

## **Scope of Work**

These are the recommendations DTR offers up moving forward with the remediation of the John Muir/SMASH elementary school. These recommendations are made from a waterproofing standpoint and are meant to work in conjunction with recommendations for the remediation of biological growth by the industrial hygienist, entomologist, and recommendations made by the structural engineer.

### **Exterior Vertical Enclosure**

- This includes removing all cement plaster, lath, building paper, and related accessories to bare sheathing and framing.
- Remove and replace sheathing as needed to meet the applicable requirements of a new liquid applied Air and Water Barrier (AWB) and the recommendations of the structural engineer. The substrate must meet the requirements of the AWB manufacturer as well as the structural engineer. Note that this may require more sheathing removal than structurally necessary, due to the requirements of the AWB.
- Remove the bottom 4 feet of exterior sheathing to allow for observations of the sill plate, studs, and insulation. This is precautionary and meant to confirm that other locations do not have similar water damage or deficiencies as those observed during the demolition testing.
- Remove and reinstall windows (into properly flashed rough openings). This pertains to ALL windows regardless of type, or material. Replace all damaged windows.
- Replace louver covers with exterior louvers and properly flash them into the waterproofing system.
- Re-clad the building walls, providing liquid-applied AWB on new and existing plywood sheathing, cover with new cement plaster cladding system with code-compliant expansion joints, control joints, sealant systems, flashings, and drainage accessories.
- Install head flashing at all doors and windows (properly lapped and flashing into the water control layer at the wall assembly). Install sill pans at all door thresholds to guide water away from the door openings.
- Properly flash all wall penetrations (existing and new).
- Replace all wood trim with new trim materials (to remediate insect and dry rot damage). Coordinate with adjacent work. Properly prep, paint and seal all exposed vertical exterior surfaces.
- Remove and replace wood framing at all handrail curbs following the recommendations of the structural engineer. Apply a liquid flashing material up and over the curb, and flash it into the upturn of the traffic coating to ensure the curbs are watertight. Handrail anchor plates are to be flashed in place with a liquid-applied flashing material.
- Coordinate vertical enclosure work with horizontal enclosure work, e.g. edge of roof flashings, roof trim, downspouts, and gutter attachments.

### **Exterior Horizontal Enclosure**

- Undertake a complete re-roof (all roof assemblies), including complete removal of existing roofing and flashing, deck repair or replacement, new penetration jacks, vents, edge metal, parapet caps, gutters, and downspouts.
- Engage a plumbing engineer to verify roof drain, gutter, and downspout sizing are appropriate to meet roof drainage requirements. Provide additional drainage where required.
- Install Sill pans at all door thresholds (with back and side legs flashed into the water control layer at rough openings). Integrate new sill pans with pedestrian traffic coatings and new deck-to-wall base flashings at walkways.
- Clean, water-test, and check all surface drains on elevated walkways. Check with a plumbing engineer on the existing capacity of elevated walkway drains which appear to be under-sized for the prevailing drainage loads. Provide additional drainage where required.
- Inspect and reconstruct pedestrian traffic coating edge flashings and tie-ins to wall construction to ensure proper drainage for both walkways and plaster cladding.
- Repair walkway deck coating (at deficient locations and at upturns below the cement plaster assemblies).
- Replace expansion joint accessories or assemblies that are incorrectly located, loose, leaking, lacking proper slope, or have fallen out. Provide watertight replacements and proper drainage.

### **Interior**

- Repair and re-finish affected interior elements and finishes which have been disturbed by exterior building enclosure repair work, structural repairs, insect remediation, or environmental cleanup. Replace cabinetwork and other interior amenities damaged by water intrusion or other causes. This work should be done in conjunction with the recommendations of the industrial hygienist as well as an entomologist.

### **Additional**

- Engage a civil engineer to assess the existing site drainage systems and confirm if the number and size of existing landscape drains is sufficient to drain the areas around them. Site drainage patterns are to direct runoff away from the buildings. Additional remedial work may be required depending on the outcome of this assessment.