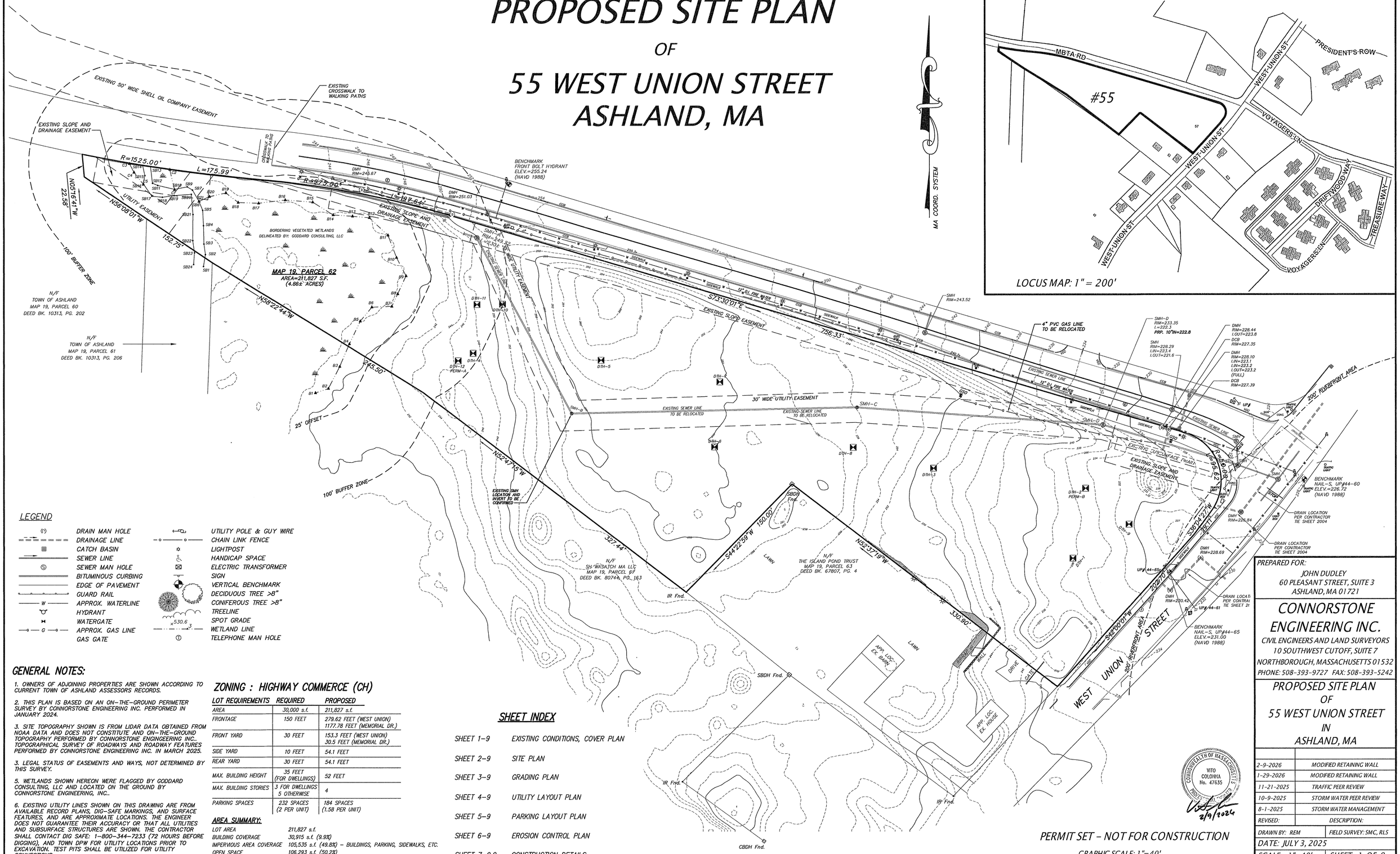
PROPOSED SITE PLAN

OF

55 WEST UNION STREET
ASHLAND, MA



LEGEND

DRAIN MAN HOLE	UTILITY POLE & GUY WIRE
DRAINAGE LINE	CHAIN LINK FENCE
CATCH BASIN	LIGHTPOST
SEWER LINE	HANDICAP SPACE
SEWER MAN HOLE	ELECTRIC TRANSFORMER
BITUMINOUS CURBING	SIGN
EDGE OF PAVEMENT	VERTICAL BENCHMARK
GUARD RAIL	DECIDUOUS TREE >8"
APPROX. WATERLINE	CONIFEROUS TREE >8"
HYDRANT	TREELINE
WATERGATE	SPOT GRADE
APPROX. GAS LINE	WETLAND LINE
GAS GATE	TELEPHONE MAN HOLE

GENERAL NOTES:

1. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF ASHLAND ASSESSORS RECORDS.
2. THIS PLAN IS BASED ON AN ON-THE-GROUND PERIMETER SURVEY BY CONNORSTONE ENGINEERING INC. PERFORMED IN JANUARY 2024.
3. SITE TOPOGRAPHY SHOWN IS FROM LIDAR DATA OBTAINED FROM NOAA DATA AND DOES NOT CONSTITUTE AN ON-THE-GROUND TOPOGRAPHY PERFORMED BY CONNORSTONE ENGINEERING INC. TOPOGRAPHICAL SURVEY OF ROADWAYS AND ROADWAY FEATURES PERFORMED BY CONNORSTONE ENGINEERING INC. IN MARCH 2025.
3. LEGAL STATUS OF EASEMENTS AND WAYS, NOT DETERMINED BY THIS SURVEY.
5. WETLANDS SHOWN HEREON WERE FLAGGED BY GODDARD CONSULTING, LLC AND LOCATED ON THE GROUND BY CONNORSTONE ENGINEERING, INC..
6. EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE RECORD PLANS, DIG-SAFE MARKINGS, AND SURFACE FEATURES, AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.

ASSESSORS MAP 19, PARCEL 62
DEED BOOK 22694, PAGE 263

ZONING : HIGHWAY COMMERCE (CH)

LOT REQUIREMENTS	REQUIRED	PROPOSED
AREA	30,000 s.f.	211,827 s.f.
FRONTAGE	150 FEET	279.62 FEET (WEST UNION) 1177.78 FEET (MEMORIAL DR.)
FRONT YARD	30 FEET	153.3 FEET (WEST UNION) 30.5 FEET (MEMORIAL DR.)
SIDE YARD	10 FEET	54.1 FEET
REAR YARD	30 FEET	54.1 FEET
MAX. BUILDING HEIGHT	35 FEET (FOR DWELLINGS)	52 FEET
MAX. BUILDING STORIES	3 FOR DWELLINGS 5 OTHERWISE	4
PARKING SPACES	232 SPACES (2 PER UNIT)	184 SPACES (1.58 PER UNIT)

AREA SUMMARY:

LOT AREA	211,827 s.f.
BUILDING COVERAGE	30,915 s.f. (9.9%)
IMPERVIOUS AREA COVERAGE	105,535 s.f. (49.8%) – BUILDINGS, PARKING, SIDEWALKS, ETC.
OPEN SPACE	106,293 s.f. (50.2%)
USEABLE OPEN SPACE	87,190 s.f. (41.1%) – EXCLUDES WETLANDS
WETLAND AREAS	19,103 s.f. (9.0%)

SHEET INDEX

PERMIT SET - NOT FOR CONSTRUCTION

GRAPHIC SCALE: 1"=40'

0 10 20 30 40 50 75 100 150 200 FEET
0 5 10 15 20 30 40 50 60 METERS

COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA No. 47635
REGISTERED PROFESSIONAL ENGINEER
2/9/2026

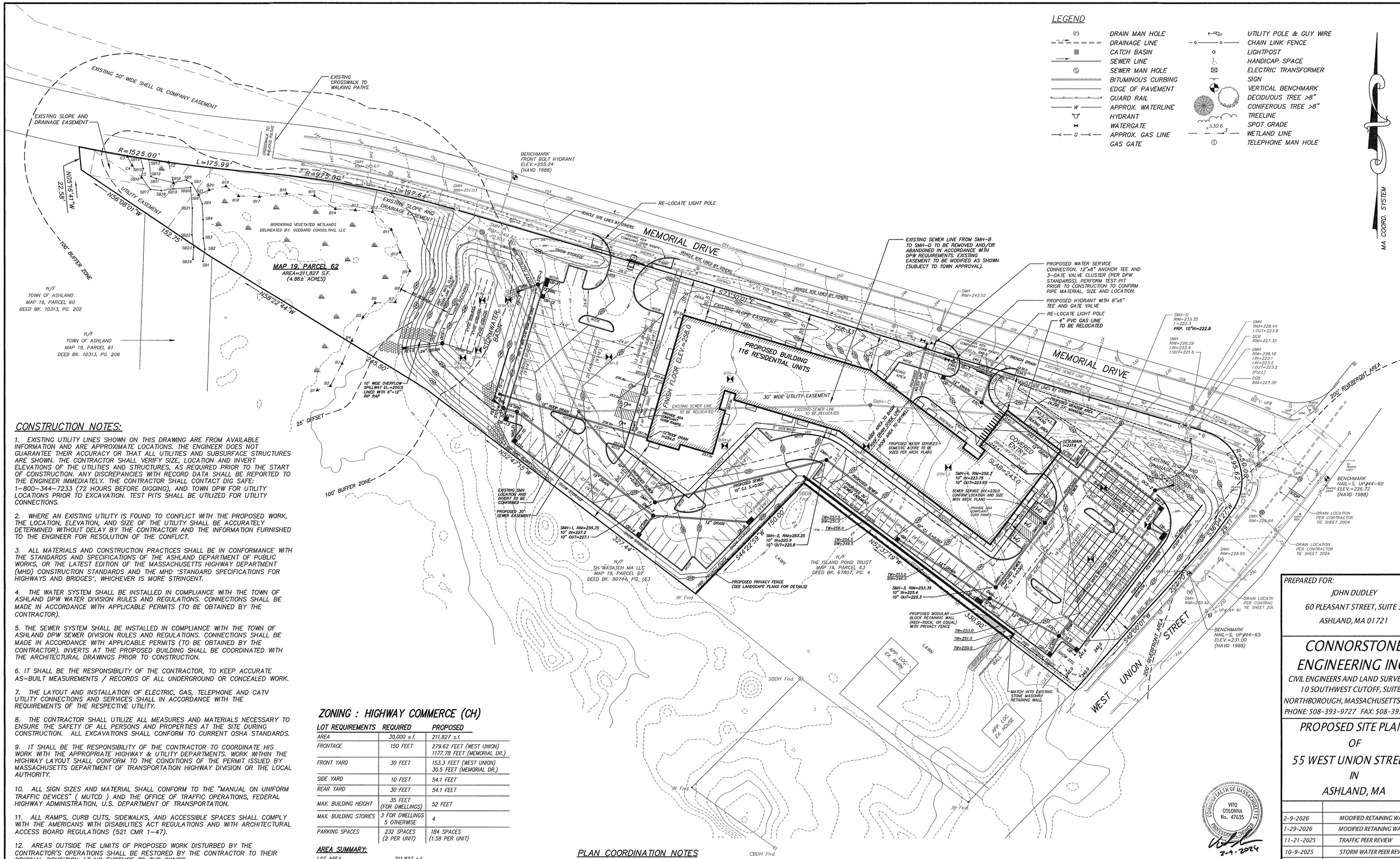
PREPARED FOR:
JOHN DUDLEY
60 PLEASANT STREET, SUITE 3
ASHLAND, MA 01721

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

PROPOSED SITE PLAN
OF
55 WEST UNION STREET
IN
ASHLAND, MA

2-9-2026	MODIFIED RETAINING WALL
1-29-2026	MODIFIED RETAINING WALL
11-21-2025	TRAFFIC PEER REVIEW
10-9-2025	STORM WATER PEER REVIEW
8-1-2025	STORM WATER MANAGEMENT
REVISED:	DESCRIPTION:
DRAWN BY: REM	FIELD SURVEY: SMC, RLS
DATE: JULY 3, 2025	
SCALE: 1"=40'	SHEET 1 OF 9.

EXISTING CONDITIONS PLAN
LOCUS PLAN / COVER PAGE



LEGEND

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GAS GATE	TELEPHONE MAN HOLE

CONSTRUCTION NOTES:

1. EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.

2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.

3. ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE ASHLAND DEPARTMENT OF PUBLIC WORKS, OR THE LATEST EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) CONSTRUCTION STANDARDS AND THE MHD "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", WHICHEVER IS MORE STRINGENT.

4. THE WATER SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE TOWN OF ASHLAND DPW WATER DIVISION RULES AND REGULATIONS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR).

5. THE SEWER SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE TOWN OF ASHLAND DPW SEWER DIVISION RULES AND REGULATIONS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR). INVERTS AT THE PROPOSED BUILDING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.

6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, TO KEEP ACCURATE AS-BUILT MEASUREMENTS / RECORDS OF ALL UNDERGROUND OR CONCEALED WORK.

7. THE LAYOUT AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CATV UTILITY CONNECTIONS AND SERVICES SHALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY.

8. THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.

9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS. WORK WITHIN THE HIGHWAY LAYOUT SHALL CONFORM TO THE CONDITIONS OF THE PERMIT ISSUED BY MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION OR THE LOCAL AUTHORITY.

10. ALL SIGN SIZES AND MATERIAL SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC DEVICES" (MUTCD) AND THE OFFICE OF TRAFFIC OPERATIONS, FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION.

11. ALL RAMPS, CURB CUTS, SIDEWALKS, AND ACCESSIBLE SPACES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR 1-47).

12. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.

13. JOINTS BETWEEN PROPOSED BITUMINOUS CONCRETE PAVEMENT AND EXISTING PAVEMENT TO REMAIN SHALL BE SAWCUT AND SEALED WITH HOT POURED RUBBERIZED ASPHALT SEALER.

14. COORDINATE ALL BUILDING DIMENSIONS, ELEVATIONS, AND UTILITY CONNECTIONS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE OWNER AND ENGINEER.

ZONING : HIGHWAY COMMERCE (CH)

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ASSESSORS MAP 19, PARCEL 62
DEED BOOK 22694, PAGE 263

PLAN COORDINATION NOTES

SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING DESIGN AND COORDINATION ITEMS:

1. PROPOSED SEWER, DOMESTIC WATER AND FIRE PROTECTION SERVICES, ROOF DRAIN CONNECTIONS TO BE CONFIRMED WITH ARCHITECTURAL PLANS.
2. SEE DESIGN PLANS BY OTHERS FOR PROPOSED SITE LIGHTING AND LANDSCAPING.

VITO COLONNA
No. 47635

2-9-2024

PERMIT SET - NOT FOR CONSTRUCTION

GRAPHIC SCALE: 1"=40'

0 10 20 30 40 50 75 100 150 200 FEET
0 5 10 15 20 30 40 50 60 METERS

PREPARED FOR:
JOHN DUDLEY
60 PLEASANT STREET, SUITE 3
ASHLAND, MA 01721

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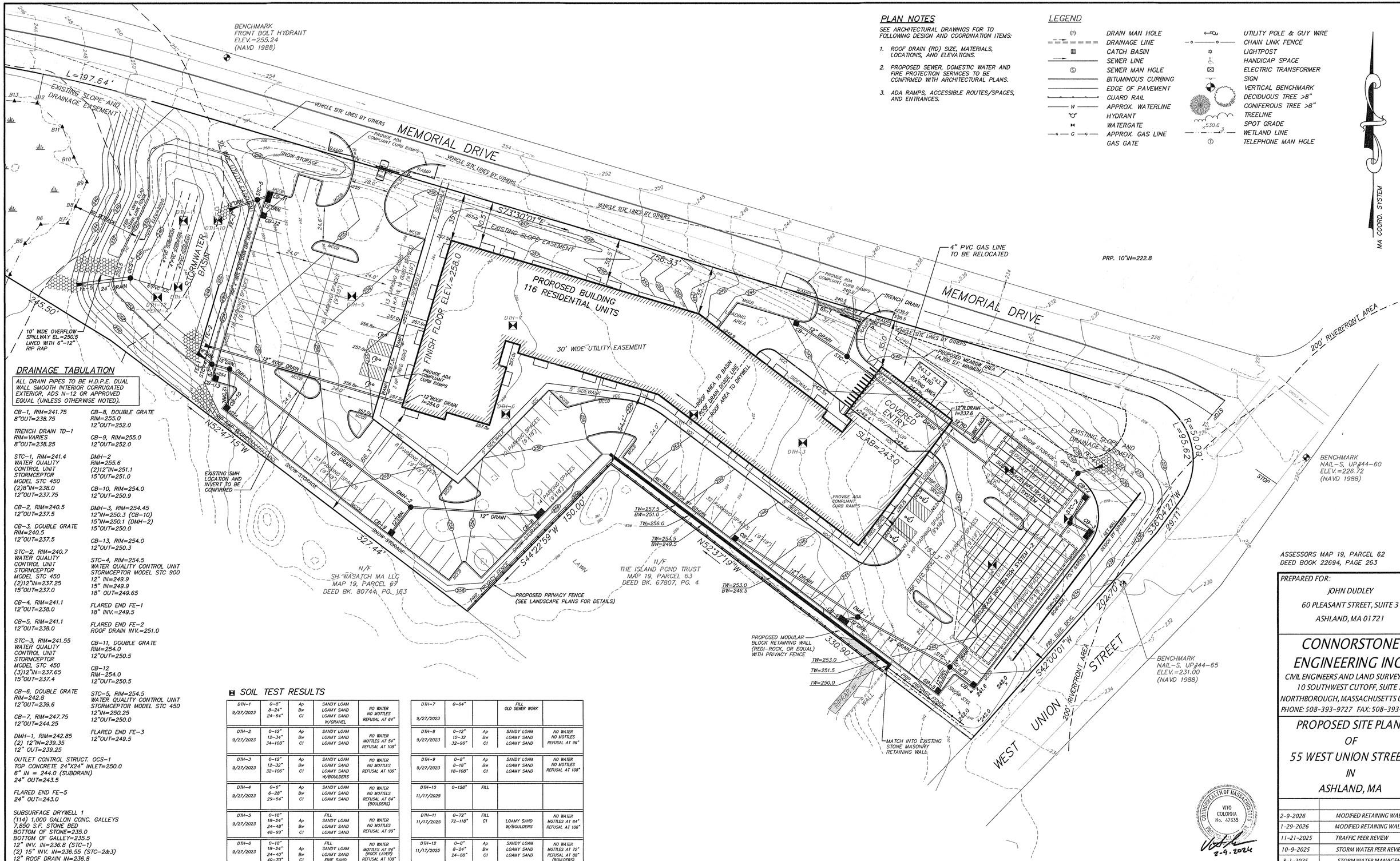
DRAWN BY: REM
FIELD SURVEY: SMC, RLS
DATE: JULY 3, 2025
SCALE: 1"=40'
SHEET 2 OF 9.

OVERALL SITE PLAN



PLAN NOTES

SEE ARCHITECTURAL DRAWINGS FOR TO FOLLOWING DESIGN AND COORDINATION ITEMS:

1. ROOF DRAIN (RD) SIZE, MATERIALS, LOCATIONS, AND ELEVATIONS.
2. PROPOSED SEWER, DOMESTIC WATER AND FIRE PROTECTION SERVICES TO BE CONFIRMED WITH ARCHITECTURAL PLANS.
3. ADA RAMPS, ACCESSIBLE ROUTES/SPACES, AND ENTRANCES.

LEGEND

- DRAIN MAN HOLE
- DRAINAGE LINE
- CATCH BASIN
- SEWER LINE
- SEWER MAN HOLE
- BITUMINOUS CURBING
- EDGE OF PAVEMENT
- GUARD RAIL
- APPROX. WATERLINE
- HYDRANT
- WATERGATE
- APPROX. GAS LINE
- GAS GATE
- UTILITY POLE & GUY WIRE
- CHAIN LINK FENCE
- LIGHTPOST
- HANDICAP SPACE
- ELECTRIC TRANSFORMER
- SIGN
- VERTICAL BENCHMARK
- DECIDUOUS TREE >8"
- CONIFEROUS TREE >8"
- TREELINE
- SPOT GRADE
- WETLAND LINE
- TELEPHONE MAN HOLE

DRAINAGE TABULATION

ALL DRAIN PIPES TO BE H.D.P.E. DUAL WALL SMOOTH INTERIOR CORRUGATED EXTERIOR, ADS N-12 OR APPROVED EQUAL (UNLESS OTHERWISE NOTED).

CB-1, RIM=241.75
8"OUT=238.75

TRENCH DRAIN TD-1
RIM=VARIES
8"OUT=238.25

STC-1, RIM=241.4
WATER QUALITY CONTROL UNIT STORMCEPTOR MODEL STC 450
(2)8"IN=238.0
12"OUT=237.75

CB-2, RIM=240.5
12"OUT=237.5

CB-3, DOUBLE GRATE
RIM=240.5
12"OUT=237.5

STC-2, RIM=240.7
WATER QUALITY CONTROL UNIT STORMCEPTOR MODEL STC 450
(2)12"IN=237.25
15"OUT=237.0

CB-4, RIM=241.1
12"OUT=238.0

CB-5, RIM=241.1
12"OUT=238.0

STC-3, RIM=241.55
WATER QUALITY CONTROL UNIT STORMCEPTOR MODEL STC 450
(3)12"IN=237.65
15"OUT=237.4

CB-6, DOUBLE GRATE
RIM=242.8
12"OUT=239.6

CB-7, RIM=247.75
12"OUT=244.25

DMH-1, RIM=242.85
(2) 12"IN=239.35
12" OUT=239.25

OUTLET CONTROL STRUCT. OCS-1
TOP CONCRETE 24"X24" INLET=250.0
6" IN = 244.0 (SUBDRAIN)
24" OUT=243.5

FLARED END FE-5
24" OUT=243.0

SUBSURFACE DRYWELL 1
(114) 1,000 GALLON CONC. GALLEYS
7,850 S.F. STONE BED
BOTTOM OF STONE=235.0
BOTTOM OF GALLEY=235.5
12" INV. IN=236.8 (STC-1)
(2) 15" INV. IN=236.55 (STC-2&3)
12" ROOF DRAIN IN=236.8

OUTLET CONTROL STRUCT. OCS-2
RIM=240.5
INTERNAL WEIR WALL TOP=238.2
18" IN=236.3
18" OUT=236.3

FLARED END FE-4
18" OUT=236.1

CB-8, DOUBLE GRATE
RIM=255.0
12"OUT=252.0

CB-9, RIM=255.0
12"OUT=252.0

DMH-2
RIM=255.6
(2)12"IN=251.1
15"OUT=251.0

CB-10, RIM=254.0
12"OUT=250.9

DMH-3, RIM=254.45
12"IN=250.3 (CB-10)
15"IN=250.1 (DMH-2)
15"OUT=250.0

CB-13, RIM=254.0
12"OUT=250.3

STC-4, RIM=254.5
WATER QUALITY CONTROL UNIT STORMCEPTOR MODEL STC 900
12" IN=249.9
15" IN=249.9
18" OUT=249.65

FLARED END FE-1
18" INV.=249.5

FLARED END FE-2
ROOF DRAIN INV.=251.0

CB-11, DOUBLE GRATE
RIM=254.0
12"OUT=250.5

CB-12
RIM=254.0
12"OUT=250.5

STC-5, RIM=254.5
WATER QUALITY CONTROL UNIT STORMCEPTOR MODEL STC 450
12"IN=250.25
12"OUT=250.0

FLARED END FE-3
12"OUT=249.5

TW=257.5
BW=251.0

TW=256.0

TW=254.5
BW=249.5

TW=253.0
BW=246.5

TW=253.0

TW=251.5

TW=250.0

SOIL TEST RESULTS

DTH-1 9/27/2023	0-8" 8-24" 24-64"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND W/GRAVEL	NO WATER NO MOTILES REFUSAL AT 64"
DTH-2 9/27/2023	0-12" 12-34" 34-108"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER MOTTLES AT 54" REFUSAL AT 108"
DTH-3 9/27/2023	0-12" 12-32" 32-106"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND W/BOULDERS	NO WATER NO MOTTLES REFUSAL AT 106"
DTH-4 9/27/2023	0-6" 6-28" 29-64"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER NO MOTIELS REFUSAL AT 64" (BOULDERS)
DTH-5 9/27/2023	0-18" 18-24" 24-48" 48-99"	Ap Bw C1	FILL SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER NO MOTILES REFUSAL AT 99"
DTH-6 9/27/2023	0-18" 18-24" 24-40" 40-70" 70-108"	Ap Bw C1 C2	FILL SANDY LOAM LOAMY SAND FINE SAND LOAMY SAND	NO WATER MOTTLES AT 94" (ROCK LAYER) REFUSAL AT 108"
DTH-7 9/27/2023	0-64"		FILL OLD SEWER WORK	
DTH-8 9/27/2023	0-12" 12-32 32-96"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER NO MOTTLES REFUSAL AT 96"
DTH-9 9/27/2023	0-8" 8-18" 18-108"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER NO MOTTLES REFUSAL AT 108"
DTH-10 11/17/2025	0-128"	FILL		
DTH-11 11/17/2025	0-72" 72-118"	FILL C1	LOAMY SAND W/BOULDERS	NO WATER MOTTLES AT 84" REFUSAL AT 106"
DTH-12 11/17/2025	0-8" 8-24" 24-88"	Ap Bw C1	SANDY LOAM LOAMY SAND LOAMY SAND	NO WATER MOTTLES AT 72" REFUSAL AT 88" (BOULDERS)

PERMEABILITY TESTING RESULTS

PERM-A = 9.0 INCHES/HOUR AT DTH-12

PERM-B = 10.2 INCHES/HOUR AT DTH-2

ASSESSORS MAP 19, PARCEL 62
DEED BOOK 22694, PAGE 263

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PROPOSED SITE PLAN OF 55 WEST UNION STREET IN ASHLAND, MA

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2-9-2026	MODIFIED RETAINING WALL
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DRAWN BY: REM | FIELD SURVEY: SMC, RLS
DATE: JULY 3, 2025
SCALE: 1"=30' | SHEET 3 OF 9.
GRADING & DRAINAGE PLAN

COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA No. 47535
REGISTERED PROFESSIONAL ENGINEER
2-9-2026

PERMIT SET - NOT FOR CONSTRUCTION

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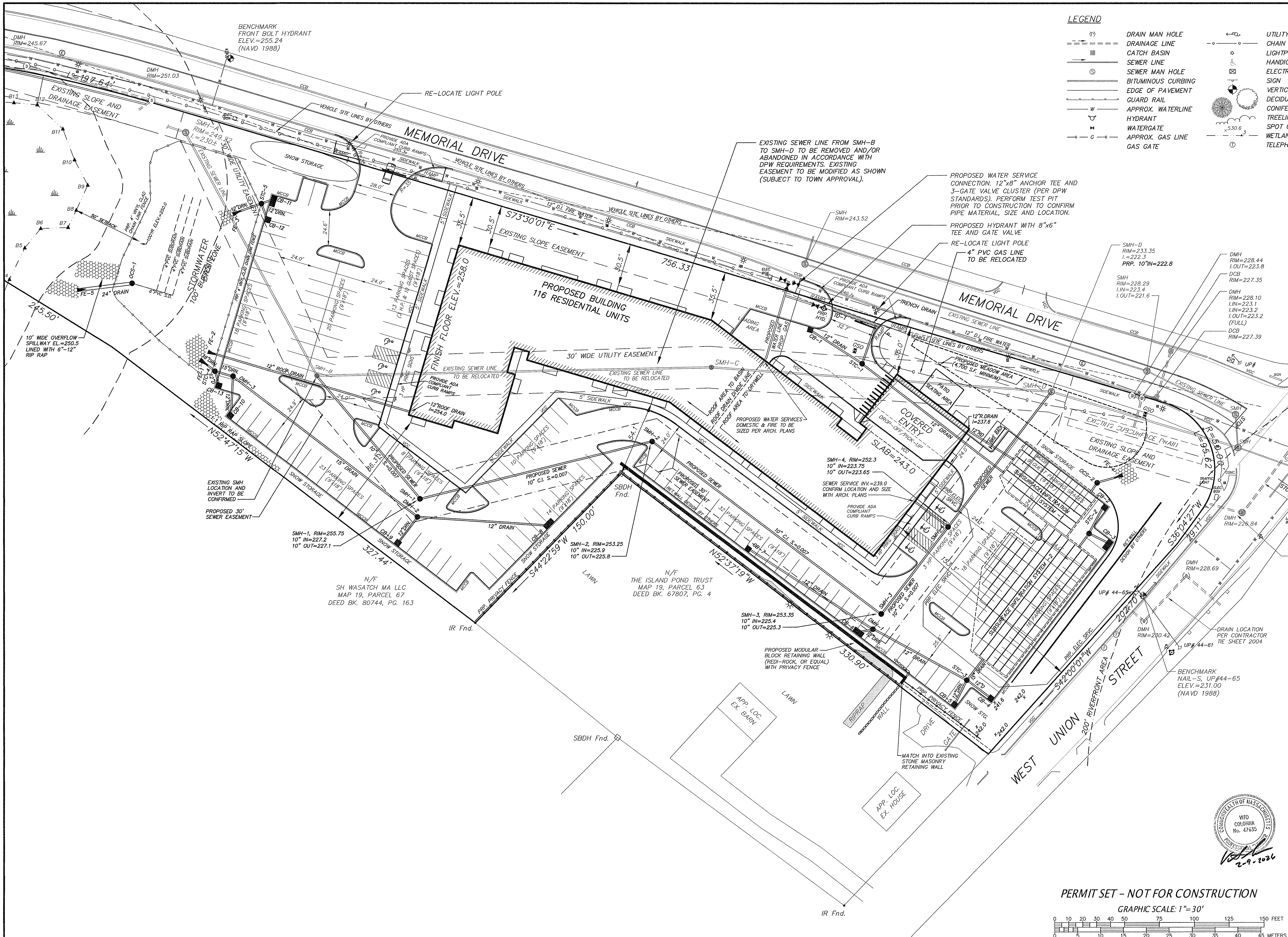
BENCHMARK
FRONT BOLT HYDRANT
ELEV.=255.24
(NAVD 1988)
MEMORIAL DRIVE
RE-LOCATE LIGHT POLE
VEHICLE SITE LINES BY OTHERS
SNOW STORAGE
EXISTING SLOPE AND DRAINAGE EASEMENT
STORMWATER 100' BUFFER ZONE
SMH-A
RIM=249.92
30' WIDE UTILITY EASEMENT
EXISTING SEWER LINE
EXISTING SLOPE EASEMENT
S73°30'01"E
756.33'
PROPOSED BUILDING
116 RESIDENTIAL UNITS
FINISH FLOOR ELEV.=258.0
30' WIDE UTILITY EASEMENT
EXISTING SEWER LINE TO BE RELOCATED
SMH-B
SMH-C
EXISTING SEWER LINE FROM SMH-B TO SMH-D TO BE REMOVED AND/OR ABANDONED IN ACCORDANCE WITH DPW REQUIREMENTS. EXISTING EASEMENT TO BE MODIFIED AS SHOWN (SUBJECT TO TOWN APPROVAL).
PROPOSED WATER SERVICE CONNECTION. 12"x8" ANCHOR TEE AND 3-GATE VALVE CLUSTER (PER DPW STANDARDS). PERFORM TEST PIT PRIOR TO CONSTRUCTION TO CONFIRM PIPE MATERIAL, SIZE AND LOCATION.
PROPOSED HYDRANT WITH 8"x6" TEE AND GATE VALVE
RE-LOCATE LIGHT POLE
4" PVC GAS LINE TO BE RELOCATED
SMH
RIM=243.52
SMH-D
RIM=233.35
I.=222.3
PRP. 10"IN=222.8
SMH
RIM=228.29
I.IN=223.4
I.OUT=221.6
DMH
RIM=228.44
I.OUT=223.8
DCB
RIM=227.35
DMH
RIM=228.10
I.IN=223.1
I.IN=223.2
I.OUT=223.2
(FULL)
DCB
RIM=227.39
200' RIVERFRONT AREA
COVERED ENTRY
DROP-OFF/PICK-UP
SLAB=243.0
PROPOSED WATER SERVICES DOMESTIC & FIRE TO BE SIZED PER ARCH. PLANS
SMH-4, RIM=252.3
10" IN=223.75
10" OUT=223.65
SEWER SERVICE INV.=239.0 CONFIRM LOCATION AND SIZE WITH ARCH. PLANS
PROVIDE ADA COMPLIANT CURB RAMPS
EXISTING SUBSURFACE DRAIN
EXISTING SLOPE AND DRAINAGE EASEMENT
SUBSURFACE INFILTRATION SYSTEM 1
SUBSURFACE INFILTRATION SYSTEM 2
BENCHMARK
NAIL-S, UP#44-60
ELEV.=226.72
(NAVD 1988)
DRAIN LOCATION PER CONTRACTOR TIE SHEET 2004
DMH
RIM=226.84
DMH
RIM=228.69
DMH
RIM=230.42
BENCHMARK
NAIL-S, UP#44-65
ELEV.=231.00
(NAVD 1988)
S36°04'27"W
S42°00'01"W
WEST UNION STREET
10' WIDE OVERFLOW SPILLWAY EL.=250.5 LINED WITH 6"-12" RIP RAP
245.50'
N52°47'15"W
EXISTING SMH LOCATION AND INVERT TO BE CONFIRMED
PROPOSED 30' SEWER EASEMENT
SMH-1, RIM=255.75
10" IN=227.2
10" OUT=227.1
SMH-2, RIM=253.25
10" IN=225.9
10" OUT=225.8
SBDH Fnd.
S44°22'59"W
150.00'
327.44'
N/F
SH WASATCH MA LLC
MAP 19, PARCEL 67
DEED BK. 80744, PG. 163
N/F
THE ISLAND POND TRUST
MAP 19, PARCEL 63
DEED BK. 67807, PG. 4
N52°37'19"W
SMH-3, RIM=253.35
10" IN=225.4
10" OUT=225.3
PROPOSED MODULAR BLOCK RETAINING WALL (REDI-ROCK, OR EQUAL) WITH PRIVACY FENCE
330.90'
MATCH INTO EXISTING STONE MASONRY RETAINING WALL
IR Fnd.
LAWN
APP. LOC. EX. BARN
APP. LOC. EX. HOUSE
SBDH Fnd.
IR Fnd.
MA COORD. SYSTEM
ASSESSORS MAP 19, PARCEL 62
DEED BOOK 22694, PAGE 263

LEGEND

Symbol	Description	Symbol	Description
	DRAIN MAN HOLE		UTILITY POLE & GUY WIRE
	DRAINAGE LINE		CHAIN LINK FENCE
	CATCH BASIN		LIGHTPOST
	SEWER LINE		HANDICAP SPACE
	SEWER MAN HOLE		ELECTRIC TRANSFORMER
	BITUMINOUS CURBING		SIGN
	EDGE OF PAVEMENT		VERTICAL BENCHMARK
	GUARD RAIL		DECIDUOUS TREE >8"
W	APPROX. WATERLINE		CONIFEROUS TREE >8"
	HYDRANT		TREELINE
	WATERGATE	x530.6	SPOT GRADE
G	APPROX. GAS LINE		WETLAND LINE
	GAS GATE		TELEPHONE MAN HOLE

PERMIT SET - NOT FOR CONSTRUCTION

GRAPHIC SCALE: 1"=30'

0 10 20 30 40 50 75 100 125 150 FEET
0 5 10 15 20 25 30 35 40 45 METERS

PREPARED FOR:

JOHN DUDLEY
60 PLEASANT STREET, SUITE 3
ASHLAND, MA 01721

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

PROPOSED SITE PLAN OF 55 WEST UNION STREET IN ASHLAND, MA

COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA
No. 47635
PROFESSIONAL ENGINEER
2-9-2026

REVISED:	DESCRIPTION:
2-9-2026	MODIFIED RETAINING WALL
1-29-2026	MODIFIED RETAINING WALL
11-21-2025	TRAFFIC PEER REVIEW
10-9-2025	STORM WATER PEER REVIEW
8-1-2025	STORM WATER MANAGEMENT

DRAWN BY: REM | FIELD SURVEY: SMC, RLS

DATE: JULY 3, 2025

SCALE: 1"=30' | SHEET 4 OF 9.

UTILITY PLAN

LEGEND
DRAIN MAN HOLE
DRAINAGE LINE
CATCH BASIN
SEWER LINE
SEWER MAN HOLE
BITUMINOUS CURBING
EDGE OF PAVEMENT
GUARD RAIL
APPROX. WATERLINE
HYDRANT
WATERGATE
APPROX. GAS LINE
GAS GATE
UTILITY POLE & GUY WIRE
CHAIN LINK FENCE
LIGHTPOST
HANDICAP SPACE
ELECTRIC TRANSFORMER
SIGN
VERTICAL BENCHMARK
DECIDUOUS TREE >8"
CONIFEROUS TREE >8"
TREELINE
SPOT GRADE
WETLAND LINE
TELEPHONE MAN HOLE
MA COORD. SYSTEM
BENCHMARK
FRONT BOLT HYDRANT
ELEV.=255.24
(NAVD 1988)
MEMORIAL DRIVE
L=197.64'
EXISTING SLOPE AND DRAINAGE EASEMENT
30' WIDE UTILITY EASEMENT
100' BUFFER ZONE
SNOW STORAGE
PROVIDE ADA COMPLIANT CURB RAMPS
RAMP
SIDEWALK
12" STOP LINE (WHITE)
STOP SIGN (R1-1)
S73°30'01"E
EXISTING SLOPE EASEMENT
756.33'
PROPOSED BUILDING
116 RESIDENTIAL UNITS
FINISH FLOOR ELEV.=258.0
HC PARKING SIGNS (3)
LOADING AREA
CROSSWALK
PATIO SEATING AREA
COVERED ENTRY
DROP-OFF/PICK-UP
SLAB=243.0
BIKE RACK
200' RIVERFRONT AREA
R=50.00
L=95.62
S36°04'27"W
BENCHMARK
NAIL-S, UP#44-60
ELEV.=226.72
(NAVD 1988)
245.50'
N52°47'15"W
RIP RAP SLOPE
327.44'
N/F
SH WASATCH MA LLC
MAP 19, PARCEL 67
DEED BK. 80744, PG. 163
IR Fnd.
PRP. PRIVACY FENCE
S44°22'59"W 150.00'
SBDH Fnd.
LAWN
N/F
THE ISLAND POND TRUST
MAP 19, PARCEL 63
DEED BK. 67807, PG. 4
N52°37'19"W
330.90'
PROPOSED MODULAR BLOCK RETAINING WALL (REDI-ROCK, OR EQUAL) WITH PRIVACY FENCE
RIPRAP
WALL
APP. LOC. EX. BARN
APP. LOC. EX. HOUSE
DRIVE
GATE
MATCH INTO EXISTING STONE MASONRY RETAINING WALL
WEST UNION STREET
S42°00'01"W
202.70'
BENCHMARK
NAIL-S, UP#44-65
ELEV.=231.00
(NAVD 1988)
RET. WALL DESIGN BY OTHERS
PERMIT SET - NOT FOR CONSTRUCTION
GRAPHIC SCALE: 1"=30'

ASSESSORS MAP 19, PARCEL 62
DEED BOOK 22694, PAGE 263

PREPARED FOR:
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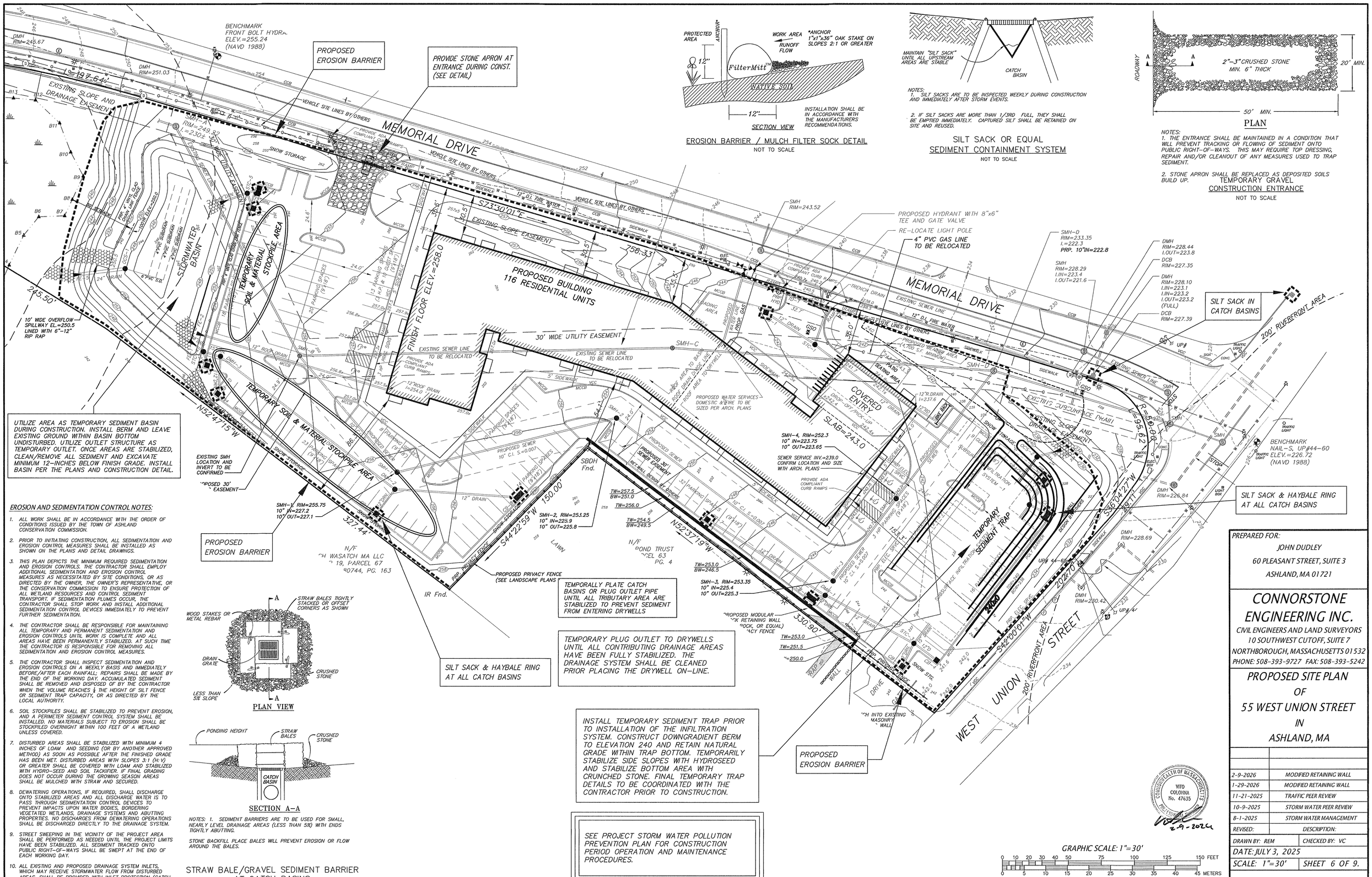
DRAWN BY: REM | FIELD SURVEY: SMC, RLS
DATE: JULY 3, 2025
SCALE: 1"=30' | SHEET 5 OF 9.
PARKING LAYOUT PLAN



EROSION BARRIER / MULCH FILTER SOCK DETAIL

NOT TO SCALE

NOTES:

1. SILT SACKS ARE TO BE INSPECTED WEEKLY DURING CONSTRUCTION AND IMMEDIATELY AFTER STORM EVENTS.
2. IF SILT SACKS ARE MORE THAN 1/3RD FULL, THEY SHALL BE EMPTIED IMMEDIATELY. CAPTURED SILT SHALL BE RETAINED ON SITE AND REUSED.

SILT SACK OR EQUAL
SEDIMENT CONTAINMENT SYSTEM

NOT TO SCALE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. STONE APRON SHALL BE REPLACED AS DEPOSITED SOILS BUILD UP.

TEMPORARY GRAVEL
CONSTRUCTION ENTRANCE

NOT TO SCALE

EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE TOWN OF ASHLAND CONSERVATION COMMISSION.
2. PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS.
3. THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS COMPLETE AND ALL AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENTATION AND EROSION CONTROL MEASURES.
5. THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A WEEKLY BASIS AND IMMEDIATELY BEFORE/AFTER EACH RAINFALL; REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN THE VOLUME REACHES ½ THE HEIGHT OF SILT FENCE OR SEDIMENT TRAP CAPACITY, OR AS DIRECTED BY THE LOCAL AUTHORITY.
6. SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION, AND A PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED. NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED.
7. DISTURBED AREAS SHALL BE STABILIZED WITH MINIMUM 4 INCHES OF LOAM AND SEEDING (OR BY ANOTHER APPROVED METHOD) AS SOON AS POSSIBLE AFTER THE FINISHED GRADE HAS BEEN MET. DISTURBED AREAS WITH SLOPES 3:1 (H:V) OR GREATER SHALL BE COVERED WITH LOAM AND STABILIZED WITH HYDRO-SEED AND SOIL TACKIFIER. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON AREAS SHALL BE MULCHED WITH STRAW AND SECURED.
8. DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS AND ALL DISCHARGE WATER IS TO PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ABUTTING PROPERTIES. NO DISCHARGES FROM DEWATERING OPERATIONS SHALL BE DISCHARGED DIRECTLY TO THE DRAINAGE SYSTEM.
9. STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY.
10. ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORMWATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN INSERTS).

NOTES: 1. SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%) WITH ENDS TIGHTLY ABUTTING.

STONE BACKFILL PLACE BALES WILL PREVENT EROSION OR FLOW AROUND THE BALES.

STRAW BALE/GRAVEL SEDIMENT BARRIER
AT CATCH BASINS

NOT TO SCALE

PREPARED FOR:
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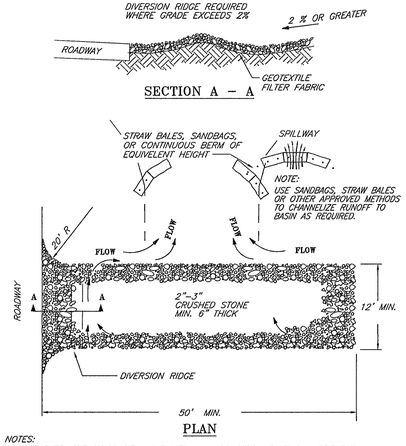
DRAWN BY: REM | CHECKED BY: VC

DATE: JULY 3, 2025

SCALE: 1"=30' | SHEET 6 OF 9.

EROSION CONTROL PLAN

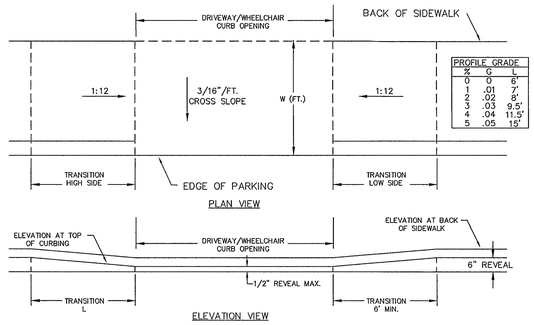
COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA No. 47635
REGISTERED PROFESSIONAL ENGINEER
2-9-2026



NOTES:

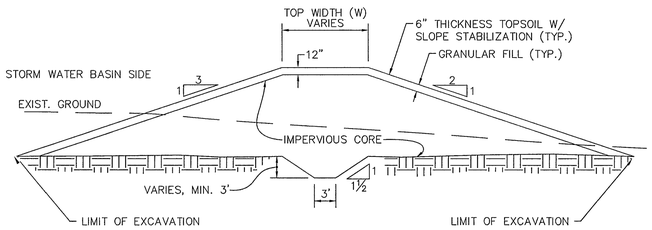
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. STONE APRON SHALL BE REPLACED AS DEPOSITED SOILS BUILD UP.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT



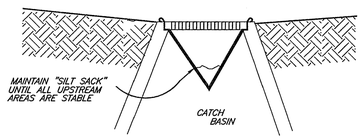
DRIVEWAY/WHEELCHAIR CURB OPENINGS

NOT TO SCALE



TYPICAL EARTH BERM SECTION

NOT TO SCALE

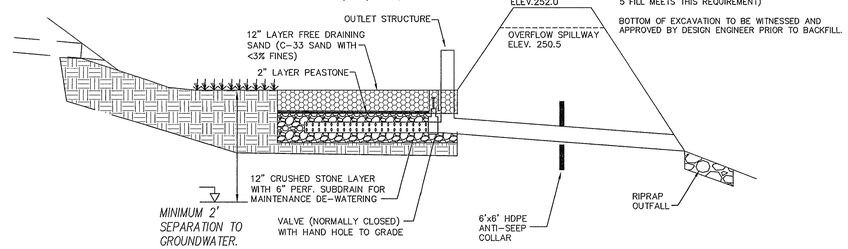


NOTES:

1. SILT SACKS ARE TO BE INSPECTED WEEKLY DURING CONSTRUCTION AND IMMEDIATELY AFTER STORM EVENTS.
2. IF SILT SACKS ARE MORE THAN 1/3RD FULL, THEY SHALL BE EMPTIED IMMEDIATELY. CAPTURES SILT SHALL BE RETAINED ON SITE AND REUSED.

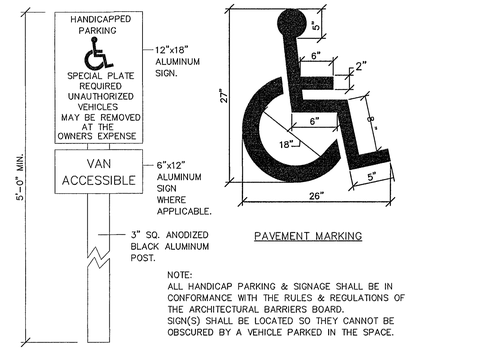
SILT SACK OR EQUAL SEDIMENT CONTAINMENT SYSTEM

NOT TO SCALE



INFILTRATION BASIN DETAIL

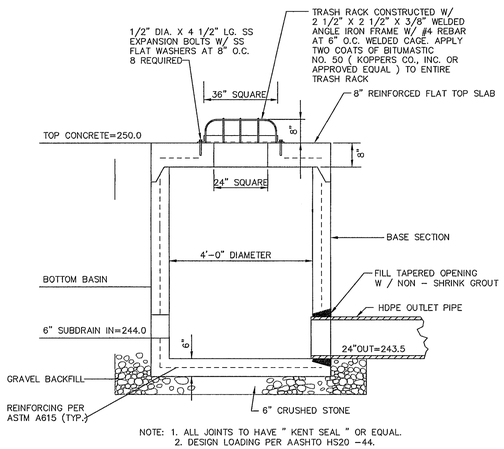
NOT TO SCALE



NOTE:
ALL HANDICAP PARKING & SIGNAGE SHALL BE IN CONFORMANCE WITH THE RULES & REGULATIONS OF THE ARCHITECTURAL BARRIERS BOARD. SIGN(S) SHALL BE LOCATED SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

HANDICAP SIGN & PAVEMENT MARKING DETAIL

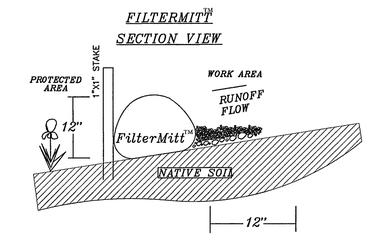
NOT TO SCALE



NOTE: 1. ALL JOINTS TO HAVE " KENT SEAL " OR EQUAL.
2. DESIGN LOADING PER AASHTO HS20 –44.

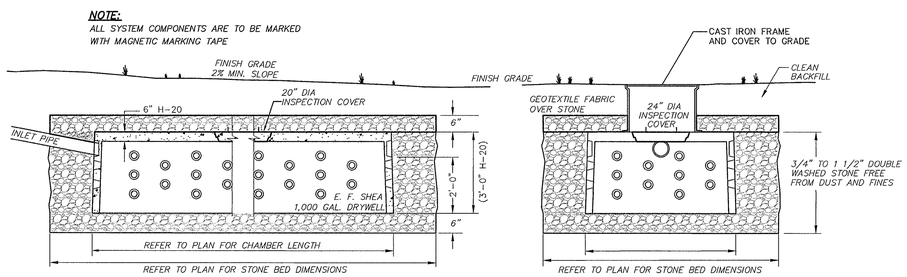
4'x4' PRECAST CONCRETE MANHOLE OUTLET CONROL STRUCTURE–1 (OCS–1)

NOT TO SCALE



SEDIMENT BARRIER DETAIL

NOT TO SCALE

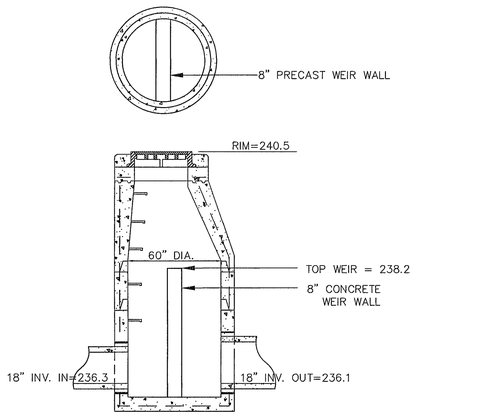


TYPICAL DRYWELL CHAMBER DETAIL

NOT TO SCALE

EXCAVATE A MINIMUM 6 INCHES IN TO NATURAL "C" LAYER, AND REMOVE ANY UNSUITABLE MATERIALS BELOW OR AROUND THE SYSTEM. ANY REPLACEMENT FILL REQUIRED SHALL BE CLEAN FREE DRAINING FILL WITH LESS THAN 5% PASSING THE #200 SIEVE (TITLE 5 FILL MEETS THIS REQUIREMENT)

BOTTOM OF EXCAVATION TO BE WITNESSED AND APPROVED BY DESIGN ENGINEER PRIOR TO BACKFILL.



OUTLET CONTROL STUCTURE–2 (OCS–2) DETAIL

NOT TO SCALE

VITO COLONNA No. 47635 COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER
2/9/2026

PREPARED FOR:
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OF
55 WEST UNION STREET
IN
ASHLAND, MA

2-9-2026	MODIFIED RETAINING WALL
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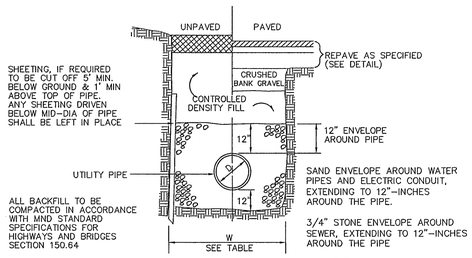
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: JULY 3, 2025	
SCALE: NONE	SHEET 7 OF 9.

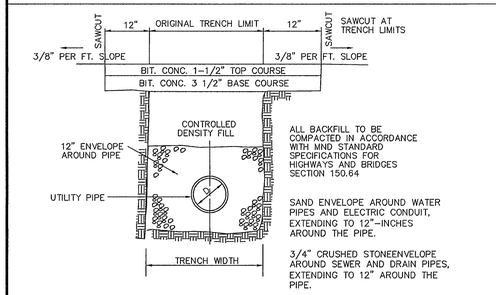
CONSTRUCTION DETAILS

TRENCH WIDTH (W)		
D DIAMETER OF PIPE	W UNSHEETED	W SHEETED
TO 12"	3'	4'
14" TO 24"	4'	5'
30" TO 36"	5'	6'



TYPICAL TRENCH SECTION

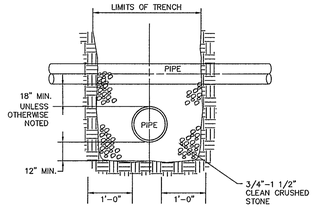
NOT TO SCALE



NOTE: SAW CUT LIMITS SHALL BE SEALED ON PERMANENT PATCHES.

PERMANENT TRENCH PAVING

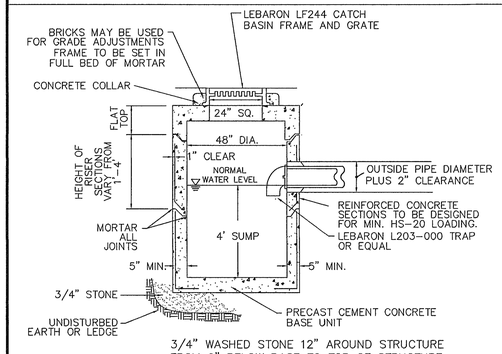
NOT TO SCALE



UTILITY CROSSING DETAIL

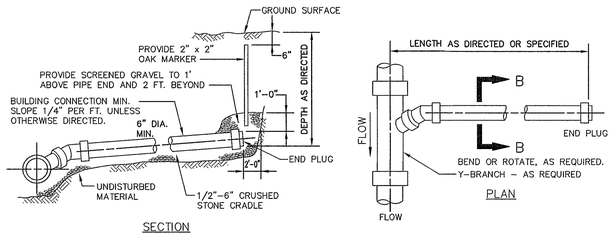
NOT TO SCALE

NOTE: FOR WATER AND SEWER CROSSINGS MAINTAIN 18 INCHES OF SEPERATION BETWEEN PIPES. LAY PIPES SUCH THAT CONNECTION JOINTS ARE 10 FEET EITHER SIDE OF THE CROSSING. ALL WATER PIPES LAID OVER SEWER PIPES.



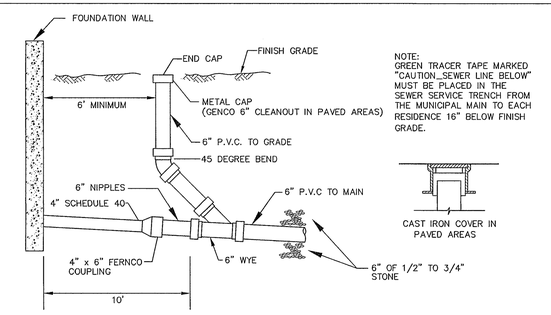
PRECAST CONCRETE CATCH BASIN

WITH GRANITE CURB INLET
NOT TO SCALE



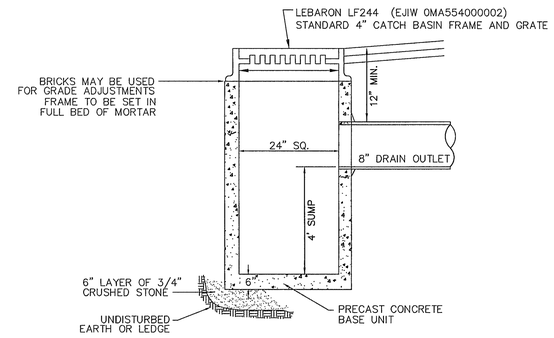
TYPICAL BUILDING CONNECTION

NOT TO SCALE



SEWER SERVICE LINES CLEANOUT & FITTINGS

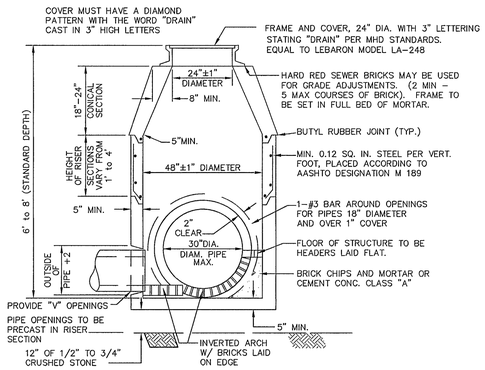
NOT TO SCALE



NOTES:
1. CONCRETE: 4,000 PSI MIN. AFTER 28 DAYS
2. DESIGNED FOR: HS-20 LOADING
3. 2' SQUARE AREA DRAIN, AS MANUFACTURED BY SHEA CONCRETE, OR EQUAL.

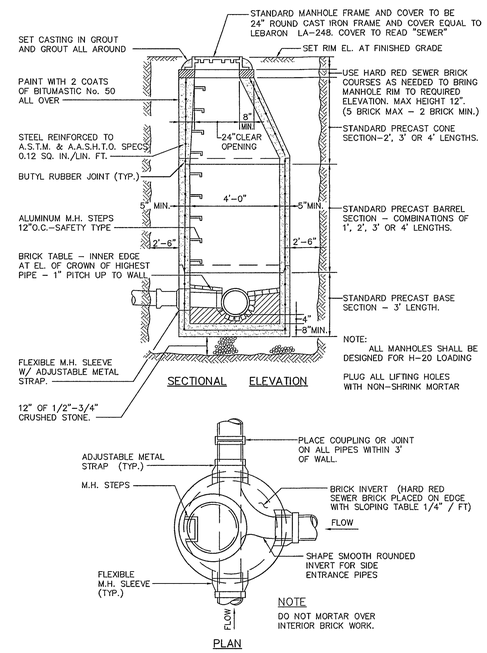
PRECAST2'X2' DROP INLET

NOT TO SCALE



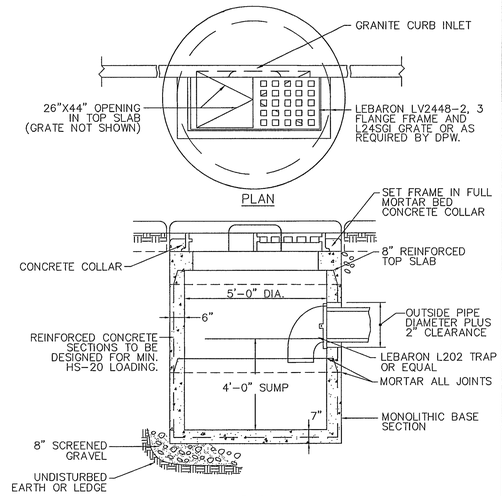
PRECAST CONCRETE MANHOLE DETAILS

NOT TO SCALE



TYPICAL PRECAST CONCRETE MANHOLE DETAIL

NOT TO SCALE

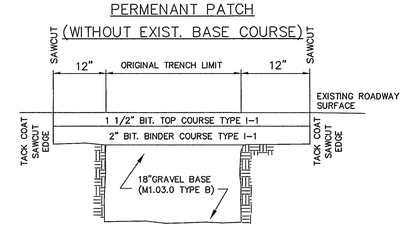


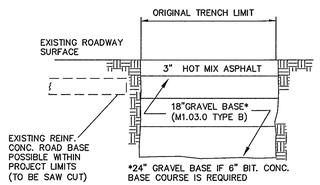
DOUBLE GRATE CATCH BASIN

WITH GRANITE CURB INLET
NOT TO SCALE

PERMENANT PATCH

(WITHOUT EXIST. BASE COURSE)





TEMPORARY PATCH

NOTES:
1. SAW CUT LIMITS SHALL BE SEALED WITH HOT POURED JOINT SEALANT.
2. GRAVEL COMPACTED IN 6" LIFTS WITH MECHANICAL COMPACTOR.
3. ALL BACKFILL TO BE COMPACTED IN ACCORDANCE WITH MDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 150.64
4. PAVEMENT OUTSIDE OF THE INDICATED LIMITS THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATION (INCLUDING BLASTING) SHALL BE REPLACED / REPAIRED AT THE CONTRACTOR'S EXPENCE.

TYPICAL TEMPORARY / PERMENANT PATCH DETAIL

NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA
No. 47635
REGISTERED PROFESSIONAL ENGINEER
2/9/2026

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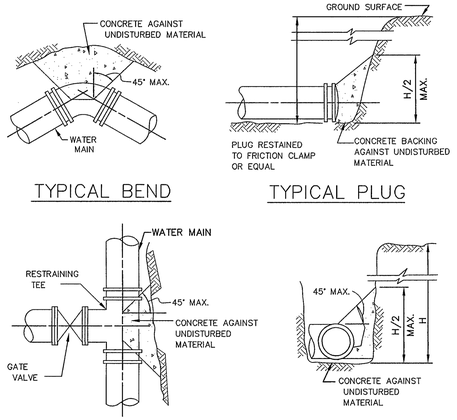
60 PLEASANT STREET, SUITE 3
ASHLAND, MA 01721

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

PROPOSED SITE PLAN
OF
55 WEST UNION STREET
IN
ASHLAND, MA

2-9-2026	MODIFIED RETAINING WALL
1-29-2026	MODIFIED RETAINING WALL
11-21-2025	TRAFFIC PEER REVIEW
10-9-2025	STORM WATER PEER REVIEW
8-1-2025	STORM WATER MANAGEMENT
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: JULY 3, 2025	
SCALE: NONE	SHEET 8 OF 9.

CONSTRUCTION DETAILS



TYPICAL BEND

TYPICAL PLUG

TYPICAL TEE & VALVE

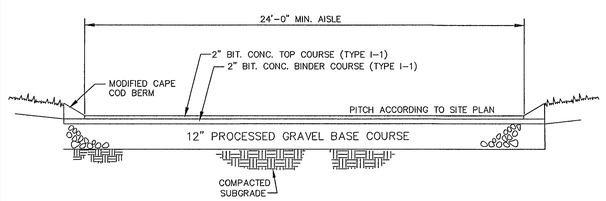
TYPICAL SECTION

NOTE: CONCRETE FOR THRUST BLOCKS SHALL BE NO LONGER THAN THE RATIO OF 2 1/2 : 5 1/2 AND SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2000 PSI (SO THAT FLANGES AND BOLTS ARE ACCESSIBLE.)

BEARING AREAS OF THRUST BLOCKS (BEARING AREA IN SQUARE FT.)				
PIPE SIZE INCHES	1/4 BEND	1/8 BEND	1/16 BEND OR LESS	PLUG TEES
6 AND 8	8	8		8
10 AND 12	22	13	8	16

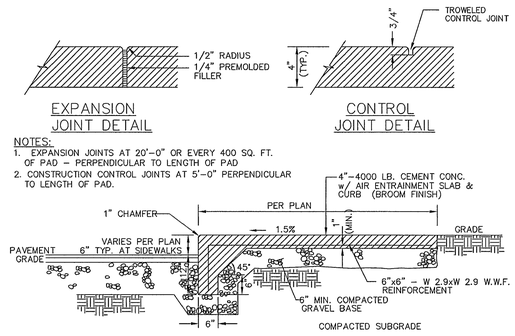
TYPICAL THRUST BLOCK DETAIL

NOT TO SCALE



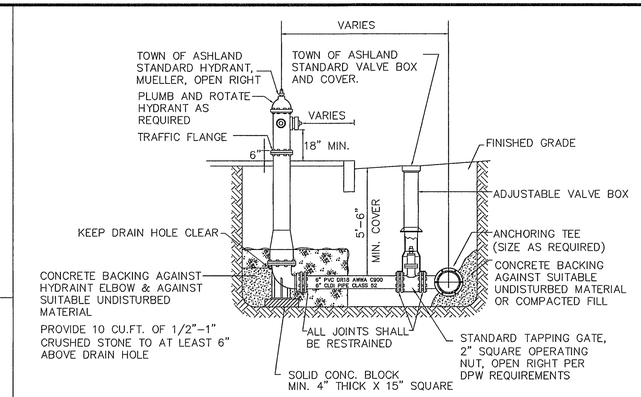
TYPICAL PARKING AISLE/DRIVEWAY PAVEMENT CROSS SECTION

NOT TO SCALE



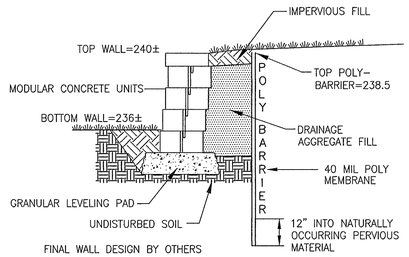
CONCRETE PAD / SIDEWALK DETAIL

NOT TO SCALE



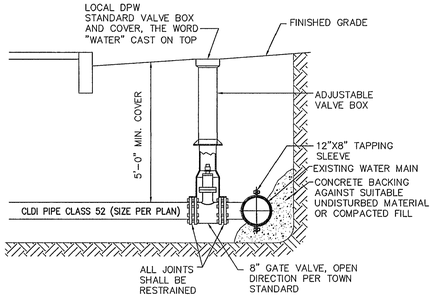
TYPICAL HYDRANT & VALVE DETAIL

NOT TO SCALE



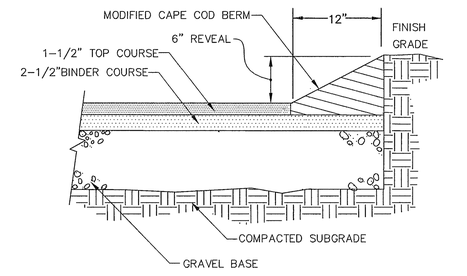
TYPICAL RETAINING WALL/POLY BARRIER DETAIL

NOT TO SCALE



TYPICAL WATER CONNECTION

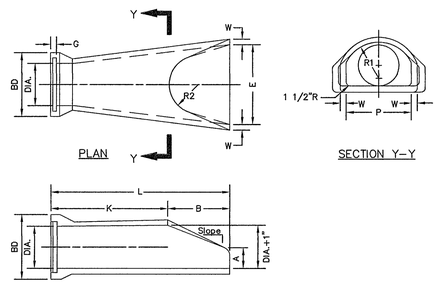
NOT TO SCALE



THROUGHOUT PARKING LOT PERIMETER UNLESS OTHERWISE SPECIFIED

MODIFIED CAPE COD BERM & PAVEMENT SECTION

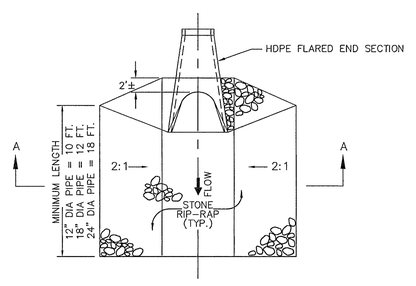
NOT TO SCALE



DIA.	W	A	B	E	BD	K	L	P	DIA. +1"	R1	R2	G	Slope
12"	2"	4"	2'-0"	2'-0"	20"	4'-8 1/8"	6'-6 1/8"	19 15/16"	13"	10 1/8"	9"	2 1/2"	3:1
15"	2 1/4"	6"	2'-3"	2'-6"	24"	4'-3 11/16"	6'-4 11/16"	24 5/16"	16"	12 1/2"	11"	2 1/2"	3:1
18"	2 1/2"	9"	2'-3"	3'-0"	28"	4'-3 7/8"	6'-6 7/8"	29"	19"	15 1/2"	12"	2 3/4"	3:1
21"	2 3/4"	9"	2'-11"	3'-6"	32"	5'-8 5/16"	6'-7 5/16"	31 5/8"	22"	16 1/8"	13"	2 3/4"	3:1
24"	3"	9 1/2"	3'-7 1/2"	4'-0"	36"	5'-9 1/2"	6'-8"	33 3/16"	25"	16 13/16"	14"	3"	3:1

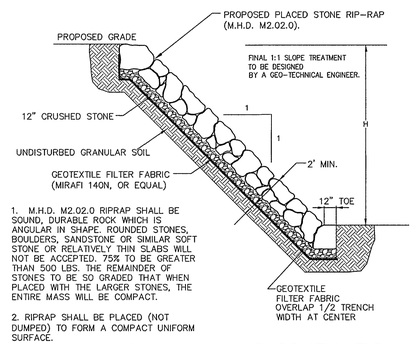
R.C.P. FLARED END SECTION DETAILS

NOT TO SCALE



RIP-RAP APRON

NOT TO SCALE



1. M.H.D. M2.02.0 RIPRAP SHALL BE SOUND, DURABLE ROCK WHICH IS ANGULAR IN SHAPE. ROUNDED STONES, BOULDERS, SANDSTONE OR SIMILAR SOFT STONE OR RELATIVELY THIN SLABS WILL NOT BE ACCEPTED. 75% TO BE GREATER THAN 500 LBS. THE REMAINDER OF STONES TO BE SO GRADED THAT WHEN PLACED WITH THE LARGER STONES, THE ENTIRE MASS WILL BE COMPACT.

2. RIPRAP SHALL BE PLACED (NOT DUMPED) TO FORM A COMPACT UNIFORM SURFACE.

1:1 RIP RAP SLOPE SCHEMATIC

NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
VITO COLONNA No. 47635
REGISTERED PROFESSIONAL ENGINEER
2/4/2026

PREPARED FOR:

JOHN DUDLEY

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ASHLAND, MA 01721

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