

PHASE & SEQUENCE DIAGRAM								
SYMBOL	TRAFFIC				SIGNAL HEADS			
	1	2	3	4	5	6	7	8
	G	R	R	R	R	R	R	R
	G	R	R	R	R	R	R	R
	G	G	G	R	R	R	R	R
	A	A	A	R	R	R	R	R
	R	R	R	G	R	R	R	R
	R	R	R	G	R	R	R	R
	R	R	R	A	A	A	A	A
	R	R	R	A	A	A	A	A
	R	R	R	A	A	A	A	A
	F/A	F/A	F/A	F/A	F/R	F/R	F/R	F/R

**LEFT - TURN EQUIPMENT**

- G SIGNAL HEADS - STD CAP VISORS**  
Remove exist signal heads, #2\*6 and replace with 5 head combination No. (see plan)  
Traffic } #2\*6  
Signal }  
Size of indication  
12" Red  
12" Amber Arrow, 12" Amber  
12" Green Arrow, 12" Green
  - H. CONTROLLER-MODIFICATIONS-**  
PHASE MODULE(S) FOR ECONOLITE EMC4000 P/N 3405800 S/N 309 PROGRAM 3454  
SOLID STATE LOAD SWITCH(S) COMPATIBLE WITH ECONOLITE CONTROLLER
  - I LOOPS AND AMPLIFIERS-COMPATIBLE WITH ECONOLITE EMC 4000**
- GENERAL NOTES**
- The Contractor Is Not Responsible For Providing The Following  
A Island Enlargement B Lane Marking
  - The Timing of The Signal System Shall Be Furnished By The Traffic Engineer
  - The location of all underground utilities shown are approximate and the Contractor must verify the locations by calling Miss Utility at 559 0100
  - The underground conduit will be of sufficient size to accommodate future left turn phase detector and signal wiring. Pole foundations No. 3 & 4 shall have additional conduit stubs to provide for future left turn detectors and signal wiring
  - Install time delay loop detectors for Loops 4 & 6

**EXISTING EQUIPMENT LIST**  
SEE PAGE 9-09 OF SPECIFICATIONS FOR MAKE/MODEL

- F POLES - MAST ARM**
- Quantity 4  
Location in accordance with Plan  
Luminous Bronze with manufacturer's primer  
Dimensions:  
No. 1 - 47 ft span  
No. 2 - 37 ft span  
No. 3 - 30 ft span  
No. 4 - 27 ft span
- All mast arms are to be oriented perpendicular to the travel lanes
- Design style and appearance equivalent to Union Metal Design 50300

- A CONTROLLER**
- Fully Actuated Two (2) Phase Solid State Controller Expandable to Three (3) Phase Fully Actuated
  - Memory & Recall For Each Phase
  - Standard Police Panel with Manual - Override Option
  - All Red Clearance Interval For Each Phase
  - Conflict Monitor With Solid State Signal Loading Switches
  - Six (6) Loop Detector Amplifiers (Loops 1 & 2 3 & 4 wired in parallel)
  - Minimum Acceptable Adjustment Range:  
a) Major & Minor Street Initial Period and Unit Extension 2-30 sec  
b) Major & Minor Street Extension 10-60  
c) Vehicle Clearance Interval - All Red Clearance Interval up to 10
  - Base Mounted Control Cabinet Large Enough to Accommodate the Ultimate Four Phases  
The cabinet shall be furnished bronze

**B DETECTORS** - Location in Accordance With Plan

Detector No. (SEE PLAN)	Dimensions
1 & 4	6 x 6
2 & 3	6 x 20
5 & 6	6 x 20
7 & 8	6 x 20

**C SIGNAL HEADS**

No. (SEE PLAN)	Size of Indications
1, 2, 3, 4	12 Red, 12 Amber, 12 Green
5, 6, 7, 8	12 Red, 8 Amber, 8 Green

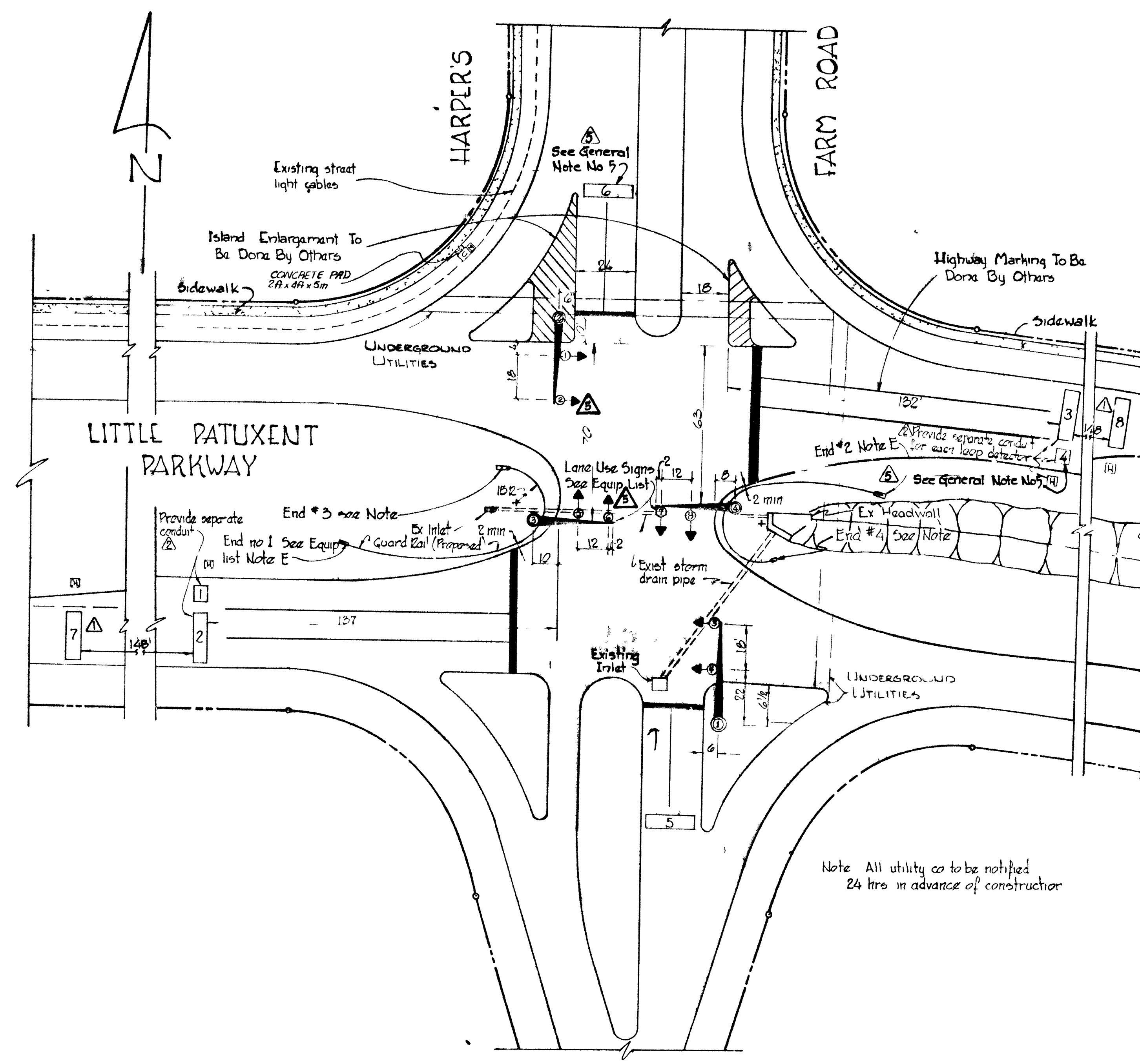
Standard Visors (CAPS) on All Indications

- D LANE USE SIGNS** SEE MUTCD\*
- Quantity 2  
Location in Accordance With Plan  
The Signs Shall Be Tethered



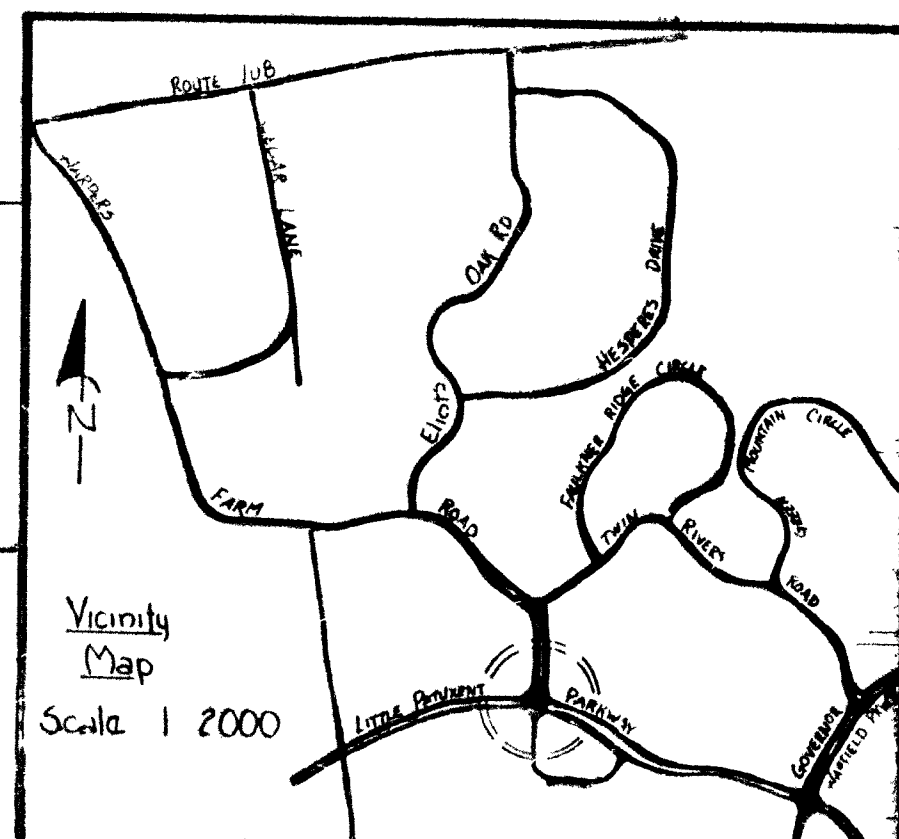
- E GUARDRAIL - BEAM**
- End #1 & 2 Are to Be Anchored in Accordance With State of Maryland - State Roads Commission Specifications Standard No 66031 Entitled Guardrail With Beam End Flare
- End #3 & 4 Are to Be Anchored in Accordance With Standard No 66002 of Same Specifications

\* Manual on Uniform Traffic Control Devices



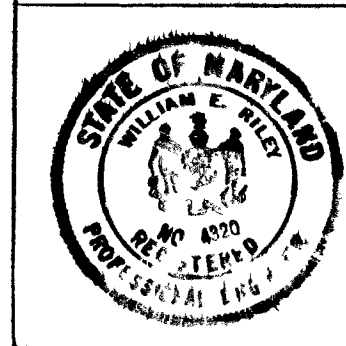
**COMMUNITY COLLEGE ENTRANCE**  
**PLAN**  
Scale 1" = 30'

- SYMBOLS**
- Signal Head
  - Vehicle Loop Detector
  - Hand Box (Junction Box)
  - Meter Box
  - Control Cabinet
  - Proposed Steel Pole



STATE HIGHWAY ADMINISTRATION  
CONTRACT NO HO 523 451 717

FEDERAL AID  
PROJECT NO M 3142(1)



*Charles A. Cole* 7/20/81  
CHIEF, DIV OF ROADS, BRIDGES & STM DRNS

*James E. Kender* 7/20/81  
CHIEF, DIV OF TRAFFIC

*William S. Pelt* 7/20/81  
CHIEF, BUREAU OF ENGINEERING

*Walter F. Newman* 7-21-81  
DIRECTOR, DEPT OF PUBLIC WORKS

REV NO	DESCRIPTION	DATE
5	Signal Adjustment & loop detectors	7/11/81
4	Left turn Phases	9/24/81
3	Added Detectors 7 & 8	Nov 1 1976

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
TRAFFIC SIGNAL CONSTRUCTION  
PLAN AND EQUIPMENT LIST  
CAPITAL IMPROVEMENT PROJECT NO. T-1-7012  
LITTLE PATUXENT PARKWAY AT  
HARPERS FARM ROAD

Scale As Shown  
Date 3/23/81  
Sheet 1 of 1  
Dwg No T-7512

Des: DC/EAC  
Draw: EAC/DC  
Chk: JK  
Appr: EAC/JK