

# AYER COMMONS

65 FITCHBURG ROAD  
AYER, MASSACHUSETTS

JUNE 14, 2022

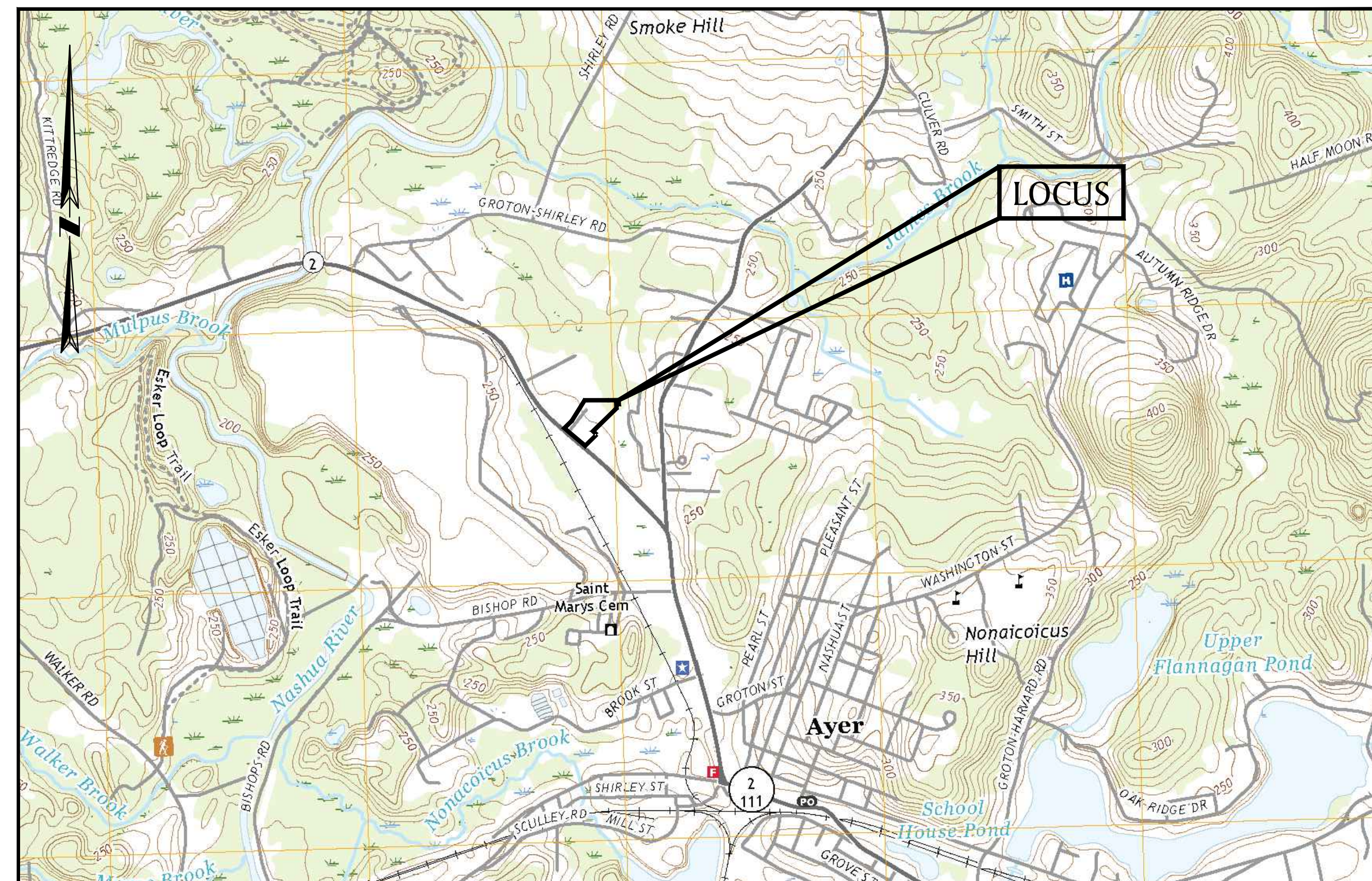
REVISION DATE: OCTOBER 11, 2022

PREPARED FOR:

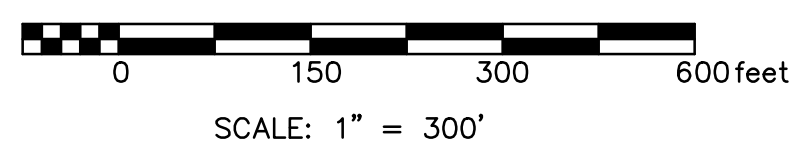


NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

PREPARED BY:



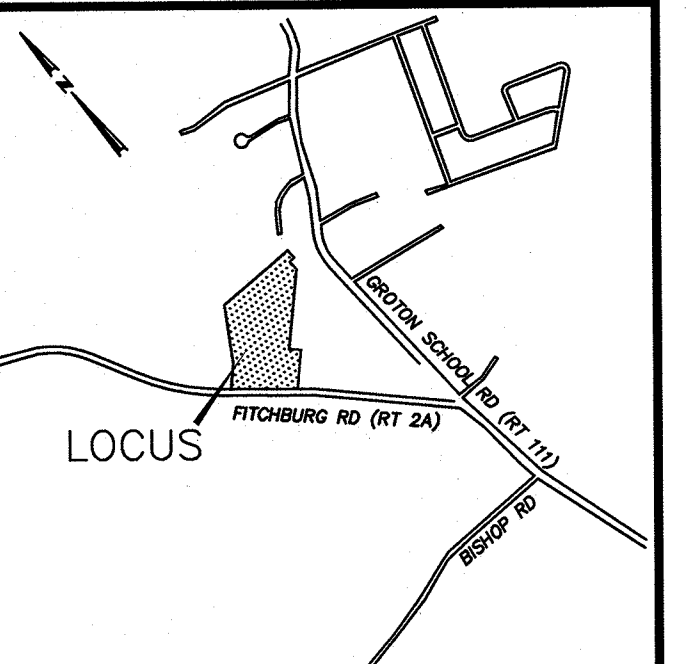
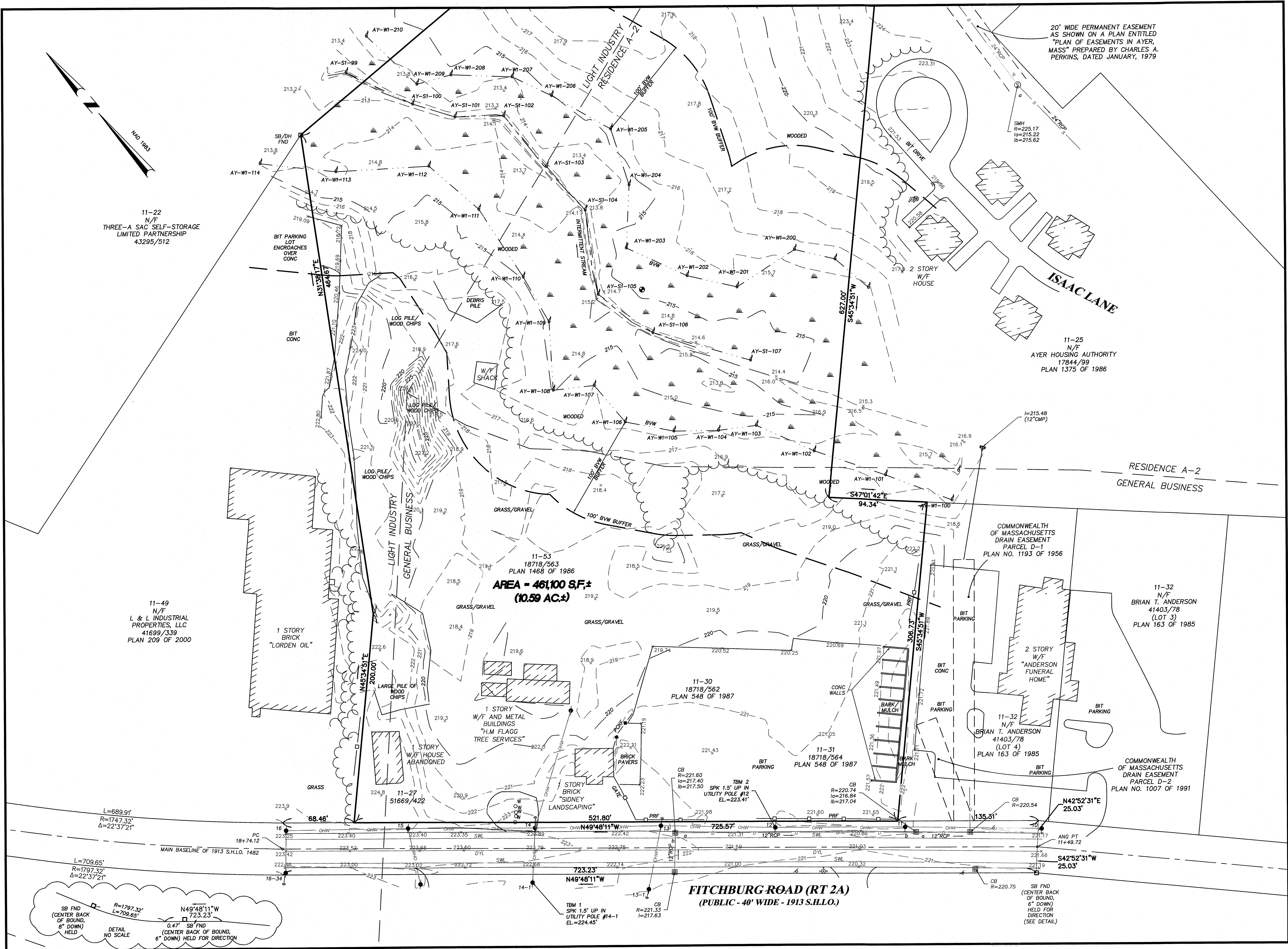
LOCUS MAP



## INDEX OF DRAWINGS

G-100	TITLE SHEET
1 of 2	EXISTING CONDITIONS
C-100	LEGEND & NOTES
C-101	EROSION & SEDIMENT CONTROL PLAN
C-102	LAYOUT & MATERIALS PLAN
C-103	GRADING & DRAINAGE PLAN
C-104	UTILITY PLAN
C-200 - C-203	CIVIL DETAILS



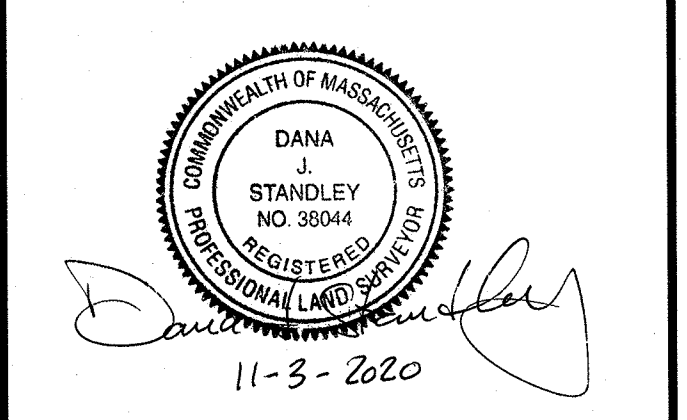


LOCUS MAP  
NO SCALE

**TOPOGRAPHIC  
PLAN OF  
LAND**  
**65 FITCHBURG STREET**  
**IN**  
**AYER**  
**MASSACHUSETTS**  
**(MIDDLESEX COUNTY)**

**EXISTING CONDITIONS**

NOVEMBER 3, 2020



PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING, INC.  
143 BORDER STREET  
EAST BOSTON, MA 02128

**BSC GROUP**  
33 Waldo Street  
Worcester, Massachusetts  
01608 508 792 4500

© 2020 BSC Group, Inc.

SCALE: 1" = 40'  
0 20 40 80 FEET

PROJ. MGR.: D.STANDLEY  
FIELD: J. PINTAVALLE, P.MORIN, P. MCIVER  
CALC./DESIGN: S.COHEN  
DRAWN: S.COHEN  
CHECK: D.STANDLEY  
FILE: P:\8992601\...8992601EC  
DWG.: --- SHEET  
JOB. NO: 89926.01 1 OF 2



# LEGEND

BIT	BITUMINOUS
BVW	BORDERING VEGETATED WETLAND
///	BUILDING
■	CATCH BASIN
X-CLF	CHAIN LINK FENCE
CONC	CONCRETE
CB/DH	CONCRETE BOUND W/DRILL HOLE
DYL	DOUBLE YELLOW LINE
▷	GRY ANCHOR
HVAC	HEAT, VENTILATION, AIR CONDITIONING
HYD	HYDRANT
△	INVERT
IP	IRON PIPE
MW	MONITORING WELL
OWW	OVERHEAD WIRE
PCKF	PICKET FENCE
PRF	POST AND RAIL FENCE
RCP	REINFORCED CONCRETE PIPE
SMH	SEWER MANHOLE
—	SIGN
SWL	SINGLE WHITE LINE
221.69 x	SPOT GRADE
SB	STONE BOUND
SB/DH	STONE BOUND W/DRILL HOLE
—	TREE LINE
●	UTILITY POLE
⊙	WATER GATE
W	WETLAND
W	WETLAND FLAG
W	WOOD POST
—	UNDERGROUND DRAIN
—	UNDERGROUND SEWER
—	WATER LINE

## GENERAL NOTES:

- 1) THE EXISTING CONDITIONS SHOWN HEREON DEPICT THE SUBJECT SITE AS IT APPEARED DURING A FIELD SURVEY CONDUCTED BY BSC GROUP, INC. ON BETWEEN SEPTEMBER 29, 2020 AND OCTOBER 18, 2020.
- 2) THE ABOVE MENTIONED FIELD SURVEY IS BASED ON NAD 1983 HORIZONTAL AND NAVD 1988 VERTICAL DATUM (TEMPORARY BENCH MARKS (TBM) SET) AS DERIVED FROM GPS OBSERVATIONS MADE AT THE TIME OF THE SURVEY.
- 3) NO DETERMINATION OF COMPLIANCE WITH ZONING REQUIREMENTS HAS BEEN MADE OR INTENDED..
- 4) THE LOCUS SITE LIES IN THE "GENERAL BUSINESS", "RESIDENCE A-2" AND "LIGHT INDUSTRY" ZONING DISTRICTS.
- 5) THE UTILITIES SHOWN ON THIS PLAN ARE TAKEN FROM LOCATIONS OF SURFACE STRUCTURES AND SUBSURFACE INVERT MEASUREMENTS (WHERE INDICATED) DURING THE AFOREMENTIONED SURVEY BY BSC GROUP, INC. AND ALSO RECORD INFORMATION SUPPLIED BY UTILITY COMPANIES.
- 6) A PORTION OF THE LOCUS PARCEL IS LOCATED IN FLOOD HAZARD ZONE X, (AREA OF MINIMAL FLOOD HAZARD) AND PARTLY IN SPECIAL FLOOD HAZARD ZONE A IS SHOWN ON THE CURRENT FEMA FLOOD HAZARD RATE MAP, MAP ID NO. 25017C0203E DATED 6/4/2010.
- 7) THE SUBJECT PREMISES HAS DIRECT ACCESS TO FITCHBURG ROAD (PUBLIC).
- 8) CENTERLINE OF INTERMITTENT STREAM AND BOUNDARIES OF ASSOCIATED BORDERING VEGETATED WETLANDS WERE DELINEATED BY BSC GROUP WETLAND SCIENTISTS ON OCTOBER 9, 2020.

## REFERENCES:

- 1) RECORDED MIDDLESEX SOUTH DISTRICT REGISTRY OF DEEDS.  
DEED BK. 51669 / PG. 422 (LOCUS)  
DEED BK. 18718 / PG. 563 (LOCUS)  
DEED BK. 18718 / PG. 562 (LOCUS)  
  
PLAN NO. 1011 OF 2006  
PLAN NO. 209 OF 2000  
PLAN NO. 1050 OF 1990  
PLAN NO. 1235 OF 1987  
PLAN NO. 548 OF 1987  
PLAN NO. 1468 OF 1986  
PLAN NO. 1375 OF 1986  
PLAN NO. 1374 OF 1986  
PLAN NO. 257 OF 1985  
PLAN NO. 163 OF 1985  
PLAN NO. 404 OF 1972  
PLAN NO. 1057 OF 1971
- 2) HIGHWAY LAYOUTS AND ALTERATIONS  
1913 STATE HIGHWAY LAYOUT OF FITCHBURG RD (RT 2A)
- 3) TOWN OF AYER ASSESSORS REF. 11-27

## ZONING DISTRICT:

ITEM	REQUIRED	PROVIDED
MINIMUM LOT AREA (S.F.)	15,000	
MINIMUM LOT FRONTAGE (FT)	100	
FRONT YARD SETBACK	30	
SIDE YARD SETBACK	15	
REAR YARD SETBACK	20	
MAXIMUM BUILDING HEIGHT (STORIES / FT)	3 / 35	
FLOOR TO AREA RATIO	1.25	

## GENERAL BUSINESS

REQUIRED	PROVIDED
12,000 1 FAMILY	
24,000 2 FAMILY	
100	
30	
15	
25	
2 1/2 / 35	
NA	

## RESIDENCE A-2

REQUIRED	PROVIDED
120,000	
100	
25	
50	
30	
2 / 40	
1.25	

## LIGHT INDUSTRY

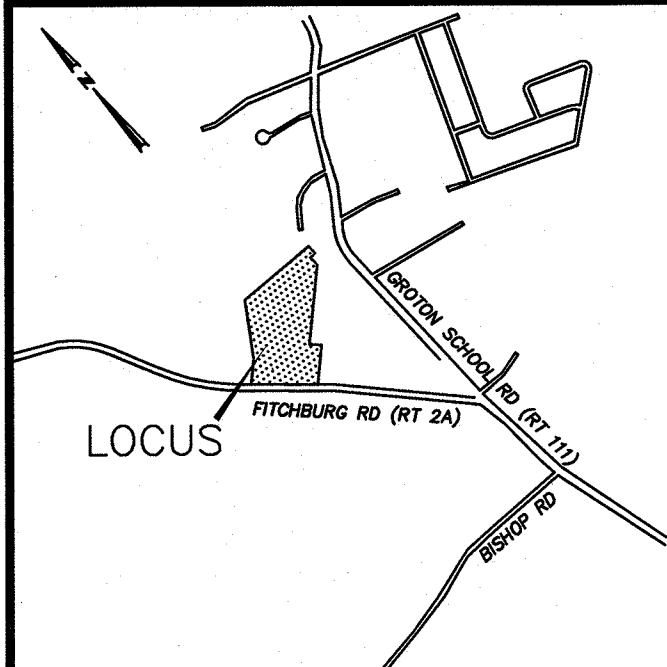
REQUIRED	PROVIDED
120,000	
100	
25	
50	
30	
2 / 40	
1.25	

## OWNER:

ROBERT DONELL, HARVEY M. FLAGG AND MARK FLAGG, AS TRUSTEES OF THE FIRST AYER REALTY TRUST  
ASSESSOR'S REFERENCES:  
11-27: DB 51669, PG 422  
11-31: DB 18718, PG 564  
11-53: DB 18718, PG 563  
11-30: DB 18718, PG 562

## UTILITY NOTE

EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND COORDINATING ANY ON-SITE ACTIVITY WITH DIG-SAFE AND THE APPROPRIATE UTILITY COMPANY AND MAINTAINING EXISTING UTILITY SYSTEM SERVICE. DIG-SAFE SHALL BE NOTIFIED PER THE COMMONWEALTH OF MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40, AT 1-888-344-7233. NO GUARANTEE IS IMPLIED OR INTENDED AS TO THE ACCURACY, LOCATION OR THAT ALL UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OR UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.



LOCUS MAP  
NO SCALE

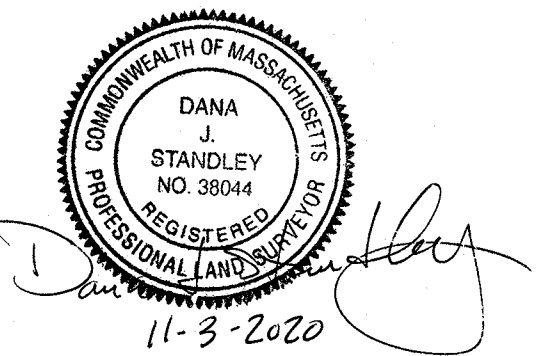
## TOPOGRAPHIC PLAN OF LAND

65 FITCHBURG STREET

IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

## EXISTING CONDITIONS

NOVEMBER 3, 2020



PREPARED FOR:

NEIGHBORHOOD OF  
AFFORDABLE HOUSING, INC.  
143 BORDER STREET  
EAST BOSTON, MA 02128



33 Waldo Street  
Worcester, Massachusetts  
01608

508 792 4500

© 2020 BSC Group, Inc.

SCALE: 1" = 40'

0 20 40 80 FEET

PROJ. MGR.: D.STANDLEY

FIELD: J. PINTAVALLE, P.MORIN, P. MCIVER

CALC./DESIGN: S.COHEN

DRAWN: S.COHEN

CHECK: D.STANDLEY

FILE: P:\8992601\...8992601EC

DWG.: ---

JOB. NO: 89926.01

SHEET  
2 OF 2



LEGEND

EXISTING	DESC.	PROPOSED
AC.	ACRES	
BK	BOOK	
BIT CONC	BITUMINOUS CONCRETE	BIT CONC
⊙	CABLE MANHOLE	
⊞⊞⊞	CATCH BASIN	⊞⊞
CONC	CONCRETE	
ⓓ	DRAIN MANHOLE	ⓓ
ⓔ	ELECTRIC HANDHOLE	
ⓔ	ELECTRIC MANHOLE	ⓔ
ⓔⓖ	GAS GATE	ⓖ
GC	GRANITE CURB	
ⓗ	HANDHOLE	
ⓗ+	HYDRANT	ⓗ+
☀	LIGHT POLE	☀
ⓞ	MANHOLE	
N/F	NOW OR FORMERLY	
PG	PAGE	
R=	PEDESTRIAN SIGNAL	
Ⓢ	RIM ELEVATION	Ⓢ
SBC	SEWER MANHOLE	
SGC	SLOPED BITUMINOUS CURB	
σ	SLOPED GRANITE CURB	
SQ. FT.	SIGN	—○—
Ⓣ	SQUARE FEET	
TOB	TELEPHONE MANHOLE	Ⓣ
⊞⊞	TOP OF BELL	
⊞⊞	TRAFFIC CONTROL BOX	
ⓉS	TRAFFIC SIGNAL	
Ⓦ	WATER GATE	Ⓦ
—W—	WATER LINE	—W—
—T—	TELEPHONE LINE	
—D—	DRAIN LINE	—D—
—S—	SEWER LINE	—S—
	SEWER FORCE MAIN	
—G—	GAS LINE	—G—
—E—	ELECTRIC LINE	—UGE—
—OHW—	OVERHEAD WIRE	—OHE—
	CABLE TELEVISION CONDUIT	
	CHAIN LINK FENCE	—X—
	ELEC/TEL/CABLE	—CTV—
	VERTICAL GRANITE CURB	=====
	BUILDING OVERHANG	— — — — —
	ACCESSIBLE PARKING	♿
—59—	MINOR CONTOUR	59
—60—	MAJOR CONTOUR	60
	NUMBER OF PARKING SPACES	16
	WETLAND DELINEATION	— — — — —
	GUARD RAIL	□ □ □ □ □ □
	STONE WALL	
	GRADE TO DRAIN	GTD →

GENERAL EROSION CONTROL NOTES:

1. THE PROPOSED PROJECT REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES) FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) UNDER THE 2022 CONSTRUCTION GENERAL PERMIT (CGP) FOR MASSACHUSETTS. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED FOR THE PROJECT. THE SITE CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR FOLLOWING THE CONDITIONS OF THE CGP AND SWPPP.
2. SEDIMENT BASINS SHALL BE APPROPRIATELY SIZED AND LOCATED/RELOCATED BY THE CONTRACTOR DURING EARTHWORK OPERATIONS.
3. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENTATION CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE INCLUDING CONSTRUCTION ENTRANCES AND PERIMETER SEDIMENT CONTROLS. SILT SHALL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS.
4. EROSION CONTROL SHALL, AT MINIMUM, BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ADDITIONAL EROSION CONTROLS AS NECESSARY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING SILT AND DEBRIS OUT OF ALL STORM DRAINAGE STRUCTURES UPON THE COMPLETION OF CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS.
9. CONTRACTOR SHALL STABILIZE ALL AREAS WITH EXPOSED SOIL WHICH WILL NOT BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF 14 DAYS OR MORE IN ACCORDANCE WITH THE SWPPP. IF WORK ON THIS PROJECT IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL FACILITIES IN GOOD CONDITION DURING THE SUSPENSION OF WORK.
10. SPRINKLE OR APPLY DUST SUPPRESSERS TO KEEP DUST WITHIN TOLERABLE LIMITS AT THE CONSTRUCTION SITE.
11. SILT SACS SHALL BE INSTALLED IN ALL CATCH BASINS, WITH PERIODIC CLEANING AND/OR REPLACING OF THE FILTER FABRIC, WHEN NECESSARY, THROUGHOUT THE DURATION OF THE CONSTRUCTION.

DURING CONSTRUCTION

1. THE CONTRACTOR SHALL INSPECT THE SITE IN ACCORDANCE WITH THE SWPPP, AND AT A MINIMUM OF ONCE A WEEK TO INSURE THAT EROSION OF SLOPES, STOCKPILES, ETC, ARE NOT OCCURRING. IN INSTANCES WHERE EROSION IS OBSERVED, SILT FENCE/HAYBALES SHALL BE INSTALLED DOWN GRADIENT OF ERODING AREAS. APPROPRIATE REPAIRS TO THE SEDIMENT CONTROLS SHALL BE MADE AS NECESSARY.
2. INSTALL SILT SACS UNDER ALL CATCH BASIN RIMS. SILT SACS SHALL BE INSPECTED ONCE A WEEK AND WITHIN 24 HOURS OF A 1/4 INCH OR GREATER RAIN STORM EVENT TO INSURE THAT DAMAGE TO THE SILT SACS HAS NOT OCCURRED. APPROPRIATE REPAIRS TO THE FILTER FABRIC SHALL BE MADE AS NECESSARY.
3. CONSTRUCTION ENTRANCES SHALL BE INSPECTED WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE. THE CONSTRUCTION ENTRANCE SHALL BE TOP DRESSED WITH NEW STONE ONCE THE ENTRANCE BECOMES COMPLETELY CLOGGED WITH MUD AND SOIL PARTICLES.
4. SEDIMENT BEHIND PERIMETER SEDIMENT CONTROLS SHALL BE REMOVED ONCE SEDIMENT REACHES A LEVEL OF DEPOSITION EQUAL TO HALF THE HEIGHT OF THE BARRIER OR LOWER IF RECOMMENDED BY THE MANUFACTURER.

FOLLOWING CONSTRUCTION (OWNER'S RESPONSIBILITY)

1. CATCH BASINS SHALL BE INSPECTED FOUR TIMES A YEAR AND CLEANED TWICE PER YEAR (AT A MINIMUM). CLEANING SHOULD OCCUR IN THE EARLY SPRING FOLLOWING SNOWMELT.
2. STORMCEPTOR WATER QUALITY UNITS (OR APPROVED EQUAL) SHALL BE INSPECTED FOUR TIMES A YEAR AND CLEANED TWICE PER YEAR (AT A MINIMUM). CLEANING SHALL OCCUR IN THE EARLY SPRING FOLLOWING SNOWMELT.
3. STORMCEPTOR WATER QUALITY UNITS (OR APPROVED EQUAL) SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY SPILL OF HAZARDOUS MATERIALS.
4. CLEANING OF CATCH BASINS AND STORMCEPTOR UNITS (OR APPROVED EQUAL) SHALL BE PERFORMED BY A VACUUM TRUCK AND MATERIALS REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
5. SUBSURFACE INFILTRATION SYSTEMS SHALL BE INSPECTED AFTER EVERY MAJOR STORM FOR THE FIRST THREE MONTHS FOLLOWING CONSTRUCTION. SUBSEQUENTLY, THESE SYSTEMS SHALL BE INSPECTED ANNUALLY.

SITE PREPARATION AND DEMOLITION:

1. AREAS OUTSIDE THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENTS SHALL RECEIVE SIX INCHES OF LOAM AND SEED, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA REGULATIONS AND LOCAL & STATE REQUIREMENTS.
3. ALL MATERIALS SHALL BE DISPOSED OF PER APPLICABLE LAWS AND REGULATIONS.
4. WHERE EXISTING PAVEMENT TO BE REMOVED MEETS EXISTING PAVEMENTS TO REMAIN, CONTRACTOR SHALL SAWCUT A STRAIGHT LINE UNLESS INDICATED OTHERWISE. ADDITIONALLY, EXISTING PAVEMENT SHALL BE SAWCUT, AS NECESSARY, FOR ALL PROPOSED UTILITY CONNECTIONS WITHIN THE RIGHT-OF-WAY. ALL WORK SHALL CONFORM TO STANDARD SPECIFICATIONS & DETAILS OF THE TOWN OF AYER AND, "CONSTRUCTION STANDARDS" OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MASS DOT) HIGHWAY DIVISION, LATEST EDITION, AND THESE CONTRACT DOCUMENTS.
5. ALL EXISTING REMAINING UTILITIES SHALL BE PROTECTED, UNLESS NOTED OTHERWISE.
6. ALL EXISTING UTILITY STRUCTURES, CONDUITS, AND APPURTENANCES OF ANY KIND SHALL BE COMPLETELY REMOVED WITHIN THE LIMITS OF EXCAVATION FOR NEW BUILDINGS, UNLESS NOTED OTHERWISE ON THE DRAWINGS. OUTSIDE THE LIMITS OF EXCAVATION FOR NEW BUILDINGS, ALL ABANDONED AND TO-BE-ABANDONED UTILITIES GREATER THAN 8 INCHES IN DIAMETER SHALL BE SEALED BY FILLING WITH HIGH SLUMP CONCRETE (FLOWABLE FILL) AT THE LIMIT OF EXCAVATION. ALL UTILITY STRUCTURES TO BE REMOVED SHALL HAVE THE ASSOCIATED PIPES REMOVED TO A DISTANCE OF 15 FEET FROM THE STRUCTURE AND SEALED.

GENERAL CONSTRUCTION NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO STANDARD SPECIFICATIONS & DETAILS OF THE TOWN OF AYER AND, "CONSTRUCTION STANDARDS" OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MASS DOT) HIGHWAY DIVISION, LATEST EDITION, AND THESE CONTRACT DOCUMENTS.
2. FILL MATERIALS PLACED UNDER PROPOSED DRIVEWAYS, LOADING DOCKS AND PARKING AREAS SHALL MEET THE FILL MATERIAL GRADATION AND COMPACTION REQUIREMENTS OF THE PROJECT PLANS AND SPECIFICATIONS.
3. UNLESS OTHERWISE INDICATED, CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
4. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.
5. ALL ACCESSIBLE PARKING SPACES, WALKWAYS AND PUBLIC BUILDING ENTRANCES SHALL BE IN COMPLIANCE WITH THE COMMONWEALTH OF MASSACHUSETTS 521 AAB AND DEPARTMENT OF JUSTICE ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION. FOR ANY DISCREPANCIES OR CLARIFICATION THE CONTRACTOR SHALL CONTACT THE ENGINEER.
6. CONTRACTOR SHALL CONSTRUCT ALL PEDESTRIAN WAYS IN ACCORDANCE WITH ADA/AAB STANDARDS.
7. ALL CURB RADII SHALL BE AS NOTED.
8. ALL EXISTING PAVEMENT IN THE VICINITY OF THE PROPOSED WORK SHALL BE RESTORED, IF DAMAGED, AT NO ADDITIONAL COST TO THE OWNER. ALL PAVEMENT WORK SHALL BLEND WITH EXISTING PAVEMENT WITH SAWCUTS AND EMULSION APPLIED TO ALL CUT SURFACES.
9. ALL DUMPSTERS SHALL REQUIRE A PERMIT PER 527 CMR 34.03.
10. CONTRACTOR SHALL PROVIDE FULL AS-BUILT OF UTILITY WORK PRIOR TO FINAL PAYMENT. AS-BUILT PLANS SHALL BE SUBMITTED ON MYLAR AND ELECTRONICALLY UPON COMPLETION OF PROJECT.
11. ALL SIGNS AND PAVEMENT MARKINGS TO BE INSTALLED WITHIN THE PROJECT SITE SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

UTILITY NOTES:

1. LOCATIONS OF UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. IN ACCORDANCE WITH M.G.L., CHAPTER 82, SECTION 40, INCLUDING AMENDMENTS; CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO SUCH EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT 1(888)344-7233 NO LESS THAN 72 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS AND HOLIDAYS TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
2. EXISTING UTILITIES ARE A COMPILATION OF ON THE GROUND SURVEY AND DIGITIZED INFORMATION FROM PREVIOUSLY APPROVED DESIGN PLANS BASED ON FIELD OBSERVATIONS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO FIELD LOCATE EXISTING UTILITIES. CONTRACTOR SHALL CONDUCT TEST PITS, AS NEEDED, TO LOCATE EXISTING UTILITIES. ALL LOCATION WORK SHALL BE CONDUCTED PRIOR TO CONSTRUCTION AND COORDINATED WITH THE ENGINEER.
3. FINAL DESIGN OF PRIVATE UTILITIES INCLUDING GAS, ELECTRIC, COMMUNICATIONS AND TELEPHONE SHALL BE PROVIDED BY THE APPROPRIATE UTILITY COMPANY. THE DRY UTILITIES SHOWN HERE ARE SHOWN FOR GENERAL COORDINATION PURPOSES ONLY.
4. CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, ETC. BY THE UTILITY COMPANY.
5. ALL UNDERGROUND STRUCTURES AND UTILITIES SHALL BE CAPABLE OF WITHSTANDING HS-20 WHEEL LOADS.
6. MEP CONSULTANT/ENGINEER IS RESPONSIBLE FOR ALL CONNECTIONS WITHIN 10-FT OF ALL PROPOSED BUILDINGS.
7. RIM ELEVATIONS OF PROPOSED MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS SHALL BE SET FLUSH AND CONSISTENT WITH THE PROPOSED FINISHED GRADES.
8. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATIONS AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
9. CONTRACTOR SHALL VERIFY UTILITY CONNECTIONS TO BUILDING WITH ARCHITECTURAL AND MEP DRAWINGS.
10. INSTALL THRUST BLOCKS AT ALL TEES AND BENDS IN ALL WATERLINES, SEWER FORCE MAINS, AND FIRE HYDRANTS.
11. ALL DRAINAGE STRUCTURES SHALL BE CLEANED AT COMPLETION OF THE PROJECT.
12. WATER METERS SHALL BE INSTALLED IN AN UN-OBSTRICTED AND EASILY ACCESSIBLE LOCATION.
13. THE CONTRACTOR SHALL SUBMIT AN AS-BUILT OF ALL UNDERGROUND UTILITIES, INCLUDING TELEPHONE, ELECTRIC, GAS, WATER, SEWER, AND STORM DRAINAGE TO THE OWNER. THE AS-BUILT SHALL INCLUDE HORIZONTAL AND VERTICAL TIES FROM ANY HANDHOLES, MANHOLES, VALVES, GATES, CLEANOUTS, TEES, ELBOWS, BENDS, ETC. TO FIXED POINTS OF REFERENCE. THE AS-BUILT SHALL BE SUBMITTED ON ONE (1) CAD DISK AND ONE (1) MYLAR.

EARTHWORK/GRADING NOTES:

1. RIM ELEVATIONS OF PROPOSED MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS SHALL BE SET FLUSH AND CONSISTENT WITH THE PROPOSED FINISHED GRADES.
2. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH EPA'S NPDES PERMITTING FOR CONSTRUCTION ACTIVITIES, AS WELL ANY EROSION AND SEDIMENTATION CONTROL PERMIT ISSUED FOR THIS PROJECT.
3. THE CONTRACTOR SHALL GIVE FOURTY-EIGHT (48) HOUR NOTICE, OR AS REQUIRED BY PROJECT PERMITS, TO PERTINENT TOWN DEPARTMENTS BEFORE COMMENCING WORK IN THE FIELD.



PROFESSIONAL ENGINEER

DATE

AYER COMMONS

65 FITCHBURG ROAD

IN

AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

LEGEND & NOTES

JUNE 14, 2022

REVISIONS:		
NO.	DATE	DESC.

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

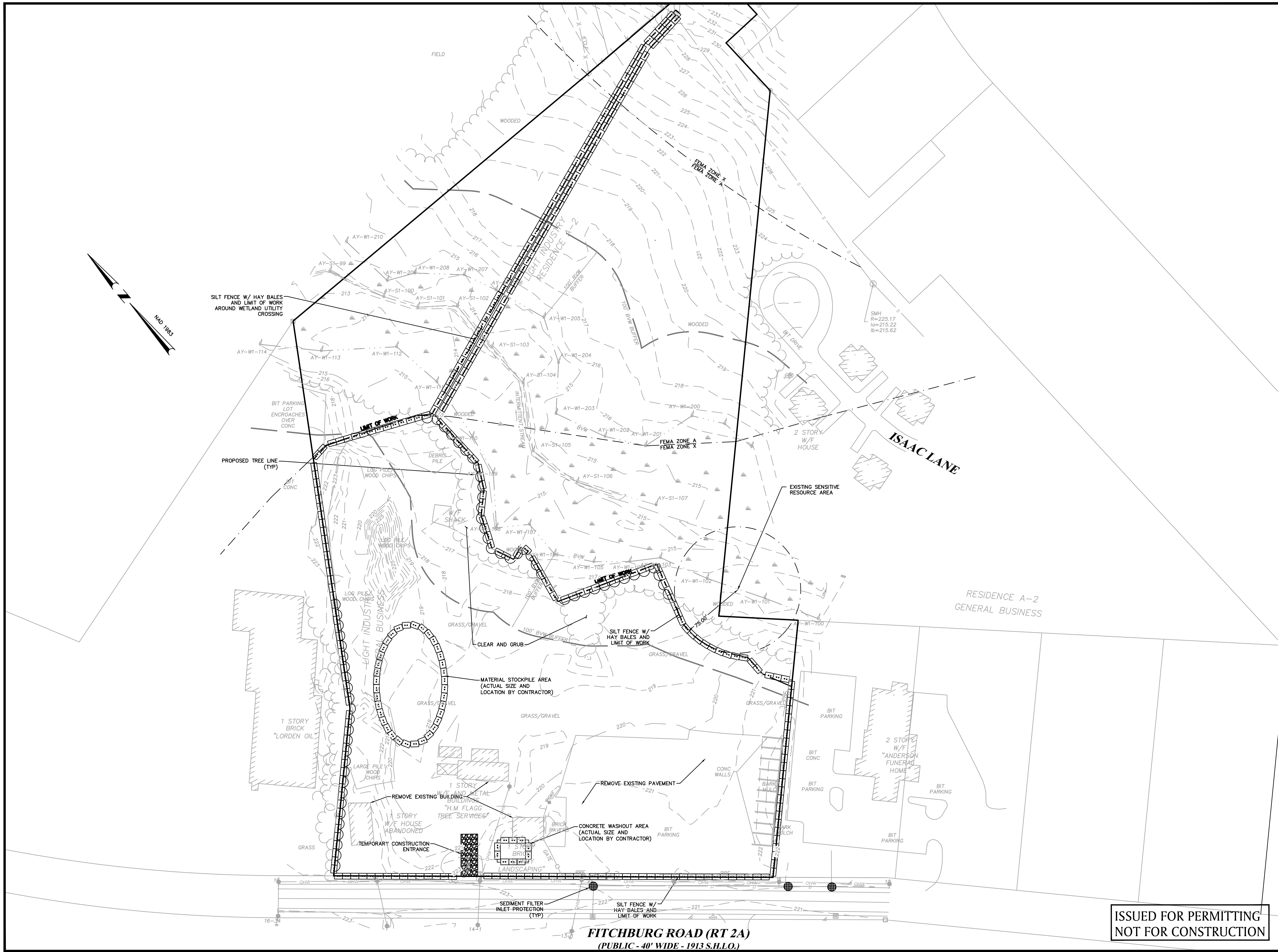
**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300

© 2022 BSC Group, Inc.  
SCALE:

FILE: LN  
DWG.:  
JOB. NO: 8-9926.01  
SHEET C-100

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION





**AYER COMMONS**

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

**EROSION AND SEDIMENT  
CONTROL PLAN**

JUNE 14, 2022

REVISIONS:		
NO.	DATE	DESC.

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300

© 2022 BSC Group, Inc.  
SCALE: 1" = 50'  
0 25 50 100 FEET

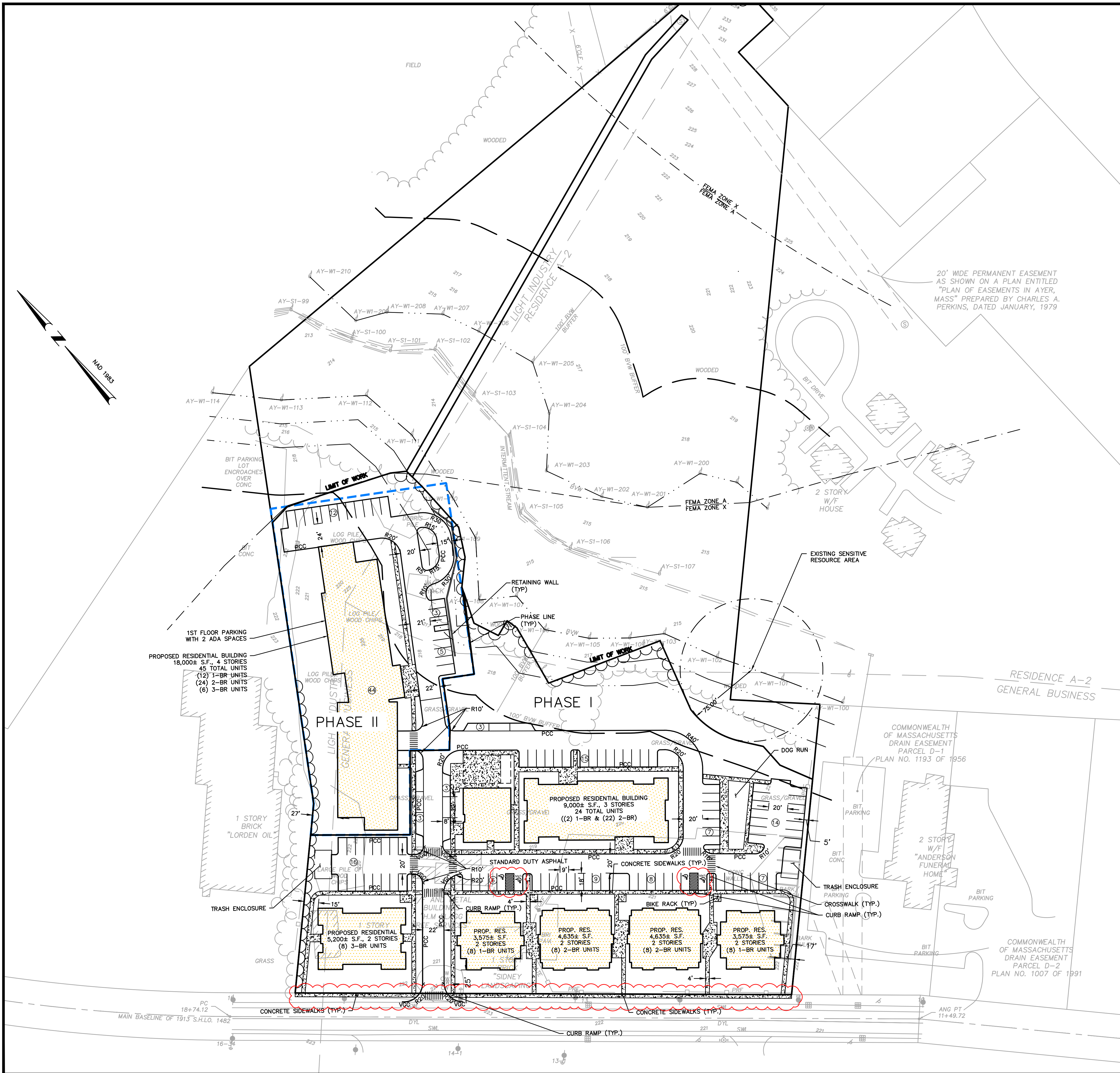
FILE:  
DWG.:  
JOB. NO: 8-9926.01

SHEET **C-101**

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION

**FITCHBURG ROAD (RT 2A)**  
(PUBLIC - 40' WIDE - 1913 S.H.L.O.)





ZONING SUMMARY

ZONING DISTRICT: GENERAL BUSINESS - LIMITED COMMERCIAL - RESIDENCE A-2			
	REQUIRED		PROVIDED
MINIMUM LOT AREA (SF)	15,000 - 120,000 - 40,000		461,100
MAXIMUM BUILDING HEIGHT	35' - 40' - 35'		SEE ARCHITECTURAL PLANS
MAXIMUM BUILDING COVERAGE	60% - 50% - 15%		10.90%
MINIMUM LOT FRONTAGE	100' - 100' - 150'		521'
MAXIMUM FLOOR AREA RATIO	1.25 - 1.25 - NA		.217
MINIMUM FRONT SETBACK	30' - 25' - 35'		25'
MINIMUM SIDE SETBACK	25' - 25' - 15'		15'
MINIMUM REAR SETBACK	20' - 30' - 30'		>30'
MINIMUM OPEN SPACE	20% - 30% - 80%		65.4%
LANDSCAPE SETBACKS - PARKING	10' ON ALL SIDES OF LOT		5'
LANDSCAPING	10% OF PARKING AREA WHERE THERE ARE MORE THAN 25 SPACES		10.9%
PARKING SPACES (9'X18' MIN)			9'X18'

SECTION 4.5 LOTS DIVIDED BY DISTRICT BOUNDARIES WHERE A DISTRICT BOUNDARY LINE DIVIDES ANY LOT EXISTING AT THE TIME SUCH LINE IS ADOPTED, THE REGULATIONS FOR THE LESS RESTRICTED PORTIONS OF SUCH LOT SHALL EXTEND NO MORE THAN FIFTY (50) FEET INTO THE MORE RESTRICTED PORTION OF SUCH LOT, PROVIDED THE LOT HAS FRONTAGE IN THE LESS RESTRICTIVE DISTRICT AND THE LOT EXISTED WHEN THE ZONING DISTRICT BOUNDARY WAS ESTABLISHED.

PARKING TABLE

	REQUIRED	PROVIDED
MULTI-FAMILY HOUSING:	76 2/3-BEDROOM UNITS (152) +	155 SPACES
1.5 SPACES PER 1 BEDROOM UNITS	30 1 BEDROOM UNITS (45) + 5% (10) =	
2 SPACES PER 2/3 BEDROOM UNITS	207 SPACES	
+ 5% FOR VISITOR PARKING		

GENERAL CONSTRUCTION NOTES:

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION CONSTRUCTION STANDARD DETAILS HIGHWAY DIVISION (LATEST EDITION), THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES (LATEST EDITION), AND THESE CONTRACT DOCUMENTS.
- UNLESS OTHERWISE INDICATED, CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.
- ALL ACCESSIBLE PARKING SPACES, WALKWAYS AND PUBLIC BUILDING ENTRANCES SHALL BE IN COMPLIANCE WITH THE COMMONWEALTH OF MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR) LATEST EDITION AND THE AMERICANS WITH DISABILITIES ACT. FOR ANY DISCREPANCIES OR CLARIFICATION THE CONTRACTOR IS TO CONTACT THE ENGINEER IN WRITING.
- ALL EXISTING PAVEMENT IN THE VICINITY OF THE PROPOSED WORK IS TO BE RESTORED, IF DAMAGED, AT NO ADDITIONAL COST TO THE OWNER. ALL PAVEMENT WORK SHALL BLEND WITH EXISTING PAVEMENT WITH SAWCUTS AND EMULSION APPLIED TO ALL CUT SURFACES.
- ALL DUMPSTERS WILL REQUIRE A PERMIT PER 527 CMR 34.03.
- CONTRACTOR TO PROVIDE FULL AS-BUILT OF UTILITY WORK PRIOR TO FINAL PAYMENT. AS-BUILT PLANS SHALL BE SUBMITTED ON MYLAR UPON COMPLETION OF PROJECT.
- ALL CURB RADII SHALL BE 3' UNLESS OTHERWISE NOTED.

LEGEND:

PCC PRECAST CONCRETE CURB  
GC GRANITE CURB

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION



PROFESSIONAL ENGINEER DATE

AYER COMMONS

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

LAYOUT AND  
MATERIAL PLAN

JUNE 14, 2022

REVISIONS:

NO.	DATE	DESC.
1	8/15/22	TOWN COMMENTS
2	10/11/22	PLAN UPDATES

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

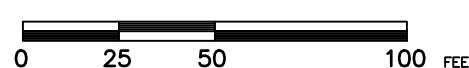


300 Brickstone Square  
Andover, Massachusetts  
01810

617 896 4300

© 2022 BSC Group, Inc.

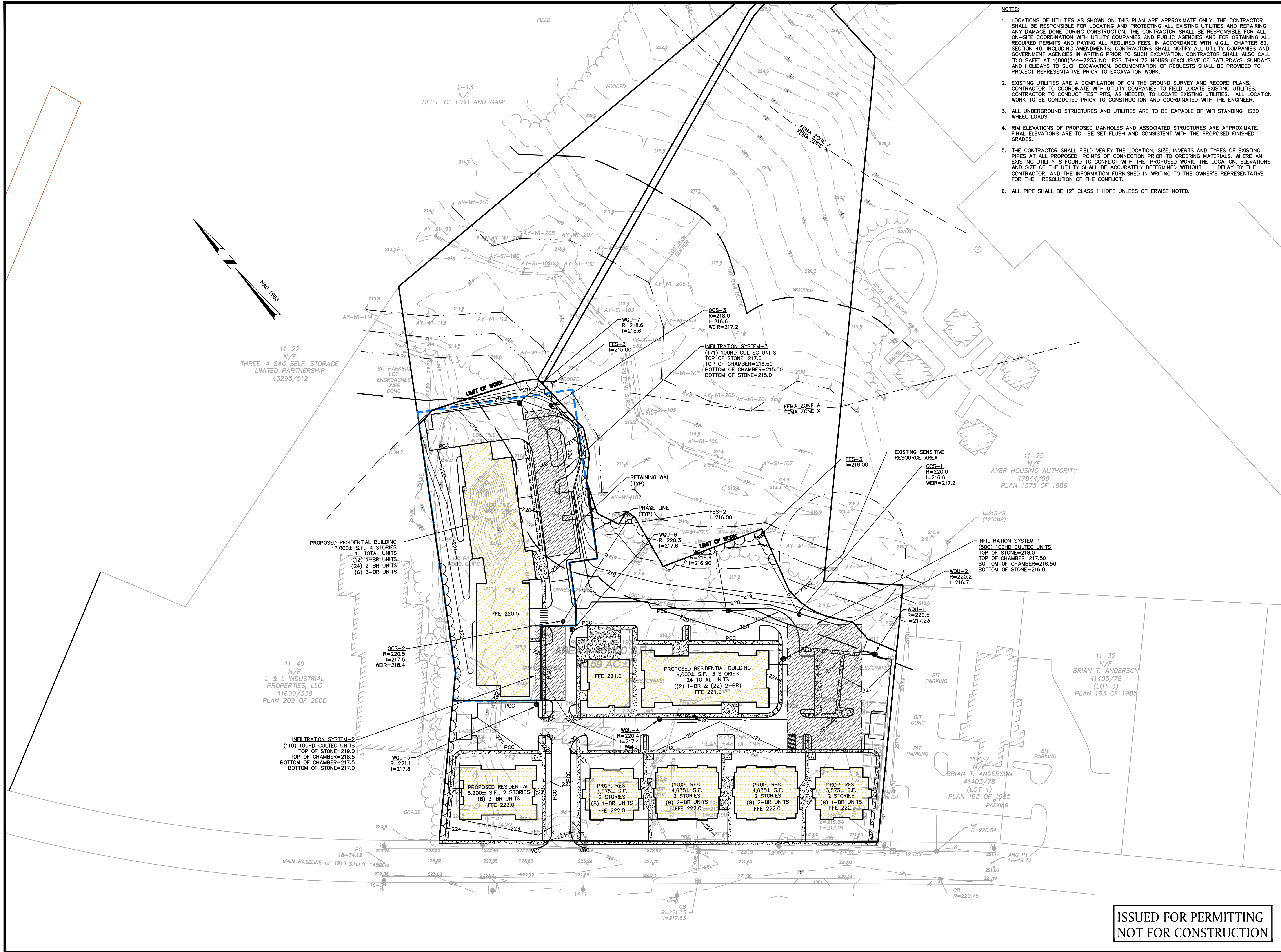
SCALE: 1" = 50'



FILE:  
DWG.:  
JOB. NO: 8-9926.01

SHEET C-102





- NOTES:
1. LOCATIONS OF UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. IN ACCORDANCE WITH M.G.L., CHAPTER 82, SECTION 40, INCLUDING AMENDMENTS, CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO SUCH EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT 1(888)344-7233 NO LESS THAN 72 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS AND HOLIDAYS) TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
  2. EXISTING UTILITIES ARE A COMPILATION OF ON THE GROUND SURVEY AND RECORD PLANS. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES TO FIELD LOCATE EXISTING UTILITIES. CONTRACTOR TO CONDUCT TEST PITS, AS NEEDED, TO LOCATE EXISTING UTILITIES. ALL LOCATION WORK TO BE CONDUCTED PRIOR TO CONSTRUCTION AND COORDINATED WITH THE ENGINEER.
  3. ALL UNDERGROUND STRUCTURES AND UTILITIES ARE TO BE CAPABLE OF WITHSTANDING HS20 WHEEL LOADS.
  4. RIM ELEVATIONS OF PROPOSED MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE PROPOSED FINISHED GRADES.
  5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATIONS AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
  6. ALL PIPE SHALL BE 12" CLASS 1 HDPE UNLESS OTHERWISE NOTED.



DATE  
PROFESSIONAL ENGINEER

## AYER COMMONS

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

### GRADING AND DRAINAGE PLAN

JUNE 14, 2022

REVISIONS:		
NO.	DATE	DESC.
1	8/15/22	TOWN COMMENTS
2	10/11/22	PLAN UPDATES

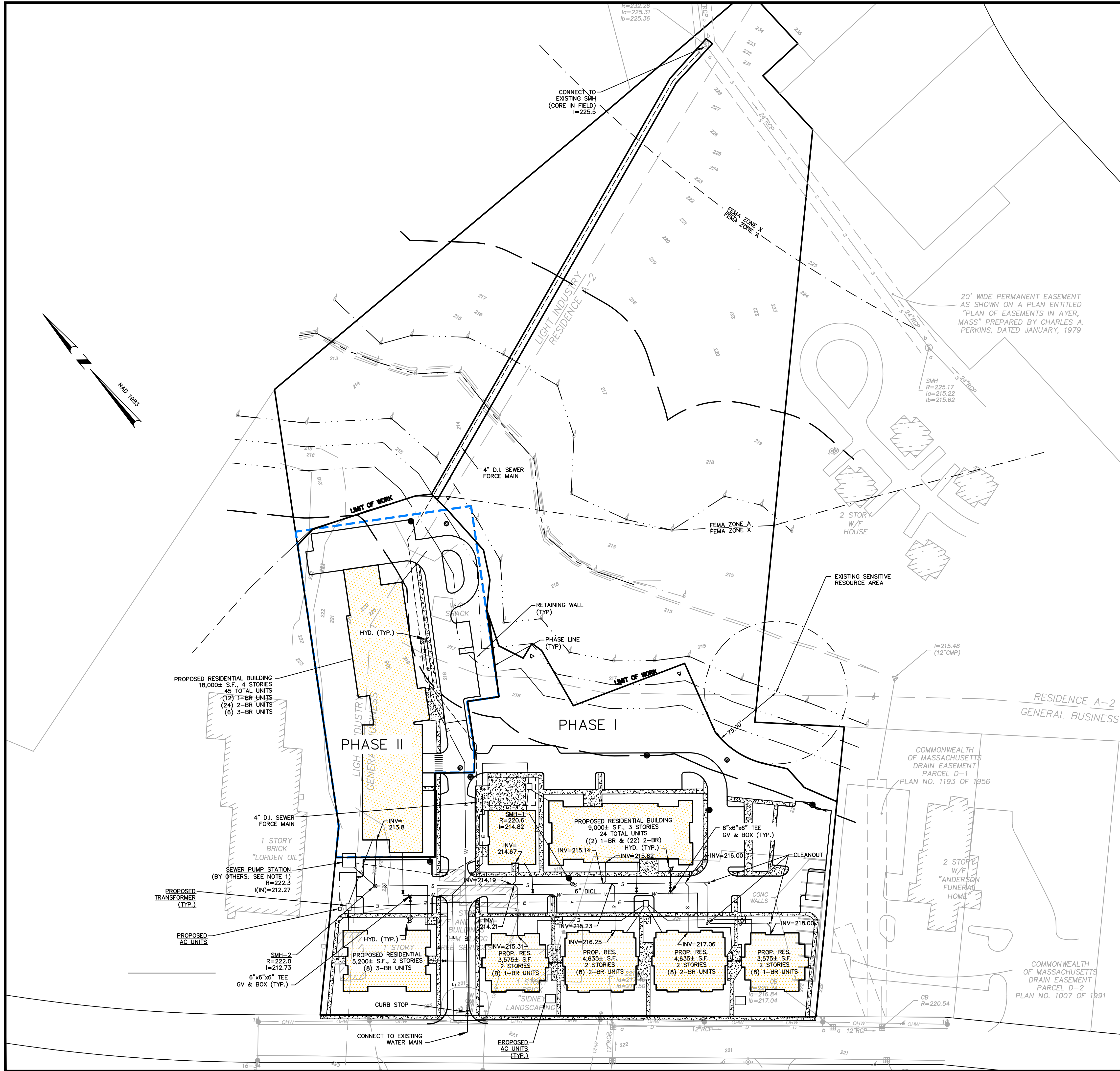
PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300

© 2022 BSC Group, Inc.  
SCALE: 1" = 50'  
0 25 50 100 FEET  
FILE:  
DWG.:  
JOB. NO: 8-9926.01  
SHEET C-103

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION





- NOTES:
- SEWER PUMP STATION DIMENSIONS AND DESIGN PARAMETERS ARE FOR EXAMPLE ONLY. CONTRACTOR SHALL CONFIRM ALL DESIGNS WITH MANUFACTURER.
  - PUMP DESIGN PARAMETERS (FOR EXAMPLE ONLY):
    - AVERAGE TOTAL DAILY FLOW: 21,785 GPD
    - PEAK TOTAL DAILY FLOW: 65,355 GPD
    - PUMP FLOW RATE (ASSUMED): 70 GPM
    - STATIC HEAD: \*13.2 FT
    - MAX. TOTAL DYNAMIC HEAD: 34.2 FT
- \*STATIC HEAD, NOT INCLUDING WET WELL DEPTH BELOW INVERT.

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION



PROFESSIONAL ENGINEER DATE

AYER COMMONS

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

UTILITY PLAN

JUNE 14, 2022

REVISIONS:

NO.	DATE	DESC.
1	8/15/22	TOWN COMMENTS
2	10/11/22	PLAN UPDATES

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

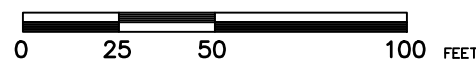


300 Brickstone Square  
Andover, Massachusetts  
01810

617 896 4300

© 2022 BSC Group, Inc.

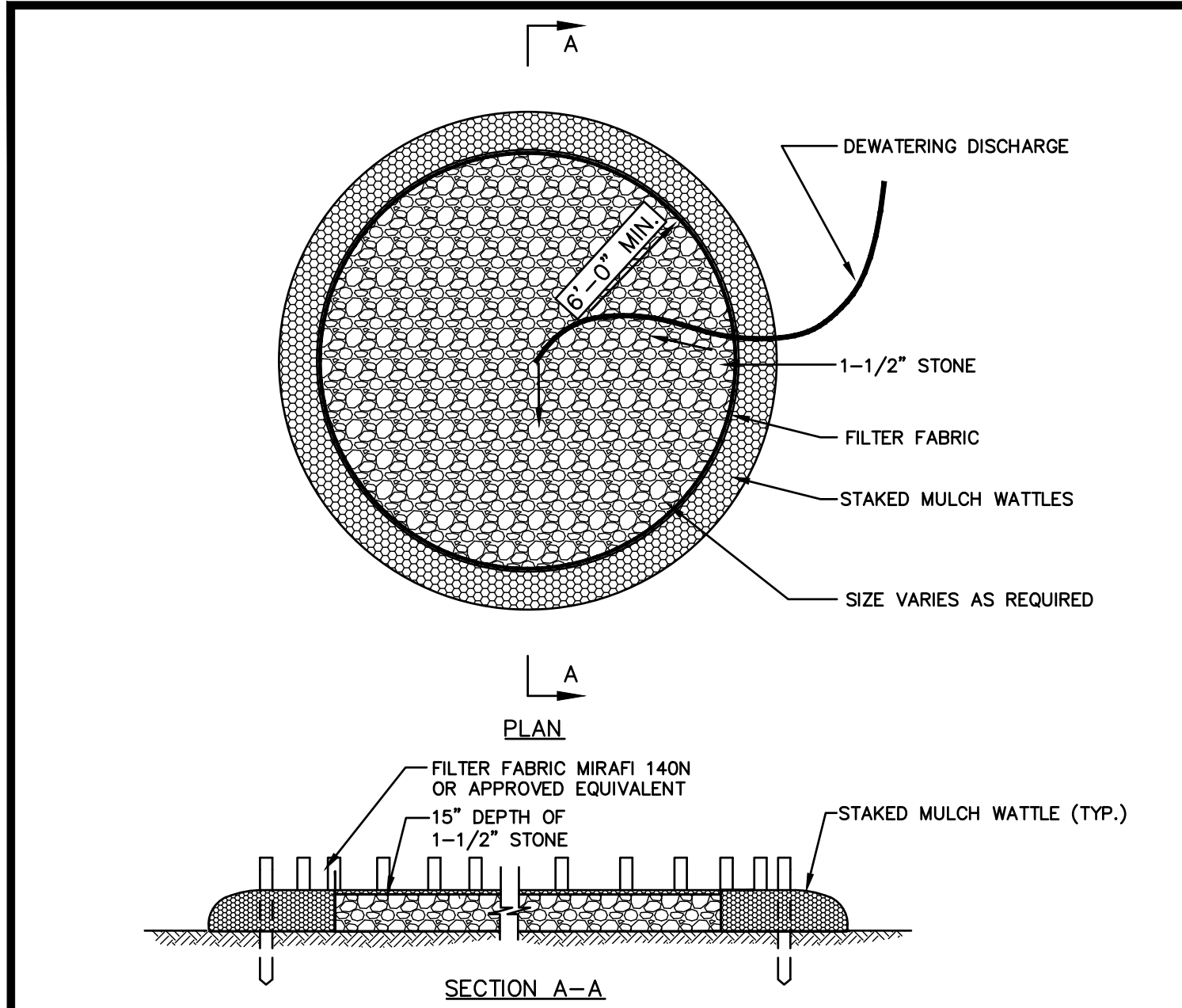
SCALE: 1" = 50'



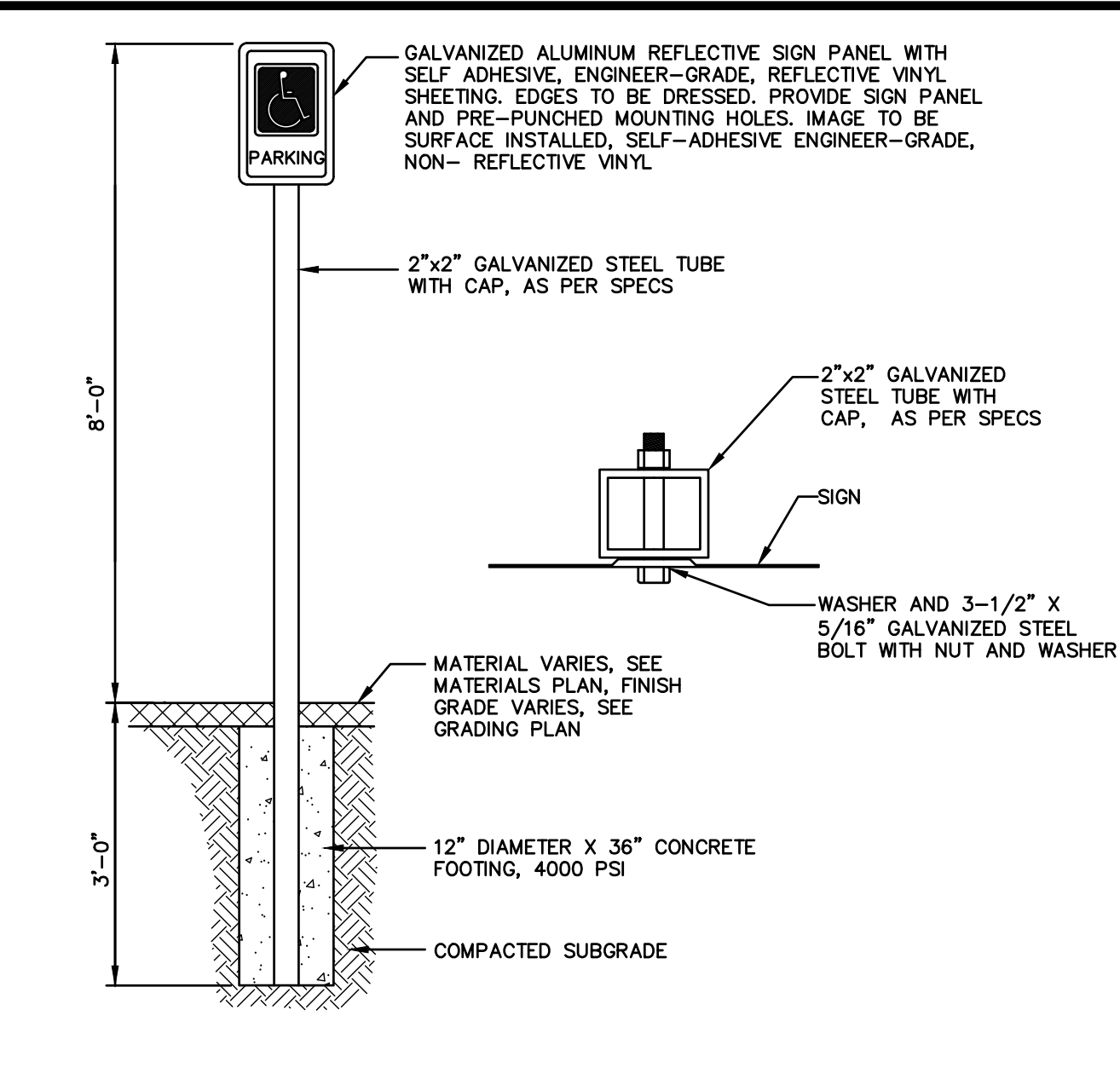
FILE:  
DWG.:  
JOB. NO: 8-9926.01

SHEET C-104

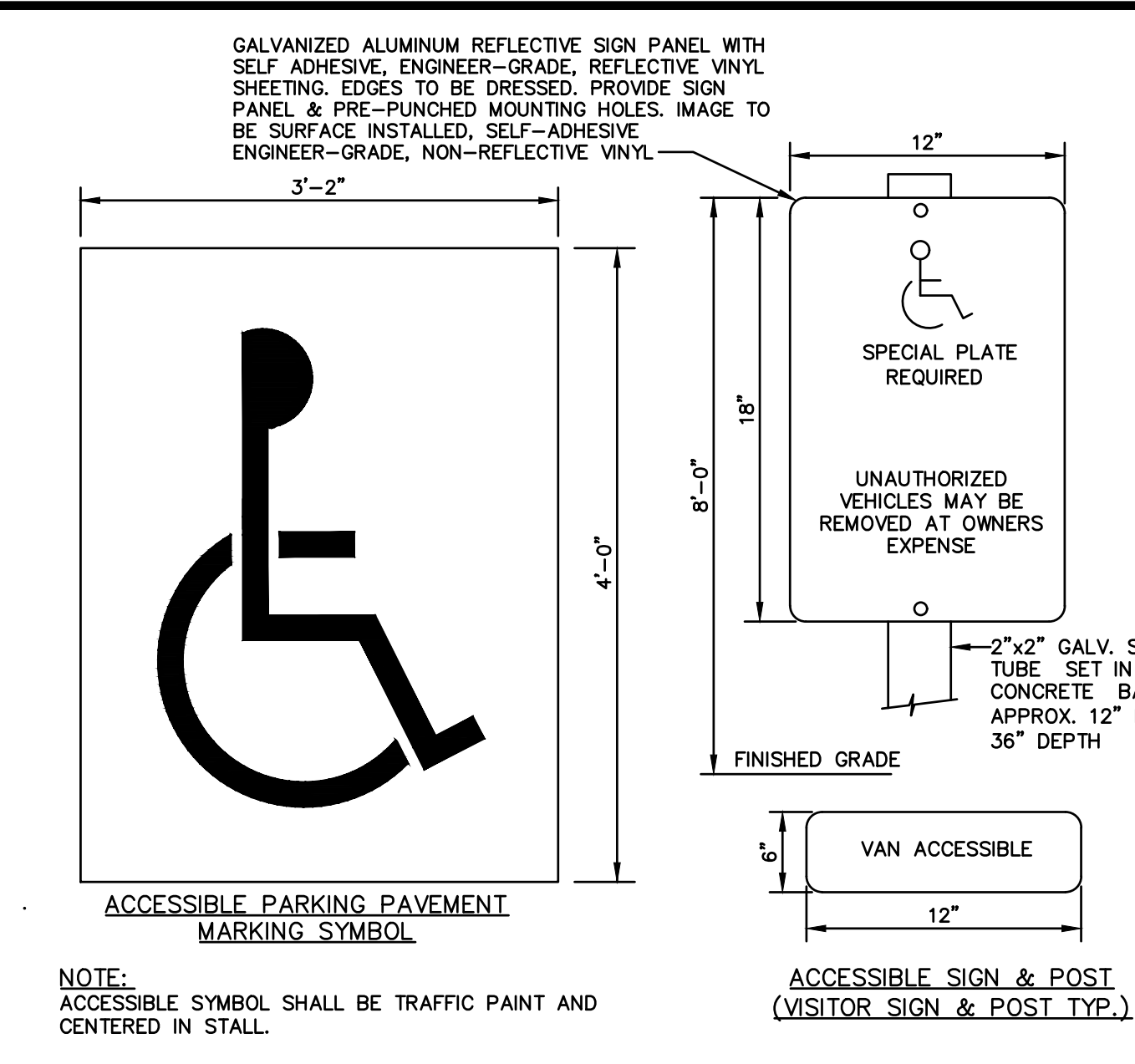




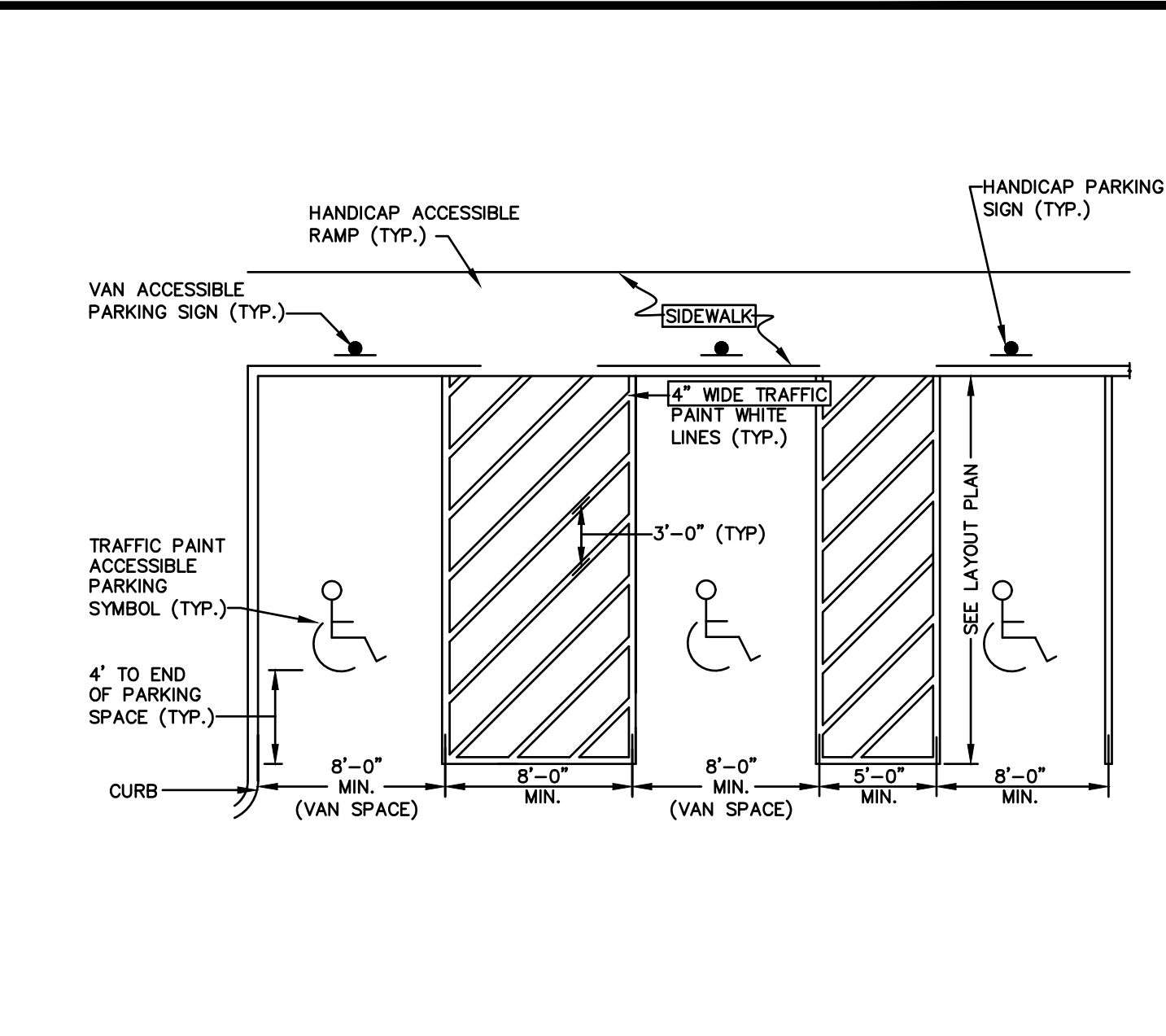
DEWATERING SEDIMENT TRAP  
SCALE: NONE



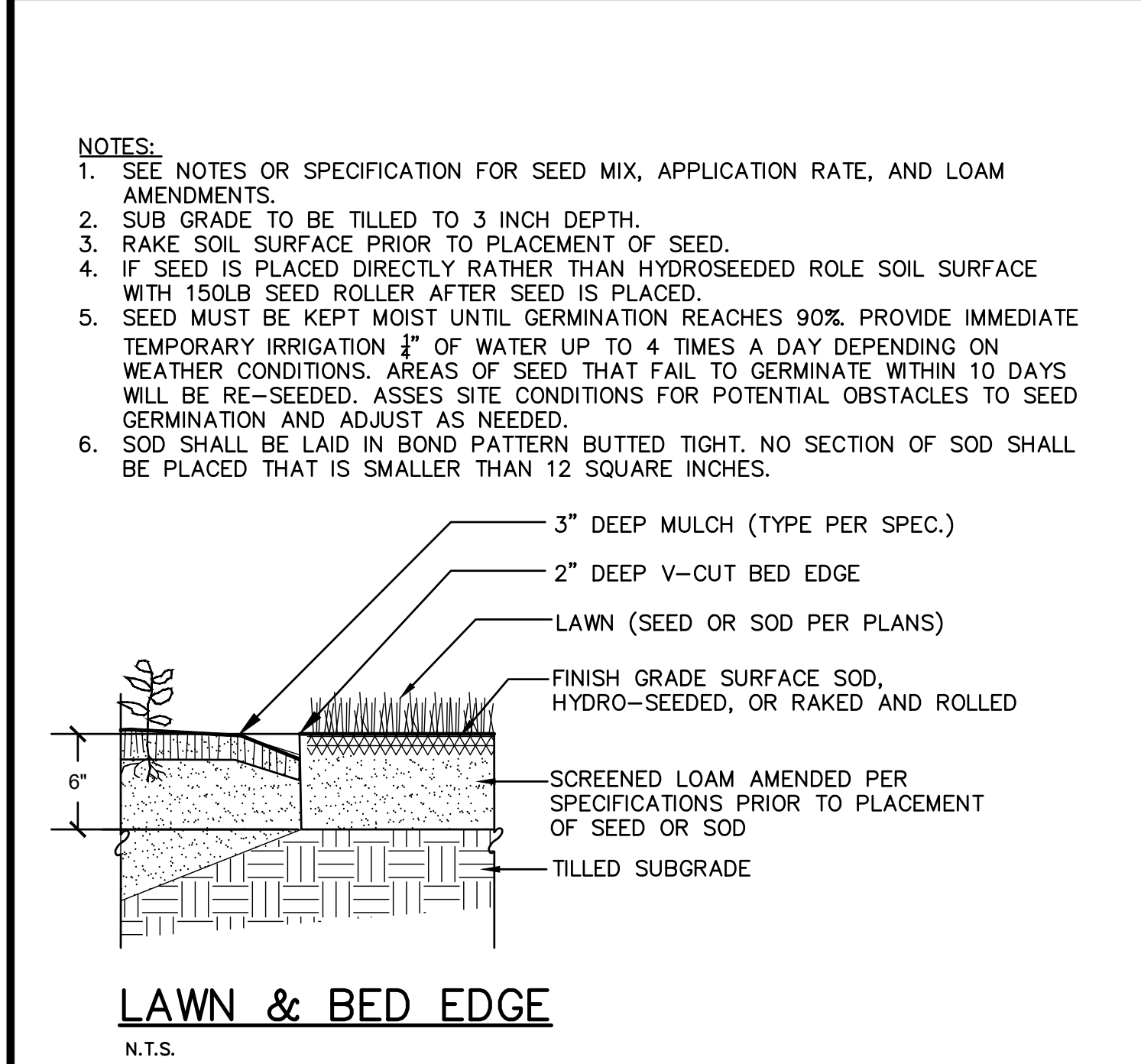
ACCESSIBLE PARKING SIGN  
SCALE: NONE



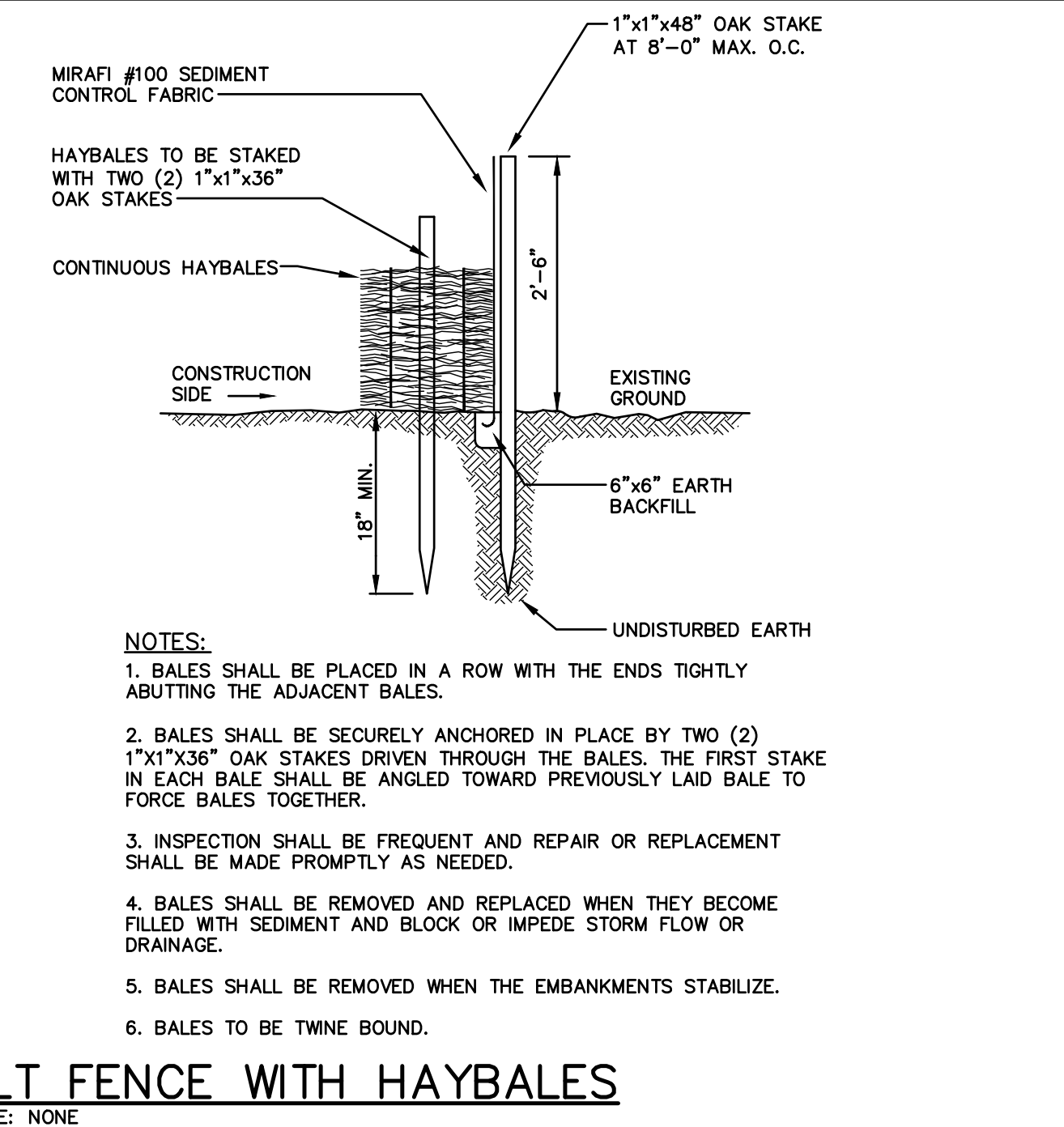
PAINTED PAVEMENT MARKINGS ACCESSIBLE PARKING SYMBOL & ACCESSIBLE PARKING SIGN  
SCALE: NONE



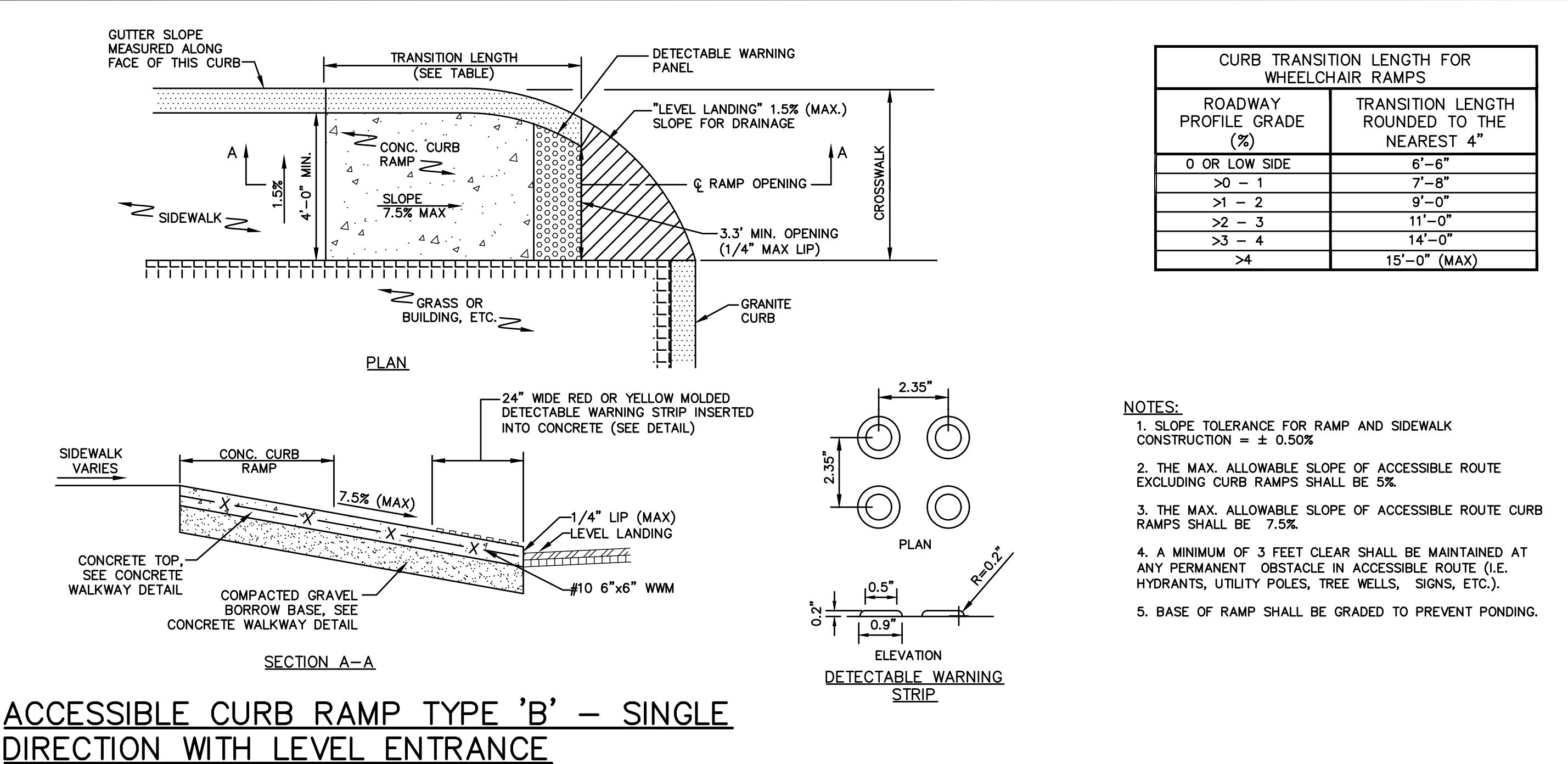
PAINTED PAVEMENT MARKINGS ACCESSIBLE PARKING SPACE  
SCALE: NONE



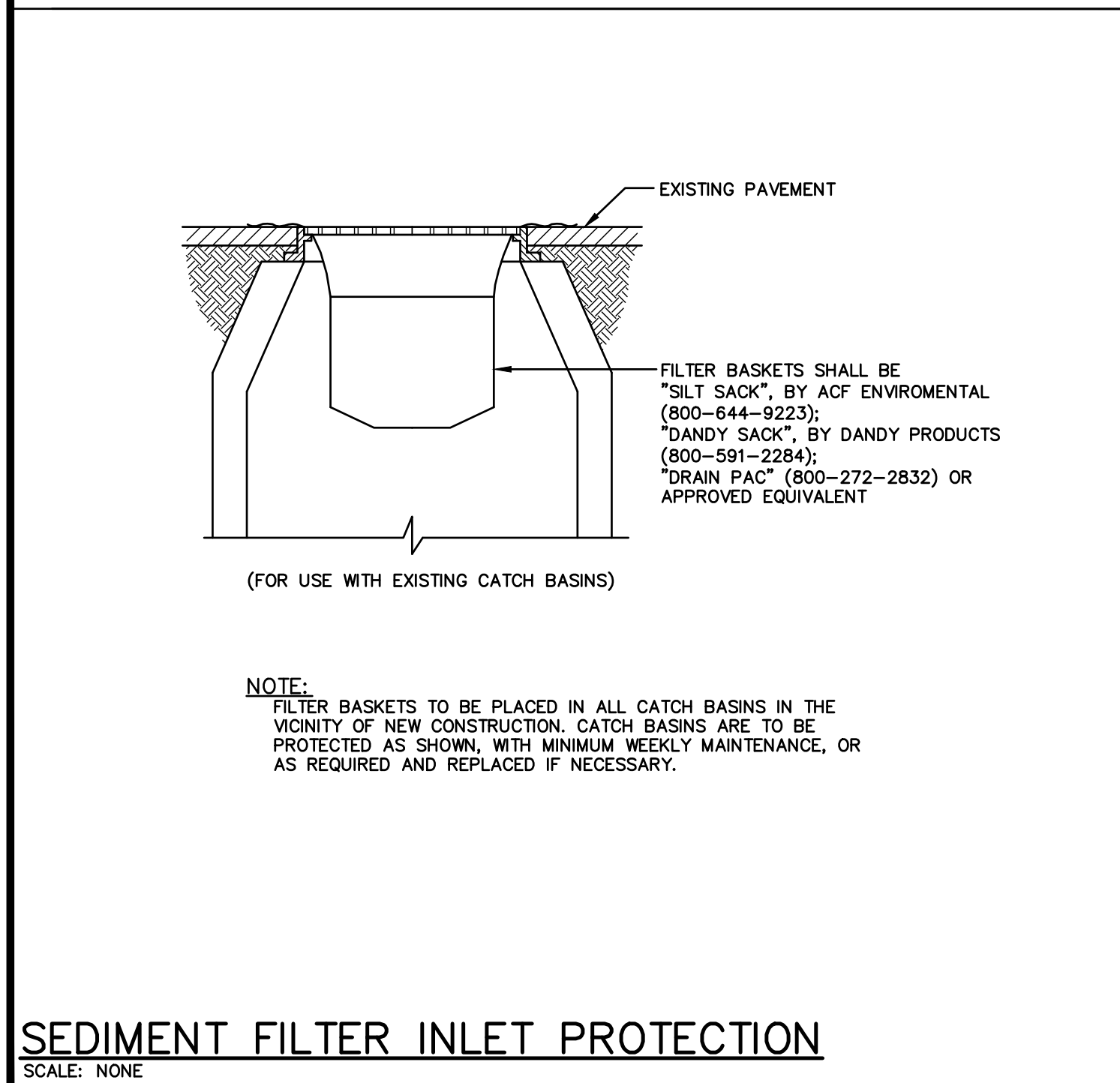
LAWN & BED EDGE  
N.T.S.



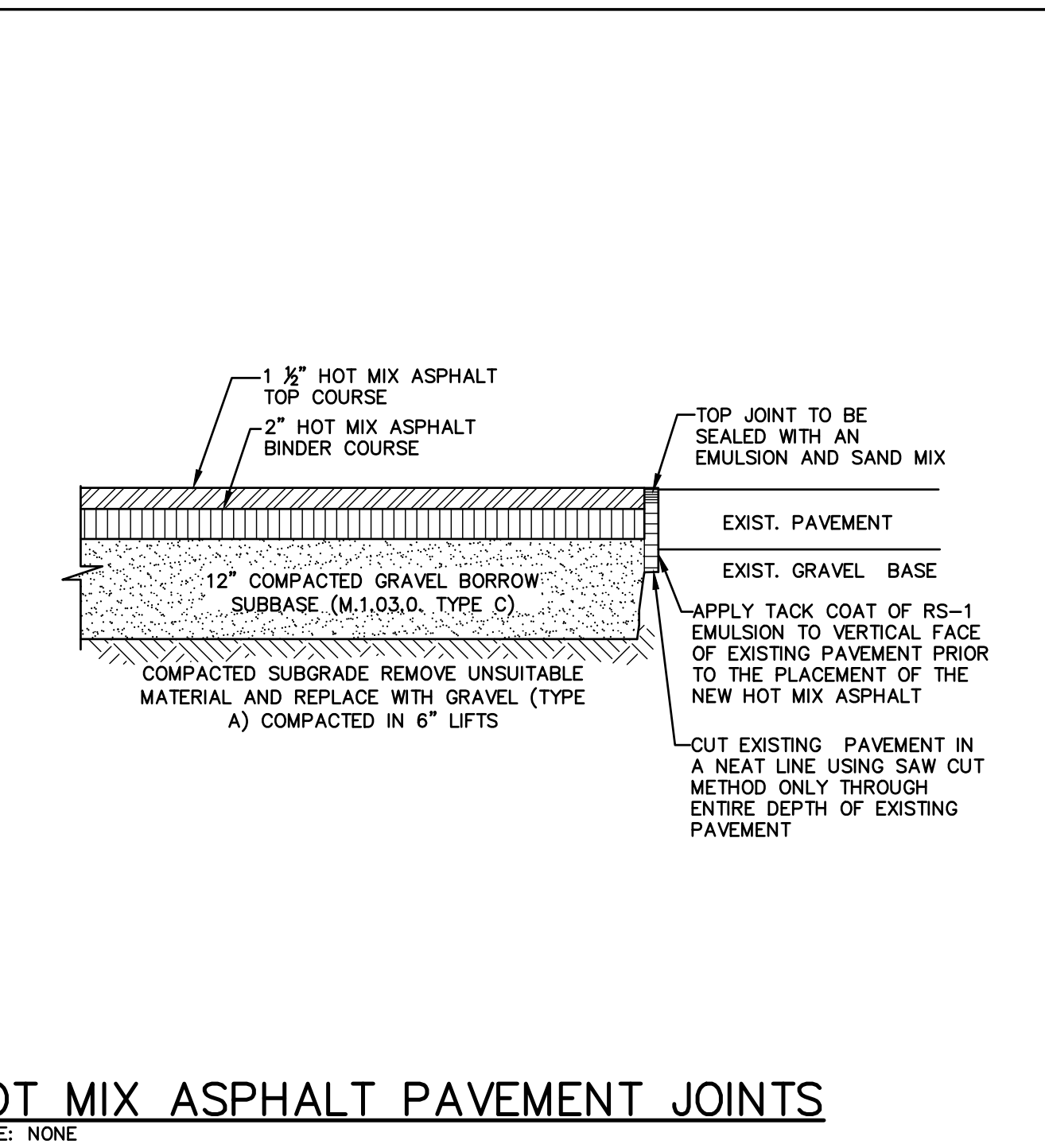
SILT FENCE WITH HAYBALES  
SCALE: NONE



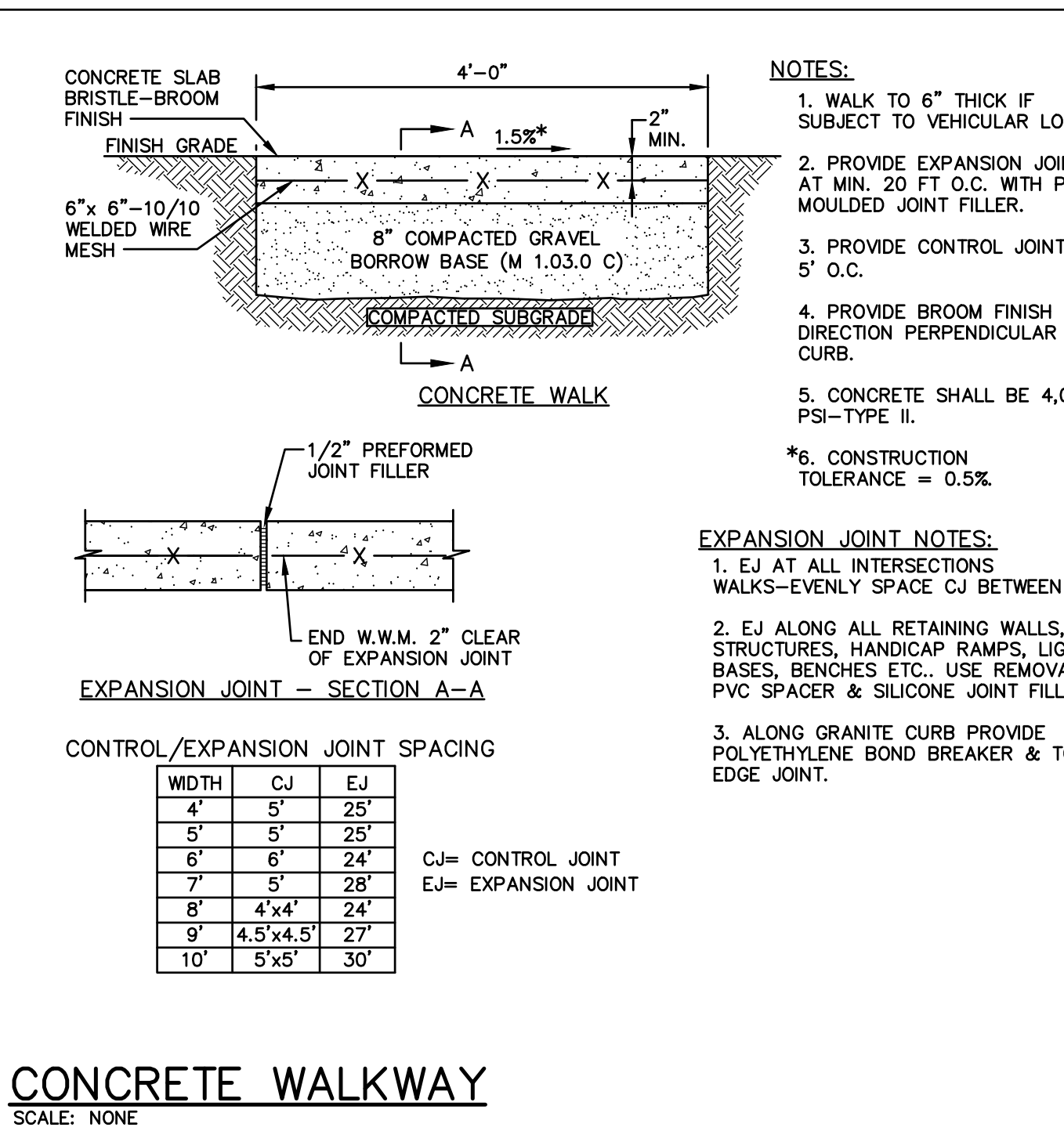
ACCESSIBLE CURB RAMP TYPE 'B' - SINGLE DIRECTION WITH LEVEL ENTRANCE  
SCALE: NONE



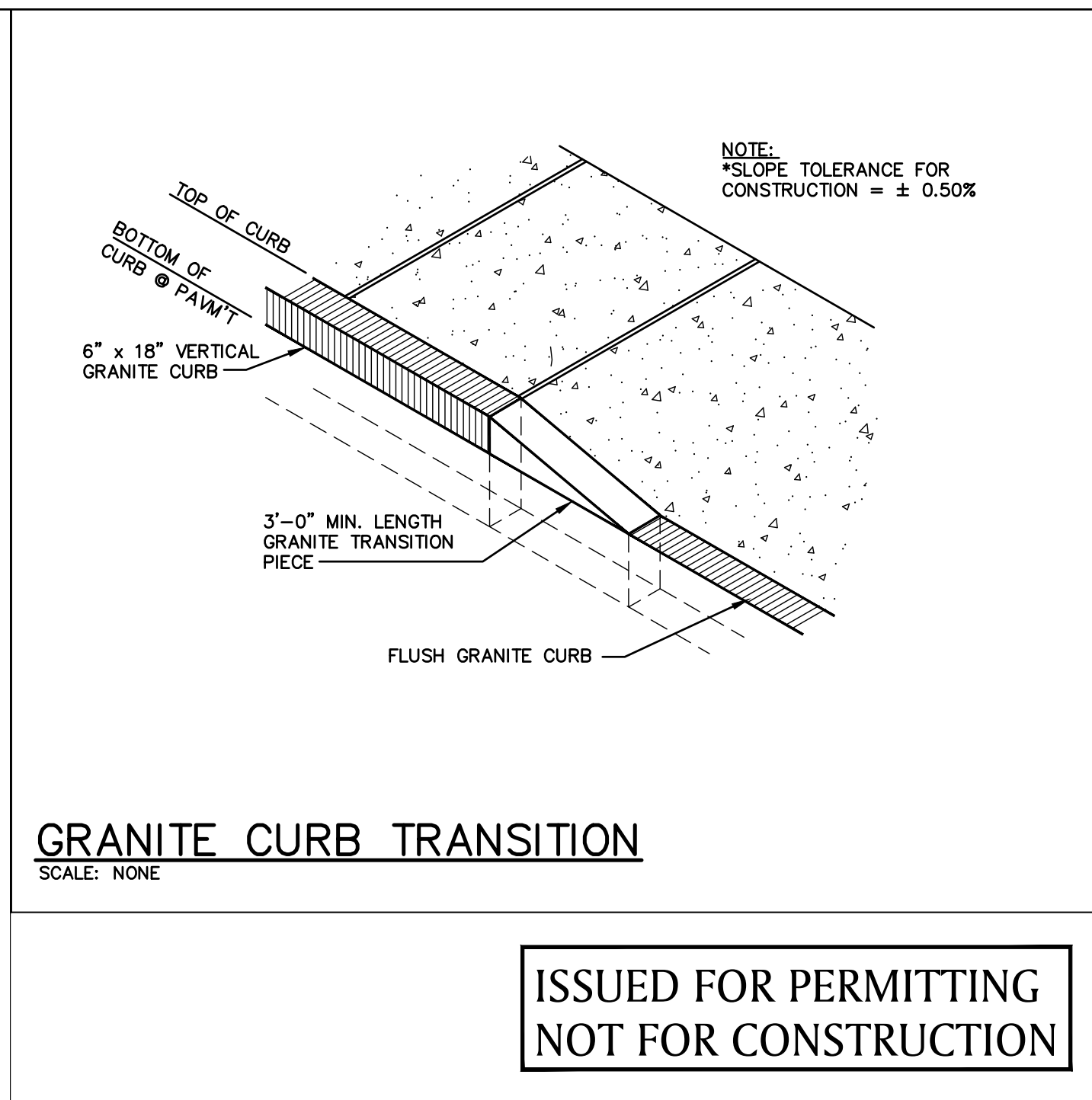
SEDIMENT FILTER INLET PROTECTION  
SCALE: NONE



HOT MIX ASPHALT PAVEMENT JOINTS  
SCALE: NONE



CONCRETE WALKWAY  
SCALE: NONE



GRANITE CURB TRANSITION  
SCALE: NONE

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION

AYER COMMONS

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

CIVIL DETAILS I

JUNE 14, 2022

REVISIONS:		
NO.	DATE	DESC.

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

BSC GROUP  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300



**STANDARD PAINTED PARKING MARKINGS**  
SCALE: NONE

**NOTES:**  
1. THIS DETAIL ONLY APPLIES TO PARKING SPACES WITH AN OVERHANG, NOT BACK TO BACK SPACES.

**TEMPORARY CONSTRUCTION ENTRANCE**  
SCALE: NONE

**NOTES:**  
1. THIS DETAIL ONLY APPLIES TO PARKING SPACES WITH AN OVERHANG, NOT BACK TO BACK SPACES.

**PRECAST CONCRETE CATCH BASIN**  
SCALE: NONE

**NOTES:**  
1. ALL PRECAST JOINTS TO BE SEALED WITH BUTYL RUBBER.  
2. DESIGN TO CONFORM TO H-20 LOADING.  
3. CONTRACTOR HAS THE OPTION TO USE ALTERNATE TOP SLAB.

**PRECAST CONCRETE CURB**  
SCALE: NONE

**FLUSH CURB**  
SCALE: NONE

**CONCRETE ENCASEMENT FOR PIPING**  
SCALE: NONE

**NOTES:**  
1. 4000 PSI CONCRETE IS TO BE USED TO ENCASE ALL SANITARY SEWERS AND SERVICE CONNECTIONS WHICH ARE WITHIN 18 INCHES OF A WATERLINE. ENCASEMENT SHALL BE A MINIMUM OF 6 INCHES AROUND THE SANITARY SEWER AND EXTEND A MINIMUM OF 10 FEET BEYOND THE WATER PIPE.

**FLEXIBLE PIPE TO MANHOLE CONNECTION (NEOPRENE BOOT)**  
SCALE: NONE

**TYPICAL PIPE TRENCH SECTION**  
SCALE: NONE

**TRENCH WIDTH DATA**

D DIAMETER OF PIPE	Wu UNSHEETED	Ws SHEETED
12" AND SMALLER	3'-0"	4'-2"
15"	3'-2"	4'-4"
18"	3'-6"	4'-8"
21"	3'-10"	5'-0"
24"	4'-2"	5'-4"
27"	4'-6"	5'-8"
30"	4'-10"	6'-0"
36"	5'-6"	6'-8"
42"	6'-2"	7'-4"
48"	6'-10"	8'-0"

**SANITARY SEWER MANHOLE**  
SCALE: NONE

**NOTES:**  
1. ALL SECTIONS SHALL BE DESIGNED FOR H-20 LOADING.  
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.  
3. ALL EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.  
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.  
5. MUNICIPAL STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYP., 5 BRICK COURSES MAX.).  
6. 5'-0" DIAMETER FOR ALL MANHOLE DEPTHS GREATER THAN 20 FEET OR WHEN ORDERED BY THE ENGINEER OR FOR INTERIOR DROP CONNECTIONS AND ALL FORCE MAIN CONNECTION MANHOLES.  
7. 6" MINIMUM WALL THICKNESS AND 7" MINIMUM BASE THICKNESS WITH 5'-0" DIAMETER MANHOLES.  
8. 4" TO 6" VERTICAL SURFACE AT THE TOP OF THE TRANSITION OR CONE SECTION REQUIRED TO ALLOW AIR-VACUUM TESTING OF THE MANHOLE DURING INSTALLATION.  
9. MAXIMUM FIRST PIPE LENGTH FROM MANHOLE 3'-0".

**TRASH ENCLOSURE**  
SCALE: NONE

**NOTES:**  
1. DOUBLE= 20" WIDE PAD FACE OF CURB TO FACE OF CURB  
2. SEE LAYOUT AND MATERIALS PLAN

**NOAH**  
Neighborhood of Affordable Housing, Inc.

DATE

PROFESSIONAL ENGINEER

**AYER COMMONS**

65 FITCHBURG ROAD  
IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

CIVIL DETAILS II

JUNE 14, 2022

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300

© 2022 BSC Group, Inc.  
SCALE: AS SHOWN  
0 25 50 100 FEET

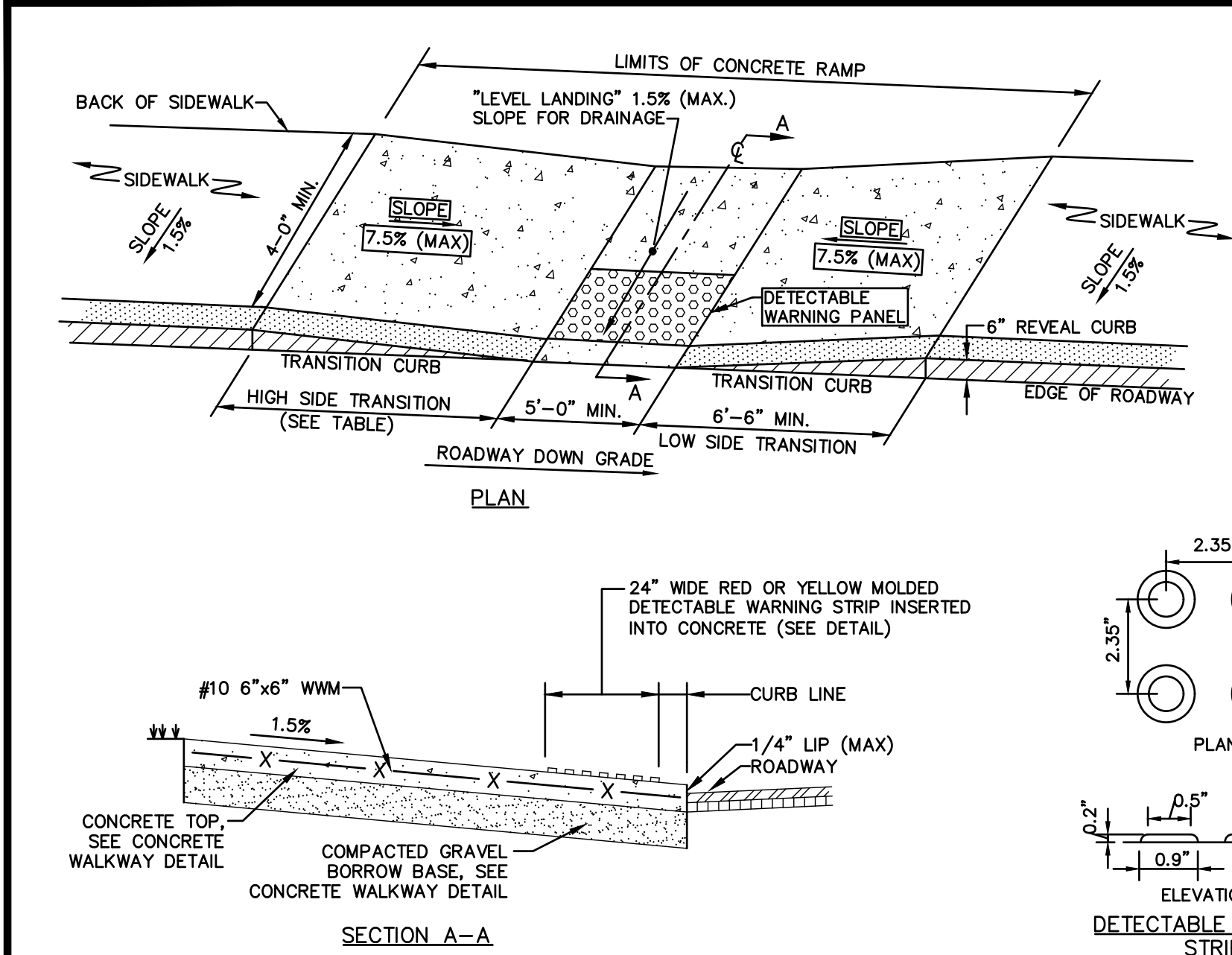
FILE:  
DWG.:  
JOB. NO: 8-9926.01

SHEET C-201

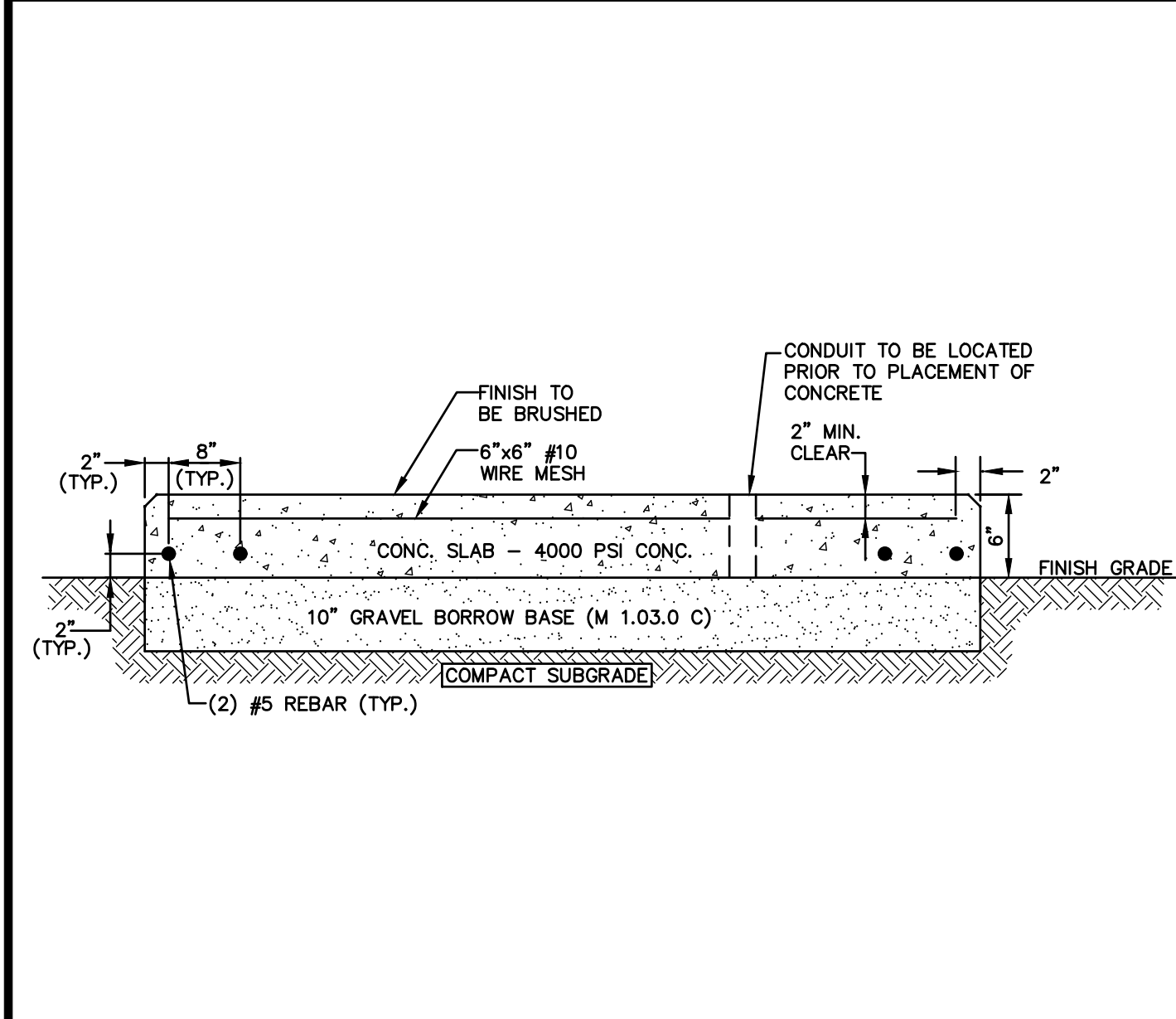


ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION

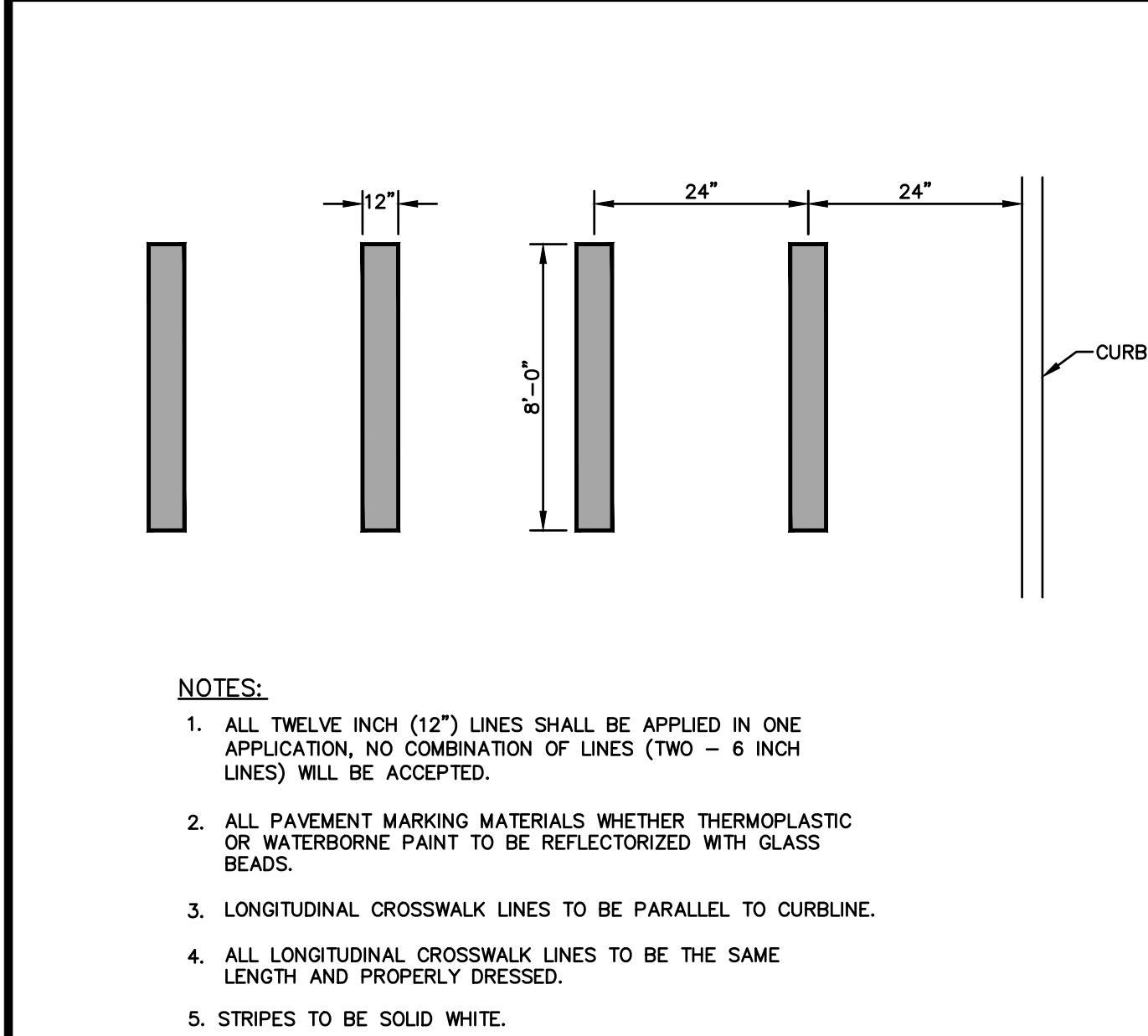




ACCESSIBLE CURB RAMP TYPE 'F' - NARROW SIDEWALK  
SCALE: NONE



TRANSFORMER PAD  
SCALE: NONE

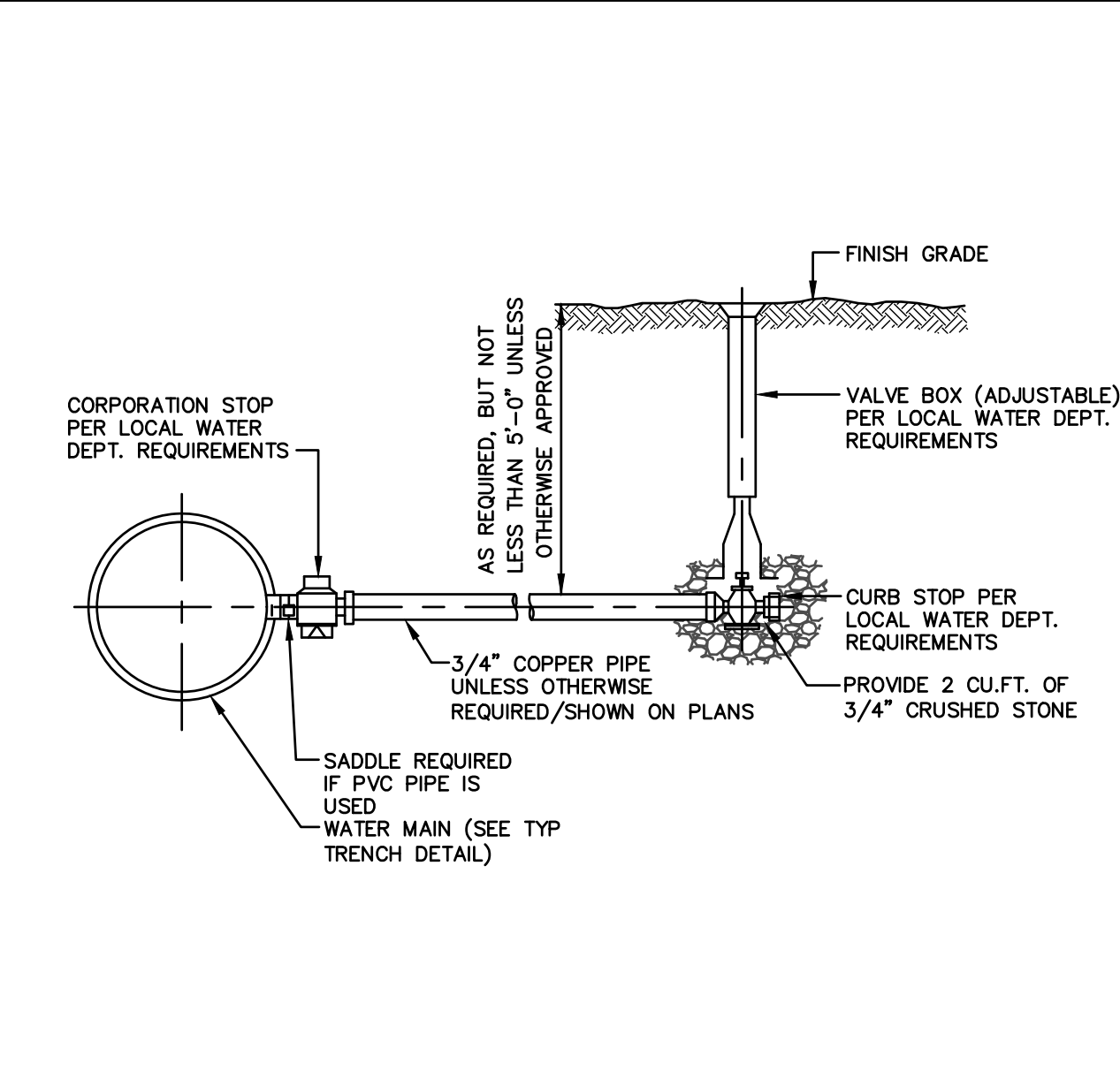


PEDESTRIAN CROSSWALK MARKINGS  
SCALE: NONE

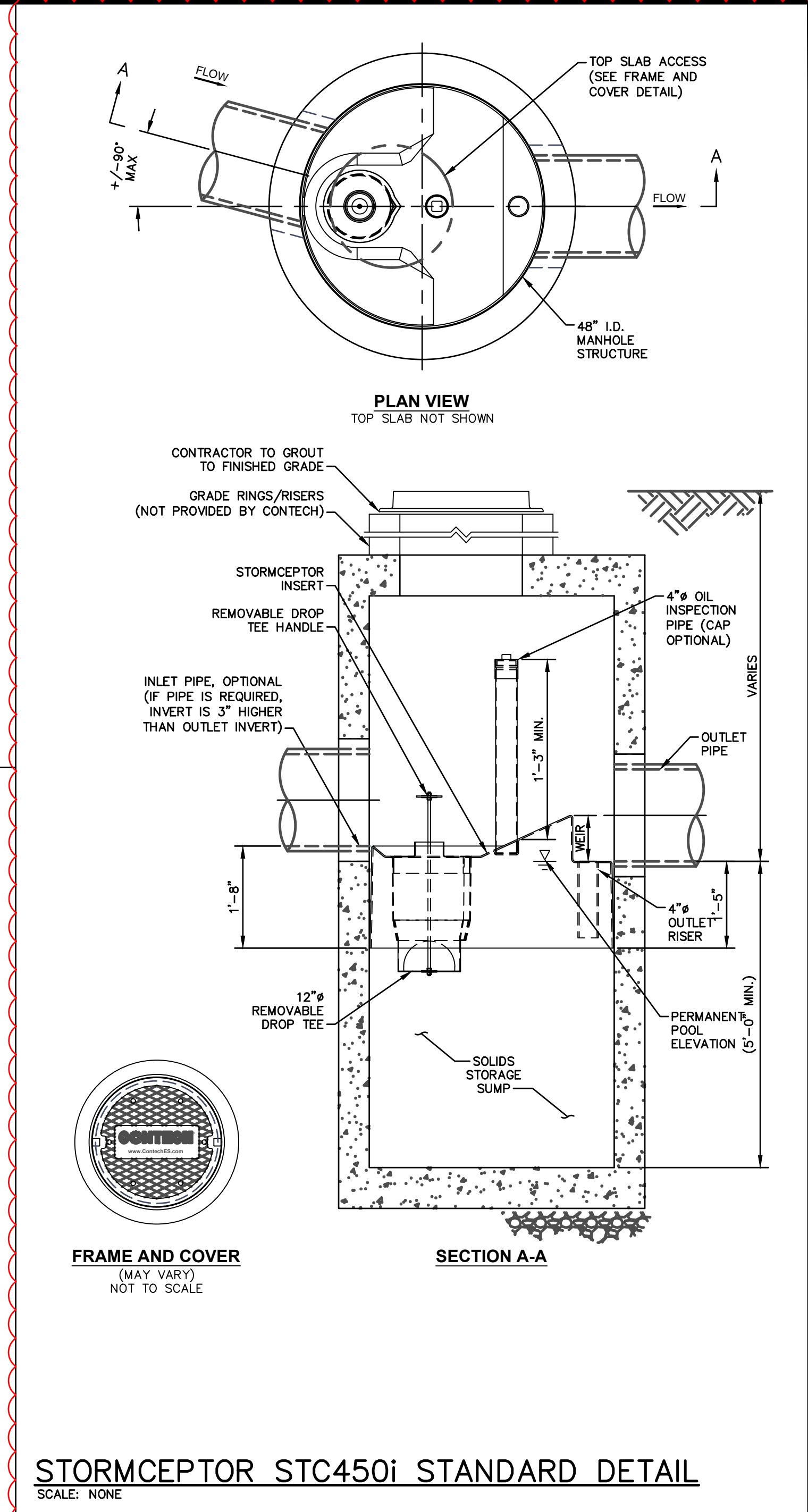
CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS	
ROADWAY PROFILE GRADE (%)	HIGH SIDE TRANSITION LENGTH ROUNDED TO THE NEAREST 4"
0 OR LOW SIDE	6'-6"
>0 - 1	7'-8"
>1 - 2	9'-0"
>2 - 3	11'-0"
>3 - 4	14'-0"
>4	15'-0" (MAX)

- NOTES:
1. SLOPE TOLERANCE FOR RAMP AND SIDEWALK CONSTRUCTION =  $\pm 0.50\%$
  2. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
  4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E. HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.

VERTICAL GRANITE CURB  
SCALE: NONE



WATER SERVICE CONNECTION  
SCALE: NONE



STORMCEPTOR STC450i STANDARD DETAIL  
SCALE: NONE

AYER COMMONS

65 FITCHBURG ROAD

IN  
AYER  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

CIVIL DETAILS IV

JUNE 14, 2022

REVISIONS:		
NO.	DATE	DESC.
1	8/15/22	TOWN COMMENTS
2	10/11/22	PLAN UPDATES

PREPARED FOR:  
NEIGHBORHOOD OF  
AFFORDABLE HOUSING  
143 BORDER STREET  
EAST BOSTON, MA

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts  
01810  
617 896 4300

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION