

# PROTECTED / PROHIBITED

(3-SECTION)  
(RIGHT TURN OVERLAP WIRED TO OVERLAPS)

## EIGHT PHASE OPERATION

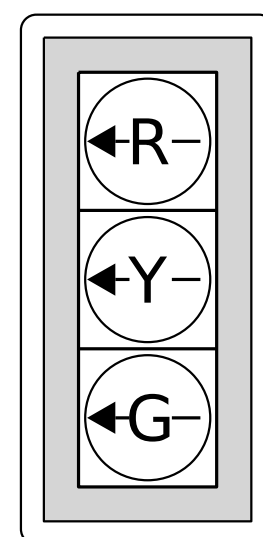
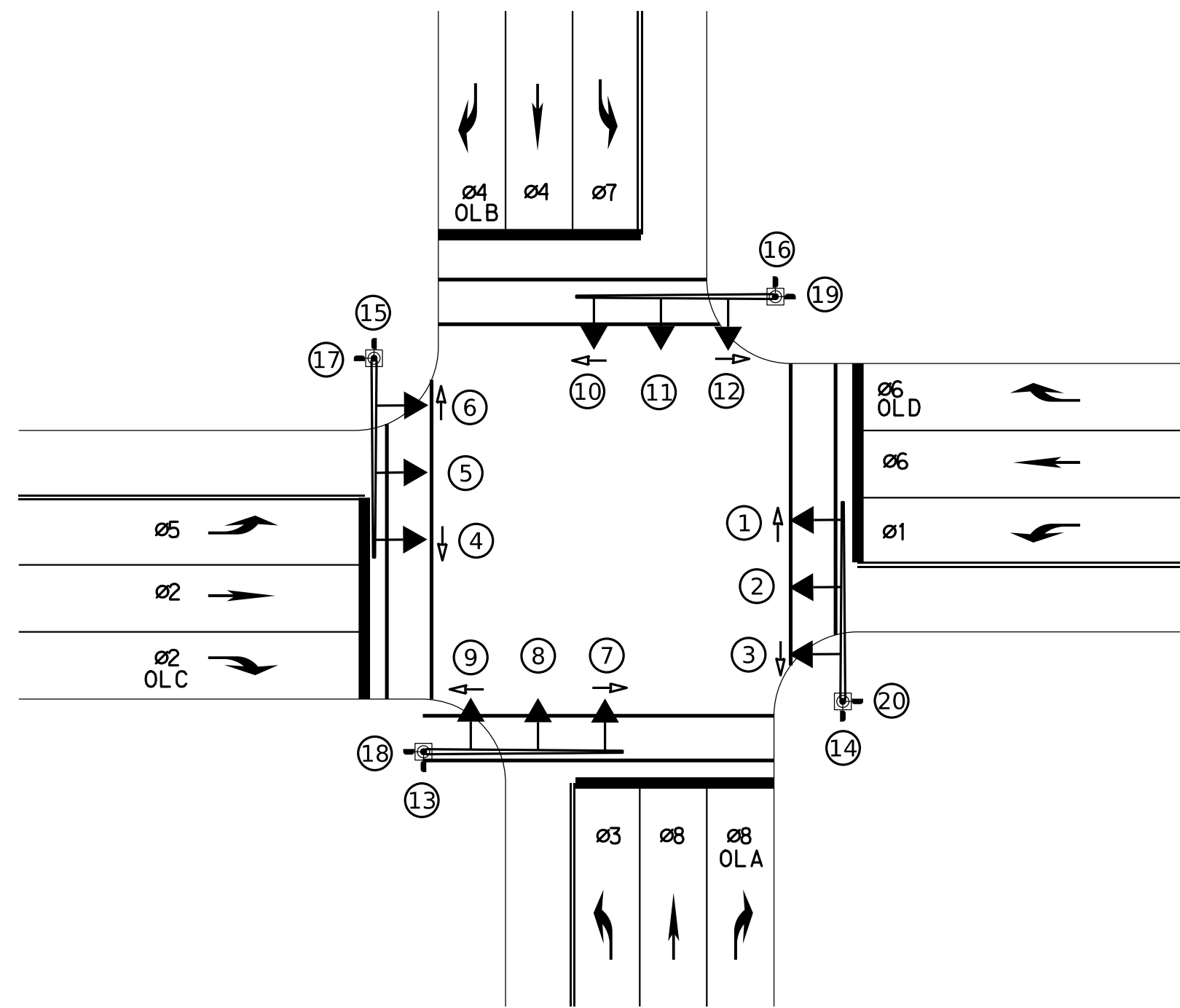
(8 VEHICLE PHASES)

### LEFT TURN PHASES

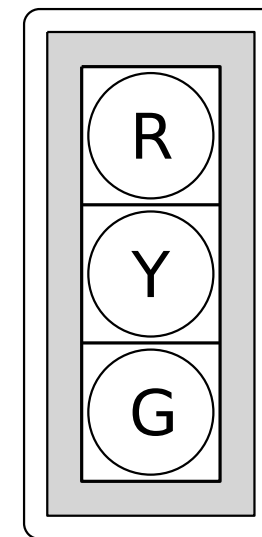
MAINLINE:  
(2) PROTECTED/PROHIBITED: 3-SECTION  
SIDE STREET:  
(2) PROTECTED/PROHIBITED: 3-SECTION

### RIGHT TURN PHASES

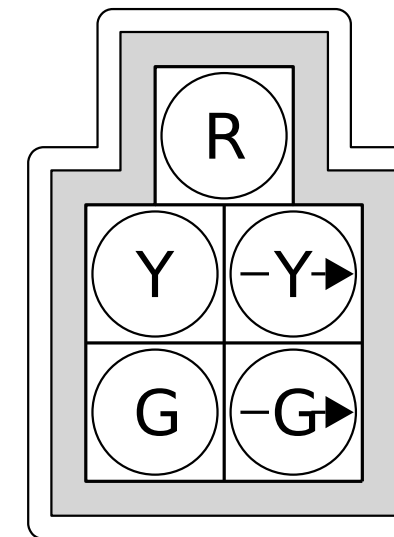
MAINLINE:  
(2) PROTECTED/PERMISSIVE: 5-SECTION  
SIDE STREET:  
(2) PROTECTED/PERMISSIVE: 5-SECTION



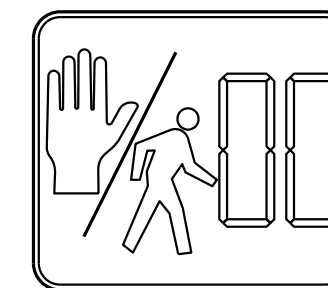
1,4,7,10



2,5,8,11



3,6,9,12



13,14,15,16  
17,18,19,20

RING A

RING B

**PHASE: 1** ACTIVE OVERLAP: **A**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
4	Ø1	X	←G-	←Y-	←R-

**PHASE: 2**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
2	Ø2	-	G	Y	R
3	Ø2	-	G	Y	R
	OLC	-	-	-	① ①
13,14	Ø2P	-	W/FDW DW	DW	DW

① -G→ IF Ø3 FOLLOWS

**PHASE: 3** ACTIVE OVERLAP: **C**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
10	Ø3	X	←G-	←Y-	←R-

**PHASE: 4**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
8	Ø4	-	G	Y	R
9	Ø4	-	G	Y	R
	OLB	-	-	-	③ ③
17,18	Ø4P	-	W/FDW DW	DW	DW

③ -G→ IF Ø5 FOLLOWS

**OVERLAPS**

**OVERLAP: A** RIGHT INCLUDED PHASES: 1 RIGHT EARLY START Ø: 8

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
12	OLA	X	-G→	-Y→	-

**OVERLAP: B** RIGHT INCLUDED PHASES: 5 RIGHT EARLY START Ø: 4

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
9	OLB	X	-G→	-Y→	-

**PHASE: 5** ACTIVE OVERLAP: **B**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
1	Ø5	X	←G-	←Y-	←R-

**PHASE: 6**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
5	Ø6	-	G	Y	R
6	Ø6	-	G	Y	R
	OLD	-	-	-	② ②
15,16	Ø6P	-	W/FDW DW	DW	DW

② -G→ IF Ø7 FOLLOWS

**PHASE: 7** ACTIVE OVERLAP: **D**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
7	Ø7	X	←G-	←Y-	←R-

**PHASE: 8**

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
11	Ø8	-	G	Y	R
12	Ø8	-	G	Y	R
	OLA	-	-	-	④ ④
19,20	Ø8P	-	W/FDW DW	DW	DW

④ -G→ IF Ø1 FOLLOWS

**OVERLAP: C** RIGHT INCLUDED PHASES: 3 RIGHT EARLY START Ø: 2

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
3	OLC	X	-G→	-Y→	-

**OVERLAP: D** RIGHT INCLUDED PHASES: 7 RIGHT EARLY START Ø: 6

SIGNALS	Ø	LPI	GREEN ACTIVE	YELLOW CHANGE	RED CLEAR
6	OLD	X	-G→	-Y→	-

PHASE TIMING

PHASES	1	2	3	4	5	6	7	8
MIN GREEN	5	12	5	5	5	12	5	5
ADVANCE WALK								
WALK		7		7		7		7
DON'T WALK		15		15		15		15
VEH EXT	2	2	2	2	2	2	2	2
MAX 1	30	60	25	30	25	60	25	30
MAX 2	30	60	25	30	25	60	25	30
YELLOW	3	4	3	3	3	4	3	3
RED	3	3	3	3	3	3	3	3
MIN RECALL								
MAX RECALL								
SOFT RECALL		X				X		
PED RECALL								
REST IN WALK								
DUAL ENTRY								
MEMORY	NL	L	NL	NL	NL	L	NL	NL

PREEMPTION

TYPE	EVP	EVP	EVP	EVP
CONFIRMATION SIGNAL	A	B	C	D
DWELL PHASES Ø	1,6	2,5	4,7	3,8
DWELL OVERLAPS				
PREEMPT MIN	10	10	10	10
PREEMPT MAX	60	60	60	60
EXIT PHASE Ø	1,6	2,5	4,7	3,8

OVERLAPS

OVERLAPS	A	B	C	D
SIGNALS	12	9	3	6
INDICATIONS	-Y→ -G→	-Y→ -G→	-Y→ -G→	-Y→ -G→
TYPE	RIGHT	RIGHT	RIGHT	RIGHT
INCLUDED Ø	1	5	3	7
RIGHT EARLY START Ø	8	4	2	6
FYA PROTECTED Ø				
FYA PERMISSIVE Ø				
FYA START DELAY				
LAG GREEN	0	0	0	0
YELLOW	-	-	-	-
RED	-	-	-	-