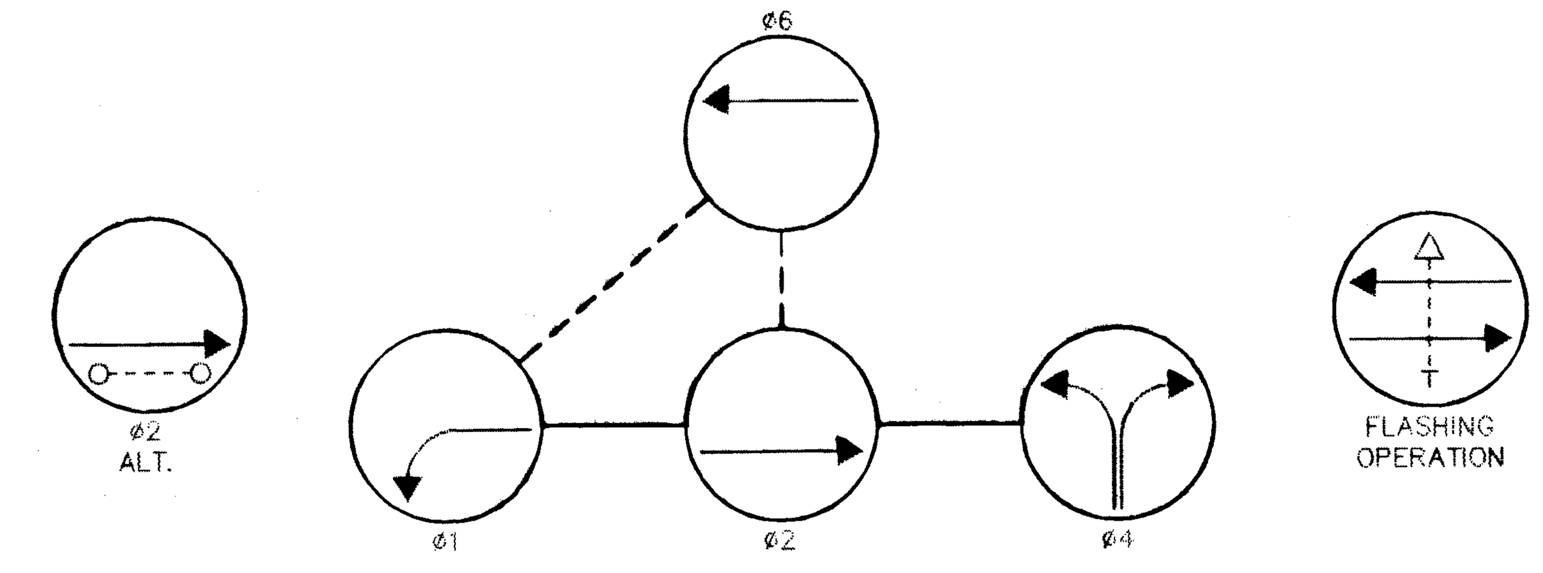
PHASE AND SEQUENCE DIAGRAM		SIGNAL HEADS 1	2	3	4	5	6	8/9	10/11
		R Y G	R Y G	R Y G	R Y G	R Y G	R Y G		
	PHASE 2+5	R	R	G G	G	R	R	DW	DW
	PHASE 5 CHANGE	R	R	G Y	G	R	R	DW	DW
	PHASE 2+6	G	G	G	G	R	R	DW	DW
	PHASE 2+6 CHANGE	Y	Y	Y	Y	R	R	DW	DW
	PHASE 2+6 Alt.	G	G	G	G	R	R	WK	WK
	PED CLEAR	G	G	G	G	R	R	FL/DW	FL/DW
	PHASE 2+6 Alt. CHANGE	Y	Y	Y	Y	R	R	DW	DW
	PHASE 8	R	R	R	R	G	G	DW	DW
	PHASE 8 CHANGE	R	R	R	R	Y	Y	DW	DW
	FLASH OPER.	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK

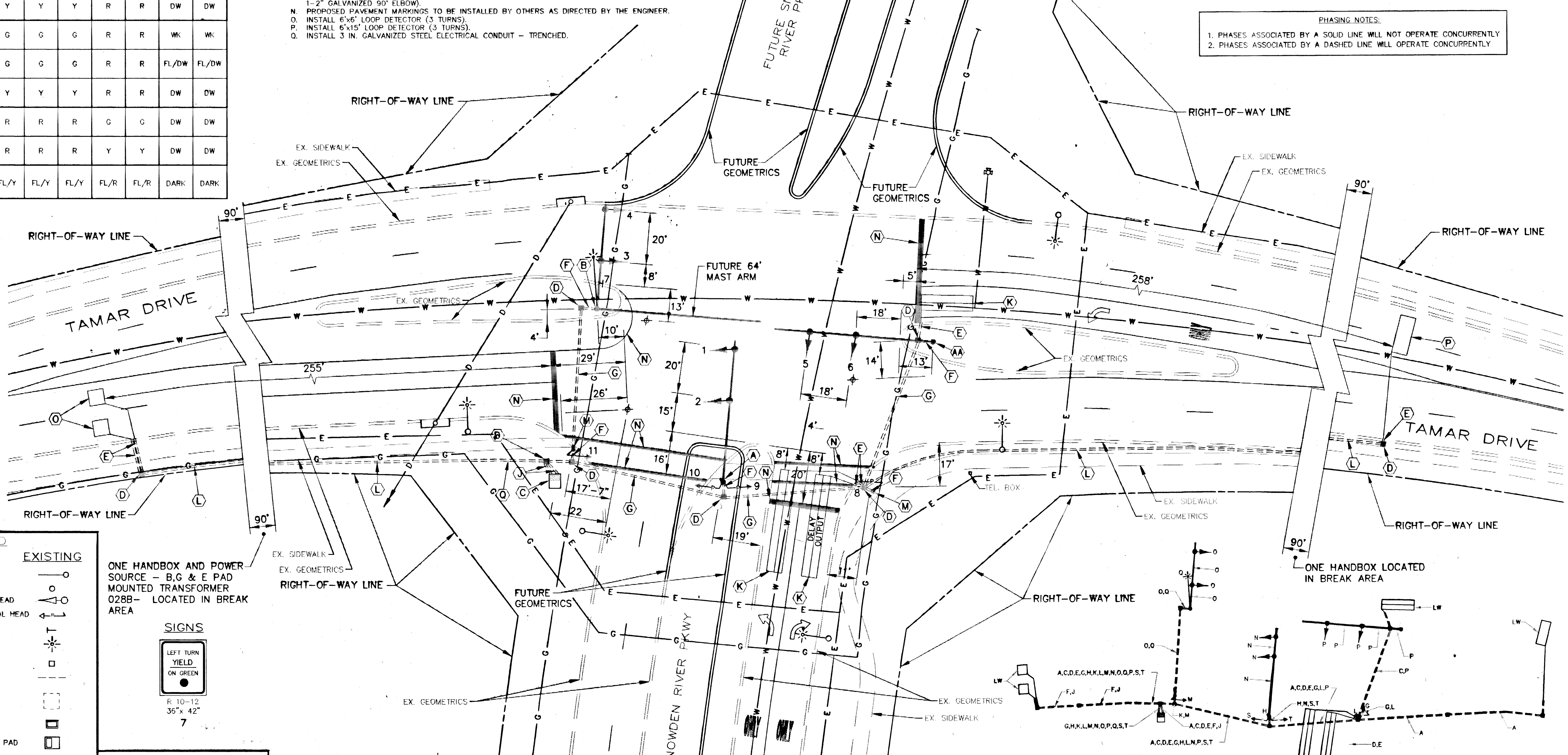
CONSTRUCTION DETAILS

AA. INSTALL 21' STEEL SIGNAL POLE WITH SINGLE 60' MAST ARM AND TRAFFIC SIGNAL HEADS. (NOTE: 1–2" GALVANIZED 90° ELBOW).
A. INSTALL 21' STEEL SIGNAL POLE WITH SINGLE 54' MAST ARM, TRAFFIC SIGNAL HEADS, PEDESTRIAN PUSHBUTTON, AND PEDESTRIAN SIGNAL HEADS. (NOTE: 1–2" GALVANIZED 90° ELBOW).
B. INSTALL 27' STEEL SIGNAL POLE WITH SINGLE 40' MAST ARM, SIGNAL HEADS, SIGN, 20' STREET LIGHTING ARM AND 250 WATT HPS (CUTOFF) LUMINAIRE (NATIONAL PARK SERVICE BROWN (FEDERAL PAINT NO. 30045) GE MODEL NO. M4AC25S0M2GMC32013) WITH PHOTOELECTRIC CELL. (NOTE: 1–2" GALVANIZED 90° ELBOW).
C INSTALL BASE MOUNTED CABINET/CONTROLLER AND ALL NECESSARY EQUIPMENT FOR AN ELECTRICAL SERVICE. (NOTE: 2–4" GALVANIZED 90° ELBOWS AND 1–2" PVC 90° ELBOW).
D. INSTALL HANDBOX.
E. INSTALL 1 IN. GALVANIZED STEEL ELECTRICAL CONDUIT FOR LOOP DETECTOR SLEEVE.
F. INSTALL 2 IN. GALVANIZED STEEL ELECTRICAL CONDUIT – TRENCHED.
G. INSTALL 3 IN. GALVANIZED STEEL ELECTRICAL CONDUIT – PUSHED.
J. INSTALL 4 IN. GALVANIZED STEEL ELECTRICAL CONDUIT – TRENCHED.
K. INSTALL 6'x40' QUADRUPOLE TYPE VEHICLE LOOP DETECTOR (2–4–2 TURNS).
L. INSTALL 2 IN. PVC ELECTRICAL CONDUIT – TRENCHED.
M. INSTALL 8' STEEL BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNALS, PUSHBUTTON AND SIGN. (NOTE: 1–2" GALVANIZED 90° ELBOW).
N. PROPOSED PAVEMENT MARKINGS TO BE INSTALLED BY OTHERS AS DIRECTED BY THE ENGINEER.
O. INSTALL 6'x6' LOOP DETECTOR (3 TURNS).
P. INSTALL 6'x15' LOOP DETECTOR (3 TURNS).
Q. INSTALL 3 IN. GALVANIZED STEEL ELECTRICAL CONDUIT – TRENCHED.

NEMA PHASING



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



LEGEND

PROPOSED		EXISTING
	MAST ARM	
	STEEL POLE	
	TRAFFIC SIGNAL HEAD	
	PEDESTRIAN SIGNAL HEAD	
	SIGN	
	STREET LIGHT	
	HANDBOX	
	CONDUIT	
	LOOP DETECTOR	
	CONTROLLER	
	CONTROLLER WITH PAD	
	WOOD POLE	
	FIRE HYDRANT	
	MANHOLE	
●W.V.	WATER VALVE	○W.V.
●G.V.	GAS VALVE	○G.V.
	GEOMETRICS TO BE CONSTRUCTED BY OTHERS DURING SIGNAL CONSTRUCTION.	

UTILITY LEGEND

—G—G—	GAS MAIN
—W—W—	WATER MAIN
—S—S—	SEWER MAIN
—D—D—	STORM DRAIN
—TV—TV—	CABLE TELEVISION
—E—E—	ELECTRIC CABLES
—T—T—	TELEPHONE CABLES
—A—A—	AERIAL CABLES

WIRING LEGEND

A – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
C – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
D – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
E – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
F – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
G – 2 CONDUCTOR CABLE (NO. 14 A.W.G.)
H – 2 CONDUCTOR CABLE (NO. 14 A.W.G.)
J – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
K – 2 CONDUCTOR CABLE (NO. 14 A.W.G.)
L – 3 CONDUCTOR CABLE (NO. 14 A.W.G.)
M – 3 CONDUCTOR CABLE (NO. 14 A.W.G.)
N – 7 CONDUCTOR CABLE (NO. 14 A.W.G.)
O – 7 CONDUCTOR CABLE (NO. 14 A.W.G.)
P – 7 CONDUCTOR CABLE (NO. 14 A.W.G.)
Q – 2 CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
S – 3 CONDUCTOR CABLE (NO. 14 A.W.G.)
T – 3 CONDUCTOR CABLE (NO. 14 A.W.G.)
LW – LOOP WIRE (NO. 14 A.W.G.)

WIRING DIAGRAM

AS-BUILT
7-25-96

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS — DATE 10/30/96
TRAFFIC ENGINEERING DIVISION — DATE 10/22/96
CHIEF, BUREAU OF ENGINEERING — DATE 10/22/96
CHIEF, BUREAU OF HIGHWAYS — DATE 10-28-96

A/E GROUP, INC.
ENGINEERS • PLANNERS
11409 Cronhill Drive
Owings Mills, Maryland 21117
A/E Job No. 94-281-009

DES: J.F.L.
DRN: J.N.W.
CHK: E.G.S.
DATE: 5/96

BY	NO.	REVISION	DATE

CAPITAL PROJECT NO.
T-7064FF
600' SCALE MAP NO. ______ DATE: ______

PLAN AND DETAILS
Tamar Dr at Snowden River Pkwy
TRAFFIC CONTROL SIGNAL DESIGN
SNOWTAMA

SCALE AS SHOWN
SHEET 1 OF 1

74C

Drawing name: TAMARSIG.DWG
Saved on: July 24, 1996 at 8:08 AM