



## Wetland Resource Delineation and Evaluation

Cabot Estates  
241 Perkins Street  
Jamaica Plain, MA  
November 11, 2016  
Rev April 11, 2019

### Introduction and Methods

The project site includes the driveway and paved areas of the Cabot Estates condominium complex at 241 Perkins Street. Its location is indicated in Figure 1 below.

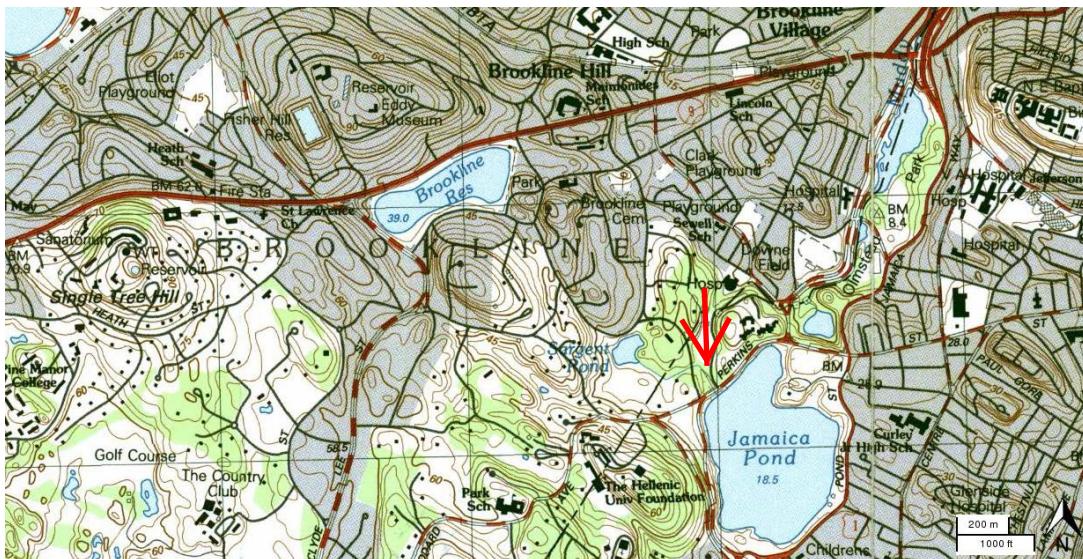


Fig. 1: USGS Site Locus

A site inspection of the project site was conducted by Rimmer Environmental Consulting, LLC (REC) on October 21, 2016 for the purposes of evaluating the location and extent of wetland resources subject to jurisdiction under the Massachusetts Wetlands Protection Act (MGL Ch. 131 s. 40). Due to the long interim between flagging and filing of the Notice of Intent, resources were re-inspected and delineated on April 9, 2019. Minor adjustments to the wetland flagging were made at that time.

Wetlands were delineated in accordance with the procedures established in the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). Numbered sequences of were placed in the field to identify the limit of wetland resource areas. Survey location of flags was provided by Samiotes Consultants.

## **Findings**

The following wetland resource areas were determined to be present on and adjacent to the project area:

### **1. Inland Bank/Land Under a Waterway**

A stream connecting Sargent Pond to Jamaica Pond passes west of the access driveway. The stream is indicated on the USGS as an intermittent stream and was dry at the time of inspection on October 21, 2016. We note that this observation was made during a period of drought warning by the EOEA Water Resources Commission Drought Management Task Force. At the time of inspection in April, the stream was flowing. No bordering wetland extends from its well-defined banks.

In the event that a stream is indicated on the USGS as intermittent, 310 CMR 10.58(2) provides a method for determining whether such a stream might qualify as a perennial stream based on watershed size using watershed size of at least 1 square mile. A stream with a watershed area of at least 0.5 square miles may also qualify as perennial if the predicted flow rate is greater than or equal to 0.01 cfs at the 99% flow duration using the USGS Stream Stats method.

The attached StreamStats report indicates the stream has a drainage area of 0.4 square miles upstream of the inlet to Jamaica Pond with a 99% flow duration value of .0102. While the watershed size is slightly smaller than the minimum threshold, the flow duration value is just above the minimum threshold. It is possible that the watershed area does not include other subsurface connections which would increase its effective size. Based on this information, while the stream technically does not meet the minimum threshold for jurisdiction as a perennial stream, practically speaking it may function as a perennial stream which would contain a 25-foot Riverfront Area extending from flags A1-A16. These flags represent both Bank and the Mean Annual High Water elevation.

### **2. Bordering Land Subject to Flooding**

This resource includes land subject to inundation from floodwaters rising from streams, ponds and lakes up to and including the statistical 100-year frequency storm event. Its boundary is generally determined by reference to the most recently available flood maps from FEMA. Figure 2 below is the FEMA Flood Maps for this area indicating the stream exiting Sargent Pond is in a Zone X and therefore does not contain a 100-year flood plain.



Fig. 2: FEMA Flood Map

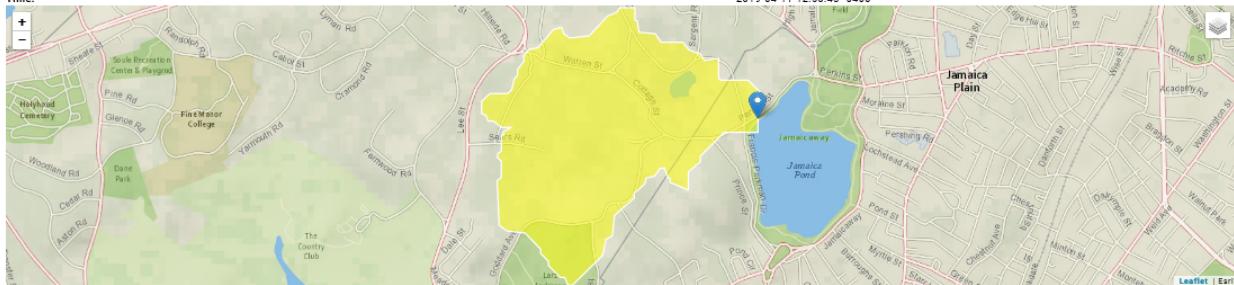
### **3. Other Resources**

The site is not located within Estimated Habitat of Rare Wetlands Wildlife and Priority Habitat, as determined by reference to Massachusetts Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program (NHESP) data available on MassGIS.

## Cabot Estates StreamStats Report

Region ID:  
Workspace ID:  
Clicked Point (Latitude, Longitude):  
Time:

MA  
MA20190411165030036000  
42.31951, -71.12311  
2019-04-11 12:50:43 -0400



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.4	square miles
ELEV	Mean Basin Elevation	162	feet
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	1.05	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.12	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless
BSLDEM250	Mean basin slope computed from 1:250K DEM	3.777	percent
ACRSOFT	Area underlain by stratified drift	0.0361	square miles
BSLDEM10M	Mean basin slope computed from 10 m DEM	8.062	percent
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	230298.5	feet
CENTROIDY	Basin centroid vertical (y) location in state plane units	896558	feet
CRSDFT	Percentage of area of coarse-grained stratified drift	9.44	percent
FOREST	Percentage of area covered by forest	13.36	percent
LAKEAREA	Percentage of Lakes and Ponds	1.25	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	61.5	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	15.4	percent
MAXTEMPC	Mean annual maximum air temperature over basin area, in degrees Centigrade	14.9	feet per mi
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	231065	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	896625	feet
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	9.44	percent
PRECPRIS00	Basin average mean annual precipitation for 1971 to 2000 from PRISM	47.3	inches
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	0.31	miles
WETLAND	Percentage of Wetlands	0.35	percent

Flow-Duration Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
50 Percent Duration	0.375	ft^3/s
60 Percent Duration	0.242	ft^3/s
70 Percent Duration	0.133	ft^3/s
75 Percent Duration	0.0984	ft^3/s
80 Percent Duration	0.0866	ft^3/s
85 Percent Duration	0.0615	ft^3/s
90 Percent Duration	0.0466	ft^3/s
95 Percent Duration	0.0248	ft^3/s
98 Percent Duration	0.015	ft^3/s
99 Percent Duration	0.0102	ft^3/s

*Flow-Duration Statistics Citations*

[Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p.](#)

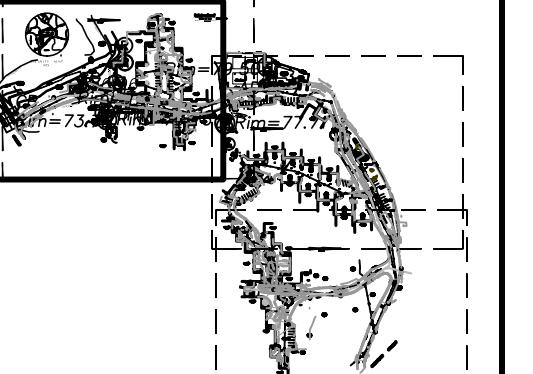
Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.4	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	3.777	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.12	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

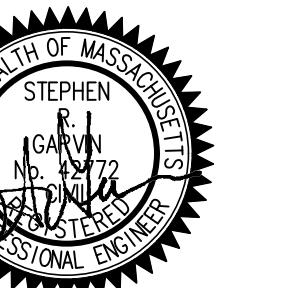
**NOTES**

1. THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN HEREIN ARE BASED ON ADDED GROUND STRUCTURES AND PLANS AVAILABLE AT RWSC AND PUBLIC/PRIVATE UTILITY COMPANIES. LOCATIONS OF UNKNOWN UTILITIES AND THEIR DRAWSHIFTS MAY VARY FROM LOCATIONS SHOWN HEREON. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE EXISTENCE OF UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE DIG-SAFE CALL CENTER SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION.
2. ELEVATIONS AS SHOWN HEREON ARE BASED ON THE BENCHMARKS SHOWN. SEE THIS PLAN FOR PROJECT BENCHMARK LOCATIONS.

1 Inch = 20 feet



## CABOT ESTATE CONDOMINIUMS 241 PERKINS STREET JAMAICA PLAIN, MA 02130



REVISION	
1	NOI Conservation Commission Submission
2	3/20
3	NOI Revisions to FEMA Delimitation
4	3/22
4	Wetland Reevaluation
5	4/17
5	Wetland Highlighting
	4/18

### SITE PREPARATION & EROSION CONTROL PLAN

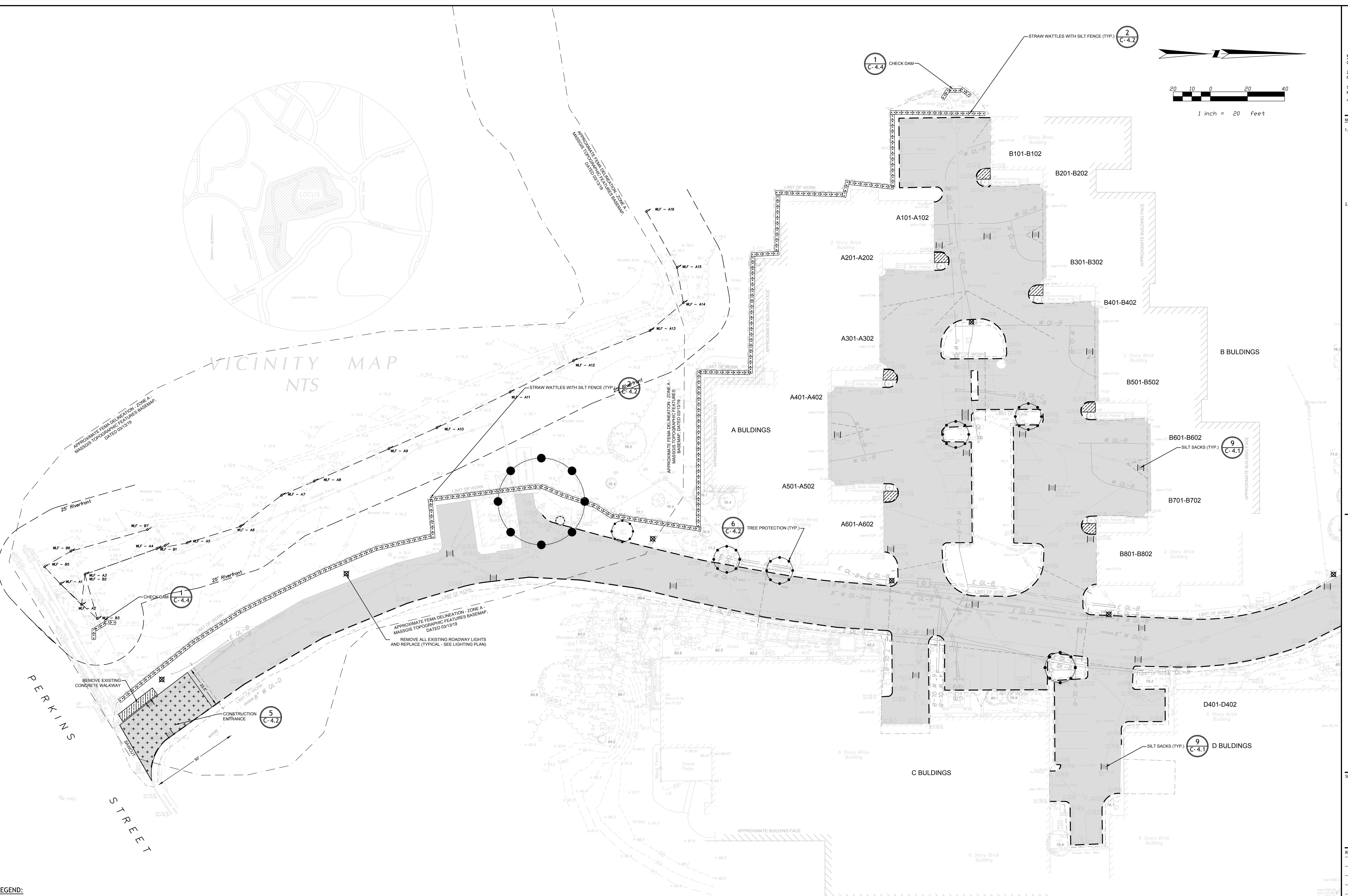
D-1.1

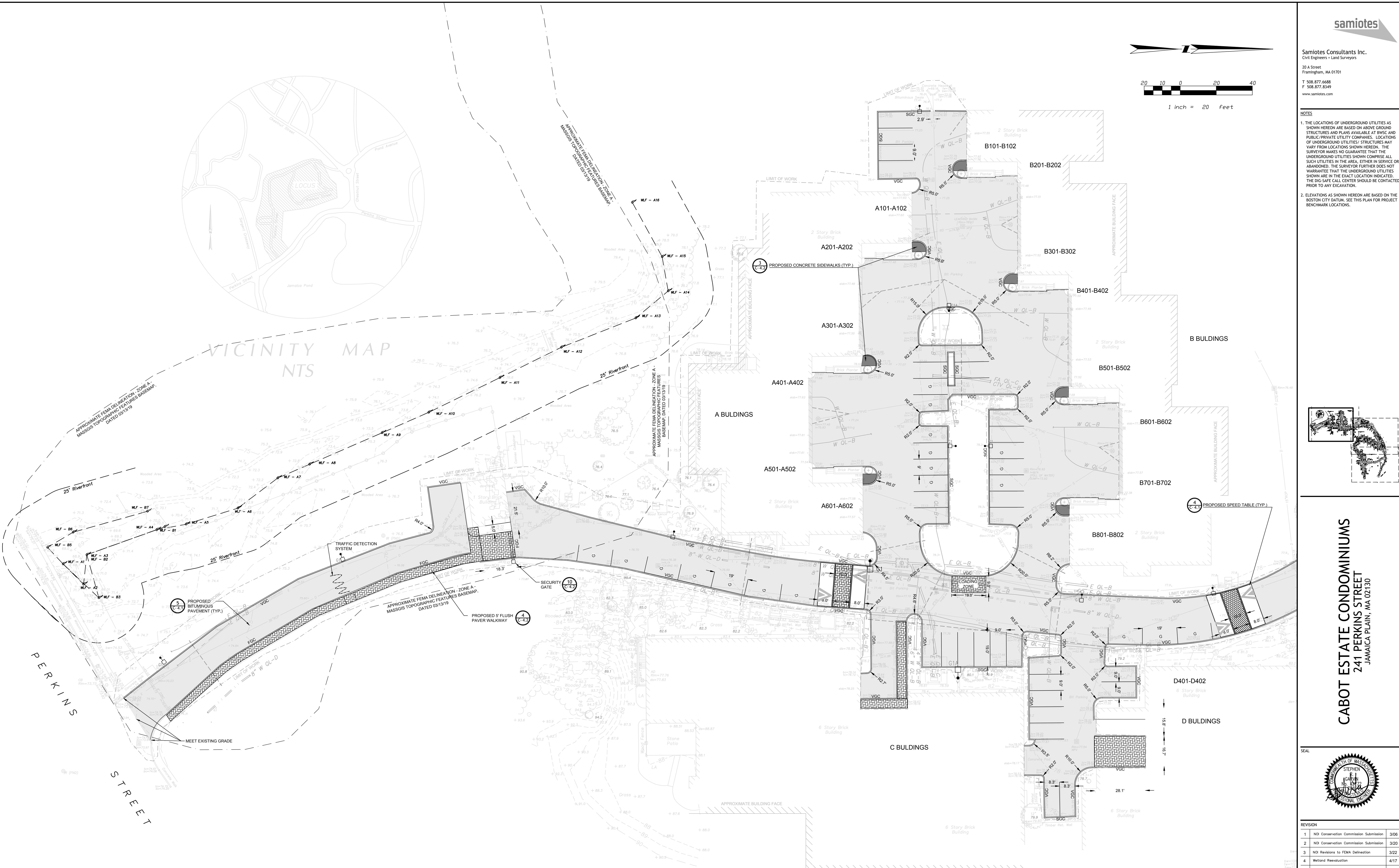
WOOD AND BRICK  
LIMIT  
EXIST

DEMOLITION LEGEND:

- BITUMINOUS CONCRETE TO BE REMOVED/PULVERIZED
- CEMENT CONCRETE TO BE REMOVED
- CURB REMOVAL
- LIMIT OF WORK
- STRAW WATTLES & SILT FENCE
- UTILITIES STRUCTURE TO BE REMOVED/REPLACED
- UTILITIES STRUCTURE TO BE ABANDONED IN PLACE
- LIGHT FIXTURES TO BE SALVAGED
- TREE TO BE REMOVED (INCLUDING STUMP)
- PROPOSED CATCHBASIN FILTER
- TREE PROTECTION

DATE: 03/06/19  
SCALE: 1" = 20'  
DRAWN BY: JP  
APPROVED BY: SRG  
FILE: F4041.DWG CABOT ESTATES - NOV 2.DWG





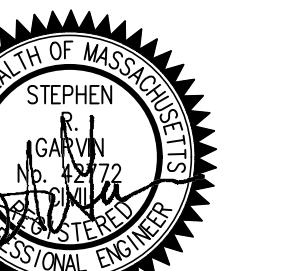
# amiothes

**samiotes Consultants Inc.**  
Engineers + Land Surveyors  
  
Street  
ingham, MA 01701  
  
8.877.6688  
8.877.8349  
  
[samiotes.com](http://samiotes.com)

THE LOCATIONS OF UNDERGROUND UTILITIES AS  
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NCHMARK LOCATIONS.

**CABOT ESTATE CONDOMINIUMS**  
241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



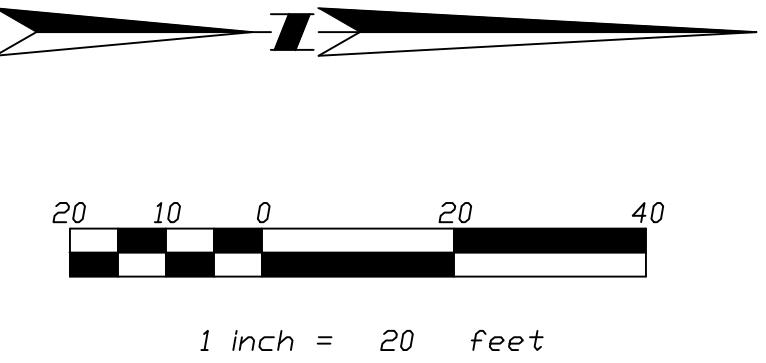
## **LAYOUT & MATERIALS PLAN**

# C-1.1

## LEGEND

		PROPOSED ASPHALT
	VGC	PROPOSED VERTICAL GRANITE CURB
		FGC
		PROPOSED FLUSH GRANITE CURB
		SGC
		PROPOSED SLOPED GRANITE CURB
		LIMIT OF WORK

Samioites Consultants Inc.  
Civil Engineers + Land Surveyors  
20 A Street  
Framingham, MA 01701  
T 508.877.6688  
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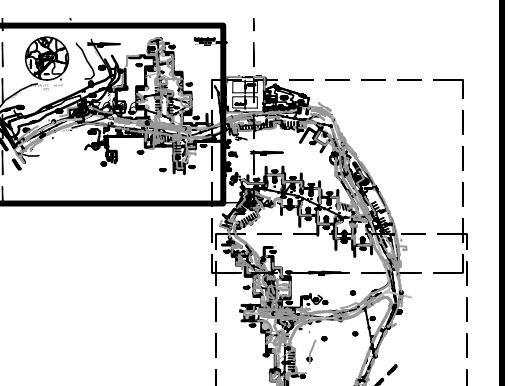


1 inch = 20 feet

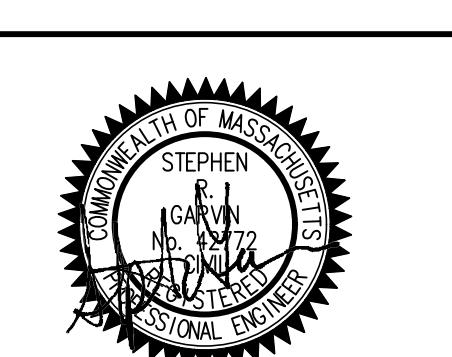
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## CABOT ESTATE CONDOMINIUMS 241 PERKINS STREET JAMAICA PLAIN, MA 02130



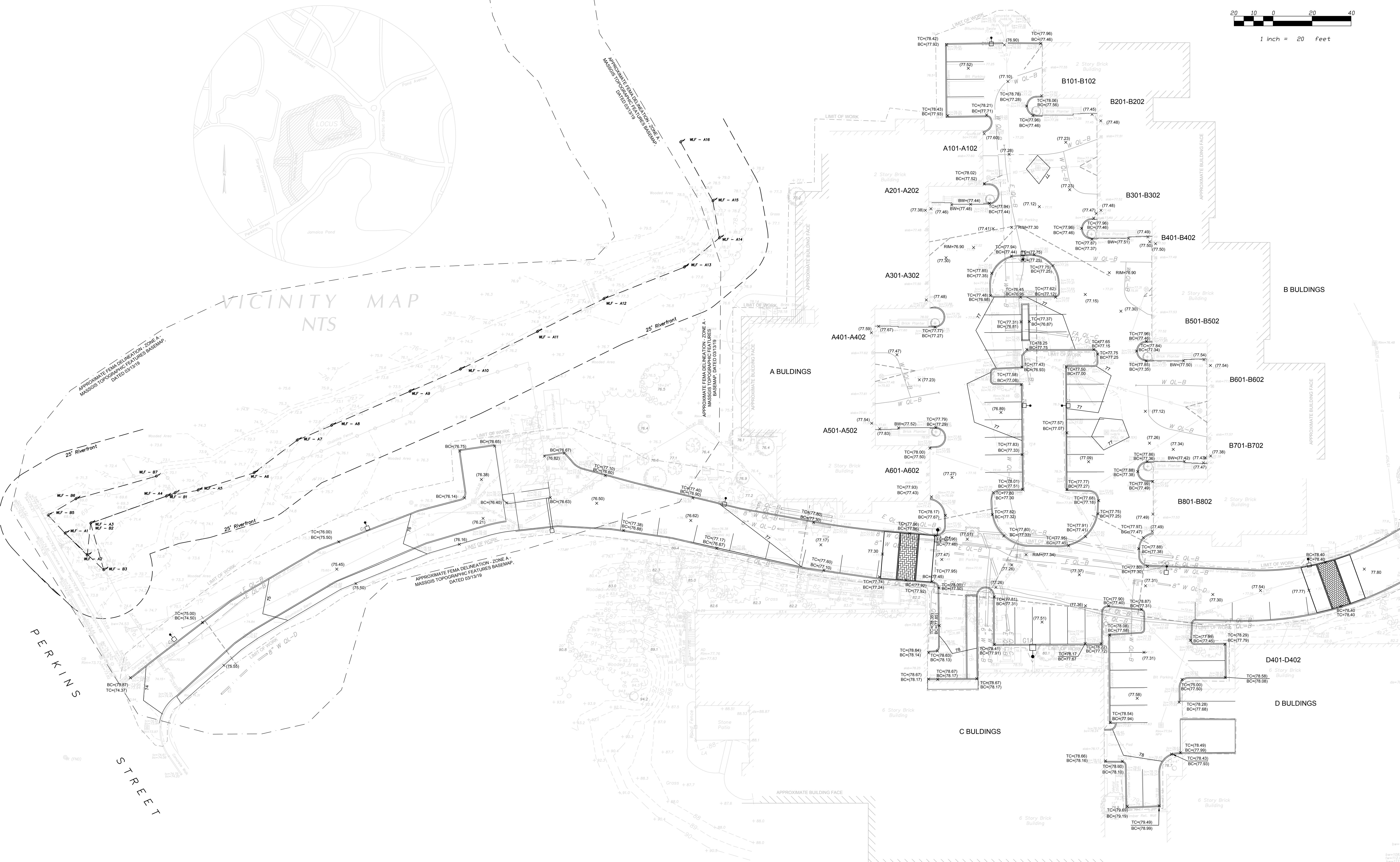
REVISION	
1	NOI Conservation Commission Submission
2	3/06
3	NOI Revisions to FEMA Delivation
4	3/22
4	Wetland Revocation
5	4/17
5	Wetland Highlighting
	4/18

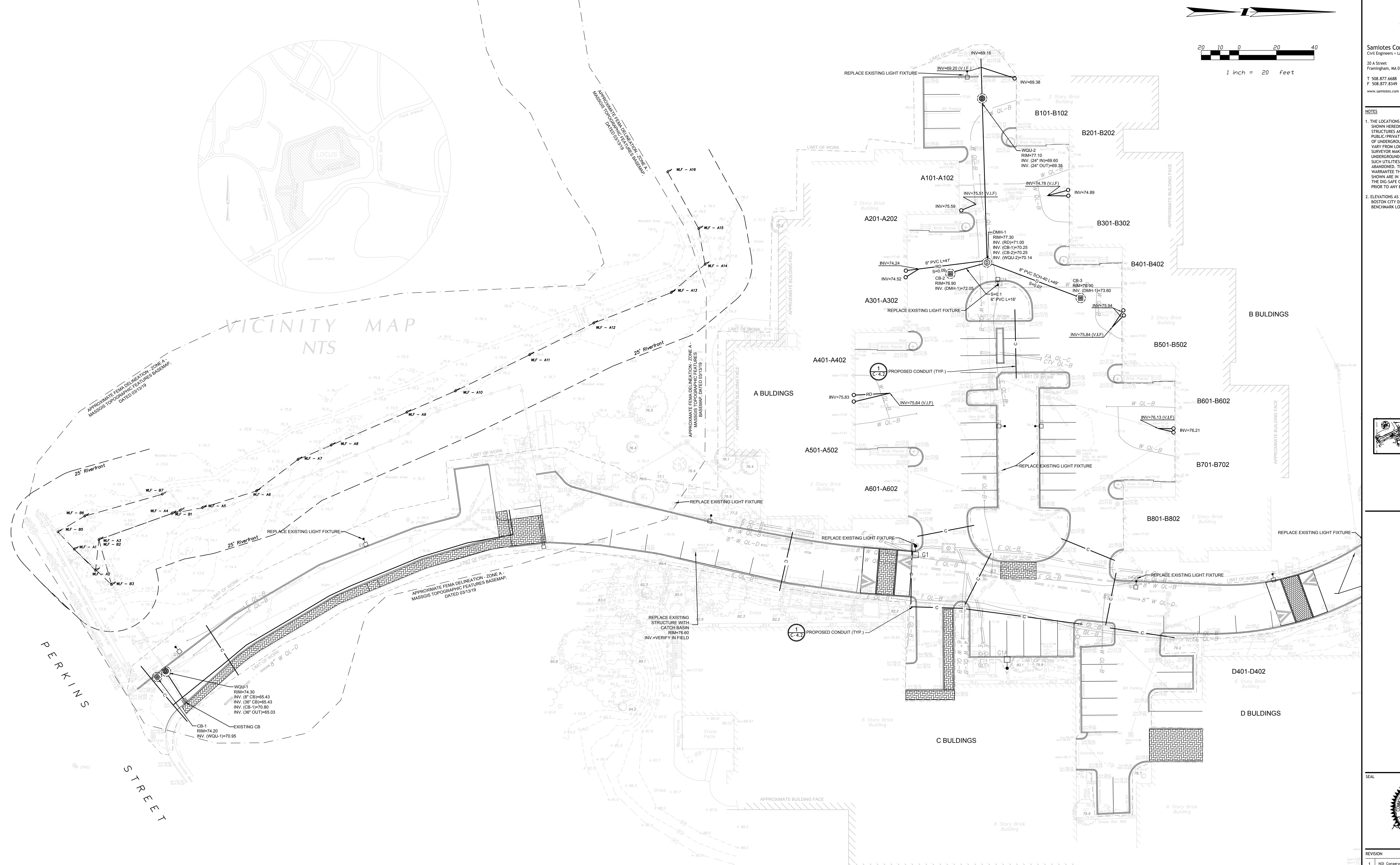
## GRADING PLAN

C-2.1

JOB # 26043.00
DATE: 03/06/19
SCALE: 1" = 20'
DRAWN BY: JP
APPROVED BY: SRG

FILE: 26043.00 CABOT ESTATES - NOV 2.DWG





**CABOT ESTATE CONDOMINIUMS**  
241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



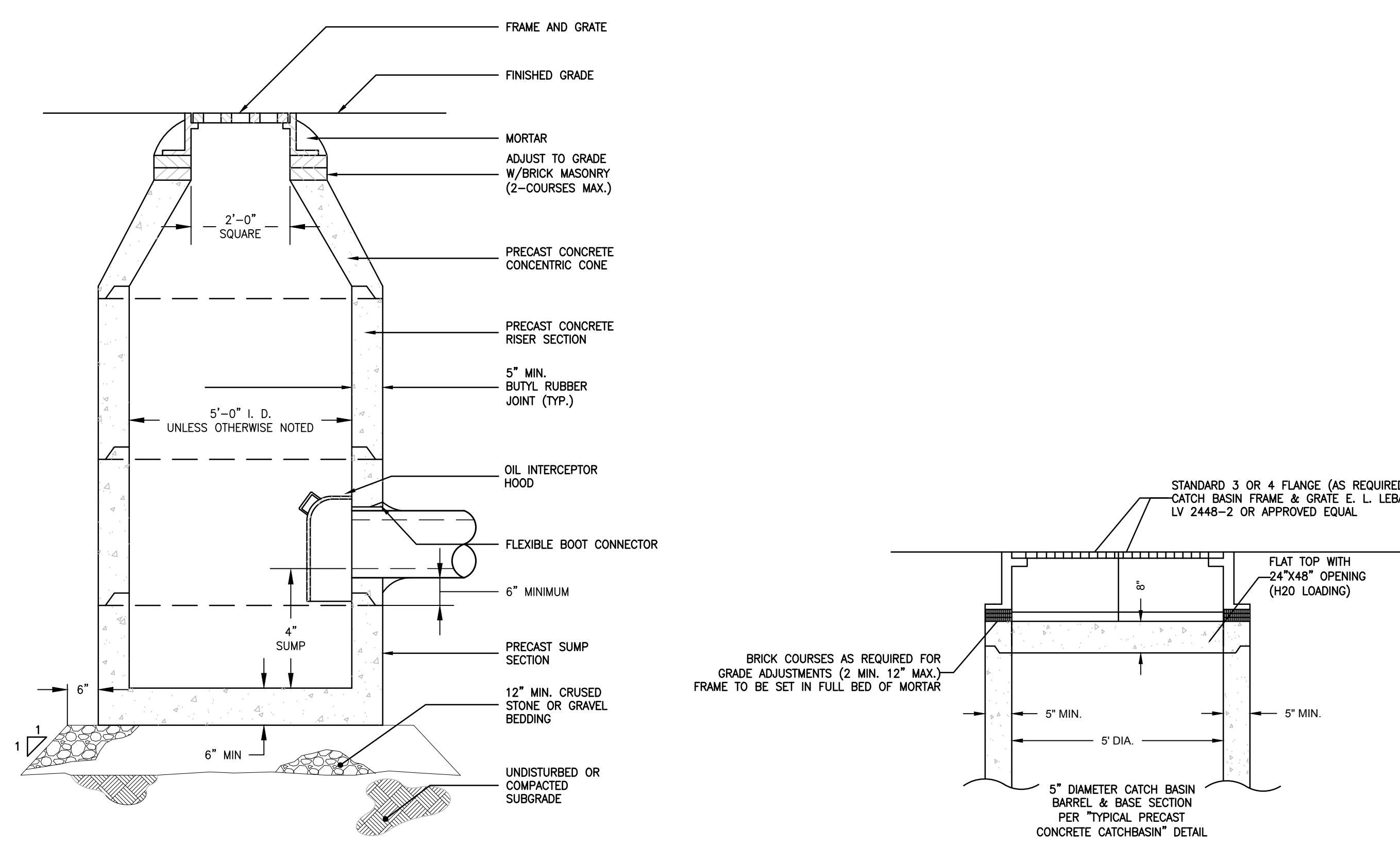
# CIVIL UTILITIES PLAN

C-3 1

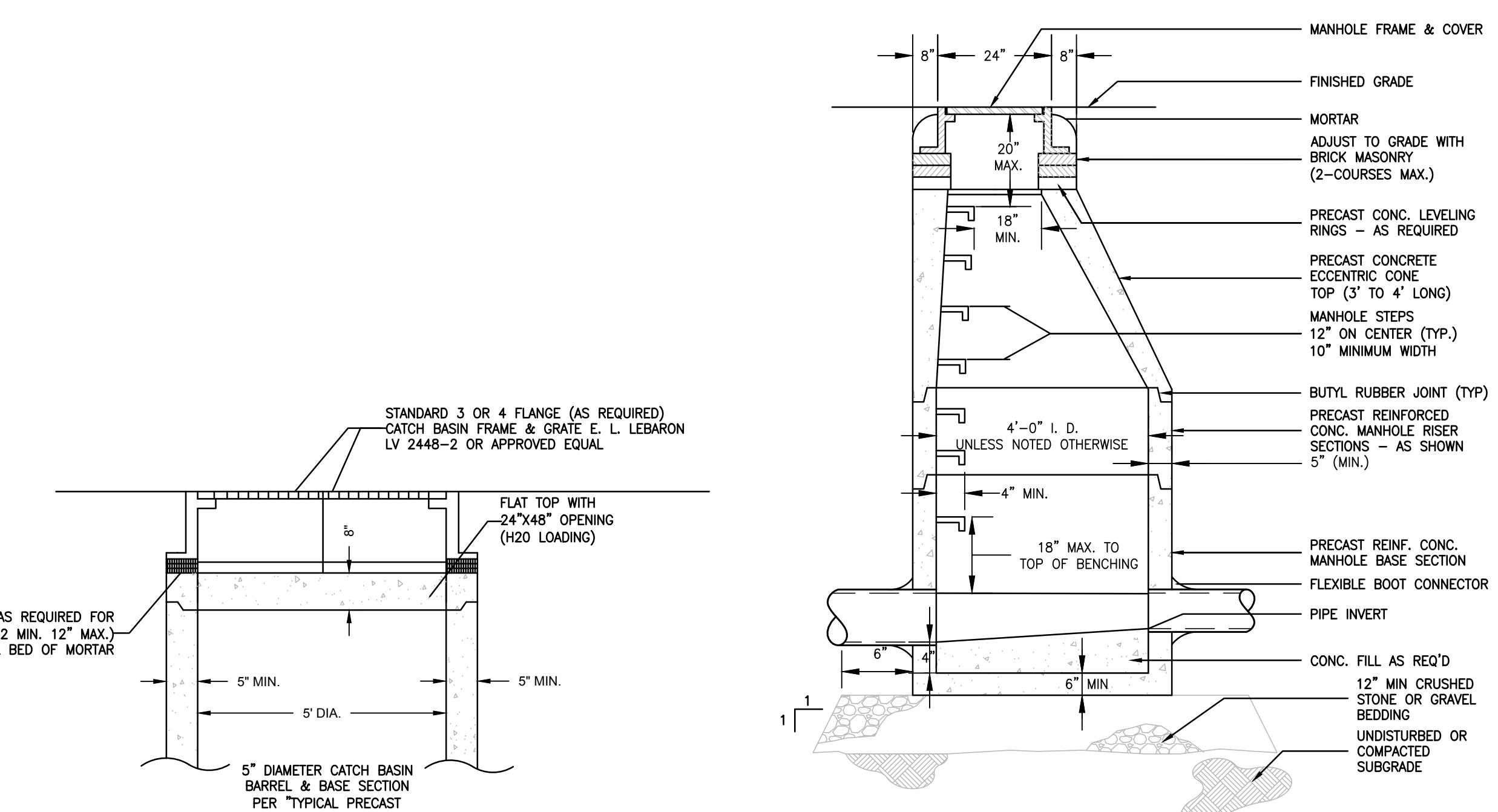
DB #	26043.00
ATE:	03/06/19
CALE:	1" = 20'
RAWN BY:	JP
PPROVED BY:	SRG
LE: 26043.00CD CABOT ESTATES - NOI #2.DWG	

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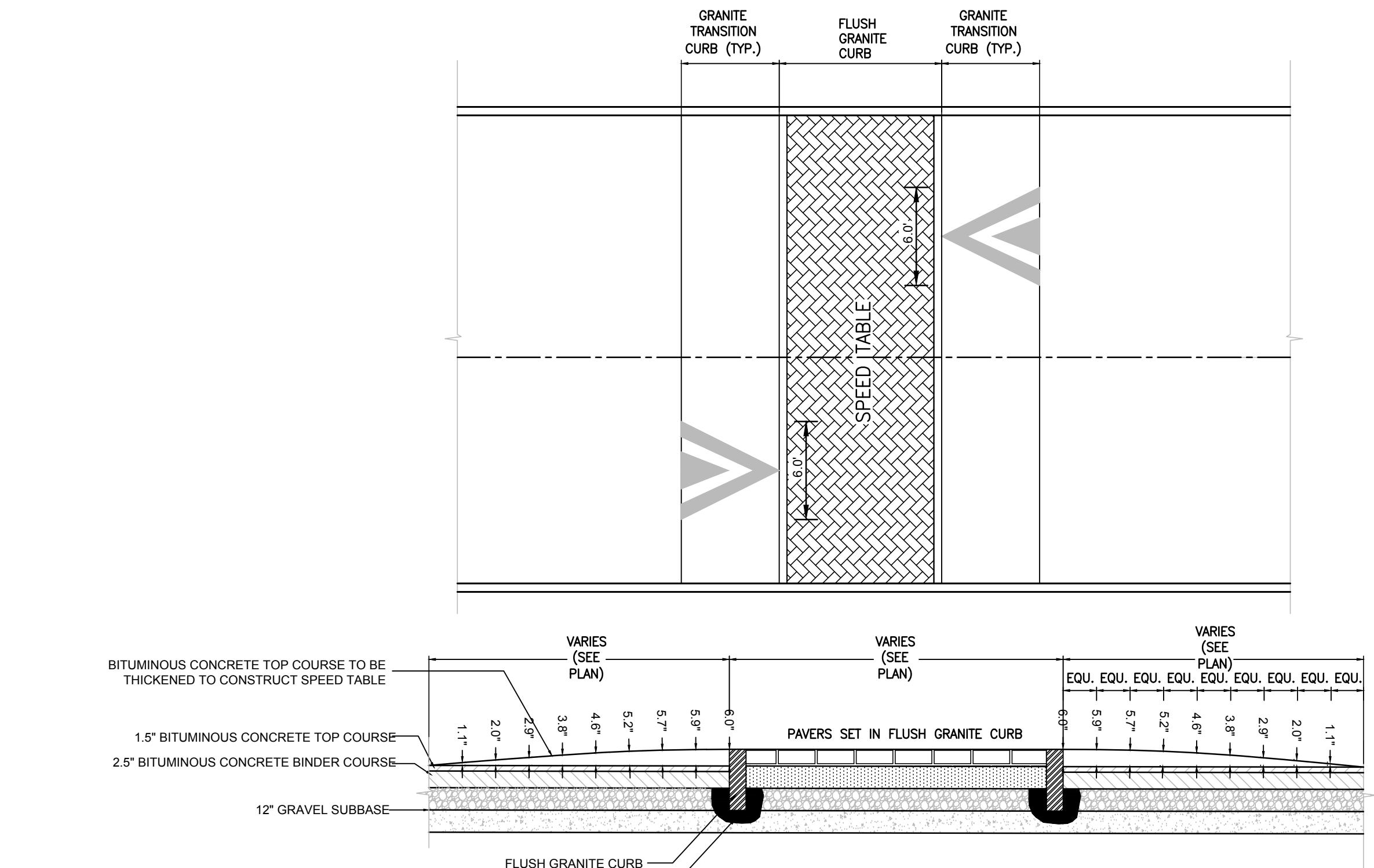


1 CATCH BASIN

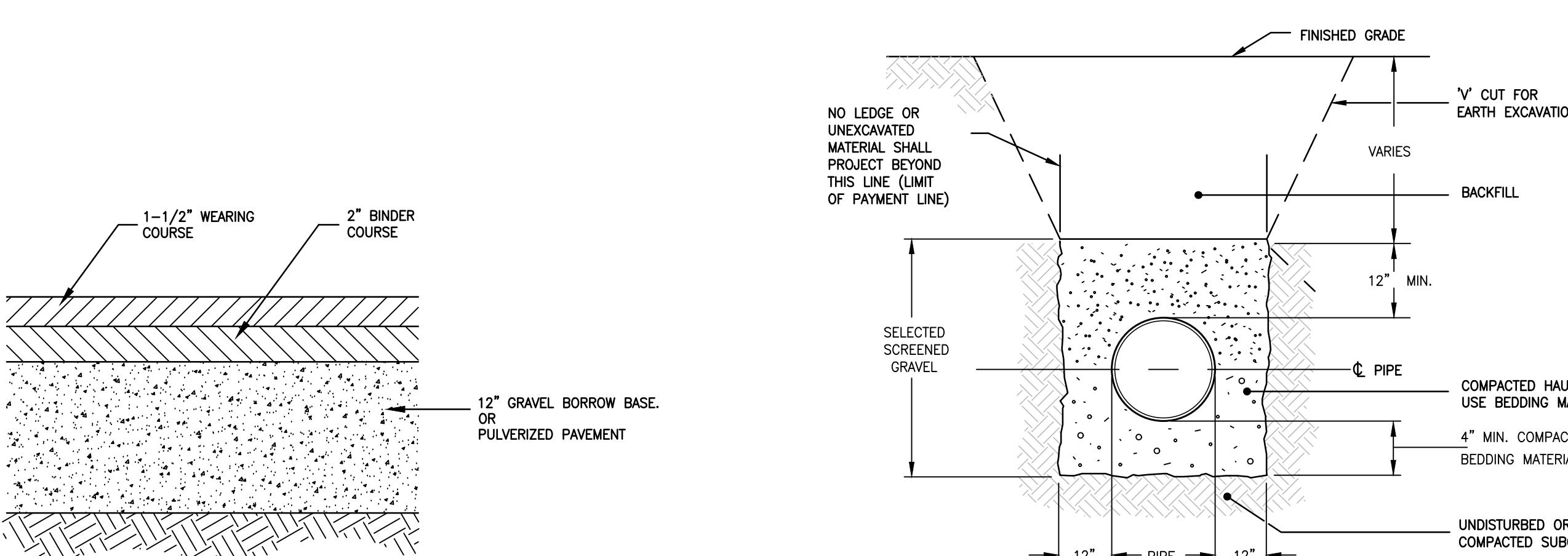


2 DOUBLE GRATE CATCH BASIN

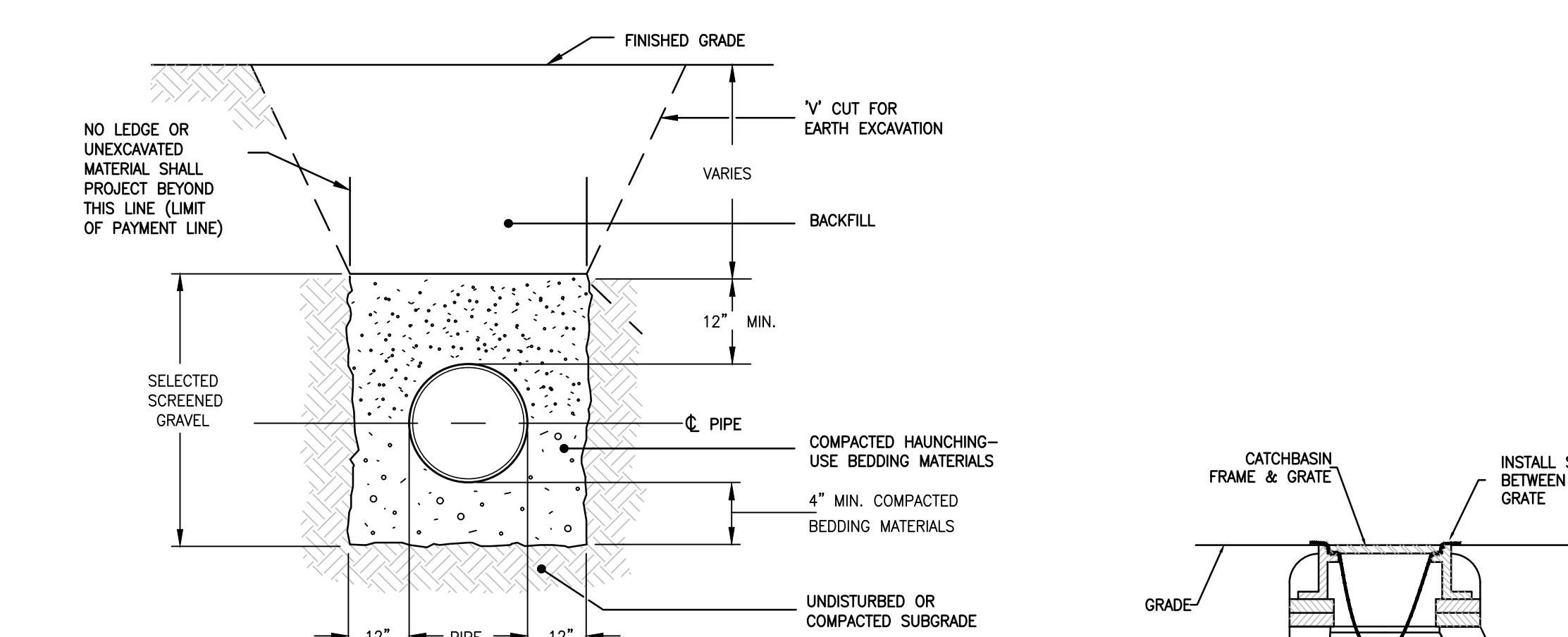
3 PRECAST STORM DRAIN MANHOLE



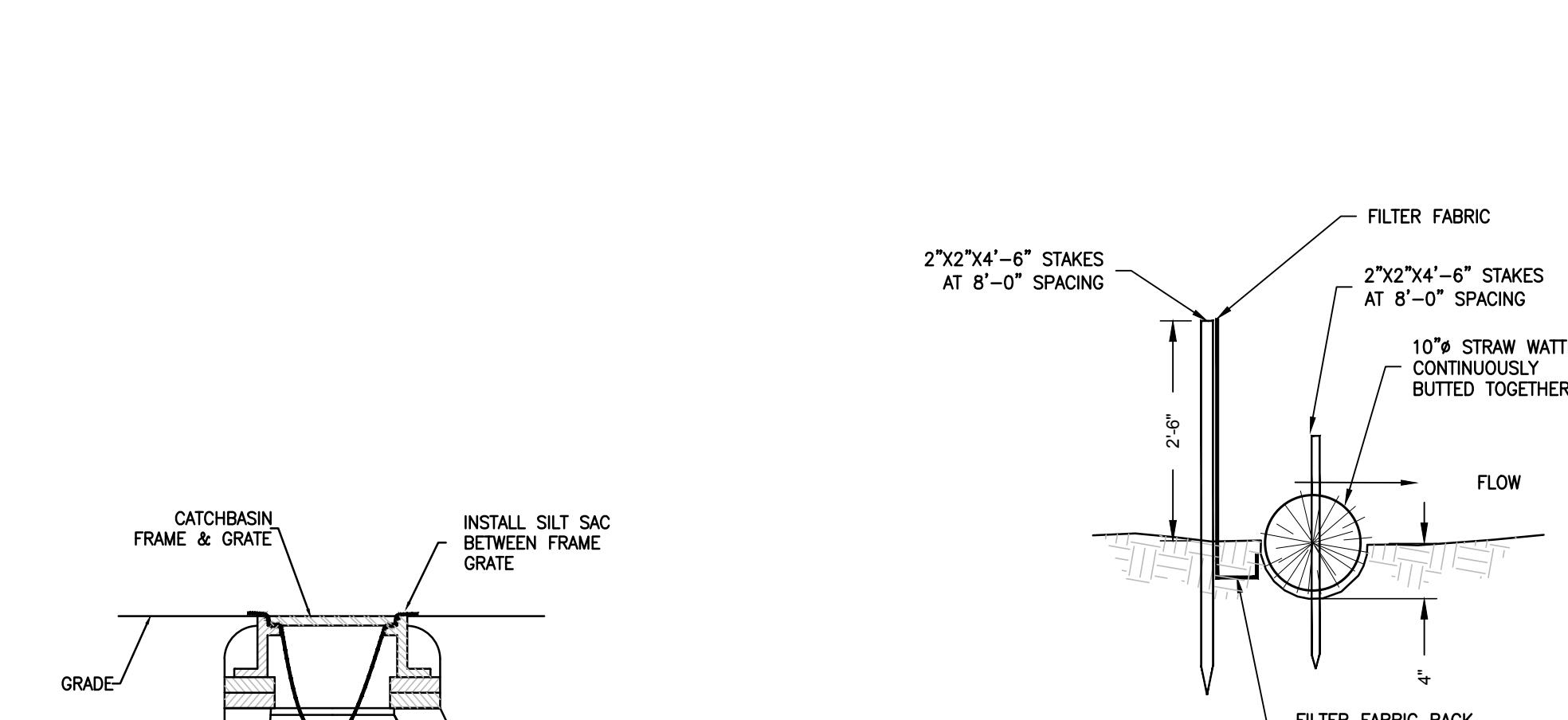
4 SPEED TABLE PLAN &amp; SECTION DETAIL



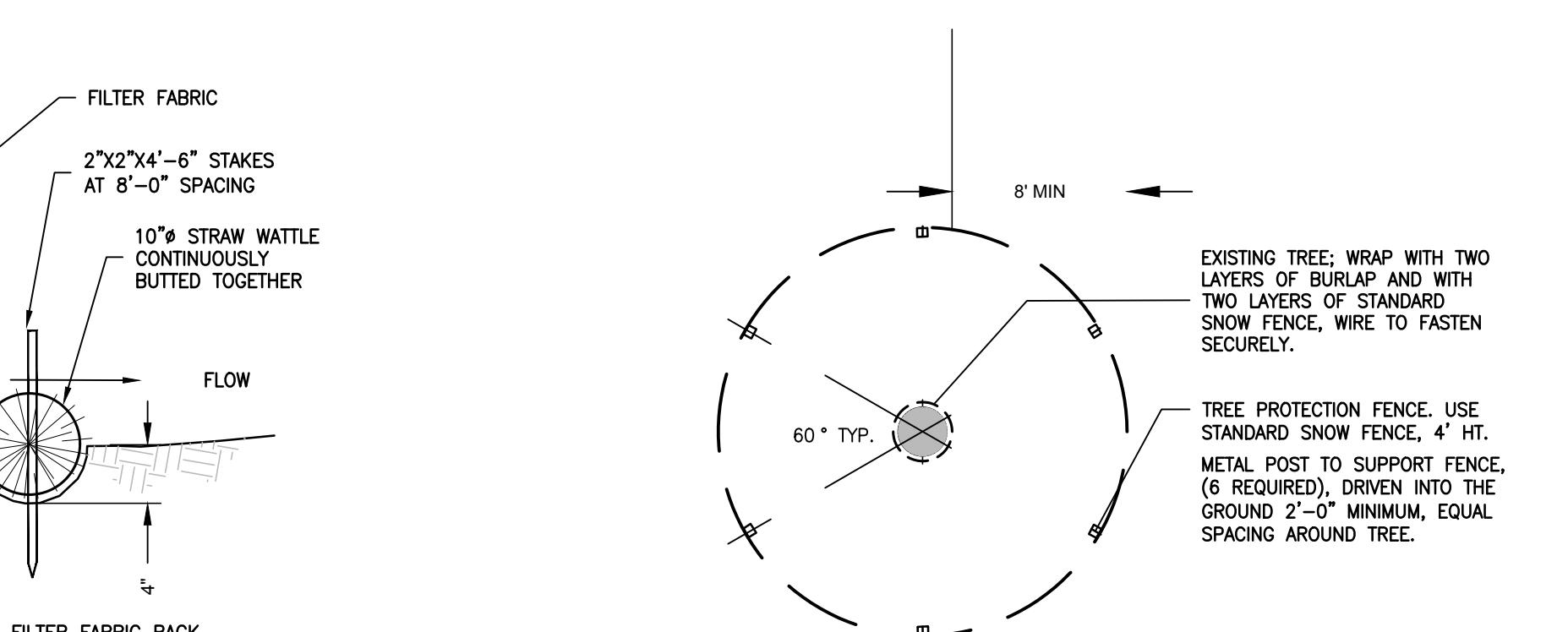
5 BITUMINOUS PAVEMENT



6 TRENCH SECTION— PVC GRAVITY PIPE

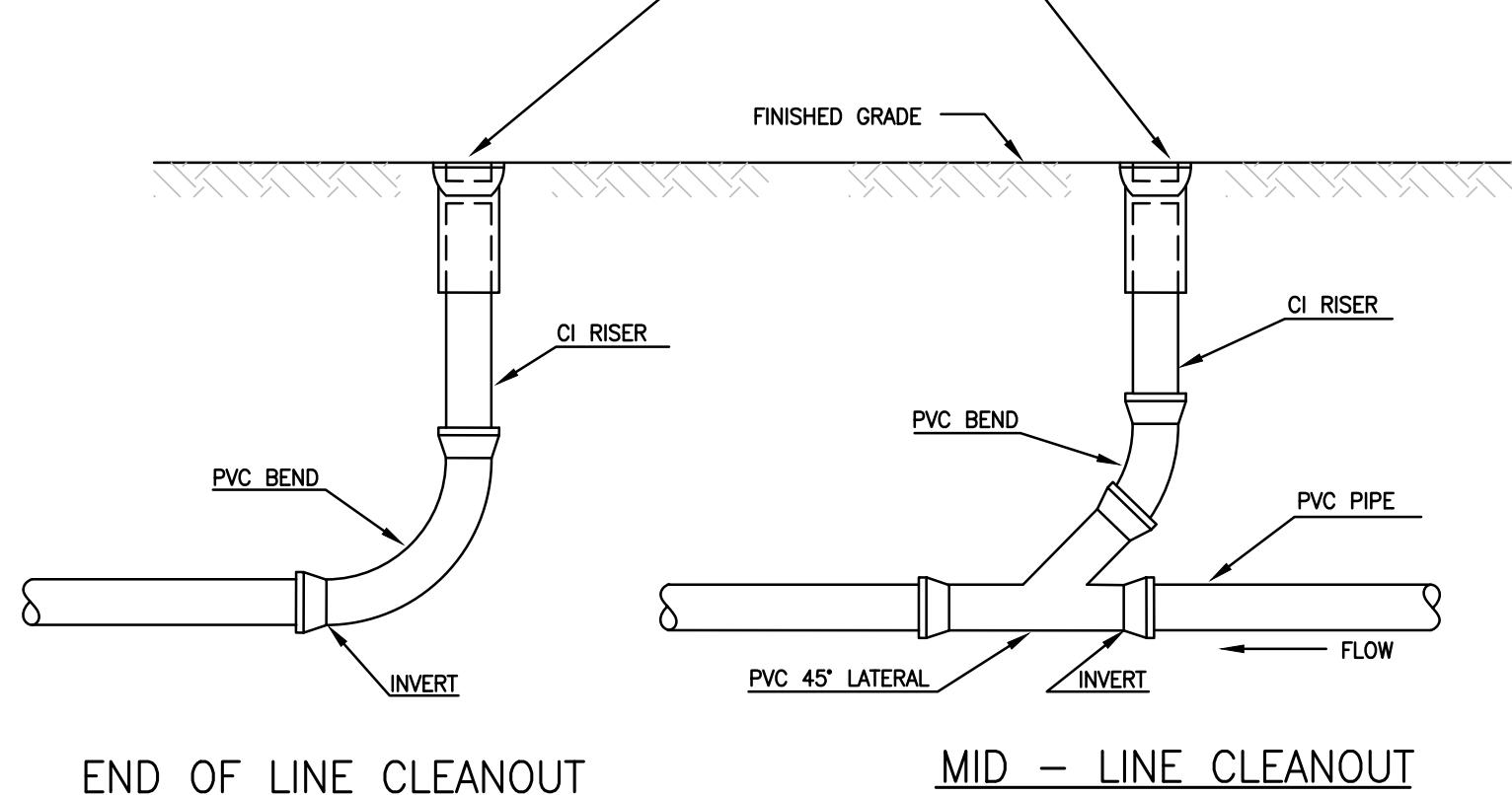


7 CATCH BASIN W/ SILT SAC

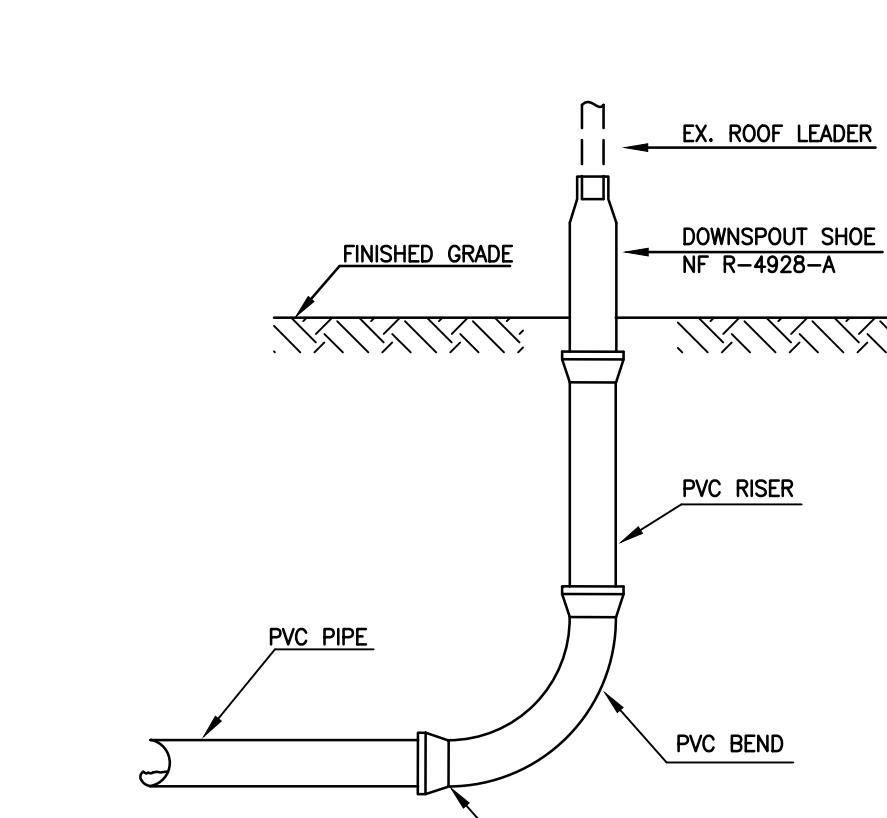


8 SILT FENCE WITH STRAW WATTLE

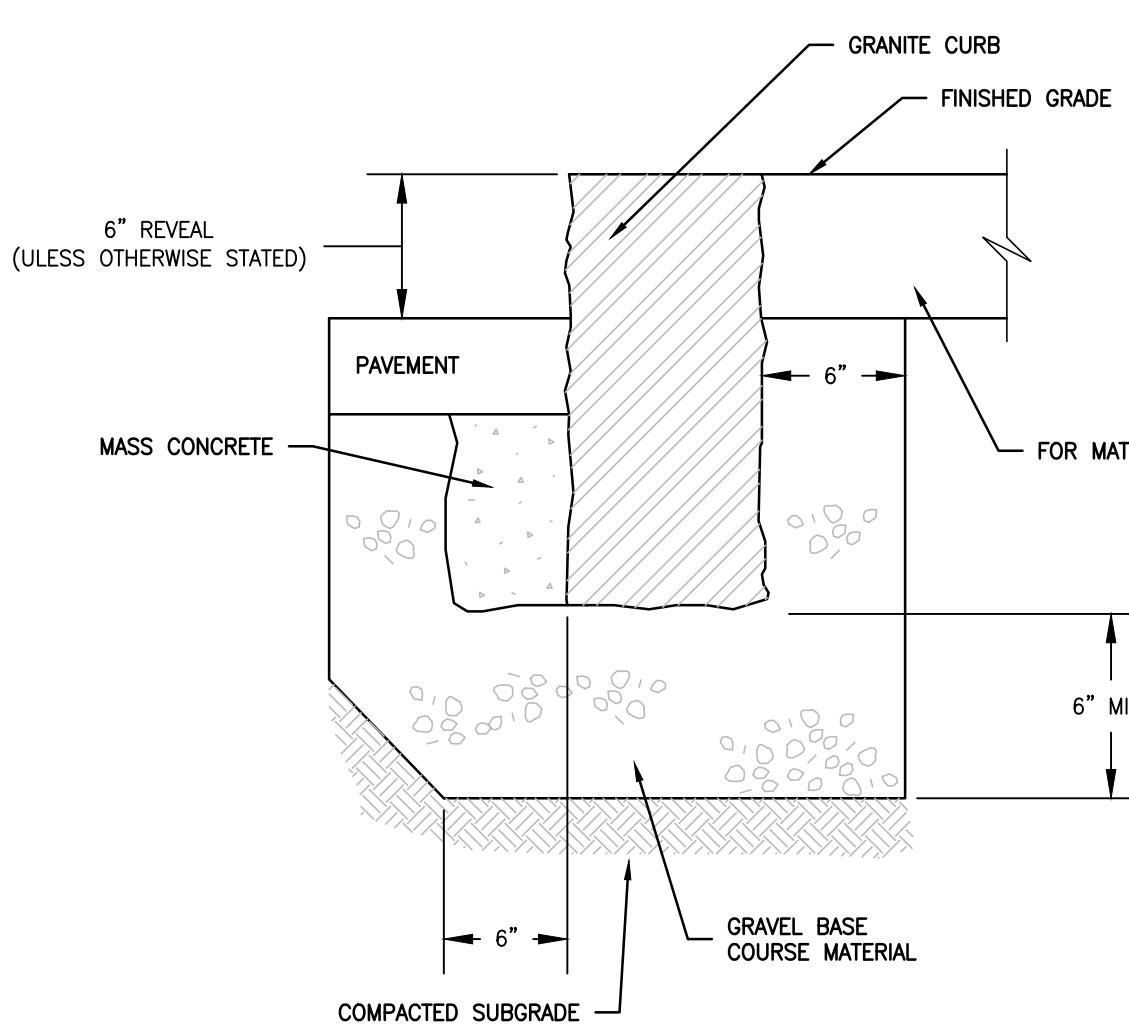
9 EXISTING TREE PROTECTION



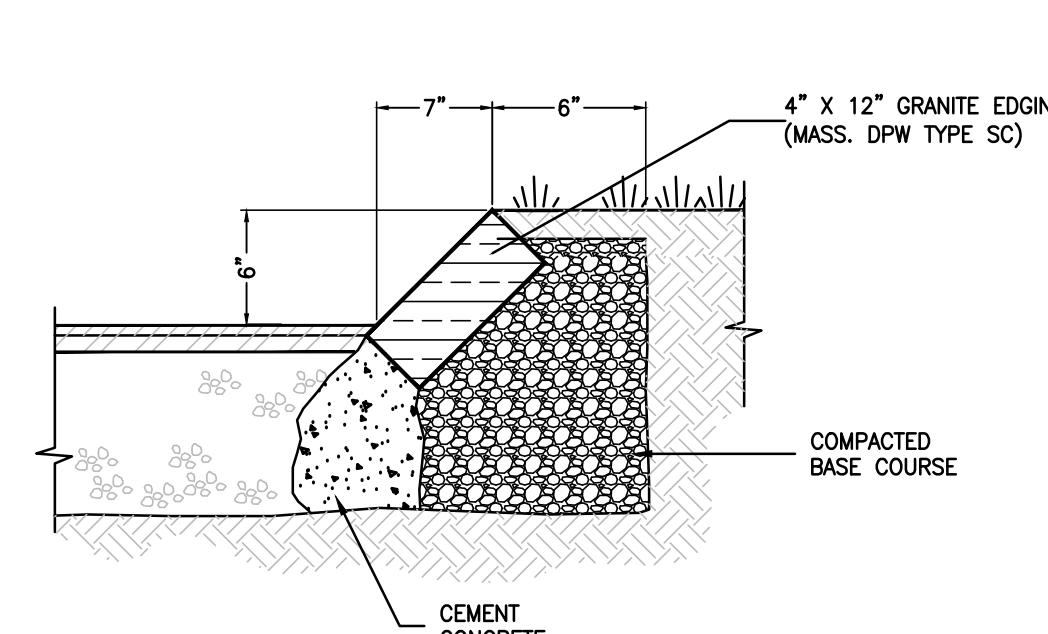
10 UNDERDRAIN CLEANOUT



11 ROOF LEADER



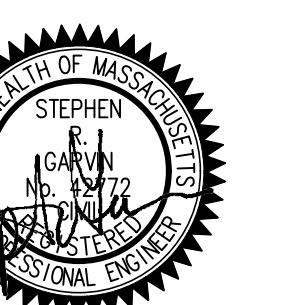
12 VERTICAL GRANITE CURB



13 SLOPED GRANITE CURBING

## CABOT ESTATE CONDOMINIUMS

241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



REVISION	DATE
1	NOD Conservation Commission Submission 3/06
2	NOD Conservation Commission Submission 3/20
3	NOD Revisions to FEMA Detention 3/22
4	Wetland Revocation 4/17
5	Wetland Highlighting 4/18

## CIVIL DETAILS

JOB # 26043.00
DATE: 03/06/19
SCALE: 1" = 20'
DRAWN BY: JP
APPROVED BY: SRG

FILE: F4641-XD CABOT ESTATES - NOV 2.ZDG

C-4.1

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**FINISHED GRADE**

**SAND BED AND SURROUND**

**NOTE:**  
IF CONDUITS ARE TO BE UTILIZED AT A LATER DATE,  
THEY SHALL BE REFERENCED  
TO FIXED LAND MARKS SO  
THEY MAY LOCATED AT A  
FUTURE DATE.

**PVC CONDUITS**

1

NTS

**PROFILE**

EXISTING PAVEMENT

GEOTEXTILE CLASS 'C' OR BETTER

EXISTING GRADE

50' MIN.

5:1

5:1

MOUNTABLE BERM (6" MIN.) EARTH FILL

MIN. 6" OF 2"-3" AGGREGATE OVER LENGTH AND WIDTH OF STRUCTURE

50' MIN. LENGTH

10' MIN.

EXISTING PAVEMENT

10' MIN.

10' MIN.

**PLAN VIEW**

4 STABILIZED CONSTRUCTION ENTRANCE  
NTS

**LOCK POST**

CAP OF 1/2" PLATE WELDED TO SLEEVE  
APPROXIMATE 13/16 OF CROSSBAR  
3/8" STEEL PLATES  
6 1/2"  
6  
1" DIA. LOCKPIN

TERMINAL POST OF 5" PIPE 7'-0" IN LENGTH SET 3'-6" IN GROUND FILLED W/ CONC.

GRADE MATERIAL AND BASE PER PLAN

CLASS D1 CONCRETE FOOTING "SONOTUBE" FORM 1'-6" DIA.  
4'  
1"  
3'-6"  
4'  
3'-0"

**PLAN**

LOCATE LOCKPOSTS IN FIELD TO ACCURATELY MATCH GATE  
GATE LEAF IN OPEN POSITION

TERMINAL POST

**6 VEHICLE CONTROL GATE**  
NTS

EXPANSION JOINT (TYP.)

SEALANT

PREMOLDED EXPANSION JOINT FILLER

GREASED STEEL DOWEL (1/2" Ø)

BROOM FINISH

1/4" FILLET

TOOLED CONTRACTION JOINT

6x6 W2.4/2.4

CAST-IN-PLACE CONC. PAV'T  
4,000 PSI

1/2"

1/4"

6"

4"

80"

COMPACTED GRAVEL BASE

COMPACTED SURGRADE

PRECAST CONCRETE PAVERS

TACK COAT

SETTING BED (3/4"±)

BIT. CONC. BASE (3": 2 EQUAL LIFTS)

GRAVEL SUBGRADE

COMPACTED SUBGRADE

**3** PRECAST CONCRETE PAVERS SET IN ASPHALT  
NTS

The diagram consists of two parts: a PLAN view at the top and a SECTION view below it.

**PLAN View:** This view shows a cross-section of the dam. It features a top layer labeled "BAILED HAY OR STRAW" supported by a grid of stakes. Below this is a layer of "STAKES EACH 12' APART". A vertical arrow labeled "DIRECTION OF FLOW" points downwards through the center of the dam. A note indicates "(2) 2"X2"X3' STAKES EACH 12' APART".

**SECTION View:** This view shows the dam's profile. The top surface has vertical hatching. A note specifies "SLOPE VARYING FROM 1:3 TO 1:5". A dimension line indicates a minimum slope of "6\" data-bbox="900 660 940 690"/> MIN.". The bottom of the dam is supported by a series of vertical stakes. A note states "CHANNEL WIDTH VARIES".

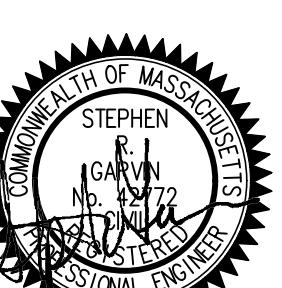
5 HAY BALE CHECK DAM  
NTS

**SECTION THRU CHAMBER**

The diagram illustrates the cross-section of a Stormceptor chamber system. The chamber has a total width of 32" and a height of 30". The top cover is labeled "STORMCEPTOR COVER AND FRAME" with a thickness of 5". The chamber floor is supported by "GRADE ADJUSTERS TO SUIT FINISHED GRADE". The interior dimensions include a central vertical pipe assembly with a "4"Ø PVC PIPE MIN. 15" HIGH W/ 4" CAP" at the top, a "12"Ø INLET DOWN PIPE (REMOVABLE)" on the left, and an "OUTLET PIPE" on the right. A "RISER" pipe connects the bottom of the central assembly to the outlet. The overall depth of the chamber is 30", with a minimum clearance of 3.0" from the bottom of the riser to the base. The plan view shows a circular access opening with "EX. 8" PIPE" connections on the left and right sides. The text "INSERT TEE HERE (TEE OPENING TO FACE SIDE WALL)" is also present.

PLAN VIEW

**CABOT ESTATE CONDOMINIUMS**  
**241 PERKINS STREET**  
JAMAICA PLAIN, MA 02130



## CIVIL DETAILS

-42