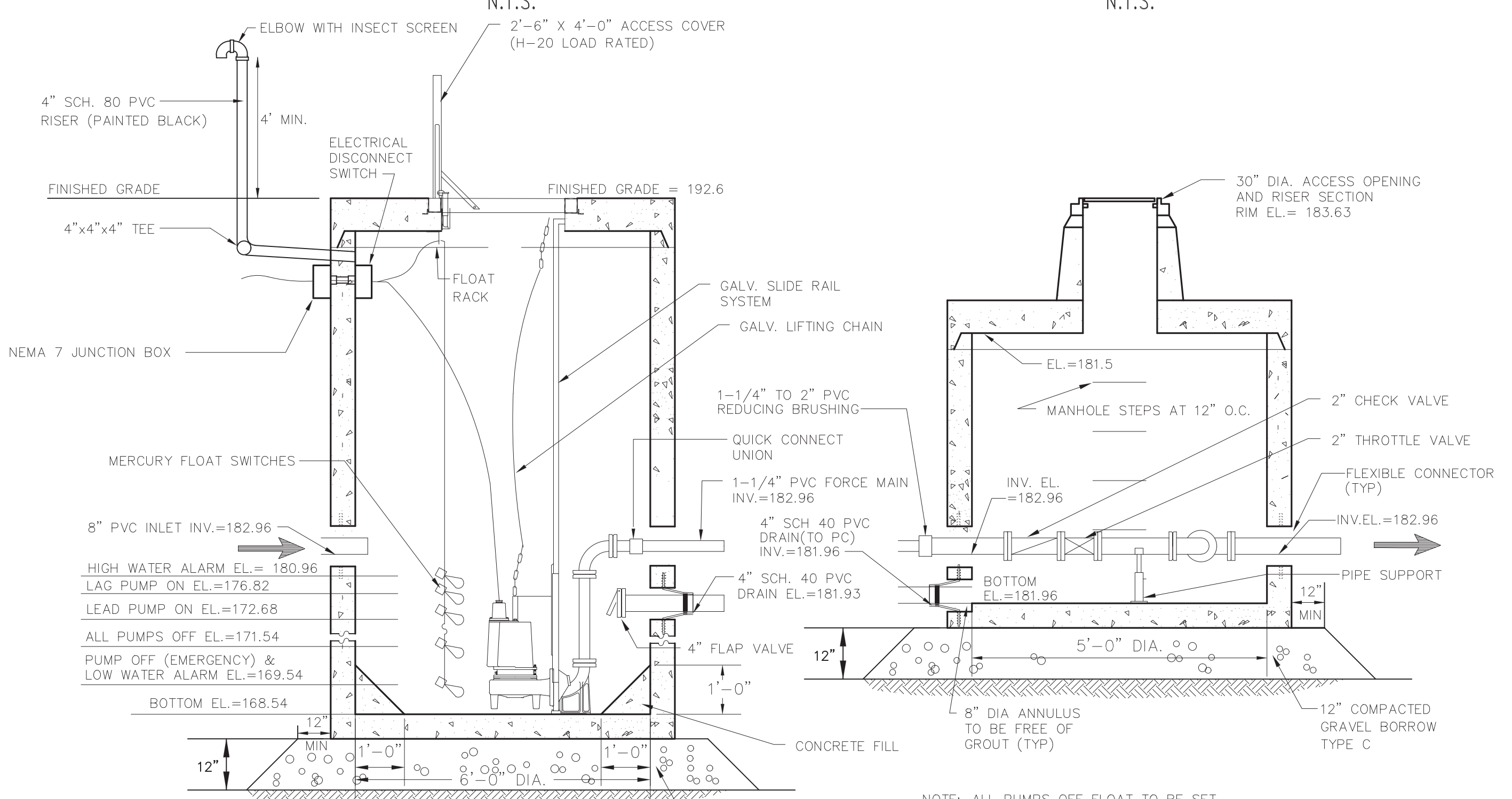
DRAWING #808



NOTES:

1. THE MAXIMUM ALLOWABLE ROUTE (SIDEWALK) AND CURB RAMP CROSS SLOPES SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMP SHALL BE 8%.
4. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP - TYPE 'A'
NOT TO SCALE



PUMP STATION DETAIL
NOT TO SCALE

Pump and Control Panel Specifications

PROVIDE A DUPLEX BARNES PUMP CONTROL PANEL, 115/230 VOLTS, NEMA 4 ENCLOSURE, ELAPSED TIME METERS (2) AND CYCLE COUNTER (2), OR APPROVED EQUAL. MOUNT CONTROL PANEL INSIDE BUILDING OR ON EXTERIOR OF BUILDING AND EQUIP WITH AUDIO/VISUAL HIGH WATER ALARM HORN AND LIGHT. ALONG WITH EMERGENCY AUTO DIALER TO PROP. MANAGER AND PUMP CO.

PROVIDE A DUPLEX SUBMERSIBLE GRINDER SEWAGE PUMPING SYSTEM: (2) BARNES PUMPS, SERIES 20VF, 2.0HP, 1.25" DISCHARGE, 240 VOLT THREE-PHASE MOTOR WITH A RATED CAPACITY OF 30 GPM AT A TOTAL DYNAMIC HEAD OF 20.61 FEET, OR APPROVED EQUAL.

THE ALARM AND PUMP SHALL BE ON SEPARATE DEDICATED ELECTRICAL CIRCUITS.

ELECTRICAL PERMITS ARE REQUIRED.

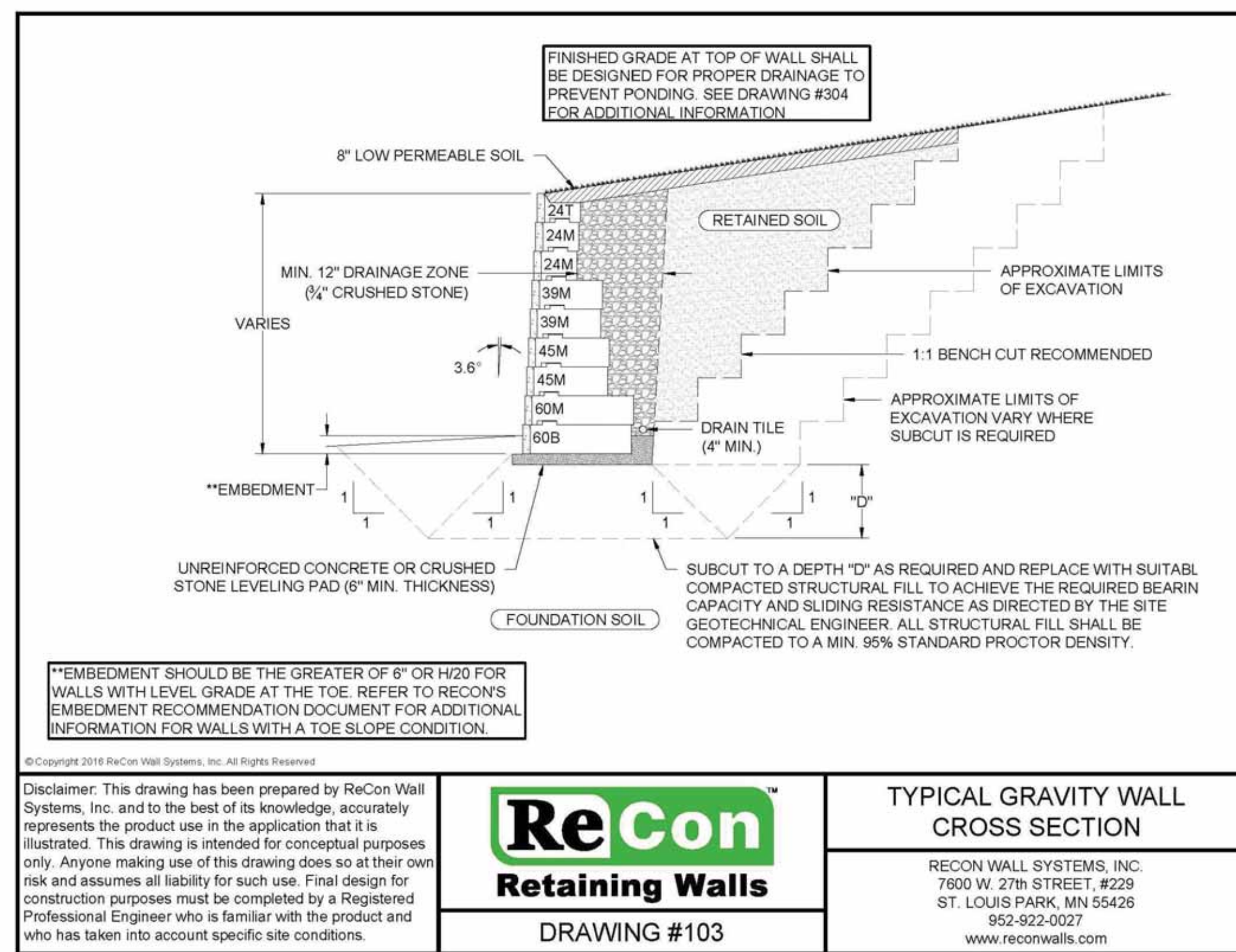
ALL WORK SHALL MEET THE STATE ELECTRICAL CODE.

CONTRACTOR/INSTALLER SHALL VERIFY PUMPS ARE SIZED PROPERLY BEFORE ORDERING AND INSTALLING.

Pump Calculations

STATIC DISCHARGE HEAD = 206.99 - 177.11 = 38.45 FT
 FRICTION LOSSES AND FITTING LOSSES FOR 4" PVC DISCHARGE LINE ABOUT 999 FT IN EQUIVALENT LENGTH AT 30 GPM
 RATE IS DETERMINED AS:
 $h_f = (0.2083)(999/130)^{1.85} \times (30^{1.85}/4^{4.87}) = 5.72$ FT
 IN WHICH "C" IS THE HAZEN-WILLIAMS COEFFICIENT (130 FOR AVE. LIFE OF PVC PIPE). THE PVC PIPE SHALL BE PRESSURE RATED FOR FORCE MAIN APPLICATION. ALL JOINTS SHALL BE PERMANENTLY BONDED AND SEALED.
 TOTAL DYNAMIC HEAD = 5.72 + 38.45 = 44.17 FT
 A PUMP CAPABLE OF DELIVERING 30 GPM AT A TDH OF 44.17 FT

** SEWER PUMP STATION ARE ESTIMATE AND CONTRACTOR TO VERIFY WITH PUMP MANUFACTURE PRIOR TO ORDERING



** EMBEDMENT SHOULD BE THE GREATER OF 6" OR H/20 FOR WALLS WITH LEVEL GRADE AT THE TOE. REFER TO RECON'S EMBEDMENT RECOMMENDATION DOCUMENT FOR ADDITIONAL INFORMATION FOR WALLS WITH A TOE SLOPE CONDITION.

© Copyright 2018 Recon Wall Systems, Inc. All Rights Reserved.

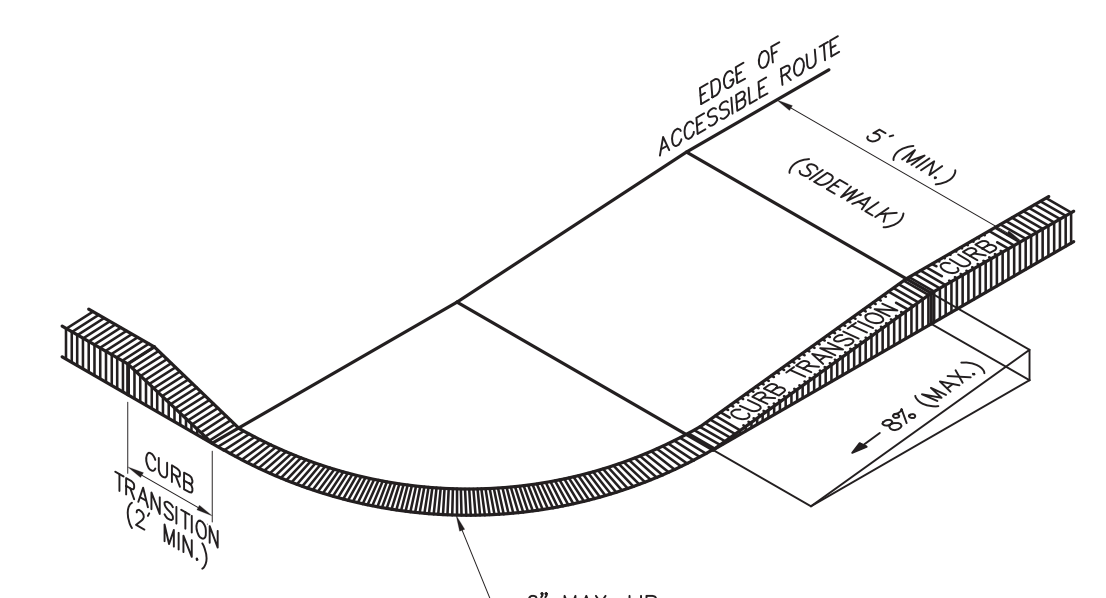
Disclaimer: This drawing has been prepared by ReCon Wall Systems, Inc. and to the best of its knowledge, accurately represents the product use in the application that it is illustrated. This drawing is intended for conceptual purposes only. Anyone making use of this drawing does so at their own risk and assumes all liability for such use. Final design for construction purposes must be completed by a Registered Professional Engineer who is familiar with the product and who has taken into account specific site conditions.

ReCon
Retaining Walls

DRAWING #103

TYPICAL GRAVITY WALL CROSS SECTION

RECON WALL SYSTEMS, INC.
7600 W. 27th STREET, #229
ST. LOUIS PARK, MN 55426
952-922-0027
www.reconwalls.com



NOTES:

1. THE MAXIMUM ALLOWABLE ROUTE (SIDEWALK) AND CURB RAMP CROSS SLOPES SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMP SHALL BE 8%.
4. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP - TYPE 'B'
NOT TO SCALE

LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:04:48 PM, DWG To PDF.pc3
 LMAN: CTB:
 MS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:	HORIZ.:
	VERT.:
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88
GRAPHIC SCALE	

MBL

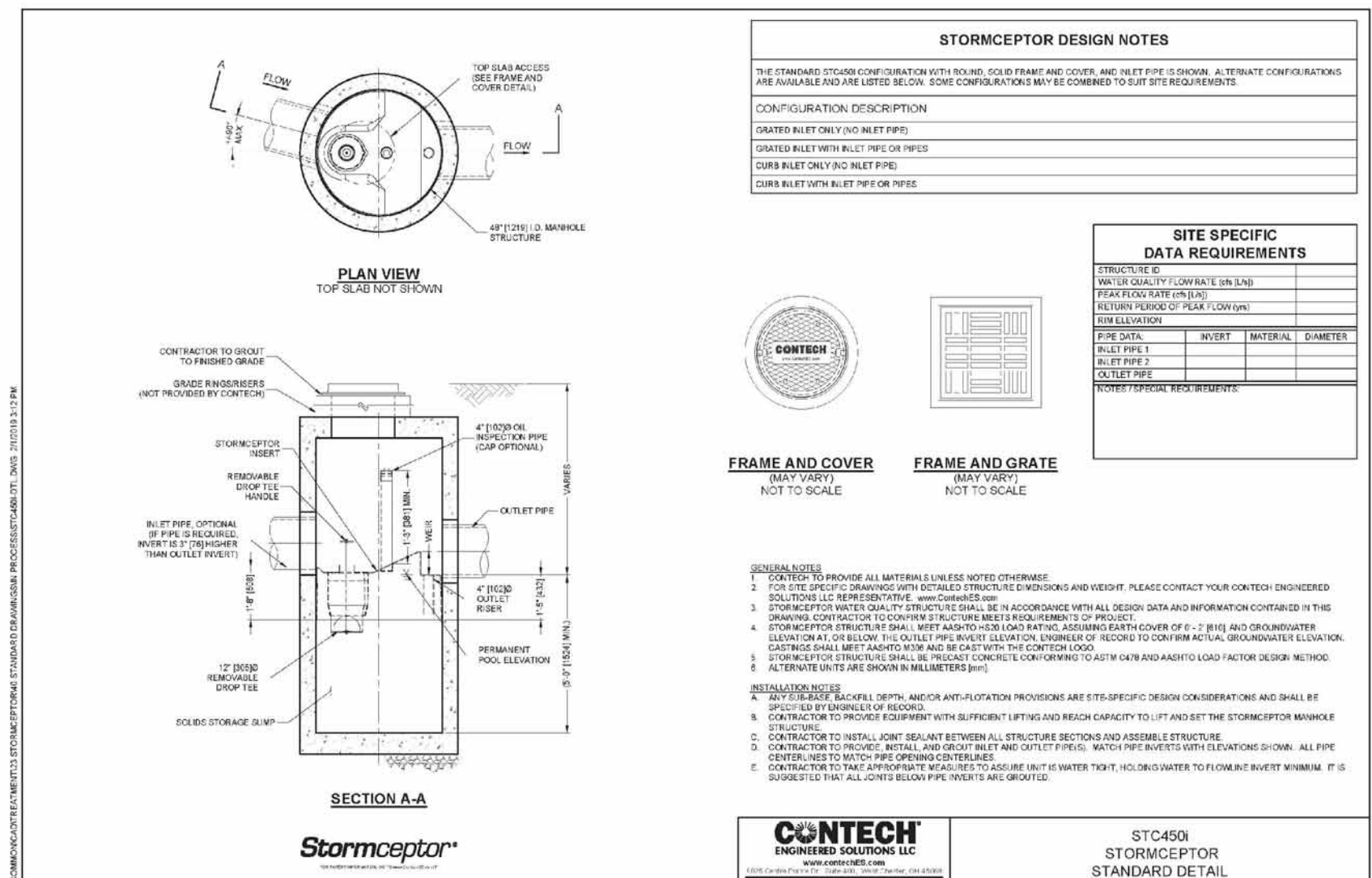
LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

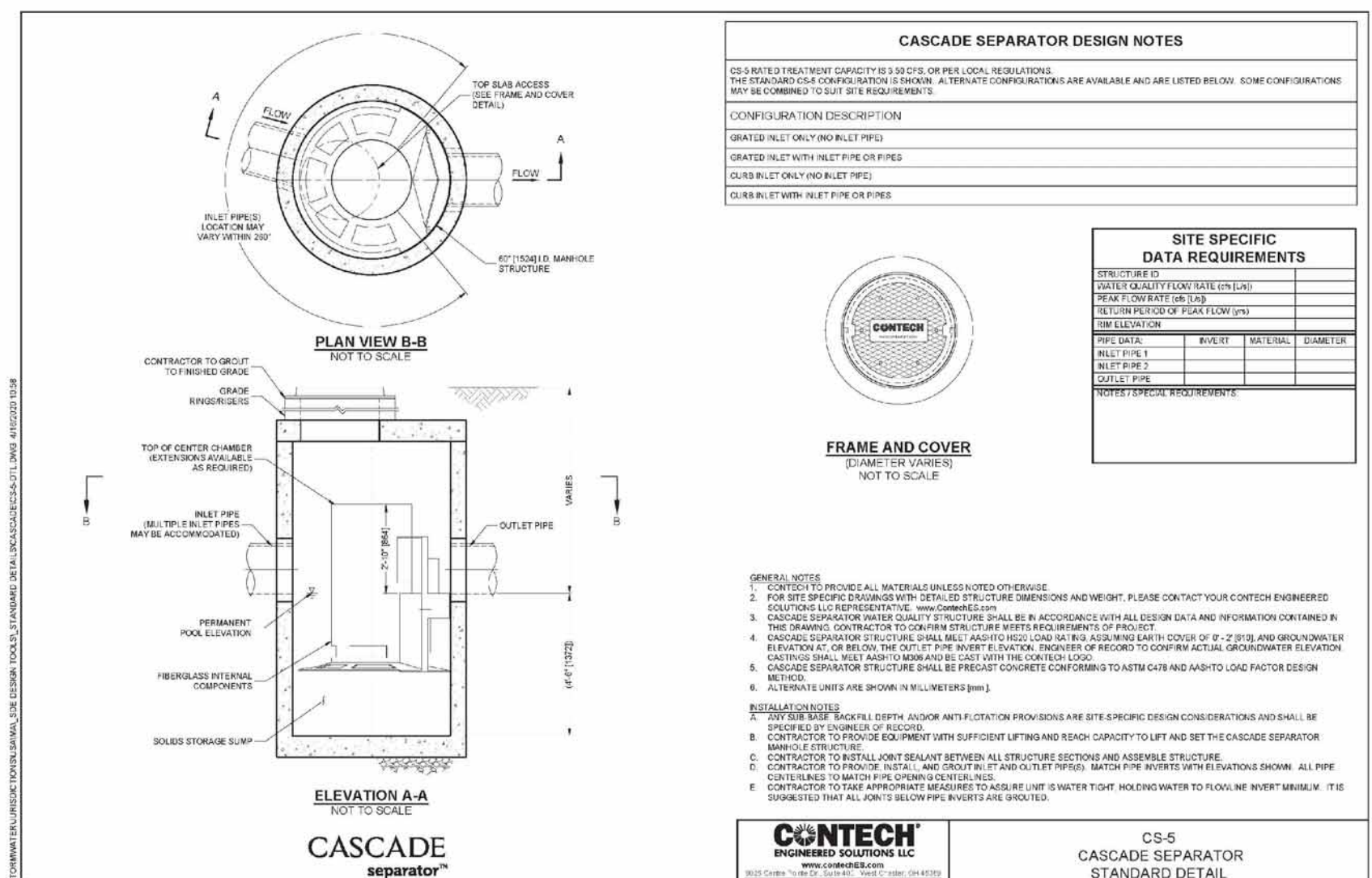
PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-9.2

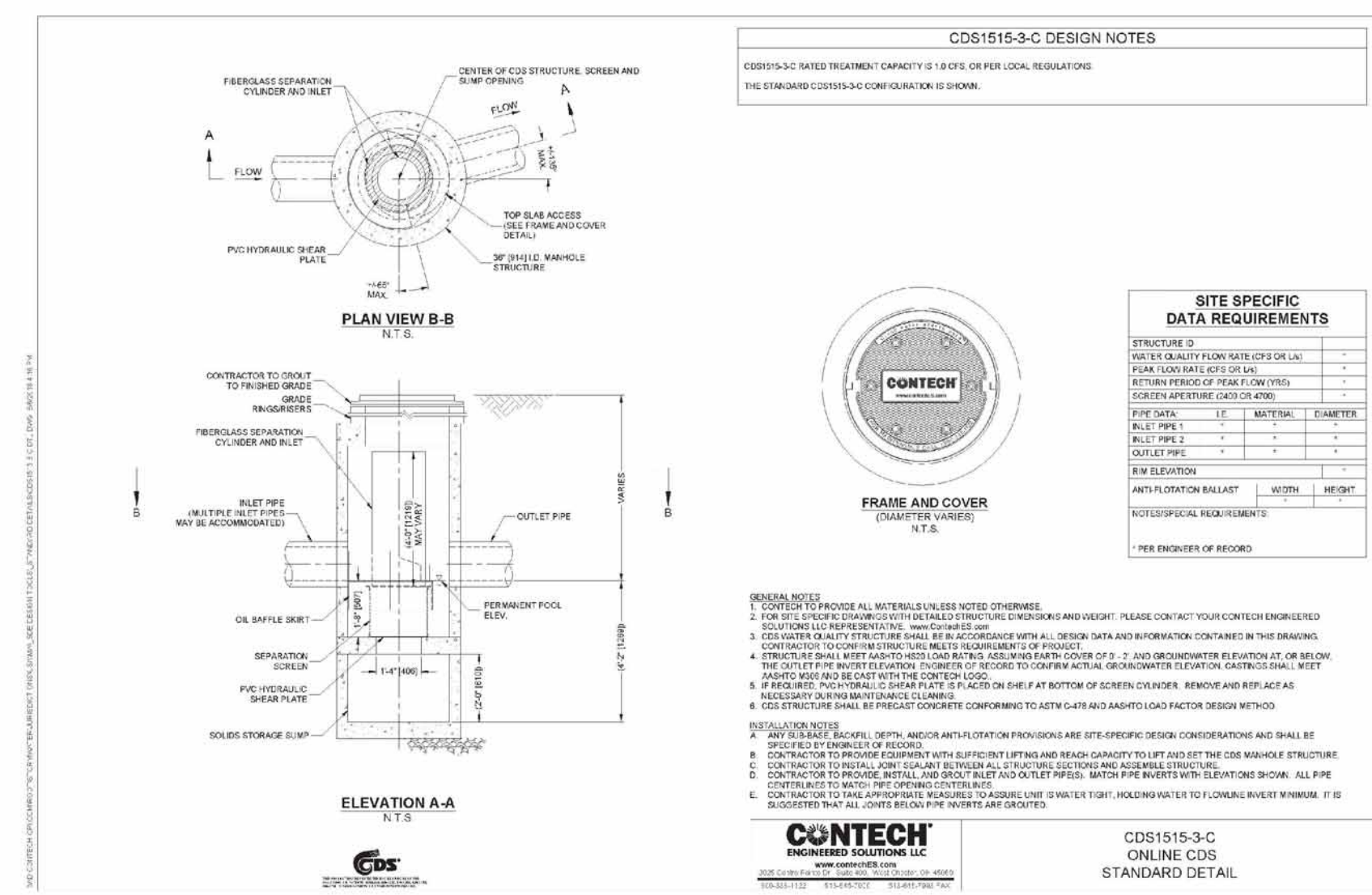




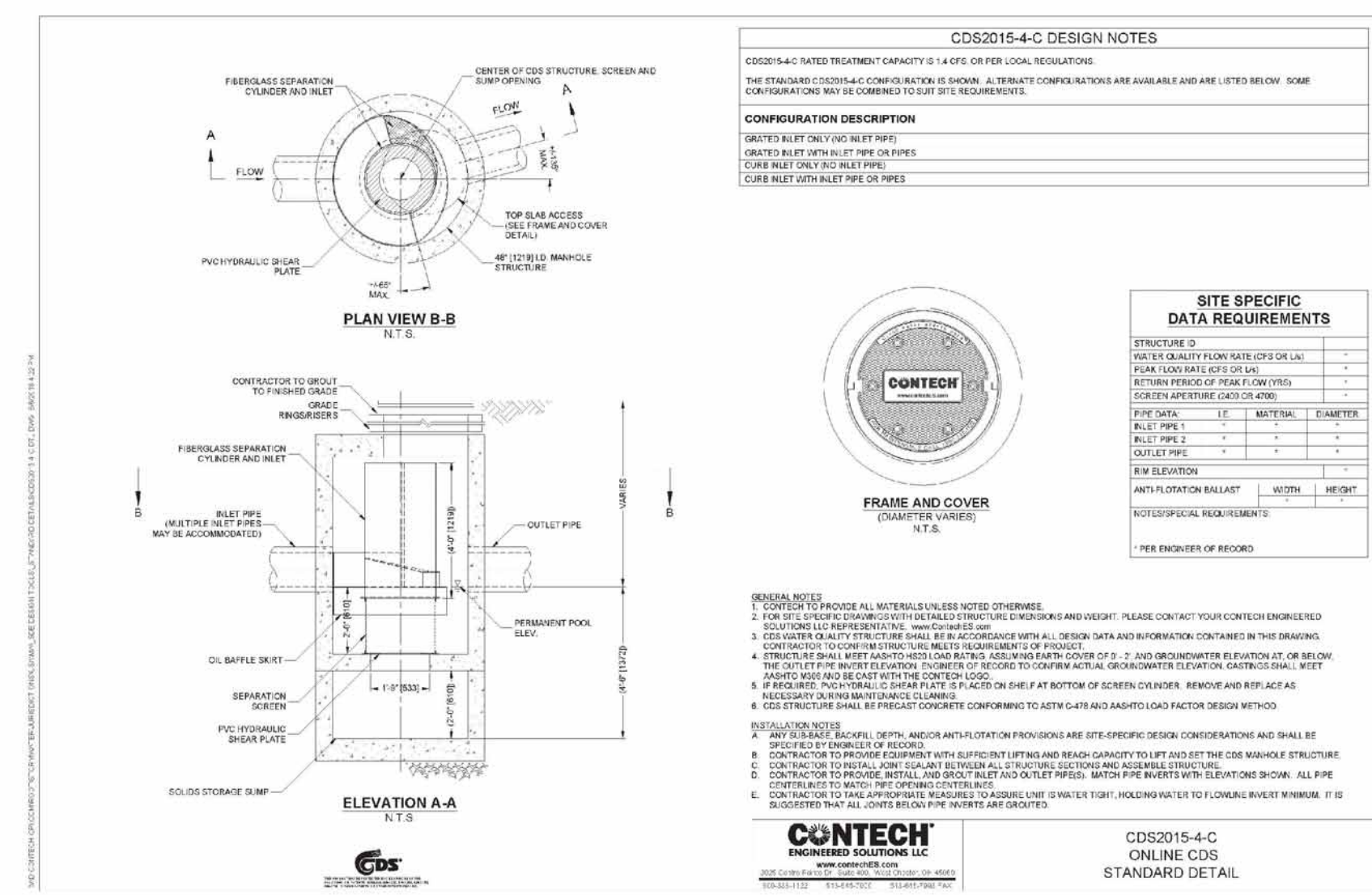
STORMCEPTOR 450i WATER QUALITY UNITS (#5, #11, #13, #14, #17)
 NOT TO SCALE



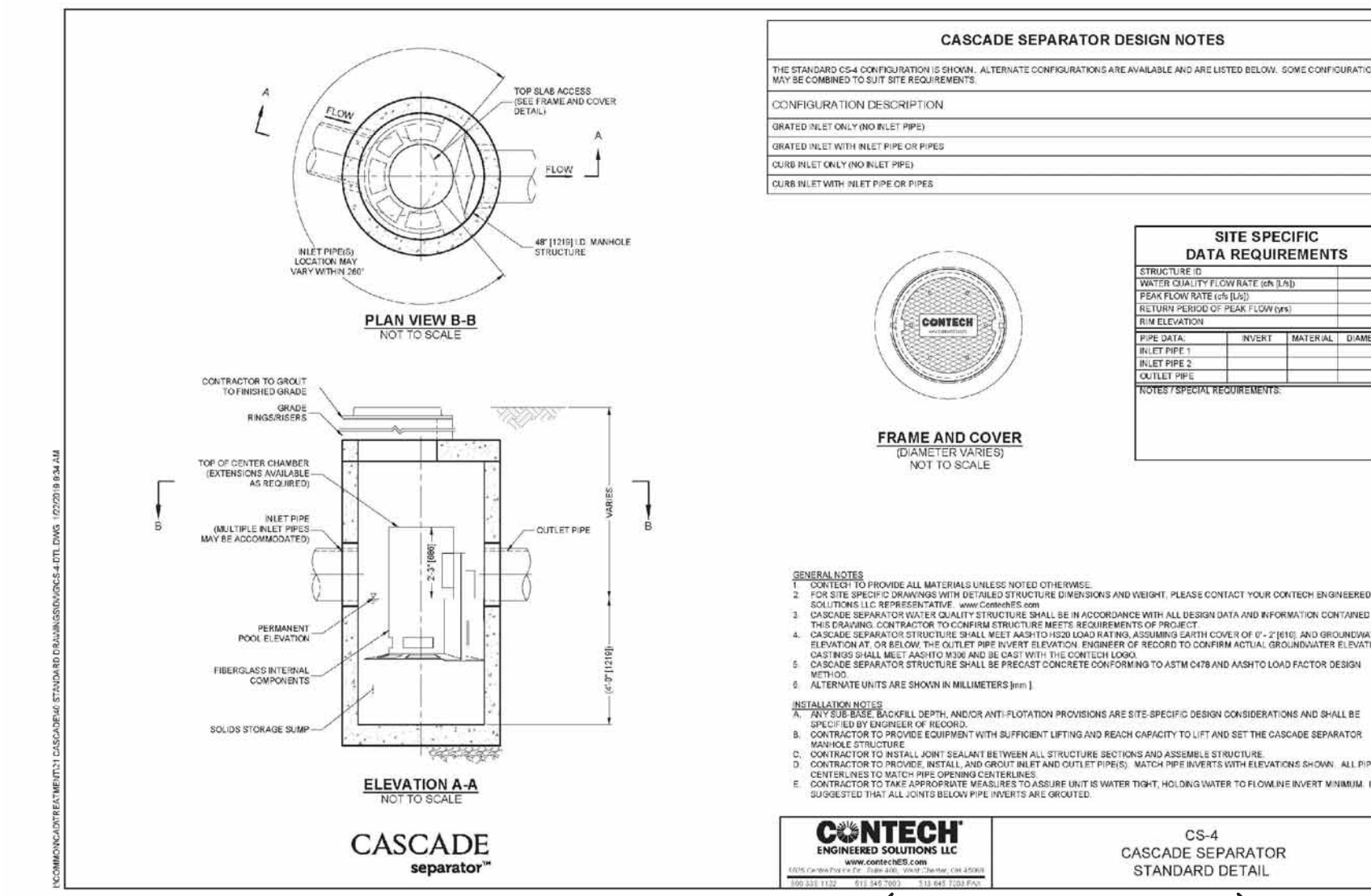
CASCADE CS-5 WATER QUALITY UNITS (#1, #2, #19)
 NOT TO SCALE



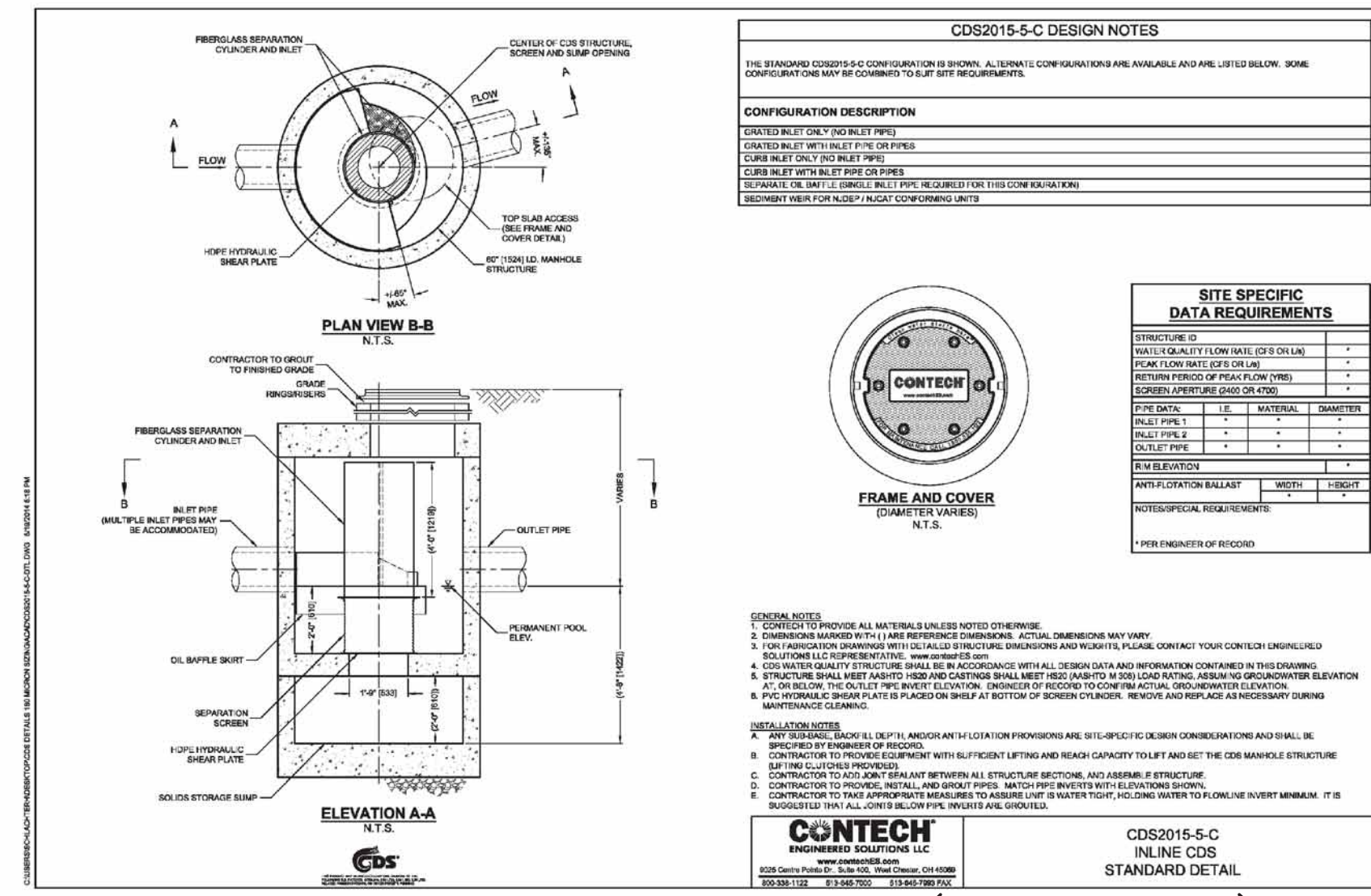
CDS 1515 WATER QUALITY UNITS (#10, #12)
 NOT TO SCALE



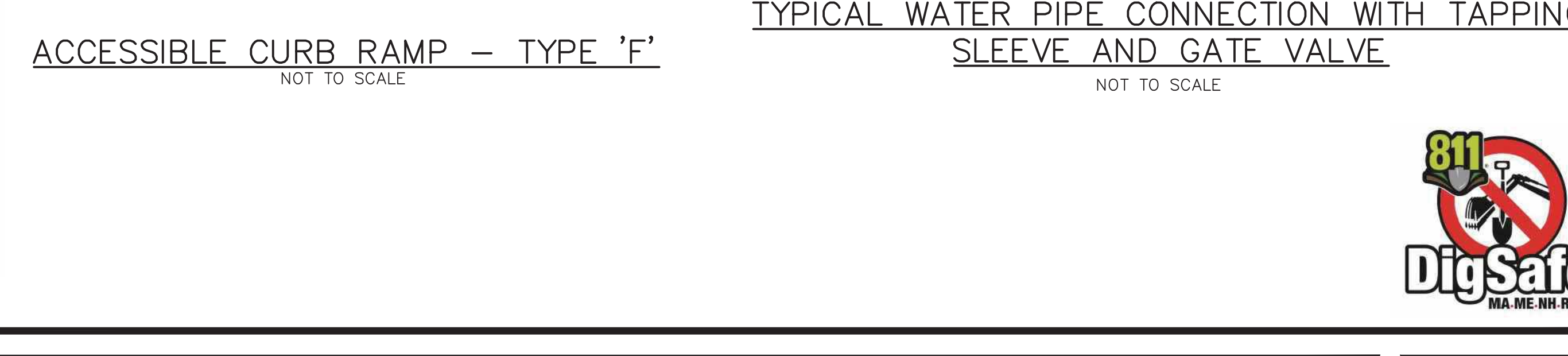
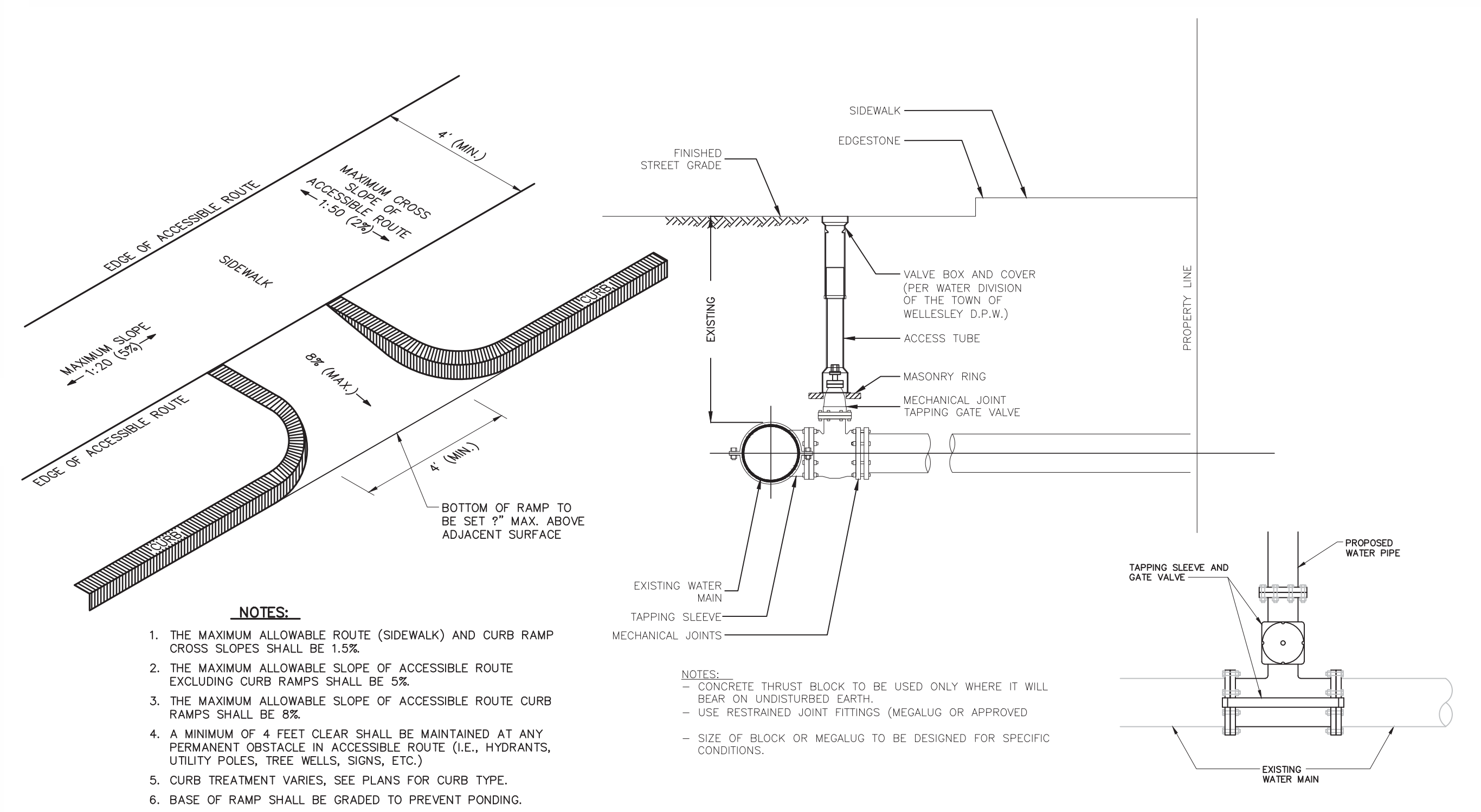
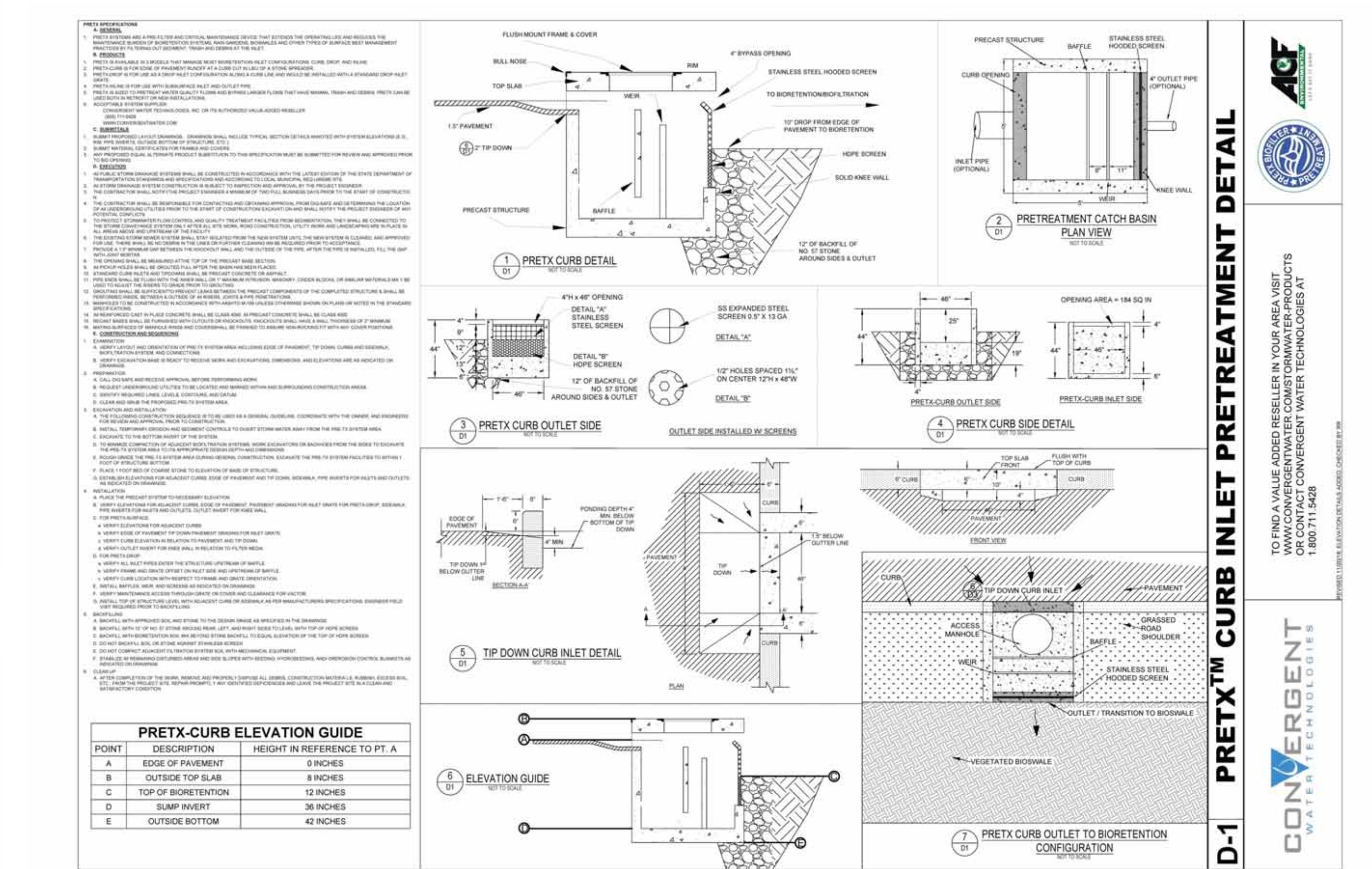
CDS 2015-4 WATER QUALITY UNITS (#3, #4, #6, #8, #18, #21, #22)
 NOT TO SCALE



CS-4 WATER QUALITY UNIT (#15, #16, #20)
 NOT TO SCALE



CDS 2015-5 WATER QUALITY UNITS (#7, #9, #23)
 NOT TO SCALE



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER
 MASSACHUSETTS

SCALE:	HOR.: VERT.:
DATUM:	HOR.: NAD83 VERT.: NAVD88
	0 GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P: 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

DETAILS
 0 INNOVATION WAY
 FALL RIVER - MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01

FALL RIVER/FREETOWN
 MASSACHUSETTS

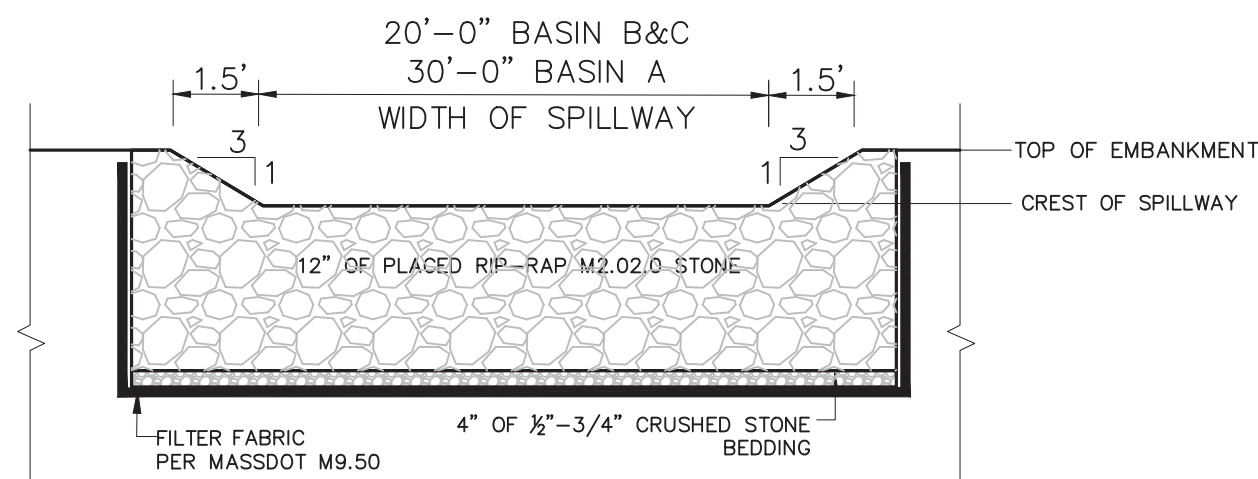
PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-9.3

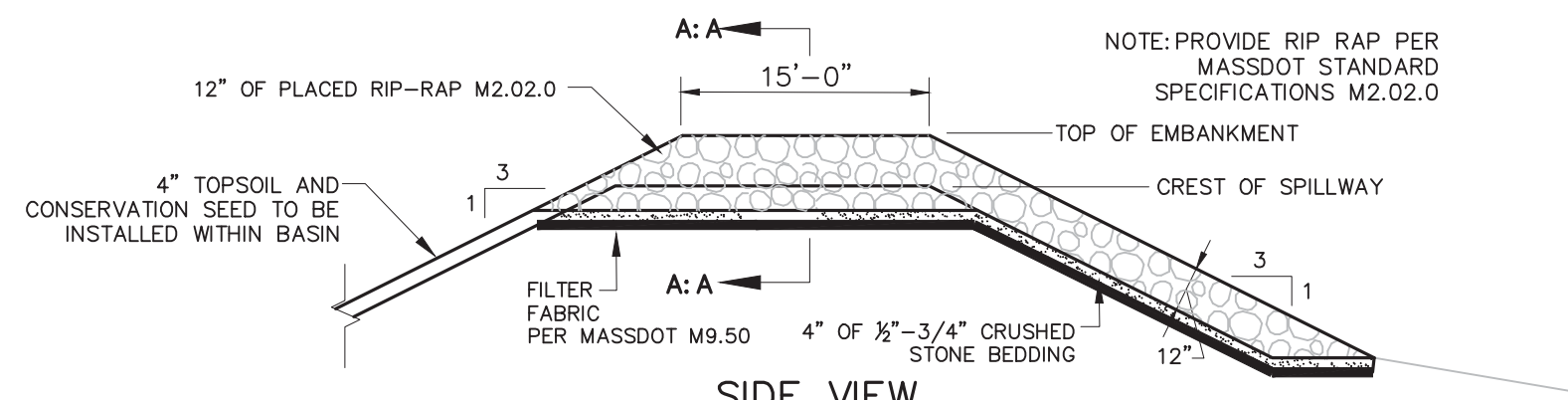
CONVERGENT WATER TECHNOLOGIES

TO FIND A VALUE ADDED SERVICE IN YOUR AREA VISIT
 WWW.CONVERGENTWATER.COM OR WATER PRODUCTS
 OR CONTACT CONVERGENT WATER TECHNOLOGIES AT
 1.800.711.9426

D-1 PREX™ CURB INLET PRETREATMENT DETAIL

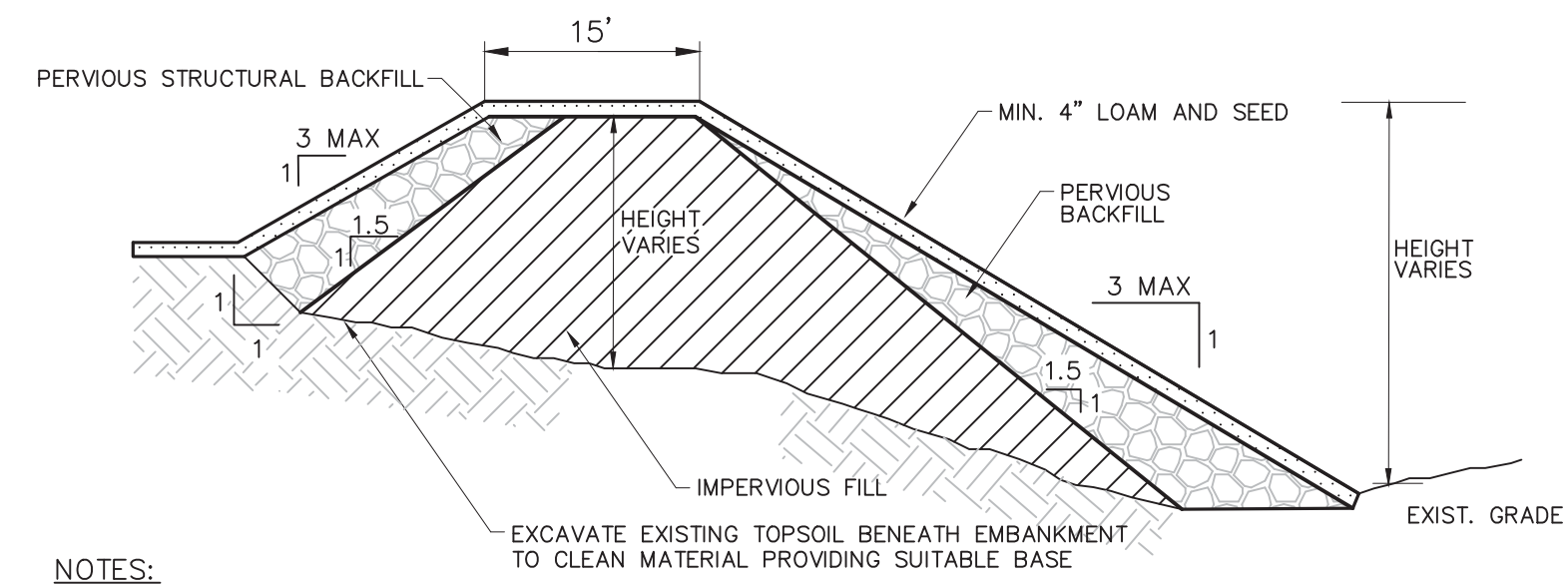


FRONT VIEW SECTION A-A



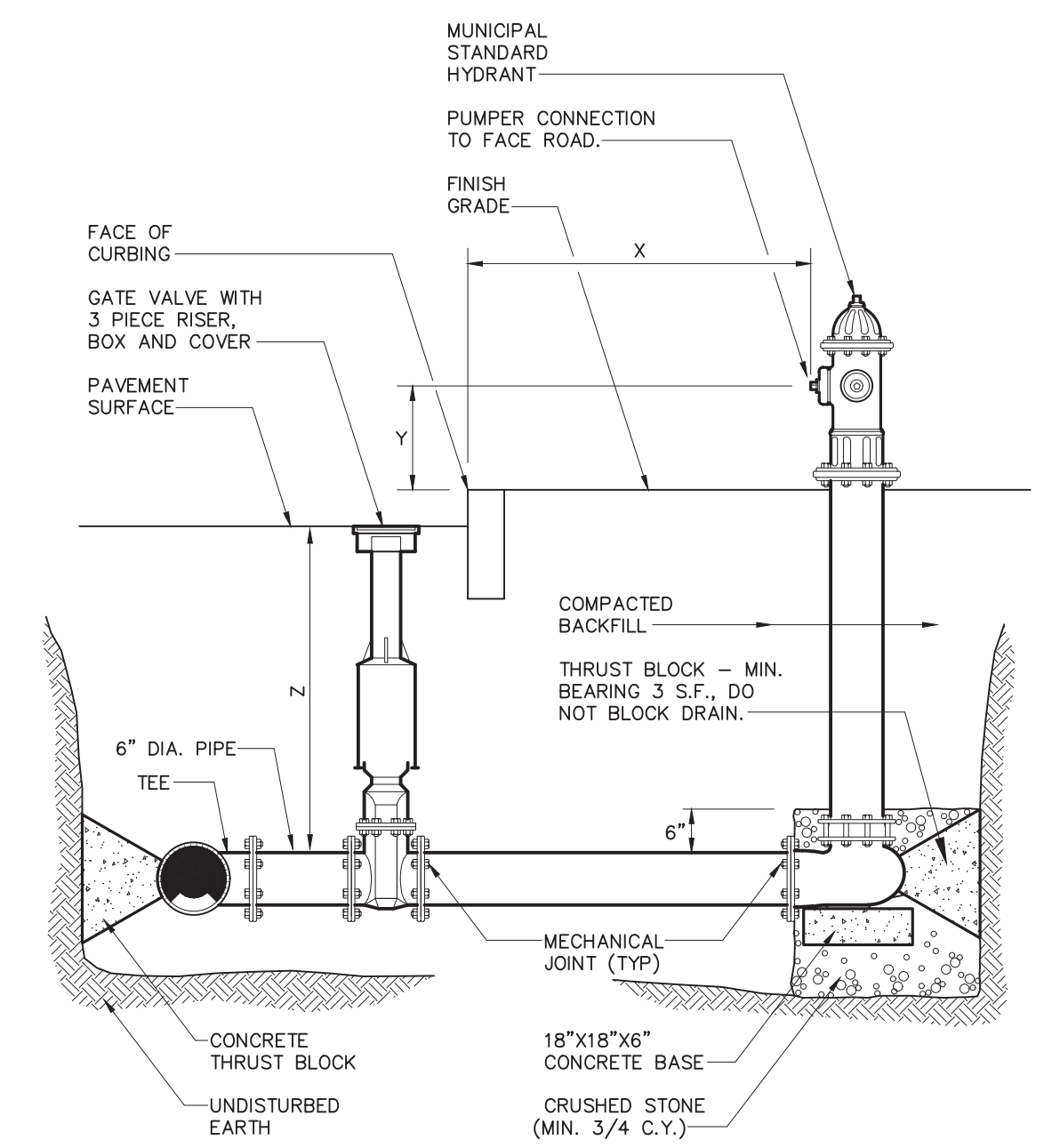
SIDE VIEW

INFILTRATION BASIN EMERGENCY SPILLWAY NOT TO SCALE



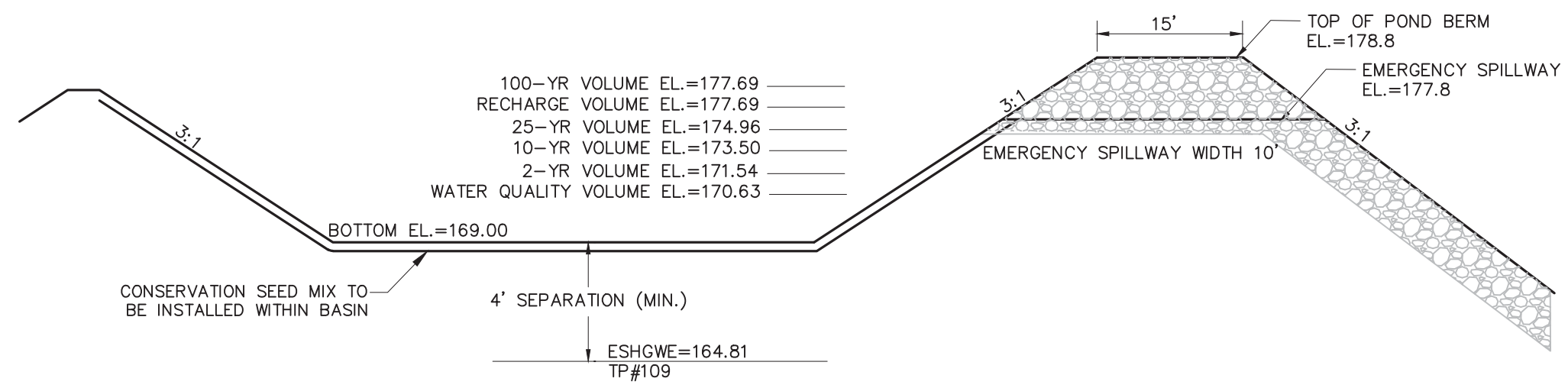
- NOTES:**
- IMPERVIOUS MATERIAL FOR USE IN FILL AREAS AND WHERE SHOWN ON THE PLANS SHALL BE COMPOSED OF INORGANIC GRAVELLY SILTY SOIL (GLACIAL TILL) WITH GRAVEL AND COBBLES UP TO 2 INCHES MAXIMUM SIZE. THE SOIL SHALL BE FREE OF RUBBISH, ICE, VEGETATIVE MATTER, LOAM, OR OTHER DEBRIS.
 - PERVIOUS MATERIAL FOR USE IN FILL AREAS AND WHERE SHOWN ON THE PLANS SHALL BE COMPOSED OF INORGANIC GRAVELLY SANDY SOIL WITH GRAVEL AND COBBLES UP TO 3.5 INCHES MAXIMUM SIZE. THE SOIL SHALL BE FREE OF RUBBISH, ICE, VEGETATIVE MATTER, LOAM, OR OTHER DEBRIS.
 - IMPERVIOUS FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION AS DEFINED BY A STANDARD SIEVE TEST (ASTM D422) AND PER MASSDOT STANDARDS (WHICH SHALL BE SUBMITTED TO THE PLANNING DEPT. AND DESIGN ENGINEER FOR APPROVAL)
- | MIN. PERCENT PASSING (BY WT.) | SEIVE TEST |
|-------------------------------|------------|
| 100 | 3.5" |
| 50-100 | 3/4" |
| 25-75 | No. 4 |
| 0-10 | No. 200 |
-
- | MIN. PERCENT PASSING (BY WT.) | SEIVE TEST |
|-------------------------------|------------|
| 100 | 2" |
| 50-100 | No. 4 |
| 50-35 | No. 30 |
| 10-4 | No. 100 |
| 0-4 | No. 200 |
- EMBANKMENT MATERIAL SHALL HAVE A MINIMUM 95% COMPACTED MATERIAL.

INFILTRATION BASIN EMBANKMENT NOT TO SCALE

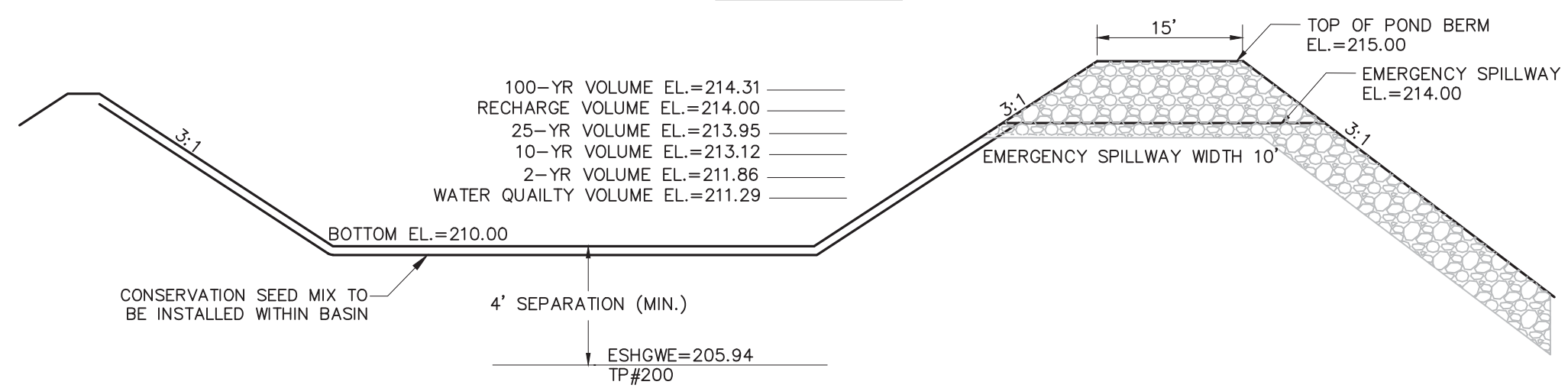


NOTE: CONCRETE THRUST BLOCKS TO BE USED ONLY WHERE THEY CAN BEAR ON UNDISTURBED EARTH. USE CLAMPS AND TIE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOIL CONDITIONS PROHIBIT THE USE OF THRUST BLOCKS.

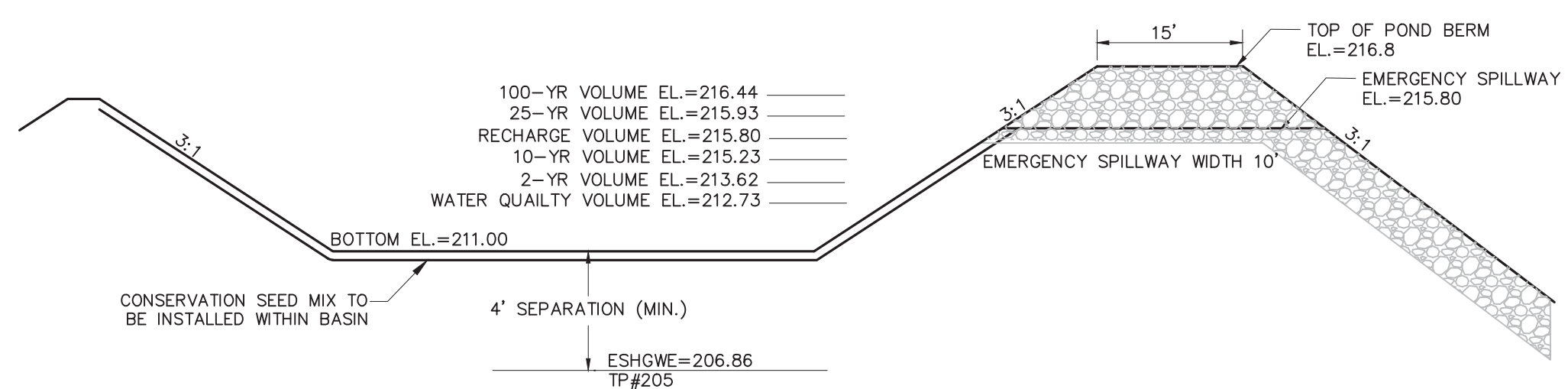
TYPICAL FIRE HYDRANT CONNECTION DETAIL NOT TO SCALE



BASIN A



BASIN B



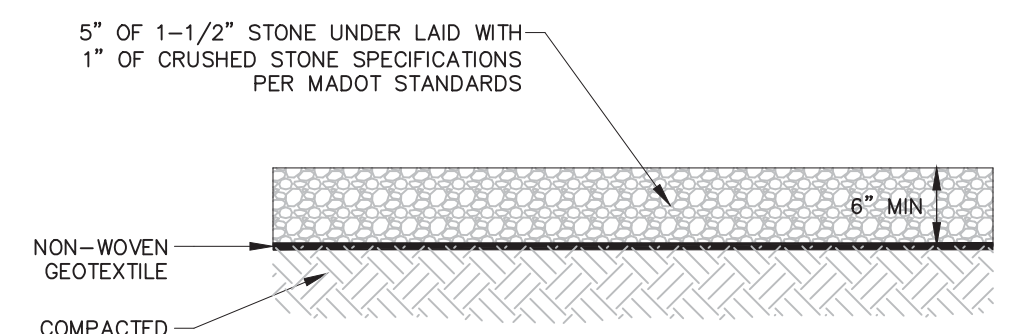
BASIN C

BASIN CONSTRUCTION NOTES:
 AS PART OF BASIN CONSTRUCTION, THE CONTRACTOR SHALL REMOVE A & B SOIL HORIZONS AND ANY OTHER UNSUITABLE SOIL THAT MAYBE ENCOUNTERED. THIS REMOVED MATERIAL SHALL BE REPLACED BY A MAINLY SANDY SOIL MIX (80% SAND/ 20% LOAM) OR OTHER MIX THAT WILL NOT OVERLY COMPACT DURING CONSTRUCTION BUT WILL MAINTAIN THE INFILTRATION CAPACITY OF THE BASIN.

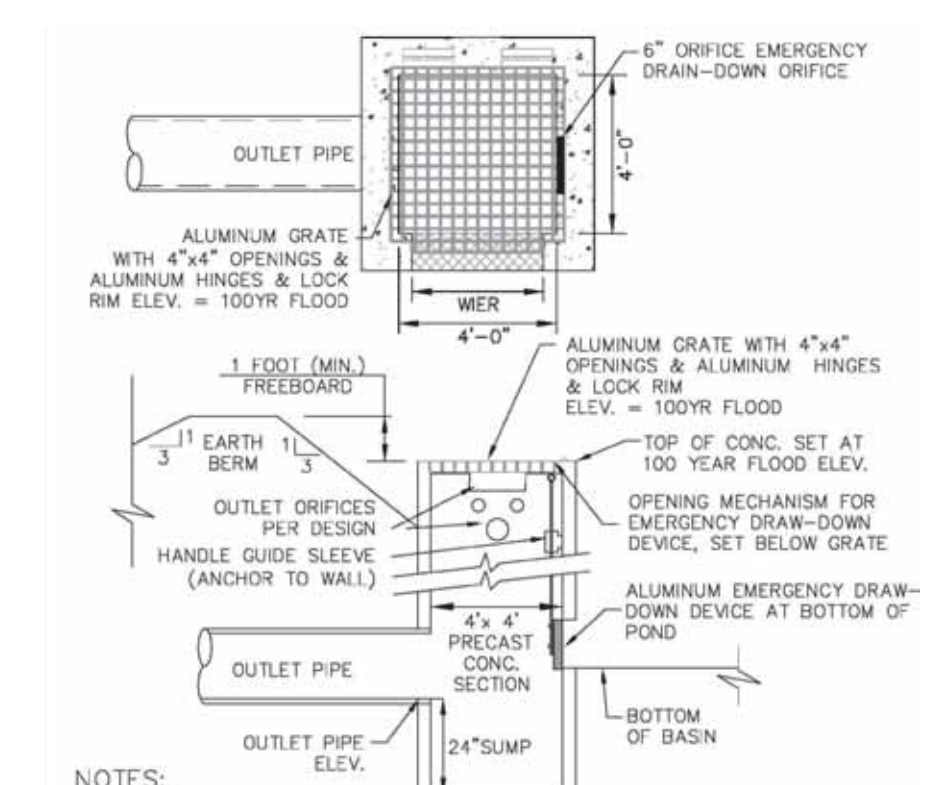
THE CONTRACTOR IS CAUTIONED THAT THE BASIN IS DESIGNED TO INFILTRATE/RECHARGE STORMWATER PRIMARILY THROUGH THE BOTTOM AND SIDES OF THE BASIN. CONSTRUCTION TECHNIQUES THAT WOULD POTENTIALLY DIMINISH THE INFILTRATION CAPACITY OF THE UNDERLYING SOILS ARE TO BE AVOIDED. COMPACTATION AND SILTATION OF THE BASIN DURING CONSTRUCTION IS PROHIBITED.

- DO NOT UTILIZE ANY PORTION OF THE BASIN FLOOR AS A HAUL ROAD FOR MATERIAL AND HEAVY EQUIPMENT.
- DO NOT COMPACT SOILS IN THE BASIN FLOOR.
- DO NOT PLACE GRAVEL OR OTHER MATERIALS TO STABILIZE THE BASIN FLOOR FOR CONSTRUCTION VEHICULAR TRAVEL ACCESS.
- STRICT COMPLIANCE WITH THE EROSION CONTROL PLAN AND THE STORMWATER OPERATIONS AND MAINTENANCE PLAN IS NECESSARY.
- BASIN CONSTRUCTION SHALL OCCUR AT THE EARLY STAGES OF THE PROJECT CONSTRUCTION SO THAT THEY ARE FULLY VEGETATED AND STABILIZED PRIOR TO RECEIVING STORMWATER.
- DO NOT USE THE BASIN AS A TEMPORARY SEDIMENT BASIN OR DE-WATERING BASIN.

INFILTRATION BASIN CROSS SECTION NOT TO SCALE



BASIN ACCESS DRIVE DETAIL NOT TO SCALE

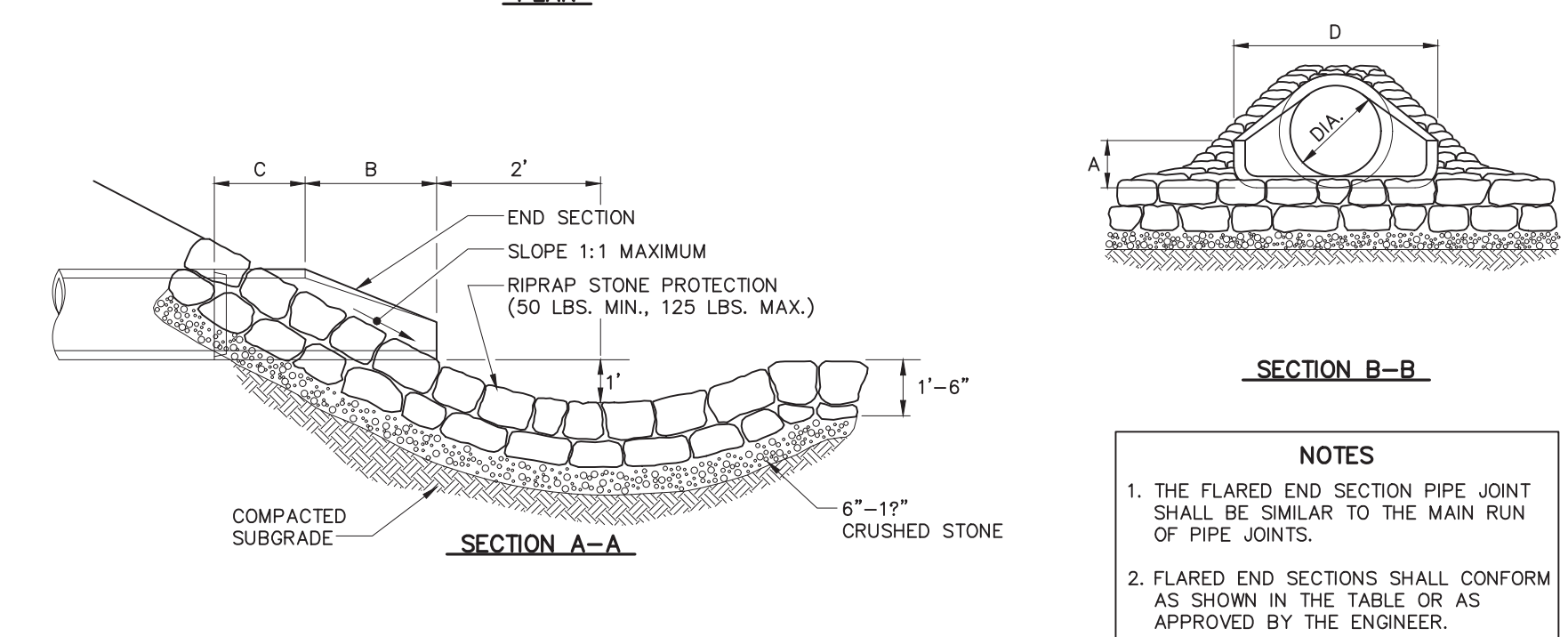


- NOTES:**
- ORIFICE ELEVATIONS SHALL BE SHOWN ON DESIGN PLANS.
 - CONTRACTOR SHALL CONFIRM INVERT GRADES IN FIELD PRIOR TO STRUCTURE INSTALLATION.
 - THE EMERGENCY DRAW-DOWN DEVICE IS PROVIDED TO ALLOW THE BASIN TO BE MANUALLY DRAINED IF NECESSARY. THE MECHANISM SHALL REMAIN CLOSED DURING NORMAL CONDITIONS.

OUTLET CONTROL STRUCTURE DETAIL NOT TO SCALE

DIMENSIONAL TABLE

PIPE DIA.	A	B	C	D	E	R
12"	4"	2'-0"	4'-0"	2'-0"	2"	9"
15"	6"	2'-3"	3'-10"	2'-6"	2 1/2"	11"
18"	9"	2'-3"	3'-10"	3'-0"	2 1/2"	12"
24"	9 1/2"	3'-7 1/2"	2'-6"	4'-0"	3"	14"
30"	12"	4'-6"	1'-7"	5'-0"	3 1/2"	15"
36"	15"	5'-3"	2'-10"	6'-0"	4"	20"
42"	21"	5'-3"	2'-11"	6'-6"	4 1/2"	22"
48"	24"	6'-0"	2'-2"	7'-0"	5"	22"
54"	27"	5'-5"	2'-11"	7'-6"	5 1/2"	24"
60"	30"	5'-0"	3'-3"	8'-0"	6"	24"



FLARED END SECTION W/STONE PROTECTION NOT TO SCALE

- NOTES**
- THE FLARED END SECTION PIPE JOINT SHALL BE SIMILAR TO THE MAIN RUN OF PIPE JOINTS.
 - FLARED END SECTIONS SHALL CONFORM AS SHOWN IN THE TABLE OR AS APPROVED BY THE ENGINEER.

LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:04:54 PM, DWG To PDF.pc3
 LMAN: LMAN:
 CTB: CTB:

No.	DATE	DESCRIPTION	BY
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
4	11/21/2022	REVISION PER COMMENTS	JAW

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

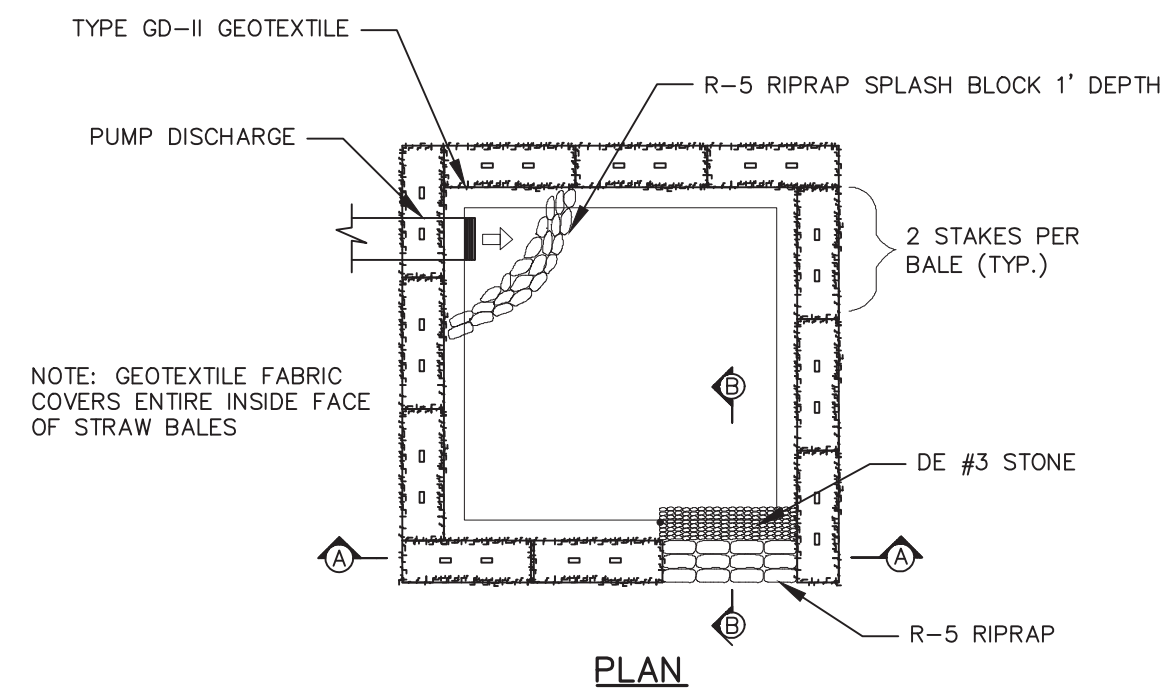
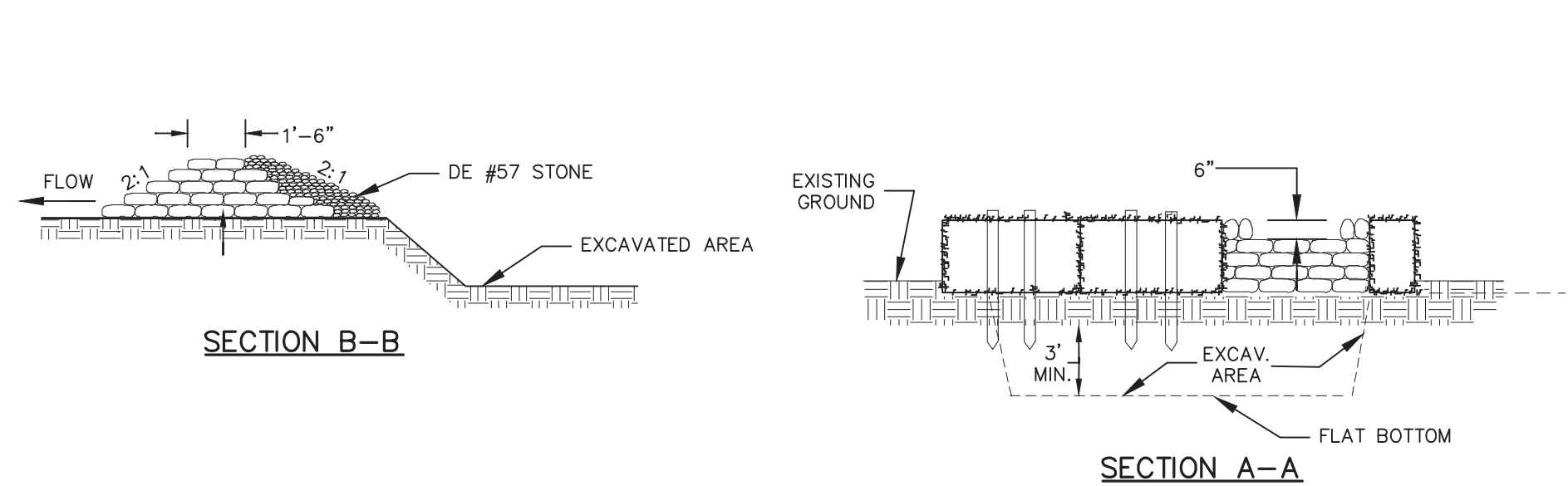
SCALE:	HORIZ.:
	VERT.:
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P: 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

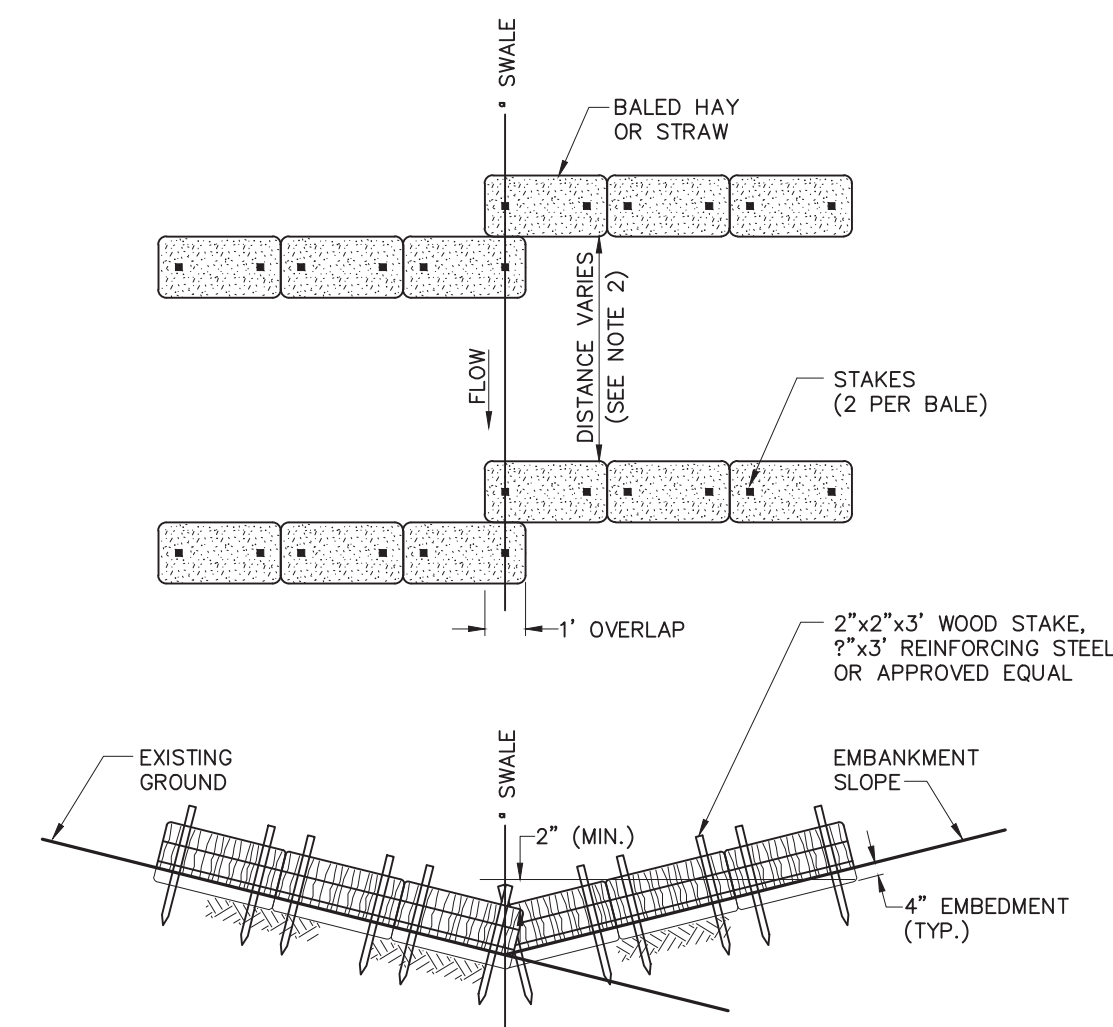
PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-9.4



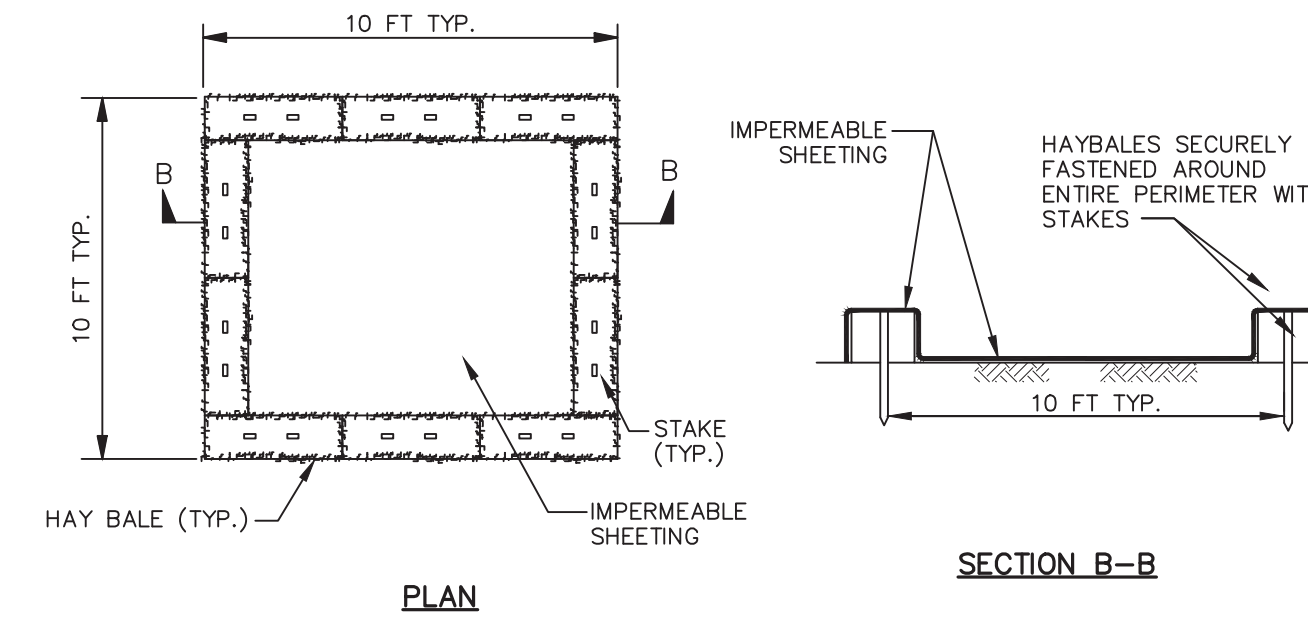


DEWATERING STRAW BALE BASIN
NOT TO SCALE

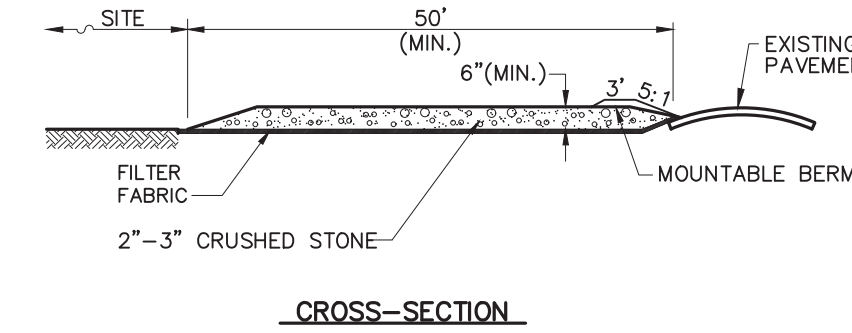
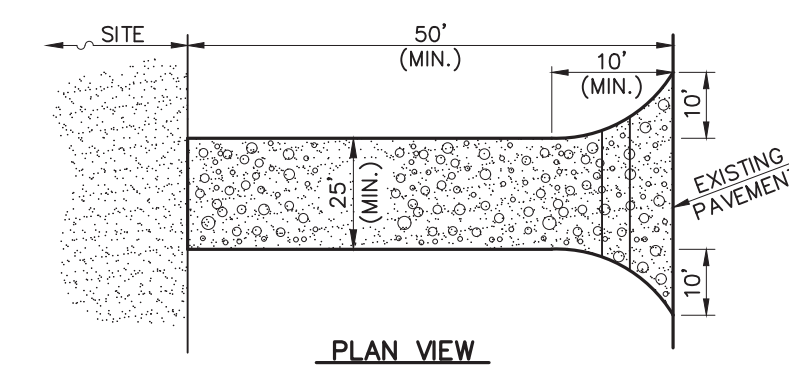


- NOTES:**
1. THIS CHECKDAM SHALL BE INSTALLED IN A DRAINAGE SWALE WITH BED WIDTHS OF 2 FT. OR LESS.
 2. THE DISTANCE BETWEEN HAY BALE CHECKDAMS SHALL BE DETERMINED BY THE SLOPE OF THE SWALE. CHECKDAMS SHALL BE SET AT EVERY 2 FT. DROP IN SWALE ELEVATION.
 3. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

TEMPORARY SWALE WITH HAY BALE CHECK DAMS
NOT TO SCALE

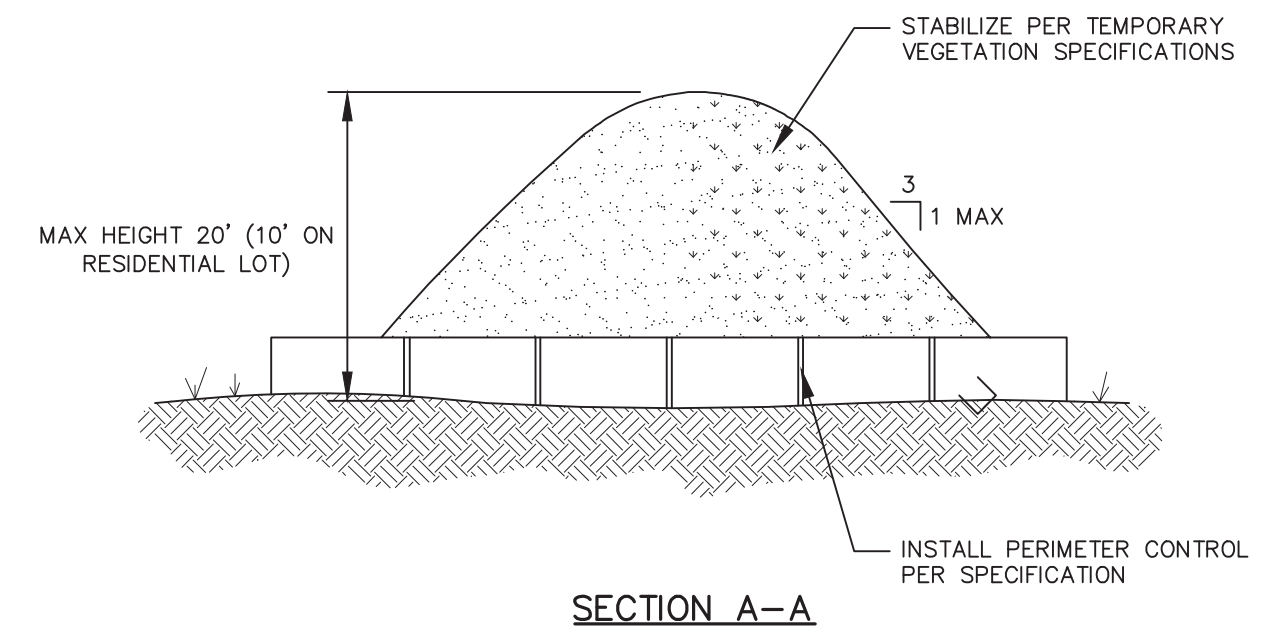
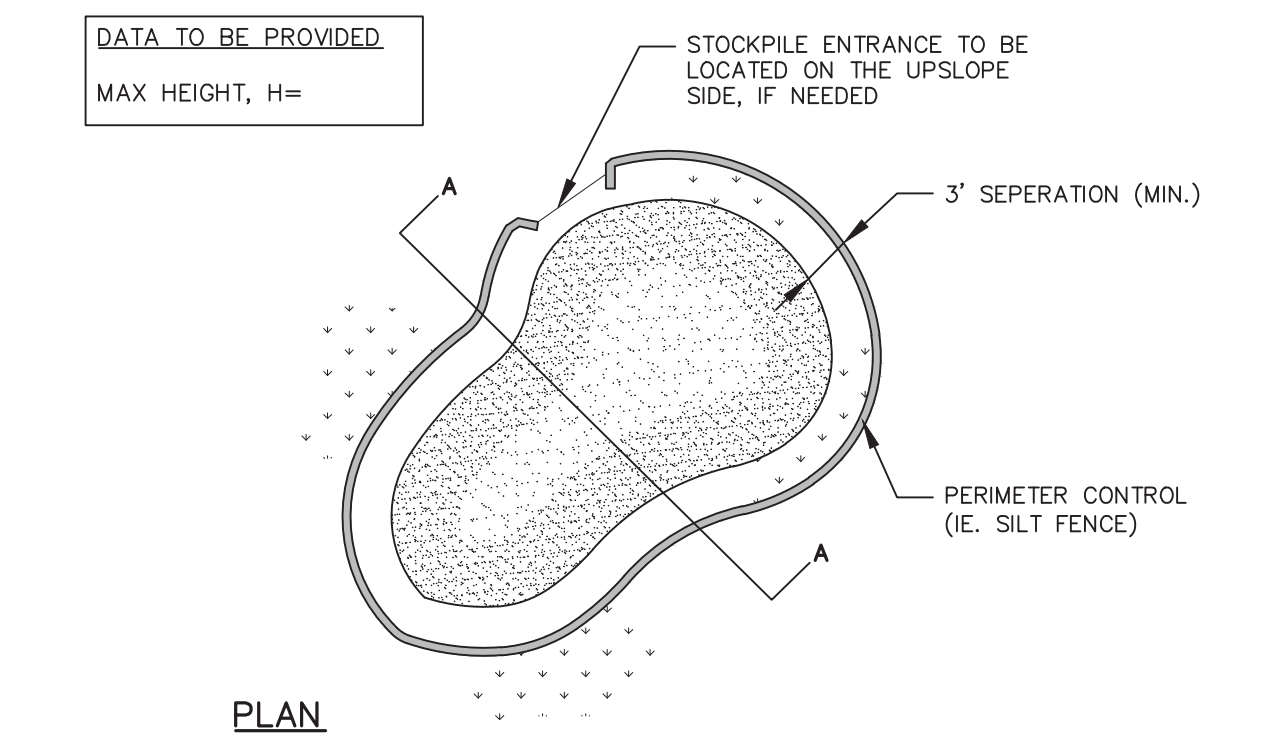


CONCRETE WASHOUT STRUCTURE
NOT TO SCALE

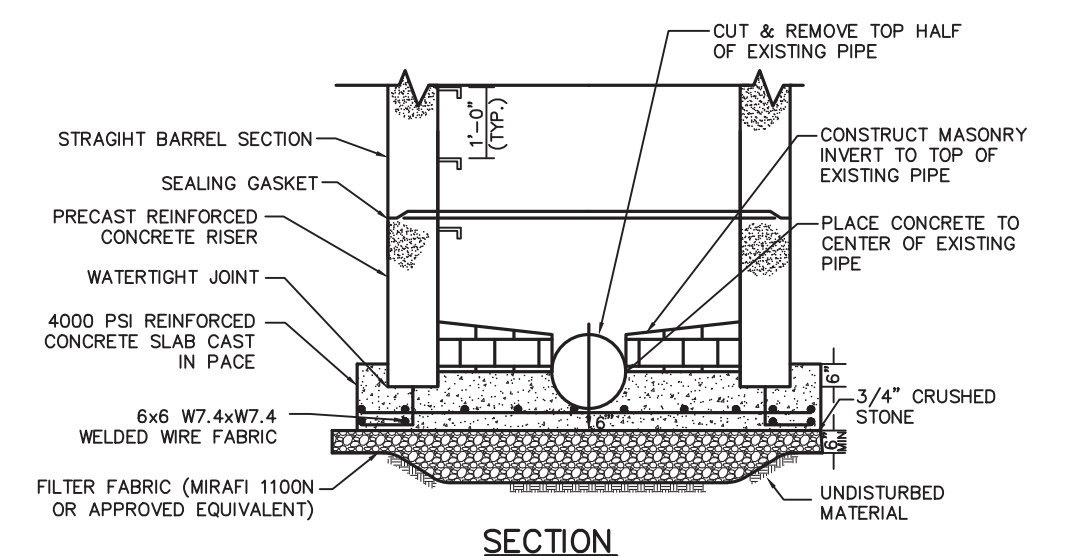
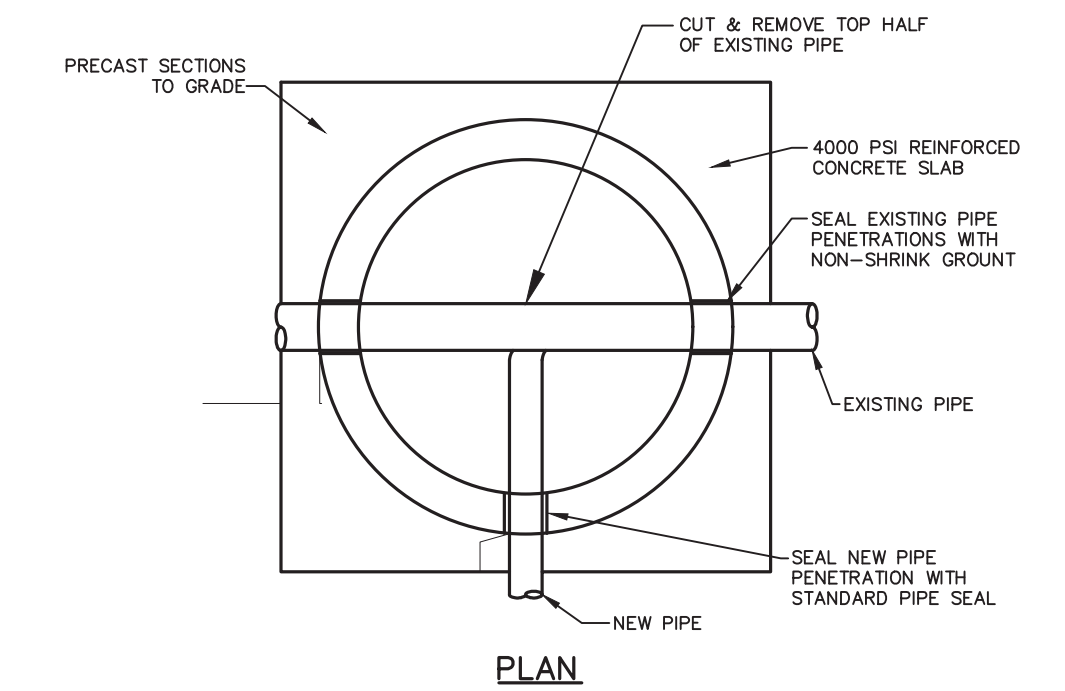


- NOTES:**
1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

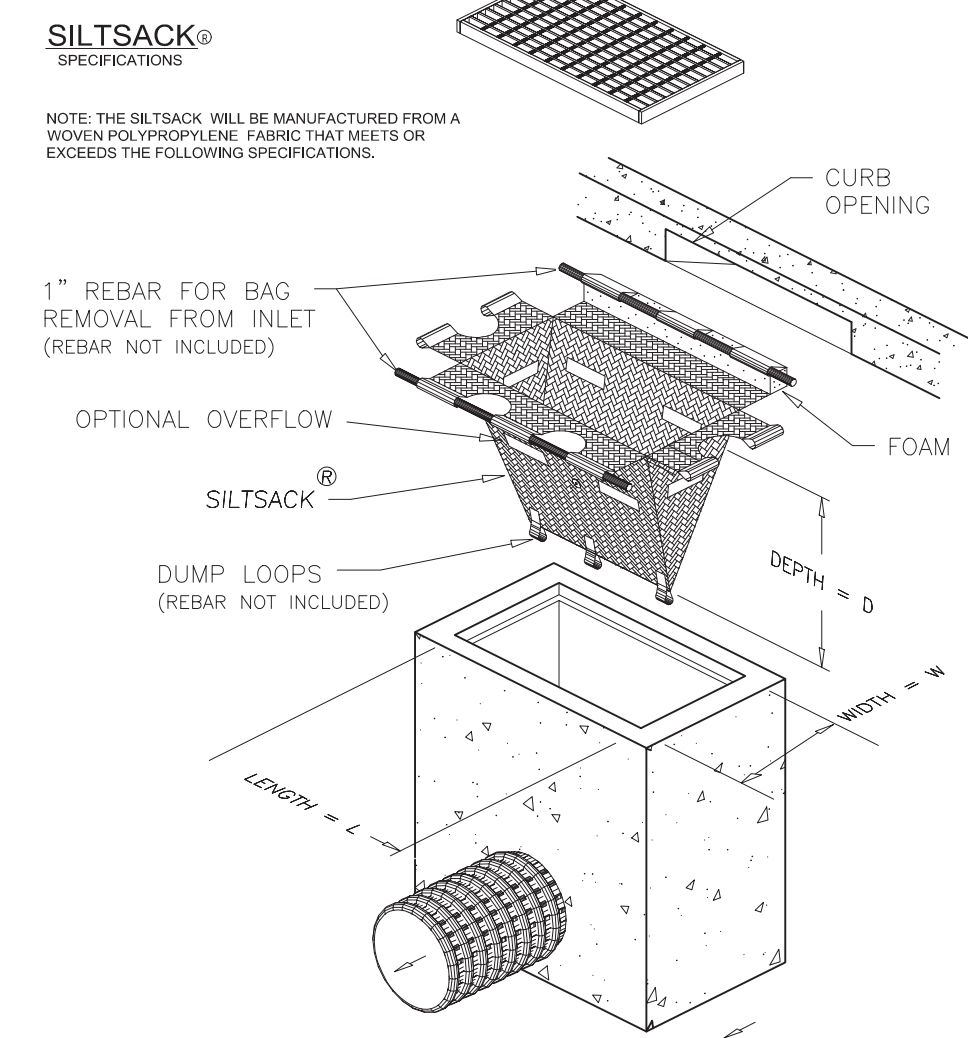


SOIL STOCKPILE
NOT TO SCALE



- NOTES:**
1. FOR MANHOLES IN LOCATIONS REQUIRING CONTROLLED DENSITY FILL, PAYMENT LIMITS SHALL BE A MAXIMUM OF 2.25 CY PER VERTICAL FOOT OF MANHOLE.
 2. SEE SPECIFICATION SECTION 02607 FOR MANHOLE COMPONENT REQUIREMENTS.
 3. SEE SPECIFICATION SECTION 03300 FOR CONCRETE REQUIREMENTS.

DRAIN MANHOLE (DOGHOUSE)
N.T.S.



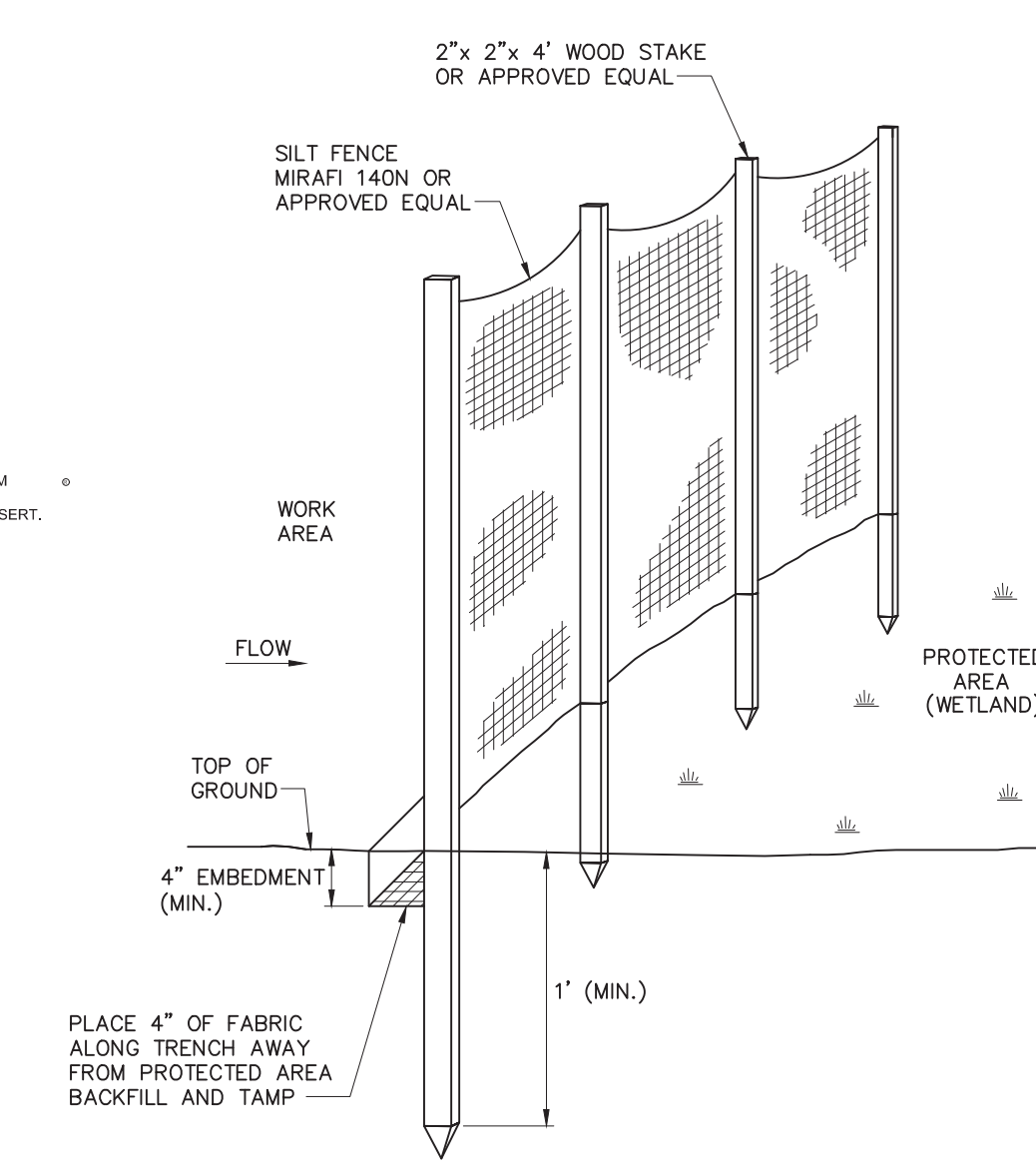
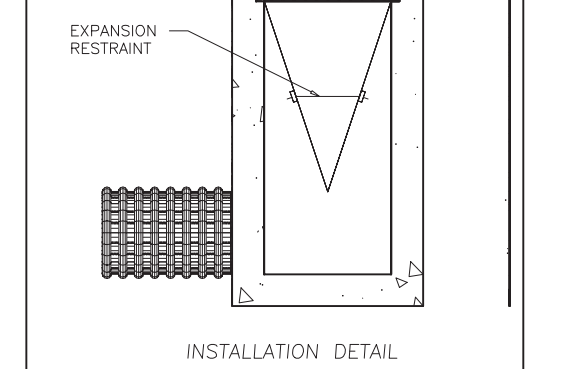
INLET PROTECTION SILT SACK
NOT TO SCALE

REGULAR FLOW SILTSACK ®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

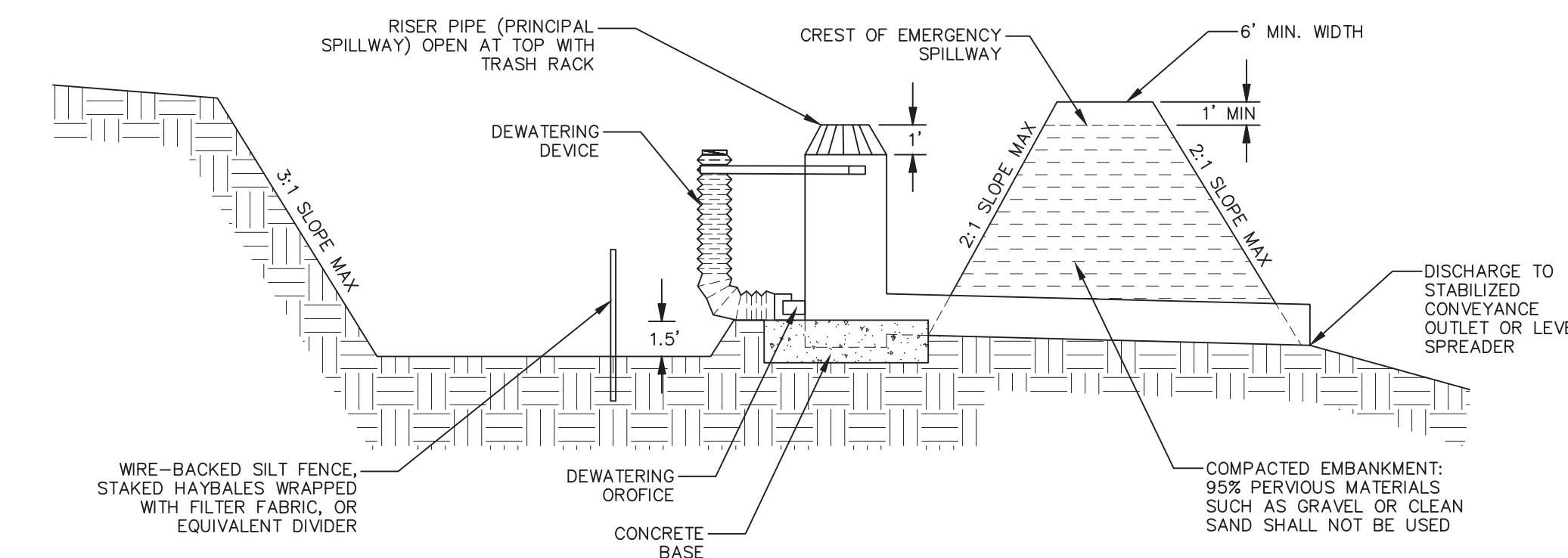
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D4632	268 LBS
GRAB TENSILE ELONGATION	ASTM D4632	20 %
TEAR	ASTM D4632	200 LBS
MULLEN BURST	ASTM D3786	420 PSF
TRIANGLE TEAR	ASTM D4633	321 LBS
UV RESISTANCE	ASTM D4395	80 %
APPROXIMATE OPENING SIZE	ASTM D4701	40 US SIEVE
FLOW RATE	ASTM D4481	40 GAL/MIN/50 FT PERIMETER
PERMEABILITY	ASTM D4481	0.05 SEC-1

HI-FLOW SILTSACK ®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D4632	268 LBS
GRAB TENSILE ELONGATION	ASTM D4632	20 %
TEAR	ASTM D4632	138 LBS
MULLEN BURST	ASTM D3786	420 PSF
TRIANGLE TEAR	ASTM D4633	415 LBS
UV RESISTANCE	ASTM D4395	90 %
APPROXIMATE OPENING SIZE	ASTM D4701	20 US SIEVE
FLOW RATE	ASTM D4481	200 GAL/MIN/50 FT PERIMETER
PERMEABILITY	ASTM D4481	1.0 SEC-1



SILT FENCE BARRIER
NOT TO SCALE



TEMPORARY SEDIMENT BASIN
NOT TO SCALE



LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:04:55 PM, DWG To PDF.pc3
 LMAN: CTB:
 MS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE

SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.:
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01

FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-9.5



MODULAR CONCRETE STORMWATER MANAGEMENT

SHEET INDEX	
PAGE	DESCRIPTION
0.0	COVER SHEET
1.0	SINGLETRAP DESIGN CRITERIA
2.0	SINGLETRAP SYSTEM LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PITS/ACCESS OPENING SPECIFICATIONS
6.0	SPLASH PAD & GEOWER DETAILS
7.0	SINGLETRAP MODULE TYPES

StormTrap
FILES USED AS PER 10/20/2019/REVISED
 1287 WINDHAM PARWAY
 ROXBOROUGH, IL 60446
 PB15-941-6249 / F331-318-5347

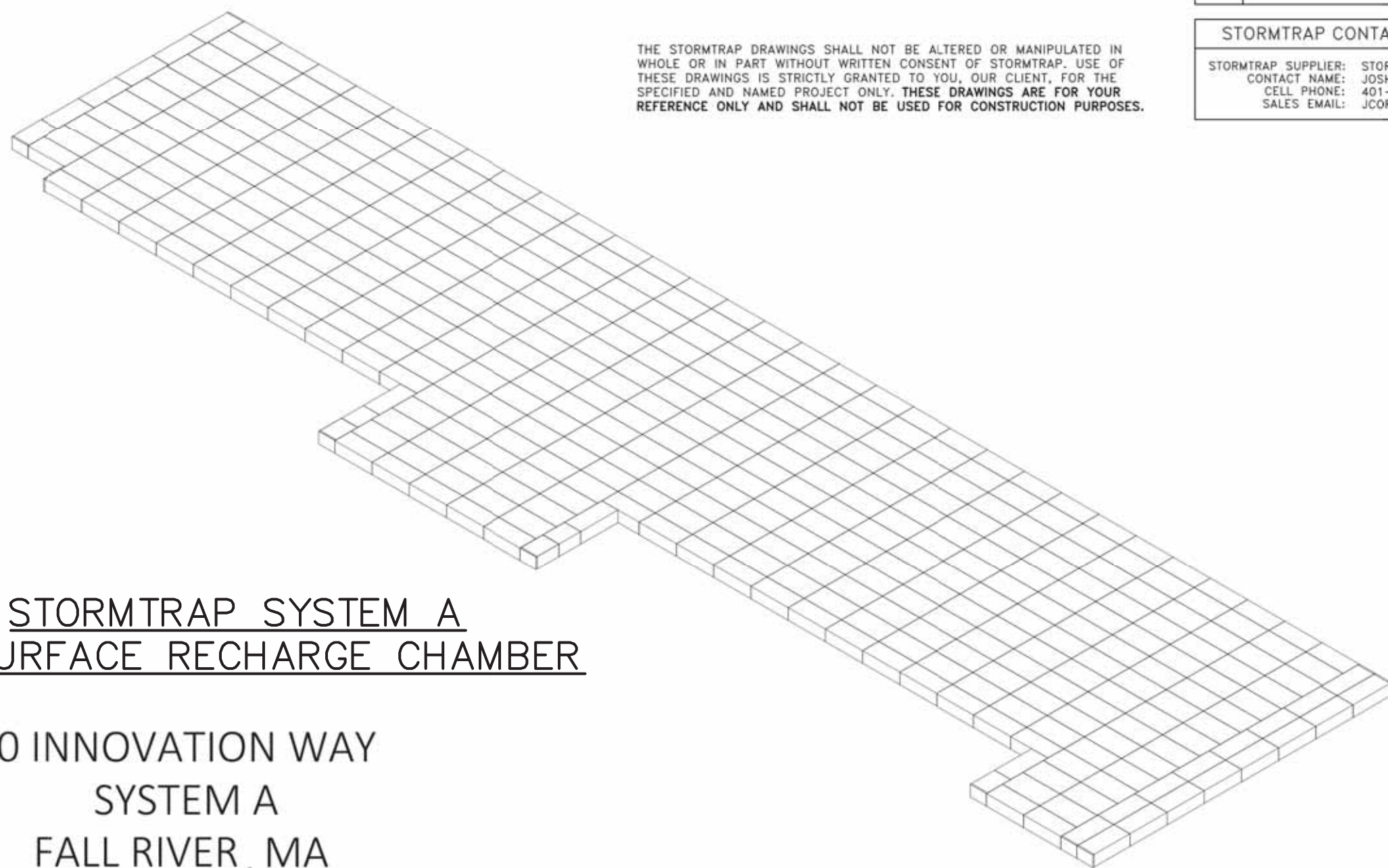
ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA
 CURRENT ISSUE DATE:
 8/10/2022
 ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
Δ	8/10/2022	PRELIMINARY	DG
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS
 SHEET TITLE:
 COVER SHEET
 SHEET NUMBER:
 0.0

THE STORMTRAP DRAWINGS SHALL NOT BE ALTERED OR MANIPULATED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF STORMTRAP. USE OF THESE DRAWINGS IS STRICTLY GRANTED TO YOU, OUR CLIENT, FOR THE SPECIFIED AND NAMED PROJECT ONLY. THESE DRAWINGS ARE FOR YOUR REFERENCE ONLY AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.



**STORMTRAP SYSTEM A
 SUBSURFACE RECHARGE CHAMBER**

0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA

BILL OF MATERIALS			
QTY.	UNIT TYPE	DESCRIPTION	WEIGHT
1	4'-0" SINGLETRAP	0	
325	II	4'-0" SINGLETRAP	16802
1	III	4'-0" SINGLETRAP	0
82	IV	4'-0" SINGLETRAP	15104
1	VII	4'-0" SINGLETRAP	0
8	SPIV	4'-0" SINGLETRAP	VARIES
1	T2 PANEL	6" THICK PANEL	2841
9	T4 PANEL	6" THICK PANEL	2236
1	T7 PANEL	6" THICK PANEL	0
74	JOINTTAPE	14.5' PER ROLL	
0	JOINTTAPE	14.5' PER ROLL	
TOTAL PIECES = 415			
TOTAL PANELS = 10			
HEAVIEST PICK WEIGHT = 16.802			

LOADING DISCLAIMER:

STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY.

TREE LOADING DISCLAIMER:

THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. STORMTRAP ACCEPTS NO LIABILITY FOR DAMAGES CAUSED BY TREES OR OTHER VEGETATION PLACED AROUND OR ON TOP OF THE SYSTEM.

DESIGN CRITERIA

ALLOWABLE MAX GRADE = 194.41
 ALLOWABLE MIN GRADE = 189.91
 INSIDE HEIGHT ELEVATION = 188.83
 SYSTEM INVERT = 184.83

NOTES:

- DIMENSIONING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
- ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
- SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.
- SEE SHEETS 6.0 & 6.1 FOR SPLASH PAD DETAILS AND LAYOUT.
- SP - INDICATES A MODULE WITH MODIFICATIONS.
- P - INDICATES A MODULE WITH A PANEL ATTACHMENT.
- CONTRACTOR'S RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.

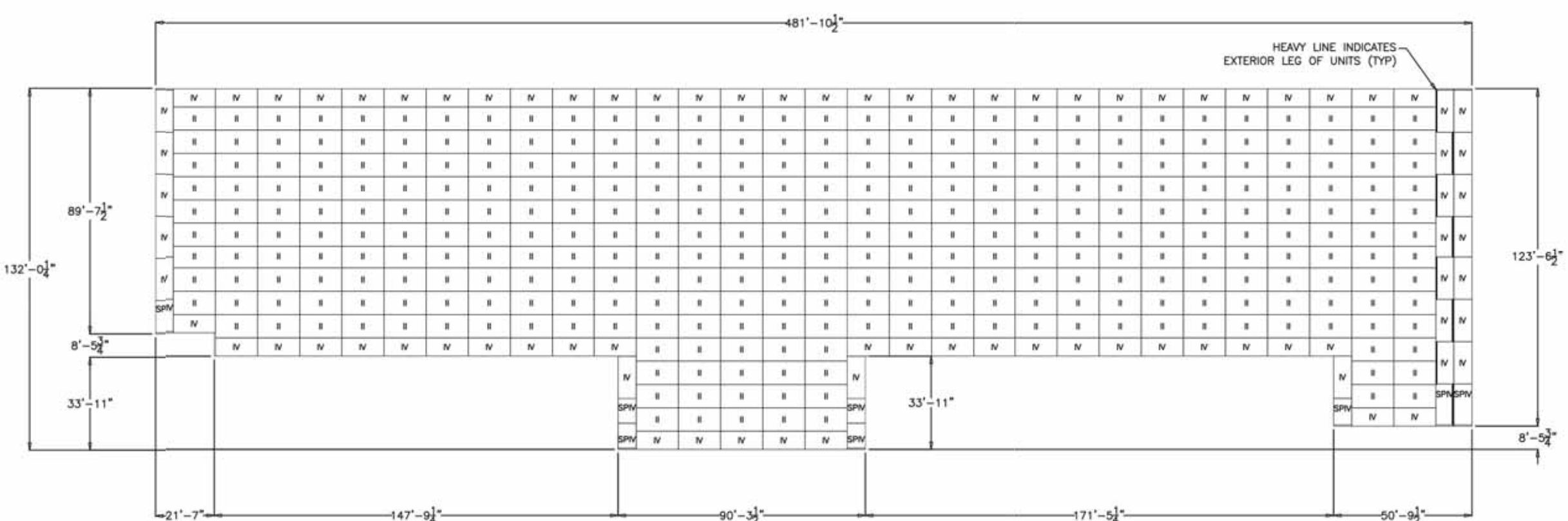
StormTrap
FILES USED AS PER 10/20/2019/REVISED
 1287 WINDHAM PARWAY
 ROXBOROUGH, IL 60446
 PB15-941-6249 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA
 CURRENT ISSUE DATE:
 8/10/2022
 ISSUED FOR:
 PRELIMINARY

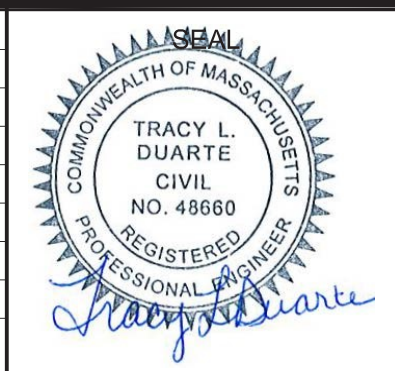
REV.	DATE	ISSUED FOR:	OWN BY:
Δ	8/10/2022	PRELIMINARY	DG
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS
 SHEET TITLE:
 SINGLETRAP LAYOUT DETAILS
 SHEET NUMBER:
 2.0



No.	DATE	REVISION PER COMMENTS	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS		JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS		JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS		JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER		JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
 V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.:
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

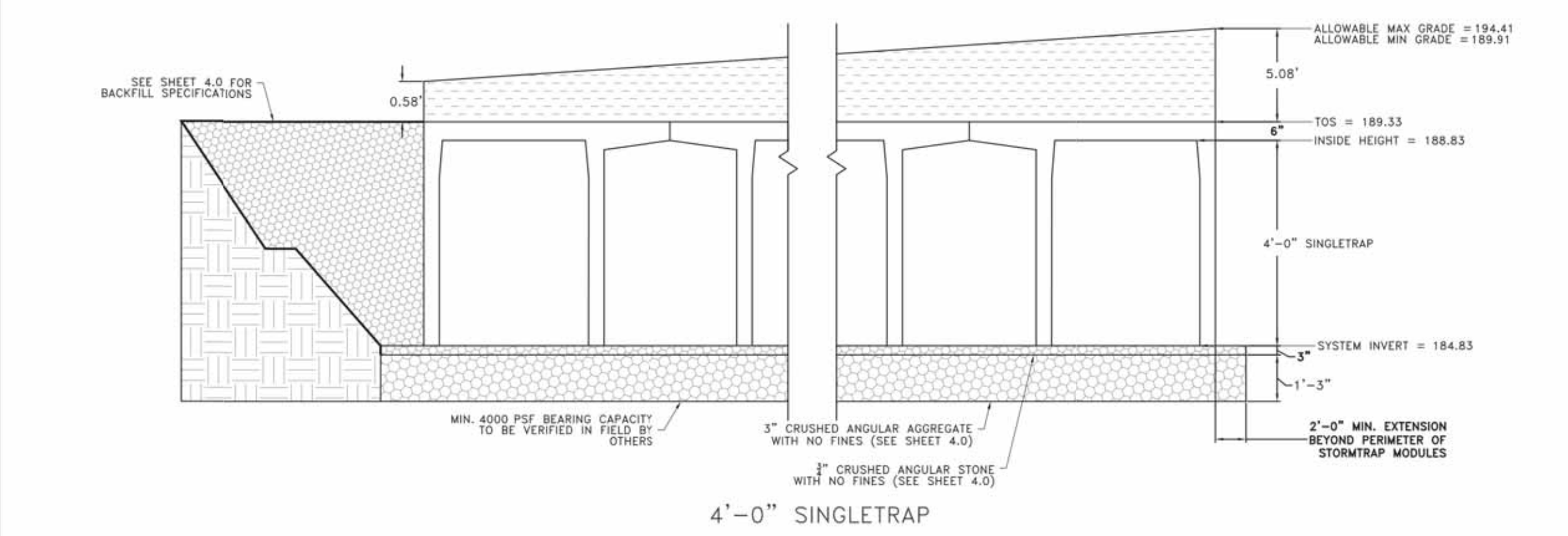
PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
 C-9.6

STRUCTURAL DESIGN LOADING CRITERIA
 LIVE LOADING: AASHTO HS-20 HIGHWAY LOADING
 GROUND WATER TABLE: BELOW INVERT OF SYSTEM
 SOIL BEARING CAPACITY: 4000 PSF
 SOIL DENSITY: 120 PCF
 EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT.
 EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE: 80 PSF/FT. (IF WATER TABLE PRESENT)
 APPLICABLE CODES: ASTM C897 ACI-318
 BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION
 WATER STORAGE PROVY: 183,519.46 CUBIC FEET
 UNIT HEADROOM: 4'-0" SINGLETRAP

- SITE SPECIFIC DESIGN CRITERIA**
- STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
 - COVER RANGE: MIN 0.58' MAX 5.08' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
 - ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
 - FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.



StormTrap
FILES USED AS PER 10/20/2019/REVISED
 1287 WINDHAM PARWAY
 ROXBOROUGH, IL 60446
 PB15-941-6249 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA
 CURRENT ISSUE DATE:
 8/10/2022
 ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
Δ	8/10/2022	PRELIMINARY	DG
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS
 SHEET TITLE:
 SINGLETRAP DESIGN CRITERIA
 SHEET NUMBER:
 1.0

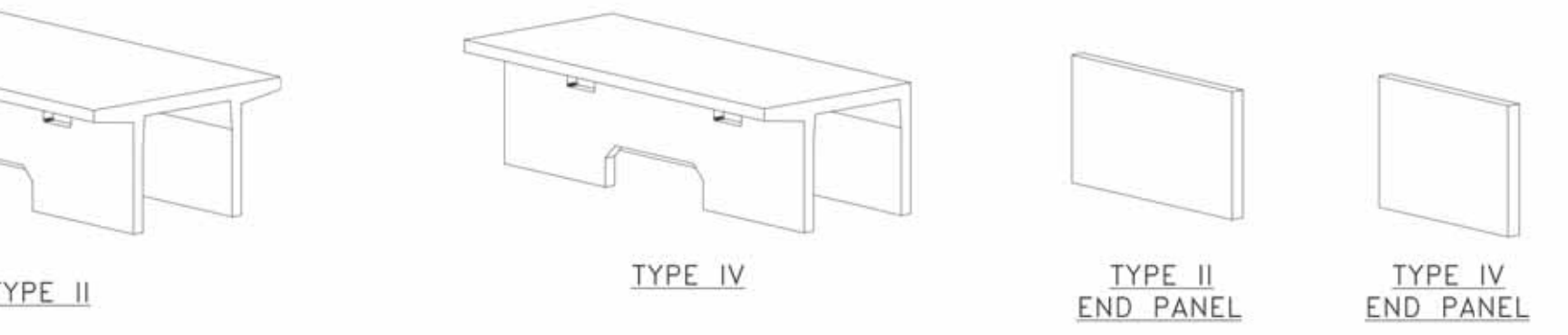
StormTrap
FILES USED AS PER 10/20/2019/REVISED
 1287 WINDHAM PARWAY
 ROXBOROUGH, IL 60446
 PB15-941-6249 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA
 CURRENT ISSUE DATE:
 8/10/2022
 ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
Δ	8/10/2022	PRELIMINARY	DG
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS
 SHEET TITLE:
 SINGLETRAP MODULE TYPES
 SHEET NUMBER:
 7.0



StormTrap
FILES USED AS PER 10/20/2019/REVISED
 1287 WINDHAM PARWAY
 ROXBOROUGH, IL 60446
 PB15-941-6249 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM A
 FALL RIVER, MA
 CURRENT ISSUE DATE:
 8/10/2022
 ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
Δ	8/10/2022	PRELIMINARY	DG
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS
 SHEET TITLE:
 SINGLETRAP MODULE TYPES
 SHEET NUMBER:
 7.0

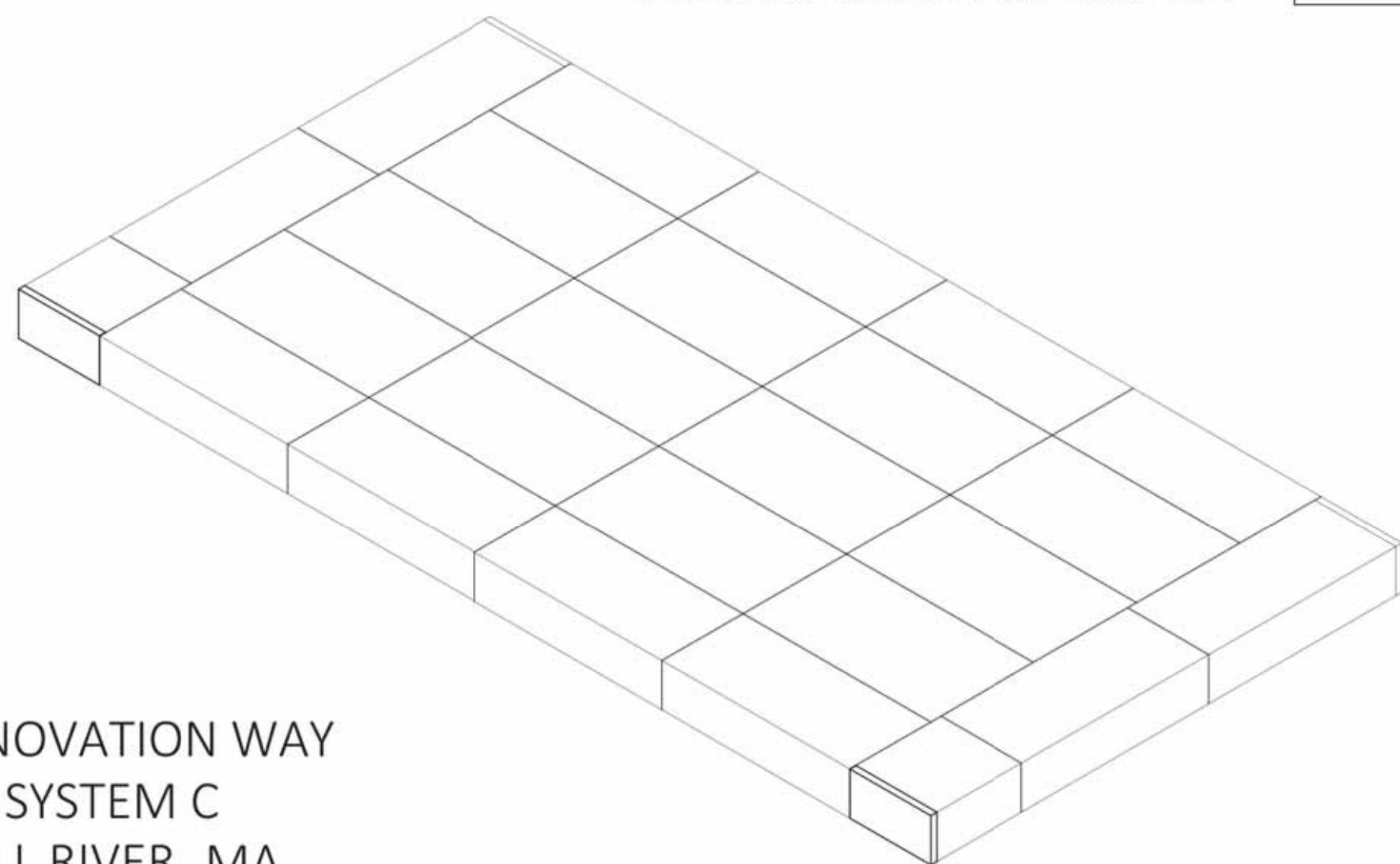




STORMTRAP SYSTEM C SUBSURFACE RECHARGE CHAMBER

NOT TO SCALE

THE STORMTRAP DRAWINGS SHALL NOT BE ALTERED OR MANIPULATED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF STORMTRAP. USE OF THESE DRAWINGS IS STRICTLY GRANTED TO YOU, OUR CLIENT, FOR THE SPECIFIED AND NAMED PROJECT ONLY. THESE DRAWINGS ARE FOR YOUR REFERENCE ONLY AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.



0 INNOVATION WAY
SYSTEM C
FALL RIVER, MA

SHEET INDEX	
PAGE	DESCRIPTION
0.0	COVER SHEET
1.0	SINGLETRAP DESIGN CRITERIA
2.0	SINGLETRAP SYSTEM LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PIPING/ACCESS OPENING SPECIFICATIONS
6.0	SPLASH PAD & GEOWEB DETAILS
7.0	SINGLETRAP MODULE TYPES

StormTrap
FILES USED AS: (REV)/STORMTRAP/REV/FILES
 1287 WINDHAM PARWAY
 ROSELAND, IL 60446
 PB15-941-6549 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM C
 GALL RIVER, MA
 CURRENT ISSUE DATE:
 11/18/2022

ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
1	11/18/2022	PRELIMINARY	KS
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS

SHEET TITLE:
 COVER SHEET

SHEET NUMBER:
 0.0

STRUCTURAL DESIGN LOADING CRITERIA

LIVE LOADING: AASHTO HS-20 HIGHWAY LOADING
 GROUND WATER TABLE: BELOW INVERT OF SYSTEM
 SOIL BEARING CAPACITY: 4000 PSF
 SOIL DENSITY: 120 PCF
 EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT.
 EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE: 80 PSF/FT. (IF WATER TABLE PRESENT)
 APPLICABLE CODES: ASTM C897 ACI-318
 BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

WATER STORAGE PROV: 7681.54 CUBIC FEET
 UNIT HEADROOM: 3'-0" SINGLETRAP

- SITE SPECIFIC DESIGN CRITERIA**
- STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
 - COVER RANGE: MIN. 1.30' MAX. 2.50' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
 - ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
 - FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.

StormTrap
FILES USED AS: (REV)/STORMTRAP/REV/FILES
 1287 WINDHAM PARWAY
 ROSELAND, IL 60446
 PB15-941-6549 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM C
 GALL RIVER, MA
 CURRENT ISSUE DATE:
 11/18/2022

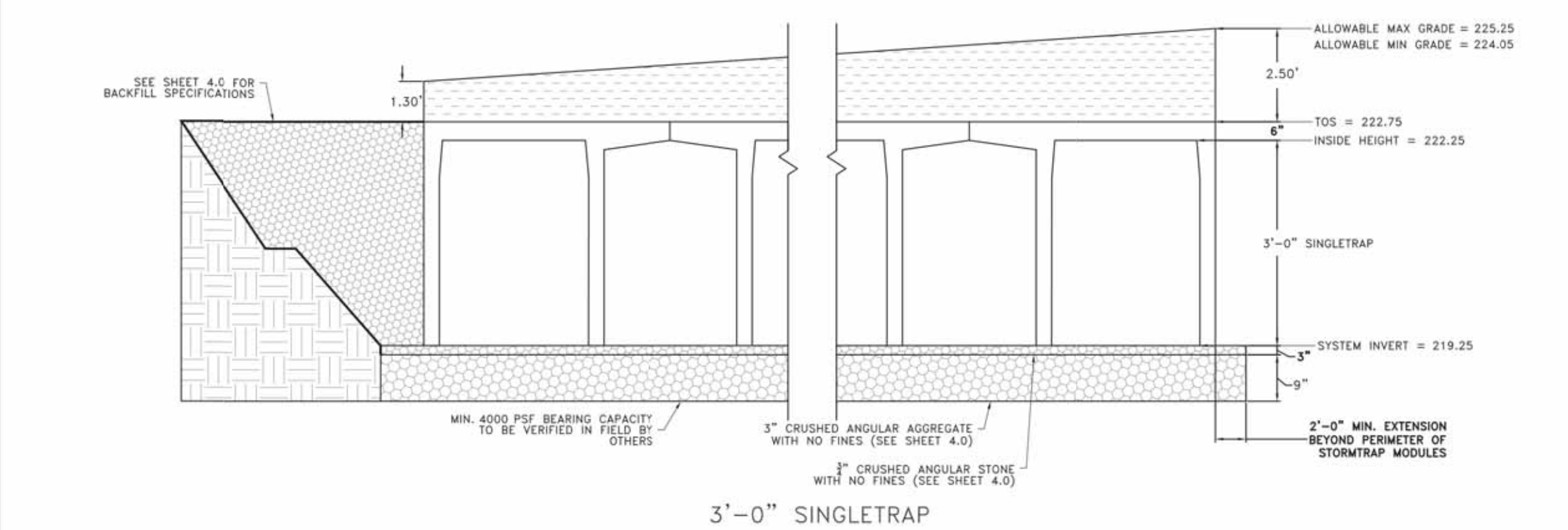
ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
1	11/18/2022	PRELIMINARY	KS
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS

SHEET TITLE:
 SINGLETRAP DESIGN CRITERIA

SHEET NUMBER:
 1.0



BILL OF MATERIALS

QTY.	UNIT TYPE	DESCRIPTION	WEIGHT
0	I	3'-0" SINGLETRAP	0
12	II	3'-0" SINGLETRAP	14886
0	III	3'-0" SINGLETRAP	0
12	IV	3'-0" SINGLETRAP	13188
0	VII	3'-0" SINGLETRAP	0
2	SPIV	3'-0" SINGLETRAP	VARIES
0	T2	6" THICK PANEL	0
4	T4	6" THICK PANEL	1740
0	T7	6" THICK PANEL	0
5	JOINTWRAP	150' PER ROLL	0
0	JOINTTAPE	14.5' PER ROLL	0
TOTAL PIECES = 26			
TOTAL PANELS = 4			
HEAVIEST PICK WEIGHT = 14,886			

LOADING DISCLAIMER:
 STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY.

TREE LOADING DISCLAIMER:
 THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. STORMTRAP ACCEPTS NO LIABILITY FOR DAMAGES CAUSED BY TREES OR OTHER VEGETATION PLACED AROUND OR ON TOP OF THE SYSTEM.

DESIGN CRITERIA
 ALLOWABLE MAX GRADE = 225.25
 ALLOWABLE MIN GRADE = 224.05
 INSIDE HEIGHT ELEVATION = 222.25
 SYSTEM INVERT = 219.25

NOTES:
 1. DIMENSIONING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
 2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
 3. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.
 4. SEE SHEETS 6.0 & 6.1 FOR SPLASH PAD DETAILS AND LAYOUT.
 5. SP - INDICATES A MODULE WITH MODIFICATIONS.
 6. P - INDICATES A MODULE WITH A PANEL ATTACHMENT.
 7. CONTRACTORS RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.

StormTrap
FILES USED AS: (REV)/STORMTRAP/REV/FILES
 1287 WINDHAM PARWAY
 ROSELAND, IL 60446
 PB15-941-6549 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM C
 GALL RIVER, MA
 CURRENT ISSUE DATE:
 11/18/2022

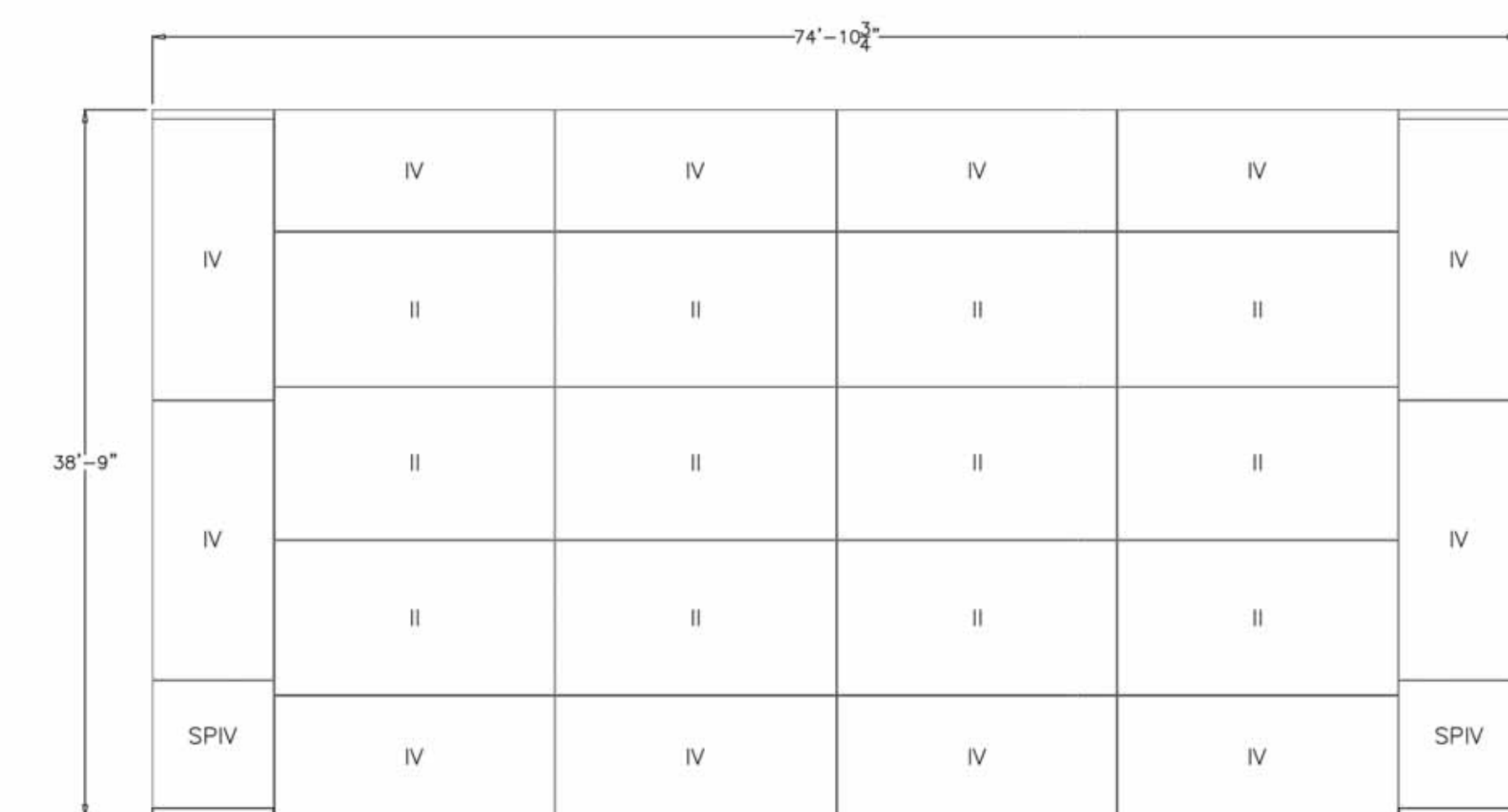
ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
1	11/18/2022	PRELIMINARY	KS
1	8/3/2022	PRELIMINARY	DG

SCALE:
 NTS

SHEET TITLE:
 SINGLETRAP LAYOUT DETAILS

SHEET NUMBER:
 2.0

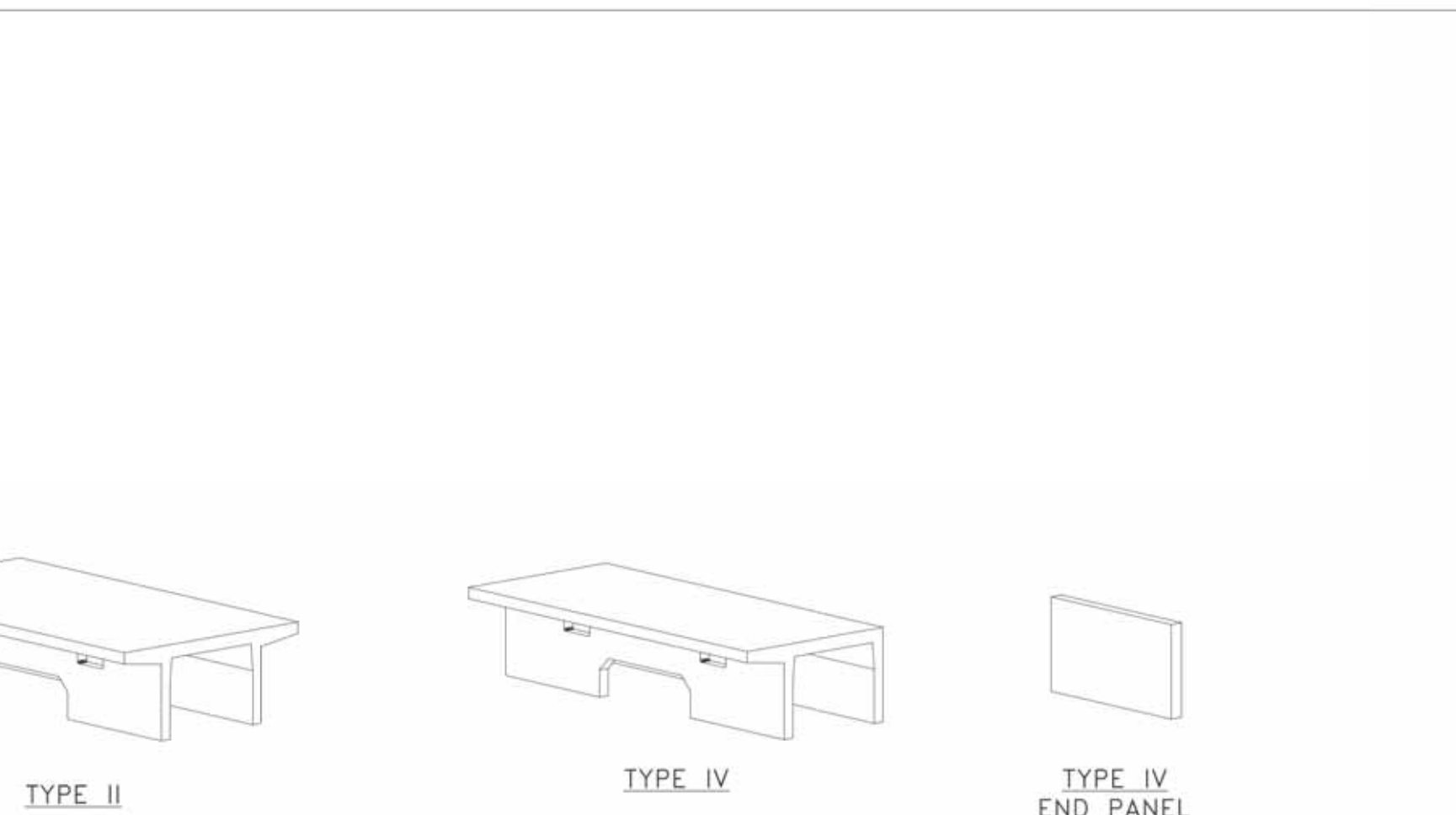


StormTrap
FILES USED AS: (REV)/STORMTRAP/REV/FILES
 1287 WINDHAM PARWAY
 ROSELAND, IL 60446
 PB15-941-6549 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM C
 GALL RIVER, MA
 CURRENT ISSUE DATE:
 11/18/2022

ISSUED FOR:
 PRELIMINARY



StormTrap
FILES USED AS: (REV)/STORMTRAP/REV/FILES
 1287 WINDHAM PARWAY
 ROSELAND, IL 60446
 PB15-941-6549 / F331-318-5347

ENGINEER INFORMATION:
 MBL LAND DEVELOPMENT & PERMITTING
 5 BRISTOL DR, SUITE 3A
 EASTON, MA 02375
 508-297-2746

PROJECT INFORMATION:
 0 INNOVATION WAY
 SYSTEM C
 GALL RIVER, MA
 CURRENT ISSUE DATE:
 11/18/2022

ISSUED FOR:
 PRELIMINARY

REV.	DATE	ISSUED FOR:	OWN BY:
1	11/18/2022	PRELIMINARY	KS
1	8/3/2022	PRELIMINARY	DG

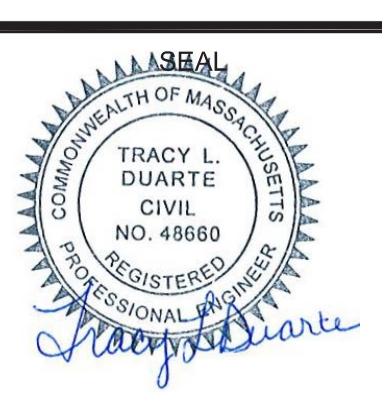
SCALE:
 NTS

SHEET TITLE:
 SINGLETRAP MODULE TYPES

SHEET NUMBER:
 7.0

No.	DATE	REVISION PER COMMENT FROM CITY OF FALL RIVER	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW	
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW	
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW	
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW	

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
 V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:

HORIZ.:	
VERT.:	

DATUM:

HORIZ.:	NA83
VERT.:	NAVD88

GRAPHIC SCALE

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-9.8

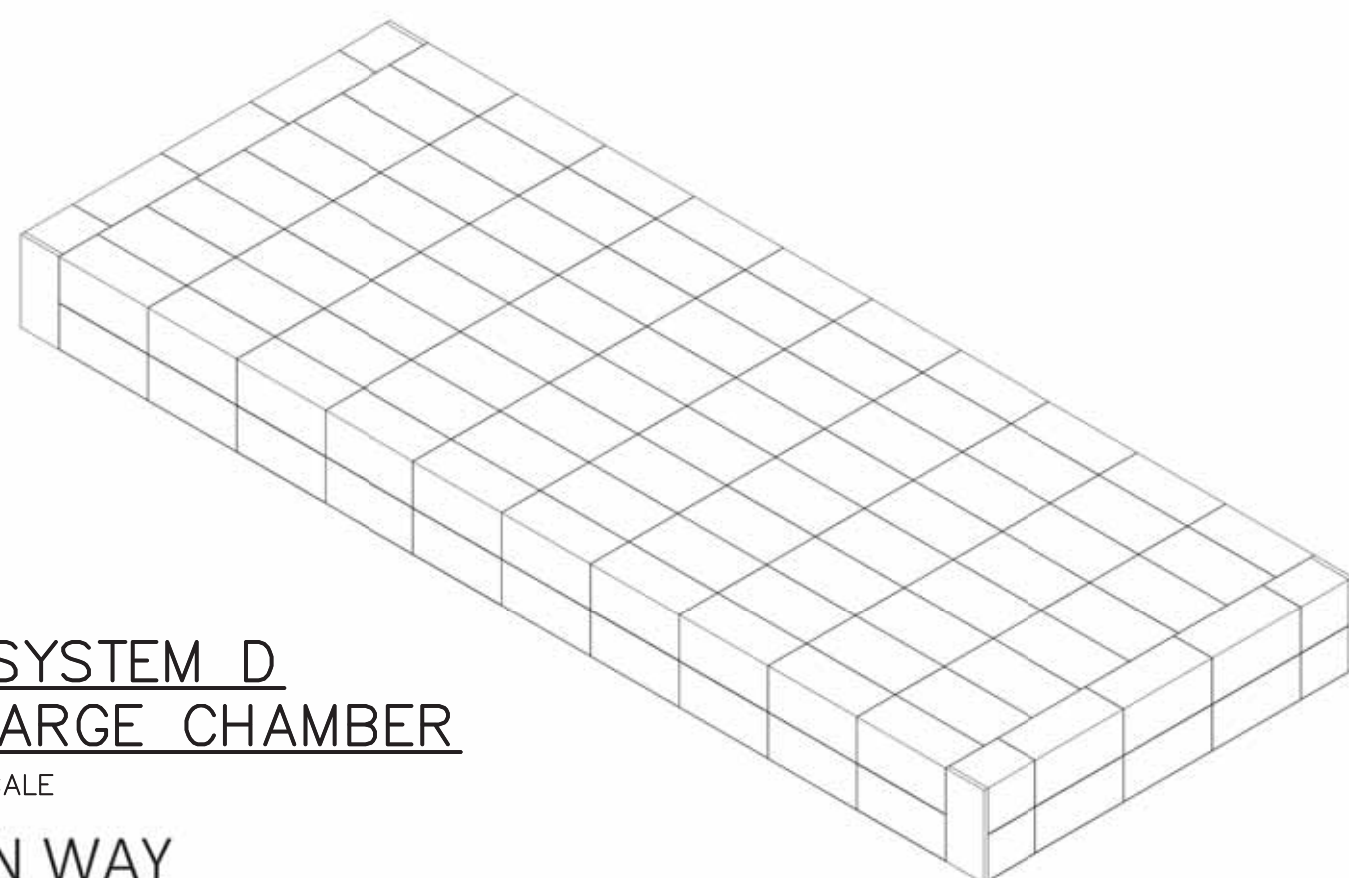


LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan\set-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:05:04 PM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:



MODULAR CONCRETE STORMWATER MANAGEMENT

THE STORMTRAP DRAWINGS SHALL NOT BE ALTERED OR MANIPULATED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF STORMTRAP. USE OF THESE DRAWINGS IS STRICTLY GRANTED TO YOU, OUR CLIENT, FOR THE SPECIFIED AND NAMED PROJECT ONLY. THESE DRAWINGS ARE FOR YOUR REFERENCE ONLY AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.



STORMTRAP SYSTEM D SUBSURFACE RECHARGE CHAMBER

NOT TO SCALE

0 INNOVATION WAY SYSTEM D FALL RIVER, MA

SHEET INDEX table with columns for PAGE, DESCRIPTION, and details for sheets 0.0 through 6.0.

STORMTRAP CONTACT INFORMATION: STORMTRAP SUPPLIER: STORMTRAP, CONTACT NAME: JOSH CORREA, CALL PHONE: 401-429-3491, SALES EMAIL: JCORREA@STORMTRAP.COM

StormTrap logo and address: 1267 WINDHAM PARWAY, ROMEVILLE, IL 60446, PB15-941-4549 / F331-318-5347

ENGINEER INFORMATION: MBL LAND DEVELOPMENT & PERMITTING, 5 BRISTOL DR, SUITE 3A, EASTON, MA 02375, 508-297-2749

PROJECT INFORMATION: 0 INNOVATION WAY SYSTEM D, FALL RIVER, MA, CURRENT ISSUE DATE: 11/18/2022

ISSUED FOR: PRELIMINARY

Revision table with columns: REV, DATE, ISSUED FOR, OWN BY. Shows revisions 1 and 2.

SCALE: NTS

SHEET TITLE: COVER SHEET

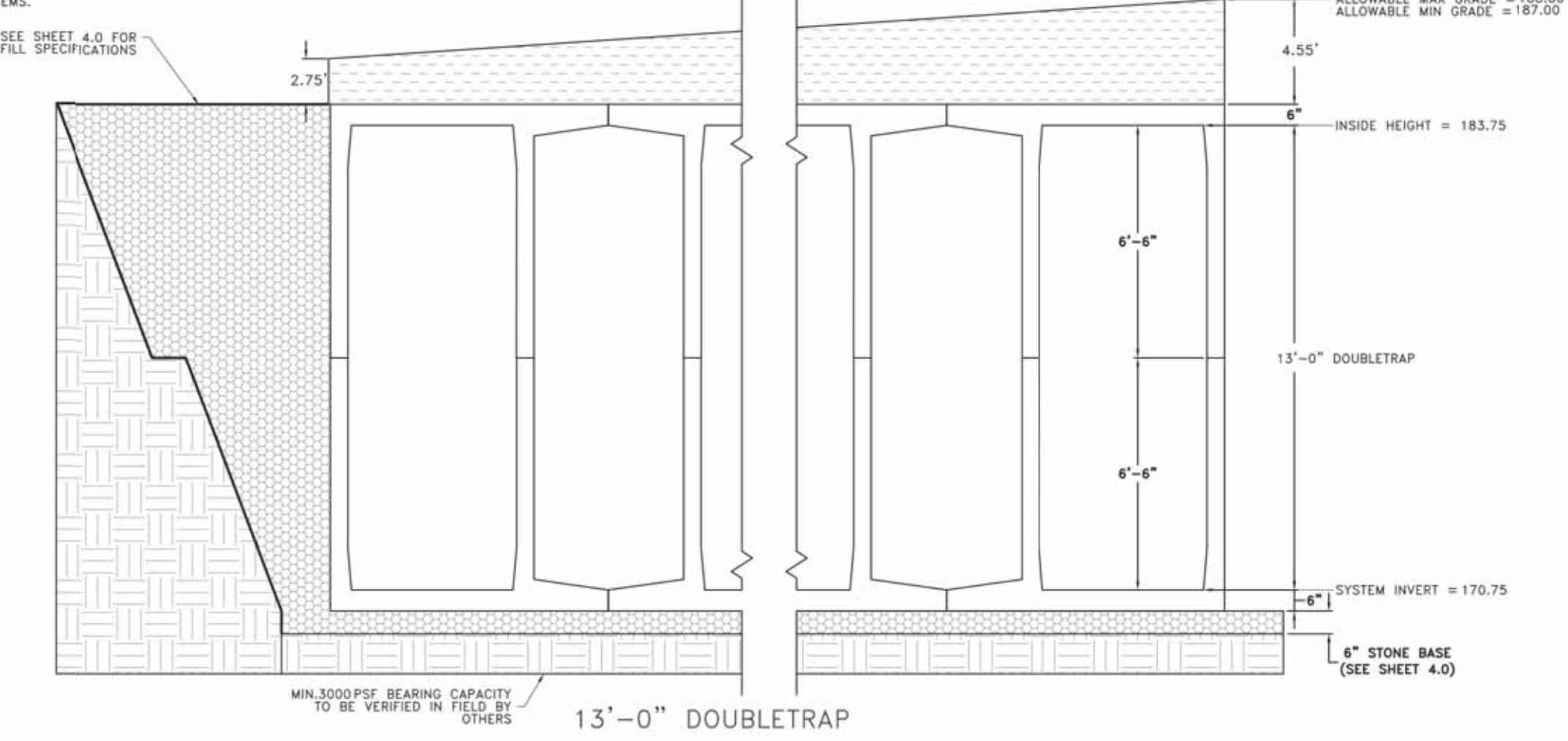
SHEET NUMBER: 0.0

STRUCTURAL DESIGN LOADING CRITERIA: LIVE LOADING: AASHTO HS-20 HIGHWAY LOADING, GROUND WATER TABLE: BELOW INVERT OF SYSTEM, SOIL BEARING PRESSURE: 3000PSF, SOIL DENSITY: 120 PCF, EARTH PRESSURE: UNSATURATED, LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT., EARTH PRESSURE: SATURATED, LATERAL ACTIVE EARTH PRESSURE: 60 PSF/FT. (OF WATER TABLE PRESSURE), APPLICABLE CODES: ASTM C857, ACI-318, BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION: WATER STORAGE PROF: 126,361.67 CUBIC FEET, UNIT HEADROOM: 13'-0" DOUBLETRAP

SITE SPECIFIC DESIGN CRITERIA: 1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD... 2. COVER RANGE: MIN. 2.75' MAX. 4.55' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS... 3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION... 4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP... 5. SYSTEM DESIGN MAY ALLOW FOR INCIDENTAL LEAKAGE AND WILL NOT BE SUBJECT TO LEAKAGE TESTING.

NOTES: THESE PRELIMINARY DRAWINGS ARE NOT TO BE USED FOR APPROVAL OR CONSTRUCTION PURPOSES. THESE DRAWINGS ARE GENERIC AND DO NOT ACCOUNT FOR SPECIAL CONSIDERATIONS - BE THEY STRUCTURAL OR OTHERWISE - ASSOCIATED WITH ANY NEARBY STRUCTURAL ITEMS OR COMPONENTS. BUILDING FOOTINGS ARE TO BE SET AT A SUFFICIENT DEPTH AND DISTANCE TO ENSURE THAT THEY EXERT NO LOADS ON THE STORMTRAP SYSTEM. THE DESIGN HERE ASSUMES THAT NO VERTICAL LOADS, SURCHARGE LOADS, OR DIRECT LATERAL LOADS ARE EXERTED ON THE STORMTRAP SYSTEM BY NEARBY BUILDING STRUCTURES, FOUNDATION ELEMENTS, OR RETAINING WALLS. STORMTRAP RESERVES THE RIGHT TO MODIFY THE DESIGN, LAYOUT, AND ORIENTATION OF THE SYSTEM SHOWN HERE TO ADDRESS ANY ISSUES ASSOCIATED WITH NEARBY STRUCTURAL ITEMS. STORMTRAP MAKES NO GUARANTEE THAT ITS PRECAST MODULES CAN BE MODIFIED TO SUPPORT ADDITIONAL LOADS WHICH ARE LATER IDENTIFIED AND ATTRIBUTED TO SAID STRUCTURAL ITEMS.



StormTrap logo and address: 1267 WINDHAM PARWAY, ROMEVILLE, IL 60446, PB15-941-4549 / F331-318-5347

ENGINEER INFORMATION: MBL LAND DEVELOPMENT & PERMITTING, 5 BRISTOL DR, SUITE 3A, EASTON, MA 02375, 508-297-2749

PROJECT INFORMATION: 0 INNOVATION WAY SYSTEM D, FALL RIVER, MA, CURRENT ISSUE DATE: 11/18/2022

ISSUED FOR: PRELIMINARY

Revision table with columns: REV, DATE, ISSUED FOR, OWN BY. Shows revisions 1 and 2.

SCALE: NTS

SHEET TITLE: DOUBLETRAP DESIGN CRITERIA

SHEET NUMBER: 1.0

BILL OF MATERIALS table with columns: QTY, UNIT TYPE, DESCRIPTION, TOP WEIGHT, BASE WEIGHT. Lists items like 1/INF, SPV, T2 PANEL, T4 PANEL, T7 PANEL, JOINT TAPE.

LOADING DISCLAIMER: STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY. TREE LOADING DISCLAIMER: THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. BUILDING PROXIMITY LOADING DISCLAIMER: THESE DRAWINGS ARE NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES. THIS DESIGN ASSUMES THAT NO VERTICAL LOADS, SURCHARGE LOADS, OR DIRECT LATERAL LOADS ARE EXERTED ON THE STORMTRAP SYSTEM BY BUILDING SUPERSTRUCTURES OR FOUNDATION ELEMENTS LOCATED IN PROXIMITY TO THE STORMTRAP SYSTEM.

DESIGN CRITERIA: ALLOWABLE MAX GRADE = 188.80, ALLOWABLE MIN GRADE = 187.00, INSIDE HEIGHT ELEVATION = 183.75, SYSTEM INVERT = 170.75. NOTES: 1. DIMENSIONING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 1/4" GAP BETWEEN EACH MODULE. 2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS. 3. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS. 4. SP - INDICATES A MODULE WITH MODIFICATIONS. 5. P - INDICATES A MODULE WITH A PANEL ATTACHMENT. 6. CONTRACTORS RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.

StormTrap logo and address: 1267 WINDHAM PARWAY, ROMEVILLE, IL 60446, PB15-941-4549 / F331-318-5347

ENGINEER INFORMATION: MBL LAND DEVELOPMENT & PERMITTING, 5 BRISTOL DR, SUITE 3A, EASTON, MA 02375, 508-297-2749

PROJECT INFORMATION: 0 INNOVATION WAY SYSTEM D, FALL RIVER, MA, CURRENT ISSUE DATE: 11/18/2022

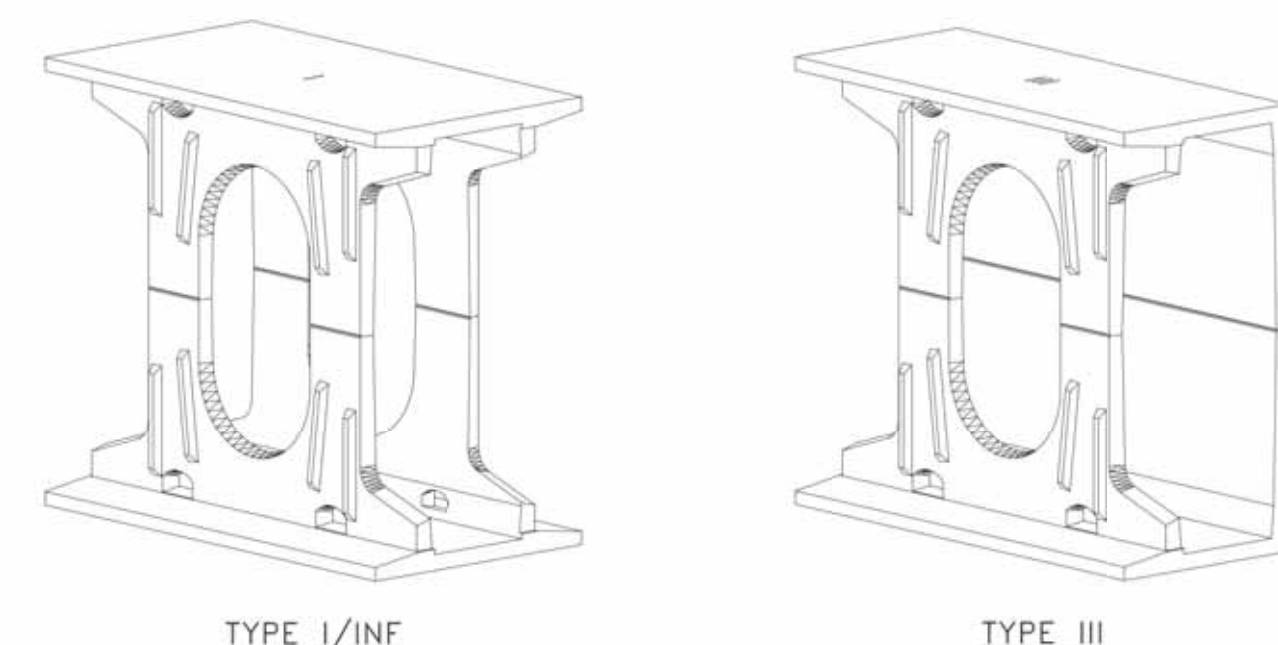
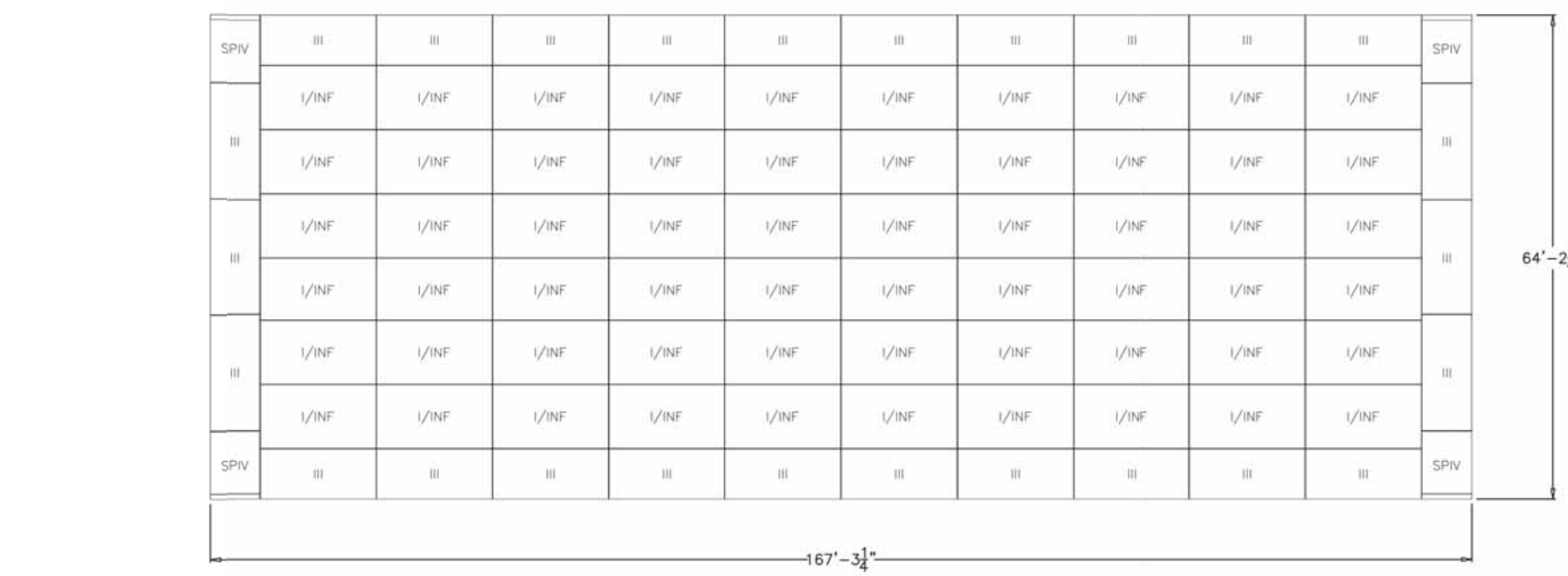
ISSUED FOR: PRELIMINARY

Revision table with columns: REV, DATE, ISSUED FOR, OWN BY. Shows revisions 1 and 2.

SCALE: NTS

SHEET TITLE: DOUBLETRAP SYSTEM LAYOUT

SHEET NUMBER: 2.0



StormTrap logo and address: 1267 WINDHAM PARWAY, ROMEVILLE, IL 60446, PB15-941-4549 / F331-318-5347

ENGINEER INFORMATION: MBL LAND DEVELOPMENT & PERMITTING, 5 BRISTOL DR, SUITE 3A, EASTON, MA 02375, 508-297-2749

PROJECT INFORMATION: 0 INNOVATION WAY SYSTEM D, FALL RIVER, MA, CURRENT ISSUE DATE: 11/18/2022

ISSUED FOR: PRELIMINARY

Revision table with columns: REV, DATE, ISSUED FOR, OWN BY. Shows revisions 1 and 2.

SCALE: NTS

SHEET TITLE: DOUBLETRAP MODULE TYPES

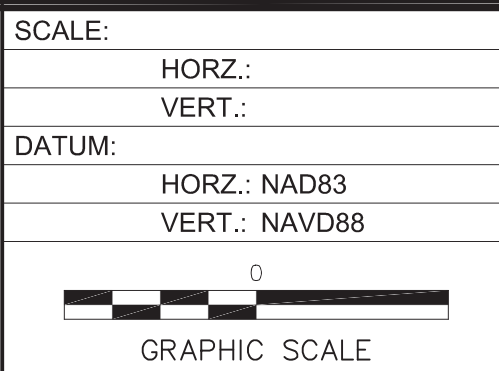
SHEET NUMBER: 6.0

Revisions table with columns: No., DATE, REVISION PER COMMENTS, DESCRIPTION, JAW, BY. Lists revisions 1 through 4.



PREPARED FOR: V.M.D. COMPANIES, LLC, 733 TURNPIKE STREET, ROUTE 114, NORTH ANDOVER, MASSACHUSETTS

SCALE: HORZ.: VERT.: DATUM: HORZ.: NAD83, VERT.: NAVD88



MBL LAND DEVELOPMENT & PERMITTING, CORP. LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS, 5 BRISTOL DRIVE, SUITE 3A, SOUTH EASTON, MA 02375, P-508.297.2746, EMAIL: info@MBLLandDevelopment.com, WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT DETAILS, 0 INNOVATION WAY, FALL RIVER - MAP W-19 LOTS 185 & 189, FREETOWN - PARCEL ID 236-006.01, FALL RIVER/FREETOWN, MASSACHUSETTS

PROJECT No.: 2021-036, DATE: JULY 25, 2022, C-9.9



Vertical text on the left margin: UCS, LMAN, CTB, MS VIEW, LUGS, X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:05:07 PM, DWG To PDF.pc3

CULTEC RECHARGER 902HD[®] SPECIFICATIONS
GENERAL
 CULTEC RECHARGER[®] 902HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

- THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. OR CANADA BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416).
- THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 - INSTANTANEOUS ASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER.
 - MAXIMUM PERMANENT (50-YEAR) COVER LOAD.
 - 1-WEEK PARKED ASHTO DESIGN TRUCK LOAD.
- THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 - THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430.
 - THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75.
 - THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95.
- THE CHAMBER SHALL BE STRUCTURAL FOAM INJECTION MOLDED OF BLUE VIRGIN HIGH MOLECULAR WEIGHT IMPACT MODIFIED POLYPROPYLENE.
- THE CHAMBER SHALL BE ARCHED IN SHAPE.
- THE CHAMBER SHALL BE OPEN-BOTTOMED.
- THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COMPLINGS.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 902HD SHALL BE 48 INCHES (1219 MM) TALL, 78 INCHES (1981 MM) WIDE AND 4.25 FEET (1.30 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 902HD SHALL BE 3.67 FEET (1.12 M).
- MULTIPLE CHAMBERS MAY BE CONNECTED TO FORM DIFFERENT LENGTH ROWS. EACH ROW SHALL BEGIN AND END WITH A SEPARATELY FORMED CULTEC RECHARGER 902HD END CAP. MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (914 MM) PVC.
- THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV[™] FC-48 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 10 INCHES (254 MM) HDPE AND 12 INCHES (300 MM) PVC.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV[™] FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 49 INCHES (1249 MM) LONG.
- THE NOMINAL STORAGE VOLUME OF THE RECHARGER 902HD CHAMBER SHALL BE 17.31 FT³ (0.49 M³) WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 902HD SHALL BE 63.47 FT³ (1.80 M³) WITHOUT STONE.
- THE NOMINAL STORAGE VOLUME OF THE HVLV[™] FC-48 FEED CONNECTOR SHALL BE 0.913 FT³ (0.026 M³) WITHOUT STONE.
- THE RECHARGER 902HD CHAMBERS SHALL HAVE 5 CORRUGATIONS.
- THE CHAMBER SHALL BE CAPABLE OF ACCEPTING A 6 INCH (150 MM) INSPECTION PORT OPENING AT THE TOP CENTER OF EACH CHAMBER, CENTERED ON THE CORRUGATION CREST.
- THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING QUALITY CONTROL AND ASSURANCE PROCEDURES.
- MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 8.3 FEET (2.53 M).

END CAP PARAMETERS

- THE CULTEC RECHARGER[®] 902HD END CAP (REFERRED TO AS "END CAP") SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416).
- THE END CAP SHALL BE TWIN-SHEET THERMOFORMED OF VIRGIN HIGH MOLECULAR WEIGHT POLYETHYLENE.
- THE END CAP SHALL BE JOINED AT THE BEGINNING AND END OF EACH ROW OF CHAMBERS USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COMPLINGS.
- THE NOMINAL DIMENSIONS OF THE END CAP SHALL BE 48.5 INCHES (1233 MM) TALL, 78 INCHES (1982 MM) WIDE AND 5.7 INCHES (144 MM) LONG. WHEN JOINED WITH A RECHARGER 902HD CHAMBER, THE INSTALLED LENGTH OF THE END CAP SHALL BE 6.2 INCHES (157 MM).
- THE NOMINAL STORAGE VOLUME OF THE END CAP SHALL BE 5.34 FT³ (0.50 M³) WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF AN INTERLOCKED END CAP SHALL BE 2.76 FT³ (0.08 M³) WITHOUT STONE.
- MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (900 MM) PVC.
- THE END CAP SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12.

CULTEC HVLV FC-48 FEED CONNECTOR PRODUCT SPECIFICATIONS
GENERAL
 CULTEC HVLV FC-48 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER[®] 902HD STORMWATER CHAMBERS.

FEED CONNECTOR PARAMETERS

- THE FEED CONNECTOR SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-429-5832)
- THE FEED CONNECTOR SHALL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HDPE).
- THE FEED CONNECTOR SHALL BE ARCHED IN SHAPE.
- THE FEED CONNECTOR SHALL BE OPEN-BOTTOMED.
- THE NOMINAL DIMENSIONS OF THE CULTEC HVLV FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 49 INCHES (1249 MM) LONG.
- THE NOMINAL STORAGE VOLUME OF THE HVLV FC-48 FEED CONNECTOR SHALL BE 0.913 FT³ (0.026 M³) WITHOUT STONE.
- THE HVLV FC-48 FEED CONNECTOR SHALL HAVE 4 CORRUGATIONS.
- THE HVLV FC-48 FEED CONNECTOR MUST BE FORMED AS A WHOLE UNIT HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
- THE FEED CONNECTOR SHALL BE DESIGNED TO WITHSTAND ASHTO HS-25 DEFINED LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE FEED CONNECTOR SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC NO. 410[™] NON-WOVEN GEOTEXTILE
 CULTEC NO. 410[™] NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR[®] AND RECHARGER[®] STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

- GEOTEXTILE PARAMETERS**
- THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-429-5832)
 - THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
 - THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
 - THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4933 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D5241 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SQ (5300 L/MIN/SQ) PER ASTM D4491 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800[™] WOVEN GEOTEXTILE
 CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS AN UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

- GEOTEXTILE PARAMETERS**
- THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-429-5832)
 - THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
 - THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK RESISTANCE OF 26 X 20% PER ASTM D4632 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,095 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D5241 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE AN APARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT² (470 LPM/M²) PER ASTM D4491 TESTING METHOD.
 - THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

GENERAL NOTES

PIPE	A	B
6" [150 mm]	N/A	N/A
8" [200 mm]	N/A	N/A
10" [250 mm]	N/A	N/A
12" [300 mm]	28.50" [726 mm]	2.25" [57 mm]
15" [375 mm]	28.50" [726 mm]	2.25" [57 mm]
18" [450 mm]	23.50" [597 mm]	2.50" [64 mm]
24" [600 mm]	19.50" [493 mm]	3.00" [76 mm]

*THE TYPICAL INVERT TABLE ABOVE IS BASED ON THE INSIDE DIAMETER OF STANDARD CORRUGATED PLASTIC PIPE. THE HEAVY DUTY END CAP HAS PRE-MARKED TRIM LINES FOR PIPE DIAMETERS 12" (300mm), 15" (375mm), 18" (450mm) AND 24" (600mm). PIPES OF ANY SIZE AND MATERIAL UP TO 24" MAY BE PLACED AT CUSTOM LOCATIONS AND CUSTOM INVERTS. THE CROWN OF THE PIPE MUST REMAIN A MINIMUM OF 4" (100mm) FROM THE EDGE OF THE HEAVY DUTY END CAP.

CULTEC RECHARGER 902HD TYPICAL PIPE INVERTS

CULTEC HVLV FC-48 FEED CONNECTOR THREE VIEW

CULTEC INSPECTION PORT - ZOOM DETAIL

CULTEC RECHARGER 902HD HEAVY DUTY PLAN VIEW

CULTEC RECHARGER 902HD HEAVY DUTY THREE VIEW

CULTEC, Inc.
 Subsurface Stormwater Management Systems
 P.O. Box 280
 878 Federal Road
 Brookfield, CT 06804
 www.cultec.com
 PH: (203) 775-4416
 PH: (800) 4-CULTEC
 FX: (203) 775-1462
 tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEMS DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 902HD
 DETAIL SHEET
 TRAFFIC APPLICATION
 CULTEC SYSTEM E

CULTEC STORMWATER CHAMBER	
PROJECT NO: -	DATE: 03/2020
DESIGNED BY: TECH	CHECKED BY: TECH
SCALE: N.T.S.	SHEET NO: 1 OF 2

No.	DATE	REVISIONS	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE

SEAL
 PREPARED FOR
 V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORIZ.:
 VERT.:
 DATUM:
 HORIZ.: NAD83
 VERT.: NAVD88

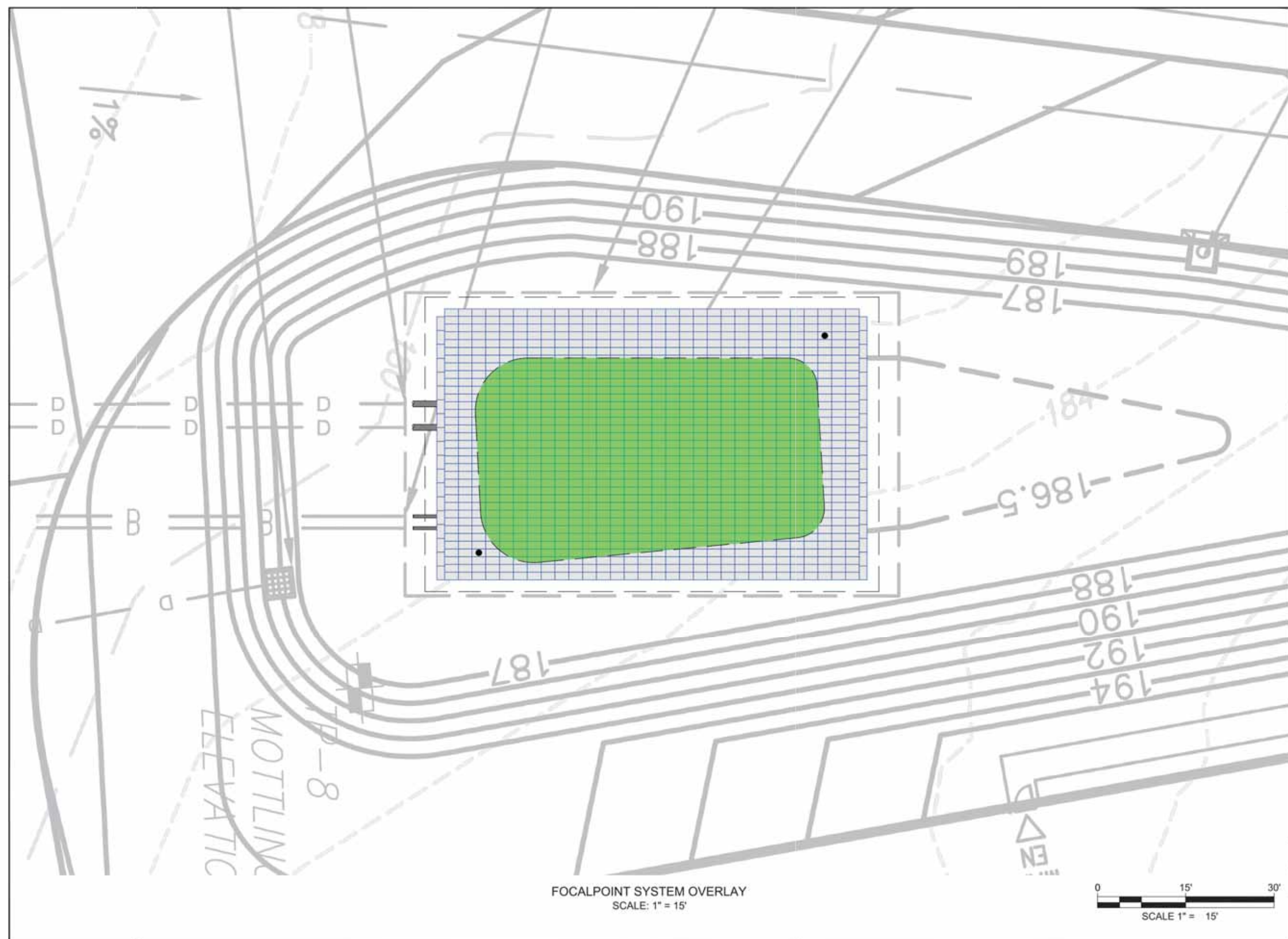
MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P: 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-9.10



LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-REV1.dwg, 11/22/2022 12:05:10 PM, DWG To PDF.pc3
 LMAN: LMAN
 CTB: CTB
 MS VIEW: MS VIEW



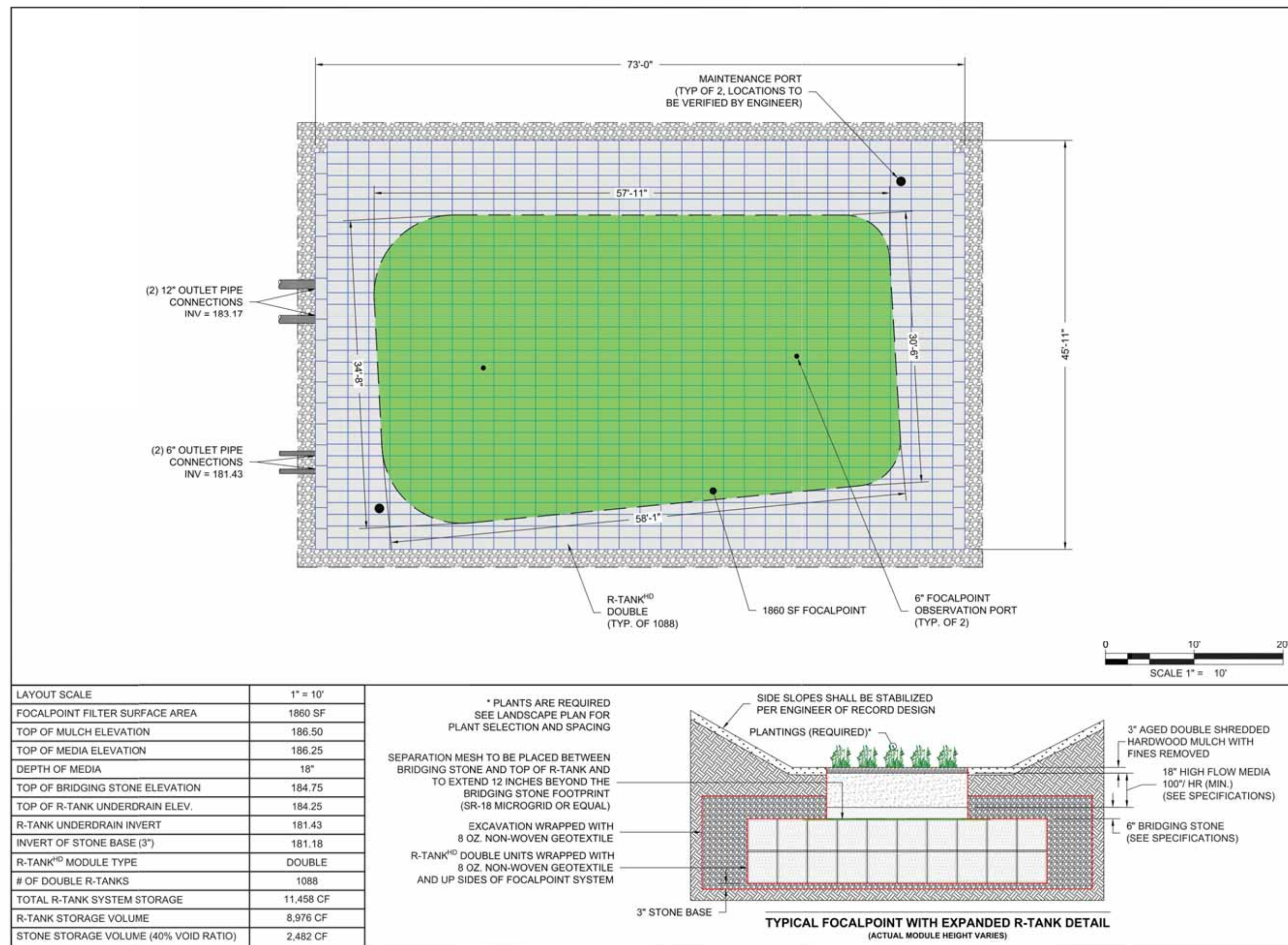
FocalPoint
 INFILTRATION SYSTEMS
 ENGINEER OF RECORD TO REVIEW, APPROVE AND
 ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON
 WATERWORKS
 FOR ADDITIONAL INFORMATION PLEASE CONTACT:
 FERGUSON WATERWORKS CONTACT:
 1-800-444-3838, www.ferguson.com

FOCALPOINT SYSTEM OVERLAY
 WAREHOUSE DEVELOPMENT
 FALL RIVER, MA
 SITE DESIGNATION: FP-1

EDG
 05/09/2022

1 of 7



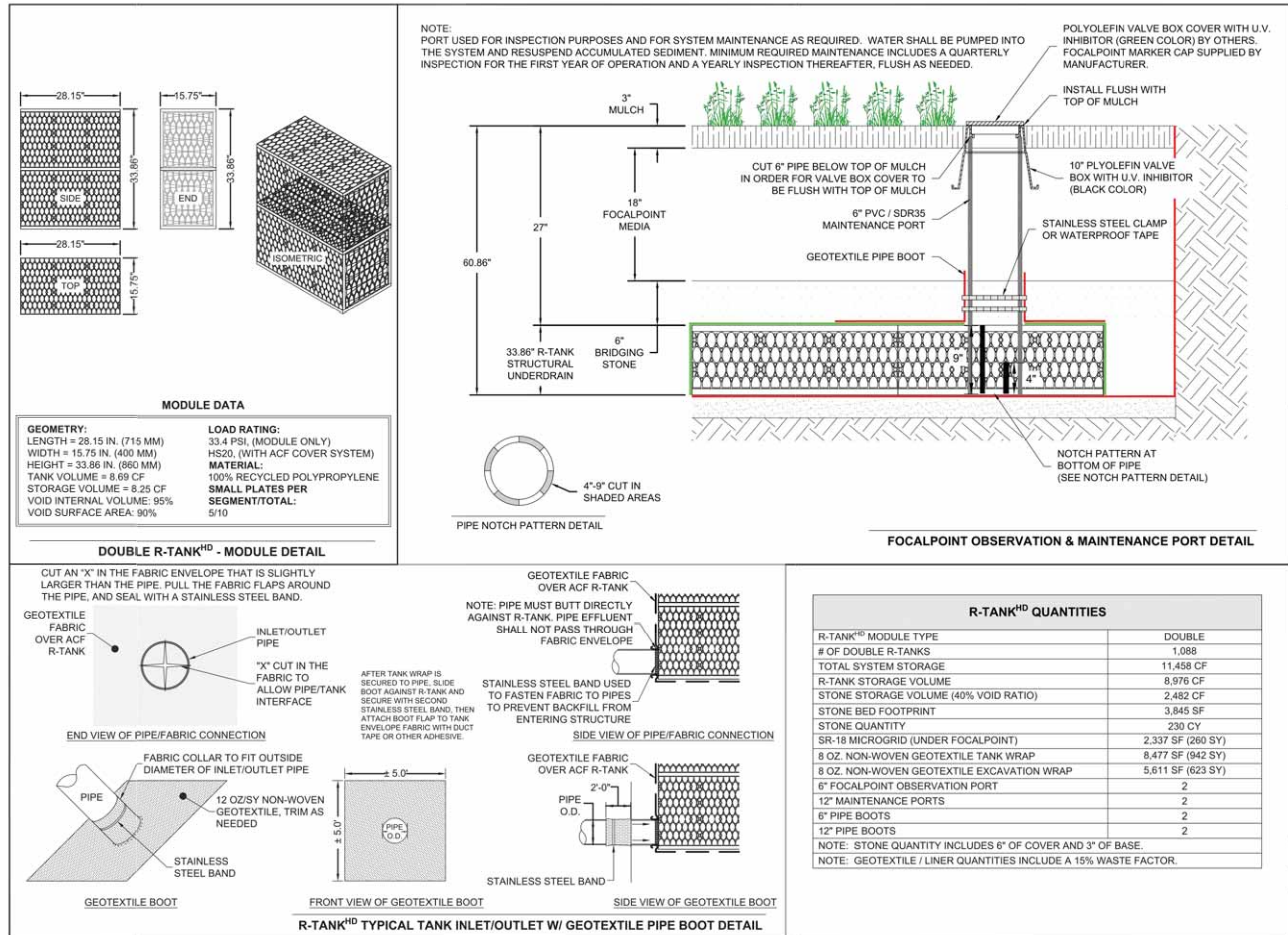
FocalPoint
 INFILTRATION SYSTEMS
 ENGINEER OF RECORD TO REVIEW, APPROVE AND
 ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON
 WATERWORKS
 FOR ADDITIONAL INFORMATION PLEASE CONTACT:
 FERGUSON WATERWORKS CONTACT:
 1-800-444-3838, www.ferguson.com

FOCALPOINT SYSTEM LAYOUT
 WAREHOUSE DEVELOPMENT
 FALL RIVER, MA
 SITE DESIGNATION: FP-1

EDG
 05/09/2022

2 of 7



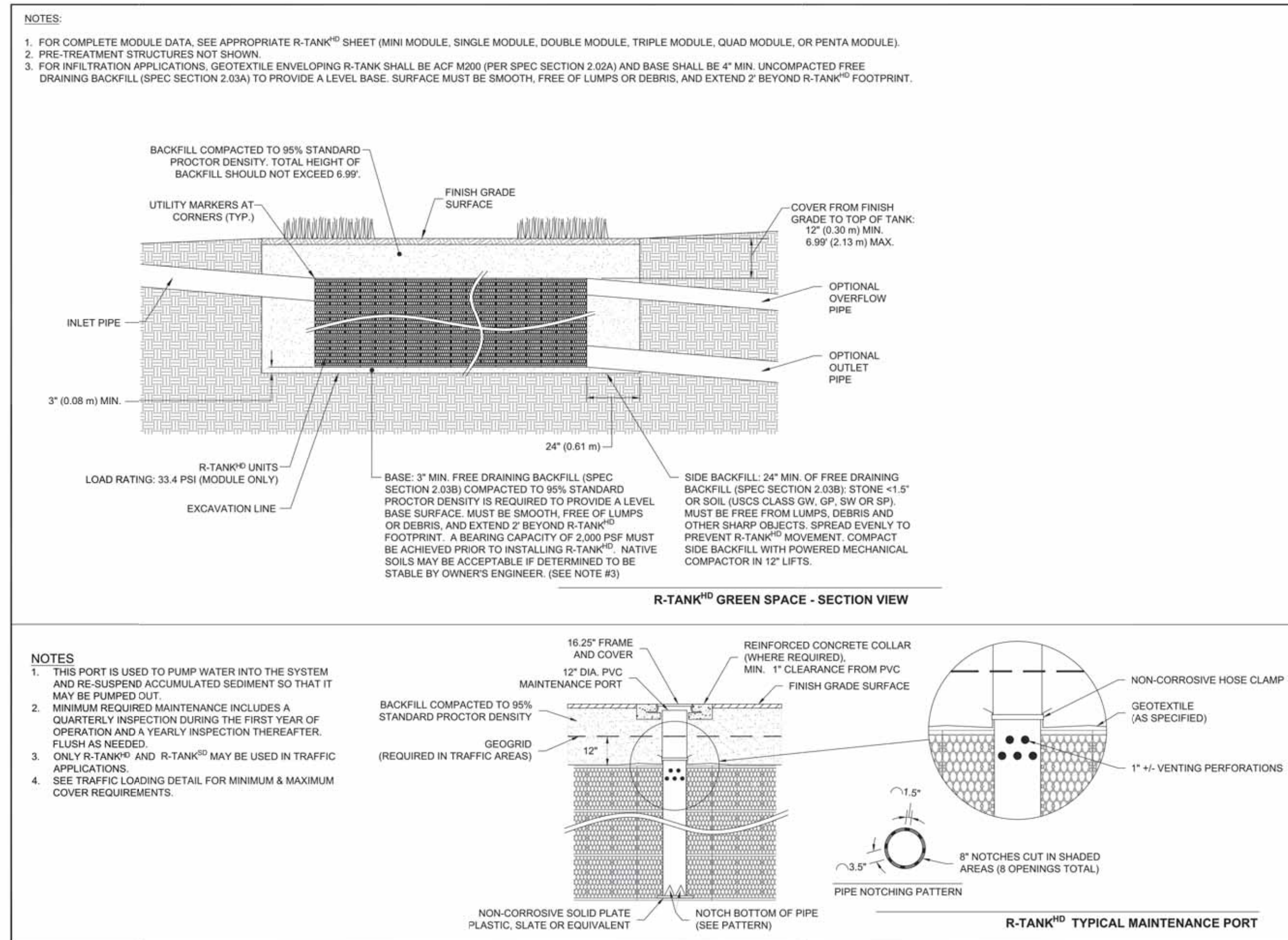
FocalPoint
 INFILTRATION SYSTEMS
 ENGINEER OF RECORD TO REVIEW, APPROVE AND
 ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON
 WATERWORKS
 FOR ADDITIONAL INFORMATION PLEASE CONTACT:
 FERGUSON WATERWORKS CONTACT:
 1-800-444-3838, www.ferguson.com

FOCALPOINT SYSTEM DETAILS
 WAREHOUSE DEVELOPMENT
 FALL RIVER, MA
 SITE DESIGNATION: FP-1

EDG
 05/09/2022

3 of 7



FocalPoint
 INFILTRATION SYSTEMS
 ENGINEER OF RECORD TO REVIEW, APPROVE AND
 ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON
 WATERWORKS
 FOR ADDITIONAL INFORMATION PLEASE CONTACT:
 FERGUSON WATERWORKS CONTACT:
 1-800-444-3838, www.ferguson.com

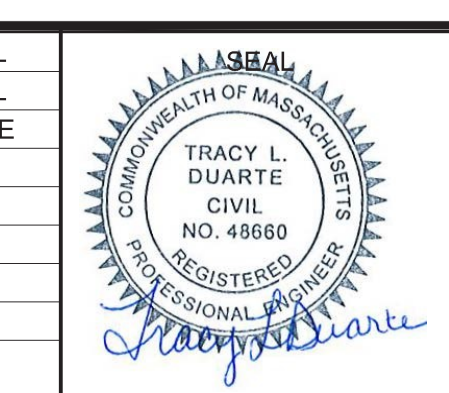
FOCALPOINT SYSTEM DETAILS
 WAREHOUSE DEVELOPMENT
 FALL RIVER, MA
 SITE DESIGNATION: FP-1

EDG
 05/09/2022

4 of 7

No.	DATE	DESCRIPTION	BY
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
4	11/21/2022	REVISION PER COMMENTS	JAW

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
 V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.:
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

GRAPHIC SCALE

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 E-MAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

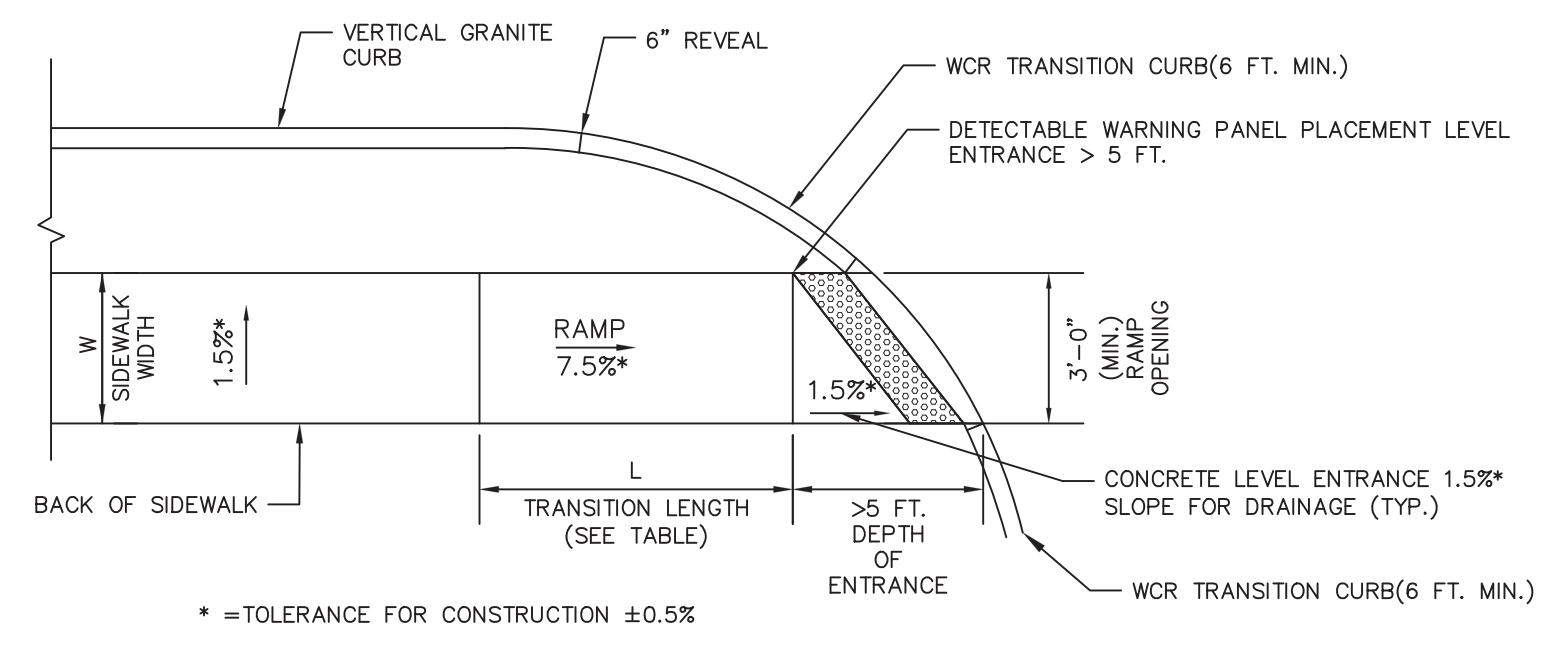
PROPOSED WAREHOUSE DEVELOPMENT
 DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-9.11



UCS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:05:16 PM, DWG To PDF.pc3
 LMAN: CTB:
 MS VIEW:

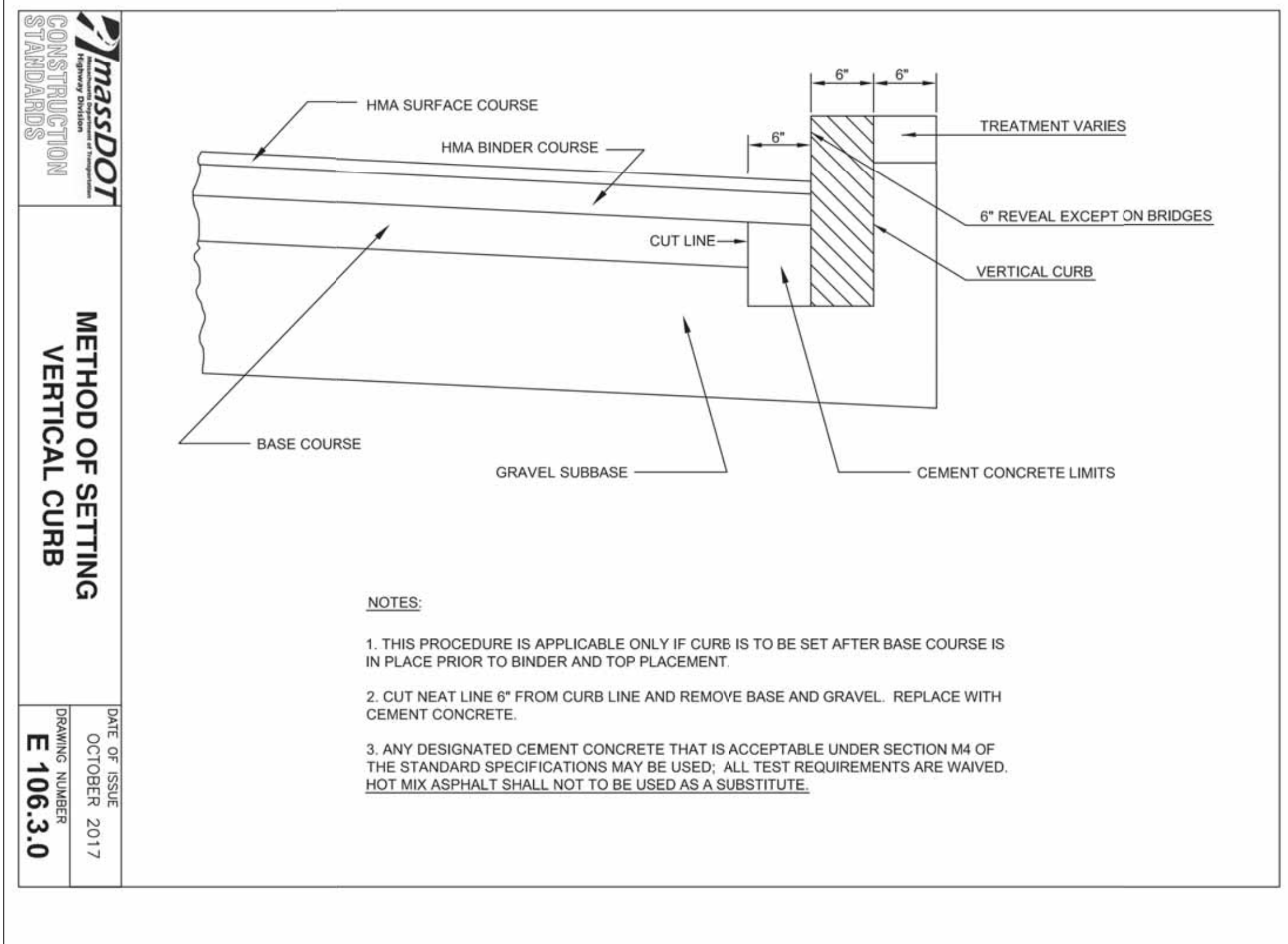


PAVEMENT NOTES:
 FOR PEDESTRIAN CURB RAMPS: 4" OF CEMENT CONCRETE (4000 PSI, 3/4", 610) OVER 8" OF GRAVEL BORROW TYPE B

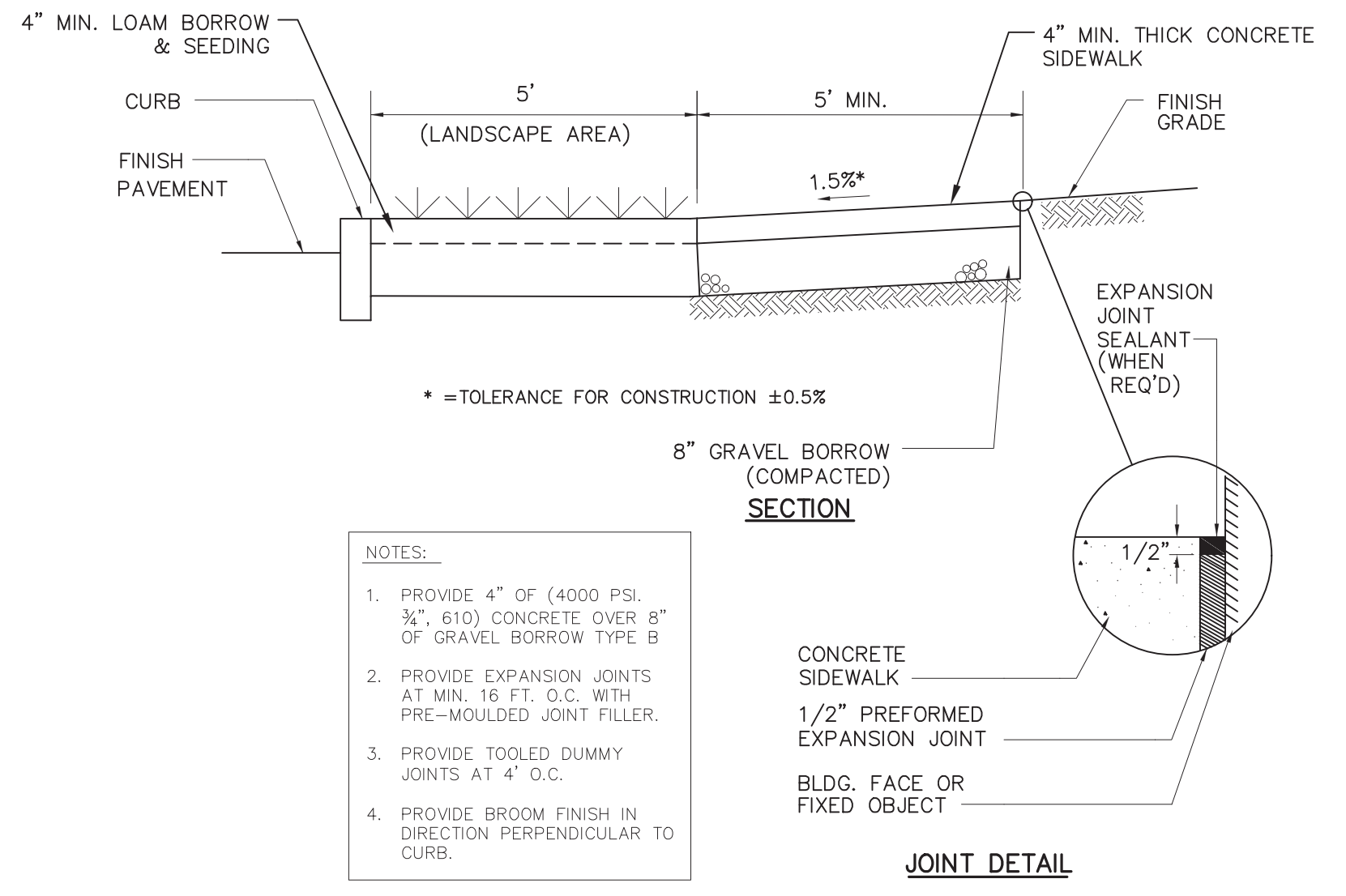
- NOTES:**
- FOR DETAILS OF TRUNCATED DOMES SEE MASSDOT CONSTRUCTION DETAIL E 107.6.5
 - DETECTABLE WARNING PANEL SHALL BE 2 FEET MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL.

DETECTABLE WARNING PANELS ON WHEELCHAIR RAMPS FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN TRAVEL WHERE LEVEL ENTRANCE EXCEEDS 5' WITH LANDSCAPE STRIP
 NOT TO SCALE

WCR #	RAMP REFERENCE POINT		WIDTH OF SIDEWALK (W)	WIDTH OF RAMP ENTRANCE 5.0' (MIN)	ROADWAY GUTTER SLOPE	TRANSITION LENGTH	
	STATION	OFFSET				LEFT SIDE	RIGHT SIDE
1	307+19±	36.4 RT	5.0'	5.0'	3.10%	N/A	14.0'

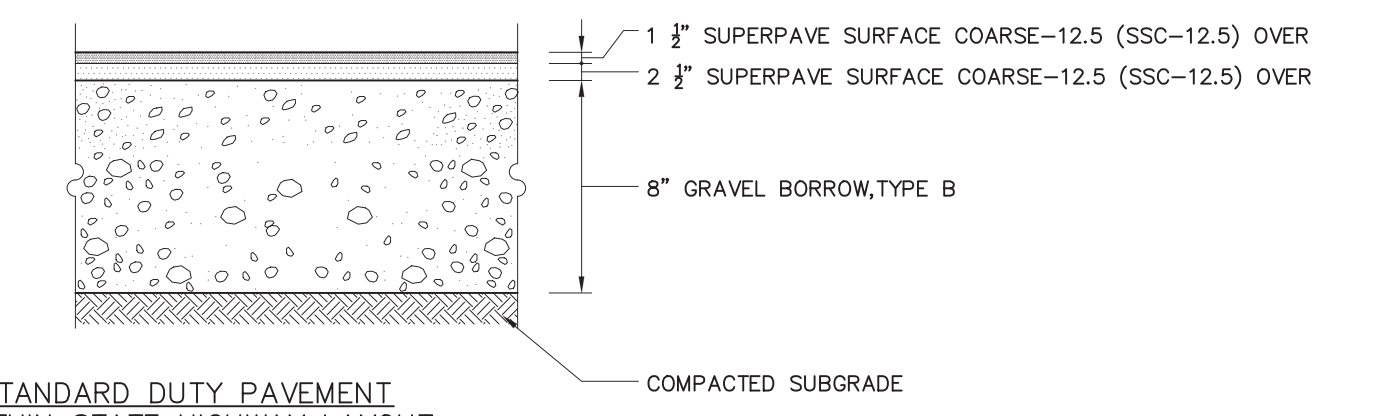


- NOTES:**
- THIS PROCEDURE IS APPLICABLE ONLY IF CURB IS TO BE SET AFTER BASE COURSE IS IN PLACE PRIOR TO BINDER AND TOP PLACEMENT.
 - CUT NEAT LINE 6" FROM CURB LINE AND REMOVE BASE AND GRAVEL. REPLACE WITH CEMENT CONCRETE.
 - ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED; ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.



- NOTES:**
- PROVIDE 4" OF (4000 PSI, 3/4", 610) CONCRETE OVER 8" OF GRAVEL BORROW TYPE B
 - PROVIDE EXPANSION JOINTS AT MIN. 16 FT. O.C. WITH PRE-MOULDED JOINT FILLER.
 - PROVIDE TOOLED DUMMY JOINTS AT 4' O.C.
 - PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

CONCRETE SIDEWALK WITH LANDSCAPE STRIP
 NOT TO SCALE

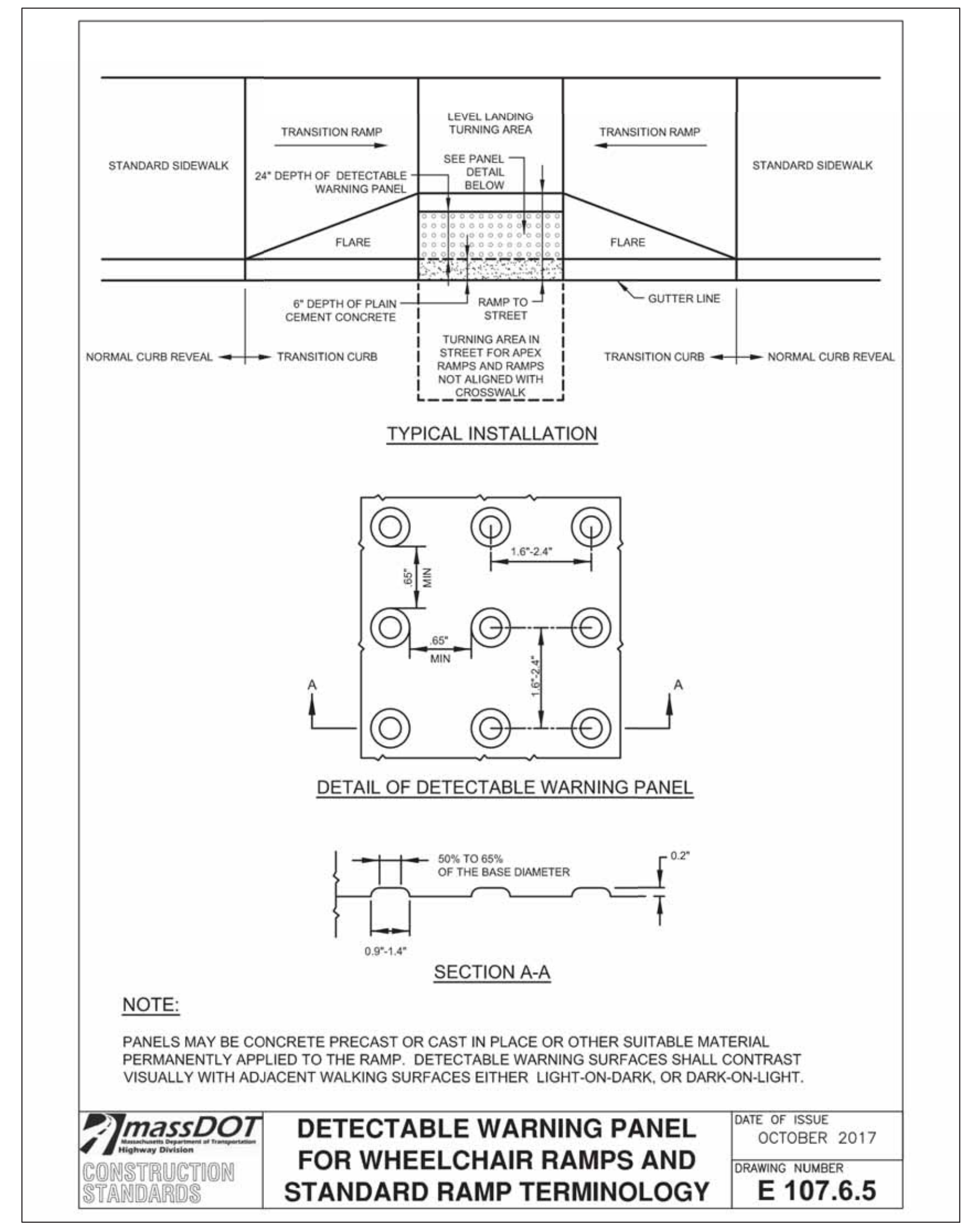


- STANDARD DUTY PAVEMENT WITHIN STATE HIGHWAY LAYOUT**
- COMPOSITION AND COMPACTION ACCEPTANCE TESTS
- OBTAIN SAMPLES FROM PLANT TO INDICATE CONFORMANCE WITH M3.13.0
 - PAVEMENT DENSITY AS OUTLINED IN M3.06.0
 - ALL SAMPLES TO BE TAKEN IN ACCORDANCE WITH AASHTO R97
 - MATERIALS SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED IN SECTION M3, DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS
- | | |
|----------------------------|-------------------------------------|
| MINERAL AGGREGATE :M3.06.2 | BITUMINOUS MATERIALS :M3.01.0 |
| MINERAL FILLER :M3.10.5 | COMPOSITION OF BASE COURSE :M2.01.7 |
- THE BITUMINOUS CONCRETE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT SECTIONS/PROVISIONS OF SECTION 460 FOR CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1
 - CLASS I BITUMINOUS PAVEMENT, TYPE I-1 REQUIRED THE SAME TESTING AS BASE COURSE AND SHALL HAVE A MINIMUM OF 95% COMPACTION. TESTING TO BE COMPLETED BY METHODS OUTLINED IN M3.13.0

BITUMINOUS CONCRETE PAVEMENT WITH STATE HIGHWAY LAYOUT SECTIONS
 NOT TO SCALE

ROADWAY PROFILE GRADE	* HIGH SIDE TRANSITION LENGTH
	ENGLISH UNITS
%	
=0%	6'-6"
>0% TO 1%	7'-8"
>1% TO 2%	9'-0"
>2% TO 3%	11'-0"
>3% TO 4%	14'-0"
>4% TO 5%	15'-0" Max

NOTE:
 * BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".



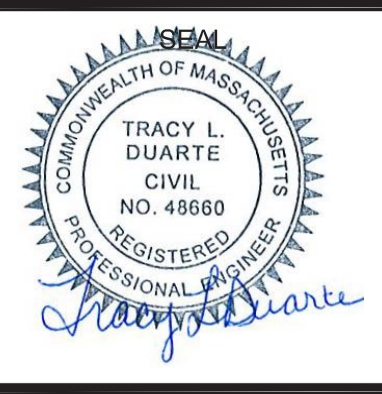
- NOTE:**
- PANELS MAY BE CONCRETE PRECAST OR CAST IN PLACE OR OTHER SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

DETECTABLE WARNING PANEL FOR WHEELCHAIR RAMPS AND STANDARD RAMP TERMINOLOGY

DATE OF ISSUE: OCTOBER 2017
 DRAWING NUMBER: E 107.6.5

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE



SEAL

PREPARED FOR
 V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.:
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

MASSDOT DETAILS
 0 INNOVATION WAY
 FALL RIVER - MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01

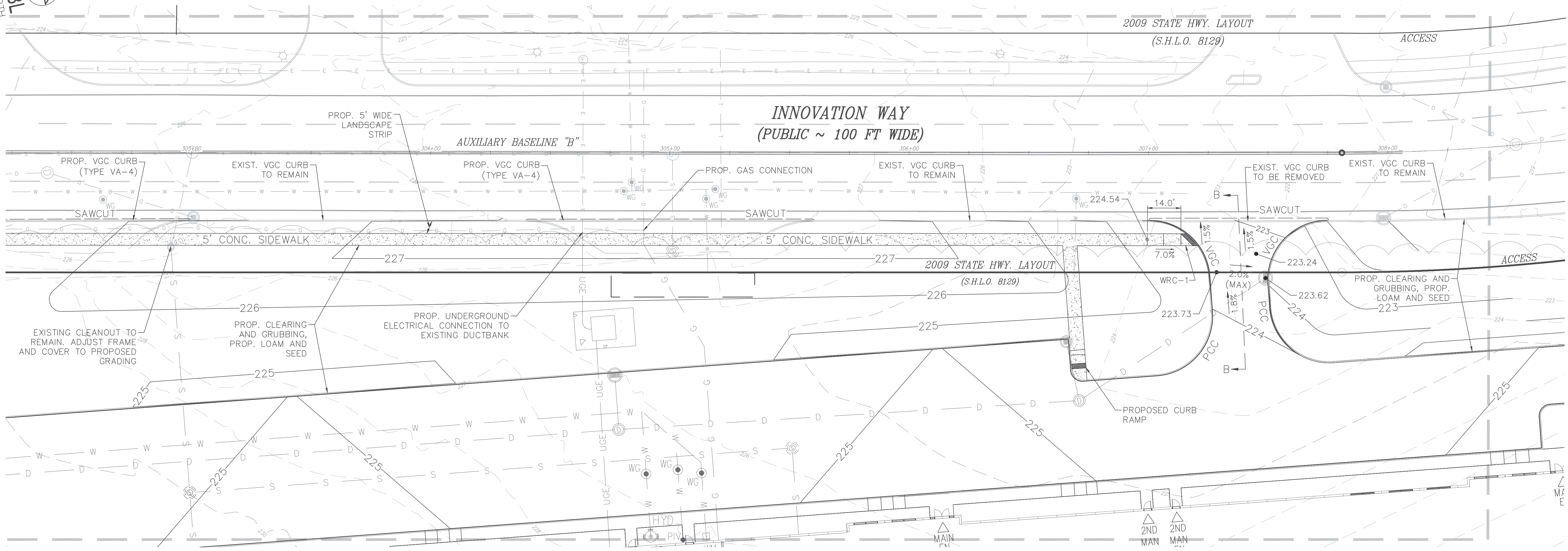
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

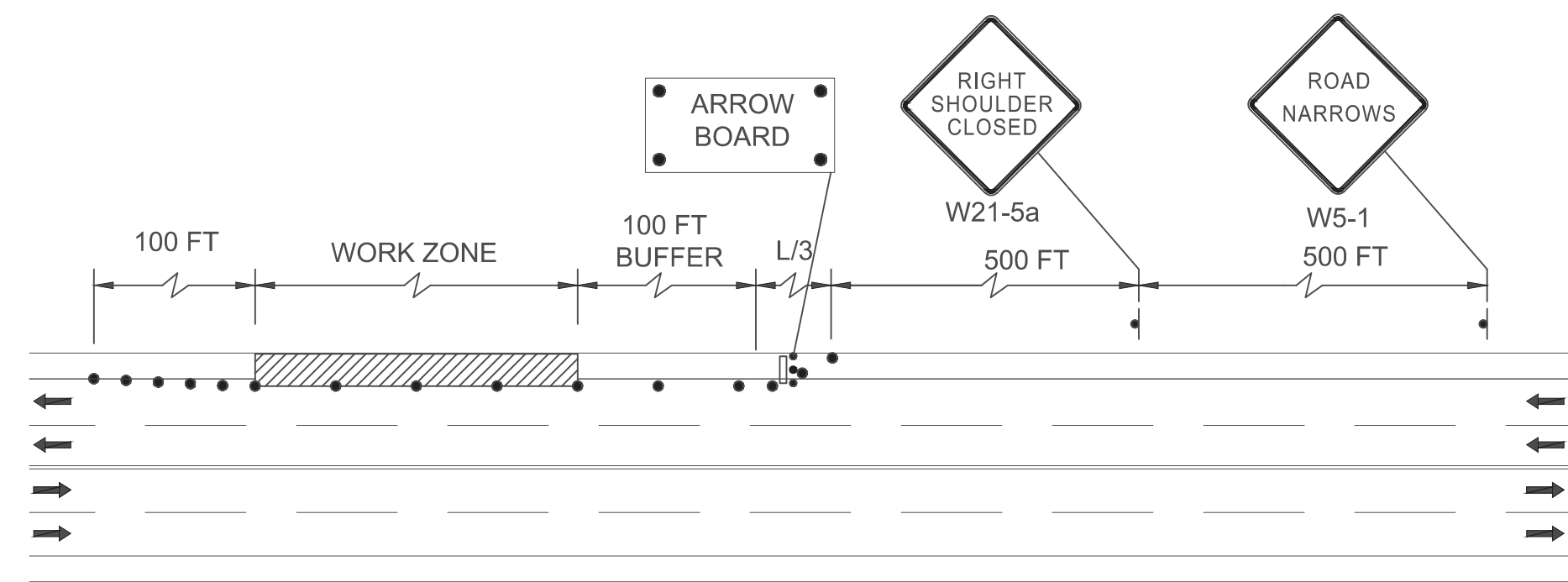
C-9.13



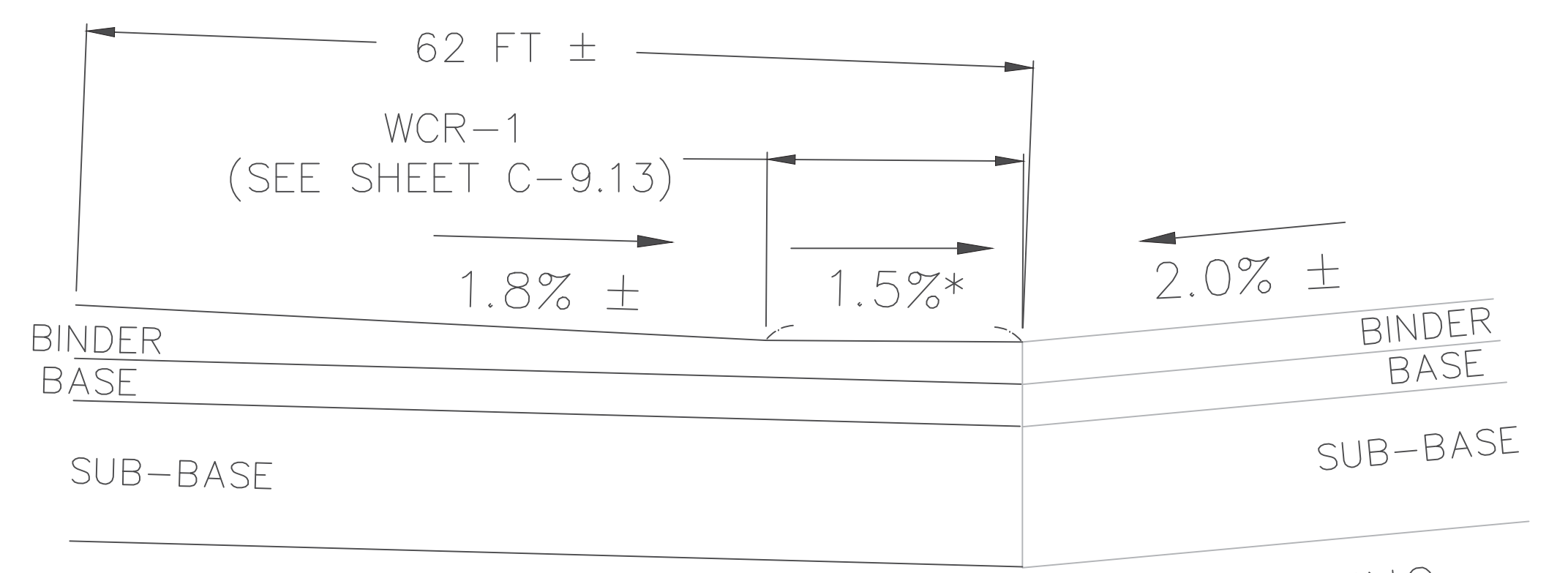
LUGS: x:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:05:28 PM, DWG To PDF, pac3
 LMAN: CTB:
 IMS VIEW:



DETAIL VIEW A-A
SCALE: 1" = 20'



TYPICAL TRAFFIC MANAGEMENT
N.T.S.



PROPOSED DRIVEWAY ENTRANCE
EXISTING INNOVATION WAY

* = CONSTRUCTION TOLERANCE ±0.5%

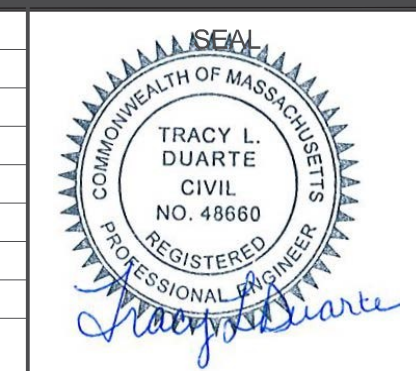
SECTION B-B
N.T.S.



LGS: X:\2021\036\CIVIL\Plot\2021-036-Innovation Way-Site Plan.dwg, 11/22/2022 12:54:02 PM, DWG To PDF.pc3
 LMAN: CTB:
 MS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
		REVISIONS	

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:	HORZ.: 1"=20'
	VERT.:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P-508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
MASSDOT DETAILS
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-9.14

OBSERVATION HOLE DATA

TEST PIT 1 GRD. EL. 203.03 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 199.20 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 199.20 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
202.53	0"-6"	A	SANDY LOAM	10YR 2/1		ROOTS, ROCKS & BOULDERS
201.54	6"-18"	B	SANDY LOAM	10YR 5/6		ROOTS
199.61	18"-41"	C1	SANDY LOAM	10YR 7/2		UNSORTED FINES
197.03	41"-72"	C2	LOAMY SAND	2.5Y 7/1	46"	TIGHT

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 2 GRD. EL. 192.40 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 189.23 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 189.23 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
192.07	0"-4"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
190.90	4"-18"	B	SANDY LOAM	10YR 5/6		
188.98	18"-41"	C1	SANDY LOAM	10YR 6/3	38"	UNSORTED FINES
186.32	41"-73"	C2	SAND	2.5Y 7/1		TIGHT & ROCKY

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 3 GRD. EL. 204.89 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 200.89 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 200.89 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
204.47	0"-5"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
203.06	5"-22"	B	SANDY LOAM	10YR 5/6		
201.31	22"-43"	C1	LOAMY SAND	10YR 6/3		UNSORTED FINES
200.22	43"-56"	C2	F. SANDY LOAM	2.5Y 6/3	48"	TIGHT, ROCKY
198.06	56"-82"	C3	SAND	2.5Y 7/1		REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 4 GRD. EL. 191.68 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 188.26 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 188.26 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
191.26	0"-5"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
190.35	5"-16"	B	SANDY LOAM	10YR 5/6		
188.85	16"-34"	C1	LOAMY SAND	10YR 7/2		
185.76	34"-71"	C2	F. SANDY LOAM	2.5Y 7/1	41"	TIGHT
						REFUSAL

WATER WEeping OBSERVED @ 71" WATER STANDING OBSERVED @ N/A

TEST PIT 5 GRD. EL. 183.50 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 181.00 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 181.00 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
182.92	0"-7"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
182.25	7"-15"	B	SANDY LOAM	10YR 5/6		
180.92	15"-31"	C1	LOAMY SAND	10YR 7/3	30"	
178.13	31"-62"	C2	F. SANDY LOAM	2.5Y 7/1		
177.25	62"-75"	C3	SAND	2.5Y 7/2		TIGHT, BOULDERS 10% ROCKS 10%

WATER WEeping OBSERVED @ 64" WATER STANDING OBSERVED @ 75"

TEST PIT 6 GRD. EL. 183.16 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 179.83 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 179.83 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
182.66	0"-6"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
181.83	6"-16"	B	SANDY LOAM	10YR 5/6		
180.08	16"-37"	C1	LOAMY SAND	10YR 7/3		
179.16	37"-48"	C2	F. SANDY LOAM	2.5Y 7/1	40"	
177.16	48"-72"	C3	SAND	2.5Y 7/2		TIGHT, ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 7 GRD. EL. 176.88 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 174.30 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 174.30 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
176.55	0"-4"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
175.71	4"-14"	B	SANDY LOAM	10YR 5/6		
174.38	14"-30"	C1	LOAMY SAND	10YR 7/3		
172.88	30"-48"	C2	F. SANDY LOAM	2.5Y 7/1	31"	
171.55	48"-64"	C3	SAND	2.5Y 7/2		TIGHT, ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ 54" WATER STANDING OBSERVED @ N/A

TEST PIT 8 GRD. EL. 183.55 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 180.38 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 180.38 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
183.13	0"-5"	A	SANDY LOAM	10YR 2/1		
182.13	5"-17"	B	SANDY LOAM	10YR 5/6		
180.63	17"-35"	C1	F. LOAMY SAND	10YR 7/3		
179.63	35"-47"	C2	F. SANDY LOAM	2.5Y 7/1	38"	
177.88	47"-68"	C3	SAND	2.5Y 7/2		TIGHT, ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 9 GRD. EL. 201.07 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 197.65 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 197.65 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
200.57	0"-6"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
199.74	6"-16"	B	SANDY LOAM	10YR 4/6		
198.15	16"-35"	C1	LOAMY SAND	10YR 7/4		UNSORTED FINES
194.65	35"-77"	C2	SAND	2.5Y 7/2	41"	TIGHT, ROCKS & BOULDERS 20%
						REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 10 GRD. EL. 198.64 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 195.64 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 195.64 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
198.06	0"-7"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
197.14	7"-18"	B	SANDY LOAM	10YR 4/6		
195.64	18"-36"	C1	LOAMY SAND	10YR 7/4		
192.89	36"-69"	C2	F. SANDY LOAM	2.5Y 8/1	36"	
191.64	69"-84"	C3	SAND	2.5Y 7/3		TIGHT & 20% ROCKS

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 11 GRD. EL. 197.83 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 193.58 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 193.58 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
197.16	0"-8"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
196.33	8"-18"	B	SANDY LOAM	10YR 4/6		
194.75	18"-37"	C1	LOAMY SAND	10YR 7/4		
192.99	37"-58"	C2	F. SANDY LOAM	2.5Y 8/1	51"	
191.99	58"-70"	C3	SAND	2.5Y 7/3		TIGHT & 20% ROCKS

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 12 GRD. EL. 205.40 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 202.15 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 202.15 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
204.72	0"-7"	A	SANDY LOAM	10YR 2/1		ROOTS, BOULDERS
203.72	7"-19"	B	SANDY LOAM	10YR 4/6		
201.55	19"-45"	C1	LOAMY SAND	10YR 7/2	39"	UNSORTED FINES
197.73	45"-92"	C2	SAND	2.5Y 7/1		TIGHT, ROCKS & BOULDERS 20%
						REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 100 GRD. EL. 237.80 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 233.38 WITNESSED BY:
 DATE: 3/21/2022 MOTTILING. EL. 233.38 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
237.38	0"-5"	A	SANDY LOAM	10YR 2/1		
235.55	5"-27"	B	SANDY LOAM	10YR 5/6		
232.13	27"-68"	C1	F. LOAMY SAND	10YR 7/3	53"	
225.63	68"-146"	C2	F. SANDY LOAM	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 101 GRD. EL. 225.70 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 221.20 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 221.20 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
225.28	0"-5"	A	SANDY LOAM	10YR 3/1		
223.78	5"-23"	B	SANDY LOAM	10YR 5/8		
220.20	23"-66"	C1	F. SANDY LOAM	10YR 6/3	54"	
216.37	66"-112"	C2	LOAMY SAND	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 102 GRD. EL. 221.56 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 217.39 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 217.39 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
221.06	0"-6"	A	SANDY LOAM	10YR 3/2		
218.89	6"-32"	B	SANDY LOAM	10YR 5/8		
213.89	32"-92"	C1	LOAMY SAND	2.5Y 7/1	50"	20% ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 103 GRD. EL. 205.07 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 200.40 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 200.40 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
204.65	0"-5"	A	SANDY LOAM	10YR 3/1		
203.49	5"-19"	B	SANDY LOAM	10YR 5/8		
201.90	19"-38"	C1	F. SANDY LOAM	10YR 6/3		
192.24	38"-154"	C2	LOAMY SAND	2.5Y 7/1	56"	TIGHT, ROCKS & BOULDERS 20%

WATER WEeping OBSERVED @ 142" EL.=194.74 WATER STANDING OBSERVED @ N/A

TEST PIT 104 GRD. EL. 208.58 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. N/A WITNESSED BY:
 DATE: 6/2/2022 MOTTILING. EL. N/A CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
208.08	0"-6"	A	SANDY LOAM	10YR 3/2		
206.66	6"-23"	B	SANDY LOAM	10YR 6/8		
205.25	23"-40"	C1	F. SANDY LOAM	10YR 7/4		
201.25	40"-88"	C2	SAND	2.5Y 8/1		TIGHT, ROCKS & BOULDERS 20%
						REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 105 GRD. EL. 225.73 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 222.40 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 222.40 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
225.40	0"-4"	A	SANDY LOAM	10YR 3/2		
224.06	4"-20"	B	SANDY LOAM	10YR 6/7		
222.73	20"-36"	C1	F. LOAMY SAND	10YR 7/3	40"	
214.56	36"-134"	C2	LOAMY SAND	2.5Y 8/1		TIGHT, 20% ROCKS & BOULDERS 10%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 106 GRD. EL. 179.34 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 175.84 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 175.84 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
178.76	0"-7"	A	SANDY LOAM	10YR 3/2		
177.84	7"-18"	B	SANDY LOAM	10YR 6/7		
175.84	18"-42"	C1	F. LOAMY SAND	10YR 7/3	42"	
167.76	42"-139"	C2	LOAMY SAND	2.5Y 8/1		TIGHT, 20% ROCKS & BOULDERS 10% POCKETS OF COARSE SAND

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 107 GRD. EL. 165.52 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 163.85 WITNESSED BY:
 DATE: 06/02/2022 MOTTILING. EL. 163.85 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
165.						

OBSERVATION HOLE DATA

TEST PIT 112 GRD. EL. 224.04 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 220.54 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 220.54 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
223.37	0"-8"	A	SANDY LOAM	10YR 2/2		
222.04	8"-24"	B	SANDY LOAM	10YR 5/8		
219.54	24"-54"	C1	F. LOAMY SAND	10YR 7/3	42"	
215.29	54"-105"	C2	LOAMY SAND	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 20%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 113 GRD. EL. 224.07 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 220.49 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 220.49 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
223.40	0"-8"	A	SANDY LOAM	10YR 2/2		
222.15	8"-23"	B	SANDY LOAM	10YR 5/8		
221.07	23"-36"	C1	F. LOAMY SAND	10YR 7/3	43"	
213.99	36"-121"	C2	LOAMY SAND	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 20%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 114 GRD. EL. 223.92 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 220.50 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 220.50 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
223.34	0"-7"	A	SANDY LOAM	10YR 2/2		COBBLES
222.17	7"-21"	B	SANDY LOAM	10YR 5/8		
220.34	21"-43"	C1	F. LOAMY SAND	10YR 7/3	41"	
216.50	43"-89"	C2	LOAMY SAND	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 20%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 115 GRD. EL. 218.58 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 215.25 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 215.25 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
217.91	0"-8"	A	SANDY LOAM	10YR 2/2		
217.16	8"-17"	B	SANDY LOAM	10YR 5/8		
215.25	17"-40"	C1	F. LOAMY SAND	10YR 7/3	40"	
210.50	40"-97"	C2	LOAMY SAND	2.5Y 7/1		TIGHT, 20% ROCKS & BOULDERS 20%

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 116 GRD. EL. 215.92 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 211.92 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 211.92 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
215.42	0"-6"	A	SANDY LOAM	10YR 3/2		
213.84	6"-25"	B	SANDY LOAM	10YR 5/6		
207.00	25"-107"	C	F. LOAMY SAND	2.5Y 7/1	48"	UNSORTED FINES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 117 GRD. EL. 213.06 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 209.14 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 209.14 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
212.56	0"-6"	A	SANDY LOAM	10YR 3/2		
211.31	6"-21"	B	SANDY LOAM	10YR 6/8		
208.89	21"-50"	C1	F. LOAMY SAND	10YR 7/3	47"	
205.56	50"-90"	C2	LOAMY SAND	2.5Y 7/1		20% ROCKS & POCKET OF SAND

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 118 GRD. EL. 211.69 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 208.02 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 208.02 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
211.19	0"-6"	A	SANDY LOAM	10YR 3/2		
210.11	6"-19"	B	SANDY LOAM	10YR 5/6		
204.7	19"-83"	C1	F. LOAMY SAND	2.5Y 7/1	44"	UNSORTED FINES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 119 GRD. EL. 166.88 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 164.88 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 164.88 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
166.46	0"-5"	A	SANDY LOAM	10YR 2/1		COBBLES
165.55	5"-16"	B	SANDY LOAM	10YR 5/6		
164.88	16"-24"	C1	F. SANDY LOAM	5Y 8/1	24"	
160.88	24"-72"	C2	LOAMY SAND	2.5Y 8/3		REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 120 GRD. EL. 163.84 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 162.34 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 162.34 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
163.09	0"-9"	A	SANDY LOAM	10YR 2/1		COBBLES
162.67	9"-14"	B	SANDY LOAM	10YR 5/6		
160.84	14"-36"	C1	F. LOAMY SAND	2.5Y 8/1	18"	UNSORTED FINES
160.17	36"-44"	C2	LOAMY SAND	2.5Y 8/3		REFUSAL

WATER WEeping OBSERVED @ 41" EL.=160.42 WATER STANDING OBSERVED @ N/A

TEST PIT 121 GRD. EL. 165.83 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 162.91 WITNESSED BY:
 DATE: 06/09/2022 MOTTLING. EL. 162.91 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
165.41	0"-5"	A	SANDY LOAM	10YR 2/1		COBBLES
164.33	5"-18"	B	SANDY LOAM	10YR 5/6		
162.33	18"-42"	C1	F. LOAMY SAND	10YR 7/3	35"	
160.58	42"-63"	C2	LOAMY SAND	2.5Y 7/1		POCKETS OF SAND
	63"-77"	C3	SAND	2.5Y 6/3		REFUSAL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 200 GRD. EL. 210.52 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 205.94 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 205.94 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
210.10	0"-5"	A	SANDY LOAM	10YR 3/2		COBBLES
208.10	5"-29"	B	SANDY LOAM	10YR 6/8		
203.27	29"-87"	C1	F. LOAMY SAND	10YR 7/2	55"	10% GRAVEL
198.19	87"-148"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL 20% COBBLES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 201 GRD. EL. 208.30 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 203.97 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 203.97 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
207.72	0"-7"	A	SANDY LOAM	10YR 3/2		COBBLES
206.72	7"-19"	B	SANDY LOAM	10YR 6/8		
203.05	19"-63"	C1	F. LOAMY SAND	10YR 7/2	52"	10% GRAVEL
195.63	63"-152"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL 20% COBBLES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 202 GRD. EL. 214.22 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 209.72 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 209.72 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
213.80	0"-5"	A	SANDY LOAM	10YR 3/2		COBBLES
212.55	5"-20"	B	SANDY LOAM	10YR 6/8		
209.47	20"-57"	C1	F. LOAMY SAND	10YR 7/2	54"	10% GRAVEL
202.80	57"-137"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL 20% COBBLES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 203 GRD. EL. 206.57 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 202.49 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 202.49 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
206.07	0"-6"	A	SANDY LOAM	10YR 3/2		COBBLES
204.74	6"-22"	B	SANDY LOAM	10YR 6/8		
199.40	22"-86"	C1	F. LOAMY SAND	10YR 7/2	49"	10% GRAVEL
192.24	86"-172"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL 20% COBBLES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 204 GRD. EL. 211.34 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 206.84 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 206.84 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
210.84	0"-6"	A	SANDY LOAM	10YR 3/2		COBBLES
209.76	6"-19"	B	SANDY LOAM	10YR 6/8		
205.42	19"-71"	C1	F. LOAMY SAND	10YR 7/2	54"	10% GRAVEL
199.17	71"-146"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL 20% COBBLES

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 205 GRD. EL. 211.53 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 206.86 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 206.86 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
210.86	0"-8"	A	SANDY LOAM	10YR 3/2		COBBLES
209.70	8"-22"	B	SANDY LOAM	10YR 6/8		
205.86	22"-68"	C1	F. LOAMY SAND	10YR 7/2	56"	
199.03	68"-150"	C2	LOAMY SAND	2.5Y 7/1		15% GRAVEL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 206 GRD. EL. 204.20 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 200.53 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 200.53 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
203.62	0"-7"	A	SANDY LOAM	10YR 3/2		COBBLES
201.70	7"-30"	B	SANDY LOAM	10YR 6/4		
198.45	30"-69"	C1	F. LOAMY SAND	10YR 7/3	44"	
190.95	69"-159"	C2	LOAMY SAND	2.5Y 7/2		10% GRAVEL

WATER WEeping OBSERVED @ 144" EL.=192.20 WATER STANDING OBSERVED @ 153" EL.=191.45

TEST PIT 207 GRD. EL. 206.78 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 203.11 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 203.11 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
206.11	0"-8"	A	SANDY LOAM	10YR 3/2		COBBLES
204.95	8"-22"	B	SANDY LOAM	10YR 6/4		
202.20	22"-55"	C1	F. LOAMY SAND	10YR 7/3	43"	
195.11	55"-140"	C2	LOAMY SAND	2.5Y 7/2		10% GRAVEL

WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A

TEST PIT 208 GRD. EL. 209.72 TEST BY: JUSTIN WILLIAMS, E.I.T.
 GW. EL. 205.55 WITNESSED BY:
 DATE: 10/05/2022 MOTTLING. EL. 205.55 CERTIFIED BY:

ELEV.	SOIL DEPTH	SOIL HORZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
209.05	0"-8"	A	SANDY LOAM	10YR 3/2		COBBLES
207.72	8"-24"	B	SANDY LOAM	10YR 6/8		
205.30	24"-53"	C1	F. LOAMY SAND	10YR 7/2	50"	
199.72	53"-120"	C2	LOAMY SAND	2.5Y 7/1		10% GRAVEL REFUSAL

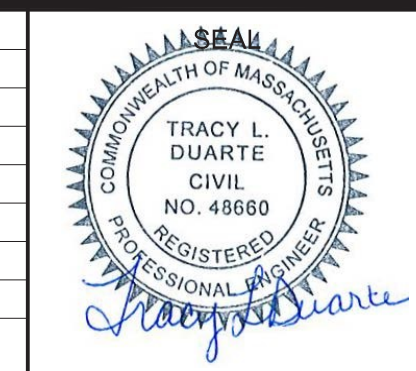
WATER WEeping OBSERVED @ N/A WATER STANDING OBSERVED @ N/A



LUGS: X:\2021\2021-036\Civil\Plot\2021-036-Innovation Way-Site Planset-Master-IM-ERO-DTL-REV1.dwg, 11/22/2022 12:05:31 PM, DWG To PDF.pc3
 LMAN: CTB:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
		REVISIONS	

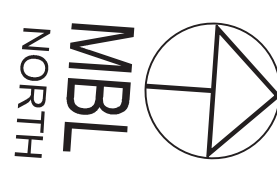
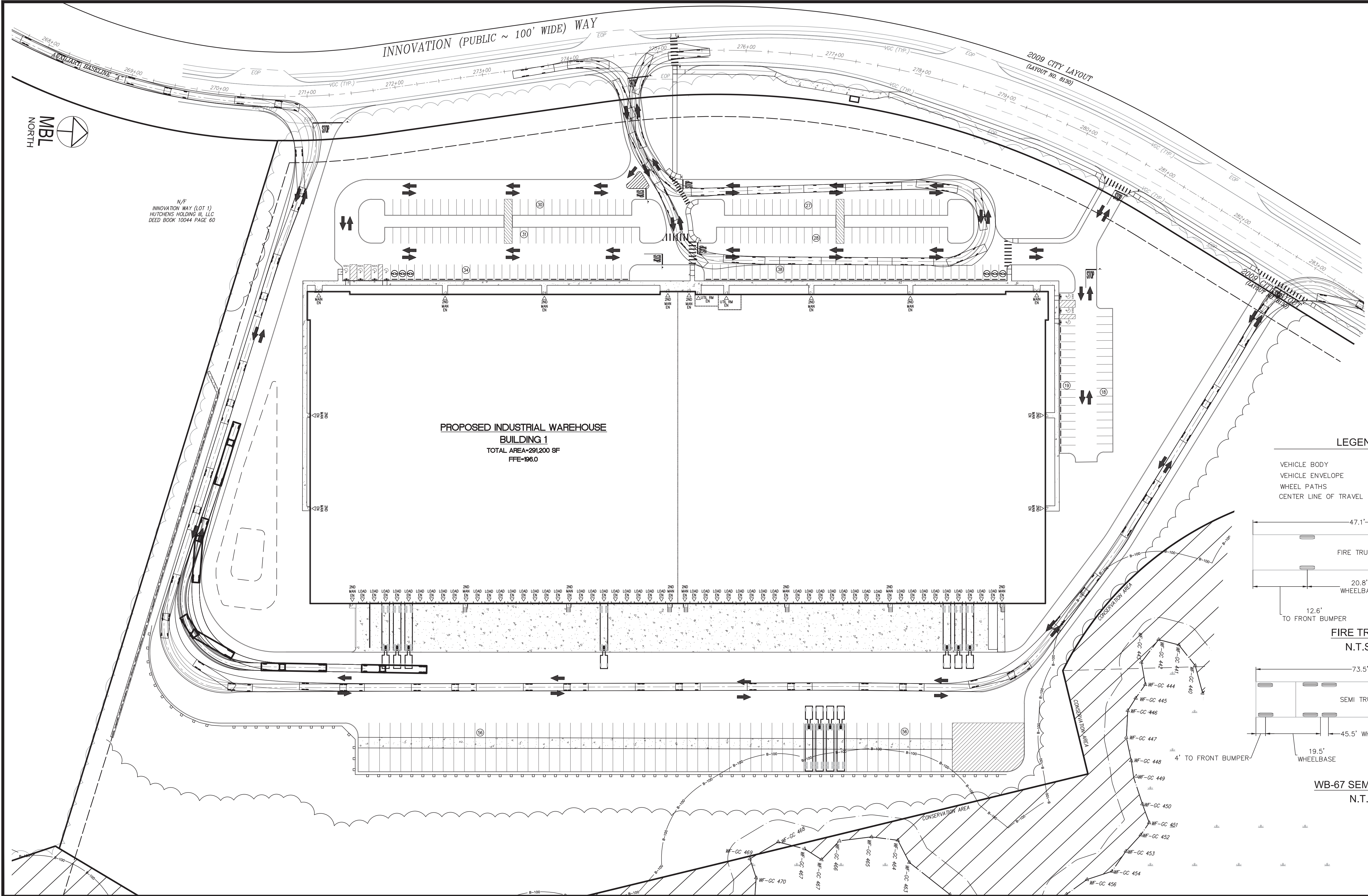
PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:	HORIZ.:
	VERT.:
DATUM:	
	HORIZ.: NAD83
	VERT.: NAVD88

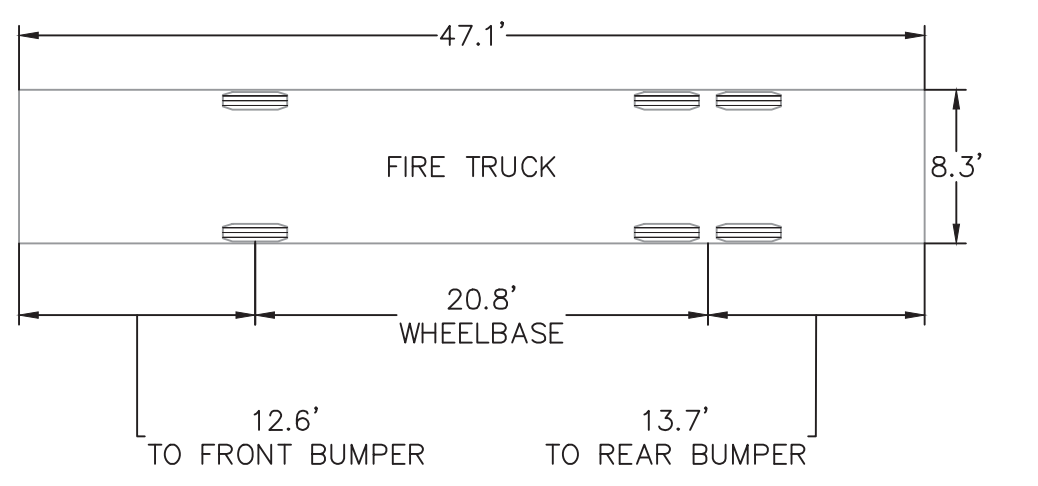


N/E
INNOVATION WAY (LOT 1)
HUTCHENS HOLDING III, LLC
DEED BOOK 10044 PAGE 60

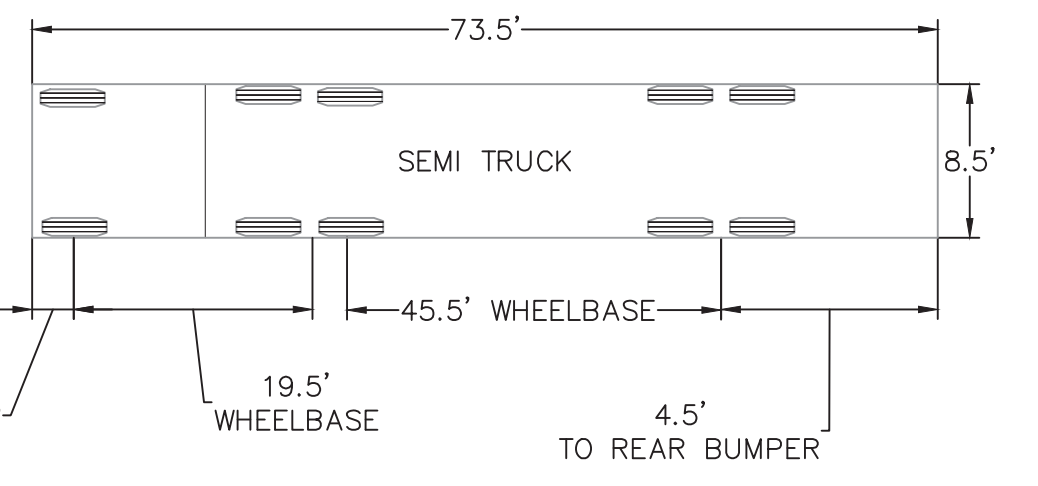
**PROPOSED INDUSTRIAL WAREHOUSE
BUILDING 1**
TOTAL AREA=291,200 SF
FFE=196.0

LEGEND

- VEHICLE BODY
- VEHICLE ENVELOPE
- WHEEL PATHS
- CENTER LINE OF TRAVEL



**FIRE TRUCK
N.T.S.**



**WB-67 SEMI TRUCK
N.T.S.**



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114
NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

MBL
LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P: 508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
TRUCK TURNING PLAN
0 INNOVATION WAY
FALL RIVER- MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022
C-11.0

LUGS: X:\2021\2021-036\CIVIL\Plot\2021-036_FTT.dwg, 11/22/2022 10:43:02 AM, DWG To PDF.pc3
 LMAN: CTB:



N/F
960 INNOVATION WAY
FALL RIVER INNOVATION SOLAR HOLDINGS, LLC.
DEED BOOK 8569 PAGE 252

N/F
1100 INNOVATION WAY
FALL RIVER DEVELOPMENT COMPANY, LLC.
DEED BOOK 9003 PAGE 248

N/F
1180 INNOVATION WAY
LIT FALL RIVER, LLC.
DEED BOOK 8832 PAGE 236

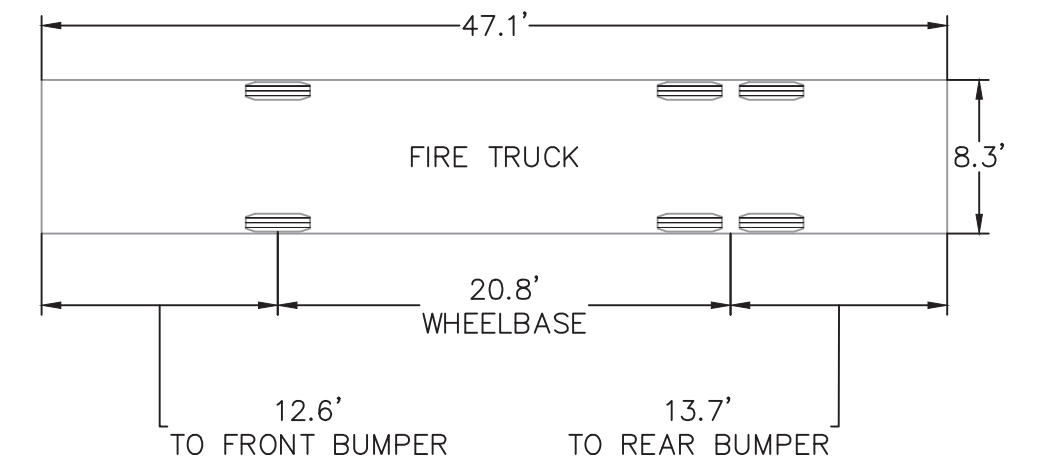
N/F
1240 INNOVATION WAY
UNIVERSITY OF MASSACHUSETTS
BUILDING AUTHORITY
C/O MASS BIOLOGICS
DEED BOOK 7932 PAGE 294

END OF 2009
CITY LAYOUT

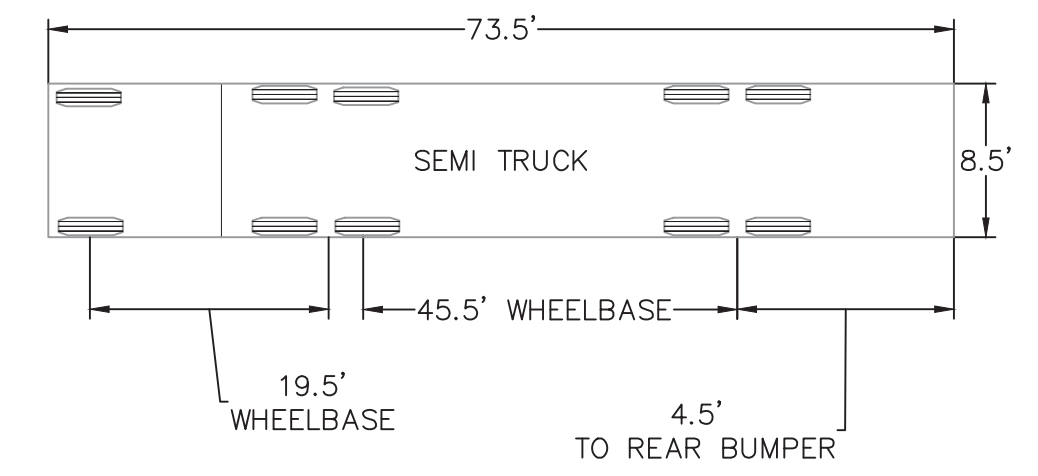
PROPOSED INDUSTRIAL WAREHOUSE
BUILDING 2
TOTAL AREA=203,397 SF
FFE=223.5

LEGEND

- VEHICLE BODY _____
- VEHICLE ENVELOPE _____
- WHEEL PATHS _____
- CENTER LINE OF TRAVEL _____

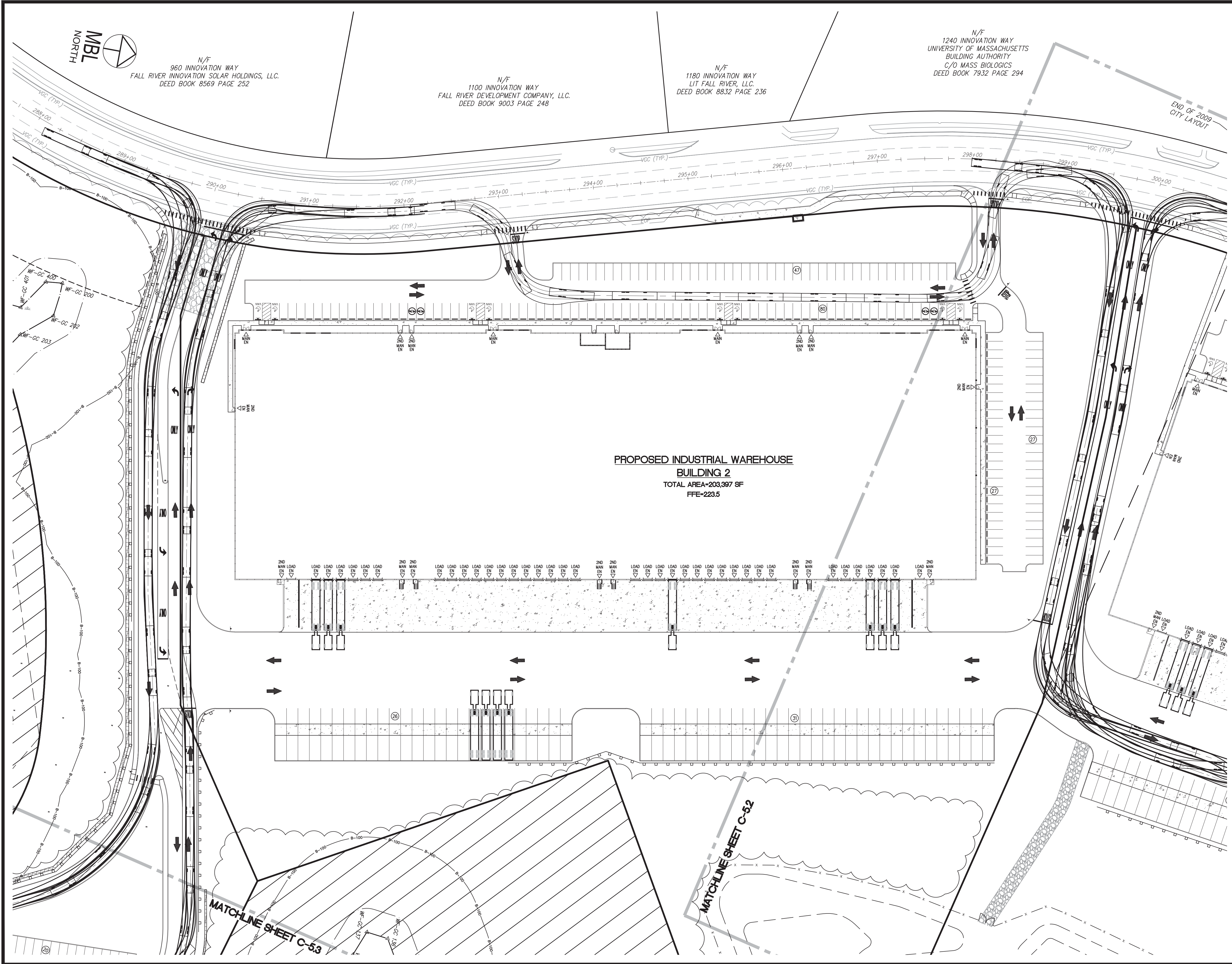


FIRE TRUCK
N.T.S.



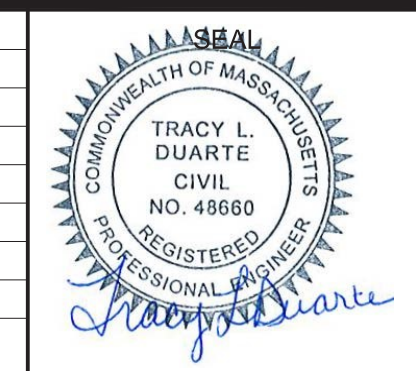
WB-67 SEMI TRUCK
N.T.S.

LUGS: IMS VIEW: LMAN: CTB: X:\2021\2021-036\Civil\Plot\2021-036_FTT.dwg, 11/22/2022 10:43:08 AM, DWG To PDF.pc3



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER: MBL
CHIEF DESIGNER: MBL
REVIEWED BY: DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114

NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

50 25 0 25 50
GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P: 508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT

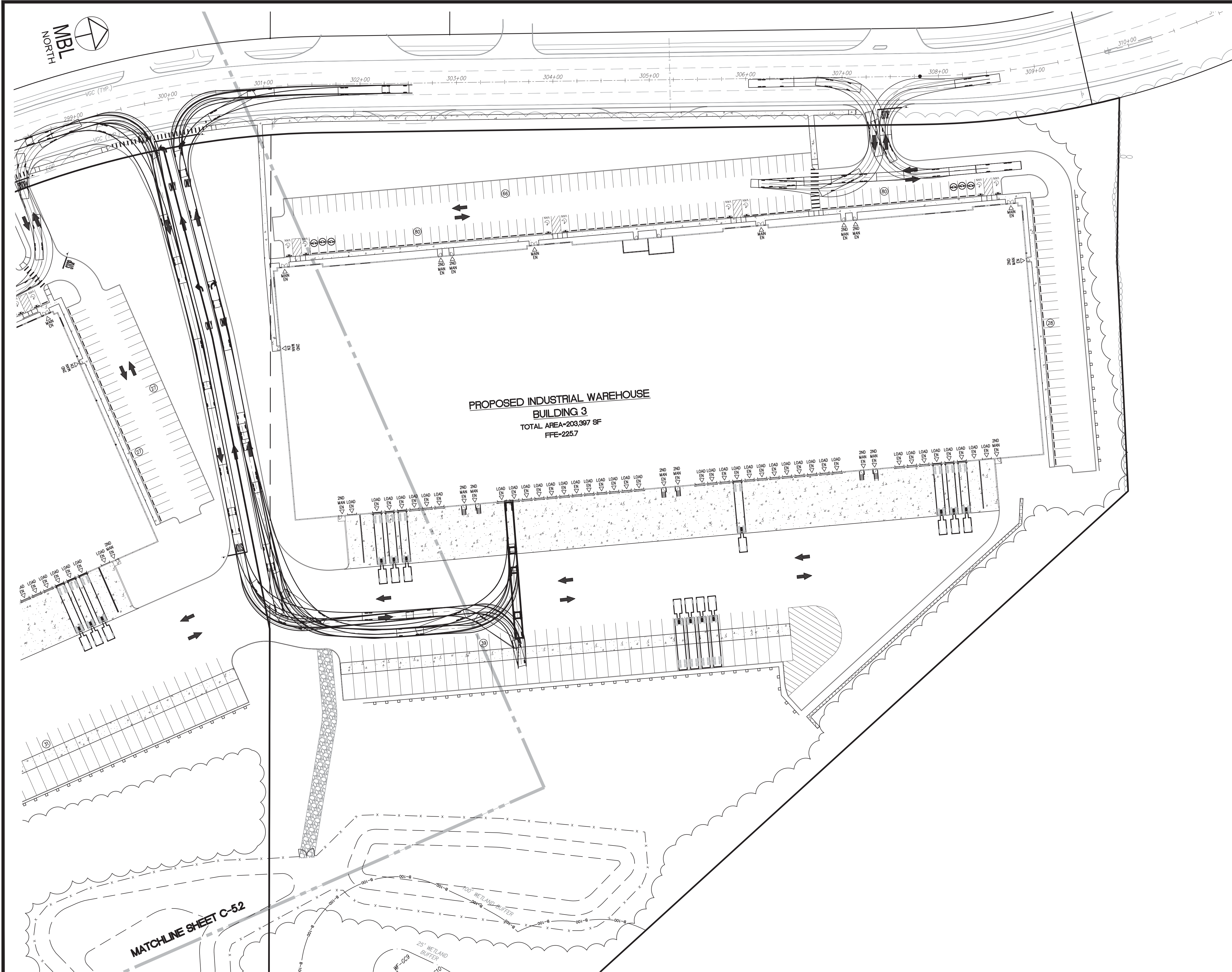
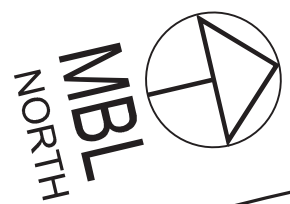
TRUCK TURNING PLAN
0 INNOVATION WAY
FALL RIVER - MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01

FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022

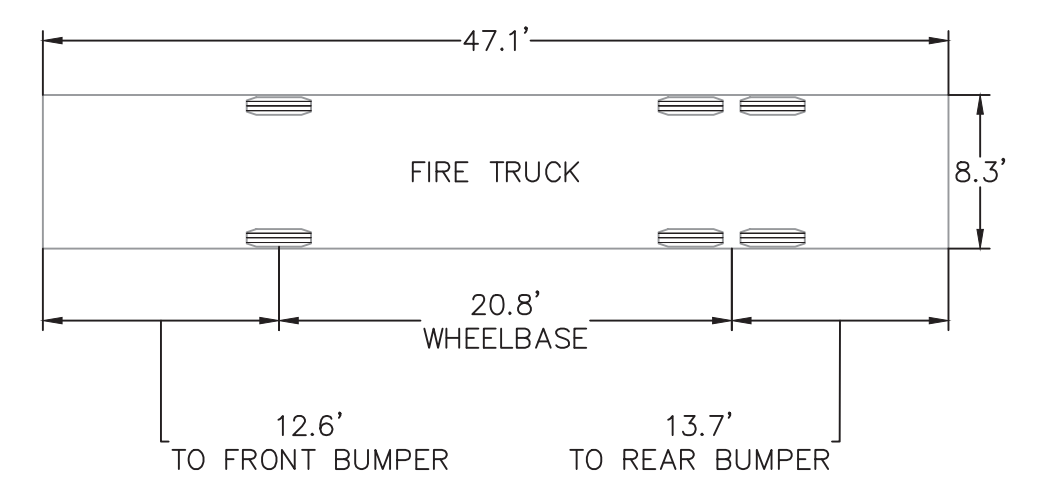
C-11.1



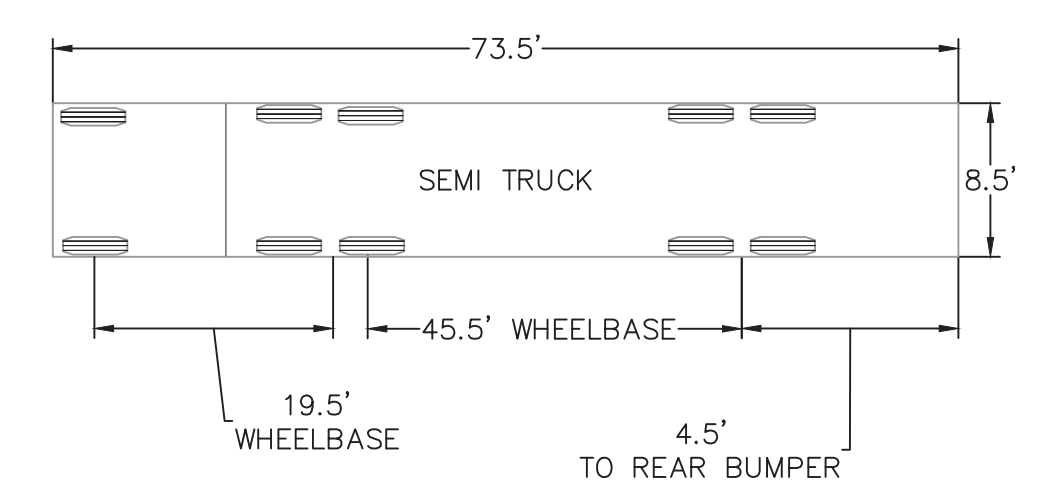


LEGEND

- VEHICLE BODY _____
- VEHICLE ENVELOPE _____
- WHEEL PATHS _____
- CENTER LINE OF TRAVEL _____



FIRE TRUCK
N.T.S.

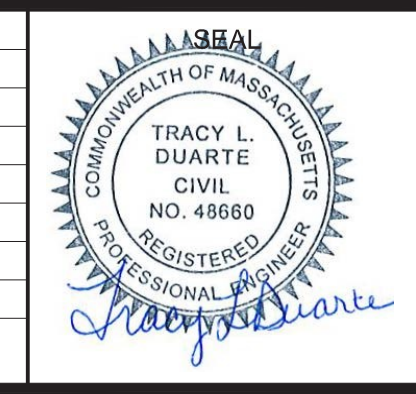


WB-67 SEMI TRUCK
N.T.S.

LUGS: LMAN: CTB: X:\2021\2021-036\Civil\Plot\2021-036_FTT.dwg, 11/22/2022 10:43:14 AM, DWG To PDF.pc3

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

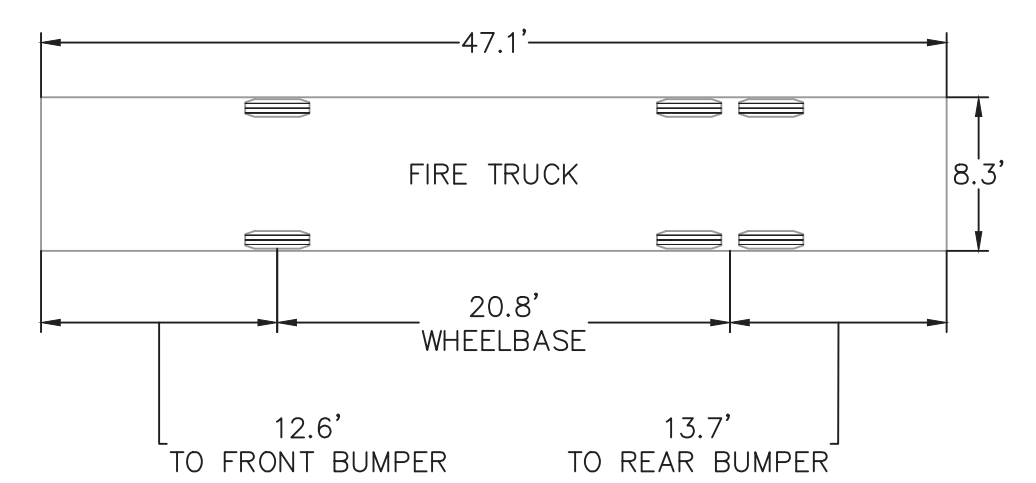
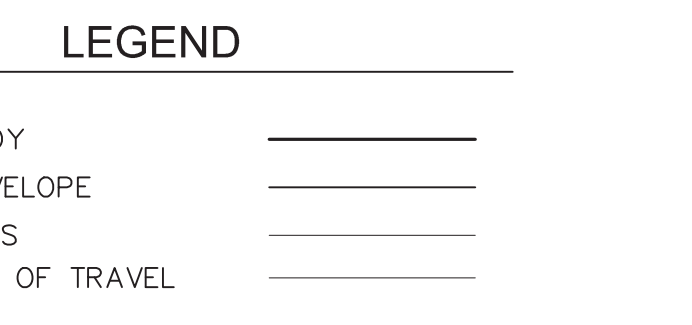
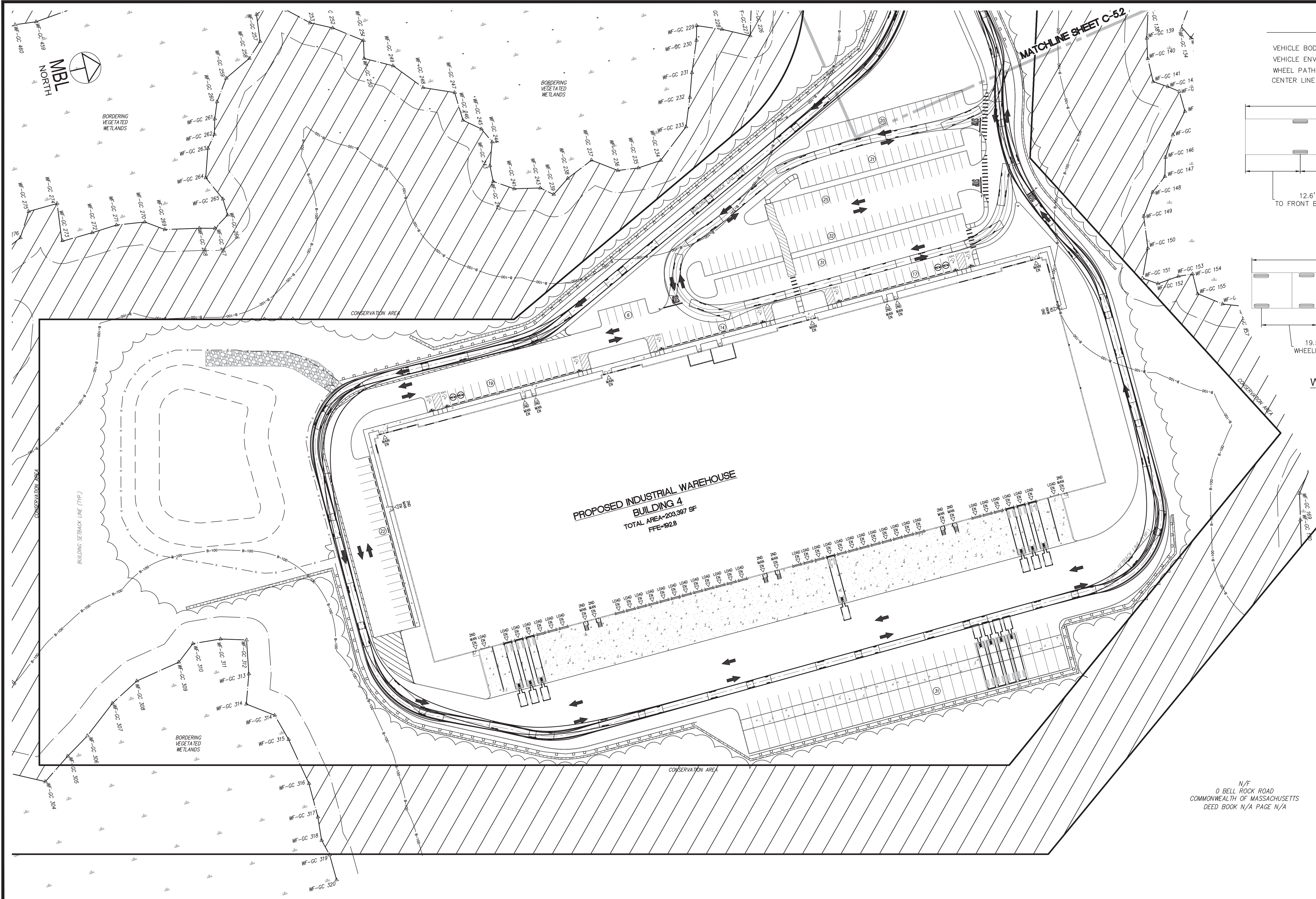
SCALE:	HORZ.: 1"=50'
	VERT.:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88
50 25 0 50 GRAPHIC SCALE	

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

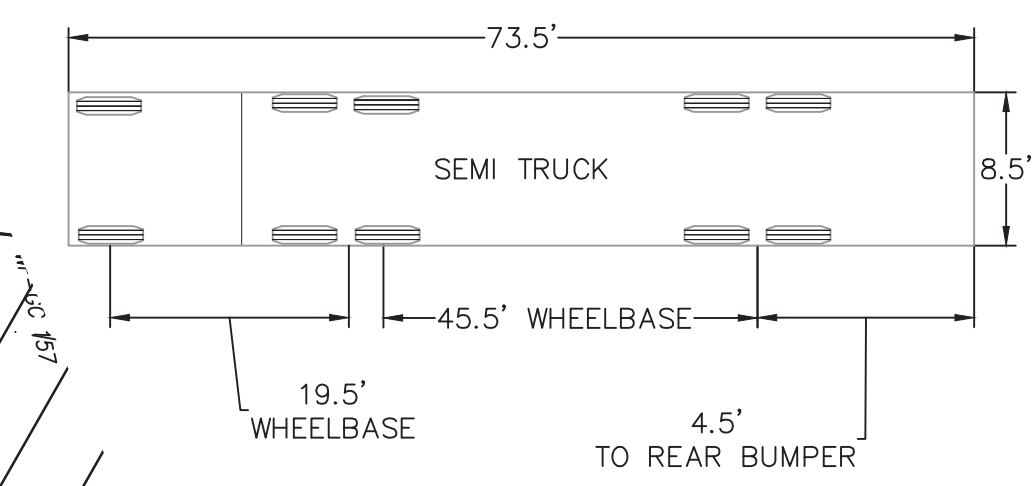
PROPOSED WAREHOUSE DEVELOPMENT
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-11.2





FIRE TRUCK
N.T.S.



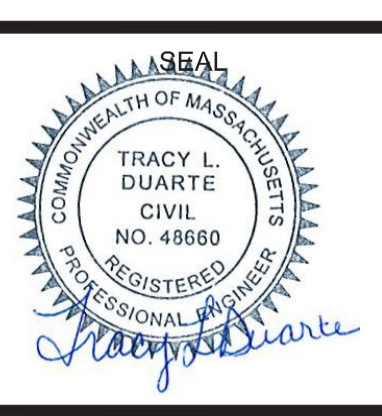
WB-67 SEMI TRUCK
N.T.S.

N/F
0 BELL ROCK ROAD
COMMONWEALTH OF MASSACHUSETTS
DEED BOOK N/A PAGE N/A



No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



SEAL

PREPARED FOR
V.M.D. COMPANIES, LLC
733 TURNPIKE STREET, ROUTE 114
NORTH ANDOVER MASSACHUSETTS

SCALE:
HORZ.: 1"=50'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

MBL
LAND DEVELOPMENT & PERMITTING, CORP.
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
5 BRISTOL DRIVE, SUITE 3A
SOUTH EASTON, MA 02375
P. 508.297.2746
EMAIL: info@MBLLandDevelopment.com
WEB: www.MBLLandDevelopment.com

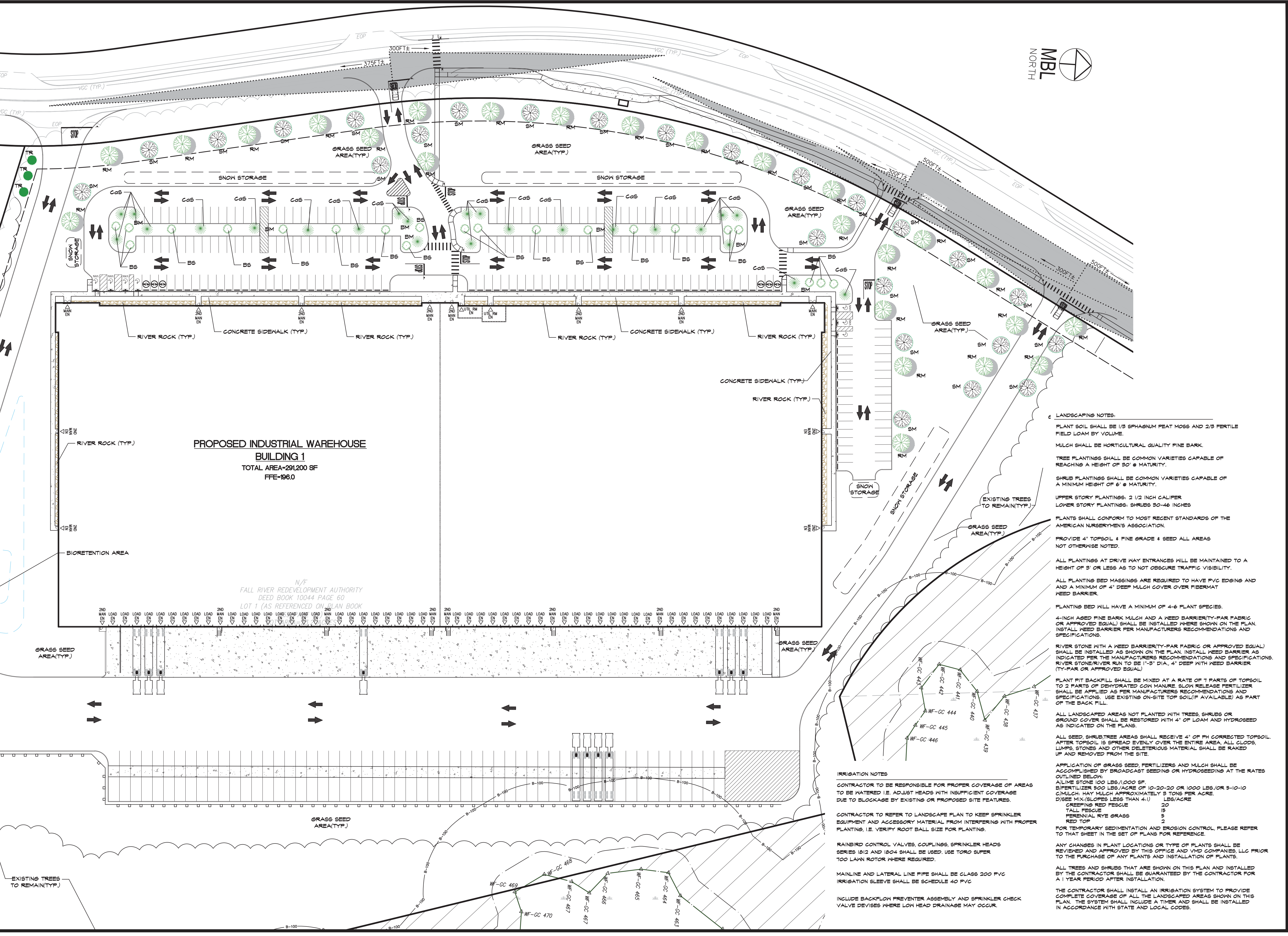
PROPOSED WAREHOUSE DEVELOPMENT
TRUCK TURNING PLAN
0 INNOVATION WAY
FALL RIVER - MAP W-19 LOTS 185 & 189
FREETOWN - PARCEL ID 236-006.01
FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
DATE: JULY 25, 2022
C-11.3

LUGS: LMAN: CTB: X:\2021\2021-036\Civil\Plot\2021-036_FTT.dwg, 11/22/2022 10:43:19 AM, DWG To PDF.pc3

Plant Legend

KEY	DESCRIPTION	INSTALL/SIZE MINIMUM
TREES	RED MAPLE	8-10 FEET, 3 GAL.
	ACER RUBRUM LINNAEUS	
	SUGAR MAPLE	8-10 FEET, 3 GAL.
	ACER SACCHARUM MARSHALL	
SHRUBS AND GROUND COVER	BARK MULCH (AGED PINE, UNDYED)	
	BOXWOOD	3-4 FEET, 3 GAL.
	BUXUS SPERMATOPHYTES	4 FT. O.C.
	THUJA OCCIDENTALIS CULTIVAR EMERALD ARBORVITAE	5-6 FT. HT.
	DWARF REDTIG DOGWOOD CORNUS SERICEA 'KELSEYI'	20-36 INCHES, 3 GAL. 4 FT. O.C.
STONE	RIVER ROCK	1" - 3" DIA RIVER STONE BED



LANDSCAPING NOTES:

- PLANT SOIL SHALL BE 1/3 SPHAGNUM PEAT MOSS AND 2/3 FERTILE FIELD LOAM BY VOLUME.
- MULCH SHALL BE HORTICULTURAL QUALITY PINE BARK.
- TREE PLANTINGS SHALL BE COMMON VARIETIES CAPABLE OF REACHING A HEIGHT OF 30' @ MATURITY.
- SHRUB PLANTINGS SHALL BE COMMON VARIETIES CAPABLE OF A MINIMUM HEIGHT OF 6' @ MATURITY.
- UPPER STORY PLANTINGS: 2 1/2 INCH CALIBER
- LOWER STORY PLANTINGS: SHRUBS 30-46 INCHES
- PLANTS SHALL CONFORM TO MOST RECENT STANDARDS OF THE AMERICAN NURSERYMEN'S ASSOCIATION.
- PROVIDE 4" TOPSOIL + FINE GRADE + SEED ALL AREAS NOT OTHERWISE NOTED.
- ALL PLANTINGS AT DRIVE WAY ENTRANCES WILL BE MAINTAINED TO A HEIGHT OF 3' OR LESS AS TO NOT OBSCURE TRAFFIC VISIBILITY.
- ALL PLANTING BED MASSINGS ARE REQUIRED TO HAVE PVC EDGING AND A MINIMUM OF 4" DEEP MULCH COVER OVER FIBERMAT WEED BARRIER.
- PLANTING BED WILL HAVE A MINIMUM OF 4-6 PLANT SPECIES.
- 4-INCH AGED PINE BARK MULCH AND A WEED BARRIER (PAR FABRIC OR APPROVED EQUAL) SHALL BE INSTALLED WHERE SHOWN ON THE PLAN. INSTALL WEED BARRIER PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
- RIVER STONE WITH A WEED BARRIER (PAR FABRIC OR APPROVED EQUAL) SHALL BE INSTALLED AS SHOWN ON THE PLAN. INSTALL WEED BARRIER AS INDICATED PER THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. RIVER STONE RIVER RUN TO BE 1"-3" DIA, 4" DEEP WITH WEED BARRIER (TY-PAR OR APPROVED EQUAL).
- PLANT PIT BACKFILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COV MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. USE EXISTING ON-SITE TOP SOIL (IF AVAILABLE) AS PART OF THE BACK FILL.
- ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE RESTORED WITH 4" OF LOAM AND HYDROSEED AS INDICATED ON THE PLANS.
- ALL SEED, SHRUB/TREE AREAS SHALL RECEIVE 4" OF PH CORRECTED TOPSOIL. AFTER TOPSOIL IS SPREAD EVENLY OVER THE ENTIRE AREA, ALL CLODS, LUMPS, STONES AND OTHER DELETERIOUS MATERIAL SHALL BE RAKED UP AND REMOVED FROM THE SITE.
- APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
 - A/LIME STONE 100 LBS/1000 SF.
 - B/FERTILIZER 500 LBS/ACRE OF 10-20-20 OR 1000 LBS/ACRE OF 5-10-10
 - C/MULCH: HAY MULCH APPROXIMATELY 3 TONS PER ACRE.
 - D/SEE MIX (SLOPES LESS THAN 4:1) LBS/ACRE
 - CREeping RED FESCUE 15
 - TALL FESCUE 15
 - PERENNIAL RYE GRASS 5
 - RED TOP 5
- FOR TEMPORARY SEDIMENTATION AND EROSION CONTROL, PLEASE REFER TO THAT SHEET IN THE SET OF PLANS FOR REFERENCE.
- ANY CHANGES IN PLANT LOCATIONS OR TYPE OF PLANTS SHALL BE REVIEWED AND APPROVED BY THIS OFFICE AND VMD COMPANIES, LLC PRIOR TO THE PURCHASE OF ANY PLANTS AND INSTALLATION OF PLANTS.
- ALL TREES AND SHRUBS THAT ARE SHOWN ON THIS PLAN AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A 1 YEAR PERIOD AFTER INSTALLATION.
- THE CONTRACTOR SHALL INSTALL AN IRRIGATION SYSTEM TO PROVIDE COMPLETE COVERAGE OF ALL THE LANDSCAPED AREAS SHOWN ON THIS PLAN. THE SYSTEM SHALL INCLUDE A TIMER AND SHALL BE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODES.

IRRIGATION NOTES

CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.

CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, I.E. VERIFY ROOT BALL SIZE FOR PLANTING.

RAINBIRD CONTROL VALVES, COUPLINGS, SPRINKLER HEADS SERIES 1812 AND 1804 SHALL BE USED. USE TORO SUPER TOO LAWN ROTOR WHERE REQUIRED.

MAINLINE AND LATERAL LINE PIPE SHALL BE CLASS 200 PVC IRRIGATION SLEEVE SHALL BE SCHEDULE 40 PVC

INCLUDE BACKFLOW PREVENTER ASSEMBLY AND SPRINKLER CHECK VALVE DEVICES WHERE LOW HEAD DRAINAGE MAY OCCUR.

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER:	MBL	SEAL	
CHIEF DESIGNER:	MBL	SEAL	
REVIEWED BY:	DATE		

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORIZ.: 1"=50'
 VERT.:
 DATUM:
 HORIZ.: NAD83
 VERT.: NAVD88

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

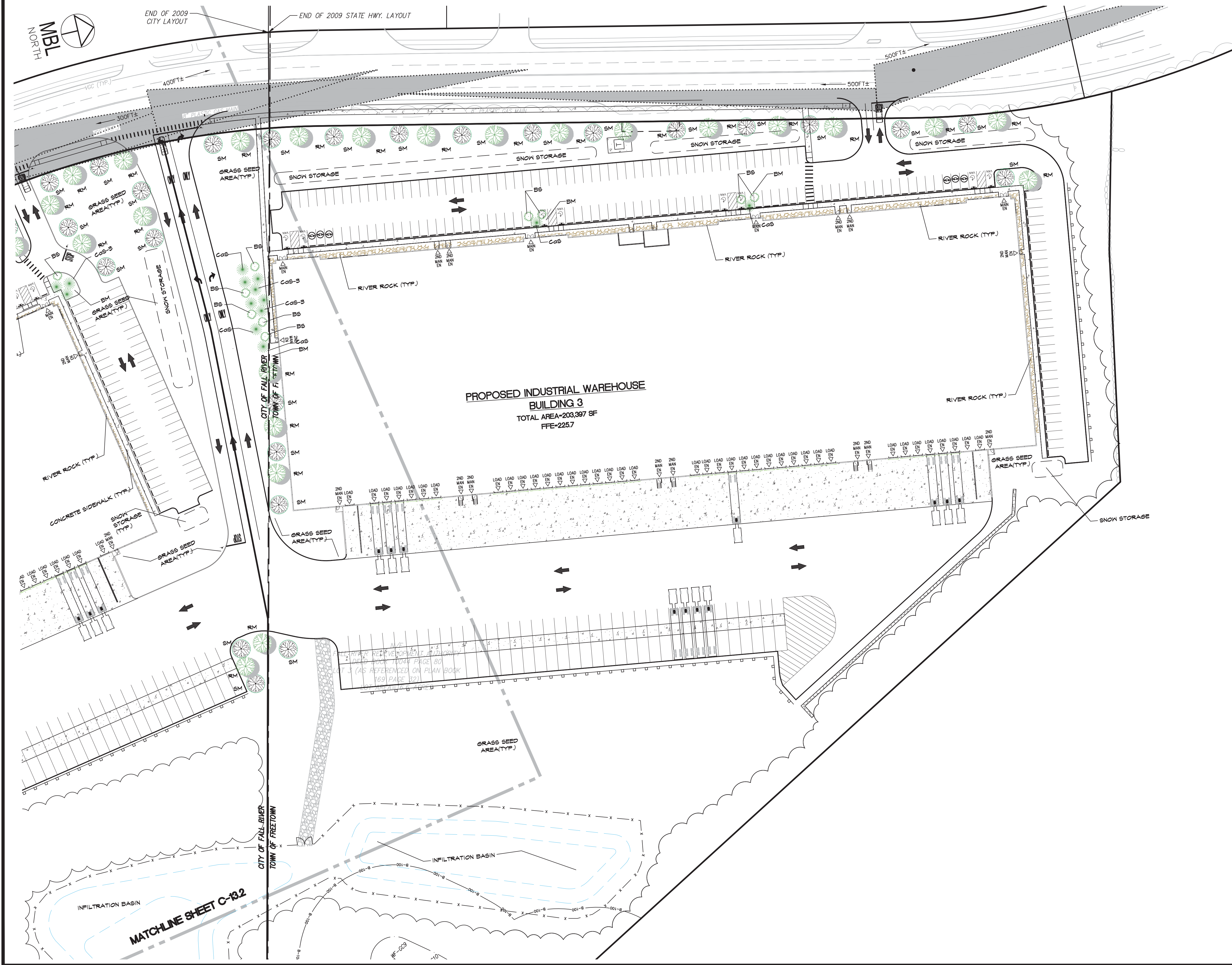
PROPOSED WAREHOUSE DEVELOPMENT
LANDSCAPING PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-12.0

UGS: x:\2021\2021-036\Civil\Plot\2021-036 - LSP.dwg, 11/22/2022 10:45:51 AM, DWG To PDF.pc3
 LMAN: CTB:



END OF 2009 CITY LAYOUT
END OF 2009 STATE HWY. LAYOUT



Plant Legend

KEY	DESCRIPTION	INSTALL/SIZE MINIMUM
TREES	RED MAPLE ACER RUBRUM LINNAEUS RM	8-10 FEET, 3 GAL.
	SUGAR MAPLE ACER SACCHARUM MARSHALL SM	8-10 FEET, 3 GAL.
SHRUBS AND GROUND COVER	BM BARK MULCH (AGED PINE, DYEDED)	
	BS BOXWOOD BUXUS SPENFERVIRENS	5-4 FEET, 3 GAL. 4 FT. O.C.
	TR THUJA OCCIDENTALIS CULTIVAR EMERALD ARBORVITAE	5-6 FT. HT.
	CoS DWARF REDTIGIS DOGWOOD CORNUS SERICEA 'KELSEYI'	20-36 INCHES, 3 GAL. 4 FT. O.C.
STONE	RIVER ROCK	1" - 3" DIA. RIVER STONE BED

LANDSCAPING NOTES:

PLANT SOIL SHALL BE 1/3 SPHAGNUM PEAT MOSS AND 2/3 FERTILE FIELD LOAM BY VOLUME.

MULCH SHALL BE HORTICULTURAL QUALITY PINE BARK.

TREE PLANTINGS SHALL BE COMMON VARIETIES CAPABLE OF REACHING A HEIGHT OF 50' @ MATURITY.

SHRUB PLANTINGS SHALL BE COMMON VARIETIES CAPABLE OF A MINIMUM HEIGHT OF 6' @ MATURITY.

UPPER STORY PLANTINGS: 2 1/2 INCH CALIPHER
LOWER STORY PLANTINGS: SHRUBS 30-46 INCHES

PLANTS SHALL CONFORM TO MOST RECENT STANDARDS OF THE AMERICAN NURSERYMEN'S ASSOCIATION.

PROVIDE 4" TOPSOIL & PINE GRADE & SEED ALL AREAS NOT OTHERWISE NOTED.

ALL PLANTINGS AT DRIVE WAY ENTRANCES WILL BE MAINTAINED TO A HEIGHT OF 3' OR LESS AS TO NOT OBSCURE TRAFFIC VISIBILITY.

ALL PLANTING BED MASSINGS ARE REQUIRED TO HAVE PVC EDGING AND A MINIMUM OF 4" DEEP MULCH COVER OVER FIBERMAT WEED BARRIER.

PLANTING BED WILL HAVE A MINIMUM OF 4-6 PLANT SPECIES.

4-INCH AGED PINE BARK MULCH AND A WEED BARRIER-PAR FABRIC OR APPROVED EQUAL) SHALL BE INSTALLED WHERE SHOWN ON THE PLAN. INSTALL WEED BARRIER PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.

RIVER STONE WITH A WEED BARRIER-PAR FABRIC OR APPROVED EQUAL) SHALL BE INSTALLED AS SHOWN ON THE PLAN. INSTALL WEED BARRIER AS INDICATED PER THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. RIVER STONE RIVER RUN TO BE 1"-3" DIA., 4" DEEP WITH WEED BARRIER (TY-PAR OR APPROVED EQUAL).

PLANT PIT BACKFILL SHALL BE MIXED AT A RATE OF 1 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COV MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. USE EXISTING ON-SITE TOP SOIL (IF AVAILABLE) AS PART OF THE BACK FILL.

ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE RESTORED WITH 4" OF LOAM AND HYDROSEED AS INDICATED ON THE PLANS.

ALL SEED, SHRUB/TREE AREAS SHALL RECEIVE 4" FF PH CORRECTED TOPSOIL. AFTER TOPSOIL IS SPREAD EVENLY OVER THE ENTIRE AREA, ALL CLODS, LIMBS, STONES AND OTHER DELETERIOUS MATERIAL SHALL BE RAKED UP AND REMOVED FROM THE SITE.

APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
 A) LINE STONE 100 LBS/1,000 SF
 B) FERTILIZER 800 LBS/ACRE OF 10-20-20 OR 1,000 LBS/ACRE OF 5-10-10
 C) MULCH: HAY MULCH APPROXIMATELY 3 TONS PER ACRE
 D) SEED MIX (SLOPES LESS THAN 4:1) LBS/ACRE
 CREEPING RED FESCUE 20
 TALL FESCUE 15
 PERENNIAL RYE GRASS 5
 RED TOP 2

FOR TEMPORARY SEDIMENTATION AND EROSION CONTROL, PLEASE REFER TO THAT SHEET IN THE SET OF PLANS FOR REFERENCE.

ANY CHANGES IN PLANT LOCATIONS OR TYPE OF PLANTS SHALL BE REVIEWED AND APPROVED BY THIS OFFICE AND VMD COMPANIES, LLC PRIOR TO THE PURCHASE OF ANY PLANTS AND INSTALLATION OF PLANTS.

ALL TREES AND SHRUBS THAT ARE SHOWN ON THIS PLAN AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A 1 YEAR PERIOD AFTER INSTALLATION.

THE CONTRACTOR SHALL INSTALL AN IRRIGATION SYSTEM TO PROVIDE COMPLETE COVERAGE OF ALL THE LANDSCAPED AREAS SHOWN ON THIS PLAN. THE SYSTEM SHALL INCLUDE A TOWER AND SHALL BE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODES.

IRRIGATION NOTES

CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.

CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTINGS, I.E. VERIFY ROOT BALL SIZE FOR PLANTINGS.

RAINFIELD CONTROL VALVES, COUPLINGS, SPRINKLER HEADS SERIES 1012 AND 1004 SHALL BE USED. USE TORO SUPER 100 LAWN ROTOR WHERE REQUIRED.

MAINLINE AND LATERAL LINE PIPE SHALL BE CLASS 200 PVC IRRIGATION SLEEVE SHALL BE SCHEDULE 40 PVC

INCLUDE BACKFLOW PREVENTER ASSEMBLY AND SPRINKLER CHECK VALVE DEVICES WHERE LOW HEAD DRAINAGE MAY OCCUR.

LUGS: LMAN: CTB: MS VIEW: 2021-036-Civil\Plot\2021-036 - LSP.dwg, 11/22/2022 10:46:03 AM, DWG To PDF.pc3

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER: MBL
 CHIEF DESIGNER: MBL
 REVIEWED BY: DATE

SEAL
 SEAL

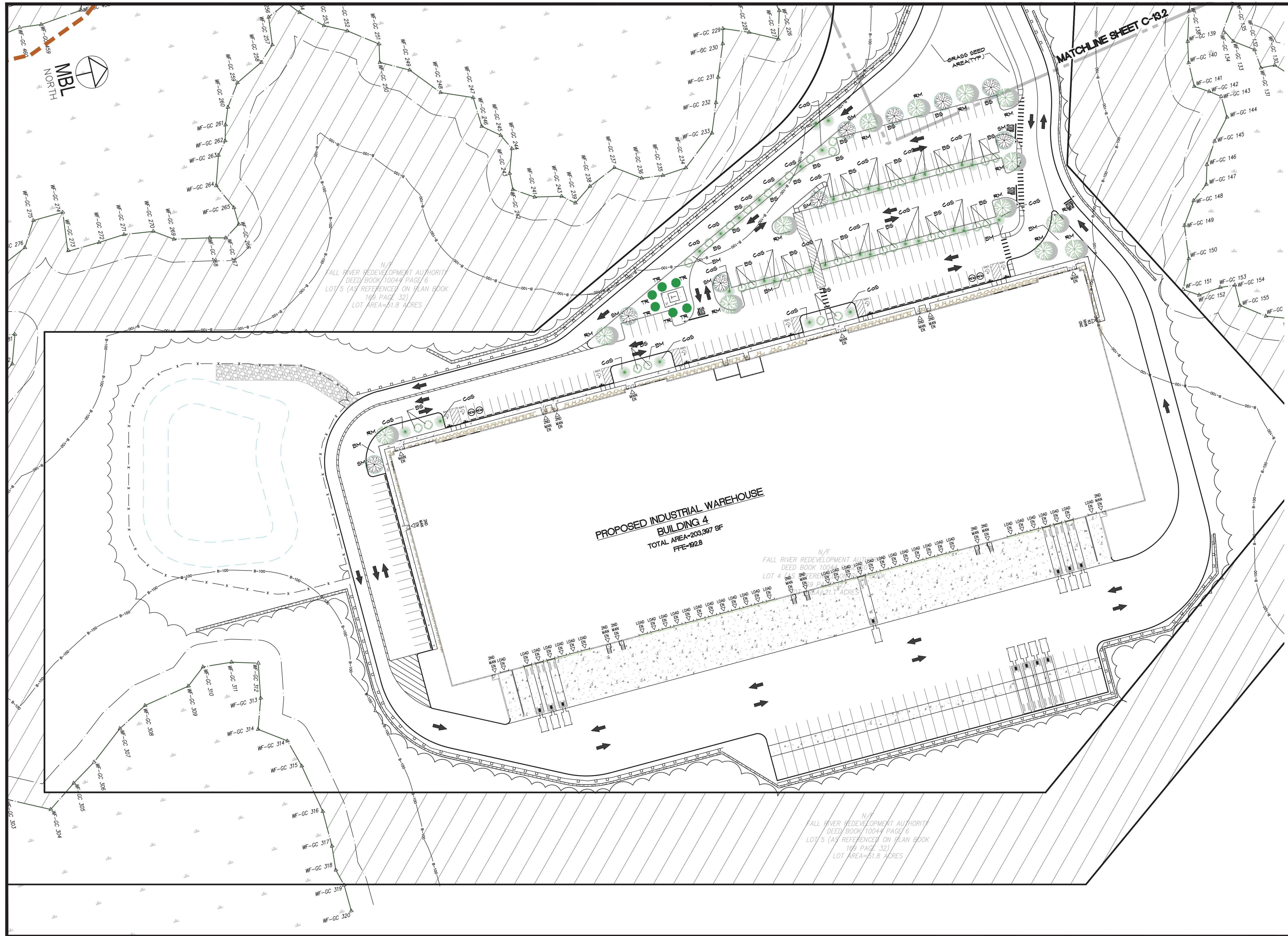
PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=50'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
LANDSCAPING PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-12.2



Plant Legend		
KEY	DESCRIPTION	INSTALL/SIZE MINIMUM
TREES	RM RED MAPLE ACER RUBRUM LINNAEUS	8-10 FEET, 3 GAL.
	SM SUGAR MAPLE ACER SACCHARUM MARSHALL	8-10 FEET, 3 GAL.
SHRUBS AND GROUND COVER	BM BARK MULCH (AGED PINE, UNDYED)	
	BS BOXWOOD BUXUS SPENPERVERENS	3-4 FEET, 3 GAL. 4 FT. O.C.
	TR THUJA OCCIDENTALIS CULTIVAR EMERALD ARBORVITAE	5-6 FT. HT.
	CoS DWARF REDTIGER DOGWOOD CORNUS SERICEA 'KELSEYI'	20-36 INCHES, 3 GAL. 4 FT. O.C.
STONE	RIVER ROCK	1" - 3" DIA. RIVER STONE BED

LUGS: X:\2021\2021-036\Civil\Plot\2021-036 - LSP.dwg, 11/22/2022 10:46:09 AM, DWG To PDF.pc3
 LMAN: CTB:
 IMS VIEW:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL	SEAL

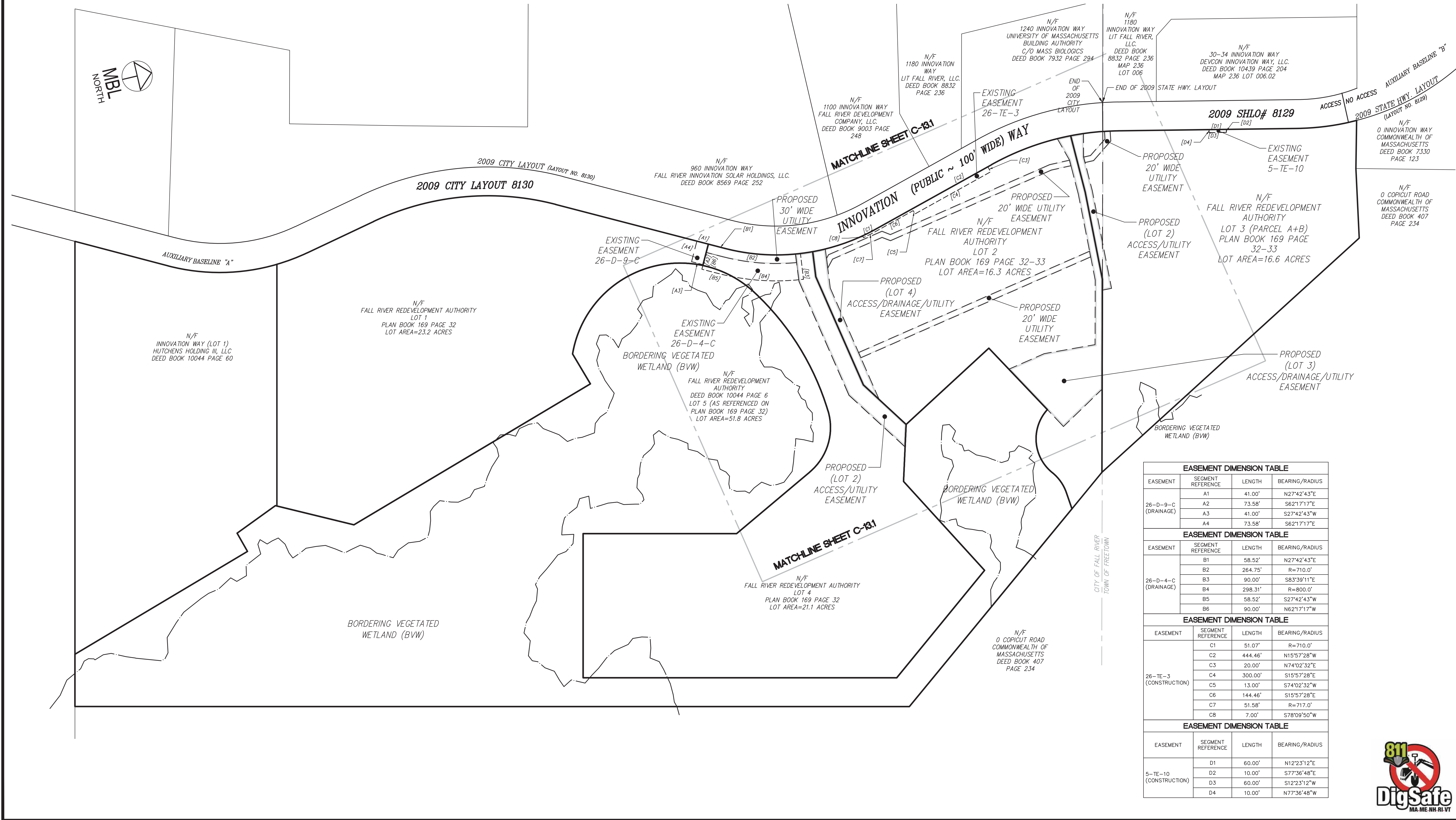
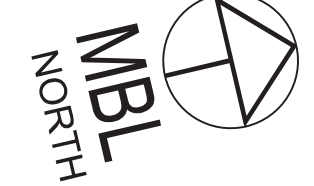
PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:	HORIZ.:
	VERT.:
DATUM:	HORIZ.: NAD83
	VERT.: NAVD88
GRAPHIC SCALE	

LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

PROPOSED WAREHOUSE DEVELOPMENT
LANSCAPING PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-12.3



EASEMENT DIMENSION TABLE			
EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
26-D-9-C (DRAINAGE)	A1	41.00'	N27°42'43"E
	A2	73.58'	S62°17'17"E
	A3	41.00'	S27°42'43"W
	A4	73.58'	S62°17'17"E
EASEMENT DIMENSION TABLE			
EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
26-D-4-C (DRAINAGE)	B1	58.52'	N27°42'43"E
	B2	264.75'	R=710.0'
	B3	90.00'	S83°39'11"E
	B4	298.31'	R=800.0'
	B5	58.52'	S27°42'43"W
	B6	90.00'	N62°17'17"W
EASEMENT DIMENSION TABLE			
EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
26-TE-3 (CONSTRUCTION)	C1	51.07'	R=710.0'
	C2	444.46'	N15°57'28"W
	C3	20.00'	N74°02'32"E
	C4	300.00'	S15°57'28"E
	C5	13.00'	S74°02'32"W
	C6	144.46'	S15°57'28"E
	C7	51.58'	R=717.0'
	C8	7.00'	S78°09'50"W
EASEMENT DIMENSION TABLE			
EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
5-TE-10 (CONSTRUCTION)	D1	60.00'	N12°23'12"E
	D2	10.00'	S77°36'48"E
	D3	60.00'	S12°23'12"W
	D4	10.00'	N77°36'48"W



LUGS: X:\2021\2021-036\CIVIL\Plot\2021-036-Innovation Way EASEMENT.dwg, 11/20/2022 8:45:24 PM, DWG To PDF.pc3
 LMAN: CTB:

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL	SEAL
------	------

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:	HORZ.: 1"=150'
	VERT.:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88

MBL LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P. 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

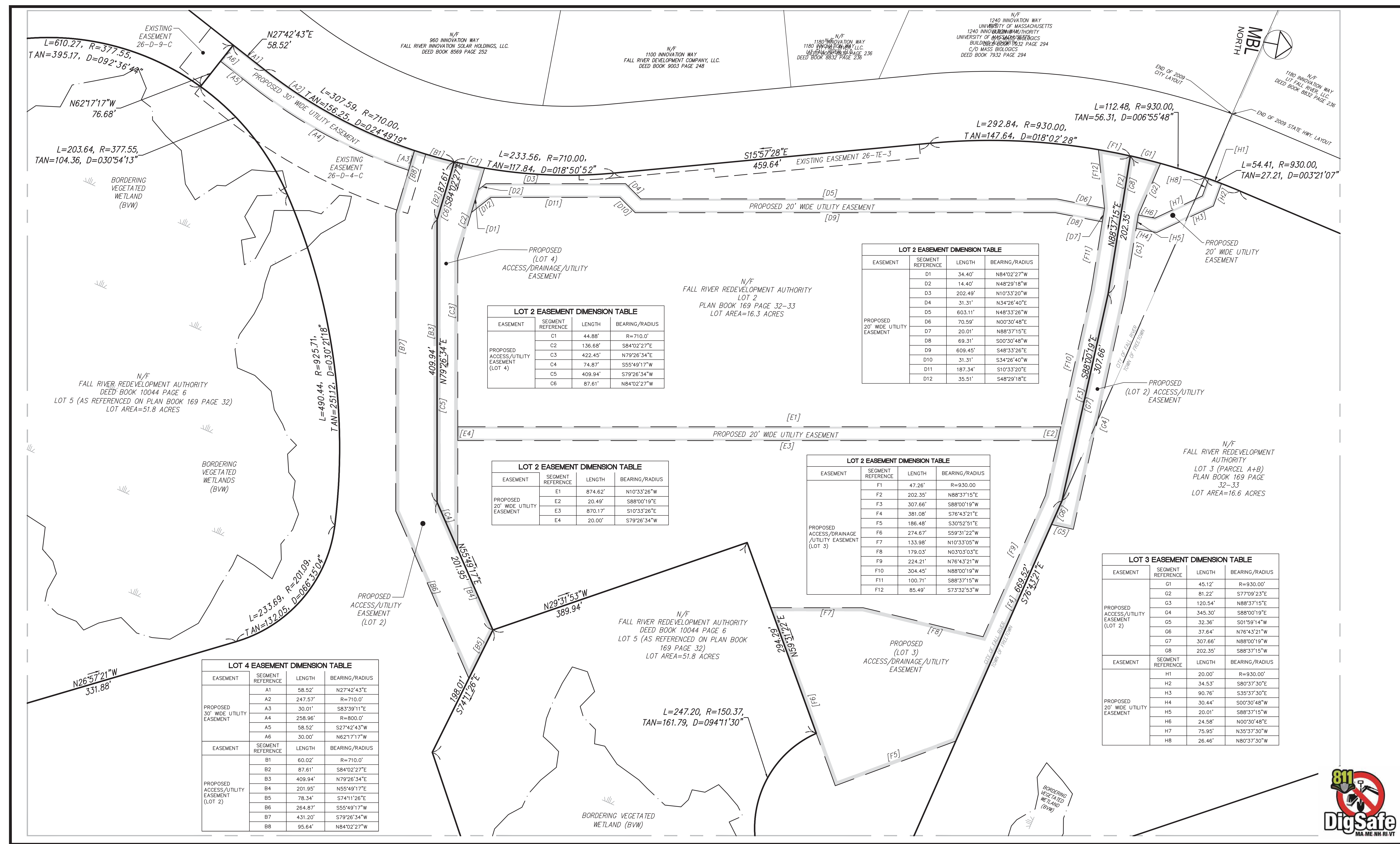
PROPOSED WAREHOUSE DEVELOPMENT
 PROPOSED EASEMENT LAYOUT PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022

C-13.0

X:\2021\2021-036\CIVIL\Plot\2021-036-Innovation Way EASEMENT.dwg, 11/20/2022 8:45:25 PM, DWG To PDF.pc3

LUCS: LMAN: CTB: IMS VIEW: LUCS



LOT 4 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED 30' WIDE UTILITY EASEMENT	A1	58.52'	N27°42'43"E
	A2	247.57'	R=710.0'
	A3	30.01'	S83°39'11"E
	A4	258.96'	R=800.0'
	A5	58.52'	S27°42'43"W
	A6	30.00'	N62°17'17"W
PROPOSED ACCESS/UTILITY EASEMENT (LOT 2)	B1	60.02'	R=710.0'
	B2	87.61'	S84°02'27"E
	B3	409.94'	N79°26'34"E
	B4	201.95'	N55°49'17"E
	B5	78.34'	S74°11'26"E
	B6	264.87'	S55°49'17"W
	B7	431.20'	S79°26'34"W
	B8	95.64'	N84°02'27"W

LOT 2 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED ACCESS/UTILITY EASEMENT (LOT 4)	C1	44.88'	R=710.0'
	C2	136.68'	S84°02'27"E
	C3	422.45'	N79°26'34"E
	C4	74.87'	S55°49'17"W
	C5	409.94'	S79°26'34"W
	C6	87.61'	N84°02'27"W

LOT 2 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED 20' WIDE UTILITY EASEMENT	E1	874.62'	N10°33'26"W
	E2	20.49'	S88°00'19"E
	E3	870.17'	S10°33'26"E
	E4	20.00'	S79°26'34"W

LOT 2 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED 20' WIDE UTILITY EASEMENT	D1	34.40'	N84°02'27"W
	D2	14.40'	N48°29'18"W
	D3	202.49'	N10°33'20"W
	D4	31.31'	N34°26'40"E
	D5	603.11'	N48°33'26"W
	D6	70.59'	N00°30'48"E
	D7	20.01'	N88°37'15"E
	D8	69.31'	S00°30'48"W
	D9	609.45'	S48°33'26"E
	D10	31.31'	S34°26'40"W
	D11	187.34'	S10°33'20"E
	D12	35.51'	S48°29'18"E

LOT 2 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED ACCESS/DRAINAGE/UTILITY EASEMENT (LOT 3)	F1	47.26'	R=930.00
	F2	202.35'	N88°37'15"E
	F3	307.66'	S88°00'19"W
	F4	381.08'	S76°43'21"E
	F5	186.48'	S30°52'51"E
	F6	274.67'	S59°31'22"W
	F7	133.98'	N10°33'05"W
	F8	179.03'	N03°03'03"E
	F9	224.21'	N76°43'21"W
	F10	304.45'	N88°00'19"W
	F11	100.71'	S88°37'15"W
	F12	85.49'	S73°32'53"W

LOT 3 EASEMENT DIMENSION TABLE

EASEMENT	SEGMENT REFERENCE	LENGTH	BEARING/RADIUS
PROPOSED ACCESS/UTILITY EASEMENT (LOT 2)	G1	45.12'	R=930.00'
	G2	81.22'	S77°09'23"E
	G3	120.54'	N88°37'15"E
	G4	345.30'	S88°00'19"E
	G5	32.36'	S01°59'14"W
	G6	37.64'	N76°43'21"W
	G7	307.66'	N88°00'19"W
	G8	202.35'	S88°37'15"W
PROPOSED 20' WIDE UTILITY EASEMENT	H1	20.00'	R=930.00'
	H2	34.53'	S80°37'30"E
	H3	90.76'	S35°37'30"E
	H4	30.44'	S00°30'48"W
	H5	20.01'	S88°37'15"W
	H6	24.58'	N00°30'48"E
	H7	75.95'	N35°37'30"W
	H8	26.46'	N80°37'30"W

No.	DATE	DESCRIPTION	BY
4	11/21/2022	REVISION PER COMMENTS	JAW
3	11/10/2022	REVISION PER MASSDOT COMMENTS	JAW
2	10/12/2022	REVISION PER MASSDOT COMMENTS	JAW
1	09/08/2022	REVISION PER COMMENT FROM CITY OF FALL RIVER	JAW
No.	DATE	DESCRIPTION	BY

PROJ. MANAGER:	MBL	SEAL	SEAL
CHIEF DESIGNER:	MBL		
REVIEWED BY:	DATE		

PREPARED FOR
V.M.D. COMPANIES, LLC
 733 TURNPIKE STREET, ROUTE 114
 NORTH ANDOVER MASSACHUSETTS

SCALE:
 HORZ.: 1"=60'
 VERT.:
 DATUM:
 HORZ.: NAD83
 VERT.: NAVD88
 GRAPHIC SCALE

MBL
 LAND DEVELOPMENT & PERMITTING, CORP.
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS
 5 BRISTOL DRIVE, SUITE 3A
 SOUTH EASTON, MA 02375
 P: 508.297.2746
 EMAIL: info@MBLLandDevelopment.com
 WEB: www.MBLLandDevelopment.com

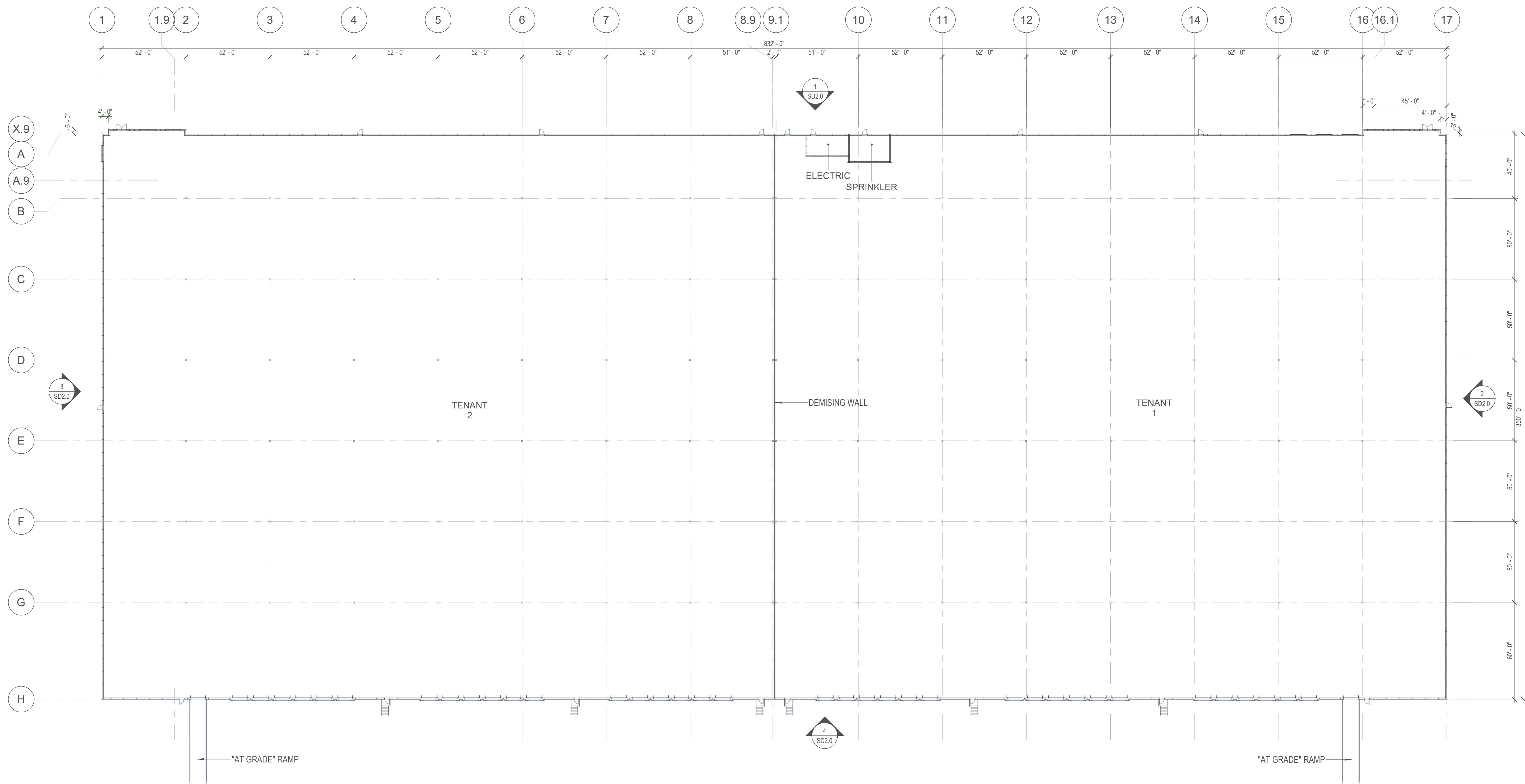
PROPOSED WAREHOUSE DEVELOPMENT
 PROPOSED EASEMENT LAYOUT PLAN
 0 INNOVATION WAY
 FALL RIVER- MAP W-19 LOTS 185 & 189
 FREETOWN - PARCEL ID 236-006.01
 FALL RIVER/FREETOWN MASSACHUSETTS

PROJ. No.: 2021-036
 DATE: JULY 25, 2022
C-13.1





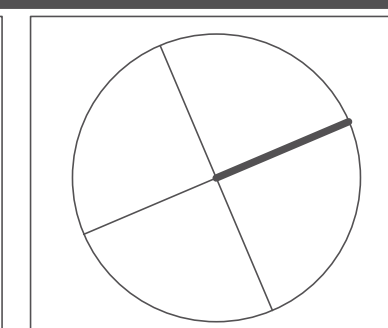
NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

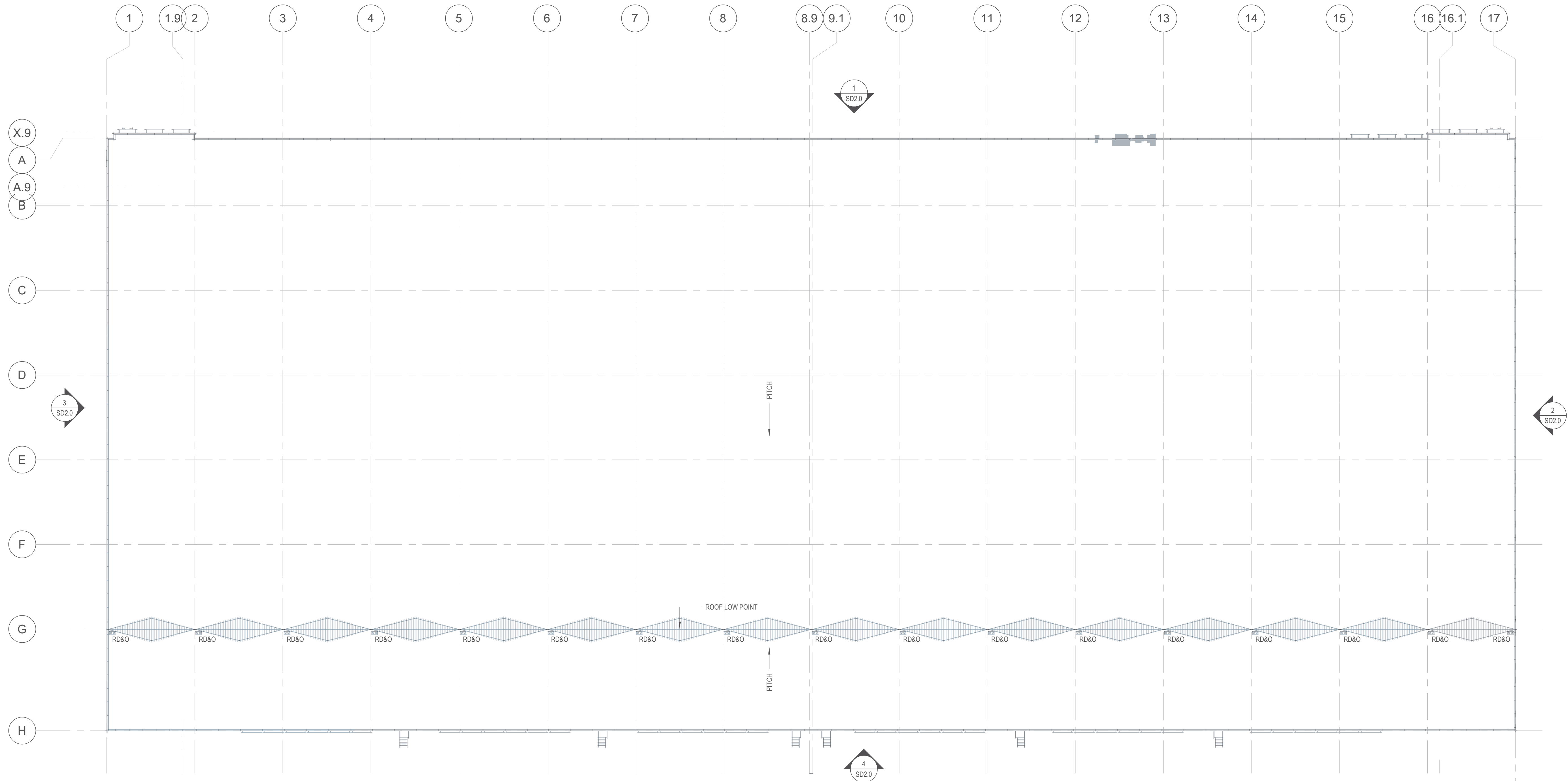


1 FIRST FLOOR PLAN
1/32" = 1'-0"



NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

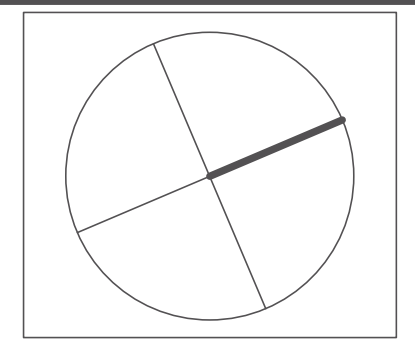


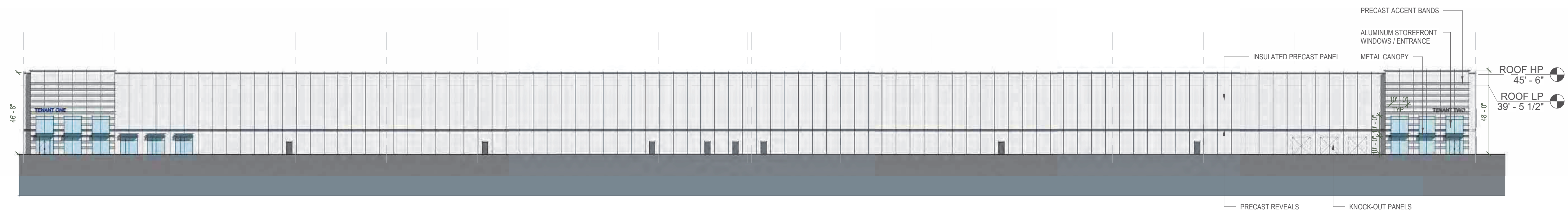


1 ROOF PLAN
1/32" = 1'-0"

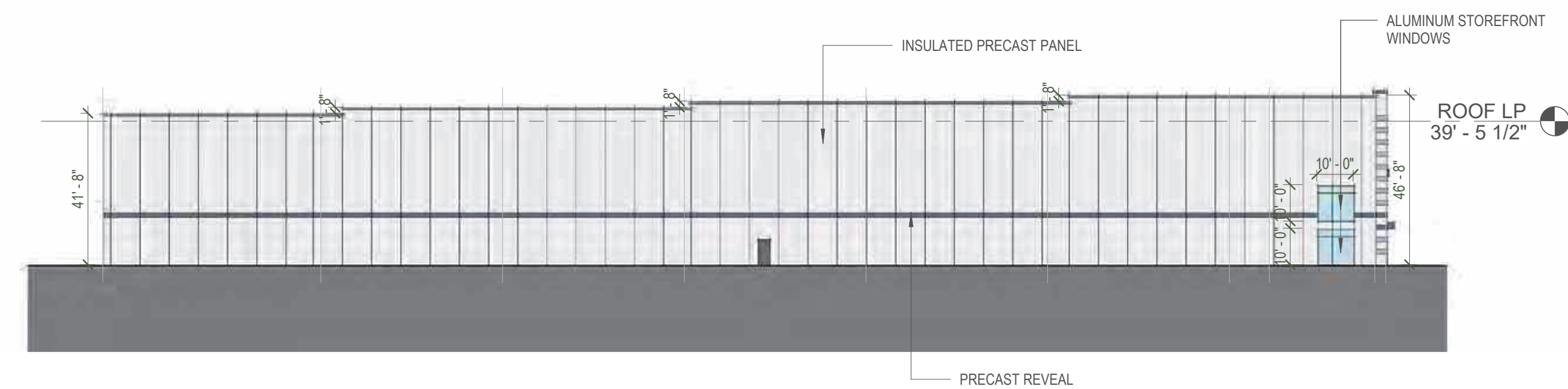
NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

SD1.2
SCHEMATIC ROOF PLAN

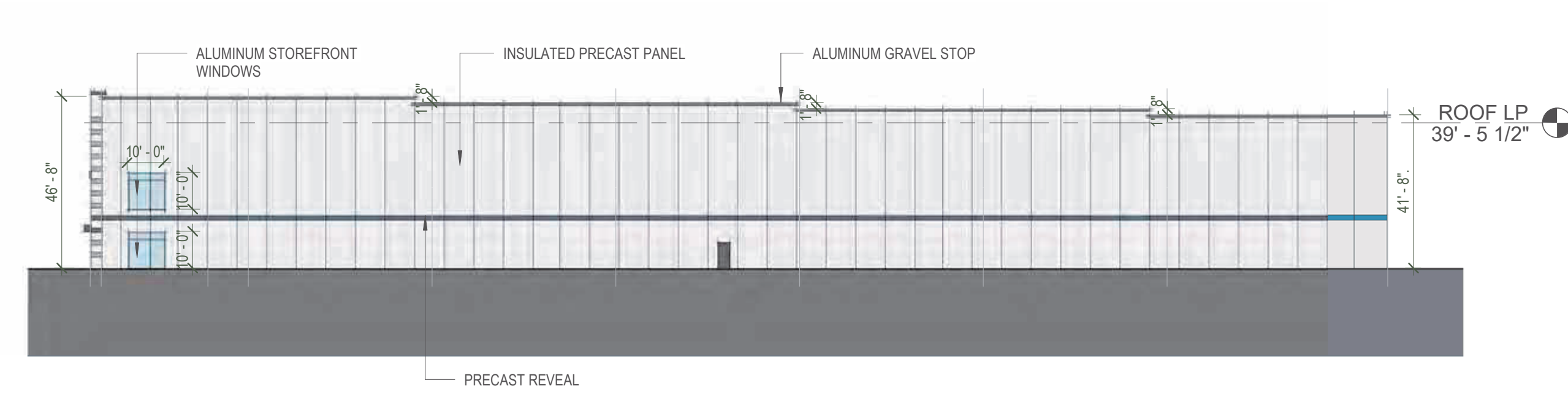




1 FRONT ELEVATION
1/32" = 1'-0"



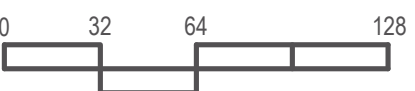
2 LEFT SIDE ELEVATION
1/32" = 1'-0"



3 RIGHT SIDE ELEVATION
1/32" = 1'-0"



4 REAR ELEVATION
1/32" = 1'-0"



PLANNERS DESIGNERS ARCHITECTS, INC.
16 HURON DRIVE NATICK, MA 01760
TEL 508 651 3600 FAX 508 655 2229

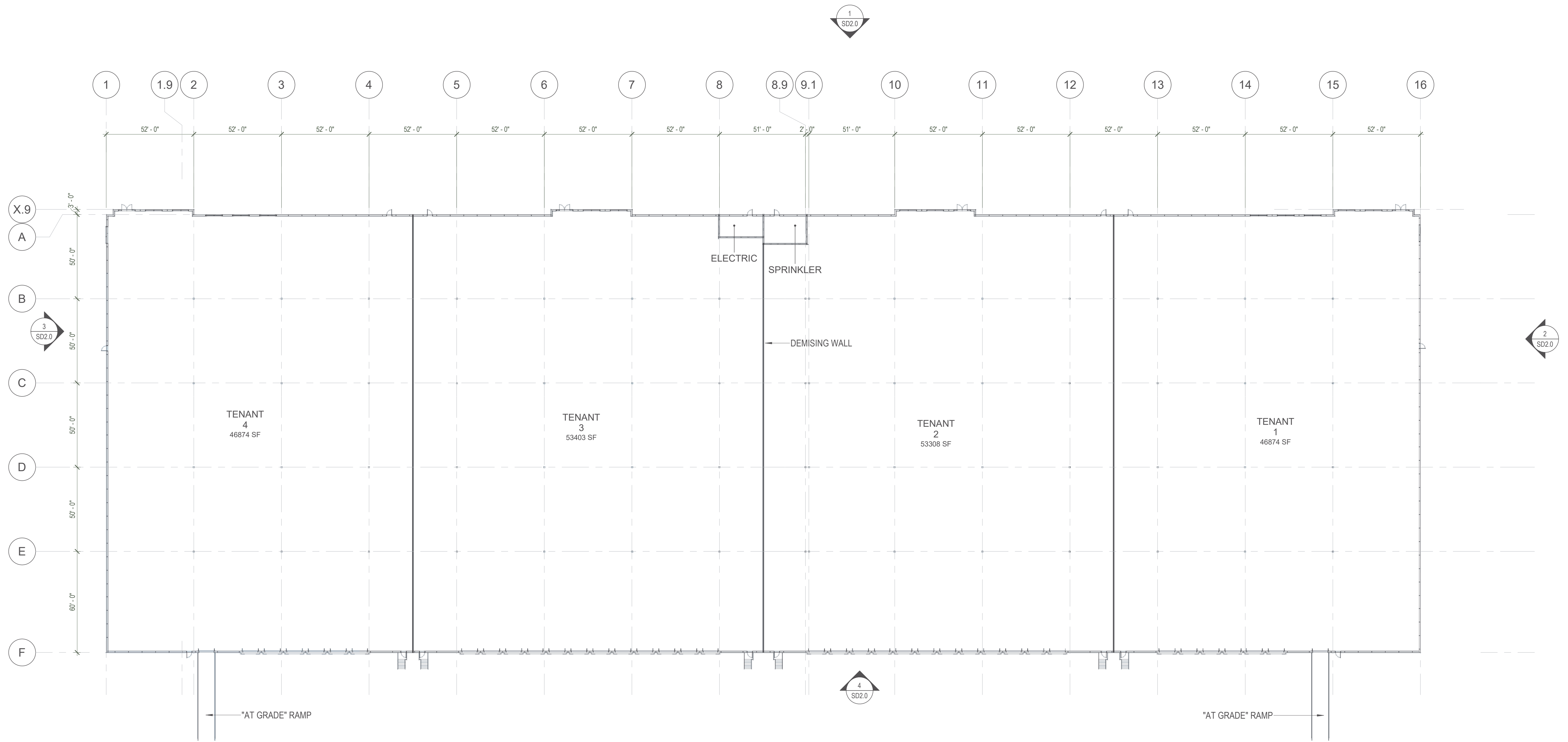
VMD FALL RIVER
INNOVATION WAY, FALL RIVER, MA

4252

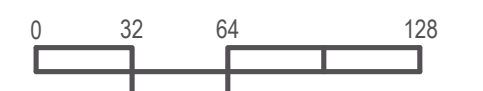
NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

SD2.0
SCHEMATIC ELEVATIONS

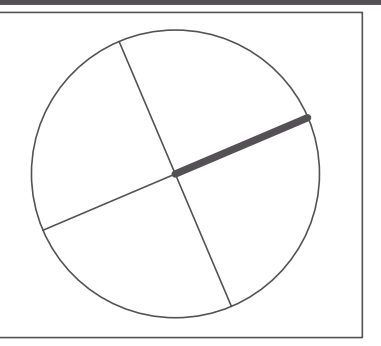


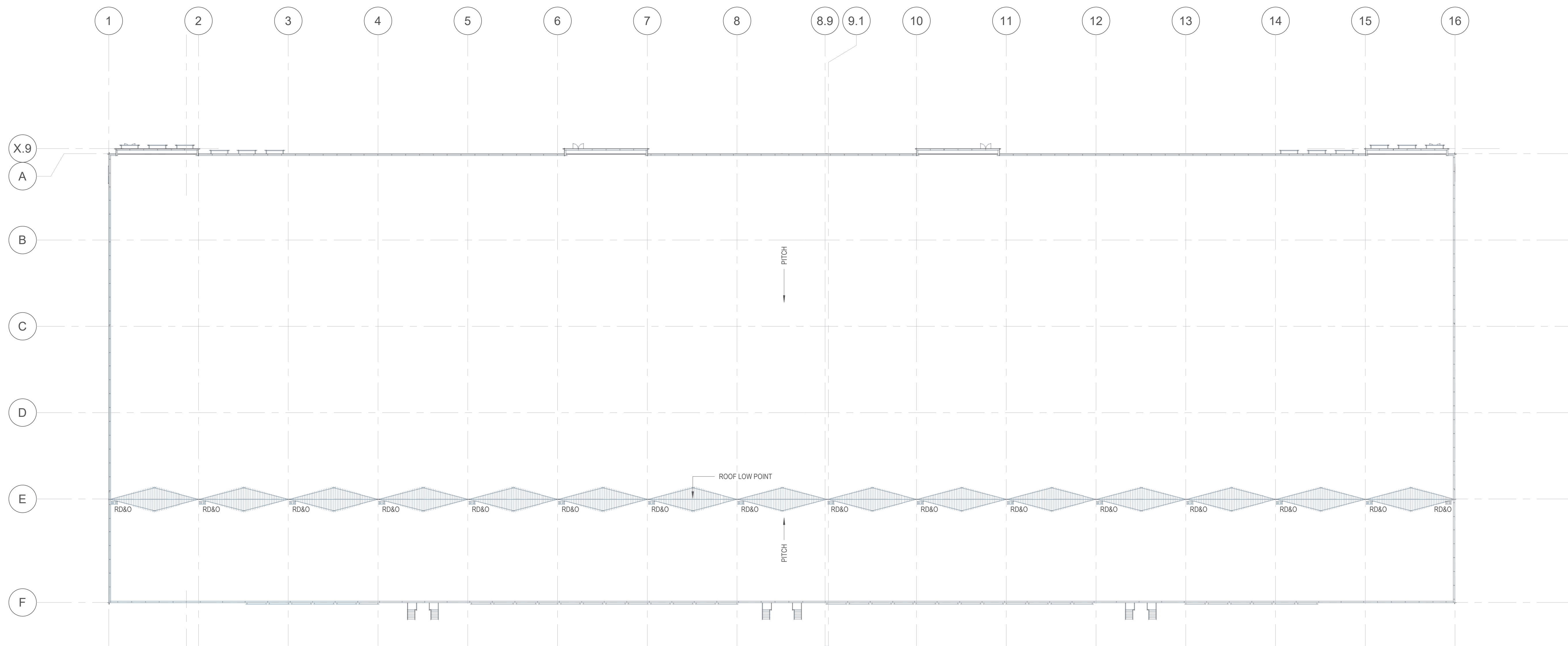


1 FIRST FLOOR PLAN
1/32" = 1'-0"

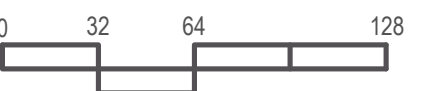


NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

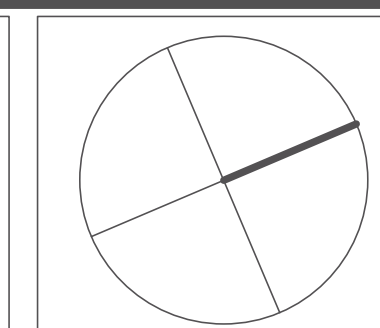


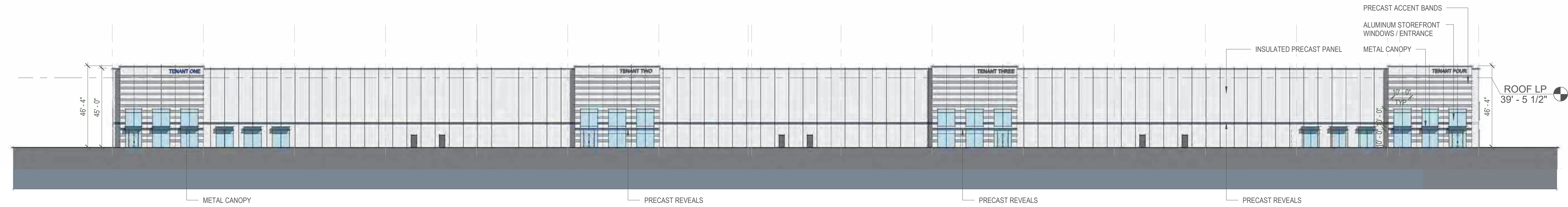


1 ROOF PLAN
1/32" = 1'-0"

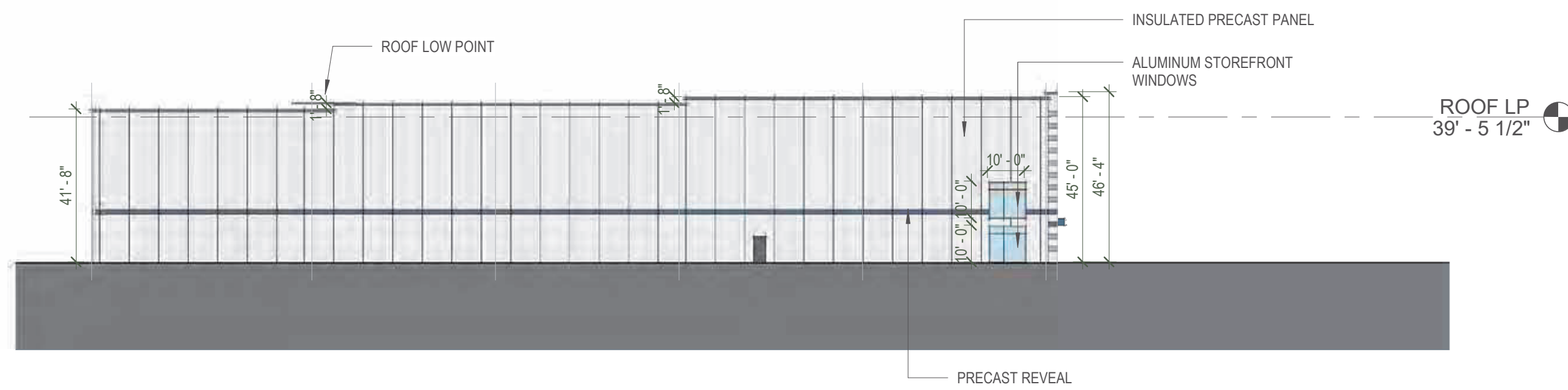


NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING

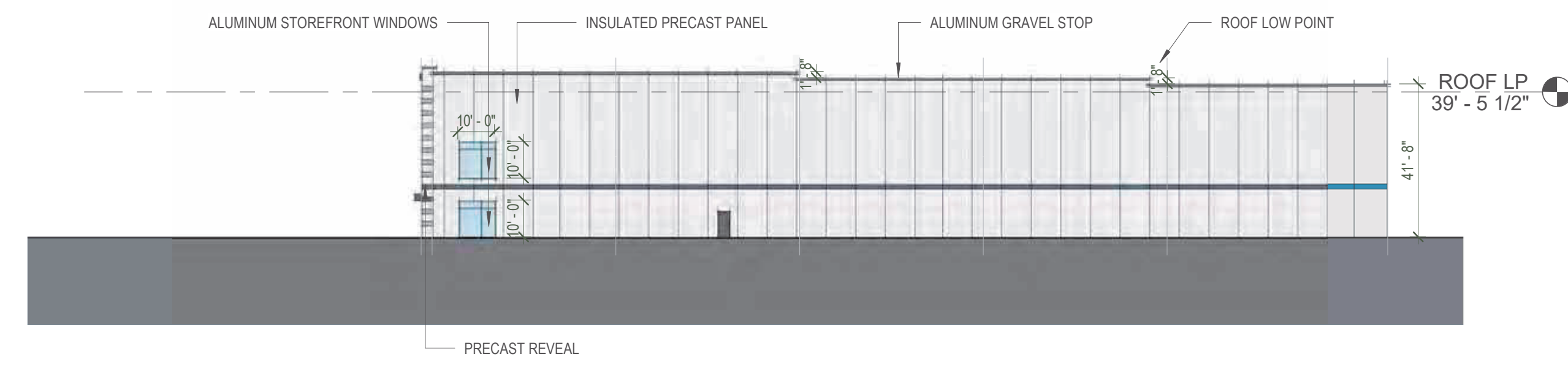




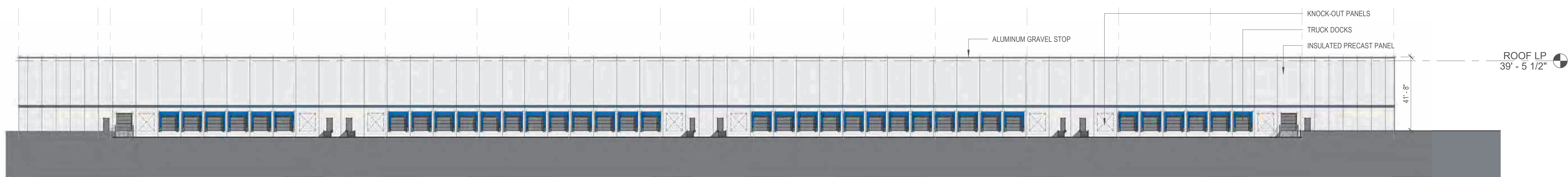
1 FRONT ELEVATION
1/32" = 1'-0"



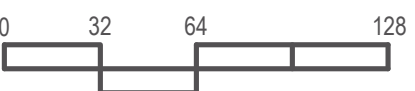
2 LEFT SIDE ELEVATION
1/32" = 1'-0"



3 RIGHT SIDE ELEVATION
1/32" = 1'-0"



4 REAR ELEVATION
1/32" = 1'-0"



NO	DATE	ISSUE
01	05-10-22	PROPOSED FLEX BUILDING