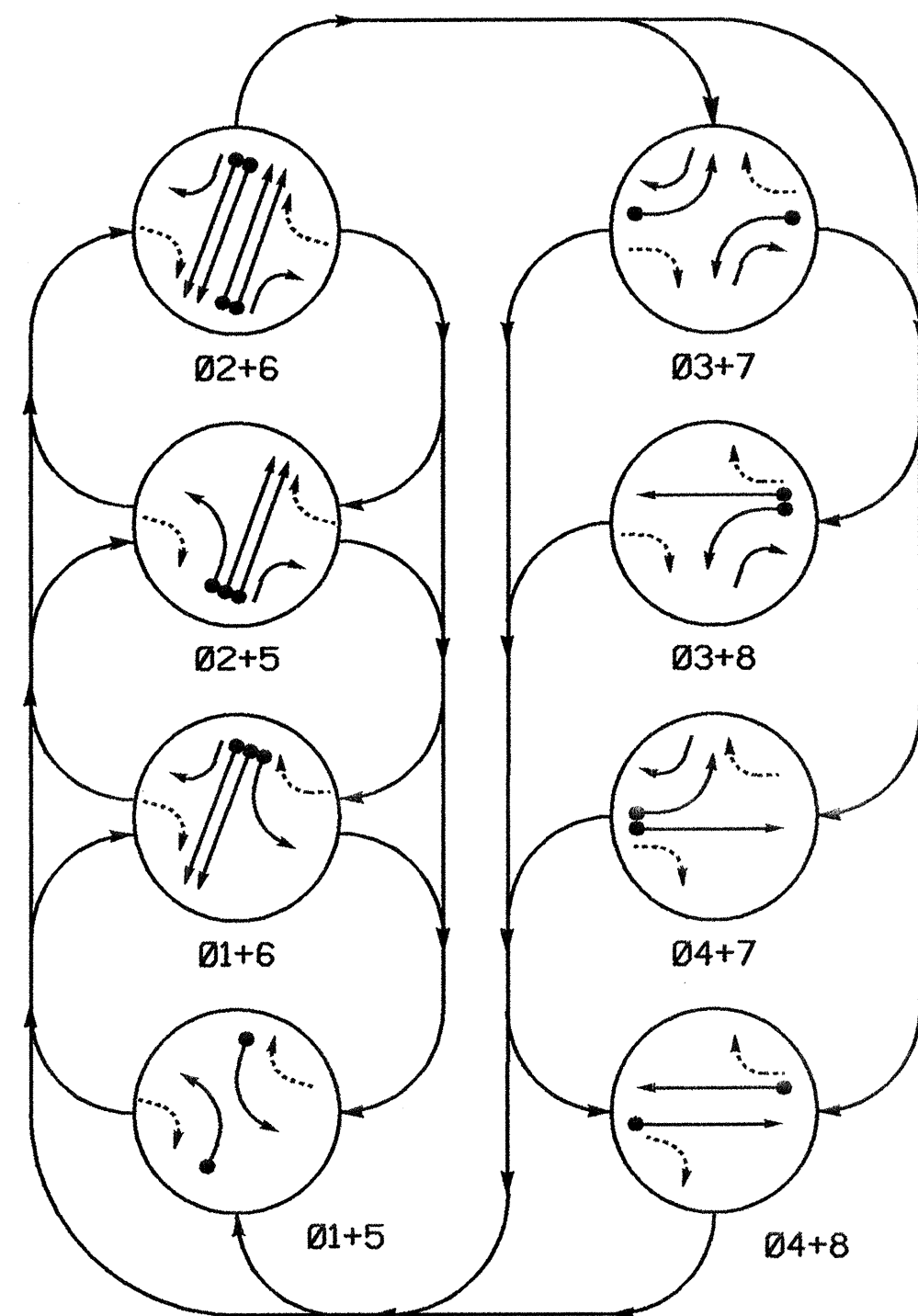


**PHASING DIAGRAM**



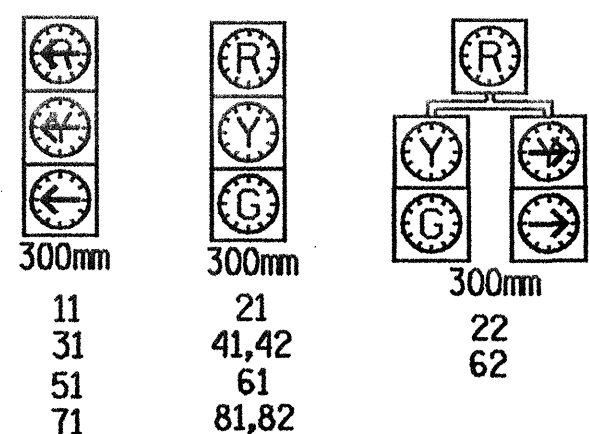
**PHASING DIAGRAM DETECTION LEGEND**

- ● DETECTED MOVEMENT
- ○ UNDETECTED MOVEMENT (OVERLAP)
- ○ UNSIGNALIZED MOVEMENT
- ○ PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE							
	Ø 1+5	Ø 2+6	Ø 3+7	Ø 4+8	Ø 1+6	Ø 2+5	Ø 3+8	Ø 4+7
11	→	→	→	→	→	→	→	→
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31	→	→	→	→	→	→	→	→
41,42	R	R	R	R	R	R	G	G
51	→	→	→	→	→	→	→	→
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71	→	→	→	→	→	→	→	→
81,82	R	R	R	R	G	R	G	R

**SIGNAL FACE I.D.**

○ Denotes L.E.D.



2070L LOOP & DETECTOR INSTALLATION												
INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	1.8X1.8	2-4-2	0	Y	1	Y	Y	-	-	-	-	Y
2A	1.8X1.8	5	130	Y	2	Y	Y	-	-	-	-	Y
2B	1.8X1.8	5	130	Y	2	Y	Y	-	-	-	-	Y
3A	1.8X1.8	2-4-2	0	Y	3	Y	Y	-	-	-	3	Y
4C	1.8X1.8	2-4-2	0	Y	4	Y	Y	-	-	-	5	Y
5A	1.8X1.8	2-4-2	0	Y	5	Y	Y	-	-	-	-	Y
6A	1.8X1.8	6	130	Y	6	Y	Y	-	-	-	-	Y
6B	1.8X1.8	6	130	Y	6	Y	Y	-	-	-	-	Y
7A	1.8X1.8	2-4-2	0	Y	7	Y	Y	-	-	-	3	Y
8A	1.8X1.8	2-4-2	0	Y	8	Y	Y	-	-	-	-	Y

**8-Phase Fully Actuated (Time Based)**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 or phase 5 may be lagged.
- Phase 3 or phase 7 may be lagged.
- Set all detector units to presence mode.
- Place cabinet so as not to obstruct sight distance of vehicles turning right on red.

**PLAN QUANTITIES**

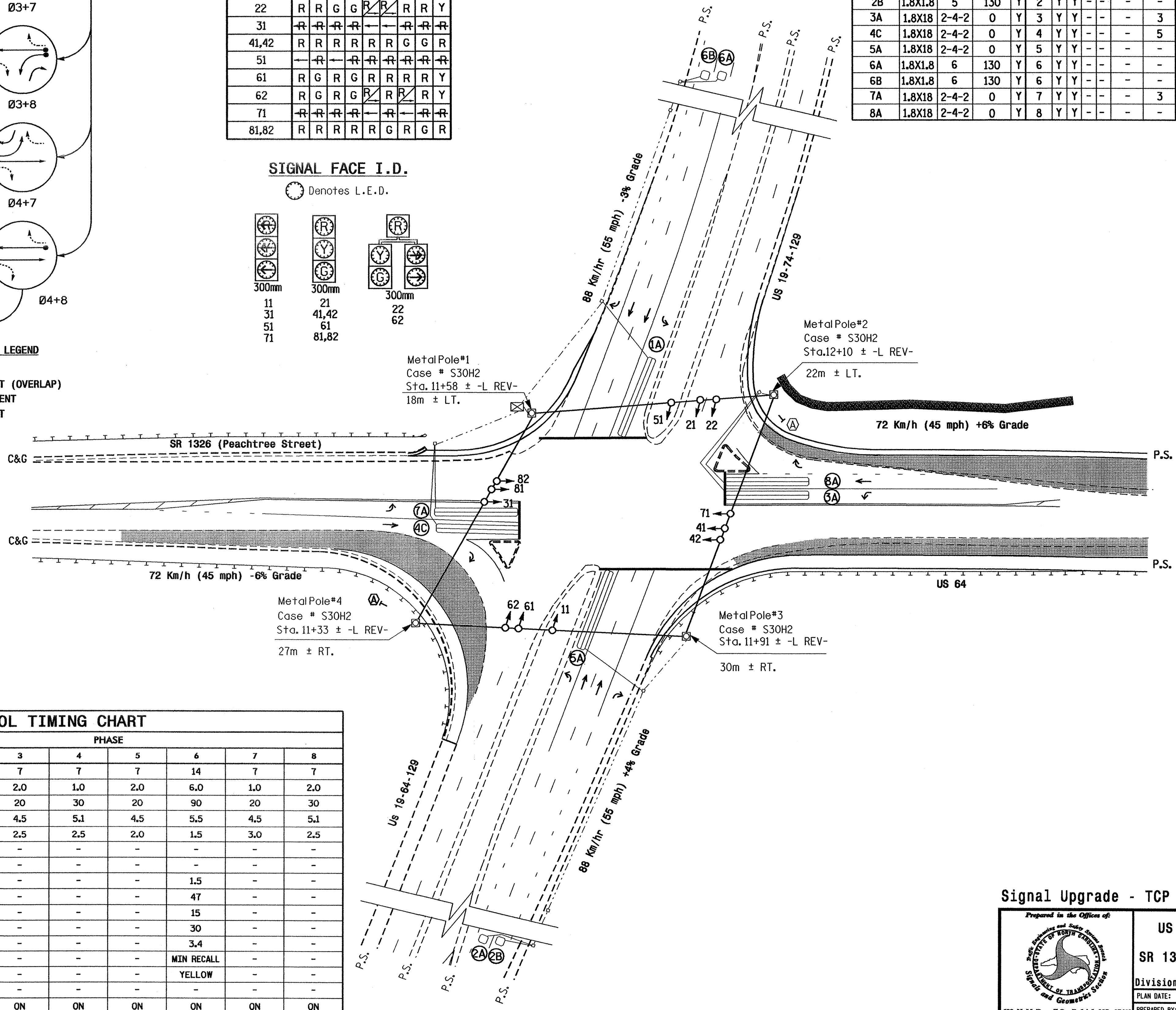
Pay Item	Meters
Signal Cable	295
Messenger Cable	220
Lead-in Cable	660

**LEGEND**

- |  |  |  |          |
|--|--|--|----------|
|  | TRAFFIC SIGNAL HEAD                            |  | EXISTING |
|  | MODIFIED SIGNAL HEAD                           |  | N/A      |
|  | PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON & SIGN |  | N/A      |
|  | SIGNAL POLE WITH GUY                           |  | N/A      |
|  | SIGNAL POLE WITH SIDEWALK GUY                  |  | N/A      |
|  | INDUCTIVE LOOP DETECTOR                        |  | N/A      |
|  | CONTROLLER & CABINET                           |  | N/A      |
|  | JUNCTION BOX                                   |  | N/A      |
|  | 50MM UNDERGROUND CONDUIT                       |  | N/A      |
|  | RIGHT OF WAY WITH MARKER                       |  | N/A      |
|  | DIRECTIONAL ARROW                              |  | N/A      |
|  | PAVEMENT MARKING ARROW                         |  | N/A      |
|  | METAL STRAIN POLE                              |  | N/A      |
|  | "YIELD" SIGN (R1-2)                            |  | N/A      |
|  | CONSTRUCTION ZONE                              |  | N/A      |

FEATURE	2070L TIMING CHART							
	1	2	3	4	5	6	7	8
Min Green 1*	7	14	7	7	7	14	7	7
Extension 1*	1.0	6.0	2.0	1.0	2.0	6.0	1.0	2.0
Max Green 1*	20	90	20	30	20	90	20	30
Yellow Clearance	4.5	5.5	4.5	5.1	4.5	5.5	4.5	5.1
Red Clearance	2.0	1.5	2.5	2.5	2.0	1.5	3.0	2.5
Walk 1*	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation*	-	1.5	-	-	-	1.5	-	-
Max Variable Initial*	-	47	-	-	-	47	-	-
Time Before Reduction*	-	15	-	-	-	15	-	-
Time To Reduce*	-	30	-	-	-	30	-	-
Minimum Gap	-	3.4	-	-	-	3.4	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	ON

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



**Signal Upgrade - TCP Phase III**

	Prepared in the Office of: 		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 24393 MURPHY WILLIAMS	
	US 19-64-74-129/US 19-74-129 at SR 1326 (Peachtree Street) / US 64			
	Division 14 Cherokee County PLAN DATE: July 2004 PREPARED BY: Luhr		Murphy REVIEWED BY: C.J. Collins REVIEWED BY:	
	SCALE 5 0 10 1:500		REVISIONS INIT. DATE	