



ADDENDUM 1
City of Newport News
IFB#2011-3749-2005

January 6, 2011

Purchasing Department, Office of the Purchasing Director
4th Floor, City Hall, 2400 Washington Avenue
Newport News, VA 23607

Phone: (757) 926-8031/ Fax: (757) 926-8038

<http://www.nngov.com/purchasing>

Roadway Improvement Project: Rock Landing Drive and Diligence Drive

Sealed bids subject to the conditions and instructions contained herein, will be received at the above office of the Purchasing Director, 4th Floor, City Hall, 2400 Washington Avenue, Newport News, Virginia 23607, until the time and date shown below (local prevailing time), for furnishing the items or services described in the bid.

It is agreed and understood this page and any following pages will constitute addendum 1, and shall be made part of the IFB document. Acknowledgement, showing receipt and acceptance of the change is to be returned in the manner specified.

Note the following change: Drawing Sheet DT-13.0, Page 55 of 58, provided with the original drawings was incorrect, and shall be replaced with the attached page.

Bid Due: 2:00 p.m., January 25, 2011

Shari D. Colvin

Contract Officer: _____
Shari D. Colvin, CPPB, Deputy Director, scolvin@nngov.com

Company Name: _____

Address: _____

City/State/Zip: _____

Telephone: _____ FAX No.: _____

E-mail: _____

Print Name: _____ Title: _____

Signature: _____ Date: _____

This form must be signed. All signatures must be original and not photocopies.



DESIGNED BY
DRAWN BY
CHECKED
APPROVED
DIRECTOR OF ENGINEERING
Date

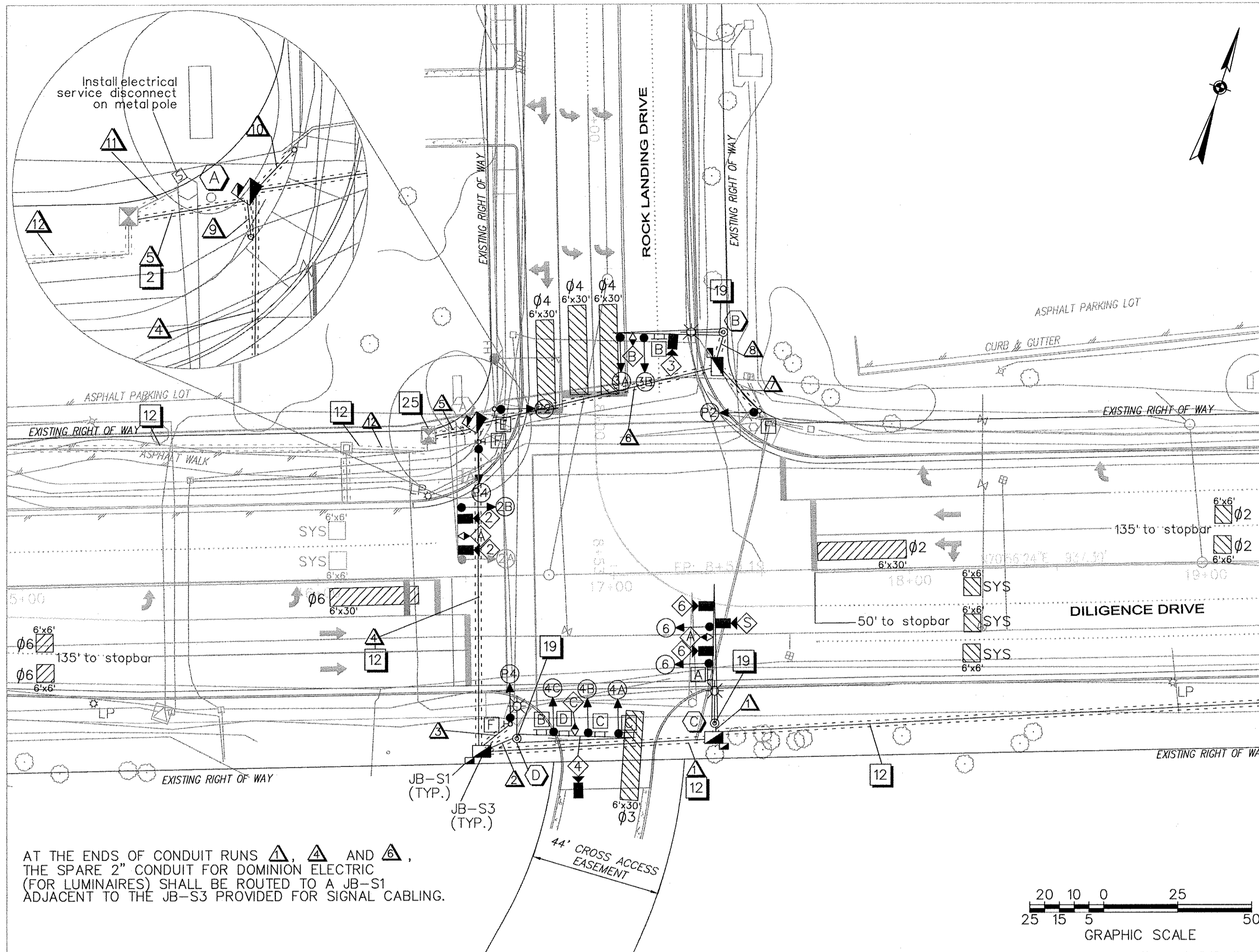
REVISIONS
DATE

CITY OF NEWPORT NEWS
DEPARTMENT OF ENGINEERING
2400 WASHINGTON AVE.
8th FLOOR
NEWPORT NEWS, VA.
PHONE: 926-8611

ROCK LANDING DR & DILIGENCE DR
SIGNAL DESIGN
SHEET 1 OF 1

FILE NO. 100002580
DATE 11/19/10
SCALE 1:25

SHEET
SG-1
56 of 58



AT THE ENDS OF CONDUIT RUNS Δ , Δ AND Δ , THE SPARE 2" CONDUIT FOR DOMINION ELECTRIC (FOR LUMINAIRES) SHALL BE ROUTED TO A JB-S1 ADJACENT TO THE JB-S3 PROVIDED FOR SIGNAL CABLING.

- CONTRACTOR SHALL CONTACT CITY OF NEWPORT NEWS ENGINEERING INSPECTION 48 HOURS IN ADVANCE OF CONSTRUCTION AT (757) 269-2470.
- REUSE EXISTING TRAFFIC SIGNAL CABINET. INTERCEPT EXISTING CONDUITS BETWEEN CABINET AND NEW JUNCTION BOX. MINIMIZE AMOUNT OF TIME TRAFFIC SIGNAL TO BE INOPERATIONAL. ALL NEW WIRES TO BE INSTALLED TO THE CLOSEST JUNCTION BOX BEFORE TURNING OFF SIGNAL TO REWIRE CABINET.
- CONTRACTOR TO INSTALL LOW-POWER LED TYPE SIGNALS FOR ALL NEW SIGNAL DISPLAYS INCLUDING ARROWS. ALL LED INDICATIONS SHALL MEET THE LATEST INSTITUTE OF TRANSPORTATION ENGINEER (ITE) STANDARDS.
- ALL NEW TRAFFIC SIGNAL HEADS SHALL BE POLYCARBONATE, MATCH EXISTING HEADS IN COLOR WITH GLASS LENSES, SOLID BLACK BACKPLATES AND HALF VISORS FOR EACH INDIVIDUAL 12" SECTION.
- ALL CONDUCTORS TO BE CONTINUOUS (NO SPLICES) BETWEEN THE TRAFFIC SIGNAL CABINET AND PROPOSED TRAFFIC SIGNAL HEADS.
- CONTRACTOR SHALL INSTALL TYPE B CLASS I PAVEMENT MARKINGS PER SECTION 704 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS AND PAVEMENT MARKING PLANS. ERADICATE ALL PAVEMENT MARKINGS WHICH CONFLICT WITH THE PROPOSED DESIGN AND LANE LINE MARKINGS WITHIN THE LIMITS OF THE INTERSECTION.
- CONTRACTOR SHALL INSTALL JB-S3 FOR ALL NEW JUNCTION BOXES. [EXCEPTION FOR JB-S1s FOR DOMINION ELECTRIC.]
- MULTIPLE CONFLICTS BETWEEN PROPOSED CONDUITS AND EXISTING UTILITIES MAY EXIST. CONTACT "MISS UTILITY" PRIOR TO HORIZONTAL DIRECTIONAL DRILLING OF CONDUIT.
- CONTRACTOR TO MOUNT VIDEO DETECTION UNITS AS INDICATED IN VIDEO MOUNTING DETAIL AND POLE SCHEDULE. VIDEO DETECTION DEVICES SHALL PROVIDE CAPABILITY TO FOCUS AND ZOOM AND BE PROVIDED WITH LED MONITOR AND SHALL BE TRAFICON VIP 3.2 SYSTEM OR APPROVED EQUIVALENT.
- NEW EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL BE 3M OPTICOM.
- ALL EXISTING TRAFFIC CONTROL EQUIPMENT, INCLUDING SIGNALIZATION AND SIGNING, THAT IS NOT USED IN THE IMPLEMENTATION OF THE NEW SIGNAL SYSTEM TO BE REMOVED BY CONTRACTOR, AND DELIVERED TO THE CITY OF NEWPORT NEWS, UPON COMPLETION OF NEW SIGNAL. PLEASE NOTIFY THE CITY OF NEWPORT NEWS SIGNAL SHOP SUPERINTENDENT ROGER HUNT AT 757-269-2452 AT LEAST 49 HOURS PRIOR TO DELIVERY OF REMOVED EQUIPMENT TO THE CITY OF NEWPORT NEWS SIGNAL SHOP, LOCATED AT 513 OYSTER POINT RD.
- CONDUIT FOR COMMUNICATIONS CABLE SHALL NOT BE SHARED. SEE CABLE ROUTING PLANS FOR ADDITIONAL INFORMATION ABOUT COMMUNICATION CABLE ROUTING.
- ABANDON IN PLACE ALL UNUSED CONDUITS.
- CONTRACTOR TO ENSURE EXISTING TRAFFIC SIGNAL REMAINS IN SERVICE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR SOIL BORINGS AND FOUNDATION DESIGNS FOR POLES (B), (C) AND (D).
- MAST ARM POLES SHALL CONFORM TO STANDARD MP-1. ALL HARDWARE SIGNAL POLE, MAST ARM, AND LUMINAIRE ARM TO BE GALVANIZED STEEL. NUT COVERS FOR EACH POLE SHALL BE PROVIDED.
- MAST ARM POLE FOUNDATIONS SHALL BE STANDARD PF-1.
- CONTRACTOR TO SUPPLY AND INSTALL SPARE 2" CONDUIT STUB OUT FOR ALL PROPOSED POLES.
- PROVIDE 2" CONDUIT TO NEAREST JB-S1 ELECTRICAL JUNCTION BOX AND PULL ELECTRICAL CONDUCTORS THROUGH POLE AND LUMINAIRE ARM LEAVING 3' OF SLACK CABLE SECURELY FASTENED TO END OF LUMINAIRE ARM AND IN THE JUNCTION BOX FOR CONNECTION OF LUMINAIRE BY DOMINION VIRGINIA POWER. INSTALLATION OF LUMINAIRES AND ELECTRICAL CONNECTION OF CONDUCTORS TO BE MADE BY DOMINION VIRGINIA POWER.
- MAST ARM POLE (C) SHALL BE DESIGNED TO ACCOMMODATE FUTURE EASTBOUND LEFT TURN 5-SECTION SIGNAL HEAD DISPLAY AT 44.2' AND A 30" X 36" SIGN AT 46.2'.
- MAST ARM POLE FOUNDATION LOCATIONS SHALL BE +/- 2FT OF THAT SHOWN ON POLE LOCATION DETAIL. CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND FIELD VERIFYING ALL FOUNDATIONS WITH MISS UTILITY PRIOR TO ORDERING ANY MAST ARM STRUCTURAL ASSEMBLIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE MAST ARM POLE FOUNDATION DESIGNS. THE DESIGNS SHALL BE PROVIDED BY A PROFESSIONAL ENGINEER LICENSED IN VIRGINIA. FOUNDATIONS SHALL BE A3.5 CONCRETE AS A MINIMUM (3500psi).
- THE CONTRACTOR SHALL PROVIDE MATERIALS TESTING DATA FOR FOUNDATION CONCRETE. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THE DATA SHALL INCLUDE γ , AIR, SLUMP, AND 7- AND 28-DAY BREAK RESULTS FOR TEST CYLINDERS. THE CITY MUST REVIEW AND APPROVE THE TESTING DATA BEFORE THE MAST ARM POLE CAN BE PLACED ON THE FOUNDATION.
- PEDESTRIAN PUSHBUTTONS IN THE SAME CORNER OF THE INTERSECTION SHALL BE AT LEAST 10 FEET APART.
- INSTALL UPS BATTERY BACKUP IN SUPPLEMENTAL CABINET BOLTED TO EXISTING SIGNAL CABINET.

CONDUIT/CONDUCTOR SCHEDULE

CIRCUIT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
SIZE	2x2" 1x2"E	2"	2"	3x2" 1x2"E	2x2" & 3"	2x2" 1x2"E	2"	2x2"	2"	2"	2"
TYPE	H	P	P	H	P	H	P	P	P	P	**
AWG #14	1C *	-	-	-	-	-	-	-	-	-	-
	2C(S)	-	-	-	-	-	-	-	-	-	2
	3C	-	1	1	4	1	1	-	1	1	-
	4C	-	1	1	4	1	1	-	1	1	-
	5C *	-	-	-	-	-	-	-	-	-	-
	7C *	1	1	-	2	3	1	-	1	-	1
#6	1C	-	-	-	-	-	-	-	-	-	-
EVP	1	1	-	2	3	1	-	1	-	-	1
VDC	2	1	-	3	4	1	-	1	-	-	2
COM***	1	-	-	1	1	1	-	1	-	-	1

E - DOMINION ELECTRIC (SPARE)
P - PVC CONDUIT (SCHEDULE 40)
H - HDPE HIGH DENSITY POLYETHYLENE CONDUIT
EVP - EMERGENCY VEHICLE PRE-EMPTION CABLE
* - SIGNAL CABLE TO CONFORM TO IMSA SEPC-20-1
(S) - SHIELDED CONDUCTOR CABLE
VDC - VIDEO DETECTION CABLE
COM - COMMUNICATIONS CABLE
** - EXISTING CONDUIT
*** - SEE CABLE ROUTING PLANS

POLE SCHEDULE

NO.	TYPE	ARM HEIGHT	POLE HEIGHT	SIGNAL MAST ARM LENGTH	VIDEO DETECTION MOUNTING				SIGNAL MOUNTING				EVP DETECTION MOUNTING	SIGN MOUNTING				POLE LOCATION (STATION)	
					32.0', 42.3'	27.7'	39.9'	33.6'	**	-	-	-		32.0'	27.0'	35.0'	30.6'		21.8'
(A)	**	**	**	**	32.0', 42.3'	27.7'	39.9'	33.6'	**	-	-	-	**	-	-	-	-	-	17+39, 82 ft
(B)	MP-1	20'	32'	38'	16.8'	27.0'	35.0'	30.6'	21.8'	-	-	-	-	-	-	-	-	-	17+33, 50 ft
(C)	MP-1	19.5'	32'	47'	24.4', 33.9', 39.6'	26.4'	38.2'	-	32.2'	21.4'	-	-	-	-	-	-	-	-	17+66, 53 ft
(D)	MP-1	19'	31'	40'	21.4'	12.4'	24.0'	34.2'	16.3'	8.5'	15.9'	28.4'	38.1'	-	-	-	-	-	16+66, 53 ft

** - EXISTING EQUIPMENT

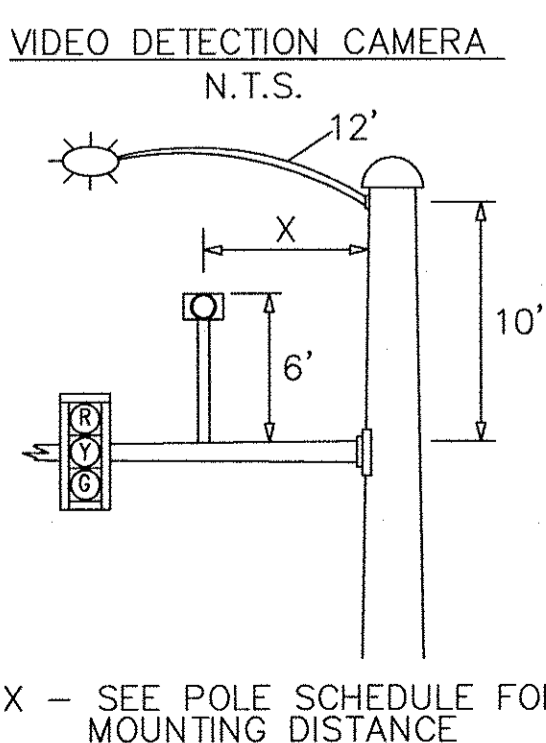
COLOR SEQUENCE CHART

PHASE SIGNAL	$\phi 2$ & $\phi 6$ R/W	$\phi 3$ R/W	$\phi 4$ R/W	FLASH
2A	G	-	-	Y
2B	G	-	G	Y
3A	-	G/G	-	R
3B	-	G	-	R
4A	-	-	G	R
4B	-	-	G/G	R
4C	-	-	G	R
6	G	-	-	Y
P2	W	-	-	BLANK
P4	-	-	W	BLANK

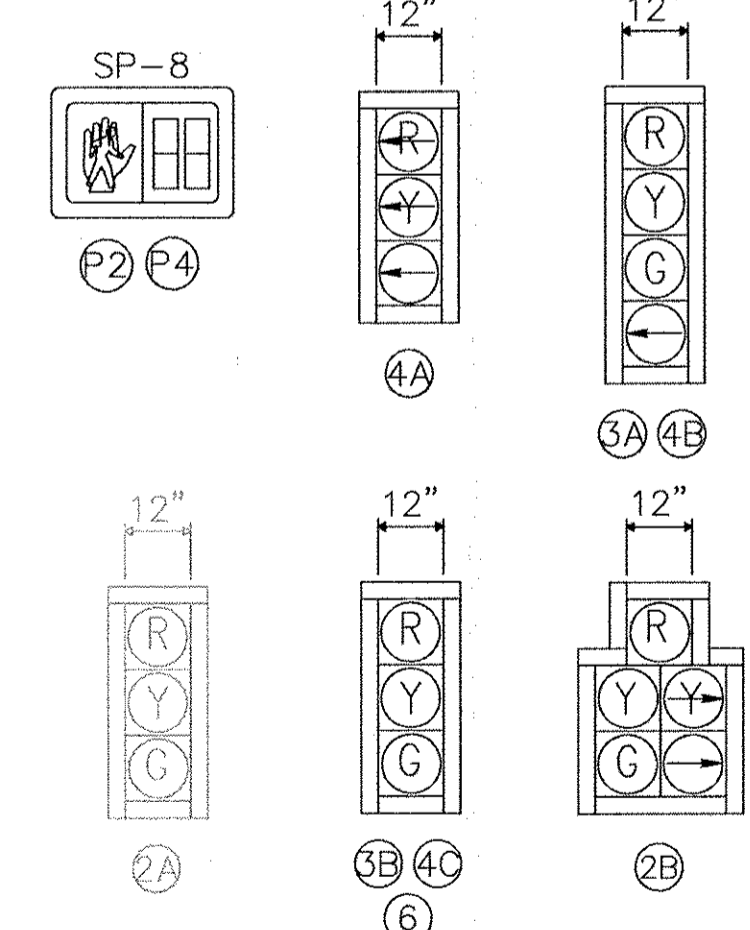
W - WALK INDICATION
- - DENOTES RED OR DON'T WALK INDICATIONS

CLEARANCE CHART

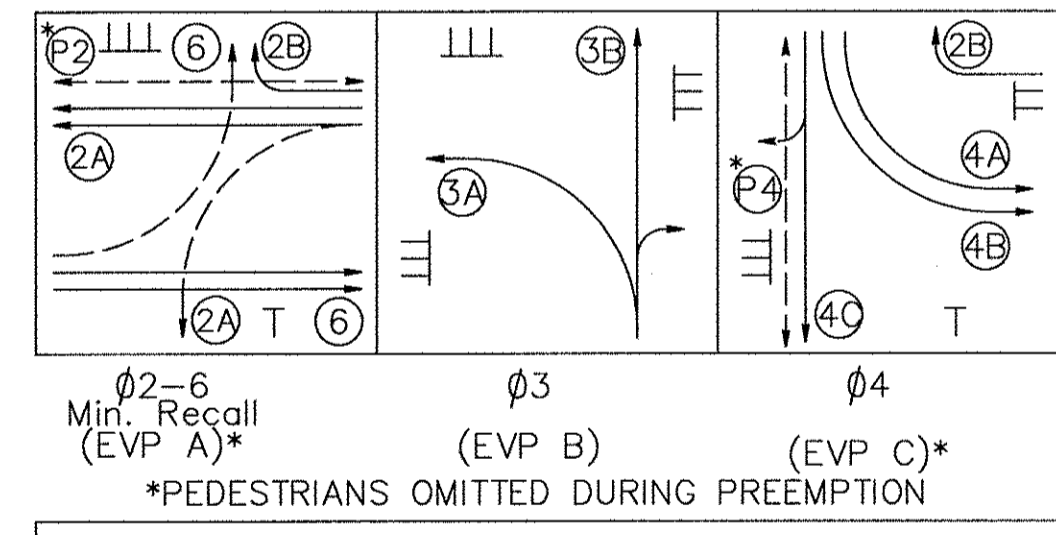
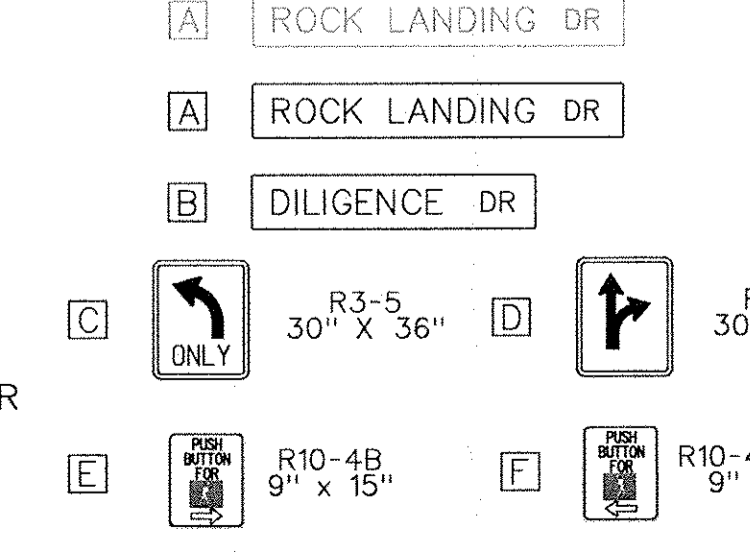
PRESENT PHASE	CLEARANCE	NEXT
G	Y	R
G/G	Y	R
G	Y	R



EXISTING & PROPOSED SIGNAL HEADS



EXISTING & PROPOSED SIGNS



LEGEND

\square	NOTES	\square	EXISTING VIDEO DETECTION CAMERA
\square	MAST ARM POLE IDENTIFIER	\square	PROPOSED VIDEO DETECTION CAMERA
\rightarrow	EXISTING MAST ARM	\rightarrow	EXISTING EMERGENCY VEHICLE DETECTOR
\rightarrow	PROPOSED MAST ARM	\rightarrow	PROPOSED EMERGENCY VEHICLE DETECTOR
\bullet	EXISTING SIGNAL HEAD	\square	EXISTING VIDEO DETECTION ZONE
\bullet	PROPOSED SIGNAL HEAD	\square	PROPOSED VIDEO DETECTION ZONE
\square	EXISTING MAST ARM MOUNTED SIGN	\square	EXISTING LOOP DETECTION
\square	PROPOSED MAST ARM MOUNTED SIGN	\square	EXISTING JUNCTION BOX
Δ	CONDUIT/CABLE NOTES	\square	PROPOSED JUNCTION BOX
-----	EXISTING CONDUIT	\square	EXISTING SIGNAL CABINET
-----	PROPOSED CONDUIT	\square	EXISTING LUMINAIRE
\circ	PROPOSED PEDESTRIAN PEDESTAL POLE W/ PUSHBUTTON AND SIGN	\square	PROPOSED LUMINAIRE



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