## ERIE COUNTY WATER AUTHORITY AUTHORIZATION FORM

For Approval/Execution of Documents (check which apply)

Contract: Project No.: 202000150 Project Description: Niagara Falls Blvd. Pedestrian Safety Design, Towns of Tonawanda & Amherst, Erie County, PIN 5308.38				
Item Description:         Agreement       Professional Service Contract       Amendment         BCD       X       NYSDOT Agreement       Contract Docume         Recommendation for Award of Contract       Recommendation         Request for Proposals       Other				
Action Requested:  X Board Authorization to Execute X Legal Approval Board Authorization to Award Execution by the Ch Board Authorization to Advertise for Bids Execution by the Sec Board Authorization to Solicit Request for Proposals Other	airman cretary to the Authority			
Approvals Needed:  APPROVED AS TO CONTENT:  X Other (if Applicable)  X Chief Operating Officer  X Executive Engineer  Director of Administration  Risk Manager  X Chief Financial Officer  X Legal  APPROVED FOR BOARD RESOLUTION:  X Secretary to the Authority	Date: 5/12/2020 Date: 5/8/2020 Date: 05/13/2020 Date: Date: Date: Date: 05/08/2020 Date: 05/13/2020  Date: Date: Date:			
Remarks: Adjustment of ECWA facilities (valve boxes) under contract	item			

**Item No:** 

**Resolution Date:** 



#### ANDREW M. CUOMO Governor

## MARIE THERESE DOMINGUEZ Commissioner

FRANK P. CIRILLO, SR/WA Regional Director

May 7, 2020

Leonard F. Kowalski, P.E., Executive Engineer Erie County Water Authority 3030 Union Road Cheektowaga, NY 14227

RE: NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN TOWNS OF TONAWANDA AND AMHERST ERIE COUNTY PIN 5308.38, D264244

Dear Mr. Kowalski:

Until further notice, the New York State Department of Transportation (NYSDOT), Region 5, Utility Unit will be sending two (2) versions of this document package: a hard copy and an electronic copy. Please return the hard copy version, by USPS. The electronic package may be returned by USPS or electronically to <a href="Utility.Unit.R05@dot.ny.gov">Utility.Unit.R05@dot.ny.gov</a>. The electronic version must be signed <a href="physically">physically</a>, not electronically. All scanning must be done at 300 dpi. Please find the additional instructions in the cover letter below. If you have any questions or concerns, please contact us via one of the methods listed at the end of this letter.

Enclosed is an electronic copy of the proposed contract plans for the above-referenced project. The Erie County Water Authority has existing facilities within the project limits. The Erie County Water Authority's involvement in this project consists of adjustment of valve box elevations. The details of the adjustment are shown on the Project Plans included with this letter.

Also enclosed are four (4) sets of documents which include the Utility Work Agreement (HC-140) and the Coordination Note. Each of the four (4) HC-140 forms must be duly approved by an authorized representative of the Erie County Water Authority. **Work included in the State's contract and performed by the State contractor will be done at no expense to the Erie County Water Authority.** 

This agreement also requires four (4) copies of a Certified Resolution by your governing body as stated in Section VI – References, of the Utility Work Agreement (HC-140). Each copy must be signed and have a seal affixed to it.

Enclosed is a sample of a Certified Resolution granting the State of New York authority to perform the facility adjustments per contract documents, agreeing to maintain facilities, and authorizing a municipal official to enter agreements with the State of New York.

Leonard F. Kowalski, P.E., Executive Engineer PIN 5308.38, D264244 May 7, 2020 Page 2 of 2

Both physical and electronic packages need to be returned. Please return four (4) physical original sets of the signed agreement with attachments, Coordination Note, and Certified Resolution to Mr. Ronald Rolling, Regional Utilities Engineer, at 100 Seneca Street, Buffalo, NY 14203. The physical documents should be returned as soon as possible, but no later than two (2) weeks from the date of the lifting of the executive order "New York State on PAUSE". The documents sent electronically are to be returned by June 10, 2020. One (1) copy of the fully executed agreement will be returned for your records.

Any questions regarding work to be done may be directed to Mr. Thomas Richards, Design Job Manager (DJM), at (716) 847-3127 or via e-mail at <a href="mailto:Thomas.Richards@dot.ny.gov">Thomas.Richards@dot.ny.gov</a>. Questions regarding these forms can be directed to Mr. Ronald Rolling, Regional Utilities Engineer, at (716) 847-3954 or via e-mail at <a href="mailto:Ronald.Rolling@dot.ny.gov">Ronald.Rolling@dot.ny.gov</a>.

Sincerely,

David J. Hill, P.E.

Assistant Regional Design Engineer Design Technical Support Unit

Bv.

Ronald W. Rolling, P.E. Regional Utilities Engineer

DJH/RWR/EJC/AJP/kar

Enclosures: Project Plans, Utility Work Agreement (HC-140), Coordination Note, and Certified Resolution sample

Since the construction, reconstruction, or maintenance of the transportation project described below, identified as:

Project Identification No.: 5308.38	F.A. Project No.:
ROW Declaration No.:	Map Nos.:
Parcel Nos.:	County of: Erie
Contract No.: D264244	

Project Description: Niagara Falls Boulevard Pedestrian Safety Design

Town of Tonawanda and Town of Amherst, Erie County

Municipality, ILE, Reimbursable

necessitates the adjustment of utility facilities as hereinafter described, the owner, **Erie County Water Authority**, of said facilities herewith agrees with the State of New York acting through the Commissioner of Transportation that this agreement shall apply to the accommodation of these utility facilities. Any adjustment of said facilities will be accomplished under the terms of this agreement, in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way, in compliance with the attached Special Note, "Coordination with the Utility Schedule", and in accordance with the contract plans, specifications, proposal, amendment(s) or change order(s).

**I. Existing Facilities** (describe type, size, capacity, location, etc.)

Erie County Water Authority has existing waterline within the highway boundary of US-62 (Niagara Falls Boulevard).

presently located on **NY State Right-of-Way** as shown on the plans for the proposed transportation project are to be adjusted as follows: (describe type, size, capacity, location, etc.)

Adjust valve box elevations.

per contract documents

for an estimated \$ N/A

II.	Fir	nancial Responsibility (check appropriate boxes):
		The facilities to be adjusted under the terms of this agreement are subject to Section 52 of the State Highway Law, and the cost of this adjustment is the sole responsibility of the owner.
	$\boxtimes$	Subdivision 24 of Section 10 of the State Highway Law enables the Commissioner of Transportation to provide, at the expense of the State, for adjustment to a municipally owned utility when such work is necessary as a result of State highway work. (Municipal Agreement if required.)
		Subdivision 24-b of Section 10 of the State Highway Law enables the Commissioner of Transportation to participate in the necessary expenses incurred for adjustment of privately, publicly, or cooperatively owned facilities, municipal utility facilities, or facilities of a corporation organized pursuant to the State Transportation Corporations Law. (Privately Owned Property Agreement or Reimbursement Agreement required.)
		Subdivision 27 of Section 10 of the State Highway Law enables the Commissioner of Transportation, upon the request of a municipality, to perform for and at the expense of such municipality specified work to be included within a State-let contract. (Betterment Resolution required.)
		Subdivision 33 of Section 10 of the State Highway Law enables the Commissioner of Transportation, upon the request of a public utility corporation, to perform for and at the expense of such public utility corporation specified work to be included within a State-let contract.
		Subdivision 13 of Section 30 of the State Highway Law enables the Commissioner of Transportation to enter into an agreement to reimburse with public funds the owner for necessary expenses incurred as a result of this adjustment, or to replace the facilities in kind.
		The owner will develop and keep a record of costs in accordance with the New York State Department of Transportation (NYSDOT) Reimbursement Procedures, and when federal funds participate in the cost, the Federal Highway Administration (FHWA) Federal-Aid Policy Guide Par 645, or as indicated below:

III. Physical Adjustment Method (check appropriate boxes):					
	The	actual adjustment or design engineering will be performed by the following method (s):			
		□ Contract let by the Commissioner.			
		☐ Contract let by the Owner. (check applicable statement, i.e., a or b)			
		a. Best Interests of State.			
		☐ b. Utility not sufficiently staffed or equipped.			
		☐ By the Owner's forces.			
IV.	Be	terment, Salvage, and Depreciation Credits Due the Project (check appropriate boxes):			
	There will be no extension of service life, improved capacity, nor any other betterment of th facility (as defined by the NYSDOT Utility Reimbursement Procedures and by FHWA Feder Policy Guide Part 645) as a result of the adjustments made pursuant to this agreement.				
		There is betterment described as follows:			
		☐ The owner will not claim reimbursement for that betterment portion of the work, but wil account for it as required by applicable NYSDOT and FHWA procedures.	duly		
		☐ The owner hereby agrees to deposit with the Comptroller of the State of New York the amount of \$ to cover the cost of the betterment as described above.			
		☐ The owner agrees to comply with the requirements of the NYSDOT Utility Reimbursen Procedure and FHWA Federal-Aid Policy Guide Part 645 with the respect to salvage a depreciation credits when applicable.			

#### V. General Covenants

The owner hereby agrees to accept full title and responsibility for the adjusted facility in writing upon satisfactory completion of the work. Such acceptance will acknowledge the owner's responsibility to maintain the facility in accordance with all applicable codes, standards and regulations, including his obligation, where applicable, to remove any or all of the facility from the highway at the order of the Commissioner of Transportation, all in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way. All compensable claims covered by this agreement will be included in one of the following:

- A. Privately Owned Property Agreement executed prior to the performance of the work.
- B. Municipal Agreement executed prior to performance of the work.
- C. Reimbursement Agreement executed prior to performance of the work.
- D. Such other agreement as approved by NYSDOT Office of Legal Affairs.

#### VI. References

appropriate boxes)	are nerewith incorpora	ted in this agreement be re	Terence (cneck
□ Federal Highway Adn     □     □ Federal Highway Adn     □ F	ninistration's Federal-A	id Policy Guide Part 645.	
□ Contract documents:	Contract Number D2	64244	
	PIN: 5308.38		
	Plan Sheets No.: Ele	ectronic copy of the propos	ed contract plans
☐ Owner's Plan Sheets			
Owner's Estimate Sh	eets Form No. FIN 223	3c	
□ Resolution dated	,	ру	
☐ Granting the State	of New York authority	to perform the adjustment	for the owner.
□ Agreeing to maintage	ain facilities adjusted vi	a State-let contract.	
☐ Authorizing depos	it of funds by the owne	r.	
☐ Certification by the ov	vner or his agent that h	e has the legal authority to	enter into this agreement.
(Print/Type Name) Owner or A	Agent (Signature)	Title	Date
	St	atewide Utilities Engineer	
Arvind K. Salgam, P.E. For the NYSDOT Commissior		Title	Date

#### SPECIAL NOTE

#### **COORDINATION WITH THE UTILITY SCHEDULE**

The contractor must coordinate their schedule of operations with the various utility owners involved with the project and shall verify utility information found in the contract documents. Utility revisions required by the various utility owners in connection with this project include:

#### **Erie County Water Authority**

#### **Utility Field Contact:**

Leonard F. Kowalski, P.E., Executive Engineer Erie County Water Authority 3030 Union Road Cheektowaga, New York 14227 D: (716) 685-8220

O: (716) 684-1510 C: (716) 341-1137 F: (716) 684-8397 lkowalski@ecwa.org

Erie County Water Authority has the following:

existing waterline within the highway boundary of US-62 (Niagara Falls Boulevard).

#### Reimbursable work to be done by the State's contractor:

The project requires adjust valve box elevations per contract documents.

The work is to be done by the State's contractor and paid by contract items.

The State's Engineer-In-Charge, in coordination with the State's contractor, shall notify the Erie County Water Authority in writing **2 weeks** before commencing work on their facilities.

The State's Engineer-In-Charge will provide record plans to the Erie County Water Authority.

#### **Additional Notes**

- 1. The Contractor is governed by and must adhere to the provisions of 16 NYCRR Part 753 (Protection of Underground Facilities).
- The State's contractor shall verify utility information found in the contract documents. The State's contractor shall notify the State's Engineer-In-Charge of any discrepancies that are found.

**PIN 5308.38** 6A

3. In addition to the above-itemized facility adjustments, other adjustments may become necessary during the construction phase as a result of more precise location data or other changes that might develop.

- 4. The Standard Specifications shall apply to all utility facility adjustments.
- 5. Any additional adjustments shall be performed by the utility owners and/or the State's contractor upon direction by the State's Engineer-In-Charge.
- 6. Suitable time frames for the additional work shall be coordinated between the State's Engineer-In-Charge, the State's contractor, and the affected utility owners. Such time frames shall not be included within previously established time frames.

#### END OF COORDINATION WITH THE UTILITY SCHEDULE

Resolution Granting the State of New York Authority to Perform the Adjustment for the Owner and Agreeing to Maintain Facilities Adjusted Via State-let Contract

and right of maintain i dominos riajustos via stato lot sontiast
RESOLUTION
Resolution#
WHEREAS, the New York State Department of Transportation proposes the construction, reconstruction, or improvement of state project name from cover letter in the name of municipality located in county name county, PIN enter PIN, and
WHEREAS, the State will include as part of the construction, reconstruction, or improvement of the above mentioned project the work to be done pursuant to Section 10, Subdivision 24, of the State Highway Law, as shown on the contract plans relating to the project and meeting the requirements of the owner, and
WHEREAS, the service life of the relocated and or replaced utilities has not been extended, and
WHEREAS, the State will provide for the reconstruction of the above mentioned work, as shown on the contract plans relating to the above mentioned project.
NOW, THEREFORE,
BE IT RESOLVED: That the name of municipality approves of the work to be done and the above mentioned work performed on the project and shown on the contract plans relating to the project and that the name of municipality will maintain or cause to be maintained the adjusted facilities performed as above stated and as shown on the contract plans.
BE IT FURTHER RESOLVED: that name has the authority to sign, with the concurrence of the board, any and all documentation that may become necessary as a result of this project as it relates to the name of municipality, and
BE IT FURTHER RESOLVED: That the clerk of the name of municipality is hereby directed to transmit five (5) certified copies of the foregoing resolution to the New York State Department of Transportation.
Moved By: Seconded By: Vote:
I, , duly appointed and qualified , do hereby CERTIFY that the foregoing resolution was adopted at a meeting duly called and held in the office of , , a quorum being present on the day of , and that said copy is a true, correct and compared copy of the original resolution so adopted and that the same has not been revoked or rescinded.
WITNESSETH my hand and seal this day of

Name, title



NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & NY 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA

F.A. PROJECT

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE DEPARTMENT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (US CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT 'PROPOSAL' EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN

CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYSDOT POLICIES AND GUIDELINES AND THE FINAL DESIGN REPORT APPROVED ON 4/24/2019 UNDER PINS 50.PS.02, 50.PS.03.

# Signal and Roadway Reduction Plan Set Only, Good as of 2020 March 06

CONTRACT D264244 ERIE COUNTY

CONTRACTOR'S NAME	
AWARD DATE	
COMPLETION DATE	
FINAL ACCEPTANCE DATE	
REGIONAL DIRECTOR	
ENGINEER IN CHARGE	
FINAL COST TOTAL	
FISCAL SHARE	COST(S)

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ACTING REGIONAL DESIGN ENGINEER

PROJECT LOCATION

NIAGARA FALLS BOULEVARD KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA

APPROVED BY RECOMMENDED BY RECOMMENDED BY RECOMMENDED BY

REGIONAL DIRECTOR OF OPERATIONS

REGIONAL CONSTRUCTION ENGINEER

APPROVED BY

REGIONAL TRAFFIC ENGINEER REGIONAL DIRECTOR DATE APPROVED ON 4/24/2019 UNDER PINS 50.PS.01, 50.PS.02, 50.PS.03

DATE

NIAGARA FALLS BLVD. PEDESTRIAN SAFETY DESIGN U.S. 62 & NY 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE FED. ROAD REG. NO. STATE SHEET NO. N.Y. CAPITAL PROJECT IDENTIFICATION NO. 5308.38

INDEX ON SHEET NO. 2

Creighton Manning

	1	
-	- 1	
	•	

ABBR.	DESCRIPTION	I
AH	AHEAD	1
AZ	AZIMUTH	+
BK R	BACK BASELINE	+
₽ <u>B</u> BRG	BEARING	+
Q.	CENTERLINE	t
CS	CURVE TO SPIRAL	t
e	SUPERELEVATION RATE (CROSS SLOPE)	t
EQ	EQUALITY	Ť
EXT	EXTERNAL	Ī
HCL	HORIZONTAL CONTROL LINE	
HSD	HEADLIGHT SIGHT DISTANCE	ļ
L	LENGTH OF CIRCULAR CURVE	+
LS	LENGTH OF SPIRAL	+
LVC E	LENGTH OF VERTICAL CURVE  CENTER CORRECTION OF VERTICAL CURVE	$^{+}$
W	MAIN LINE	+
PC	POINT OF CURVATURE	ť
PI	POINT OF INTERSECTION	t
POL	POINT ON LINE	Ť
PSD	PASSING SIGHT DISTANCE	T
PT	POINT OF TANGENT	I
PVC	POINT OF VERTICAL CURVE	
PVI	POINT OF VERTICAL INTERSECTION	ļ
PVT	POINT OF VERTICAL TANGENT	ļ
R	RADIUS	╀
SC	SPIRAL TO CURVE STOPPING SIGHT DISTANCE	ł
SSD ST	SPIRAL TO TANGENT	t
STA	STATION	t
T	TANGENT LENGTH	t
TGL	THEORETICAL GRADE LINE	t
TS	TANGENT TO SPIRAL	T
VC	VERTICAL CURVE	ı
	TOPOGRAPHY (DRAINAGE)	L
ADDD	DESCRIPTION	L
ABBR.		ļ
BB	BOTTOM OF BANK (STREAM)	+
BC BO	BOTTOM OF CURB BOTTOM OF OPENING	╁
CAP	CORRUGATED ALUMINUM PIPE	+
CB	CATCH BASIN	t
CIP	CAST IRON PIPE	t
© STRM	CENTERLINE OF STREAM	T
CMP	CORRUGATED METAL PIPE	T
CP	CONCRETE PIPE	Ι
CSP	CORRUGATED STEEL PIPE	Ĺ
CULV	CULVERT	Ļ
DIA	DIAMETER	ļ
DMH	DRAINAGE MANHOLE	+
DS	DRAINAGE STRUCTURE PIPE	+
D'XING	DITCH CROSSING	1
EHW EL	EXTREME HIGH WATER ELEVATION	+
ELEV	ELEVATION	1
ELW	EXTREME LOW WATER	1
ES	END SECTION	1
HW	HEADWALL	1
INV	INVERT	1
	MANHOLE	1
MH	IMMENANTERIGE.EVATER	4
MHWYAI	,	
MHWYAN OHW	ORDINARY HIGH WATER	1
MHWYAN OHW OLW	ORDINARY HIGH WATER ORDINARY LOW WATER	
MHWYAN OHW OLW RCP	ORDINARY HIGH WATER ORDINARY LOW WATER REINFORCED CONCRETE PIPE	
MHWYAN OHW OLW RCP SICPP	ORDINARY HIGH WATER ORDINARY LOW WATER REINFORCED CONCRETE PIPE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE	
MHINYAN OHW OLW RCP SICPP TB	ORDINARY HIGH WATER ORDINARY LOW WATER REINFORCED CONCRETE PIPE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE TOP OF BANK (STREAM)	
MHWYAN OHW OLW RCP SICPP	ORDINARY HIGH WATER ORDINARY LOW WATER REINFORCED CONCRETE PIPE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE	-

ALIGNMENT

ABBR.	DESCRIPTION	ABBR	.   DESCRIPTIO	N		ABBR.	DESCRIPTION
AH	AHEAD	ABU	T ABUTMENT			Е	ELECTRIC
AZ	AZIMUTH	AOB	E AS ORDERED	BY ENGINEER		EMH	ELECTRIC MANHOLE
ВК	BACK	ASP	H ASPHALT			G	GAS
В	BASELINE	BD	Y BOUNDARY			GP	GUY POLE
BRG	BEARING	BLD				GSB	GAS SERVICE BOX (HOUSE LINE)
C	CENTERLINE	В	_			GV	GAS VALVE (MAIN LINE)
CS	CURVE TO SPIRAL	C				HYD	HYDRANT
e	SUPERELEVATION RATE (CROSS SLOPE)	CON		JEHTEN.		LP	LIGHT POLE
EQ	EQUALITY	CONS		N .		LPG	LOW PRESSURE GAS
EXT	EXTERNAL	C				PP	POWER POLE
HCL	HORIZONTAL CONTROL LINE		D DEED DISTAN			SA	SANITARY SEWER
HSD	HEADLIGHT SIGHT DISTANCE	D				SMH	SANITARY MANHOLE
L	LENGTH OF CIRCULAR CURVE	DW		SOIVEMENT		ST	STORM SEWER
LS	LENGTH OF SPIRAL	E		VENENT			TELEPHONE
LVC	LENGTH OF VERTICAL CURVE	E	_			ТСВ	TRAFFIC CONTROL BOX
E	CENTER CORRECTION OF VERTICAL CURVE	FE				TELBOX	TELEPHONE BOX
M	MAIN LINE	FEE WO/		TION WITHOUT ACCESS		TEL P	TELEPHONE POLE
PC PC	POINT OF CURVATURE			TION WITHOUT ACCESS		TMH	TELEPHONE MANHOLE
PI	POINT OF INTERSECTION	F F				CTV	CABLE TELEVISION
POL	POINT ON LINE						WATER
PSD	PASSING SIGHT DISTANCE	F				WCD	
PT	POINT OF TANGENT	GA	_			WSB WV	WATER SERVICE BOX (HOUSE LINE) WATER VALVE (MAIN LINE)
$\overline{}$		G				πν	WATER VALVE (MAIN LINE)
PVC	POINT OF VERTICAL CURVE	H					SUBSURFACE EXPLORATION
PVI	POINT OF VERTICAL INTERSECTION	HW		TOOL DIDE			
PVT	POINT OF VERTICAL TANGENT	I		IRUN PIPE		ABBR.	DESCRIPTION
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SC	SPIRAL TO CURVE	MO	_	ACHED			
SSD	STOPPING SIGHT DISTANCE	N&				AH	HAND AUGER
ST	SPIRAL TO TANGENT	0		OUND		CP	CONE PENTROMETER
STA	STATION	0/				DA	21/4 INCHES CASED DRILL HOLE
T	TANGENT LENGTH		P PARCEL			DM	DRILLING MUD
TGL	THEORETICAL GRADE LINE	PAV'				DN	4 INCHES CASED DRILL HOLE
TS	TANGENT TO SPIRAL	P				FH	HOLLOW FLIGHT AUGER
VC	VERTICAL CURVE	PED POL				PA	POWER AUGER
	TOPOGRAPHY (DRAINAGE)		PROPERTY L	INE		PH	PROBE
ABBR.	DESCRIPTION	P0				PT	PERCOLATION TEST HOLE
		R				RP	1 INCH SAMPLER (RETRACTABLE PLUG)
BB	BOTTOM OF BANK (STREAM)	RT					TO BE DEFINED AT THE TIME OF EXPLORATION
BC	BOTTOM OF CURB	RO				SP	SEISMIC POINT
B0	BOTTOM OF OPENING	R	_			TP	TEST PIT
CAP	CORRUGATED ALUMINUM PIPE		H STATE HIGH	VAY			ATION "C" IN CATEGORIES:
СВ	CATCH BASIN	SHLD					DN, AND FH WITH:
CIP	CAST IRON PIPE	SP				В	BRIDGE
© STRM	CENTERLINE OF STREAM	S				C	CUT
CMP	CORRUGATED METAL PIPE	ST				D	DAM
CP	CONCRETE PIPE	ST				F	FILL
CSP	CORRUGATED STEEL PIPE	S				K	CULVERT
CULV	CULVERT		E TEMPORARY			W	WALL
DIA	DIAMETER	T				Х	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION
DMH	DRAINAGE MANHOLE	U/		)			BE DEFINED AT THE TIME THE EXPLORATION   IS MADE
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D'XING	DITCH CROSSING						
EHW	EXTREME HIGH WATER	[	STANDARD	ITEM PAYMENT UNIT:	EQUIV	AI ENT	
EL	ELEVATION		SYMBOL	ESTIMATE OF		ALENT ICLATURE:	STANDARD SHEETS
ELEV	ELEVATION		(PLANS)	QUANTITIES SHEET		S/PROPOS/	
ELW	EXTREME LOW WATER	_	11 EAITO/	QOMITTIES SHEET			203-04 619-02 619-31 619-63 655-07
ГС	END CECTION	1 1		_	TNICHES	:	203-05 619-04 619-32 619-64 655-08

TOPOGRAPHY (MISCELLANEOUS)

DESCRIPTION

ABBR.

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
II	i	INCHES
,	LF	LINEAR FEET
mi	MI	MILES
f†²	SF	SQUARE FEET
YD <sup>2</sup>	SY	SQUARE YARD
AC	AC	ACRES
YD <sup>3</sup>	CY	CUBIC YARD
GAL	GAL	GALLON
lb	LB	POUND
TON	TON	TON

UTILITIES

ABBR. DESCRIPTION

	INDEX	TOTAL NUMBER OF SH	EETS 124			
SHEET NUMBER	DESCRIPTION		DRAWING NUMBER			
1	TITLE SHEET		COVER			
2	INDEX AND ABBREVIATIONS		IND-01			
3-4	LEGEND, LINE AND POINT SYMBOLOGY		LEG-01 TO LEG-02			
5	WORK ZONE TRAFFIC CONTROL NOTES		WZN-01			
6-7	WORK ZONE TRAFFIC CONTROL PLANS		WZP-01 TO WZP-02			
8-9	MAINTENANCE JURISDICTION PLAN		MJP-01 TO MJP-02			
10-16	MISCELLANEOUS TABLES		MST-01 TO MST-07			
17-19	MISCELLANEOUS DETAILS		MSD-01 TO MSD-03			
20	DRAINAGE DETAILS		DD-01			
21	KEY PLAN		KP-01			
22	GENERAL NOTES		GN-01			
23-24	EARTHWORK SUMMARY SHEETS		ESS-1 TO ESS-2			
25-76	GENERAL PLANS		GNP-01 TO GNP-51			
77-78	SIGN TEXT DATA SHEET		STD-01 T0 STD-02			
79-114	TRAFFIC SIGNAL DETAILS		TSD-Ø1 TO TSD-36			
115-120	OVERHEAD SIGN STRUCTURES		OSS-1 TO OSS-6			
121-122	ESTIMATE OF QUANTITIES		EIQ-01 TO EIQ-02			
123-124	ESTIMATE OF QUANTITIES		EQ-01 TO EQ-02			

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN	PIN
U.S. 62 & NY 950K	US
FROM KENMORE AVENUE TO ADMIRALS WALK	
TOWNS OF AMHERST & TONAWANDA	
COUNTY: ERIE REGION: 5	

IN 5308.38 BRIDGES ROUTE 62 & NY 950K

CULVERTS ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED INDEX

CONTRACT NUMBER D264244

DRAWING NO. IND-01 SHEET NO. 02





TRAFFIC WORK ZONE **ALIGNMENT** LANDSCAPE ROADWAY STYLE NAME DESCRIPTION STYLE NAME DESCRIPTION STYLE NAME DESCRIPTION TWZBT\_P BARRIER, TEMPORARY BARRIER, TEMPORARY, W/ WARNING · CZ RCZ\_P CONTROL (CENTERLINE) ~~~~~ LABL AREA. BRUSH LINE CLEAR ZONE LIGHTS TWZCD\_P AD\_P ^^^^ LAHR AREA, HEDGE ROW \_\_\_ \_\_\_\_ CHANNELIZING DEVICE **DETOUR** GUIDE RAIL, MISCELLANEOUS PAVEMENT MARKING REMOVAL OR ,,,,,,,,,,, TWZPMRC\_F AT\_P TRANSITION CONTROL LAPB AREA, PLANTING BED GUIDE RAIL, BOX BEAM BRIDGE UTILITIES LAWA AREA, WOODED AREA OUTLINE RGRM GUIDE RAIL, BOX BEAM, MEDIAN 0-0-0-RAIL LAWE AREA, WATERS EDGE - (C) 100 RGC GUIDE RAIL, CABLE STYLE NAME DESCRIPTION CONDUIT, UNDERGROUND BSHT SHEET PILING LCUT\_P RGCB CUT LIMIT GUIDE RAIL, CONCRETE BARRIER CONDUIT, HANGING CONTROL LFILL. FILL LIMIT 0 RGP\_P GUIDE POST 0 CONDUIT, OVERHEAD -8--52-RGW GUIDE RAIL, W BEAM BASELINE ELECTRIC LINE, UNDERGROUND LTRC \*\*\*\*\*\*\*\*\* TREE ROW, CONTERROUS RGWM GUIDE RAIL. W BEAM, MEDIAN CBPR BASELINE, PROJECTION UEH ELECTRIC LINE, HANGING DRAINAGE LTRD TREE ROW, DECIDUOUS PARKING BUMPER ELECTRIC LINE, OVERHEAD RRC RAIL ROAD, CATENARY LWH WALL, H PILE CULVERT PIPE ELECTRIC TRANSMISSION, OVERHEAD LWR WALL, RETAINING RRER RAIL ROAD, 3RD RAIL DCP\_F CULVERT PIPE (DIF ELECTRIC, SUBSTATIONS <del>\* \* \* \* \*</del> 000000000 LWS WALL, STONE RRPLS\_P RAIL, PHOTO, LARGE SCALE FO FIBER OPTIC, UNDERGROUND DDG\_P DITCH, GRASS LINED **ROW MAPPING** -JF0[-UFOH FIBER OPTIC, HANGING DDP\_P DITCH, PAVED INVERT RRPSS. RAIL, PHOTO, SMALL SCALE DEED LINE OFO-FIBER OPTIC, OVERHEAD RUMBLE STRIP PF. EASEMENT, EXISTING GAS. UNDERGROUND DDS\_P DITCH, STONE LINED RRSLS\_P RAIL, SURVEY, LARGE SCALE PE MEP\_P EASEMENT, PERMANENT ]G[-UGH GAS. HANGING DFL\_P FLOW LINE MEPA\_P EASEMENT, PERMANENT, APPROX. RRSSS RAIL. SURVEY. SMALL SCALE OG GAS, OVERHEAD SLOTTED DRAIN SIGNS MET\_P EASEMENT, TEMPORARY - TC INFORM CABLE, UNDERGROUND DUD\_P SBLB BILLBOARDS META\_F EASEMENT. TEMPORARY, APPROX. LICH INFORM CABLE, HANGING ENVIRONMENTAL MULTIPLE POST FEE ACQUISITION, W/ ACCESS FEE OIL LINE, UNDERGROUND S **EBLHS** BALE, STRAW MFA\_P FEE ACQUISITION, APPROXIMATE SSO STRUCTURE, OVERHEAD AFEE . DOH OIL LINE, HANGING -0-0-0-0-CURTAIN, TURBIDITY SSOC STRUCTURE, OVHD, CANTILEVER MFS\_P FEE ACQUISITION, SHAPE POLE, BRACE, PUSH BRACE **EDMC** DAM, COFFER STRIPING FFF W/OA MFWOA\_ FEE ACQUISITION, W/O ACCESS UPGW POLE, GUY WIRE EDMEC\_P DAM, EARTHEN CHECK MHA HISTORICAL, ACQUISITION STB\* BROKEN LINE - 54 USA SANITARY SEWER, UNDERGROUND MHB HIGHWAY BOUNDARY STDB. DOUBLE BROKEN LINE USAH SANITARY SEWER, HANGING EDMGSC\_P DAM, GRAVEL BAG/SAND BAG CHECK MHBA HIGHWAY BOUNDARY, APPROX. DOTTED LINE LONG STDL . USAF SANITARY SEWER, FORCE MAIN, UG EDMPC\_P DAM, PREFABRICATED CHECK MHBW HWY BOUNDARY, FACE OF WALL STDS. DOTTED LINE SHORT -ISAFT-USAFH SANITARY SEWER, FORCE MAIN, H MHBWOA HIGHWAY BOUNDARY, W/O ACCESS HE W/OA STFB\* FULL BARRIER LINE TELEPHONE, UNDERGROUND EDMSC\_P DAM, STONE CHECK JURISDICTION, CITY MJC STHe HATCH LINE UTH TELEPHONE, HANGING **EFNS** FENCE, SILT MJCY JURISDICTION, COUNTY STPB. PARTIAL BARRIER LINE OT . UTO TELEPHONE, OVERHEAD EFNSV FENCE, SILT & VEGETATION MJHD JURISDICTION, HISTORIC DISTRICT STRCT ROUNDABOUT, CAT TRACKS CABLE TV, UNDERGROUND FFNV FENCE, VEGETATION JURIS., (GREAT, MILITARY) LOT LIN \* \* \* \* \* \* \* \* \* \* MJEE STRY ROUNDABOUT, YIELD LINE UTVH -CTV-CABLE TV. HANGING EWAA\_P WETLAND, ADJACENT AREA MJN JURISDICTION, NATION STSB STOP BAR -OCTV CABLE TV, OVERHEAD WETLAND, FEDERAL MJPB JURISDICTION, PUBLIC LANDS STSE: SOLID, EDGE UNKNOWN, LINDERGROUND WETLAND, FEDERAL AND STATE EWFS MJS JURISDICTION, STATE STXL - LLA-UUH UNKNOWN, HANGING X WALK, LADDER LINE EWM WETLAND, MITIGATION AREA MJT JURISDICTION, TOWN UNKNOWN, OVERHEAD EWS-WETLAND, STATE STXLB X WALK, LADDER BAR LINE NJV JURISDICTION, VILLAGE WATER LINE, UNDERGROUND = W (WHITE) OR Y (YELLOW) PROPERTY LOT LINE WATER LINE, HANGING TRAFFIC CONTROL MPLA PROPERTY LOT LINE, APPROXIMATE WATER LINE, OVERHEAD SIGNAL, SPAN WIRE MSL SUB LOT LINE 1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED). 2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).

3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.

R. WINTER

8

- 4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE
- 5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD
- 6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN	PIN 5308.38	BRIDGES	CULVERTS
U.S. 62 & NY 950K	US ROUTE 62 & NY 950K		
FROM KENMORE AVENUE TO ADMIRALS WALK			
TOWNS OF AMHERST & TONAWANDA			
COUNTY: ERIE REGION: 5			
	7		



ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

LEGEND LINE & POINT SYMBOLOGY



NEW YORK Department of Transportation

CONTRACT NUMBER

D264244

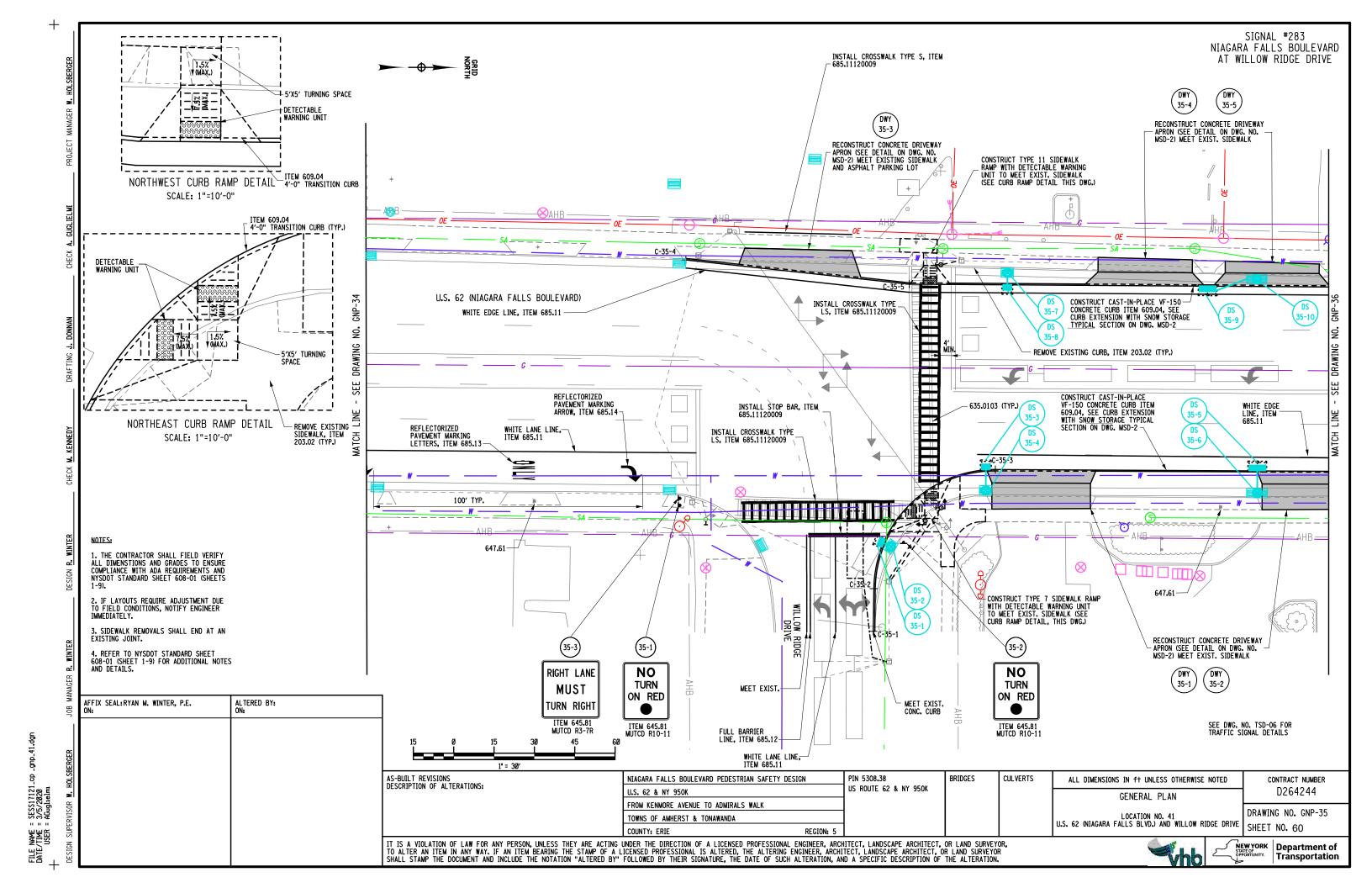
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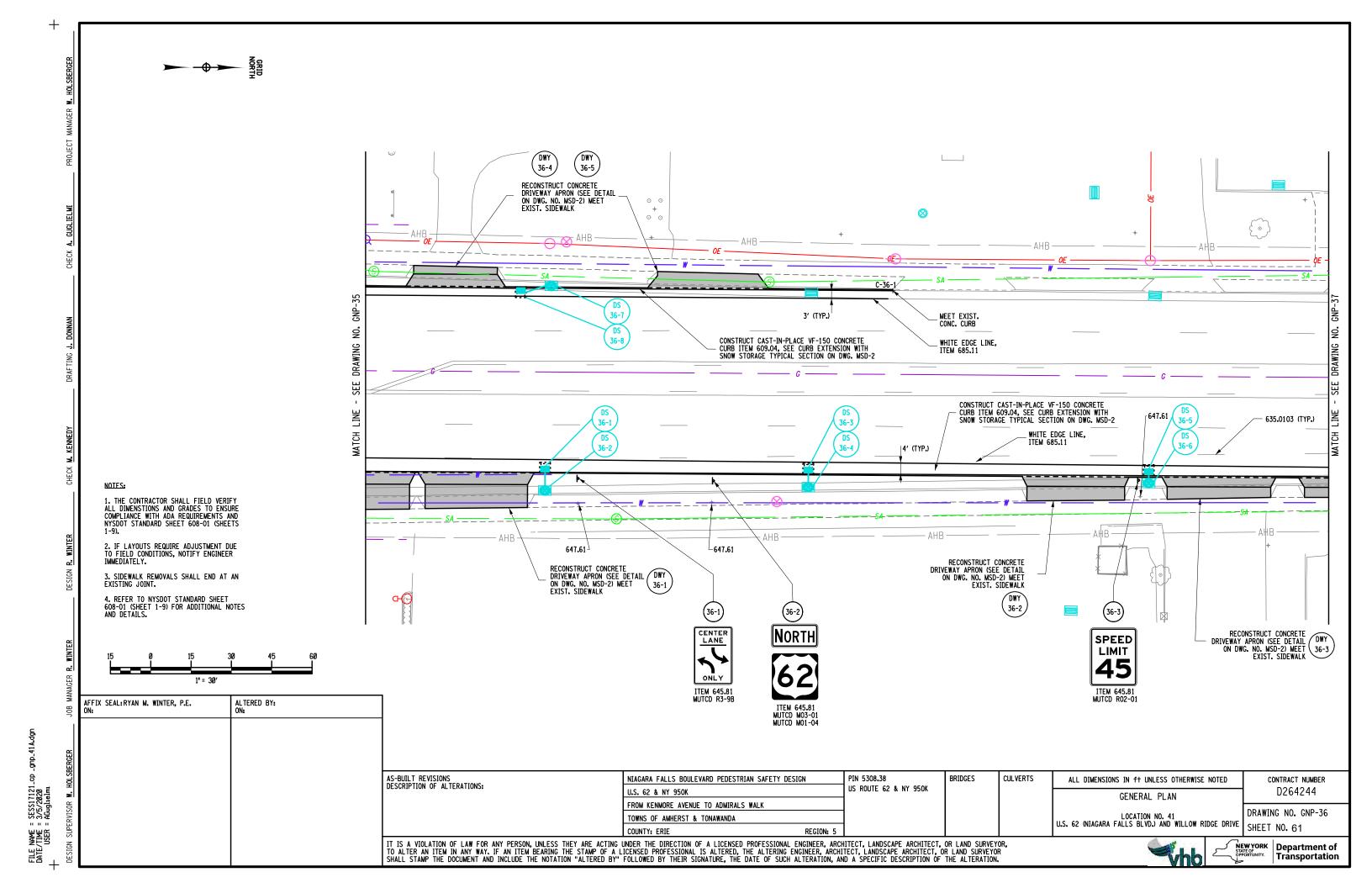
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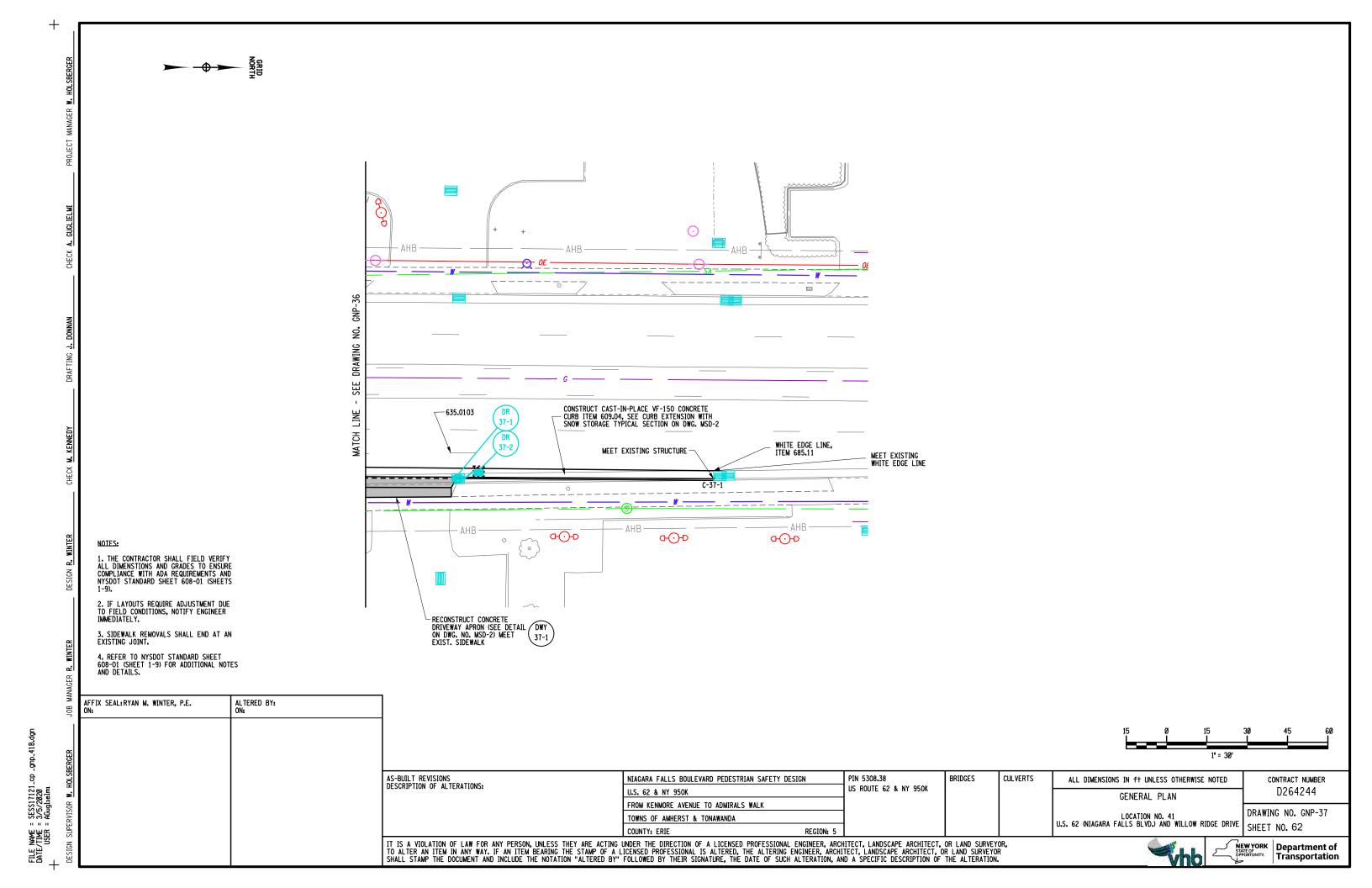
ALIGNMENT DRAINAGE ITS ROW MAPPING SIGNS UTILITIES CELL NAME DESCRIPTION CENTER OF CURVATURE 0 Œ. ELECTRIC, BOX TANT P ANTENNAS MDI-16 DEED LINE, TYPE 1 SINGLE POST SP SINGLE POST, PROPOSED E ACDGO 0 HEM ELECTRIC. METER IASCTS ACCOU, SPEED/COUNT SNSR.S MDL 28 DEED LINE, TYPE 2 TRUCTURE, RECTANGULAR ACS CURVE TO SPIRAL P 3 SB\_F BACK TO BACK, PROPOSED (E) UEMH ELECTRIC, MANHOLE ICARPAD CABINET & PAG MDL3P DEED LINE, TYPE 3 TRUCTURE. INVER 3 Δ ADPI\_P DETOUR, POINT OF INTERSECT. **UEPT** ELECTRIC, POLE, TRANS. CCTV SITE MDL4P DEED LINE, TYPE 4 ICCTV DELINEATORS STRUCTURE, MANHOLE 9 0 ADPL\_P DETOUR, POINT ON LINE COPO G ICDPD CDPD TRANSCEIVER MOL5P DEED LINE, TYPE 5 SPM PARKING METER UGM GAS, METER TRUCTURE, MANHOLE, AEQN EQUATION TYPE "XX" "XX" = 48, 60, 72, 96 0 ICELL MEEP AFM (G) UGMH GAS, MANHOLE CELL PHONE TOWER EASEMENT, EXISTING SRM REFERENCE MARKERS (1) EQUATION AHEAD SRSC3 AEQNAH ( SHLD, CTY, 123 DIG. LIGLM GAS, LINE MARKER CONDUIT JACK OR BORING ICJB MEPAP\_F EASEMENT, PERM., APPROX. TRUCTURE, ROUND (B) 0 FF **MEQNBK** EQUATION BACK  $\boxtimes$ ICNTLCAE CONTROLLER CABINET MEPP\_P EASEMENT, PERM., BACK LINE SRSC4 SHLD, CTY, 4 DIG. HGP GAS/FUEL PUMP RUCTURE, RECT., WITH CURB 0 0 0 AEVI EVENT STATION (C) **ICPB** MEPSP\_I SRSCT2 SHLD, CTY TOUR, 1-2 DIG. LIGV GAS. VALVE COMMUNICATION PULL BOX EASEMENT, PERM., SHAPE POINT OF CURVATURE 1 APC -8 ICTD CONDUIT TURNING DOWN MEAP F FEE ACQUISITION, APPROX. SRSCT4 SHLD, CTY TOUR, 3-4 DIG. **(30)** LIGVT GAS, VENT TRUCTURE, RECT., TYPE "X" APCC POINT OF COMPOUND CURVATURE  $X^{n} = I_{n} R_{n} L_{n} M_{n} O_{n} P_{n} U$ ULP ICTU CONDUIT TURNING UP MFP\_P FEE ACQUISITION, BACK LINE SRSI SHLD, INTERSTATE LIGHTING, POLE -0 Ô API POINT OF INTERSECTION 000 0  $\Box$ 100 ULPM ICVTR' MFSP\_F SRSN2 SHLD, NATIONAL, 2 DIG LIGHTING, POLE, MEDIAN COMM, VEH, ROAD TRANSCEIVER FEE ACQUISITION. SHAPE ENVIRONMENTAL 0 APOB POINT OF BEGINNING A IDEF AUL I DEFAULT MHRAF HIGHWAY BNDRY., APPROX SRSN3 SHLD, NATIONAL, 3 DIG. LILPP LIGHTING, POLE, PED. CULV EIOP\_P STR., INLET, OUTLET PROT. APOC POINT OF CURVATURE (9) EZ **IEZR** E-ZPASS READER MHBCP HISTORICAL, BLDG. CORNERS SRSS2 SHLD, STATE, 2 DIG. MISC. FILLER DAR APOE POINT OF END  $\circ$ A F7-7 SRSS3 SHLD, STATE, 3 DIG 0 LIOLM OIL . I INF MARKER **IEZTR** TRANSMITTAL READER MHRP HIGHWAY BNDRY, PT STR., INLET PROT., GRAVEL BAY (GB)  $\bigcirc$ POINT ON LINE 0 APOL **IFOXCAB** SRSS4 SHLD, STATE, 4 DIG. POLE, WITH UTILITY FIBER OPTIC X-CONNECT CABINET PT., JURIS, CITY STR., INLET PROT., HAY/STRAW APOS POINT ON SPIRAL **IFUSSPL** FUSION SPLICE ( MPBC PT., BUILDING CORNER POLE, DEAD INO UTILITY TRAFFIC CONTROL APOT POINT ON TANGENT 0 00 LIPL POLE, WITH LIGHT **IHARADV** HAR ADVISORY SIGN MPCC PT., CROSS CUT STR., INLET PROT., PREFAB. TCBJ BOX. JUNCTION APOVC POINT ON VERTICAL CURVE 一00 3 USM SANITARY SEWER MANHOLE IHARS' MPDE PT. DRILL HOLE TCBF BOX, PULL BOX STR., INLET PROT., SILT FENCE POINT ON VERTICAL TANGENT APOVT P UTB TELEPHONE, BOOTH A II.C LOAD CENTER MPE PT., FENCE LOCATION TCBS BOX. SPLICE APORC POINT ON REVERSE CURVE 0 UTLM TELEPHONE, LINE MARKER IMECSP MECHANICAL SPLICE MPTP PT., IRON PIPE **ERCB** RISER, CONCRETE BOX MICROCOMPUTER CABINET TCMC (0) APT POINT OF TANGENCY PM ) IMSCS PORT. SPEED & COUNT SENSOR MPTE PT., IRON ROD O UTMH TELEPHONE, MANHOLE 0 ETRS\_P TRAP, SEDIMENT TOPP PED POLE APVC POINT OF VERTICAL CURVATURE 0 LITYLM CABLE TV, LINE MARKER M MICRO SPEED & COUNT SENSOR MPM PT., MONUMENT IMSCTS WETLAND FLAG SIGNAL HEADS  $\blacksquare$ 0 APVCC POINT OF VERT, CMPND CURVE TMT MICROWAVE TRANSCEIVER MPMM PT., MONUMENT, MISC **UTVPB** CABLE TV, PULL BOX 0 SIGNAL POLE TCSP GEOTECHNICAL POINT OF VERT. INTERSECTION APVI 10 PT., NAIL **IOVHVMS** PERM, OVERHEAD VMS MPN TRAFFIC WORK ZONE GDH DRILL HOLE APVRO POINT OF VERT, REVERSE CURVE 0 遊 8 A PORT, ACCOU, SPD & CNT, SENSOR MPRS IPASCS PT., RAILROAD SPIKE **UUJB** LIMITHOWN, JUNCTION BOX APVI POINT OF VERTICAL TANGENCY IPEDS PEDESTRIAN SIGNAL HEAD MPSP PT., SPIKE ..... TWZAP\_P ARROW PANEL LIPIK NOWN, MANHOLE LANDSCAPE SPIRAL TO CURVE 0 ASC TWZAPC P IPSS PAVEMENT SURFACE SENSOR MPST PT. STAKE ARROW PANEL, CAUTION MODE UUPB UNKNOWN, PULL BOX ELEVATION, SPOT SPIRAL POINT OF INTERSECTION ASPI \*\*\* de PVMS **IPVMS** PERM, VMS (8) MPTW PT., TREE W/ WIRE TWZAPT\_P ARROW PANEL, TRAILER OR SUPPOR LIUVE LINKNOWN, VALVE FLAG POLE ASTS SPIRAL TO SPIRAL \* IRM PT., WALL LOCATION TWZBCD\_F BARRICADE (TYPE III) LINKROWN, YEN'T  $\times$ LMB MAILBOX SPIRAL TO TANGENT IRWIS ROWY WEATHER INFO. SENSOR CHANGEABLE MESSAGE SIGN (PVMS 00 LÜUW TWZCMS\_F LINKNOWN, WELL ROW ACQUISITION PAPER BOX TANGENT TO SPIRAL ATS 弘 00 ISP SOLAR PANEL TWZFLG\_P FLAGGER Q UWEH WATER, FIRE HYDRANT POST, SINGLE MFS\_P\_T FEE ACQUISITION AVEVT VERTICAL EVENT POINT SS ISST SPREAD SPECT, TRANSCEIVER TWZFT\_P W WATER, METER HWM 0 LRB ROCK, BOULDER IMPACT ATTENUATOR VERTICAL HIGH POINT TW71A F TOR TELEPHONE DEMARCATION BLE (1) LIWMH WATER, MANHOLE MEPS\_P\_ EASEMENT, PERMANENT CRASH CUSHION (TEMPORARY) SHRUB, CONIFEROUS VERTICAL LOW POINT (0) AVLOW ITP SUBSURFACE TEMP. PROBE TWZLUM\_P LUMINAIRE (TEMPORARY) UWV WATER, VALVE LSHO SHRUB, DECIDUOUS METS\_P\_1 EASEMENT, TEMPORARY IVIRI VEHICLE TO ROWY TRANSCEIVER ₹> TWZSOT\_P SYMBOL, DIRECTION OF TRAFFIC 0 LIWW WATER, WELL BRIDGE LTC TREE, CONIFEROUS YMBOL, DIRECTION OF TEMPORARY WIM TWIMD WEIGHT IN MOTION DETECTOR TWZSDTD\_P METS\_P\_1 OCCUPANCY, TEMPORARY BSC BRIDGE, SCUPPER TREE, DECIDUOUS (VVR) TWZSGN\_P SIGN (TEMPORARY) WIRELESS VIDEO REPEATER TREE, STUMP MFS\_P\_T FEE ACQUISITION W/O ACCESS SIGNAL, TRAFFIC OR PEDESTRIAN CONTROL TWZSIG\_P (V)-IWVRC WIRELESS VIDEO RECEIVER  $\sim$ TEMPORARY) Ø LTW TREE, WELL OR WALL മ CBP BASELINE, POINT IWVTT WIRELESS VIDEO TRANSMITTER TWZWL\_P WARNING LIGHT ROADWAY UNKNOWN POIN' BASELINE, POINT ON LINE WORK VEHICLE RES P ELEVATION, SPOT WORK VEHICLE WITH TRUCK 1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED). BASELINE, SPUR POINT 0 TWZWVA\_P CBSP MOUNTED ATTENUATOR  $\boxtimes$ RGA GUIDE RAIL, ANCHOR 2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, CBTP BASELINE, TIE POINT JTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.). GUIDE POST, SINGLE 3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES. CPH POINT, HORIZ, PHOTOGRAMMETR NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN PIN 5308.38 BRIDGES CULVERTS CONTRACT NUMBER ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER US ROUTE 62 & NY 950K D264244 CPSM POINT, SURVEY MARKER, PERM U.S. 62 & NY 950K LEGEND LINE & POINT SYMBOLOGY FROM KENMORE AVENUE TO ADMIRALS WALK CPSV POINT, VERT., PHOTOGRAMMETRY DRAWING NO. LEG-02 MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE TOWNS OF AMHERST & TONAWANDA SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHEET NO. 04 COUNTY: ERIE REGION: 6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE

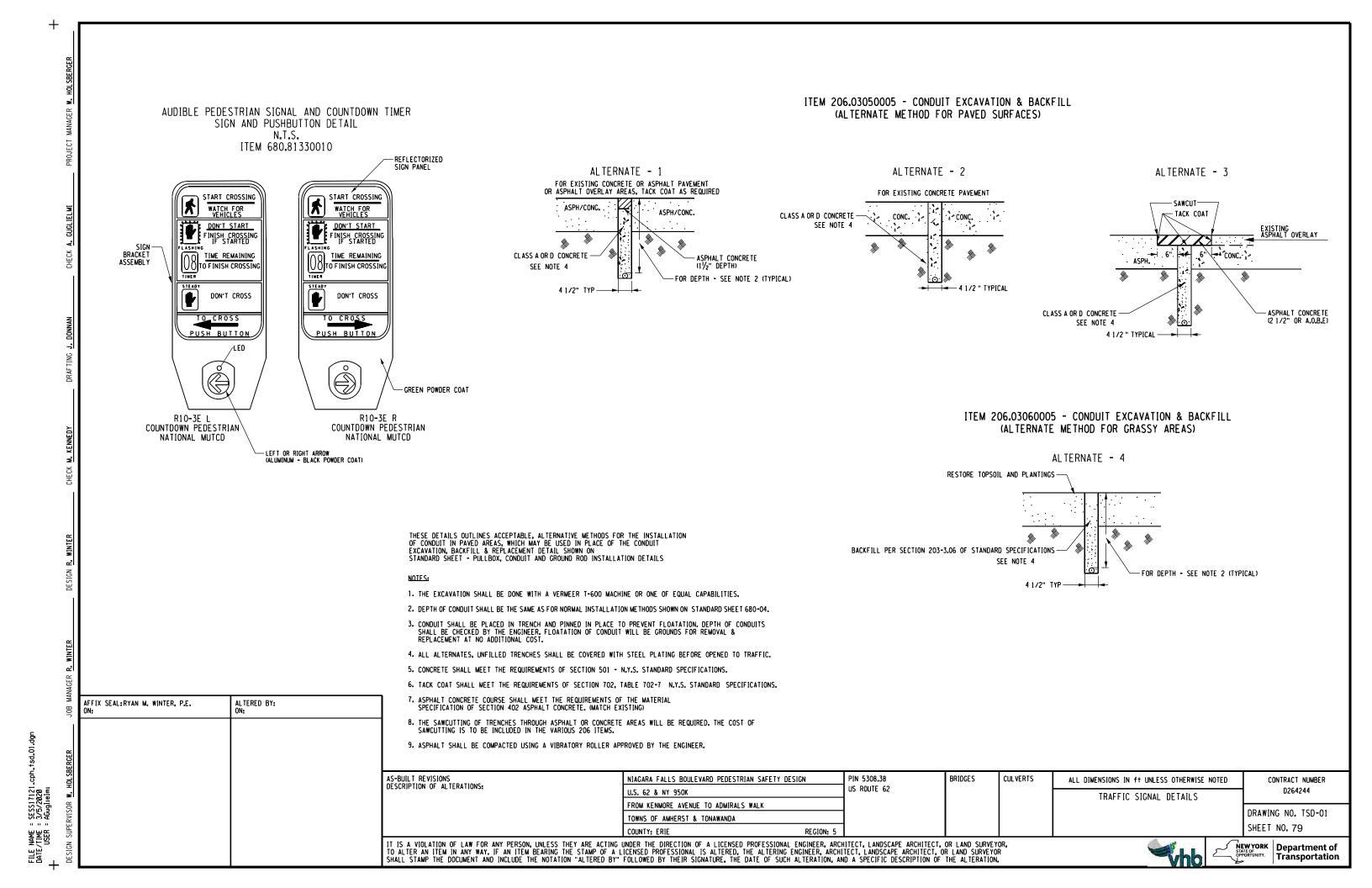
CORRESPONDING EXISTING FEATURES.

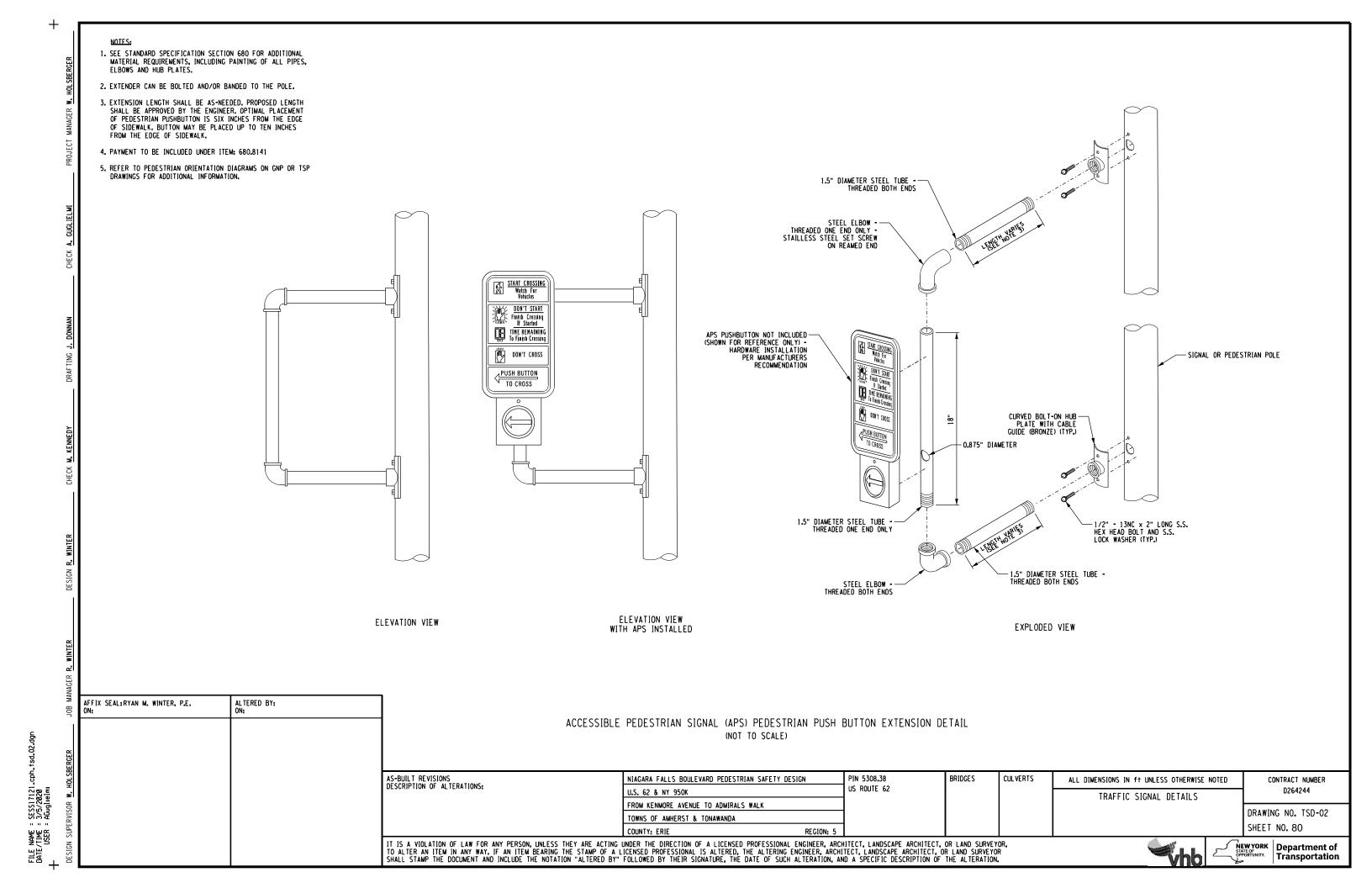
NEW YORK Department of Transportation











AFFIX SEAL:

1. EXCAVATION

A. EXCEPT IN ROADWAY SECTIONS, THE CONTRACTOR SHALL EXCAVATE ALL EXISTING TRAFFIC SIGNAL PULLBOXES, POLES, AND FOUNDATIONS TO A DEPTH OF 6" BELOW EXISTING GRADE AND BACKFILL WITH MATERIAL IN KIND. THE CHARACTER AND CONDITION SHALL MATCH THAT SURROUNDING THE STRUCTURE OR AOBE. WITHIN THE ROADWAY, THESE EXCAVATIONS WILL BE MADE TO A DEPTH OF 1 FOOT BELOW THE TOP OF SUBGRADE AND BACKFILLED WITH SUITABLE MATERIAL. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 680.790XXXO5 "REMOVE TRAFFIC SIGNAL INSTALLATION."

#### 2. SIGNAL POLES

A. AT INTERSECTIONS WHERE SIGNAL POLES OR PEDESTRIAN POLES ARE BEING PLACED IN SIDEWALKS, THE TOP OF THE FOUNDATION SHALL BE FLUSH WITH THE TOP OF THE SIDEWALK.

#### 3. TRAFFIC SIGNALS

- A. ALL POLYCARBONATE SIGNAL HEADS WITH THREE OR MORE SECTIONS REQUIRE A REINFORCEMENT PLATE UNLESS CONNECTED TO A FIXED OBJECT (POLE OR MAST ARM) BY A BRACKET WITH TWO SEPARATE CONNECTION POINTS (TOP AND
- B. THE CONTRACTOR SHALL INSTALL A HEAVY DUTY STAINLESS STEEL WASHER ON THE SIGNAL HEAD BALANCE ADJUSTER.
- C. ITEMS 680.810601 "SIGNAL SECTION POLYCARBONATE TYPE 1", 680.813106 "PEDESTRIAN SIGNAL SECTION", 680.8141 "PEDESTRAIN SIGNAL BRACKET MOUNT ASSEMBLY", 680.8142 "PEDESTRIAN SIGNAL POST TOP MOUNT ASSEMBLY", 680.81330010 "AUDIBLE PEDESTRIAN SIGNAL", SHALL BE
- C. ITEM 680.81990003 TRAFFIC SIGNAL BACK PLATES WITH YELLOW REFLECTIVE TAPE SHALL BE MODIFIED TO ONLY ALLOW 5 INCH NON LOUVERED, FLAT BACK FINISHED BACK PLATES WITH A 3 INCH WIDE YELLOW REFLECTIVE TAPE BORDER AROUND THE OUTER EDGE.

#### 4. PEDESTRIAN SIGNALS

- A. ALL PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED PARALLEL WITH THE APPROPRIATE CROSSWALK. ALSO, ALL INDICATIONS SHALL BE INSTALLED AWAY FROM TURNING VEHICULAR TRAFFIC UNLESS OTHERWISE SHOWN ON THE
- B. ALL PEDESTRIAN SIGNS SHALL BE 9 INCHES X 15 INCHES (R10-3i) REGARDLESS OF THE SIZE OF POLE THEY ARE INSTALLED ON. THE COST OF FURNISHING AND INSTALLING THESE SIGNS SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 680.81330010 AUDIBLE PEDESTRIAN SIGNAL.

AS-BUILT REVISIONS

DESCRIPTION OF ALTERATIONS:

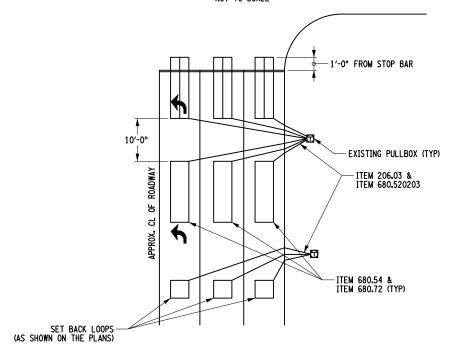
#### 5. AUDIBLE WIRING

- A. THE MANUFACTURER'S SUGGESTED CABLES (OR EQUIVALENTS) SHALL BE USED WITH AUDIBLE PEDESTRIAN SIGNAL (APS) UNITS. THE QUANTITY OF CABLE REQUIRED AT EACH LOCATION SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE APS MANUFACTURER'S INSTALLATION DETAILS AND
- B. REFER TO THE MANUFACTURER'S INSTALLATION AND PROCEDURE MANUALS FOR DETAILS.
- C. THE COST TO FURNISH AND INSTALL ALL WIRING BETWEEN THE AUDIBLE PEDESTRIAN SIGNAL (APS) UNITS FOR ITEM 680.81330010 AND THEIR RESPECTIVE CONTROL UNITS MOUNTED IN THE PEDESTRIAN HEADS SHALL BE NCLUDED UNDER PROVISIONS OF ITEM 680.81330010.
- D. WHERE AUDIBLE PEDESTRIAN SIGNAL (APS) UNITS ARE MOUNTED SEPARATELY FROM THEIR RESPECTIVE CONTROL UNITS, THE COST TO FURNISH AND INSTALL THE 4 CONDUCTOR COMMUNICATION WIRE BETWEEN THE APS UNIT AND THEIR RESPECTIVE CONTROL UNITS MOUNTED IN THE PEDESTRIAN HEADS SHALL BE INCLUDED UNDER PROVISIONS OF ITEM 680.81330010.
- E, THE COST TO FURNISH AND INSTALL THE WIRE CONNECTING THE APS ACTIVATION BUTTON FOR ITEM 608.81330010 WITH THE ASSOCIATED PEDESTRIAN INDICATION INPUT WIRE AT THE PEDESTRIAN POLE SHALL BE NCLUDED UNDER PROVISIONS OF ITEM 680.81330010.

#### 6. APS

A. CONTRACTOR SHALL ORDER APS BUTTONS FROM MANUFACTURER WITH STREET NAME MESSAGES PRE-INSTALLED. CONTRACTOR SHALL PROVIDE COPIES OF THE ASSOCIATED ELECTRONIC WAVE FILES TO NYSDOT.

#### INDUCTANCE LOOP INSTALLATION DETAIL TYPICAL LAYOUT



#### NOTES:

- 1. THE CONTRACTOR SHALL BE AWARE THAT SIGNAL LOOPS ARE DUE TO BE INSTALLED UNDER THIS CONTRACT AT VARIOUS LOCATIONS AS SHOWN ON THE TRAFFIC SIGNAL DETAILS. THEY SHALL BE INSTALLED AFTER THE MILLING OPERATION IS COMPLETED IN THOSE AREAS AND BEFORE THE TOP COURSE HAS BEEN PLACED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER-IN-CHARGE (EIC) IN WRITING SEVEN (7) DAYS PRIOR TO THE BEGINNING OF ANY MILLING OPERATIONS AT SIGNALIZED INTERSECTIONS. THE EIC SHALL THEN CONTACT THE NYSDOT SIGNAL MAINTENANCE UNIT OF THIS NOTIFICATION SO THAT ANY NECESSARY ADJUSTMENTS TO THE SIGNAL OPERATION CAN BE MADE PRIOR TO ANY MILLING IN THE LOOP AREAS. THE CONTACT FOR NYSDOT SIGNAL MAINTENANCE IS MIKE BARRETT OR NEIL FRIEDMAN AT 716-649-1426. THE CONTRACTOR SHALL NOT INSTALL ANY PORTION OF ANY DETECTION LOOP UNLESS A MEMBER OF THE NYSDOT SIGNAL MAINTENANCE UNIT IS PRESENT (AT THE SITE OF INSTALLATION) OR HAS RECEIVED PERMISSION TO INSTALL THE DETECTION LOOPS WITHOUT THEIR PRESENCE.
- 2. EXISTING CAST ALUMINUM JUNCTION BOXES SHALL BE REMOVED. COST OF THE WORK TO BE INCLUDED IN ITEM 680.54
- 3. ANY EXISTING ELEMENT OF THE SIGNAL SYSTEM THAT IS TO REMAIN AND IS DAMAGED BY THE CONTRACTORS OPERATIONS, SHALL BE REPAIRED/REPLACED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CONTRACT.
- 4. DURING LOOP REPLACEMENT IT IS THE INTENT TO UTILIZE THE EXISTING FLEXIBLE CONDUIT (ITEM 680.520203) WHENEVER POSSIBLE, FOR CONNECTING THE NEW LOOP WIRE TO THE EXISTING PULLBOX. ITEMS 206.03 & 680.520203 ARE INCLUDED IN THE CONTRACT IF IT BECOMES APPARENT THAT THE EXISTING FACILITIES CANNOT BE REUSED AND NEW ONES ARE REQUIRED.
- 5. IF EXCAVATION ACROSS AN EXISTING SIDEWALK IS REQUIRED, THE CONTRACTOR SHALL REPLACE THE ENTIRE AFFECTED BLOCK OF SIDEWALK AND NOT JUST THE WIDTH OF THE TRENCH. THE COST FOR SIDEWALK REPLACEMENT SHALL BE PAID UNDER ITEM 206.03.
- 6. THE CONTRACTOR SHALL SPLICE THE NEW INDUCTANCE LOOP WIRES, THAT REPLACED THE EXISTING LOOP WIRE, TO THE EXISTING SHIELDED LEAD-IN CABLE AT THE CURB SIDE PULLBOX. THE COST SHALL BE INCLUDED IN ITEM 680.72.
- 7. THE FRONT LOOP DETECTORS, KNOWN AS QUADRUPOLES, SHALL BE 6' X 20' HAVING 2-4-2 TURNS OF WIRE AS DETAILED ON STANDARD SHEET 680-14. ALL OTHER LOOP DETECTORS, WITH THE EXCEPTION OF SETBACK LOOPS, SHALL BE 6' X 20' HAVING THREE (3) TURNS OF WIRE. SET BACK LOOPS SHALL BE 6' X 6' HAVING FOUR (4) TURNS.
- 8. UPON COMPLETION OF MILLING OPERATIONS IN THE AREAS WITH DAMAGED LOOP DETECTORS, THE CONTRACTOR WILL BE ALLOWED THREE (3) WORKING DAYS FOR REPLACEMENT OF THE LOOP DETECTORS. THE LOOPS SHALL BE PLACED IN THE MILLED SURFACE AND SEALED WITH LOOP EMBEDDING SEALER, AS SHOWN ON STANDARD SHEET 680-14. IF THE LOOPS ARE DAMAGED PRIOR TO THE PLACEMENT OF THE TOP COURSE, THE CONTRACTOR SHALL REPLACE THE LOOPS AT NO COST TO THE CONTRACT.



ALTERED BY:

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE REGION: 5

PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

**CUL VERTS** 

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

AND DETAILS

TRAFFIC SIGNAL GENERAL NOTES DRAWING NO. TSD-03

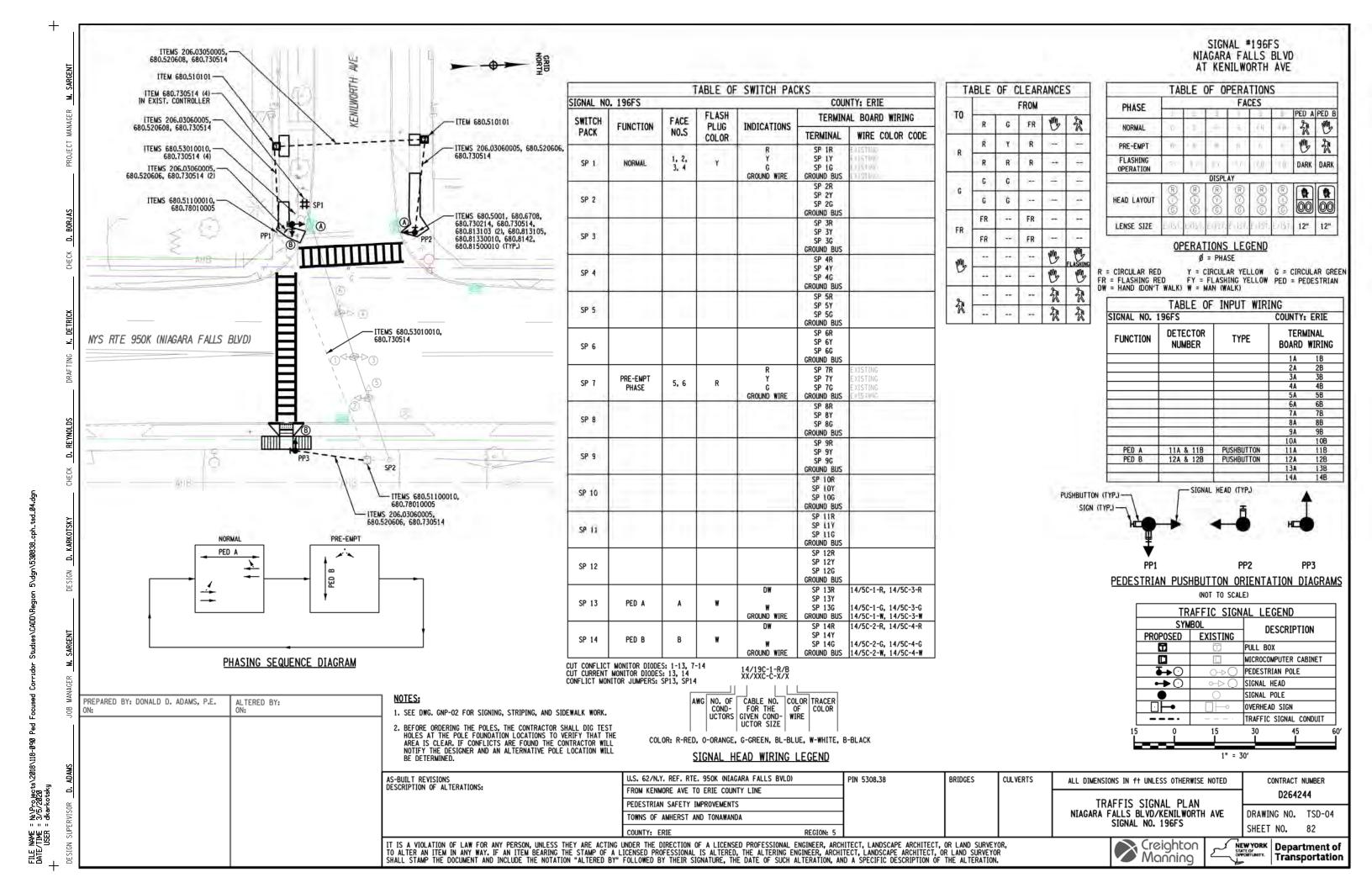
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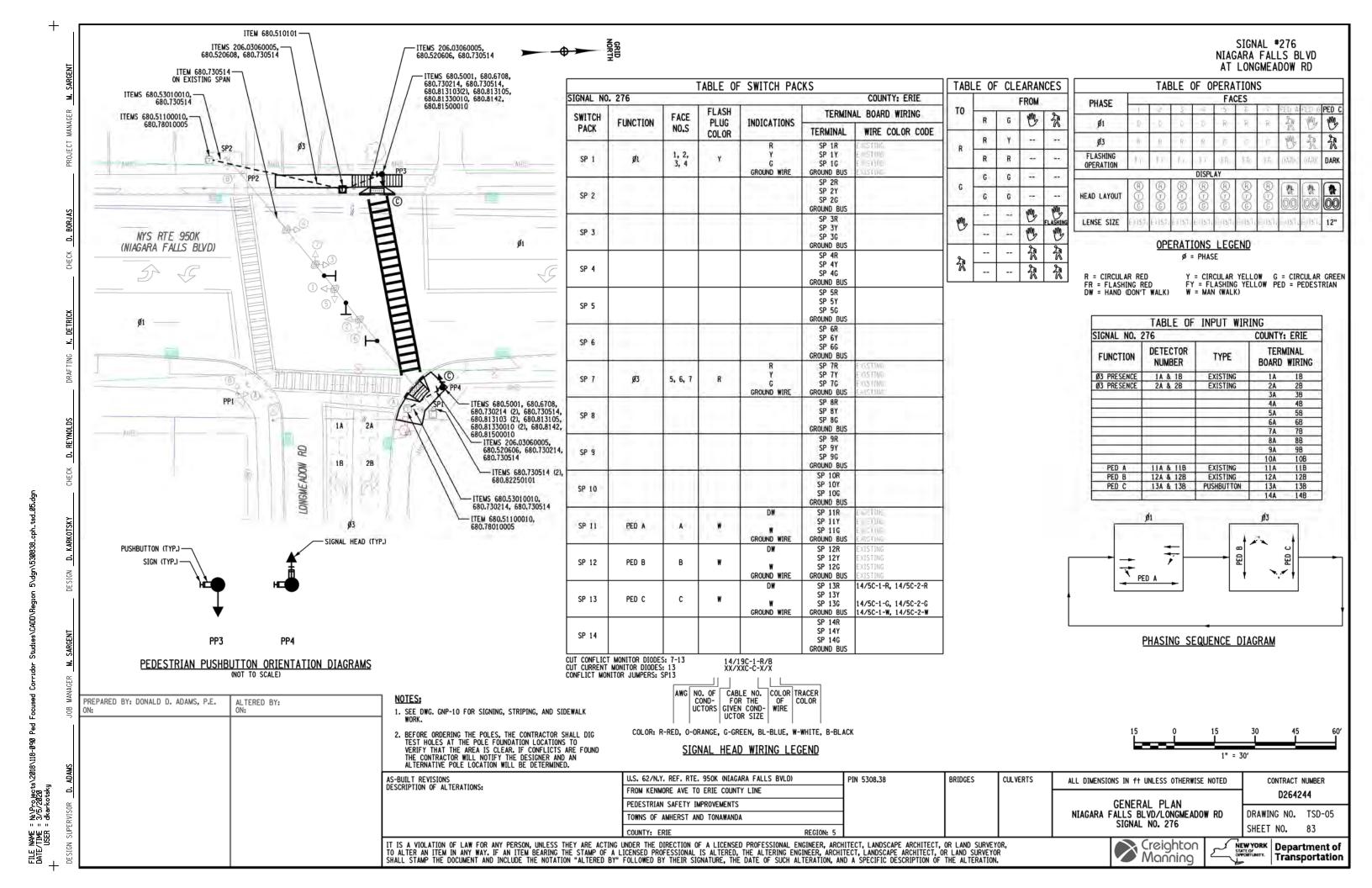
NEW YORK | Department of Transportation

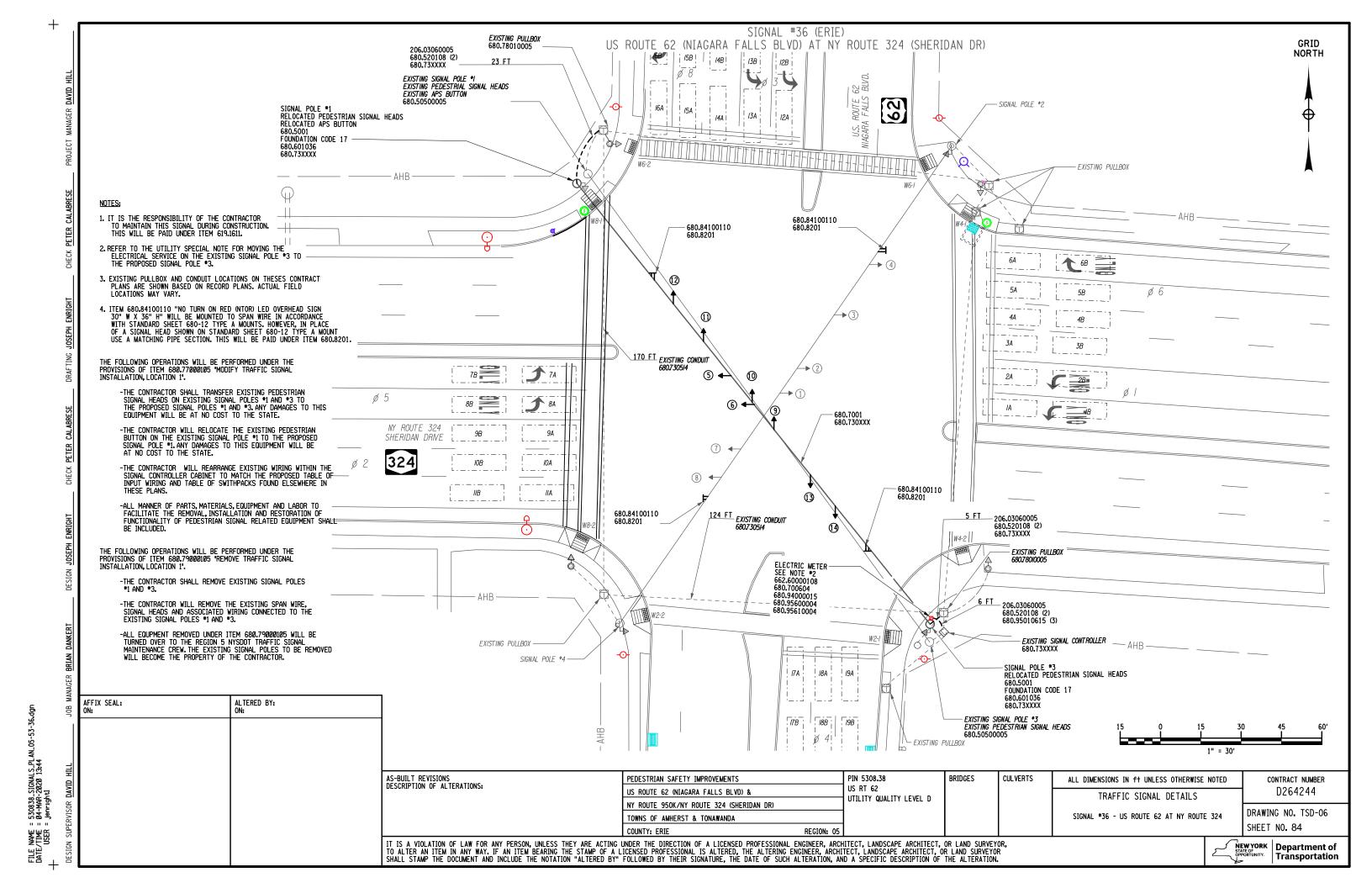
CONTRACT NUMBER

81

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.







AFFIX SEAL:

	QUANTITY AND ITEM LIST			
	SIGNAL #(36) - US 62 (NIAGARA FALLS BLVD) @ NY ROUTE 324 (SHERII		-227	-
ITEM NO.	DESCRIPTION	UNIT	QTY	$\alpha$
206.03060005	CONDUIT EXCAV & BACKFILL (NOT IN ROADWAY)	FT	Х	
619.1611	MAINTAIN TRAFFIC SIGNAL EQUIP (REQ A)	INT MO	X	
662.60000108	FURNISHING ELECTRICAL SERVICE	DC	X	
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	15	
680.50500005	REMOVE POLE FOUNDATION	FT	28	
680.520105	CONDUIT, STEEL, ZINC COATED, 1 1/2 NPS	FT	X	
680.520506	CONDUIT, RIGID PLASTIC, CLASS 1 , 2 NPS	FT	X	
680.520508	CONDUIT, RIGID PLASTIC, CLASS 1 , 3 NPS	FT	X	
680.601036	TRAFFIC SIGNAL POLE-SPAN WIRE 10,000 POUND LOAD, 36 FEET LONG	EA	2	
680.7001	SINGLE SPAN WIRE ASSEMBLY	EA	1	
680.700604	RISER ASSEMBLY, 1-1/2" DIA.	EA	X	
680.730214	SIGNAL CABLE, 2 CONDUCTOR, 14 AWG	FT	X	
680.730514	SIGNAL CABLE, 5 CONDUCTOR, 14 AWG	FT	X	
680.730714	SIGNAL CABLE, 7 CONDUCTOR, 14 AWG	FT	X	
680.77000105	MODIFY TRAFFIC SIGNAL INSTALLATION, LOCATION 1	ELOC	1	
680.78010005	ALTER PULLBOX FOR CONDUITS	EA	2	
680.79000105	REMOVE TRAFFIC SIGNAL INSTALLATION, LOCATION 1	EA	1	
680.810101	SIGNAL MODULE - 12 IN, RED BALL LED	EA	4	
680.810102	SIGNAL MODULE - 12 IN, RED ARROW LED	EA	4	
680.810103	SIGNAL MODULE - 12 IN, YELLOW BALL LED	EA	4	
680.810104	SIGNAL MODULE - 12 IN, YELLOW ARROW LED	EA	4	
680.810105	SIGNAL MODULE - 12 IN, GREEN BALL LED	EA	4	
680.810106	SIGNAL MODULE - 12 IN, GREEN ARROW LED	EA	4	
680,810601	SIGNAL SECTION, POLYCARBONATE, TYPE 1, 12IN	EA	24	
680.8111	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY	EA	8	
680.8201	OVERHEAD SIGN ASSEMBLY, TYPE A	EA	4	
680.84100110	NO TURN ON RED (NTOR) LED OVERHEAD SIGN 30" W X 36" H	EA	4	
680.94000015	RAINTIGHT DISCONNECT BOX	EA	1	
680.94997008	F AND I ELECTRICAL DISCONNECT GEN. TRAN SWITCH	EA	x	
680.95010615	SERVICE CABLE, 1 CONDUCTOR, 6 AWG	FT	X	
680.95600004	ELECTRICAL METER PAN	EA	-141	
680.95610004	POWER DISTRIBUTION PANEL	EA	1	
690.11000105	SPECIALTY WORK (ELECTRICAL)	IS	X	_

## SIGNAL #36 (ERIE) NIAGARA FALLS BLVD AT SHERIDAN DR

1) CONDUIT ORIENTATION SHOWN MAY DIFFER FROM REQUIRED ORIENTATION. FIELD VERIFY BEFORE CONDUIT INSTALLATION.

2) DISTANCES SHOWN ARE APPROXIMATE. SIGNAL HEADS AND SIGNS MAY BE ADJUSTED IN THE FIELD WITH APPROVAL OF EIC.

3) POWER METER AND DISCONNECT/TRANSFER SWITCH SHALL BE INSTALLED AS PER STANDARD SHEET 680-05.

4) CONTRACTOR IS RESPONSIBLE THAT POWER METER IS AT A HEIGHT THAT COMPLIES WITH ALL REQUIREMENTS AND ELECTRICAL CODES AS PUT FORTH BY ELECTRICAL UTILITY

5) DISCONNECT/TRANSFER SWITCH REQUIRES A HOLE FOR ACCESS TO THE INTERIOR OF THE SIGNAL POLE. THE HOLE IS REQUIRED TO BE GREATER THAN 11/16", THEREFORE, THIS HOLE CAN NOT BE FIELD DRILLED. THIS HOLE MUST BE MADE BY SIGNAL POLE MANUFACTURER. (PER SPEC 724-03)

PHASING DIAGRAM

TO BE PROVIDED BY TRAFFIC AND SAFETY

	SIGNAL HEAD DATA TABLE												
FACE	680.810101	680.810102	680.810103	680.810104	680.810105	680.810106	680.810601	680.8111					
5		1		1		1	3	1					
6		1		1		1	3	1					
9		1		1		1	3	1					
10		1		1		1	3	1					
11	1		1		1		3	1					
12	1		1		1		3	1					
13	1		1		1		3	1					
14	1		1		1		3	1					
TOTALS	4 EA	4 EA	4 EA	4 EA	4 EA	4 EA	24 EA	8 EA					

ALTERED BY: ON:

SIGNAL HEAD ALIGNMENT NOTES:

ALIGN HEADS 5 AND 6 CENTERED OVER THE LANE.

ALIGN HEADS (9) AND (10) CENTERED OVER THE LANE.

ALIGN HEADS (1) AND (12) OVER THE LANE LINE.

ALIGN HEADS (3) AND (14) OVER THE LANE LINE.

ITEM 680.84100110 TO BE LOCATED 3 FEET  $\pm$  TO RIGHT OF SIGNALS (4), (8), (12), AND (14) OR AS DIRECTED BY EIC.

SIGNAL	HEAD LAYOUT
<b>(</b>	$\mathbb{R}$
	$\bigcirc$
( <del>C</del> )	<u>(G)</u>
FACES	FACES
5,6,9,10	11,12,13,14

### KEY

R - RED BALL

Y - YELLOW BALL

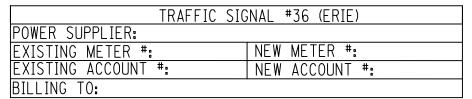
G - GREEN BALL

← RED ARROW

← YELLOW ARROW

←Y - FLASHING YELLOW ARROW

← - GREEN ARROW



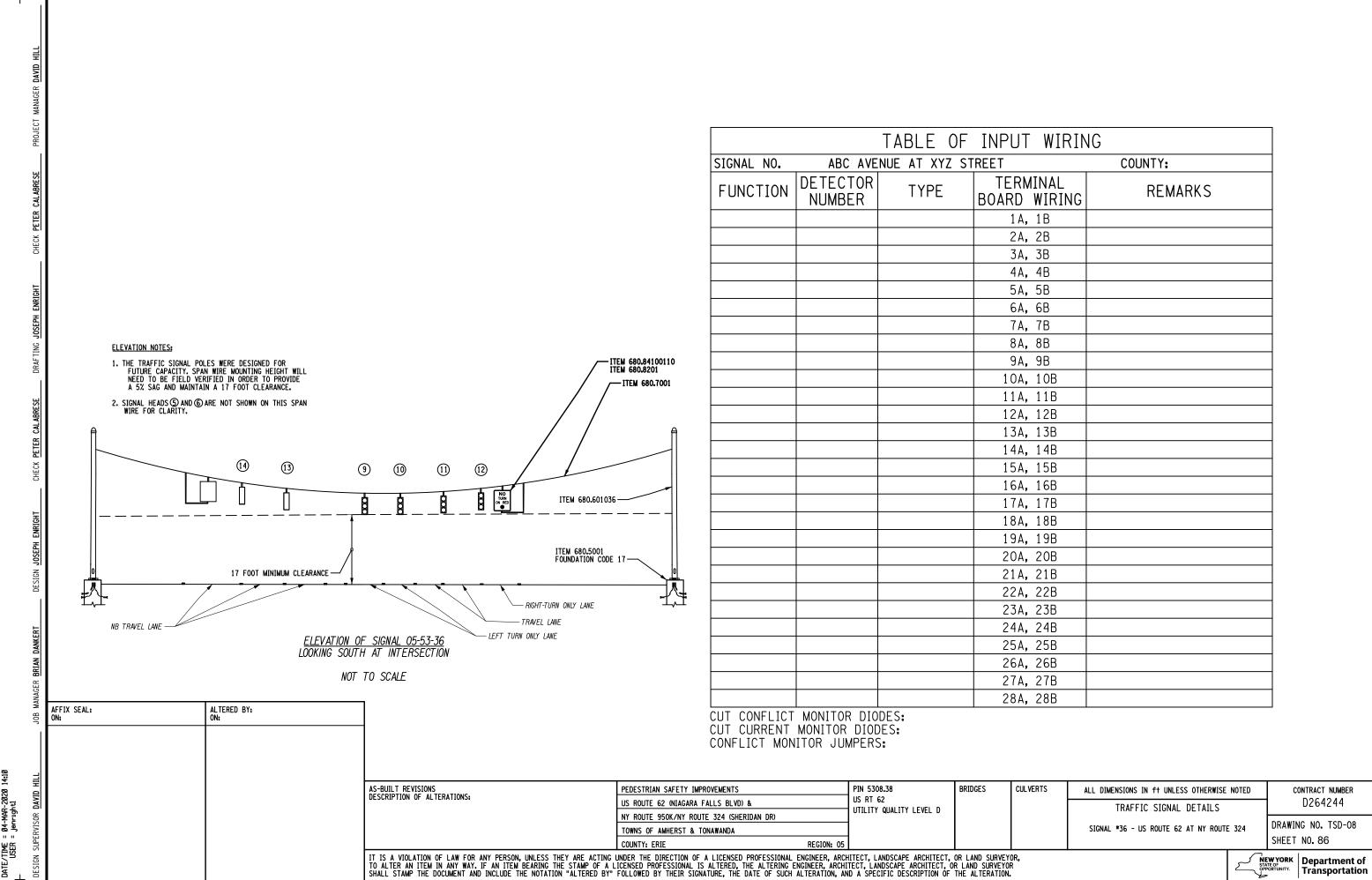
		1		DE30111 11011	w
		680.84100110	NO TURN ON R	ED (NOTR) LED OVERHEAD	4
TRAFFIC SI	GNAL #36 (ERIE)				
SUPPLIER:				NO TURN	
ING METER #:	NEW METER #:	30" X 3€	6"	ON RED	
ING ACCOUNT #:	NEW ACCOUNT #:				
IG TO:			SIGN TO	BE SIMILAR TO R10-11.	

	_							
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	PEDESTRIAN SAFETY IMPROVEMENTS	PIN 5308.38 US RT 62 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NO	TED	CONTRACT NUMBER	
	US ROUTE 62 (NIAGARA FALLS BLVD) &				TRAFFIC SIGNAL DETAILS		D264244	
	NY ROUTE 950K/NY ROUTE 324 (SHERIDAN DR)	UTILITY QUALITY LEVEL D			THAT TO STORAL BETALES	H	DDAWING NO TCD 07	
	TOWNS OF AMHERST & TONAWANDA				SIGNAL #36 - US ROUTE 62 AT NY ROUTE 324		DRAWING NO. TSD-07	
	COUNTY: ERIE REGION: 05	5					SHEET NO. 85	
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A L SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY"	ICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCH	HITECT, LANDSCAPE ARCHITECT, C	OR LAND SURVEYO	)R	2	NEW STATE OPPOR	VYORK Department of Transportation	

ITFM

SIGN FACE DATA TABLE

DESCRIPTION



= 530838\_SIGNALS\_TABLEOFINPUTWIRE = 04-MAR-2020 14:10 = Jenright1

1			IT IS A VIOLATION OF LAW FOR ANY PERSON, UNITO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEA SHALL STAMP THE DOCUMENT AND INCLUDE THE N	TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE	REGION: 05	]			SIGNAL	*36 - US ROUTE 62 AT NY ROUTE 324	DRAWING N
			DESCRIPTION OF ALTERATIONS:	US ROUTE 62 (NIAGARA FALLS BLVD) &  NY ROUTE 950K/NY ROUTE 324 (SHERIDAN DR)		US RT 62 UTILITY QUALITY LEVEL				TRAFFIC SIGNAL DETAILS	D2
			AS-BUILT REVISIONS	PEDESTRIAN SAFETY IMPROVEMENTS		PIN 5308.38	BRIDG	ES CULVERTS	ALL DIVE	NSIONS IN ++ UNLESS OTHERWISE NOTED	CONTR
ON:		ON:					1	ן טהואט אואב	כחמ חאועה		_
AFFIX SEA	EAL:	ALTERED BY:			SP 14			GRND WIRE	SP 14R SP 14Y SP 14G GRND BUS		
					SP 13			GRND WIRE	SP 13G GRND BUS		
								GRND WIRE	GRND BUS  SP 13R SP 13Y		
					SP 12			OWAD ATIVE	SP 12R SP 12Y SP 12G		
					SP 11			GRND WIRE	SP 11R SP 11Y SP 11G GRND BUS		
					SP 10			GRND WIRE	SP 10R SP 10Y SP 10G GRND BUS		
					SP 9			GRND WIRE	SP 9G GRND BUS		
					60.0			GRND WIRE	GRND BUS SP 9R SP 9Y		
					SP 8			ONNO WINE	SP 8R SP 8Y SP 8G		
					SP 7			GRND WIRE	SP 7R SP 7Y SP 7G GRND BUS		
					SP 6			GRND WIRE	SP 6Y SP 6G GRND BUS		
					SP 5			GRND WIRE	SP 5G GRND BUS SP 6R		
								GRND WIRE	SP 4G GRND BUS SP 5R SP 5Y		
					SP 4			GRND WIRE	GRND BUS SP 4R SP 4Y		
					SP 3			GIVIAN MILE	SP 3R SP 3Y SP 3G		
					SP 2			GRND WIRE	SP 2R SP 2Y SP 2G GRND BUS		
					SP 1			GRND WIRE	SP 1R SP 1Y SP 1G GRND BUS		
					PACK	FUNCTION FACE NO.S	PLUG COLOR	INDICATIONS	TERMINAL	WIRE COLOR CODE	
					SIGNAL N		JE AT XY FLASH	Z STREET	TERM	COUNTY: MINAL BOARD WIRING	
							TABLI	E OF SWITC	H PACKS		

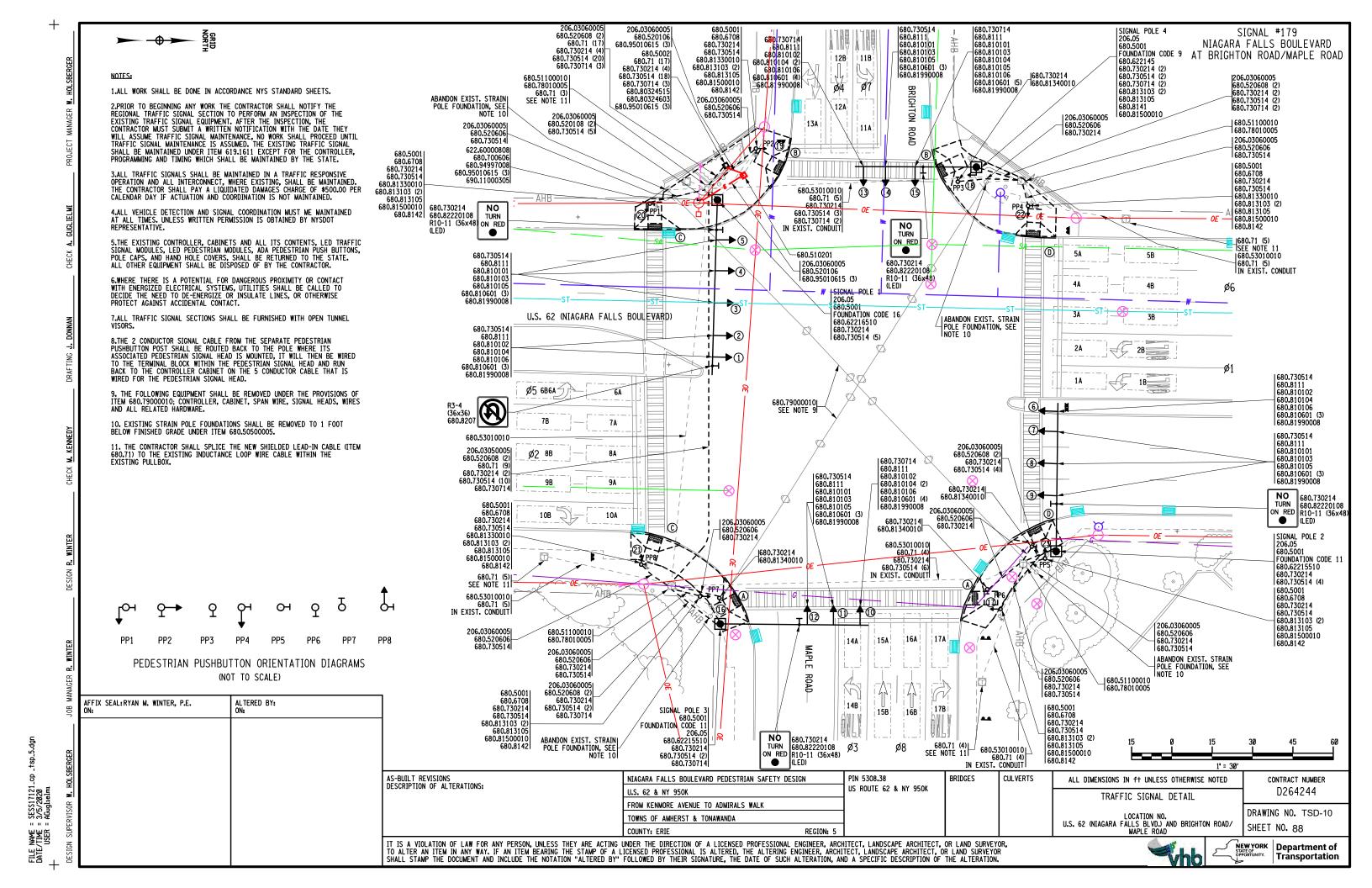
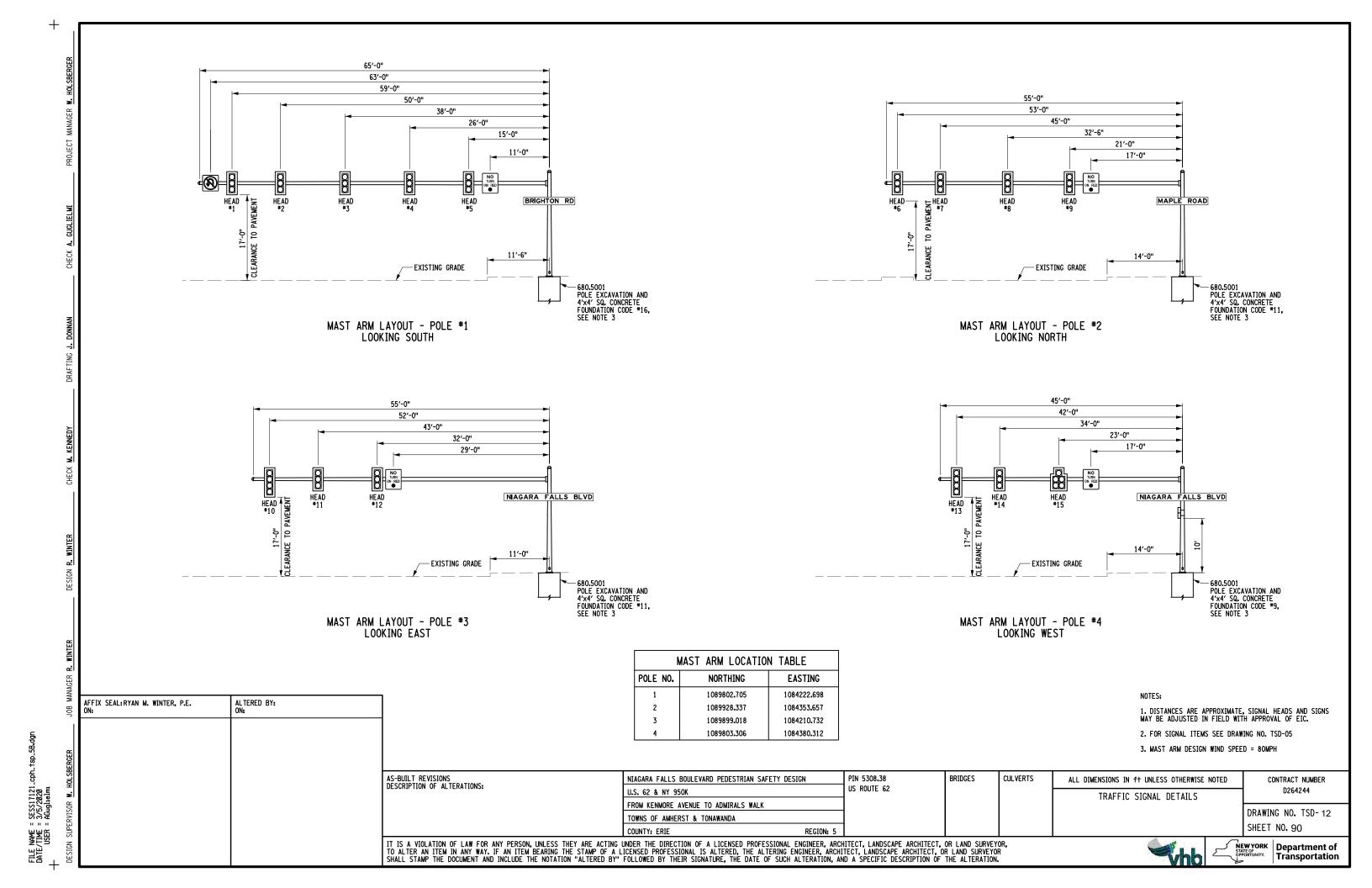


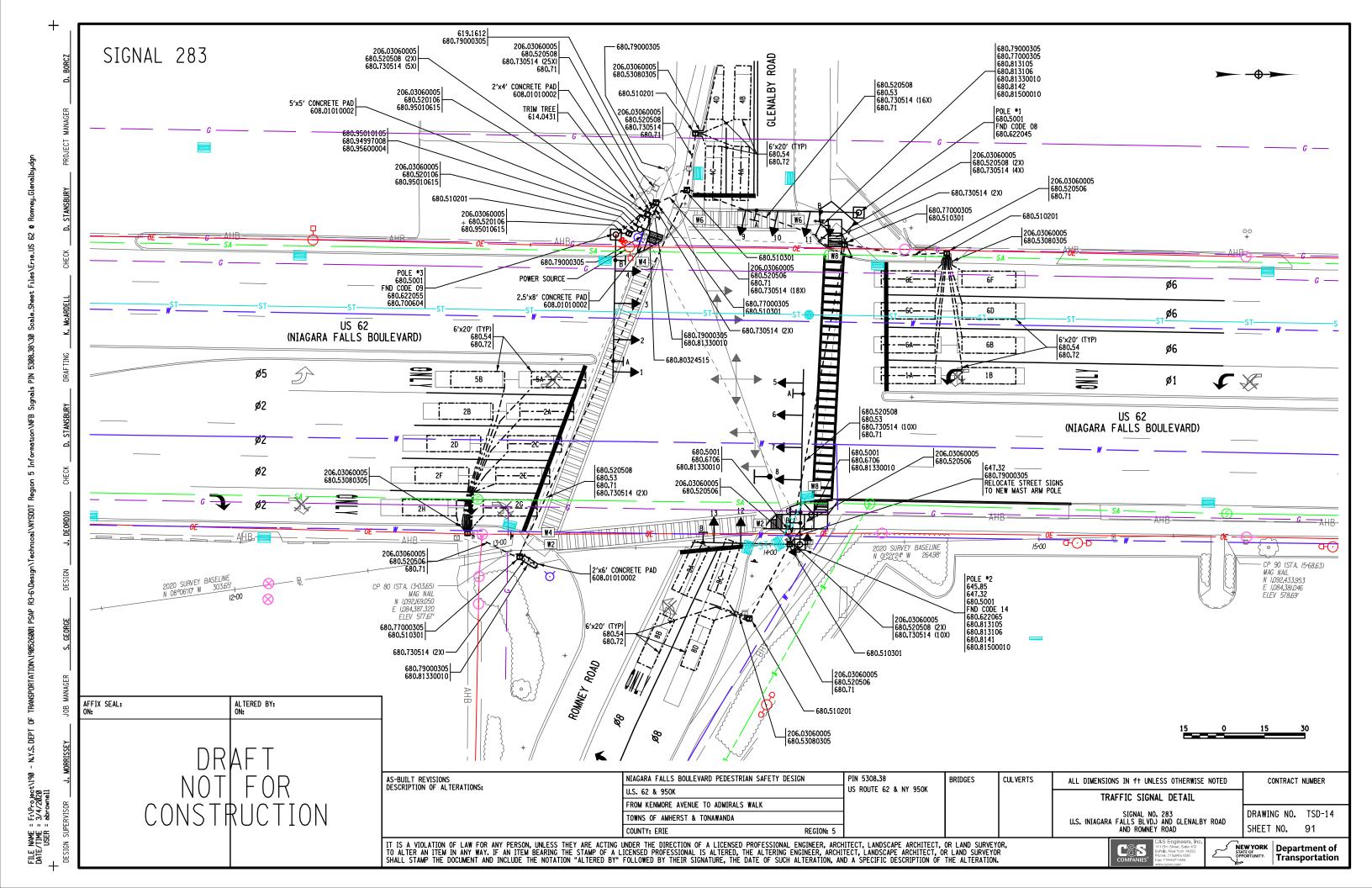
TABLE OF CLEARANCES SIGNAL OF OPERATION SPECIFICATIONS SIGNAL OF OPERATION SPECIFICATIONS SIGNAL #179 FROM TARLE OF SWITCH PACKS TABLE OF SWITCH PACKS NIAGARA FALLS BOULEVARD T0 SIGNAL NO. 179 INT. NAME: U.S. 62 (NIAGARA FALLS BLVD) AND INT. NAME: U.S. 62 (NIAGARA FALLS BLVD) AND BRIGHTON ROAD/MAPLE ROAD SIGNAL NO. 179 AT BRIGTON ROAD/MAPLE ROAD 19 浆 G <del>+G</del>R <del>∙G</del>G <del>+6</del> BRIGHTON ROAD/MAPLE ROAD TERMINAL WIRING BOARD **FUNCTION** FACE NOS INDICATION DETECTOR FRMINAL BOAR PACK WIRE COLOR CODE FUNCTION REMARKS NUMBER WIRING SP 1V 14/5C-2-0 1,2 SP1 01 PRESENCE LOOF **EXISTING** GROUND WIRE GROUND BU 14/5C-2-W 14A, 14B 12A, 12B, 13A, PRESENCE LOOP Ø3 Ø4 Ø5 Ø7 Ø8 SP 2R SP 2Y SP 2G PRESENCE LOOP **EXISTING** G +¥R <del>+Y</del>G G R¥→ 14/5C-8-0 14/5C-8-G 14/5C-9-0 14/5C-9-G 6A, 6B 11A, 11B PRESENCE LOOP EXISTING SPZ Ø2 7,8,9 G PRESENCE LOOP 4/5C-7-G EXISTING G G G --G GROUND BUS PRESENCE LOOP GROUND WIRE OVL "B" SP 3Y SP 3G <del>+G</del>Y --+GR SP3 13 4/7C-2-G 10A, 10B Ø3 +GR 11A, 11B 12A, 12B GROUND WIRE SROUND BL +<del>G</del>R --+GR R SP 4K 13A , 13B 14A , 14B 15A , 15B 16A , 16B 17A , 17B 14/5C-11-0 14/5C-11-G SP4 04 11,12 SP 4G \_\_ <del>+G</del>G <del>+G</del>G <del>+G</del>G 14/5C-11-W GROUND WIRE GROUND BUS <del>∙G</del>G <del>+G</del>G SP 5V SP 5G SROUND BUS <del>+G</del>G <del>+G</del>G ----4/5C-6-0 SP5 05 18A, 18B 19A, 19B 20A, 20B 21A, 21B \_\_ Y<del>G</del>• R<del>G</del>→ PUSHBUTTON SP 6V SP 6G 14/5C-4-0 14/5C-4-G PUSHBUTTON PUSHBUTTON SP 6 Ø6 SP 6G SROUND BU. SP 7R --22A , 22B 23A , 23B PED D PUSHBUTTON 24A , 24B 25A , 25B 26A , 26B 27A , 27B <del>∙R</del> Ψ ٠¥ --OVL "C" SP 7Y SP7 10 SP 7G 4/7C-1-G Ø7 ₩ GROUND WIR GROUND BI 14/7C-3-R 14/7C-3-O 14/7C-3-B SP 8Y SP 8G FY ٠¥ --SP8 14,15 Ø8 GROUND BUS GROUND WIRE 14/7C-3-W FY FY --<-Y-SP 9Y SP 9G SP9 Ø3 13 <del>•6</del> <del>+6</del> <del>•6</del> ----GROUND BUS <del>-6</del> <del>-6</del> --+6 OVL"A SP 10V SP 10G -Y-> -G-> SP 10 15 07 **6** GROUND BU SP 11R SP 11Y 0 GROUND WIRE ₩, <-Y 4/7C-1-0 0 1 SP 11 Ø7 10 SP 11G GROUND BUS 14/7C-1-W GROUND WIRE TABLE OF OPERATIONS 浆 叔 ----SP 12Y 叔 SP 12 **FACES** SP 12G 浆 浆 PHASE 4/5C-14-R 4/5C-15-R DW PED A SP 13Y SP 13 16,17 <-R-R <-G- G <-R- R <-R- R R 012 GROUND WIR R <-G- R <-R- R <-R- R PHASING SEQUENCE DIAGRAM <-R- G <-R- R <-R- R R B A PED B SP 14V SP 14 18,19 14/5C-17-G 14/5C-17-W Ø1 + Ø5 Ø6 Ø3 + Ø7ø3 + ø8 Ø1 + Ø6 GROUND WIRE GROUND BUS 4/5C-16-W 

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R = LEFT RED ARROW
FR = FLASHING RED
DW = HAND (DON'T WALK)
FY = FLASHING YELLOW
FY = FLASHING YELOW
FY = FLASHING YELLOW
FY = FLASHING YEL AFFIX SEAL: ALTERED BY: OVL = OVERLAP W = MAN (WALK) COLOR: R-RED, O-ORANGE, G-GREEN, BL-BLUE, W-WHITE, B-BLACK NOTES: SIGNAL HEAD WIRING LEGEND 1. SEE DWG. TSD-XX FOR TRAFFIC SIGNAL WORK. AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS: NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN PIN 5308.38 BRIDGES CULVERTS ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER U.S. 62 & NY 950K D264244 U.S. 62 & NY 950K TRAFFIC SIGNAL DETAIL FROM KENMORE AVENUE TO ADMIRALS WALK SIGNAL NO. 179 DRAWING NO. TSD- 11 LOCATION NO. 23
U.S. 62 (NIAGARA FALLS BLVD.) AND BRIGHTON ROAD TOWNS OF AMHERST & TONAWANDA SHEET NO. 89 COUNTY: ERIE AND MAPLE ROAD IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. NEW YORK
STATE OF OPPORTUNITY.
OPPORTUNITY.
Transportation Transportation

= SESS17121\_ = 3/5/2020 = AGuglielmi

FILE NAME DATE/TIME USER





ARROW MAY FACE LEFT OR RIGHT, IT IS CONTRACTOR'S RESPONSIBILITY FOR PROPER ARROW ORIENTATION.

PEDESTRIAN PUSHBUTTON SIGNS: PEDESTRIAN PUSHBUTION SIGNS:
USE SIGN R10-31 (MUTCD).
SIZE OF SIGN SHALL BE 9" X 15".
INCLUDE TEXT AND PROPER DIRECTIONAL ARROWS:
"ROMNEY ROAD" FOR W2 (2)
"NIAGARA FALLS BLVD" FOR W4 (2) AND W8 (2)
"GLENALBY ROAD" FOR W6 (2)

R10-3i

#### TRAFFIC SIGNAL MODIFY AND REMOVAL NOTES:

ITEM 680.79003005 - REMOVE TRAFFIC SIGNAL INSTALLATION, US 62 AND ROMNEY/GLENALBY ROAD LOCATION SHALL INCLUDE THE FOLLOWING:

SW & NE QUADRANT: REMOVAL OF EXISTING TRAFFIC SIGNAL POLES, SPAN WIRES, SIGNAL SECTIONS, AND WIRING. RELOCATE EXISTING STREET SIGNS IN NE QUADRANT TO NEW TRAFFIC SIGNAL MAST ARM POLE. EXISTING CONTROLLER ATTACHED TO THE TRAFFIC SIGNAL POLE TO BE SALVAGED AND STORED FOR

NE QUADRANT: REMOVAL OF EXISTING PEDESTRIAN SIGNAL POLE, INCLUDING PEDESTRIAN SECTIONS, BUTTON, SIGN AND WIRING.

NW, SW & SE QUADRANT: REMOVAL OF EXISTING PUSH BUTTONS AND SIGNS ON EXISTING PEDESTRIAN POLES WHERE THERE IS APS BUTTON REPLACEMENT. IF NEW APS PUSH BUTTON REQUIRES NEW HOLES TO BE DRILLED IN POLE, EXISTING HOLES SHALL BE COVERED WITH A PLATE AND FASTENERS, COST

SW QUADRANT: REMOVAL OF EXISTING PULLBOX AND ABANDON EXISTING WIRES AND CONDUIT.

ITEM 680,77003005; MODIFY TRAFFIC SIGNAL INSTALLATION - US 62 AND ROMNEY/GLENALBY ROAD LOCATION SHALL INCLUDE THE FOLLOWING:

NE QUADRANT: REMOVAL OF EXISTING PEDESTRIAN POST TOP MOUNT ASSEMBLY AND BI-MODAL INDICATIONS, ADD NEW HAND/MAN AND COUNTDOWN TIMER INDICATION ASSEMBLY AND RE-INSTALL EXISTING BI-MODAL INDICATION TO NEW BI-DIRECTIONAL POST TOP MOUNT ASSEMBLY ON EXISTING POLE.

NW, SW & SE GUADRANTS: INSTALL NEW PULLBOX OVER EXISTING CONDUIT. REMOVE EXISTING WIRING AT NEW PULLBOX INSTALLATION. MODIFY EXISTING CONDUIT TO ATTACH TO THE NEW PULLBOX. PLACE NEW WIRING IN EXISTING CONDUIT LEADING TO EXISTING PEDESTRIAN TRAFFIC POLES BEING RETAINED.

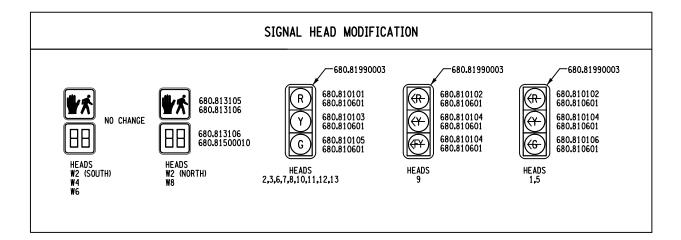
#### **ELECTRICAL SPECIALTY WORK NOTES:**

ITEM 690.11000305- SPECIALTY WORK (ELECTRICAL), (EXTRA WORK FOR OH ELECTRIC FROM POWER SOURCE, DOWN TO CONTROLLER) SHALL INCLUDE THE

SW QUADRANT: REMOVE EXISTING POWER CABLE FROM CONNECTION TO POWER SOURCE AT THE POLE TO THE CONTROLLER, AND ANY CABLE CONNECTION WORK AT THE POWER SOURCE AND THE CONTROLLER, ALSO INCLUDES ANY INCIDENTAL WORK AND MATERIALS THAT ARE REQUIRED TO SATISFACTORILY COMPLETE THE INSTALLATION OF THE LECTION WITER LINEER THEM SOURCESCOODE. OF THE ELECTRIC METER UNDER ITEM 680.95600004.

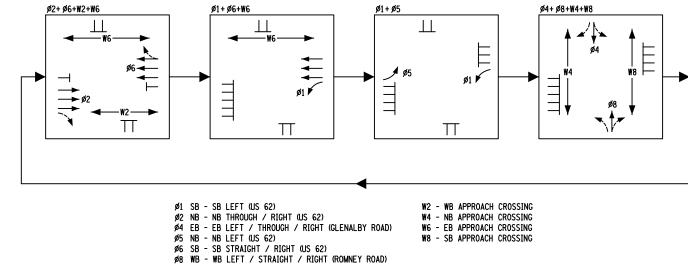
#### **WIRING NOTES:**

PEDESTRIAN SIGNAL CABLES SHALL BE CONNECTED TO AVAILABLE SWITCH PACK TERMINALS WITHIN THE CONTROLLER CABINET AND COORDINATED WITH THE APPROPRIATE VEHICULAR PHASE.



#### NOTES:

- UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON, A "WALKING MAN" INDICATION FOLLOWED BY A FLASHING "HAND" WITH COUNTDOWN TIMER INDICATION, FOLLOWED BY A STEADY "HAND" INDICATION WILL BE DISPLAYED.
- UNDER ITEM 680.80324515, NYSDOT WILL SUPPLY THE SIGNAL CONTROLLER, CABINET AND CABINET BASE. THE CONTRACTOR SHALL INSTALL THE CABINET. NYSDOT WILL INSTALL THE CONTROLLER, PERIPHERAL EQUIPMENT, AND SOFTWARE. CONTACT MARK SORGI OR JOHN RYAN AT 716-649-1426 AT LEAST 3 DAYS IN ADVANCE TO COORDINATE.



PHASING SEQUENCE



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE REGION: 5

PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER TRAFFIC SIGNAL DETAIL DRAWING NO. TSD-15 SIGNAL NO. 283

U.S. (NIAGARA FALLS BLVD.) AND GLENALBY ROAD AND ROMNEY ROAD

SHEET NO.

NEW YORK Department of Transportation

92

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

						OPE	RATIONS	SCHEDU	JLE								
		5	SB.			NB			WB			E	В	PEDESTRIAN HEADS			
FAC	E 1	2	3	4	5	6	7	8	9	10	11	12	13	W2	W4	W6	W8
PHASE																	
Ø2 + Ø6 + W2 + W6	<-R−	G	_ G	G	<r−< td=""><td>G</td><td>G</td><td>G</td><td><r−< td=""><td>R</td><td>R</td><td>R</td><td>R</td><td>W/FDW</td><td>DW</td><td>W/FDW</td><td>DW</td></r−<></td></r−<>	G	G	G	<r−< td=""><td>R</td><td>R</td><td>R</td><td>R</td><td>W/FDW</td><td>DW</td><td>W/FDW</td><td>DW</td></r−<>	R	R	R	R	W/FDW	DW	W/FDW	DW
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(Ø2 + Ø6) RED CLEAR	←R	R	R	R	<del><r< del="">−</r<></del>	R	R	R	<del><r< del="">−</r<></del>	R	R	R	R	DW	DW	DW	DW
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Ø1 + Ø6 + W6	<b>←G</b> —	G	G	G	<-R—	R	R	R	<-R—	R	R	R	R	DW	DW	W/FDW	DW
(Ø1 + Ø6) YELLOW CLEAR	< <b>∀</b>	Y	Y	Υ	<del><r< del="">−</r<></del>	R	R	R	<del><r< del="">−</r<></del>	R	R	R	R	D'Và	₽₩V	DW	DW
(Ø1 + Ø6) RED CLEAR	<del><r< del="">−</r<></del>	R	R	R	<del><r< del="">−</r<></del>	R	R	R	← <del>R</del> —	R	R	R	R	DW	D₩	DW	DW
							THE	N									
Ø1 + Ø5	<del>&lt;</del> 6−	R	R	R	<del>&lt;</del> 6−	R	R	R	←R	R	R	R	R	DW	DW	DW	DW
(Ø1 + Ø5) YELLOW CLEAR		R	R	R	<Υ—	R	R	R	<del><r< del="">−</r<></del>	R	R	R	R	DŴ	DW'	DW	DW
(Ø1 + Ø5) RED CLEAR	←R	R	R	R	<del><r< del="">−</r<></del>	R	R	R	< <del>R</del> −	R	R	R	R	DW	DW	DW	DW
							THE	N			•						
Ø4 + Ø8 + W4 + W8	<del>&lt; R−</del>	R	R	R	< <b>R</b> ─	R	R	R	<del>&lt;</del> FY−	G	G	G	G	DW	W/FDW	DW	W/FDW
(Ø4 + Ø8) YELLOW CLEAR	<del>&lt; R</del> −	R	R	R	< <del>R</del> −	R	R	R	< <b>Y</b> −	Υ	Υ	Υ	Y	DW	DW	DW	DW
(Ø4 + Ø8) RED CLEAR	←R	R	R	R	←R	R	R	R	< <del>R</del> −	R	R	R	R	DW	DW	DW	DW
EMERGENCY FLASH	R	R	R	R	R	R	R	R	R	R	R	R	R	DARK	DARK	DARK	DARK

#### <u>LEGEND</u>

ALTERED BY: ON: AFFIX SEAL: ON: DRAFT NOT FOR CONSTRUCTION

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS: NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE REGION: 5

PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER TRAFFIC SIGNAL DETAIL SIGNAL NO. 283 U.S. (NIAGARA FALLS BLVD.) AND GLENALBY ROAD AND ROMNEY ROAD DRAWING NO. TSD-16

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

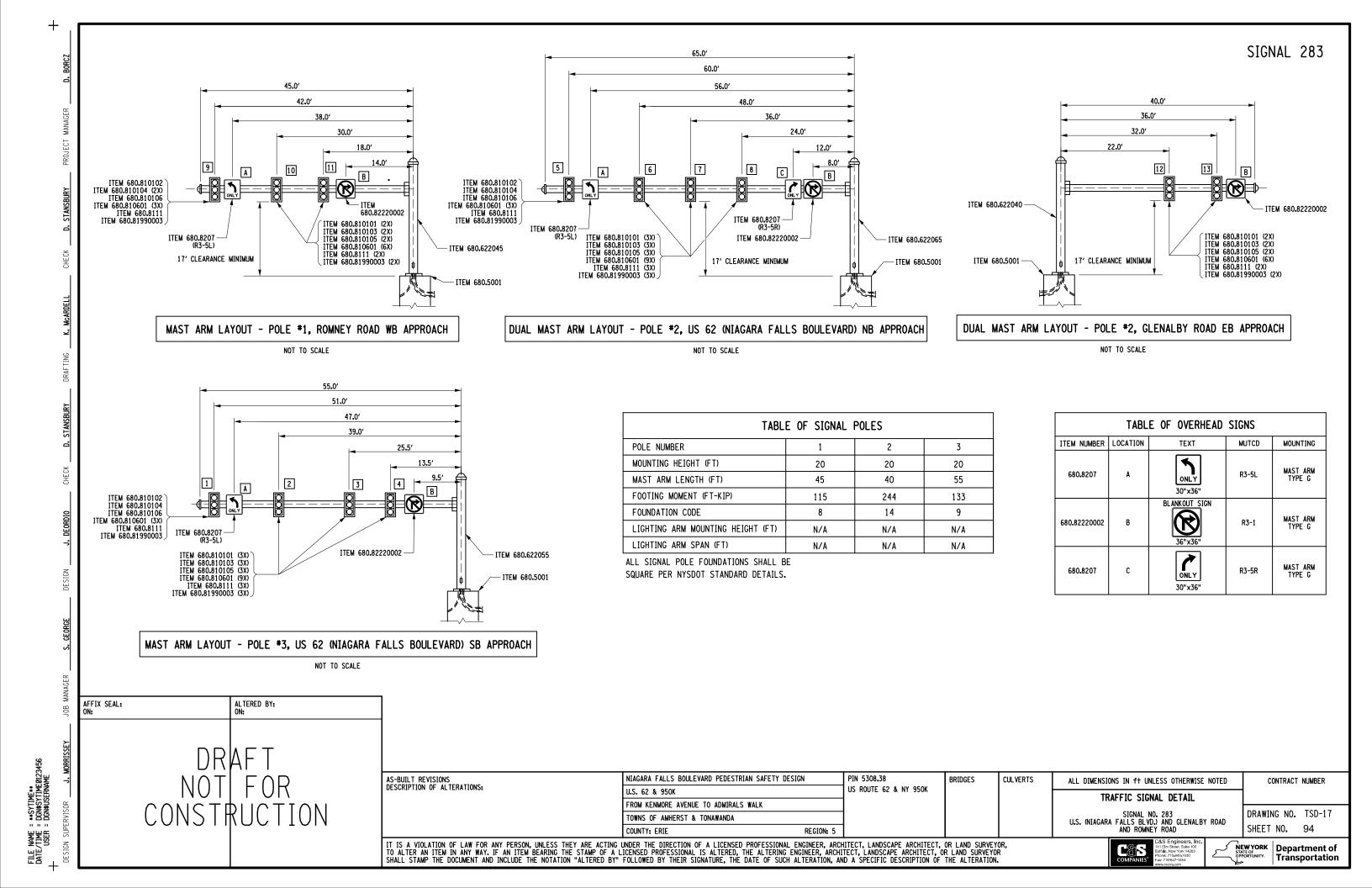


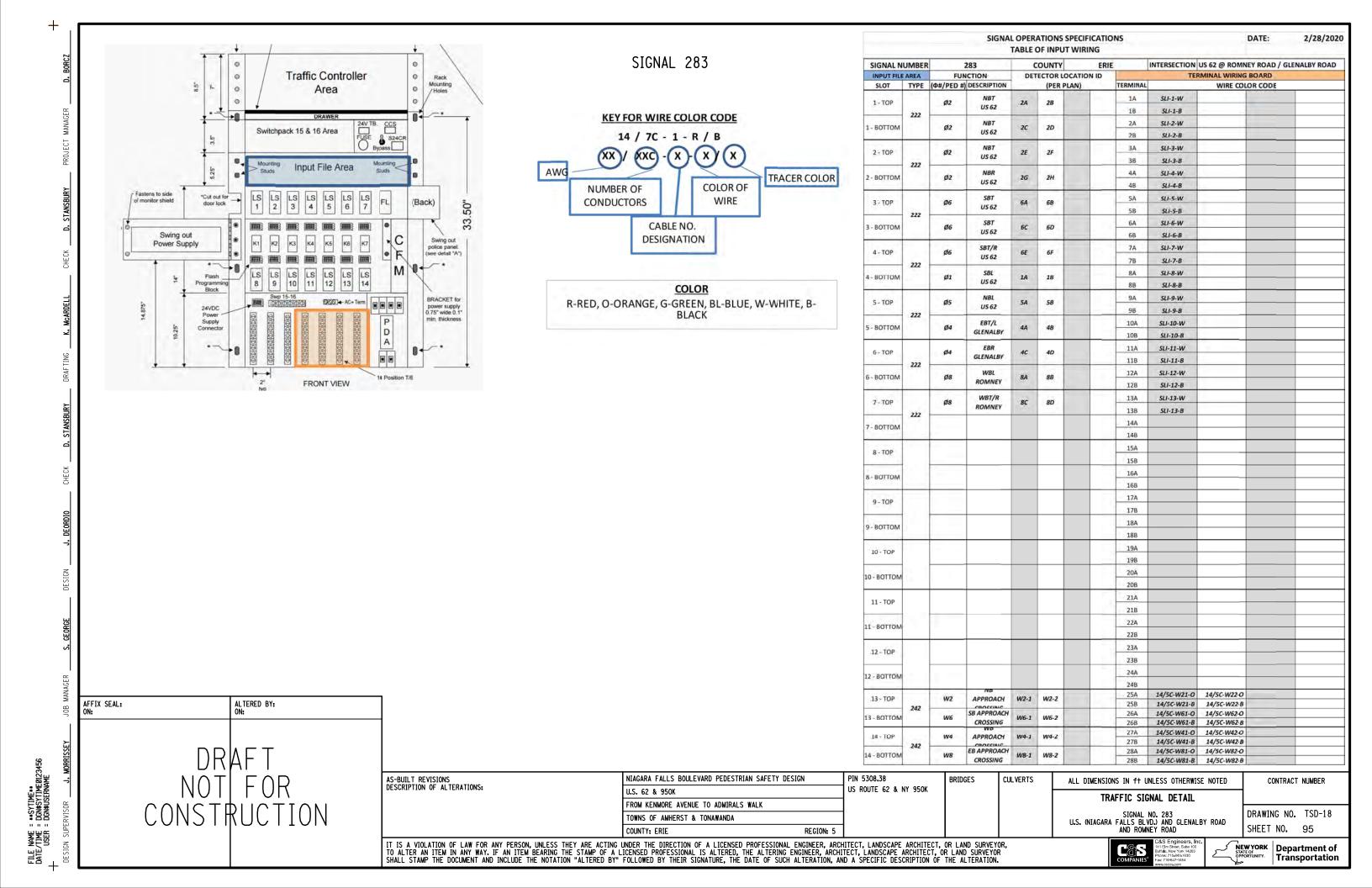


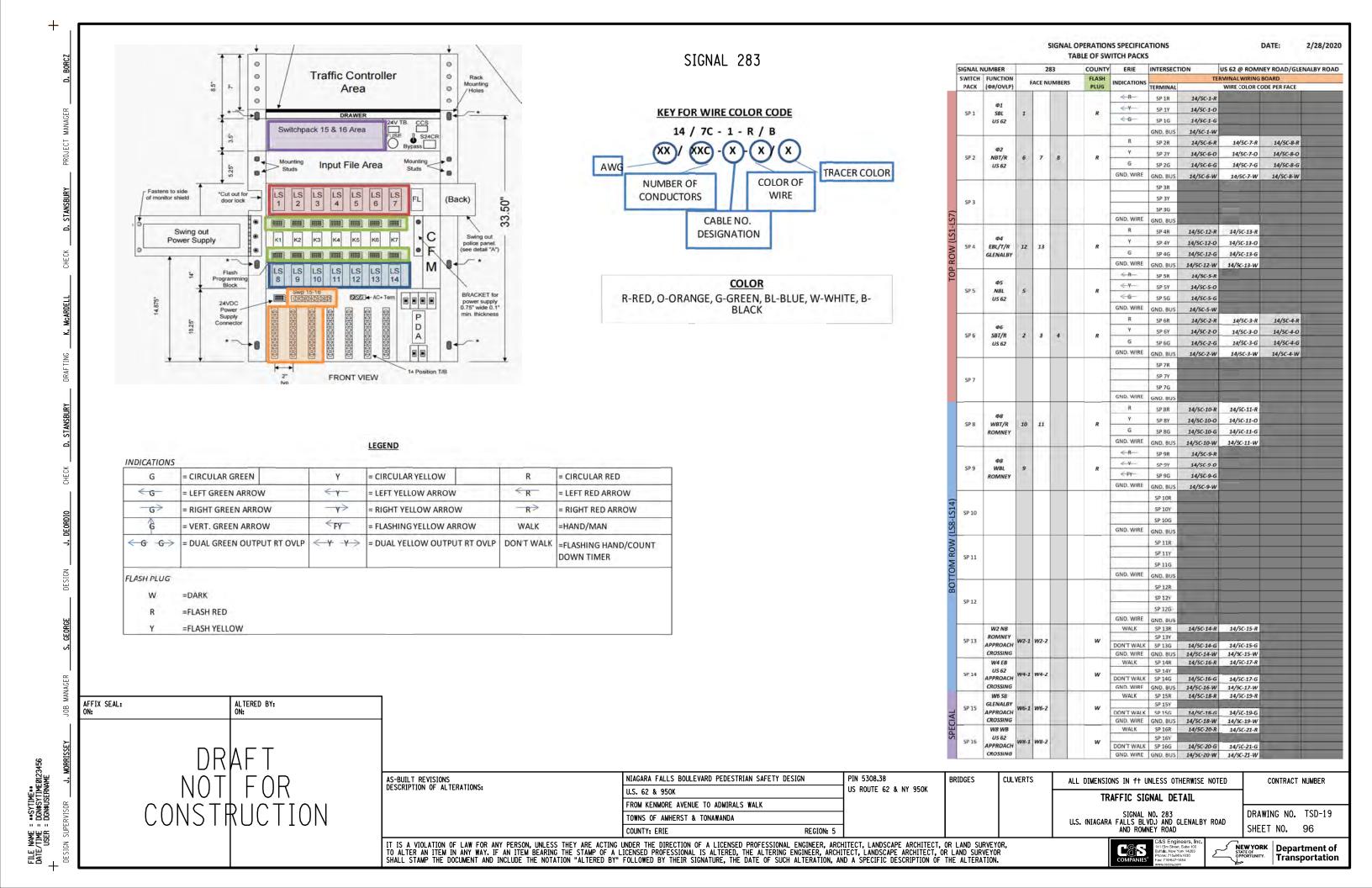
SHEET NO.

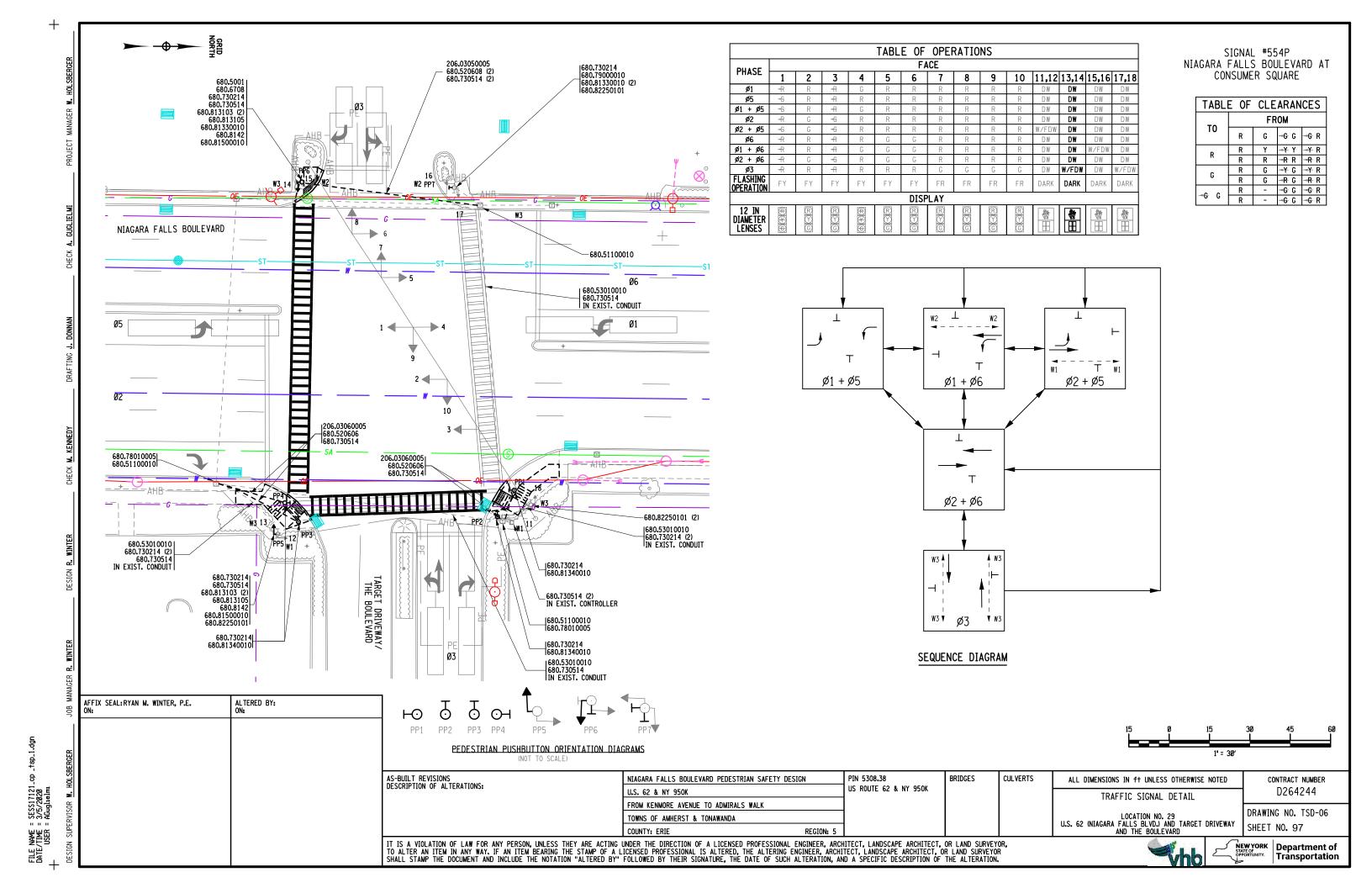
NEW YORK STATE OF OPPORTUNITY. Department of Transportation

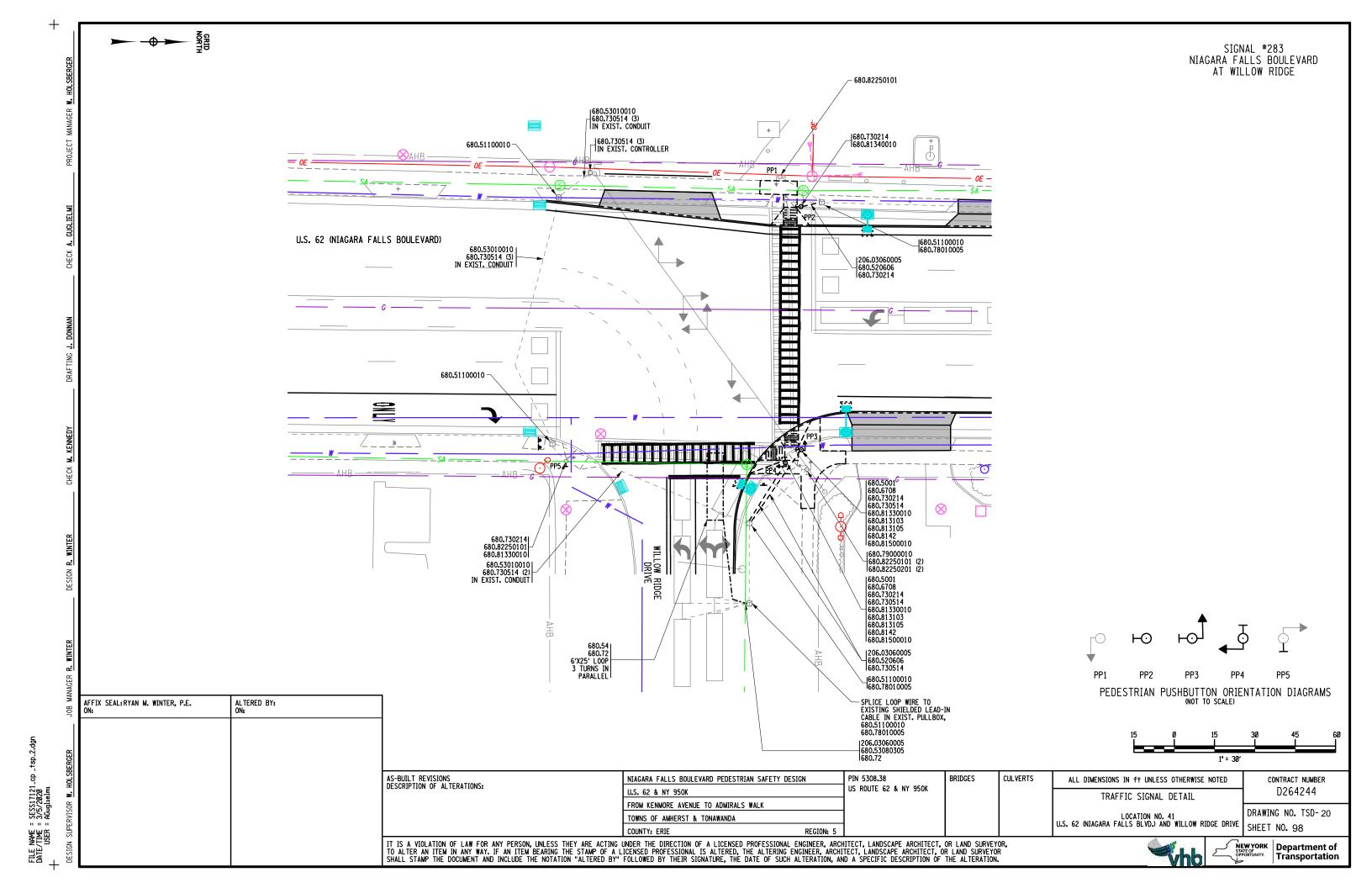
93

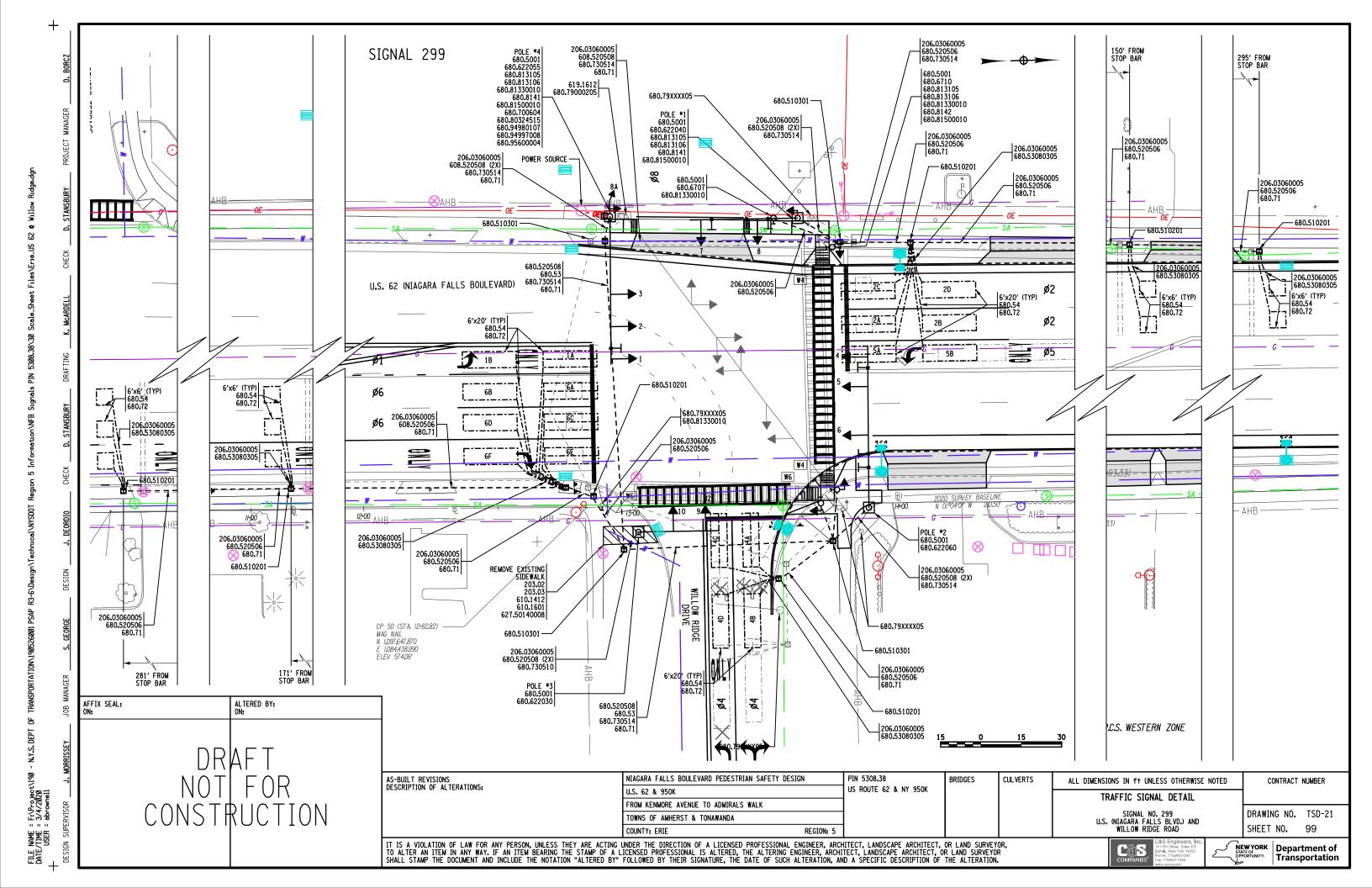












ARROW MAY FACE LEFT OR RIGHT, IT IS CONTRACTOR'S RESPONSIBILITY FOR PROPER ARROW ORIENTATION.

PEDESTRIAN PUSHBUTTON SIGNS: PEDESTRIAN PUSHBUTI ON SIGNS:
USE SIGN R10-31 (MUTCD).
SIZE OF SIGN SHALL BE 9" X 15".
INCLUDE TEXT AND PROPER DIRECTIONAL ARROWS:
"DRIVEMAY" FOR W2 (2)
"NIAGARA FALLS BLYD." FOR W4 (2)
"WIAGARA FALLS BLYD." FOR W4 (2)

R10-3i

#### TRAFFIC SIGNAL MODIFY AND REMOVAL NOTES:

ITEM 680.79000205 REMOVE TRAFFIC SIGNAL INSTALLATION - US 62 AND WILLOW RIDGE DRIVE LOCATION SHALL INCLUDE THE FOLLOWING:

SW & NE QUADRANT: REMOVAL OF EXISTING TRAFFIC SIGNAL POLES, SPAN WIRES, SIGNAL SECTIONS, AND WIRING. RELOCATE EXISTING SREET SIGNS IN NE QUADRANT TO NEW TRAFFIC SIGNAL MAST ARM POLE. EXISTING CONTROLLER TO BE SALVAGED AND STORED FOR PICKUP BY NYSDOT TRAFFIC FORCES.

NE & NW QUADRANT: REMOVAL OF EXISTING PEDESTRIAN POLE, INCLUDING PEDESTRIAN SECTION, BUTTON, SIGN AND WIRING.

SE QUADRANT: REMOVAL OF EXISTING PUSH BUTTONS AND SIGNS ON EXISTING PEDESTRIAN POLES WHERE THERE IS APS BUTTON REPLACEMENT. IF NEW APS PUSH BUTTON REQUIRES NEW HOLES TO BE DRILLED IN POLE, EXISTING HOLES SHALL BE COVERED WITH A PLATE AND FASTENERS, COST INCLUDED UNDER THIS ITEM. EXISTING PUSH BUTTON INPUT WIRING SHALL BE RE-USED FOR NEW APS PUSH BUTTONS AT THE EXISTING PEDESTRIAN POLES.

NE QUADRANT: REMOVAL OF EXISTING MAST ARM POLE AND OVERHEAD SIGNS. RELOCATE EXISTING PARKING SIGNS TO NEW SIGN POST.

#### **ELECTRICAL SPECIALTY WORK NOTES:**

ITEM 690.11000205- SPECIALTY WORK (ELECTRICAL), (EXTRA WORK FOR OHELECTRIC FROM POWER SOURCE, DOWN TO CONTROLLER) SHALL INCLUDE THE FOLLOWING:

SW QUADRANT: REMOVE EXISTING POWER CABLE FROM CONNECTION TO POWER SOURCE AT THE POLE TO THE CONTROLLER, INSTALL HANDHOLE ON POLE TO SPLICE INTO EXISTING CONDUIT (IF ANY) INSIDE THE POLE NEAR THE PROPOSED ELECTRIC METER AND DISCONNECT SWITCH, AND ANY CABLE CONNECTION WORK AT THE POWER SOURCE AND THE CONTROLLER. ALSO INCLUDES ANY INCIDENTAL WORK AND MATERIALS THAT ARE REQUIRED TO SATISFACTORILY COMPLETE THE INSTALLATION OF THE ELECTRIC METER UNDER ITEM 680.95600004.

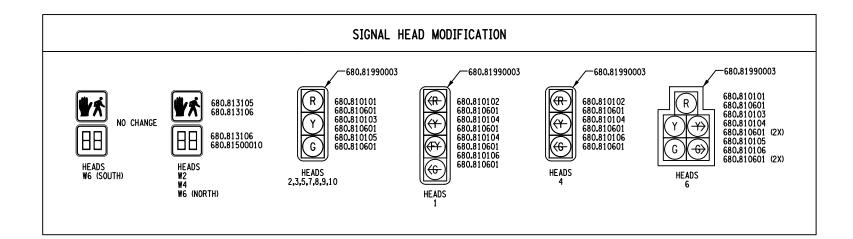
## **WIRING NOTES:**

1. PEDESTRIAN SIGNAL CABLES SHALL BE CONNECTED TO AVAILABLE SWITCH PACK TERMINALS WITHIN THE CONTROLLER CABINET AND COORDINATED WITH THE APPROPRIATE VEHICULAR PHASE.

ALTERED BY:

AS-BUILT REVISIONS

DESCRIPTION OF ALTERATIONS:



Ø1+Ø6+W6

## **LEGEND**

- CIRCULAR GREEN ←G - LEFT ARROW GREEN -G> - RIGHT ARROW GREEN - CIRCULAR RED - LEFT ARROW RED ←R - LEFT ARROW RED - RIGHT ARROW RED Y - CIRCULAR YELLOW

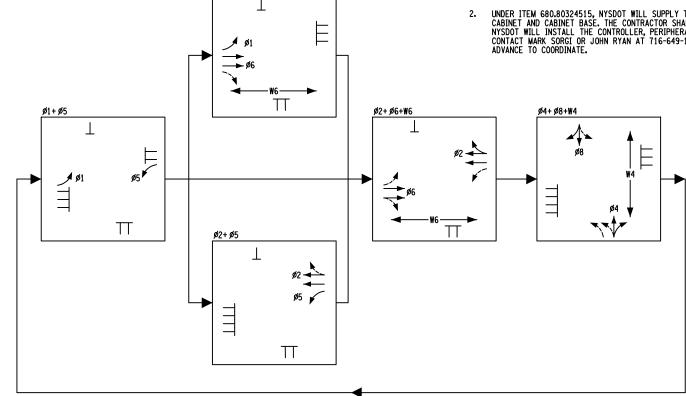
Y - LEFT ARROW YELLOW

RIGHT ARROW YELLOW

FR - FLASHING RED DW - HAND (DON'T WALK) W - MAN (WALK)

#### NOTES:

- UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON, A "WALKING MAN" INDICATION FOLLOWED BY A FLASHING "HAND" WITH COUNTDOWN TIMER INDICATION, FOLLOWED BY A STEADY "HAND" INDICATION WILL BE DISPLAYED.
- UNDER ITEM 680.80324515, NYSDOT WILL SUPPLY THE SIGNAL CONTROLLER, CABINET AND CABINET BASE. THE CONTRACTOR SHALL INSTALL THE CABINET. NYSDOT WILL INSTALL THE CONTROLLER, PERIPHERAL EQUIPMENT, AND SOFTWARE. CONTACT MARK SORGI OR JOHN RYAN AT 716-649-1426 AT LEAST 3 DAYS IN



Ø1 SB - SB LEFT (US 62)

Ø2 SB - SB THROUGH / RIGHT (US 62)

Ø4 WB - WB LEFT / THROUGH / RIGHT (WILLOW RIDGE DRIVE)

W2 - EB APPROACH CROSSING W4 - SB APPROACH CROSSING W6 - WB APPROACH CROSSING

ø5 NB - NB LEFT (US 62)

ø5 NB - NB THROUGH / RIGHT (US 62)

## PHASING SEQUENCE

NOT FOR CONSTRUCTION

PIN 5308.38 NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN BRIDGES CULVERTS ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER US ROUTE 62 & NY 950K U.S. 62 & 950K TRAFFIC SIGNAL DETAIL FROM KENMORE AVENUE TO ADMIRALS WALK DRAWING NO. TSD-22 SIGNAL NO. 299 TOWNS OF AMHERST & TONAWANDA U.S. (NIAGARA FALLS BLVD.) AND
WILLOW RIDGE ROAD SHEET NO. 100 COUNTY: ERIE REGION: 5 IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

AFFIX SEAL:

NEW YORK Department of Transportation

					<b>OPERATIO</b>	ONS SCH	IEDULE						
		SB				NB		V	VB	E	В	PEDESTRI	AN HEADS
	FACE	1	2	3	4	5	6	7	8	9	10	W4	W6
PHASE	$\overline{}$												
Ø1 + Ø5		<del>&lt;</del> 6−	R	R	<b>←G</b>	R	R	R	R	R	R	DW	DW
(Ø1 + Ø5) YELLOW CLEAR		< <u>Y</u>	R	R	< <u>Y</u>	R	R	R	R	R	R	DW	DW
(Ø1 + Ø5) RED CLEAR		< <u>R</u>	R	R	< <del>R</del>	R	R	R	R	R	R	DW	DW
						THEN							
Ø2 + Ø5		<del>&lt;</del> 6−	G	G	← <del>R</del>	R	R	R	R	R	R	DW	DW
(Ø2 + Ø5) YELLOW CLEAR		<y−< td=""><td>Υ</td><td>Υ</td><td>&lt;-R—</td><td>R</td><td>R</td><td>R</td><td>R</td><td>R</td><td>R</td><td>DW</td><td>DW</td></y−<>	Υ	Υ	<-R—	R	R	R	R	R	R	DW	DW
(Ø2 + Ø5) RED CLEAR		< <u>R</u>	R	R	<- <del>R</del> −	R	R	R	R	R	R	DW	DW
						THEN							
Ø1 + Ø6 + W6		<del><r< del="">−</r<></del>	R	R	<del>&lt;</del> 6−	G	G	R	R	R	R	DW	W/FDW
(Ø1 + Ø6) YELLOW CLEAR		<del><r< del="">−</r<></del>	R	R	< <u>Y</u>	Υ	Υ	R	R	R	R	DW	DW
(Ø1 + Ø6) RED CLEAR		<del><r< del="">−</r<></del>	R	R	<del><r< del="">−</r<></del>	R	R	R	R	R	R	DW	DW
						THEN							
Ø2 + Ø6 + W6		<del><fy−< del=""></fy−<></del>	G	G	< <del>FY−</del>	G	G	R	R	R	R	DW	W/FDW
(Ø2 + Ø6) YELLOW CLEAR		<b>←Y</b>	Υ	Υ	< <u>Y</u>	Υ	Υ	R	R	R	R	DW	DW
(Ø2 + Ø6) RED CLEAR		<del><r< del="">−</r<></del>	R	R	<del><r< del="">−</r<></del>	R	R	R	R	R	R	DW	DW
						THEN							
Ø4 + Ø8 + W4		<del>&lt;-R−</del>	R	R	<del>&lt;-R−</del>	R	R	G	G	G	G	W/FDW	DW
(Ø4 + Ø8) YELLOW CLEAR		<del>≪R</del>	R	R	< <del>-R−</del>	R	R	Υ	Υ	Υ	Y	DW	DW
(Ø4 + Ø8) RED CLEAR		<del>≺R</del>	R	R	<	R	R	R	R	R	R	DW	DW
EMERGENCY FLASH		R	R	R	R	R	R	R	R	R	R	DARK	DARK

# <u>Legend</u>

AFFIX SEAL: ON:	ALTERED BY: ON:
DR	AFT
NOT	( FOR
CONST	RUCTION

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

 NUMBER THE RESPONDENCE AS A LEAST-NOOF DEACHESTALL.	FUOTUEED	
COUNTY: ERIE	REGION:	5
TOWNS OF AMHERST & TONAWANDA		
FROM KENMORE AVENUE TO ADMIRALS WALK		
U.S. 62 & 950K		
NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DE	SIGN	

PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

CULVERTS

TRAFFIC SIGNAL DETAIL

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER

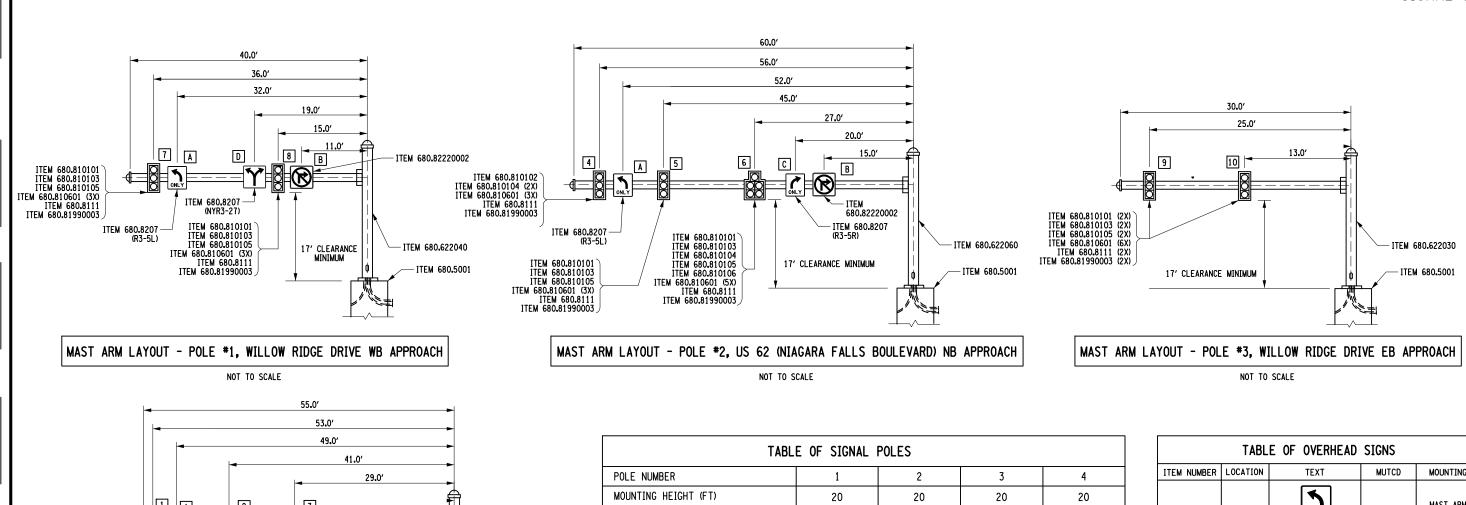
SIGNAL NO. 299 U.S. (NIAGARA FALLS BLVD.) AND WILLOW RIDGE ROAD DRAWING NO. TSD-23 SHEET NO. 101

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.









	53.0′
	49.0′
	41.0′
	29.0′
ITEM 680.810102 ITEM 680.810104 (2X) ITEM 680.810106 ITEM 680.810601 (4X) ITEM 680.8111 ITEM 680.81990003	TITEM 680.8207  ITEM 680.810101 (2X) ITEM 680.810105 (2X) ITEM 680.810105 (2X) ITEM 680.810105 (2X) ITEM 680.810105 (2X) ITEM 680.810601 (6X) ITEM 680.811900003 (2X)  ITEM 680.81990003 (2X)

MAST ARM LAYOUT - POLE #4, US 62 (NIAGARA FALLS BOULEVARD) SB APPROACH NOT TO SCALE

SQUARE PER NYSDOT STANDARD DETAILS.

	TABL	E OF OVERHEAD	SIGNS	
ITEM NUMBER	LOCATION	TEXT	MUTCD	MOUNTING
680.8207	A	ONLY 30"×36"	R3-5L	MAST ARM TYPE G
680.82220002	В	BLANKOUT SIGN	R3-1	MAST ARM TYPE G
680.8207	С	ONLY 30"×36"	R3-5R	MAST ARM TYPE G
680.8207	D	36"×36"	NYR3-27	MAST ARM TYPE G

AFFIX SEAL: ON: ALTERED BY: ON: DRAFT NOT FOR CONSTRUCTION

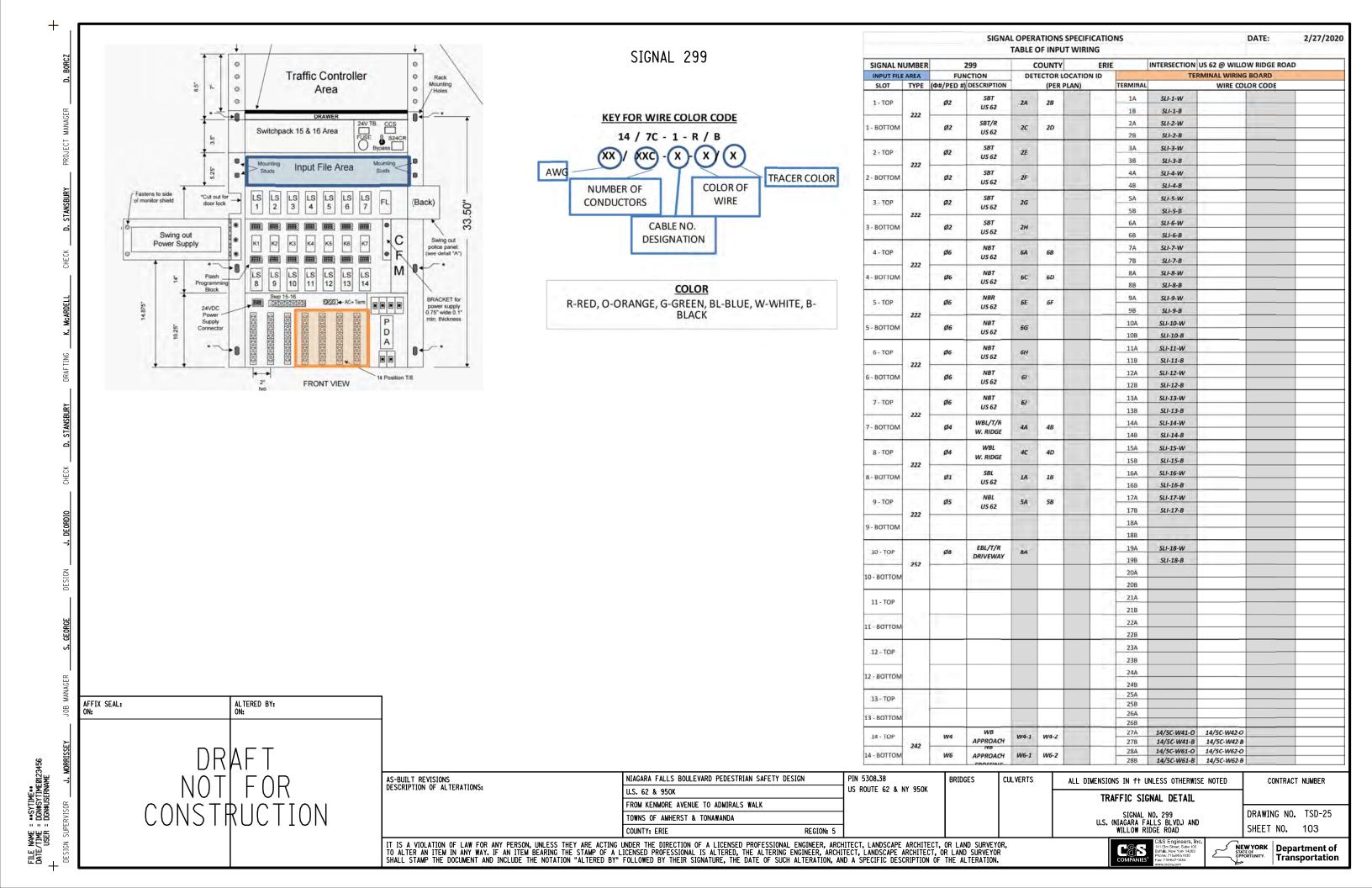
MAST ARM LENGTH (FT) 40 60 30 55 FOOTING MOMENT (FT-KIP) 75 123 112 157 FOUNDATION CODE 10 9 LIGHTING ARM MOUNTING HEIGHT (FT) N/A N/A N/A N/A LIGHTING ARM SPAN (FT) N/A N/A N/A N/A ALL SIGNAL POLE FOUNDATIONS SHALL BE

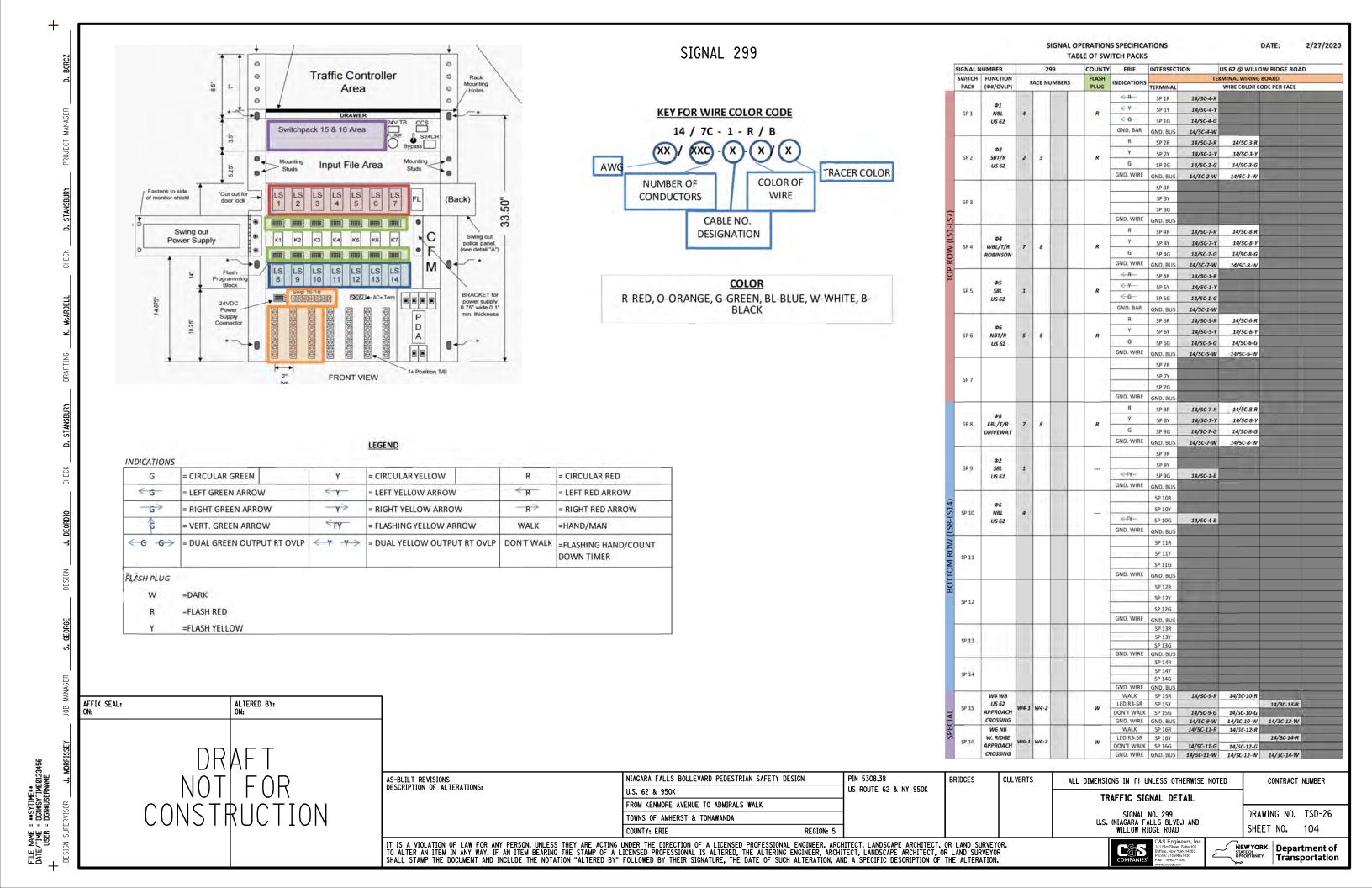
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS: NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN PIN 5308.38 CULVERTS BRIDGES ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED CONTRACT NUMBER US ROUTE 62 & NY 950K U.S. 62 & 950K TRAFFIC SIGNAL DETAIL FROM KENMORE AVENUE TO ADMIRALS WALK SIGNAL NO. 299 U.S. (NIAGARA FALLS BLVD.) AND WILLOW RIDGE ROAD DRAWING NO. TSD-24 TOWNS OF AMHERST & TONAWANDA SHEET NO. 102 COUNTY: ERIE REGION: 5

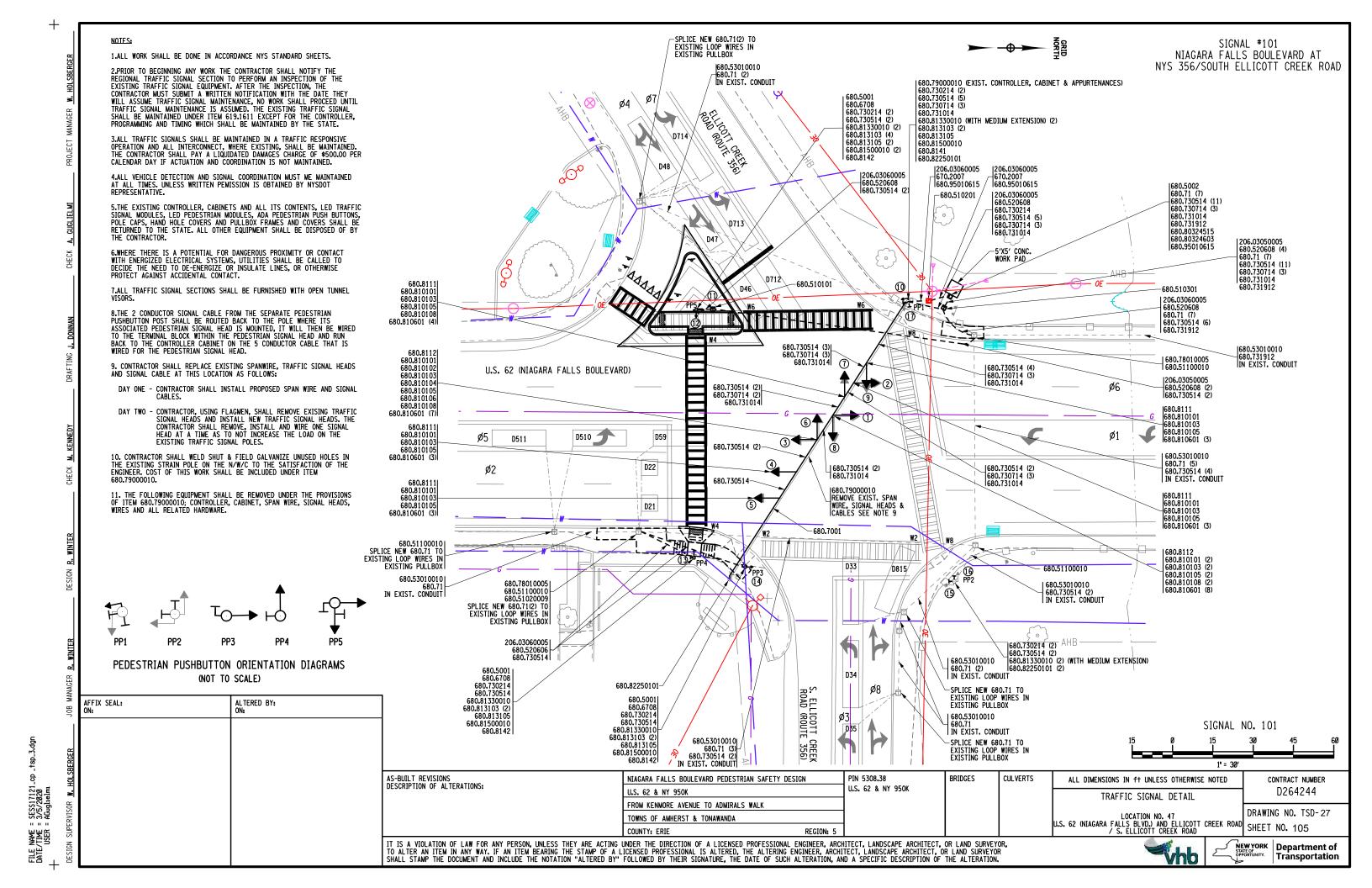
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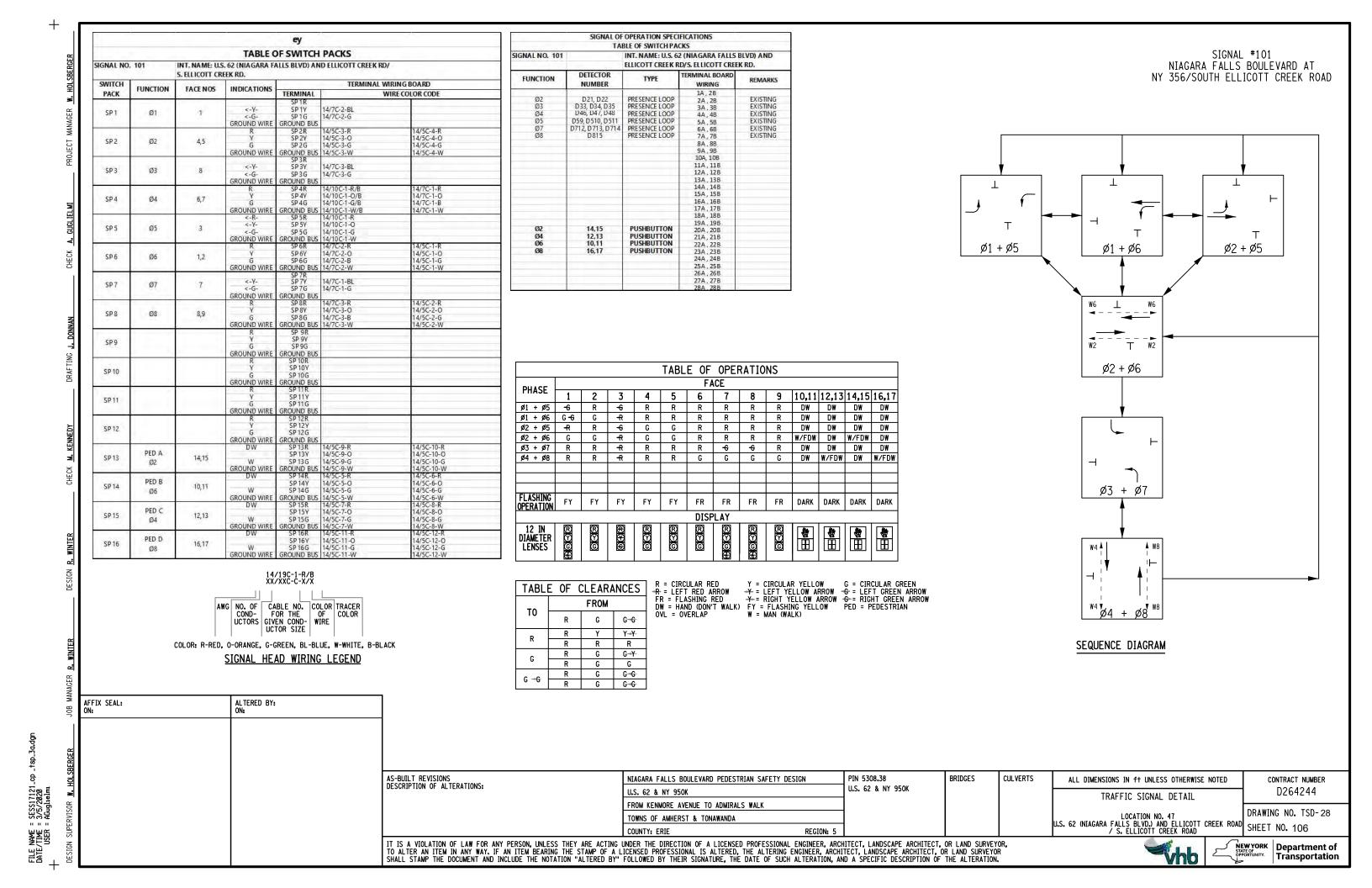


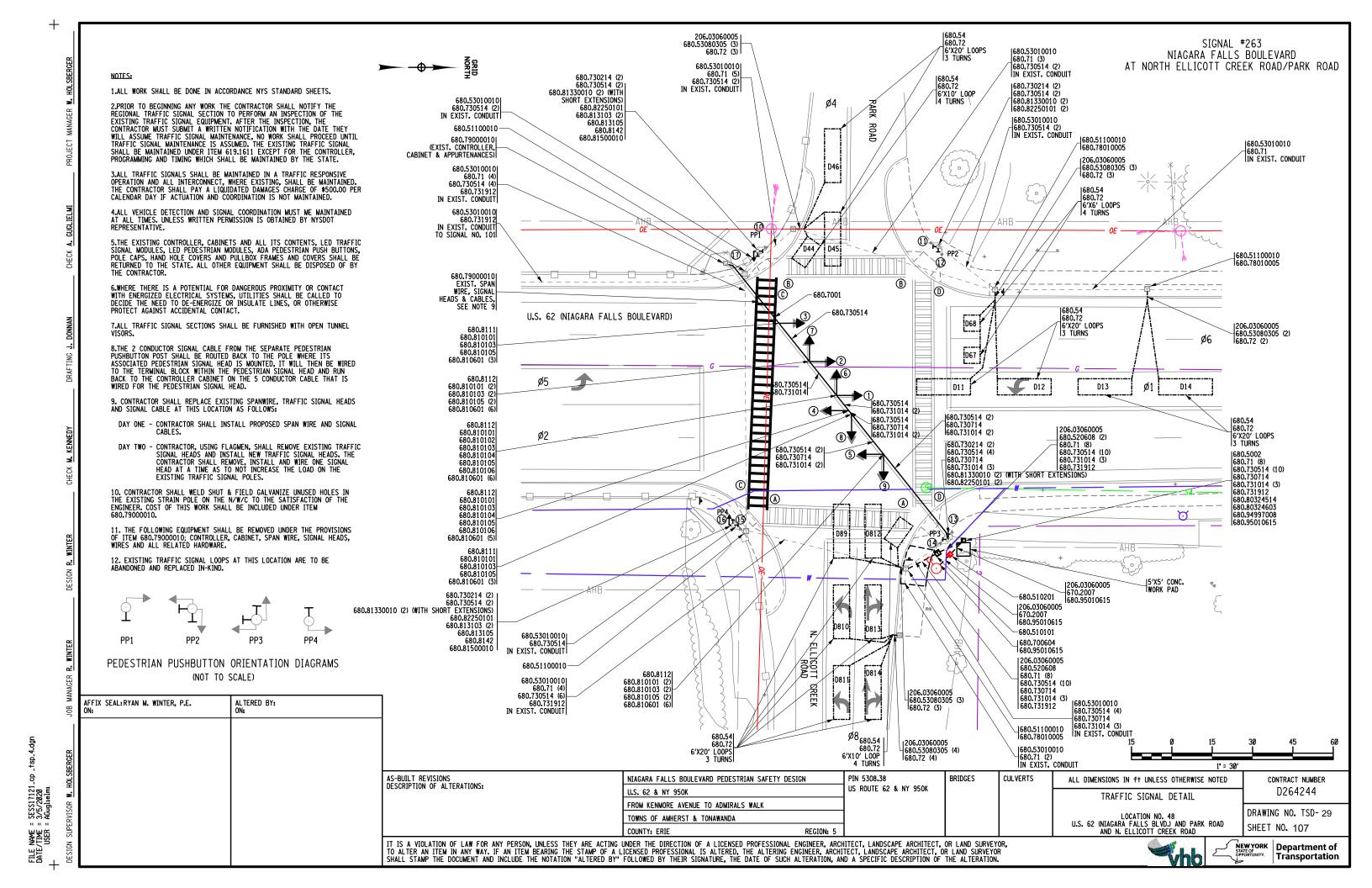
Transportation











SIGNAL OF OPERATION SPECIFICATIONS  TABLE OF SWITCH PACKS											
SIGNAL NO. 263	TAB			LVD) AND							
	PARK ROAD/N. ELLICOTT CREEK ROAD										
FUNCTION	DETECTOR NUMBER	TYPE		REMARKS							
Ø1	D11, D12, D13, D14	PRESENCE LOOP	1A , 2B								
	CALLED AND A VE	Jan Barrens	3A, 3B								
Ø4	D44, D45, D46	PRESENCE LOOP	4A,4B								
			5A,5B								
			6A, 6B								
Ø8	D89, D810, D811, D812, D813, D814	PRESENCE LOOP	7A,7B								
	1		8A,8B								
			J.S. 62 (NIAGARA FALLS BLVD /N. ELLICOTT CREEK ROAD  TERMINAL BOARD WIRING  OOP 1A, 2B 2A, 2B 3A, 3B OOP 4A, 4B 5A, 5B 6A, 6B OOP 7A, 7B  8A, 8B 9A, 9B 10A, 10B 11A, 11B 12A, 12B 13A, 13B 14A, 14B 15A, 15B 16A, 16B 17A, 17B 18A, 15B 16A, 16B 17A, 17B 18A, 18B 19A, 19B ON 20A, 20B ON 21A, 21B ON 22A, 22B ON 23A, 23B 24A, 24B 25A, 25B 26A, 26B								
			10A, 10B								
			11A, 11B								
			12A, 12B								
			13A, 13B								
			14A,14B								
			15A, 15B								
			16A, 16B								
			17A, 17B								
			18A, 18B								
		. D	19A, 19B								
Ø2	PED A	PUSHBUTTON	20A, 20B								
Ø4	PED C	PUSHBUTTON	21A, 21B								
Ø6	PED B	PUSHBUTTON	22A, 22B								
Ø8	PED D	PUSHBUTTON	23A, 23B								
			26A, 26B								
			27A, 27B								
			28V 28B								

				TABLI	E OF	OPEF	RATIO	NS					
PHASE						F.A	CE						
PHASE	1	2	3	4	5	6	7	8	9	10,11	12,13	14,15	16,17
ø1 + ø5	<-G-	R	R	<-G- R	R	R	R	R	R	DW	DW	DW	DW
ø1 + ø6	<-G-	G	G	R	R	R	R	R	R	DW	DW	DW	DW
ø2 + ø5	<-R-	R	R	<-G- G	G	R	R	R	R	DW	DW	DW	DW
ø2 + ø6	<-R-	G	G	G	G	R	R	R	R	W/FDW	DW	W/FDW	DW
ø4 + ø8	<-R-	R	R	R	R	G	G	G	G	DW	W/FDW	DW	W/FDW
FLASHING OPERATION	FR	FY	FY	FY	FY	FR	FR	FR	FR	DARK	DARK	DARK	DARK
						DISF	LAY						
12 IN	<b>₽</b>	R	R	R	R	R	R	R	R	<b>*</b>			<b>**</b>
DIAMETER LENSES	<b>AA</b>	<u>ම</u> යන	000	<b>⊕</b> ©	<u>ම</u> ලන	<u>මුල</u> ම	<u>ම</u> පම	<u>මුල</u> ම	000				
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TABL	E OF	CLEARANCES							
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Т0	R	G	G <-G-						
	R	Y	Y <-Y-						
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G <del>-G</del>	R	G	G <-G-						
ט ט	R	G	G <-G-						

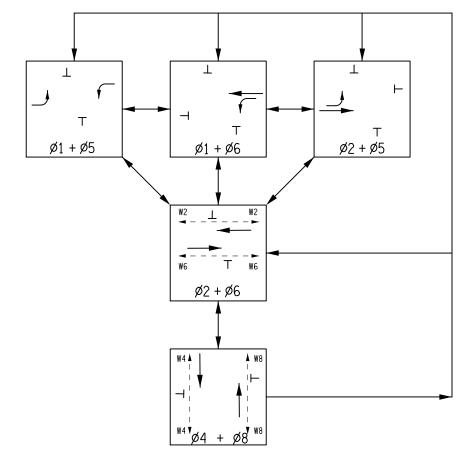
## **OPERATIONS LEGEND** Ø = PHASE

R = CIRCULAR RED Y = CIRCULAR YELLOW G = CIRCULAR GREEN
+R = LEFT RED ARROW +Y = LEFT YELLOW ARROW -6 = LEFT GREEN ARROW
DW = HAND (DON'T WALK)

FY = FLASHING YELLOW G = RIGHT GREEN ARROW
DW = HAND (DON'T WALK)

FY = FLASHING YELLOW PED = PEDESTRIAN
W = MAN (WALK)

SIGNAL #263 NIAGARA FALLS BOULEVARD AT NORTH ELLICOTT CREEK ROAD/PARK ROAD



SEQUENCE DIAGRAM

14/5C-10-G

14/5C-6-G

SP 15V

SP 15G

GROUND BU

SP 16Y

SP 16G

GROUND WIRE

14/5C-9-G

14/5C-9-W

14/5C-5-G

14/19C-1-R/B XX/XXC-C-X/X AWG NO. OF CABLE NO. COLOR TRACER OF COND-UCTORS GIVEN COND-UCTOR SIZE COLOR: R-RED, O-ORANGE, G-GREEN, BL-BLUE, W-WHITE, B-BLACK

SIGNAL HEAD WIRING LEGEND

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS: NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN PIN 5308.38 BRIDGES CULVERTS ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED U.S. 62 & NY 950K U.S. 62 & NY 950K TRAFFIC SIGNAL DETAIL FROM KENMORE AVENUE TO ADMIRALS WALK LOCATION NO. 48
U.S. 62 (NIAGARA FALLS BLVD.) AND PARK ROAD
AND N. ELLICOTT CREEK ROAD TOWNS OF AMHERST & TONAWANDA

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NEW YORK STATE OF OPPORTUNITY. Department of Transportation Transportation

SHEET NO. 108

CONTRACT NUMBER

D264244

DRAWING NO. TSD- 30

= SESS17121\_ = 3/5/2020 = AGuglielmi FILE NAME : DATE/TIME : USER :

SP 15

SP 16

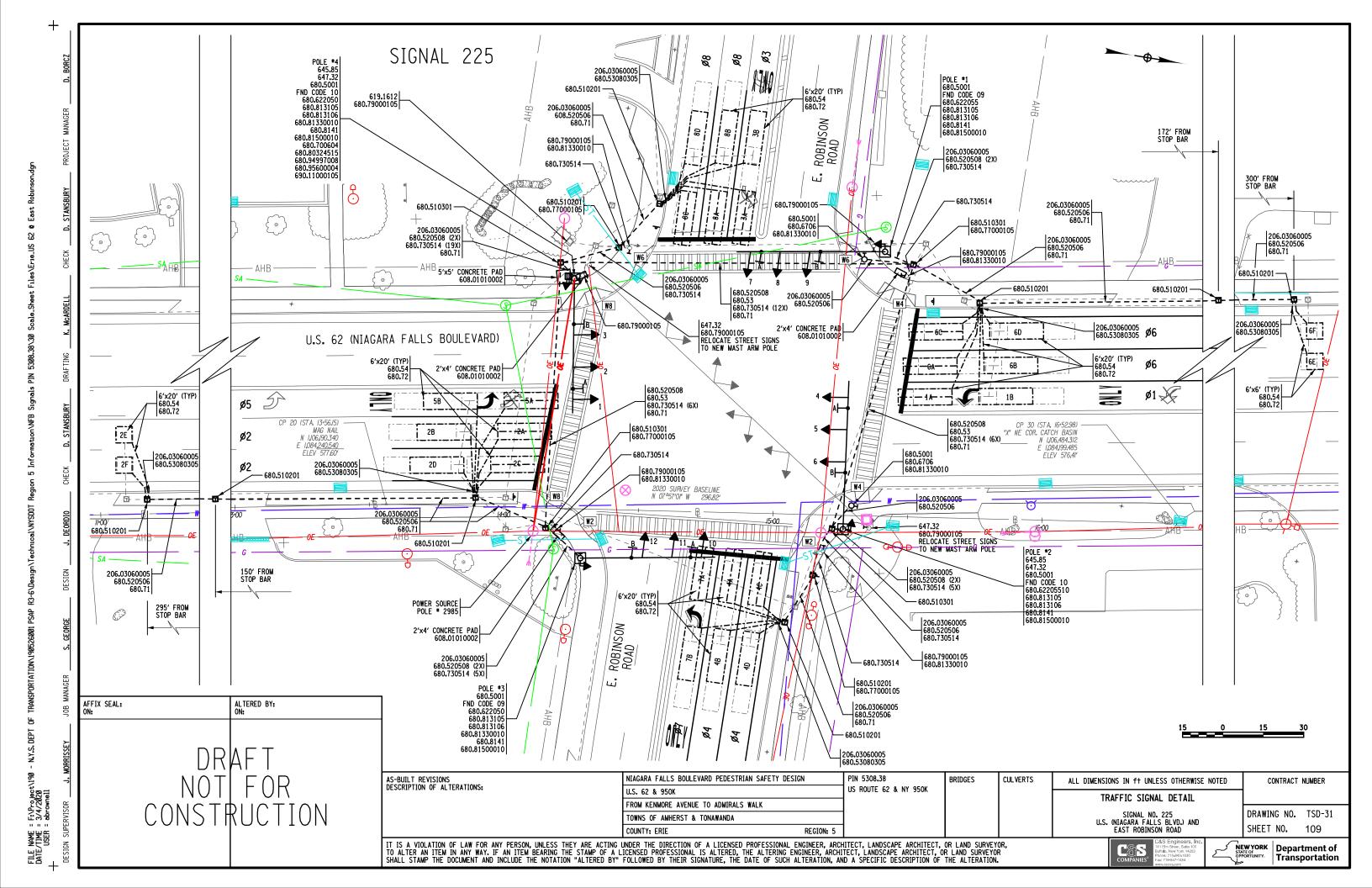
AFFIX SEAL: ON:

Ø4

PED D

22,23

ALTERED BY:



DON'T START Finish Crossing It Started

ARROW MAY FACE LEFT OR RIGHT, IT IS CONTRACTOR'S RESPONSIBILITY FOR PROPER ARROW ORIENTATION.

PEDESTRIAN PUSHBUTTON SIGNS: USE SIGN R10-31 (MUTCD). SIZE OF SIGN SHALL BE 9" X 15". INCLUDE TEXT AND PROPER DIRECTIONAL ARROWS: "NIAGARA FALLS BLVD" FOR W4 (2) AND W8 (2)
"EAST ROBINSON ROAD" FOR W2 (2) AND W6 (2)

TRAFFIC SIGNAL MODIFY AND REMOVAL NOTES:

ITEM 680.79000105 - REMOVE TRAFFIC SIGNAL INSTALLATION, US 62 AND EAST ROBINSON ROAD LOCATION SHALL INCLUDE THE FOLLOWING:

SW & NE QUADRANT: REMOVAL OF EXISTING TRAFFIC SIGNAL POLES, SPAN WIRES, PEDESTRIAN AND SIGNAL SECTIONS, AND WIRING. RELOCATE EXISTING STREET SIGNS TO NEW TRAFFIC SIGNAL MAST ARM POLE. EXISTING STANDALONE CONTROLLER IN SW QUADRANT TO BE SALVAGED AND STORED FOR PICKUP BY NYSDOT TRAFFIC FORCES.

SW QUADRANT: REMOVAL OF EXISTING PEDESTRIAN BUTTON POLE, INCLUDING PEDESTRIAN BUTTON, SIGN AND WIRING. REMOVAL OF EXISTING PUSH BUTTONS AND SIGNS ON EXISTING PEDESTRIAN POLES WHERE THERE IS APS BUTTON REPLACEMENT. IF NEW APS PUSH BUTTON REQUIRES NEW HOLES TO BE DRILLED IN POLE, EXISTING HOLES SHALL BE COVERED WITH A PLATE AND FASTENERS, COST INCLUDED UNDER THIS ITEM.

NE & SE QUADRANT: REMOVAL OF EXISTING PUSH BUTTONS AND SIGNS ON EXISTING PEDESTRIAN POLES WHERE THERE IS APS BUTTON REPLACEMENT. IF NEW APS PUSH BUTTON REQUIRES NEW HOLES TO BE DRILLED IN POLE, EXISTING HOLES SHALL BE COVERED WITH A PLATE AND FASTENERS, COST INCLUDED UNDER THIS ITEM.

NW QUADRANT: REMOVAL OF EXISTING PEDESTRIAN SIGNAL POLE, INCLUDING PEDESTRIAN SIGNAL INDICATIONS, BUTTONS, SIGNS AND WIRING. REMOVAL OF EXISTING PUSH BUTTONS AND SIGNS ON EXISTING PEDESTRIAN POLES WHERE THERE IS APS BUTTON REPLACEMENT. IF NEW APS PUSH BUTTON REQUIRES NEW HOLES TO BE DRILLED IN POLE, EXISTING HOLES SHALL BE COVERED WITH A PLATE AND FASTENERS, COST INCLUDED UNDER THIS ITEM.

ITEM 680.77000105 - MODIFY TRAFFIC SIGNAL INSTALLATION, US 62 AND EAST ROBINSON ROAD LOCATION SHALL INCLUDE THE FOLLOWING:

ALL QUADRANTS: INSTALL NEW PULLBOX OVER EXISTING CONDUIT. REMOVE EXISTING WIRING AT NEW PULLBOX INSTALLATION. MODIFY EXISTING CONDUIT TO ATTACH TO THE NEW PULLBOX. PLACE NEW WIRING IN EXISTING CONDUIT LEADING TO EXISTING PEDESTRIAN TRAFFIC POLES BEING

## ELECTRICAL SPECIALTY WORK NOTES:

ITEM 690,11000105- SPECIALTY WORK (ELECTRICAL), (EXTRA WORK FOR OH ELECTRIC FROM POWER SOURCE, DOWN TO CONTROLLER) SHALL INCLUDE THE

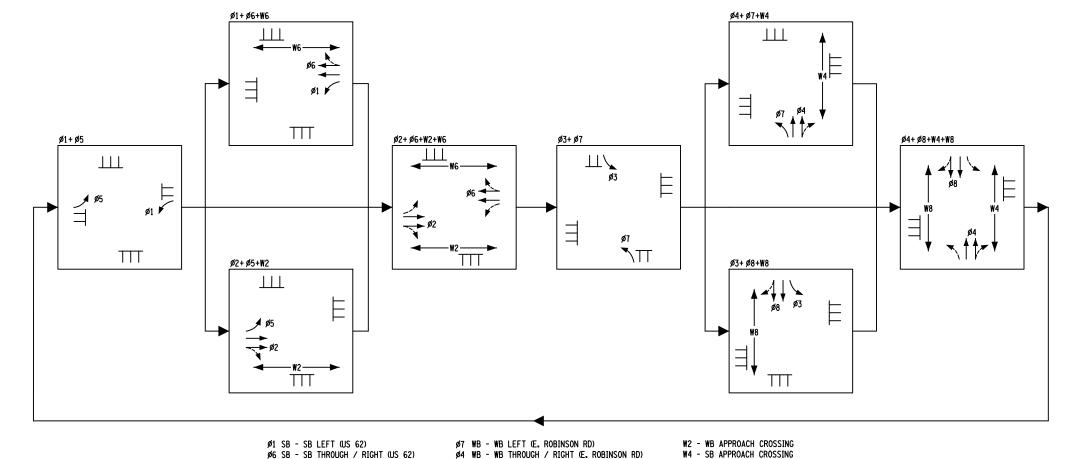
SW QUADRANT: REMOVE EXISTING POWER CABLE FROM CONNECTION TO POWER SOURCE AT THE POLE TO THE CONTROLLER, AND ANY CABLE CONNECTION WORK AT THE POWER SOURCE AND THE CONTROLLER, ALSO INCLUDES ANY INCIDENTAL WORK AND MATERIALS THAT ARE REQUIRED TO SATISFACTORILY COMPLETE THE INSTALLATION OF THE ELECTRIC METER UNDER ITEM 680,95600004.

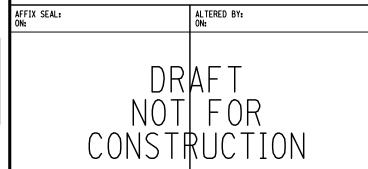
# **WIRING NOTES:**

1. PEDESTRIAN SIGNAL CABLES SHALL BE CONNECTED TO AVAILABLE SWITCH PACK TERMINALS WITHIN THE CONTROLLER CABINET AND COORDINATED WITH THE APPROPRIATE VEHICULAR PHASE.

SIGNAL HEAD MODIFICATION -680.81990003 -680.81990003 <del>(R</del>) (R)680.810601 680.810601 680.813106 (<del>(</del>\) 680.810104 680.810601 680.810103 NO CHANGE 680.810601 88 680.813106 (H) (H) 680.810105 680.810104 (G)680.81500010 680.810601 680.810601 680.810106 680.810601 HEADS W4 (EAST) W6 (NORTH) 2,3,5,6,8,9,11,12 W4 (WEST) W6 (SOUTH) W8 (EAST) HEADS 1,4,7,10

- UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON, A "WALKING MAN" INDICATION FOLLOWED BY A FLASHING "HAND" WITH COUNTDOWN TIMER INDICATION, FOLLOWED BY A STEADY "HAND" INDICATION WILL BE DISPLAYED.
- UNDER ITEM 680.80324515, NYSDOT WILL SUPPLY THE SIGNAL CONTROLLER, CABINET AND CABINET BASE. THE CONTRACTOR SHALL INSTALL THE CABINET. NYSDOT WILL INSTALL THE CONTROLLER, PERIPHERAL EQUIPMENT, AND SOFTWARE. CONTACT MARK SORGI OR JOHN RYAN AT 716-649-1426 AT LEAST 3 DAYS IN ADVANCE TO COORDINATE.





AS-BUILT REVISIONS

DESCRIPTION OF ALTERATIONS:

REGION: 5

#2 NB - NB THROUGH / RIGHT (US 62)

Ø5 NB - NB LEFT (US 62)

ø3 EB - EB LEFT (E. ROBINSON RD) Ø8 EB - EB THROUGH / RIGHT (E. ROBINSON RD)

W4 - SB APPROACH CROSSING Ø4 WB - WB THROUGH / RIGHT (E. ROBINSON RD) W6 - EB APPROACH CROSSING W8 - NB APPROACH CROSSING

## PHASING SEQUENCE

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & 950K FROM KENMORE AVENUE TO ADMIRALS WALK

PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED TRAFFIC SIGNAL DETAIL

U.S. (NIAGARA FALLS BLVD.) AND EAST ROBINSON ROAD

CONTRACT NUMBER DRAWING NO. TSD-32

COUNTY: ERIE IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

TOWNS OF AMHERST & TONAWANDA

NEW YORK | Department of Transportation

110

SHEET NO.

SIGNAL 225

						(	OPERATI	ONS SCH	EDULE								
$\overline{}$			SB			NB			WB			EB		PEDESTRIAN HEADS			
F	ACE	1	2	3	4	5	6	7	8	9	10	11	12	W2	W4	W6	W8
PHASE	$\overline{}$																
Ø1 + Ø5		<b>←G</b> -	R	R	<del>&lt;</del> G−	R	R	<del><r< del="">−</r<></del>	R	R	<del>&lt; R−</del>	R	R	DW	DW	DW	DW
(Ø1 + Ø5) YELLOW CLEAR		<b>←Y</b>	R	R	<Υ—	R	R	< <del>R</del> −	R	R	< <del>R</del>	R	R	DW	DW	DW	DW
(Ø1 + Ø5) RED CLEAR		<del>&lt; R</del> −	R	R	< <u>R</u>	R	R	< <del>R</del> −	R	R	<-R	R	R	DW	DW	DW	DW
								THEN									
Ø2 + Ø5 + W2		R	R	R	←G-	G	G	<del><r< del="">−</r<></del>	R	R	<-R-	R	R	W/FDW	DW	DW	DW
(Ø2 + Ø5) YELLOW CLEAR		R	R	R	< <b>Y</b> ─	Υ	Y	< <del>R</del> −	R	R	< <del>R</del>	R	R	DW	DW	DW	DW
(Ø2 + Ø5) RED CLEAR		R	R	R	< <del>R</del>	R	R	←R	R	R	< <del>R</del>	R	R	DW	GWD.	_ DW	DW
								THEN							_		
Ø1 + Ø6 + W6		<del>&lt;</del> €-	G	G	<-R—	R	R	<-R—	R	R	<-R-	R	R	DW	DW	W/PER	DW
(Ø1 + Ø6) YELLOW CLEAR		<Υ—	Υ	Υ	←R	R	R	←R	R	R	←R	R	R	DW	DW	DW	DW
(Ø1 + Ø6) RED CLEAR		<del><r< del="">−</r<></del>	R	R	←R	R	R	< <del>R</del> −	R	R	< <del>R</del>	R	R	DW	DW	DW	DW
								THEN									
Ø2 + Ø6 + W2 + W6		<fy-< td=""><td>G</td><td>G</td><td><fy-< td=""><td>G</td><td>G</td><td><r—< td=""><td>R</td><td>R</td><td>&lt;-R−</td><td>R</td><td>R</td><td>W/FDW</td><td>DW</td><td>W/FDW</td><td>DW</td></r—<></td></fy-<></td></fy-<>	G	G	<fy-< td=""><td>G</td><td>G</td><td><r—< td=""><td>R</td><td>R</td><td>&lt;-R−</td><td>R</td><td>R</td><td>W/FDW</td><td>DW</td><td>W/FDW</td><td>DW</td></r—<></td></fy-<>	G	G	<r—< td=""><td>R</td><td>R</td><td>&lt;-R−</td><td>R</td><td>R</td><td>W/FDW</td><td>DW</td><td>W/FDW</td><td>DW</td></r—<>	R	R	<-R−	R	R	W/FDW	DW	W/FDW	DW
(Ø2 + Ø6) YELLOW CLEAR		<Υ—	Y	Y	< <b>∀</b>	Υ	Y	<del><r< del="">−</r<></del>	R	R	< <del>R</del>	R	R	DW	DW	DW	DW
(Ø2 + Ø6) RED CLEAR		←R	R	R	<del><r< del="">−</r<></del>	R	R	<del><r< del="">−</r<></del>	R	R	< <del>R</del> −	R	R	DW	DW	DW	DW
						,		THEN									
Ø3 + Ø7		←R—	R	R	< <b>R</b> ─	R	R	<del>&lt;</del> 6−	R	R	←G-	R	R	DW	DW	DW	DW
(Ø3 + Ø7) YELLOW CLEAR		←R	R	R	← <del>R</del>	R	R	< <b>∀</b>	R	R	< <u>Y</u>	R	R	DW	DW	DW	DW
(Ø3 + Ø7) RED CLEAR		←R	R	R	< <del>R</del> −	R	R	← <del>R</del>	R	R	<del><r< del=""></r<></del>	R	R	DW	DW	DW	DW
								THEN									
Ø4 + Ø7 + W4		←R—	R	R	< <b>R</b> −	R	R	<b>←G</b>	G	G	←R	R	R	DW	W/FDW	DW	DW
(Ø4 + Ø7) YELLOW CLEAR		<del><r< del="">−</r<></del>	R	R	← <del>R</del>	R	R	<Υ—	Υ	Υ	← <del>R</del>	R	R	DW	DW	DW	DW
(Ø4 + Ø7) RED CLEAR		<del><r< del="">−</r<></del>	R	R	< <del>R</del> −	R	R	← <del>R</del>	R	R	← <del>R</del>	R	R	DW	DW	DW	DW
								THEN									
Ø3 + Ø8 + W8		<del>&lt; R</del> −	R	R	< <b>R</b> −	R	R	R	R	R	<del>&lt;</del> 6	G	G	DW	DW	DW	W/FD
(Ø3 + Ø8) YELLOW CLEAR	$\neg$	←R	R	R	< <del>R</del> −	R	R	R	R	R	< <u>Y</u>	Υ	Y	DW	DW	DW	DW
(Ø3 + Ø8) RED CLEAR	$\neg$	<del><r< del="">−</r<></del>	R	R	< <del>R</del> −	R	R	R	R	R	<del><r< del="">−</r<></del>	R	R	DW	DW	DW	DW
								THEN									
Ø4 + Ø8 + W4 + W8		<del>&lt; R</del> −	R	R	<-R—	R	R	<fy-< td=""><td>G</td><td>G</td><td><fy-< td=""><td>G</td><td>G</td><td>DW</td><td>W/FDW</td><td>DW</td><td>W/FD</td></fy-<></td></fy-<>	G	G	<fy-< td=""><td>G</td><td>G</td><td>DW</td><td>W/FDW</td><td>DW</td><td>W/FD</td></fy-<>	G	G	DW	W/FDW	DW	W/FD
(Ø4 + Ø8) YELLOW CLEAR		<del><r−< del=""></r−<></del>	R	R	< <del>R</del> −	R	R	< <b>Y</b> −	Υ	Υ	< <b>Y</b> −	Υ	Υ	DW	DW	DW	DW
(Ø4 + Ø8) RED CLEAR	$\neg$	<del>&lt; R</del> −	R	R	< <del>R</del> −	R	R	← <del>R</del> −	R	R	<del>&lt; R−</del>	R	R	DW	DW	DW	DW
	$\neg$							1									
EMERGENCY FLASH		<del><r< del="">−</r<></del>	R	R	< <del>R</del> −	R	R	←R-	R	R	← <del>R</del> −	R	R	DARK	DARK	DARK	DAR

## <u>Legend</u>

G - CIRCULAR GREEN

- LEFT ARROW GREEN

- R - CIRCULAR RED

- - LEFT ARROW RED

- - LEFT ARROW RED

- - LEFT ARROW RED

- - CIRCULAR YELLOW

- - LEFT ARROW YELLOW

- - LEFT ARROW FLASHING YELLOW

- - RIGHT ARROW FLASHING YELLOW

- - RIGHT ARROW FLASHING YELLOW

- - RIGHT ARROW FLASHING YELLOW

- - LEFT ARROW FLASHING YELLOW

- - LEFT ARROW FLASHING YELLOW

- - LASHING RED

- FDW - FLASHING HAND (DON'T WALK)

- DW - HAND (DON'T WALK)

- WAN (WALK)

DRAFT NOT FOR CONSTRUCTION

ALTERED BY: ON:

AFFIX SEAL: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

NIAGARA FALLS BOULEVARD PEDESTRIAN SAFETY DESIGN U.S. 62 & 950K FROM KENMORE AVENUE TO ADMIRALS WALK TOWNS OF AMHERST & TONAWANDA COUNTY: ERIE REGION: 5 PIN 5308.38 BRIDGES US ROUTE 62 & NY 950K

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED TRAFFIC SIGNAL DETAIL

CONTRACT NUMBER

SIGNAL NO. 225 U.S. (NIAGARA FALLS BLVD.) AND EAST ROBINSON ROAD DRAWING NO. TSD-33 SHEET NO. 111

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NEW YORK STATE OF OPPORTUNITY. Department of Transportation

