

MD 197 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

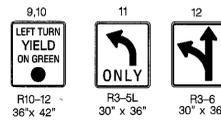
**GENERAL NOTES**

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
2. INSTALL 4-CONDUCTOR OPTICOM CABLE FROM THE PROPOSED OPTICOM DETECTOR EYE, ALONG THE SPAN WIRE, DOWN THE POLE THROUGH THE EXISTING CONDUIT TO THE BASE MOUNTED CABINET.
3. THE QUANTITIES SHOWN ON THIS SHEET ARE FOR THIS INTERSECTION ONLY. QUANTITIES FOR THE ENTIRE PROJECT ARE SUMMARIZED ON THE GENERAL INFORMATION SHEET.
4. INSTALL PRESENCE DETECTOR 1 FT. BEHIND STOPLINE.

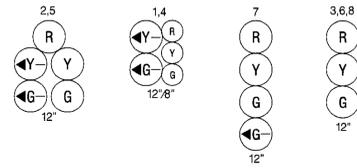
**CONSTRUCTION DETAILS**

- A. INSTALL OPTICOM DETECTOR EYE
- B. INSTALL DISCRIMINATOR MODULE INTO EXISTING POLE MOUNTED CABINET
- C. USE EXISTING SPAN WIRE
- D. INSTALL 6 FT. X 30 FT. QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN FLEXIBLE TUBING (3-6-3 WINDING)
- E. INSTALL 1 IN. LIQUID-TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
- F. SPLICE NEW LOOP WIRE TO EXISTING 2-CONDUCTOR CABLE IN HANDHOLE

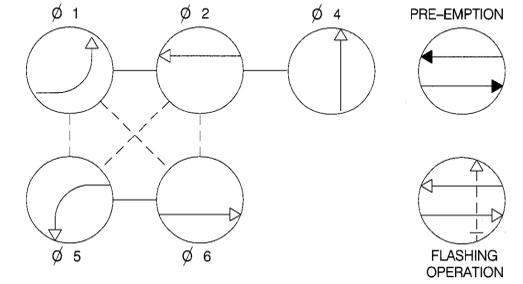
**EXISTING SIGNS**



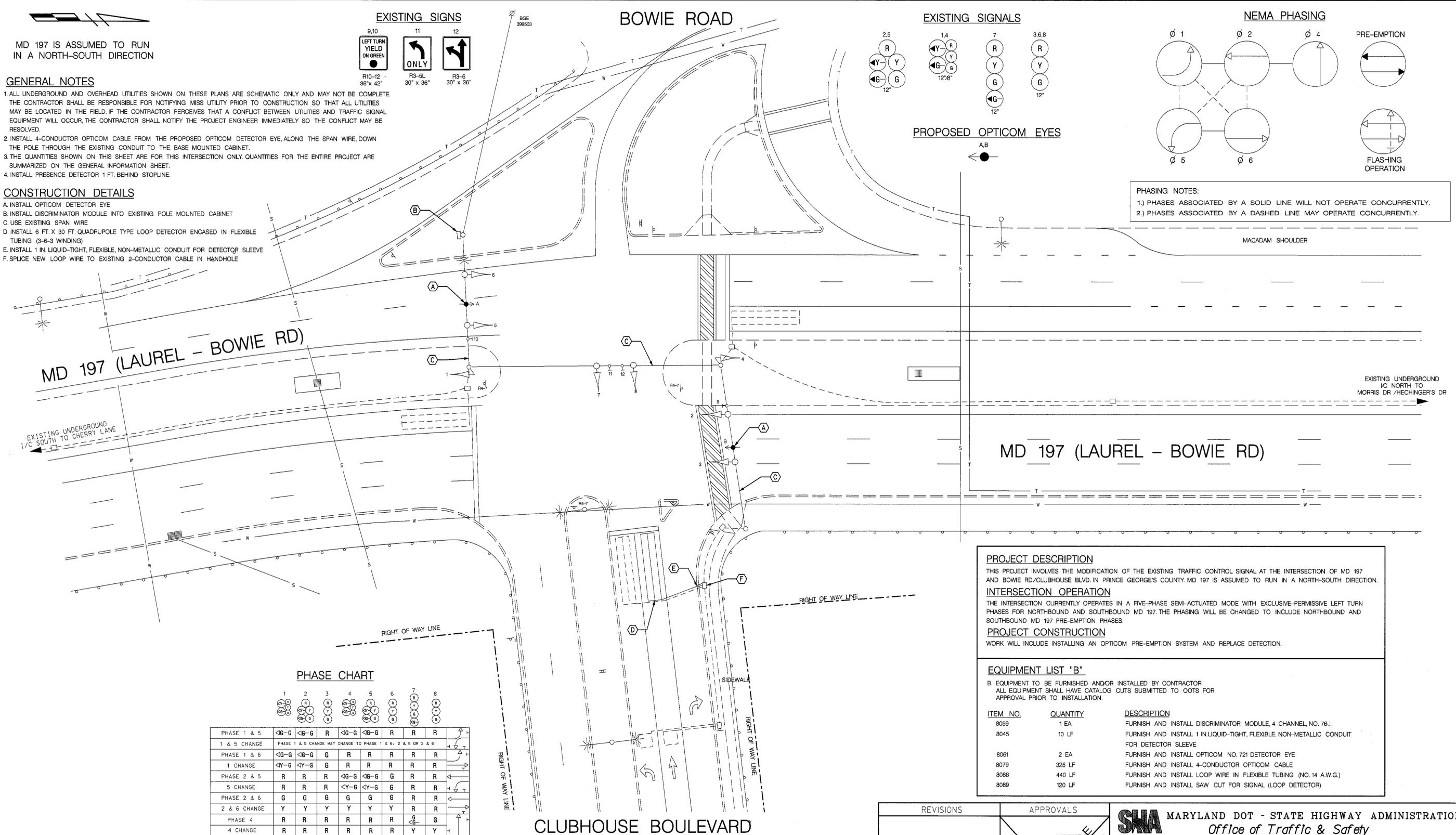
**EXISTING SIGNALS**



**NEMA PHASING**



**PHASING NOTES:**  
 1.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
 2.) PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.



**PHASE CHART**

	1	2	3	4	5	6	7	8
PHASE 1 & 5	<G-G	<G-G	R	<G-G	<G-G	R	R	R
1 & 5 CHANGE	PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6							
PHASE 1 & 6	<G-G	<G-G	G	R	R	R	R	R
1 CHANGE	<Y-G	<Y-G	G	R	R	R	R	R
PHASE 2 & 5	R	R	R	<G-G	<G-G	G	R	R
5 CHANGE	R	R	R	<Y-G	<Y-G	G	R	R
PHASE 2 & 6	G	G	G	G	G	G	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	R	R	G	G
4 CHANGE	R	R	R	R	R	R	Y	Y
PRE-EMPTION	G	G	G	G	G	G	R	R
PRE-EMPTION CHANGE	Y	Y	Y	Y	Y	Y	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

**LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES**

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
WATER	W
CABLE TV	TV

**PROJECT DESCRIPTION**  
 THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 197 AND BOWIE RD/CLUBHOUSE BLVD. IN PRINCE GEORGE'S COUNTY, MD 197 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**  
 THE INTERSECTION CURRENTLY OPERATES IN A FIVE-PHASE SEMI-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 197. THE PHASING WILL BE CHANGED TO INCLUDE NORTHBOUND AND SOUTHBOUND MD 197 PRE-EMPTION PHASES.

**PROJECT CONSTRUCTION**  
 WORK WILL INCLUDE INSTALLING AN OPTICOM PRE-EMPTION SYSTEM AND REPLACE DETECTION.

**EQUIPMENT LIST "B"**  
 B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR  
 ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
8059	1 EA	FURNISH AND INSTALL DISCRIMINATOR MODULE, 4 CHANNEL, NO. 76-L
8045	10 LF	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8061	2 EA	FURNISH AND INSTALL OPTICOM NO. 721 DETECTOR EYE
8079	325 LF	FURNISH AND INSTALL 4-CONDUCTOR OPTICOM CABLE
8088	440 LF	FURNISH AND INSTALL LOOP WIRE IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8089	120 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)

**TRAFFIC CONCEPTS, INC.**  
 325 Gambrills Road  
 Suite E  
 Gambrills, MD 21054  
 (410) 923-7101  
 FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

REVISIONS	APPROVALS
(B) INSTALL OPTICOM PRE-EMPTION 9-23-2004 TMZ 11-3-03	TEAM LEADER TRAFFIC ENGINEERING DESIGN DIVISION DIRECTOR TRAFFIC ENGINEERING DESIGN DIVISION DIRECTOR OFFICE OF TRAFFIC & SAFETY

**SHA** MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
 Office of Traffic & Safety  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 TRAFFIC SIGNAL PLAN  
 MD 197 AND BOWIE ROAD / CLUBHOUSE BLVD.

DRAWN BY: L. TAUBER	F.A.P. NO. N/A	TS NO. 2623 B	SHEET NO.
CHECKED BY:	S.H.A. NO.	T.I.M.S. NO. G492	6 OF 11
SCALE: 1"=20'	COUNTY: PRINCE GEORGE'S	LOG MILE: 16019714.43	
DATE: 3-90			