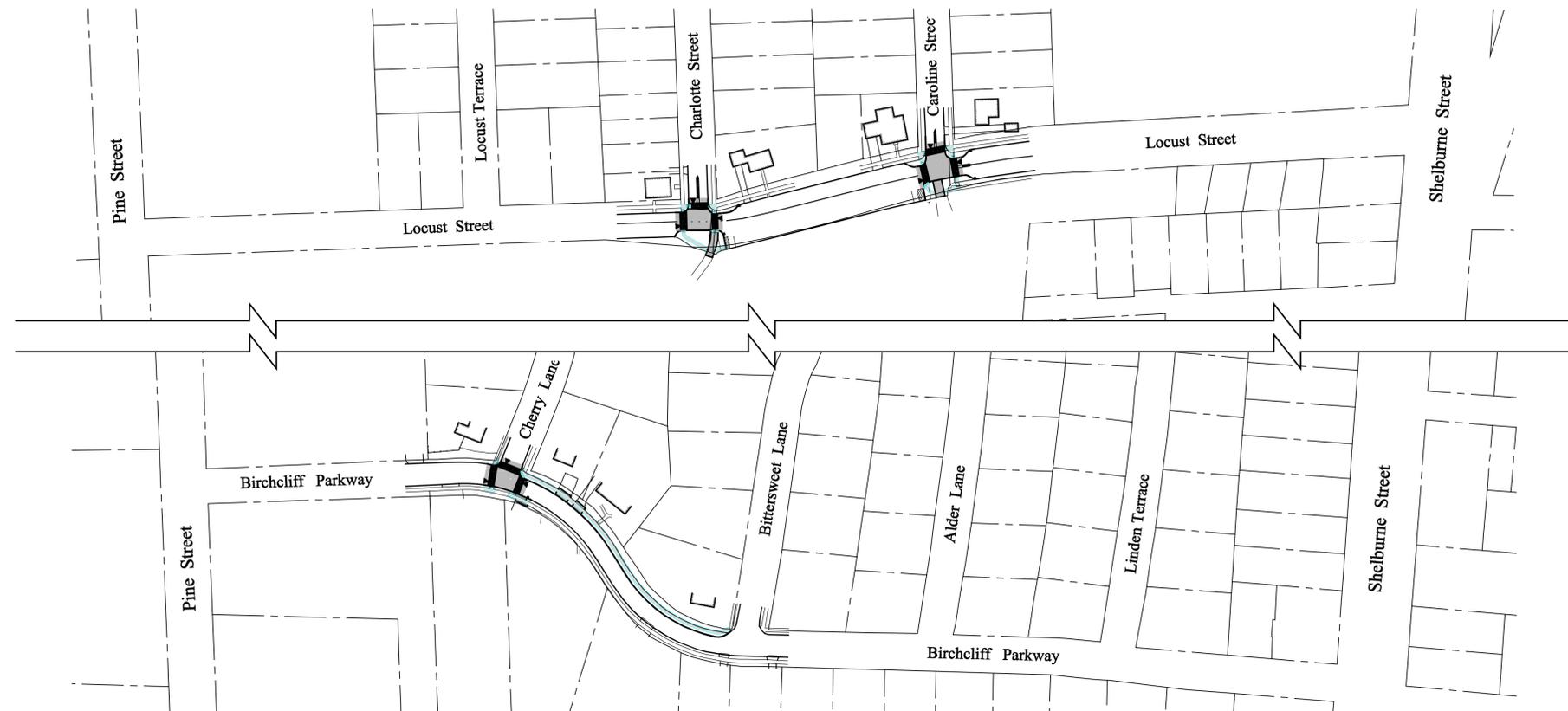
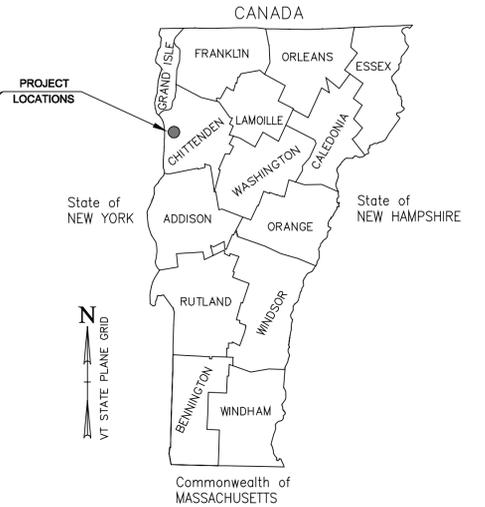
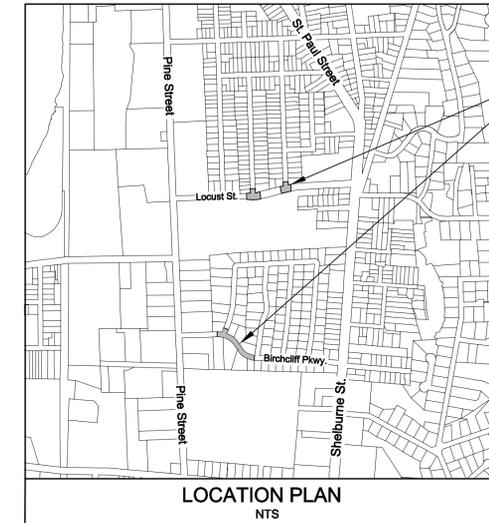


# City of Burlington County of Chittenden Burlington STP BP 13(6) Pedestrian Improvements

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

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



**OVERALL SITE PLAN**

**INDEX OF SHEETS**

- 1 TITLE SHEET
- 2 BIRCHCLIFF PARKWAY LAYOUT PLAN
- 3-5 INTERSECTION LAYOUT PLANS
- 5A LOCUST STREET LAYOUT PLAN
- 6 DETAILS AND SPECIFICATIONS

**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 SIDELINES ARE BASED ON LIMITED FOUND EXISTING BOUNDARY EVIDENCE AND PLANS BY OTHERS. THE INDIVIDUAL PROPERTY LINES WERE LOCATED BASED ON FOUND EVIDENCE, THE ABOVE PLANS, PROPERTY SURVEYS 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.

**CONCEPT PLANS  
OCTOBER 2014**

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

<b>TITLE SHEET</b>	<b>BURLINGTON STP BP 13(6)</b>	SHEET: <b>1</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

**GENERAL CONSTRUCTION SPECIFICATIONS**

- 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.
- 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.
- 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.
- 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.

**TREE PRUNING AND PROTECTION (AS DIRECTED BY RESIDENT ENGINEER)**

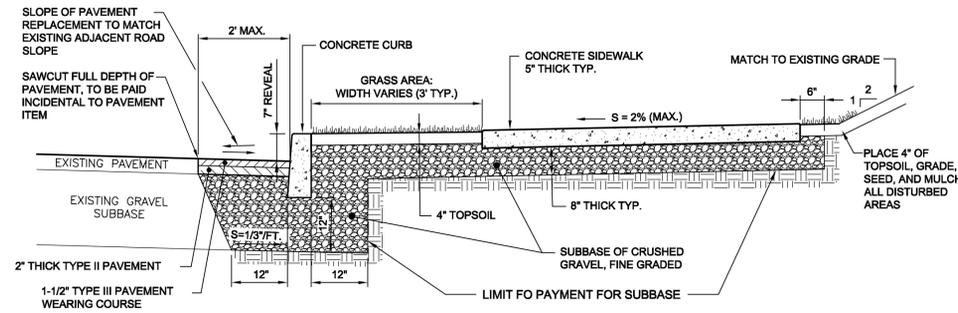
- PRIOR TO THE START OF CONSTRUCTION, INSTALL TEMPORARY PROJECT DEMARCATION FENCE (PDF) IN LOCATIONS SHOWN ON PLANS FOR TREE AND PLANT PROTECTION.
- PDF FENCE SHALL PROTECT EXISTING TREES, SHRUBS AND OTHER VEGETATION THROUGHOUT CONSTRUCTION AGAINST CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING AND BRUISING OF BARK; SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS; EXCESS FOOT OR VEHICULAR TRAFFIC; AND PARKING OF VEHICLES.
- WHERE TEMPORARY CLEARANCE IS NEEDED DURING CONSTRUCTION THAT MAY CONFLICT WITH EXISTING TREES, BRANCHES SHALL BE TIED BACK TO HOLD THEM OUT OF THE CLEARANCE ZONE.
- WHEN EXCAVATION IS TO OCCUR IN CLOSE PROXIMITY TO EXISTING TREES, ROOT PRUNING SHALL BE DONE PRIOR TO CONSTRUCTION. ROOTS SHALL BE CLEANLY CUT, WITH CUTS TO THE DEPTH OF THE REQUIRED EXCAVATION. WHEN COMPLETED, REPLACE SOIL IN THE TRENCH AREA.
- ROOTS ENCOUNTERED DURING EXCAVATION IN THE VICINITY OF TREES SHALL BE CLEANLY CUT AND PROTECTED DURING CONSTRUCTION OPERATIONS. TEMPORARILY COVER EXPOSED ROOTS WITH A DOUBLE LAYER OF DAMPENED BURLAP TO PREVENT ROOTS FROM DRYING OUT UNTIL THEY CAN BE COVERED WITH SOIL. COVER ROOTS WITH SOIL AS SOON AS POSSIBLE REMOVING BURLAP FIRST.
- IF ANY TREES OR SHRUBS DESIGNATED TO BE SAVED ARE DAMAGED AND REPLACEMENT IS REQUIRED, TREES OR SHRUBS OF THE SAME SPECIES AND VARIETY SHALL BE PURCHASED AND PLANTED BY THE CONTRACTOR. THE TOTAL INCH DIAMETER OF THE REPLACEMENT TREES OR SHRUBS SHALL EQUAL THE DIAMETER OF THE TREE OR SHRUB TO BE REPLACED, UP TO 3" IN IDAMETER.
- PRUNING OF EXISTING TREES, AS IDENTIFIED ON THE PLANS, SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE'S TREE PRUNING GUIDELINES, THE ANSI A300 PRUNING STANDARD AND THE MOST RECENT EDITION OF ANSI Z133.1.
- REMOVE TEMPORARY PROTECTION DEVICES AND FACILITIES INSTALLED DURING COURSE OF WORK AFTER COMPLETION OF ALL WORK AND RESTORE PLANT PROTECTION AREAS TO THEIR ORIGINAL CONDITION.

**TURF ESTABLISHMENT**

ALL DISTURBED AREAS THAT DO NOT HAVE AN IMPERVIOUS SURFACE SHALL BE STABILIZED WITH SEEDING AND MULCHING PRIOR TO OCTOBER 1. ANY WORK PERFORMED AFTER SEPTEMBER 15 OF EACH YEAR SHALL BE STABILIZED WITH MULCH OR NETTING SUFFICIENT TO PREVENT EROSION AND SHALL BE IMMEDIATELY SEEDED AND REMULCHED AS SOON AS WEATHER PERMITS IN THE SPRING. PLACEMENT OF TOPSOIL, AND THE APPLICATION OF SEED, FERTILIZER, LIME (WHERE APPLICABLE), AND MULCH SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- A MINIMUM OF 4" OF APPROVED TOPSOIL SHALL BE PLACED IN ALL AREAS. PLACEMENT OF TOPSOIL SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN, EXCESSIVELY WET, OR OTHERWISE IN A CONDITION DETRIMENTAL TO THE WORK. FOLLOWING PLACEMENT OF TOPSOIL, THE SURFACE SHALL BE RAKED. ALL STONES, LUMPS, ROOTS, OR OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED.
- SEED MIXTURE SHALL CONFORM TO THE SEED MIX TABLE SHOWN ON THIS SHEET AND BE SPREAD UNIFORMLY IN ALL AREAS INDICATED ON THE PLANS AT THE SPECIFIED RATE. FOR SEEDING BETWEEN SEPTEMBER 1 AND OCTOBER 1, WINTER RYE SHALL BE OVERSEEDDED AT AN APPLICATION RATE OF 120 POUNDS PER ACRE.
- FERTILIZER SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND BE APPLIED BASED UPON SOIL DEFICIENCIES. LIME SHALL ONLY BE APPLIED AS NEEDED BASED UPON A SOIL pH TEST.
- WITHIN 24 HOURS OF APPLICATION OF SEED, FERTILIZER AND LIME, THE SURFACE SHALL BE MULCHED WITH A HAY MULCH. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A MINIMUM RATE OF 2 TONS PER ACRE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR A FULL GROWTH OF GRASS IN ALL DISTURBED AREAS TO BE RE-VEGETATED. VEGETATION GROWTH SHALL BE PERMANENT AND SUFFICIENT TO PREVENT EROSION OF THE UNDERLYING SOIL UNDER ALL CONDITIONS OF PRECIPITATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND CARING FOR SEEDED, MULCHED, AND AREAS OF ESTABLISHED VEGETATION UNTIL FINAL ACCEPTANCE OF THE WORK BY THE OWNER.

URBAN GRASS SEED MIX	
% OF MIX	TYPE OF SEED
50	PERENNIAL RYEGRASS
25	CREEPING RED FESCUE
15	KENTUCKY BLUEGRASS
10	ANNUAL RYEGRASS
100	SEED AT 4 TO 5 LBS PER 1,000 SQ. FT.

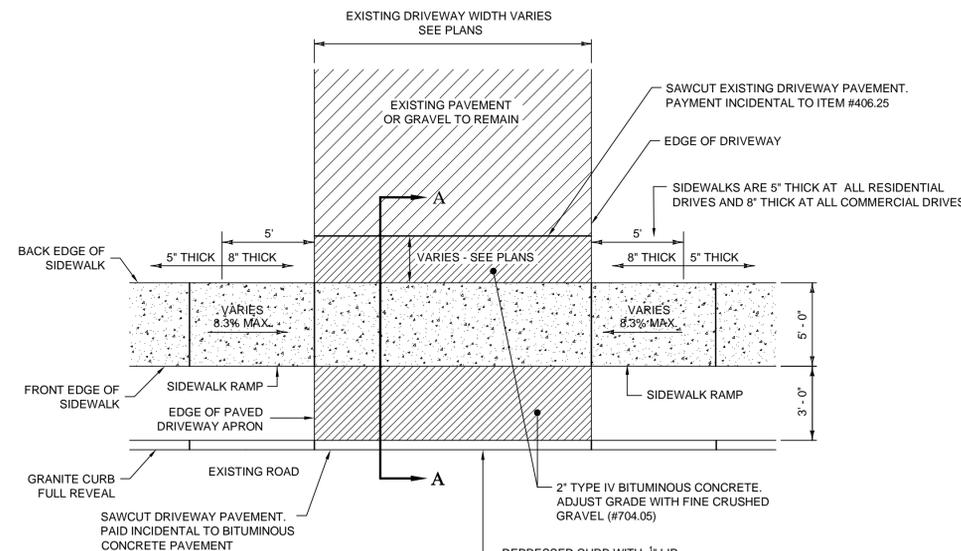


**TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB AND GRASS STRIP SECTION**

NTS

**NOTES:**

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

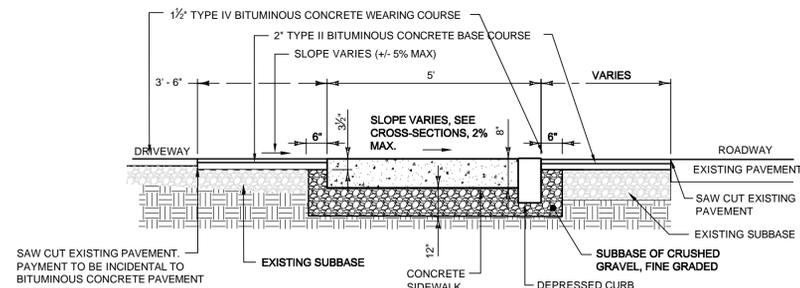


**NOTES:**

- SUBBASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.
- 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.

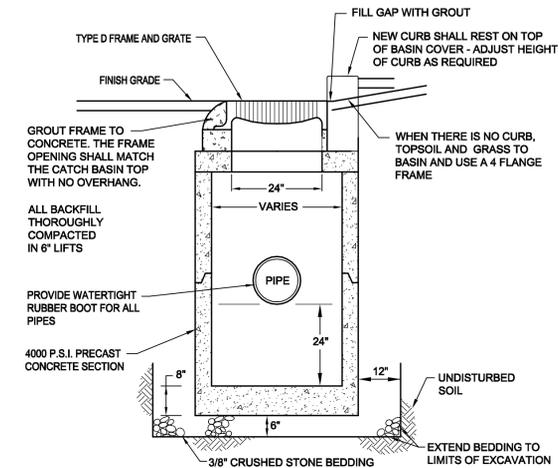
**TYPICAL SECTION A-A CONCRETE SIDEWALK ACROSS DRIVEWAYS**

NTS



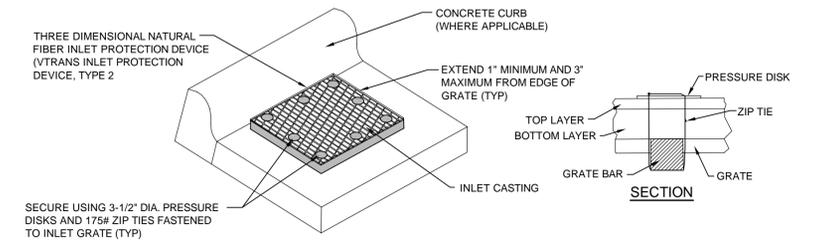
**TYPICAL SECTION A-A CONCRETE SIDEWALK ACROSS DRIVEWAYS**

NTS



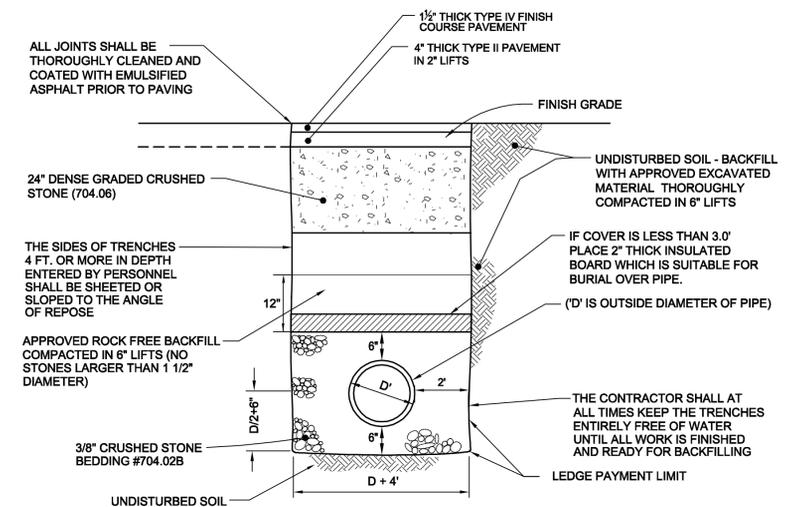
**TYPICAL PRECAST CONCRETE CATCH BASIN WITH CAST IRON GRATE**

NTS



**FLAT TYPE INLET PROTECTION TYPE II**

NTS



NOTE: REMOVAL OF EXISTING CONCRETE IN ROADWAY AND REMOVAL OF EXISTING PAVEMENT PAID INCIDENTAL TO LF OF STORM PIPE. SAW CUTTING ASSOCIATED WITH THESE ITEMS IS PAID INCIDENTAL TO ITEM #406.25.

**TYPICAL STORM TRENCH**

NTS

**CONCEPT PLANS  
OCTOBER 2014**

**TYPICAL  
DETAILS &  
SPECIFICATIONS**



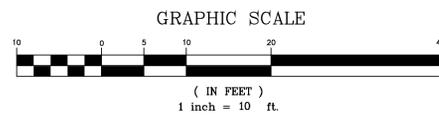
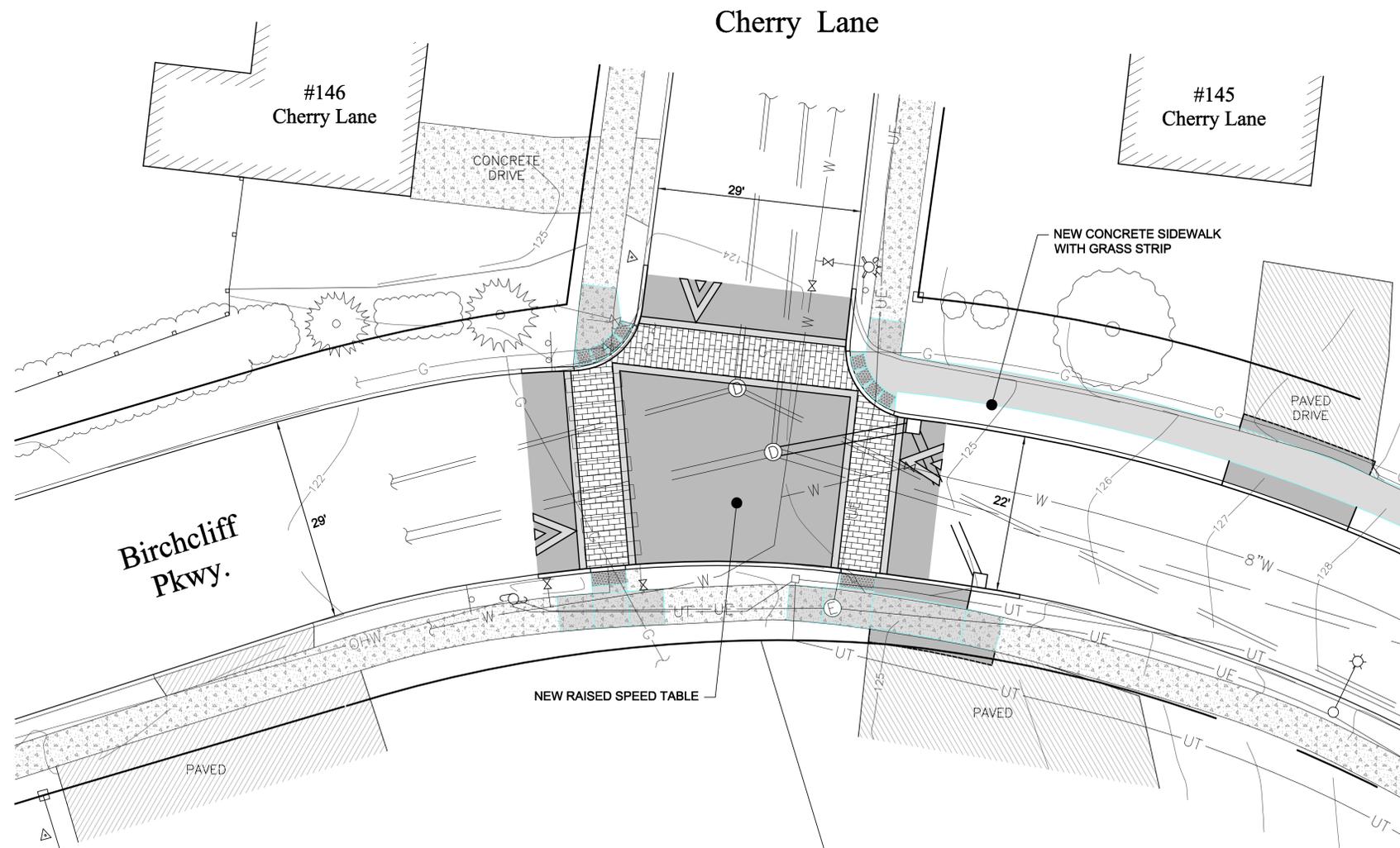
**BURLINGTON STP BP 13(6)**

**Lamoureux & Dickinson  
Consulting Engineers, Inc.**  
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**2**



CONCEPT PLANS  
NOVEMBER 2014

INTERSECTION  
LAYOUT  
PLAN

BURLINGTON STP BP 13(6)



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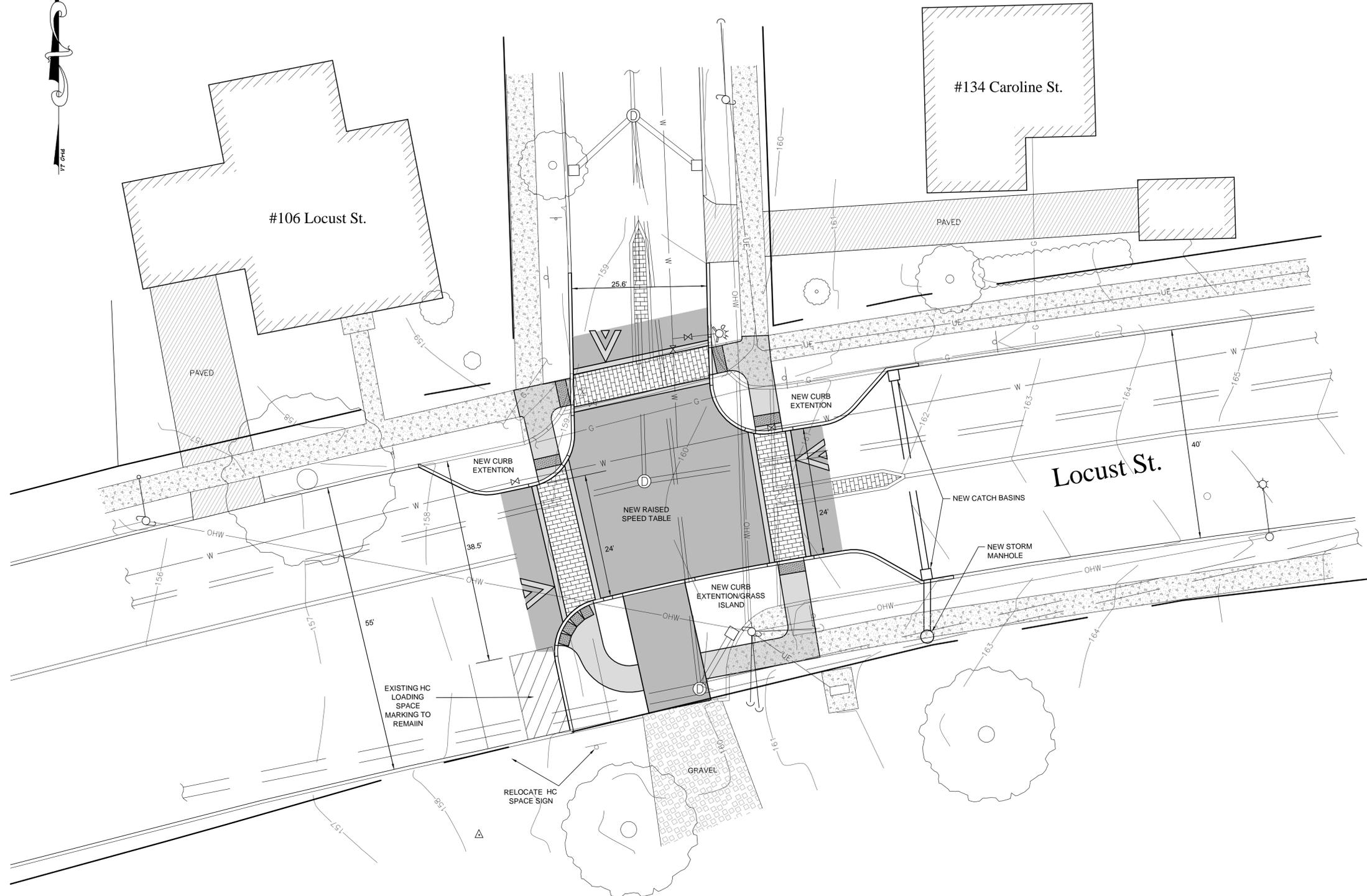
3



Caroline St.

#106 Locust St.

#134 Caroline St.



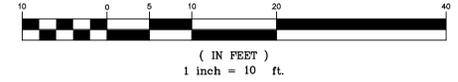
Locust St.

EXISTING HC LOADING SPACE MARKING TO REMAIN

RELOCATE HC SPACE SIGN

GRAVEL

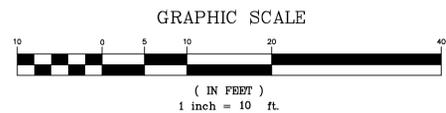
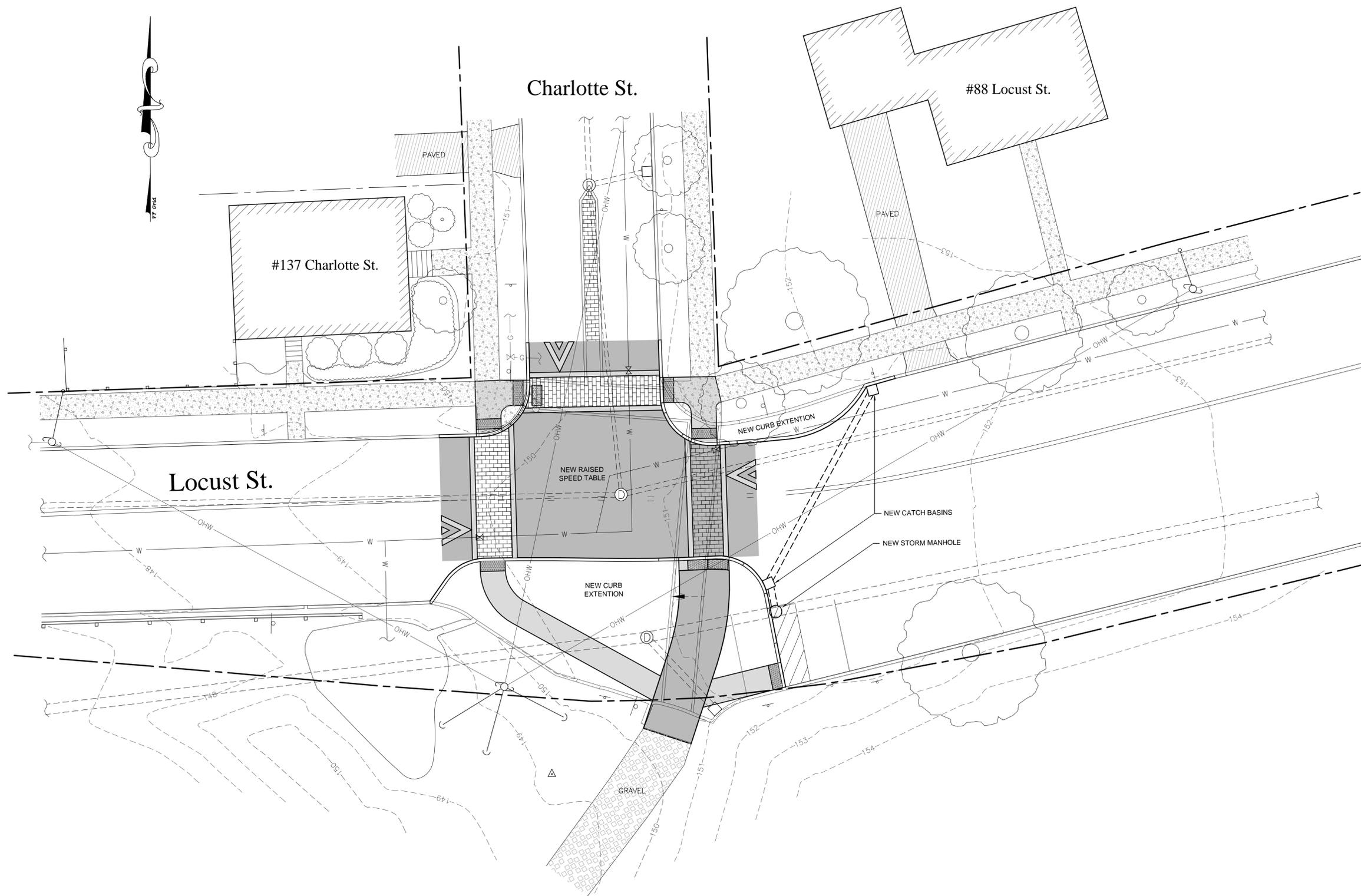
GRAPHIC SCALE



CONCEPT PLANS  
NOVEMBER 2014

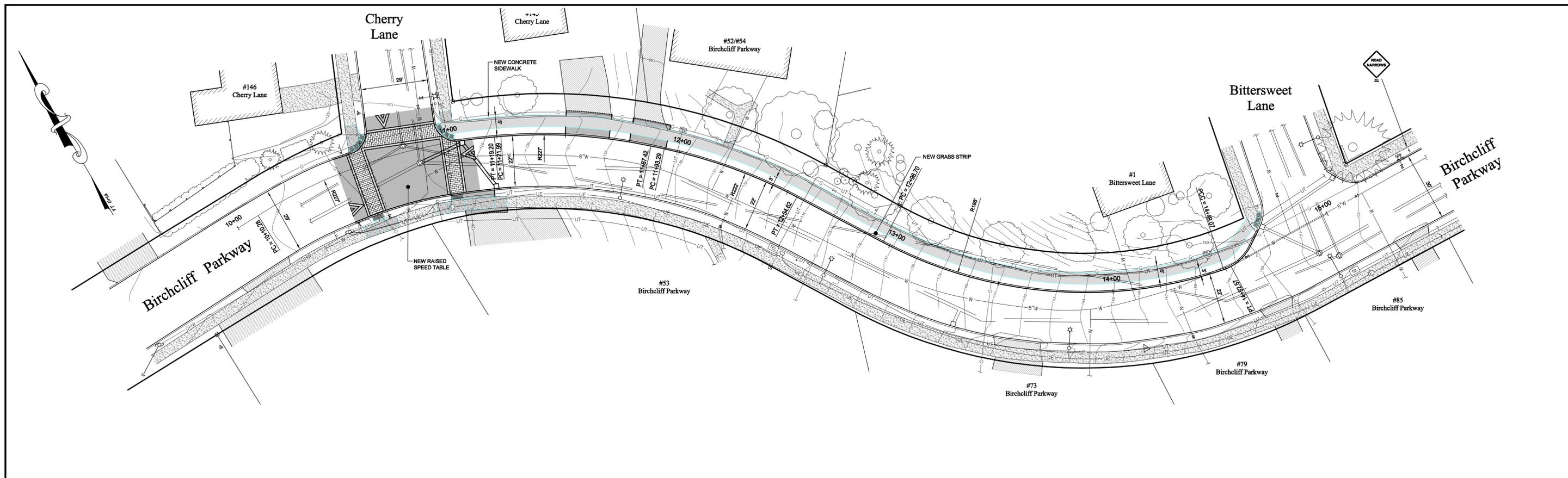
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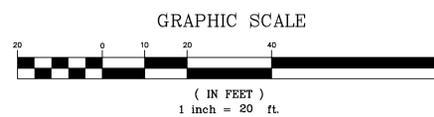


INTERSECTION LAYOUT PLAN	BURLINGTON STP BP 13(6)		SHEET:
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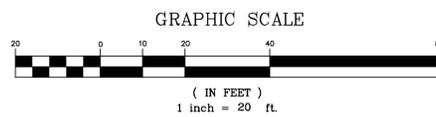


CONCEPT PLANS  
 NOVEMBER 2014

<b>BIRCHCLIFF PARKWAY LAYOUT PLAN</b>	<b>BURLINGTON STP BP 13(6)</b>	
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### LAYOUT PLAN



CONCEPT PLANS  
OCTOBER 2014

LOCUST  
STREET  
LAYOUT  
PLAN

BURLINGTON STP BP 13(6)



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