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**SECTION 00335**

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**EXISTING HAZARDOUS MATERIALS CONDITIONS**

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**PART 1 – GENERAL**

## 1.01 SUMMARY

- A. This section provides a list of known and assumed hazardous materials that may be impacted during renovation, demolition, repair, custodial and/or maintenance activities. The hazardous materials information has been provided through existing surveys conducted by the San Francisco Unified School District (District) and the District's environmental consultants.
- B. Some materials and items found at the Site either contain or may contain materials known to the State of California to be either hazardous, carcinogenic or reproductive toxins. These include but are not limited to asbestos, lead, PCB's, silica, and other materials.
- C. The Contractor shall hold the District and its consultants harmless for claims, damages, losses, and expenses, including attorney's fees arising out of the Contractor's hazardous materials related work including releases from any incidental disturbance of existing hazardous materials, on-site or off site spills of hazardous materials, or from non-compliance with the Contract Documents and regulatory requirements.

## 1.02 HAZARD COMMUNICATION

- A. The District may have conducted previous hazardous materials abatement projects at the site. The hazardous materials abatement oversight information is available for review by appointment only through the District's Asbestos Control Program at (415) 241-6226.
- B. Copies of previous hazardous materials report(s) and the AHERA Management Plan for the site are available for review by appointment only through the District's Asbestos Control Program at (415) 241-6226.
- C. Asbestos Hazards at McKinley Elementary School
  - 1. Asbestos has been identified at concentrations greater than one percent (>1%) in the following materials:
    - a. Interior Building:
      - 1) Texture (2% Chrysotile asbestos) at gypsum board walls and ceilings throughout. Gypsum board with asbestos texture is located above acoustical ceiling tiles (suspended and glued) and behind plywood wall and acoustical panels at select locations.
      - 2) Taping compounds (2% Chrysotile asbestos) at gypsum board walls and ceilings throughout. Gypsum board with asbestos taping compounds is located above all acoustical ceiling tiles (suspended and glued) and

behind plywood wall and acoustical panels throughout.

- 3) Fire door insulation (5-10% Chrysotile asbestos, 15-30% Amosite asbestos) at interior doors throughout.
- 4) Floor Tile (12"x12" orange) (5% Chrysotile asbestos) and mastic (black) (8% Chrysotile asbestos) at Cafeteria 101, Storage 102, Work Room 104, Nurse 106, Speech 110, Special Ed. 119, Electrical 123, Elevator Machine Room, Elevator, Storage 218, Teacher's Prep. 220, Storage 229A, Storage 229B and Electric 230B.
- 5) Floor Tile Mastic (black) 8% Chrysotile asbestos) below non-asbestos-containing floor tile (12"x12" brown) at Electrical 123.
- 6) Sheet Flooring (orange) (40% Chrysotile asbestos) at Kitchen 103, Toilet 106T, Toilet 115T, Toilet 116T, Toilet 117T, Toilet 118T,
- 7) Sink undercoatings (black) (4-5% Chrysotile asbestos) on stainless steel sinks at Work Room 104, Speech 110, Special Ed. 119, Teacher's Prep. 220 and Teacher's Prep 229.
- 8) Glazing compound (black tarry) at interior door at Custodian Storage 220A.

b. Exterior Building:

- 1) No building finishes were identified to contain detectable concentrations of asbestos.

c. Exterior Site

- 1) Waterproof membrane (tar paper) (40% Chrysotile asbestos) at exterior concrete foundation walls above and below grade.
- 2) Asphalt paving and top coatings (gray/brown) (2% Chrysotile asbestos throughout Main Play Yard.

2. The following materials have not been sampled and shall be assumed to contain asbestos at concentrations > 1%:

- a. Asbestos cement underground sewer, water and drain piping located throughout the entire site.

3. Asbestos has been identified at concentrations less than one percent (<1%) in the following materials:

- a. Vinyl base mastic (brown) (0.14% Chrysotile asbestos) at Elevator Machine Room

4. The following sampled suspect materials had results that reported NO detectable concentrations of asbestos by PLM analysis:

a. Interior Building:

- 1) Gypsum board at walls and ceilings (*Note: the taping compounds and texture were identified to contain asbestos at concentrations >1%*).
- 2) Acoustical ceiling tiles and glue (12"x12" white spline and glued to

gypsum board substrate with taping compounds and texture coatings  
(*Note: the taping compounds and texture were identified to contain asbestos at concentrations >1%*).

- 3) Carpets and carpet glues.
- 4) Marmoleum sheet flooring, backing and glues.
- 5) Floor tile (12"x12" white) and mastic at all Stairs.
- 6) Floor tile (12"x12" blue) and mastic at the 2<sup>nd</sup> Floor at Custodian Storage 220A.
- 7) White floor leveling compounds.
- 8) Vinyl stair treads and risers and associated mastics at all Stairs.
- 9) Vinyl base (brown/red) and mastics throughout.
- 10) Sinks undercoatings (gray) at all Classrooms.
- 11) Ceramic floor tiles (4'x6' red brick pattern) grouts and mortars at Lobby C90.
- 12) Ceramic wall and floor tiles, grouts and mortar / glues at Toilets.
- 13) Heat shield gaskets at incandescent light fixtures at Toilets.
- 14) Chalkboards (metal) with white packing material at Classrooms.
- 15) Window gasketing (black rubber) at interior hollow metal windows and doors.
- 16) Seam tape (white) at metal ducting throughout.

b. Exterior Building:

- 1) Stucco plaster and paint coatings
- 2) All roofing materials
- 3) Mastic / Sealants (gray) at roof mounted HVAC units and metal ducting.

c. Exterior Site:

- 1) Asphalt paving and slurry top coat at Upper Play Yard,
- 2) Paints (various colors) on exterior concrete retaining walls throughout the site.

5. Areas and/or Spaces known or presumed to be contaminated with asbestos containing materials, dust, and debris include:

a. Not used.

6. Areas and/or Spaces where asbestos abatement was conducted include:

a. Not used.

D. Lead Hazards at McKinley Elementary School

1. Lead has been detected in individual painted surfaces and surface coatings in concentrations **greater** than 5,000 parts per million (ppm) lead or 1.0 milligram of lead per square centimeter (mg/cm<sup>2</sup>). Where ranges of lead levels are indicated, Contractor shall presume the highest level is typical. These lead containing surfaces include, but are not limited to the following:

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- a. Interior Building:
    - 1) No painted surfaces identified to contain lead at concentrations greater than 5,000 ppm or 1.0 mg/cm<sup>2</sup>.
  - b. Exterior Building:
    - 1) Ceramic wall tile project (yellow) adjacent to the front entry of the school (3.7 mg/cm<sup>2</sup>).
  - c. Exterior Site:
    - 1) Chain link fencing, posts, gates and hardware throughout the site (1.0 mg/cm<sup>2</sup>).
    - 2) Metal railings and pickets (blue and silver) (1.0 mg/cm<sup>2</sup>).
    - 3) Metal handrail brackets (silver) at all stairs (1.4 mg/cm<sup>2</sup>).
    - 4) Metal bike rack (red) (1.0 mg/cm<sup>2</sup>).
    - 5) Play stripping (yellow) at Main Play Yard (1.0 mg/cm<sup>2</sup>).
    - 6) Stair treads stripping (yellow) at all stairs (1.0 mg/cm<sup>2</sup>).
    - 7) Metal flag pole base (1.0 mg/cm<sup>2</sup>).
2. Lead has been identified in individual painted surfaces and surface coatings in concentration **less** than 5,000 ppm lead or 1.0 mg/cm<sup>2</sup>. Where ranges of lead levels are indicated, Contractor shall presume the highest level is typical. These lead containing surfaces include, but are not limited to the following surfaces:
- a. Interior Building:
    - 1) Gypsum board walls and ceilings (-0.3 to -0.2 mg/cm<sup>2</sup>).
    - 2) Metal window sash (-1.1 to -0.6 mg/cm<sup>2</sup>).
    - 3) Metal window framing (-0.5 to -0.1 mg/cm<sup>2</sup>).
    - 4) Wood window casing and trim (-0.2 to -0.1 mg/cm<sup>2</sup>).
    - 5) Wood wall paneling (-0.0 mg/cm<sup>2</sup>).
    - 6) Ceramic floor tile (red brick pattern) at Lobby C90 (-0.2 mg/cm<sup>2</sup>).
    - 7) Wood baseboards (-0.1 mg/cm<sup>2</sup>).
    - 8) Elevator doors and door frames (0.5 to 0.6 mg/cm<sup>2</sup>).
    - 9) Metal handrails and handrail brackets (0.2 to 0.4 mg/cm<sup>2</sup>).
    - 10) Metal chalkboards (-0.1 mg/cm<sup>2</sup>).
    - 11) Tack boards (0.0 mg/cm<sup>2</sup>).
    - 12) Fire sprinkler piping (0.2 mg/cm<sup>2</sup>).
    - 13) Roof access ladder (0.0 mg/cm<sup>2</sup>).
  - b. Exterior Building:
    - 1) Stucco plaster walls (-0.1 to 0.0 mg/cm<sup>2</sup>).
    - 2) Metal doors and door frames (-0.1 to 0.0 mg/cm<sup>2</sup>).
    - 3) Metal window sash and framing (0.0 mg/cm<sup>2</sup>).
    - 4) Metal conduits (0.2 mg/cm<sup>2</sup>).
    - 5) Metal downspouts (0.5 mg/cm<sup>2</sup>).
    - 6) Metal gutters (-0.1 mg/cm<sup>2</sup>).

- 7) Wood fascia (0.0 mg/cm<sup>2</sup>).
- 8) Metal flashing (0.3 mg/cm<sup>2</sup>).
- 9) Metal roofing (-0.2 mg/cm<sup>2</sup>).

c. Exterior Site:

- 1) Concrete retaining walls (0.0 mg/cm<sup>2</sup>).
  - 2) Metal light posts (0.3 mg/cm<sup>2</sup>).
  - 3) Play stripping (white) (-0.3 mg/cm<sup>2</sup>).
  - 4) Paint coating on Asphalt (blue) (-0.2 mg/cm<sup>2</sup>).
  - 5) Basketball posts (-0.1 mg/cm<sup>2</sup>).
  - 6) Metal hand rails at all stairs (0.0 mg/cm<sup>2</sup>).
  - 7) Play structures at Main Play Yard and Upper Play Yard (-0.2 to 0.0 mg/cm<sup>2</sup>).
  - 8) Planter boxes (0.0 mg/cm<sup>2</sup>).
  - 9) Wood benches at Upper Play Yard (-0.1 to 0.0 mg/cm<sup>2</sup>).
  - 10) Metal flag pole (-0.3 mg/cm<sup>2</sup>).
  - 11) Fire stand pipe (0.0 mg/cm<sup>2</sup>).
3. The Contractor shall assume that all paints and surface coatings contain detectable quantities of lead requiring compliance with CAL/OSHA lead regulation in the absence of objective data to the contrary. Additionally, the Contractor shall assume that, at a minimum, lead is "present" in all of these materials at levels that have a potential, until proven otherwise, to create a lead hazard.
  4. The District has not verified that any paints, coatings, dusts, or materials are "lead free" or below 600 ppm. The Contractor shall treat all paints, coatings, dusts or materials as having a lead content greater than 600 ppm requiring dust controls and personal protective procedures for construction activities in conformance with the Cal/OSHA Lead Construction Standard, 8 CCR 1532.1 lead. Any paint, varnish, or other coating or finish not listed above shall be considered to be lead-based paint with lead levels at or exceeding 5000 ppm lead or 1.0 mg/cm<sup>2</sup> for this contract.
  5. All firms, including sub-contracted firms who impact lead-based paint (LBP) (5,000 ppm lead or 1.0 mg/cm<sup>2</sup> or greater) at Child Occupied Facilities shall conduct all work in accordance with 40 CFR Part 745. This includes but is not limited to being an EPA certified firm; having an EPA "Certified Renovator"; providing "on-the-job" training for workers; conducting pre-renovation notifications; following specific work practice procedures for containment, disturbance and final clean-up; and inspection requirements. Renovation is defined in 40 CFR Part 745 as the modification to any existing structure or portion that results in the disturbance of LBP surfaces, unless the activity is performed as part of an abatement. In essence this regulation includes all work activities that disturb LBP surfaces.
  6. The EPA certified Contractor or Sub-contractor(s) "Certified Renovator" shall be responsible for identifying the specific job activities which impact lead-based paint (LBP) during renovation that requires the use of "containment" as described in 40 CFR Part 745. Work also includes but is not limited to provide "on-the-job"

training for workers; conduct pre-renovation notifications; follow specific work practice procedures for containment, disturbance and final clean-up; and inspection requirements as defined by regulation.

7. In addition to lead-containing paints and coatings, the Contractor shall assume that lead is present at detectable levels over 600 ppm in existing plumbing components and solders, glazing compounds, roof jacks, and surficial soils.
- E. Metallic Mercury and mercury compounds are present at this site in fluorescent lighting tubes, high intensity discharge lamps, and mercury thermostats. All demolition and disposal of these items shall be conducted in accordance with applicable safety and environmental regulation and the requirements of the Contract Documents.
- F. Polychlorinated biphenyl (PCB)-containing fluorescent lighting ballasts. This site contains fluorescent lighting fixtures manufactured or installed prior to 1979. All fixtures known or presumed to have been installed prior to 1979 shall be considered to contain PCB ballasts unless otherwise noted in the contract documents. Removal, handling and disposal of PCB ballasts are subject to applicable regulation and requirements of the Contract Documents.
- G. Crystalline Silica is presumed present in all concrete, plaster, ceramic tile, grouts, and other cementitious materials at this site as well as soils. Worker protection and control of air dust during cutting, drilling, demolition and other construction operations is the responsibility of the Contractor.
- H. The Contractor shall take into consideration all existing known and presumed hazardous materials that may be disturbed or otherwise impacted by the Work of this project. All work of this project that disturbs or otherwise impacts hazardous material shall be considered included in the Work of the project and shall be conducted in accordance with all applicable regulations and the Contract Documents. The Contractor shall use appropriately trained and qualified personnel to conduct all hazardous material related work and shall adhere to the requirements for handling, removal, clean-up, and disposal in accordance with the Contract Documents and all applicable Cal/OSHA, Cal/EPA, Department of Health Services (DHS), and Bay Area Air Quality Management District (BAAQMD) regulations.

#### 1.03 RELATED DOCUMENTS

- A. Contract Documents including hazardous material-related plans and specifications and all other project construction documents. Refer to Section 01011 Summary of Hazardous Materials Work, Article 1.04 Related Documents for a more detailed listing.

#### 1.04 USE OF HAZARDOUS MATERIALS INFORMATION

- A. Hazardous material information identified herein was obtained for the use of the District and its Consultants for planning and design stages of the Project. The above mentioned survey data and reports are not, as a whole, part of the Contract Documents, but can be relied upon by the Contractor to characterize general site conditions, although quantities, friability and other factors may have changed or altered since the published report dates.

- B. All statements, findings and interpretations in the above mentioned reports are those of the Survey or Environmental Consultant. The District makes no representation, either expressed or implied, as to the completeness or adequacy of the above mentioned reports. Bidders are advised that the limited testing of components allows for generalizations in describing the extent of hazardous materials. Contractors may visit the site and investigate to identify locations of hazardous materials identified herein. Specific components or materials, should be checked against the referenced survey reports and the Contract Documents, or be tested at affected locations, prior to disturbance of such components.

**PART 2 – PRODUCTS: NOT USED**

**PART 3 – EXECUTION: NOT USED**

END OF SECTION