

# FUTURE CENTRAL FIRE STATION

PRESENTATION MAY 29, 2018

# DEMONSTRATING THE NEED FOR FIRE PROTECTION IN CUMRU TOWNSHIP

MAP ON NEXT SLIDE:

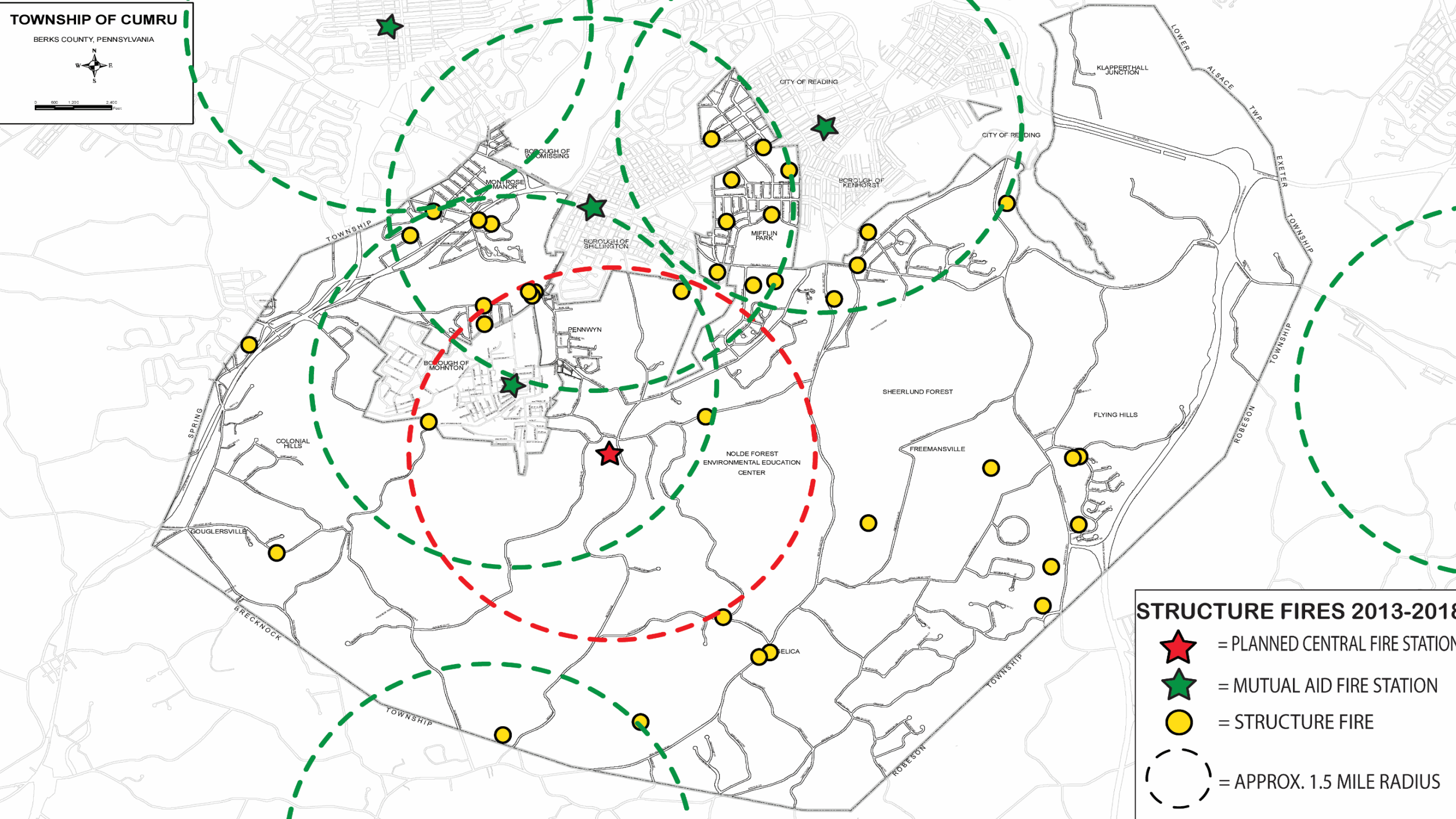
- STRUCTURE FIRES ONLY
- PAST 5 YEARS
- USES 1.5 MILE RADIUS WITHOUT ANALYSIS OF ROADS

# TOWNSHIP OF CUMRU





BERKS COUNTY, PENNSYLVANIA



0 600 1200 2400 Feet



## STRUCTURE FIRES 2013-2018

-  = PLANNED CENTRAL FIRE STATION
-  = MUTUAL AID FIRE STATION
-  = STRUCTURE FIRE
-  = APPROX. 1.5 MILE RADIUS

# ESTABLISHING NEEDS OF THE DEPARTMENT

- FIRE STUDY 2011
- STRATEGIC PLAN 2016-2020
- STATION 2 (CEDAR TOP STATION)

ONLY STATION OWNED BY TOWNSHIP - OTHER STATIONS LEASED  
108+ YEARS OLD, WITH MAINTENANCE CONCERNS  
DOES NOT MEET NEEDS OF VOLUNTEERS  
DOES NOT HAVE DECONTAMINATION FACILITIES  
CANNOT HOUSE ALL APPARATUS

# DETERMINING LOCATION OF STATION

- STUDY OF FOUR LOCATIONS
- DEVELOPED MATRIX OF SITE CHARACTERISTICS - NEXT SLIDE
- CONCLUSION: BEST LOCATION FOR FUTURE FIRE STATION IS ON THE TOWNSHIP CAMPUS



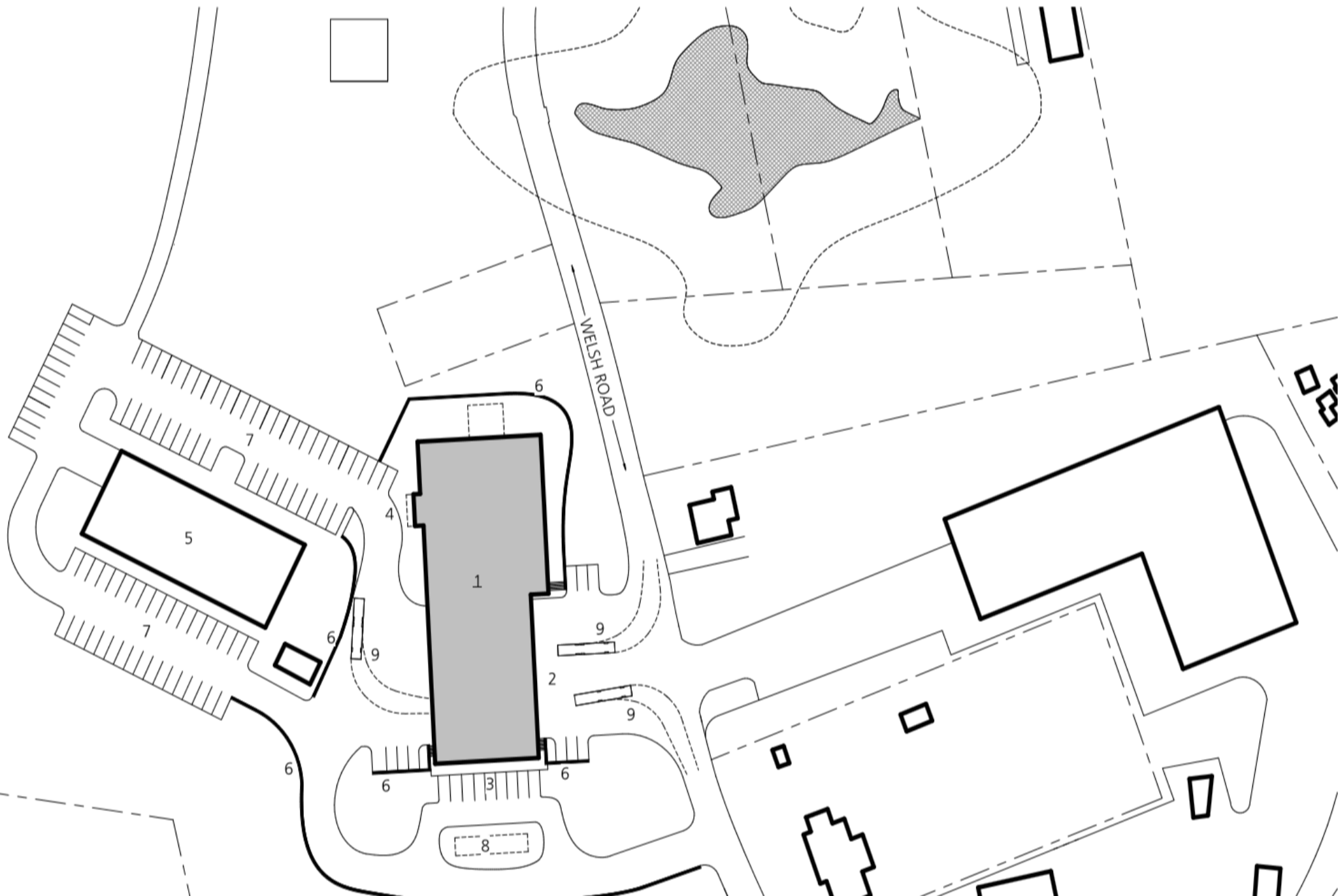
## Cumru Township Fire Station Site Selection Matrix

### Possible Fire Station Sites

Site Selection Considerations	Impact Type		Reading Health	Township Campus	Christmas Tree Farm	Developer Given	
			Flying Hills	Church/Welsh	Phil/High	Cedar Top Road	
1	CT owns the site	Cost	4	4	1	4	
2	Project could begin now on the site	Time & Cost	4	4	1	4	
3	Location of current CTFD membership pool	Operational & Service Delivery	1	4	1	1	
4	Location based on 3 year historical data provided	Operational & Service Delivery	1	3	3	3	
5	Usable portion of the site	Cost & Operational	3	3	3	2	
6	Parking Spaces: Staff, Hot & Membership	Cost & Operational	3	4	3	1	
7	Two ways in & out of site: Emergency & POV	Life Safety	2	3	2	2	
8	Highway Speed	Life Safety	1	3	2	3	
9	Sightlines: Speed, visible distance & crowning	Life Safety	1	3	2	2	
10	Noise from site to homes across the street	Goodwill	3	4	2	2	
11	Water near the site: Domestic or Well	Cost	4	2	4	4	
12	Sewer near the site	Cost	1	4	4	4	
13	Electrical Service Hazard/Relocation	Cost	2	4	2	2	
14	Site approach: Setback, T42 turning radius, off St.	Cost & Operational	3	4	3	1	
15	Site Prep: Fill, retaining walls, grading	Cost	3	4	2	1	
<b>Scoring Legend</b>	1 = Major Cost and/or Project Negative Impact. 4 = Minimal Cost and/or Project Negative Impact.		<b>Totals</b>	<b>36</b>	<b>53</b>	<b>35</b>	<b>36</b>
<b>Suitability of Sites based on 2015 Conditions and Impacts</b>			<b>60.00%</b>	<b>88.33%</b>	<b>58.33%</b>	<b>60.00%</b>	

# CONCEPTUALIZING CAMPUS LAYOUT

- WETLAND DELINEATION DONE
- MASTER PLAN / FEASIBILITY STUDY AUTHORIZED 2016
- REQUEST FOR QUALIFICATIONS FOR ARCHITECT TO CONDUCT MASTER PLAN
- FOCUS ON EXPERIENCE DESIGNING FIRE STATIONS
- REQUEST FOR PROPOSALS FROM RFQ FINALISTS
- INTERVIEWS OF FINALISTS
- DEVELOPMENT OF MASTER PLAN, WITH OPTIONS FOR LOCATION OF FIRE STATION ON TOWNSHIP CAMPUS



- 1 - STATION FOOTPRINT (23,500 SQ.FT.)
- 2 - FRONT APPARATUS BAY APRON
- 3 - HOME RESPONSE PARKING/ENTRY
- 4 - PUBLIC ENTRY
- 5 - EXISTING TOWNSHIP BUILDING
- 6 - RETAINING WALL LOCATIONS
- 7 - EXISTING PARKING EXPANDED
- 8 - FIRE SUPPRESSION TANK
- 9 - TURNING RADIUS OF 47' LADDER



# NOTES ABOUT CAMPUS LAYOUT

- CAN OPERATE OUT OF STATION 2 UNTIL OCCUPANCY (NOT HAVING TO DO PHASED CONSTRUCTION SAVES MONEY)
- ONE-STORY BUILDING (SAVES COST OF ELEVATORS AND STAIRWELLS)
- SUPPORT FROM PUBLIC WORKS AND TOWNSHIP INFRASTRUCTURE READILY AVAILABLE (MORE EFFICIENT)
- DRIVE THROUGH BAYS (INCREASES SAFETY)
- REVERSE FRONTAGE BUILDING

# FROM WELSH ROAD



PERSPECTIVE  
**CUMRU FIRE DEPARTMENT**

**MANN'S WOODWARD STUDIOS**  
PUBLIC SAFETY ARCHITECTURE + PLANNING  
[www.mwsarch.com](http://www.mwsarch.com) 410-344-1460  
12/29/2017

# FROM OFFICE BUILDING



PERSPECTIVE  
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# PROGRAMMING NEEDS

- DECONTAMINATION FACILITIES
- TRAINING ROOM
- OFFICES
- BUNK ROOMS
- BAYS FOR CURRENT AND FUTURE APPARATUS
- STORAGE FOR VARIOUS EQUIPMENT
- DAY ROOM
- FITNESS ROOM
- STUDY ROOM



SCHEDULE - FINISHES				
NUMBER	ROOM INFORMATION	ROOM LENGTH	ROOM WIDTH	AREA
101	LOBBY	26'-0"	21'-0"	678 SF
102	MEETING ROOM	40'-0"	30'-0"	1,400 SF
103	ST.	6'-0"	7'-0"	20 SF
104	ST.	15'-0"	4'-0"	45 SF
105	WOMENS	11'-0"	12'-0"	132 SF
106	MENS	11'-0"	12'-0"	132 SF
107	OFFICE #5	10'-0"	15'-0"	150 SF
108	COPY / MAIL	10'-0"	4'-0"	51 SF
109	CONFERENCE	20'-0"	12'-0"	240 SF
111	TOILET	7'-0"	7'-0"	49 SF
112	KITCHEN	24'-0"	22'-0"	688 SF
113	PANTRY	10'-0"	6'-0"	60 SF
114	DAYROOM	20'-0"	22'-0"	480 SF
115	UTILITY	8'-0"	4'-0"	32 SF
116	OPEN BUNK	60'-0"	12'-0"	720 SF
117	BUNK #1	12'-0"	12'-0"	144 SF
118	BUNK #2	12'-0"	12'-0"	144 SF
119	BUNK #3	12'-0"	12'-0"	144 SF
120	BUNK #4	12'-0"	12'-0"	144 SF
124	CORRIDOR			1,000 SF
127	OPEN STORAGE	6'-0"	10'-0"	53 SF
128	TURNOUT GEAR	21'-0"	30'-0"	630 SF
130	OFFICE #3	14'-0"	14'-0"	196 SF
132	OFFICE #2	14'-0"	14'-0"	196 SF
133	OFFICE #4	17'-0"	13'-0"	209 SF
134	OFFICE #1	14'-0"	14'-0"	196 SF

SCHEDULE - FINISHES				
NUMBER	ROOM INFORMATION	ROOM LENGTH	ROOM WIDTH	AREA
136	TOILET	20'-0"	10'-0"	200 SF
137	DECON	12'-0"	20'-0"	240 SF
138	APPARATUS BAY	121'-0"	82'-0"	9,918 SF
141	FIRE EQUIPMENT STORAGE	22'-0"	10'-0"	220 SF
142	SCBA / COMPRESSOR	10'-0"	10'-0"	100 SF
143	WORKSHOP	14'-0"	10'-0"	140 SF
144	APPARATUS MAINTENANCE OFFICE	9'-0"	17'-0"	153 SF
145	TOILET	12'-0"	10'-0"	120 SF
146	UTILITY	22'-0"	16'-0"	338 SF
147	T&S #1	7'-0"	8'-0"	56 SF
148	T&S #2	7'-0"	8'-0"	56 SF
149	LAUNDRY / JAN.	7'-0"	9'-0"	63 SF
150	T&S #3	7'-0"	8'-0"	56 SF
152	FITNESS	22'-0"	22'-0"	568 SF
153	ST.	11'-0"	6'-0"	66 SF
154	QUARTER MASTER STORAGE	20'-0"	9'-0"	180 SF
155	STUDY	22'-0"	11'-0"	80 SF
159	CL.			115 SF
161	MECH. / ELEC.	10'-0"	8'-0"	80 SF
162	STORAGE	10'-0"	10'-0"	100 SF
163	DECON LOCKER	8'-0"	20'-0"	160 SF
164	SHOWER	8'-0"	8'-0"	64 SF
165	STORAGE	10'-0"	10'-0"	100 SF
166	SECURE VESTIBULE	22'-0"	6'-0"	132 SF
167	OPEN BUNK	20'-0"	7'-0"	140 SF
180	OPEN BUNK	20'-0"	7'-0"	140 SF
181	OPEN BUNK	20'-0"	7'-0"	140 SF

TOTAL SQUARE FOOTAGE - 23,500 SQ. FT.



- APPARATUS BAY -
- TURNOUT GEAR -
- OPEN BUNKS -
- PRIVATE BUNKS -
- PERSONAL LOCKERS -
- MEETING ROOM -

- 6 BAYS - (ALL BAYS DOUBLE DEEP)
- 66 RACKS @ 20" X 20"
- 6 BUNKS / 12 PERSON MAX. SLEEPING CAPACITY
- 4 BUNKS / 8 PERSON MAX. SLEEPING CAPACITY
- 45 UNITS @ 18" X 20"
- 66 SEATS @ TABLE

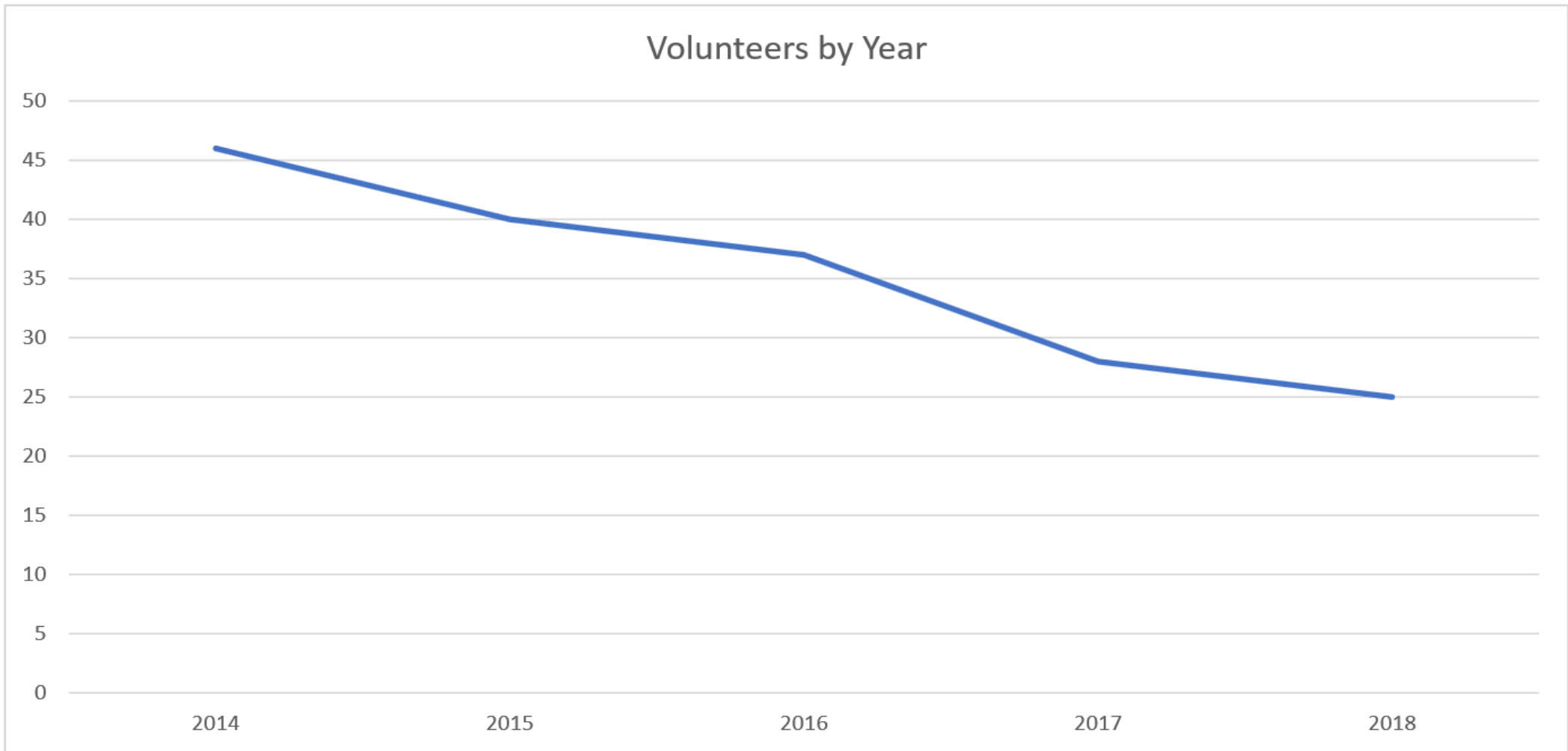
# FLOOR PLAN - CONCEPT

## CUMRU FIRE DEPARTMENT

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 WWW.MWSARCH.COM 410-344-1460

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# CONCERNING VOLUNTEERS



# FLOW CHART OF DESIGN PROCESS

