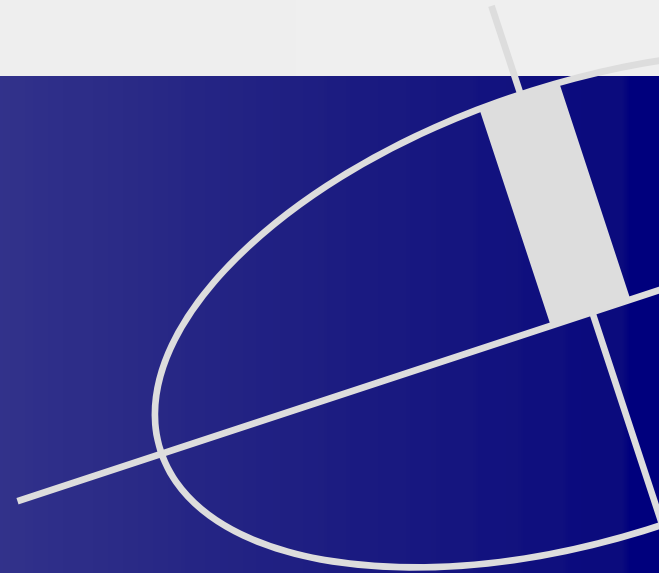
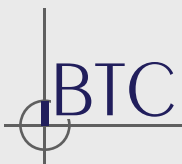


# Exterior Repair Project Glen Ellyn Public Library



By:  
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**Building Technology Consultants, PC**

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# Outline

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- 2010 and 2011 Roof Replacement and Facade Repair Project
  - Review Primary Reasons for Work and Replacement/Repairs
    - Roof Replacement
    - Facade Repairs
    - Interior Repairs at Attic
- Questions

# Primary Reasons for Roof Replacement

- Aging of existing asphalt fiberglass shingle system.
- Sagging of roof sheathing between wood trusses.
- Insufficient ventilation of attic space.
- Insufficient water management system (snow build-up, icicles on gutters, leaking gutters and downspouts, etc.)











# Roof Replacement Work

- Roofing System Replacement will include:
  - Complete tear off of existing system and installation of new asphalt fiberglass shingle system with all new metal accessories.
    - An alternate will be included for a 50-year shingle.
  - Installation of passive ventilation system.
    - Allow for more air flow through attic.
    - Help prevent premature failure of the roofing system.
    - Reduce condensation issues.

# Roof Replacement Work (cont.)

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- Roofing System Replacement will include:
  - Installation of fall protection system.
    - Provide easier access for future maintenance.
  - Installation of a snow guard system.
    - Reduce accumulation of snow at eaves and formation of icicles at gutters.

# Primary Reasons for Facade Repairs

- Ongoing water infiltration through EIFS cladding.
- Existing masonry mortar joints have separated, especially between cast stone units and cast stone-to-brick masonry.
- Sealant joints have failed.
- South elevation metal ledge flashing at 3<sup>rd</sup> floor is allowing water infiltration.









# Facade Repair Work

- Stucco and Facade Work will include:
  - Removing existing EIFS at primary elevations and installation of a three-coat stucco system with a water management system.
    - Replacing windows at these areas will be included as an alternate.
    - Repairing/replacing sealant joints for EIFS at south elevation recessed walkway (alternate).
    - Recoating the EIFS surfaces at the recessed walkway will also be included as an alternate.

## Facade Repair Work (cont.)

- Stucco and Facade Work will include :
  - Repointing deteriorated mortar joints.
    - An alternate will be included for repointing all mortar joints.
  - Grinding and sealing cast stone-to-cast stone joints and brick-to-cast stone joints.
  - Replacing sealant.
  - Replacing 3<sup>rd</sup> floor metal ledge flashing.
  - Applying a clear water repellent sealer (alternate).

# Primary Reasons for Interior Repairs at Attic

- Unwanted air movement into the attic through penetrations in the ceiling.
  - Causes inefficiencies in the HVAC system.
  - May contribute to freezing of sprinkler pipes in ceiling plenum



ON TOP  
← DIST  
Detector

← DSD



# Interior Repair Work

- Interior Repair Work will include:
  - Providing air barrier/fire stopping material at penetrations through 3<sup>rd</sup> floor interior sheathing gypsum ceiling.
  - Providing localized repairs to interior sheathing gypsum.
  - Providing additional loose fill insulation in attic.

# Unknown Conditions for Work

- Until the existing conditions are exposed during the work, the following can't be determined at this time:
  - Extent of sheathing replacement.
  - Extent of localized facade repairs.
  - Extent of water damage and mold, if any.
- A cash allowance of \$250,000 will be included in the Contract to account for unforeseen conditions. An additional \$20,000 allowance has been included to address and mold remediation. Additional contingency funds should be set aside.

# Questions???

