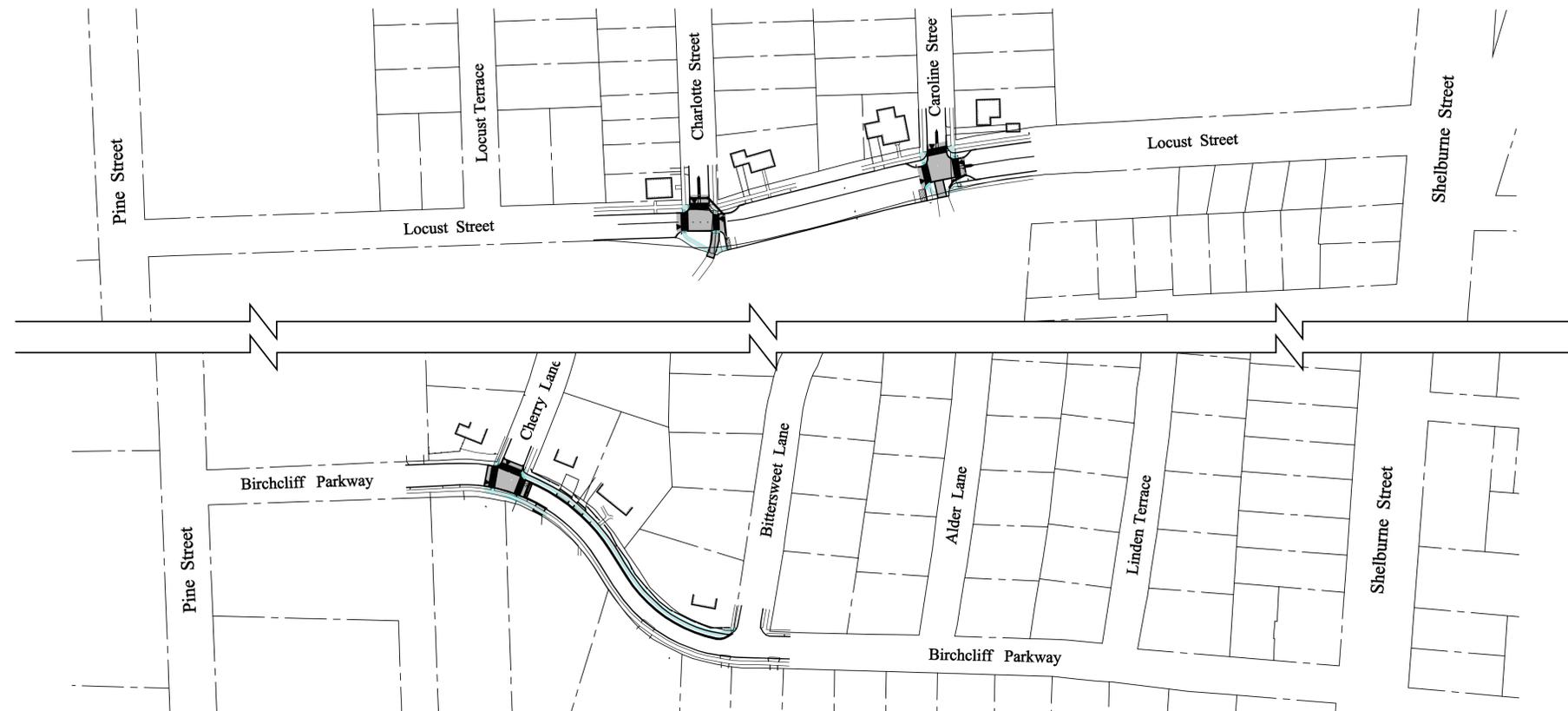
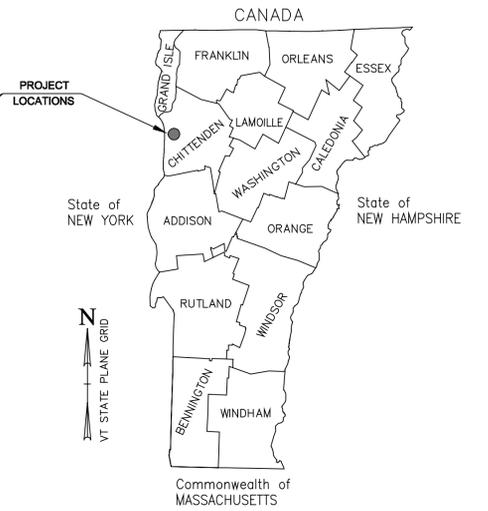
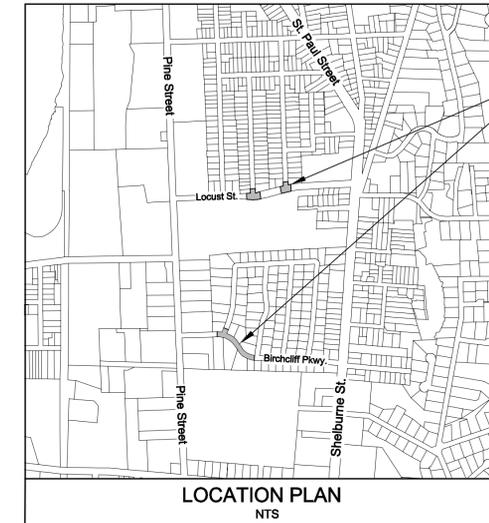


# City of Burlington County of Chittenden Burlington STP BP 13(6) Pedestrian Improvements

PROJECT LOCATIONS: ON LOCUST STREET; THE INTERSECTIONS OF CAROLINE & CHARLOTTE STREET WITH LOCUST STREET. ON BIRCHCLIFF PARKWAY; STARTING AT 400 FT± EAST OF PINE STREET AND EXTENDING TO BITTERSWEET LANE, AND INTERSECTION IMPROVEMENTS AT THE CHERRY LANE/BIRCHCLIFF PARKWAY INTERSECTION.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES GRADING, SUBBASE, NEW 5' WIDE SIDEWALK AND CURB, SPEED TABLES, CURB EXTENSIONS, DRIVEWAY RECONSTRUCTION, NEW DRAINAGE STRUCTURES, NEW SIGNS AND OTHER RELATED ITEMS.



OVERALL SITE PLAN

NOTES:

1. THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE VERMONT AGENCY OF TRANSPORTATION. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS INCORPORATED IN THESE PLANS.
2. THE LOCUST STREET AND BIRCHCLIFF PARKWAY RIGHT OF WAYS ARE BASED ON LIMITED FOUND EXISTING BOUNDARY EVIDENCE, CITY RECORDS, AND PLANS BY OTHERS. INDIVIDUAL PROPERTY SIDELINES WERE LOCATED BASED ON FOUND EVIDENCE AND CITY PARCEL MAPS.
3. LINES SHOWN ON THESE PLANS AS EXISTING PROPERTY LINES ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE ACQUISITION OF LANDS AND RIGHTS FOR THIS PROJECT.

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 QUANTITY SHEET
- 3 QUANTITY SHEET
- 4 DETAILS AND SPECIFICATIONS
- 5 DETAILS AND SPECIFICATIONS
- 6 BIRCHCLIFF PARKWAY LAYOUT PLAN & PROFILE
- 7 CHERRY LANE/BIRCHCLIFF PARKWAY INTERSECTION LAYOUT PLAN
- 8 CAROLINE STREET/LOCUST STREET INTERSECTION LAYOUT PLAN
- 9 CHARLOTTE/LOCUST STREET INTERSECTION LAYOUT PLAN
- 10-12 BIRCHCLIFF PARKWAY CROSS-SECTIONS
- 13 CONSTRUCTION APPROACH & TRAFFIC SIGN DETAILS

QUALITY ASSURANCE  
PROGRAM LEVEL 3

DATUM  
VERTICAL NAVD 88  
HORIZONTAL NAD 83(1996)

FUNDING ASSISTANCE FOR THIS PROJECT IS BEING FURNISHED BY THE FHWA, THE CITY OF BURLINGTON AND THE STATE OF VERMONT

TITLE SHEET

25% PLANS  
JANUARY 2015

BURLINGTON STP BP 13(6)

**L** Lamoureux & Dickinson  
Consulting Engineers, Inc.  
14 Morse Drive, Essex, VT 05452  
802-878-4450 www.LDengineering.com

L&D PROJECT NUMBER: 14087  
DRAWN BY: L&D  
CHECKED BY: DG/RD

SHEET:

1

# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES											TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
										Incidental construction.	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										1	1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				
										280	280		CY	COMMON EXCAVATION	203.15				
										8	8		CY	SOLID ROCK EXCAVATION	203.16				
										70	70		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28				
										300	300		CY	TRENCH EXCAVATION OF EARTH	204.20				
													SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10				
										453	453		CY	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.26				
										1	1		CWT	EMULSIFIED ASPHALT	404.65				
										93	93		TON	BITUMINOUS CONCRETE PAVEMENT	406.25				
										10	10		GAL	WATER REPELLENT, SILANE	514.10				
										157	157		LF	15" CPEP	601.0910				
										8	8		EACH	CONCRETE CATCH BASIN WITH CAST IRON GRATE	604.10				
										2	2		EACH	CONCRETE MANHOLE WITH CAST IRON COVER	604.11				
													EACH	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40				
													EACH	CHANGING ELEVATION OF SEWER MANHOLES	604.42				
													EACH	CAST IRON COVER WITH FRAME	604.55				
										40	40		HR	POWER BROOM RENTAL, TYPE II	608.31				
										1	1		MGAL	DUST CONTROL WITH WATER	609.10				
										935	935		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28				
										834	834		LF	REMOVAL OF EXISTING CURB	616.41				
													EACH	RELOCATE MAILBOX, SINGLE SUPPORT	617.10				
										357	357		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10				
										28	28		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH	618.11				
										184	184		SF	DETECTABLE WARNING SURFACE	618.30				
										8	8		EACH	ADJUST ELEVATION OF VALVE BOX	629.20				
										50	50		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
										100	100		HR	FLAGGERS	630.15				
										1	1		LS	MOBILIZATION/DEMobilIZATION	635.11				
													LS	TRAFFIC CONTROL	641.10				
										471	471		LF	12 INCH WHITE LINE	646.24				
													LF	DURABLE 4 INCH YELLOW LINE	646.410				
													LF	DURABLE 24 INCH STOP BAR	646.480				
										9	9		EACH	DURABLE LETTER OR SYMBOL	646.490				
													LF	DURABLE CROSSWALK MARKING	646.500				
										200	200		SY	GEOTEXTILE FOR SILT FENCE	649.51				
										10	10		LB	SEED	651.15				
										10	10		LB	FERTILIZER	651.18				
										0.5	0.5		TON	AGRICULTURAL LIMESTONE	651.20				
										0.5	0.5		TON	STRAW MULCH	651.29				
										40	40		CY	TOPSOIL	651.35				

PROJECT NAME: **Burlington STP BP (13)6**  
 PROJECT NUMBER: **14087**  
 FILE NAME: **QuantitySheet 25% Plans** PLOT DATE: **01/13/2016**  
 PROJECT LEADER: **DJG** DRAWN BY: **DJG**  
 DESIGNED BY: **DJG** CHECKED BY: **DJG**  
 QUANTITY SHEET #1 SHEET **2** OF **13**

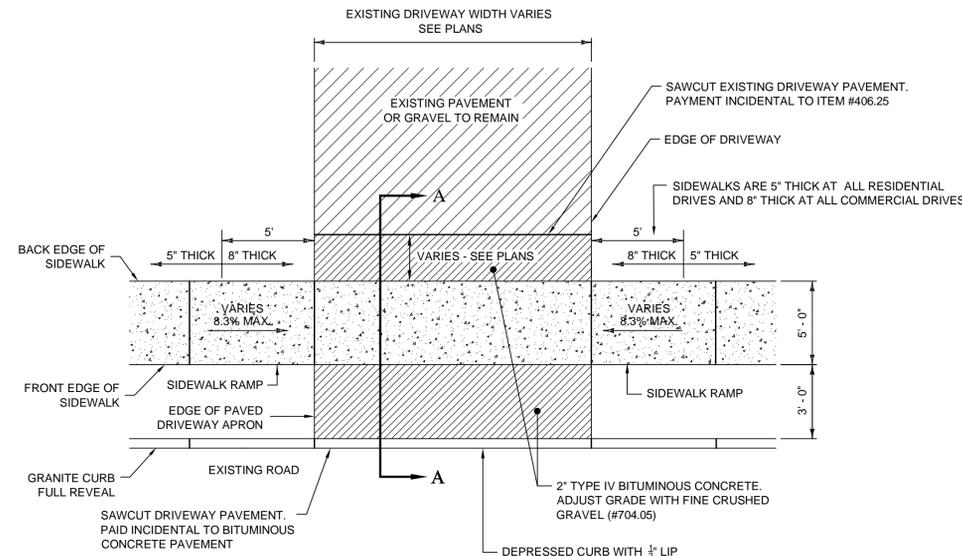
# QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES											TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
										Incidental construction.	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										1	1		LS	EPSC PLAN	652.10				
										10	10		HR	MONITORING EPSC PLAN	652.20				
										340	340		SY	TEMPORARY EROSION MATTING	653.20				
										8	8		EACH	INLET PROTECTION DEVICE, TYPE II	653.41				
										1500	1500		LF	PROJECT DEMARCATION FENCE	653.55				
													LF	EROSION LOG	653.60				
										16	16		SF	TRAFFIC SIGNS, TYPE A	675.20				
										28	28		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
										4	4		EACH	REMOVING SIGNS	675.50				
													EACH	ERECTING SALVAGED SIGNS	675.60				
										69	69		TON	SPECIAL PROVISION BITUMINOUS CONCRETE PAVEMENT, HAND PLACED, PG58-28	900.680				

PROJECT NAME: Burlington STP BP (13)6  
 PROJECT NUMBER: 14087  
 FILE NAME: Quantity Sheet 25% Plans PLOT DATE: 01/13/2015  
 PROJECT LEADER: DJG DRAWN BY: DJG  
 DESIGNED BY: DJG CHECKED BY: DJG  
 QUANTITY SHEET #2 SHEET 3 OF 13

**GENERAL CONSTRUCTION SPECIFICATIONS**

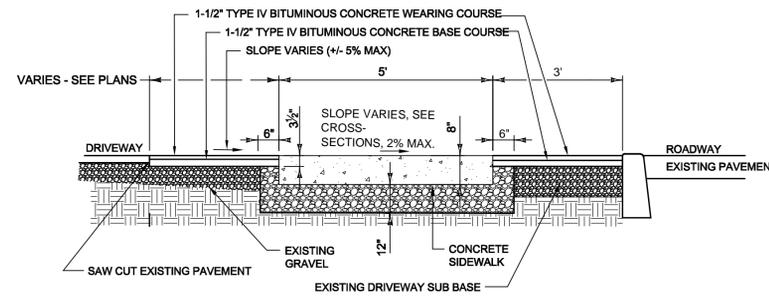
1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011 AND ITS LATEST REVISIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND THESE PLANS.
2. THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AT 811 AND THE CITY OF BURLINGTON PUBLIC WORKS DEPARTMENT PRIOR TO ANY EXCAVATION.
3. UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. EXPLORATORY EXCAVATION SHALL BE PERFORMED IN THE LOCATIONS SHOWN ON THE PLANS. ADDITIONAL EXPLORATORY EXCAVATION SHALL BE COORDINATED WITH AND SUBJECT TO THE RESIDENT ENGINEERS APPROVAL. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH UTILITY OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. THE CONTRACTOR SHALL WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER AND/OR SWEEP ASPHALT ROADS WITH A POWER BROOM (TYPE 1) OR A STREET SWEEPER (POWER BROOM TYPE II) AS DUST CONTROL ON A DAILY BASIS, OR AT MORE FREQUENT INTERVALS AS DIRECTED BY THE ENGINEER AND/OR OWNER.



**NOTES:**

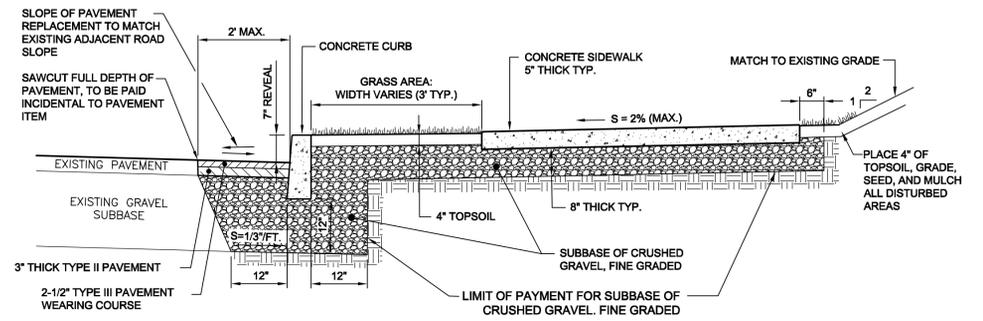
1. SUBBASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.
2. EMULSIFIED ASPHALT SHALL BE APPLIED TO THE FACE OF CURB BELOW GRADE, EDGE OF SIDEWALK AND TO THE EXISTING PAVEMENT EDGE. EMULSIFIED ASPHALT SHALL BE APPLIED UNDER PRESSURE OR WITH A "NEW" BRUSH. OLD OR DRIED OUT BRUSHES SHALL NOT BE USED.

**PLAN VIEW**



**SECTION VIEW**

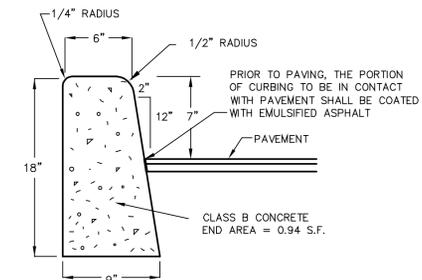
**TYPICAL BITUMINOUS CONCRETE DRIVEWAY APRON WITH SIDEWALK DETAIL**  
N.T.S.



**TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB AND GRASS STRIP SECTION**  
N.T.S.

**NOTES:**

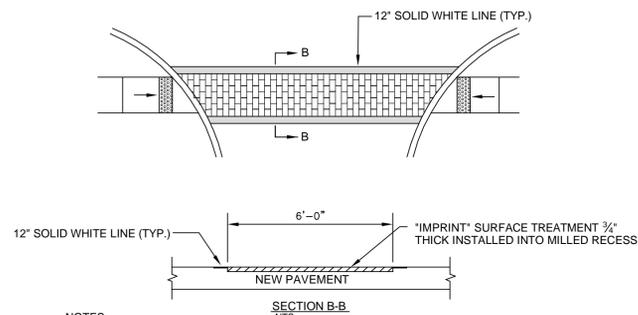
1. EMULSION SHALL BE PLACED ON THE BACK OF THE CURB WHERE IT WILL BE IN CONTACT WITH NEW DRIVEWAY PAVEMENT.
2. EMULSIFIED ASPHALT TO BE APPLIED AT THE RATE OF 0.025 GAL/SQ YD.
3. BITUMINOUS CONCRETE PAVEMENT SHALL BE 75 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 58-28.
4. THE CONTRACTOR SHALL APPLY A CONCRETE SEALING COMPOUND TO ALL EXPOSED CONCRETE CURB AND SIDEWALK SURFACES, ITEM #514.10 WATER REPELLANT, SILANE.



**NOTES:**

- 1) CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
- 2) CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO AASHTO DESIGNATION M-15.3 ( 1/2" SPONGE RUBBER OR CORK. )
- 3) ALL CONCRETE SHALL BE AIR ENTRAINED NOT LESS THAN 5% AND NOT MORE THAN 7%

**CONCRETE CURB**  
N.T.S.



**NOTES:**

1. SAWCUT PAVEMENT AT EDGES AND REMOVE PAVEMENT BY MILLING INSIDE THE CROSSWALK TO SPECIFIED 3" DEPTH. PREPARE MILLED PAVEMENT SURFACE AND EDGES PER MANUFACTURER'S RECOMMENDATIONS.
2. SURFACING SHALL BE A HOT APPLIED RESIN BASED SYNTHETIC ASPHALT SURFACE TREATMENT. MATERIAL GRADE OF THE SURFACING TREATMENT SHALL MEET THE REQUIREMENTS FOR HIGH TRAFFIC VOLUME ROADS AND NORTHERN U.S. TEMPERATURES. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
3. CROSSWALK SURFACING SHALL BE COLORED THROUGHOUT WITH AN OXIDE RED COLOR MATERIAL (NOT SURFACE PAINTED). APPLY STANDARD BRICK (OFFSET DESIGN) TEXTURE PATTERN.

**IMPRINTED & COLORED CROSSWALK MARKING DETAIL**  
N.T.S.

**25% PLANS**  
**JANUARY 2015**

TYPICAL  
DETAILS &  
SPECIFICATIONS

**BURLINGTON STP BP 13(6)**

**L** Lamoureux & Dickinson  
Consulting Engineers, Inc.  
14 Morse Drive, Essex, VT 05452  
802-878-4450 www.LDEngineering.com

L&D PROJECT NUMBER: 14087  
DRAWN BY: L&D  
CHECKED BY: DG/RD

SHEET:

**4**

VAOT URBAN AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
42.5%	34	68	CREeping RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

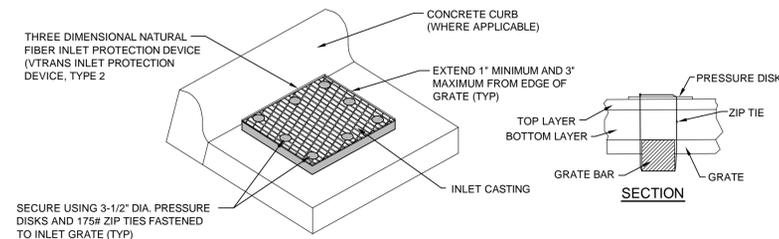
GENERAL GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10/20/20/10	19-19-19	PELLETIZED	LIQUID
500 LBS/AC		2 TONS/AC	4.4 GAL/AC

**CONSTRUCTION GUIDANCE**

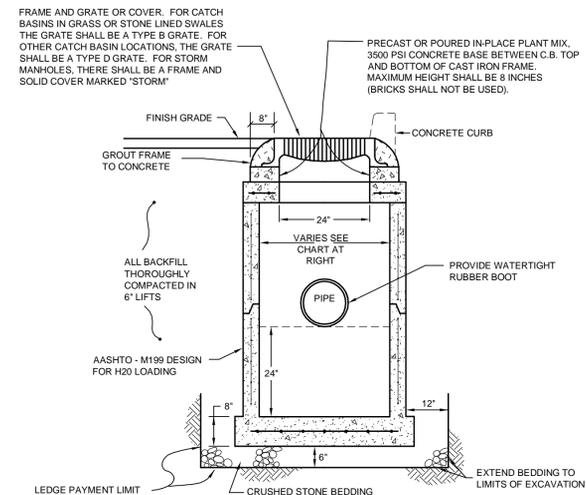
- RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
- URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
- ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
- HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE. ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
- TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

SEED

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)



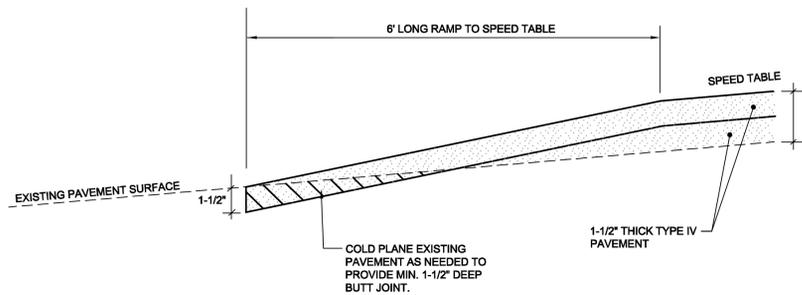
**FLAT TYPE INLET PROTECTION TYPE II**  
NTS



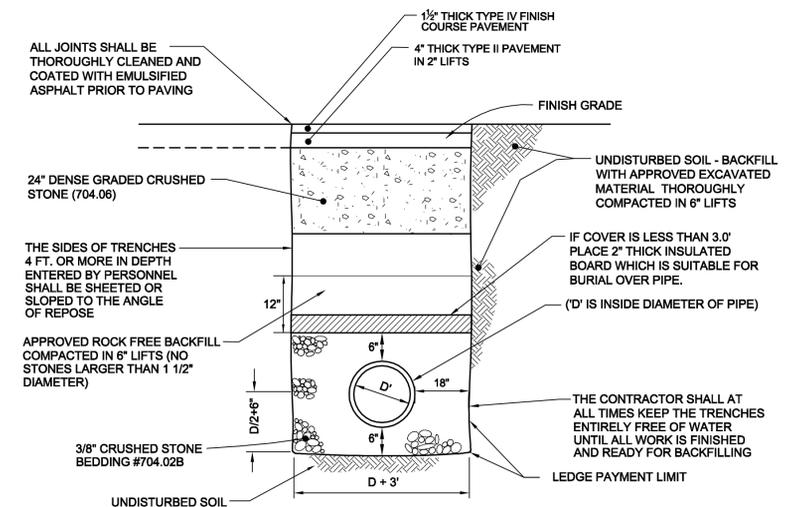
**PRECAST CATCH BASIN / STORM MANHOLE**  
NTS

NOTE: CATCH BASINS MAY BE LARGER THAN SHOWN ON THIS DETAIL WITH MULTIPLE OR LARGER DIA PIPES IN ONE BASIN.

TYPE	CATCH BASIN DIAMETER	LARGEST PIPE DIA. ALLOWED	SIDEWALL THICKNESS	CONCRETE COVER THICKNESS	BASE DIAMETER
I	36"	18"	4"	6"	50"
II	48"	30"	5"	10"	72"
III	60"	36"	6"	12"	84"
IV	72"	48"	7"	18"	96"

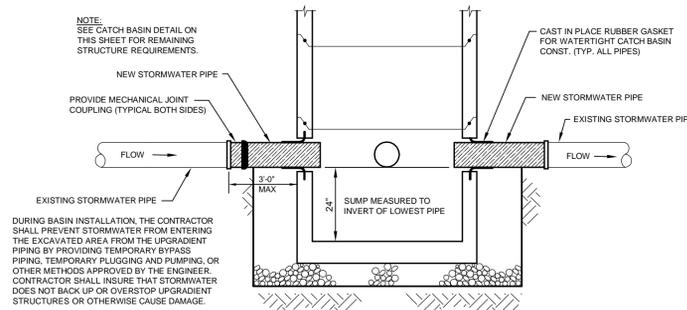


**SPEED TABLE RAMP SECTION (LONGITUDINAL ALONG TRAVEL LANES)**  
NTS

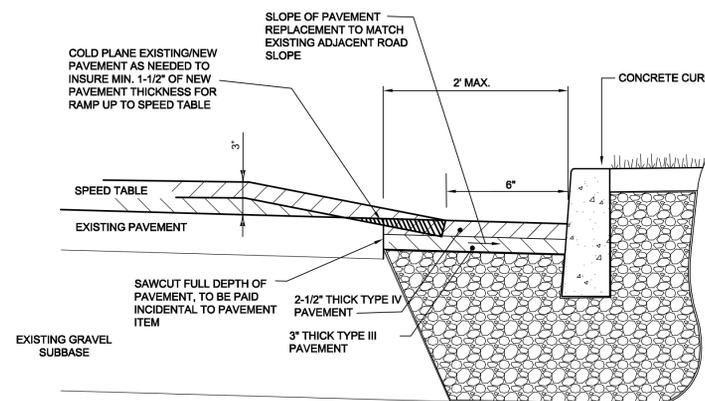


**TYPICAL STORM TRENCH**  
NTS

NOTE: REMOVAL OF EXISTING PAVEMENT OVER THE TRENCH LIMITS PAID INCIDENTAL TO LF OF STORM PIPE. SAW CUTTING ASSOCIATED WITH THESE ITEMS IS PAID INCIDENTAL TO ITEM #406.25.



**IN-LINE STORM BASIN/MANHOLE DETAIL**



**TYPICAL NEW ROADWAY GUTTER DETAIL WITH SPEED TABLE RAMP**  
NTS

**NOTES:**

- EMULSION SHALL BE PLACED ON THE FRONT OF THE CURB AND ON EDGE OF EXISTING PAVEMENT CUT EDGE WHERE IT WILL BE IN CONTACT WITH NEW ROADWAY PAVEMENT.
- EMULSIFIED ASPHALT TO BE APPLIED AT THE RATE OF 0.025 GAL./SQ YD.

25% PLANS  
JANUARY 2015

BURLINGTON STP BP 13(6)

TYPICAL  
DETAILS &  
SPECIFICATIONS

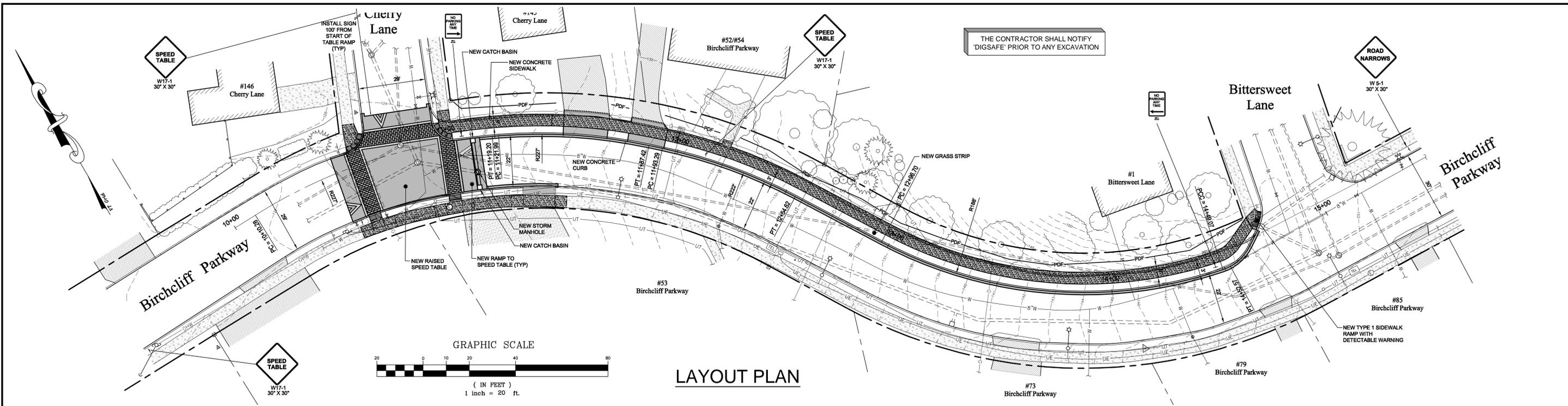


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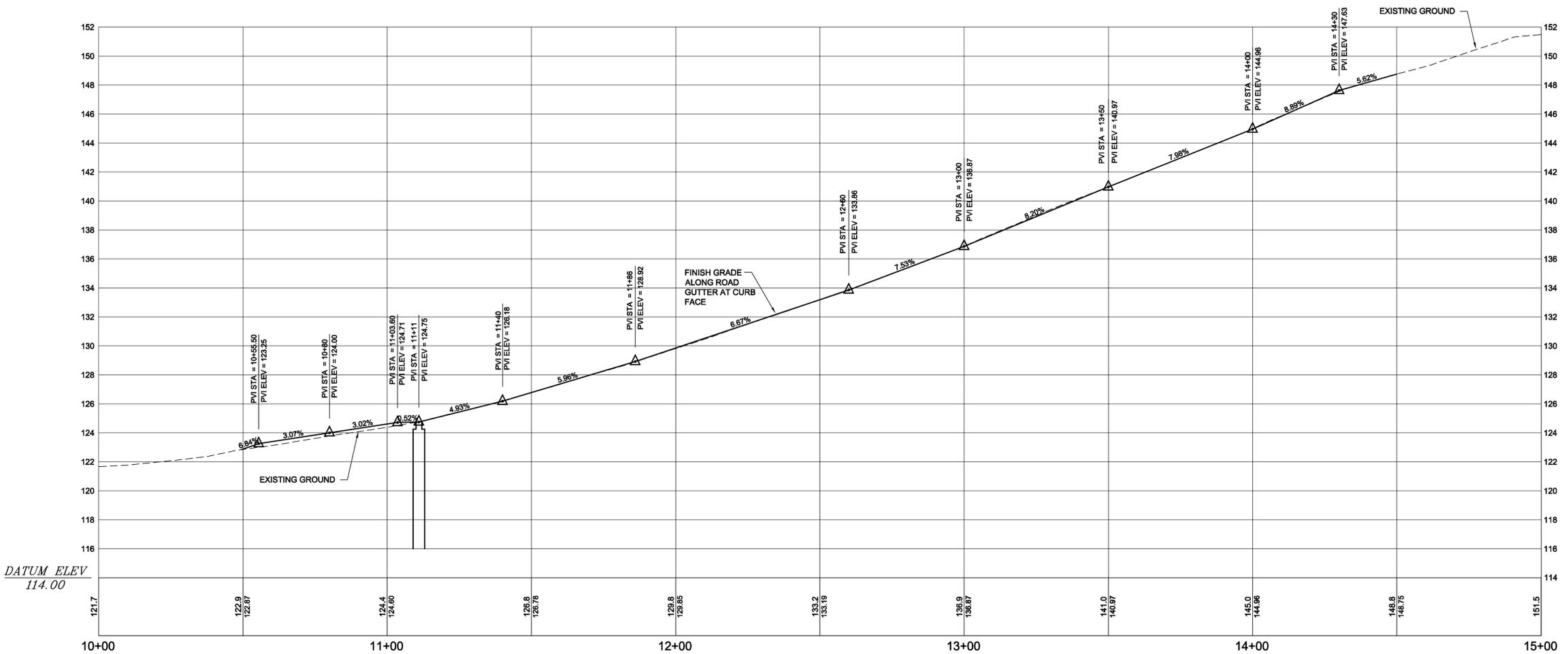
L&D PROJECT NUMBER: 14087  
DRAWN BY: L&D  
CHECKED BY: DG/RD

SHEET:

5



LAYOUT PLAN



- LEGEND**
- RIGHT-OF WAY BOUNDARY LINE
  - PROPERTY BOUNDARY LINE
  - EXISTING FENCE
  - EXISTING WATER LINE
  - EXISTING SEWER LINE
  - EXISTING CATCH BASIN & STORM PIPES
  - EXISTING CONTOUR
  - UTILITY POLE WITH GUY WIRE & OVERHEAD WIRES
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ EXISTING DRAINAGE MANHOLE
  - ⊙ SURVEY CONTROL POINT
  - ⊙ EXISTING SIGN
  - ⊙ PROPERTY CORNER PIPE/MON. FOUND
  - PDF PROJECT DEMARCATION FENCE
  - G EXISTING GAS LINE (APPROX. ONLY)
  - ⊙ EXISTING TREE/SHRUB
  - ⊙ EXISTING STREETLIGHT
  - ⊙ EXISTING HYDRANT & VALVE
  - UE EXISTING UG ELEC. (APPROX. ONLY)
  - UT EXISTING UG COMM. (APPROX. ONLY)
  - EXISTING CONCRETE SIDEWALK
  - NEW 5' WIDE CONCRETE SIDEWALK
  - NEW TEXTURED CROSSWALK ACROSS SPEED TABLE

25% PLANS  
JANUARY 2015

BIRCHCLIFF PARKWAY  
LAYOUT  
PLAN &  
PROFILE

BURLINGTON STP BP 13(6)

**L** Lamoureux & Dickinson  
Consulting Engineers, Inc.  
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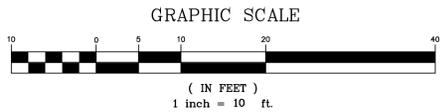
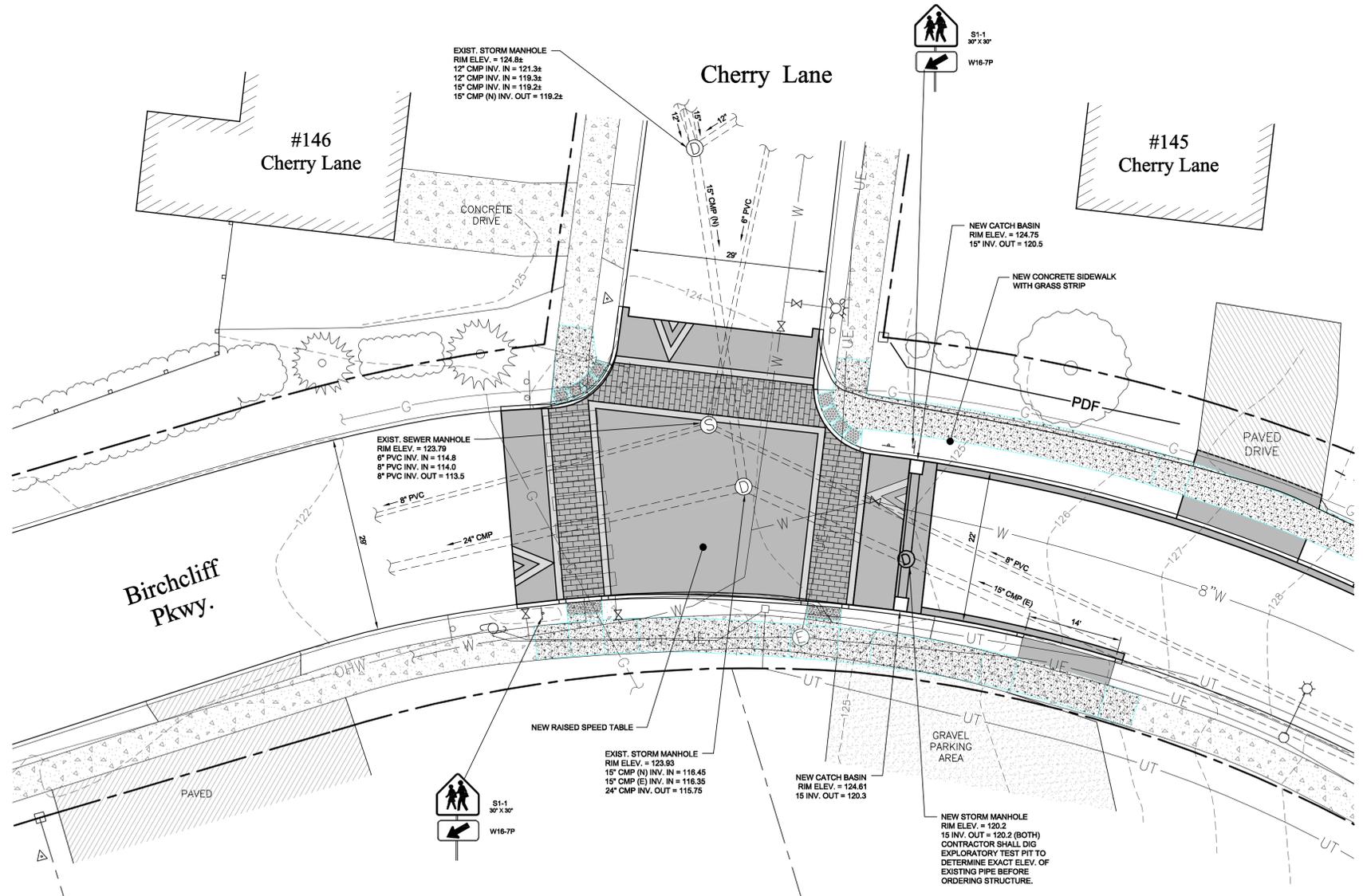
SHEET:  
**6**

THE CONTRACTOR SHALL NOTIFY 'DIGSAFE' PRIOR TO ANY EXCAVATION



**LEGEND**

- RIGHT-OF WAY BOUNDARY LINE
- - - PROPERTY BOUNDARY LINE
- - - EXISTING FENCE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- - - EXISTING CATCH BASIN & STORM PIPES
- - - 142 — EXISTING CONTOUR
- OHW — EXISTING UTILITY POLE WITH GUY WIRE & OVERHEAD WIRES
- ⊙ — EXISTING SEWER MANHOLE
- ⊙ — EXISTING DRAINAGE MANHOLE
- ⊙ — SURVEY CONTROL POINT
- ⊙ — EXISTING SIGN
- — PROPERTY CORNER PIPE/MON. FOUND
- PDF — PROJECT DEMARCATION FENCE
- G — EXISTING GAS LINE (APPROX. ONLY)
- ⊙ — EXISTING TREE/SHRUB
- ⊙ — EXISTING STREETLIGHT
- ⊙ — EXISTING HYDRANT & VALVE
- UE — EXISTING UG ELEC. (APPROX. ONLY)
- UT — EXISTING UG COMM. (APPROX. ONLY)
- ▨ — EXISTING CONCRETE SIDEWALK
- ▨ — NEW 5' WIDE CONCRETE SIDEWALK
- ▨ — NEW TEXTURED CROSSWALK ACROSS SPEED TABLE



25% PLANS  
JANUARY 2015

<p><b>CHERRY LANE &amp; BIRCHCLIFF PARKWAY INTERSECTION LAYOUT PLAN</b></p>	<p><b>BURLINGTON STP BP 13(6)</b></p>	<p>SHEET: <b>7</b></p>
<p><b>Lamoureux &amp; Dickinson</b> Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com</p>		<p>L&amp;D PROJECT NUMBER: 14087 DRAWN BY: L&amp;D CHECKED BY: DG/RD</p>

P:\2015\14087\14087.dwg, 1/27/2015 10:11:11 AM, 11

Caroline St.

INSTALL SIGN 100' FROM  
START OF TABLE RAMP  
(TYP)



SPEED  
TABLE

W17-1  
30" X 30"



RELOCATE  
EXISTING  
SIGNS

S1-1



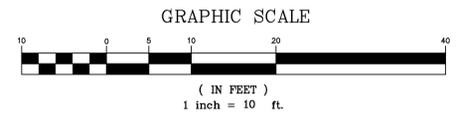
SPEED  
TABLE

W17-1  
30" X 30"

LEGEND

- RIGHT-OF WAY BOUNDARY LINE
- PROPERTY BOUNDARY LINE
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING CATCH BASIN & STORM PIPES
- EXISTING CONTOUR
- OHW --- UTILITY POLE WITH GUY WIRE & OVERHEAD WIRES
- ⊙ EXISTING SEWER MANHOLE
- ⊙ EXISTING DRAINAGE MANHOLE
- ▽ SURVEY CONTROL POINT
- ⊙ EXISTING SIGN
- PROPERTY CORNER PIPE/MON. FOUND
- PDF --- PROJECT DEMARCATION FENCE
- G --- EXISTING GAS LINE (APPROX. ONLY)
- ⊙ EXISTING TREE/SHRUB
- ⊙ EXISTING STREETLIGHT
- ⊙ EXISTING HYDRANT & VALVE
- UE --- EXISTING UG ELEC. (APPROX. ONLY)
- UT --- EXISTING UG COMM. (APPROX. ONLY)
- EXISTING CONCRETE SIDEWALK
- NEW 5' WIDE CONCRETE SIDEWALK
- NEW TEXTURED CROSSWALK ACROSS SPEED TABLE

25% PLANS  
JANUARY 2015



CAROLINE ST.  
& LOCUST ST.  
INTERSECTION  
LAYOUT  
PLAN

BURLINGTON STP BP 13(6)

**L** Lamoureux & Dickinson  
Consulting Engineers, Inc.  
14 Morse Drive, Essex, VT 05452  
802-878-4450 www.LDEngineering.com

L&D PROJECT NUMBER: 14087  
DRAWN BY: L&D  
CHECKED BY: DG/RD

SHEET:  
8

THE CONTRACTOR SHALL NOTIFY  
'DIGSAFE' PRIOR TO ANY EXCAVATION



SPEED  
TABLE

W17-1  
30" X 30"



RELOCATE  
EXISTING  
SIGNS

S1-1

W16-7P

EXIST. STORM MANHOLE  
RIM ELEV. = 158.87  
12" CMP INV. IN = 153.6  
12" CMP INV. IN = 153.8  
12" CMP INV. OUT = 154.2

EXIST. CATCH BASIN  
RIM ELEV. = 158.88  
12" CMP INV. OUT = 155.1

#106 Locust St.

EXIST. SEWER MANHOLE  
RIM ELEV. = 159.79  
15" CAPPED STUB = 153.3  
8" CMP INV. IN = 151.6  
8" CMP INV. OUT = 151.2

EXISTING "NO  
PARKING" SIGN TO  
REMAIN

EXISTING  
"CAROLINE STREET"  
SIGN TO REMAIN

EXIST. CATCH BASIN  
RIM ELEV. = 158.52  
12" CMP INV. OUT = 154.65

#134 Caroline St.

RELOCATE  
EXISTING  
SIGNS

Locust St.

NEW CATCH BASIN  
RIM ELEV. = 161.1  
15" OUT = 156.75

NEW CATCH BASIN  
RIM ELEV. = 161.21  
15" IN = 156.55  
15" OUT = 156.45

NEW CATCH BASIN  
RIM ELEV. = 161.0  
15" IN = 156.45  
10" OUT = 156.40

EXIST. STORM MANHOLE  
RIM ELEV. = 159.98  
6" PVC INV. IN = 152.45  
6" CMP INV. IN = 152.35  
10" CMP INV. IN = 155.4  
12" CMP INV. IN = 152.75  
24" CMP INV. IN = 152.7  
24" CMP INV. OUT = 152.0

PAVED

SAVE AND  
PROTECT  
EXISTING  
TREE

PAVED

EXISTING "NO  
PARKING" SIGN TO  
REMAIN

NEW CURB  
EXTENSION

NEW CURB  
EXTENSION

NEW CURB  
EXTENSION/  
GRASS ISLAND

REMOVE EXISTING CATCH  
BASIN AND EXTEND 10" PIPE  
TO NEW CATCH BASIN

EXISTING HC  
LOADING SPACE  
MARKING TO  
REMAIN

RELOCATE HC  
SPACE SIGN

GRAVEL

RELOCATE  
EXISTING  
SIGNS

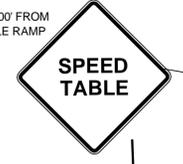


P:\2015\Burlington STP BP 13(6)\DWG\20150113\13(6) PLAN 1.dwg

THE CONTRACTOR SHALL NOTIFY 'DIGSAFE' PRIOR TO ANY EXCAVATION



INSTALL SIGN 100' FROM START OF TABLE RAMP (TYP)



EXISTING SIGNS TO REMAIN



W17-1  
30" X 30"

**LEGEND**

- RIGHT-OF WAY BOUNDARY LINE
- PROPERTY BOUNDARY LINE
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING CATCH BASIN & STORM PIPES
- EXISTING CONTOUR
- OHW --- OHW --- UTILITY POLE WITH GUY WIRE & OVERHEAD WIRES
- EXISTING SEWER MANHOLE
- EXISTING DRAINAGE MANHOLE
- SURVEY CONTROL POINT
- EXISTING SIGN
- PROPERTY CORNER PIPE/MON. FOUND
- PDFF --- PROJECT DEMARCATION FENCE
- G --- EXISTING GAS LINE (APPROX. ONLY)
- EXISTING TREE/SHRUB
- EXISTING STREETLIGHT
- EXISTING HYDRANT & VALVE
- EXISTING UG ELEC. (APPROX. ONLY)
- EXISTING UG COMM. (APPROX. ONLY)
- EXISTING CONCRETE SIDEWALK
- NEW 5' WIDE CONCRETE SIDEWALK
- NEW TEXTURED CROSSWALK ACROSS SPEED TABLE

Charlotte St.

#88 Locust St.

#137 Charlotte St.

NEW CATCH BASIN  
RIM ELEV. = 150.1  
15" INV. OUT = 145.75

EXIST. CATCH BASIN  
RIM ELEV. = 149.92  
10" CMP INV. OUT = 146.9

NEW STORM CATCH BASIN  
RIM ELEV. = 150.0  
15" INV. IN = 145.0  
24" INV. IN = 142.15  
24" INV. OUT = 142.0

EXISTING 'NO PARKING  
HERE TO CORNER' SIGN  
TO REMAIN

SAVE EXISTING  
TREE

EXIST. SEWER MANHOLE  
RIM ELEV. = 150.76  
8" PVC INV. IN = 142.15  
10" CMP INV. IN = 141.35  
10" CMP INV. OUT = 141.3

NEW RAISED  
SPEED TABLE

NEW STORM CATCH BASIN  
RIM ELEV. = 151.2  
15" INV. IN = 145.35  
15" INV. OUT = 145.25

NEW STORM CATCH BASIN  
RIM ELEV. = 150.0  
15" INV. IN = 145.0  
24" INV. IN = 142.15  
24" INV. OUT = 142.0

NEW CURB  
EXTENSION

EXIST. CATCH BASIN  
RIM ELEV. = 150.76  
(2) 4" PVC IN = 147.25  
10" INV. OUT = 147.8

EXIST. STORM MANHOLE  
RIM ELEV. = 150.79  
10" INV. IN = 147.9  
24" CMP INV. IN = 141.3  
24" CMP INV. OUT = 140.5

Locust St.

EXISTING 'SLOW  
SCHOOL ZONE'  
SIGN TO REMAIN

'NO PARKING  
ANYTIME' SIGN  
TO BE REMOVED

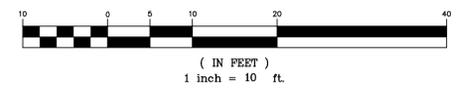


EXISTING  
SIGNS TO  
BE  
RE-LOCATED

INSTALL SIGN 100' FROM START OF TABLE RAMP (TYP)



**GRAPHIC SCALE**



25% PLANS  
JANUARY 2015

CHARLOTTE ST.  
& LOCUST ST.  
INTERSECTION  
LAYOUT  
PLAN

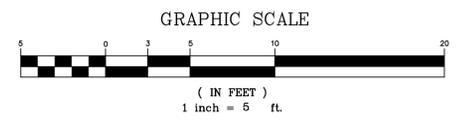
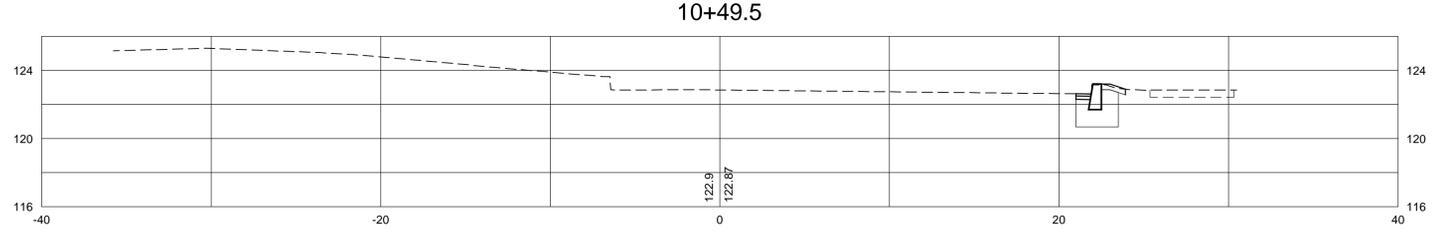
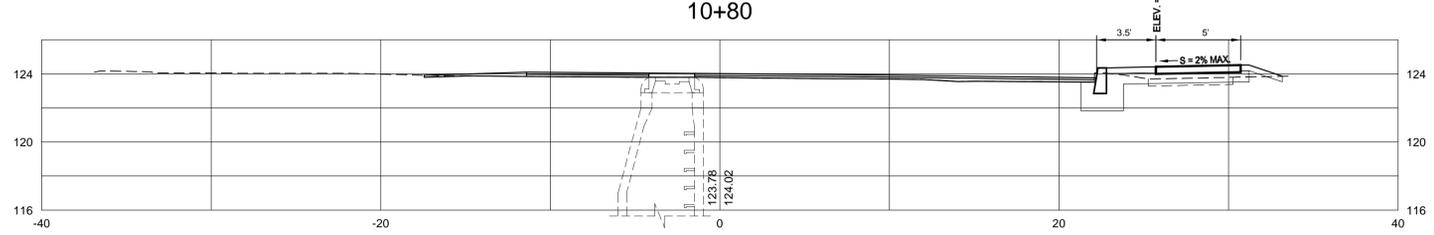
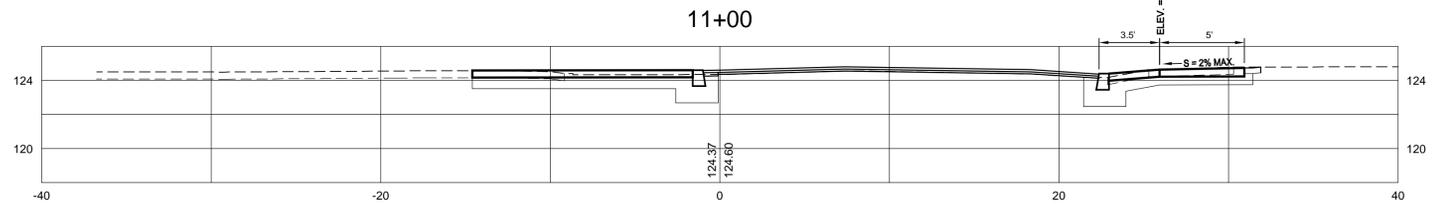
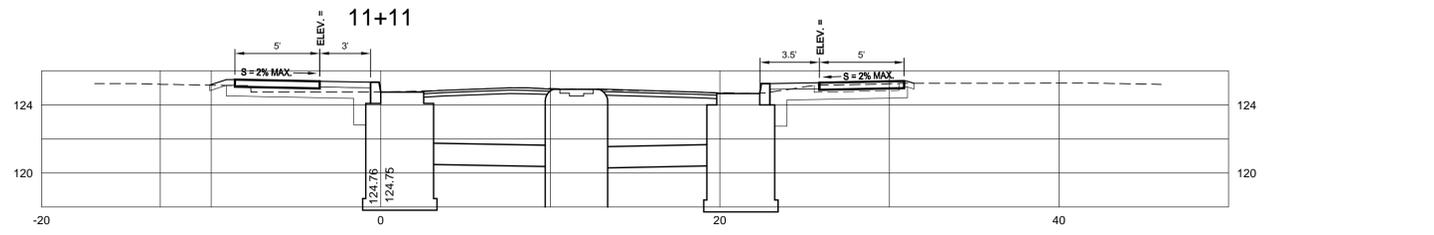
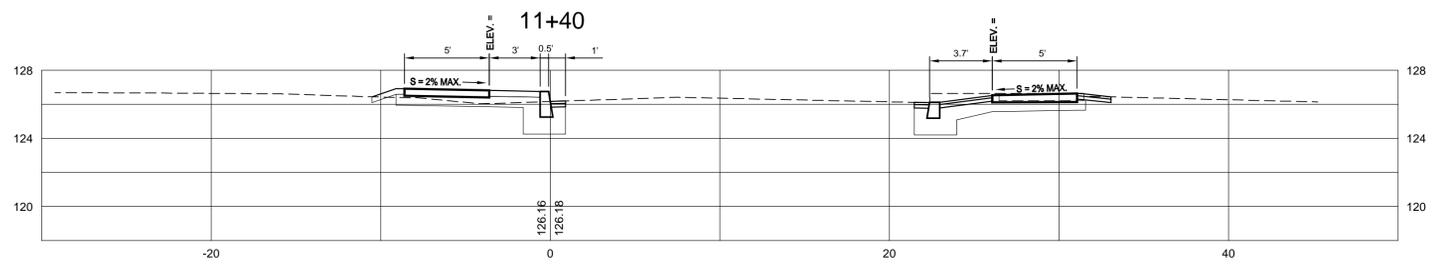
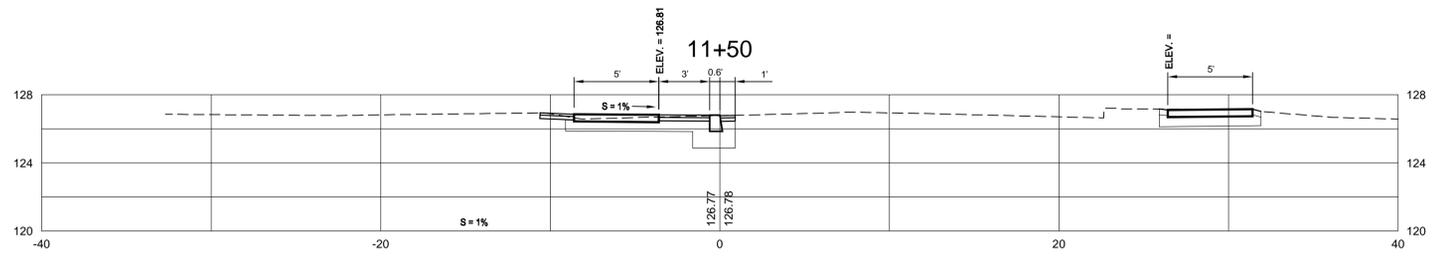
BURLINGTON STP BP 13(6)



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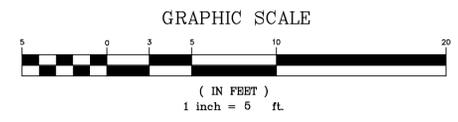
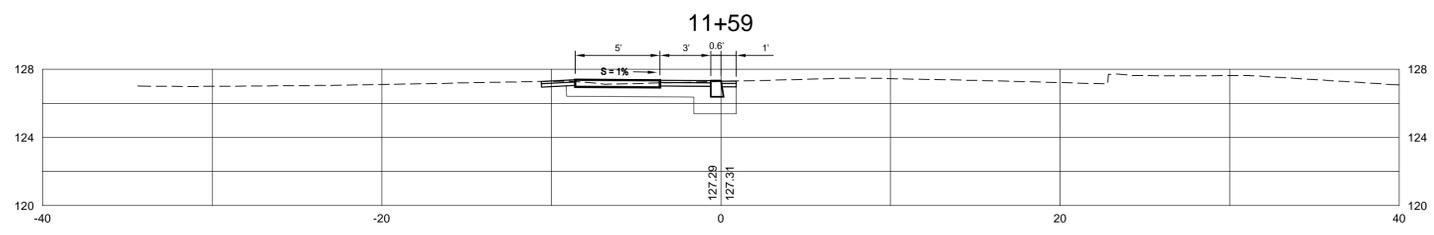
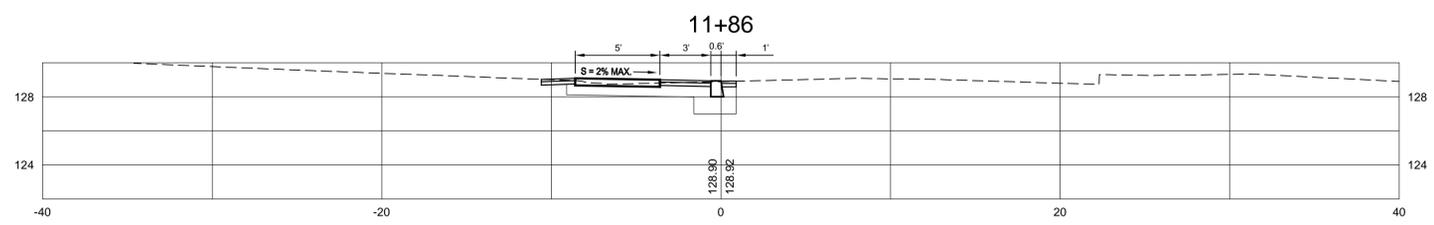
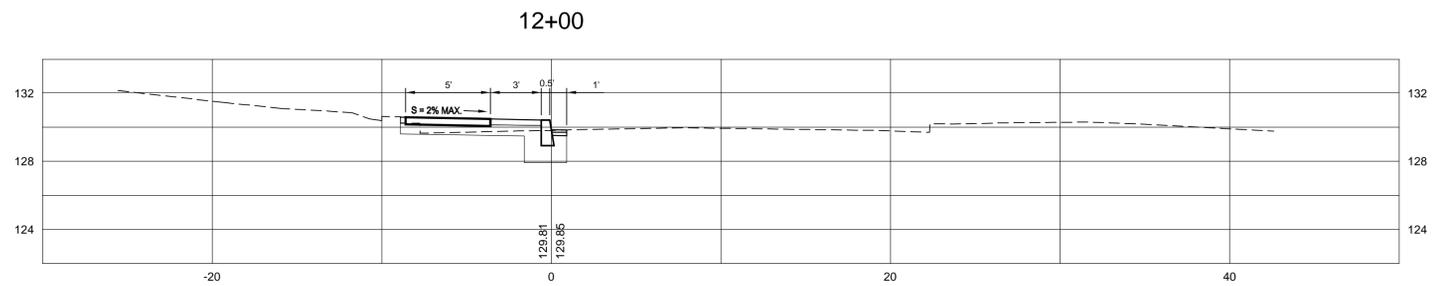
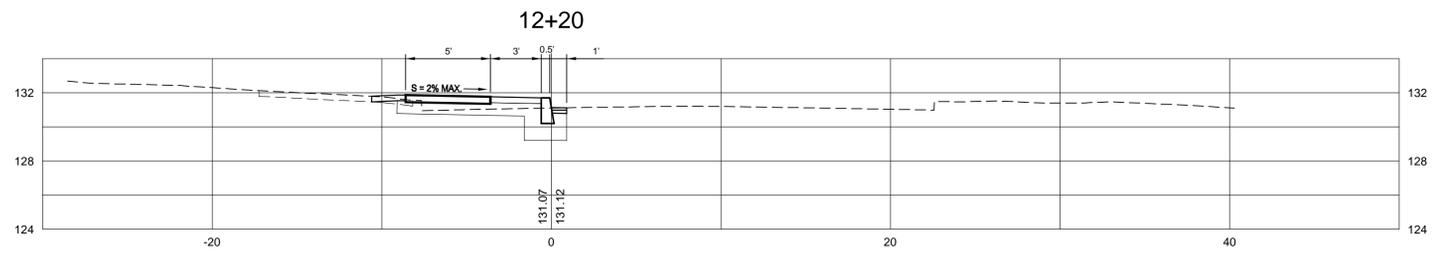
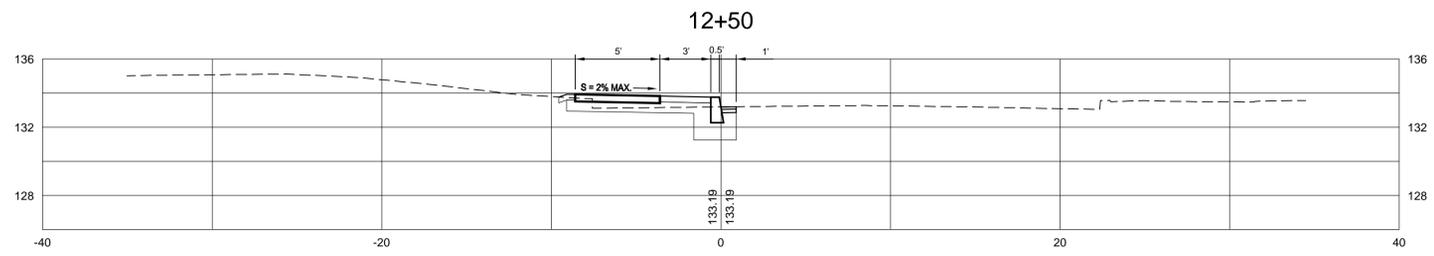
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**9**



25% PLANS  
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<b>BIRCHCLIFF PARKWAY CROSS SECTIONS</b>	<b>BURLINGTON STP BP 13(6)</b>	
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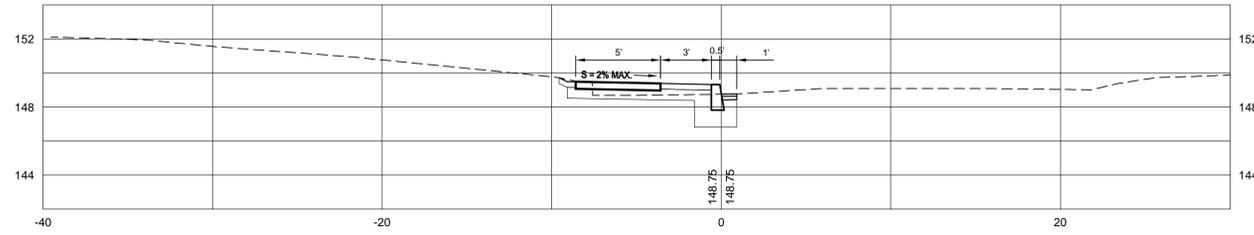


25% PLANS  
JANUARY 2015

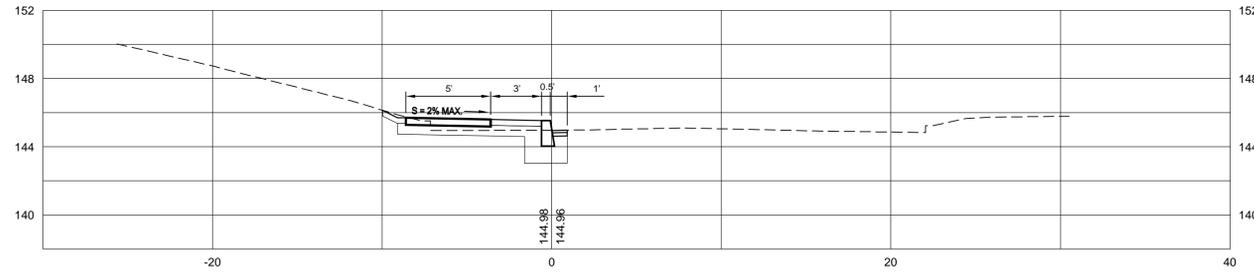
<b>BIRCHCLIFF PARKWAY CROSS SECTIONS</b>	<b>BURLINGTON STP BP 13(6)</b>	
	 <b>Lamoureux &amp; Dickinson</b> Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDEngineering.com	L&D PROJECT NUMBER: 14087 DRAWN BY: L&D CHECKED BY: DG/RD
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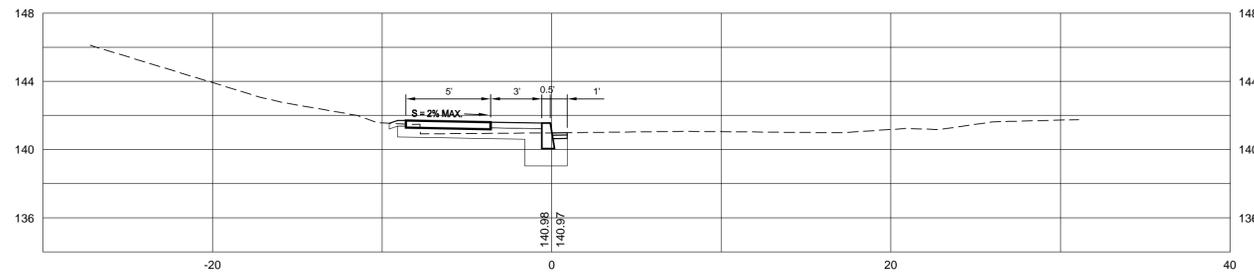
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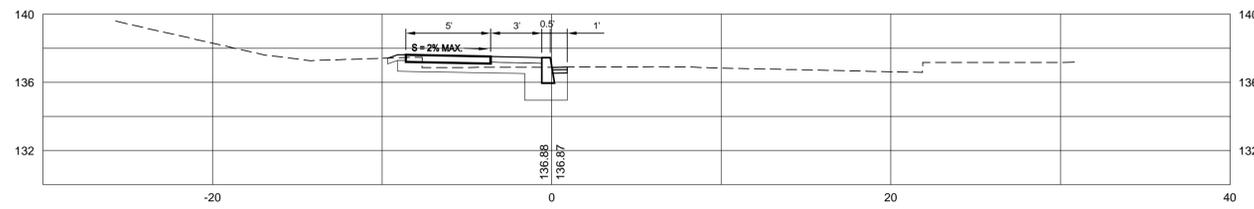
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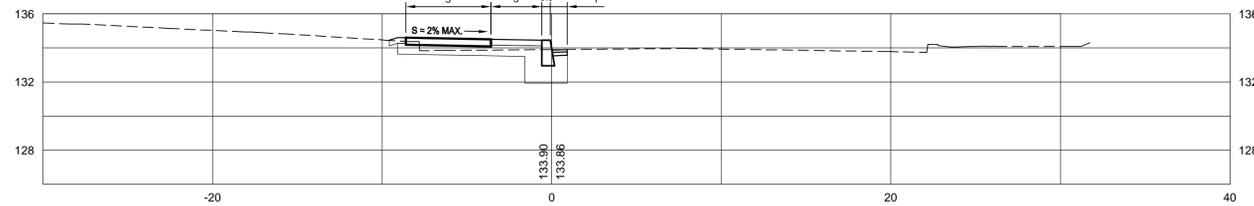
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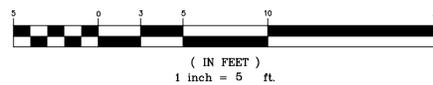
13+00



12+60



GRAPHIC SCALE



25% PLANS  
JANUARY 2015

BIRCHCLIFF  
PARKWAY  
CROSS  
SECTIONS

BURLINGTON STP BP 13(6)

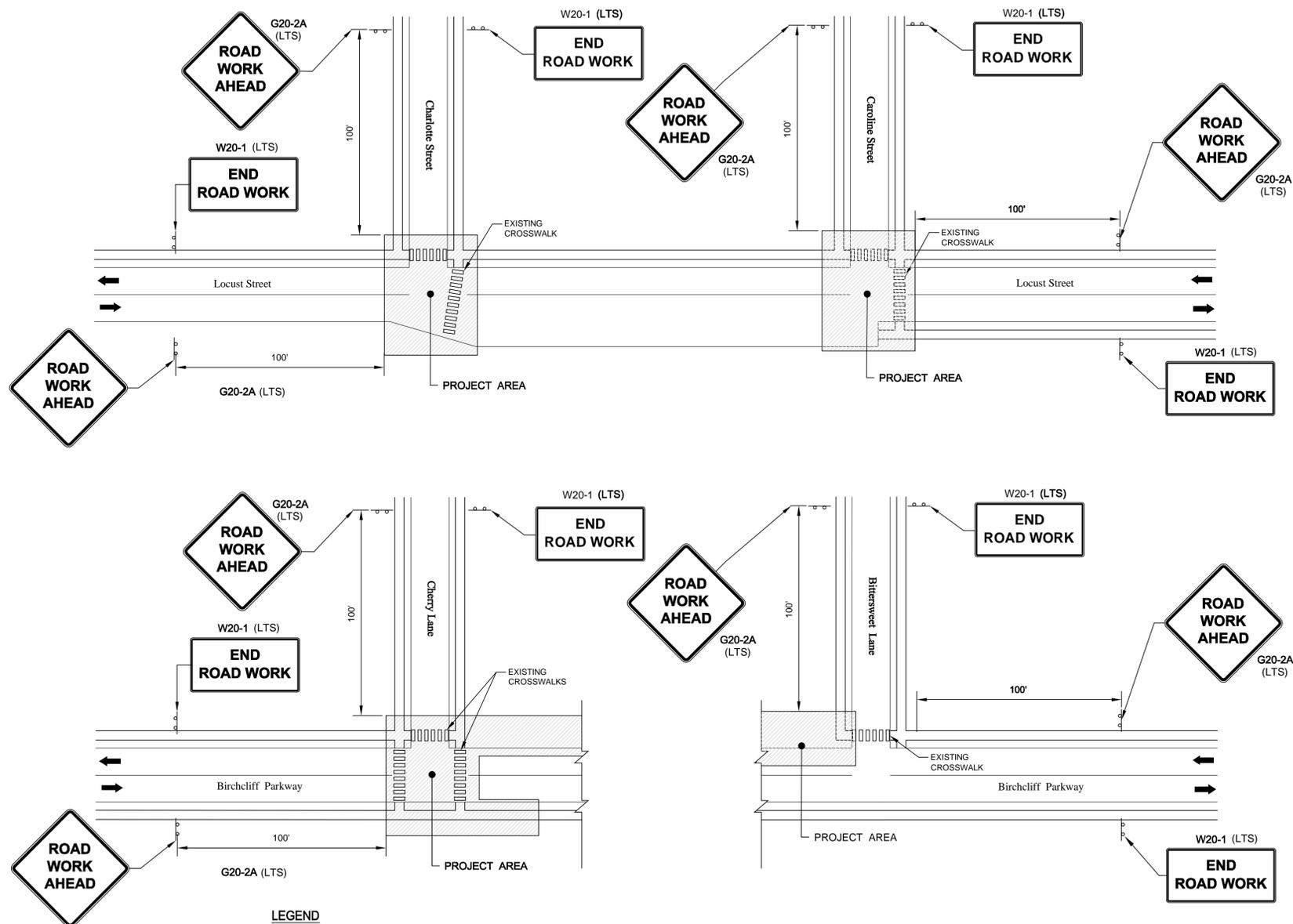


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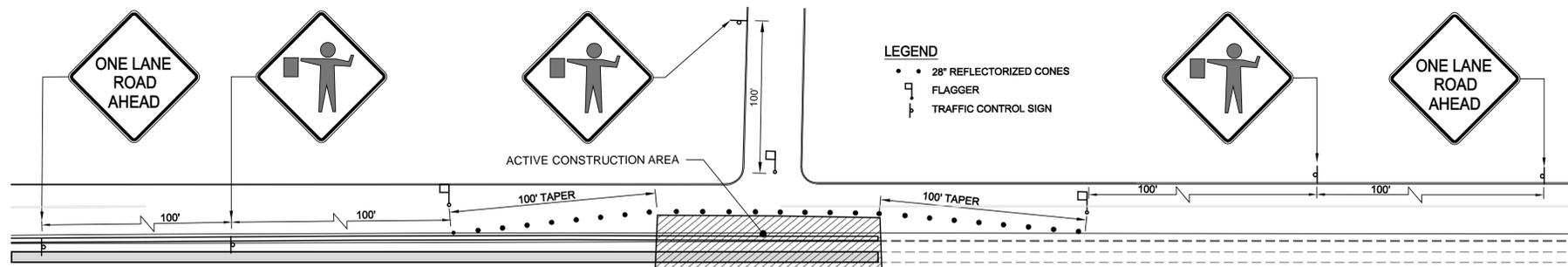
12



**LEGEND**

- ▬ CONSTRUCTION SIGNS
- LTS LONG TERM STATIONARY SIGNS

**Long Term Stationary Construction Approach Signage Layouts**  
NTS



**LEGEND**

- 28" REFLECTORIZED CONES
- FLAGGER
- ▬ TRAFFIC CONTROL SIGN

**Short Term Lane Closure Detail**  
NTS

**TEMPORARY TRAFFIC CONTROL NOTES**

1. THE TRAFFIC SIGNAGE PLAN ABOVE IS FOR APPROACH SIGNAGE ONLY. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE RESIDENT ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION AND IN ACCORDANCE WITH THE MUTCD.
2. ALL TEMPORARY CONTROL DEVICES SHALL MEET OR EXCEED VTRANS STANDARD DETAILS E-100, E-101, E-102, E-106, E-110. WHERE E - STANDARDS CONFLICT WITH THE MUTCD, THE MUTCD SHALL GOVERN.
3. FOR ANY WORK WITHIN THE HIGHWAY RIGHT-OF-WAY A MINIMUM OF ALTERNATING ONE-WAY THRU TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC SHALL BE MAINTAINED AT NIGHT, ON WEEKENDS AND HOLIDAYS, DURING PEAK TRAFFIC (7AM-9AM & 3PM-6PM) AND WHENEVER POSSIBLE DURING CONSTRUCTION.
4. SHORT TERM STATIONARY TRAFFIC CONTROL SIGNING AND CHANNELIZING DEVICES SHALL BE IN ACCORDANCE WITH THE APPROPRIATE MUTCD STANDARDS (PART 6). TYPICAL APPLICATIONS 3.10, 22 AND 23 ARE USEFUL EXAMPLES. VARIATIONS IN THE SIGNING PACKAGES MAY BE DICTATED BY UNIQUE GEOMETRY, SPECIFIC CONSTRUCTION ACTIVITIES, AND/OR TRAFFIC CONDITIONS.
5. APPROACH CONSTRUCTION SIGNING (LONG TERM STATIONARY) SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PERIOD.
6. THE CONTRACTOR SHALL NOT WORK WITHIN THE HIGHWAY ROW WITHOUT THE APPROPRIATE CITY APPROVED CONSTRUCTION SIGNING AND TEMPORARY TRAFFIC CONTROL DEVICES IN PLACE.
7. TO FACILITATE THE FLOW OF TRAFFIC, THE CITY SHALL HAVE AUTHORITY TO MODIFY THE CONTRACTOR'S ONGOING OPERATIONS OR PROPOSED METHODS OF CONSTRUCTION AS DEEMED NECESSARY FOR THE SAFETY, CONVENIENCE AND WELFARE OF THE TRAVELING PUBLIC. THE CONTRACTOR SHALL COMPLY WITH THE CITY DIRECTIVES CONCERNING THIS MATTER.
8. THE MIXING OF TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS, CONES, ETC.) ALONG A TANGENT HIGHWAY IS NOT ALLOWED. DRUMS SHOULD BE USED TO CHANNELIZE OR DELINEATE ROAD USER'S FLOW WHILE REFLECTORIZED CONES ARE BETTER SUITED TO DELINEATE DRIVES WITHIN THE WORK ZONE.
9. CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR ADVANCE NOTICE TO PROPERTY OWNERS PRIOR TO COMMENCING WORK IN DRIVES. WHERE SIDEWALKS CROSS DRIVES, THEY SHALL BE CONSTRUCTED IN TWO PHASES, MAINTAINING ACCESS TO DRIVEWAYS AT ALL TIMES.
10. FLAGGERS AND/OR TRAFFIC CONTROL PERSONNEL SHALL DIRECT BICYCLISTS THROUGH THE CONSTRUCTION AREA IN THE SAME MANNER AS VEHICULAR TRAFFIC.

**TEMPORARY CONSTRUCTION SIGNS**

1. ALL SIGN STANDS AND POST INSTALLATION SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM 350 (NCHRP) COMPLIANT.
2. AS A MINIMUM, ROLL-UP SIGN MATERIAL SHALL HAVE ASTM D 4956-01 TYPE VI FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
3. ALL POST MOUNTED SIGNS SHALL HAVE ASTM D 4956-01 TYPE VII, TYPE VIII OR TYPE IX FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
4. ALL TRAFFIC CONES, BARRICADES AND BARRELS SHALL USE TYPE III RETRO-REFLECTIVE SHEETING.
5. ALL STATIONARY SIGNS SHALL BE MOUNTED ON TWO 3 LBS/FT FLANGED CHANNEL OR SQUARE STEEL POSTS. NO SIGN POSTS SHALL EXTEND OVER THE TOP EDGE OF THE SIGN INSTALLED ON SAID POSTS.

**FLAGGERS AND UNIFORM TRAFFIC OFFICERS**

FLAGGERS SHALL BE REQUIRED TO ATTEND A 4 HOUR APPROVED TRAINING COURSE AND CARRY THEIR FLAGGER CERTIFICATION CARD WITH THEM. THE CONTRACTOR SHALL PROVIDE COPIES OF ALL DOCUMENTATION OF THE CERTIFICATION OBTAINED FOR EACH FLAGGER ON THE PROJECT.

ALL FLAGGERS OR UTO SERVING AS A TRAINED FLAGGER SHALL WEAR SAFETY APPAREL MEETING REQUIREMENTS OF ISEA "AMERICAN NATIONAL STANDARD OF HIGH-VISIBILITY APPAREL" AND LABELED AS MEETING THE ANSI/ISEA 107-2004 STANDARD PERFORMANCE FOR CLASS 2 RISK EXPOSURE. INDIVIDUALS ENGAGED IN TRAFFIC CONTROL SHALL WEAR THE HIGH-VISIBILITY VEST WITH "TRAFFIC CONTROL" VISIBLE, WITHOUT EXCEPTION.

MUTCD TYPICAL APPLICATIONS TA-6, TA-10 & TA-13 SHALL BE USED WHEN NECESSITATED BY THE CONTRACTOR'S WORK OPERATIONS



SHORT-TERM STATIONARY DAY SIGNS

**25% PLANS**  
**JANUARY 2015**

Construction Approach & Traffic Control Details and Specifications

**BURLINGTON STP BP 13(6)**

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SHEET:  
**13**