

Mystic Water Works at Capen Court

Client
Somerville Housing Authority

Historical Consultant
MacRostie Historic Advisors
07 Consultant Street Address
Tel: 617-499-4009
Fax: 617-499-4019

Cost Estimator
VJ Associates
06 Consultant Street Address
06 Consultant City Address
Tel: 781-444-8200
Fax: 781-444-8242

Code Consultant
R.W. Sullivan Engineering
05 Consultant Street Address
05 Consultant City Address
Tel: 617-523-8227
Fax: 617-523-8016

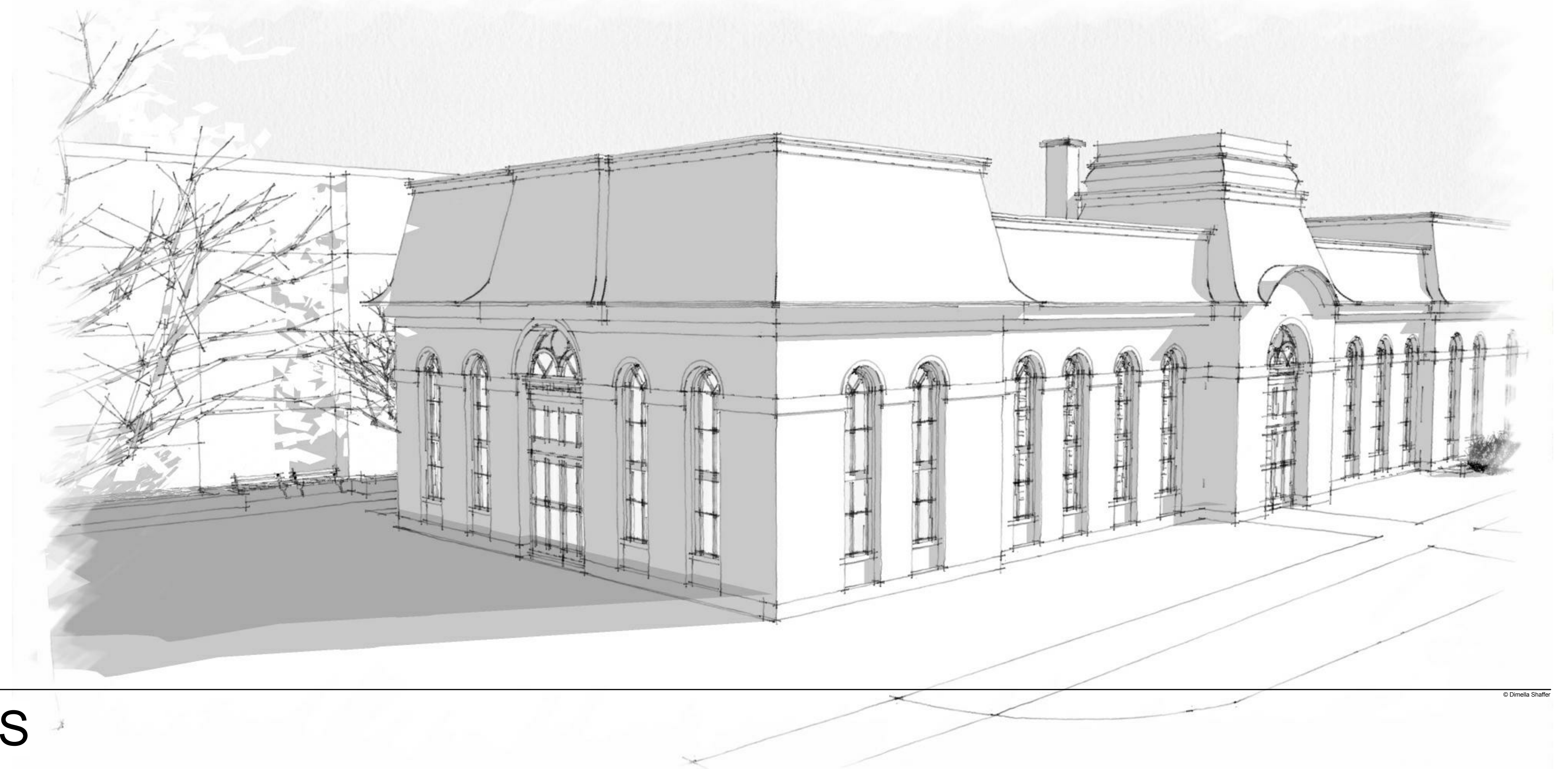
Landscape Consultant
Copley Wolff Design Group
04 Consultant Street Address
04 Consultant City Address
Tel: 617-654-9000
Fax: 617-654-9002

Civil Engineer
Nitsch Engineering
03 Consultant Street Address
03 Consultant City Address
Tel: 617-338-0063
Fax: 617-338-6472

Structural Engineer
L.A. Fuess Partners
02 Consultant Street Address
02 Consultant City Address
Tel: 617-948-5700
Fax: 617-948-5710

MEP/FP Engineer
R.W. Sullivan Engineering
01 Consultant Street Address
01 Consultant City Address
Tel: 617-523-8227
Fax: 617-523-8016

**DiMella
Shaffer**
Architecture | Interior Design | Planning
281 Summer Street Tel: 617-426-5004
Boston, MA 02210 Fax: 617-426-0046
www.dimellashaffer.com



CIVIL & LANDSCAPE DRAWINGS

COMPREHENSIVE PERMIT SUBMISSION SET

NOVEMBER 18, 2011

Client Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

Scale:

Drawn By: Author	Checked By: Checker	Reviewed By:
----------------------------	-------------------------------	---------------------

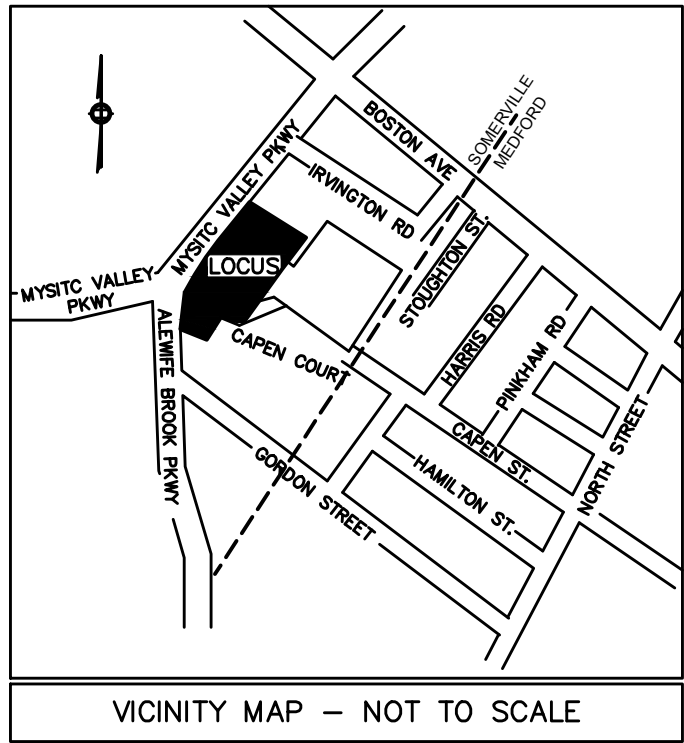
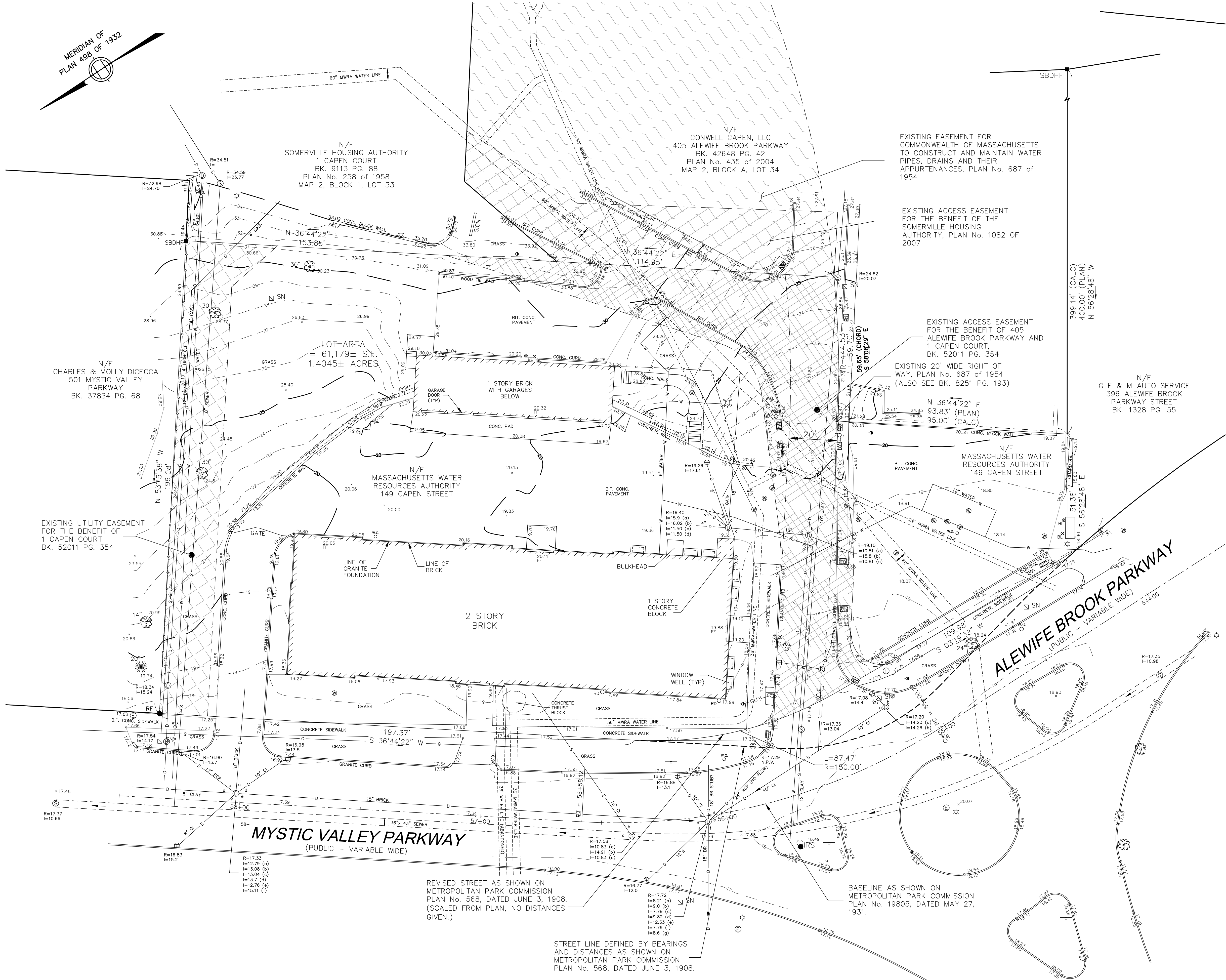
Project No. 2010080.00

Mystic Water
Works at Capen
Court

Capen St.
Somerville, MA 02144

DRAWING LIST - CIVIL
AND LANDSCAPE

CIVIL AND LANDSCAPE DRAWINGS	
Sheet Number	Sheet Name
0.1	DRAWING LIST - CIVIL AND LANDSCAPE
C1.00	EXISTING CONDITIONS PLAN
L1.00	SITE MATERIALS PLAN
L2.00	CONCEPTUAL GRADING PLAN
L3.00	LANDSCAPE PLAN
L4.00	DETAILS
L5.00	DETAILS
C1.01	EROSION AND SEDIMENTATION CONTROL PLAN
C1.02	EROSION AND SEDIMENTATION CONTROL DETAILS
C1.03	SITE DEMOLITION PLAN
C2.01	SITE UTILITY PLAN
C3.01	SITE UTILITY DETAILS
C3.02	SITE UTILITY DETAILS
C3.03	SITE UTILITY DETAILS



LEGEND	
—○—	CHAIN LINK FENCE
—S—	SANITARY SEWER
—CS—	COMBINED SEWER & DRAIN
—D—	DRAIN LINE
—W—	WATER LINE
—E—	ELECTRIC LINE
—G—	GAS LINE
⊙	SANITARY SEWER MANHOLE
⊙	DRAIN MANHOLE
⊙	UNKNOWN MANHOLE
⊙	ELECTRIC MANHOLE
⊙	LIGHT POLE
⊙	FIRE HYDRANT
⊙	UTILITY POLE
⊙	GUY WIRE
⊙	WATER GATE
⊙	GAS GATE
⊙	DECIDUOUS TREE
⊙	CONIFEROUS TREE
⊙	DETECTABLE WARNING PANEL
⊙	SPOT ELEVATION

NOTES

LOCATION OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE AS LOCATED BY FIELD SURVEY, PLANS OF RECORD, INFORMATION FURNISHED BY THE RESPECTIVE UTILITY COMPANIES, AND OTHER AVAILABLE SOURCES IN POSSESSION OF DESIGN CONSULTANTS INC. AS OF THIS DATE. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION OF ALL UTILITIES WHICH MAY EXIST AT THIS TIME WITHIN THE PREMISES SURVEYED.

THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY TO DEPICT THE PROPERTY LINES AND THE EXISTING CONDITIONS FOR DESIGN PURPOSES, AND WAS PERFORMED BETWEEN FEBRUARY 7, 2008 AND JUNE 22, 2011, BY DESIGN CONSULTANTS, INC. (DCI).

THE CITY OF SOMERVILLE MUNICIPAL UTILITIES (WATER, SEWER & DRAIN) ARE NOT PART OF DIG-SAFE. CONTACT THE CITY OF SOMERVILLE FOR THE MARKING OF SOMERVILLE MUNICIPAL UTILITIES. CONTACT DIG-SAFE AT 1-888-344-7233 OR 1-800-322-4844 AT LEAST 72 HOURS PRIOR TO EXCAVATION.

OWNERSHIP INFORMATION USED IN THE PREPARATION OF THIS PLAN WAS OBTAINED FROM THE CITY OF SOMERVILLE ASSESSOR'S OFFICE.

TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THIS PLAN CONFORMS TO THE TECHNICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.

P.L.S. EVERETT J. CHANDLER, P.L.S. MASS. REGISTRATION NO. 41783

DATE:

LOCUS TITLE INFORMATION

OWNER: COMMONWEALTH OF MASSACHUSETTS

DEED REFERENCE:

PLAN REFERENCE: PLAN No. 258 of 1958

ADDRESS: 149 CAPEN STREET

ASSESSORS: MAP 2, BLOCK A, LOT 31

DiMella Shaffer

Architecture | Interior Design | Planning

281 Summer Street
Boston, MA 022

Tel 617.426.5004
Fax 617.426.0046

Client Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

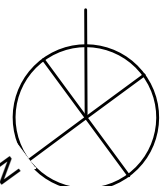
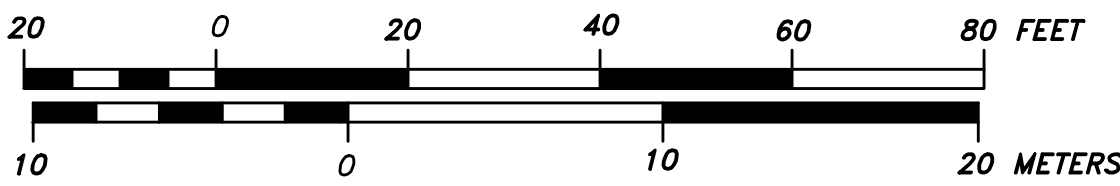
Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date
Scale: 1"=20'	March 5, 2011

Drawn By: Checked By: Reviewed By:

Project No. 2010080.00

Mystic Water Works at Capen Court

EXISTING CONDITIONS PLAN



C100

Client	Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer	L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer	Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant	Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator	VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant	MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

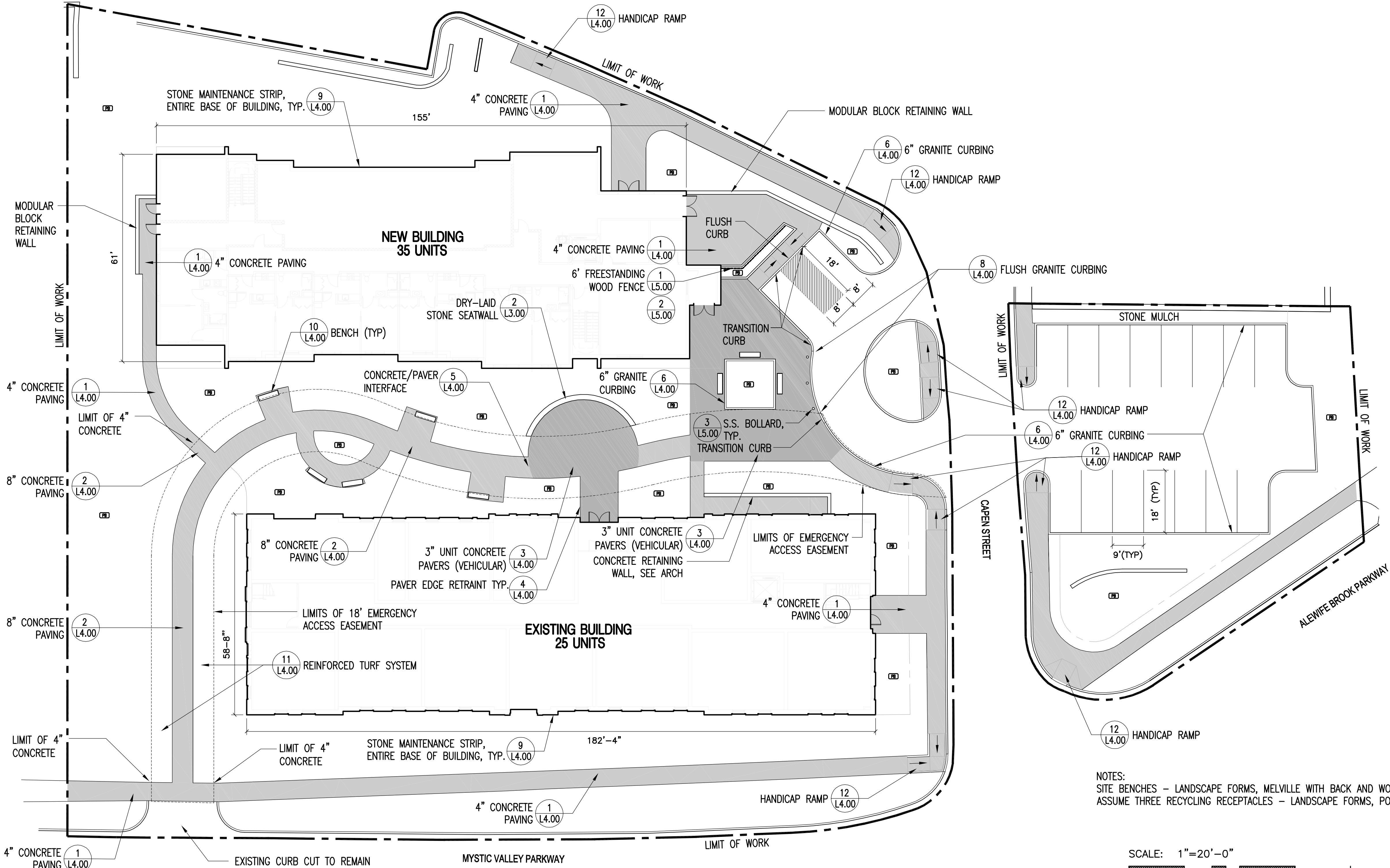
Scale:		
Drawn By:	Checked By:	Reviewed By:
Author	Checker	

Project No. 2010080.00

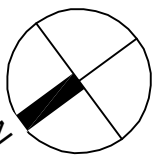
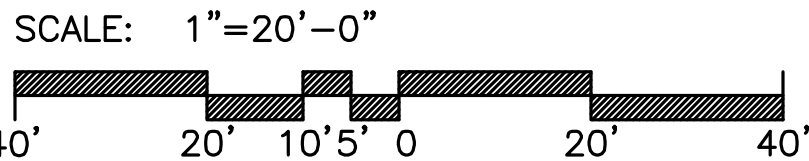
Mystic Water
Works at Capen
Court

Capen St.
Somerville, MA 02144

Site Materials Plan



1 MATERIALS PLAN
SCALE: 1"=16'-0"



L1.00

Client	Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer	L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer	Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant	Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator	VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant	MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

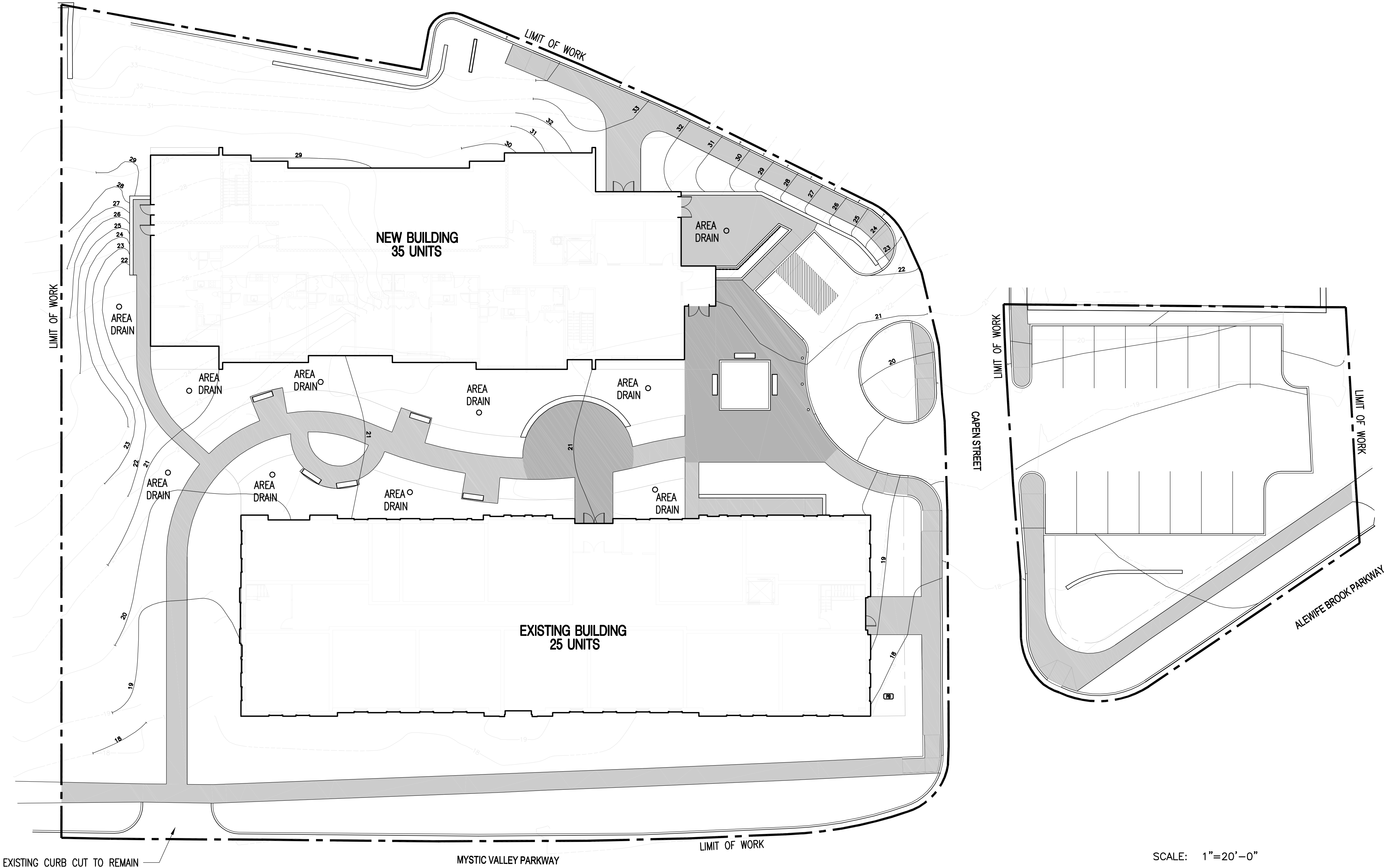
Scale:		
Drawn By:	Checked By:	Reviewed By:
Author	Checker	

Project No. 2010080.00

Mystic Water
Works at Capen
Court

Capen St.
Somerville, MA 02144

Conceptual Grading
Plann



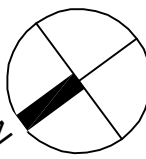
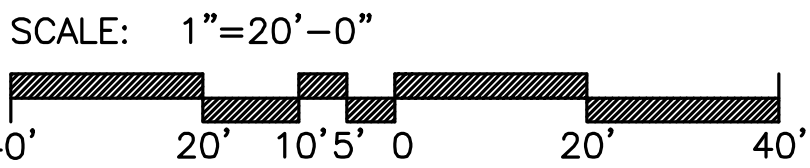
EXISTING CURB CUT TO REMAIN

MYSTIC VALLEY PARKWAY

LIMIT OF WORK

CAPEN STREET

ALEWIFE BROOK PARKWAY



Architecture | Interior Design | Planning

Tel
617.426.5004
Fax
617.426.0046

Historical Consultant Tel: 617-499-4009
MacRostie Historic Advisors Fax: 617-499-4019

[illegible]

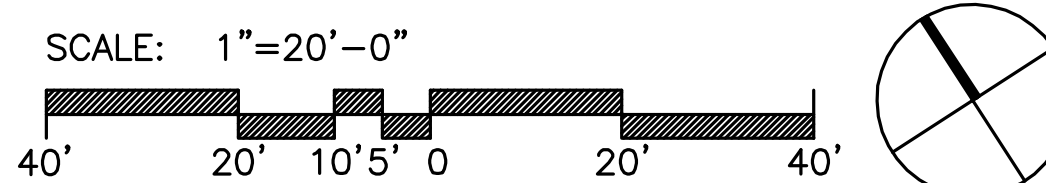
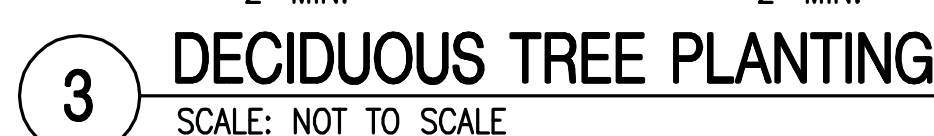
Scale:

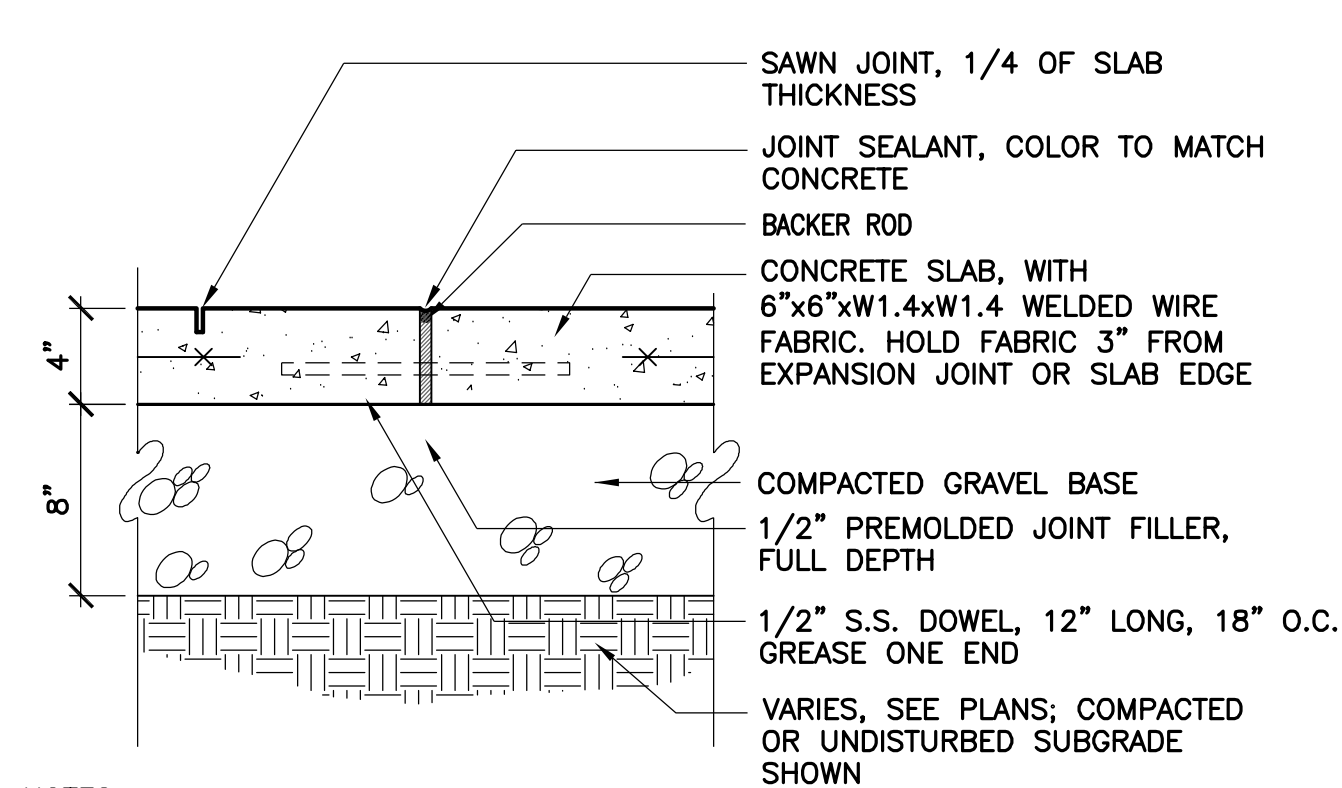
Project No. 2010080.00

Capen St.
Somerville, MA 02144

L3.00

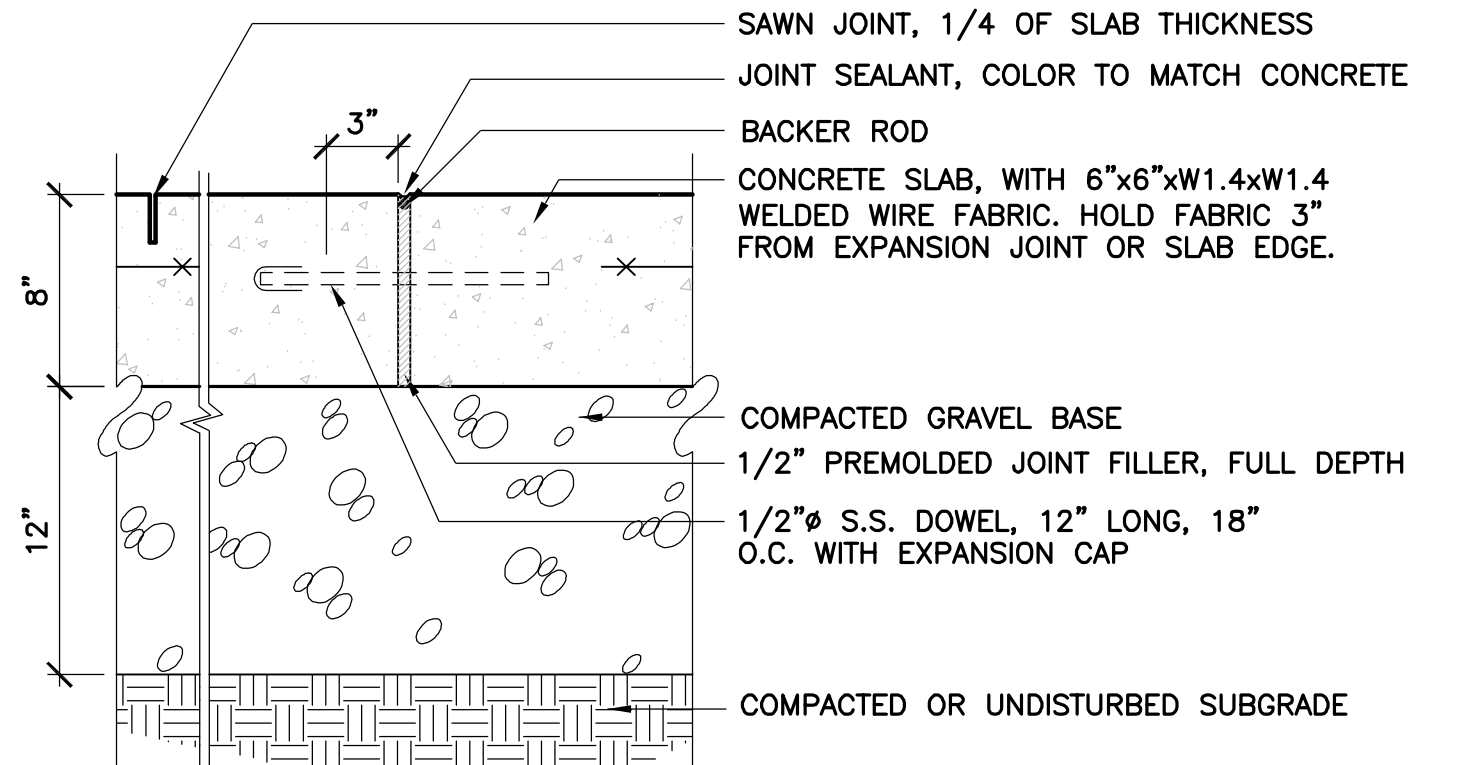
LAWN - SOD





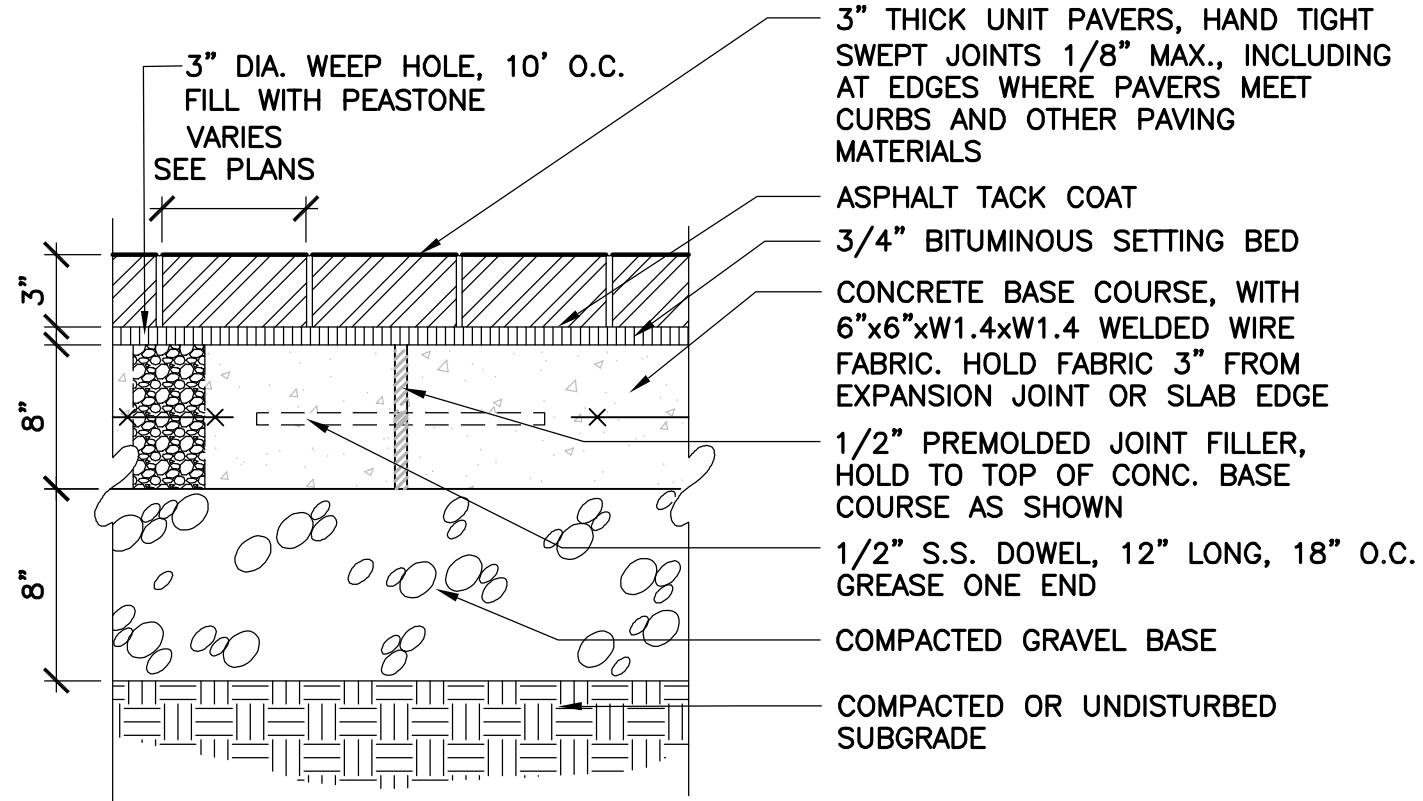
NOTES:
1. CONTROL JOINTS EVERY 5' UNLESS OTHERWISE SHOWN ON PLAN
2. EXPANSION JOINTS EVERY 20' UNLESS OTHERWISE SHOWN ON PLAN
3. PROVIDE 10" THICKENED EDGE AT PLANTING BEDS, 6" WIDTH

1 4" CONCRETE PAVEMENT
SCALE: 1-1/2"=1'-0"

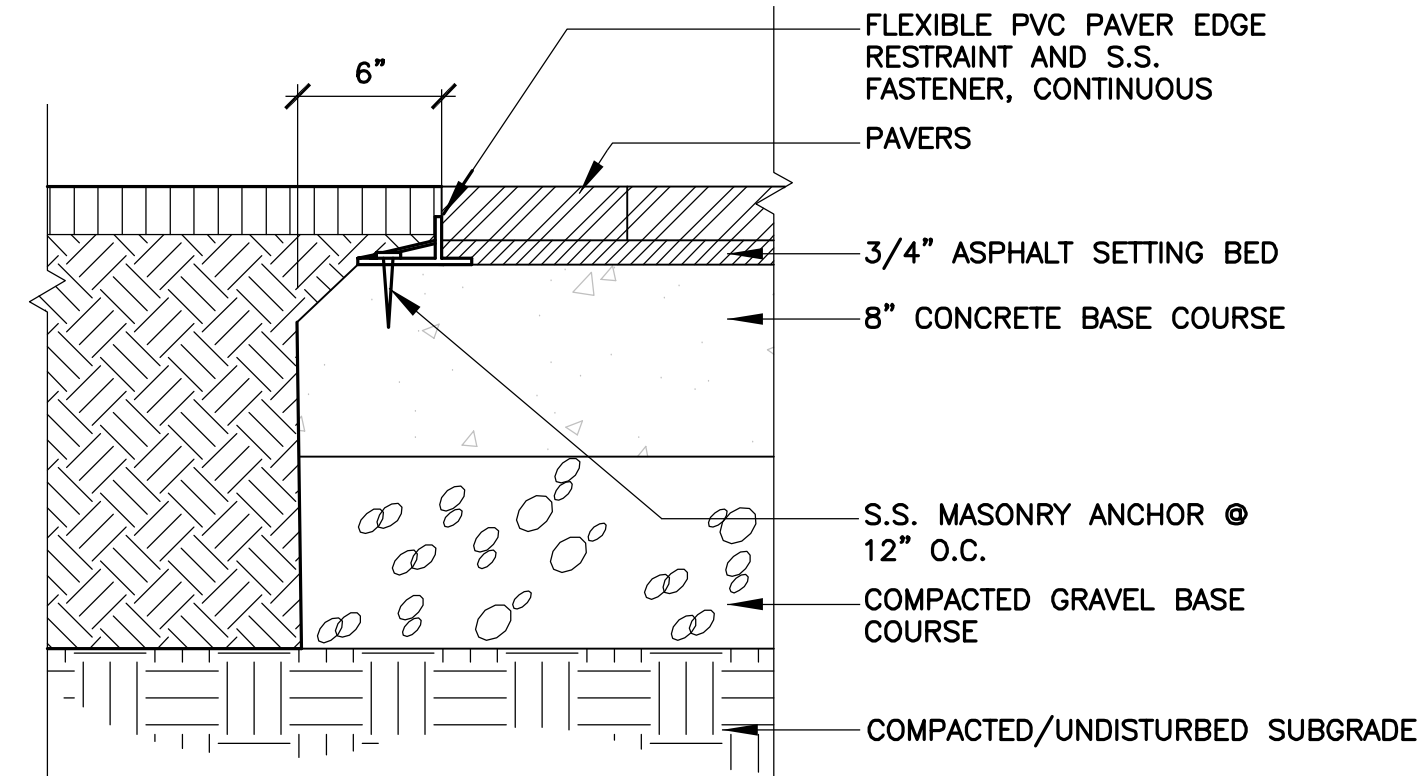


NOTE:
1. CONTROL JOINTS EVERY 5' O.C. UNLESS OTHERWISE SHOWN ON PLAN.
2. EXPANSION JOINTS EVERY 20' O.C. UNLESS OTHERWISE SHOWN ON PLAN.
3. PROVIDE 12" THICKENED EDGE AT JOINT WITH BITUMINOUS OR PLANTING BEDS, 6" WIDE

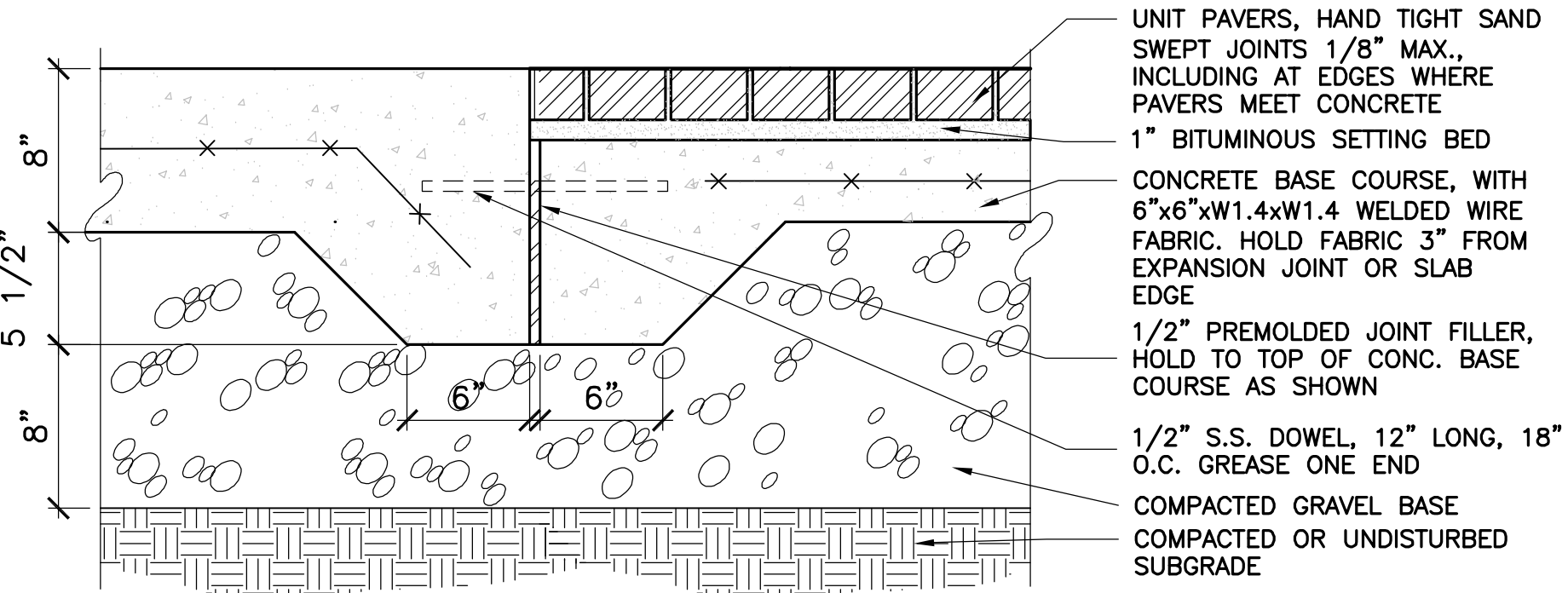
2 8" CONCRETE PAVEMENT
SCALE: 1-1/2"=1'-0"



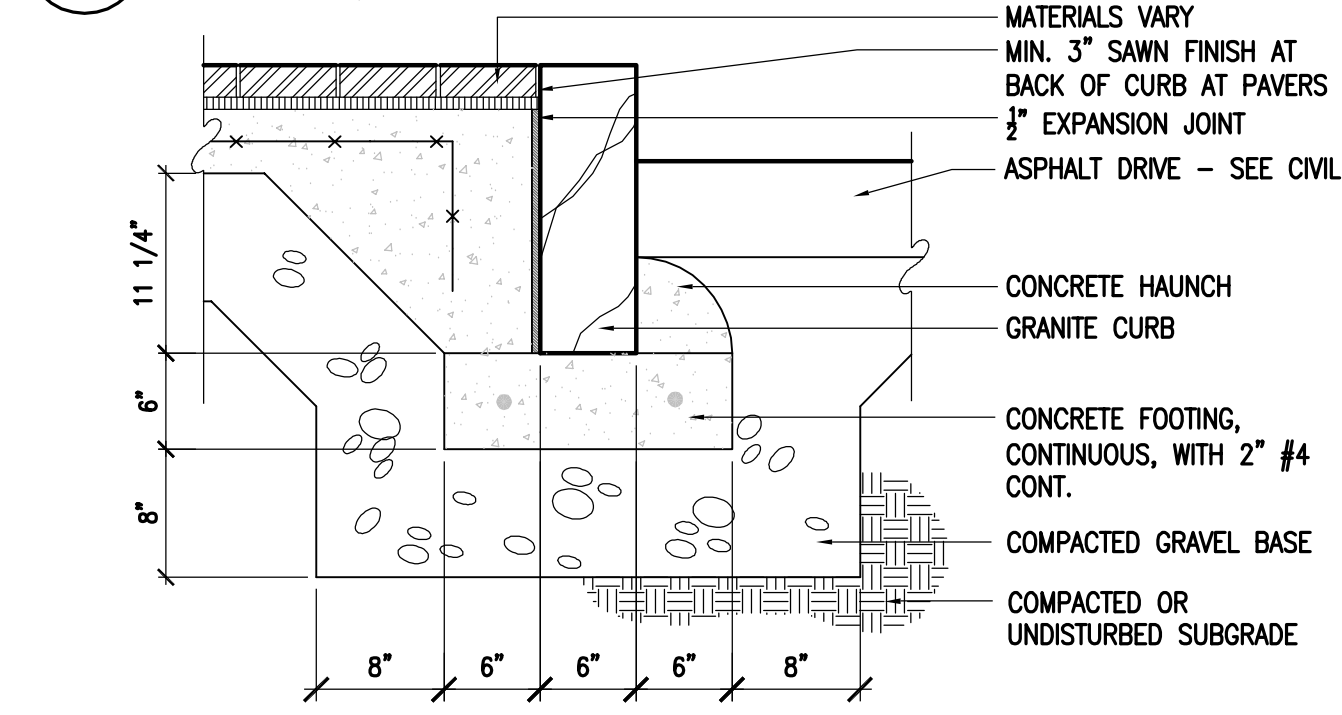
3 3" UNIT CONCRETE PAVERS (VEHICULAR)
SCALE: 1-1/2"=1'-0"



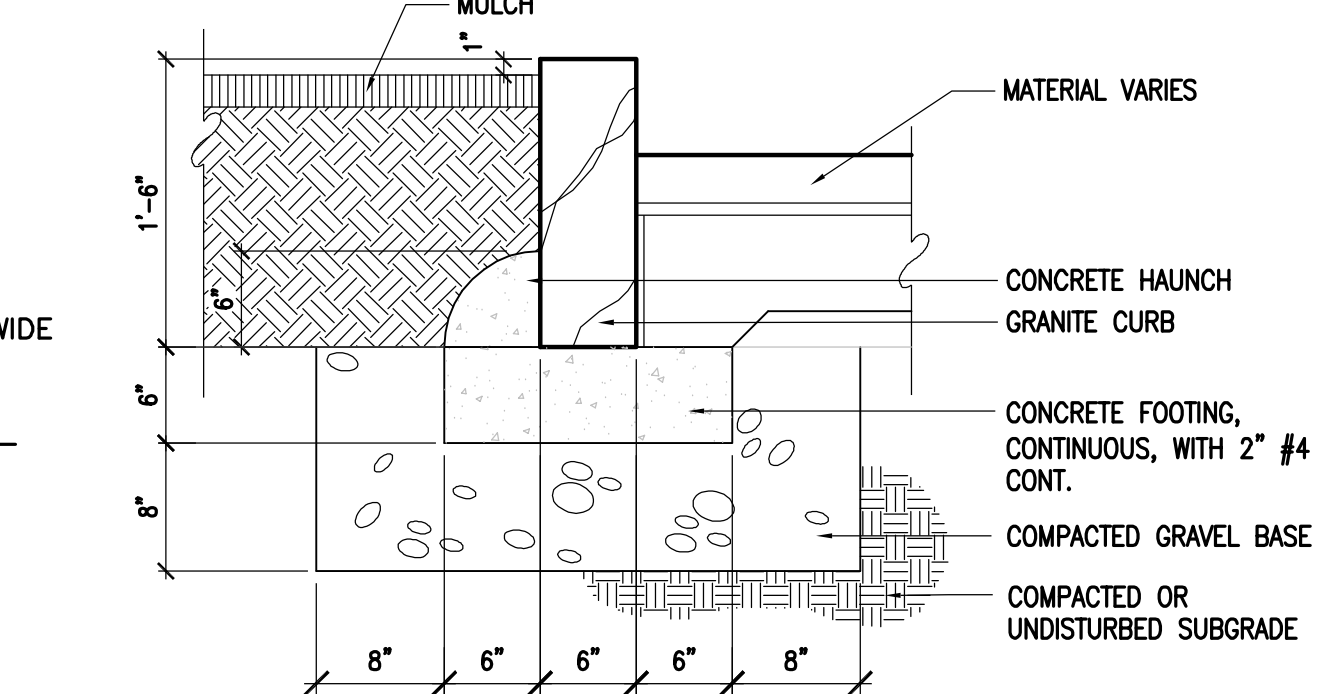
4 EDGE RESTRAINT AT UNIT PAVERS
SCALE: 1-1/2"=1'-0"



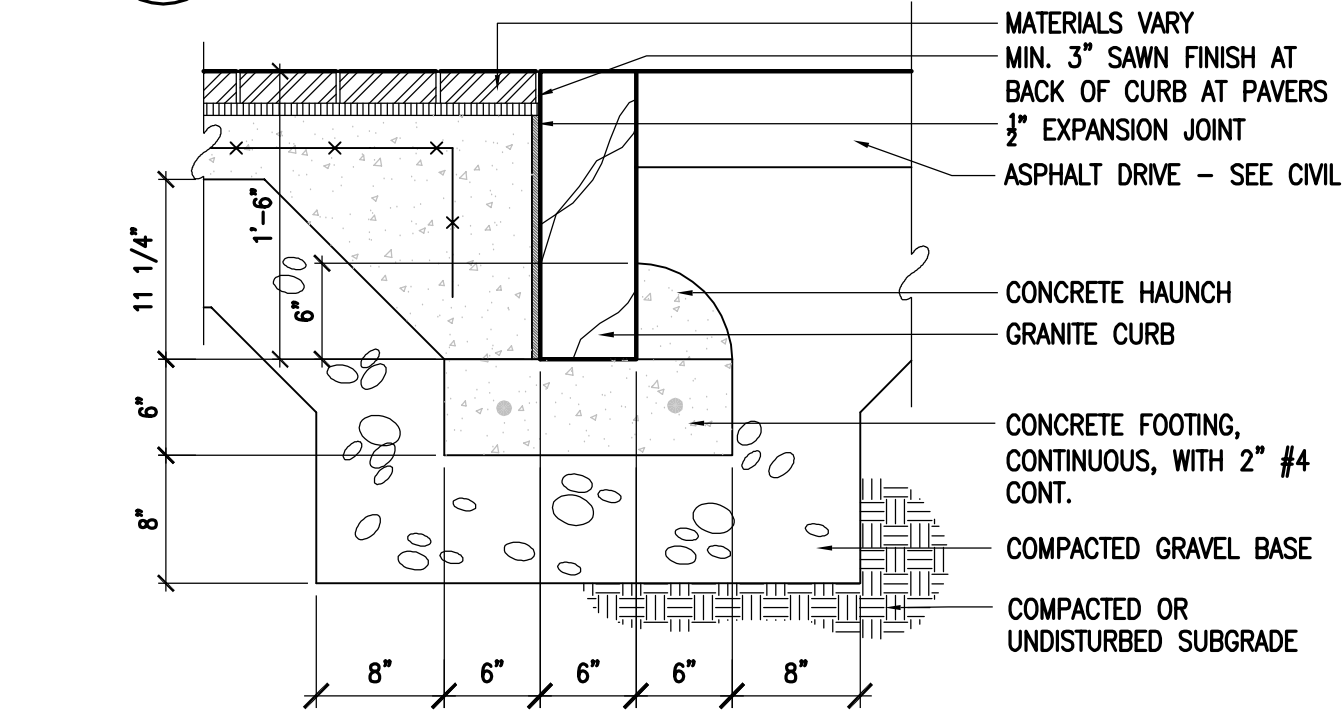
5 UNIT PAVER AT CONCRETE
SCALE: 1-1/2"=1'-0"



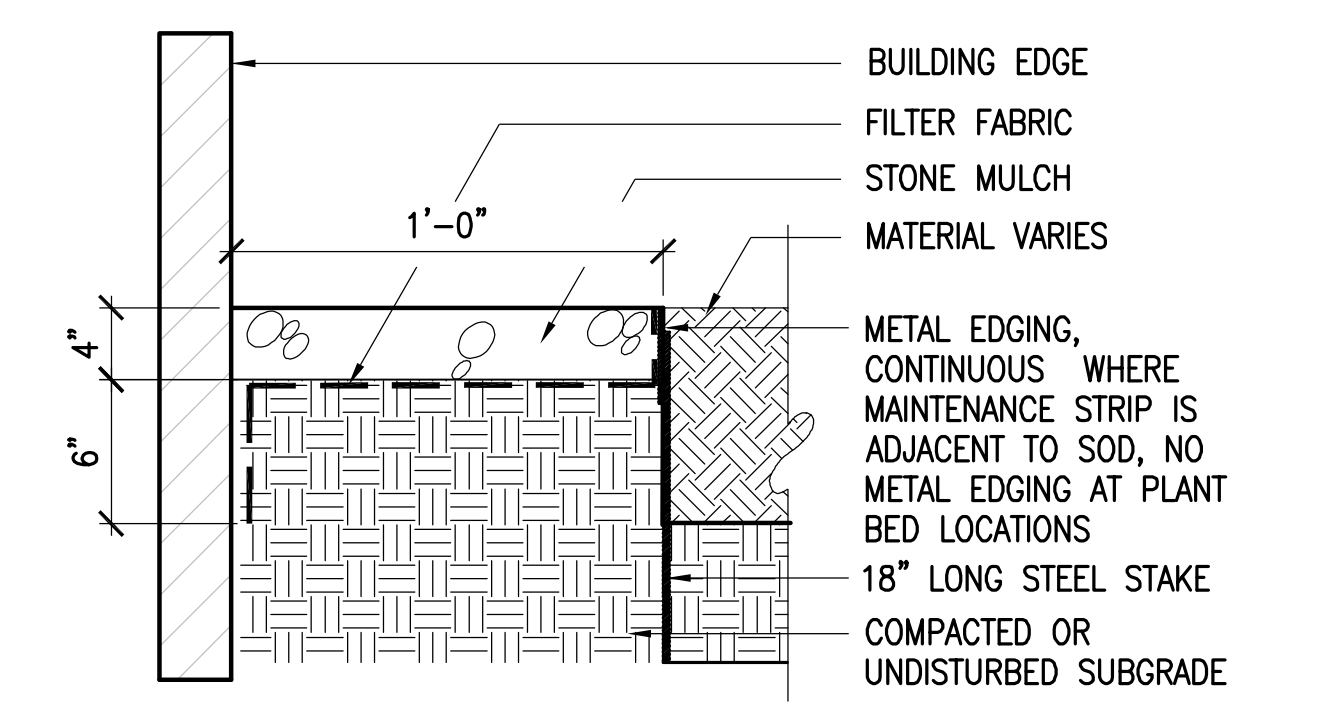
6 VERTICAL GRANITE CURB
SCALE: 1"=1'-0"



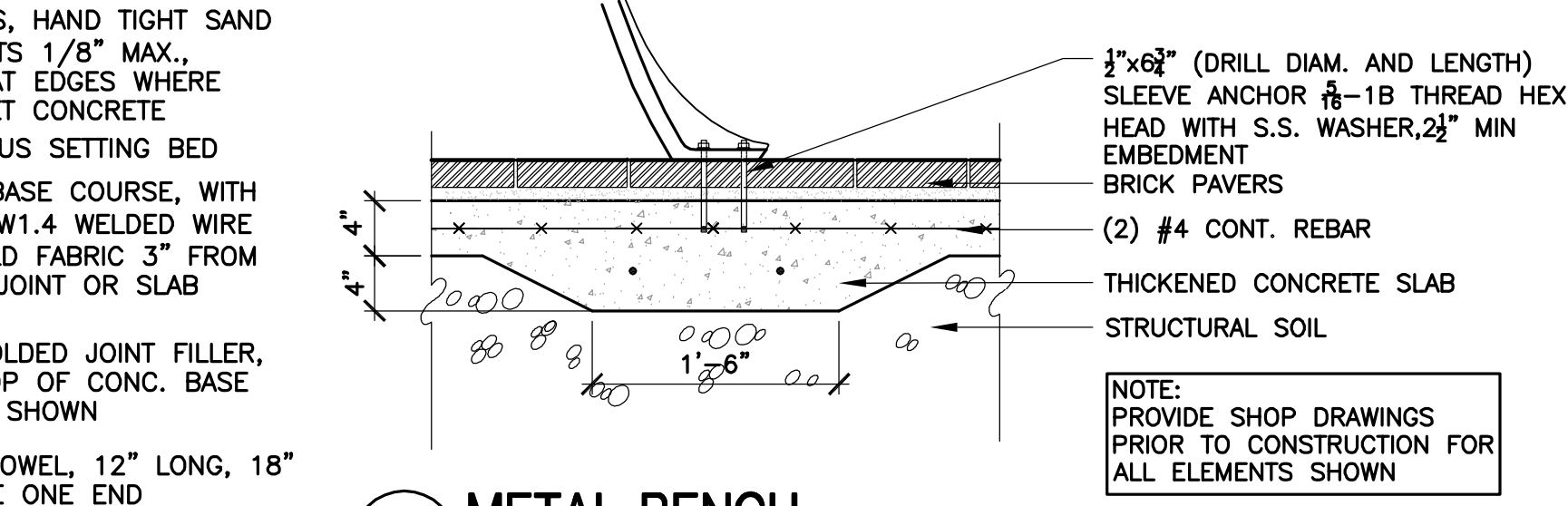
7 GRANITE PLANTER CURB
SCALE: 1"=1'-0"



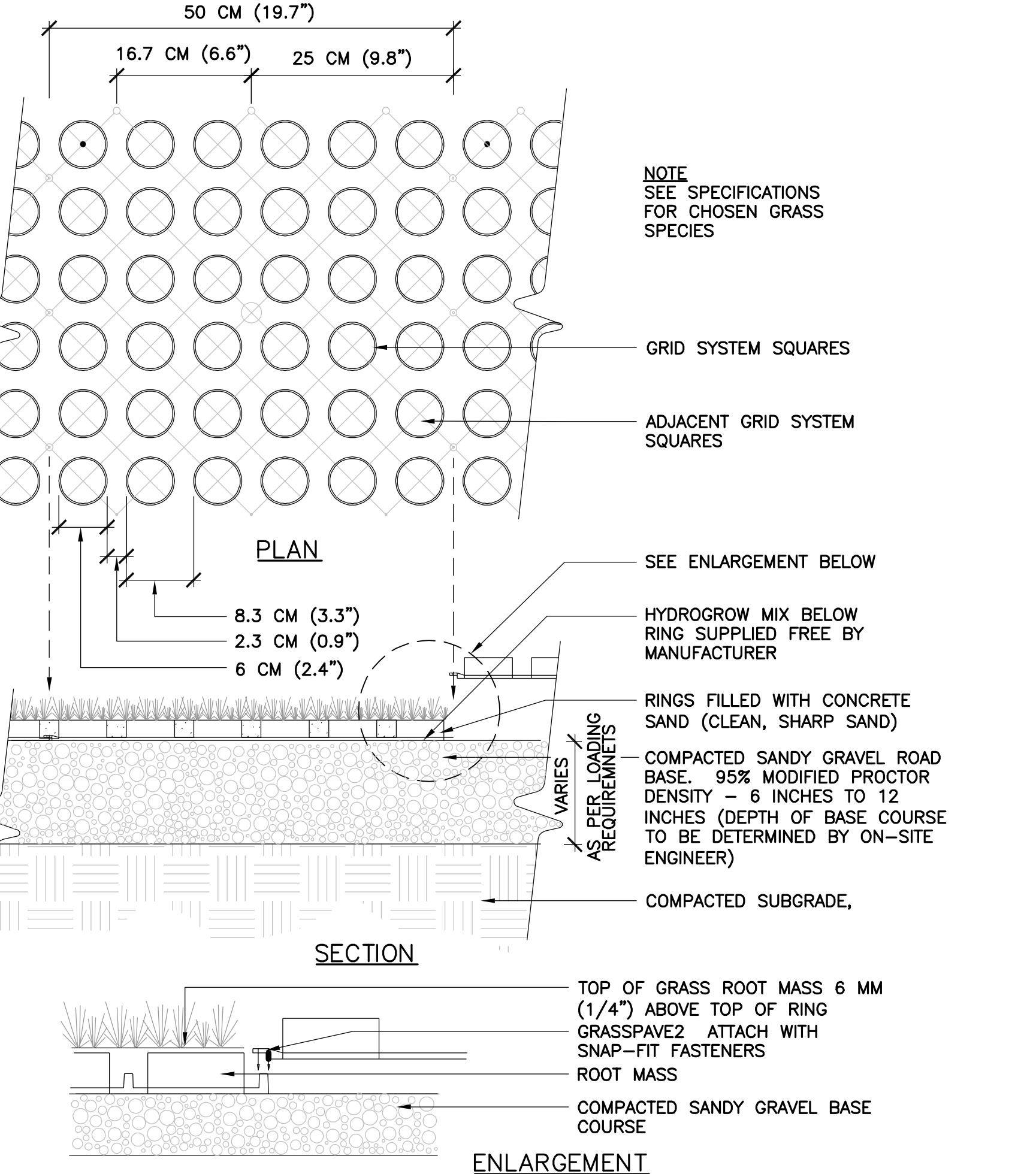
8 FLUSH GRANITE CURB
SCALE: 1"=1'-0"



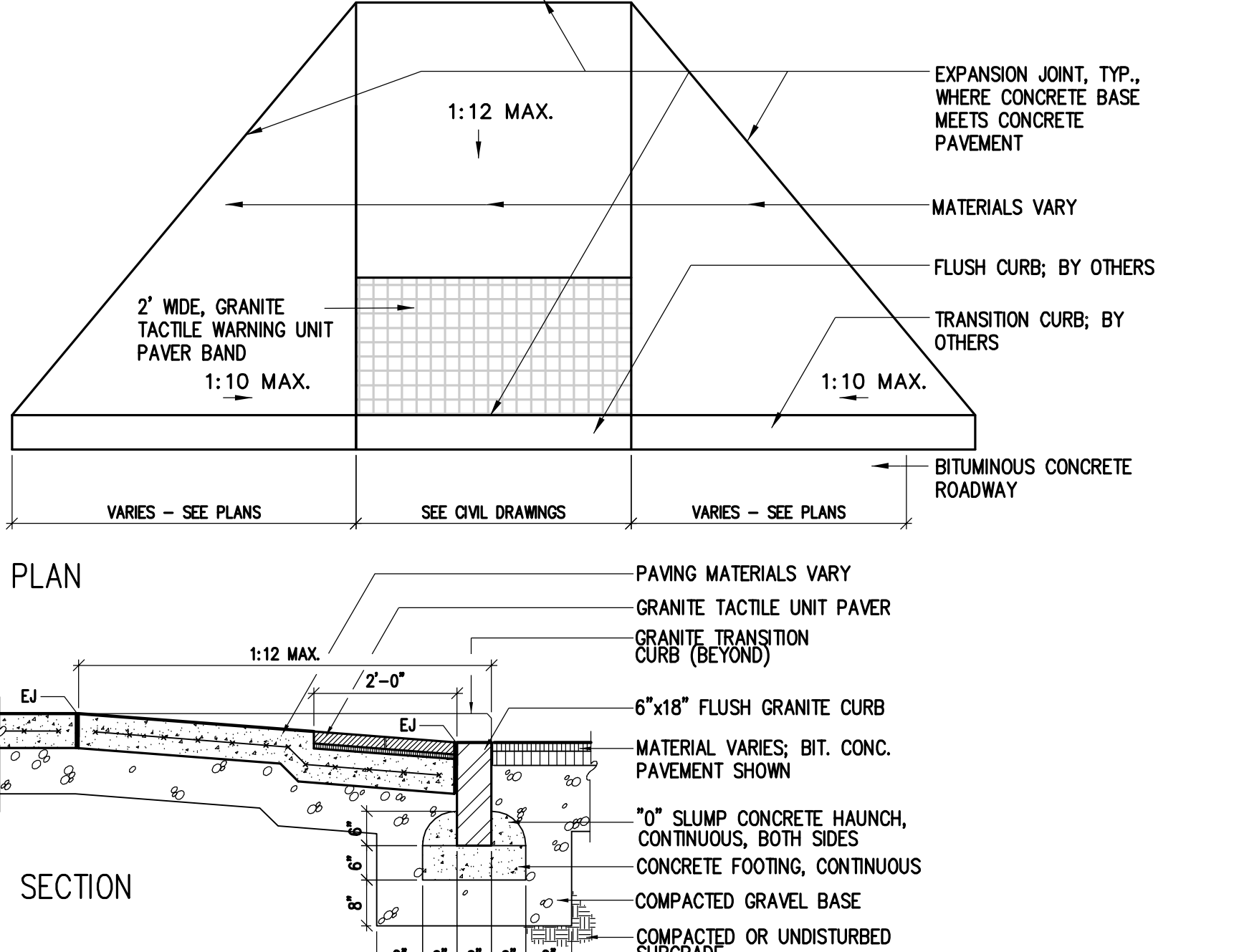
9 STONE MAINTENANCE STRIP
SCALE: 1-1/2"=1'-0"



10 METAL BENCH
SCALE: 1"=1'-0"



11 REINFORCED TURF SYSTEM
SCALE: 1-1/2"=1'-0"



12 HANDICAP RAMP
SCALE: 1/2"=1'-0"

Client	Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer	L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer	Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant	Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator	VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant	MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

Drawn By:	Checked By:	Reviewed By:
Author	Checker	

Project No. 2010080.00

Mystic Water Works at Capen Court

Capen St.
Somerville, MA 02144

DETAILS

Client	Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer	L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer	Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant	Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant	R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator	VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant	MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

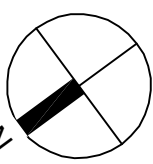
Scale:		
Drawn By:	Checked By:	Reviewed By:
Author	Checker	

Project No. 2010080.00

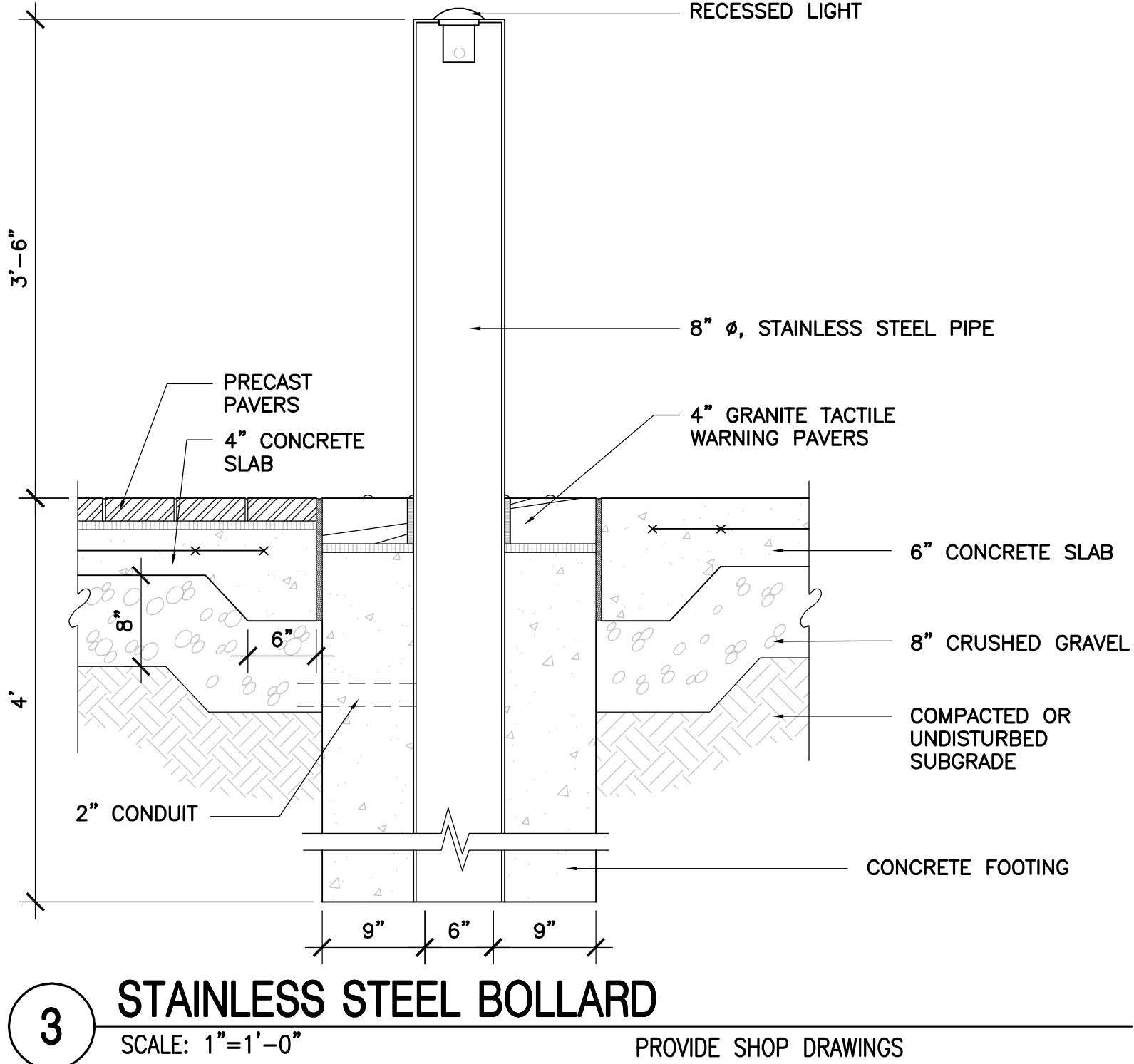
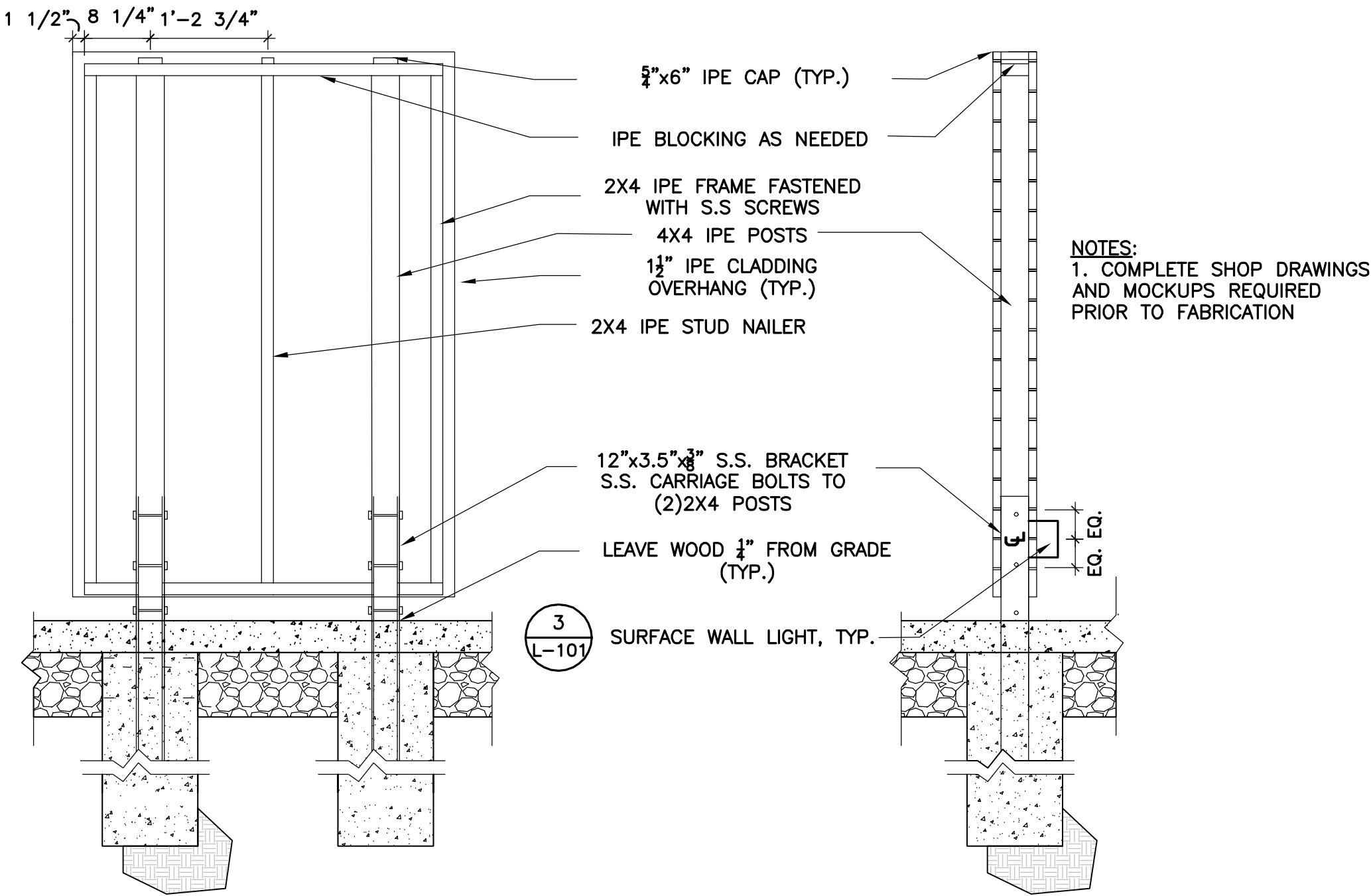
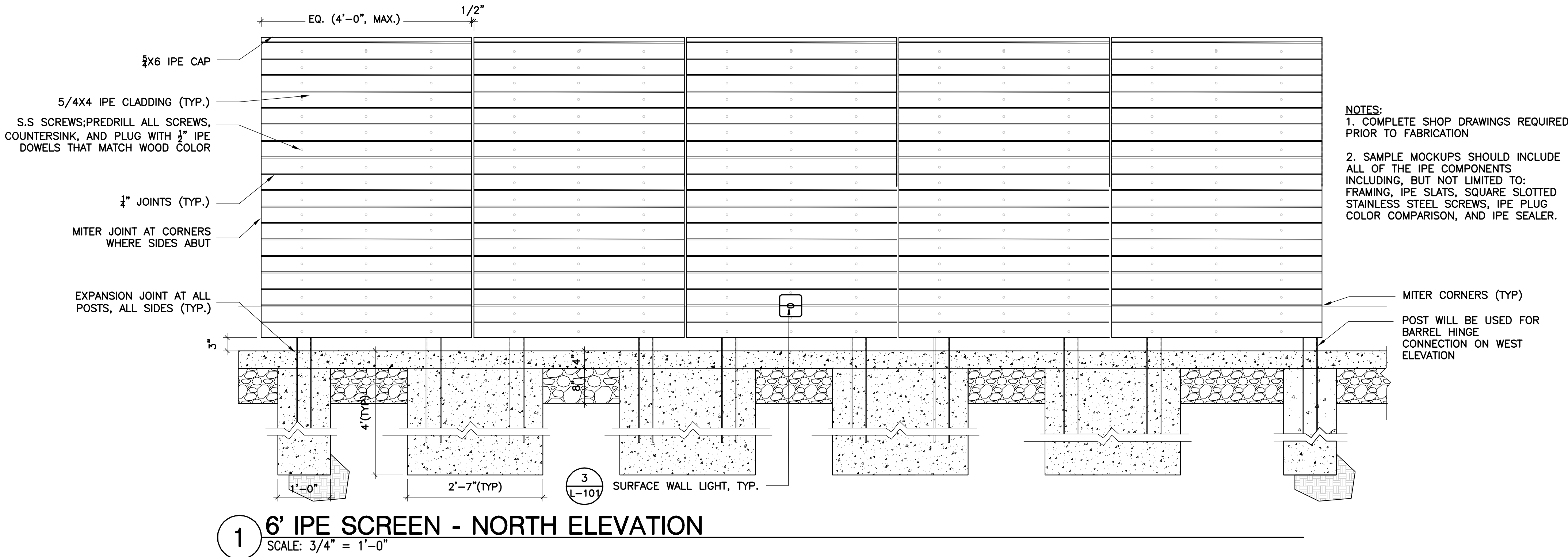
Mystic Water
Works at Capen
Court

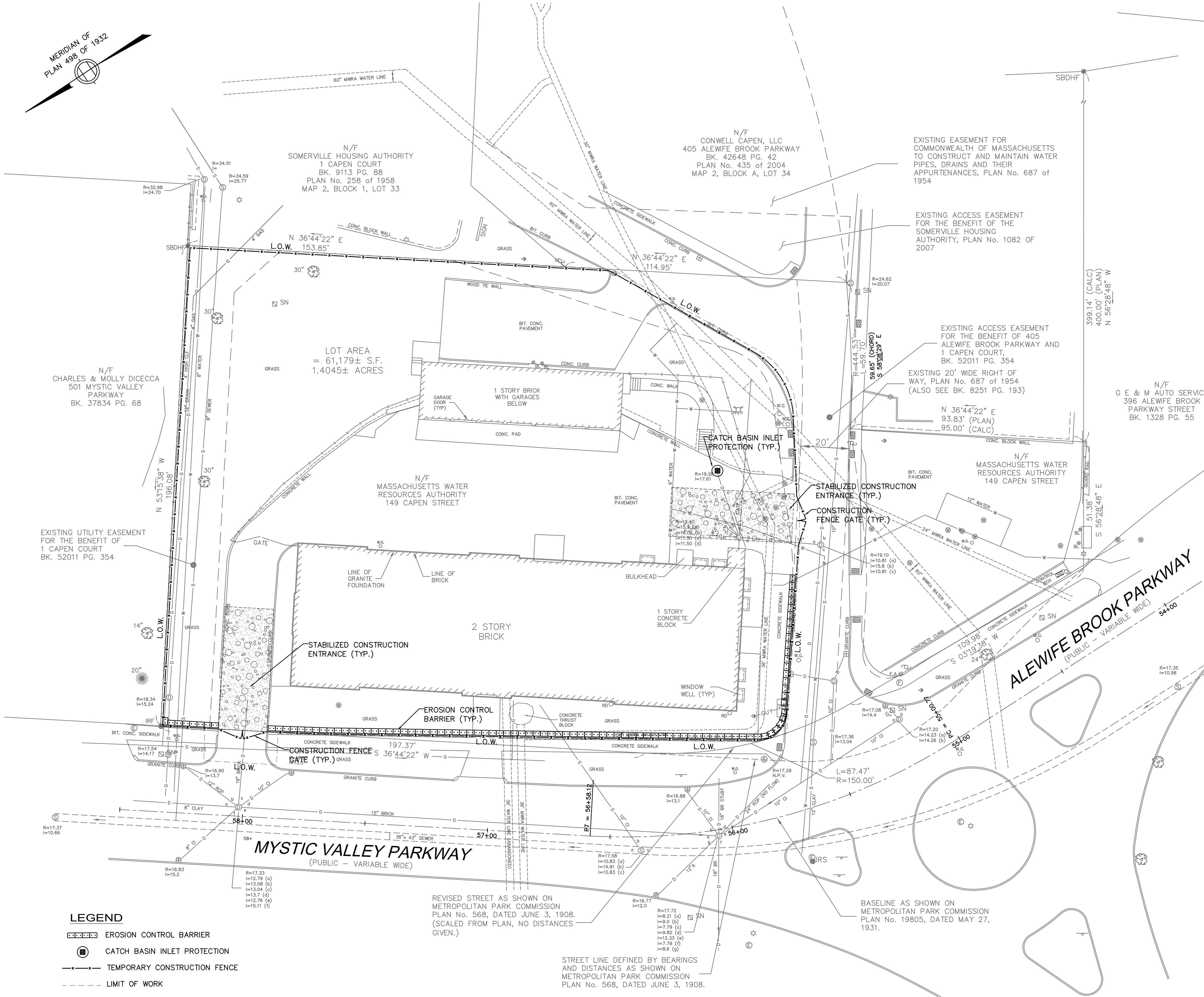
Capen St.
Somerville, MA 02144

Details



L5.00





SEDIMENTATION AND EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH PUBLISHED EROSION CONTROL AND SEDIMENT GUIDELINES FOR MASSACHUSETTS (SEE REFERENCE BELOW, NOTE #6).
2. SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF AND DURING ALL PHASES OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO AND IMMEDIATELY AFTER ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE BALANCE OF THE SITE.
3. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE THAT THE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE LIMIT OF WORK. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
4. ALL POINTS OF CONSTRUCTION INGRESS OR EGRESS WILL BE PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC WAYS.
5. ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAINAGE SYSTEM (I.E. THROUGH THE USE OF HAY BALES, CATCH BASIN SEDIMENT TRAPS, GRAVEL, BOARDS OR OTHER APPLICABLE METHODS).
6. THE CONTRACTOR INSTALLING THE ABOVE SHALL OBTAIN AND FOLLOW THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" PREPARED BY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION, DATED MAY 1997, REPRINTED MAY 2003.
7. ALL DRAINAGE SWALES AND GROUND SURFACES WITHIN THE LIMIT OF WORK SHALL BE PROTECTED.
8. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
9. ALL STOCK PILES SHALL BE PROTECTED AND LOCATED AWAY FROM EXISTING WATER BODIES & WITHIN THE LIMIT OF WORK.
10. ANY SEDIMENT TRACKED ONTO PAVED AREAS SHALL BE SWEEP AT THE END OF EACH WORKING DAY.
11. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFF-SITE.
12. ALL TOPSOIL ENCOUNTERED WITHIN THE WORK AREA SHALL BE STRIPPED TO ITS FULL DEPTH AND STOCKPILED FOR REUSE. EXCESS TOPSOIL SHALL BECOME THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AS DIRECTED BY THE OWNER. TOPSOIL PILES SHALL REMAIN SEGREGATED FROM EXCAVATED SUBSURFACE SOIL MATERIALS.
13. TEMPORARY DIVERSION DITCHES, PERMANENT DITCHES, CHANNELS, EMBANKMENTS AND ANY DENUDED SURFACE WHICH WILL BE EXPOSED FOR A PERIOD OF ONE MONTH OR MORE SHALL BE CONSIDERED CRITICAL VEGETATION AREAS. THESE AREAS SHALL BE MULCHED WITH STRAW. MULCH SHALL BE SPREAD UNIFORMLY IN A CONTINUOUS BLANKET OF SUFFICIENT THICKNESS TO COMPLETELY HIDE THE SOIL FROM VIEW.
14. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS INDICATED IN THE PLAN PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION OPERATIONS.
15. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION AND SEDIMENT CONTROLS AT THE COMPLETION OF SITE CONSTRUCTION.
16. MEANS OF EROSION AND SEDIMENT PROTECTION AS NOTED ON THE DRAWINGS INDICATE THE MINIMUM PROVISIONS NECESSARY. ADDITIONAL MEANS OF PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED FOR CONTINUED OR UNFORESEEN EROSION PROBLEMS, AT NO ADDITIONAL EXPENSE TO THE OWNER.
17. THE CONTRACTOR SHALL USE TEMPORARY SEEDING, MULCHING OR OTHER APPROVED STABILIZATION MEASURES TO PROTECT EXPOSED AREAS DURING PROLONGED CONSTRUCTION OR OTHER LAND DISTURBANCE. STOCKPILES THAT WILL BE EXPOSED FOR LONGER THAN 15 DAYS SHALL BE SEEDDED WITH AN ANNUAL RYE.
18. ALL STOCKPILED MATERIALS SHALL BE LOCATED AT LEAST 100- FEET FROM THE WETLANDS/RIVERFRONT. EXCESS EXCAVATED MATERIALS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF WITHIN 20 DAYS AFTER EXCAVATION.

DiMella Shaffer

Architecture | Interior Design | Planning

281 Summer Street
Boston, MA 022

Tel 617.426.5004
Fax 617.426.0046

Client
Somerville Housing Authority

Tel: 617-625-1125

MEP/FP Engineer
R.W. Sullivan Engineering

Tel: 617-523-8227
Fax: 617-523-8016

Structural Engineer
L.A. Fuess Partners

Tel: 617-948-5700
Fax: 617-948-5710

Civil Engineer
Nitsch Engineering

Tel: 617-338-0063
Fax: 617-338-6472

Landscape Consultant
Copley Wolff Design Group

Tel: 617-654-9000
Fax: 617-654-9002

Code Consultant
R.W. Sullivan Engineering

Tel: 617-523-8227
Fax: 617-523-8016

Cost Estimator
VJ Associates

Tel: 781-444-8200
Fax: 781-444-8242

Historical Consultant
MacRostie Historic Advisors

Tel: 617-499-4009
Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

Scale: 1"=20'

Drawn By: OMW

Checked By: AD

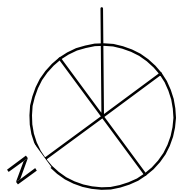
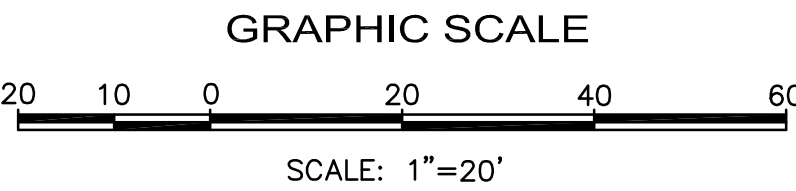
Reviewed By:

Project No. 2010080.00

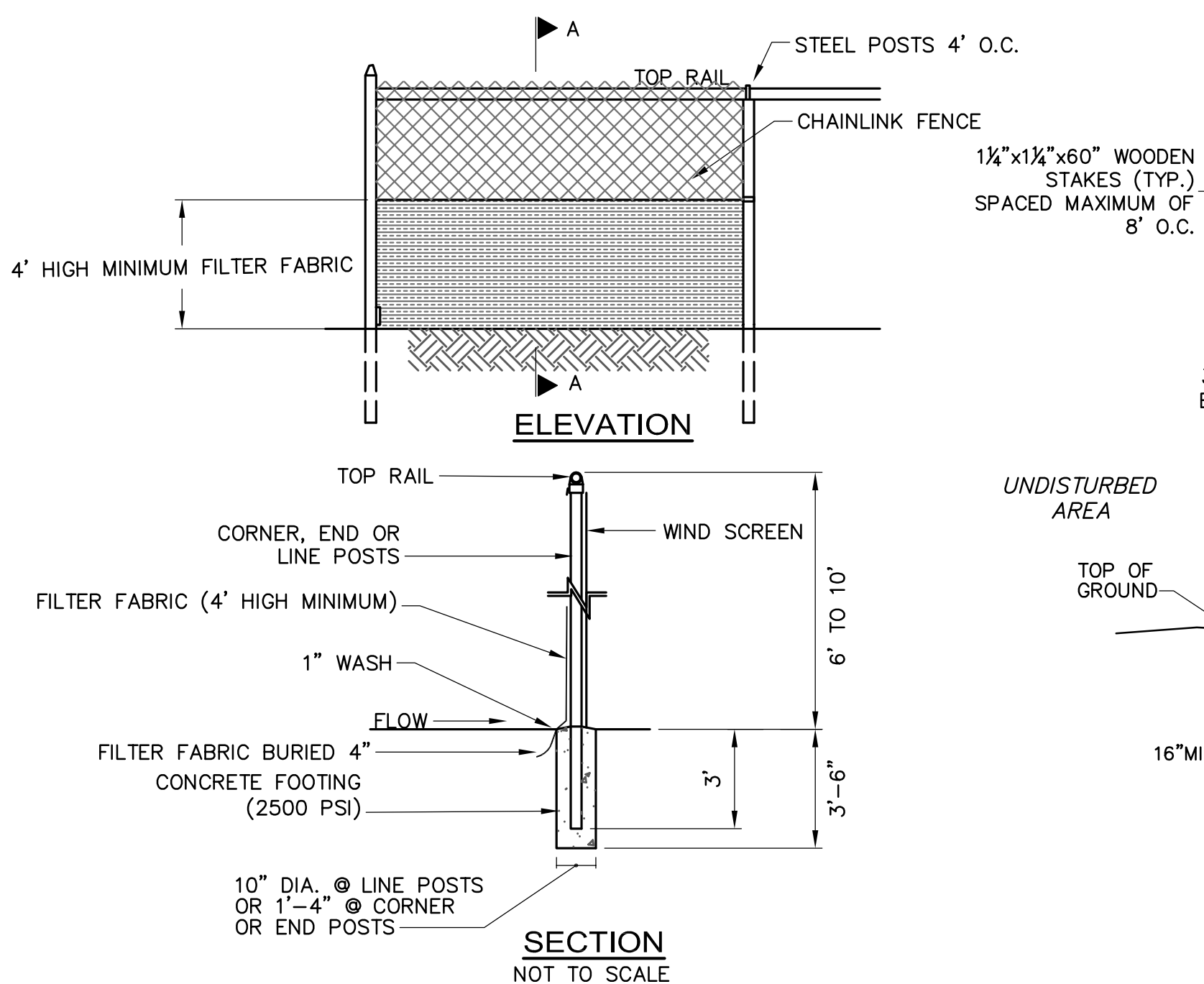
Mystic Water Works at Capen Court

Capen St.
Somerville, MA 02144

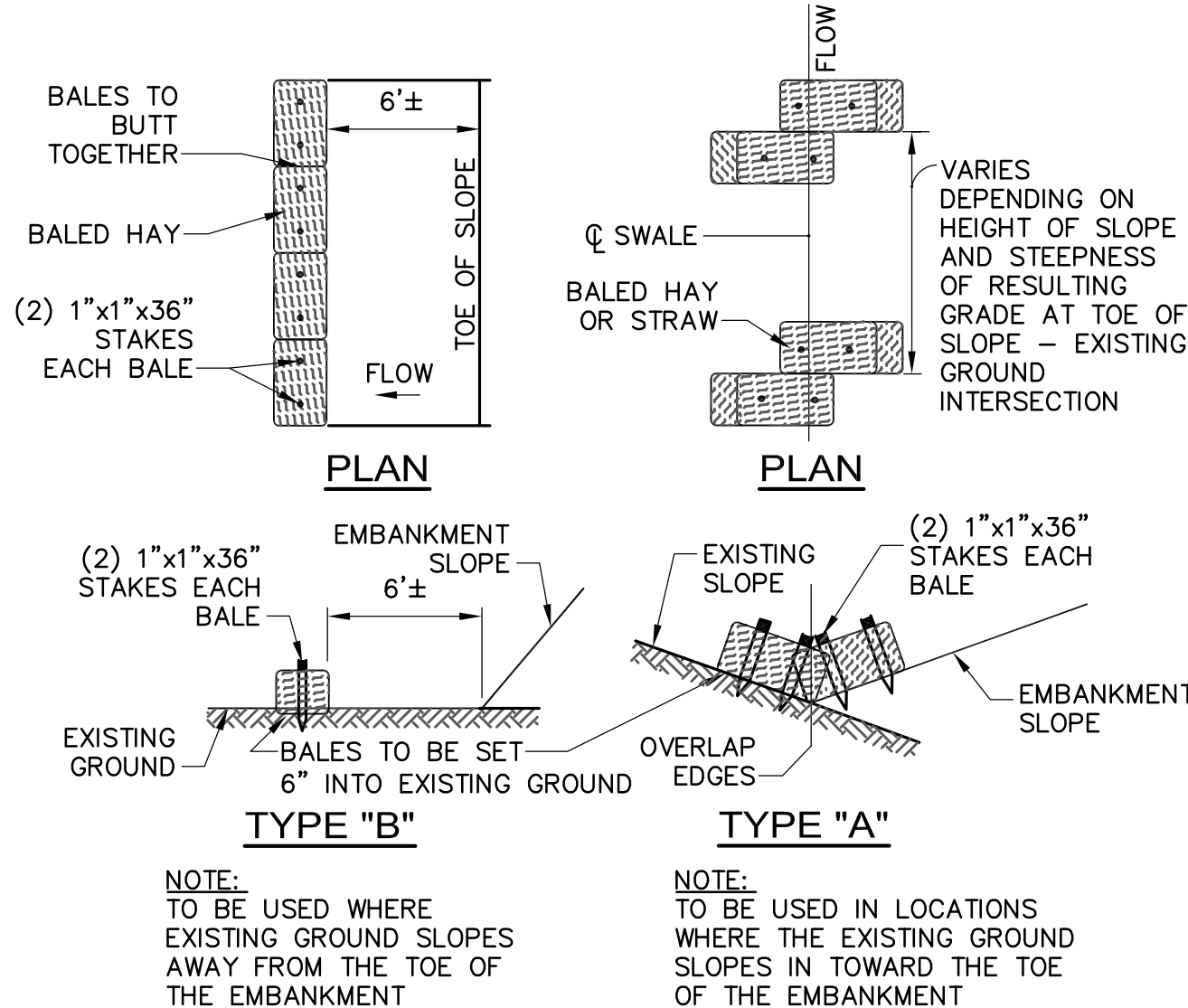
EROSION AND SEDIMENTATION CONTROL PLAN



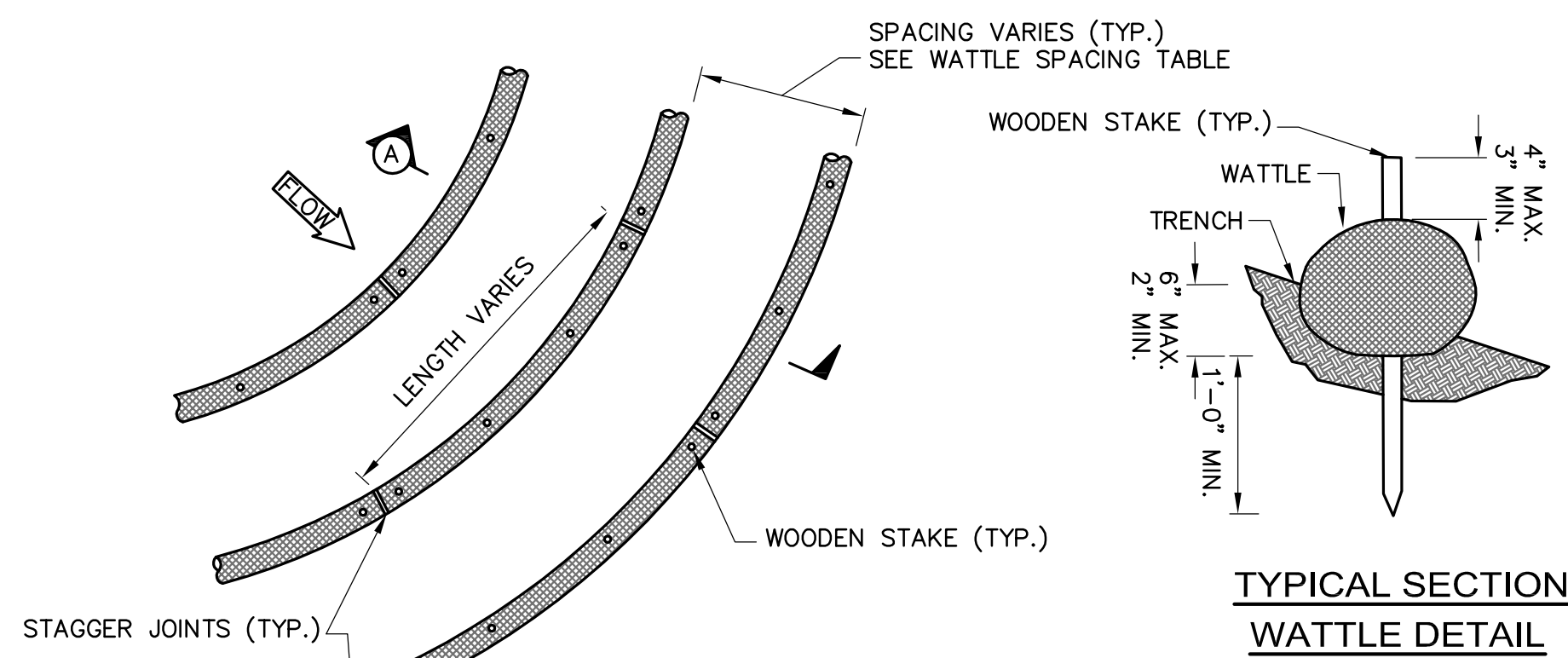
C101



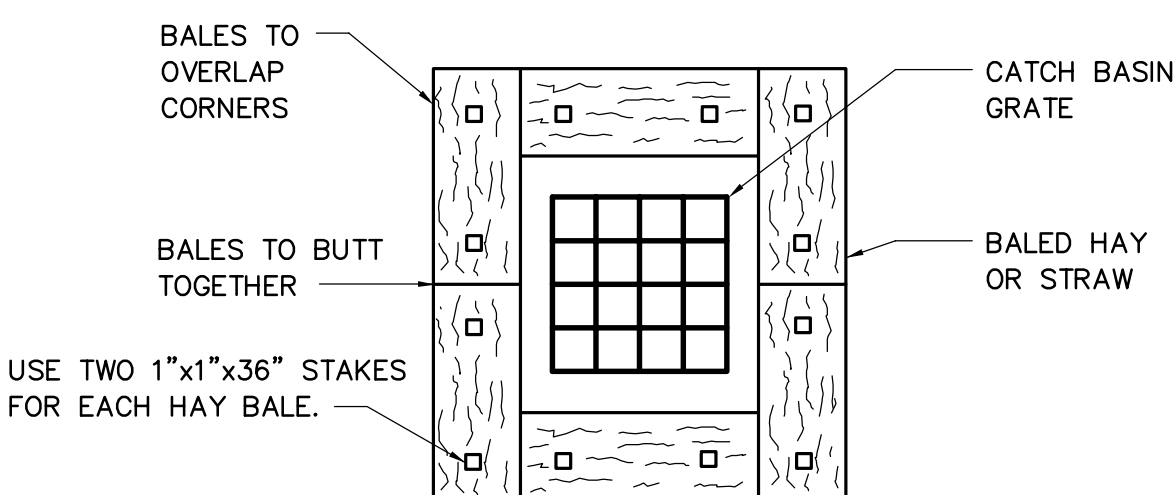
**EROSION CONTROL - TYPE 1
SILT FENCE & STRAWBALES**



**EROSION CONTROL - TYPE 2
SUPER SILT FENCE**



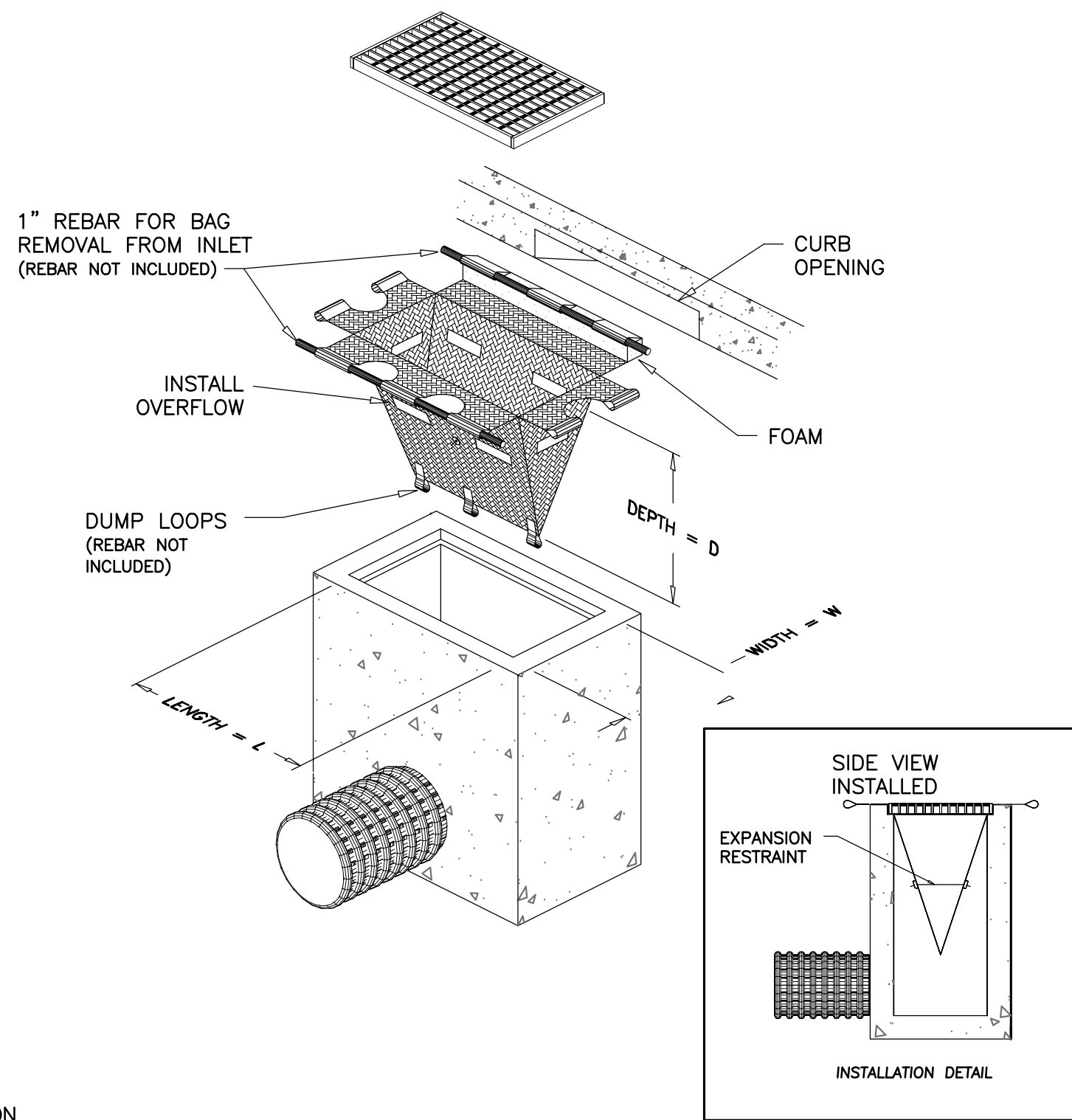
**EROSION CONTROL - TYPE 4
BALED HAY EROSION CHECKS**



- NOTES:**
- ENCLOSE STRUCTURE WITH HAY BALES IMMEDIATELY AFTER CONSTRUCTION. MAINTAIN UNTIL REMOVAL IS AUTHORIZED BY ENGINEER.
 - IF GRATE IS AGAINST AN EXISTING CURB THEN HAY BALES ARE TO BE PLACED AROUND THREE SIDES OF THE GRATE ONLY.
 - WHEN STAKES MUST BE DRIVEN INTO PAVEMENT THE CONTRACTOR SHALL USE METAL STAKES OR DRILL HOLES AND INSTALL WOOD STAKES.
 - BALE STRINGS SHALL BE PARALLEL TO BUT NOT RESTING ON THE GROUND.
 - PROVIDE FILTER FABRIC BETWEEN GRATE & FRAME. MAINTAIN UNTIL REMOVAL IS AUTHORIZED BY ENGINEER.

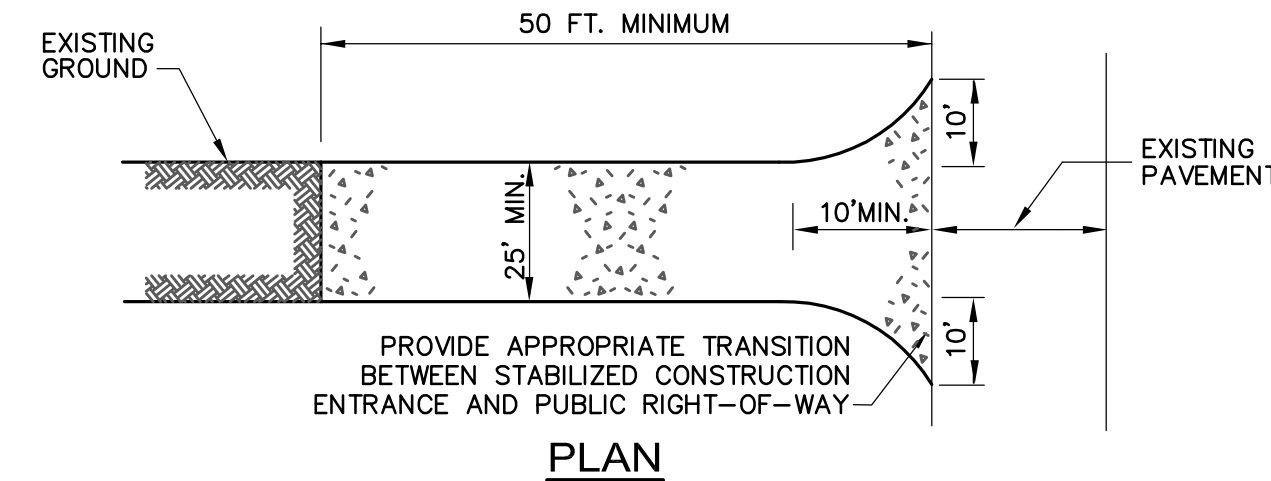
**INLET PROTECTION - TYPE 2
HAYBALE CATCH BASIN**

NOT TO SCALE



**INLET PROTECTION - TYPE 1
CATCH BASIN W/ WATER QUALITY INSERT**

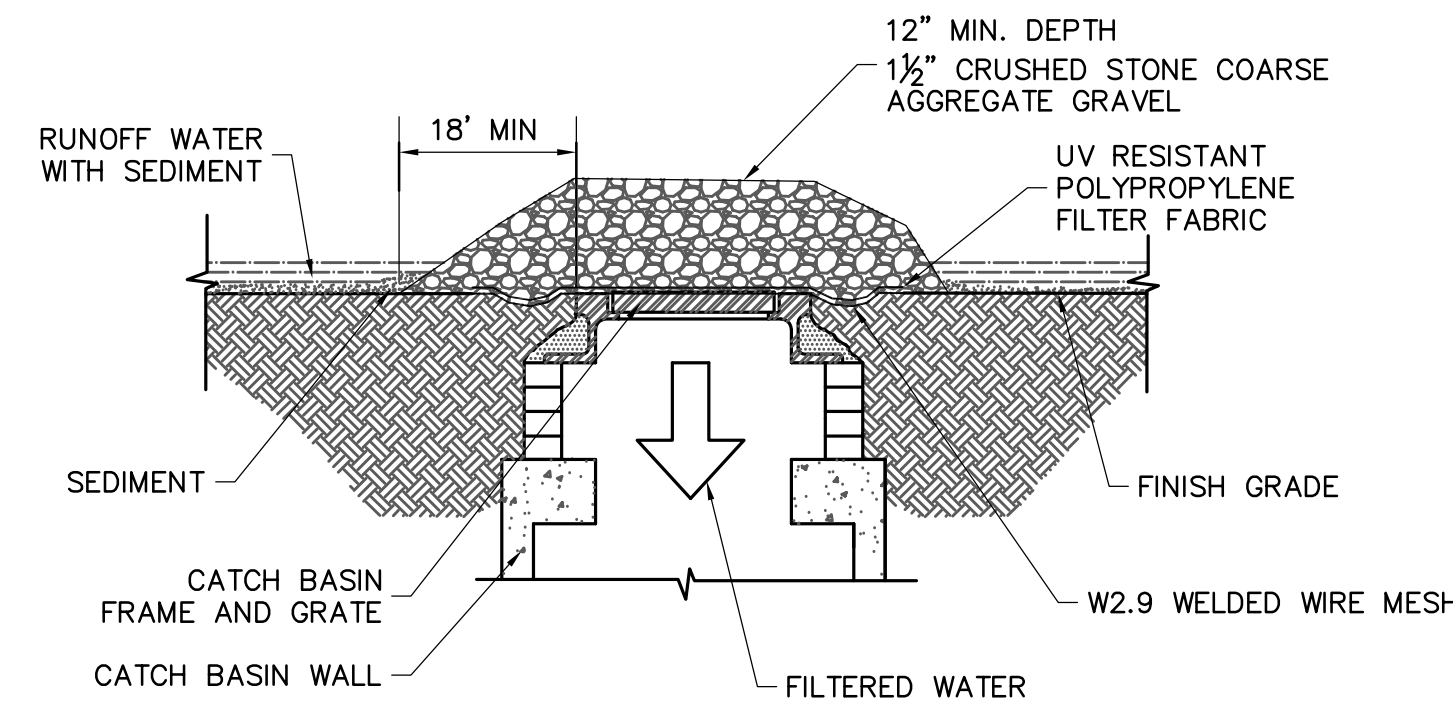
NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE 2" STONE.
 - LENGTH - GREATER THAN OR EQUAL TO 50 FEET
 - THICKNESS - 4"
 - WIDTH - TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE PERMITTED.
 - MAINTENANCE - 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.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

STABILIZED CONSTRUCTION ENTRANCE

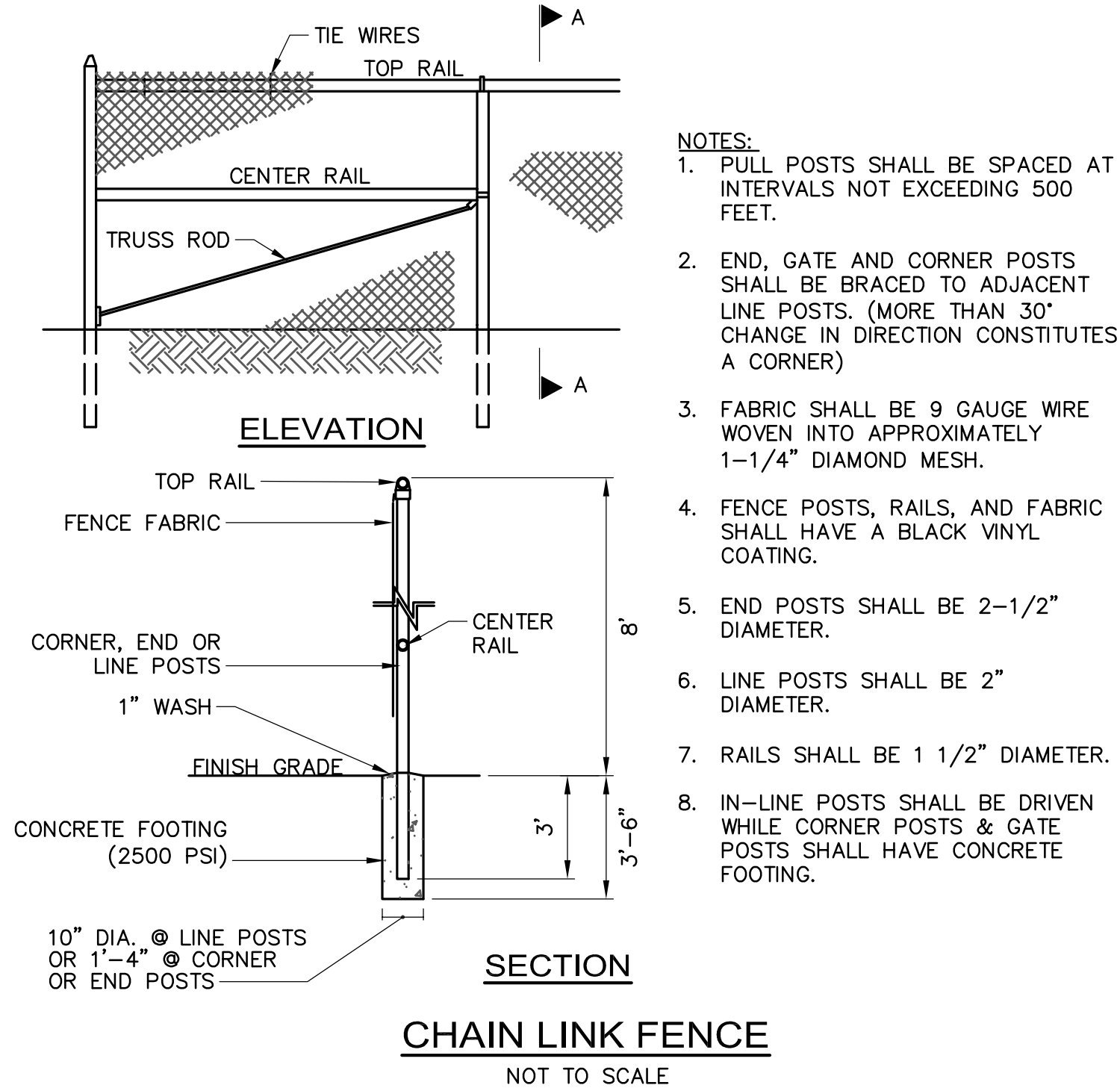
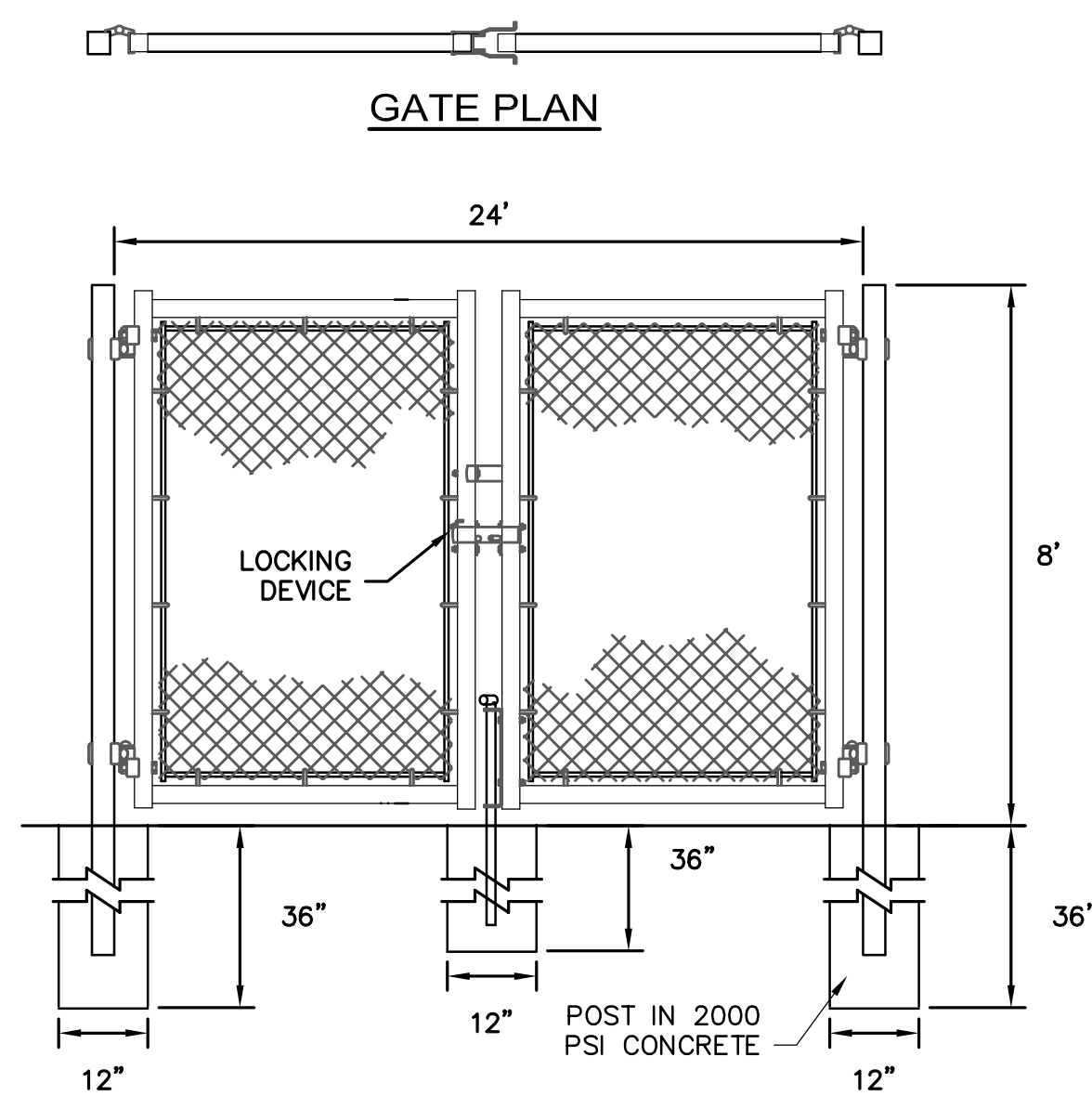
NOT TO SCALE



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

**GRAVEL AND WIRE MESH
INLET PROTECTION - TYPE 3**

NOT TO SCALE



281 Summer Street
Boston, MA 022
Tel 617.426.5004
Fax 617.426.0046

Client
Somerville Housing Authority
Tel: 617-625-1125

MEP/FP Engineer
R.W. Sullivan Engineering
Tel: 617-523-8227
Fax: 617-523-8016

Structural Engineer
L.A. Fuess Partners
Tel: 617-948-5700
Fax: 617-948-5710

Civil Engineer
Nitsch Engineering
Tel: 617-338-0063
Fax: 617-338-6472

Landscape Consultant
Copley Wolff Design Group
Tel: 617-654-9000
Fax: 617-654-9002

Code Consultant
R.W. Sullivan Engineering
Tel: 617-523-8227
Fax: 617-523-8016

Cost Estimator
VJ Associates
Tel: 781-444-8200
Fax: 781-444-8242

Historical Consultant
MacRostie Historic Advisors
Tel: 617-499-4009
Fax: 617-499-4019

Project Status

Comprehensive Permit Submission Sept. 16, 2011
Issue Description Date

Scale: NOT TO SCALE

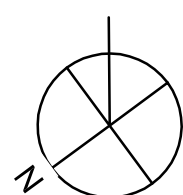
Drawn By: OMW
Checked By: AD
Reviewed By:

Project No. 2010080.00

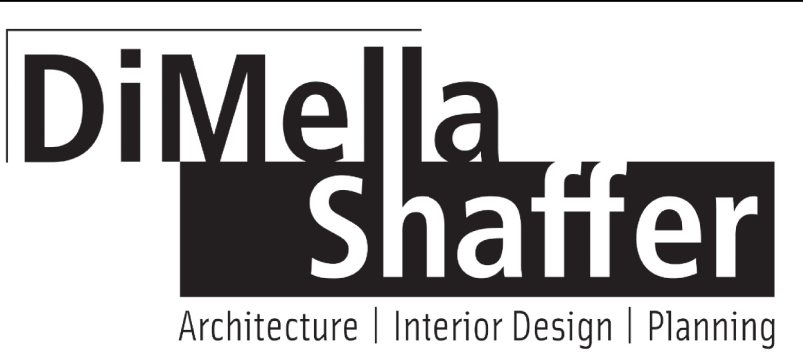
**Mystic Water
Works at Capen
Court**

Capen St.
Somerville, MA 02144

**EROSION AND
SEDIMENTATION
CONTROL DETAILS**



C102



281 Summer Street
Boston, MA 022

Tel 617.426.5004
Fax 617.426.0046

Client
Somerville Housing Authority Tel: 617-625-1125

MEP/FP Engineer Tel: 617-523-8227
R.W. Sullivan Engineering Fax: 617-523-8016

Structural Engineer Tel: 617-948-5700
L.A. Fuess Partners Fax: 617-948-5710

Civil Engineer Tel: 617-338-0063
Nitsch Engineering Fax: 617-338-6472

Landscape Consultant Tel: 617-654-9000
Copley Wolff Design Group Fax: 617-654-9002

Code Consultant Tel: 617-523-8227
R.W. Sullivan Engineering Fax: 617-523-8016

Cost Estimator Tel: 781-444-8200
VJ Associates Fax: 781-444-8242

Historical Consultant Tel: 617-499-4009
MacRostie Historic Advisors Fax: 617-499-4019

Project Status

[illegible]

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

Scale: 1"=20'

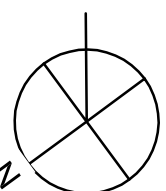
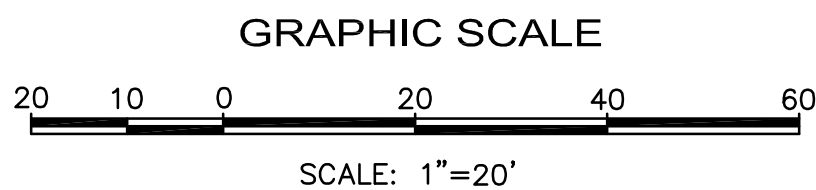
Drawn By: OMW **Checked By:** AD **Reviewed By:**

Project No. 2010080.00

Mystic Water Works at Capen Court

Capen St.
Somerville, MA 02144

SITE UTILITY PLAN



C201



617.426.5004
Fax
617.426.0046

Somerville Housing Authority Tel: 617-625-1125

MEP/FP Engineer Tel: 617-523-8227
R.W. Sullivan Engineering Fax: 617-523-8016

Structural Engineer Tel: 617-948-5700
L.A. Fuess Partners Fax: 617-948-5710

Civil Engineer Tel: 617-338-0063
Nitsch Engineering Fax: 617-338-6472

Landscape Consultant Tel: 617-654-9000
Copley Wolff Design Group Fax: 617-654-9002

Code Consultant Tel: 617-523-8227
R.W. Sullivan Engineering Fax: 617-523-8016

Cost Estimator Tel: 781-444-8200
VJ Associates Fax: 781-444-8242

Historical Consultant Tel: 617-499-4009
MacRostie Historic Advisors Fax: 617-499-4019

Comprehensive Permit Submission		Sept. 16, 2011
Issue Description		Date

Scale: 1"=20'

Drawn By: OMW **Checked By:** AD **Reviewed By:**

Project No. 2010080.00

Capen St.
Somerville, MA 02144



© Dimella Shaffer



WTRENCH



NOTES:

1. THRUST BLOCKS TO BE USED ON ALL PRESSURE PIPES AT HORIZONTAL AND VERTICAL BENDS GREATER OR EQUAL TO 45°, TEES AND DEAD ENDS.
2. FOR FITTINGS WITH LESS THAN 45° DEFLECTION USE BEARING AREAS FOR 45° BEND.
3. BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 PSF AND A MINIMUM INTERNAL WATER PRESSURE OF 175 PSIG. JOINTS SHALL NOT BE ENCASED IN CONCRETE, BEARING AREAS MAY BE DISREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK IS WITHIN 12" OF THE GROUND SURFACE. PIPE AND CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND ROCK FACE.

SIZE OF MAIN (INCHES)	90° BEND (S.F.)	45° BEND (S.F.)	DEAD END (S.F.)
4	2.3	1.3	1.6
6	4.7	2.5	3.3
8	8.0	4.5	6.0
12	17.0	9.5	12.0

NOT TO SCALE



STTRENCH



NOT TO SCALE

TAPSLEEV



NOT TO SCALE

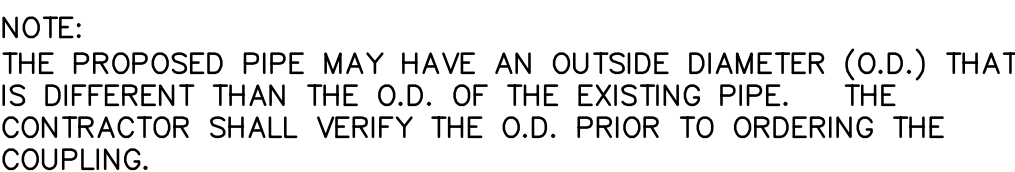
HYD



SECTION D-D
SQUARE

NOTE:
ALL GATE BOX RIMS TO BE RAISED TO FINISH GRADE
AFTER BINDER COURSE OR LEVELING COURSE
PVMT HAS BEEN PLACED.

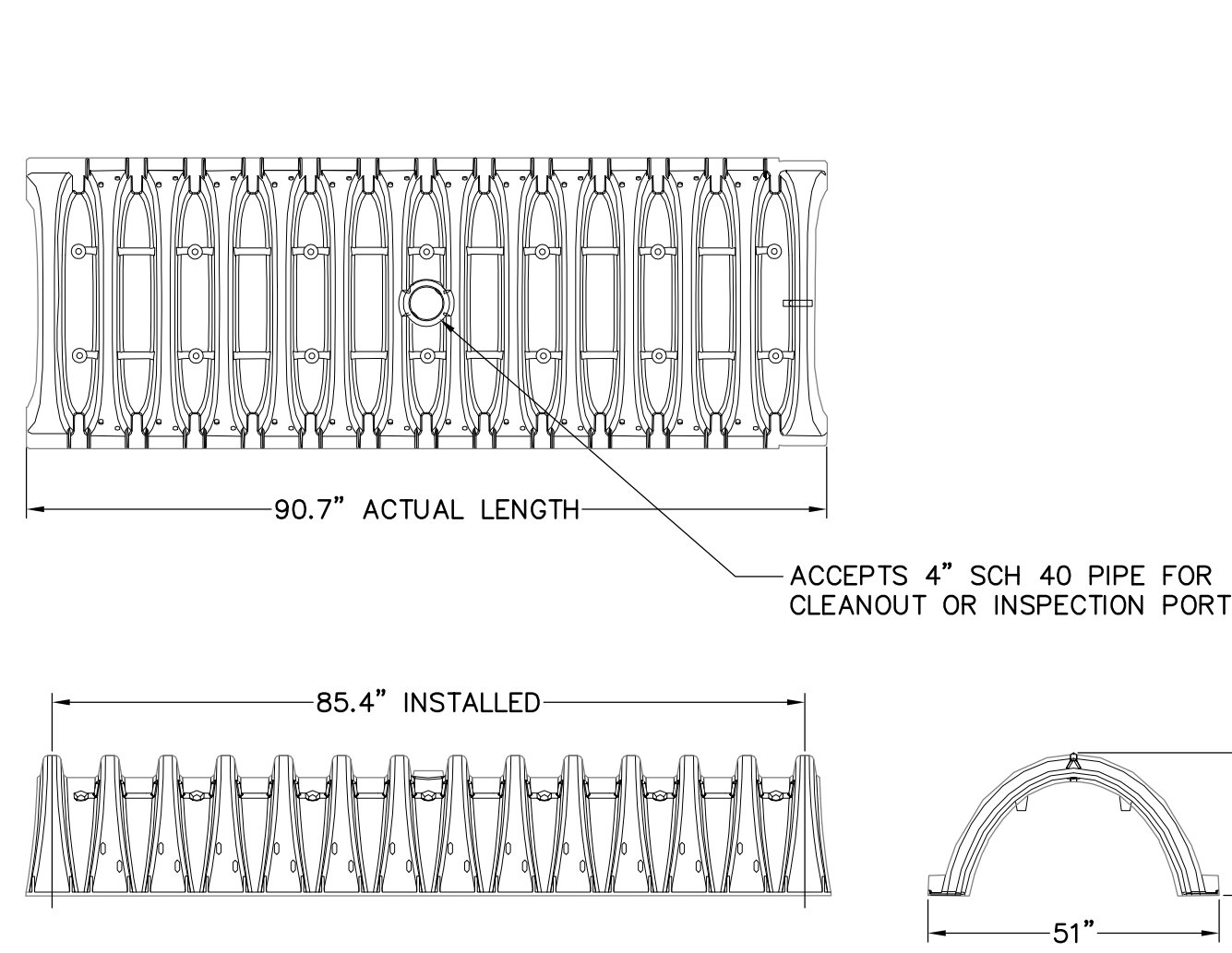
NOT TO SCALE



NOT TO SCALE

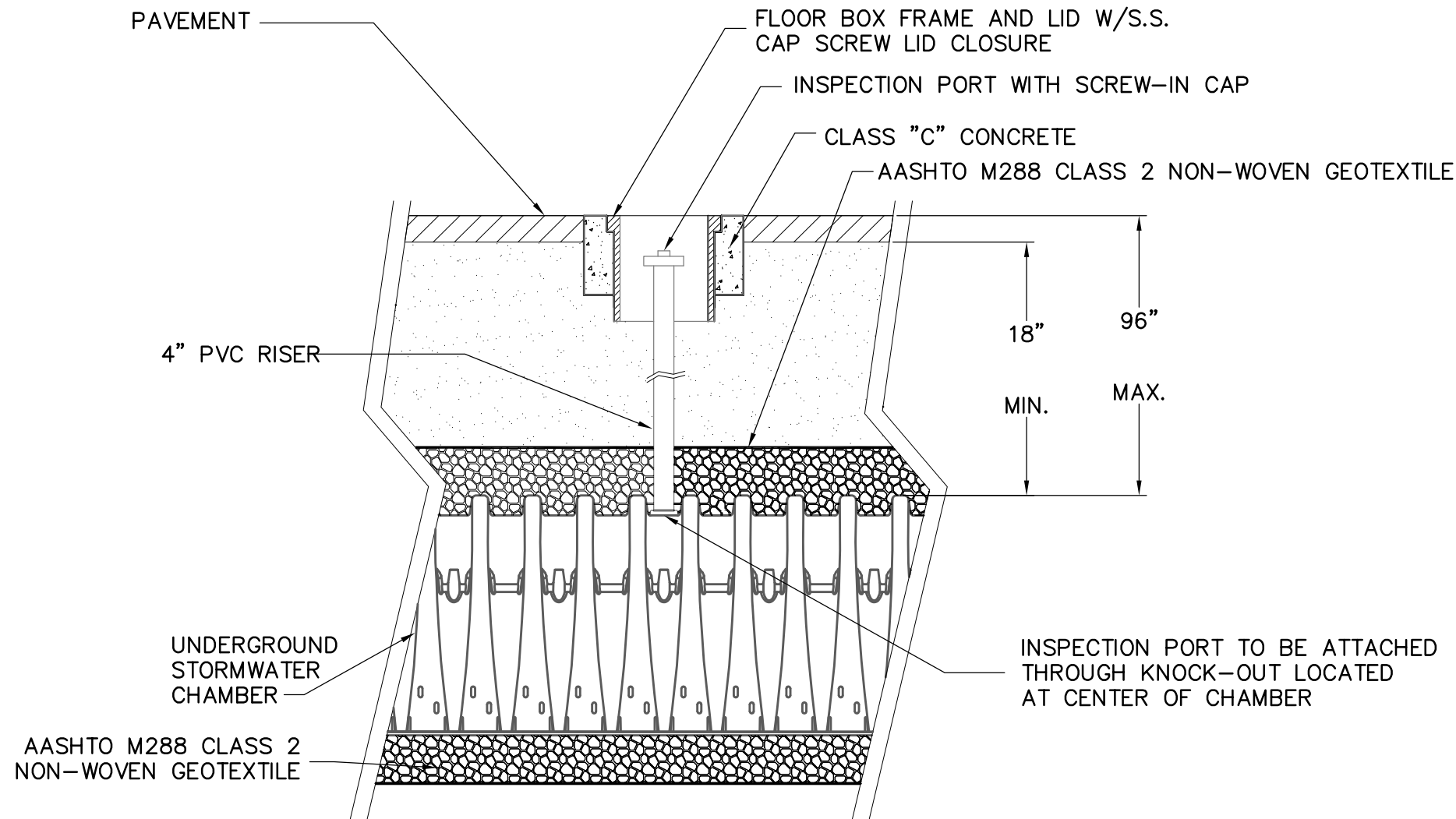
NOTES:

1. WATER METER TO BE APPROVED BY THE CITY OF SOMERVILLE WATER DIVISION
2. ALL HYDRANTS AND GATE VALVES SHALL OPEN XXXX.

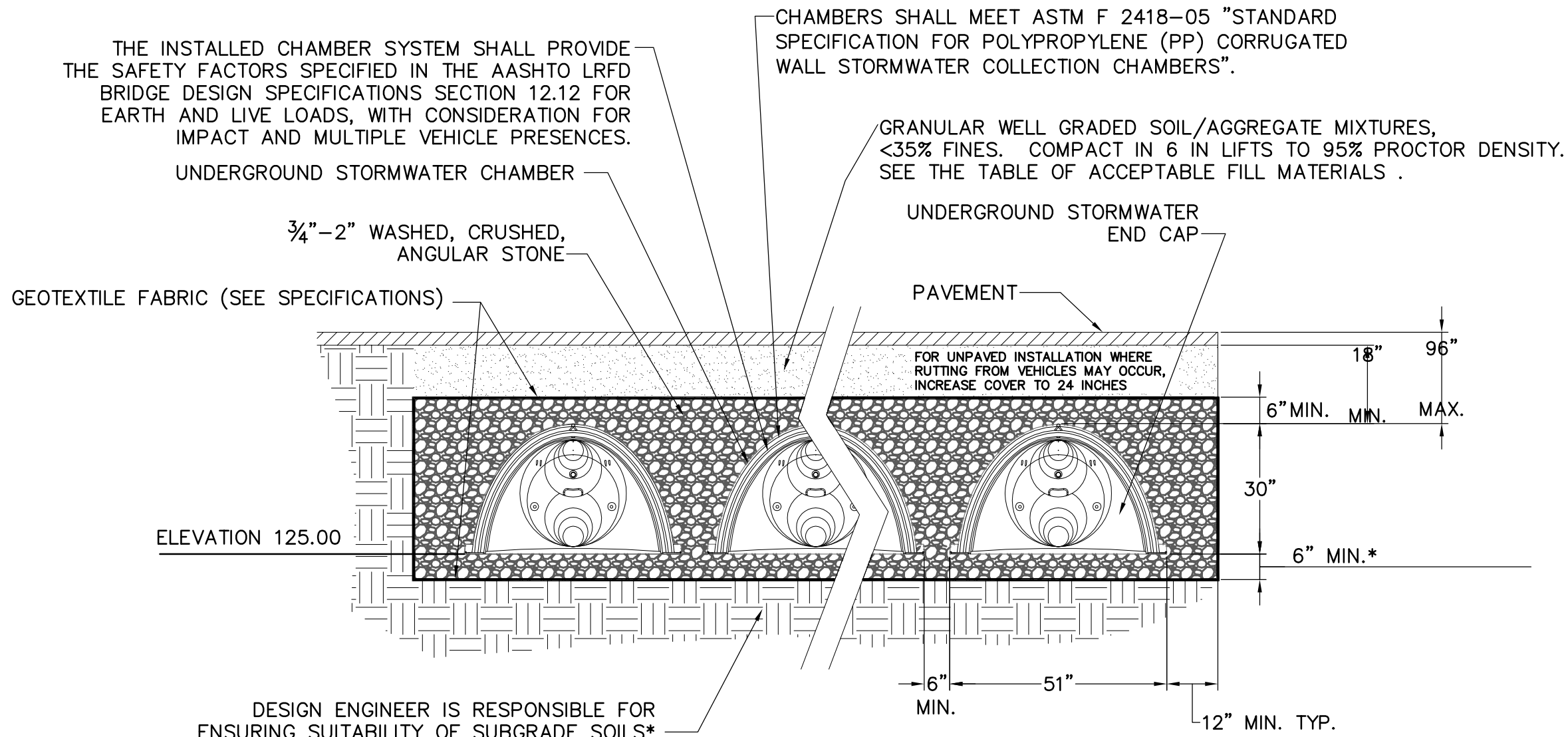


UNDERGROUND STORMWATER CHAMBER
NOT TO SCALE

NOMINAL CHAMBER SPECIFICATIONS	
SIZE (W x H x INSTALLED LENGTH)	51.0" x 30.0" x 85.4"
CHAMBER STORAGE	45.9 CUBIC FEET
MINIMUM INSTALLED STORAGE	74.9 CUBIC FEET
WEIGHT	74 LBS.



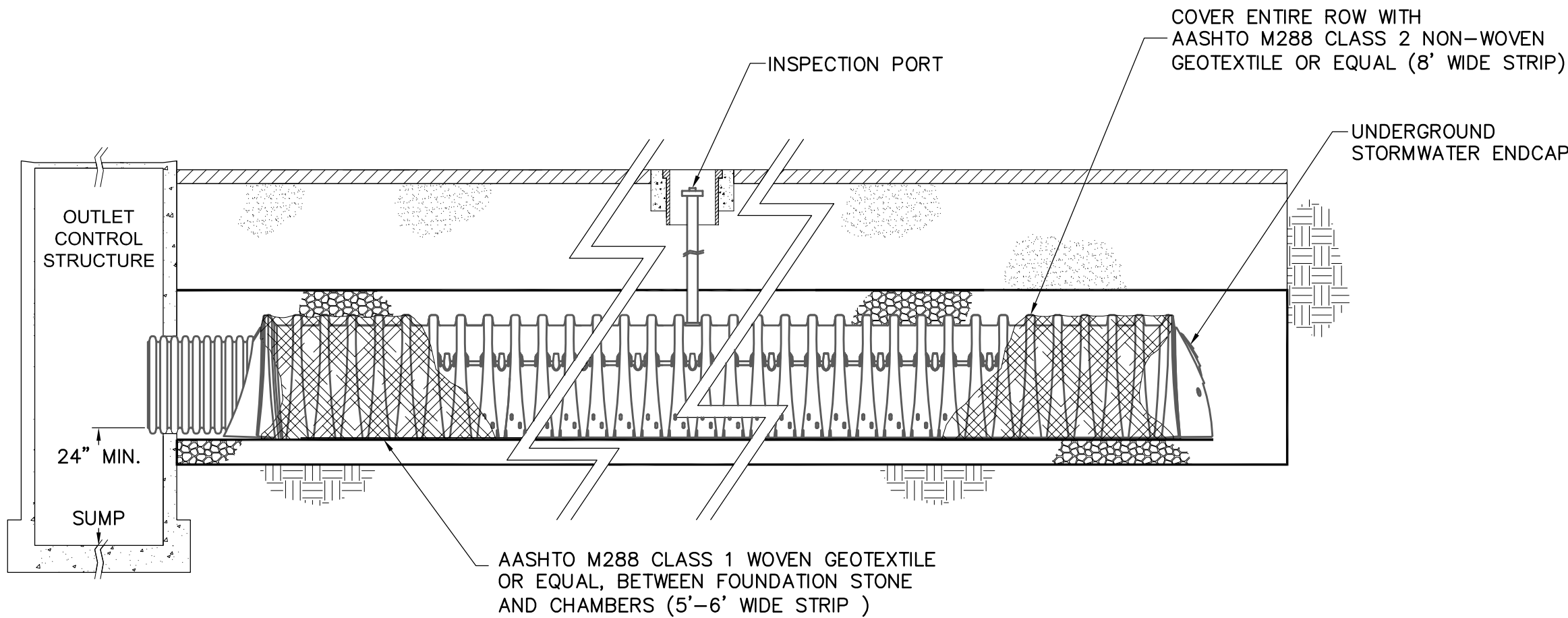
UNDERGROUND STORMWATER INSPECTION PORT DETAIL
NOT TO SCALE



NOTE:
CONTRACTOR TO REMOVE EXISTING TOPSOIL, SUBSOIL, FILL AND ANY OTHER IMPERVIOUS LAYERS WITHIN THE LAYOUT OF THE SYSTEM TO THE BOTTOM OF STONE ELEVATION OF SYSTEM. INSTALL SAND FILL IN ACCORDANCE WITH TITLE V REQUIREMENTS.

THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE SAFETY FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS

UNDERGROUND STORMWATER SECTION
NOT TO SCALE



UNDERGROUND STORMWATER ISOLATION ROW DETAIL
NOT TO SCALE

Client Somerville Housing Authority	Tel: 617-625-1125
MEP/FP Engineer R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Structural Engineer L.A. Fuess Partners	Tel: 617-948-5700 Fax: 617-948-5710
Civil Engineer Nitsch Engineering	Tel: 617-338-0063 Fax: 617-338-6472
Landscape Consultant Copley Wolff Design Group	Tel: 617-654-9000 Fax: 617-654-9002
Code Consultant R.W. Sullivan Engineering	Tel: 617-523-8227 Fax: 617-523-8016
Cost Estimator VJ Associates	Tel: 781-444-8200 Fax: 781-444-8242
Historical Consultant MacRostie Historic Advisors	Tel: 617-499-4009 Fax: 617-499-4019

Project Status

Comprehensive Permit Submission	Sept. 16, 2011
Issue Description	Date

Scale: 1"=20'

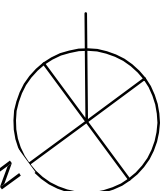
Drawn By:	Checked By:	Reviewed By:
OMW	AD	

Project No. 2010080.00

Mystic Water Works at Capen Court

Capen St.
Somerville, MA 02144

SITE UTILITY DETAILS



C303