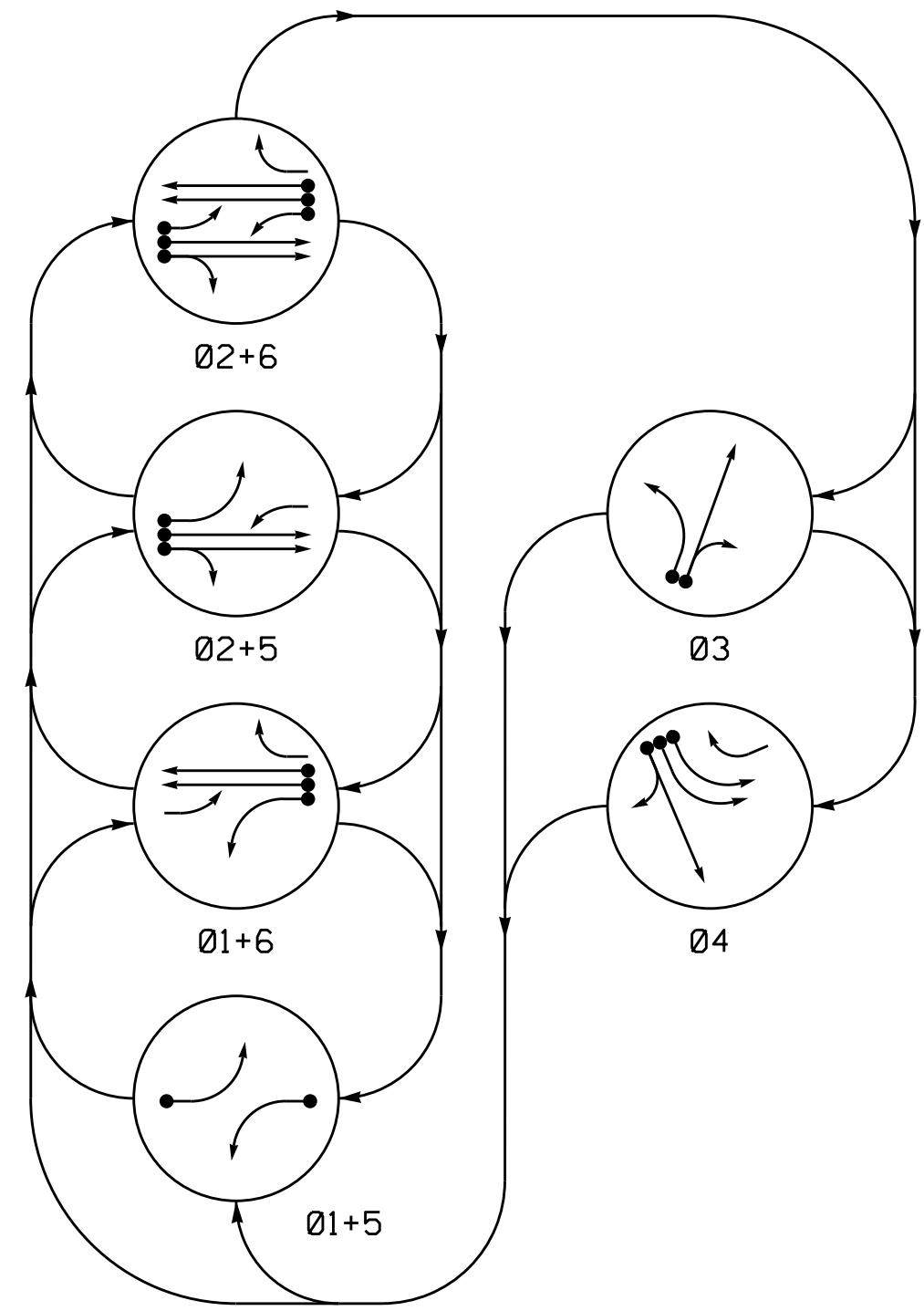


PHASING DIAGRAM

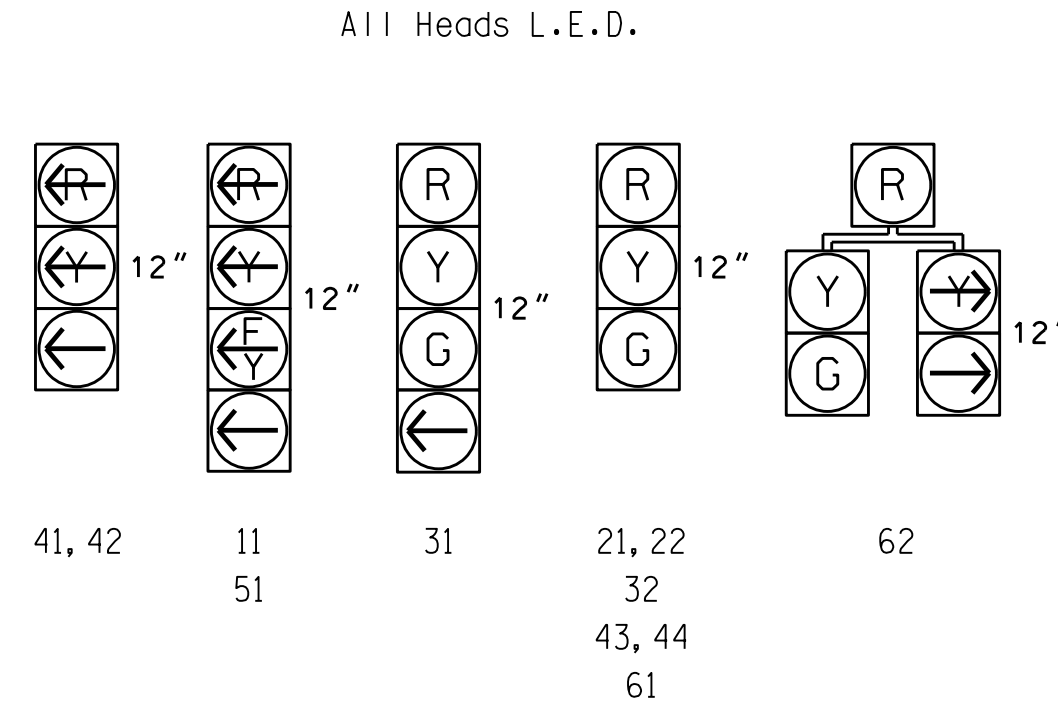


PHASING DIAGRAM DETECTION LEGEND

- ➔ ● DETECTED MOVEMENT
- ➔ ○ UNDETECTED MOVEMENT (OVERLAP)
- ➔ - UN SIGNALIZED MOVEMENT
- ➔ - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE						
	01+5	01+6	02+5	02+6	03	04	PEDESTRIAN
11	➔	➔	➔	➔	➔	➔	➔
21, 22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41, 42	➔	➔	➔	➔	➔	➔	➔
43, 44	R	R	R	R	G	R	R
51	➔	➔	➔	➔	➔	➔	➔
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y

SIGNAL FACE I.D.

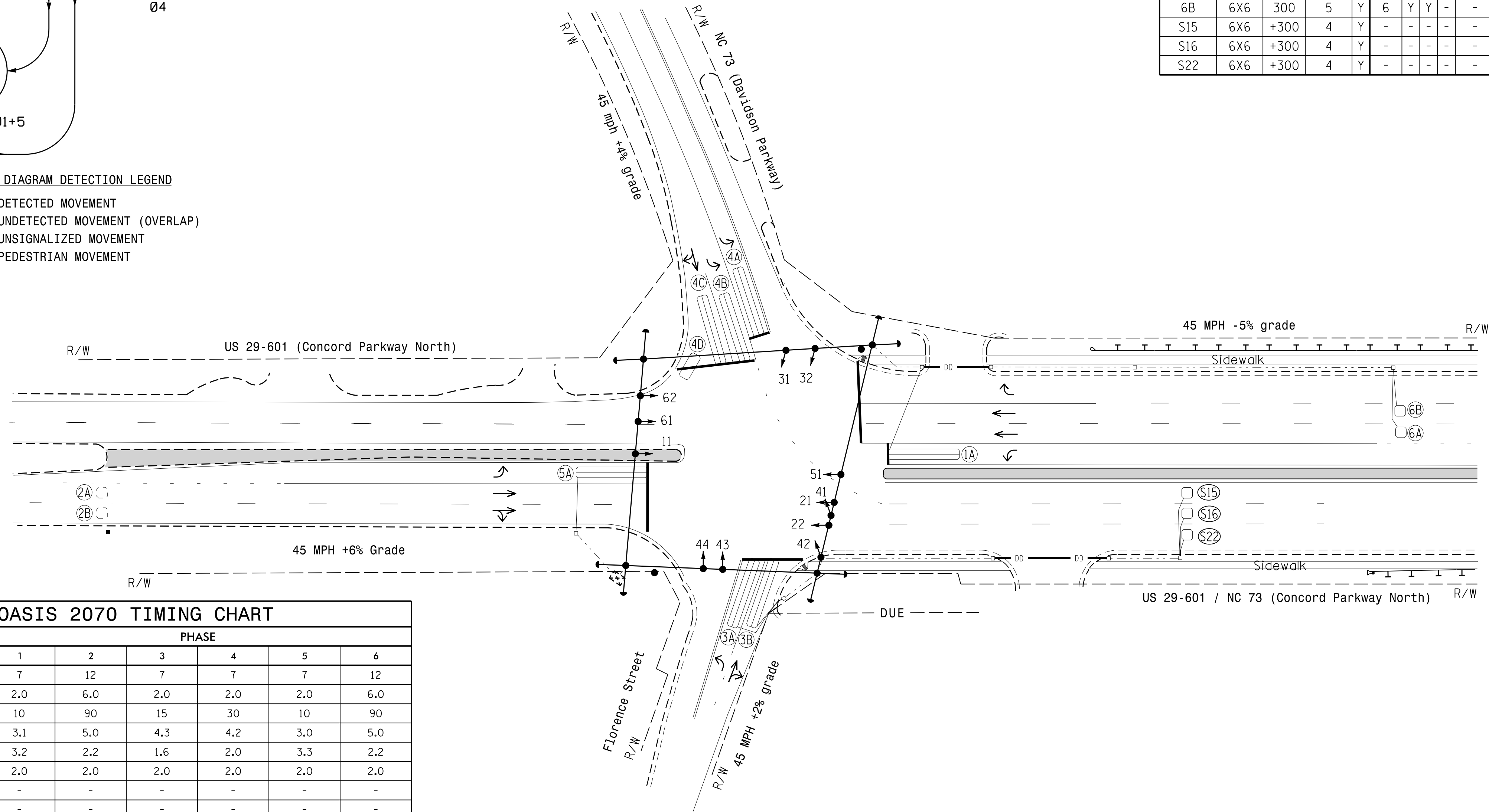


LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					
					PHASE	CALLING	EXTENSION	FULL TIME DELAY		
1A	6X40	0	2-4-2	Y	1	Y	Y	-	15	-
2A	6X6	300	EXIST	-	2	Y	Y	-	-	-
2B	6X6	300	EXIST	-	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	Y	3	Y	Y	-	3	-
3B	6X40	0	2-4-2	Y	3	Y	Y	-	10	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	3	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	3	-
4C	6X40	0	2-4-2	Y	4	Y	Y	-	10	-
4D	6X15	15	3	Y	4	Y	Y	-	15	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	15	-
6A	6X6	300	5	Y	6	Y	Y	-	-	-
6B	6X6	300	5	Y	6	Y	Y	-	-	-
S15	6X6	+300	4	Y	-	-	-	-	-	Y
S16	6X6	+300	4	Y	-	-	-	-	-	Y
S22	6X6	+300	4	Y	-	-	-	-	-	Y

6 Phase Fully Actuated Concord/Kannapolis CLS-Zone 2

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012. "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset # 0820.



FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1*	7	12	7	7	7	12
Extension 1	2.0	6.0	2.0	2.0	2.0	6.0
Max Green 1*	10	90	15	30	10	90
Yellow Clearance	3.1	5.0	4.3	4.2	3.0	5.0
Red Clearance	3.2	2.2	1.6	2.0	3.3	2.2
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1*	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation*	-	1.5	-	-	-	1.5
Max Variable Initial*	-	34	-	-	-	34
Time Before Reduction*	-	10	-	-	-	10
Time To Reduce*	-	20	-	-	-	20
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	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.

LEGEND

- | PROPOSED                                         | EXISTING                       |
|--------------------------------------------------|--------------------------------|
| ○➔ Traffic Signal Head                           | ●➔ N/A                         |
| ○➔ Modified Signal Head                          | ○➔ N/A                         |
| ➔ Sign                                           | ➔ 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                        | ⊗ Inductive Loop Detector      |
| ⊠ Controller & Cabinet                           | ⊠ Controller & Cabinet         |
| ⊡ Junction Box                                   | ⊡ Junction Box                 |
| - - - 2-in Underground Conduit                   | - - - 2-in Underground Conduit |
| N/A Right of Way                                 | - - - Right of Way             |
| ➔ Directional Arrow                              | ➔ Directional Arrow            |
| N/A Guardrail                                    | - - - Guardrail                |
| - - - Directional Drill                          | - - - Directional Drill        |

Signal Upgrade Final Design

US 29-601/US 29-601-NC 73  
(Concord Parkway North) at  
NC 73 (Davidson Parkway) /  
Florence Street

Division 10 Cabarrus County Concord

PLAN DATE: November 2014 REVIEWED BY: T. Williams

PREPARED BY: M. Mahbooba REVIEWED BY:

SEAL

PROFESSIONAL ENGINEER

J. Williams

12/15/2014

DATE

SIG. INVENTORY NO. 10-0820

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 40

1" = 40'