CE 474 – Class 08

September 10, 2015

[Field work, brief class meeting]

For next time…

Class 08 (9.10)

[Field work, brief class meeting]

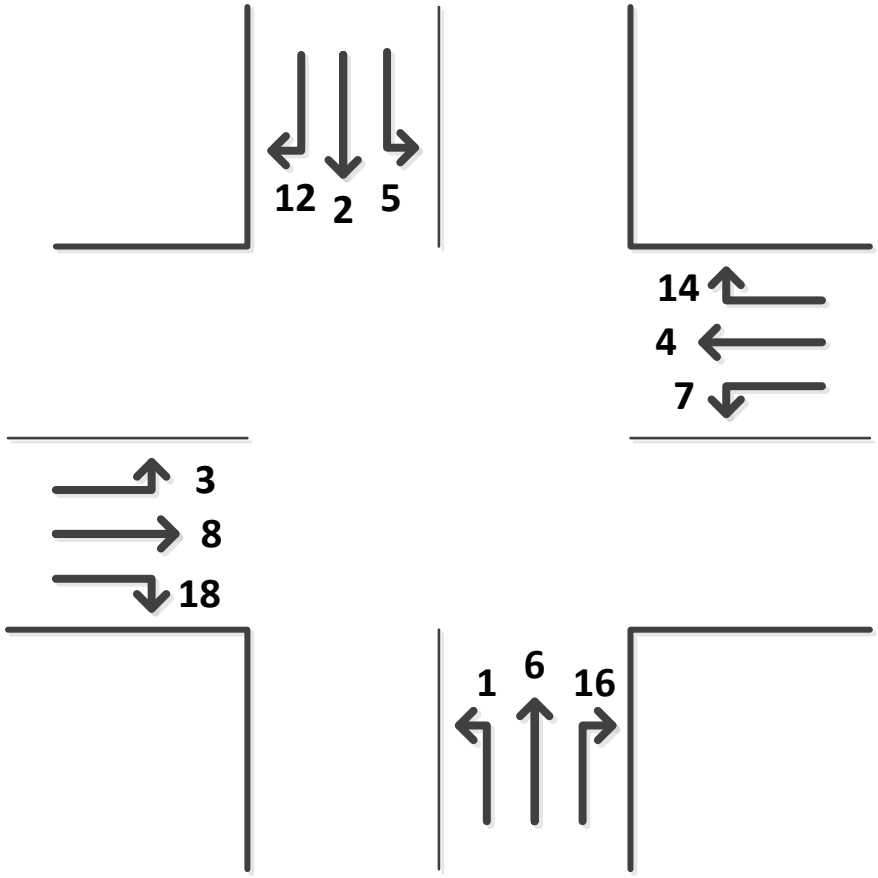
Do: A15

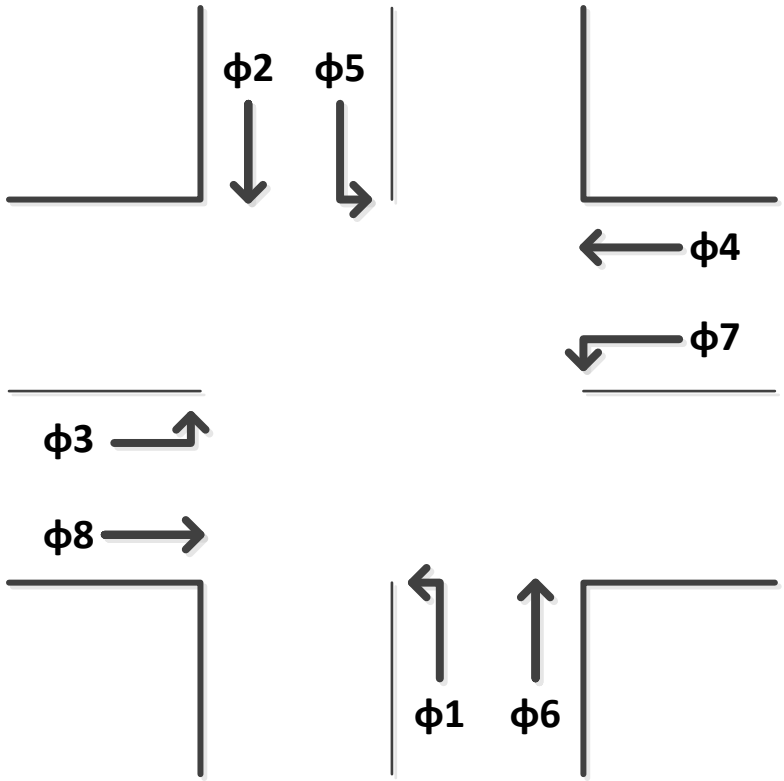
- Field, group
- Due 9.14
- Note revised Task 3

Homework (due 9.14):

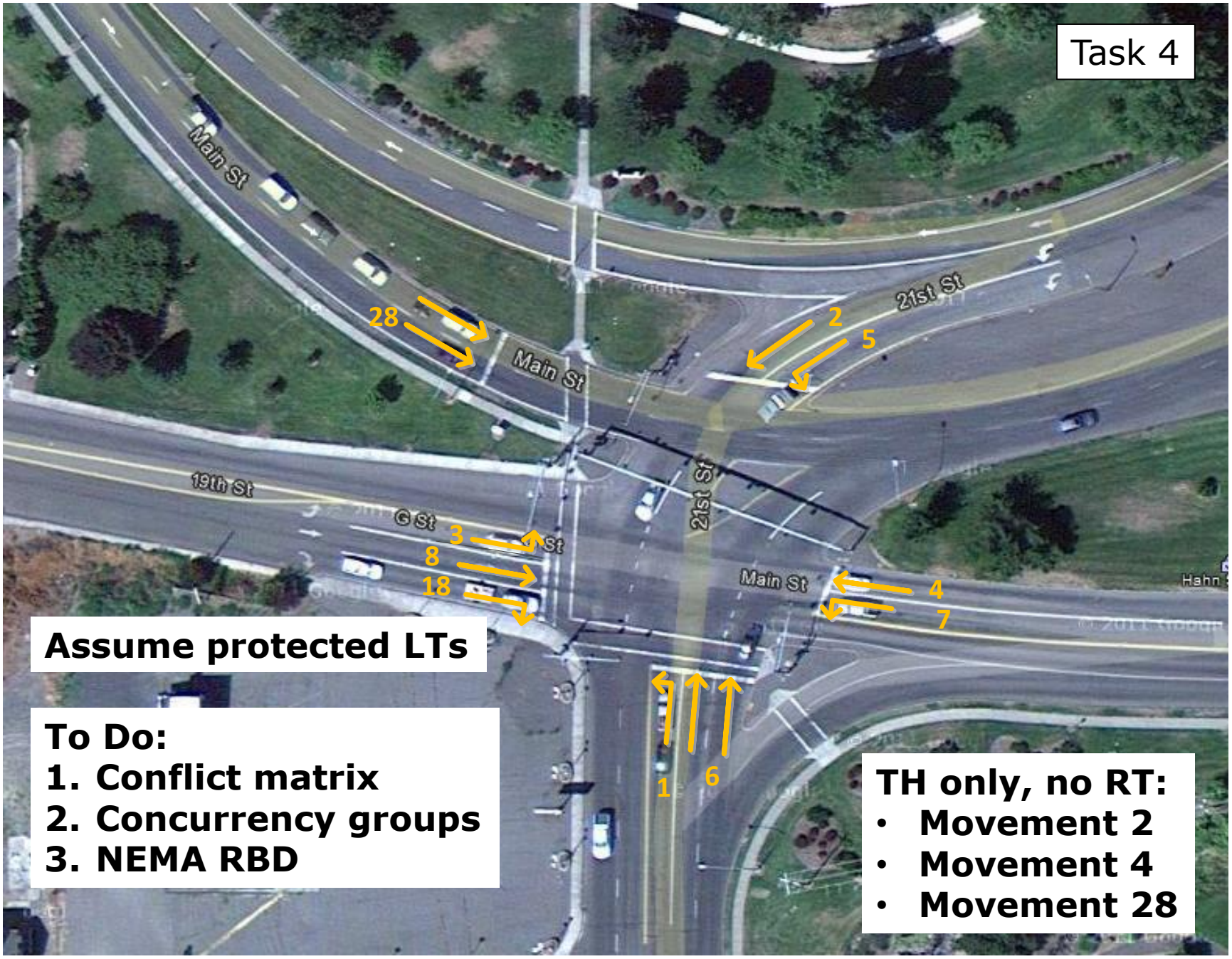
- Read: A16
- Read: STM (pp 5.1-5.16)
- Do: A16 CTQ (new question) (individual)
- Read: Chapter 4 overview
- Read: A17
- Do: A17 CTQ (individual)

What new information did you learn about phasing in the STM as compared with your text (A13)? Prepare a list of 3-5 bullet points.





Assume permitted LTs
Construct RBD


Task 4
Main St
28
Main St
2
5
21st St
19th St
G St
3
8
18
St
21st St
Main St
4
7
1
6
Assume protected LTs
To Do:
1. Conflict matrix
2. Concurrency groups
3. NEMA RBD
TH only, no RT:
• Movement 2
• Movement 4
• Movement 28

	Subject movement									
Conflicting (X) or compatible (C) movement		1	2	3	4	5	6	7	8	18	28
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	18										
	28										

Conflicting (X) or compatible (C) movement	Subject movement									
	1	2	3	4	5	6	7	8	18	28
1		X	X	X	C	C	X	X	C	C
2	X		X	X	C	C	X	X	X	X
3	X	X		X	X	X	C	C	C	X
4	X	X	X		X	X	C	C	C	C
5	C	C	X	X		X	X	X	C	X
6	C	C	X	X	X		X	X	C	X
7	X	X	C	C	X	X		X	X	C
8	X	X	C	C	X	X	X		C	C
18	X	X	C	C	C	C	X	C		C
28	C	X	X	C	X	X	C	C	C	

Concurrency Groups

NS	EW
1, 2, 5, 6	3, 4, 7, 8, 18, 28 (?)

Ring Barrier Diagram

Ring 1	φ1 1	φ2 2	φ3 3	φ4 4, 28
Ring 2	φ5 5	φ6 6	φ7 7	φ8 8, 18

barrier

Task 1. Prepare a sketch of the intersection to which you have been assigned, including the geometry and the movements that you observe at the intersection.

~~Task 2. Based on standard NEMA phasing, add the phase numbers to the sketch of the movements that you prepared in Task 1.~~

Task 3. [REVISED] Observe the intersection for a period of **15 minutes**. Record the movements that occur at the same time, one sequence after another.

Task 4. Prepare a RBD showing the sequence of phases that you believe exist at this intersection. Document any differences between the normal sequence (Figure 59) and any special phasing sequences that you observe.

Table 8. Data collection form for sequence of phases

Cycle	Sequence of movements ~~for phase~~ observed

Table 8. Data collection form for sequence of phases

Cycle	Sequence of movements ~~for phase~~ observed
1	1
	1,6
	2,6
	3,7
	3,8
	4,8
2	1,5
	1,6
	2,6
	3,8
	4,8

Cycle 1

ϕ1	ϕ1	ϕ2	ϕ3	ϕ3	ϕ4
ϕ5	ϕ6	ϕ6	ϕ7	ϕ8	ϕ8

Cycle 2

ϕ1	ϕ1	ϕ2	ϕ3	ϕ4
ϕ5	ϕ6	ϕ6	ϕ8	ϕ8

Group	Team	Name	Intersection
A	2	Morris Cornwell Keller	SH 8/Warbonnet
B	3	Hartzell LeCates Landa	Palouse River Drive
C	5	Larrea Cupps	SH 8/Line
	6	Saras Skinner	
D	7	Scheel Kury Geibel	US 95/Sweet
E	9	Bode Hale	SH 8/US 95
	10	Dashti Maffey	
F	12	Almakrab Crow Elmore	SH 8/Warbonnet
G	13	Ryu Alrashdi	SH 8/Line
	14	Bernauer Taylor-Stiffarm	

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