

# NAS-JRB Willow Grove Base Reuse Alternatives



Horsham Township, PA

August 17, 2011



**Congratulations!**

**“Horsham ranked No. 31  
'Best Places to Live' in the  
U.S.”**

— CNN/Money Magazine

August 16, 2011

# Reuse Alternatives Presentation

## I. PRESENTATION

- A. Summary of Charrette Meeting (June 10-11<sup>th</sup>)
- B. Case Study – Glenview Naval Air Station  
Glenview, IL
- C. Results of Market Analysis
- D. Reuse Concept Rules
- E. Presentation of 3 Reuse Options
  - Overall Vision and Land Uses
  - Traffic Impacts
  - Public Infrastructure Impacts
  - Acreage & Development Program
  - Tax Base Impacts
  - Employment Impacts

## II. BOARD & PUBLIC DISCUSSION





**COMMUNITY CHARRETTE**  
**RECAP**

June 10<sup>th</sup>-11<sup>th</sup>, 2011

**RKG**



# CHARRETTE SUMMARY

**AFTERNOON SESSION = 270 People**  
**NIGHT SESSION = 248 People**  
**TOTAL PARTICIPANTS = 518**

- **Break-out groups defined uses**
  - Employment
  - Residential
  - Open space & recreation
  - Other supportive uses
- **Community input was synthesized into preliminary land use ideas**
  - Presented next day
  - Ideas helped to inform the three Alternative Development Scenarios



# MAJOR HIGHLIGHTS FROM CHARRETTE

- Town Center
- Office Park
- Senior Housing
- R&D/Institutional Uses
- Open Space/Trails
- “Green” uses
- Museum/community spaces
- Renewable Energy
- Pedestrian Friendly







# CASE STUDY

## Naval Air Station Glenview Glenview, IL

**RKG**

**RKG**

# NAVAL AIR STATION GLENVIEW



Source: Chicago's North Shore Convention and Visitors Bureau [www.cnsccb.com](http://www.cnsccb.com)

- **20 miles north of Chicago**
- **Closed in 1995; reuse plan for 1,121 acres; completed 2005**  
**“The Glen” = mix of residential, business, open space**
- **Two runways demolished (5,000-foot and 8,000-foot)**
  - **Cost = \$5.5 million (includes runway reclamation value)**
  - **Two years to demolish (contractor recycled/re-used)**



# NAVAL AIR STATION GLENVIEW

- 650 acres sold for private sector commercial and residential uses
- ~323 acres residential units (single family, multi, senior)



Source: [www.theglentowncenter.org](http://www.theglentowncenter.org)

- 45 acres Glen Town Center shopping center
- 19 eateries, movie complex, other retail shops
- 18,000 SF hangar now Dick's Sporting Goods
- 400 acres open space (2 golf courses, prairie reserve, central park, fishing pond, and other smaller parks)

# NAVAL AIR STATION GLENVIEW

## LESSONS LEARNED

- Consensus building vital (most important step)
- Need upfront champions and momentum
- Long-term vision
- Understand market realities
- Phase and manage risk



Source: [www.theglentowncenter.org](http://www.theglentowncenter.org)

**Glenview Investment = \$140 million (bonds, TIF)**  
**Land Sale Revenue = \$225 million**  
**PROJECT PAID FOR PUBLIC INVESTMENT**



# REGIONAL MARKET CONDITIONS

**RKG**



**RKG**

# OFFICE & RESEARCH AND DEVELOPMENT

## OFFICE

### *CURRENT CONDITIONS*

- Strong corporate presence
- Little new development
- Horsham fairing better than regional suburban market (reduced Class A vacancy & increased absorption 2010)

### *POTENTIAL*

- Alternative to older stock
- Ideal for build-to-suit

## R&D

### *CURRENT CONDITIONS*

- Employment growing at rapid pace
- Federal funding competition increasing
- R&D universities willing to consider

### *POTENTIAL*

- Form public/private partnerships
- Develop unique programs/concept



# RETAIL AND INDUSTRIAL

## RETAIL

### *CURRENT CONDITIONS*

- Retail market slow to recover
- Little retail in Horsham, however large supply in County
- Vacancy comparatively high @ 12.2% (11.3% nationally)

### *POTENTIAL*

- Neighborhood serving (no malls or big boxes)
- Incorporate into Town Center
- Location = Horsham Rd./611

## INDUSTRIAL

### *CURRENT CONDITIONS*

- Slight increases in vacancy and neg. absorption 2010
- Strong pharm./food/surgical equipment manufacturers
- Ideal location (PA Turnpike)

### *POTENTIAL*

- Ideal for build-to-suit
- Incorporate industrial condominium space

# SINGLE FAMILY AND TOWNHOMES

## SINGLE FAMILY

### *CURRENT CONDITIONS*

- Majority of recent development = Single family
- Buyers increasingly “price sensitive”
- Sales activity declined past year (-597)

### *POTENTIAL*

- Smaller homes
- More affordable homes

## TOWNHOMES

### *CURRENT CONDITIONS*

- Older housing stock
- Two units built in last ten years
- Not as in high demand as single family homes

### *POTENTIAL*

- New development to replace older stock
- Affordably priced



# APARTMENTS AND SENIOR HOUSING

## APARTMENTS

### *CURRENT CONDITIONS*

- Older apartment stock
- Last large development was in 1987
- Vacancy in submarket is decreasing (currently 5.3%)
- Forecasts indicate strengthening market

### *POTENTIAL*

- Modern apartment living opportunity
- Incorporate into Town Center

## SENIOR HOUSING

### *CURRENT CONDITIONS*

- Limited senior housing in Horsham (both assisted and independent)
- Aging community
- Large gain in senior health services employment

### *POTENTIAL*

- Large community support for senior housing
- Interest from retirement community organization

# SENIOR LIVING/HEALTHCARE SERVICES CLUSTER



- **Horsham is aging community (65+ increased 3.3% since 2000)**
- **Large gain in senior health services since 2000 (home health care and continuing care both increased ~25% in County)**
- **Lack of assisted living/independent living communities in Horsham**
- **Community support for senior housing and support services**



# **LIFE SCIENCE R&D, MANUFACTURING & EDUCATION CLUSTER**

- **Strong life science presence (38% of MSA life science employment is in County)**
- **R&D County employment grew at very rapid pace (260%) from 2000 to 2010 (current employment = 9,084)**
- **Opportunity to foster R&D university partnerships at site**
- **Need a unique program**
- **Example is North Carolina Research Center**

# **CORPORATE HEADQUARTERS, MANAGEMENT & PROFESSIONAL SERVICES CLUSTER**

- **Strong corporate presence (~62,500 professional and management jobs in County)**
- **Management of companies = 92% growth in County since 2000 (16,866 current jobs)**
- **Management is a growth industry, even during recession (added 2,020 jobs since 2007)**
- **Educated workforce to draw from**
- **High paying jobs**
- **Compatible use/ highly desired by community**



# GREEN ENERGY RESEARCH STATION CLUSTER

- **Currently, largest solar farm in PA only 26-acres (3.5 megawatts) – opportunity for much larger solar farm project at site**
- **PA incentives highly competitive**
- **Offers energy credits and industry recruitment incentives (credits for manufacturers – based on # jobs created)**
- **Strong manufacturing presence in County (4<sup>th</sup> largest employment category) however renewable energy-related manufacturing an untapped market**

# **TRANSPORTATION, WAREHOUSING & DISTRIBUTION CLUSTER**



- **Access to PA Turnpike**
- **Site is large enough to accommodate large warehouses – however use would likely need to be buffered from other uses (town center, residential, etc.)**
- **Recent growth in truck transportation and support activities for transportation**

# LAND USE CONCEPTS



## RESIDENTIAL

- Single Family
- Townhomes
- Continuing Care Retirement Community
  - Independent living
  - Assisted living
  - Nursing home



# LAND USE CONCEPTS



## TOWN CENTER

- Retail
- Office
- Residential
- Cultural & Recreation

# LAND USE CONCEPTS

- RESIDENTIAL
- CORPORATE OFFICE PARK
- R&D/EDUCATION CAMPUS
- LIGHT INDUSTRIAL PARK
- HOTEL/CONFERENCE CENTER
- SCHOOL
- PARKS/OPEN SPACE
- INTEGRATION OF SUSTAINABLE DEVELOPMENT & RENEWABLE ENERGY CONCEPTS





# REUSE SITE PLANNING RULES



- **Highest land value from Norristown Road and south. Should generally be reserved for tax-base generating uses**
- **Preference for locating higher-traffic generating uses on Horsham Road as opposed to Easton Rd.**
- **Keep residential away from main roads.**
- **North part of site should be the lowest density with the highest park integration**
- **Provide for a corporate/education campus setting. Create large 50-acre sites (which can be divided into smaller parcels if needed)**

# REUSE SITE PLANNING RULES

- **Create two new connections between Horsham Road and Easton Road. Improve Maple Avenue and Tournament Drive connections into site.**
- **Avoid landfill Site 3 (but utilize natural amenities and setting)**
- **Incorporate green connections and walkways into all scenarios**
- **Incorporate sustainable development and renewable energy systems into all reuse alternatives**

# REUSE PLAN Option A





# BASE REUSE VISION



- **National Model for Base Reuse**
- **Incorporates the Latest Sustainable Development and Renewable Energy Technologies**
- **High Quality Mixed-Use Neighborhood**
- **Real estate tax base that could exceed \$1.5 billion at build-out**
- **A major employment center with an integrated town center, community gathering areas, open space and high quality neighborhoods**
- **Plan that adapts to changing market forces**

# sustainable opportunitites

EARTH



opportunity to re-use existing materials in various ways, & recycle waste materials

SUN



shield for summer sun & capture winter sun

LANDSCAPE



opportunity for green roof areas [reduces rainwater run-off to creek], expanded habitat areas, integrated native/natural landscape, future connections to the creek, & program opportunities

SUN



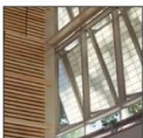
opportunity for photo voltaic & solar hot water

DAYLIGHT



capture northern daylight & other daylighting opportunities

WIND



opportunity for natural ventilation & energy recovery

WATER

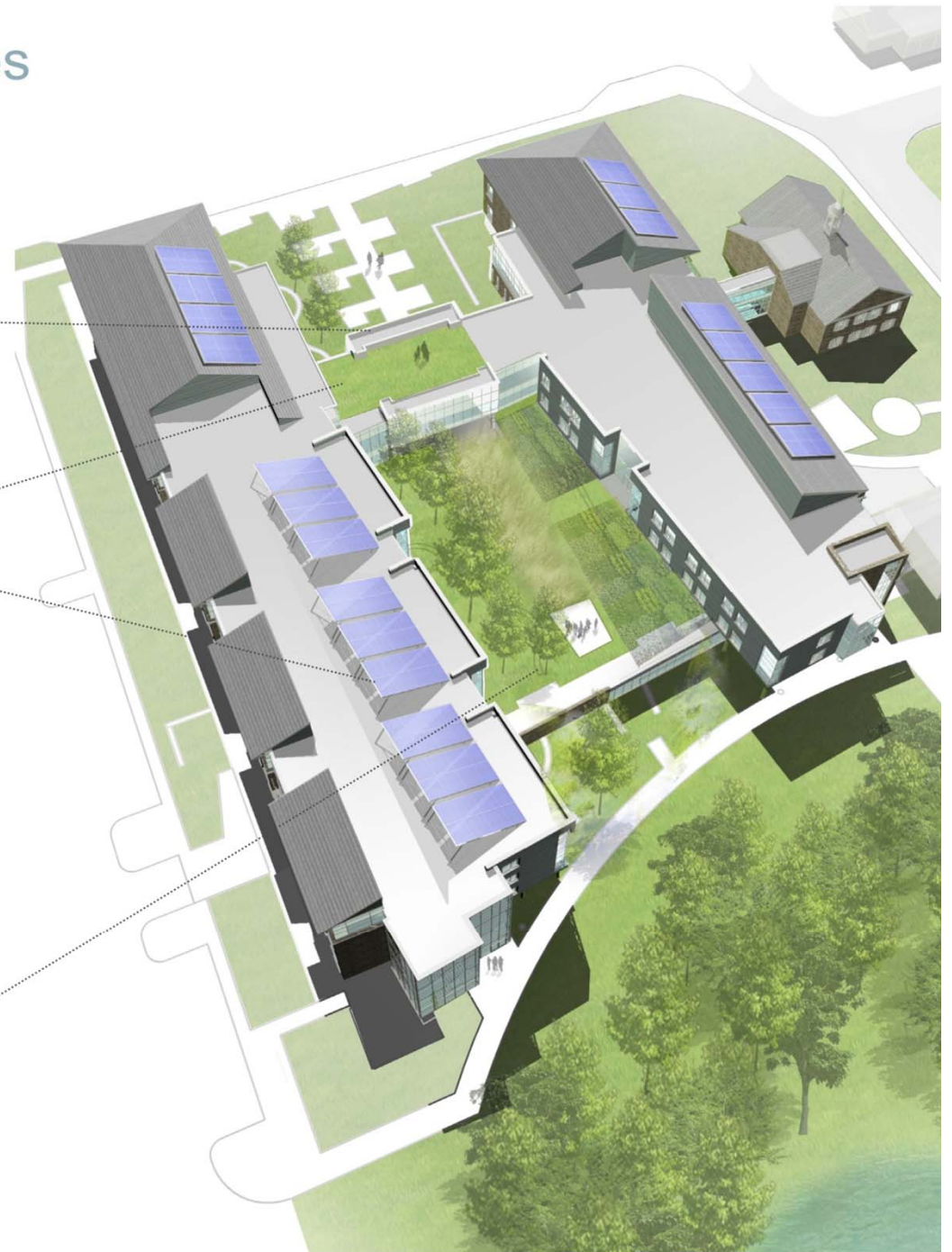


opportunity for raingardens [reduces stormwater run-off, increases habitat, integrate collection of rainwater for planting irrigation & toilet flushing]

EARTH



opportunity for geo-exchange for heating & cooling





**Natural Lighting**



**Solar Campus**



**Wind Power**



**Solar Arrays**



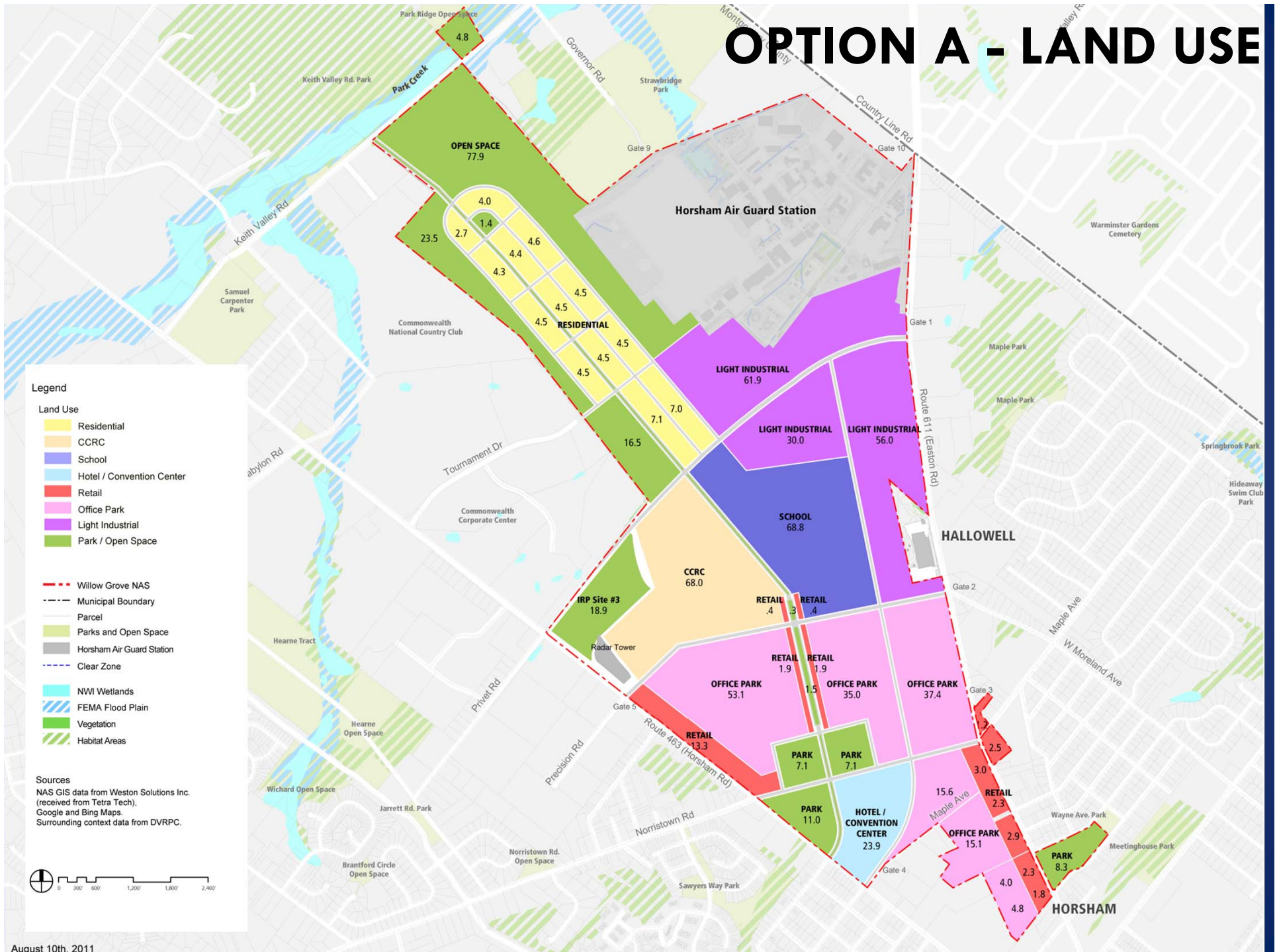
**Geothermal Heating**



**Solar Path Lighting**



# OPTION A - LAND USE

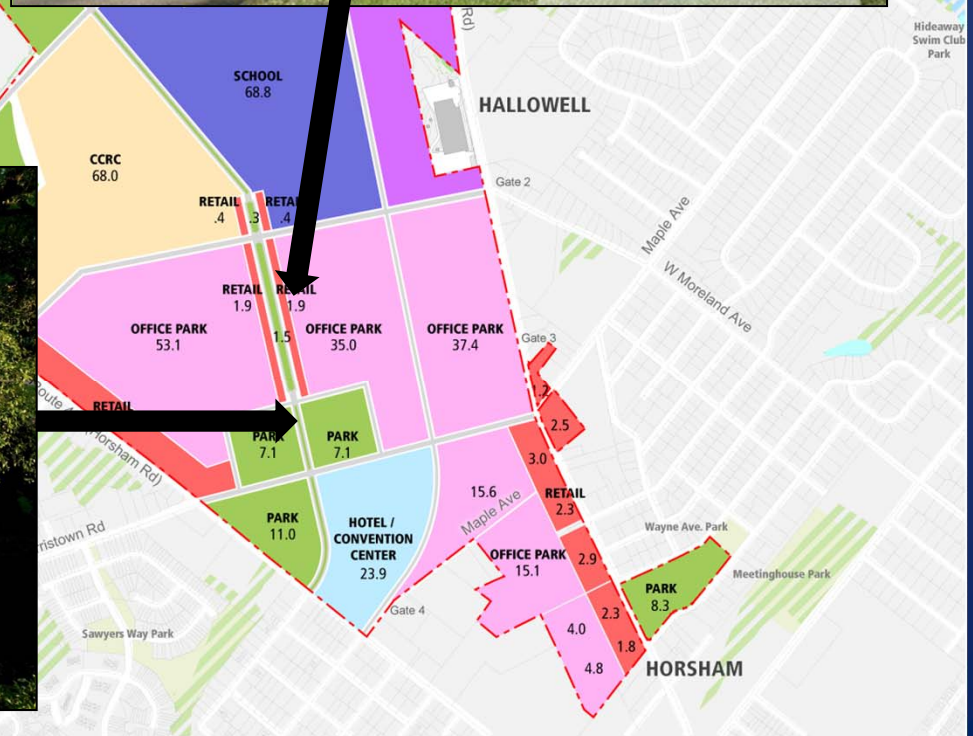




# OPTION A - LAND USE



- Legend**
- Land Use**
- Residential
  - CCRC
  - School
  - Hotel / Convention Center
  - Retail
  - Office Park
  - Light Industrial
  - Park / Open Space





# OPTION A - LAND USE

Source: WRT



Source: www.publicbroadcasting.net

Source: www.monroecounty.gov



Source: www.cityofmonogahela-pa.gov



## Legend

### Land Use

- Residential
- CCRC
- School
- Hotel / Convention Center
- Retail
- Office Park
- Light Industrial
- Park / Open Space

- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone

- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

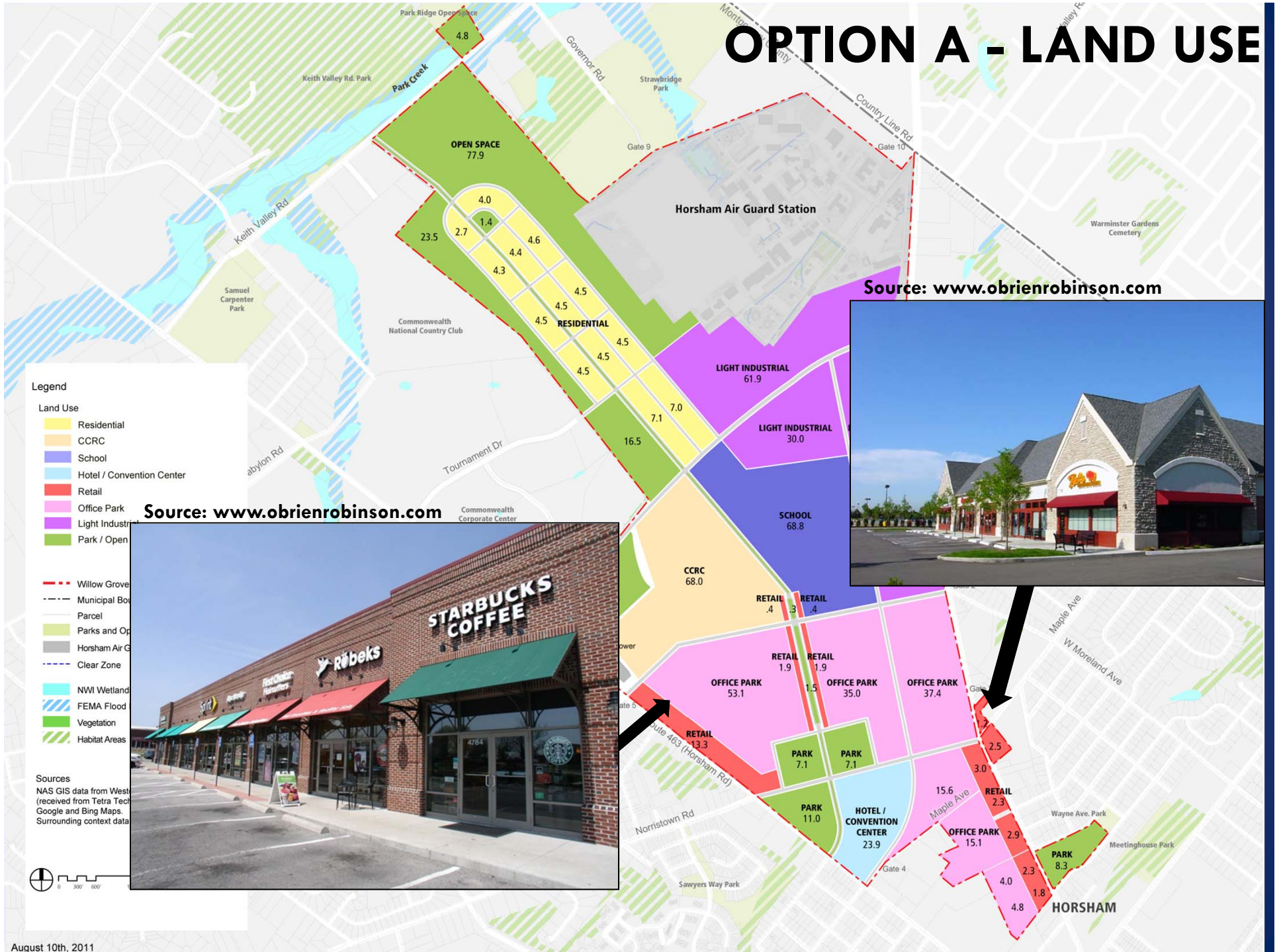
### Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.





# OPTION A - LAND USE



Source: [www.obrienrobinson.com](http://www.obrienrobinson.com)

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### Legend

#### Land Use

- Residential
- CCRC
- School
- Hotel / Convention Center
- Retail
- Office Park
- Light Industrial
- Park / Open Space

- Willow Grove
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetland
- FEMA Flood
- Vegetation
- Habitat Areas

#### Sources

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 Surrounding context data











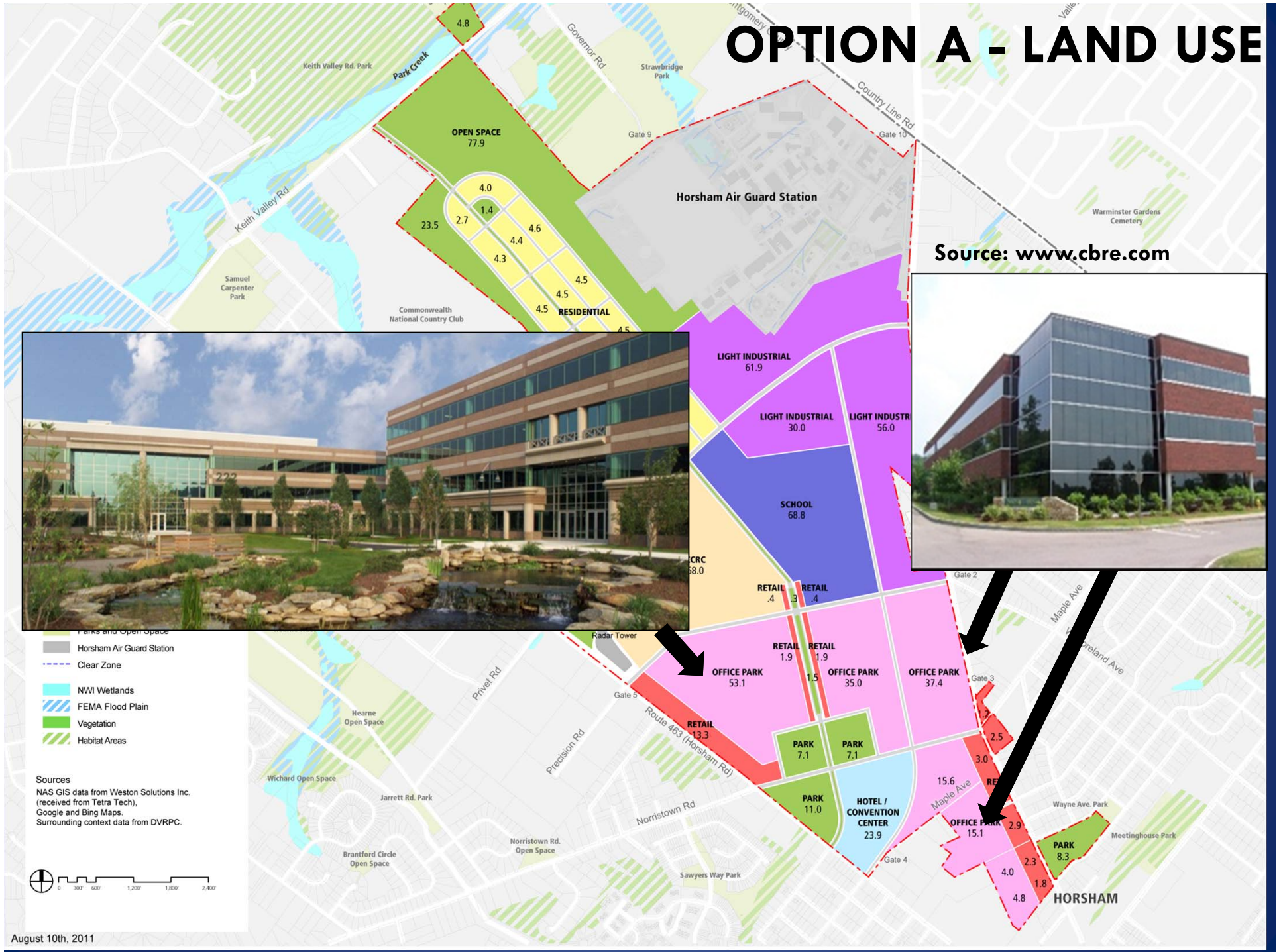


# OPTION A - LAND USE





# OPTION A - LAND USE

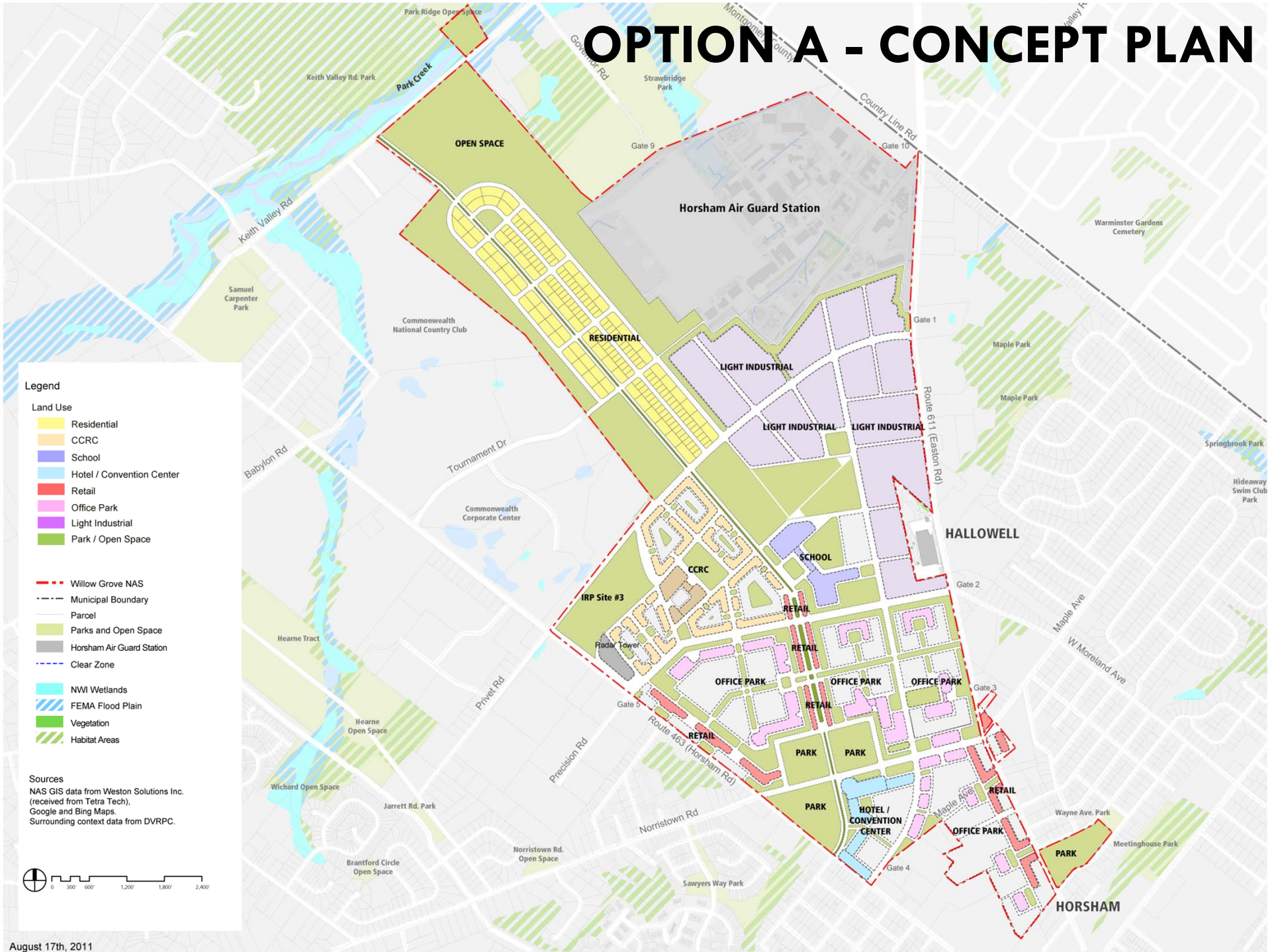


Source: [www.cbre.com](http://www.cbre.com)



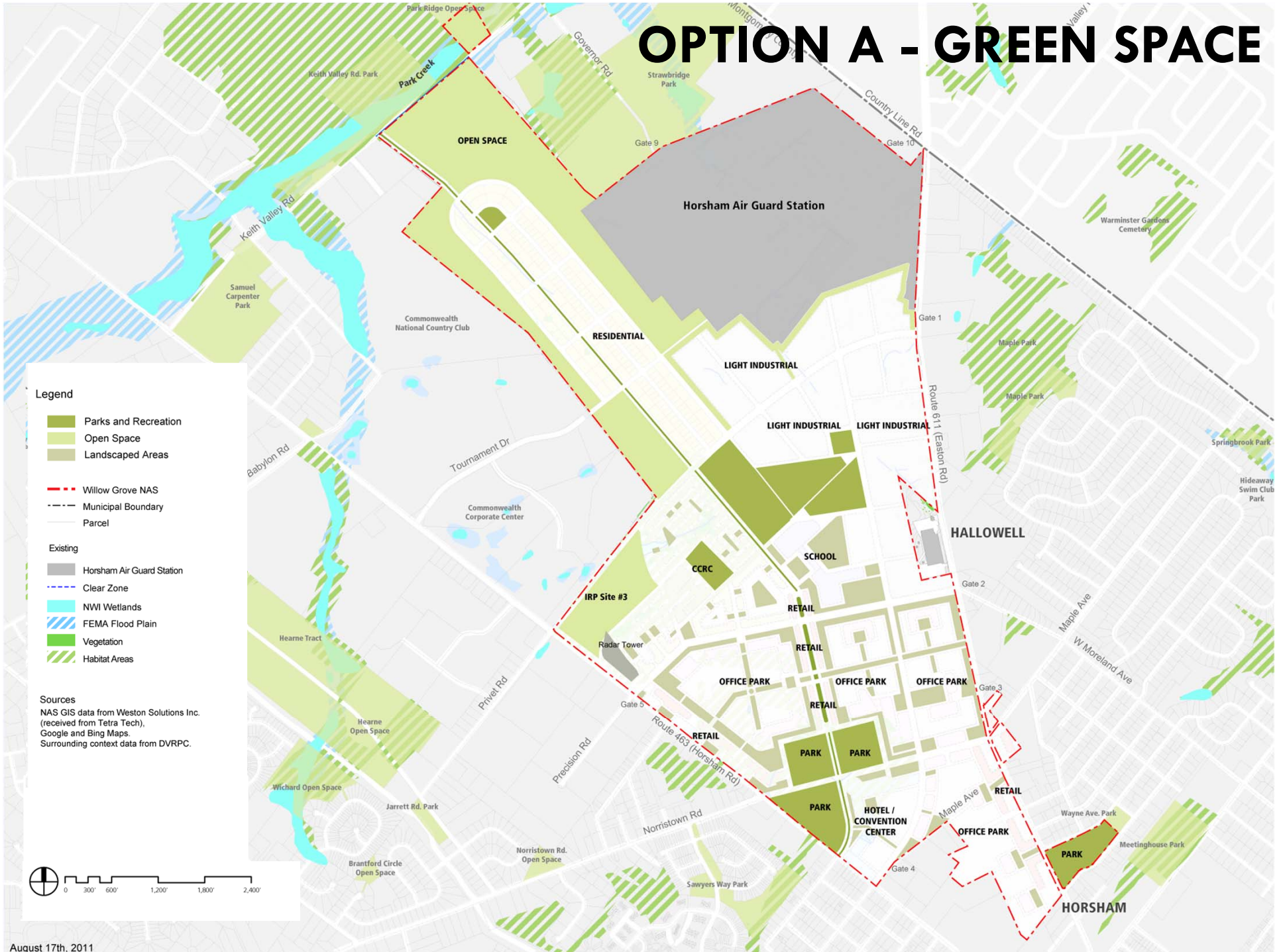


# OPTION A - CONCEPT PLAN



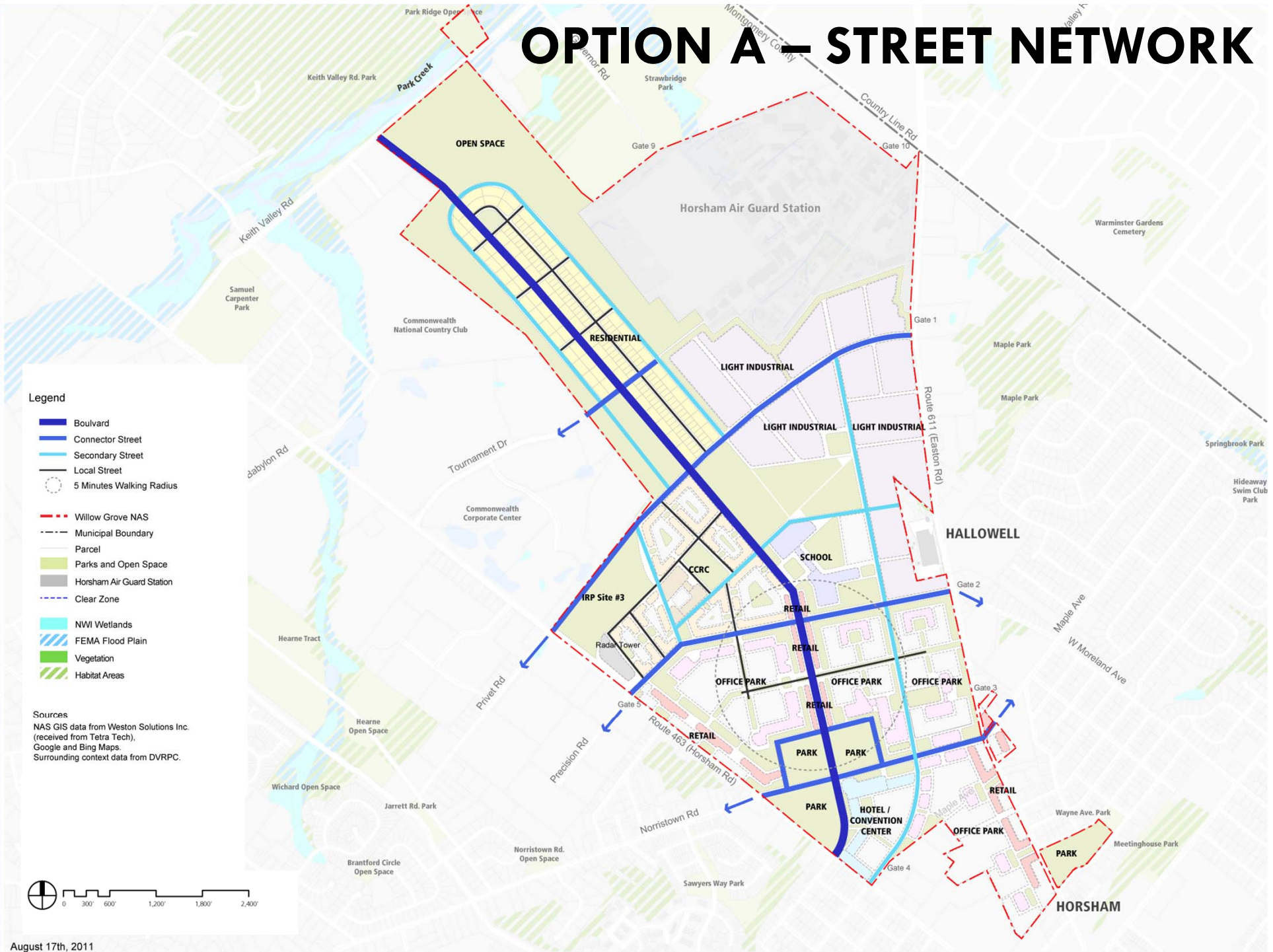


# OPTION A - GREEN SPACE





# OPTION A – STREET NETWORK



# TRIP GENERATION



- **Estimates “new” trips for proposed development**
- **Based on studies of existing sites**
- **Multiple variables based on “use”**
  - **Square footage**
  - **Number of units**
  - **Specific criteria**
- **Data for entire day and AM/PM Peak Hours**
- **Reductions for “pass-by” trips and multiple destination trips**



# INTERSECTIONS ANALYZED

- **Analysis conducted using AM and PM peak Hour Vol.**
- **Existing Intersections**
  1. Easton Road (611) and W. County Line Road and Privet Road
  2. Easton Road (611) and W. Moreland Avenue
  3. Easton Road (611) and Maple Ave (Upper)
  4. Easton Road (611) and Maple Ave (Lower)
  5. Easton Road (611) and Meetinghouse Road
  6. Easton Road (611) and Horsham Road (463)
  7. Horsham Road (463) and Dresher Road
  8. Horsham Road (463) and Maple Ave
  9. Horsham Road (463) and Walnut Ave
  10. Horsham Road (463) and Norristown Rd
  11. Horsham Road (463) and Precision Rd
  12. Horsham Road (463) and Privet Rd

# INTERSECTION ANALYZED




- **New Intersections**

1. Easton Road (611) and Gate 1
2. Easton Road (611) and Gate 2
3. Horsham Road (463) and Town Center Entrance



# INTERSECTION OPERATIONS

- **Analysis conducted using existing intersection geometrics**
- **Intersection improvements were not included in analysis**
- **Proposed development options were compared to current operations**

	<ul style="list-style-type: none"><li>• <b>Improved traffic operations</b></li></ul>
	<ul style="list-style-type: none"><li>• <b>Comparable traffic operations to current conditions</b></li></ul>
	<ul style="list-style-type: none"><li>• <b>Worsened traffic operations</b></li></ul>

# OPTION A – System Wide Traffic



- The AM peak hour traffic increases 17% over the current conditions
- The PM peak hour traffic increases 11% over the current conditions



# Option A – AM Peak

## Legend

- Improved Traffic Operations
- Comparable Traffic Operations to Current Conditions
- Worsened Traffic Operations

- ▬ Boulevard
- ▬ Connector Street
- ▬ Secondary Street
- ▬ Local Street
- 5 Minutes Walking Radius

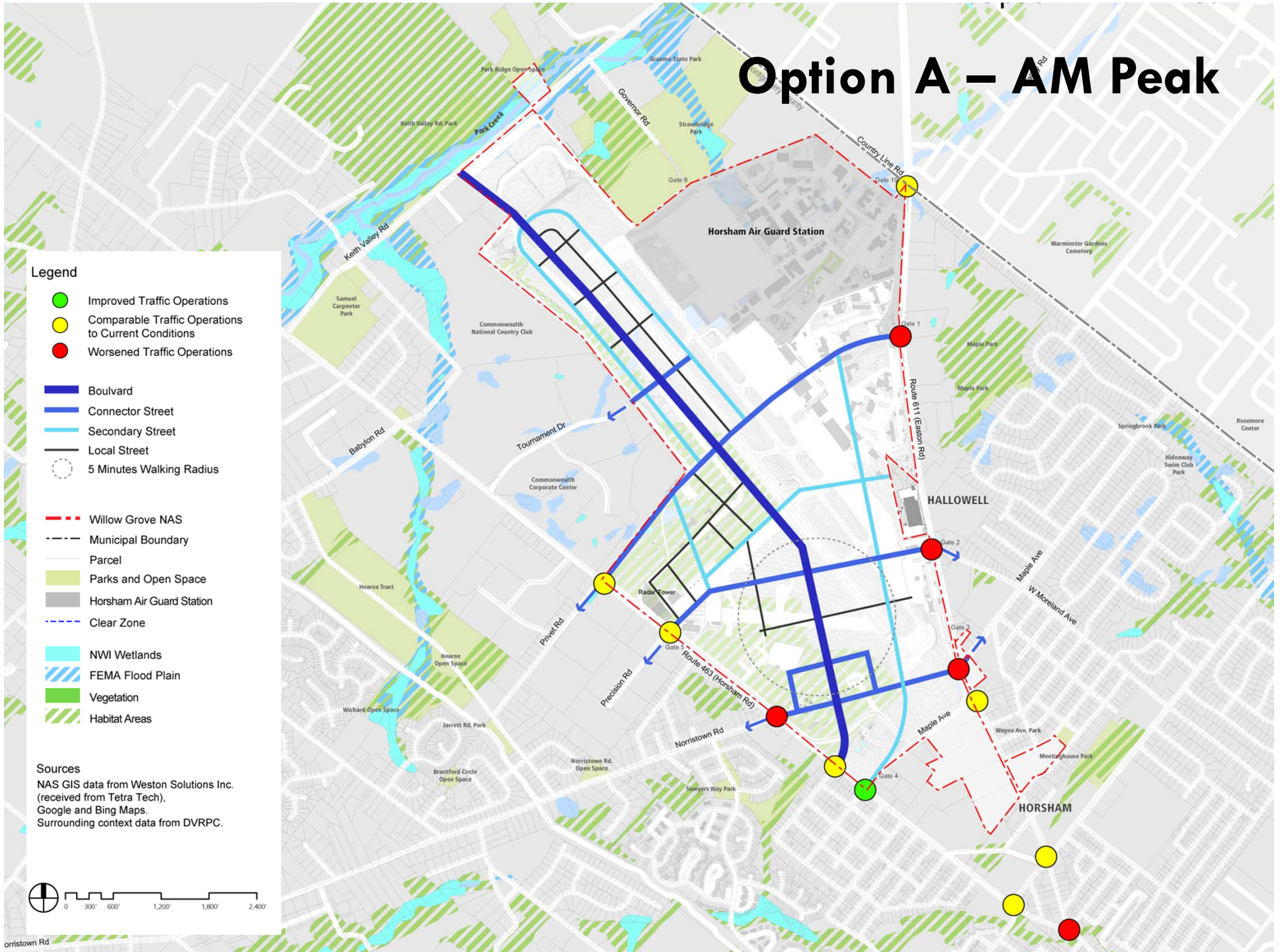
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

## Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.



Horsham Rd





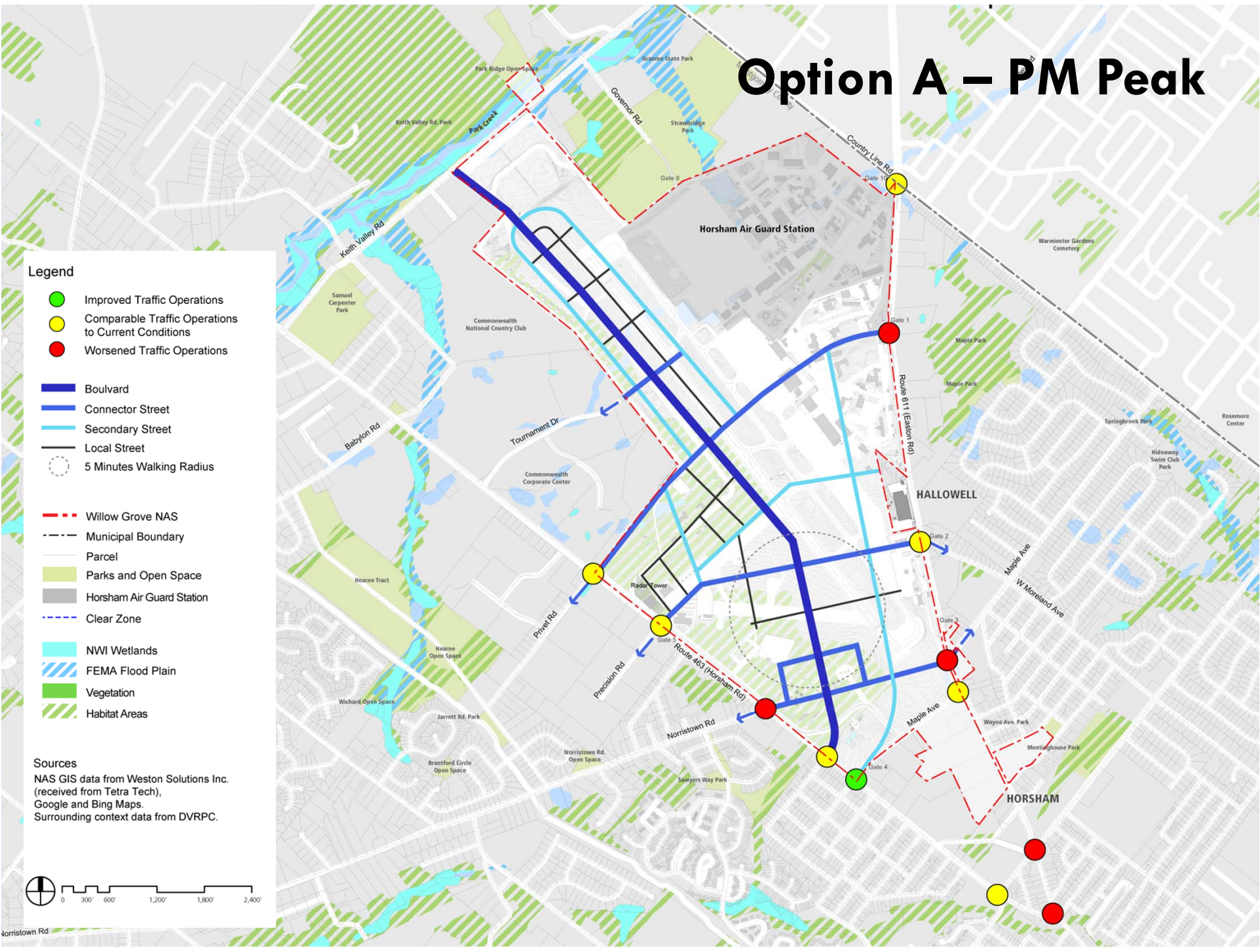
# Option A – PM Peak

- Legend**
- Improved Traffic Operations
  - Comparable Traffic Operations to Current Conditions
  - Worsened Traffic Operations

- ▬ Boulevard
- ▬ Connector Street
- ▬ Secondary Street
- ▬ Local Street
- 5 Minutes Walking Radius

- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
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Norristown Rd



# UTILITIES/INFRASTRUCTURE COSTS

	OPTION A		
System	Required	Utility	Cost
Water	882,248 gpd	4" & 6" mains	<b>\$11.7 Mil</b>
Wastewater	749,911 gpd	15" (avg.) gravity main	<b>\$16.4 Mil</b>
Roads	58,350 LF	2-lane 24' wide w/curb	<b>\$10.8 Mil</b>
Total			<b>\$38.9 Mil</b>

# ESTIMATED IMPACTS OF REUSE OPTIONS

- **Based on acreage estimates for land use types**
- **Uses published averages for square footage per employee for various use types**
- **Order-of-magnitude costs used for construction**
- **Construction employment based on county average wage for select construction sectors**



# LAND USE ACREAGE – OPTION A

<b>Option A</b>	<b># of Acres</b>	<b>% of Total</b>
Single Family	69	9.3%
Townhomes		
55+	30	4.1%
CCRC	26	3.5%
CCRC/Med Office/Amenities	12	1.6%
Hotel/Conference	14	1.9%
Town Center	14	1.9%
Office Park	156	21.2%
Light Industrial	150	20.3%
Retail	22	3.0%
School	69	9.3%
Park/Open Space	177	24.0%
<b>Total</b>	<b>739</b>	<b>100.0%</b>
<b>Other Uses (streets, utilities, etc)</b>	<b>153</b>	<b>-</b>
<b>Total Acres at Site</b>	<b>892</b>	<b>-</b>

# BUILDING PROGRAM – OPTION A

Development SF and Units*	Option A
	15 Year Total
Single Family	481
Townhomes	0
55+	390
CCRC	364
CCRC/Med Office/Amenities	60,000
Hotel/Conference	111,200
Town Center	
Town Center Retail	7,600
Town Center Office	0
Town Center Residential	0
Cultural & Recreation	40,000
Office Park	1,015,950
Light Industrial	1,347,300
Retail	144,950
School	240,800
Park/Open Space	-

**TOTAL  
RESIDENTIAL  
UNITS: 1,235**

\*Residential development is expressed as units.



# REAL ESTATE TAX BASE IMPACTS – OPTION A

Investment/Tax Base	Option A	
	15 Year Total	% of Total
Single Family	\$210,393,750	31.3%
Townhomes	\$0	0.0%
55+	\$63,180,000	9.4%
CCRC	\$54,600,000	8.1%
CCRC/Med Office/Amenities	\$12,000,000	1.8%
Hotel/Conference	\$16,680,000	2.5%
Town Center		
Town Center Retail	\$1,026,000	0.2%
Town Center Office	\$0	0.0%
Town Center Residential	\$0	0.0%
Cultural & Recreation	\$6,000,000	0.9%
Office Park	\$187,950,750	28.0%
Light Industrial	\$101,047,500	15.0%
Retail	\$19,568,250	2.9%
School	-	-
Park/Open Space	-	-
<b>Total</b>	<b>\$672,446,250</b>	<b>100.0%</b>

# EMPLOYMENT IMPACTS – OPTION A

Option A	Construction Jobs		Permanent Jobs	
	#	% of Total	#	% of Total
Single Family	710	29.0%	-	-
Townhomes	-	-	-	-
55+	213	8.7%	-	-
CCRC	184	7.5%	655	9.5%
CCRC/Med Office/Amenities	40	1.6%	222	3.2%
Hotel/Conference	56	2.3%	78	1.1%
Town Center				
Town Center Retail	3	0.1%	27	0.4%
Town Center Office	-	-	-	-
Town Center Residential	-	-	-	-
Cultural & Recreation	20	0.8%	3	0.0%
Office Park	634	25.9%	4,064	58.9%
Light Industrial	341	13.9%	1,347	19.5%
Retail	66	2.7%	507	7.3%
School	183	7.5%	-	-
Park/Open Space	-	-	-	-
<b>Total</b>	<b>2,450</b>	<b>100.0%</b>	<b>6,903</b>	<b>100.0%</b>



# HLRA/PUBLIC Q&A



- **What aspects/land uses of the scenario did you particularly like?**
- **Is there anything presented in this scenario that you do not wish to see in the final preferred plan?**
- **Do you have any other issues or concerns with this scenario?**

# REUSE PLAN OPTION B

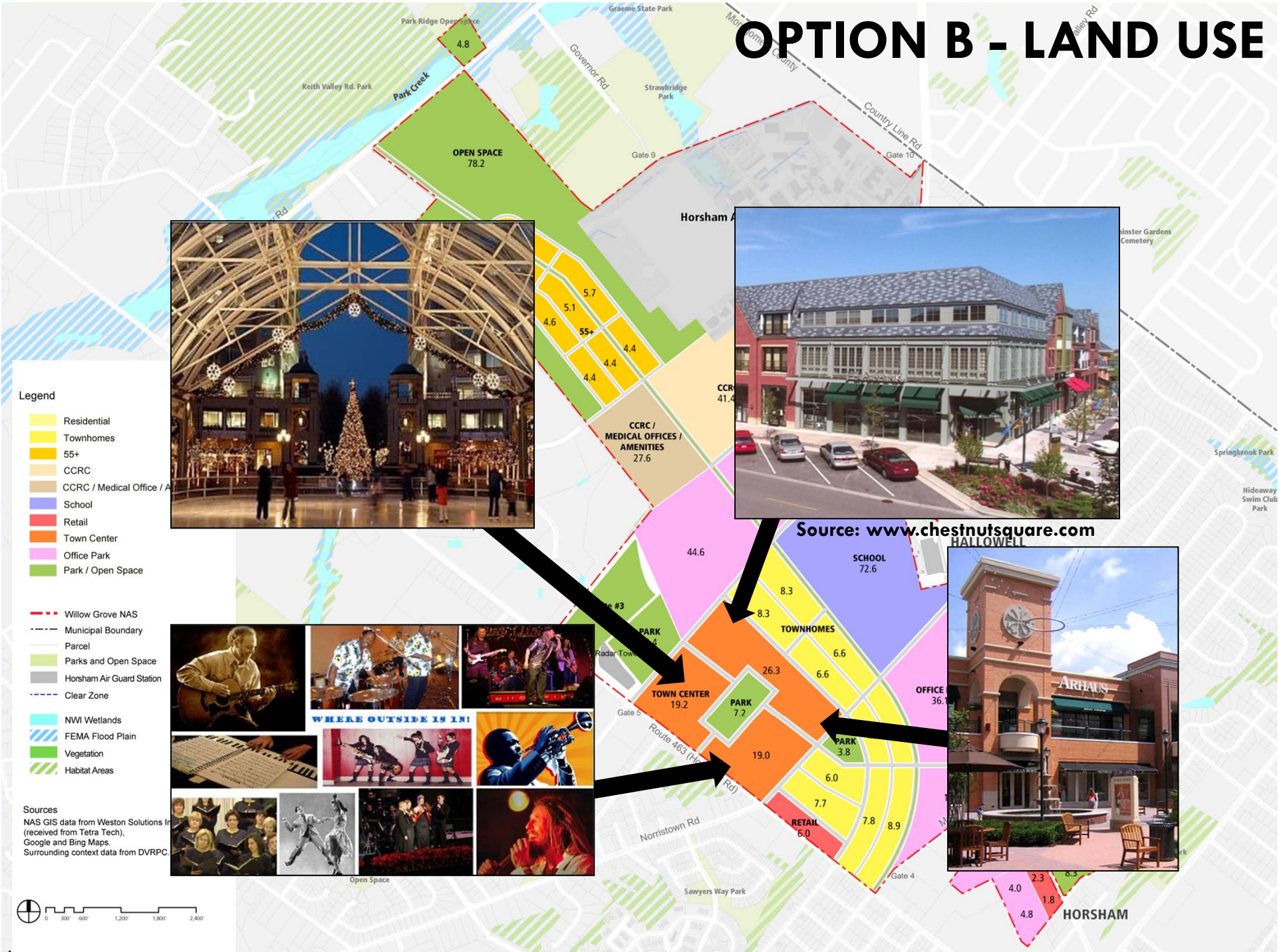








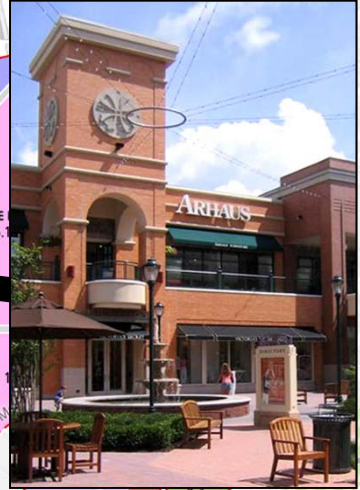
# OPTION B - LAND USE



- Legend**
- Residential
  - Townhomes
  - 55+
  - CCRC
  - CCRC / Medical Office / A
  - School
  - Retail
  - Town Center
  - Office Park
  - Park / Open Space

- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
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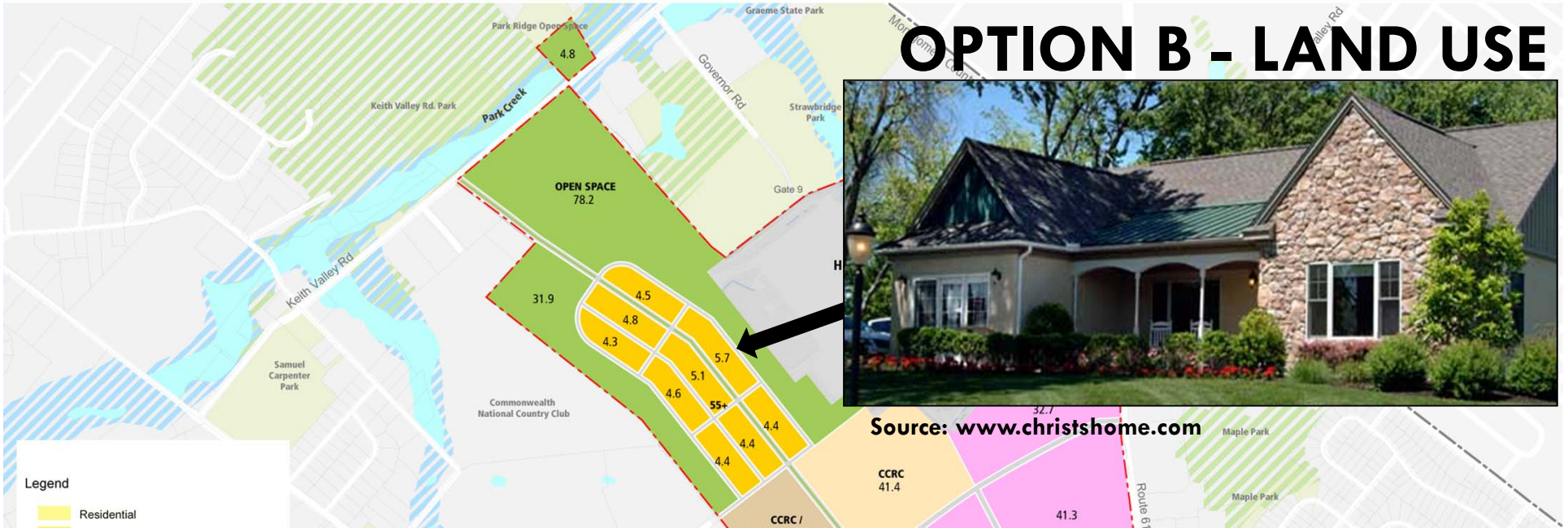
Sources  
 NAS GIS data from Weston Solutions Inc (received from Tetra Tech),  
 Google and Bing Maps.  
 Surrounding context data from DVRPC.



Source: [www.chestnutsquare.com](http://www.chestnutsquare.com)



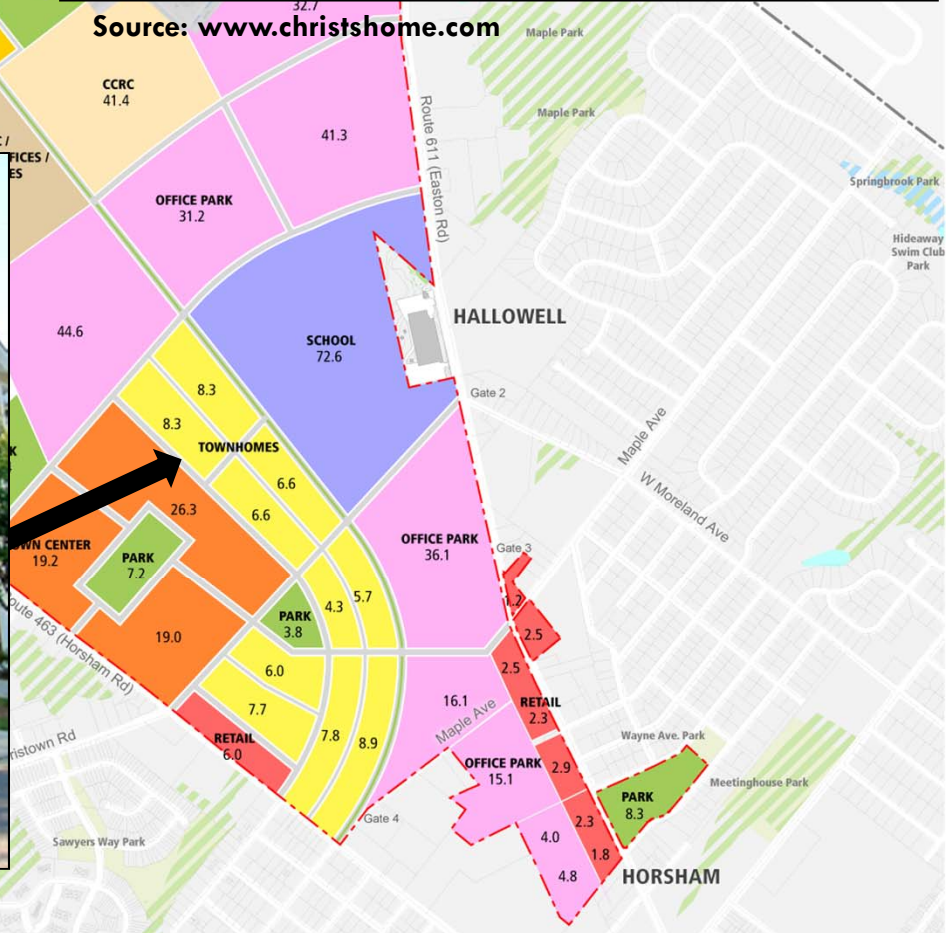
# OPTION B - LAND USE



Source: [www.christshome.com](http://www.christshome.com)

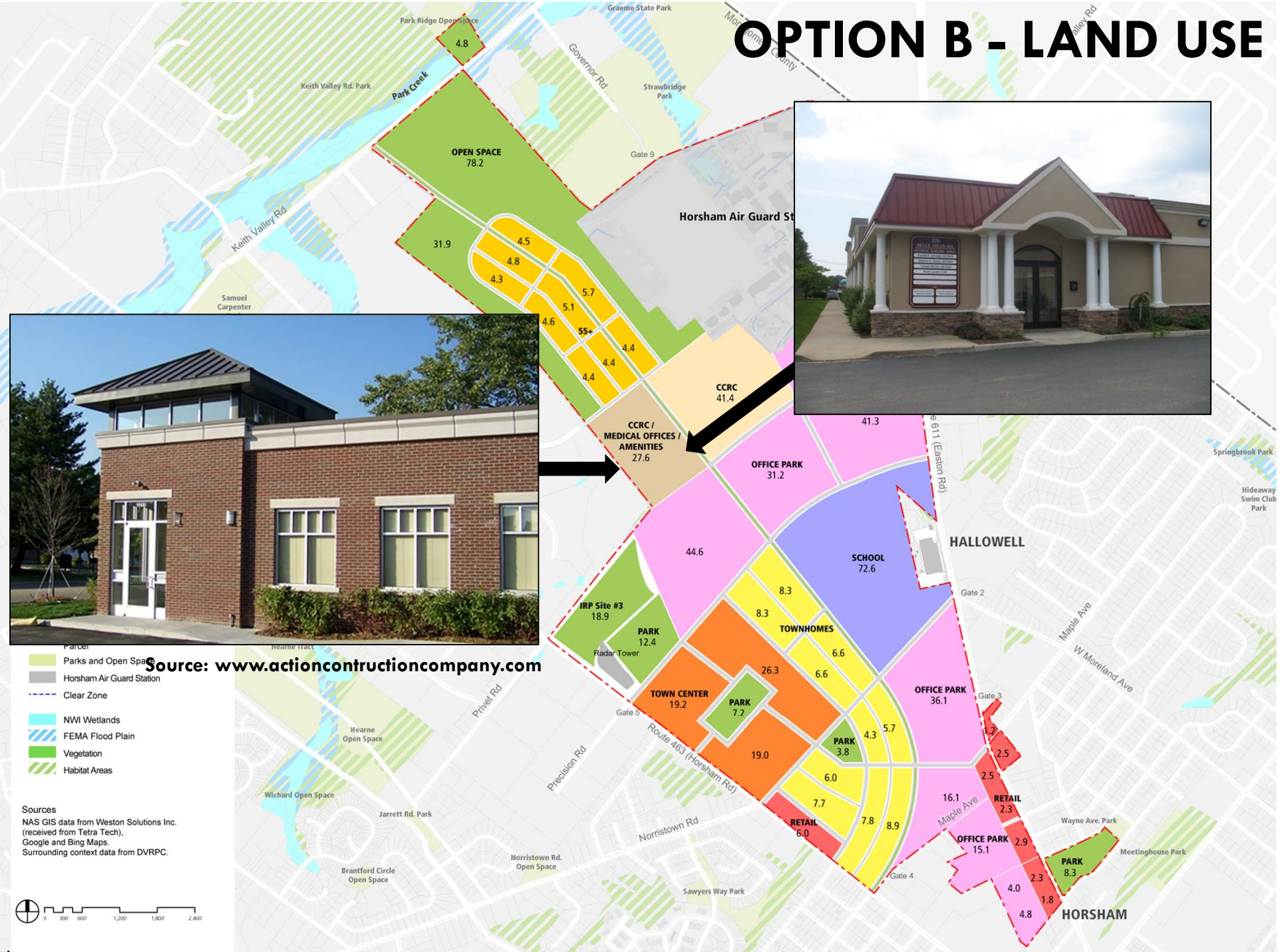


Source: [www.morrislake.com](http://www.morrislake.com)





# OPTION B - LAND USE



**Legend:**

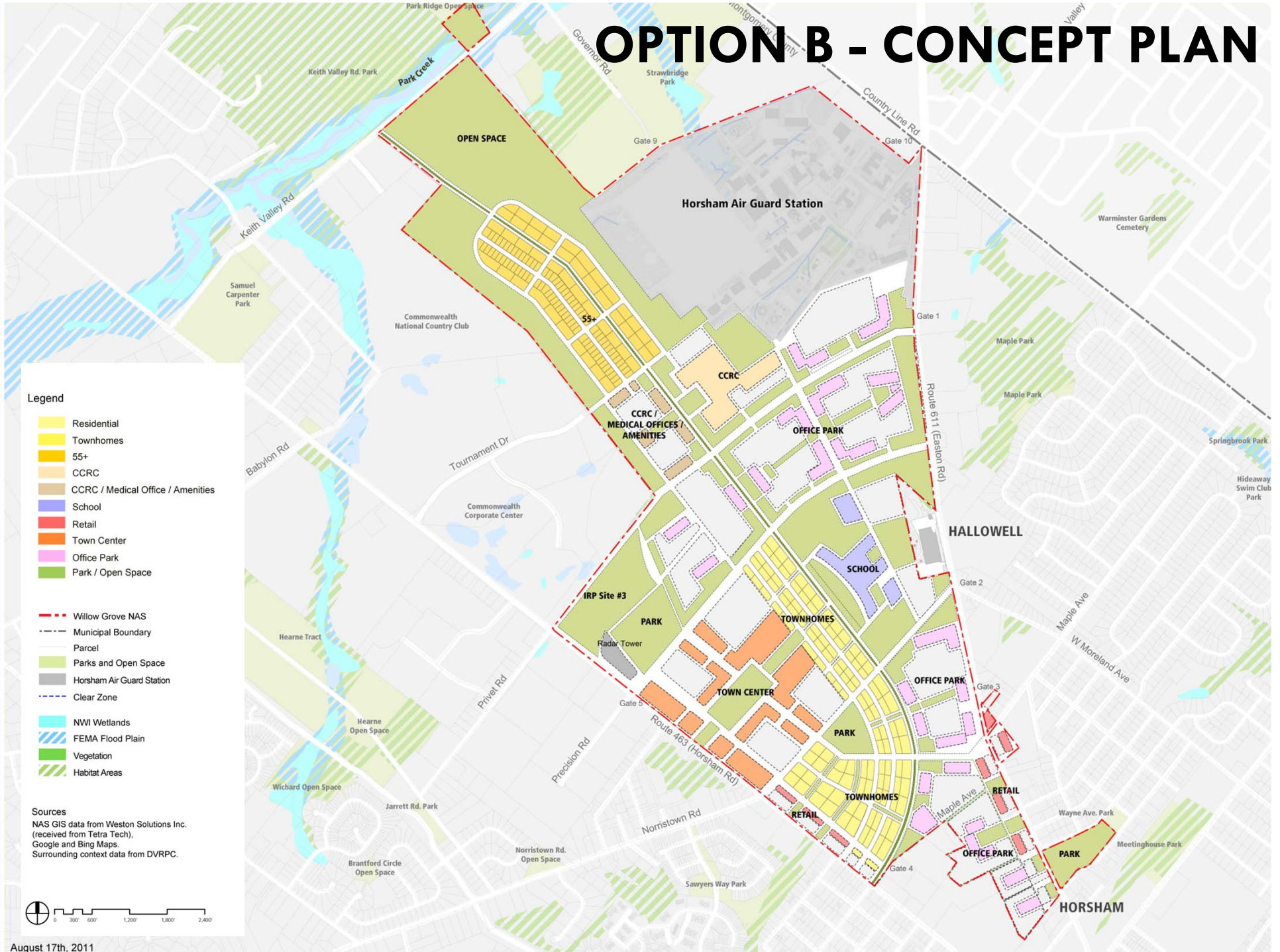
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**Sources:**  
 NAS GIS data from Weston Solutions Inc. (received from Tetra Tech),  
 Google and Bing Maps.  
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**Scale:** 0 300 600 1,200 1,800 2,400



# OPTION B - CONCEPT PLAN



## Legend

- Residential
- Townhomes
- 55+
- CCRC
- CCRC / Medical Office / Amenities
- School
- Retail
- Town Center
- Office Park
- Park / Open Space
- Willow Grove NAS
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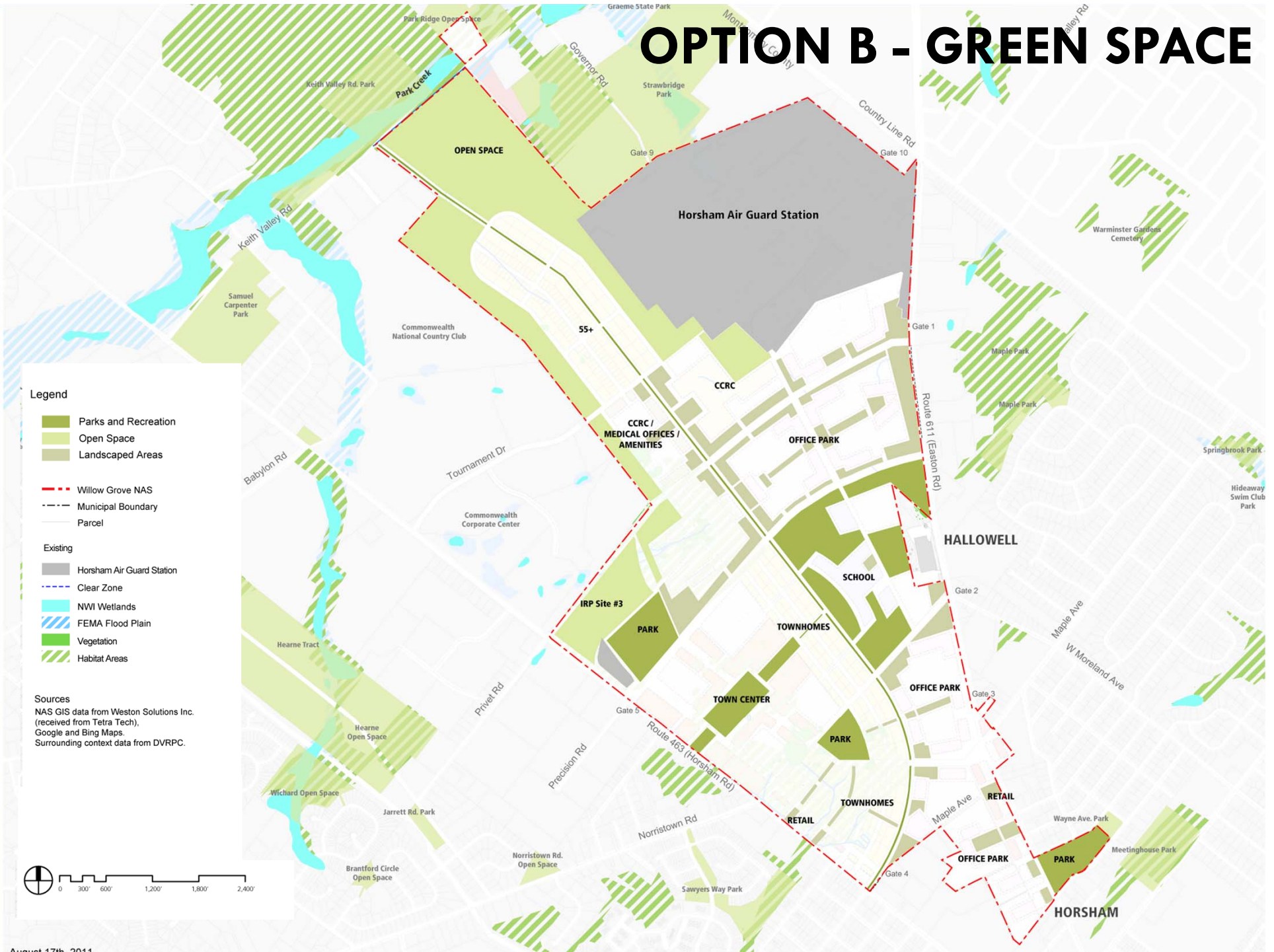
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August 17th, 2011

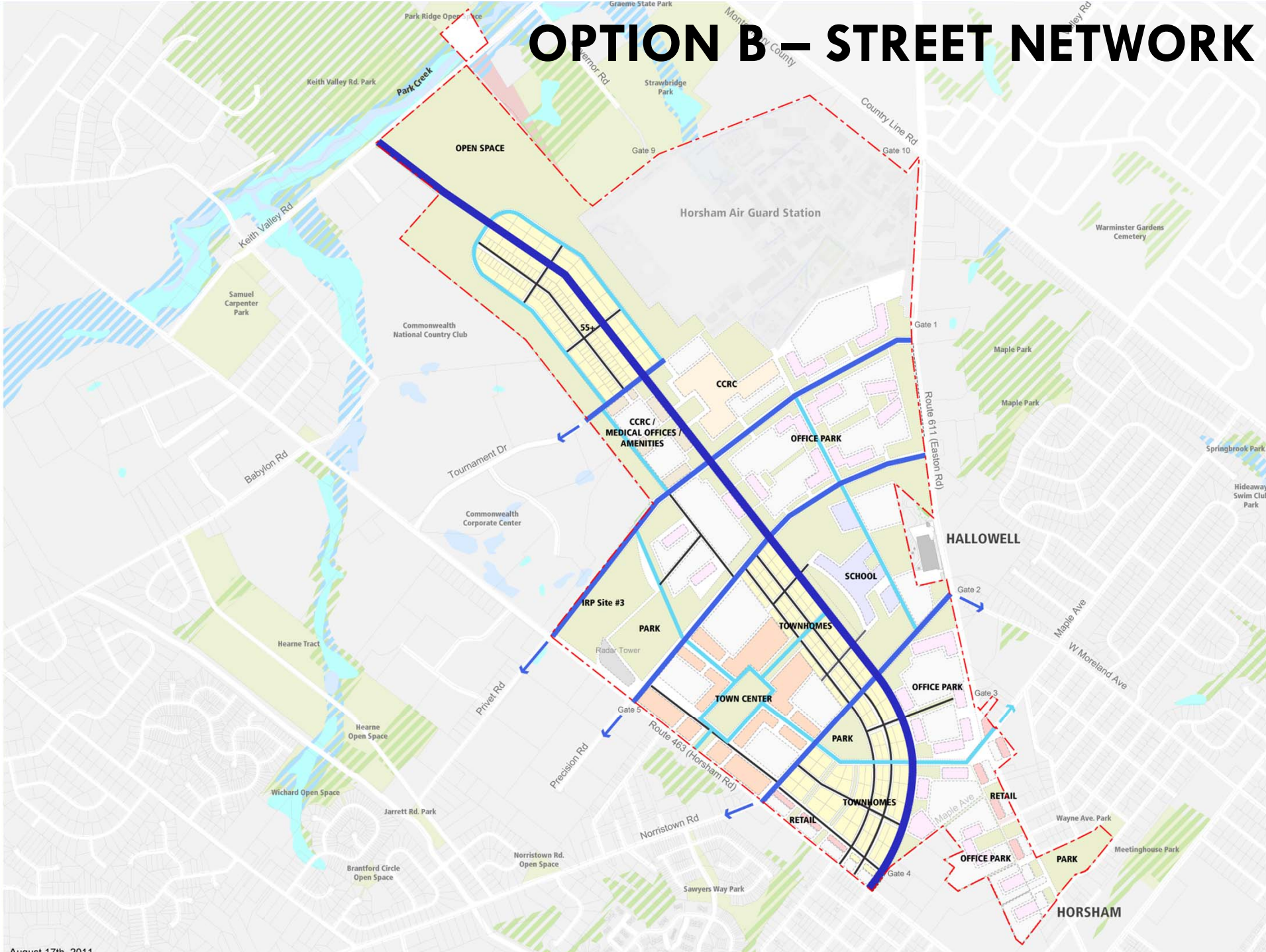


# OPTION B - GREEN SPACE





# OPTION B – STREET NETWORK



# OPTION B – System Wide Traffic



- The AM peak hour traffic increases 23% over the current conditions
- The PM peak hour traffic increases 13% over the current conditions



# Option B – AM Peak

## Legend

- Improved Traffic Operations
- Comparable Traffic Operations to Current Conditions
- Worsened Traffic Operations

- Boulevard
- Connector Street
- Secondary Street
- Local Street
- 5 Minutes Walking Radius

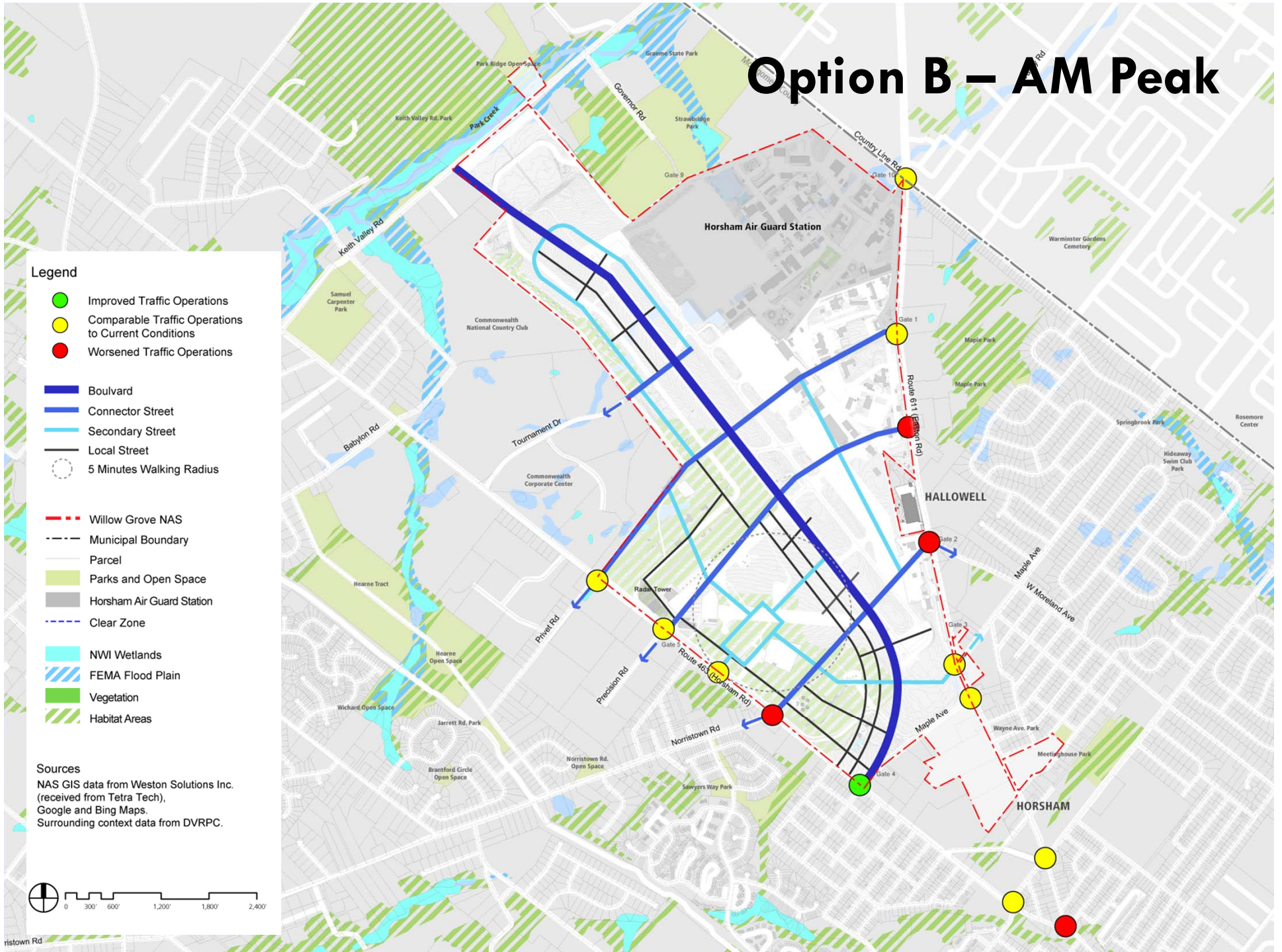
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

## Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.



ristown Rd





# Option B – PM Peak

## Legend

- Improved Traffic Operations
- Comparable Traffic Operations to Current Conditions
- Worsened Traffic Operations

- ▬ Boulevard
- ▬ Connector Street
- ▬ Secondary Street
- ▬ Local Street
- 5 Minutes Walking Radius

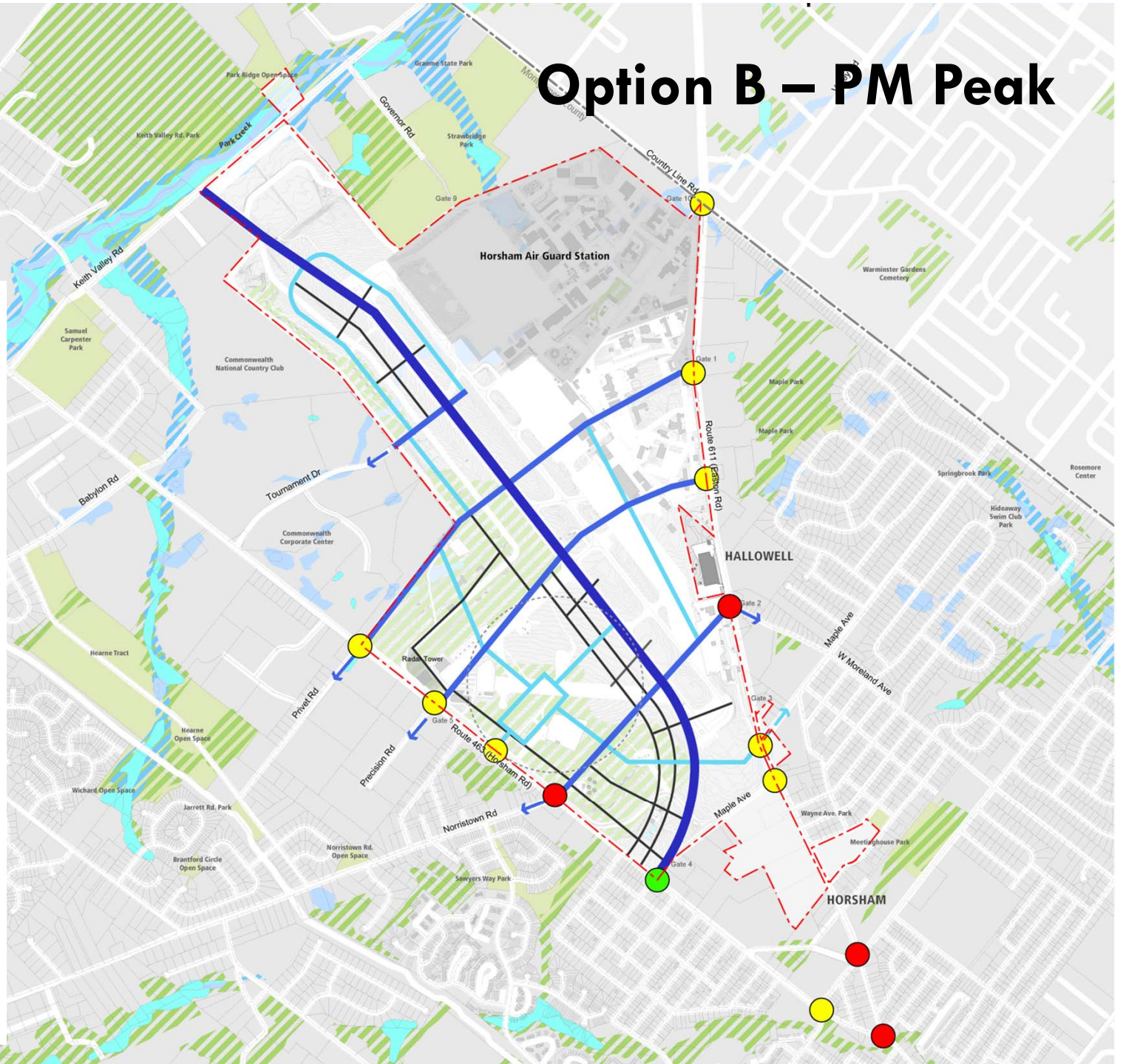
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

## Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.



Norristown Rd





# UTILITIES/INFRASTRUCTURE COSTS

	OPTION B		
System	Required	Utility	Cost
Water	<b>994,802</b> gpd	4" & 6" mains	<b>\$13.0</b> Mil
Wastewater	<b>845,582</b> gpd	15" (avg.) gravity main	<b>\$18.2</b> Mil
Roads	<b>64,500</b> LF	2-lane 24' wide w/curb	<b>\$11.9</b> Mil
<b>Total</b>			<b>\$43.1</b> Mil

# LAND USE ACREAGE – OPTION B

<b>Option B</b>	<b># of Acres</b>	<b>% of Total</b>
Single Family	8	1.2%
Townhomes	70	9.8%
55+	42	5.9%
CCRC	41	5.6%
CCRC/Med Office/Amenities	28	3.8%
Hotel/Conference		
Town Center	65	9.0%
Office Park	220	30.6%
Light Industrial		
Retail	14	1.9%
School	73	10.1%
Park/Open Space	160	22.2%
<b>Total</b>	<b>720</b>	<b>100.0%</b>
<b>Other Uses (streets, utilities, etc)</b>	<b>172</b>	<b>-</b>
<b>Total Acres at Site</b>	<b>892</b>	<b>-</b>



# BUILDING PROGRAM – OPTION B

Development SF and Units*	Option B
	15 Year Total
Single Family	58
Townhomes	702
55+	550
CCRC	567
CCRC/Med Office/Amenities	138,000
Hotel/Conference	0
Town Center	
Town Center Retail	109,000
Town Center Office	43,600
Town Center Residential	405
Cultural & Recreation	40,000
Office Park	1,430,650
Light Industrial	0
Retail	89,050
School	254,100
Park/Open Space	-

**TOTAL  
RESIDENTIAL  
UNITS: 2,282**

\*Residential development is expressed as units.

# REAL ESTATE TAX BASE IMPACTS – OPTION B

Investment/Tax Base	Option B	
	15 Year Total	% of Total
Single Family	\$25,418,750	3.4%
Townhomes	\$210,600,000	28.4%
55+	\$89,083,800	12.0%
CCRC	\$85,050,000	11.5%
CCRC/Med Office/Amenities	\$27,600,000	3.7%
Hotel/Conference	\$0	0.0%
Town Center		
Town Center Retail	\$14,715,000	2.0%
Town Center Office	\$6,540,000	0.9%
Town Center Residential	\$54,656	0.0%
Cultural & Recreation	\$6,000,000	0.8%
Office Park	\$264,670,250	35.7%
Light Industrial	\$0	0.0%
Retail	\$12,021,750	1.6%
School	-	-
Park/Open Space	-	-
<b>Total</b>	<b>\$741,754,206</b>	<b>100.0%</b>



# EMPLOYMENT IMPACTS – OPTION B

Option B	Construction Jobs		Permanent Jobs	
	#	% of Total	#	% of Total
Single Family	86	3.2%	-	-
Townhomes	710	26.4%	-	-
55+	300	11.1%	-	-
CCRC	287	10.7%	1,021	12.5%
CCRC/Med Office/Amenities	93	3.5%	511	6.3%
Hotel/Conference	-	-	-	-
Town Center				
Town Center Retail	50	1.9%	382	4.7%
Town Center Office	22	0.8%	196	2.4%
Town Center Residential	0	0.0%	-	-
Cultural & Recreation	20	0.7%	3	0.0%
Office Park	893	33.1%	5,723	70.3%
Light Industrial	-	-	-	-
Retail	41	1.5%	312	3.8%
School	193	7.2%	-	-
Park/Open Space	-	-	-	-
<b>Total</b>	<b>2,694</b>	<b>100.0%</b>	<b>8,146</b>	<b>100.0%</b>

# HLRA/PUBLIC Q&A

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- **What aspects/land uses of the scenario did you particularly like?**
- **Is there anything presented in this scenario that you do not wish to see in the final preferred plan?**
- **Do you have any other issues or concerns with this scenario?**

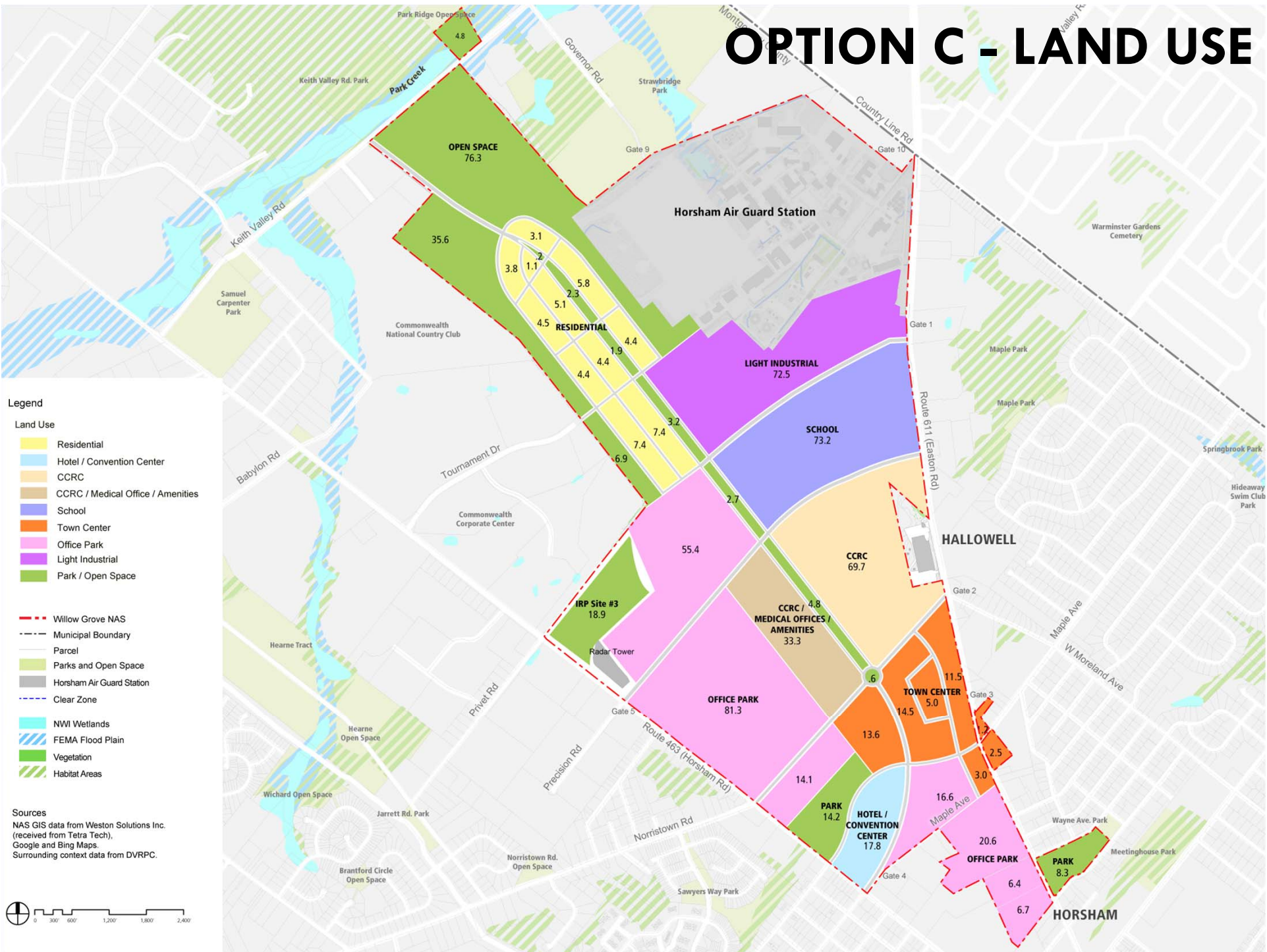


# REUSE PLAN OPTION C





# OPTION C - LAND USE



- Legend**
- Land Use**
- Residential
  - Hotel / Convention Center
  - CCRC
  - CCRC / Medical Office / Amenities
  - School
  - Town Center
  - Office Park
  - Light Industrial
  - Park / Open Space

- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

**Sources**  
 NAS GIS data from Weston Solutions Inc. (received from Tetra Tech),  
 Google and Bing Maps.  
 Surrounding context data from DVRPC.

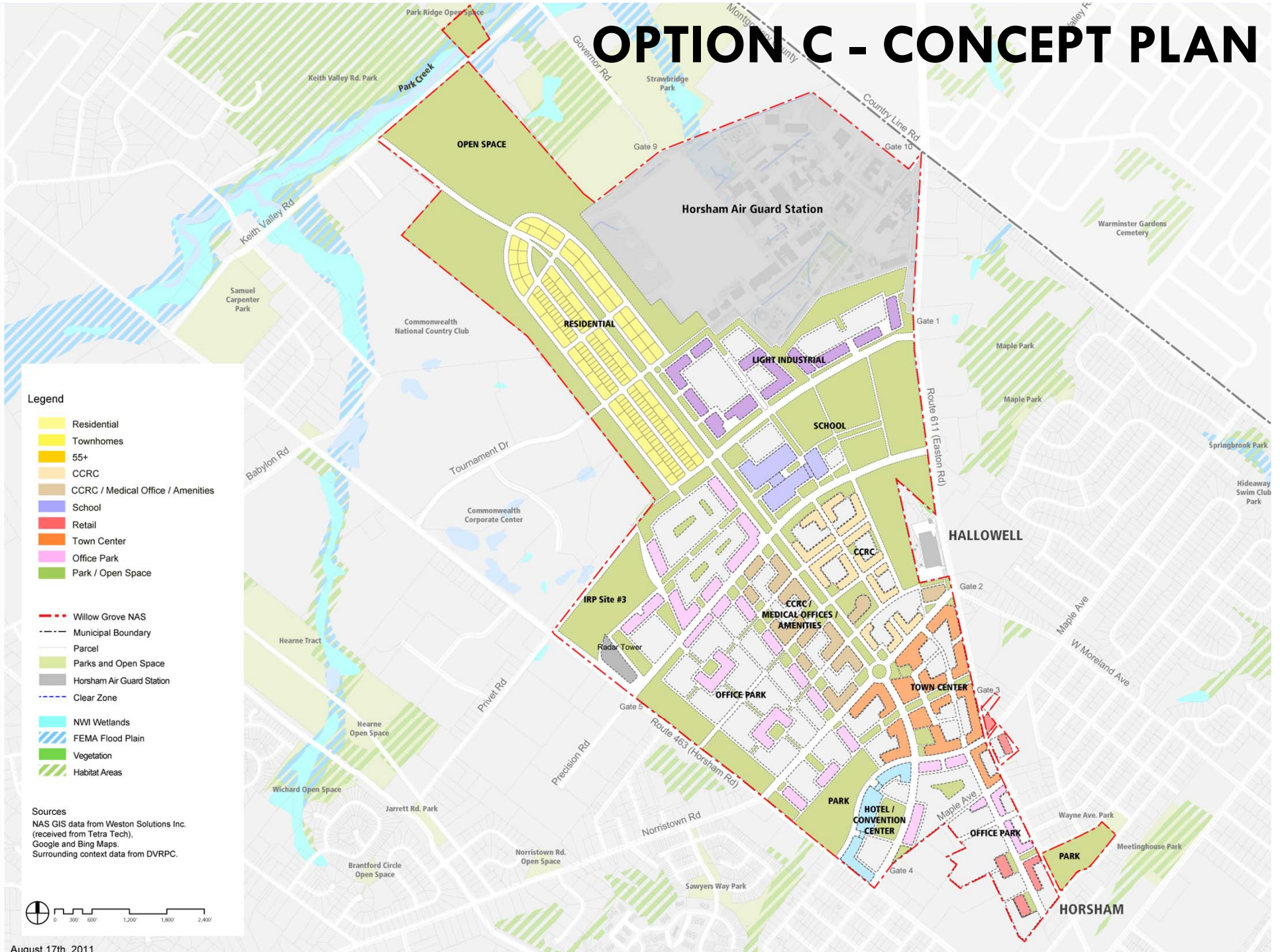






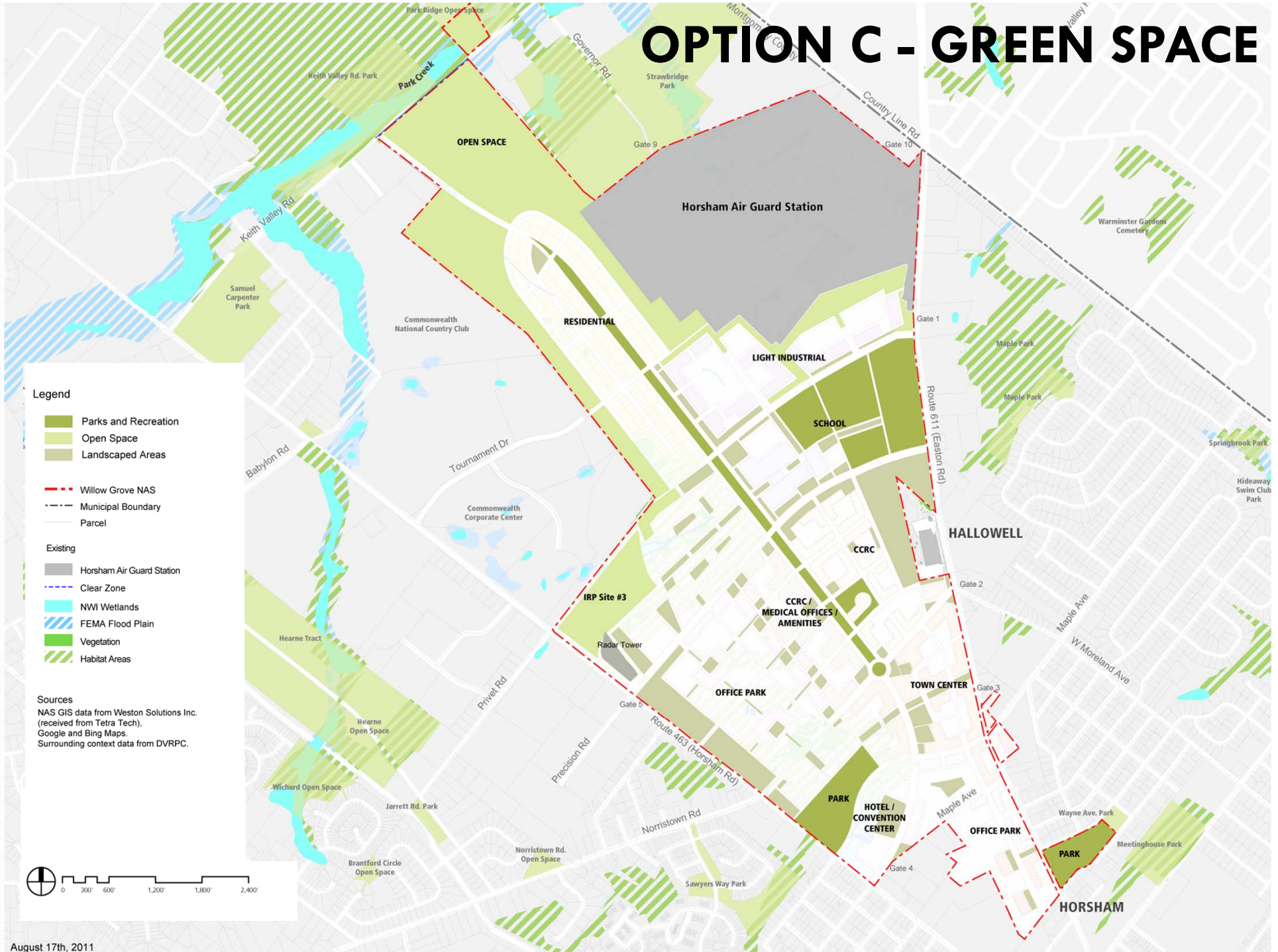


# OPTION C - CONCEPT PLAN





# OPTION C - GREEN SPACE



## Legend

- Parks and Recreation
- Open Space
- Landscaped Areas
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Existing
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

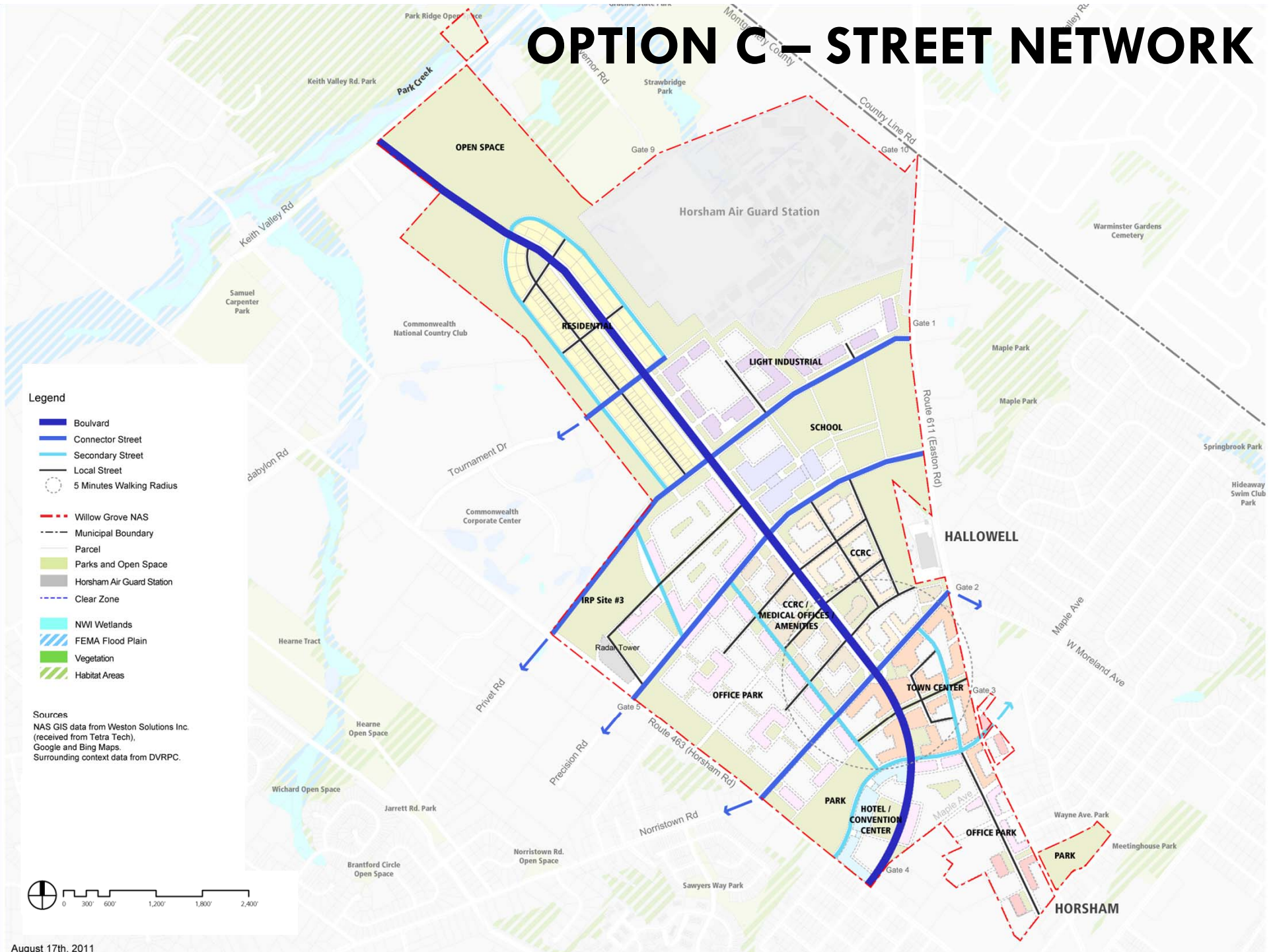
## Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.





# OPTION C – STREET NETWORK



## Legend

- █ Boulevard
- █ Connector Street
- █ Secondary Street
- █ Local Street
- 5 Minutes Walking Radius
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

Sources  
 NAS GIS data from Weston Solutions Inc.  
 (received from Tetra Tech),  
 Google and Bing Maps.  
 Surrounding context data from DVRPC.





# OPTION C – System Wide Traffic



- The AM peak hour traffic increases 26% over the current conditions
- The PM peak hour traffic increases 15% over the current conditions

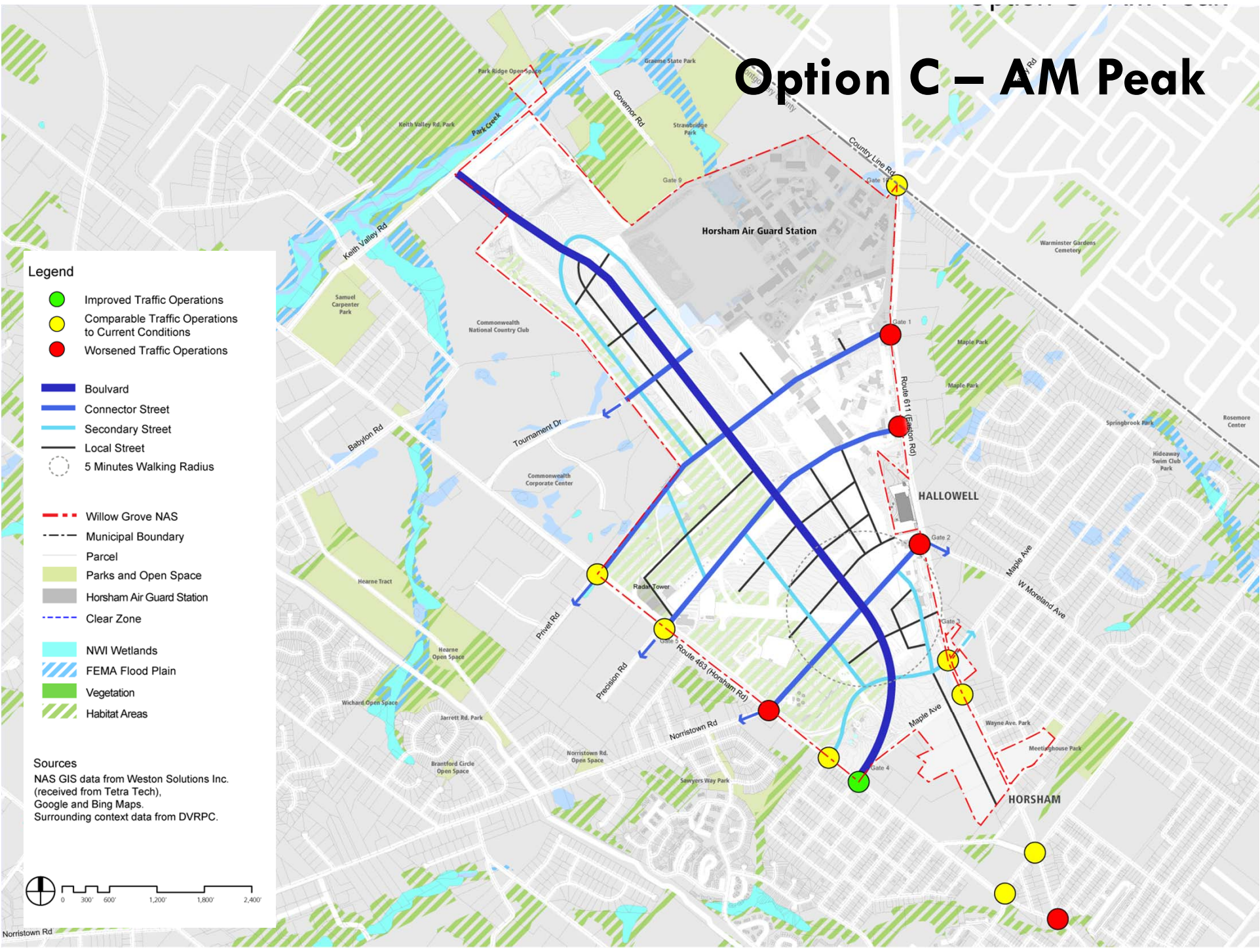
# Option C – AM Peak

- Legend**
- Improved Traffic Operations
  - Comparable Traffic Operations to Current Conditions
  - Worsened Traffic Operations

- ▬ Boulevard
- ▬ Connector Street
- ▬ Secondary Street
- ▬ Local Street
- 5 Minutes Walking Radius

- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

**Sources**  
 NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps.  
 Surrounding context data from DVRPC.





# Option C – PM Peak

## Legend

- Improved Traffic Operations
- Comparable Traffic Operations to Current Conditions
- Worsened Traffic Operations

- Boulevard
- Connector Street
- Secondary Street
- Local Street
- 5 Minutes Walking Radius

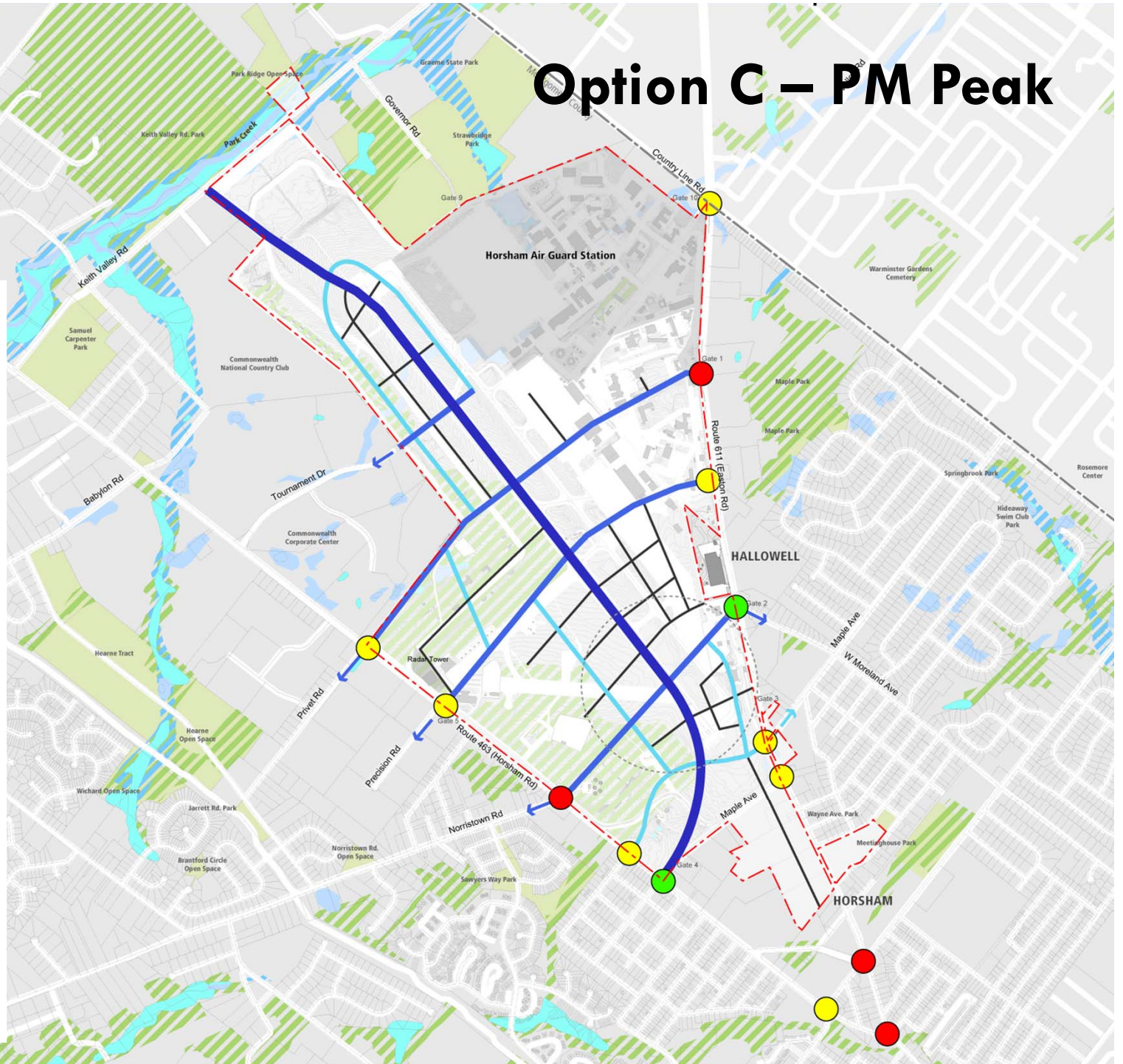
- Willow Grove NAS
- Municipal Boundary
- Parcel
- Parks and Open Space
- Horsham Air Guard Station
- Clear Zone
- NWI Wetlands
- FEMA Flood Plain
- Vegetation
- Habitat Areas

## Sources

NAS GIS data from Weston Solutions Inc. (received from Tetra Tech), Google and Bing Maps. Surrounding context data from DVRPC.



Horsham Rd



# UTILITIES/INFRASTRUCTURE

	OPTION C		
System	Required	Utility	Cost
Water	<b>970,767</b> gpd	4" & 6" mains	<b>\$11.7</b> Mil
Wastewater	<b>825,152</b> gpd	15" (avg.) gravity main	<b>\$16.4</b> Mil
Roads	<b>53,950</b> LF	2-lane 24' wide w/curb	<b>\$10.0</b> Mil
<b>Total</b>			<b>\$38.1</b> Mil



# LAND USE ACREAGE – OPTION C

<b>Option C</b>	<b># of Acres</b>	<b>% of Total</b>
Single Family	51	7.0%
Townhomes		0.0%
55+	60	8.2%
CCRC	28	3.8%
CCRC/Med Office/Amenities	15	2.1%
Hotel/Conference	18	2.4%
Town Center	48	6.5%
Office Park	188	25.7%
Light Industrial	75	10.2%
Retail		
School	73	10.0%
Park/Open Space	176	24.0%
<b>Total</b>	<b>731</b>	<b>100.0%</b>
<b>Other Uses (streets, utilities, etc)</b>	<b>161</b>	<b>-</b>
<b>Total Acres at Site</b>	<b>892</b>	<b>-</b>

# BUILDING PROGRAM – OPTION C

Development SF and Units*	Option C
	15 Year Total
Single Family	360
Townhomes	0
55+	780
CCRC	392
CCRC/Med Office/Amenities	75,000
Hotel/Conference	142,400
Town Center	
Town Center Retail	75,200
Town Center Office	30,080
Town Center Residential	279
Cultural & Recreation	40,000
Office Park	1,222,650
Light Industrial	670,500
Retail	0
School	256,200
Park/Open Space	-

**TOTAL  
RESIDENTIAL  
UNITS: 1,811**

\*Residential development is expressed as units.



# REAL ESTATE TAX BASE IMPACTS – OPTION C

Investment/Tax Base	Option C	
	15 Year Total	% of Total
Single Family	\$157,412,500	23.3%
Townhomes	\$0	0.0%
55+	\$126,360,000	18.7%
CCRC	\$58,800,000	8.7%
CCRC/Med Office/Amenities	\$15,000,000	2.2%
Hotel/Conference	\$21,360,000	3.2%
Town Center		
Town Center Retail	\$10,152,000	1.5%
Town Center Office	\$4,512,000	0.7%
Town Center Residential	\$37,707	0.0%
Cultural & Recreation	\$6,000,000	0.9%
Office Park	\$226,190,250	33.5%
Light Industrial	\$50,287,500	7.4%
Retail	\$0	0.0%
School	-	-
Park/Open Space	-	-
<b>Total</b>	<b>\$676,111,957</b>	<b>100.0%</b>

# EMPLOYMENT IMPACTS – OPTION C

Option C	Construction Jobs		Permanent Jobs	
	#	% of Total	#	% of Total
Single Family	531	21.5%	-	-
Townhomes	-	-	-	-
55+	426	17.2%	-	-
CCRC	198	8.0%	706	10.0%
CCRC/Med Office/Amenities	51	2.1%	278	3.9%
Hotel/Conference	72	2.9%	100	1.4%
Town Center				
Town Center Retail	34	1.4%	263	3.7%
Town Center Office	15	0.6%	135	1.9%
Town Center Residential	0	0.0%	-	-
Cultural & Recreation	20	0.8%	3	0.0%
Office Park	763	30.8%	4,891	69.4%
Light Industrial	170	6.9%	671	9.5%
Retail	-	-	-	-
School	194	7.8%	-	-
Park/Open Space	-	-	-	-
<b>Total</b>	<b>2,474</b>	<b>100.0%</b>	<b>7,045</b>	<b>100.0%</b>

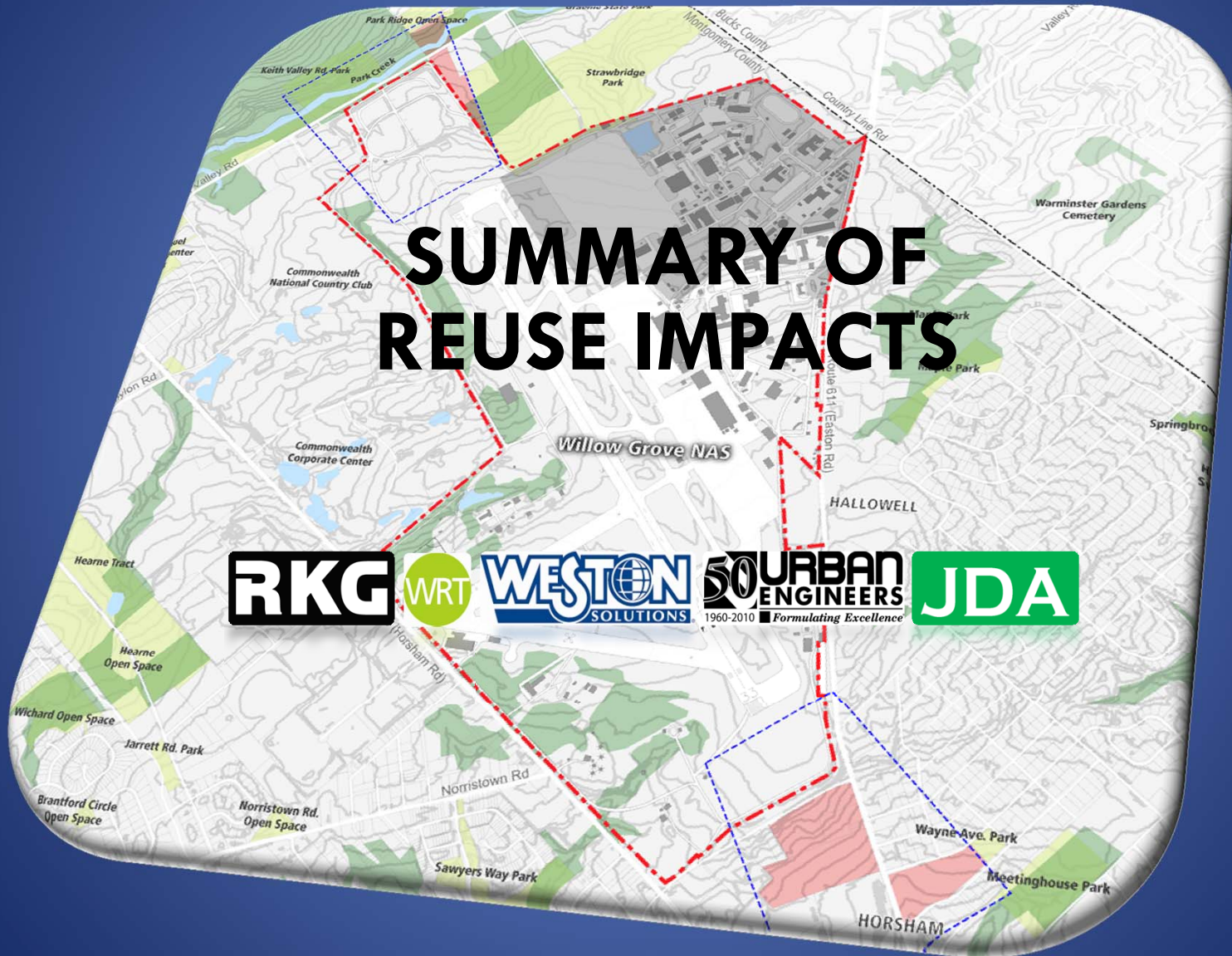


# HLRA/PUBLIC Q&A



- **What aspects/land uses of the scenario did you particularly like?**
- **Is there anything presented in this scenario that you do not wish to see in the final preferred plan?**
- **Do you have any other issues or concerns with this scenario?**

# SUMMARY OF REUSE IMPACTS





# UTILITIES/INFRASTRUCTURE

	OPTION A			OPTION B			OPTION C		
	Req.	Utility	Cost	Req.	Utility	Cost	Req.	Utility	Cost
<b>Water</b>	<b>882,248</b> gpd	4" & 6" mains	<b>\$11.7</b> mil	<b>994,802</b> gpd	4" & 6" mains	<b>\$13.0</b> mil	<b>970,767</b> gpd	4" & 6" mains	<b>\$11.7</b> mil
<b>Wastewater</b>	<b>749,911</b> gpd	15" (avg.) gravity main	<b>\$16.4</b> mil	<b>845,582</b> gpd	15" (avg.) gravit y main	<b>\$18.2</b> mil	<b>825,152</b> gpd	15" (avg.) gravi ty main	<b>\$16.4</b> mil
<b>Roads</b>	<b>58,350</b> LF	2-lane 24' wide w/curb	<b>\$10.8</b> mil	<b>64,500</b> LF	2- lane 24' wide w/cur b	<b>\$11.9</b> mil	<b>53,950</b> LF	2- lane 24' wide w/cur b	<b>\$10.0</b> mil
<b>Total</b>			<b>\$38.9</b> mil			<b>\$43.2</b> mil			<b>\$38.1</b> mil

# LAND USE ACREAGE COMPARISON

Acreage	Option A	Option B	Option C
Single Family	69	8	51
Townhomes	0	70	0
55+	30	42	60
CCRC	26	41	28
CCRC/Med Office/Amenities	12	28	15
	0	0	0
Hotel/Conference	14	0	18
	0	0	0
Town Center	14	65	48
	0	0	0
Office Park	156	220	188
Light Industrial	150	0	75
Retail	22	14	0
	0	0	0
School	69	73	73
Park/Open Space	177	160	176
<b>Total</b>	<b>739</b>	<b>720</b>	<b>731</b>
<b>Other Uses (streets, utilities, etc)</b>	<b>153</b>	<b>172</b>	<b>161</b>
<b>Total Acres at Site</b>	<b>892</b>	<b>892</b>	<b>892</b>



# BUILDING PROGRAM

Development SF and Units	Option A	Option B	Option C
	15 Year Total	15 Year Total	15 Year Total
Single Family	481	58	360
Townhomes	0	702	0
55+	390	550	780
CCRC	364	567	392
CCRC/Med Office/Amenities	60,000	138,000	75,000
Hotel/Conference	111,200	0	142,400
Town Center			
Town Center Retail	7,600	109,000	75,200
Town Center Office	0	43,600	30,080
Town Center Residential	0	405	279
Cultural & Recreation	40,000	40,000	40,000
Office Park	1,015,950	1,430,650	1,222,650
Light Industrial	1,347,300	0	670,500
Retail	144,950	89,050	0
School	240,800	254,100	256,200
Park/Open Space	-	-	-

# REAL ESTATE TAX BASE IMPACTS

Investment/Tax Base	Option A	Option B	Option C
Single Family	\$210,393,750	\$25,418,750	\$157,412,500
Townhomes	\$0	\$210,600,000	\$0
55+	\$63,180,000	\$89,083,800	\$126,360,000
CCRC	\$54,600,000	\$85,050,000	\$58,800,000
CCRC/Med Office/Amenities	\$12,000,000	\$27,600,000	\$15,000,000
Hotel/Conference	\$16,680,000	\$0	\$21,360,000
Town Center			
Town Center Retail	\$1,026,000	\$14,715,000	\$10,152,000
Town Center Office	\$0	\$6,540,000	\$4,512,000
Town Center Residential	\$0	\$54,656	\$37,707
Cultural & Recreation	\$6,000,000	\$6,000,000	\$6,000,000
Office Park	\$187,950,750	\$264,670,250	\$226,190,250
Light Industrial	\$101,047,500	\$0	\$50,287,500
Retail	\$19,568,250	\$12,021,750	\$0
School	-	-	-
Park/Open Space	-	-	-
<b>Total</b>	<b>\$672,446,250</b>	<b>\$741,754,206</b>	<b>\$676,111,957</b>



# EMPLOYMENT IMPACTS - CONSTRUCTION

Construction Jobs	Option A	Option B	Option C
Single Family	710	86	531
Townhomes	-	710	-
55+	213	300	426
CCRC	184	287	198
CCRC/Med Office/Amenities	40	93	51
Hotel/Conference	56	-	72
Town Center			
Town Center Retail	3	50	34
Town Center Office	-	22	15
Town Center Residential	-	0	0
Cultural & Recreation	20	20	20
Office Park	634	893	763
Light Industrial	341	-	170
Retail	66	41	-
School	183	193	194
Park/Open Space	-	-	-
<b>Total</b>	<b>2,450</b>	<b>2,694</b>	<b>2,474</b>

# EMPLOYMENT IMPACTS - PERMANENT

Permanent Jobs	Option A	Option B	Option C
Single Family	-	-	-
Townhomes	-	-	-
55+	-	-	-
CCRC	655	1021	706
CCRC/Med Office/Amenities	222	511	278
Hotel/Conference	78	-	100
Town Center			
Town Center Retail	27	382	263
Town Center Office	-	196	135
Town Center Residential	-	-	-
Cultural & Recreation	3	3	3
Office Park	4064	5723	4891
Light Industrial	1347	-	671
Retail	507	312	-
School	-	-	-
Park/Open Space	-	-	-
<b>Total</b>	<b>6,903</b>	<b>8,146</b>	<b>7,045</b>



# OPEN PUBLIC COMMENT





# Community Feedback

The public input on the three Reuse Plan Alternatives is encouraged!

- What plan elements do you like or dislike?
- What combination, location, or configuration of elements would you like to see in the Final Plan?

Please fill out index cards or e-mail the HLRA your input on the plan concepts by

September 1, 2011 to: [mail@hlra.org](mailto:mail@hlra.org).







## **HORSHAM TOWNSHIP AUTHORITY FOR NAS-JRB WILLOW GROVE WEDNESDAY • AUGUST 17, 2011 • 7:00 P.M.**

### **MEETING AGENDA**

- Call to order and Pledge of Allegiance
- RKG Presentation of Base Reuse Alternatives
- Opportunity for questions and comments
- Approval of the following Meeting Minutes: July 27, 2011
- Executive Director's Report
- Solicitor's Report
- Bills and Communications
- Approval of list of checks
- Additional business, if any
- Next HLRA Board Meeting: Wed., September 21, 2011 at 3:00 P.M.