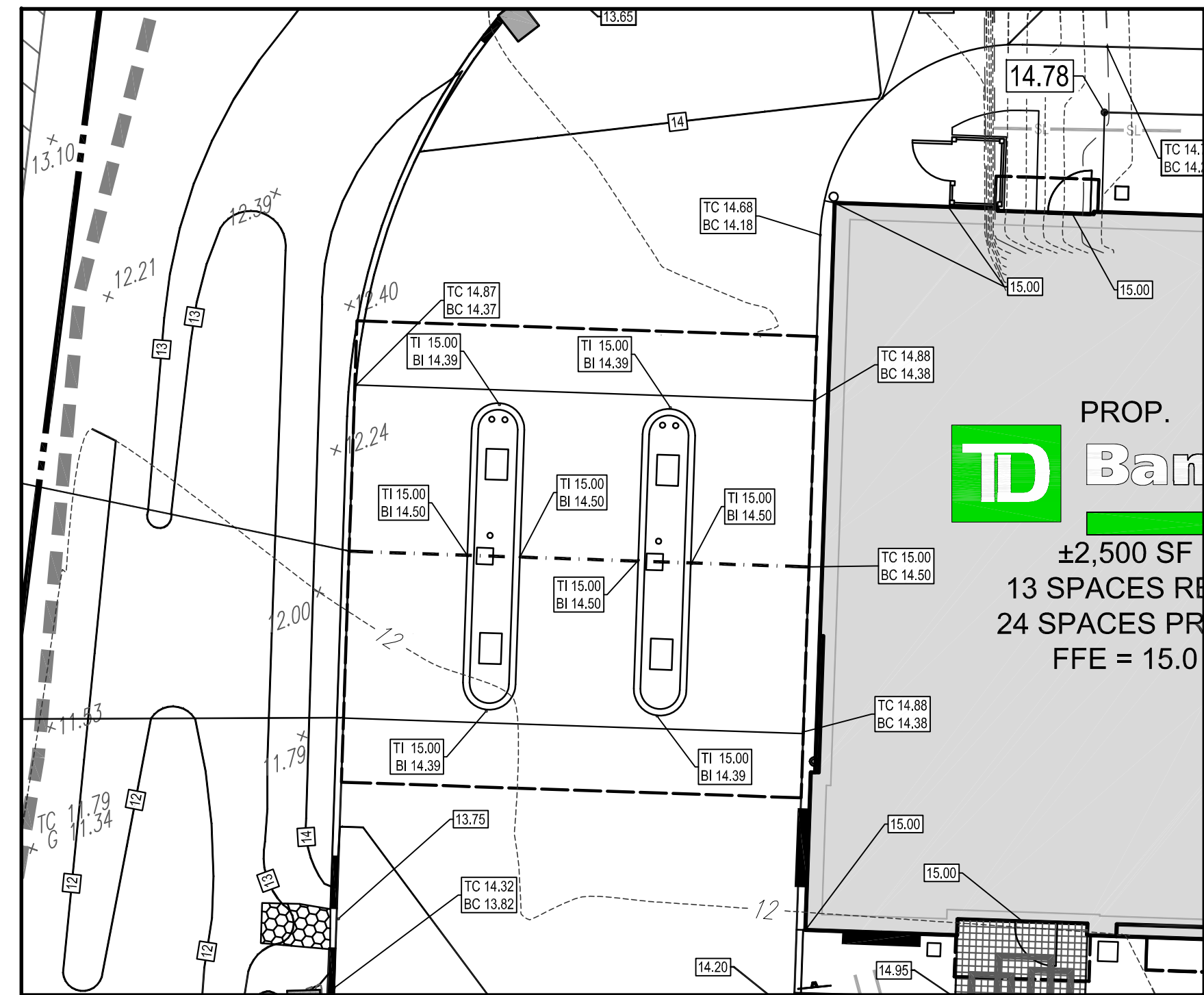
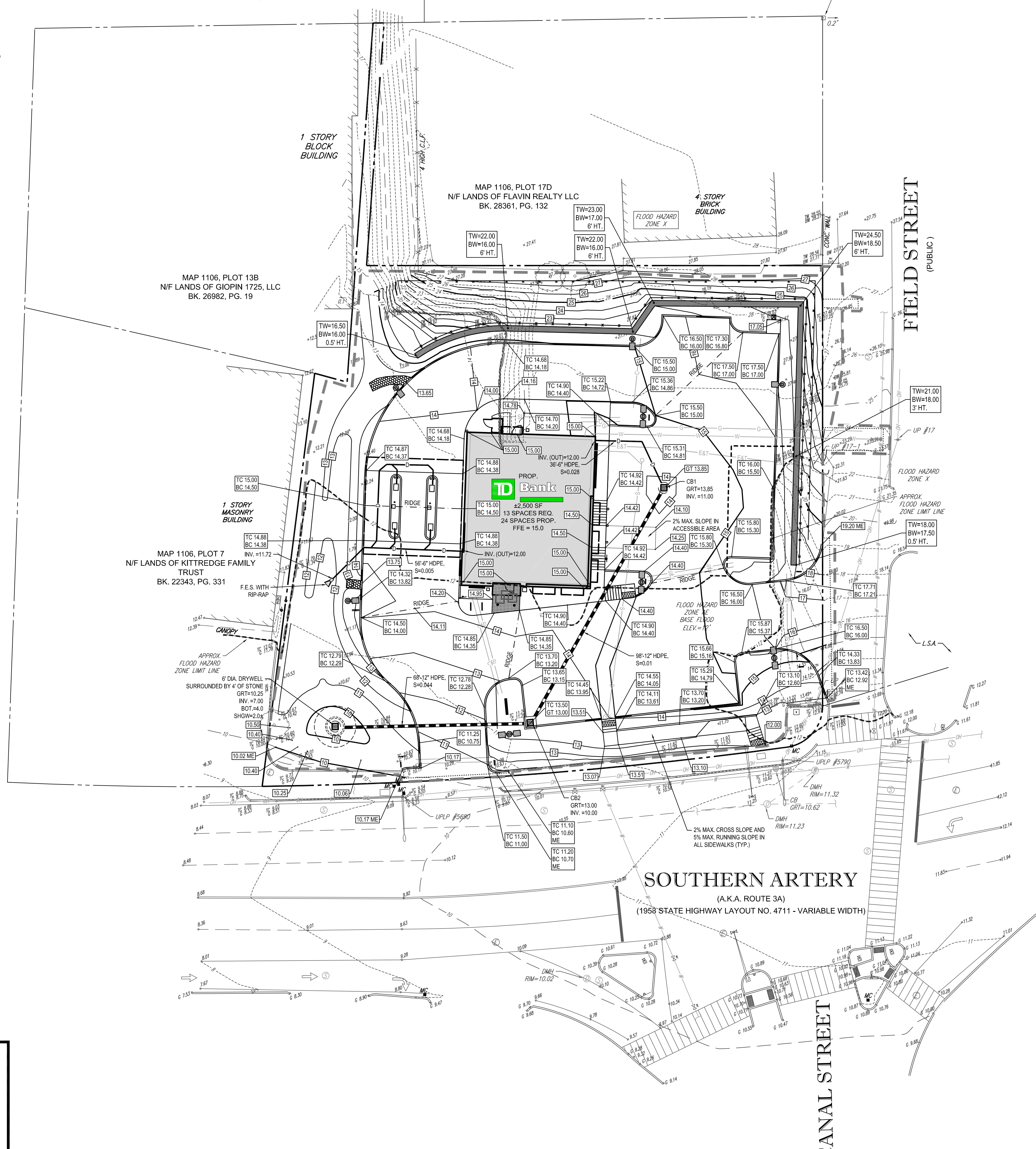


MAP 1109, PLOT 19B



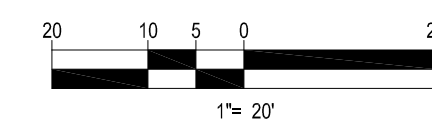
GRADING DETAIL
SCALE: 1"=10'

SUMMARY OF DRAINAGE CALCULATIONS

"C" BEFORE EXISTING SITE				
CONDITION	AREA (SF)	%	COEFF.	FRACT. COMP.
ASPHALT/BIUILDING	26,876	77.70%	0.9	0.70
LANDSCAPE / GRASS	7,708	22.30%	0.3	0.07
TOTAL	34,584	100.00%	"C" COMPOS. = 0.77	
"C" AFTER PROPOSED SITE				
CONDITION	AREA (SF)	%	COEFF.	FRACT. COMP.
ASPHALT/BIUILDING	20,334	58.80%	0.9	0.53
LANDSCAPE / GRASS	14,250	41.20%	0.3	0.12
TOTAL	34,584	100.00%	"C" COMPOS. = 0.65	
APPROXIMATE TIME OF CONCENTRATIONS & STORM INTENSITIES				
TC = 5 MIN. (TIME OF CONCENTRATION - EXISTING)				
TC = 5 MIN. (TIME OF CONCENTRATION - PROPOSED)				
I = 3.2 IN./HR. (2 YR STORM INTENSITY)				
I = 4.7 IN./HR. (10 YR STORM INTENSITY)				
I = 5.5 IN./HR. (25 YR STORM INTENSITY)				
I = 6.7 IN./HR. (100 YR STORM INTENSITY)				
DETERMINE OFF-SITE RUNOFF - TOTAL SITE:				
"Q" EXISTING = "C" COMP. X I X AREA =	1.96	2.87	3.35	4.08 CFS
"Q" PROP. = "C" COMP. X I X AREA =	1.63	2.40	2.81	3.42 CFS
NET INCREASE/DECREASE IN RUNOFF = -0.33 -0.47 -0.54 -0.66 CFS				
NOTE: NO INCREASE IN RUNOFF DUE TO INCREASE IN PERVIOUS (I.E. LANDSCAPE) SURFACES (6,842 SF).				

THIS PLAN TO BE UTILIZED FOR SITE
GRADING PURPOSES ONLY

REFER TO GENERAL NOTES SHEET
FOR GRADING & UTILITY NOTES



Know what's below.
Call before you dig.

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REVISIONS

REV	DATE	COMMENT	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

PRELIMINARY

PROJECT No.: W111008
DRAWN BY: DML
CHECKED BY: RM/JGS
DATE: 12/12/2013
SCALE: AS NOTED
CAP I.D.: W111008SD

SITE PLAN DOCUMENTS FOR



LOCATION OF SITE
PLOTS 4, 5, 6 AND 15C, MAP 1106
476-486 SOUTHERN ARTERY
CITY OF QUINCY
NORFOLK COUNTY
MASSACHUSETTS



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SOUTH BOROUGH, MA 01772
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GRADING & DRAINAGE PLAN

SHEET NUMBER:
5
OF 14

REV 0 - 12/12/2013