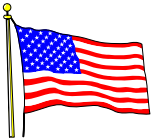


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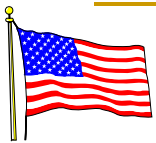
# Park Circle Fire Station

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Capital Planning Committee  
Substitute Motion  
Recommendation on Article 47



# Engine 3 Shelter



June 13, 2005

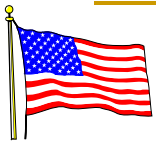
Park Circle Fire Station

2

# Engine 3 At Dusk



Arlington Firefighter directs Engine 3 home after early evening call on June 1, 2005.

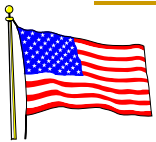


June 13, 2005

Park Circle Fire Station

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# Entering Shelter



June 13, 2005

Park Circle Fire Station

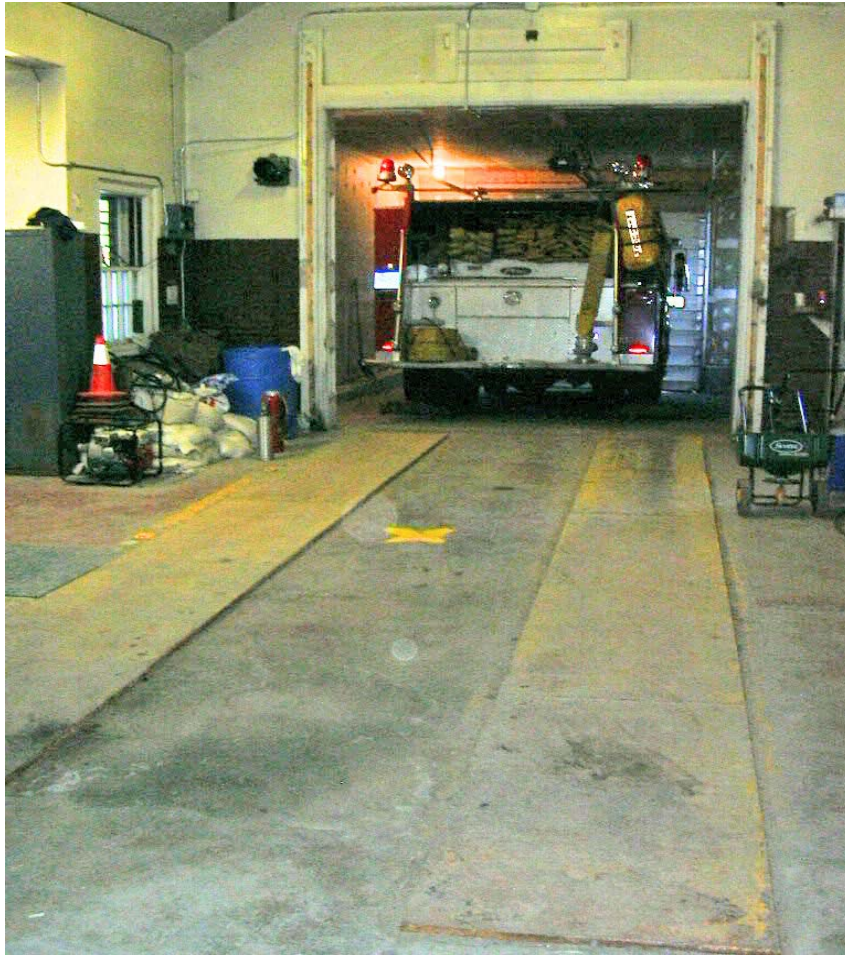
# Engine 3 At Home



- Note narrow fit and lack of work space, maintenance, or safety assurance operating area.
- Entire shelter is fit where former driveway provided entrance to station proper.



# View From Original Bay



- Note difference in working area.
- Note lighting conditions.

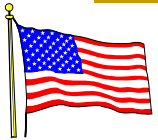


June 13, 2005

Park Circle Fire Station

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# Working and Living at Park Circle



June 13, 2005

Park Circle Fire Station

# Ceiling Damage in Kitchen Area



June 13, 2005

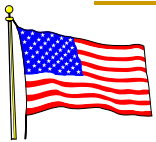
Park Circle Fire Station

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# San Andreas Ceiling Fault

Created Across Building by Floor Sag

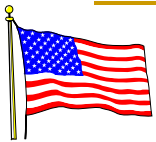


June 13, 2005

Park Circle Fire Station

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# Proposed Station Architect's Sketch

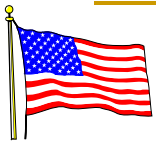
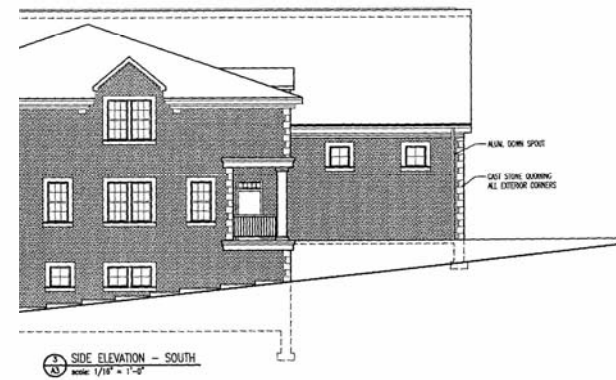


June 13, 2005

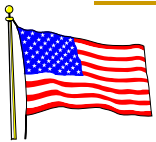
Park Circle Fire Station

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# Front and Side Views on Grade



# Computer Simulation: Front View



June 13, 2005

Park Circle Fire Station

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# Computer Simulation: Looking North



June 13, 2005

Park Circle Fire Station

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# New Station Summary

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## General:

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Size 7,300 S.F.  
Bays 2 40' x 16'

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## Facilities:

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Unisex M/F Accom.  
3 Bunk Rooms  
M&F Toilets/Showers  
Kitchen  
Day Room  
Meeting Room  
Officer's Office

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## Support Infrastructure:

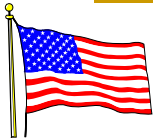
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HVAC  
Exhaust System  
Telecommunications  
A/V Meeting/Training  
Reinforced Structure  
First Aid  
Public Restroom  
Fitness Training

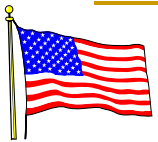
## Cost Summary

(2003 Design)

Construction	\$	1,800,000
Relocation		110,000
Construction Mgt.		68,000
Communications/IT		128,900
Exhaust, etc.		41,000
Furniture & Fittings		23,900
	\$	2,171,800
Inflation (3%/Year)	\$	128,200
Estimated Total	\$	2,300,000



# Core Mission: Citizen Safety



June 13, 2005

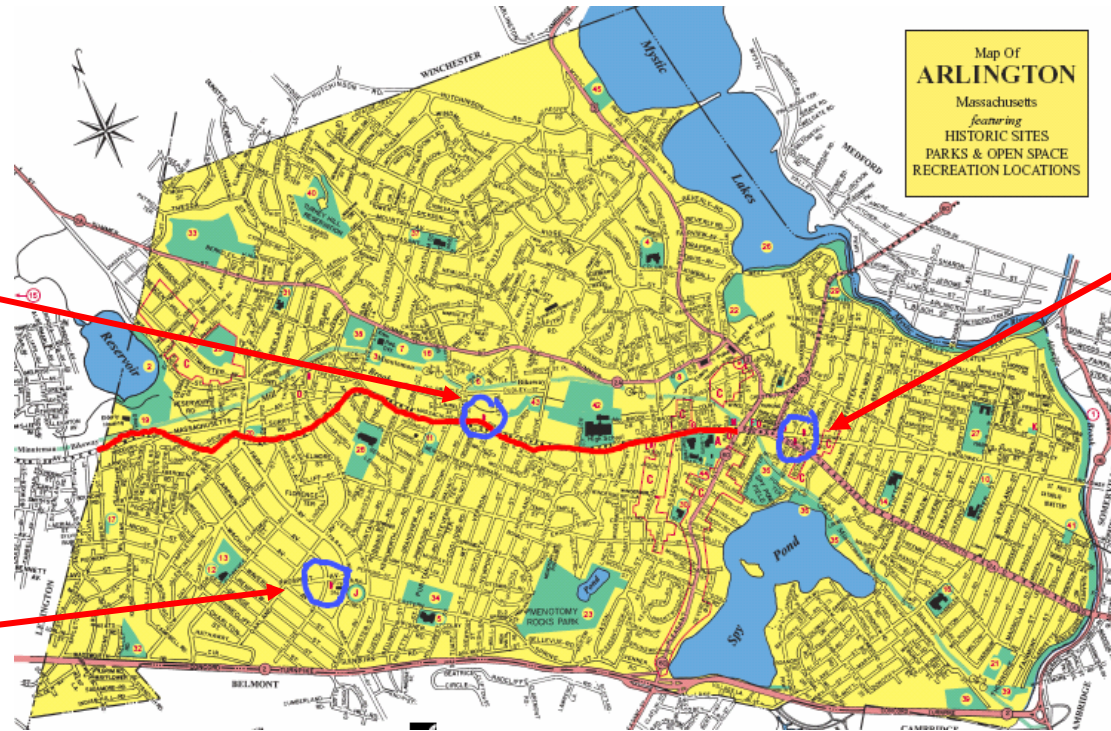
Park Circle Fire Station

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# Arlington

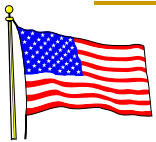
Highland

Park Circle



HQ

- Land-limited
- Highway, hill and lake bounded
- Divided by rail (bike path), road (Mass Ave.), and Spy Pond.



June 13, 2005

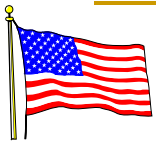
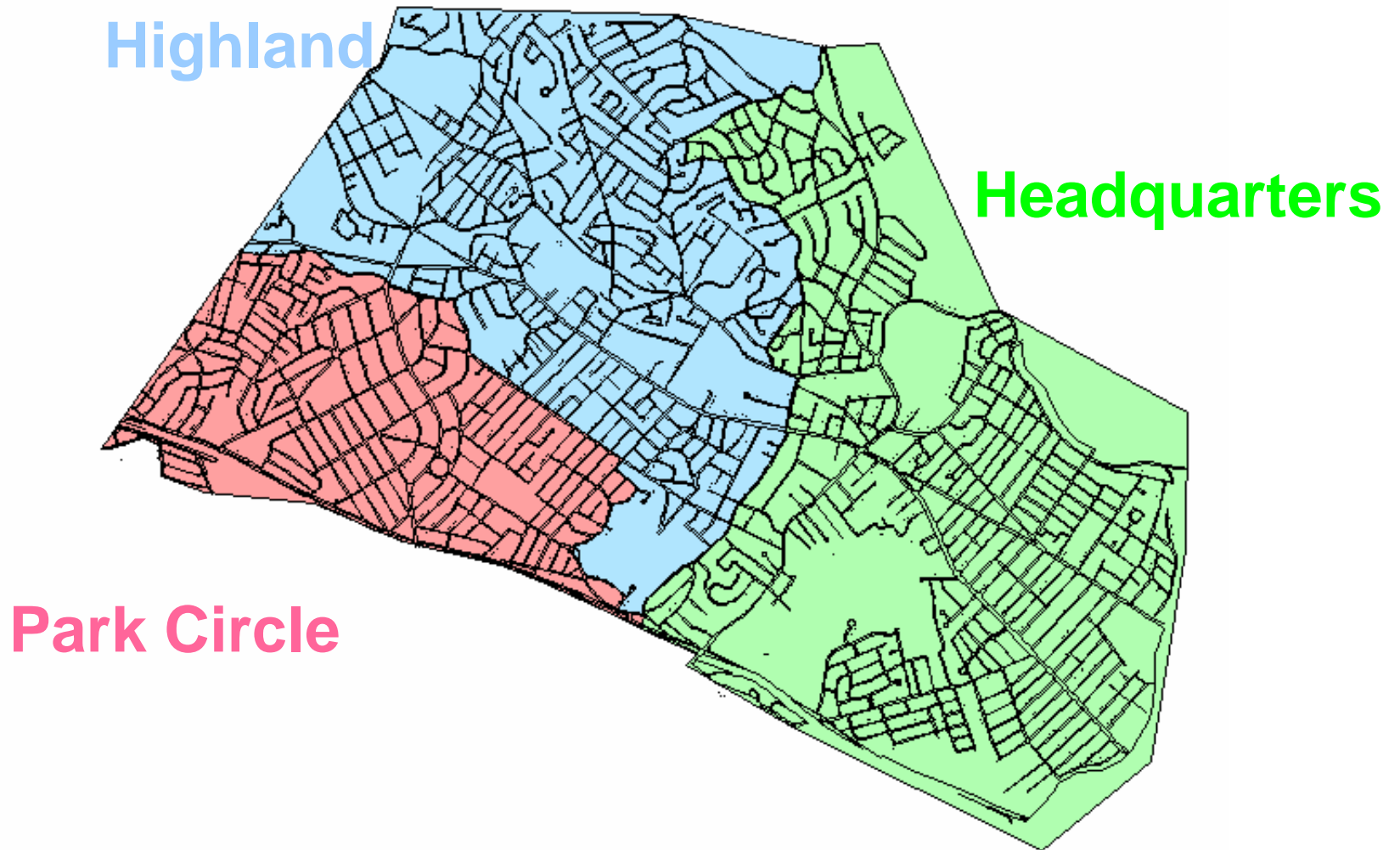
Park Circle Fire Station

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# First Response Coverage



# Three Year History

	2002		2003		2004		Average
<b>EMS</b>							
Highland	793	32%	774	32%	680	30%	749
Park Circle	479	20%	424	17%	413	18%	439
HQ	1173	48%	1248	51%	1210	53%	1,210
	2445	100%	2446	100%	2303	100%	2,398

<b>Fire</b>							
Highland	29	41%	27	36%	27	35%	28
Park Circle	14	20%	20	27%	13	17%	16
HQ	28	39%	27	36%	37	48%	31
	71	100%	74	100%	77	100%	74

<b>Other</b>							
Highland	555	35%	497	32%	481	32%	511
Park Circle	304	19%	277	18%	239	16%	273
HQ	729	46%	800	51%	803	53%	777
	1588	100%	1574	100%	1523	100%	1,562

Other: Gas leaks, electrical hazards, good intent calls, alarms sounded, lock outs, downed trees, etc.



# Park Circle *Town-wide* Three Year Stats

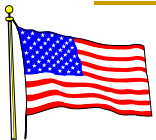
EMS	Average
Highland	31%
Park Circle	18%
HQ	51%
	100%

Fire	Average
Highland	37%
Park Circle	21%
HQ	41%
	100%

Other	Average
Highland	33%
Park Circle	17%
HQ	50%
	100%

Total	4,034
Highland	32%
Park Circle	18%
HQ	50%
	100%

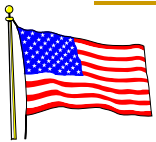
- 18% of EMS calls
- 21% Fire Calls.
- 17% of Other calls.
- Overall, about 18% of all calls or 727 calls per year.
- *But...where were these calls?*



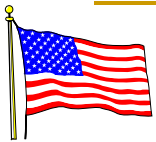
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# Data Analysis

- Three year's total 11,668 calls.
  - Useable data 6,576 (no obvious entry errors, etc.) Any questionable data was eliminated.
  - Town Manager, Fire Chief, Town Planner, QED, GIS Mapping and Intern Matt Lehrich.
  - Question: What value beyond Park Circle District does Engine 3 provide?
    - Crossing the road/rail barrier to Morningside
    - Crossing the road/pond barrier to East Arlington
  - Question: Is Park Circle a town-wide resource?
- 



# First Responses to Park Circle Distinct

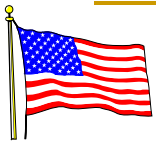
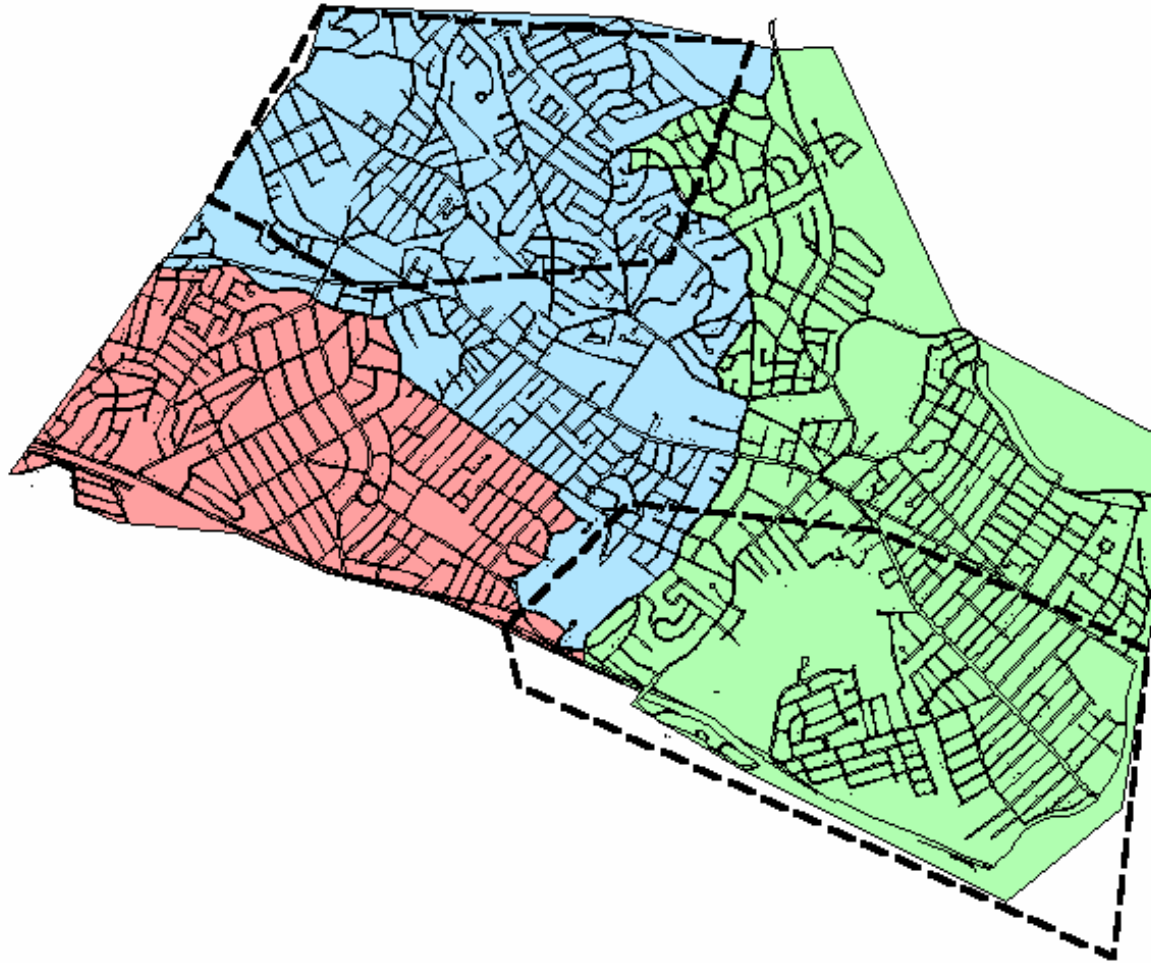


June 13, 2005

Park Circle Fire Station

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# Does Engine 3 Travel?



June 13, 2005

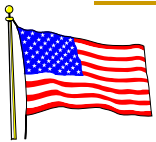
Park Circle Fire Station

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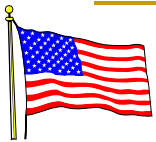
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# Morningside Data

- In Morningside, 892 calls analyzed. 94 or over 10% first responses were by Engine 3.
  - 3 were for fires
  - 54 were for medical emergencies
  - 37 other (gas leaks, electrical hazards, good intent calls, alarms sounded, lock outs, etc.)
- Critical First On Site
  - Engine 3 was first on site in 86/94 or 91% of calls for unspecified reasons.
  - In 8 of 94 calls , Engine 2 was otherwise deployed.



# Engine 3 First Response Morningside



June 13, 2005

Park Circle Fire Station

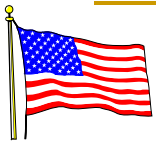
24



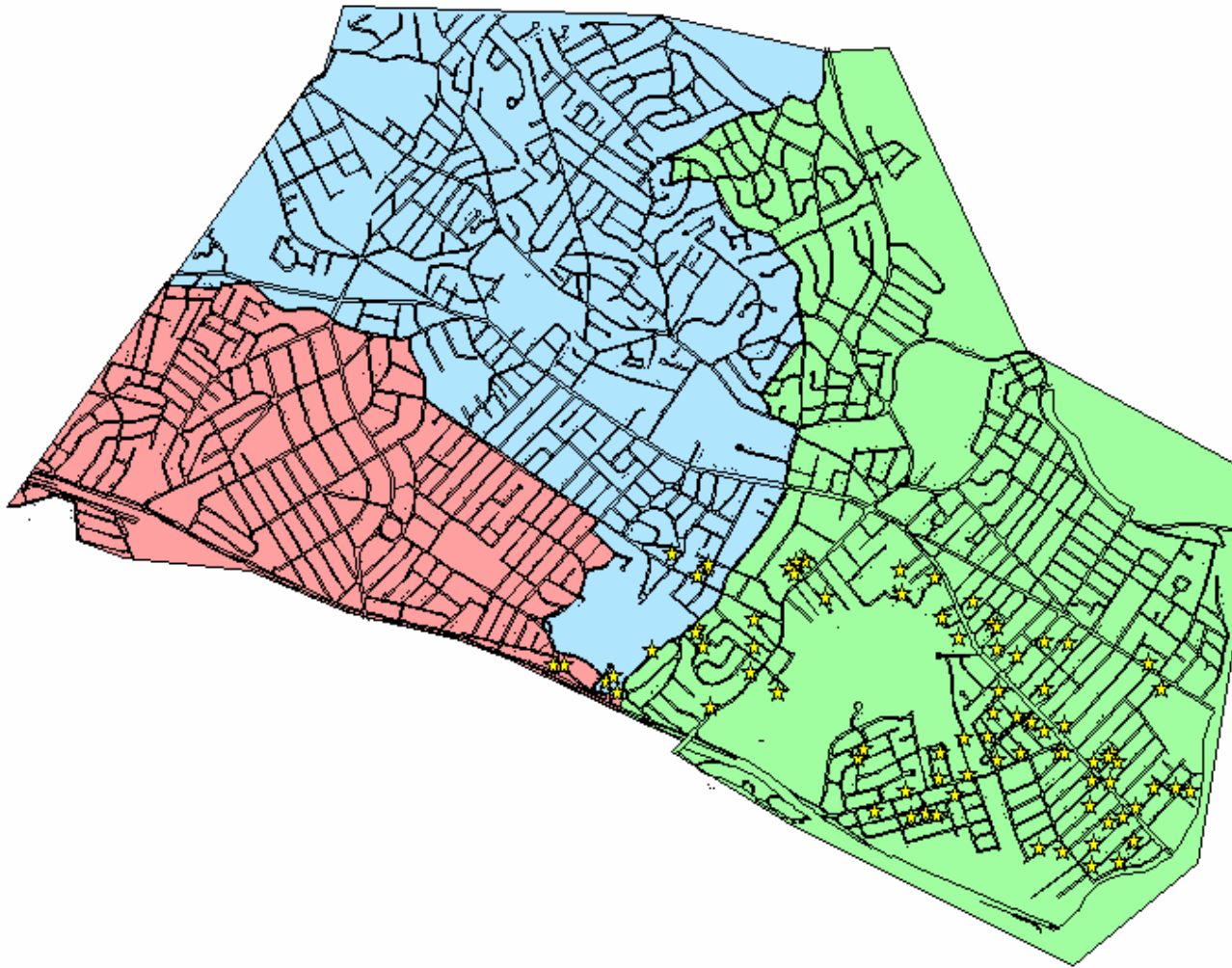
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# East Arlington Data

- In East Arlington, 1435 calls analyzed. 88 or over 6% first responses were by Engine 3.
  - 4 were for fires
  - 42 were for medical emergencies
  - 42 other (gas leaks, electrical hazards, good intent calls, alarms sounded, lock outs, etc.)
- Critical First On Site
  - Engine 3 was first on site in 82/88 or 93% of calls for unspecified reasons.
  - In 6 of 88 calls, Engine 4 was otherwise deployed.



# Engine 3 First Response East Arlington



June 13, 2005

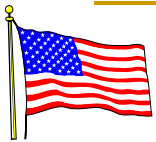
Park Circle Fire Station

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# Answer: Engine 3 Travels

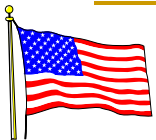
- Of the 6,576 total calls analyzed, Engine 3 was the first responder to 1413, or 21% of the calls, a 3% higher rate as first responder than its total call percentage.
- 182 first responses, or 13% of Engine 3's total first responses were "out-of-district", to Morningside or East Arlington.
  - 7 were for Fire.
  - 96 were for Medical Emergencies.
  - 79 were for Other
- Over 91% of out of district calls were critical first responses where Engine 3 was first on site.
- This is real data, not a theoretical MMA study.



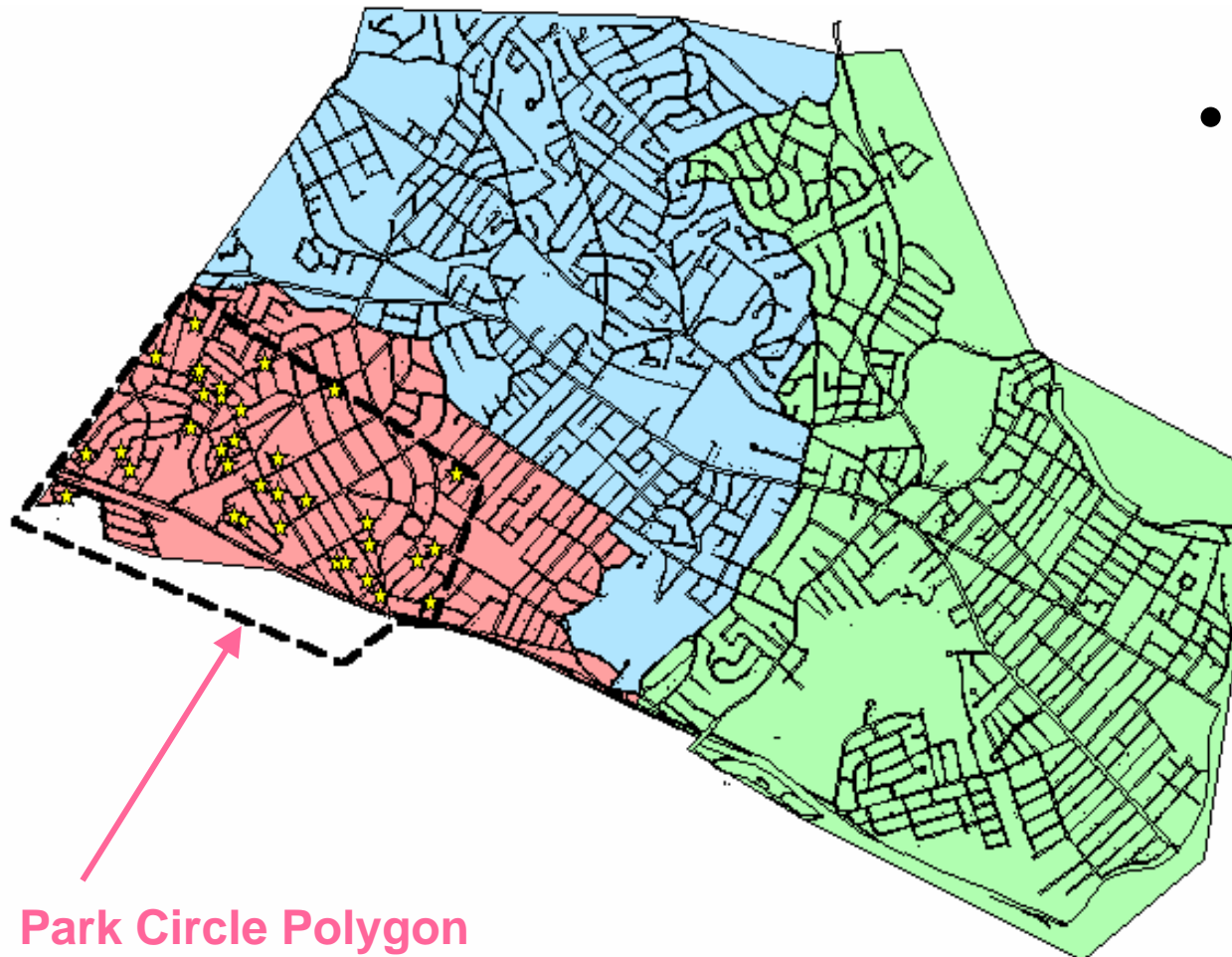
# Response Time: The Life and Death Metric

	2002			2003			2004			STD DEV
	Total	<=6 Mins	> 6 Mins	Total	<=6 Mins	> 6 Mins	Total	<=6 Mins	> 6 Mins	<=6 Mins
<b>EMS</b>										
Highland	793	89.4%	10.6%	774	85.9%	14.1%	680	90.6%	9.4%	2.4%
Park Circle	479	87.9%	12.1%	424	87.0%	13.0%	413	89.3%	10.7%	1.2%
HQ	1173	90.3%	9.7%	1248	88.5%	11.5%	1,211	91.4%	8.6%	1.5%
Total	2445			2446			2304			
<b>Fire</b>										
Highland	29	82.8%	17.2%	27	85.2%	14.8%	27	84.6%	14.8%	1.2%
Park Circle	14	85.7%	14.3%	20	90.0%	10.0%	13	85.2%	15.4%	2.6%
HQ	28	92.9%	7.1%	27	88.9%	11.1%	37	94.6%	5.4%	2.9%
Total	71			74			77			
<b>Other</b>										
Highland	555	85.2%	14.8%	497	79.7%	20.3%	481	83.2%	16.8%	2.8%
Park Circle	304	83.9%	15.1%	377	79.4%	20.6%	239	84.5%	15.5%	2.8%
HQ	729	85.1%	13.9%	800	83.1%	16.9%	803	89.9%	10.1%	3.5%
Total	1588			1674			1523			

- Engine 3 performance compares with Highland and HQ.
- Engine 3 variability tracks other station despite long distance runs to Morningside and East Arlington.



# Highland to Park Circle: Suboptimal



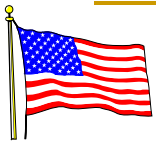
- 35 % of all first responses from Highland Station to the designated portion of the Park Circle district exceeded the critical 6 minute response time standard.



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# If We Eliminate Park Circle: Life Critical Service Will Degrade

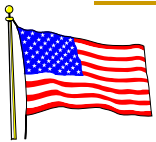
- **HQ to Park Circle 6 Minute Standard**
  - All: 24/36 calls, service goes from 86% to 67%
  - Park Polygon: 11/19 calls, service goes from 86% to 58%
  
- **Highland to Park Circle 6 Minute Standard**
  - All: 74/96 calls: service goes from 86% to 77%
  - Park Polygon: 26/40 calls, service goes from 86% to 65%



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# Summary and Conclusion

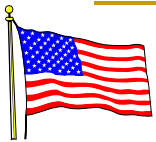
- Park Circle is in condemnable condition, it demands action.
- Mass Ave is a barrier as well as a thoroughfare, Spy Pond blocks East Arlington as well. There is little or no land available for alternative locations.
- At this time, there is no other viable plan for an alternative location and facility to service the Town's needs.
- Relocating Engine 3 degrades service.



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# Park Circle is a Critical Resource

- Engine 3 is a first responder to **21%** of the calls in Arlington overall.
- Engine 3 is first responder to **10%** of calls in Morningside.
- Engine 3 is first responder to **6%** of the calls in East Arlington.
- Park Circle is a Town-wide safety resource.
- Arlington needs the Park Circle Fire Station.





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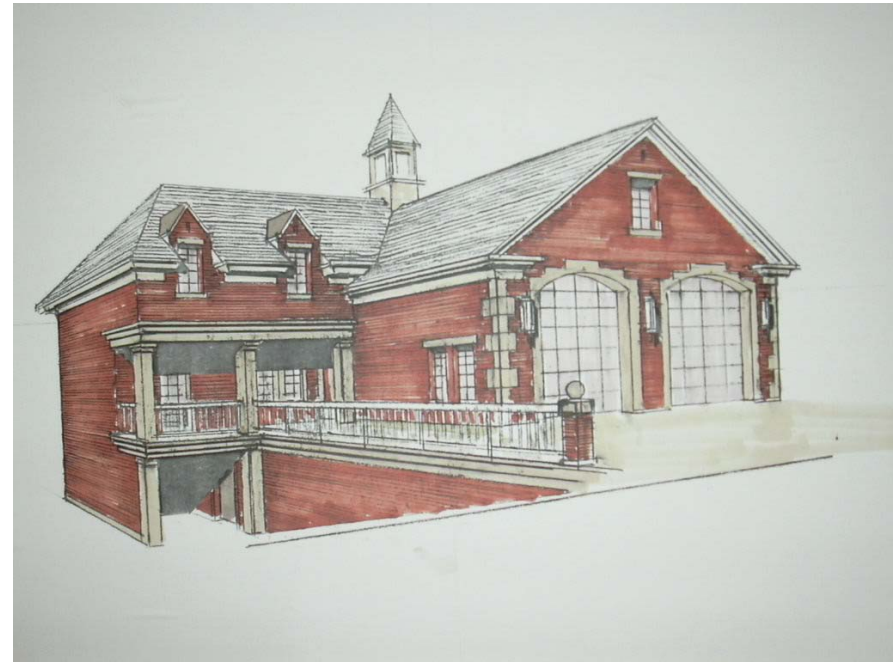
# Capital Planning Committee Recommendation

- The Capital Planning Committee respectfully requests that you support its substitute motion on Article 47.



# Analysis Team

- Fire Chief Allan McEwen
- Town Manager Brian Sullivan
- Planning Director Kevin O'Brien
- Management Intern Matt Lehrich
- Capital Planning Committee



Thank You

