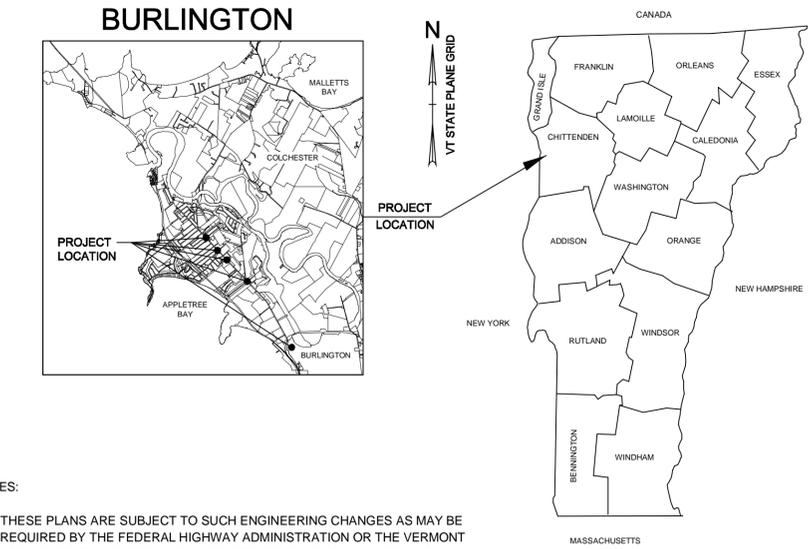


BURLINGTON TAP TA15 (1)

CITY OF BURLINGTON, VERMONT

NORTH AVENUE UNSIGNALIZED PEDESTRIAN CROSSWALKS

THIS PROJECT INVOLVES THE INSTALLATION OF FIVE (5) NEW UNSIGNALIZED PEDESTRIAN CROSSWALKS ACROSS NORTH AVENUE AT:
 WARD STREET
 BURLINGTON COLLEGE
 KILLARNEY / VILLAGE GREEN DRIVE
 POIRIER PLACE
 GOSSE COURT
 GREEN ACRES DRIVE / CAYUGA COURT
 WORK INCLUDES PAVEMENT MARKINGS, WARNING SIGNS AND MARKINGS, CONCRETE SIDEWALKS, MAST ARMS WITH PHB, CURBING AND LIGHTING.



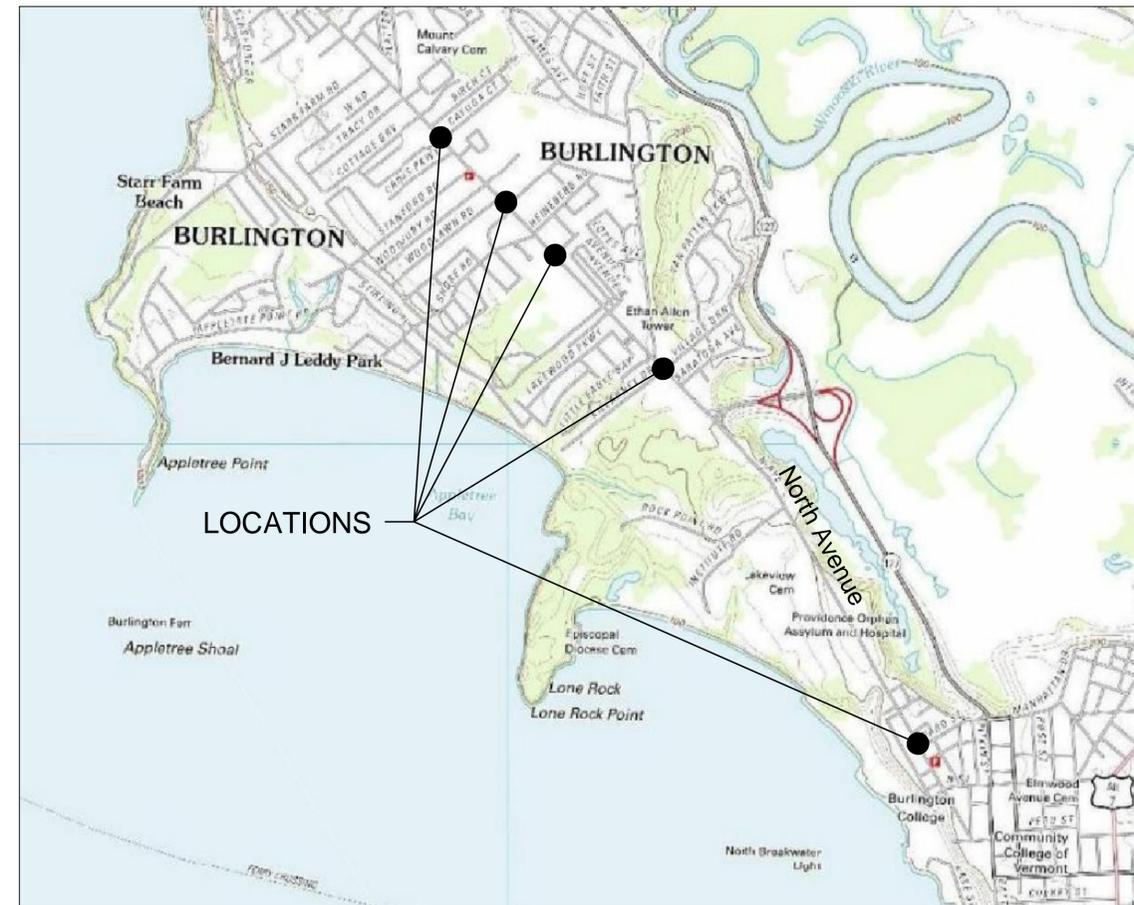
- NOTES:
1. THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE VERMONT AGENCY OF TRANSPORTATION. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED 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 RIGHT-OF-WAYS OF NORTH AVENUE AND ITS INTERSECTING STREETS ARE BASED ON HISTORICAL RIGHT-OF-WAY WIDTHS PROVIDED BY THE CITY OF BURLINGTON, AND ARE LOCATED USING FOUND EVIDENCE PLUS AVAILABLE SURVEY PLATS AND UTILITY MAPPING. INDIVIDUAL PARCEL SIDELINES SHOWN HEREON ARE BASED ON CITY PARCEL MAPS.
 3. RIGHT-OF-WAY AND PARCEL LINES SHOWN HEREON SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE ACQUISITION OF LANDS AND RIGHTS FOR THIS PROJECT.

INDEX OF SHEETS

SHEET #	TITLE
1	TITLE SHEET
2	TYPICAL DETAILS & SECTIONS
3	WARD STREET
4	KILLARNEY DRIVE / VILLAGE GREEN
5	KILLARNEY DRIVE / VILLAGE GREEN ALTERNATE
6	POIRIER PLACE
7	POIRIER PLACE ALTERNATE
8	GOSSE COURT / DODDS COURT
9	GREEN ACRES DRIVE / CAYUGA COURT
10-12	TRAFFIC CONTROL PLANS

VAOT STANDARD DETAILS

DETAIL #	TITLE	DATE
C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-2005
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-2005
C-3A	SIDEWALK RAMPS	03-10-2008
C-3B	SIDEWALK RAMPS AND MEDIAN ISLANDS	03-10-2008
C-10	CURBING	02-11-2008
E-121	STANDARD SIGN PLACEMENT, CONVENTIONAL ROAD	08-08-1995
E-192	PAVEMENT MARKING DETAILS	10-12-2000
E-193	PAVEMENT MARKING DETAILS	08-18-1995
T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-2012
T-17	TRAFFIC CONTROL MISCELLANEOUS DETAILS	08-06-2002
T-28	CONSTRUCTION SIGN DETAILS	08-06-2012
T-30	CONSTRUCTION SIGN DETAILS	08-06-2012
T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013



LOCATION MAP
NTS

LEGEND

- SURVEY CONTROL POINT
- EXISTING SIGNS
- NEW SIGN
- EXISTING TREE
- EXISTING SHRUBS
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- EXISTING UTILITY POLE & OVERHEAD WIRES
- EXISTING DRAINAGE MANHOLE
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING WATER HYDRANT
- NEW LIGHT POLE WITH LUMINAIRE

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

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

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1996)

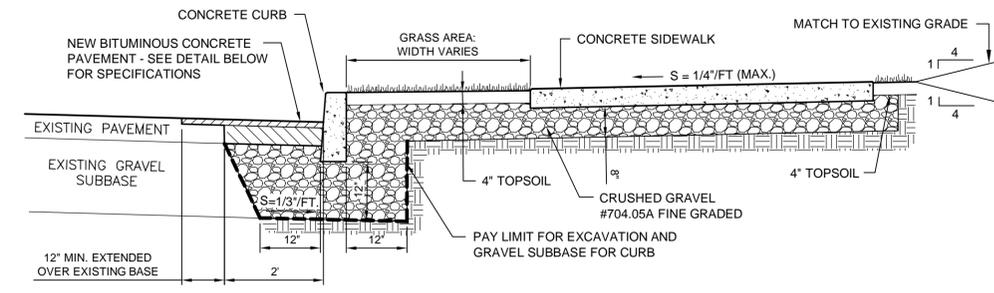
CITY OF BURLINGTON
APPROVED _____ DATE _____
CITY ENGINEER

CONCEPTUAL PLANS
AUGUST, 2016

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

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' AND THE CITY OF BURLINGTON PRIOR TO ANY EXCAVATION.
- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. EXPLORATORY EXCAVATION SHALL BE COORDINATED WITH AND SUBJECT TO THE RESIDENT ENGINEER'S 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 THE 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 I) 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.

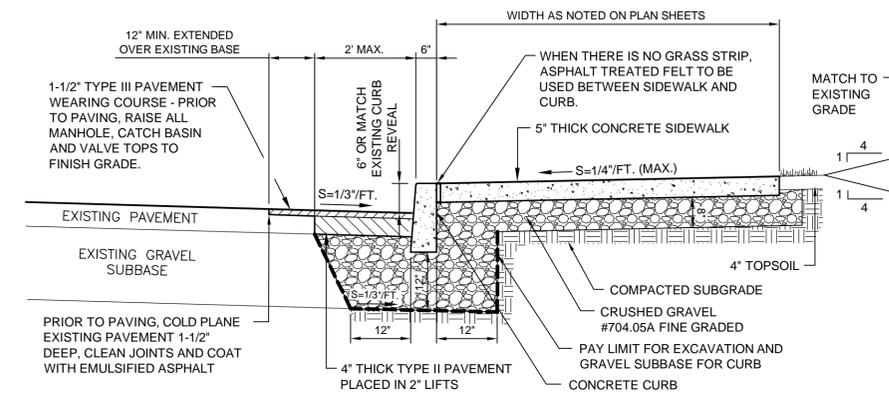


TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB AND GRASS STRIP SECTION

NTS

CONCRETE SIDEWALK NOTES:

- SIDEWALKS TO BE CAST IN 10' SECTIONS (MAX.) WITH A BROOM FINISH AND 1/4" TRANSVERSE EXPANSION JOINTS PLACED AT INTERVALS NOT EXCEEDING 50 FT. PREFORMED JOINT FILLER SHALL BE INSTALLED AT THE EXPANSION JOINTS. ALL EDGES SHALL BE TOOL ROUNDED WITH AN EDGE HAVING A 1/4" RADIUS. SIDEWALKS SHALL BE SCORED TO A 1" DEPTH EVERY 5' (CONTROL JOINTS).
- FINE GRADED CRUSHED GRAVEL (VTRANS STD. SPEC. 704.05) SUBBASE SHALL BE COMPACTED TO A 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.
- CONCRETE SHALL MEET THE FOLLOWING SPECIFICATIONS:
 - 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
 - 7" MAXIMUM SLUMP
 - 7.0% (+/- 1.5%) AIR CONTENT
 - 20% FLY ASH OR 25% GGBFS SUBSTITUTION FOR PORTLAND CEMENT
- ALL NEW CONCRETE SIDEWALK SHALL BE CURED FOR A PERIOD OF 7 DAYS OF ORIGINAL PLACEMENT
- ALL NEW CONCRETE SIDEWALK SHALL BE TREATED WITH A SILANE WATER REPELLENT SEALER APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS BETWEEN 14-40 DAYS OF ORIGINAL CONCRETE PLACEMENT.

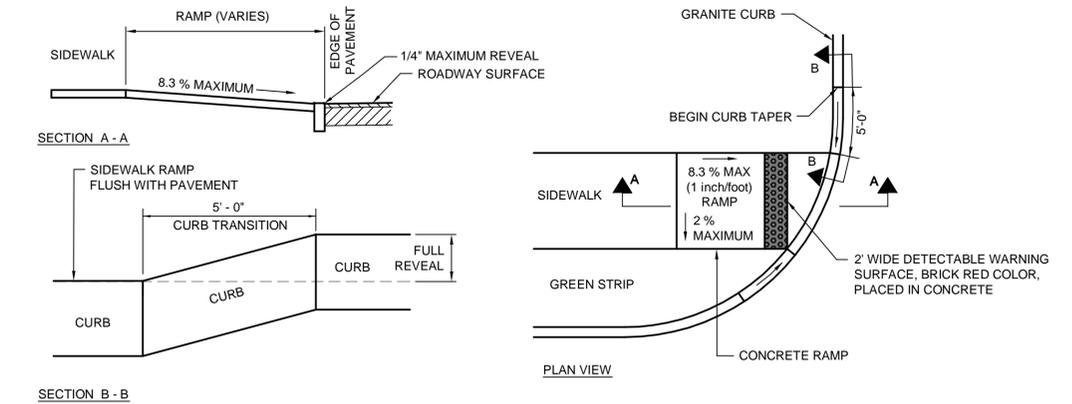


TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB

NTS

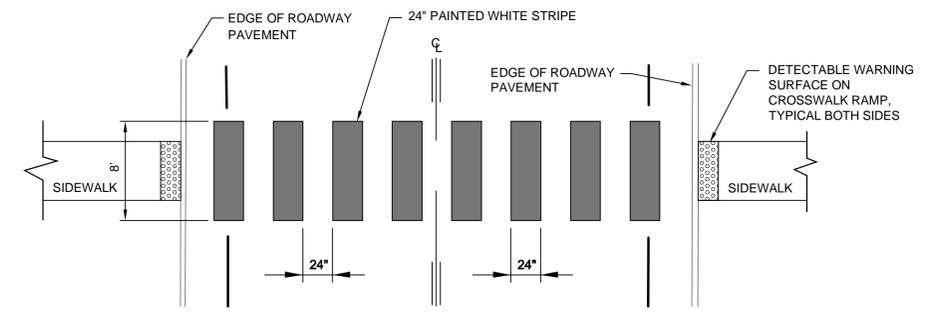
PAVING & CURB NOTES:

- THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE/EXISTING PAVEMENT BEFORE INSTALLING THE TYPE III PAVEMENT WEARING COURSE. EMULSION SHALL BE PLACED ON THE FACE OF THE CURB WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT. EMULSIFIED ASPHALT, TO BE APPLIED AT THE RATE OF 0.015 GAL./SQ YD.
- BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +1/4" - (FOR TOTAL THICKNESS OF BASE AND/OR WEARING COURSE).
- BITUMINOUS CONCRETE PAVEMENT SHALL BE 75 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 58-34.
- CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
- CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO AASHTO DESIGNATION M-153 (1/2" SPONGE RUBBER OR CORK).



TYPICAL HANDICAP RAMP DETAIL

NTS



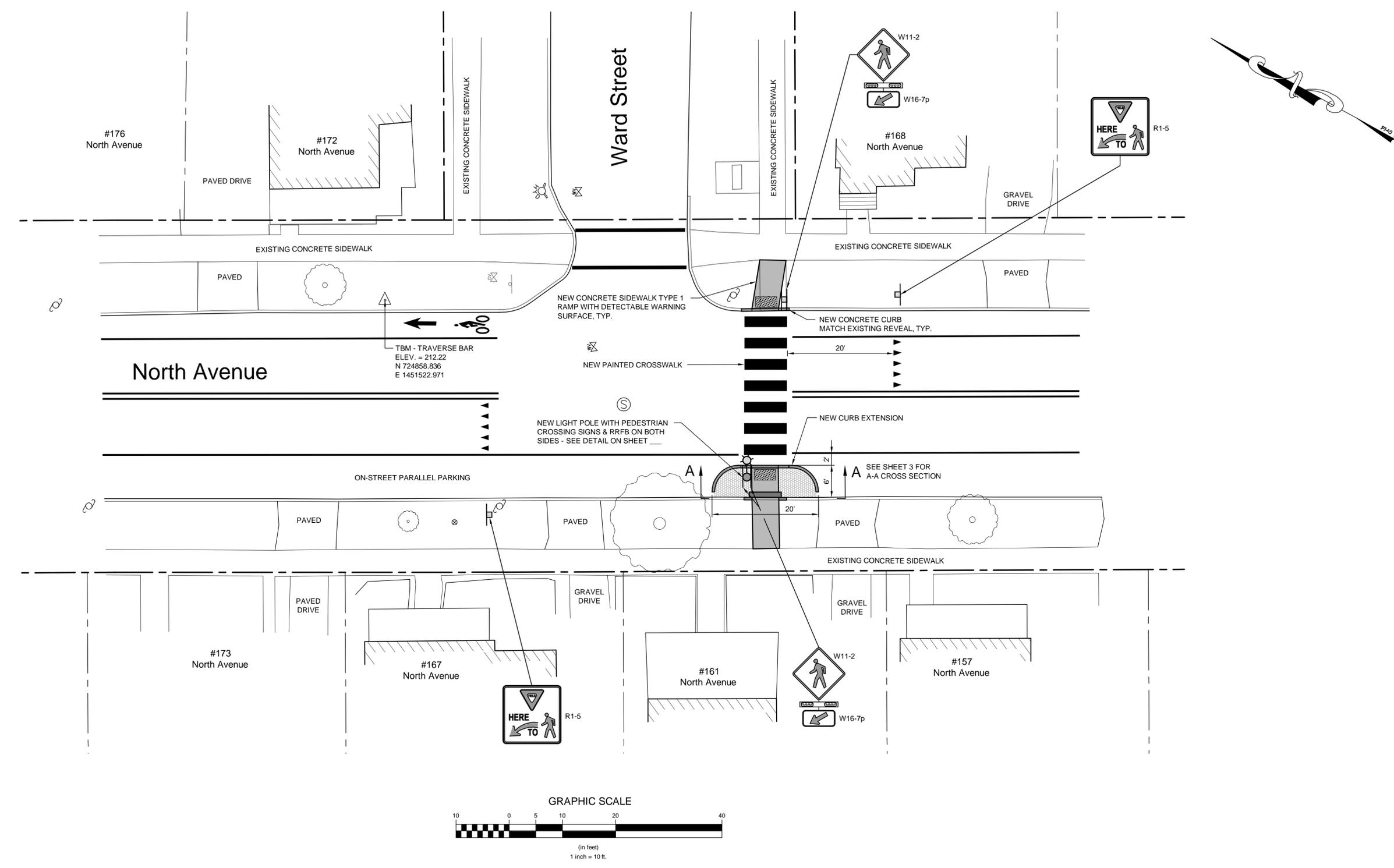
PAINTED BLOCK PATTERN CROSSWALK DETAIL

NTS

CONCEPTUAL PLANS
August 12, 2016

PROJECT NAME:	Burlington TAP TA15 (1) North Avenue Unsignalized Crosswalks	
PROJECT #:	16026	DATE: JUNE 21, 2016
PROJECT LEADER:	RD	DRAWN BY: WH
DESIGNED BY:	RD	CHECKED BY: RD
TYPICAL DETAILS & SECTIONS		SHEET 2 OF 12



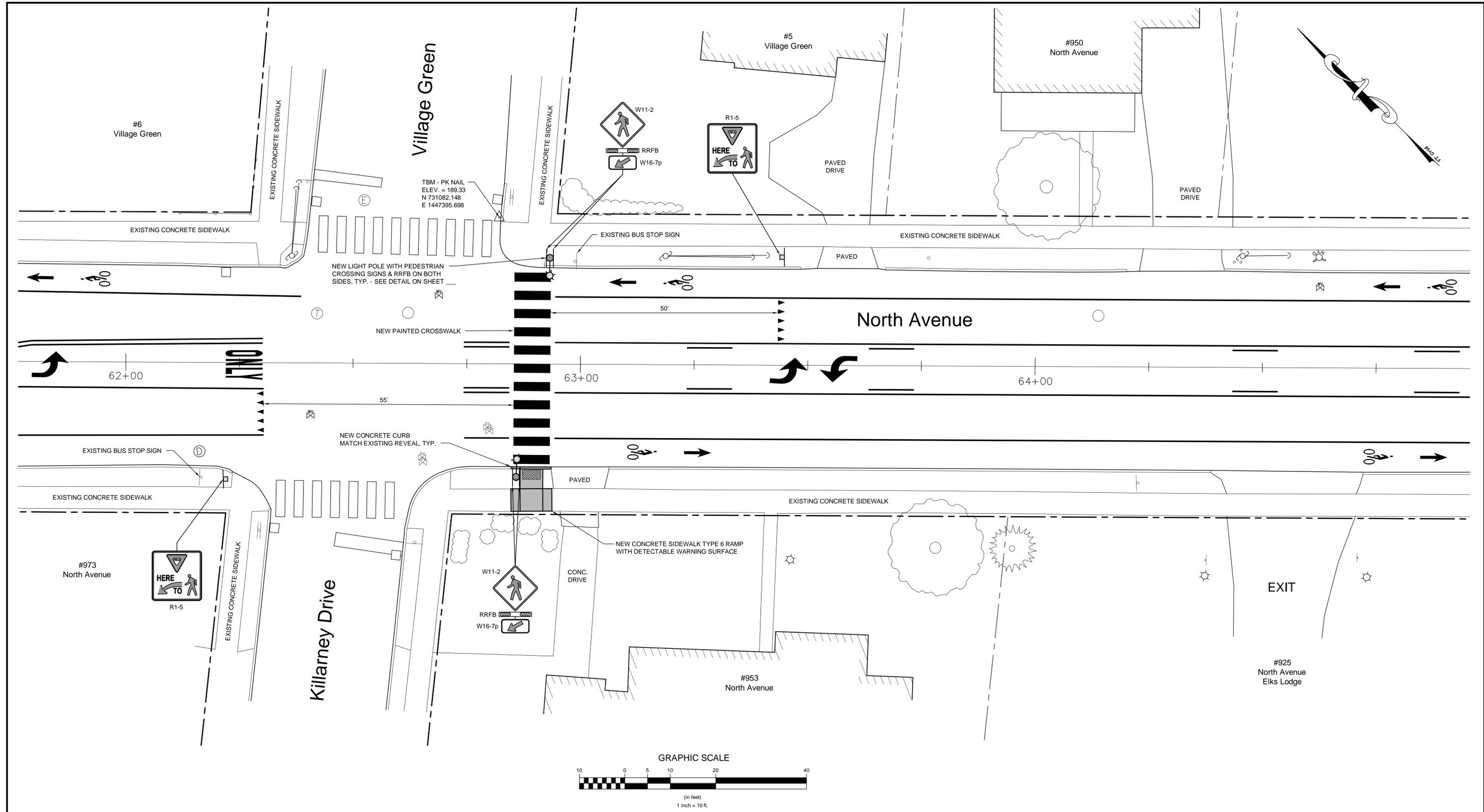


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PROPOSED LAYOUT	SHEET 3 OF 12

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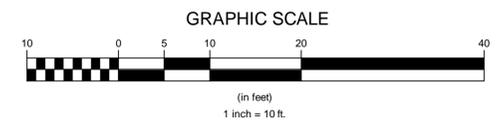
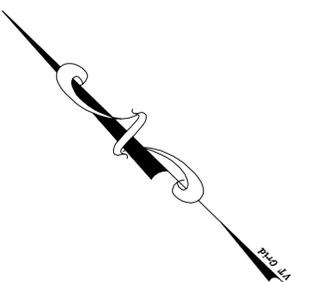
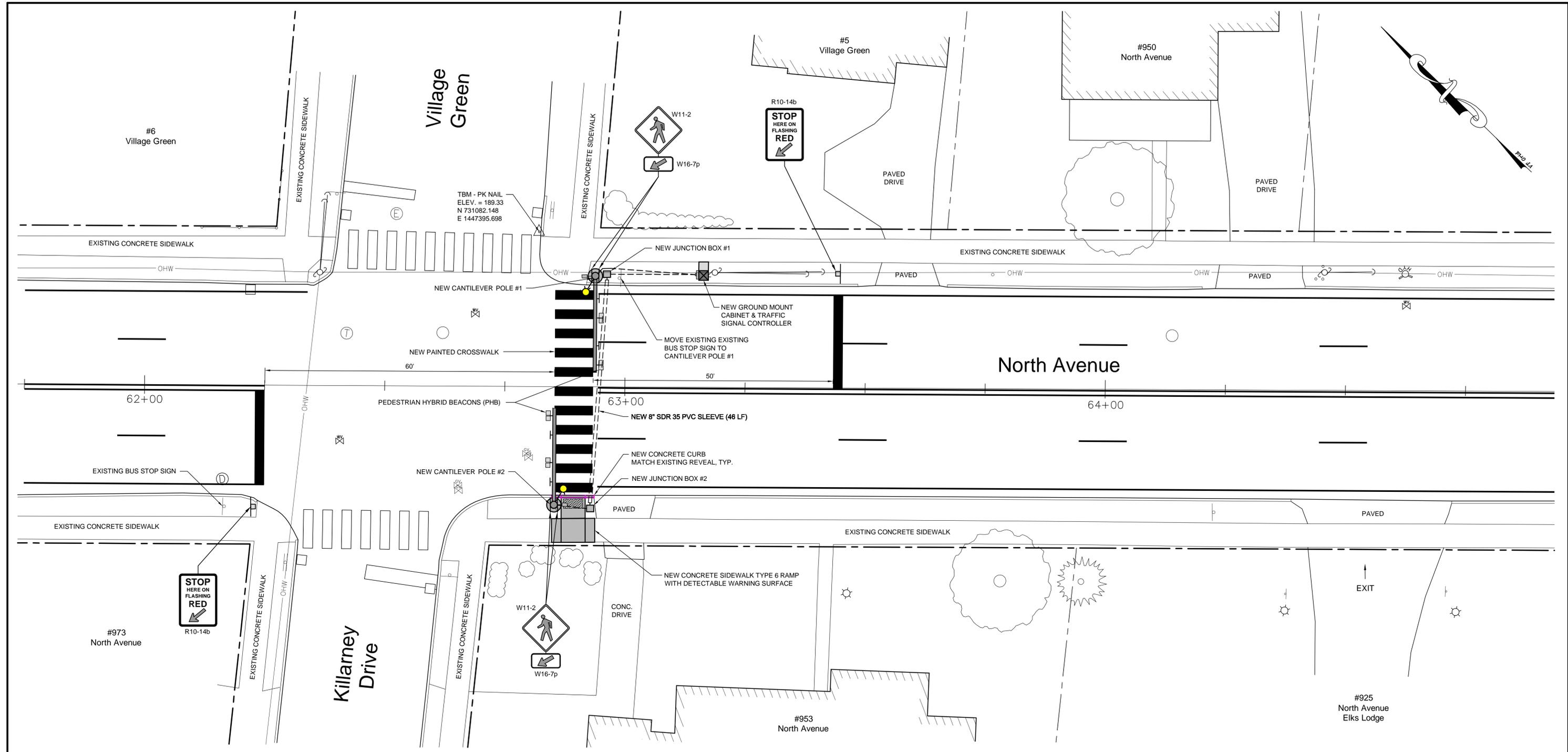


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DESIGNED BY:	RD	CHECKED BY:	RD
PROPOSED LAYOUT		SHEET	4 OF 12

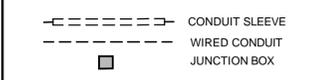
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**ALTERNATE PLAN FOR
4-LANE ROADWAY**

TRAFFIC SIGNAL LEGEND



NOTE:
NEW SLEEVES MAY BE INSTALLED BY OPEN CUT EXCAVATION. SAW CUT & REMOVE OVER NEW SLEEVE. REPLACE WITH NEW TYPE II BITUMINOUS CONCRETE PAVEMENT WITH 12" MIN. DENSE GRADED CRUSHED STONE SUBBASE. MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS ABOVE CONCRETE.

CONDUIT SCHEDULE

FROM	TO	2" WIRED CONDUIT	DESCRIPTION
UTILITY POLE	CONTROLLER CABINET	5'	ELECTRICAL SERVICE
CONTROLLER CABINET	CANTILEVER POLE #1	25'	SIGNAL WIRING / STREET LIGHTING
CONTROLLER CABINET	JUNCTION BOX #1	20'	SIGNAL WIRING / STREET LIGHTING
JUNCTION BOX #1	JUNCTION BOX #2	50'	SIGNAL WIRING / STREET LIGHTING
JUNCTION BOX #2	CANTILEVER POLE #1	10'	SIGNAL WIRING / STREET LIGHTING

**CONCEPTUAL PLANS
August 12, 2016**

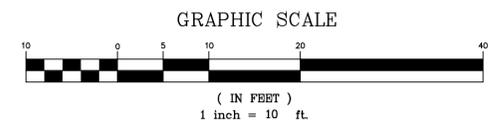
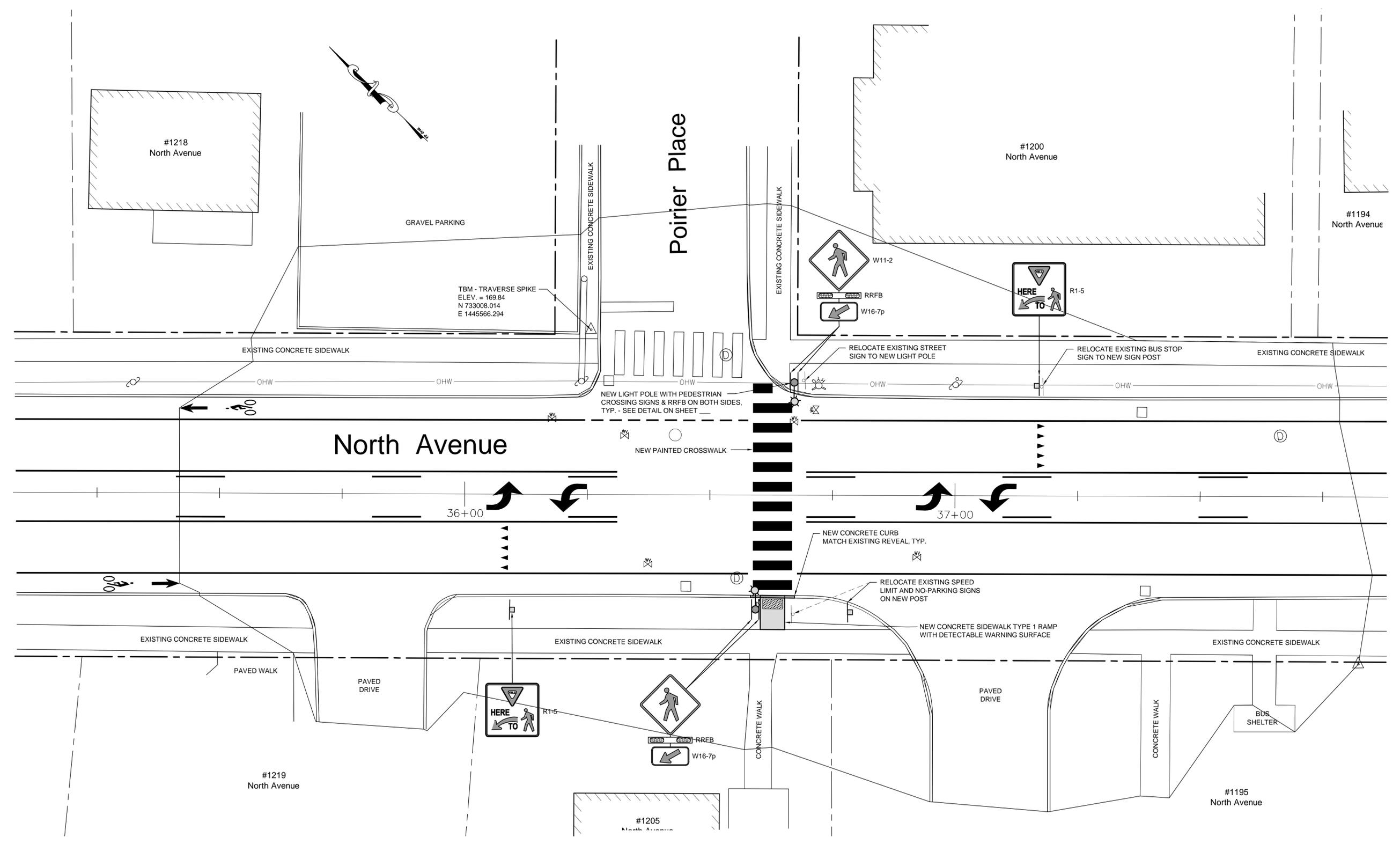
PROJECT NAME: **Burlington TAP TA15 (1)
North Avenue Unsignalized Crosswalks**

PROJECT #: 16026
PROJECT LEADER: RD
DESIGNED BY: RD
PROPOSED LAYOUT

DATE: JUNE 21, 2016
DRAWN BY: WH
CHECKED BY: RD
SHEET 5 OF 12



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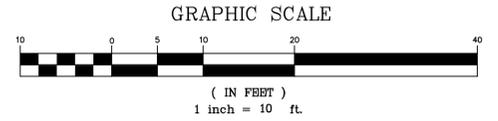
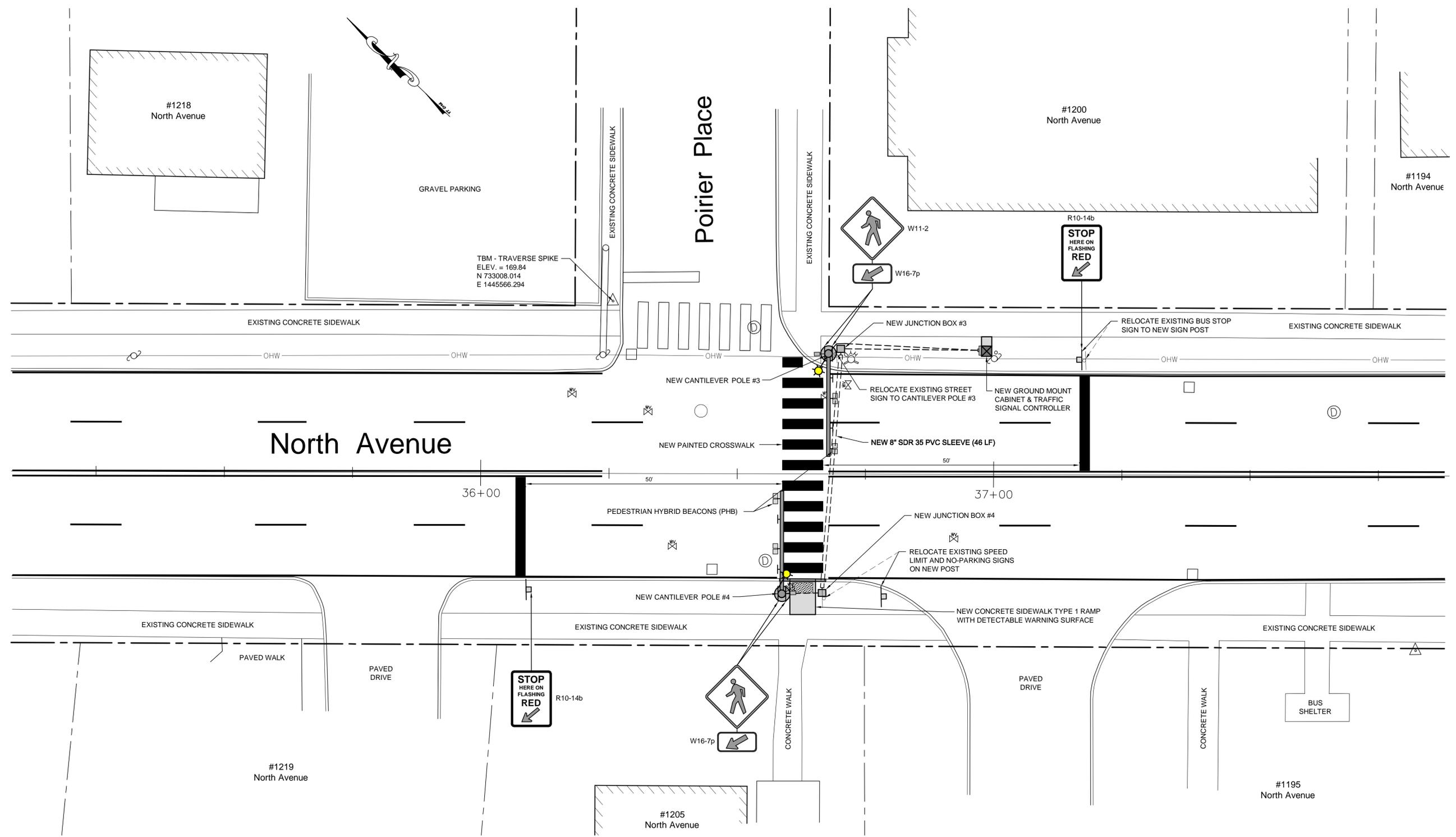


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PROPOSED LAYOUT		SHEET 6 OF 12

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TRAFFIC SIGNAL LEGEND

	CONDUIT SLEEVE
	WIRED CONDUIT
	JUNCTION BOX

CONDUIT SCHEDULE

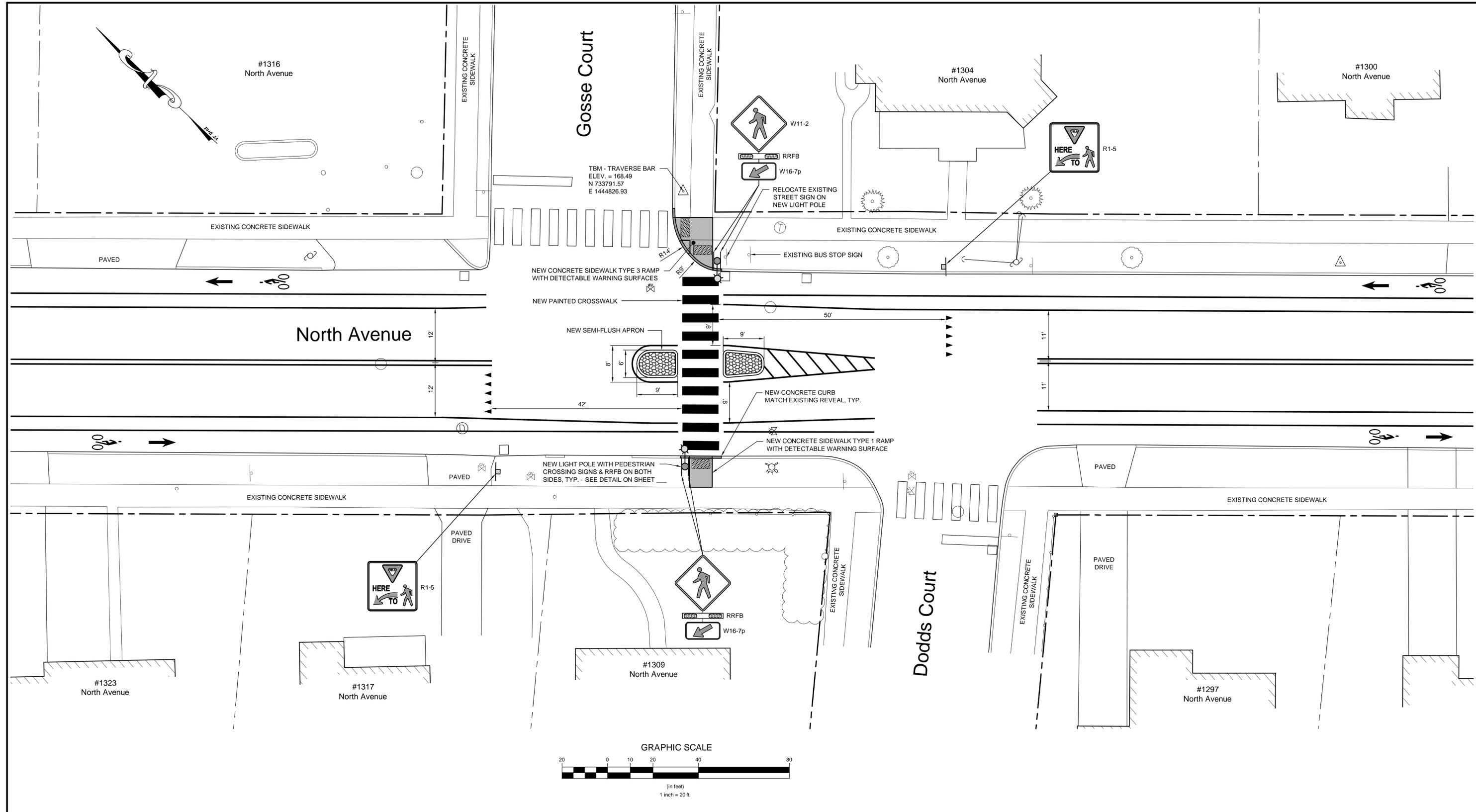
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CONCEPTUAL PLANS
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PROPOSED LAYOUT		SHEET 7 OF 12

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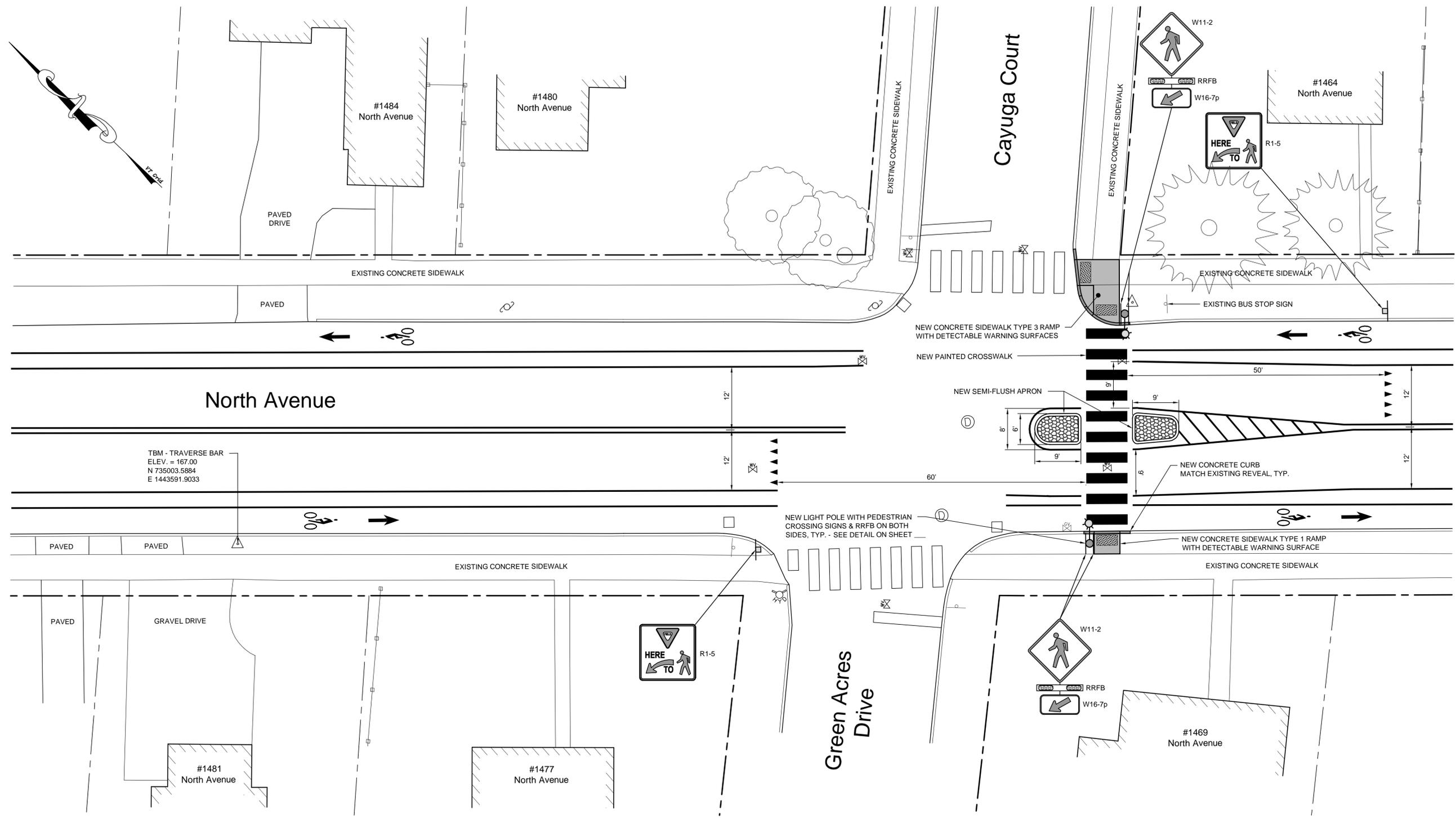


CONCEPTUAL PLANS
August 12, 2016

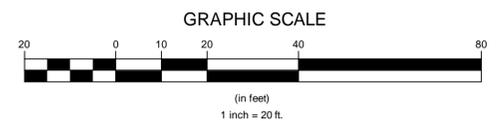
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PROPOSED LAYOUT		SHEET 8 OF 12

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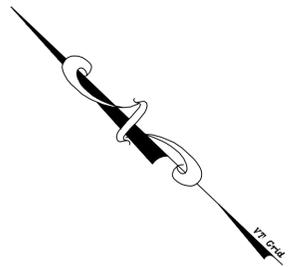


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PROPOSED LAYOUT		SHEET 9 OF 12

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Legend

- Proposed Crosswalk (rectangular rapid flashing beacon)
- Existing Crosswalk (unsignalized)
- ◆ Existing Crosswalk (traffic signal)

CONCEPTUAL PLANS August 12, 2016

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PROPOSED LAYOUT	SHEET OF 12	

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