

# UPPER DUBLIN TOWNSHIP

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## CONCEPTUAL SITE PLANS WITH OTHER USES CRITERIA, BENEFITS AND NEGATIVES

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June 30, 2009



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# PROJECT CRITERIA

- ❖ 27,000 Square Foot Fire House.
- ❖ Apparatus Bays and Fire House on one floor.
- ❖ Up to Seven Apparatus Bays
- ❖ Three Drive Thru Apparatus Bays

# PROJECT CRITERIA

- ❖ Ample Dedicated Parking for the Responders
- ❖ Maximize the Distance between the School Zone and the Apparatus Bays

# CONSIDERATIONS

- ❖ New Fire House Conceptual Site and Utilities Report – May 29, 2009.
  - Included Cost for Site Improvements
  - Defined Responsibilities
  - Basis for Cost Estimate - Site
    - Zoning, Soil, Grading & Fill, Seismic
    - Water Table, Landscaping, Aprons,
    - Curbs and Sidewalks, Parking Lots
    - Walkways, Outdoor Lighting, Sign,
    - Snow Removal

# CONSIDERATIONS

- ❖ New Fire House Conceptual Site and Utilities Report – May 29, 2009.
  - Basis for Cost Estimate - Utilities
    - Storm Water
    - Sanitary Sewage
    - Electric
    - Natural Gas
    - Water/Fire Hydrant
    - Emergency Power
    - Security & Communications

# CONSIDERATIONS

- ❖ New Fire House Conceptual Site and Utilities Report – May 29, 2009.
  - Optional Systems
    - Geothermal
    - Lighting and Power management Systems
    - Campus Utility Service

# CONSIDERATIONS

- ❖ New Fire House Conceptual Site and Utilities Report – May 29, 2009.
  - Budgetary Cost Estimate
  - Traffic Studies
  - Notes of Conference

# CONSIDERATIONS

- ❖ New Fire House Conceptual Site and Utilities Report – May 29, 2009.
  - Appendices
    - Lightning Protection Risk Assessment
    - Seismic Design Category Calculations
    - Electric Power Load Summary
    - Detailed Cost Estimate
    - PECO Tariff Rate Schedules
    - Drawings

# CONSIDERATIONS

- ❖ Meet Project Criteria established for the Fire House
- ❖ Safety risk associated with being adjacent to or near a Fire House
- ❖ Functional Compatibility of the Different Occupancies.
- ❖ Functional Separation of the different occupancies.

# CONSIDERATIONS

- ❖ Optimal use of the property contours.
- ❖ Impact to neighboring residential properties.
- ❖ Impact to residents of Upper Dublin Township.
- ❖ Limitations on the Fire House, including no hazardous materials.
- ❖ Provisions for future construction.

# CONSIDERATIONS

- ❖ Feasible alternate configurations.
- ❖ No Zoning Requirements
- ❖ Soil Class C
- ❖ Seismic Design Category C
- ❖ LEED Certification

# OTHER USES

- ❖ 40,000 Square Feet Institutional Space
- ❖ 20,000 Square Feet Office Space
- ❖ 5,000 Square Foot Office Building
- ❖ 2,000 Square Foot Garage
- ❖ Existing Historic House

# OTHER USES



# OTHER USES



# INSTITUTIONAL SPACE

- ❖ SK-1.0 Fire House/Institutional Space & Office Bldg Conceptual Plan
- ❖ SK-1.1 Fire House/Institutional Space & Office Bldg Conceptual Plan – 2 Future Bays
- ❖ SK-1.2 Fire House Conceptual Plan & Office Bldg – Future Institutional Space







# OFFICE SPACE

- ❖ SK-2.0 Fire House/Office Space & Office Bldg Conceptual Plan
- ❖ SK-2.1 Fire House/Office Space & Office Bldg Conceptual Plan – 2 Future Bays





# GARAGE SPACE

- ❖ SK-3.0 Fire House/Office Space & Garage Conceptual Plan
- ❖ SK-3.1 Fire House/Office Space & Garage Conceptual Plan – 2 Future Bays
- ❖ SK-3.2 Fire House Conceptual Plan – 2 Future Bays, Office and Garage







# PARKING SPACES

- ❖ SK-1.0 Fire House/Institutional Space & Office Bldg – **180 Spaces**
- ❖ SK-1.1 Fire House/Institutional Space & Office Bldg – 2 Future Bays – **160 Spaces**
- ❖ SK-1.2 Fire House– Future Institutional Space & Office Bldg – **70 Spaces**

# PARKING SPACES

- ❖ SK-2.0 Fire House/Office Space & Office Bldg – **170 Spaces**
- ❖ SK-2.1 Fire House/Office Space & Office Bldg – 2 Future Bays – **140 Spaces**

# PARKING SPACES

❖ SK-3.0 Fire House/Office Space & Garage – **155 Spaces**

❖ SK-3.1 Fire House/Office Space & Garage – 2 Future Bays – **140 Spaces**

❖ SK-3.2 Fire House – 2 Future Bays, Office and Garage – **90 Spaces**



# BUDGETARY TOTAL PROJECT COST

## INSTITUTIONAL SPACE

- ❖ SK-1.0 Fire House/Institutional Space & Office Bldg – **\$22,300,000**
- ❖ SK-1.1 Fire House/Institutional Space & Office Bldg – 2 Future Bays - **\$21,715,000**
- ❖ SK-1.2 Fire House– Future Institutional Space & Office Bldg – **\$12,390,000**



# BUDGETARY TOTAL PROJECT COST

## OFFICE SPACE

- ❖ SK-2.0 Fire House/Office Space & Office Bldg – **\$15,145,000**
- ❖ SK-2.1 Fire House/Office Space & Office Bldg – 2 Future Bays – **\$13,820,000**



# BUDGETARY TOTAL PROJECT COST

## GARAGE SPACE

❖ SK-3.0 Fire House/Office Space & Garage – **\$16,950,000**

❖ SK-3.1 Fire House/Office Space & Garage – 2 Future Bays – **\$16,500,000**

❖ SK-3.2 Fire House – 2 Future Bays, Office and Garage – **\$12,390,000**



# BENEFITS

- ❖ Reduce square footage construction costs.
- ❖ Reduce site improvement costs because of less fill.
- ❖ Lower per square foot utility operating costs.

# BENEFITS

- ❖ Lower per square foot maintenance operating costs
- ❖ Potential to increase the distance between Apparatus Bays and School Zone
- ❖ No subdivision costs.

# BENEFITS

- ❖ More Seismic Design Category C space in the Township.
- ❖ Eliminate possibility of Seismic Design Category D.
- ❖ Higher ratio of building square footage to impervious cover.

# BENEFITS

- ❖ Additional LEED credit opportunities
  - SS c4.2 Alternate Transportation Bike Storage and Changing Rooms.
  - SS c7.2 Heat Island Effect Roof
  - EA c2 On Site Renewable Energy
  - ID c1.1 Innovation in Design

# NEGATIVES

- ❖ Additional Cost for Concrete Deck and Piers.
- ❖ The Historic House will have to be renovated.
- ❖ Additional cost for larger Seismic Design Category C Space.