CONSTRUCTION NOTES:

1. THE LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN LOCATED ON THIS PROJECT. THE CONTRACTOR SHALL CONTACT DIGSAFE (1-888-DIGSAFE) A MINIMUM OF 72 HOURS PRIOR TO ANY CONSTRUCTION TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. ANY EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY APPROVED METHODS.
3. THE TERM "MEET EXIST" MEANS TO MEET BOTH THE EXISTING ALIGNMENT AND ELEVATION.
4. ALL EXISTING GRANITE CURB THAT MEETS SPECIFICATIONS SHALL BE RE-USED WITHIN THE PROPOSED WORK, EXCEPT CURVED STONES OF A DIFFERENT RADIUS THAN THAT PROPOSED.
5. IN INSTANCES WHERE AN EXISTING MANHOLE, HANDHOLE, OR OTHER "SURFACE" TYPE STRUCTURE THAT CANNOT BE REMOVED OR RESET IS WITHIN THE PROPOSED OR EXISTING (IF RECIPROCAL OR WITHIN PROJECT LIMITS) ACCESSIBLE SURFACE, THE STRUCTURE SHALL BE CAREFULLY ADJUSTED SUCH THAT THE TOPMOST SURFACES OR THE STRUCTURE COVER SHALL BE FLUSH WITH THE CURB RAMP SURFACE.
6. CONTRACTOR, IN COORDINATION WITH MASSDOT, SHALL COORDINATE WITH ADJACENT PROPERTY OWNER TO DETERMINE ALL NECESSARY LANDSCAPING DETAILS. FINAL CONDITIONS SHALL REPLICATE EXISTING CONDITIONS TO THE GREATEST EXTENT FEASIBLE.

PAVEMENT NOTES:

HOT MIX ASPHALT WALK SURFACE (ITEM 702) AND
HOT MIX ASPHALT DRIVEWAY (ITEM 703):

THE WORK UNDER THESE ITEMS SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 701 AND SECTION 450 AND TO THE FOLLOWING

HMA WALK SURFACE COURSE SHALL BE A COMPACTED THICKNESS OF 1 INCH SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5). THE INTERMEDIATE COURSE SHALL BE A COMPACTED THICKNESS OF 1 1/2 INCHES SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5).

HMA DRIVEWAY SURFACE COURSE SHALL BE A COMPACTED THICKNESS OF 1 1/2 INCHES SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5). THE INTERMEDIATE COURSE SHALL BE A COMPACTED THICKNESS OF 2 INCHES SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5).

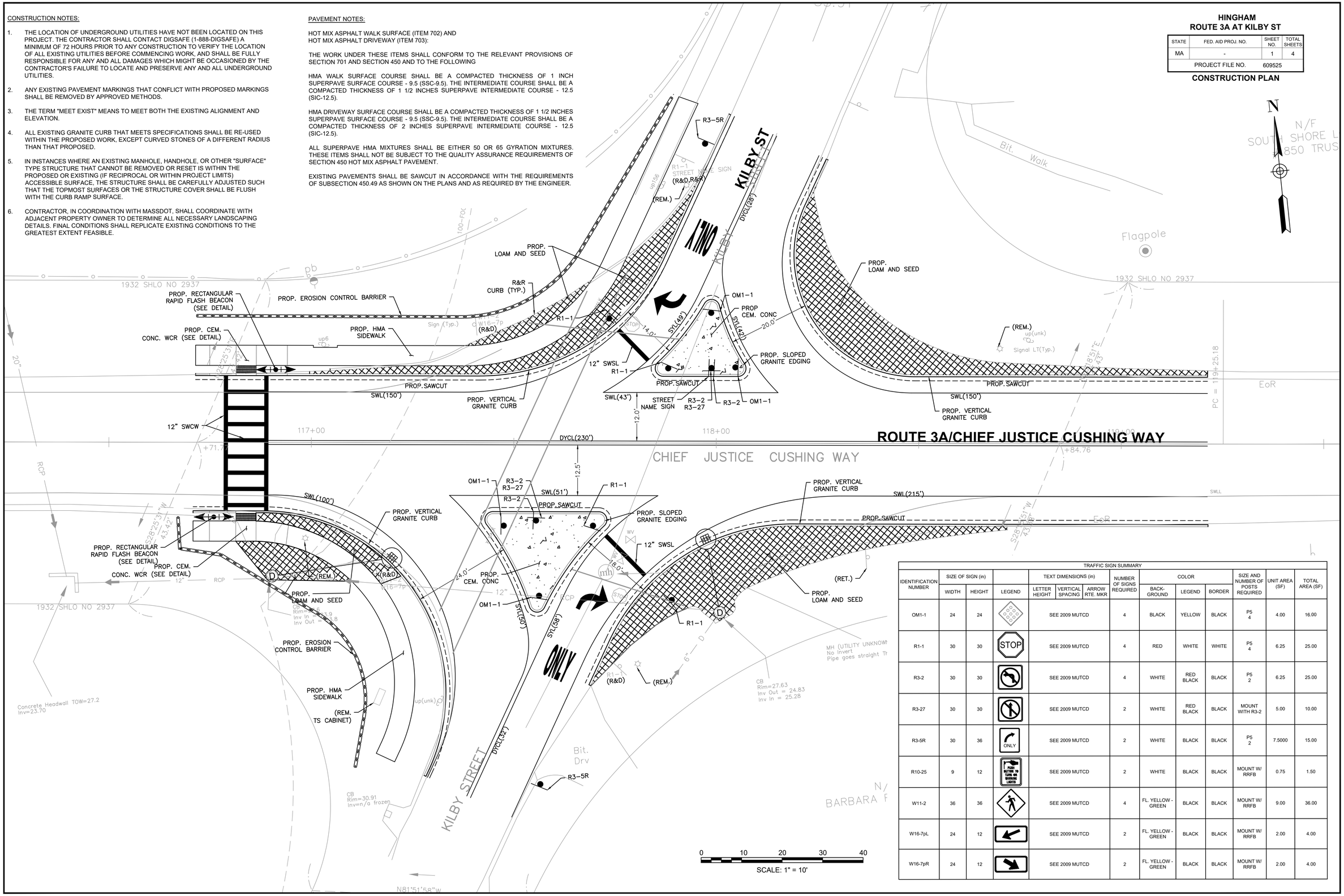
ALL SUPERPAVE HMA MIXTURES SHALL BE EITHER 50 OR 65 GYRATION MIXTURES. THESE ITEMS SHALL NOT BE SUBJECT TO THE QUALITY ASSURANCE REQUIREMENTS OF SECTION 450 HOT MIX ASPHALT PAVEMENT.

EXISTING PAVEMENTS SHALL BE SAWCUT IN ACCORDANCE WITH THE REQUIREMENTS OF SUBSECTION 450.49 AS SHOWN ON THE PLANS AND AS REQUIRED BY THE ENGINEER.

HINGHAM
ROUTE 3A AT KILBY ST

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	4
PROJECT FILE NO.	609525		

CONSTRUCTION PLAN



TRAFFIC SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN (in)			TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			SIZE AND NUMBER OF POSTS REQUIRED	UNIT AREA (SF)	TOTAL AREA (SF)
	WIDTH	HEIGHT	LEGEND	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR		BACK-GROUND	LEGEND	BORDER			
OM1-1	24	24		SEE 2009 MUTCD			4	BLACK	YELLOW	BLACK	P5 4	4.00	16.00
R1-1	30	30	STOP	SEE 2009 MUTCD			4	RED	WHITE	WHITE	P5 4	6.25	25.00
R3-2	30	30		SEE 2009 MUTCD			4	WHITE	RED BLACK	BLACK	P5 2	6.25	25.00
R3-27	30	30		SEE 2009 MUTCD			2	WHITE	RED BLACK	BLACK	MOUNT WITH R3-2	5.00	10.00
R3-5R	30	36	ONLY	SEE 2009 MUTCD			2	WHITE	BLACK	BLACK	P5 2	7.5000	15.00
R10-25	9	12	PUSH BUTTON TO TURN ON SIGNAL LIGHTS	SEE 2009 MUTCD			2	WHITE	BLACK	BLACK	MOUNT W/ RRFB	0.75	1.50
W11-2	36	36		SEE 2009 MUTCD			4	FL. YELLOW - GREEN	BLACK	BLACK	MOUNT W/ RRFB	9.00	36.00
W16-7pL	24	12		SEE 2009 MUTCD			2	FL. YELLOW - GREEN	BLACK	BLACK	MOUNT W/ RRFB	2.00	4.00
W16-7pR	24	12		SEE 2009 MUTCD			2	FL. YELLOW - GREEN	BLACK	BLACK	MOUNT W/ RRFB	2.00	4.00

HINGHAM
ROUTE 3A AT KILBY ST

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	4
PROJECT FILE NO.	609525		

CURB TIE PLAN

N
KILBY ST
KILBY STREET
KILBY
ROUTE 3A/CHIEF JUSTICE CUSHING WAY
CHIEF JUSTICE CUSHING WAY
N/F MBTA
N/F SOUTH SHORE L 850 TRUS
N/F BARBARA FERGUSSON
Flagpole
Bit. Walk
Bit. Drv
1932 SHLO NO 2937
100-FOOT BUFFER ZONE
117+00
118+00
WCR1
WCR2
+95.35, LT 83.93'
+3.43, LT 81.16'
+76.63, LT 43.39'
+86.89, LT 45.53'
+38.50, LT 19.00'
+71.38, LT 19.00'
+71.38, LT 16.50'
+41.59, LT 16.50'
+97.02, LT 34.51'
+0.69, LT 31.02'
+85.51, LT 19.95'
+6.98, LT 19.57'
+86.89, LT 16.50'
+5.29, LT 16.50'
+27.04, LT 70.25'
+21.87, LT 59.07'
+21.29, LT 16.50'
+49.11, LT 16.50'
+70.82, RT 16.93'
+70.82, RT 19.42'
+88.34, RT 16.92'
+85.63, RT 19.42'
+44.89, RT 17.00'
+70.99, RT 17.00'
+43.30, RT 20.21'
+72.37, RT 20.45'
+53.92, RT 40.46'
+57.62, RT 40.70'
+73.63, RT 48.96'
+68.65, RT 59.75'
+19.74, RT 19.92'
+21.46, RT 19.92'
+21.95, RT 76.19'
+20.71, RT 78.88'
+28.19, RT 80.79'
+28.43, RT 82.44'
R=2.0'
14.0'
20.0'
24.0'
18.0'
16.5'
16.9'
17.0'
19.9'
L=402.36'
R=6458.61
S84°27'36"E
57.21'
MH (UTILITY UNKNOWN) No Invert Pipe goes straight Thru
CB Rim=27.63 Inv Out = 24.83 Inv In = 25.28
CB Rim=30.91 Inv=n/a frozen
Concrete Headwall TOW=27.2 Inv=23.70
SCALE: 1" = 10'

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C1	65°12'36"	50.00	56.91	T=31.98'
C2	16°40'38"	64.00	18.63	T=9.38'
C3	18°07'22"	50.00	15.82	T=7.97'
C4	114°47'24"	30.00	60.10	T=46.90'
C5	65°12'36"	50.00	56.91	T=31.98'
C6	21°13'34"	68.00	25.19	T=12.74'
C7	19°04'43"	69.00	22.98	T=11.60'
C8	114°47'24"	45.00	90.16	T=70.35'

Plotted on 15-Mar-2021 4:59 PM

DRAWING PROPOSED.DWG

HINGHAM
ROUTE 3A AT KILBY ST

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	4
PROJECT FILE NO.	609525		

DRAINAGE AND UTILITY PLAN

DRAWING PROPOSED.DWG Plotted on 15-Mar-2021 4:59 PM

N

KILBY ST
STREET

KILBY

Flagpole

pb

up6

up156

up(unk)

Signal LT(Typ.)

Sign (Typ.)

STOP

OHW

100-FOOT BUFFER ZONE

117+00
+71.77

118+00

120+00
+84.76

PC = 119+25.18

ROUTE 3A/CHIEF JUSTICE CUSHING WAY

CHIEF JUSTICE CUSHING WAY

PROP. 26 LF
12" RCP

CB
RIM ELEV: 29.03
INV ELEV OUT: 25.03

12" RCP

CIT TO DMH
RIM ELEV: 27.6
INV ELEV IN: 23.9
INV ELEV IN (NEW): 24.77
INV ELEV OUT: 23.8

CB
Rim=27.6
Inv In = 23.9
Inv Out = 23.8

CB
Rim=30.91
Inv=n/a frozen

up(unk)

Bit.
Drv

KILBY STREET

CB
RIM ELEV: 28.76
INV ELEV OUT: 25.76

PROP. 15 LF
12" RCP

12" RCP

CIT TO DMH
RIM ELEV: 27.63
INV ELEV IN: 25.28
INV ELEV IN (NEW): 25.61
INV ELEV OUT: 24.83

CB
Rim=27.63
Inv Out = 24.83
Inv In = 25.28

6" D

MH (UTILITY UNKNOWN)
No Invert
Pipe goes straight Thru

SWLL

EoR

WV

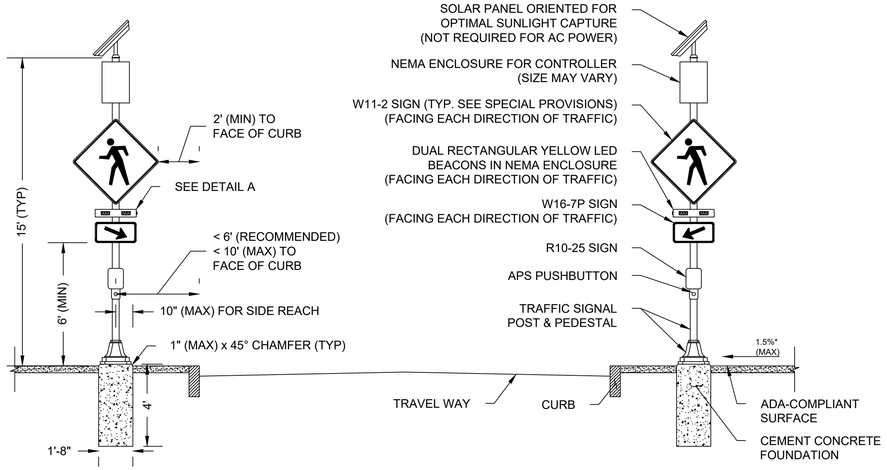
mh

0 10 20 30 40

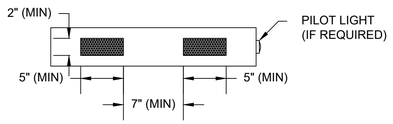
SCALE: 1" = 10'

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	4
PROJECT FILE NO.	609525		

CONSTRUCTION DETAILS



DETAIL A: DUAL YELLOW BEACON



NOTES:

1. CROSSWALK AND ADA-COMPLIANT RAMPS NOT SHOWN. SEE PLANS FOR LOCATIONS.
2. REFER TO THE SPECIAL PROVISIONS FOR SIGN DIMENSIONS.
3. ALL CONDUIT, PULL BOXES, SERVICE CONNECTIONS, AND EQUIPMENT GROUNDING REQUIRED FOR AC POWER IS NOT SHOWN IN THIS DETAIL AND SHALL BE PAID FOR SEPARATELY UNDER THEIR RESPECTIVE PAY ITEMS.
4. ACCESS TO ALL PEDESTRIAN ACTUATED CONTROLS SHALL BE ADA/AAB COMPLIANT.
5. *0.5% CONSTRUCTION TOLERANCE FOR CROSS-SLOPE.

MAJOR ITEMS LIST

2 CEMENT CONCRETE FOUNDATIONS PER 812.30.1
2 15' TRAFFIC SIGNAL POSTS & PEDESTALS
2 APS PUSHBUTTON SYSTEMS
4 DUAL RECTANGULAR YELLOW LED BEACONS IN NEMA ENCLOSURES
2 9"x12" R10-25 SIGNS (PUSH BUTTON TO TURN ON WARNING LIGHTS) SIGNS
4 36"X36" W11-2 SIGNS
2 24"X24" W16-7PR SIGNS
2 24"X24" W16-7PL (DIAGONAL DOWNWARD ARROW) SIGNS
2 SOLAR PANEL SYSTEMS (NOT REQUIRED FOR AC POWER)
2 NEMA TYPE 3R OR HIGHER ENCLOSED TO HOUSE:
-ELECTRICAL COMPONENTS, INCLUDING WIRING AND SOLID CIRCUIT BOARDS
-ON-BOARD USER INTERFACE
-BATTERY SYSTEMS
-FREQUENCY HOPPING SPREAD SPECTRUM (OR OTHER ALTERNATE FCC APPORVED WILERLESS ACTIVATION UNITS WITH A MINIMUM 150' RANGE PLUS ALL MOUNTING AND SUPPORTING HARDWARE AND WIRING NECESSARY TO COMPLETE A WORKING SYSTEM.

RECTANGULAR RAPID FLASHING BEACON
N.T.S.

NOTES:

1. THIS PROCEDURE IS APPLICABLE ONLY IF CURB IS TO BE SET AFTER BASE COURSE IS IN PLACE PRIOR TO BINDER AND TOP PLACEMENT.
2. CUT NEAT LINE 6" FROM CURB LINE AND REMOVE BASE AND GRAVEL. REPLACE WITH CEMENT CONCRETE.
3. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED; ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT TO BE USED AS A SUBSTITUTE.

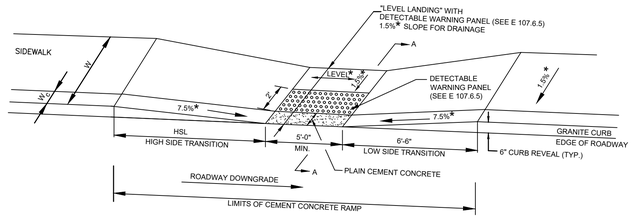
METHOD OF SETTING VERTICAL CURB
N.T.S.

SLOPED EDGING

NOTES:

1. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE TO THE DEPARTMENT UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS; ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT TO BE USED AS A SUBSTITUTE.
2. THE REVEAL IS TO BE A MAXIMUM OF 4" UNDER ALL CONDITIONS, THE ANGLE IS TO BE A MINIMUM OF 60° FROM VERTICAL UNDER ALL CONDITIONS.

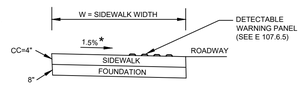
METHOD OF SETTING SLOPED EDGING
N.T.S.



LEGEND

HSL = HIGH SIDE TRANSITION LENGTH (SEE E 107.9.0)
W = SIDEWALK WIDTH
W_C = CURB WIDTH
CC = CEMENT CONCRETE
★ = TOLERANCE FOR CONSTRUCTION ±0.5%
USABLE SIDEWALK WIDTH PER AAB = W-W_C
USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'0"
SEE E 107.6.5 FOR DETAILS OF DETECTABLE WARNING PANEL

NOTE:
ROADWAY, GUTTER, AND FIRST 6" OF SIDEWALK TO BE ADJUSTED FOR FIELD CONDITIONS



SECTION A-A

WHEELCHAIR RAMP WITH LANDSCAPING STRIP
N.T.S.

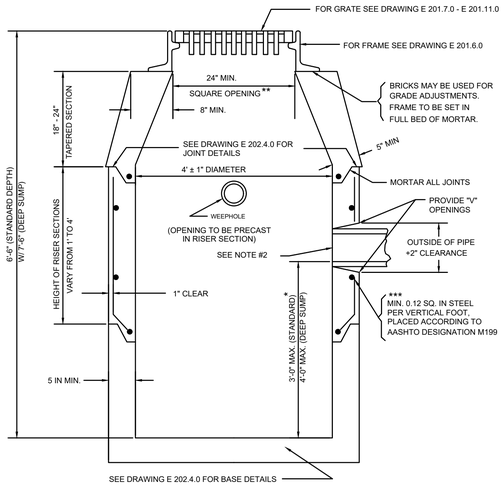
WHEELECHAIR RAMPS										
WCR #	STATION	OFFSET	LENGTH OF PRIMARY RAMP (W1)	WIDTH OF SIDEWALK (W)	WIDTH OF RAMP OPENING	DEPTH OF LEVEL LANDING	ROADWAY GUTTER SLOPE	RAMP MATERIAL	TRANSITION LENGTH	
									LEFT SIDE	RIGHT SIDE
1	116+83.87	16.50' LT	2'-6"	5'	5'-0"	5'-0"	-0.90%	CEM CONC	7'8"	6'5"
2	116+83.87	16.90' RT	2'-6"	5'	5'-0"	5'-0"	-1.00%	CEM CONC	6'6"	7'8"

ROADWAY PROFILE GRADE	* HIGH SIDE TRANSITION LENGTH
%	ENGLISH UNITS
=0%	6'-6"
>0% TO 1%	7'-8"
>1% TO 2%	9'-0"
>2% TO 3%	11'-0"
>3% TO 4%	14'-0"
>4% TO 5%	15'-0" Max

NOTE:

★ BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".

CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS

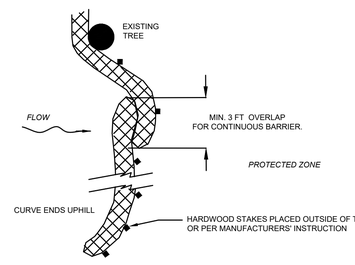


* MINIMUM DEPTH OF SUMP TO BE 2 FT
** WHEN A CURB INLET IS INSTALLED, THE OPENING IS TO BE 24"±1" X 27"±1"
*** REINFORCING STEEL BASED ON A WALL THICKNESS OF 5".

NOTES:

1. DETAILS NOT INDICATED ABOVE ARE TO BE SIMILAR TO THOSE SHOWN ON E 201.3.0
2. FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.
3. FOR DESCRIPTION, MATERIALS AND CONSTRUCTION METHOD, SEE STANDARD SPECIFICATIONS.
4. ALL CONCRETE TO BE AIR ENTRAINED

PRECAST CONCRETE CATCH BASIN
N.T.S.



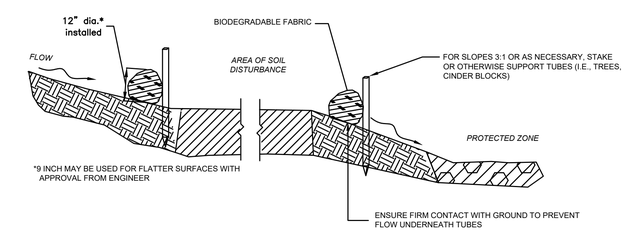
PLACE TUBE AS CLOSE TO LIMIT OF SOIL DISTURBANCE AS POSSIBLE, ALONG CONTOURS, AND PERPENDICULAR TO FLOW.

ADJUST LOCATION AS REQUIRED FOR OPTIMUM EFFECTIVENESS. DO NOT INSTALL IN WATERWAYS OR BORDERING VEGETATED WETLANDS.

PLAN VIEW

REDUCE HIGH WATER FLOW ONTO WORK ZONE

CAPTURE SEDIMENT AND PREVENT FLOW OFF SITE



SECTION

SEDIMENT BARRIER - COMPOST FILTER TUBE
N.T.S.