



**SOUTH LOOP  
FIRE STATION & PARK STUDY  
CITY COUNCIL  
WORKSHOP**

**MARCH 14, 2016**



**SOUTH LOOP FIRE STATION & PARK STUDY**

# PRESENTATION AGENDA

- INTRODUCTIONS & HISTORY
- BUILDING PROGRAM
- STUDY LOCATION MAP
- FIRE STATION SITE PLANS
- PARK SITE PLANS
- BUDGET SUMMARY
- QUESTIONS



# PROGRAMMING

## BUILDING PROGRAMMING

Space Name	Space Description/Notes	Initial Qty	Size	Area	Total
<b>Public Access</b>					
Vestibule		1	8'x8'	64	64
	Total				<b>64</b>
<b>Admin</b>					
Office		8	9'x10'	90	720
Classroom/Training		1	30'x30'	900	900
Locker Room		1	20'x20'	400	400
Restroom		2	8'x10'	80	160
Restroom/Showers		3	9'x11'	99	297
Fitness Room		1	20'x30'	600	600
Dayroom		1	30'x30'	900	900
Kitchen		1	15'x20'	300	300
Storage		1	10'x12'	120	120
	Subtotals				4,397
	Circulation	15%			660
	Total				<b>5,057</b>
<b>Support</b>					
Dispatch		1	15'x20'	300	300
Turnout Gear		1	20'x20'	400	400
Decon		1	14'x18'	252	252
SCBA		1	10'x14'	140	140
Decon Restroom		1	9'x10'	90	90
Secure Storage		1	15'x15'	225	225
Open Storage		1	15'x15'	225	225
Hose Tower		1	14'x14'	196	196
Utility		1	10'x12'	120	120
	Subtotals				1,948
	Circulation	15%			292
	Total				<b>2,240</b>





# PROGRAMMING

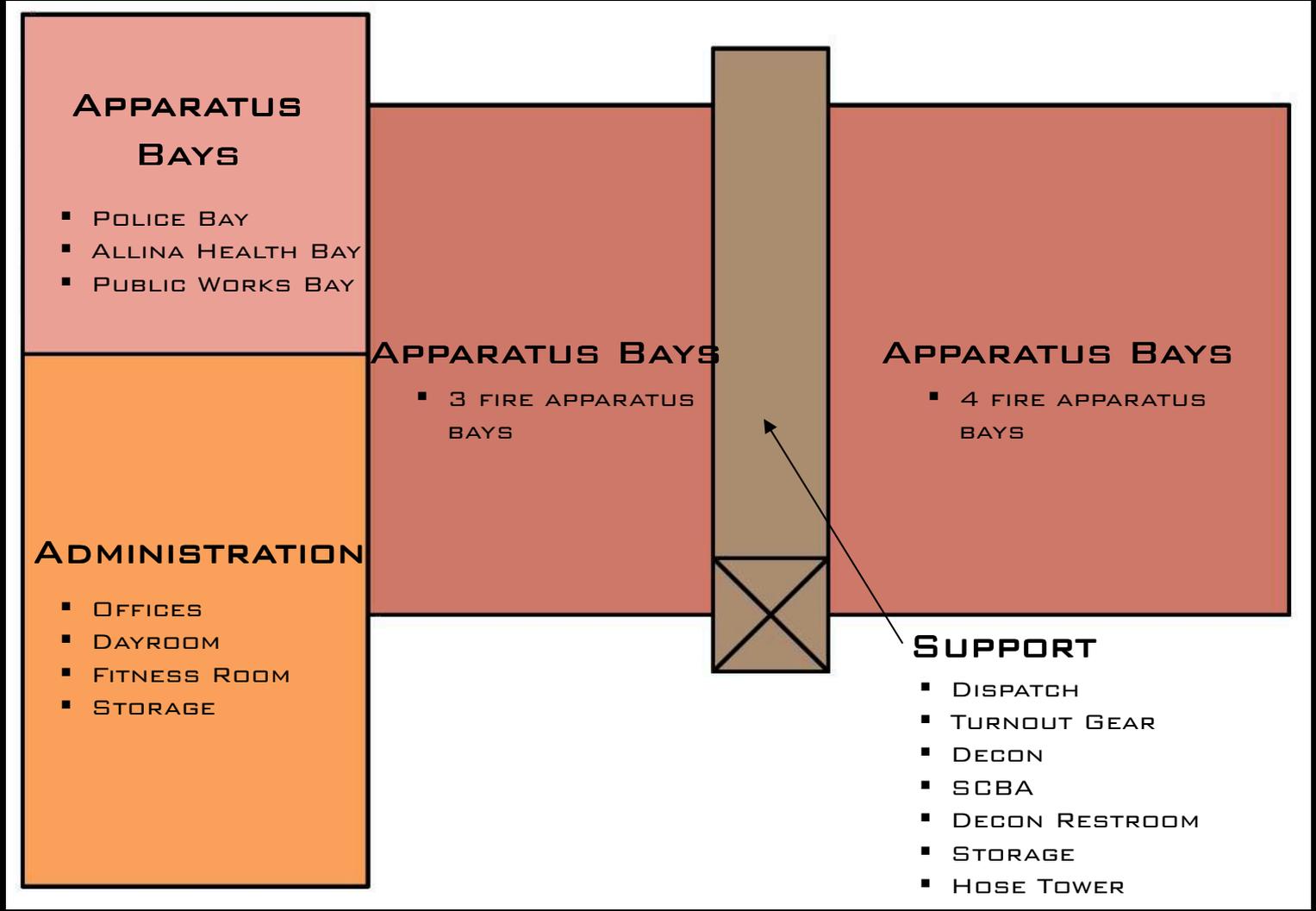
## BUILDING PROGRAMMING

Space Name	Space Description/Notes	Initial Qty	Size	Area	Total
<b>Apparatus Bays</b>					
Apparatus Bays		7	20'x90'	1,800	11,700
Allina Health EMS Bay		1	20'x40'	800	800
Police Bay		1	20'x40'	800	800
Public Works Bay		1	20'x60'	1,200	1,200
	Subtotals				14,500
	Circulation	15%			2,175
	Total				<b>16,675</b>
<b>Miscellaneous</b>					
Police Office		1	9'x10'	90	90
Allina Health EMS Office		1	9'x10'	90	90
IS Department		1	8'x10'	80	80
Mechanical Room		1	15'x20'	300	300
	Subtotals				560
	Circulation	15%			84
	Total				<b>644</b>
	<b>Total</b>				<b>24,680</b>



# PROGRAMMING

## BUILDING PROGRAMMING



# SITE STUDY LOCATIONS

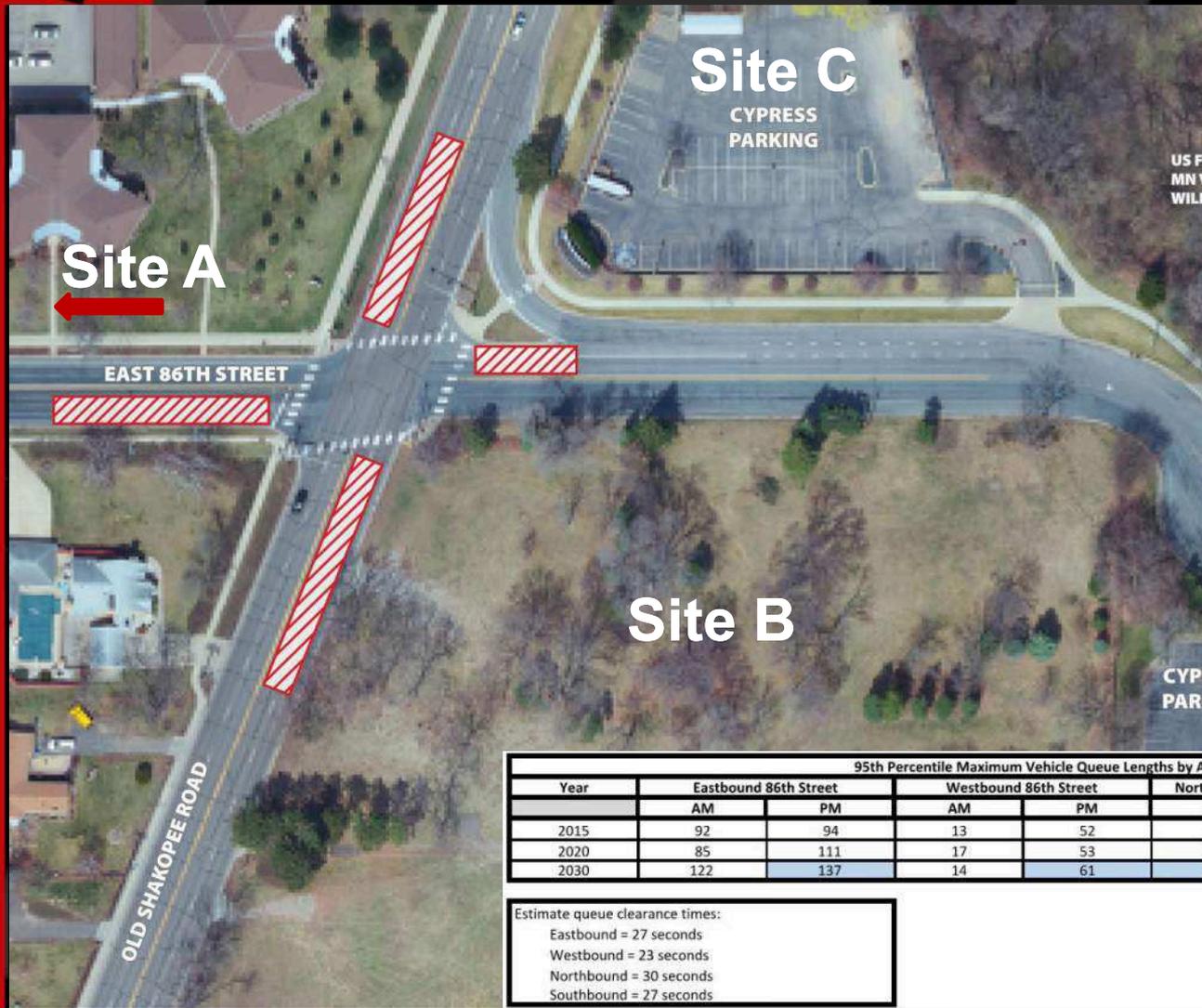
## SOUTH LOOP REGION



- POTENTIAL SITES
- SITE A – EXISTING SITE ON 86<sup>TH</sup> STREET
  - SITE B – NEW SITE ON THE SOUTH SIDE OF 86<sup>TH</sup> STREET & OLD SHAKOPEE ROAD
  - SITE C – NEW SITE ON THE NORTH SIDE OF 86<sup>TH</sup> STREET & OLD SHAKOPEE ROAD

# INTERSECTION TRAFFIC ANALYSIS

## 86<sup>TH</sup> STREET/OLD SHAKOPEE



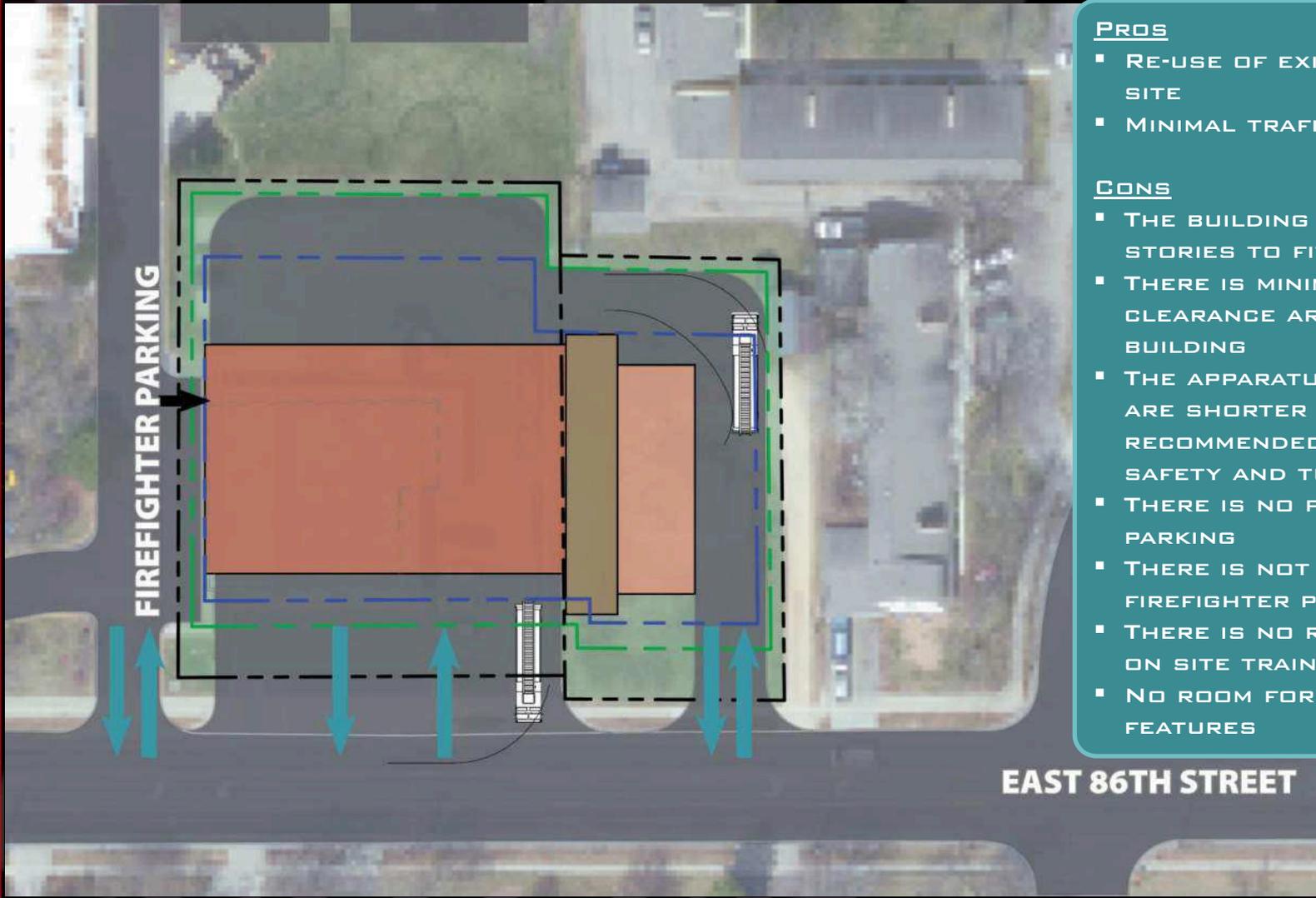
- TRAFFIC ANALYSIS**
- FIREFIGHTERS RESPONDING TO STATION (EASTBOUND & NORTHBOUND MOST COMMON)
  - SITE A AND SITE B LESS TIME FOR FIREFIGHTERS, SITE C INCREASED TIME
  - QUEUEING LENGTHS – AVOID BLOCKING STATION ENTRANCE & EXIT
  - FUTURE MEDIAN ON OLD SHAKOPEE ROAD
  - APPARATUS RESPONSE TIME FOR CLEARING INTERSECTION
  - SAFETY OF ENTERING TRAFFIC

95th Percentile Maximum Vehicle Queue Lengths by Approach (in feet)

Year	Eastbound 86th Street		Westbound 86th Street		Northbound Old Shakopee Road		Southbound Old Shakopee Road	
	AM	PM	AM	PM	AM	PM	AM	PM
2015	92	94	13	52	97	58	68	101
2020	85	111	17	53	110	72	65	119
2030	122	137	14	61	152	54	60	106

Estimate queue clearance times:  
 Eastbound = 27 seconds  
 Westbound = 23 seconds  
 Northbound = 30 seconds  
 Southbound = 27 seconds

## SITE LAYOUT



### PROS

- RE-USE OF EXISTING SITE
- MINIMAL TRAFFIC ISSUES

### CONS

- THE BUILDING IS THREE STORIES TO FIT ON SITE
- THERE IS MINIMAL CLEARANCE AROUND THE BUILDING
- THE APPARATUS APRONS ARE SHORTER THAN RECOMMENDED FOR SAFETY AND TURNING
- THERE IS NO PUBLIC PARKING
- THERE IS NOT ENOUGH FIREFIGHTER PARKING
- THERE IS NO ROOM FOR ON SITE TRAINING
- NO ROOM FOR PARK FEATURES

# SITE B - 86<sup>TH</sup> & OLD SHAKOPEE

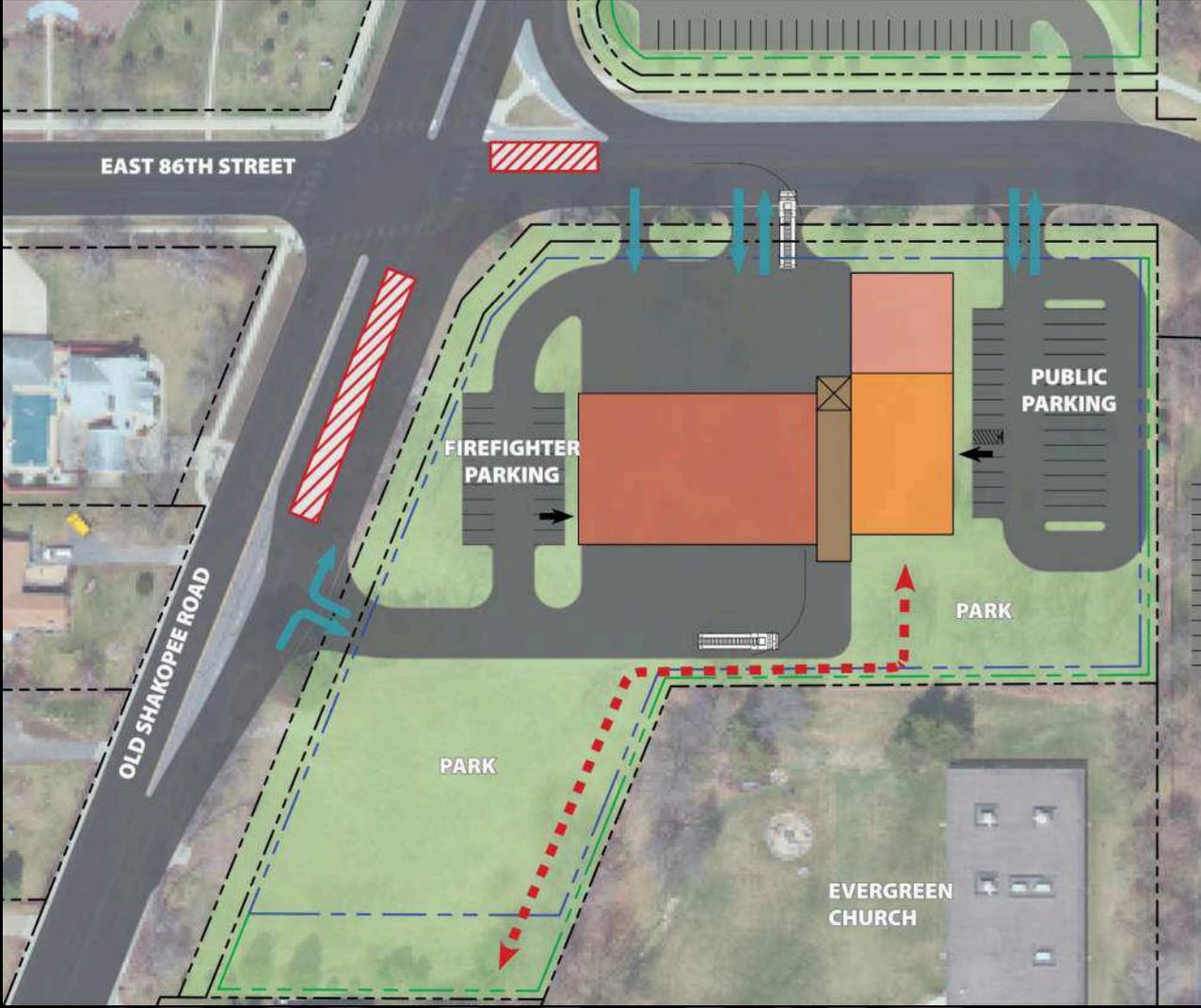
## SITE LAYOUT - OPTION 1



- PROS**
- APPROPRIATE APPARATUS APRON LENGTHS
  - ACCESS FOR APPARATUS /FIREFIGHTERS FROM BOTH 86<sup>TH</sup> & OLD SHAKOPEE ROAD
  - ALLOWS TRAINING ON SITE
  - ADEQUATE PARKING FOR PUBLIC AND FIREFIGHTERS
  - ALLOWS ROOM FOR PARK FEATURES
  - NO ISSUES WITH QUEUE LENGTHS OR CLEARANCES
  - QUICKER ARRIVAL TIME FOR FIREFIGHTERS
- CONS**
- THE ADMIN/SUPPORT APPARATUS PARTIALLY OBSCURES THE APPARATUS BAYS.
  - RIGHT IN/RIGHT OUT ONLY FOR PUBLIC PARKING

# SITE B - 86<sup>TH</sup> & OLD SHAKOPEE

## SITE LAYOUT - OPTION 2



- PROS**
- APPROPRIATE APPARATUS APRON LENGTHS
  - ACCESS FOR APPARATUS /FIREFIGHTERS FROM BOTH 86<sup>TH</sup> & OLD SHAKOPEE ROAD
  - ALLOWS TRAINING ON SITE
  - ADEQUATE PARKING FOR PUBLIC AND FIREFIGHTERS
  - ALLOWS ROOM FOR PARK FEATURES
  - NO ISSUES WITH QUEUE LENGTHS OR CLEARANCES
  - FULL VIEW OF APPARATUS BAYS FROM OLD SHAKOPEE ROAD
- CONS**
- WEAKER PATH CONNECTION TO REFUGE
  - PUBLIC PARKING FURTHER FROM PARK AREA AND LESS VISIBLE TO OLD SHAKOPEE ROAD

# SITE B - 86<sup>TH</sup> & OLD SHAKOPEE

## SITE LAYOUT - OPTION 3



### PROS

- APPROPRIATE APPARATUS APRON LENGTHS
- ACCESS FOR APPARATUS /FIREFIGHTERS FROM BOTH 86<sup>TH</sup> & OLD SHAKOPEE ROAD
- ALLOWS TRAINING ON SITE
- ADEQUATE PARKING FOR PUBLIC AND FIREFIGHTERS
- ALLOWS ROOM FOR PARK FEATURES ALONG OSR
- NO ISSUES WITH QUEUE LENGTHS OR CLEARANCES

### CONS

- THE ADMIN/SUPPORT APPARATUS PARTIALLY OBSCURES THE APPARATUS BAYS
- RIGHT IN/RIGHT OUT ONLY FOR PUBLIC PARKING

# SITE B - 86<sup>TH</sup> & OLD SHAKOPEE

## SITE LAYOUT - OPTION 4



- PROS**
- APPROPRIATE APPARATUS APRON LENGTHS
  - ACCESS FOR APPARATUS /FIREFIGHTERS FROM BOTH 86<sup>TH</sup> & OLD SHAKOPEE ROAD
  - ALLOWS TRAINING ON SITE
  - ADEQUATE PARKING FOR PUBLIC AND FIREFIGHTERS
  - NO ISSUES WITH QUEUE LENGTHS OR CLEARANCES
  - FULL VIEW OF APPARATUS BAYS FROM OLD SHAKOPEE ROAD
- CONS**
- RIGHT IN/RIGHT OUT ONLY FOR PUBLIC PARKING
  - WEAKER PATH CONNECTION TO REFUGE
  - PUBLIC PARKING FURTHER FROM PARK AREA AND LESS VISIBLE TO OLD SHAKOPEE ROAD

# SITE B - 86<sup>TH</sup> & OLD SHAKOPEE

## SITE LAYOUT - OPTION 5



- PROS**
- APPROPRIATE APPARATUS APRON LENGTHS
  - ACCESS FOR APPARATUS/FIREFIGHTERS FROM BOTH 86<sup>TH</sup> & OLD SHAKOPEE ROAD
  - ALLOWS TRAINING ON SITE
  - ADEQUATE PARKING FOR PUBLIC & FIREFIGHTERS
  - ALLOWS ROOM FOR PARK FEATURES NEAR TO REFUGE ENTRANCE
  - APPARATUS BAYS VISIBLE TO STREET
- CONS**
- APPARATUS EXIT OVERLAPS QUEUE ON OLD SHAKOPEE ROAD
  - RIGHT IN/RIGHT OUT ONLY FOR PUBLIC PARKING
  - PUBLIC PARKING DOESN'T SERVE PARK